Appendix I

Transportation Impact Study

Final Transportation Impact Study for College Park

Prepared for:
City of Rocklin

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FEHR PEERS

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I. EXECUTIVE SUMMARY

This study analyzes the transportation impacts associated with the proposed College Park project that would be situated on two non-contiguous sets of parcels in southeast Rocklin, CA. This study analyzes project impacts under existing, existing plus approved projects, and cumulative conditions. The analysis covers the roadway, bicycle, pedestrian, and transit networks, and also evaluates project access and Vehicle Miles Traveled (VMT).

OVERVIEW OF PROPOSED PROJECT

The proposed project is comprised of a North Village and a South Village. The North Village would be situated east of Sierra College Boulevard and north of Rocklin Road. The South Village would be situated south of Rocklin Road and east of El Don Drive. Refer to Figures 2A and 2B for project site plans and assumed vehicular access points. The project would consist of the following land uses:

North Village Land Uses	South Village Land Uses
• 317 single-family dwelling units • 378 multi-family dwelling units • 45,000 square feet of retail	• 25 single-family detached dwelling units • 195 senior affordable multi-family units [1] • 52,500 square feet of professional office • 22,500 square feet of medical-office [1] An alternate use consisting of 115 traditional affordable multifamily units is also being considered.

A portion of the South Village would replace the existing overflow parking lot that serves the adjacent Sierra College campus.

The North and South Village would generate a combined 10,400 new daily trips, 700 new AM peak hour trips, and 870 new PM peak hour trips, with the North Village constituting about 75 percent of the total. The project would generate approximately 71,400 VMT under baseline conditions and 61,150 VMT under cumulative conditions. The project's VMT efficiency review is presented on the following pages.

In the project vicinity, the City of Rocklin General Plan Circulation Element identifies Sierra College Boulevard as an ultimate six-lane facility, and Rocklin Road as an ultimate four- and six-lane facility east and west of Sierra College Boulevard, respectively. As part of the North Village, frontage improvements consisting of a third travel lane on northbound Sierra College Boulevard and a second travel lane on

westbound Rocklin Road would be constructed (along with other intersection improvements). Based on the City's travel demand model, these widenings would induce a net increase of 3,000 VMT.

STUDY AREA, SCENARIOS, AND TIME PERIODS

The study area (see Figure 1) includes 23 existing intersections and driveways in the project vicinity. Intersections were analyzed for weekday AM and PM peak hour conditions under existing (pre-COVID conditions), existing plus approved projects, and cumulative conditions.

STANDARDS OF SIGNIFICANCE

Senate Bill (SB) 743 was signed into law in 2013 and has led to substantial changes in the way transportation impact analyses are being prepared. Notably, it precludes the use of Level of Service (LOS) to identify significant transportation impacts in CEQA documents for land use projects, recommending instead that Vehicle Miles Traveled (VMT) be used as the preferred metric. On December 28, 2018, the CEQA Guidelines were amended to add Section 15064.3, Determining the Significance of Transportation Impacts, which states that generally, vehicle miles traveled is the most appropriate measure of transportation impacts. According to 15064.3(a), "*Except as provided in subdivision (b)(2) (regarding roadway capacity), a project's effect on automobile delay shall not constitute a significant environmental impact.*" On July 1, 2020, the provisions of 15064.3 became applicable statewide. In December 2018, the California Office of Planning and Research (OPR) published *Technical Advisory on Evaluating Transportation Impacts in CEQA*, which provided guidance for implementing SB 743. This study frequently cites guidance and recommendations from this "Technical Advisory".

The *Technical Advisory* offers guidance regarding land use projects that are presumed to be less-than-significant. The following two project types, which are included as part of the proposed project, qualify as projects presumed to have a less-than-significant transportation impact:

- Affordable housing because it is known to improve jobs-housing balance and/or generate less VMT than market-based units. This conclusion is supported by data contained in the Sacramento Area Council of Governments (SACOG) 2018 household survey regarding differences in person trip rates by income.
- Local-serving retail (50,000 square feet or less) because it tends to shorten trips and reduce VMT.

For this report, both LOS and VMT are reported. LOS results are reported to provide decision-makers and the general public a better understanding of the effects the project may have on the surrounding roadway network and the types of operational enhancements that could be considered to improve

operations. Presentation of LOS information also helps the City evaluate the project's consistency with Policy C-10 of the *City of Rocklin General Plan Circulation Element* (2012) pertaining to intersection LOS. VMT is estimated for the project and used as the basis to identify project-specific and cumulatively significant impacts on the roadway network. Impacts to the bicycle, pedestrian, and transit networks are also evaluated, as are emergency vehicle impacts and hazardous conditions.

PROJECT-SPECIFIC IMPACTS AND MITIGATION MEASURES

EVALUATION OF TRANSPORTATION SYSTEM IMPACTS

- *Impact TR-1: The project would generate average VMT per dwelling unit or thousand square feet of non-residential space that is greater than 85 percent of the City-wide average for that land use type.*

Table ES-1 illustrates how each land use component of the proposed project would compare to 85 percent of the City-wide average for that land use type. Under baseline conditions, VMT impacts would be considered significant at four of the seven specific land use types and locations. Only the affordable housing, the retail (both presumed less than significant per the *Technical Advisory*, See Chapter VI) and 25-unit single-family component in the South Village would be considered less than significant. This impact is considered *significant*.

TABLE ES-1: NORTH AND SOUTH VILLAGE AVERAGE VMT BY LAND USE TYPE

Village	Land Use	Quantity	Measurement of VMT	Baseline Conditions [1]			Cumulative Conditions [2]		
				Average VMT	Performance Standard [3]	Sig. Impact?	Average VMT	Performance Standard [3]	Sig. Impact?
North	Single-Family	317 units	VMT/du	69.7	59.5	Yes	53.6	53.5	Yes
	Multi-Family	378 units	VMT/du	51.2	40.0	Yes	39.2	34.7	Yes
	Retail	45 ksf	VMT/ksf	N / A [4]		No	N / A [4]		No
South	Single-Family	25 units	VMT/du	57.9	59.5	No	53.5	53.5	No
	Senior Affordable Multi-Family	195 units	VMT/du	N / A [4]		No	N / A [4]		No
	Office	52.5 ksf	VMT/ksf	106.8	94.4	Yes	110.2	103.1	Yes
	Medical-Office	22.5 ksf	VMT/ksf	197.5	154.9	Yes	202.8	172.0	Yes

Notes:
[1] Derived from City of Rocklin base year travel demand model.
[2] Derived from City of Rocklin cumulative year travel demand model.
[3] Performance standard is 85 percent of the City-wide average for that land use type.
[4] N / A = Quantitative VMT metrics not shown because retail and affordable housing presumed to be less-than-significant.
Significant impacts are shaded.
Source: Fehr & Peers, 2021.

Mitigation Measure TR-1: *The project applicant shall implement feasible transportation demand management (TDM) strategies, which would reduce the VMT generated by the project's land uses. Examples of potential measures for residential uses include (but are not limited to): reducing the parking supply, subsidized transit passes, and pedestrian-oriented design. Examples of potential measures for employment uses include (but are not limited to): paid parking, employee telecommuting, expansion of transit service coverage / subsidized transit fares, enhanced bicycle and pedestrian connections, and flexible work schedules.*

Though not all individual TDM strategies may be applicable, this mitigation is considered generally feasible because it is within the applicant's purview to implement and has been found effective in peer-reviewed academic studies. However, the precise effectiveness of a given TDM strategy can be difficult to accurately measure due to a number of factors such as types of tenants, employee responses to strategies, and other factors. Additionally, it is noted that the VMT reductions would need to be in range of 12 to 25 percent (depending on the land use type and location) in order to meet the applicable performance standard. Those are considered robust targets to achieve given the site's suburban setting and lack of viable alternative modes. Because there are no assurances that Mitigation Measure TR-1 would fully mitigate this impact, Impact TR-1 is considered *significant and unavoidable.*

- *Impact TR-2: The project would construct additional roadway capacity that would lead to induced travel and increased VMT.*

The following potentially capacity-inducing improvements, consistent with the City of Rocklin General Plan Circulation Element, (as well as other intersection improvements) would be constructed along the North Village frontage: addition of a third travel lane on northbound Sierra College Boulevard and a second travel lane on westbound Rocklin Road. Using the City's travel demand model, these improvements were shown to generate approximately 3,000 net additional system-wide VMT, which is considered a *significant* impact based on the *Technical Advisory* guidance that any increase in VMT caused by a roadway capacity project would be considered significant.

Mitigation Measure TR-2: *The project applicant shall construct a bus turnout and shelter in the northbound direction of Sierra College Boulevard directly north of Rocklin Road. These improvements shall be constructed with the first phase of development of the North Village and to the satisfaction of the City of Rocklin and Placer County Transit.*

This mitigation measure would provide opportunities for project residents, employees, and customers to use public transit to access each site instead of driving a passenger vehicle. Because it cannot be assured that this shift away from driving to transit would occur, this impact is considered *significant and unavoidable.*

EVALUATION OF TRANSIT IMPACTS

- Impact TR-3: *The project would potentially disrupt or interfere with existing or planned transit facilities.*

Policy C-50 of the *City of Rocklin General Plan (2012)* calls for the City to work with transit providers to plan, fund, and implement additional transit services that are cost-effective and responsive to existing and future resident needs. Similarly, Policy C-2 calls for the City to coordinate land use and transportation planning to support transit services. Mitigation Measure TR-2 calls for the applicant to construct a bus shelter and turnout along the North Village project frontage on Sierra College Boulevard north of Rocklin Road. Similarly, a driveway is proposed on Rocklin Road east of El Don Drive to serve the South Village, which would also be situated near an existing bus stop. Because the introduction of project driveways near existing/planned bus stops could introduce conflicts between buses and passenger vehicles (if not properly planned for), this impact is considered *significant*.

Mitigation Measure TR-3: *The project applicant shall coordinate with the City of Rocklin and Placer County Transit regarding the placement and design of its project driveways on Sierra College Boulevard and Rocklin Road to ensure that they do not interfere with existing/planned transit operations. Preferred driveway designs should provide sufficient distance between the stop location and the driveway to provide adequate sight distance and could potentially include a continuous bus turnout / deceleration lane to accommodate ingress to each project driveway.*

This mitigation would reduce this impact to *less than significant*.

Project impacts on the bicycle and pedestrian networks, hazardous design features, and emergency vehicle access were found to be *less than significant* and no mitigation is required. The project would not cause any freeway off-ramp 95th percentile queue lengths to exceed their available storage at the I-80/Rocklin Road and I-80/Sierra College Boulevard interchange. Therefore, project impacts related to freeway off-ramp queuing are considered *less than significant*.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

EVALUATION OF TRANSPORTATION SYSTEM IMPACTS

- *Impact TR-4: The project would generate average VMT per dwelling unit or thousand square feet of non-residential space under cumulative conditions that is greater than 85 percent of the City-wide average for that land use type.*

Table ES-1 illustrates how each land use component of the proposed project would compare to 85 percent of the City-wide average for that land use type under cumulative conditions. As shown, VMT

impacts would be considered significant at four of the seven specific land use types and locations. The affordable housing and 25-unit single-family component in the South Village and the retail in the North Village would be considered *less than significant*. This impact is considered *significant*.

Mitigation Measure TR-4: Implement Mitigation Measure TR-1 (Implement TDM Strategies)

Because there are no assurances that Mitigation Measure TR-1 would fully mitigate this impact, Impact TR-4 is considered cumulatively *significant and unavoidable*.

- *Impact TR-5: The project would construct additional roadway capacity that would lead to induced travel and increased VMT under cumulative conditions.*

The following potentially capacity-inducing improvements (as well as other intersection improvements) would be constructed along the North Village frontage: addition of a third travel lane on northbound Sierra College Boulevard and a second through travel lane on westbound Rocklin Road. Using the City's travel demand model, these improvements were shown to generate approximately 3,000 net additional system-wide VMT, which is considered a *significant* impact.

Mitigation Measure TR-5: Implement Mitigation Measure TR-2 (Construct Bus Turnouts/Shelters)

Because it cannot be assured that the VMT savings associated with bus stop construction would shift a sufficient number of motorists to instead use the bus, this impact is considered cumulatively *significant and unavoidable*.

- *Impact TR-6: The project would contribute to further worsened vehicular queuing (onto the freeway mainline) at the I-80 eastbound off-ramp at Rocklin Road and I-80 eastbound and westbound off-ramps at Sierra College Boulevard under cumulative conditions.*

Under cumulative no project conditions, expected vehicular queues at the three of the four off-ramps at the I-80/Sierra College Boulevard and I-80/Rocklin Road interchange would reach or exceed the available storage in each off-ramp. The project would add trips to each of these off-ramps, thereby exacerbating this queuing issue. This is considered a *significant* impact.

Mitigation Measure TR-6: *The project applicant(s) shall pay the appropriate City of Rocklin CIP / Traffic Impact Fee.*

The City's CIP / Traffic Impact Fee program collects fees to help fund the reconstruction of the I-80/Rocklin Road interchange. The City intends on updating this fee program in the near future to also include funding for improvements at the I-80/Sierra College Boulevard interchange. Both improvements would increase the capacity at each interchange to help alleviate queue spillbacks. However, because it cannot be assured that adequate funds will be available to fund both interchange

improvements and it is not a certainty that identified improvements will reduce vehicle queues from spilling back onto the freeway, this impact is considered cumulatively *significant and unavoidable.*

EVALUATION OF TRANSIT IMPACTS

- Impact TR-7: *The project would potentially disrupt or interfere with planned transit facilities under cumulative conditions.*

Policy C-50 of the *City of Rocklin General Plan (2012)* calls for the City to work with transit providers to plan, fund, and implement additional transit services that are cost-effective and responsive to existing and future resident needs. Similarly, Policy C-2 calls for the City to coordinate land use and transportation planning to support transit services. Mitigation Measure TR-2 calls for the applicant to construct a bus shelter and turnout along the North Village project frontage on Sierra College Boulevard north of Rocklin Road. Similarly, a driveway is proposed on Rocklin Road east of El Don Drive to serve the office component of the South Village, which would also be situated near an existing bus stop. This impact is considered *significant.*

Mitigation Measure TR-7: Implement Mitigation Measure TR-3 (Coordinate with the City of Rocklin and Placer County Transit regarding the placement and design of its project driveways on Sierra College Boulevard and Rocklin Road).

This mitigation would reduce this impact to *less than significant* under cumulative conditions.

CUMULATIVE IMPACTS FOUND LESS THAN SIGNIFICANT

Cumulative project impacts on the bicycle network, pedestrian network, hazardous design features, and emergency vehicle access were found to be *less than significant* and no mitigation is required.

POTENTIAL OPERATIONAL ENHANCEMENTS

A series of operational enhancements were tested under all 'plus project' analysis scenarios. Figures 12 and 13 illustrate these enhancements. Under existing plus project conditions, they would substantially benefit operations in the study area. It is worth reiterating that adding capacity to the I-80/Rocklin Road interchange may require partial or full reconstruction that could entail widening and replacement of the overcrossing structure. This would be a very expensive and time-consuming project to complete. Until that improvement is in place, Rocklin Road east of I-80 will continue to experience heavy delays and lengthy queues. To accommodate cumulative traffic levels, all potential enhancements would be needed as well as a more extensive set of transportation improvements including upgrades to both the I-80/Rocklin Road and I-80/Sierra College Boulevard interchanges. See Chapter VII for details on the effectiveness of the operational enhancements.

Review of Project Access

An in-depth project access review was conducted to determine what improvements should be constructed along each site's frontage to accommodate its traffic. Refer to Figures 14 and 15 for recommendations. Chapter VII also includes a list of recommended transportation-related Conditions of Approval for the project.

I. INTRODUCTION

PURPOSE

This study analyzes the transportation impacts associated with the proposed College Park project that would be situated on two non-contiguous sets of parcels in southeast Rocklin, CA. This study analyzes project impacts under existing, existing plus approved projects, and cumulative conditions. The analysis covers the roadway, bicycle, pedestrian, and transit networks, and also evaluates project access and Vehicle Miles Traveled (VMT).

OVERVIEW OF PROPOSED PROJECT

The proposed project is comprised of a North Village and a South Village, each of which is described below. Refer to **Figure 1** for the general locations of these villages within the broader study area.

According to the *Preliminary Site Plan College Park North* (Wood Rodgers, revised November 2020), the North Village would be situated east of Sierra College Boulevard and north of Rocklin Road. Based on the project site plan and information provided by the applicant, it would consist of the following land uses:

- 317 single-family dwelling units
- 378 multi-family dwelling units
- 45,000 square feet of retail

Figure 2A shows the locations of these land uses within the site as well as proposed vehicular access points. Key aspects of project access include the following:

1. East leg (known as Street A) constructed at the existing signalized Sierra College Boulevard/Stadium Way intersection to provide access to the northern residential component of the project.
2. Access provided to the southern portion of the residential along Sierra College Boulevard at Street G. This intersection would allow inbound/outbound right-turns and inbound southbound left-turn movements.
3. Multiple access points provided to a proposed retail center located in the northeast corner of the Rocklin Road/Sierra College Boulevard intersection (including a southbound left-turn lane which would require removal of the northbound left-turn pocket into the Sierra College campus).
4. Access to the proposed multi-family use in the southeast corner of the North Village would be provided by two driveways on Rocklin Road. Note that a detailed site plan for this property is not currently proposed.

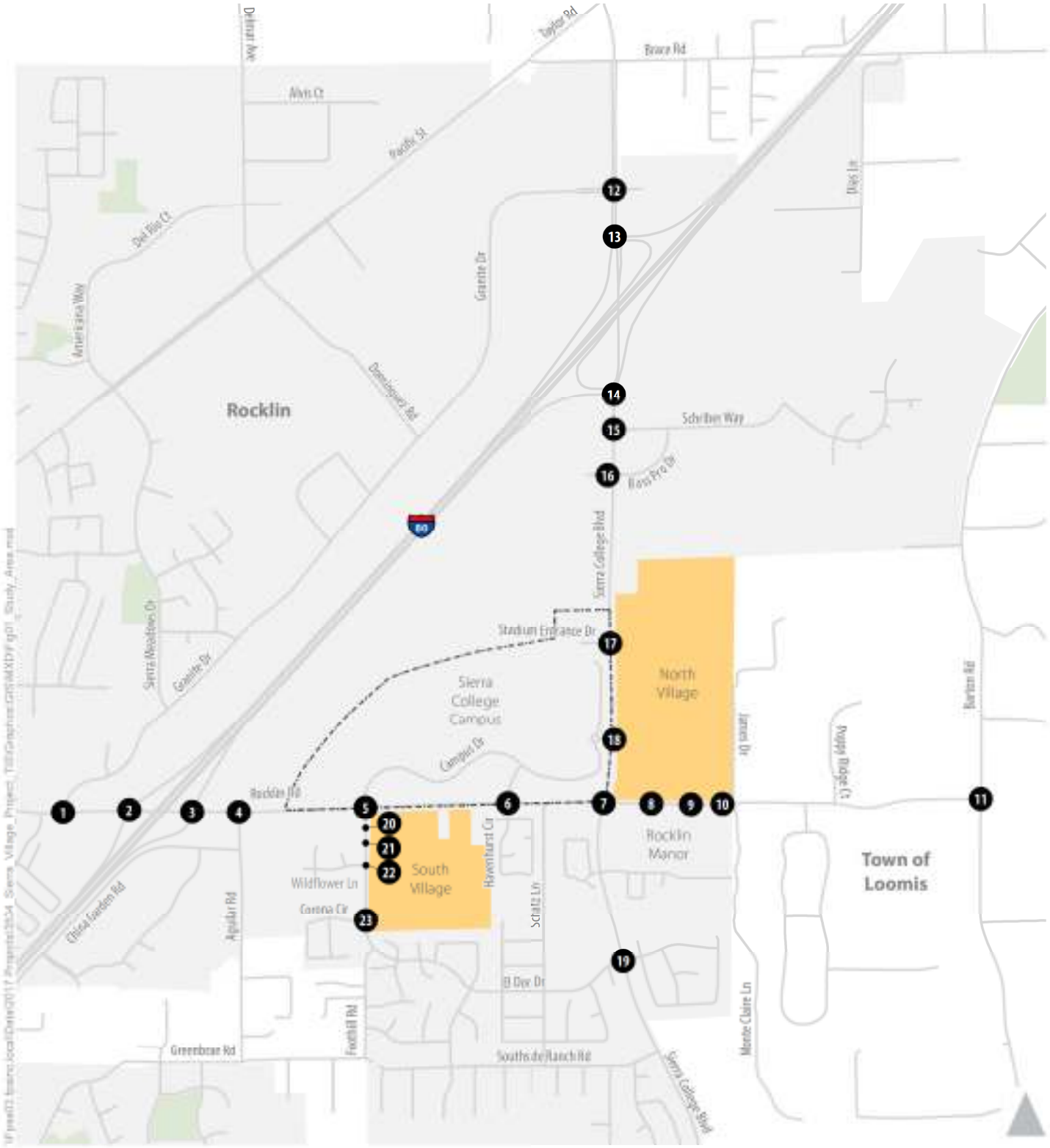


Figure 1

Study Area

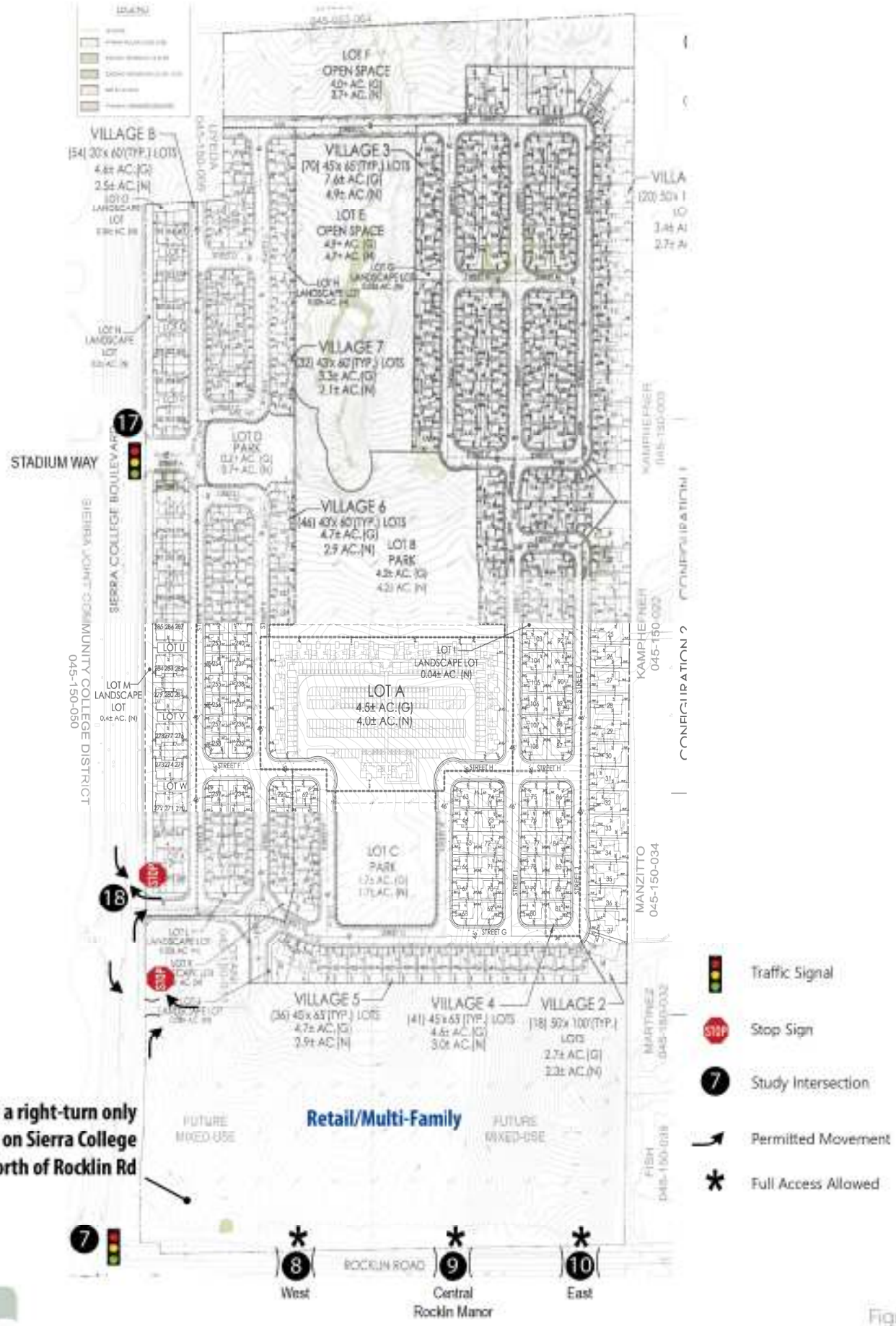


Figure 2A

Project Site Plan (North Village)

5. Widening to add a third travel lane on northbound Sierra College Boulevard, a second travel lane on westbound Rocklin Road along the project frontage, consistent with the City of Rocklin General Plan Circulation Element. No capacity improvements were assumed at the Sierra College Boulevard/Rocklin Road intersection for analysis purposes since the project's proposed access plan did not include any. The need for these improvements is evaluated in Chapter VI.
6. Although not depicted on the site plan, a vehicular connection is planned at the most westerly project driveway on Rocklin Road and would extend northerly to the roundabout along Street G.

According to *Preliminary Site Plan College Park South* (Wood Rodgers, November 2020), the South Village would be situated south of Rocklin Road and east of El Don Drive. Based on the site plan and input from the applicant, it would consist of the following land uses:

- 25 single-family detached dwelling units
- 195 senior affordable multi-family units (alternate use consisting of 115 traditional affordable multi-family units also being considered)
- 52,500 square feet of professional office
- 22,500 square feet of medical-office

The office uses would replace the existing overflow parking lot that serves the adjacent Sierra College campus. **Figure 2B** shows the locations of these land uses within the site as well as planned vehicular access points. Key aspects of project access include the following:

1. Access would be provided by two right-turn only driveways on Rocklin Road and two full-access driveways on El Don Drive (opposite the Rocklin Sierra Plaza retail center and Wildflower Lane).
2. Access to the single-family residential uses would be provided by a full-access street connection from El Don Drive opposite Corona Circle.

As shown on Figure 2b, the South Village is comprised of four distinct properties that are physically separated from each other by a creek/riparian corridor, open space, and an existing building. This figure shows that a multi-modal bridge (accommodating bikes/pedestrians and vehicles) would be constructed to connect the two most easterly properties north of the main creek channel, which would be served by a single right-turn only driveway on Rocklin Road (located east of an existing building).

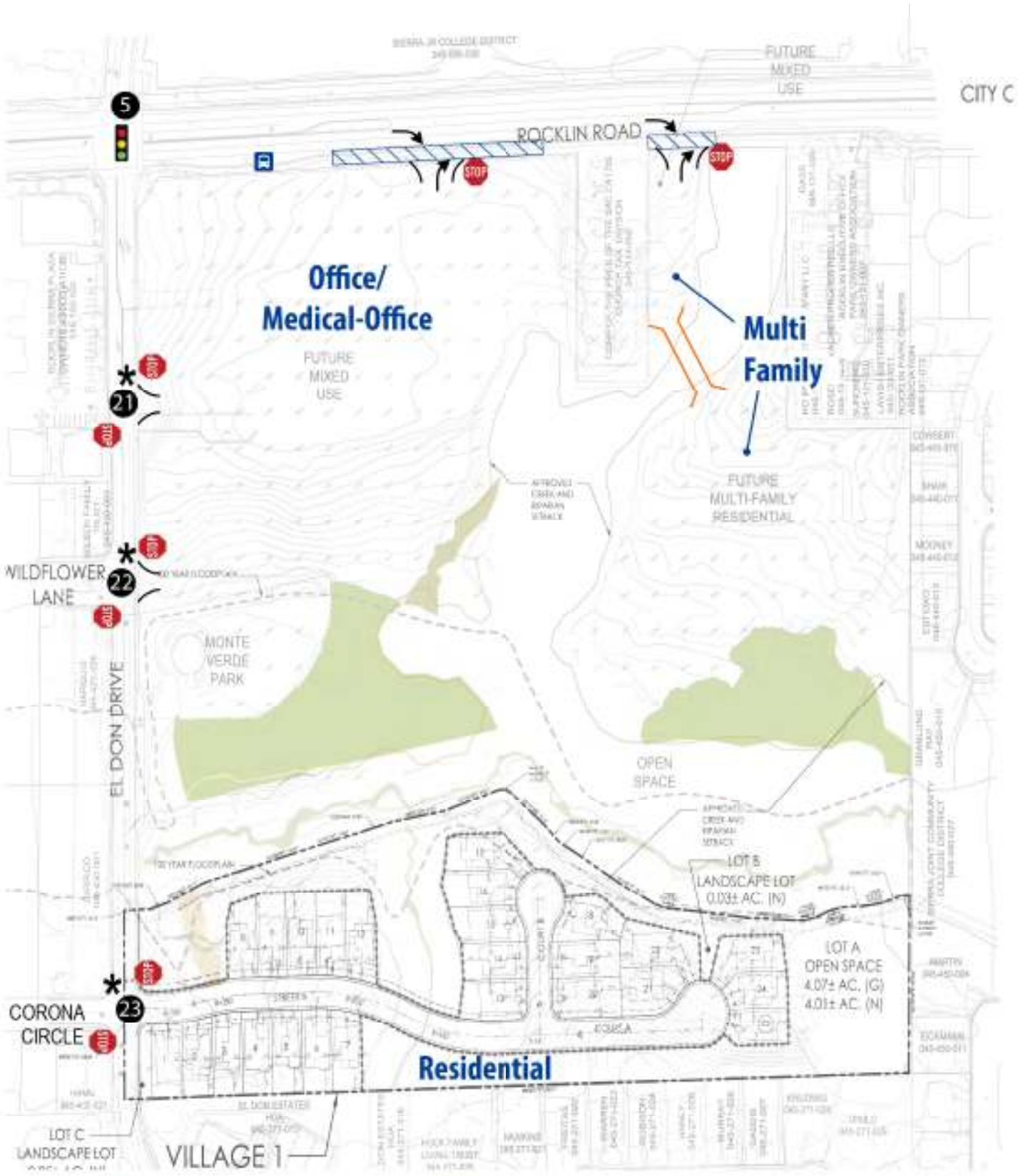


Figure 2B

Project Site Plan (South Village)

STUDY AREA AND PERIODS

The study area (see Figure 1) includes 23 existing intersections and driveways in the project vicinity. These intersections, which are located within the jurisdictions of Rocklin, Loomis, and Caltrans, were selected in consultation with City of Rocklin staff and consider the project's size, location, and generation and spatial distribution of vehicle trips. They were also informed by comments made on the Notice of Preparation (NOP) that an EIR is being prepared. Study intersections were analyzed for weekday AM and PM peak hour conditions.

STANDARDS OF SIGNIFICANCE

Background

Senate Bill (SB) 743 was signed into law in 2013 and has led to substantial changes in the way transportation impact analyses are being prepared. Notably, it precludes the use of LOS to identify significant transportation impacts in CEQA documents for land use projects, recommending instead that Vehicle Miles Traveled (VMT) be used as the preferred metric. On December 28, 2018, the CEQA Guidelines were amended to add Section 15064.3, Determining the Significance of Transportation Impacts, which states that generally, vehicle miles traveled is the most appropriate measure of transportation impacts. According to 15064.3(a), "*Except as provided in subdivision (b)(2) (regarding roadway capacity), a project's effect on automobile delay shall not constitute a significant environmental impact.*" On July 1, 2020, the provisions of 15064.3 became applicable statewide.

In December 2018, the California Office of Planning and Research (OPR) published *Technical Advisory on Evaluating Transportation Impacts in CEQA*, which provided guidance for implementing SB 743. This study frequently cites guidance and recommendations from this "*Technical Advisory*".

The *Technical Advisory* recommends consideration of whether the project is consistent with the applicable Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The guidance aligns with CEQA Guidelines Section 15125(d), which requires that an EIR should discuss inconsistencies between the proposed project and the regional transportation plan. For the Sacramento Area Council of Governments (SACOG) region, this consists of the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTS/SCS). The project is located within an area designated as an Established Community in both the 2016 and 2020 MTP/SCS. The MTP/SCS is aimed at reducing greenhouse gas emissions through VMT reduction, and these efforts are primarily focused on urban areas, where investments in the roadway system and transit, bike and pedestrian infrastructure are built into the MPT/SCS to achieve identified air quality targets.

According to the MTP/SCS, Established Community areas are typically areas adjacent to, or surrounding, Center and Corridor Communities. Many are characterized as "first tier", "inner ring", or mature subdivision communities. Local land use patterns aim to maintain the existing character and land use pattern in these areas. Land uses in Established Communities are typically made up of existing low- to medium-density residential neighborhoods, office and industrial parks, or commercial strip centers. Depending on the density of existing land uses, some Established Communities have bus service; others may have commuter bus service or very little service. The MTP/SCS assumes that over the next two decades, the region will attract roughly 168,000 new homes and 228,000 new jobs to infill areas in cities, suburbs and towns across the region. This is about 64 percent of new housing and 84 percent of the new jobs expected in the region by 2040.

The *Technical Advisory* recommended that lead agencies should analyze the effects of a retail project by assessing the change in total VMT, because retail projects typically re-route travel from other retail destinations. A retail project might lead to increases or decreases in VMT, depending on previously existing retail travel patterns. However, the OPR Guidelines also suggest that *local-serving* retail development tends to shorten trips and reduce VMT. Thus, according to OPR, lead agencies generally may presume such development creates a less than significant transportation impact. The OPR Guidelines further note that because lead agencies will best understand their own communities and the likely travel behaviors of future project users, they are likely in the best position to decide when a project will likely be local-serving. Generally, however, retail development including stores larger than 50,000 square feet might be considered regional-serving.

The project includes 45,000 square feet of retail as part of the North Village. Based on the square footage being less than the 50,000 square foot threshold in the OPR guidelines and the anticipation that the ultimate retail commercial uses will be local-serving in nature, the retail portion of the project is anticipated to create a less than significant transportation impact.

The *Technical Advisory* also noted that adding affordable housing to infill locations generally improves jobs-housing match, in turn shortening commuties and reducing VMT. Futher, "...low-wage workers in particular would be more likely to choose a residential location close to their workplace, if one is available." In areas where existing jobs-housing match is closer to optimal, low income housing nevertheless generates less VMT than market-rate housing. Therefore, a project consisting of a high percentage of affordable housing may be a basis for a lead agency to find a less-than-significant impact on VMT. Evidence supports a presumption of less than significant impact for a 100 percent affordable residential development (or the residential component of a mixed-use development in infill locations.

Lead agencies may develop their own presumption of less than significant impact for residential projects (or residential portions of mixed use projects) containing a particular amount of affordable housing, based on local circumstances and evidence. Furthermore, a project which includes any affordable residential units may factor the effect of the affordability on VMT into the assessment of VMT generated by those units.

The project includes 195 senior affordable multi-family units. Based on that component of the project being 100 percent affordable, per the *Technical Advisory*, the affordable housing portion of the project is anticipated to create a less than significant transportation impact.

For this report, both LOS and VMT are reported. LOS results are reported to provide decision-makers and the general public a better understanding of the effects the project may have on the surrounding roadway network and the types of operational enhancements that could be considered to improve operations. Presentation of LOS information also helps the City evaluate the project's consistency with Policy C-10 of the *City of Rocklin General Plan Circulation Element* (2012) pertaining to intersection LOS. VMT is estimated for the project and used as the basis to identify project-specific and cumulatively significant impacts on the roadway network.

POLICY CONSIDERATIONS

Policy C-10 of the *City of Rocklin General Plan Circulation Element* (2012) states the following:

A. Maintain a minimum traffic Level of Service "C" for all signalized intersections during the PM peak hour on an average weekday, except in the circumstances described in C-10.B and C. below.

B. Recognizing that some signalized intersections within the City serve and are impacted by development located in adjacent jurisdictions, and that these impacts are outside the control of the City, a development project which is determined to result in a Level of Service worse than "C" may be approved, if the approving body finds (1) the diminished level of service is an interim situation which will be alleviated by the implementation of planned improvements or (2) based on the specific circumstances described in Section C. below, there are no feasible street improvements that will improve the Level of Service to "C" or better as set forward in the Action Plan for the Circulation Element.

C. All development in another jurisdiction outside of Rocklin's control which creates traffic impacts in Rocklin should be required to construct all mitigation necessary in order to maintain a LOS C in Rocklin unless the mitigation is determined to be infeasible by the Rocklin City Council. The standard for determining the feasibility of the mitigation would be whether or not the improvements create unusual economic, legal, social, technological, physical or other similar burdens and considerations".

The City has interpreted Policy C-10 to also apply to Caltrans ramp intersections. However, the policy does not apply to unsignalized private driveways.

The *Town of Loomis General Plan Circulation Element* (2016) identifies a LOS C policy at most study intersections within the Town Limits (with several exceptions). The only study intersection within Loomis is Rocklin Road/Barton Road, which has a LOS C standard.

In May 2020, the California Department of Transportation (Caltrans) published the *Vehicle Miles Traveled-Focused Transportation Impact Study Guide* (TISG), which replaced its Guide for the Preparation of Traffic Impact Studies (2002). The TISG generally endorses the policies, technical approaches, and recommendations from OPR's *Technical Advisory*. It also indicates that Caltrans intends to "transition away from requesting LOS or other vehicle operations analyses of land use projects", instead placing the focus on VMT and safety.

Caltrans published the *Interim Local Land Development and Intergovernmental Review (LDIGR) Safety Review Practitioners Guidance* in December 2020. This document provides guidance for conducting safety reviews of land use projects and plans that may affect the State Highway System. Although the LDIGR Safety Review Practitioners Guidance stops short of including specific thresholds of significance or providing specific recommendations for how safety evaluations should be included in CEQA documents, it does clearly indicate the State's expectation that, when appropriate, CEQA studies of land use projects should include safety investigations of the State Highway System. Furthermore, that document specifies that mitigation measures for identified safety impacts should avoid increasing roadway capacity, which may induce VMT or affect conditions for vulnerable users, such as bicyclists of pedestrians.

With regard to roadway network operations, this report identifies each facility's operating goal, and then determines whether operations are acceptable or deficient. At intersections, deficiencies are only identified for PM peak hour conditions because the General Plan LOS policy pertains to this time period (and not the AM peak hour). For the "plus project" scenarios, potential enhancements are identified and analyzed for those facilities deemed as operating deficiently to understand how operations would be benefited if they were implemented.

THRESHOLDS OF SIGNIFICANCE

The project would cause a significant impact if it would:

ROADWAY SYSTEM

- Generate an average VMT per dwelling unit or thousand square feet of non-residential that is greater than 85 percent of the City-wide average for that land use type.[1]
- Construct additional roadway capacity that would lead to induced travel and increased VMT.[2]
- Cause the 95th percentile queue length at a freeway off-ramp to extend beyond the gore point onto the mainline (or exacerbate a current or future condition by increasing the 95th percentile queue by one or more vehicles).

BICYCLE/PEDESTRIAN SYSTEM

- Disrupt or interfere with existing or planned bicycle or pedestrian facilities.

TRANSIT SYSTEM

- Disrupt or interfere with existing or planned transit facilities or services.

HAZARDOUS CONDITIONS

- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment.

EMERGENCY ACCESS

- Result in inadequate emergency access.

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1 The California Office of Planning & Research (OPR)'s *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018) recommends that a VMT efficiency metric that is 15 percent below that of existing development may be a reasonable threshold in order to meet the State's long-term goals for addressing climate change.

2 The *Technical Advisory* indicates that transportation projects that would cause induced travel, as evidenced by an increase in VMT, would be considered to cause a significant impact.

ANALYSIS METHODOLOGIES

This study analyzes traffic operating conditions using level of service (LOS) as the primary measure of operational performance. Vehicle LOS is a qualitative measure of traffic flow from the perspective of motorists and is an indication of the comfort and convenience associated with driving.

SIGNALIZED INTERSECTIONS

Page 4.4-38 of the *City of Rocklin General Plan Update DEIR* (2011) identifies the need to analyze signalized intersections in the City using the *Interim Materials on Highway Capacity – Circular 212* (Transportation Research Board, 1980) methodology. As part of an ongoing update to its Circulation Element, the City is migrating away from 'Circular 212' to instead use the state-of-the-practice *Highway Capacity Manual* (HCM) methodology. Nevertheless, all signalized study intersections in Rocklin are analyzed using Circular 212 in addition to HCM methods, which are described below. The Circular 212 results can be found in **Appendix A** for all scenarios. **Table 1** presents the volume-to-capacity (v/c) ratio ranges using Circular 212 and the HCM-based delay ranges for each LOS category for signalized intersections. The body of this report includes the HCM-based micro-simulation analysis results, which are described in detail below.

TABLE 1: LEVEL OF SERVICE THRESHOLDS – SIGNALIZED INTERSECTIONS

Level of Service	Average Control Delay (seconds per vehicle)	
	Circular 212 (V/C Ratio)	HCM
A	≤ 0.60	≤ 10 sec/veh
B	0.61 – 0.70	> 10 to 20 sec/veh
C	0.71 – 0.80	> 20 to 35 sec/veh
D	0.81 – 0.90	> 35 to 55 sec/veh
E	0.91 – 1.00	> 55 to 80 sec/veh
F	> 1.0	> 80 sec/veh

Notes:
[1] Delay values rounded to the nearest second and evaluated for LOS based on the above thresholds (i.e, 10 sec = LOS A).
Source: Fehr & Peers, 2021

This study uses the SimTraffic microsimulation model to calculate LOS at all study intersections because the intersections are closely spaced along Sierra College Boulevard and Rocklin Road and are affected by traffic conditions at adjacent interchanges. This software considers the effects of signal coordination, vehicle queue spillbacks between intersections, and variation in driver and vehicle types.

UNSIGNALIZED INTERSECTIONS

SimTraffic was also applied at the unsignalized study intersections. Results (LOS and average delay) are reported for both the entire intersection as well as the minor street movement with the greatest delay. **Table 2** presents the delay range for each LOS category for unsignalized intersections.

TABLE 2: LEVEL OF SERVICE THRESHOLDS - UNSIGNALIZED INTERSECTIONS

Level of Service	Average Control Delay (seconds per vehicle)
	Unsignalized Intersections [2]
A	≤ 10 sec/veh
B	> 10 to 15 sec/veh
C	> 15 to 25 sec/veh
D	> 25 to 35 sec/veh
E	> 35 to 50 sec/veh
F	> 50 sec/veh

Notes:

[1] Delay values rounded to the nearest second and evaluated for LOS based on the above thresholds (i.e, 10 sec = LOS A).

Source: Fehr & Peers, 2021

VEHICLE MILES TRAVELED (VMT)

This section describes the three different types of VMT calculations performed as part of this study. Each calculation is for a different purpose as described below. By definition, one VMT occurs when a vehicle is driven one mile. A given VMT value represents the amount of travel for an entire weekday. Lastly, VMT values represent the full length of a given trip, and are not truncated at city boundaries.

All VMT calculations were developed using the City's travel demand model. When this model was being developed in 2017, it was anticipated that it would ultimately be used for project-level VMT calculation purposes. Therefore, as part of its validation, it underwent a series of reasonableness checks such as whether it accurately matches the proportion of employed City residents who work outside the City, and whether average home-based trip lengths match data from the California Household Travel Survey. Because VMT is highly sensitive to land use placement, the model also underwent diagnostic tests to compare different VMT estimates per dwelling unit in different parts of the City. It was important that the model's VMT estimates were sensitive to geographic locations (e.g., VMT should be greater for a unit in Whitney Oaks versus central Rocklin). Case studies were used to test this performance attribute. The model passed each of these tests. The model development report is available at City offices.

VMT was calculated in the following three ways (refer to Appendix C for VMT calculations):

1. Total VMT – represents all vehicular travel to/from each site over a typical weekday generated by the proposed land uses.[3]
2. Induced Travel VMT – represents the model-wide net increase in VMT caused by the proposed roadway widenings (to add one travel lane) along the North Village frontages of Rocklin Road and Sierra College Boulevard.
3. Average VMT per Dwelling Unit and Thousand Square Feet (KSF) of Non-Residential – VMT generated by the project's land uses are calculated separately for each land use type and then divided by the number of dwelling units or thousand square feet of building space. Those results are then compared to City-wide averages to determine the project's relative VMT efficiency for that land use type. Table 3 contains the City-wide average VMT for the five proposed land use types.

TABLE 3: CITYWIDE AVERAGE VMT BY LAND USE TYPE

Land Use [1]	Unit	Citywide Average VMT per Unit [2]	
		Baseline	Cumulative
Single-Family	du	70.0	62.9
Multi-Family	du	47.0	40.8
Office	ksf	111.1	121.3
Medical-Office	ksf	182.2	202.4

Notes:

[1] Retail and affordable housing land uses not shown here because both project types are presumed to have less-than-significant transportation impacts.

[2] Based on output from City of Rocklin travel demand model.

du = dwelling unit. ksf = thousand square feet.

Source: Fehr & Peers, 2021.

[3] Due to the model's formulation, it is not able to track non-home-based trips (e.g., office to gym) back to a household. Hence, these trip types are not considered in the "total VMT" estimates. However, they are considered in the model and are reflected in its traffic forecasts.

II. EXISTING CONDITIONS

This chapter describes the existing transportation system including the roadway, bicycle, pedestrian, and transit systems within the study area. Conditions depicted here represent pre-COVID conditions based on traffic count data collected and observations made prior to the beginning of the pandemic.

ROADWAY SYSTEM

Regional access to the project is provided by I-80, which is a six-lane freeway within the study area. I-80 has interchanges at Rocklin Road and Sierra College Boulevard. These two arterials are described in detail below:

- Rocklin Road – is an east-west arterial that extends from downtown Rocklin easterly to Barton Road in the Town of Loomis. Between I-80 and El Don Drive, it has a posted speed limit of 40 miles per hour (mph) with two travel lanes in each direction separated by a center median or channelized left-turn pockets. A third lane is added in the eastbound direction prior to Havenhurst Circle. Directly east of Sierra College Boulevard, it has two lanes in each direction and on-street parking on the south side of the street. Further east, it transitions to a two-lane road separated by a two-way left-turn lane and the two-way left-turn lane ends at the Town of Loomis boundary. In April 2016, the segment of Rocklin Road east of Aguilar Road was observed to carry 26,900 daily trips.

- Sierra College Boulevard – is a north-south arterial that extends south from State Route 193 in Placer County until it becomes Hazel Avenue as it enters Sacramento County. Along the North Village frontage, it has a posted speed limit of 50 mph with three lanes in the southbound direction and two lanes in the northbound direction separated by a center median or channelized left-turn pockets. In April 2016, the segment of Sierra College Boulevard north of Stadium Drive was observed to carry 24,300 daily trips.

Local access to the South Village would be provided by El Don Drive, which is a two-lane collector/residential street with a posted speed limit of 25 mph. Directly south of Rocklin Road, it is median-divided and provides access to Lot 'O', which is the overflow Sierra College parking lot situated in the southeast corner of the Rocklin Road/El Don Drive intersection. South of Foothill Road, it becomes a two-lane undivided roadway with fronting residences, extending to Sierra College Boulevard.

PEAK HOUR TRAFFIC VOLUMES

Traffic counts were obtained at the study intersections in Fall 2018. Schools were in session at the time of the counts and typical traffic conditions were observed. **Figure 3** displays the existing weekday AM and PM peak hour traffic volumes, lane configurations, and traffic controls at each study intersection.

INTERSECTION OPERATIONS

Table 4 displays the existing (pre-COVID pandemic) weekday AM and PM peak hour traffic operations analysis results at the study intersections (refer to **Appendix B** for detailed calculations). This table indicates that the Sierra College Boulevard/Rocklin Road and I-80 EB Ramps/Rocklin Road intersections operate worse than LOS C, while all others operate at LOS C or better. It should be noted that these results are representative of typical weekday AM and PM peak hour conditions. It is not uncommon to see conditions worse than reported here during the first couple of weeks of enrollment at the nearby Sierra College campus. Similarly, conditions also become particularly busy in the afternoon as students/staff depart the campus.

BICYCLE/PEDESTRIAN SYSTEM

Figures 4A and 4B display the existing pedestrian and bicycle facilities located near the North and South Village sites, respectively. As shown, Class II facilities (designated on-street with appropriate signing and striping) exist along portions of Rocklin Road and Sierra College Boulevard. Bicycle facilities are not present along El Don Drive.

Sidewalks are present along Rocklin Road and El Don Drive adjacent to the South Village site. The segments of Sierra College Boulevard and Rocklin Road along the North Village frontage do not have sidewalks. This is to be expected since these properties are undeveloped (with the exception of one residence). At signalized intersections, crosswalks with push-button pedestrian activation are present on most approaches.

TRANSIT SYSTEM

The following description of transit service in the study area was based on conditions in place just prior to the beginning of the COVID-19 pandemic. Although some transit service operators have restored bus service to pre-COVID levels, many others have not including providers serving this area. However, since this analysis focuses on operations for a post-pandemic condition, transit service levels prior to the pandemic are presented here as they may be similar after the pandemic.

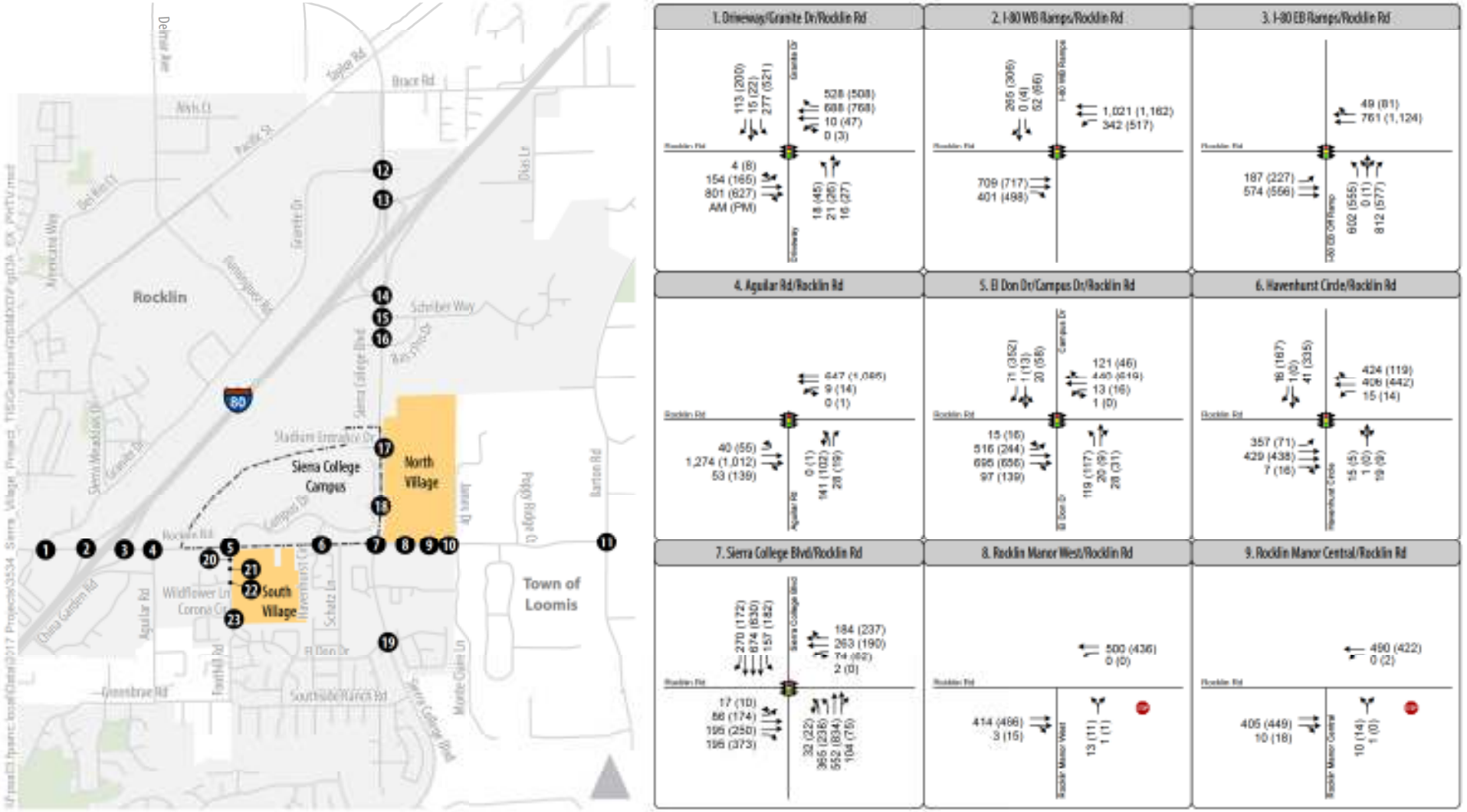


Figure 3A

Peak Hour Traffic Volumes and Lane Configurations - Existing Conditions

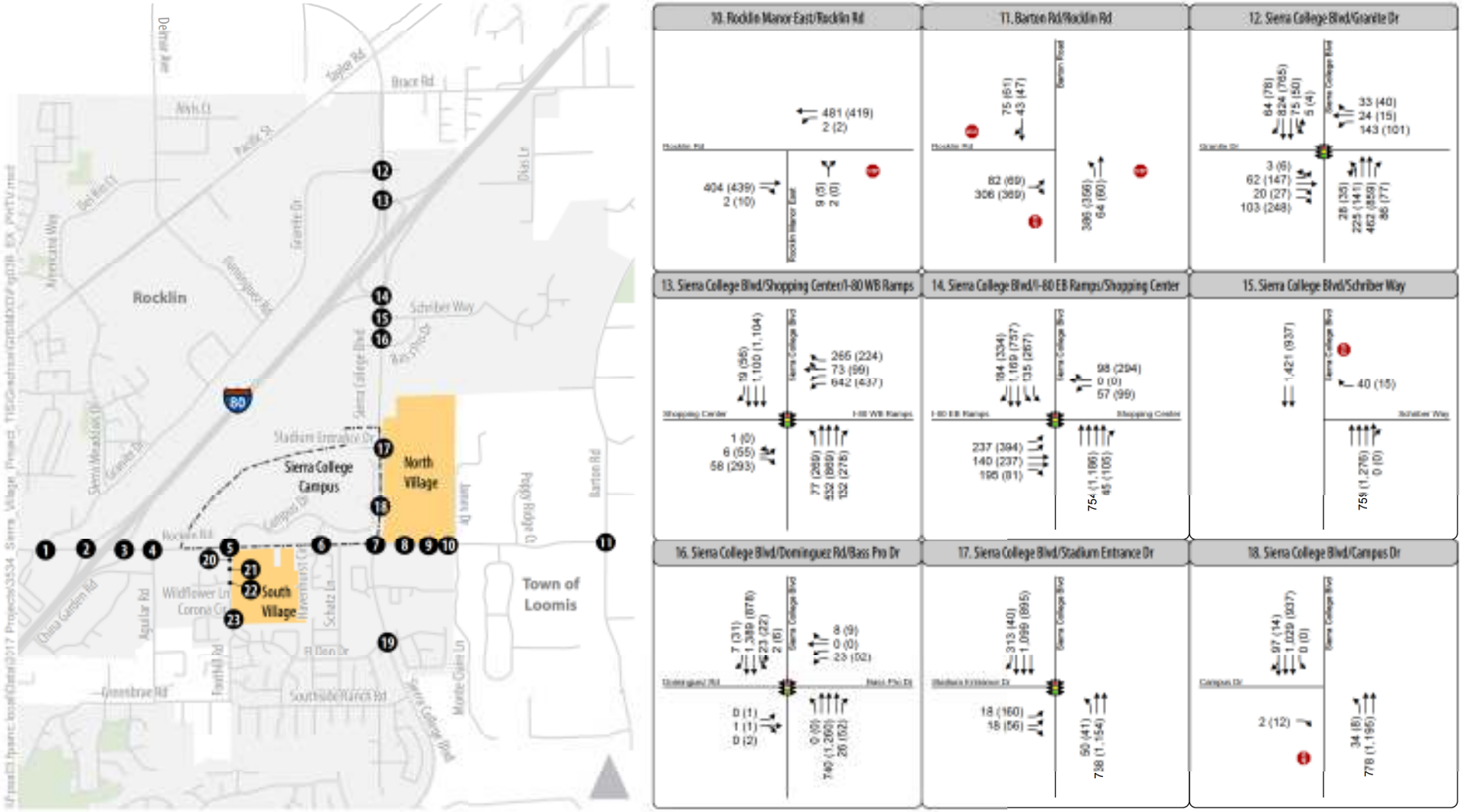
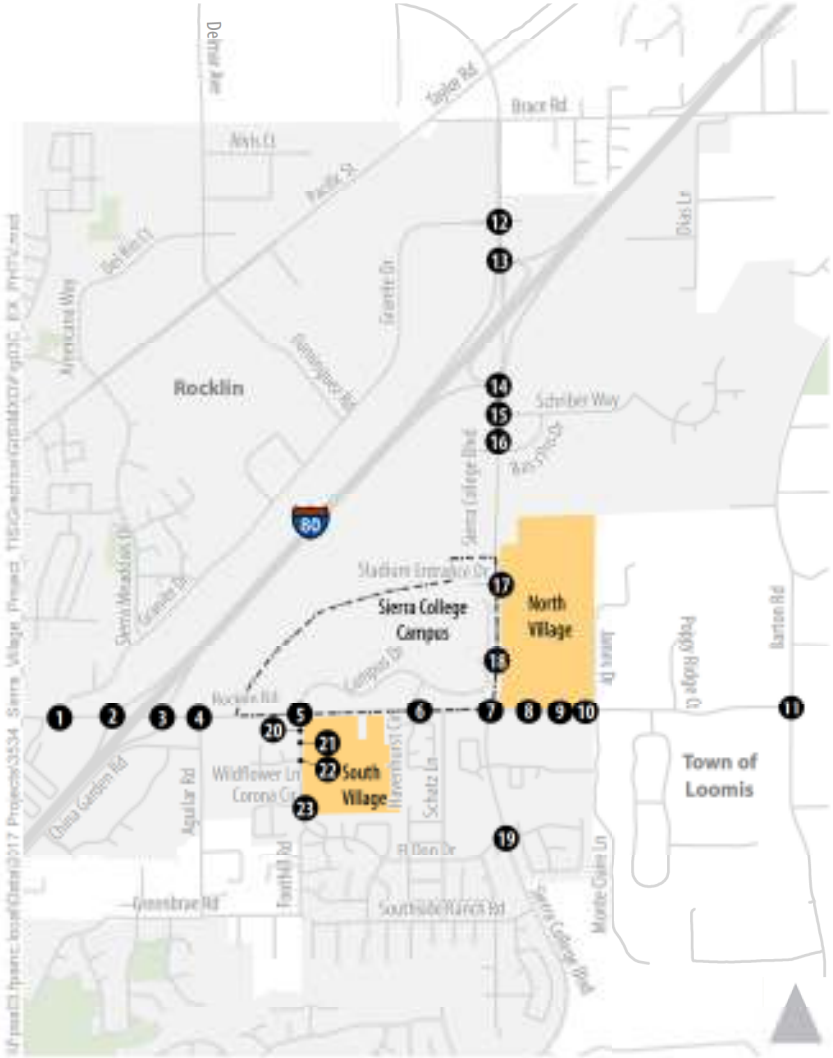
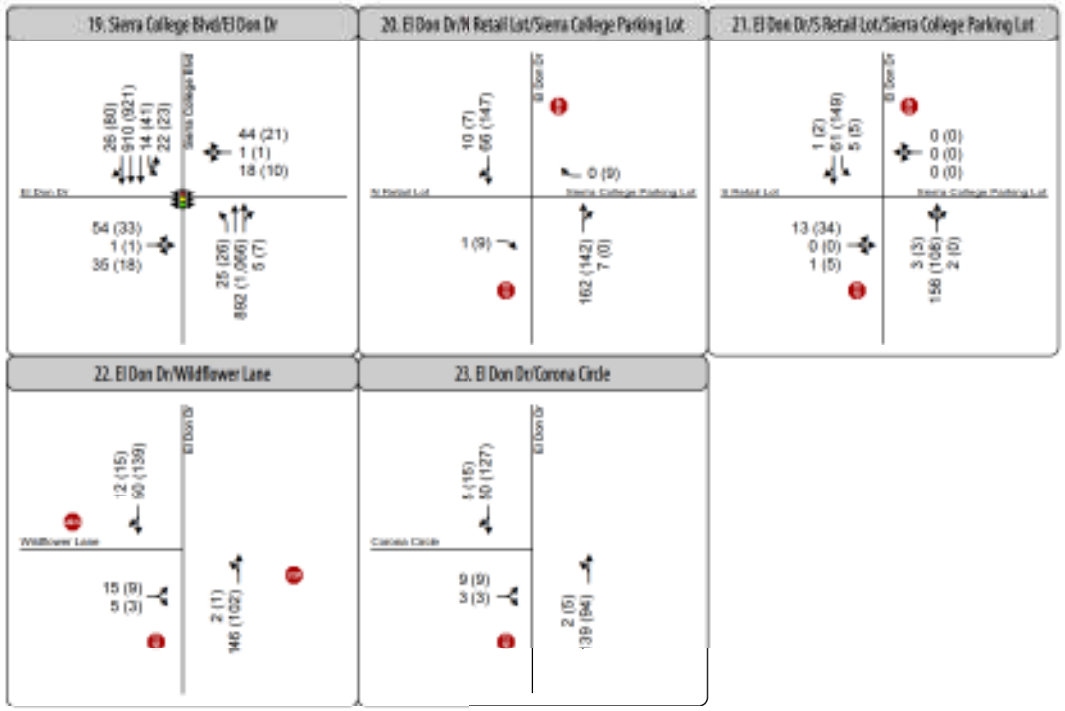


Figure 3B

Peak Hour Traffic Volumes and Lane Configurations - Existing Conditions





1 Study Intersection
Sierra College Campus
Project Site
Turn Lane
AM (PM) Peak Hour Traffic Volume
Traffic Signal
Stop Sign

Figure 3C

Peak Hour Traffic Volumes and Lane Configurations - Existing Conditions

TABLE 4: PEAK HOUR INTERSECTION LEVEL OF SERVICE – EXISTING CONDITIONS

Intersection	Control	Operating Goal [1]	Peak Hour	Average Delay (secs) [2]	LOS [2]
1. Rocklin Rd/Granite Dr	Signal	C	AM	17	B
			PM	30	C
2. Rocklin Rd/I-80 WB Ramps	Signal	C	AM	20	C
			PM	28	C
3. Rocklin Rd/I-80 EB Ramps	Signal	C	AM	28	C
			PM	43	D
4. Rocklin Rd/Aguilar Rd	Signal	C	AM	9	A
			PM	23	C
5. Rocklin Rd/El Don Dr	Signal	C	AM	31	C
			PM	30	C
6. Rocklin Rd/Havenhurst Circle	Signal	C	AM	23	C
			PM	14	B
7. Rocklin Rd/Sierra College Blvd	Signal	C	AM	39	D
			PM	36	D
8. Rocklin Rd/Rocklin Manor West	TWSC	- [4]	AM	2 (12)	A (B)
			PM	2 (8)	A (A)
9. Rocklin Rd/Rocklin Manor Central	TWSC	- [4]	AM	1 (10)	A (A)
			PM	1 (11)	A (B)
10. Rocklin Rd/Rocklin Manor East	TWSC	- [4]	AM	2 (9)	A (B)
			PM	1 (11)	A (B)
11. Rocklin Rd/Barton Rd	AWSC	C	AM	10	B
			PM	9	A
12. Sierra College Blvd/Granite Dr	Signal	C	AM	24	C
			PM	21	C
13. Sierra College Blvd/I-80 WB Ramps	Signal	C	AM	17	B
			PM	22	C
14. Sierra College Blvd/I-80 EB Ramps	Signal	C	AM	19	B
			PM	23	C
15. Sierra College Blvd/Schriber Way	TWSC [3]	C	AM	3 (6)	A (A)
			PM	2 (10)	A (A)
16. Sierra College Blvd/Bass Pro Dr	Signal	C	AM	6	A
			PM	9	A
17. Sierra College Blvd/Stadium Dr	Signal	C	AM	8	A
			PM	11	B
18. Sierra College Blvd/Campus Dr	TWSC	- [4]	AM	4 (13)	A (B)
			PM	4 (7)	A (A)
19. Sierra College Blvd/El Don Drive	Signal	C	AM	12	B
			PM	8	A
20. El Don Dr/N. Retail Access/SC Lot	TWSC	- [4]	AM	1 (1)	A (A)
			PM	2 (3)	A (A)

TABLE 4: PEAK HOUR INTERSECTION LEVEL OF SERVICE – EXISTING CONDITIONS

Intersection	Control	Operating Goal [1]	Peak Hour	Average Delay (secs) [2]	LOS [2]
21. El Don Dr/S. Retail Access/SC Lot	TWSC	- [4]	AM	1 (5)	A (A)
			PM	2 (6)	A (A)
22. El Don Dr/Wildflower Lane	TWSC	C	AM	5	A
			PM	6	A
23. El Don Dr/Corona Circle	TWSC	C	AM	1 (4)	A (A)
			PM	1 (5)	A (A)

Notes:

1. Per each agency's LOS policy, standards, or direction.
2. All intersections analyzed using SimTraffic microsimulation model. For signalized intersections, average intersection delay is reported for all approaches. For side-street stop controlled intersections, the delay and LOS for the most-delayed individual movement is shown in parentheses next to the average intersection delay and LOS. All results are rounded to the nearest second.
3. Intersection was stop-controlled at the time of the counts, but has since been signalized.
4. LOS Policy does not apply to unsignalized driveways.

Shaded cells represent deficient operations when compared to operating goal. At intersections, operating goal only applies to PM peak hour conditions.

TWSC = Two-way stop control. AWSC = All-way stop control.

Source: Fehr & Peers, 2021.



Figure 4A

Existing Bicycle and Pedestrian Network (North Village)



Figure 4B

Existing Bicycle and Pedestrian Network (South Village)

TRANSIT SERVICE (AS OF FEBRUARY 2020)

Placer County Transit and Roseville Transit serve the study area with bus stops located in the eastbound and westbound directions of Rocklin Road adjacent to El Don Drive. Additionally, a stop is located in the Rocklin Crossings Shopping Center. Placer County Transit operates the following routes in the project's vicinity:

- The Lincoln to Sierra College route serves the area hourly in each direction from 6:00 AM to 7:50 PM on weekdays. The route travels along various Rocklin roadways into the City of Lincoln.
- The Auburn to Light Rail (Watt/I-80) route serves the Sierra College campus hourly in each direction weekdays from 5:30 AM to 7:40 PM.
- The Taylor Road Shuttle operates between the Sierra College campus to Auburn and serves the Sierra College campus every other hour in each direction weekdays from 7:15 AM to 8:25 PM.

The cost is $1.25 per ride. Bicycles are allowed, and are front-mounted on the bus exterior subject to available space. Although the northern portion of the residential component of the North Village would be about ½ mile from the stop at the Rocklin Crossings Shopping Center, sidewalks are not present on Sierra College Boulevard between the project site and this shopping center; however, the project would add a sidewalk along its Sierra College Boulevard frontage for a portion of the distance, but some pedestrian travel between the northerly end of the project and that stop would need to occur on a paved shoulder.

According to the *Roseville Transit Local Bus Service Guide* (Effective November 18, 2019) (found at https://www.roseville.ca.us/UserFiles/Servers/Server_7964838/File/Government/Departments/Public%20Works/Roseville%20Transit/Services%20&%20Schedules/Local/2019-Nov-18-Local-bus-route-map.pdf), Routes E and G operate in clockwise and counter-clockwise directions, respectively, along a loop generally consisting of I-80, Rocklin Road, Sierra College Boulevard, Eureka Road, and Douglas Boulevard. These routes operate on two-hour headways on weekdays from about 7 AM to 6 PM. The fare is $1.50 per ride. Bicycles are allowed, and are front-mounted on the bus exterior subject to available space.

Moderate levels of boardings / alightings (i.e., passengers exiting the bus) were observed during the morning, afternoon, and evening peak periods at the bus stops on Rocklin Road near El Don Drive. Riders primarily consisted of Sierra College students. In this context, moderate means about a dozen students exiting or waiting for a bus.

III. EXISTING PLUS PROJECT CONDITIONS

This chapter describes the project's travel characteristics and evaluates its impacts under existing conditions.

TRIP GENERATION

Table 5 displays the expected daily, AM peak hour, and PM peak hour trip generation associated with the North Village. These trip totals consider 'pass-by' trips, which are trips already on the network that access the project (retail uses only) en route to a different primary destination. Internal trips between complementary land uses in the North Village were estimated to be six percent on a daily basis, 7.5 percent during the AM peak hour, and 8.2 percent during the PM peak hour (refer to **Appendix C** for supporting calculations for those estimates). After considering internal and pass-by trips, the North Village would generate approximately 8,200 new daily trips, 515 new AM peak hour trips, and 670 new PM peak hour trips.

TABLE 5: NORTH VILLAGE TRIP GENERATION

ITE Land Use (Code)	Quantity (units or ksf)	Vehicle Trip Rate[1]							Vehicle Trips						
		Daily	AM Peak Hour			PM Peak Hour			Daily	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out		Total	In	Out	Total	In	Out
Single-Family (210)	317	9.44	0.74	0.18	0.56	0.99	0.62	0.37	2,992	235	59	176	314	198	116
Multi-Family (220)	378	7.32	0.46	0.11	0.35	0.56	0.35	0.21	2,767	174	40	134	212	134	78
Retail (820)	45	77.62	3.87	2.40	1.47	6.69	3.21	3.48	3,493	174	108	66	301	144	157
								Gross Trips	9,252	583	207	376	827	476	351
								Internal Trips	-564	-44	-16	-28	-68	-39	-29
								Pass-By Trips [2]	-484	-24	-15	-9	-88	-42	-46
								New Trips	8,204	515	176	339	671	395	276

Notes:
[1] Trip rates are based on the *Trip Generation Manual 10th Edition* (Institute of Transportation Engineers 2017).
[2] Pass-by rates of 15% for AM peak hour and daily, and 34% for PM peak hour was assumed based on rates contained in the *Trip Generation Handbook* (ITE, 2017).
Source: Fehr & Peers, 2021.

Table 6 displays the expected daily, AM peak hour, and PM peak hour trip generation associated with the South Village. Internalization is estimated to be 4 percent on a daily basis and 7 percent during the AM and PM peak hours. As shown, the South Village would generate approximately 2,200 new daily trips, 180 new AM peak hour trips, and 200 new PM peak hour trips.

TABLE 6: SOUTH VILLAGE TRIP GENERATION

ITE Land Use (Code)	Quantity (units or ksf)	Vehicle Trip Rate[1]							Vehicle Trips						
		Daily	AM Peak Hour			PM Peak Hour			Daily	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out		Total	In	Out	Total	In	Out
Single-Family (210)	25	9.44	0.76	0.18	0.56	1.00	0.64	0.36	236	19	5	14	25	16	9
Senior Multi-Family (252) [2]	195	3.70	0.20	0.07	0.13	0.26	0.14	0.12	722	39	14	25	51	28	23
Office (710)	52.5	10.82	1.45	1.24	0.21	1.18	0.19	0.99	568	76	65	11	62	10	52
Medical-Office (720)	22.5	34.53	2.62	2.04	0.58	3.47	0.98	2.49	777	59	46	13	78	22	56
Gross Trips									2,303	193	130	63	216	76	140
Internal Trips									-92	-13	-9	-4	-15	-5	-10
Total Trips									2,211	180	121	59	201	71	130

Notes:
[1] Trip rates are based on the *Trip Generation Manual 10th Edition* (Institute of Transportation Engineers 2017).
[2] The *Trip Generation Manual* does not have a specific land use category for affordable senior multi-family units. Instead, a conservative approach was taken to estimate this use's trips based on the market-based senior multi-family trip rates.
Source: Fehr & Peers, 2021.

As noted previously, an alternate land use to the 195 senior multi-family affordable units would be 115 affordable units without an age-restriction. Since the quality of data from the *Trip Generation Manual* for affordable housing is modest (i.e., just a handful of studies available), other data sources were reviewed. According to the SACOG 2018 household survey, person trip rates were 15 percent lower among individuals in households making less than $50,000 per year versus more than $50,000 per year. This suggests that if the 195 multi-family affordable units in Table 6 were replaced by 115 non-aged restricted affordable units, the resulting trip generation would be nearly equivalent. To illustrate, 115 affordable units would generate 85 percent of the regular multi-family rate of 7.3 trips per day, or 713 trips, while the senior affordable multi-family estimate in Table 6 shows 722 trips.

Table 7 summarizes the expected number of new trips that the North and South Village would generate. As shown, they would generate a combined 10,400 daily trips, 700 AM peak hour trips, and 870 PM peak hour trips, with the North Village constituting about 75 percent of the total.

TABLE 7: NORTH AND SOUTH VILLAGE TRIP GENERATION

Village	New Vehicle Trips						
	Daily	AM Peak Hour			PM Peak Hour		
		Total	In	Out	Total	In	Out
North	8,204	515	176	339	671	395	276
South	2,211	180	121	59	201	71	130
Total	10,415	695	297	398	872	466	406

Notes:
Source: Fehr & Peers, 2021.

TRIP DISTRIBUTION/ASSIGNMENT

The distribution of project trips was determined based on a number of factors including:

- Location of land uses within each village.
- Project-only traffic assignments from base year City of Rocklin travel demand model.
- Peak period travel time comparisons using mobile apps and other internet-based tools of selecting either the I-80/Rocklin Road or I-80/Sierra College Boulevard interchanges.
- Permitted driveway turning movements.

Figure 5A displays the expected trip distribution for the North Village residential uses. As shown, Sierra College Boulevard to/from the north toward I-80 is expected to be used to a slightly greater degree than Rocklin Road to/from the west. This is primarily due to more capacity along Sierra College Boulevard and direct access to/from the north on Sierra College Boulevard. **Figure 5B** displays the expected trip distribution for the North Village retail uses. This exhibit shows a fairly balanced distribution to/from the north, west, and south based on proximity to I-80, site location, and complementary land uses.

Figures 6A and 6B display the expected trip distribution of inbound and outbound trips, respectively, to the South Village. Slightly different distribution percentages are expected because project access from Rocklin Road would be restricted to right-turns only which will affect route choice. Additionally, trip origins for inbound trips would be slightly different than trip destinations for outbound trips.

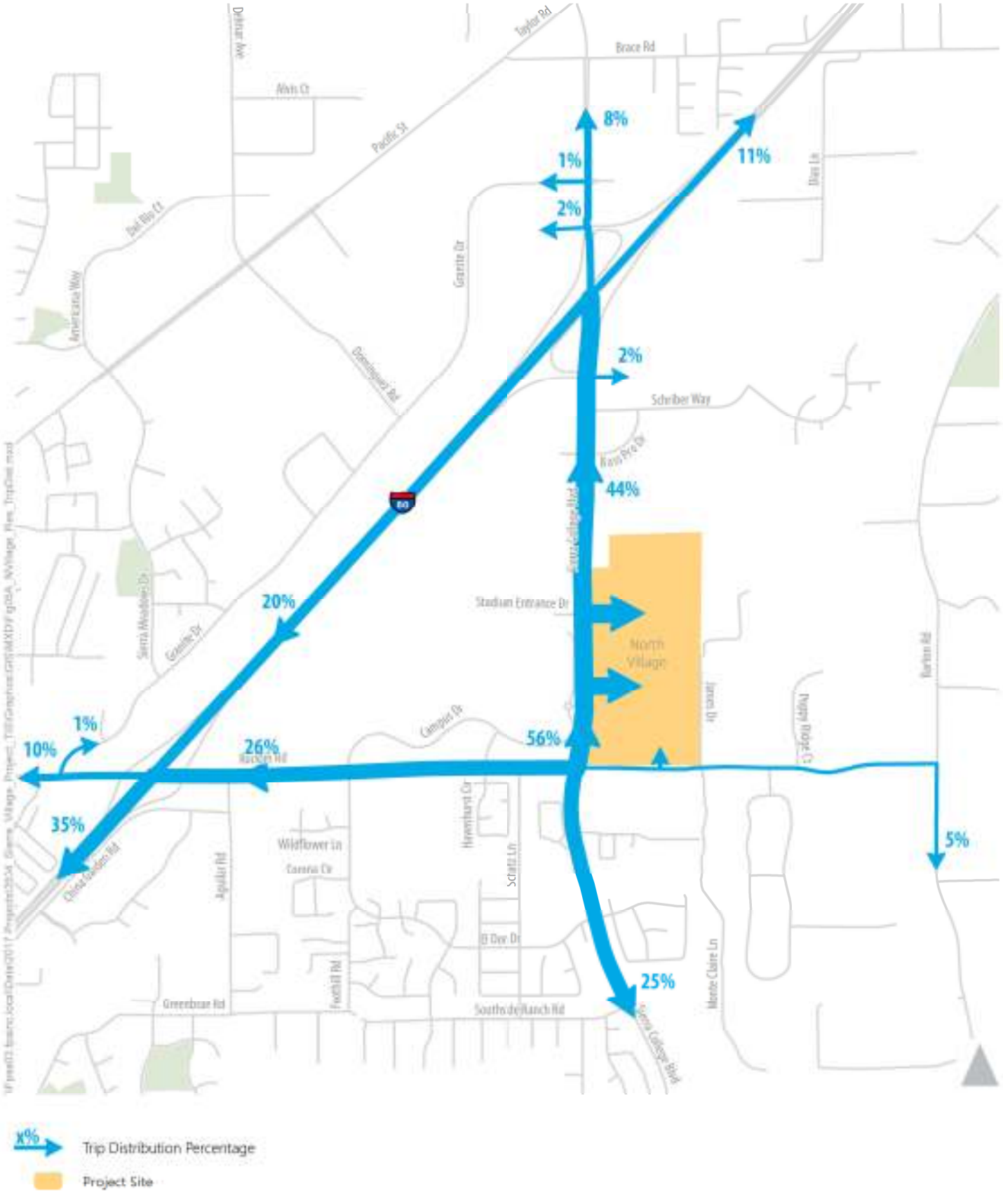


Figure 5A

Trip Distribution - North Village Residential

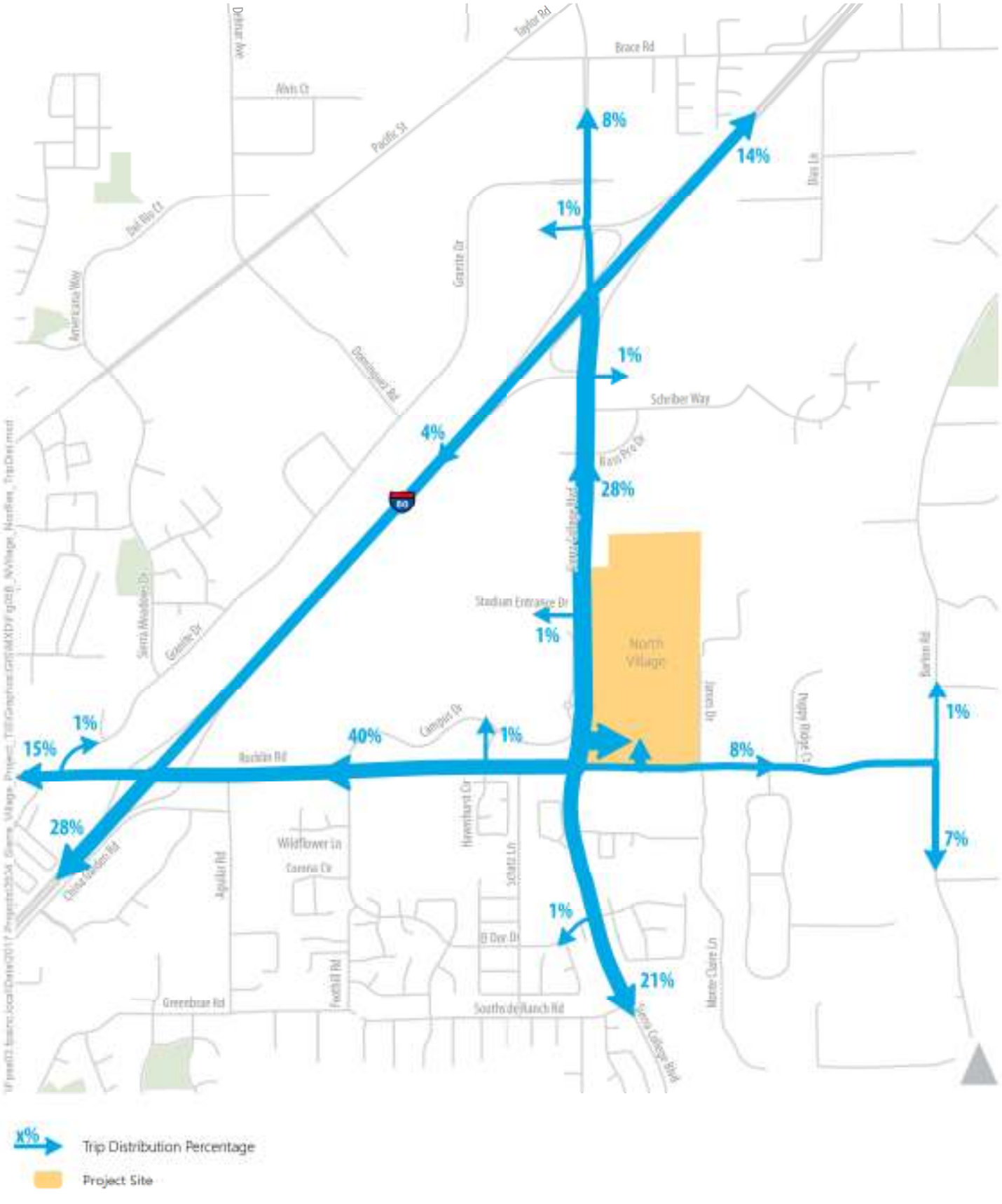


Figure 58

Trip Distribution - North Village Retail

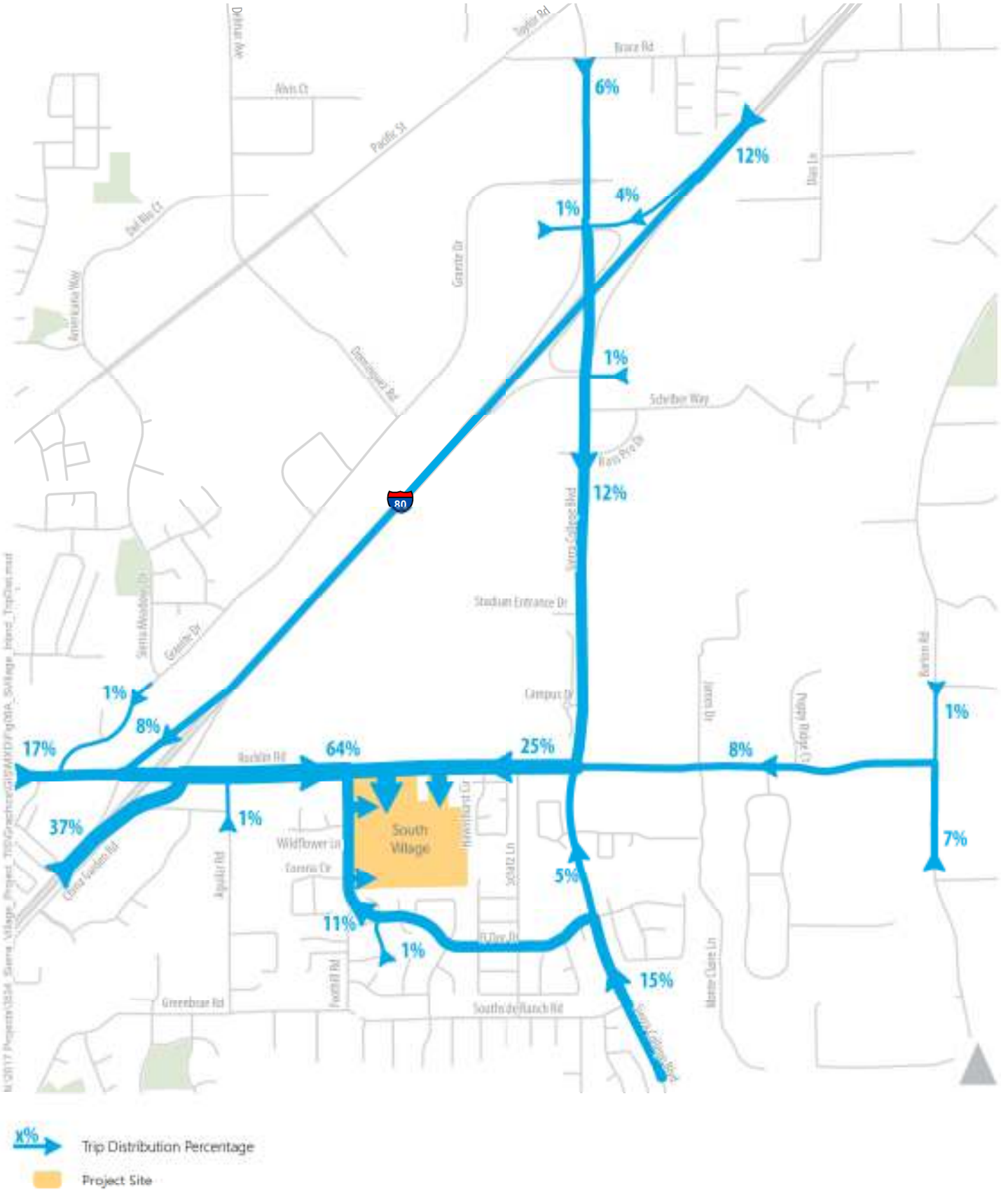


Figure 6A

Inbound Trip Distribution - South Village

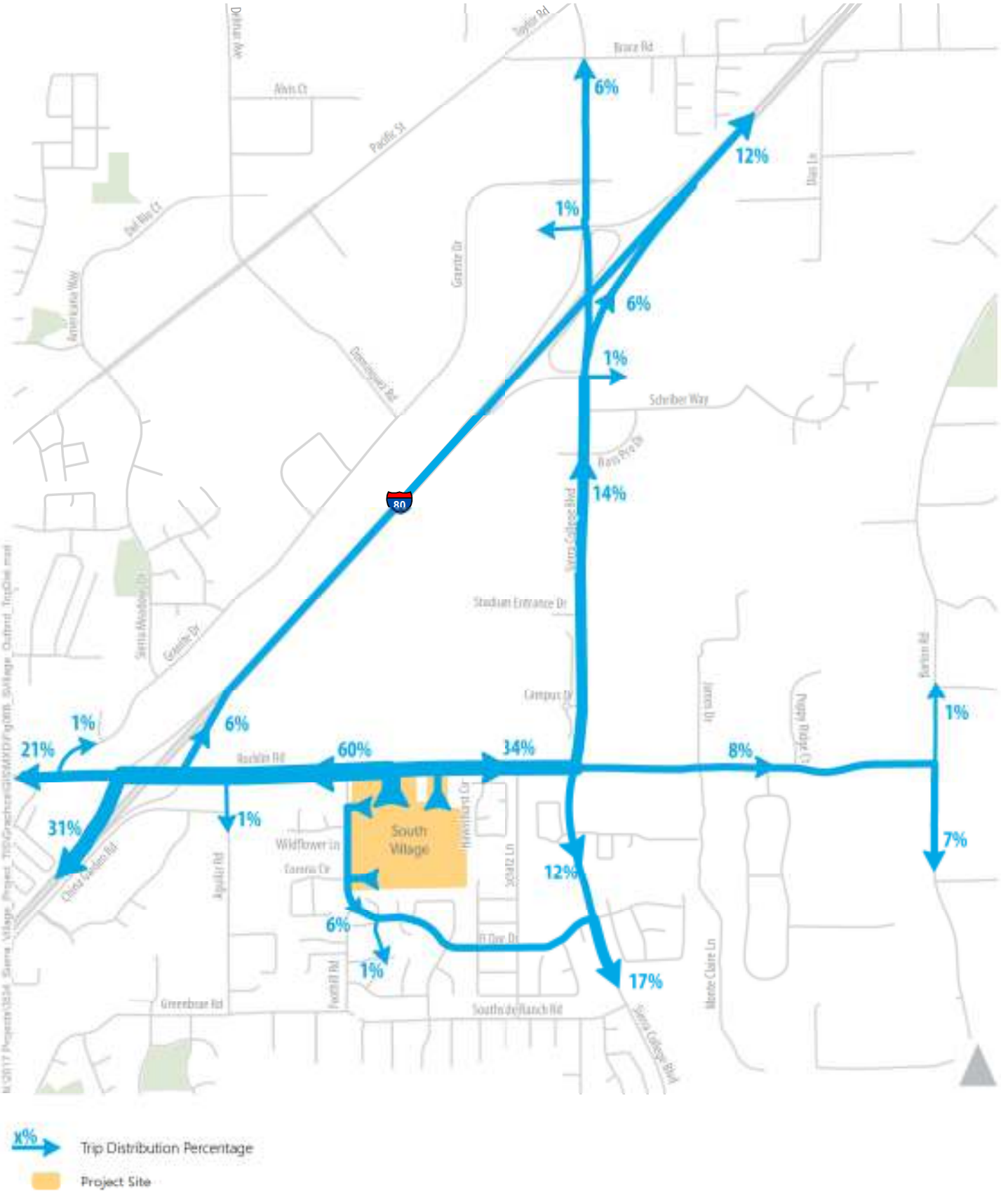


Figure 68

Outbound Trip Distribution - South Village

As shown, the majority of South Village trips would be distributed to/from the west on Rocklin Road toward I-80.

These two figures indicate that 10 percent of inbound trips and five percent of outbound trips would use El Don Drive between the project site and Sierra College Boulevard. Greater usage is expected in the inbound direction due to the lack of direct left-turn movements into the site from Rocklin Road. These motorists would instead need to perform a u-turn at the Rocklin Road/El Don Drive intersection. This segment of El Don Drive features three all-way stop intersections. Under uncongested conditions, it would likely be quicker for motorists to remain on the arterial streets. However, diversion could occur during peak periods when delays increase on the arterial streets.

Project trips were assigned to the study intersections and driveways in accordance with the trip distribution percentages and permitted driveway turning movements. Those trips were then added to the existing volumes to yield the Existing Plus Project volumes shown in **Figure 7**.

SHIFT IN TRIPS FROM SIERRA COLLEGE OVERFLOW LOT

The South Village would eliminate the Sierra College campus overflow parking lot, which consists of 488 spaces accessed from two driveways on El Don Drive. Usage of this driveway fluctuates depending on the time of the year. During peak campus parking demands, this lot can be nearly full. But as overall parking demand wanes toward the end of the school semester, parking occupancy in this lot drops. Additionally, it is noted that this lot is used most often for two strategic purposes. Some students consider it an effective option for avoiding otherwise congested conditions when afternoon classes conclude. Other students consider it as a reliable source of parking if arriving to the campus later in the morning. Therefore, this lot tends to fill slightly later in the morning than the on-campus lots. Based in the 2018 counts, between 10 and 20 vehicles per hour during the AM and PM peak hours were observed entering/exiting the lot.

A new 1,500 space parking structure is under construction and will be open upon the return of school in Fall 2021. This structure is located on the north end of campus (i.e., accessed from Stadium Drive off Sierra College Boulevard). With construction of the South Village, it is assumed that there will be a displacement of trips away from the overflow lot to the new parking garage. The traffic assignments under existing plus project conditions reflect this displacement of trips.

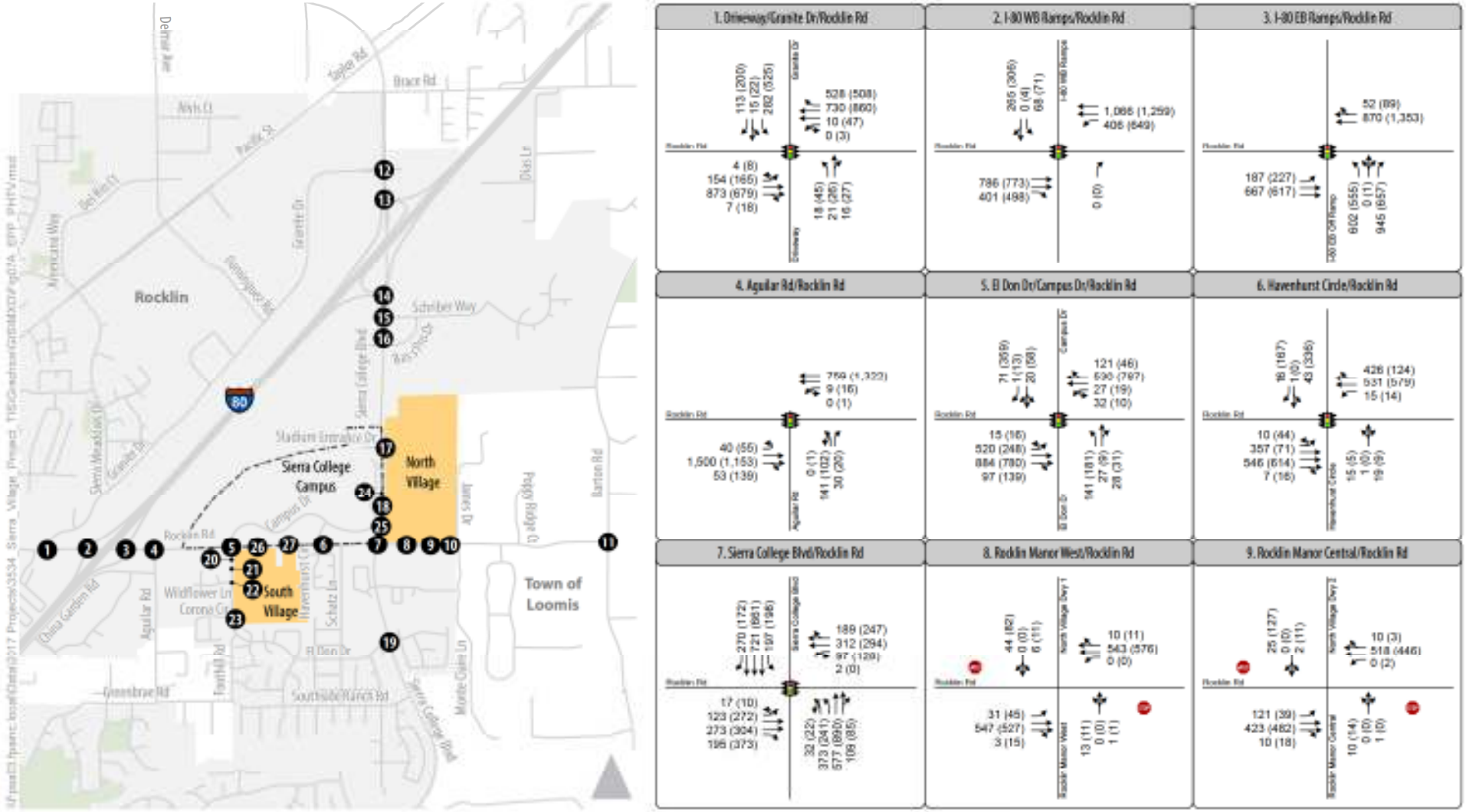


Figure 7A

Peak Hour Traffic Volumes and Lane Configurations - Existing Plus Project Conditions

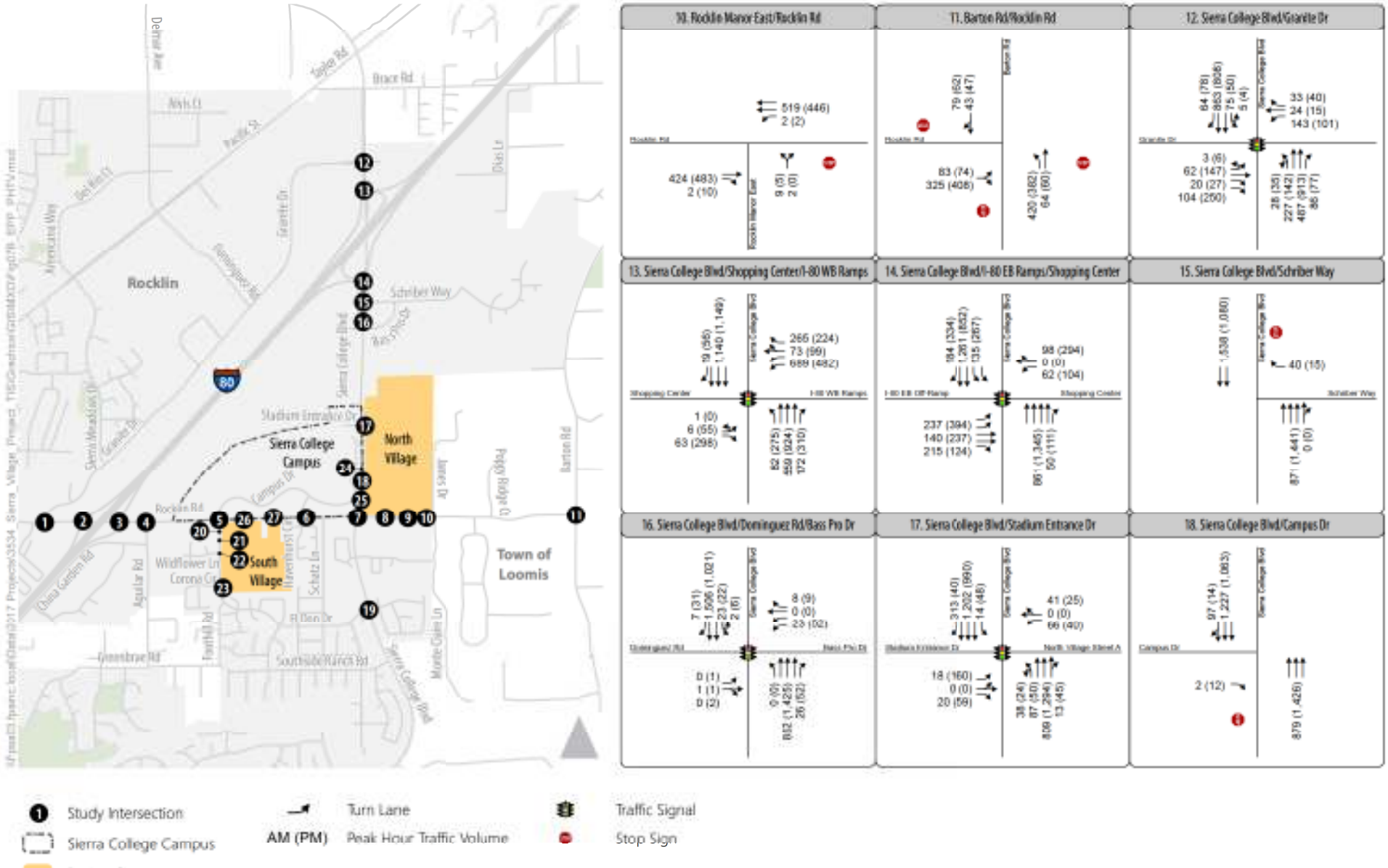


Figure 7B

Peak Hour Traffic Volumes and Lane Configurations - Existing Plus Project Conditions

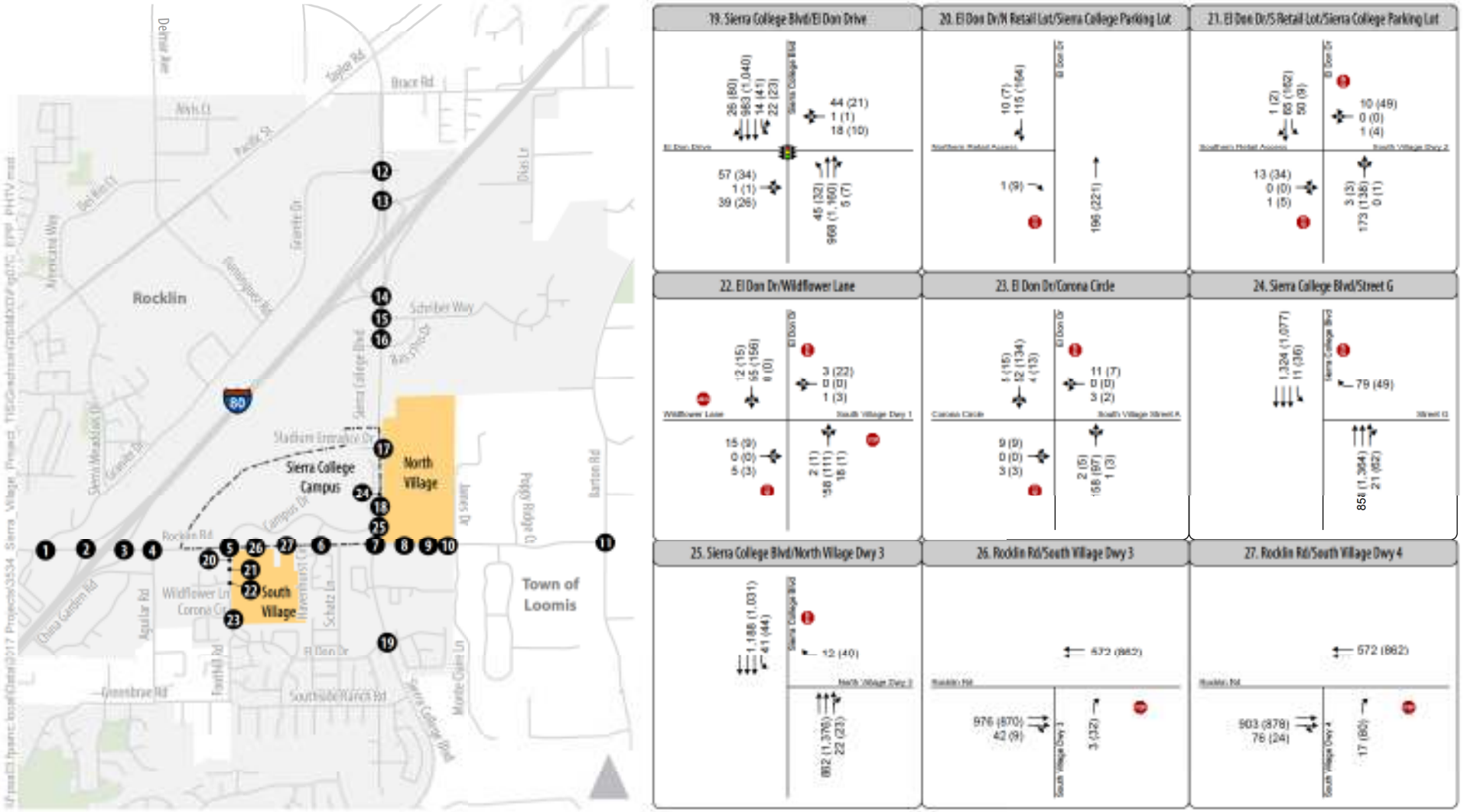


Figure 7C

Peak Hour Traffic Volumes and Lane Configurations - Existing Plus Project Conditions

VEHICLE MILES TRAVELED (VMT)

Table 8 displays the project's total VMT, disaggregated for the North Village and South Village. Values are shown for both baseline and cumulative conditions for all land uses. As shown, under baseline conditions, about 70 percent of the project's VMT is generated by the North Village, which is to be expected given its larger vehicle trip generation.

TABLE 8: NORTH AND SOUTH VILLAGE VMT

Village	Baseline [1]	Cumulative [2]
North	51,450	41,500
South [3]	19,950	19,650
Total	**71,400**	**61,150**

Notes
[1] Derived from City of Rocklin base year travel demand model.
[2] Derived from City of Rocklin cumulative year travel demand model.
[3] Multi-family senior affordable housing not included as a land use category in the City's travel demand model. For total VMT estimation purposes, this land use was estimated to generate 6,900 VMT under baseline conditions and 6,400 VMT under cumulative conditions. These estimates are derived from this use's expected daily trip generation and length of trips.
Values rounded to the nearest fifty VMT.
Source: Fehr & Peers, 2021.

The City's travel demand model was used to model the effects of widening to add a third travel lane on northbound Sierra College Boulevard and a second travel lane on westbound Rocklin Road along the project frontage, consistent with the City of Rocklin General Plan Circulation Element. The results are shown in **Table 9**.

TABLE 9: INDUCED TRAVEL (VMT) CAUSED BY ROADWAY WIDENING

Roadway Widening	Induced Travel (VMT) [1]
Approximate 2,000 foot widening of Sierra College Boulevard to add a third northbound travel lane	3,000 VMT
Approximate 1,300 foot widening of Rocklin Road to add a second westbound travel lane	

Notes:
[1] Derived from City of Rocklin base year travel demand model based on the total VMT generated in the study area without and with the roadway widenings.
Values rounded to the nearest one hundred VMT.
Source: Fehr & Peers, 2021.

Table 10 displays the average VMT per DU or KSF for the North and South Village proposed land uses. This table indicates the following:

- VMT per DU is slightly more efficient in the South Village versus North Village. This may be due to its closer location to I-80 for motorists traveling in the predominate direction to/from the west.
- VMT decreases between baseline and cumulative conditions for the residential land uses due to the introduction of more complementary retail and office uses under the cumulative setting. This causes a redistribution of trip origins and destinations, effectively decreasing home-based trip lengths.

TABLE 10: NORTH AND SOUTH VILLAGE AVERAGE VMT PER DU AND KSF

Village	Land Use	Quantity	Measurement of VMT	Average VMT	
				Baseline [1]	Cumulative [2]
North	Single-Family	317 units	VMT/du	69.7	53.6
	Multi-Family	378 units	VMT/du	51.2	39.2
	Retail	45 ksf	VMT/ksf	N / A [3]	
South	Single-Family	25 units	VMT/du	57.9	53.5
	Affordable Senior Multi-Family [3]	195 units	VMT/du	N / A [3]	
	Office	52.5 ksf	VMT/ksf	106.8	110.2
	Medical-Office	22.5 ksf	VMT/ksf	197.5	202.8

Notes:
[1] Derived from City of Rocklin base year travel demand model.
[2] Derived from City of Rocklin cumulative year travel demand model.
[3] N / A = Not Applicable because retail and affordable housing are presumed to cause a less-than-significant impact (refer to Chapter VI).
Source: Fehr & Peers, 2021.

EXISTING PLUS PROJECT INTERSECTION LEVELS OF SERVICE

Table 11 displays intersection LOS and delay under existing plus project conditions. This scenario assumes full buildout of both the North and South Villages. Technical calculations are provided in Appendix C. Aside from project access improvements, the existing plus project analysis does not assume any other off-site capacity improvements as no such improvements were proposed as part of the access plan (i.e., lane configurations at Sierra College Boulevard/Rocklin Road intersection are unchanged). Chapter VI evaluates what improvements may be required at this intersection and others to accommodate the project.

TABLE 11: PEAK HOUR INTERSECTION LEVEL OF SERVICE – EXISTING PLUS PROJECT CONDITIONS

Intersection	Control	Operating Goal [1]	Peak Hour	Existing Conditions		Existing Plus Project Conditions	
				Average Delay (secs) [2]	LOS [2]	Average Delay (secs) [2]	LOS [2]
1. Rocklin Rd/Granite Dr	Signal	C	AM	17	B	19	B
			PM	30	C	30	C
2. Rocklin Rd/I-80 WB Ramps	Signal	C	AM	20	C	24	C
			PM	28	C	34	C
3. Rocklin Rd/I-80 EB Ramps	Signal	C	AM	28	C	29	C
			PM	43	D	46	D
4. Rocklin Rd/Aguilar Rd	Signal	C	AM	9	A	11	B
			PM	23	C	100	F
5. Rocklin Rd/El Don Dr	Signal	C	AM	31	C	56	E
			PM	30	C	178	F
6. Rocklin Rd/Havenhurst Circle	Signal	C	AM	23	C	23	C
			PM	14	B	60	E
7. Rocklin Rd/Sierra College Blvd	Signal	C	AM	39	D	46	D
			PM	36	D	78	E
8. Rocklin Rd/Rocklin Manor West	TWSC	- [4]	AM	2 (12)	A (B)	3 (19)	A (C)
			PM	2 (8)	A (A)	3 (25)	A (D)
9. Rocklin Rd/Rocklin Manor Central	TWSC	- [4]	AM	1 (10)	A (A)	2 (17)	A (C)
			PM	1 (11)	A (B)	2 (13)	A (B)
10. Rocklin Rd/Rocklin Manor East	TWSC	- [4]	AM	2 (9)	A (B)	2 (14)	A (C)
			PM	1 (11)	A (B)	1 (4)	A (A)
11. Rocklin Rd/Barton Rd	AWSC	C	AM	10	B	11	B
			PM	9	A	11	B
12. Sierra College Blvd/Granite Dr	Signal	C	AM	24	C	22	C
			PM	21	C	22	C
13. Sierra College Blvd/I-80 WB Ramps	Signal	C	AM	17	B	17	B
			PM	22	C	22	C
14. Sierra College Blvd/I-80 EB Ramps	Signal	C	AM	19	B	19	B
			PM	23	C	24	C
15. Sierra College Blvd/Schriber Way	TWSC [3]	C	AM	3 (6)	A (A)	3 (8)	A (A)
			PM	2 (10)	A (A)	2 (22)	A (C)
16. Sierra College Blvd/Bass Pro Dr	Signal	C	AM	6	A	6	A
			PM	9	A	10	A
17. Sierra College Blvd/Stadium Dr	Signal	C	AM	8	A	14	B
			PM	11	B	17	B
18. Sierra College Blvd/Campus Dr	TWSC	- [4]	AM	4 (13)	A (B)	3 (5)	A (A)
			PM	4 (7)	A (A)	2 (5)	A (A)
19. Sierra College Blvd/El Don Drive	Signal	C	AM	12	B	13	B

TABLE 11: PEAK HOUR INTERSECTION LEVEL OF SERVICE – EXISTING PLUS PROJECT CONDITIONS

Intersection	Control	Operating Goal [1]	Peak Hour	Existing Conditions		Existing Plus Project Conditions	
				Average Delay (secs) [2]	LOS [2]	Average Delay (secs) [2]	LOS [2]
			PM	8	A	8	A
20. El Don Dr/N. Retail Access/SC Lot	TWSC	- [4]	AM	1 (1)	A (A)	3 (4)	A (A)
			PM	2 (3)	A (A)	29 (53)	D (F)
21. El Don Dr/S. Retail Access/SC Lot	TWSC	- [4]	AM	1 (5)	A (A)	2 (6)	A (A)
			PM	2 (6)	A (A)	38 (163)	E (F)
22. El Don Dr/Wildflower Lane	TWSC	C	AM	5	A	5	A
			PM	6	A	10	B
23. El Don Dr/Corona Circle	TWSC	C	AM	1 (4)	A (A)	1 (4)	A (A)
			PM	1 (5)	A (A)	1 (5)	A (A)
24. Sierra College Blvd/Street G	TWSC	- [4]	AM	Does Not Exist		3 (9)	A (A)
			PM			3 (17)	A (C)
25. Sierra College Blvd/North Village Dwy 3	TWSC	- [4]	AM	Does Not Exist		2 (7)	A (A)
			PM			3 (17)	A (C)
26. Rocklin Rd/South Village Dwy 3	TWSC	- [4]	AM	Does Not Exist		1 (2)	A (A)
			PM			66 (151)	F (F)
27. Rocklin Rd/South Village Dwy 4	AWSC	- [4]	AM	Does Not Exist		2 (9)	A (A)
			PM			31 (71)	D (F)

Notes:

1. Per each agency's LOS policy, standards, or direction.
2. All intersections analyzed using SimTraffic microsimulation model. For signalized intersections, average intersection delay is reported for all approaches. For side-street stop controlled intersections, the delay and LOS for the most-delayed individual movement is shown in parentheses next to the average intersection delay and LOS. All results are rounded to the nearest second.
3. Intersection was stop-controlled at the time of the counts, but has since been signalized.
4. LOS Policy does not apply to unsignalized driveways.

Shaded cells represent deficient operations when compared to operating goal. At intersections, operating goal only applies to PM peak hour conditions.

TWSC = Two-way stop control. AWSC = All-way stop control.

Source: Fehr & Peers, 2021.

The project would cause four City-maintained intersections along Rocklin Road to operate at LOS E or F during the PM peak hour. The project would add approximately 230 westbound through vehicles to the Rocklin Road/I-80 EB Ramps intersection. The majority of this traffic would be positioned in the inside through lane in anticipation of accessing the left-turn lane to merge onto westbound I-80. Review of the SimTraffic model output shows that the westbourd left-turn lane onto I-80 (which currently serves 520 vehicles) would only be able to accommodate an additional 45 vehicles during the PM peak hour. The remaining 90 vehicles would be present in the westbound queue on Rocklin Road at the end of the PM

peak hour. This phenomenon is illustrated in image 1. The queue spillback effects would extend beyond El Don Drive, adversely affecting Havenhurst Circle and unsignalized driveways on Rocklin Road and El Don Drive.

The project would add a combined 42 vehicle trips during the AM and PM peak hours to the segment of El Don Drive between the South Village and Sierra College Boulevard. This would represent a 14 percent increase over the existing traffic volume.



Image 1: SimTraffic screenshot of PM peak hour queuing on Rocklin Road.

At the request of the City, a phasing analysis was performed to determine what improvements, if any, may be triggered at the Sierra College Boulevard/Rocklin Road intersection with development of the northerly component of the North Village (i.e., 317 single-family units and 108 multi-family units). The results are shown in **Table 12** and indicate that during the PM peak hour, LOS D operations would be maintained, though delays would increase from 36 to 47 seconds per vehicle (although the City's LOS policy is C, the LOS D operations exist without the project). A similar analysis under existing plus approved projects conditions is presented in Chapter IV. Based on the results of both analyses, recommendations are offered in Chapter IV.

The Circular 212 results shown in Appendix A indicate that all signalized City-maintained study intersections would operate at LOS C or better under existing plus project conditions. The HCM and Circular 212 results are known to generate different results for a number of reasons. Whereas HCM reflects conditions during the busiest 15-minutes of the peak hour, Circular 212 results represent hourly conditions. Other factors that explain differences relate to the more operational nature of the HCM methods versus the planning-level nature of Circular 212. HCM results are considered more accurate.

TABLE 12: PEAK HOUR INTERSECTION LEVEL OF SERVICE – EXISTING PLUS NORTH VILLAGE RESIDENTIAL ONLY CONDITIONS

Intersection	Control	Operating Goal [1]	Peak Hour	Existing Conditions		Existing Plus North Village Residential Only Conditions	
				Average Delay (secs) [2]	LOS [2]	Average Delay (secs) [2]	LOS [2]
7. Rocklin Rd/Sierra College Blvd [3]	Signal	C	AM	39	D	42	D
			PM	36	D	47	D

Notes:

1. Per each agency's LOS policy, standards, or direction.
2. All intersections analyzed using SimTraffic microsimulation model. For signalized intersections, average intersection delay is reported for all approaches. For side-street stop controlled intersections, the delay and LOS for the most-delayed individual movement is shown in parentheses next to the average intersection delay and LOS. All results are rounded to the nearest second.
3. Analysis assumed no improvements made at the study intersection under "plus project" conditions.

Shaded cells represent deficient operations when compared to operating goal. At intersections, operating goal only applies to PM peak hour conditions.

Source: Fehr & Peers, 2021.

Table 13 displays the existing plus project weekday AM and PM peak hour 95th percentile queue lengths at the off-ramps at the I-80/Rocklin Road and I-80/Sierra College Boulevard interchanges. As shown, the 95th percentile queue would not exceed the available storage at any of the four study off-ramps under existing plus project conditions.

TABLE 13: I-80 FREEWAY OFF-RAMP QUEUES – EXISTING PLUS PROJECT CONDITIONS

Off-Ramp	Available Storage [2]	95th Percentile Queue (ft.) [1]			
		Existing Conditions		Existing Plus Project Conditions	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
I-80 westbound off-ramp at Rocklin Road	1,175 ft.	275 ft.	350 ft.	275 ft.	350 ft.
I-80 eastbound off-ramp at Rocklin Road [3]	1,150 ft.	425 ft.	500 ft.	450 ft.	475 ft.
I-80 westbound off-ramp at Sierra College Boulevard [3]	1,300 ft.	275 ft.	250 ft.	350 ft.	275 ft.
I-80 eastbound off-ramp at Sierra College Boulevard	1,300 ft.	200 ft.	275 ft.	300 ft.	275 ft.

NOTES:

[1] Values rounded up to the nearest 25 feet.

[2] Available storage measured from stop bar to freeway off-ramp gore point.

[3] EB I-80 includes an 840-foot auxiliary/deceleration lane in advance of the Rocklin Road off-ramp. WB I-80 includes a 450-foot auxiliary/deceleration lane in advance of the Sierra College Boulevard off-ramp. These values are in addition to the storage shown above.

Shaded cells represent deficient operations because queue length exceeds available off-ramp storage.

SOURCE: FEHR & PEERS, 2021.

Project trips would use the following freeway on-ramps within the study area:

- I-80/Sierra College Boulevard eastbound diagonal on-ramp
- I-80/Sierra College Boulevard westbound loop on-ramp
- I-80/Rocklin eastbound diagonal on-ramp
- I-80/Rocklin westbound diagonal on-ramp

Of these ramps, only the I-80/Sierra College Boulevard westbound loop on-ramp currently operates with ramp metering. This ramp meter, which features one metered lane and one High Occupancy Vehicle (HOV) unmetered lane, became operational in Spring 2021. The ramp meter signal timing is coordinated with travel conditions on westbound I-80. Observations were made at this on-ramp during weekday AM and PM peak hours in April 2021. During the PM peak hour, the ramp meter was not operational because conditions on westbound I-80 were free-flow. During the AM peak hour, the ramp meter was operational. Based on the amount of time between successive green lights (which varied), the ramp meter flow rate was in the range of 400 to 600 vehicles per hour. This on-ramp can store up to 18 vehicles without vehicular queuing onto Sierra College Boulevard. A maximum of four vehicles were observed to be simultaneously queued at this ramp meter during the AM peak hour. The project would add 40 AM peak hour vehicles and 32 PM peak hour vehicles to this movement. This level of traffic represents fewer than one vehicle per minute. Thus, the project would not cause the on-ramp queue to spill back to Sierra College Boulevard. Thus, no modifications to the on-ramp ramp meter are warranted.

IV. EXISTING PLUS APPROVED PROJECTS PLUS PROJECT CONDITIONS

This chapter analyzes the potential impacts of the proposed project under a scenario that considers development of various approved (but not yet constructed) land development projects in the study area.

APPROVED PROJECTS

A list of approved land development projects was identified for inclusion in the "existing plus approved projects" scenario. These projects have either already been approved or are pending approval. Since they had not been constructed at the time of the traffic counts (in Fall 2018), their trips are not reflected in the existing volumes. It is noted that some of the projects (i.e., Rocklin 60, Croftwood Unit 1, etc.) were partly occupied at the time of the traffic counts. Best efforts were undertaken using date-stamped aerial imagery to estimate how many units were unoccupied at the time of the counts.

Table 14 displays the list of approved projects. While this list does not include all approved projects in the City of Rocklin, it does represent those projects whose trips may have an effect on traffic volumes at the study intersections. In total, this list includes over 1,300 dwelling units, 90,000 square feet of new retail and an additional 4,000 students at Sierra College (i.e., about half of its planned expansion under its Facilities Master Plan). This analysis was based on projects that were approved, but not yet constructed as of Spring 2020. The now approved Loomis Costco store to be located north of I-80 and east of Sierra College Boulevard between Granite Drive and Brace Road was not assumed in place because at the time of the analysis, it was not yet approved at the time the technical analysis was performed in Spring 2020. However, it is accounted for in the Cumulative Analysis.

TRAFFIC FORECASTS

The approved projects shown in Table 14 were added to the base year version of the City of Rocklin travel demand model. The model was then run and increases in traffic volumes at the study intersections (caused by the addition of these projects) were calculated. Those increases were then added to the existing traffic volumes to yield the "existing plus approved projects" forecasts, which are shown on **Figure 8**.

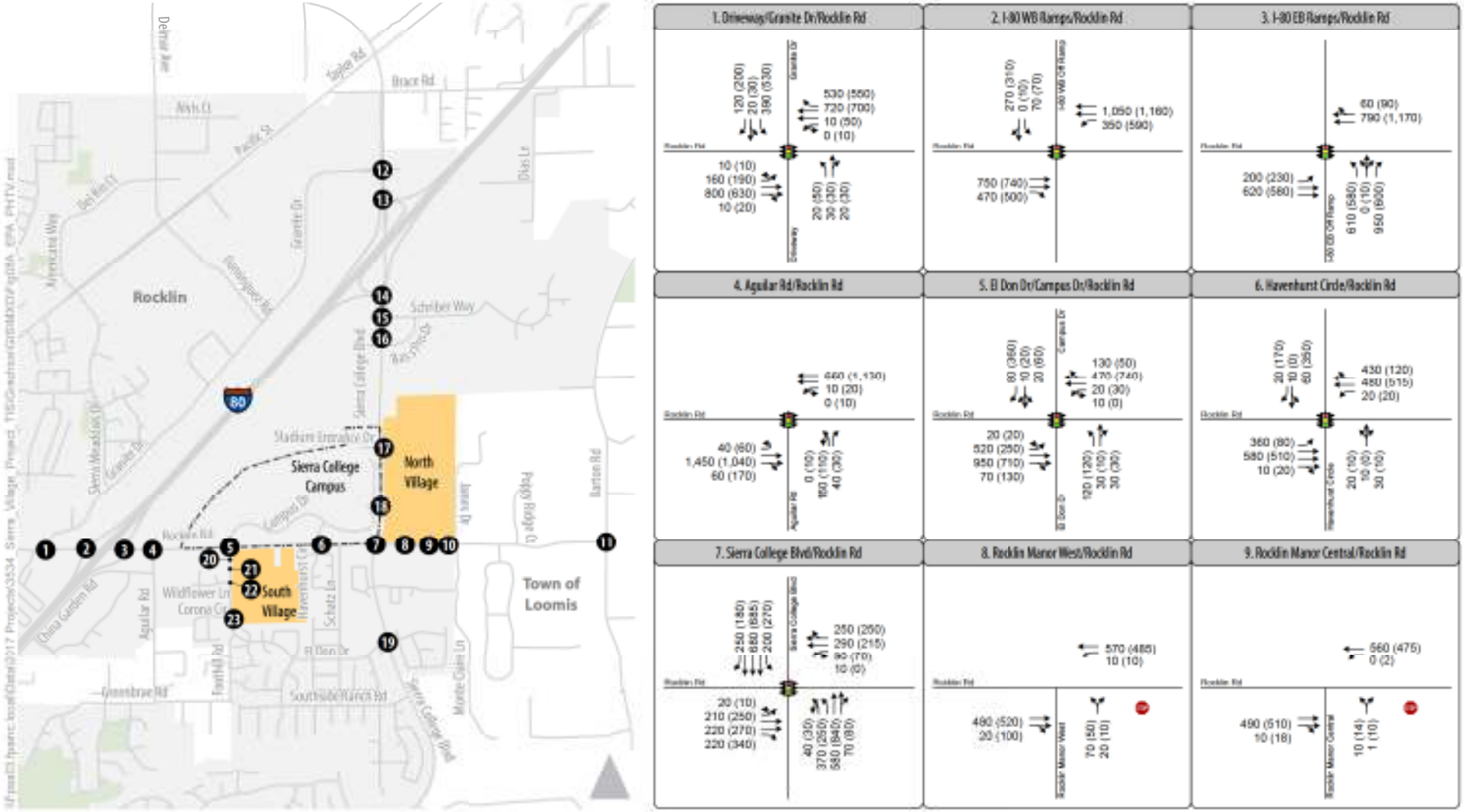


Figure 8A

Peak Hour Traffic Volumes and Lane Configurations - Existing Plus Approved Projects Conditions

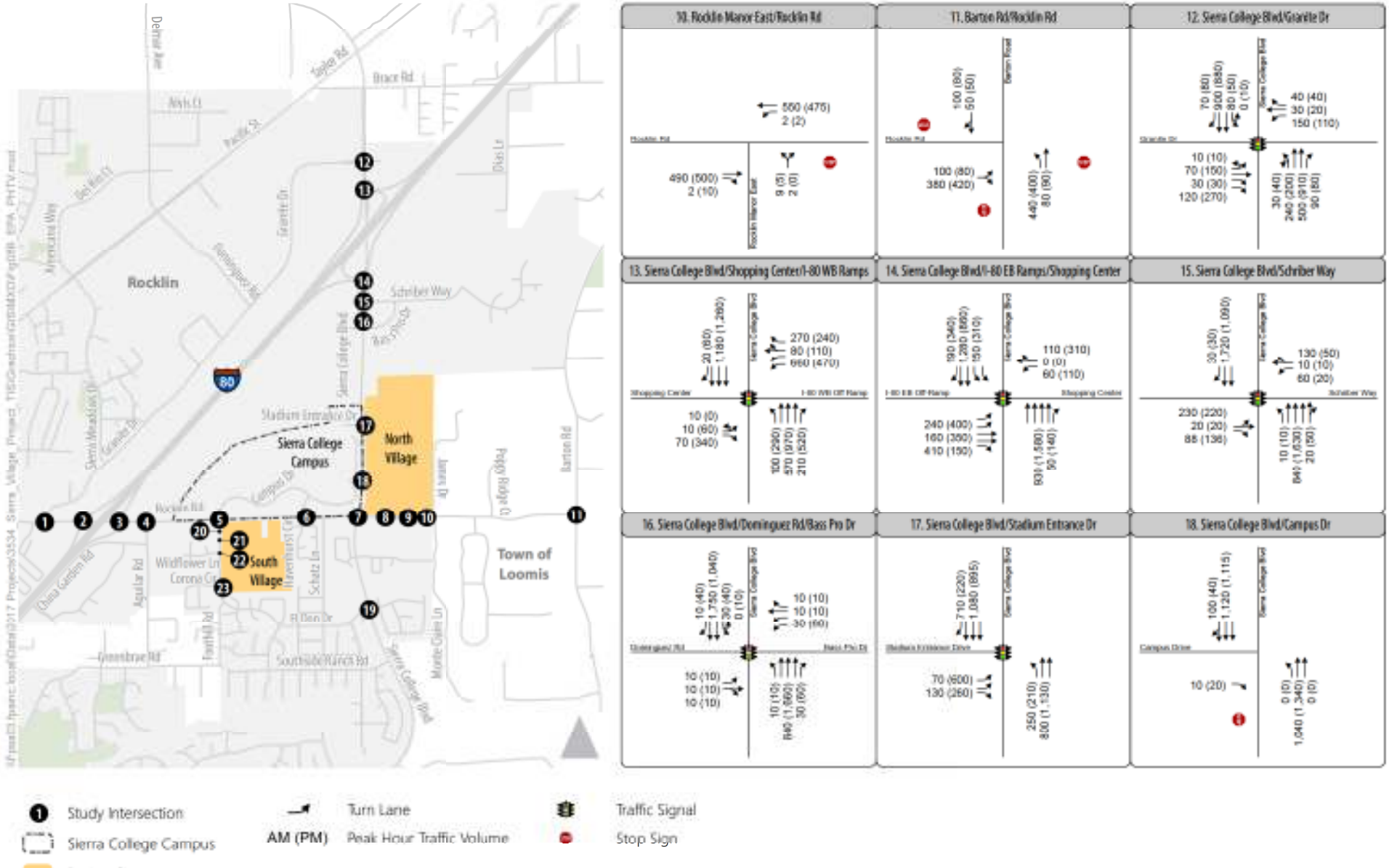


Figure 8B

Peak Hour Traffic Volumes and Lane Configurations - Existing Plus Approved Projects Conditions

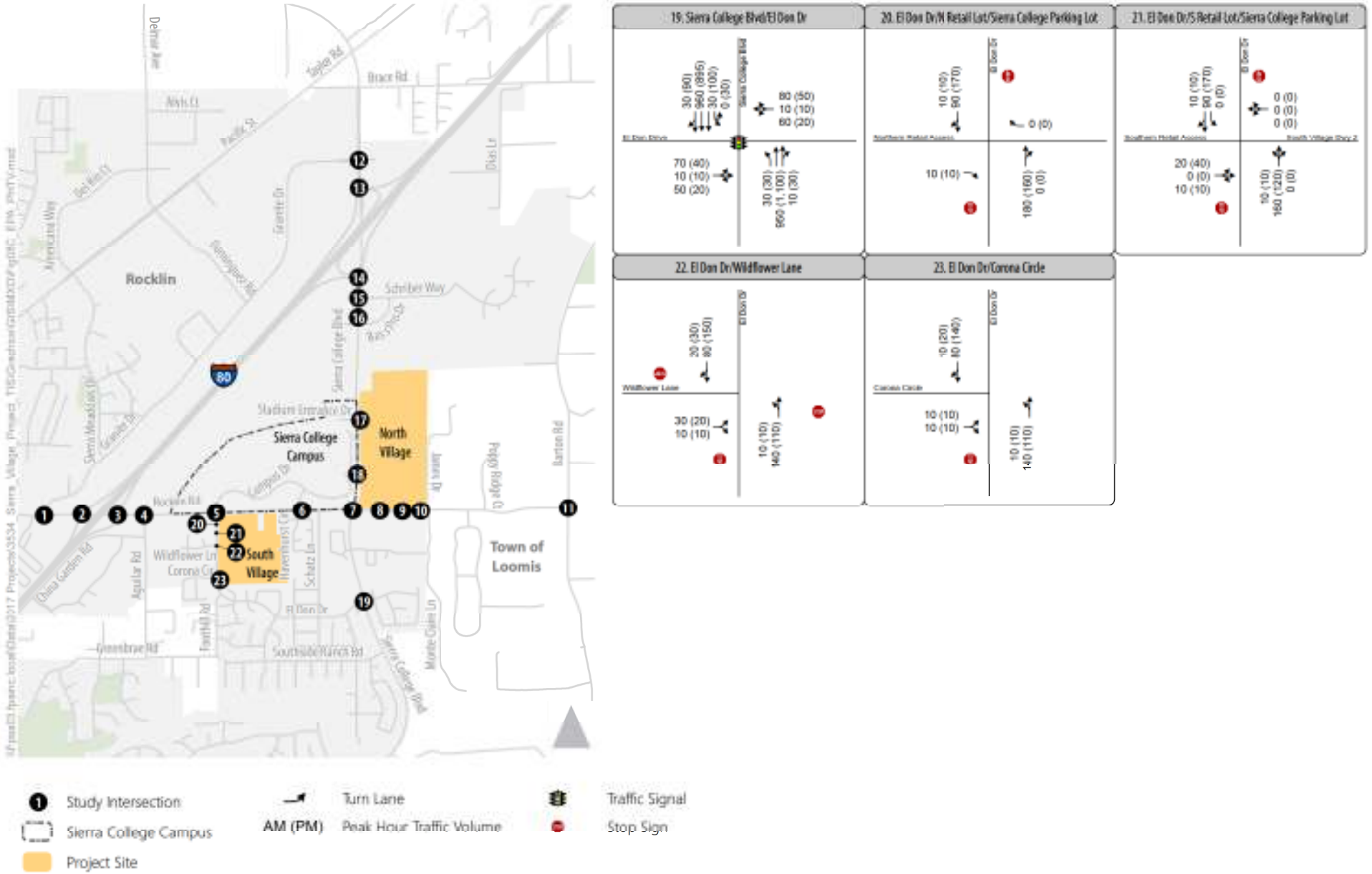


Figure 8C

Peak Hour Traffic Volumes and Lane Configurations - Existing Plus Approved Projects Conditions

TABLE 14: APPROVED PROJECTS LIST

Name [1]	Land Use Type/Quantity [2]	Location
Rocklin Crossings	10 ksf retail	SE quadrant of I-80/Sierra College Blvd.
Rocklin Commons	35 ksf retail	NW quadrant of I-80/Sierra College Blvd.
Granite Dominguez Subdivision	35 sf du	On Granite Drive, west of Dominguez Rd.
Los Cerros Subdivision	115 sf du	On ridge along Hillside Dr.
Rocklin 60	119 sf du	Behind Rocklin Crossings along Schriber Way
Croftwood, Unit 1	20 sf du	East of Schriber Way
Granite Terrace	42 sf du	Behind Rocklin library
Sierra Gateway Apts	195 mf du	SE corner of Rocklin Road/Sierra College Blvd.
Parklands Subdivision	122 sf du	North of Pacific Street west of Del Mar Ave.
The Center at Secret Ravine	12 ksf retail	East of Sierra College south Rocklin Crossings
ZL Rocklin	204 mf du	North of Pacific St, and east of Midas Ave.
Sierra Pine Subdivision	199 sf du	SW of Dominguez Rd and Pacific St.
Rocklin Station	33 ksf retail	NW of Sierra College Blvd/Schriber Way
Oak Vista Subdivision	63 sf du	East of Schriber Way
Croftwood, Unit 2	63 sf du	East of Schriber Way
Granite Bluff Subdivision	75 sf du	SE of Rocklin Rd/Aguilar Rd
Sierra College FMP [1]	4,000 students	NW of Sierra College Blvd/Rocklin Rd

NOTES:
[1] This list was based on projects that were approved, but not yet constructed as of Fall 2018.
[2] Analysis assumes a net increase of about 4,000 students enrolled at the Sierra College campus. This is 50 percent of the total enrollment increase contemplated by its approved Facilities Master Plan. Analysis also assumes the opening of a new 1,500-space parking garage on the north end of the campus.
sf = Single-Family. mf = Multi-Family. ksf = Thousand Square Feet. du= dwelling unit.
SOURCE: FEHR & PEERS, 2021.

Project trips were added to the existing plus approved projects forecasts using the same trip generation and distribution analysis procedures described previously. The resulting "existing plus approved projects plus project" traffic forecasts are shown on **Figure 9.**

INTERSECTION OPERATIONS

Table 15 displays the average delay and LOS at the study intersections under existing plus approved projects conditions, without and with the proposed project. Refer to Appendix C for technical calculations.

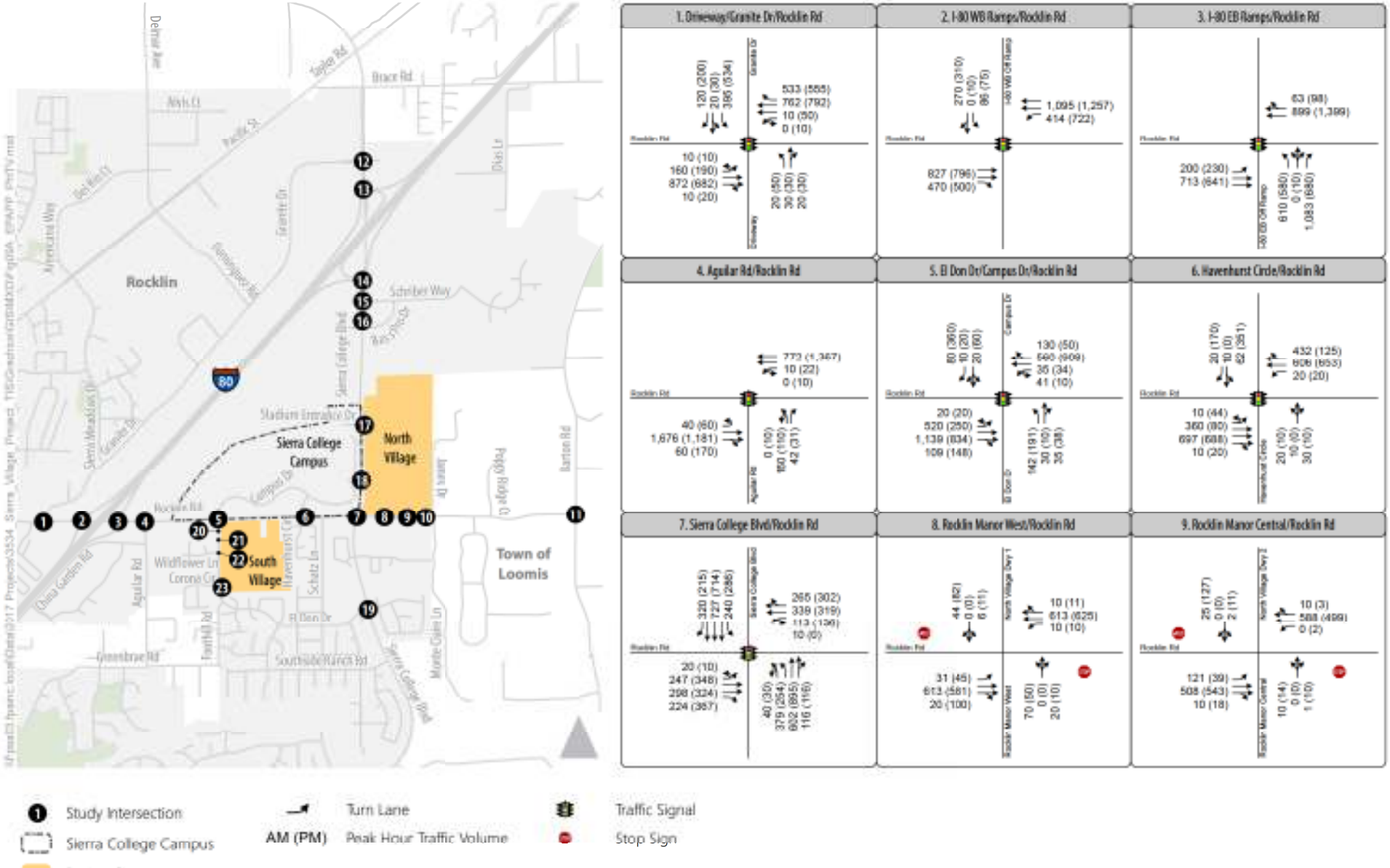


Figure 9A

Peak Hour Traffic Volumes and Lane Configurations - Existing Plus Approved Projects Plus Project Conditions

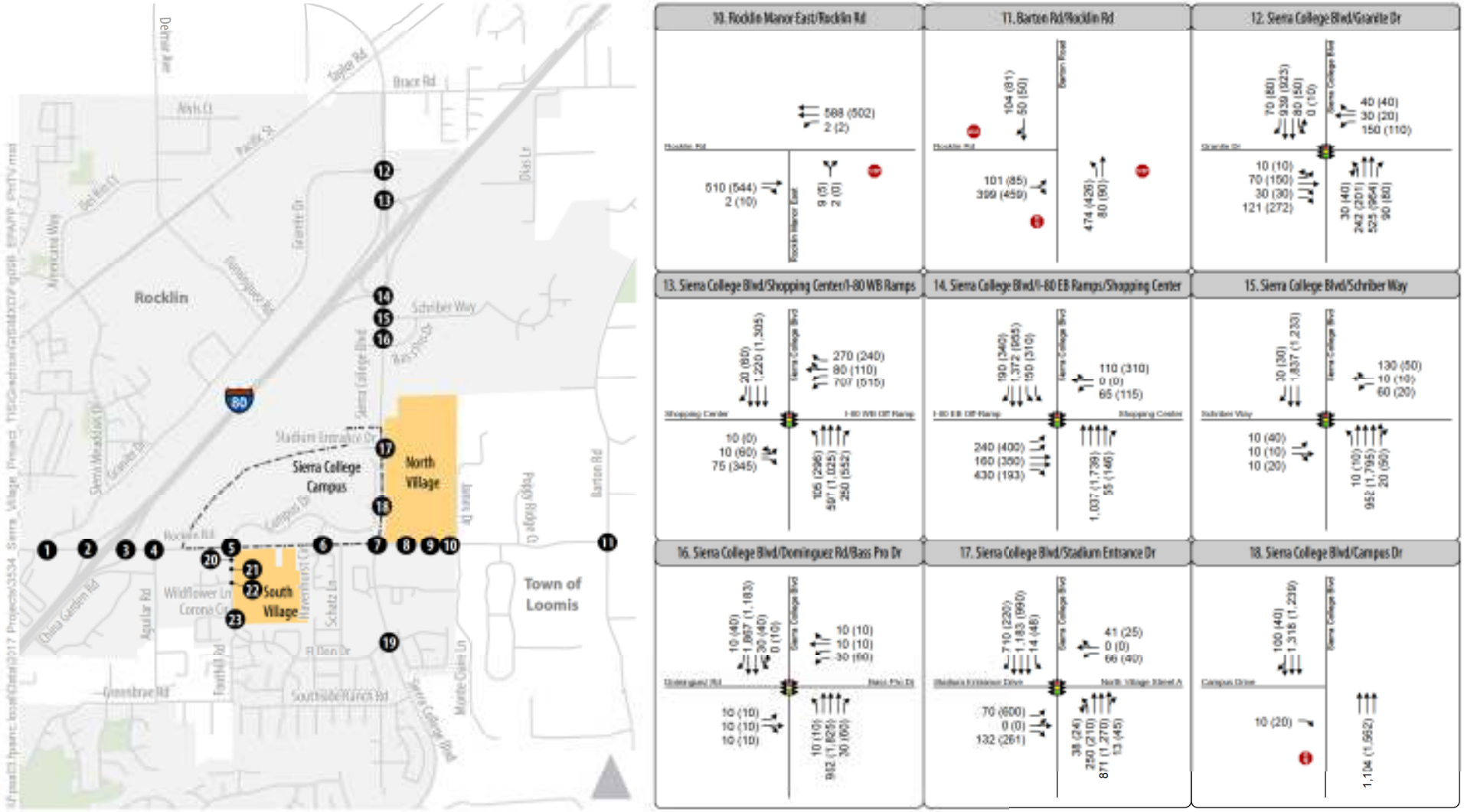
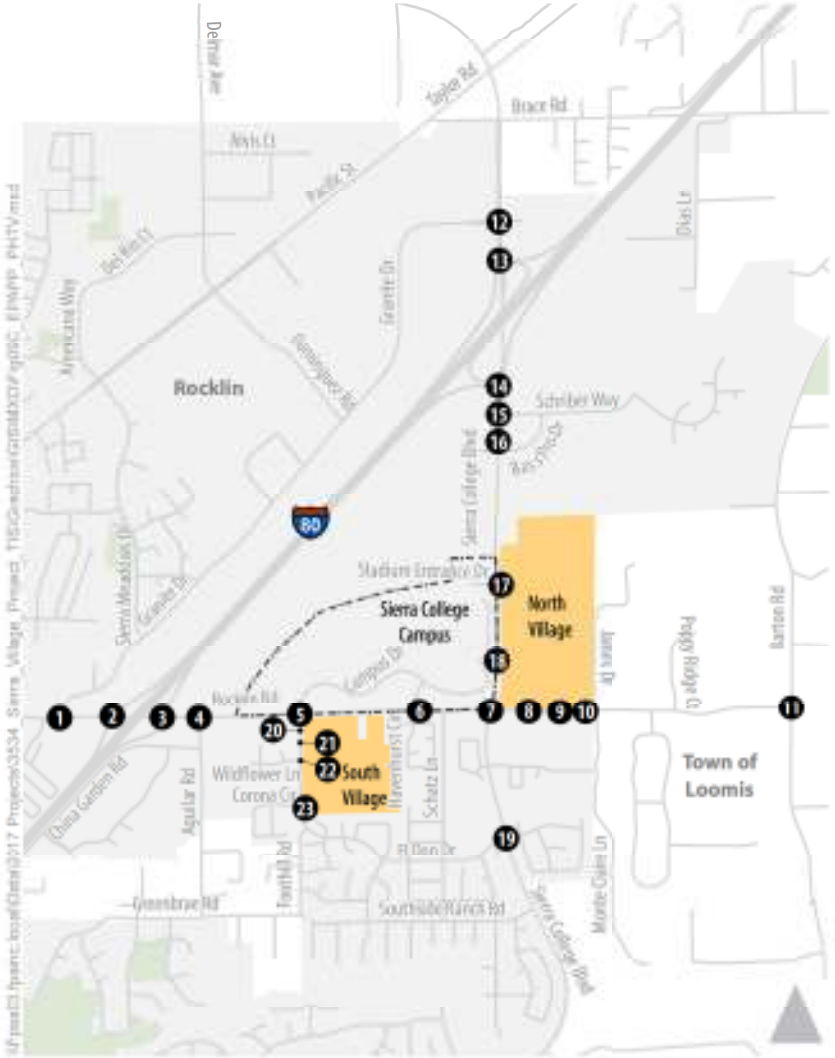
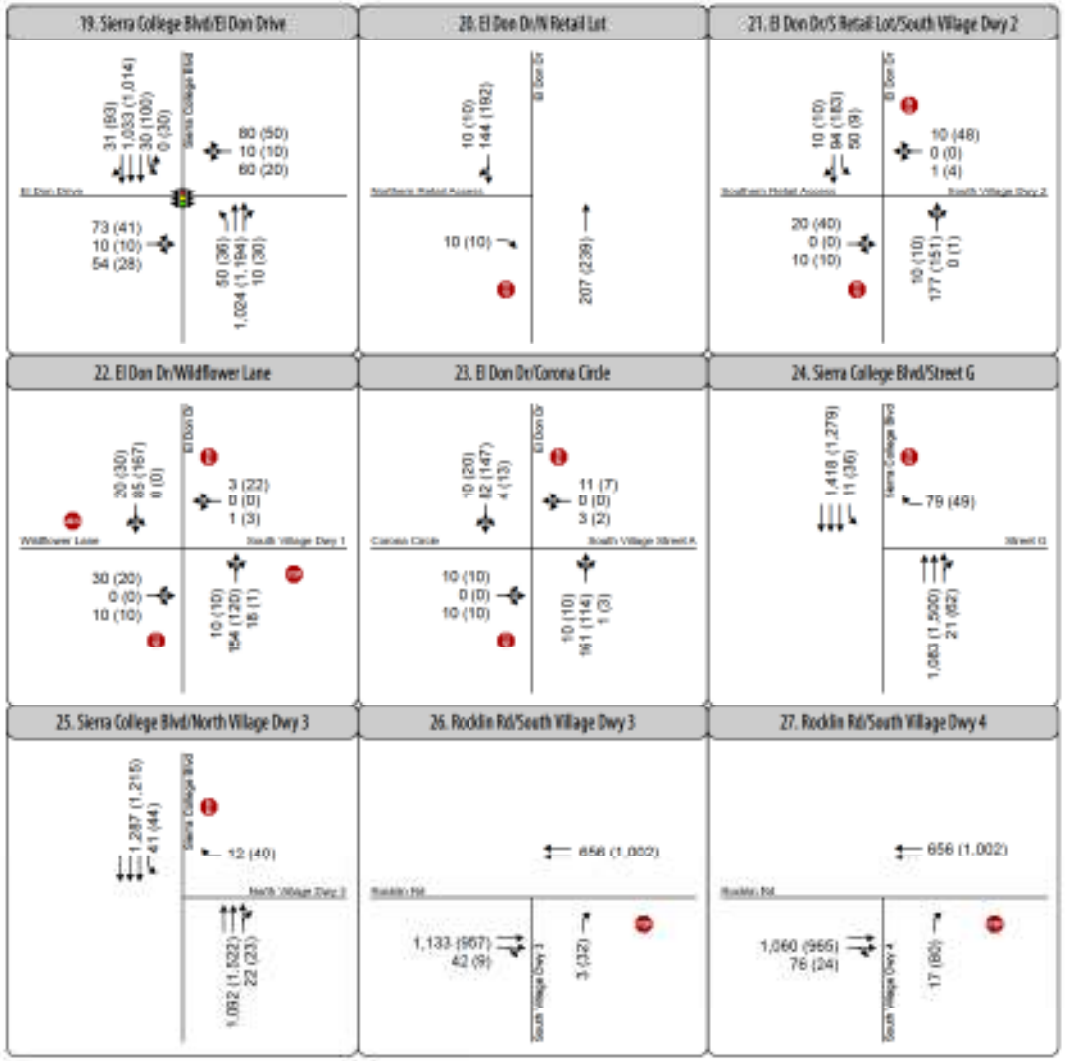


Figure 9B

Peak Hour Traffic Volumes and Lane Configurations - Existing Plus Approved Projects Plus Project Conditions





1 Study Intersection
Sierra College Campus
Project Site
Turn Lane
AM (PM) Peak Hour Traffic Volume
Traffic Signal
Stop Sign

Figure 9C

Peak Hour Traffic Volumes and Lane Configurations - Existing Plus Approved Projects Plus Project Conditions

TABLE 15: PEAK HOUR INTERSECTION LEVEL OF SERVICE – EXISTING PLUS APPROVED PROJECTS PLUS PROJECT CONDITIONS

Intersection	Control	Operating Goal [1]	Peak Hour	Existing Plus Approved Projects Conditions		Existing Plus Approved Projects Plus Project Conditions	
				Average Delay (secs) [2]	LOS [2]	Average Delay (secs) [2]	LOS [2]
1. Rocklin Rd/Granite Dr	Signal	C	AM	24	C	24	C
			PM	32	C	66	E
2. Rocklin Rd/I-80 WB Ramps	Signal	C	AM	25	C	25	C
			PM	42	D	62	E
3. Rocklin Rd/I-80 EB Ramps	Signal	C	AM	29	C	31	C
			PM	40	D	46	D
4. Rocklin Rd/Aguilar Rd	Signal	C	AM	10	A	12	B
			PM	26	C	63	E
5. Rocklin Rd/El Don Dr	Signal	C	AM	40	D	53	D
			PM	35	D	152	F
6. Rocklin Rd/Havenhurst Circle	Signal	C	AM	22	C	25	C
			PM	19	B	47	D
7. Rocklin Rd/Sierra College Blvd	Signal	C	AM	48	D	63	E
			PM	50	D	98	F
8. Rocklin Rd/Rocklin Manor West	TWSC	- [3]	AM	6 (33)	A (D)	10 (69)	A (F)
			PM	2 (17)	A (C)	11 (84)	B (F)
9. Rocklin Rd/Rocklin Manor Central	TWSC	- [3]	AM	2 (20)	A (C)	2 (21)	A (A)
			PM	1 (14)	A (B)	2 (17)	A (C)
10. Rocklin Rd/Rocklin Manor East	TWSC	- [3]	AM	2 (13)	A (B)	2 (15)	A (B)
			PM	2 (13)	A (B)	2 (10)	A (A)
11. Rocklin Rd/Barton Rd	AWSC	C	AM	15	B	13	B
			PM	11	B	12	B
12. Sierra College Blvd/Granite Dr	Signal	C	AM	26	C	27	C
			PM	28	C	32	C
13. Sierra College Blvd/I-80 WB Ramps	Signal	C	AM	20	C	22	C
			PM	27	C	27	C
14. Sierra College Blvd/I-80 EB Ramps	Signal	C	AM	48	D	72	E
			PM	29	C	27	C
15. Sierra College Blvd/Schriber Way	Signal	C	AM	11	B	11	B
			PM	8	A	9	A
16. Sierra College Blvd/Bass Pro Dr	Signal	C	AM	17	B	18	B
			PM	19	B	21	C
17. Sierra College Blvd/Stadium Dr	Signal	C	AM	15	B	22	C
			PM	26	C	36	D

TABLE 15: PEAK HOUR INTERSECTION LEVEL OF SERVICE – EXISTING PLUS APPROVED PROJECTS PLUS PROJECT CONDITIONS

Intersection	Control	Operating Goal [1]	Peak Hour	Existing Plus Approved Projects Conditions		Existing Plus Approved Projects Plus Project Conditions	
				Average Delay (secs) [2]	LOS [2]	Average Delay (secs) [2]	LOS [2]
18. Sierra College Blvd/Campus Dr	TWSC	- [3]	AM	2 (5)	A (A)	4 (6)	A (A)
			PM	3 (6)	A (A)	5 (9)	A (A)
19. Sierra College Blvd/El Don Drive	Signal	C	AM	15	B	16	B
			PM	12	B	26	C
20. El Don Dr/N. Retail Access/SC Lot	TWSC	- [3]	AM	2 (3)	A (A)	3 (5)	A (A)
			PM	2 (3)	A (A)	24 (47)	C (E)
21. El Don Dr/S. Retail Access/SC Lot	TWSC	- [3]	AM	2 (7)	A (A)	2 (7)	A (A)
			PM	2 (8)	A (A)	36 (120)	E (F)
22. El Don Dr/Wildflower Lane	TWSC	C	AM	5	A	5	A
			PM	6	A	15	C
23. El Don Dr/Corona Circle	TWSC	C	AM	1 (5)	A (A)	1 (4)	A (A)
			PM	1 (5)	A (A)	1 (4)	A (A)
24. Sierra College Blvd/Street G	TWSC	C	AM	Does Not Exist		4 (13)	A (B)
			PM			4 (24)	A (C)
25. Sierra College Blvd/North Village Dwy 3	TWSC	- [3]	AM	Does Not Exist		3 (12)	A (B)
			PM			5 (25)	A (C)
26. Rocklin Rd/South Village Dwy 3	TWSC	- [3]	AM	Does Not Exist		1 (2)	A (A)
			PM			49 (102)	E (F)
27. Rocklin Rd/South Village Dwy 4	AWSC	- [3]	AM	Does Not Exist		2 (11)	A (B)
			PM			22 (44)	C (E)

Notes:

1. Per each agency's LOS policy, standards, or direction.
2. All intersections analyzed using SimTraffic microsimulation model. For signalized intersections, average intersection delay is reported for all approaches. For side-street stop controlled intersections, the delay and LOS for the most-delayed individual movement is shown in parentheses next to the average intersection delay and LOS. All results are rounded to the nearest second.
3. LOS Policy does not apply to unsignalized driveways.

Shaded cells represent deficient operations when compared to operating goal. At intersections, operating goal only applies to PM peak hour conditions.

TWSC = Two-way stop control. AWSC = All-way stop control.

Source: Fehr & Peers, 2021.

As shown, the Rocklin Road/I-80 WB Ramps and Sierra College Boulevard/Rocklin Road intersections would operate deficiently under existing plus approved projects conditions. The addition of project traffic would cause five additional intersections to operate deficiently. All deficient operations would occur during the PM peak hour.

A phasing analysis was performed to determine what improvements, if any, may be needed at the Sierra College Boulevard/Rocklin Road intersection with development of the northerly component of the North Village (i.e., 317 single-family units and 108 multi-family units). The results are shown in **Table 16** and indicate that operations would degrade from LOS D to E during the PM peak hour. This decrease is caused by project-added traffic to the following critical turning movements: eastbound left-turn, southbound left-turn, and northbound through movements. Fehr & Peers recommends the following to offset the degraded condition caused by the project and to restore operations to an acceptable LOS C condition:

- The northerly residential component of the North Village project should be conditioned to construct the following improvements at the Sierra College Boulevard/Rocklin Road intersection:
    - Second eastbound left-turn lane
    - Third northbound through lane
    - Dedicated northbound right-turn lane
    - Second southbound left-turn lane

TABLE 16: PEAK HOUR INTERSECTION LEVEL OF SERVICE – EXISTING PLUS APPROVED PROJECTS PLUS NORTH VILLAGE RESIDENTIAL ONLY CONDITIONS

Intersection	Control	Operating Goal [1]	Peak Hour	Existing Plus Approved Projects No Project Conditions		Existing Plus Approved Projects Plus North Village Residential Only Conditions	
				Average Delay (secs) [2]	LOS [2]	Average Delay (secs) [2]	LOS [2]
7. Rocklin Rd/Sierra College Blvd [3]	Signal	C	AM	48	D	55	D
			PM	50	D	72	E

Notes:

1. Per each agency's LOS policy, standards, or direction.
2. All intersections analyzed using SimTraffic microsimulation model. For signalized intersections, average intersection delay is reported for all approaches. For side-street stop controlled intersections, the delay and LOS for the most-delayed individual movement is shown in parentheses next to the average intersection delay and LOS. All results are rounded to the nearest second.
3. Analysis assumed no improvements made at the study intersection under "plus project" conditions.

Shaded cells represent deficient operations when compared to operating goal. At intersections, operating goal only applies to PM peak hour conditions.

Source: Fehr & Peers, 2021.

The Circular 212 results shown in Appendix A indicate that all signalized City-maintained study intersections would operate at LOS C or better under existing plus approved projects plus project conditions with the exception of Sierra College Boulevard/Rocklin Road whose PM peak hour operations would degrade from LOS D (without project) to LOS E (with project), with a 0.136 increase v/c ratio. However, the operational enhancements described in Chapter VII would result in operations improving to LOS B.

V. CUMULATIVE CONDITIONS

This chapter analyzes the cumulative impacts of the proposed project on the transportation system. A No Project scenario was developed, which assumes both sites remain in their current state. The Plus Project scenario assumes development of each site as proposed. Refer to Appendix D for all technical calculations.

LAND USE ASSUMPTIONS

The cumulative analysis is based on the version of the City of Rocklin 2030 travel demand model most recently used in 2018 for the Sierra College FMP EIR Transportation Impact Study. The 2030 land use assumptions include buildout of vacant and partially developed parcels throughout Rocklin. It includes all of the approved projects listed in this previous chapter. It also includes the now approved Costco project located on Sierra College Boulevard near Brace Road in Loomis.

ROADWAY NETWORK ASSUMPTIONS

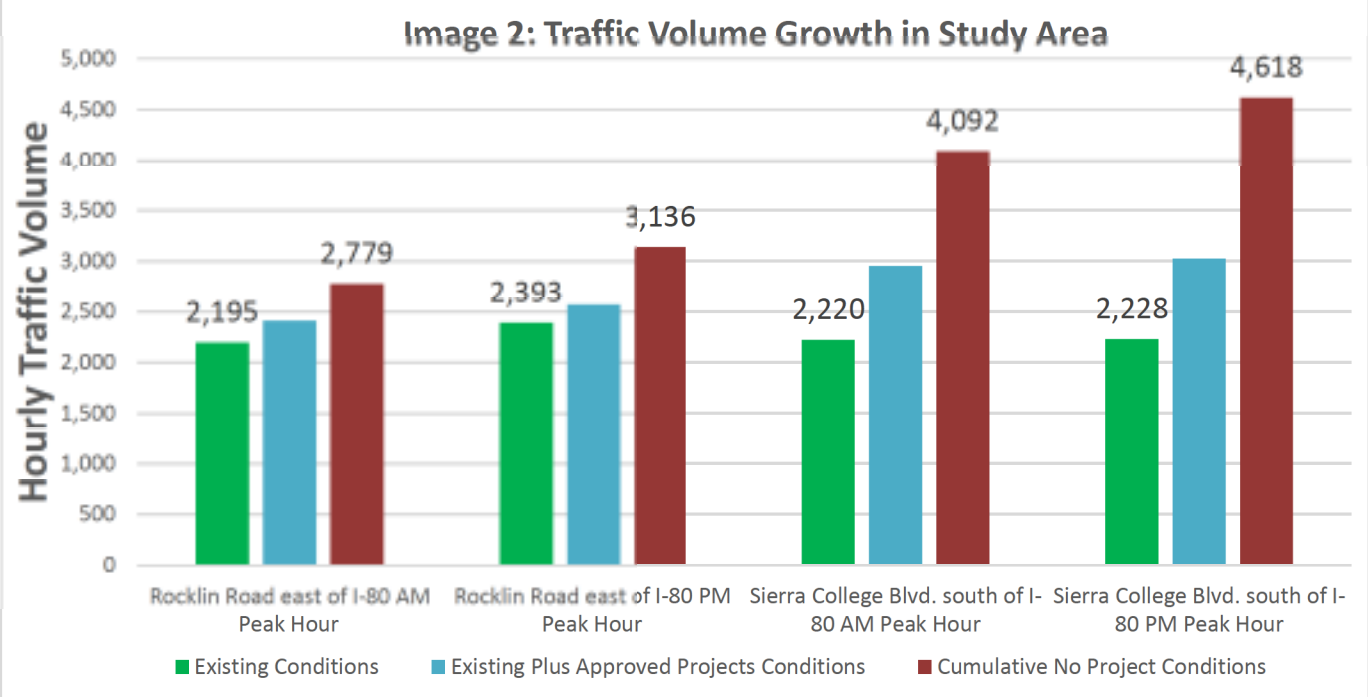
The following describes the key roadway network assumptions in the model within the study area:

- Rocklin Road is widened to have six continuous lanes from east of I-80 to Sierra College Boulevard per the City's adopted Circulation Element. A small amount of widening to six lanes is also planned/assumed between the I-80 WB Ramps and Granite Drive.
- Sierra College Boulevard is widened to consist of three continuous travel lanes in each direction from south of I-80 to just beyond El Don Drive per the City's adopted Circulation Element. A small amount of widening to six lanes is also planned north of Granite Drive.
- Dominguez Road is extended southeasterly from Granite Drive over I-80 to Sierra College Boulevard (as two lanes) per the City's Circulation Element.
- I-80/Rocklin Road and I-80/Sierra College Boulevard interchanges are assumed to remain in their current conditions, though it is noted that partial funding for improvements to the Rocklin Road interchange is included in the City's CIP / Traffic Impact Fee program. The City is contemplating greater funding allocations to both interchanges as part of future CIP/ Traffic Impact fee program updates (in conjunction with the Circulation Element update). As part of planned/funded improvements to the I-80/SR 65 interchange, the eastbound off-ramp at Rocklin Road is planned to be upgraded to a two-lane exit (i.e., becomes the terminus of an auxiliary (weave) lane between SR 65 and Rocklin Road.

- Minor Improvements such as additional turn lanes, are assumed at several signalized study intersections (e.g., Rocklin Road/Granite Drive, Sierra College Boulevard/Granite Drive, Sierra College Boulevard/Rocklin Road) consistent with mitigation measures contained in the *City of Rocklin General Plan* (2011). These improvements can be identified by comparing the existing and cumulative lane configurations exhibits.

TRAFFIC FORECASTS

Figures 10 and 11 display the AM and PM peak hour traffic forecasts for the cumulative no project and cumulative plus project scenarios. Image 2 illustrates that more substantial growth is anticipated along Sierra College Boulevard versus Rocklin Road between existing and cumulative no project conditions. This is reasonable because much more development is planned along this important north-south regional arterial and major commute route.



INTERSECTION OPERATIONS

Table 17 displays the average delay and LOS at the study intersections under cumulative conditions, without and with the proposed project. Refer to Appendix D for technical calculations.

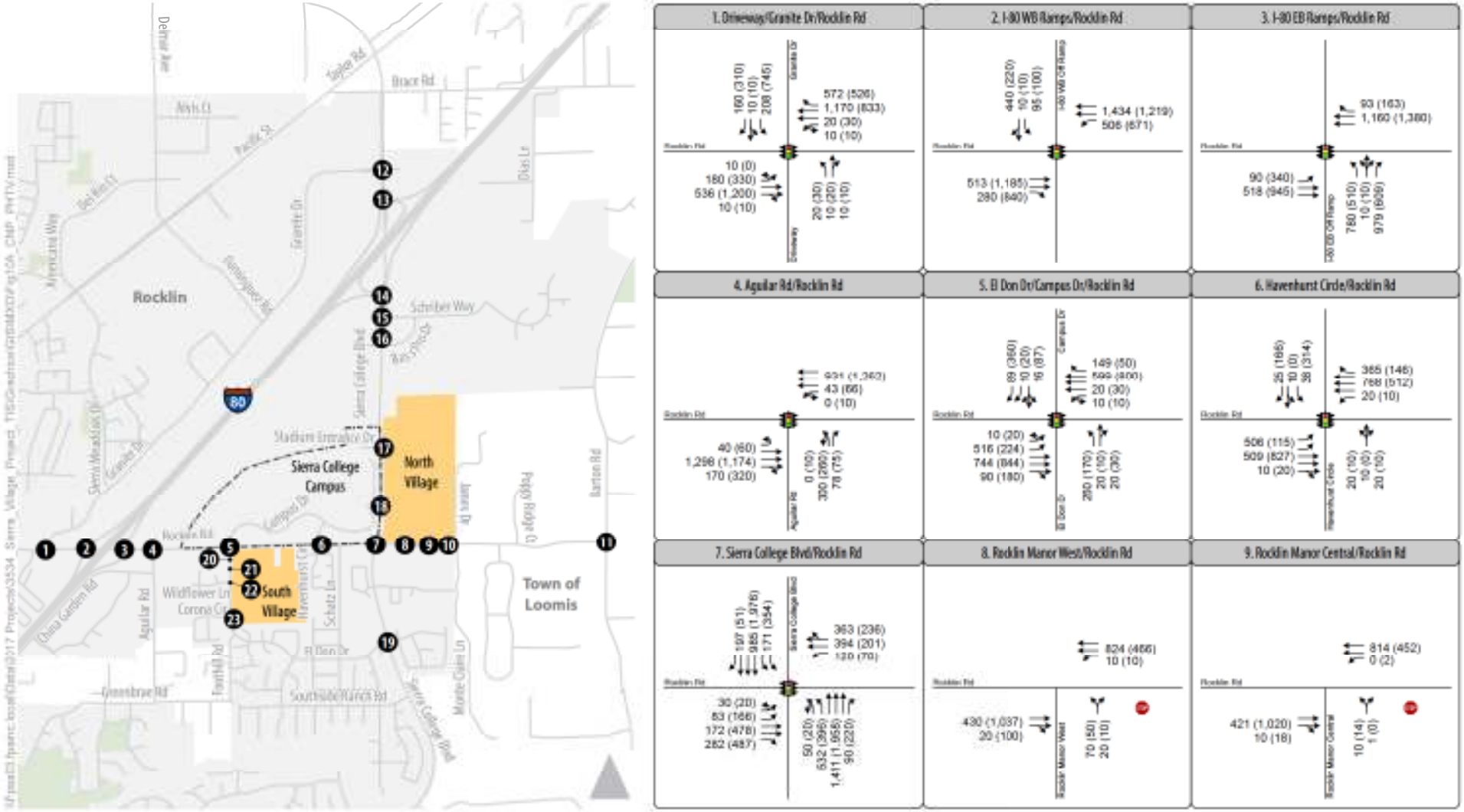


Figure 10A

Peak Hour Traffic Volumes and Lane Configurations - Cumulative No Project Conditions

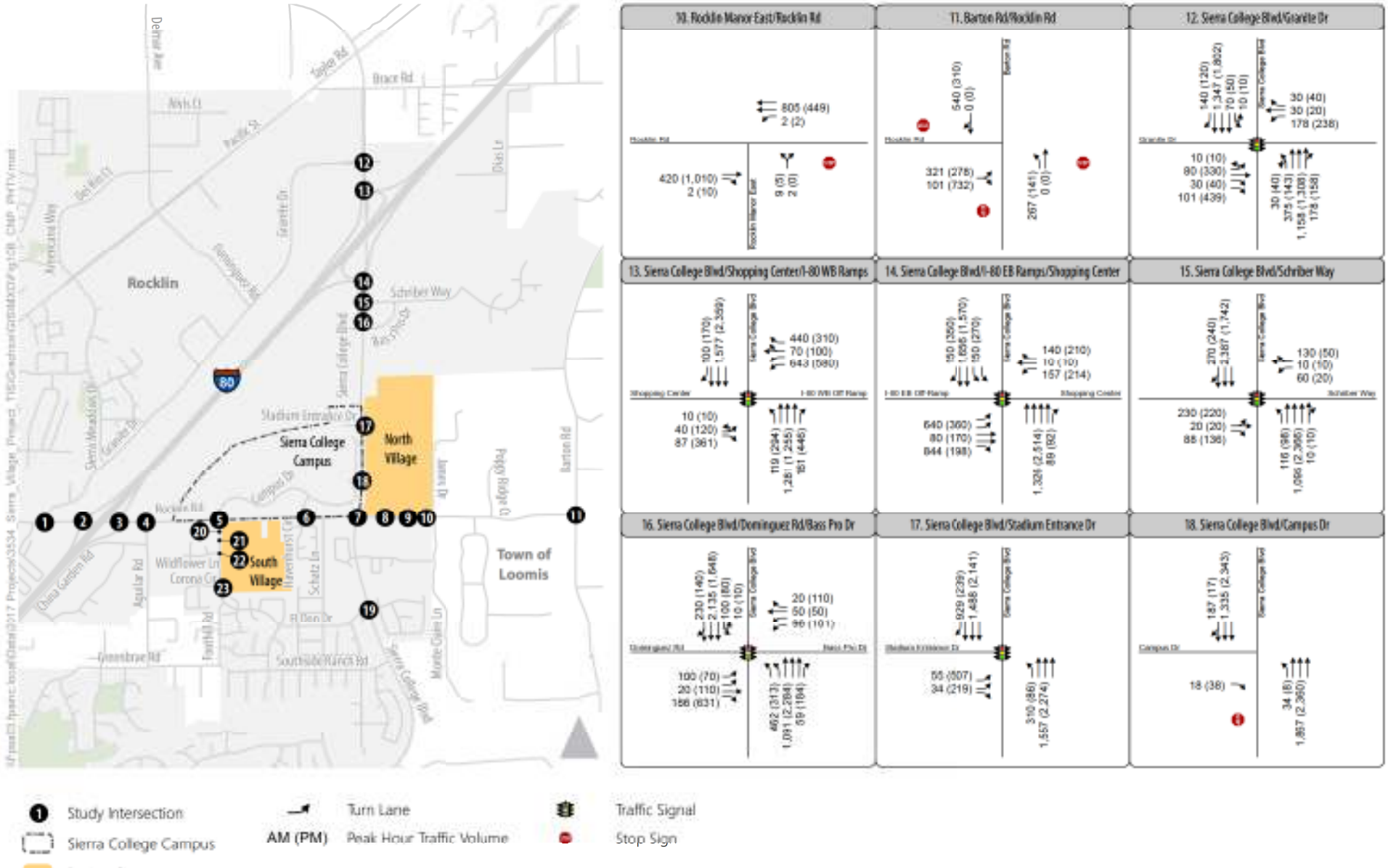
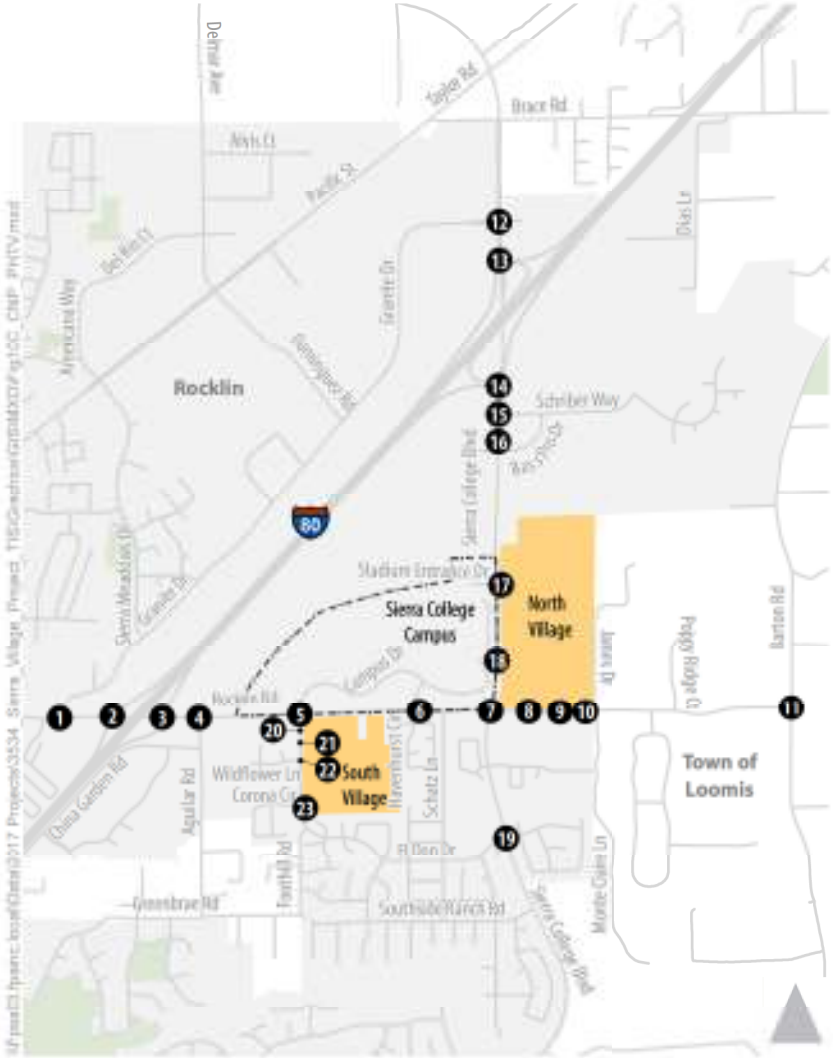
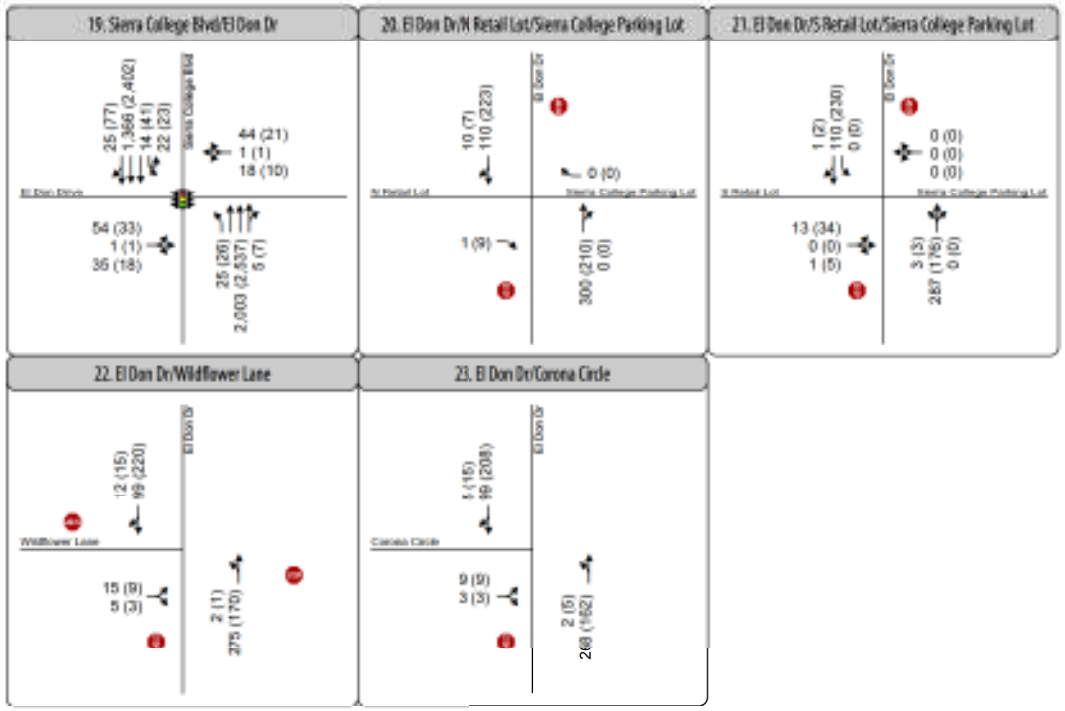


Figure 108

Peak Hour Traffic Volumes and Lane Configurations - Cumulative No Project Conditions



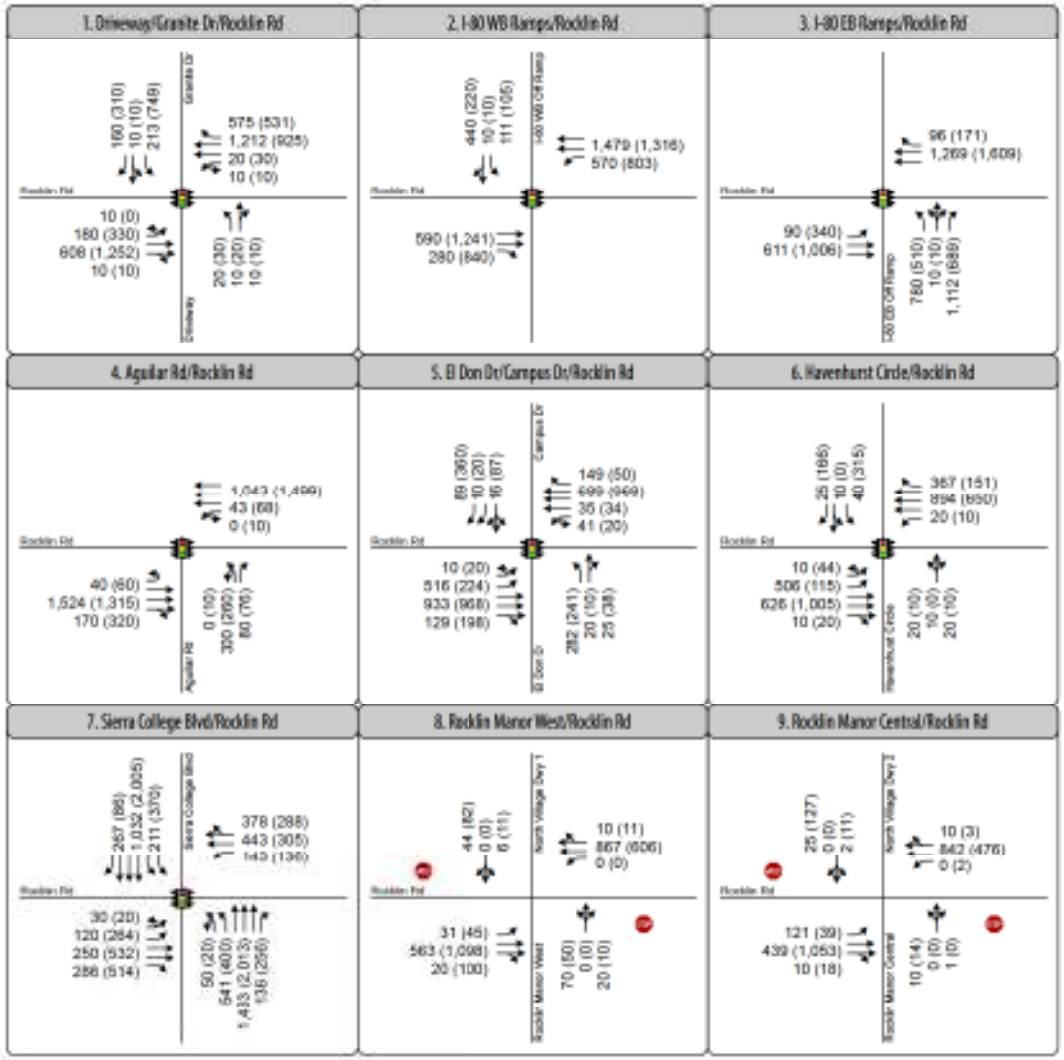


1 Study Intersection
Sierra College Campus
Project Site
Turn Lane
AM (PM) Peak Hour Traffic Volume
Traffic Signal
Stop Sign

Figure 10C

Peak Hour Traffic Volumes and Lane Configurations - Cumulative No Project Conditions





1 Study Intersection
Sierra College Campus
Project Site
Turn Lane
AM (PM) Peak Hour Traffic Volume
Traffic Signal
Stop Sign

Figure 11A

Peak Hour Traffic Volumes and Lane Configurations - Cumulative Plus Project Conditions

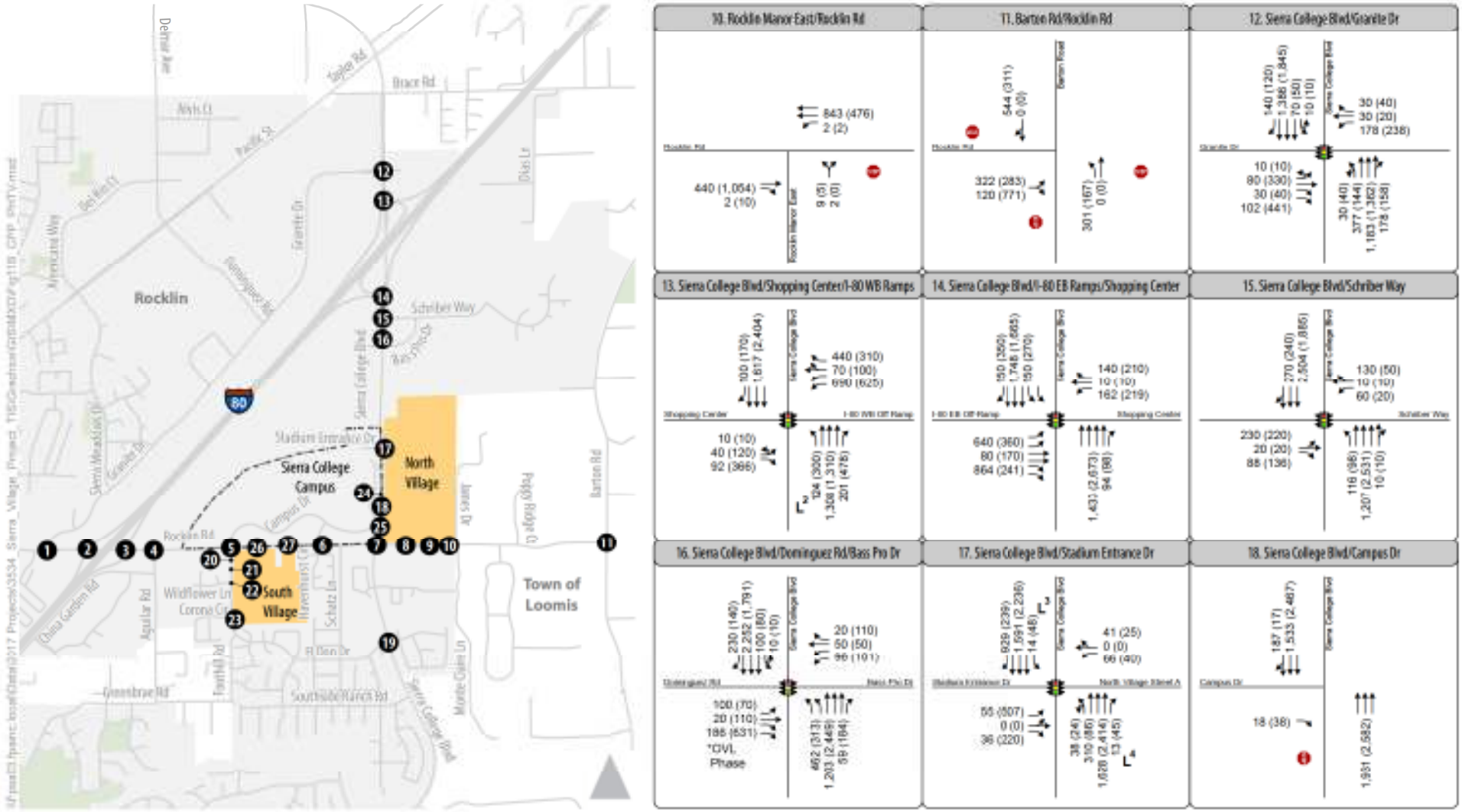
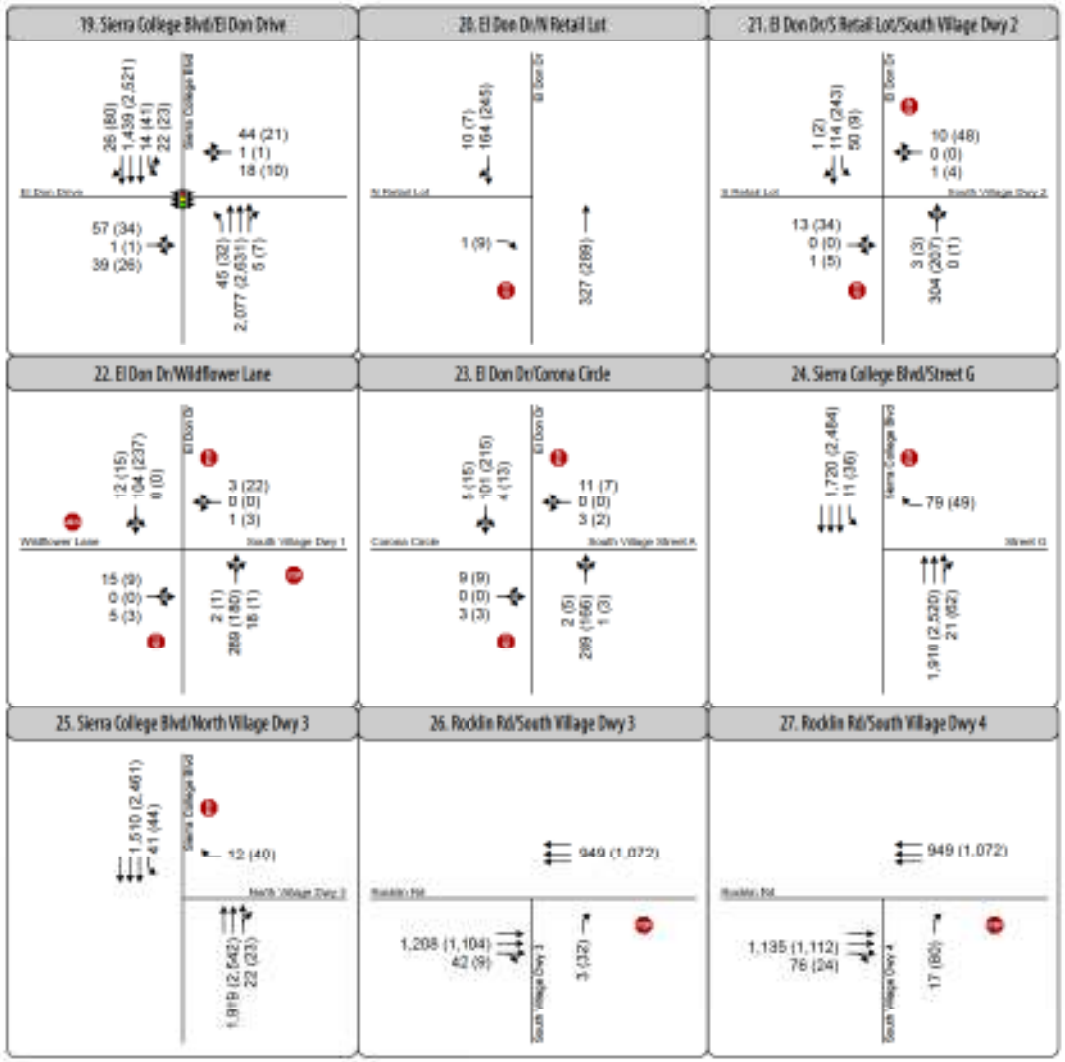


Figure 11B

Peak Hour Traffic Volumes and Lane Configurations - Cumulative Plus Project Conditions





1 Study Intersection
Sierra College Campus
Project Site
Turn Lane
AM (PM) Peak Hour Traffic Volume
Traffic Signal
Stop Sign

Figure 11C

Peak Hour Traffic Volumes and Lane Configurations - Cumulative Plus Project Conditions

TABLE 17: PEAK HOUR INTERSECTION LEVEL OF SERVICE – CUMULATIVE PLUS PROJECT CONDITIONS

Intersection	Control	Operating Goal [1]	Peak Hour	Cumulative No Project Conditions		Cumulative Plus Project Conditions	
				Average Delay (secs) [2]	LOS [2]	Average Delay (secs) [2]	LOS [2]
1. Rocklin Rd/Granite Dr	Signal	C	AM	20	C	22	C
			PM	196	F	223	F
2. Rocklin Rd/I-80 WB Ramps	Signal	C	AM	41	D	39	D
			PM	56	E	57	E
3. Rocklin Rd/I-80 EB Ramps	Signal	C	AM	33	C	46	D
			PM	53	D	101	F
4. Rocklin Rd/Aguilar Rd	Signal	C	AM	19	B	19	B
			PM	65	E	91	F
5. Rocklin Rd/El Don Dr	Signal	C	AM	27	C	30	C
			PM	76	E	117	F
6. Rocklin Rd/Havenhurst Circle	Signal	C	AM	18	B	17	B
			PM	16	B	30	C
7. Rocklin Rd/Sierra College Blvd	Signal	C	AM	90	F	98	F
			PM	138	F	149	F
8. Rocklin Rd/Rocklin Manor West	TWSC	- [3]	AM	87 (149)	F (F)	71 (>300) [4]	F (F)
			PM	23 (92)	C (F)	59 (>300) [4]	F (F)
9. Rocklin Rd/Rocklin Manor Central	TWSC	- [3]	AM	48 (177)	E (F)	35 (192)	D (F)
			PM	6 (45)	A (E)	35 (>300) [4]	D (F)
10. Rocklin Rd/Rocklin Manor East	TWSC	- [3]	AM	25 (86)	C (F)	13 (84)	B (F)
			PM	1 (11)	A (B)	5 (52)	A (F)
11. Rocklin Rd/Barton Rd	AWSC	C	AM	11	B	11	B
			PM	32	D	52	F
12. Sierra College Blvd/Granite Dr [5]	Signal	C	AM	240	F	238	F
			PM	385	F	344	F
13. Sierra College Blvd/I-80 WB Ramps	Signal	C	AM	191	F	149	F
			PM	164	F	141	F
14. Sierra College Blvd/I-80 EB Ramps	Signal	C	AM	289	F	295	F
			PM	43	D	62	E
15. Sierra College Blvd/Schriber Way	Signal	C	AM	31	C	37	D
			PM	28	C	33	C
16. Sierra College Blvd/Bass Pro Dr	Signal	C	AM	30	C	27	C
			PM	95	F	73	E
17. Sierra College Blvd/Stadium Dr	Signal	C	AM	16	B	21	C
			PM	257	F	184	F
18. Sierra College Blvd/Campus Dr	TWSC	- [3]	AM	6 (6)	A (A)	6 (7)	A (A)
			PM	12 (56)	B (F)	48 (91)	F (F)
19. Sierra College Blvd/El Don Drive	Signal	C	AM	25	C	61	E

TABLE 17: PEAK HOUR INTERSECTION LEVEL OF SERVICE – CUMULATIVE PLUS PROJECT CONDITIONS

Intersection	Control	Operating Goal [1]	Peak Hour	Cumulative No Project Conditions		Cumulative Plus Project Conditions	
				Average Delay (secs) [2]	LOS [2]	Average Delay (secs) [2]	LOS [2]
			PM	264	F	223	F
20. El Don Dr/N. Retail Access/SC Lot	Signal	- [3]	AM	7 (9)	A (A)	4 (5)	A (A)
			PM	20 (37)	C (E)	63 (120)	F (F)
21. El Don Dr/S. Retail Access/SC Lot	TWSC	- [3]	AM	2 (12)	A (B)	2 (6)	A (A)
			PM	12 (38)	B (E)	55 (>300)[4]	F (F)
22. El Don Dr/Wildflower Lane	TWSC	C	AM	6	A	6	A
			PM	12	B	24	C
23. El Don Dr/Corona Circle	TWSC	C	AM	1 (5)	A (A)	1 (6)	A (A)
			PM	1 (5)	A (A)	1 (4)	A (A)
24. Sierra College Blvd/Street G	TWSC	- [3]	AM	Does Not Exist		7 (16)	A (C)
			PM			58 (>300)[4]	F (F)
25. Sierra College Blvd/North Village Dwy 3	TWSC	- [3]	AM	Does Not Exist		6 (20)	A (C)
			PM			38 (>300)[4]	E (F)
26. Rocklin Rd/South Village Dwy 3	TWSC	- [3]	AM	Does Not Exist		2 (4)	A (A)
			PM			35 (76)	D (F)
27. Rocklin Rd/South Village Dwy 4	AWSC	- [3]	AM	Does Not Exist		2 (7)	A (A)
			PM			11 (17)	B (C)

Notes:

1. Per each agency's LOS policy, standards, or direction.
2. All intersections analyzed using SimTraffic microsimulation model. For signalized intersections, average intersection delay is reported for all approaches. For side-street stop controlled intersections, the delay and LOS for the most-delayed individual movement is shown in parentheses next to the average intersection delay and LOS. All results are rounded to the nearest second.
3. LOS Policy does not apply to unsignalized driveways.
4. Value of '>300' shown for stop-controlled intersections with traffic volumes that exceed the program's ability to produce reasonable delay forecasts.
5. Results at the Sierra College Boulevard/Granite Drive intersection may appear worse than in other studies because it is located at the edge of the network and all delays on the southbound approach are attributed to this intersection regardless of whether the queue would have extended to an upstream signal or not (in which case the delay would have properly been assigned to that location).

Shaded cells represent deficient operations when compared to operating goal. At intersections, operating goal only applies to PM peak hour conditions.

TWSC = Two-way stop control. AWSC = All-way stop control.

Source: Fehr & Peers, 2021.

This table indicates the following:

- The I-80/Rocklin Road and I-80/Sierra College Boulevard interchanges would operate deficiently, both without and with the project.
- Of the 25 study intersections outside Caltrans right-of-way, 11 are signalized. Of those 11, nine would operate deficiently under cumulative plus project PM peak hour conditions. Much of the deficient operations are caused by capacity constraints at the two interchanges.

The Circular 212 results shown in Appendix A indicate that three of the ten signalized City-maintained study intersections (i.e., Sierra College Boulevard/Rocklin Road, Sierra College Boulevard/Granite Drive, and Sierra College Boulevard/Bass Pro Drive/Dominguez Road) would operate at LOS D or worse under cumulative no project conditions, with the remainder operating at LOS C or better. The project would worsen conditions at each intersection.

Analysis of freeway off-ramp queuing and potential impacts under cumulative conditions is a complicated topic for the following two reasons:

1. The *Interim Local Land Development and Intergovernmental Review (LDIGR) Safety Review Practitioners Guidance* (Caltrans, December 2020) states the following with respect to project effects on freeway off-ramp queuing:

   > *"Traffic safety mitigation shall not be requested under conditions where queuing already exists on a freeway exit ramp. This includes conditions where freeway exit-ramp queuing currently spills back onto the mainline".*

   Based on that guidance, it may be inferred that if a "no project" 95th percentile vehicle queue (either existing or cumulative no project) already spills back onto the freeway mainline, then the addition of project trips to that queue would not be considered an impact requiring mitigation. However, Fehr & Peers respectfully disagrees with this standard because it effectively allows for exacerbation of an otherwise unacceptable condition, which is not permitted in many other topic areas of CEQA. Instead, this study considers a significant impact to occur if the project exacerbates queues that already spill back to the freeway mainline or causes the queue to spill back onto the mainline.

2. Both study interchanges have insufficient capacity to accommodate the projected levels of cumulative traffic. This causes substantial delays and queuing, particularly on the freeway off-ramps. The condition is particularly acute at the I-80/Sierra College Boulevard interchange in which the "percent demand served" (i.e., percentage of the hourly vehicle demand able to pass through a given intersection in that time period) is in the 70 to 75 percent range. With this degree of congestion, the micro-simulation model is not stable and is prone to generating results that vary widely between successive model runs or scenarios. For this reason, **Table 18**

displays AM and PM peak hour 95th percentile queue lengths at the off-ramps under cumulative no project conditions. Columns on the far right of the table then show the number of project added trips and percent increase in the off-ramp volume caused by the project. Analysis of off-ramp queuing impacts from the project is then based on this data.

TABLE 18: I-80 FREEWAY OFF-RAMP QUEUES – CUMULATIVE CONDITIONS

Off-Ramp	Available Storage [2]	Cumulative No Project Conditions								Cumulative Plus Project Conditions	
		AM Peak Hour				PM Peak Hour				AM Peak Hour	PM Peak Hour
		LOS	Percent Demand Served	Off-Ramp Volume	95th Percentile Queue	LOS	Percent Demand Served	Off-Ramp Volume	95th Percentile Queue	Projected Added Trips to Off-Ramp	
I-80 westbound off-ramp at Rocklin Road	1,175 ft.	D	97%	545	1,000 ft.	E	89%	330	725 ft.	+16 (+3%)	+5 (+2%)
I-80 eastbound off-ramp at Rocklin Road [3]	1,150 ft.	C	96%	1769	500 ft.	D	91%	1,129	1,150 ft. [5]	+133 (+8%)	+80 (+7%)
I-80 westbound off-ramp at Sierra College Boulevard [3]	1,300 ft.	F	71%	1,153	> 1 mile [4]	F	74%	990	2,775 ft.	+47 (+4%)	+45 (+5%)
I-80 eastbound off-ramp at Sierra College Blvd	1,300 ft.	F	71%	1,564	> 1 mile [4]	D	76%	728	425 ft.	+20 (+1%)	+43 (+6%)

NOTES:

[1] Values rounded up to the nearest 25 feet.

[2] Available storage measured from stop bar to freeway off-ramp gore point.

[3] EB I-80 includes an 840-foot auxiliary/deceleration lane in advance of the Rocklin Road off-ramp. WB I-80 includes a 450-foot auxiliary/deceleration lane in advance of the Sierra College Boulevard off-ramp. These values are in addition to the storage shown above.

[4] > 1 mile = Queue extends considerable distance beyond interchange onto freeway mainline. Value not shown because volume inputs exceed the program range that would provide reasonable outputs.

[5] Project would add traffic to this off-ramp, causing the queue to spill back onto the freeway mainline. See following page for further explanation.

Shaded cells represent deficient operations because queue length exceeds available off-ramp storage.

Source: Fehr & Peers, 2021.

The results in Table 18 yield the following conclusions:

- I-80 Westbound Off-Ramp at Rocklin Road – The project would not cause the 95th percentile vehicle queue to spill back onto the freeway. Therefore, no impacts associated with freeway off-ramp queuing are identified at this location.
- I-80 Eastbound Off-Ramp at Rocklin Road – Under no project conditions, the 95th percentile queue during the PM peak hour occupies the entirety of the off-ramp storage, but does not spill back onto the freeway mainline. The project, by virtue of adding 80 vehicles to this off-ramp, would cause the 95th percentile queue to increase by at least two vehicles, thus spilling onto the freeway mainline. Therefore, a significant impact associated with freeway off-ramp queuing would occur at this location.
- I-80 Westbound Off-Ramp at Sierra College Boulevard – Under no project conditions, the 95th percentile queue during both the AM and PM peak hours spills a considerable distance onto the freeway mainline. The project, by virtue of adding about 45 vehicles to this off-ramp during each peak hour, would cause the 95th percentile queue to increase by one or two vehicles, thus exacerbating the freeway off-ramp queuing condition. Therefore, a significant impact associated with freeway off-ramp queuing would occur at this location.
- I-80 Eastbound Off-Ramp at Sierra College Boulevard – Under no project conditions, the 95th percentile queue during the AM peak hour spills a considerable distance onto the freeway mainline. During this hour, the project would add 20 vehicle trips, which would represent a one percent increase in total volume. It is unlikely that this modest level of added traffic would noticeably worsen an already excessive freeway off-ramp queue of at least one mile. Therefore, no impacts are identified associated with freeway off-ramp queuing at this location.

Table 19 displays the freeway on-ramp metering analysis (see Appendix D for technical calculations). This table indicates that the project would not cause metered traffic on the I-80 westbound loop on-ramp at Sierra College Boulevard to exceed the available ramp meter storage. Because no interchange improvements were assumed under cumulative conditions, ramp metering was also not assumed in place at the other on-ramps.

TABLE 19: I-80 FREEQAY RAMP METER STORAGE ANALYSIS – CUMULATIVE PLUS PROJECT CONDITIONS

On-Ramp	Type	Available Storage [1]	95th Percentile Vehicle Queue [2]					
			AM Peak Hour [3]			PM Peak Hour [4]		
			Ramp Metering Rate [5]	Cumulative		Ramp Metering Rate [6]	Cumulative	
				No Project	Plus Project		No Project	Plus Project
I-80 WB loop on-ramp at Sierra College Blvd.	1 General Purpose Metered Lane + 1 Unmetered HOV Bypass Lane	450 ft.	240 vph	25 ft.	55 ft.	400 vph	25 ft.	340 ft.

NOTES:

[1] Measured from limit line of ramp meter to upstream signalized intersection.

[2] Assumes 15% usage of HOV bypass lane, measured peak 15-minute arrival percentages, and uniform arrivals within each 15-minute time window.

[3] Project would increase the loop on-ramp volume from 161 to 200 vph during the AM peak hour.

[4] Project would increase the loop on-ramp volume from 446 to 478 vph during the PM peak hour.

[5] Most restrictive ramp metering rate selected based on anticipated heavy westbound I-80 peak travel demand.

[6] Typical ramp metering rate (one vehicle released every nine seconds) selected for non-peak travel period and direction. Selection of a less restrictive ramp metering rate would dramatically reduce queue.

vph = vehicles per hour.

Source: Fehr & Peers, 2021.

VI. IMPACTS AND MITIGATION MEASURES

This chapter evaluates the significance of project impacts using the thresholds of significance described in Chapter I.

PROJECT-SPECIFIC IMPACTS

EVALUATION OF TRANSPORTATION SYSTEM IMPACTS

- *Impact TR-1: The project would generate average VMT per dwelling unit or thousand square feet of non-residential space that is greater than 85 percent of the City-wide average for that land use type.*

Table 20 illustrates how each land use component of the proposed project would compare to 85 percent of the City-wide average for that land use type. Under baseline conditions, VMT impacts would be considered significant at four of the seven specific land use types and locations. Only the affordable housing[4] and 25-unit single-family component in the South Village and the retail in the North Village would be considered less-than-significant. On average, the impacted sites would be approximately 22 percent above the VMT threshold. When compared to the City-wide average, they would be, on average, four percent above that metric. This impact is considered ***significant***.

Mitigation Measure TR-1: *The project applicant shall implement feasible transportation demand management (TDM) strategies, which would reduce the VMT generated by the project's land uses. Examples of potential measures for residential uses include (but are not limited to): reducing the parking supply, subsidized transit passes, and pedestrian-oriented design. Examples of potential measures for employment uses include (but are not limited to): paid parking, employee telecommuting, expansion of transit service coverage / subsidized transit fares, enhanced bicycle and pedestrian connections, and flexible work schedules.*

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4 OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA (2018)* offers guidance regarding land use projects that are presumed to be less-than-significant. One of those project types is affordable housing because it is known to improve jobs-housing balance and/or generate less VMT than market-based units. This conclusion is supported by data contained in the Sacramento Area Council of Governments (SACOG) 2018 household survey regarding differences in person trip rates by income.

TABLE 20: NORTH AND SOUTH VILLAGE AVERAGE VMT BY LAND USE TYPE

Village	Land Use	Quantity	Measurement of VMT	Baseline Conditions [1]			Cumulative Conditions [2]		
				Average VMT	Performance Standard [3]	Sig. Impact?	Average VMT	Performance Standard [3]	Sig. Impact?
North	Single-Family	317 units	VMT/du	69.7	59.5	Yes	53.6	53.5	Yes
	Multi-Family	378 units	VMT/du	51.2	40.0	Yes	39.2	34.7	Yes
	Retail	45 ksf	VMT/ksf	N / A [4]		No	N / A [4]		No
South	Single-Family	25 units	VMT/du	57.9	59.5	No	53.5	53.5	No
	Senior Affordable Multi-Family	195 units	VMT/du	N / A [4]		No	N / A [4]		No
	Office	52.5 ksf	VMT/ksf	106.8	94.4	Yes	110.2	103.1	Yes
	Medical-Office	22.5 ksf	VMT/ksf	197.5	154.9	Yes	202.8	172.0	Yes

Notes:
[1] Derived from City of Rocklin base year travel demand model.
[2] Derived from City of Rocklin cumulative year travel demand model.
[3] Performance standard is 85 percent of the City-wide average for that land use type.
[4] N / A = Quantitative VMT metrics not shown because retail and affordable housing presumed to be less-than-significant (see prior page).
Significant impacts are shaded.
Source: Fehr & Peers, 2021.

Though not all individual TDM strategies may be applicable, this mitigation is considered generally feasible because it is within the applicant's purview to implement and has been found effective in peer-reviewed academic studies. However, the precise effectiveness of a given TDM strategy can be difficult to accurately measure due to a number of factors such as types of tenants, employee responses to strategies, and other factors. Additionally, it is noted that the VMT reductions would need to be in range of 12 to 25 percent (depending on the land use type and location) in order to meet the applicable performance standard. Those are considered robust targets to achieve given the site's suburban setting and lack of viable alternative modes. Because there are no assurances that Mitigation Measure TR-1 would fully mitigate this impact, Impact TR-1 is considered ***significant and unavoidable***.

- *Impact TR-2: The project would construct additional roadway capacity that would lead to induced travel and increased VMT.*

The project would construct a third travel lane on northbound Sierra College Boulevard and a second travel lane on westbound Rocklin Road along the North Village frontage, consistent with the City of Rocklin General Plan Circulation Element. Using the City's travel demand model, these improvements were shown to generate approximately 3,000 net additional system-wide VMT, which is considered a

significant impact based on the *Technical Advisory* guidance that any increase in VMT caused by a roadway capacity project would be considered significant.

Mitigation Measure TR-2: *The project applicant shall construct a bus turnout and shelter in the northbound direction of Sierra College Boulevard directly north of Rocklin Road. These improvements shall be constructed with the first phase of development of the North Village and to the satisfaction of the City of Rocklin and Placer County Transit.*

This mitigation measure would provide opportunities for project residents, employees, and customers to use public transit to access each site instead of driving a passenger vehicle (the nearest bus stop to the North Village is currently a considerable distance to the north and does not have sidewalks to support walking). In rough numbers, to achieve a net 3,000 VMT reduction, approximately 360 persons per day would need to shift from driving to public transit[5]. Because it cannot be assured that this shift away from driving to transit would occur, this impact is considered ***significant and unavoidable***.

The project would not cause any freeway off-ramp 95th percentile queue lengths to exceed their available storage. Therefore, project impacts related to freeway off-ramp queuing are considered ***less than significant*** under existing plus project conditions.

EVALUATION OF BICYCLE IMPACTS

The project would not preclude construction of any planned bicycle facilities as identified in the *City of Rocklin Parks and Trails Master Plan* (2017). The project would comply with relevant strategies and policies from Chapter V of that document. Therefore, this impact is considered ***less than significant***.

EVALUATION OF PEDESTRIAN IMPACTS

The project would not be in conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the City's pedestrian system. The project would include pedestrian facilities along its frontages where not currently constructed. Project impacts to pedestrian facilities are considered ***less than significant***.

[5] This would correspond to 720 one-way trip ends. Assuming 1.2 persons per vehicle, 600 vehicle trips would be avoided. At an average of five miles per avoided trip, the VMT savings would be 3,000. This reduction would represent an approximate 7 percent bus mode split based on the number of new vehicle trips shown in Table 5.

EVALUATION OF TRANSIT IMPACTS

- Impact TR-3: *The project would potentially disrupt or interfere with existing or planned transit facilities.*

Policy C-50 of the *City of Rocklin General Plan (2012)* calls for the City to work with transit providers to plan, fund, and implement additional transit services that are cost-effective and responsive to existing and future resident needs. Similarly, Policy C-2 calls for the City to coordinate land use and transportation planning to support transit services. Mitigation Measure TR-2 calls for the applicant to construct a bus shelter and turnout along the North Village project frontage on Sierra College Boulevard north of Rocklin Road. Similarly, a driveway is proposed on Rocklin Road east of El Don Drive to serve the South Village, which would also be situated near an existing bus stop. Because the introduction of project driveways near existing/planned bus stops could introduce conflicts between buses and passenger vehicles (if not properly planned for), this impact is considered ***significant.***

Mitigation Measure TR-3: *The project applicant shall coordinate with the City of Rocklin and Placer County Transit regarding the placement and design of its project driveways on Sierra College Boulevard and Rocklin Road to ensure that they do not interfere with existing/planned transit operations. Preferred driveway designs should provide sufficient distance between the stop location and the driveway to provide adequate sight distance and could potentially include a continuous bus turnout / deceleration lane to accommodate ingress to each project driveway.*

This mitigation would reduce this impact to ***less than significant.***

EVALUATION OF IMPACTS DUE TO HAZARDOUS DESIGN FEATURES

Chapter VII contains various site design recommendations that would be incorporated into the project site plans and designs to ensure that the project would not cause any hazardous design features. This includes accommodation of project access, and on-site circulation. All improvements would be constructed to current standards. This impact is considered ***less than significant*** and no mitigation is required.

EVALUATION OF IMPACTS DUE TO INADEQUATE EMERGENCY ACCESS

A Rocklin Fire Station is located on Rocklin Road west of I-80. Emergency vehicles from this station would require less than a five minute drive to access each project site. Emergency vehicle pre-emption devices are present at traffic signals along Sierra College Boulevard and Rocklin Road. Therefore, this impact is considered ***less than significant*** and no mitigation is required.

CUMULATIVELY CONSIDERABLE IMPACTS

EVALUATION OF TRANSPORTATION SYSTEM IMPACTS

- *Impact TR-4: The project would generate average VMT per dwelling unit or thousand square feet of non-residential space under cumulative conditions that is greater than 85 percent of the City-wide average for that land use type.*

Table 20 illustrates how each land use component of the proposed project would compare to 85 percent of the City-wide average for that land use type under cumulative conditions. As shown, VMT impacts would be considered significant at four of the seven specific land use types and locations. The affordable housing and 25-unit single-family component in the South Village and the retail component in the North Village would be considered ***less than significant***. On average, the four impacted properties would be five percent below the City-wide average for these use types. However, they would be approximately 12 percent above their applicable VMT thresholds. This impact is considered ***significant***.

Mitigation Measure TR-4: Implement Mitigation Measure TR-1 (Implement TDM Strategies)

Because there are no assurances that Mitigation Measure TR-1 would fully mitigate this impact, Impact TR-4 is considered cumulatively ***significant and unavoidable***.

- *Impact TR-5: The project would construct additional roadway capacity that would lead to induced travel and increased VMT under cumulative conditions.*

The project would construct the following potentially capacity-inducing improvements (as well as other intersection improvements) along the North Village frontage: addition of a third travel lane on northbound Sierra College Boulevard and a second travel lane on westbound Rocklin Road, consistent with the City of Rocklin General Plan Circulation Element. Using the City's travel demand model, these improvements were shown to generate approximately 3,000 net additional system-wide VMT, which is considered a ***significant*** impact based on the *Technical Advisory* guidance that any increase in VMT caused by a roadway capacity project would be considered significant.

Mitigation Measure TR-5: Implement Mitigation Measure TR-2 (Construct Bus Turnouts/Shelters)

Because it cannot be assured that the VMT savings associated with bus stop construction would shift a sufficient number of motorists to instead use the bus, this impact is considered cumulatively ***significant and unavoidable***.

- *Impact TR-6: The project would contribute to further worsened vehicular queuing (onto the freeway mainline) at the I-80 eastbound off-ramp at Rocklin Road and I-80 eastbound and westbound off-ramps at Sierra College Boulevard under cumulative conditions.*

Under cumulative no project conditions, expected vehicular queues at the I-80 eastbound off-ramp at Rocklin Road (PM peak hour), at the I-80 eastbound off-ramp at Sierra College Boulevard (AM peak hour), and at the I-80 westbound off-ramp at Sierra College Boulevard (both AM and PM peak hours) would reach or exceed the available storage in each off-ramp. The project would add trips to each off-ramp, thereby exacerbating this queuing issue. This is considered a **significant** impact.

Mitigation Measure TR-6: *The project applicant(s) shall pay the appropriate City of Rocklin CIP / Traffic Impact Fee.*

The City's CIP / Traffic Impact Fee program currently collects fees to help fund the reconstruction of the I-80/Rocklin Road interchange. The City intends on updating this fee program in the near future to also include funding for improvements at the I-80/Sierra College Boulevard interchange. Both improvements would increase the capacity at the interchange, which would help alleviate queue spillbacks onto the freeway. However, because it cannot be assured that adequate funds will be available to fund both interchange improvements and it is not a certainty that identified improvements will reduce vehicle queues from spilling back onto the freeway, this impact is considered cumulatively ***significant and unavoidable***.

EVALUATION OF BICYCLE IMPACTS

The project would not preclude construction of any planned bicycle facilities as identified in the *City of Rocklin Parks and Trails Master Plan* (2017). The project would comply with relevant strategies and policies from Chapter V of that document. Therefore, this impact is considered ***less than significant*** under cumulative conditions.

EVALUATION OF PEDESTRIAN IMPACTS

The project would not be in conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the City's pedestrian system. The project would include pedestrian facilities along its frontages where not currently constructed. Project impacts to pedestrian facilities are considered ***less than significant*** under cumulative conditions.

EVALUATION OF TRANSIT IMPACTS

- *Impact TR-7: The project would potentially disrupt or interfere with planned transit facilities under cumulative conditions.*

Policy C-50 of the *City of Rocklin General Plan (2012)* calls for the City to work with transit providers to plan, fund, and implement additional transit services that are cost-effective and responsive to existing and future resident needs. Similarly, Policy C-2 calls for the City to coordinate land use and transportation planning to support transit services. Mitigation Measure TR-2 calls for the applicant to construct a bus shelter and turnout along the North Village project frontage on Sierra College Boulevard north of Rocklin Road. Similarly, a driveway is proposed on Rocklin Road east of El Don Drive to serve the office component of the South Village, which would also be situated near an existing bus stop. This impact is considered ***significant.***

Mitigation Measure TR-7: Implement Mitigation Measure TR-3 (Coordinate with the City of Rocklin and Placer County Transit regarding the placement and design of its project driveways on Sierra College Boulevard and Rocklin Road).

This mitigation would reduce this impact to ***less than significant*** under cumulative conditions.

EVALUATION OF IMPACTS DUE TO HAZARDOUS DESIGN FEATURES

Chapter VII contains various site design recommendations that would be incorporated into the project site plans and designs to ensure that the project would not cause any hazardous design features. This includes accommodation of project access, and on-site circulation. All improvements would be constructed to current standards. This impact is considered ***less than significant*** under cumulative conditions and no mitigation is required.

EVALUATION OF IMPACTS DUE TO INADEQUATE EMERGENCY ACCESS

A Rocklin Fire Station is located on Rocklin Road west of I-80. Emergency vehicles from this station would require less than a five minute drive to access each project site. Emergency vehicle pre-emption devices are present at traffic signals along Sierra College Boulevard and Rocklin Road. Therefore, this impact is considered ***less than significant*** under cumulative conditions and no mitigation is required.

VII. OTHER CONSIDERATIONS

This chapter discusses several important topics including potential operational enhancements that would improve deficient operations at study intersections. Results of a detailed project access evaluation are also presented.

POTENTIAL OPERATIONAL ENHANCEMENTS

Figure 12 illustrates lane configurations that were identified to improve near-term operations in the study area. These enhancements include:

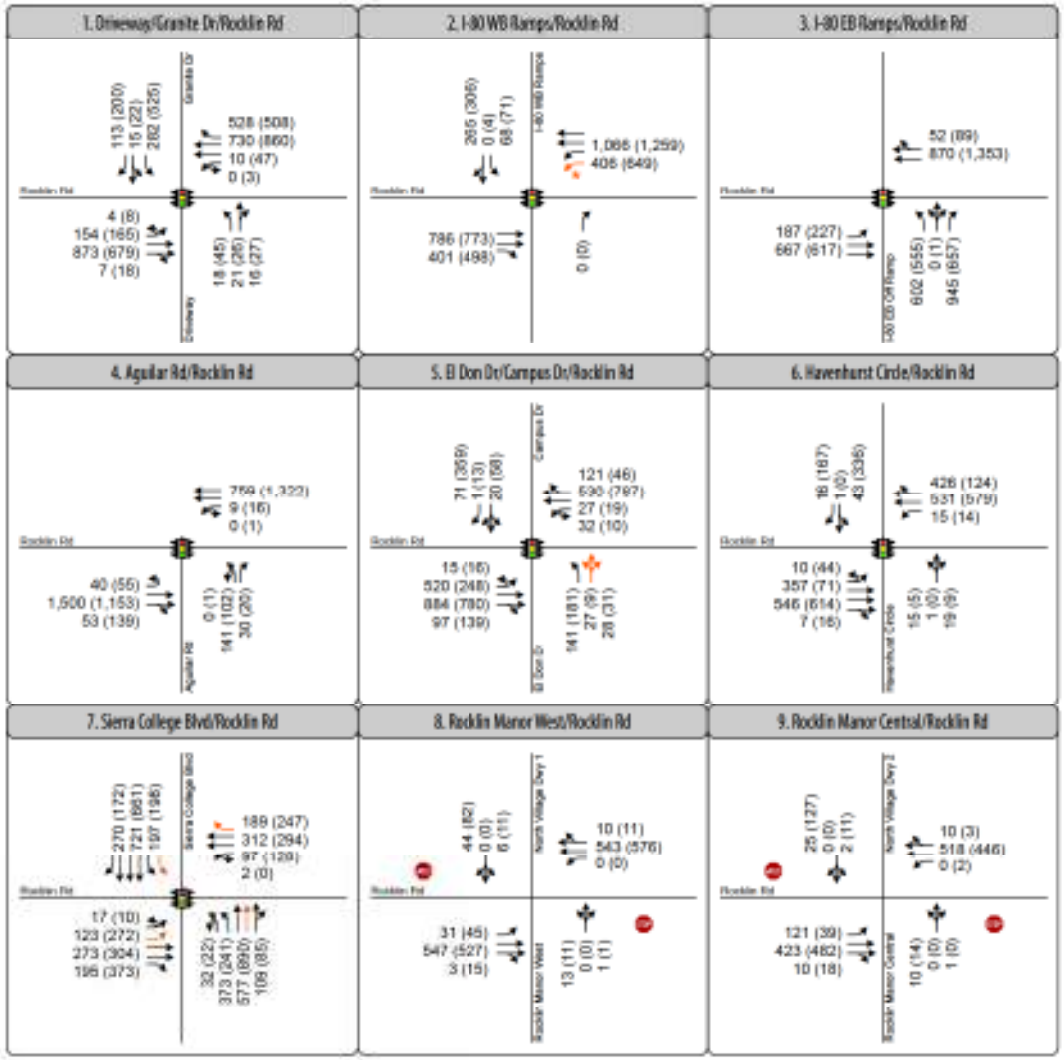
- *Addition of a second left-turn lane on westbound Rocklin Road at the I-80 WB Ramps*. This would require reconstruction of the I-80/Rocklin Road interchange to widen the undercrossing. This would be very costly and time-consuming to complete. But as was shown in Image 3 in Chapter III, this movement is the source of considerable congestion along westbound Rocklin Road.
- *Modification of the outside lane on the northbound El Don Drive approach to Rocklin Road from a shared through/right lane to a shared left/through/right lane*. This could be accomplished via a straightforward lane reassignment along with minor signal system modifications.
- *Construction of the following improvements at the Sierra College Boulevard/Rocklin Road Intersection* (refer to **Figure 13** for geometric drawings developed by the applicant's civil engineer, Wood Rodgers[6], showing how these improvements would be feasible via lane narrowing, shifting travel lanes, and utilization of undeveloped properties):
    - *Third through lane added on northbound Sierra College Boulevard from Rocklin Road to the north project boundary*
    - *Second left-turn lane added on southbound Sierra College Boulevard*
    - *Second left-turn lane added on eastbound Rocklin Road*
    - *Exclusive right-turn lane added on the westbound Rocklin Road*
- *Addition of a northbound right-turn lane on Sierra College Boulevard at Stadium Entrance/Street A*. Property within the project site would be dedicated to construct this lane.

Table 21 shows how the operational enhancements would benefit traffic operations under existing plus project conditions (see Appendix E for calculations). The potential operational enhancements would benefit operations under existing plus project conditions, with only the Rocklin Road/I-80 EB Ramps and Rocklin Road/El Don Drive intersections operating at a deficient LOS D during the PM peak hour. It should be noted that the Sierra College Campus Facility Master Plan contemplates improvements to this intersection including a second eastbund left-turn lane and widening of Campus Drive.

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6 *Rocklin Road/Sierra College Boulevard Geometric Alignment Drawing* (Wood Rodgers, November 13, 2020)





Study Intersection
Sierra College Campus
Project Site
Turn Lane
Turn Lane Added with Potential Operational Enhancements
AM (PM) Peak Hour Traffic Volume
Traffic Signal
Stop Sign
* Would Require Major Interchange Reconstruction

Note: Also includes a right-turn lane on NB approach at intersection 17. No other enhancements were identified at intersections 10-27.

Figure 12

Peak Hour Traffic Volumes and Lane Configurations - Existing Plus Project Conditions With Potential Interim Operational Enhancements



Source: Wood Rodgers, November 2020

Figure 13

Rocklin Road/Sierra College Boulevard Intersection Improvements

TABLE 21: PEAK HOUR INTERSECTION LEVEL OF SERVICE – EXISTING PLUS PROJECT CONDITIONS WITH POTENTIAL OPERATIONAL ENHANCEMENTS

Intersection	Control	Operating Goal [1]	Peak Hour	Existing Conditions		Existing Plus Project Conditions			
						Without Enhancements		With Enhancements	
				Average Delay (secs) [2]	LOS [2]	Average Delay (secs) [2]	LOS [2]	Average Delay (secs) [2]	LOS [2]
1. Rocklin Rd/Granite Dr	Signal	C	AM	17	B	19	B	18	B
			PM	30	C	30	C	32	C
2. Rocklin Rd/I-80 WB Ramps	Signal	C	AM	20	C	24	C	21	C
			PM	28	C	34	C	30	C
3. Rocklin Rd/I-80 EB Ramps	Signal	C	AM	28	C	29	C	28	C
			PM	43	D	46	D	42	D
4. Rocklin Rd/Aguilar Rd	Signal	C	AM	9	A	11	B	10	A
			PM	23	C	100	F	27	C
5. Rocklin Rd/El Don Dr	Signal	C	AM	31	C	56	E	33	C
			PM	30	C	178	F	42	D
6. Rocklin Rd/Havenhurst Circle	Signal	C	AM	23	C	23	C	26	C
			PM	14	B	60	E	20	B
7. Rocklin Rd/Sierra College Blvd	Signal	C	AM	39	D	46	D	35	C
			PM	36	D	78	E	32	C
8. Rocklin Rd/Rocklin Manor West	TWSC	- [4]	AM	2 (12)	A (B)	3 (19)	A (C)	2 (16)	A (C)
			PM	2 (8)	A (A)	3 (25)	A (D)	3 (15)	A (B)
9. Rocklin Rd/Rocklin Manor Central	TWSC	- [4]	AM	1 (10)	A (A)	2 (17)	A (C)	2 (11)	A (B)
			PM	1 (11)	A (B)	2 (13)	A (B)	2 (16)	A (C)
10. Rocklin Rd/Rocklin Manor East	TWSC	- [4]	AM	2 (9)	A (B)	2 (14)	A (C)	2 (7)	A (B)
			PM	1 (11)	A (B)	1 (4)	A (A)	1 (7)	A (A)
11. Rocklin Rd/Barton Rd	AWSC	C	AM	10	B	11	B	12	B
			PM	9	A	11	B	10	B
12. Sierra College Blvd/Granite Dr	Signal	C	AM	24	C	22	C	23	C
			PM	21	C	22	C	22	C
13. Sierra College Blvd/I-80 WB Ramps	Signal	C	AM	17	B	17	B	18	B
			PM	22	C	22	C	25	C
14. Sierra College Blvd/I-80 EB Ramps	Signal	C	AM	19	B	19	B	19	B
			PM	23	C	24	C	24	C
15. Sierra College Blvd/Schriber Way	TWSC [3]	C	AM	3 (6)	A (A)	3 (8)	A (A)	3 (7)	A (A)
			PM	2 (10)	A (A)	2 (22)	A (C)	3 (13)	A (B)
16. Sierra College Blvd/Bass Pro Dr	Signal	C	AM	6	A	6	A	7	A
			PM	9	A	10	A	9	A
17. Sierra College Blvd/Stadium Dr	Signal	C	AM	8	A	14	B	16	B
			PM	11	B	17	B	17	B

TABLE 21: PEAK HOUR INTERSECTION LEVEL OF SERVICE – EXISTING PLUS PROJECT CONDITIONS WITH POTENTIAL OPERATIONAL ENHANCEMENTS

Intersection	Control	Operating Goal [1]	Peak Hour	Existing Conditions		Existing Plus Project Conditions			
						Without Enhancements		With Enhancements	
				Average Delay (secs) [2]	LOS [2]	Average Delay (secs) [2]	LOS [2]	Average Delay (secs) [2]	LOS [2]
18. Sierra College Blvd/Campus Dr	TWSC	- [4]	AM	4 (13)	A (B)	3 (5)	A (A)	3 (5)	A (A)
			PM	4 (7)	A (A)	2 (5)	A (A)	3 (6)	A (A)
19. Sierra College Blvd/El Don Drive	Signal	C	AM	12	B	13	B	13	B
			PM	8	A	8	A	9	A
20. El Don Dr/N. Retail Access/SC Lot	TWSC	- [4]	AM	1 (1)	A (A)	3 (4)	A (A)	1 (2)	A (A)
			PM	2 (3)	A (A)	29 (53)	D (F)	5 (7)	A (A)
21. El Don Dr/S. Retail Access/SC Lot	TWSC	- [4]	AM	1 (5)	A (A)	2 (6)	A (A)	2 (4)	A (A)
			PM	2 (6)	A (A)	38 (163)	E (F)	2 (7)	A (A)
22. El Don Dr/Wildflower Lane	TWSC	C	AM	5	A	5	A	5	A
			PM	6	A	10	B	5	A
23. El Don Dr/Corona Circle	TWSC	C	AM	1 (4)	A (A)	1 (4)	A (A)	1 (5)	A (A)
			PM	1 (5)	A (A)	1 (5)	A (A)	1 (5)	A (A)
24. Sierra College Blvd/Street G	TWSC	- [4]	AM	Does Not Exist		3 (9)	A (A)	3 (11)	A (B)
			PM			3 (17)	A (C)	3 (17)	A (C)
25. Sierra College Blvd/North Village Dwy 3	TWSC	- [4]	AM	Does Not Exist		2 (7)	A (A)	2 (8)	A (B)
			PM			3 (17)	A (C)	3 (12)	A (B)
26. Rocklin Rd/South Village Dwy 3	TWSC	- [4]	AM	Does Not Exist		1 (2)	A (A)	1 (3)	A (A)
			PM			66 (151)	F (F)	3 (9)	A (A)
27. Rocklin Rd/South Village Dwy 4	AWSC	- [4]	AM	Does Not Exist		2 (9)	A (A)	2 (6)	A (A)
			PM			31 (71)	D (F)	2 (12)	A (B)

Notes:

1. Per each agency's LOS policy, standards, or direction.
2. All intersections analyzed using SimTraffic microsimulation model. For signalized intersections, average intersection delay is reported for all approaches. For side-street stop controlled intersections, the delay and LOS for the most-delayed individual movement is shown in parentheses next to the average intersection delay and LOS. All results are rounded to the nearest second.
3. Intersection was stop-controlled at the time of the counts, but has since been signalized.
4. LOS Policy does not apply to unsignalized driveways.

Shaded cells represent deficient operations when compared to operating goal. At intersections, operating goal only applies to PM peak hour conditions.

TWSC = Two-way stop control. AWSC = All-way stop control.

Source: Fehr & Peers, 2021.

Table 22 shows operational benefits of these enhancements under existing plus approved projects plus project conditions. Technical calculations are provided in Appendix E. The potential enhancements under this scenario are identical to those under existing plus project conditions, with the exception of converting the outside through lane from the I-80 EB off-ramp at Sierra College Boulevard to a shared through/right lane under the approved projects scenario.

TABLE 22: PEAK HOUR INTERSECTION LEVEL OF SERVICE – EXISTING PLUS APPROVED PROJECTS PLUS PROJECT CONDITIONS WITH POTENTIAL OPERATIONAL ENHANCEMENTS

Intersection	Control	Operating Goal [1]	Peak Hour	Existing Plus Approved Projects Conditions		Existing Plus Approved Projects Plus Project Conditions			
						Without Enhancements		With Enhancements	
				Average Delay (secs) [2]	LOS [2]	Average Delay (secs) [2]	LOS [2]	Average Delay (secs) [2]	LOS [2]
1. Rocklin Rd/Granite Dr	Signal	C	AM	24	C	24	C	25	C
			PM	32	C	66	E	34	C
2. Rocklin Rd/I-80 WB Ramps	Signal	C	AM	25	C	25	C	22	C
			PM	42	D	62	E	38	D
3. Rocklin Rd/I-80 EB Ramps	Signal	C	AM	29	C	31	C	31	C
			PM	40	D	46	D	47	D
4. Rocklin Rd/Aguilar Rd	Signal	C	AM	10	A	12	B	11	B
			PM	26	C	63	E	29	C
5. Rocklin Rd/El Don Dr	Signal	C	AM	40	D	53	D	55	D
			PM	35	D	152	F	48	D
6. Rocklin Rd/ Havenhurst Circle	Signal	C	AM	22	C	25	C	26	C
			PM	19	B	47	D	22	C
7. Rocklin Rd/Sierra College Blvd	Signal	C	AM	48	D	63	E	39	D
			PM	50	D	98	F	37	D
8. Rocklin Rd/Rocklin Manor West	TWSC	- [3]	AM	6 (33)	A (D)	10 (69)	A (F)	3 (23)	A (C)
			PM	2 (17)	A (C)	11 (84)	B (F)	3 (33)	A (D)
9. Rocklin Rd/Rocklin Manor Central	TWSC	- [3]	AM	2 (20)	A (C)	2 (21)	A (A)	2 (19)	A (C)
			PM	1 (14)	A (B)	2 (17)	A (C)	2 (16)	A (C)
10. Rocklin Rd/Rocklin Manor East	TWSC	- [3]	AM	2 (13)	A (B)	2 (15)	A (B)	2 (19)	A (C)
			PM	2 (13)	A (B)	2 (10)	A (A)	2 (14)	A (B)
11. Rocklin Rd/Barton Rd	AWSC	C	AM	15	B	13	B	16	C
			PM	11	B	12	B	12	B
12. Sierra College Blvd/Granite Dr	Signal	C	AM	26	C	27	C	30	C
			PM	28	C	32	C	32	C
13. Sierra College Blvd/I-80 WB Ramps	Signal	C	AM	20	C	22	C	22	C
			PM	27	C	27	C	29	C

TABLE 22: PEAK HOUR INTERSECTION LEVEL OF SERVICE – EXISTING PLUS APPROVED PROJECTS PLUS PROJECT CONDITIONS WITH POTENTIAL OPERATIONAL ENHANCEMENTS

Intersection	Control	Operating Goal [1]	Peak Hour	Existing Plus Approved Projects Conditions		Existing Plus Approved Projects Plus Project Conditions			
						Without Enhancements		With Enhancements	
				Average Delay (secs) [2]	LOS [2]	Average Delay (secs) [2]	LOS [2]	Average Delay (secs) [2]	LOS [2]
14. Sierra College Blvd/I-80 EB Ramps	Signal	C	AM	48	D	72	E	53	D
			PM	29	C	27	C	28	C
15. Sierra College Blvd/Schriber Way	Signal	C	AM	11 (52)	B (F)	11	B	12	B
			PM	8 (39)	A (E)	9	A	12	B
16. Sierra College Blvd/Bass Pro Dr	Signal	C	AM	17	B	18	B	12	B
			PM	19	B	21	C	26	C
17. Sierra College Blvd/Stadium Dr	Signal	C	AM	15	B	22	C	24	C
			PM	26	C	36	D	40	D
18. Sierra College Blvd/Campus Dr	TWSC	C	AM	2 (5)	A (A)	4 (6)	A (A)	4 (13)	A (B)
			PM	3 (6)	A (A)	5 (9)	A (A)	4 (7)	A (A)
19. Sierra College Blvd/El Don Drive	Signal	C	AM	15	B	16	B	17	B
			PM	12	B	26	C	13	B
20. El Don Dr/N. Retail Access/SC Lot	TWSC	- [3]	AM	2 (3)	A (A)	3 (5)	A (A)	3 (4)	A (A)
			PM	2 (3)	A (A)	24 (47)	C (E)	5 (9)	A (A)
21. El Don Dr/S. Retail Access/SC Lot	TWSC	- [3]	AM	2 (7)	A (A)	2 (7)	A (A)	2 (7)	A (A)
			PM	2 (8)	A (A)	36 (120)	E (F)	6 (18)	A (C)
22. El Don Dr/Wildflower Lane	TWSC	C	AM	5	A	5	A	5	A
			PM	6	A	15	C	6	A
23. El Don Dr/Corona Circle	TWSC	C	AM	1 (5)	A (A)	1 (4)	A (A)	1 (5)	A (A)
			PM	1 (5)	A (A)	1 (4)	A (A)	2 (4)	A (A)
24. Sierra College Blvd/Street G	TWSC	- [3]	AM	Does Not Exist		4 (13)	A (B)	4 (13)	A (C)
			PM			4 (24)	A (C)	4 (20)	A (C)
25. Sierra College Blvd/North Village Dwy 3	TWSC	- [3]	AM	Does Not Exist		3 (12)	A (B)	3 (12)	A (B)
			PM			5 (25)	A (C)	5 (24)	A (C)
26. Rocklin Rd/South Village Dwy 3	TWSC	- [3]	AM	Does Not Exist		1 (2)	A (A)	1 (2)	A (A)
			PM			49 (102)	E (F)	47 (98)	E (F)
27. Rocklin Rd/South Village Dwy 4	AWSC	- [3]	AM	Does Not Exist		2 (11)	A (B)	2 (11)	A (B)
			PM			22 (44)	C (E)	21 (43)	A (C)

Notes:

1. Per each agency's LOS policy, standards, or direction.
2. All intersections analyzed using SimTraffic microsimulation model. For signalized intersections, average intersection delay is reported for all approaches. For side-street stop controlled intersections, the delay and LOS for the most-delayed individual movement is shown in parentheses next to the average intersection delay and LOS. All results are rounded to the nearest second.
3. LOS Policy does not apply to unsignalized driveways.

TABLE 22: PEAK HOUR INTERSECTION LEVEL OF SERVICE – EXISTING PLUS APPROVED PROJECTS PLUS PROJECT CONDITIONS WITH POTENTIAL OPERATIONAL ENHANCEMENTS

Intersection	Control	Operating Goal [1]	Peak Hour	Existing Plus Approved Projects Conditions		Existing Plus Approved Projects Plus Project Conditions			
						Without Enhancements		With Enhancements	
				Average Delay (secs) [2]	LOS [2]	Average Delay (secs) [2]	LOS [2]	Average Delay (secs) [2]	LOS [2]

Shaded cells represent deficient operations when compared to operating goal. At intersections, operating goal only applies to PM peak hour conditions.

TWSC = Two-way stop control. AWSC = All-way stop control.

Source: Fehr & Peers, 2021.

Under ths scenario, the Rocklin Road/I-80 EB Ramps, Rocklin Road/I-80 WB Ramps, Rocklin Road/El Don Drive, Rocklin Road/Sierra College Boulevard, Sierra College Boulevard/Stadium Drive/Street A, and Sierra College Boulevard/I-80 EB Ramps intersections would each operate at a deficient LOS D during the PM peak hour.

In summary, the improvements shown on Figure 12 would be effective in improving operations under these near-term scenarios. However, it is worth reiterating the note shown on Figure 12 that the added capacity to the I-80/Rocklin Road interchange may require its full reconstruction including widening and replacement of the overcrossing structure. This would be a very expensive and time-consuming project to complete. Until that improvement or an equally effective alternate improvement is in place, Rocklin Road east of I-80 will continue to experience heavy delays and lengthy queues.

To accommodate cumulative traffic levels, all interim potential enhancements would be needed as well as a more extensive set of transportation improvements including upgrades to both interchanges. The cumulative plus project scenario was reanalyzed with the following additional operational enhancements (in addition to the interim enhancements):

1. Reconstruct the I-80/Rocklin Road interchange, maintaining its tight-diamond configuration and adding side-by-side dual left-turn lanes onto each on-ramp and widening to include three travel lanes in each direction.[7]

[7] It is worth noting that the City is also contemplating reconstruction of this interchange with a diverging diamond configuration. As part of a separate project, Fehr & Peers has analyzed this interchange configuration for a near-term (2030) timeframe and found operations to be acceptable. Cumulative operations with this interchange upgrade option have not been analyzed.

2. Construct third continuous through lane on southbound Sierra College Boulevard overcrossing of I-80.
3. Optimized lane configurations (but no widening) on the eastbound Dominguez Road approach to Sierra College Boulevard and on the I-80 EB off-ramps approach to Sierra College Boulevard.

Table 23 shows how these operational enhancements would benefit traffic operations under cumulative plus project conditions. This table shows that although some intersections would improve to acceptable levels, many would remain deficient. This is caused in part to continued oversaturated conditions at the I-80/Sierra College Boulevard interchange, which causes queue spillback a considerable distance in each direction of Sierra College Boulevard.

TABLE 23: PEAK HOUR INTERSECTION LEVEL OF SERVICE – CUMULATIVE PLUS PROJECT CONDITIONS WITH POTENTIAL OPERATIONAL ENHANCEMENTS

Intersection	Control	Operating Goal [1]	Peak Hour	Cumulative Conditions		Cumulative Plus Project Conditions			
						Without Enhancements		With Enhancements	
				Average Delay (secs) [2]	LOS [2]	Average Delay (secs) [2]	LOS [2]	Average Delay (secs) [2]	LOS [2]
1. Rocklin Rd/Granite Dr	Signal	C	AM	20	C	22	C	22	C
			PM	196	F	223	F	185	F
2. Rocklin Rd/I-80 WB Ramps	Signal	C	AM	41	D	39	D	23	C
			PM	56	E	57	E	34	C
3. Rocklin Rd/I-80 EB Ramps	Signal	C	AM	33	C	46	D	30	C
			PM	53	D	101	F	30	C
4. Rocklin Rd/Aguilar Rd	Signal	C	AM	19	B	19	B	19	B
			PM	65	E	91	F	32	C
5. Rocklin Rd/El Don Dr	Signal	C	AM	27	C	30	C	29	C
			PM	76	E	117	F	49	D
6. Rocklin Rd/Havenhurst Circle	Signal	C	AM	18	B	17	B	19	B
			PM	16	B	30	C	49	D
7. Rocklin Rd/Sierra College Blvd	Signal	C	AM	90	F	98	F	70	E
			PM	138	F	149	F	139	F
8. Rocklin Rd/Rocklin Manor West	TWSC	- [3]	AM	87 (149)	F (F)	71 (>300) [5]	F (F)	5 (23)	A (C)
			PM	23 (92)	C (F)	59 (>300) [5]	F (F)	9 (26)	A D)
9. Rocklin Rd/Rocklin Manor Central	TWSC	- [3]	AM	48 (177)	E (F)	35 (192)	D (F)	3 (14)	A (B)
			PM	6 (45)	A (E)	35 (>300) [5]	D (F)	4 (32)	A (D)
10. Rocklin Rd/Rocklin Manor East	TWSC	- [3]	AM	25 (86)	C (F)	13 (84)	B (F)	2 (13)	A (B)
			PM	1 (11)	A (B)	5 (52)	A (F)	1 (17)	A C)
11. Rocklin Rd/Barton Rd	AWSC	C	AM	11	B	11	B	14	B
			PM	32	D	52	F	68	F

TABLE 23: PEAK HOUR INTERSECTION LEVEL OF SERVICE – CUMULATIVE PLUS PROJECT CONDITIONS WITH POTENTIAL OPERATIONAL ENHANCEMENTS

Intersection	Control	Operating Goal [1]	Peak Hour	Cumulative Conditions		Cumulative Plus Project Conditions			
						Without Enhancements		With Enhancements	
				Average Delay (secs) [2]	LOS [2]	Average Delay (secs) [2]	LOS [2]	Average Delay (secs) [2]	LOS [2]
12. Sierra College Blvd/Granite Dr [4]	Signal	C	AM	240	F	238	F	377	F
			PM	385	F	344	F	374	F
13. Sierra College Blvd/I-80 WB Ramps	Signal	C	AM	191	F	149	F	264	F
			PM	164	F	141	F	137	F
14. Sierra College Blvd/I-80 EB Ramps	Signal	C	AM	289	F	295	F	279	F
			PM	43	D	62	E	48	D
15. Sierra College Blvd/Schriber Way	Signal	C	AM	31	C	37	D	75	E
			PM	28	C	33	C	28	C
16. Sierra College Blvd/Bass Pro Dr	Signal	C	AM	30	C	27	C	35	C
			PM	95	F	73	E	65	E
17. Sierra College Blvd/Stadium Dr	Signal	C	AM	16	B	21	C	24	C
			PM	257	F	184	F	173	F
18. Sierra College Blvd/Campus Dr	TWSC	- [3]	AM	6 (6)	A (A)	6 (7)	A (A)	6 (6)	A A)
			PM	12 (56)	B (F)	48 (91)	F (F)	45 (79)	E (F)
19. Sierra College Blvd/El Don Drive	Signal	C	AM	25	C	61	E	58	E
			PM	264	F	223	F	230	F
20. El Don Dr/N. Retail Access/SC Lot	TWSC	- [3]	AM	7 (9)	A (A)	4 (5)	A (A)	3 (5)	A (A)
			PM	20 (37)	C (E)	63 (120)	F (F)	3 (5)	A (A)
21. El Don Dr/S. Retail Access/SC Lot	TWSC	- [3]	AM	2 (12)	A (B)	2 (6)	A (A)	2 (9)	A (A)
			PM	12 (38)	B (E)	55 (>300)[5]	F (F)	2 (8)	A (A)
22. El Don Dr/Wildflower Lane	TWSC	C	AM	6	A	6	A	6	A (A)
			PM	12	B	24	C	6	A
23. El Don Dr/Corona Circle	TWSC	C	AM	1 (5)	A (A)	1 (6)	A (A)	1 (7)	A (A)
			PM	1 (5)	A (A)	1 (4)	A (A)	1 (6)	A (A)
24. Sierra College Blvd/Street G	TWSC	- [3]	AM	Does Not Exist		7 (16)	A (C)	6 (18)	A (C)
			PM			58 (>300)[5]	F (F)	53 (>300)[5]	F (F)
25. Sierra College Blvd/North Village Dwy 3	TWSC	- [3]	AM	Does Not Exist		6 (20)	A (C)	6 (25)	A (C)
			PM			38 (>300)[5]	E (F)	38 (>300) [5]	E (F)
26. Rocklin Rd/South Village Dwy 3	TWSC	- [3]	AM	Does Not Exist		2 (4)	A (A)	2 (12)	A (B)
			PM			35 (76)	D (F)	5 11)	A (B)
27. Rocklin Rd/South Village Dwy 4	AWSC	- [3]	AM	Does Not Exist		2 (7)	A (A)	2	A
			PM			11 (17)	B (C)	14	B

Notes:

1. Per each agency's LOS policy, standards, or direction.

TABLE 23: PEAK HOUR INTERSECTION LEVEL OF SERVICE – CUMULATIVE PLUS PROJECT CONDITIONS WITH POTENTIAL OPERATIONAL ENHANCEMENTS

Intersection	Control	Operating Goal [1]	Peak Hour	Cumulative Conditions		Cumulative Plus Project Conditions			
						Without Enhancements		With Enhancements	
				Average Delay (secs) [2]	LOS [2]	Average Delay (secs) [2]	LOS [2]	Average Delay (secs) [2]	LOS [2]

2. All intersections analyzed using SimTraffic microsimulation model. For signalized intersections, average intersection delay is reported for all approaches. For side-street stop controlled intersections, the delay and LOS for the most-delayed individual movement is shown in parentheses next to the average intersection delay and LOS. All results are rounded to the nearest second.
3. LOS Policy does not apply to unsignalized driveways.
4. Results at Sierra College Boulevard/Granite Drive may appear worse than in other studies because it is located at the edge of the network and all delays on the southbound approach are attributed to this intersection regardless of whether the queue would have extended to an upstream signal.
5. Value of '>300' shown for stop-controlled intersections with traffic volumes that exceed the program's ability to produce reasonable delay forecasts. Shaded cells represent deficient operations when compared to operating goal.

At intersections, operating goal only applies to PM peak hour conditions.
TWSC = Two-way stop control. AWSC = All-way stop control.
Source: Fehr & Peers, 2021.

EVALUATION OF TURN LANE STORAGE REQUIREMENTS

Results from the SimTraffic analysis were used to analyze turn lane storage requirements for critical movements in the vicinity of the project site. **Table 24** shows the 95th percentile vehicle queues under the three existing plus approved projects scenarios analyzed in this study. **Table 25** shows the 95th percentile vehicle queues for outbound traffic exiting at the various unsignalized project driveways serving the North and South Village for the two approved projects plus project scenarios (i.e., without and with potential enhancements). Results are shown for these scenarios (versus cumulative) because they contemplate development of various approved, but not yet constructed projects in the area site vicinity. The cumulative analysis results, which did not assume improvements at either the I-80/Rocklin Road or I-80/Sierra College Boulevard interchanges, were reviewed but found to not provide (for planning purposes) reliable queue length estimates because the lack of adequate capacity enhancements at each interchange (due to vehicular queue spillbacks throughout the network).

PROJECT ACCESS REVIEW – NORTH VILLAGE

The review of the North Village project access focuses on adequacy of project access, locations of project driveways, and accommodation of non-auto modes of travel.

Sierra College Boulevard Frontage

Per City design standards and results in Table 24, Fehr & Peers recommends the following at the signalized Sierra College Boulevard/Stadium Way/Street A intersection (see **Figure 14** for illustration of project access recommendations for the North Village).

- Construct a 250-foot southbound left-turn lane and 180-foot northbound right-turn lane.
- Provide an exclusive left and a shared through/right lane with 100 feet of storage each on the westbound Street A approach (i.e., exiting the residential toward Sierra College Boulevard).
- Operate the eastbound and westbound phases with split-phasing (necessary because the eastbound approach will include a shared left/through lane due to lane alignment requirements).
- Provide a crosswalk across Sierra College Boulevard on the south leg of the intersection (so that pedestrian calls operate with the higher demand eastbound movement).
- At the first internal intersection (Street A/Street B), place stop signs on the northbound and southbound approaches. A stop sign would not be placed for inbound traffic entering the residential community at this intersection so as to avoid traffic spilling back from such a stop sign placement on Sierra College Boulevard.

TABLE 24: 95TH PERCENTILE QUEUE LENGTHS AT PROJECT ACCESSES AND ADJACENT INTERSECTIONS – EXISTING PLUS APPROVED PROJECTS PLUS PROJECT CONDITIONS

Intersection	Movement	Available Storage (ft.)	95th Percentile Queue (in feet) Under Existing Plus Approved Projects [1]					
			Without Proposed Project		With Proposed Project			
					Without Enhancements		With Enhancements [2]	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Rocklin Road/El Don Drive/ Campus Drive	Westbound Left	250	75	125	150	325	175	200
	Northbound Left	125	125	125	125	125	125	125
	Northbound Through/Right [3]	125 / 300	200	200	275	500	250	350
Rocklin Road/Sierra College Boulevard	Southbound Left	250	250	325	300	350	175	200
	Southbound Through	575	225	350	275	500	300	250
	Eastbound Left	225	275	300	300	300	200	225
	Eastbound Through	925	225	350	400	850	200	200
	Westbound Left	225	200	150	250	275	175	200
	Westbound Through [4]	425	575	425	500	600	200	200
	Westbound Right [4]	N/A / 185	Does Not Exist		Does Not Exist		75	100
	Southbound Left-Turn	N/A / 250	Does Not Exist		50	150	75	150

Sierra College Boulevard/ Stadium Drive	Westbound Left-Turn	100		100	100	100	100
	Westbound Through/Right	100		75	75	75	75
	Northbound Right-Turn	N/A / 180		Does Not Exist		50	150
Sierra College Boulevard/ Street G	Southbound Left-Turn	N/A / 240		50	75	50	75
Sierra College Boulevard/ Retail Center	Southbound Left-Turn	N/A / 170		50	75	50	75
Rocklin Road/ Rocklin Manor W/Dwy 1	Eastbound Left-Turn	N/A / 200		50	50	50	50

NOTES:

[1] All results obtained from SimTraffic model for given scenario. All values rounded to the nearest 25 feet and represent the 95th percentile queue "per lane'.

[2] Refer to prior section for potential enhancements.

[3] Potential enhancements modify this lane to become a shared left/through/right movement. Resulting left/through/right lane storage would increase to 300 feet.

[4] Available storage extends back to Rocklin Manor West driveway. Project would construct a dedicated right-turn lane.

N / A = Not Applicable (Does not exist or to be determined by study).

Shaded cells indicate 95th percentile queue exceeds available storage.

Source: Fehr & Peers, 2021.

TABLE 25: 95TH PERCENTILE QUEUE LENGTHS FOR OUTBOUND TRAFFIC AT STOP-CONTROLLED PROJECT DRIVEWAYS – EXISTING PLUS APPROVED PROJECTS PLUS PROJECT CONDITIONS

Intersection	Movement	Available Storage (ft.) [3]	95th Percentile Queue (in feet) Under Existing Plus Approved Projects Plus Project [1]			
			Without Enhancements		With Enhancements [2]	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
North Village						
Rocklin Road/North Village Dwy 1	Southbound Left/Through/Right	N / A	100	225	75	75
Rocklin Road/North Village Dwy 2	Southbound Left/Through/Right	N / A	50	100	50	100
Sierra College Blvd./ North Village Dwy 3	Westbound Right	N / A	50	75	50	75
Sierra College Blvd./Street G	Westbound Right	125	75	75	75	75
South Village						
El Don Dr/Wildflower Ln/South Village Dwy 1	Westbound Left/Through/Right	N / A	25	50	25	50
El Don Dr/South Village Dwy 2	Westbound Left/Through/Right	N / A	50	50	50	50
Rocklin Road/South Village Dwy 3	Northbound Right	N / A	25	50	25	50
Rocklin Road/S. Village Dwy 4	Northbound Right	N / A	50	100	50	100
El Don Dr/Corona Circle/ Street A	Westbound Left/Through/Right	50	50	50	50	50

NOTES:
[1] All results obtained from SimTraffic model for given scenario. All values rounded to the nearest 25 feet.
[2] Refer to prior section for potential enhancements.
[3] Based on site plans or N / A (not applicable) if to be determined from study.
Source: FEHR & PEERS, 2021.

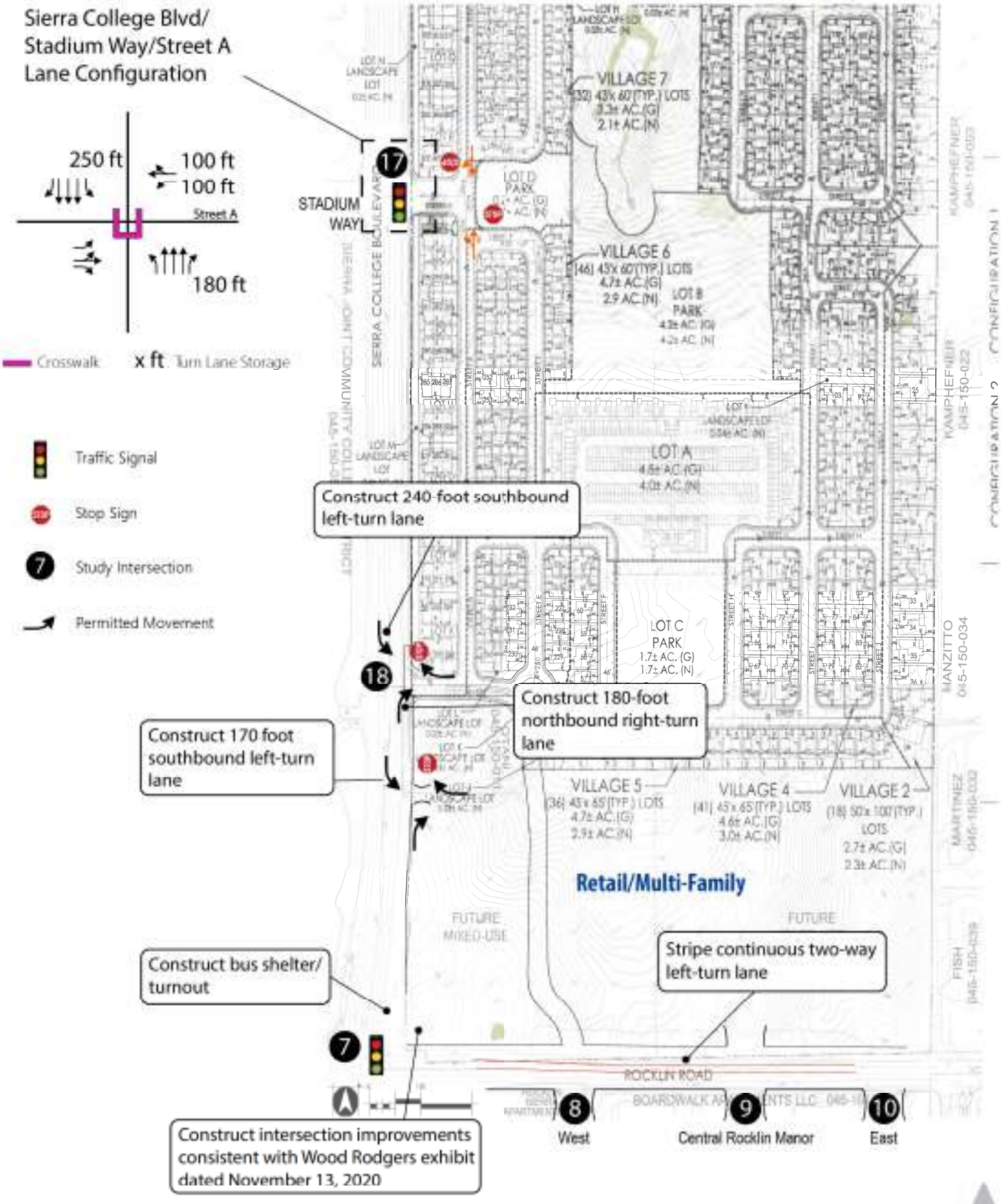


Figure 14

Project Access Recommendations (North Village)

Per City design standards and results in Table 24, Fehr & Peers recommends the following at the unsignalized Street G intersection:

- Construct a 240-foot southbound left-turn lane (per Wood Rodgers AutoCAD plan drawing).
- Construct a 180-foot northbound right-turn deceleration lane (based on approximate available distance from Street G to northerly retail driveway)

Per City design standards and results in Table 24, Fehr & Peers recommends the following access recommendations along Sierra College Boulevard for the retail center. Note that since a project site plan has not been provided for review, the recommendations are necessarily generic in nature and intended to help guide the site design.

- Construct a 170-foot southbound left-turn lane (per Wood Rodgers Drawing shown in Figure 13).
- Construct a continuous bus turnout / deceleration lane that would begin directly north of Rocklin Road and terminate at the northern retail driveway (see Figure 13).
- Design project driveways to provide outbound vehicle throat depths in accordance with values shown in Table 25.

Rocklin Road Frontage

Fehr & Peers recommends the following:

- Formally stripe and add pavement markings to delineate the median lane to be a continuous two-way left-turn lane from east of the narrow raised median (near the westbound left-turn lane) to the easterly edge of the project site.
- Design project driveways to provide outbound vehicle throat depths in accordance with values shown in Table 25.

Given the modest amount of westbound right-turning traffic into the project driveways, right-turn deceleration lanes are not warranted. Driveway spacing is adequate to accommodate left-turn movements from the project driveways and the existing driveways on the south side of the street.Sierra College Boulevard/Rocklin Road Intersection Improvements

Fehr & Peers recommends the following:

- Construct all improvements shown in Figure 13. This includes the following specific added lanes and storage lengths:
    - Westbound approach shall consist of a 120-foot left-turn lane, two through lanes, and a 150-foot right-turn lane.
    - Eastbound approach is widened to add a second 220-foot left-turn lane.

- Northbound approach is widened/restriped to add a third northbound through lane and a right-turn lane with turn lane length to the satisfaction of the City Engineer.
- Southbound approach is widened/restriped to add a second southbound left-turn lane with a design whereby the inside turn lane is 200 feet in length while the outside turn lane is 260 feet in length (for sight distance considerations described below).

Sierra College Boulevard Sight Distance Considerations

Sight distance concerns at the project accesses on Sierra College Boulevard were identified as an area requiring further evaluation in Spring 2020 when the administrative draft report was being prepared. This led to a series of virtual meetings, in which potential sight distance solutions were identified and then evaluated. This section provides an overview of the sight distance concerns and then summarizes the solutions that were developed.

Sight Distance Limitations

Sight distance limitations were identified for southbound traffic turning left into both Street G and the retail center due to the horizontal curvature present on Sierra College Boulevard. Page IS 04-06 of the City of Rocklin *Improvement Standards (2016)* states that roadway designs shall not be allowed "where sight distance will be inadequate for drivers to tell if they can safely enter the traffic flow or cross the street", though exceptions may be made by the City Engineer for especially difficult design circumstances. A minimum sight distance of 500 feet is recommended for a design speed of 55 mph (i.e., 5 mph above the 50 mph posted speed limit). Table 201.1 of the *Highway Design Manual* (Caltrans, 2018) indicates that the stopping sight distance (SSD) is 500 feet for a 55 mph design speed. **Image 3** presents the view a motorist would have of oncoming traffic from the approximate location of the southbound left-turn lane into the retail center if the lane were constructed in the current median location. To achieve the 500-foot SSD, a left-turning motorist would need to be able to observe oncoming traffic just as the vehicle enters the signalized intersection. As shown, the oncoming vehicle (with headlights on) is stopped at the red light and positioned in the inside through lane. If the southbound left-turn pocket were fully occupied (as occurs frequently), this stopped vehicle would not be visible from the unsignalized southbound left-turn pocket.



Image 3:View from original left-turn lane location serving retail center (looking south toward Rocklin Road).

Sight Distance Solution

The applicant team, Fehr & Peers, and City staff worked collaboratively in Summer and Fall 2020 to develop a geometric design for Sierra College Boulevard that accomplished two important objectives. First, it showed how the ultimate lane configuraitons at the Sierra College Boulevard/Rocklin Road intersection would be constructed (including the amount of encroachment in the North Village property). Second, it developed specific median and turn lane geometric features that enabled an adequate line of sight to be provided for motorists on southbound Sierra College Boulevard turning left in turn lanes accessing Street G and the retail center.

This design is shown on Figure 13. It displays the line of sight that would be provided for motorists in each turn pocket. Note that each line of sight passes very closely to the adjacent more southerly left-turn pocket. Because of this, the City is requiring a field review of the turn pocket locations by a professional engineer prior to their opening to traffic to ensure that the improvements have been constructed per the design plans such that sight distance requirements are met.

PROJECT ACCESS REVIEW – SOUTH VILLAGE

The review of the South Village project access focuses on adequacy of project access from both Rocklin Road and El Don Drive.

Rocklin Road Frontage

Per City design standards and results in Table 24, Fehr & Peers recommends the following:

- Depending on final site plan design, construct either:
  - Continuous bus turnout / deceleration lane into project driveway; or
  - Physically separated driveway on east portion of frontage with 180-foot deceleration lane.
- Construct raised median for a distance of 460 feet between the back of the westbound left-turn pocket at El Don Drive and the back of eastbound left-turn pocket at Havenhurst Circle. This would restrict movements at the adjacent church driveway to right-turns only. However, it is noted that u-turns are allowed on Rocklin Road at El Don Drive and Havenhurst Circle.
- Design project driveways to provide outbound vehicle throat depths in accordance with values shown in Table 25.

<u>El Don Drive Frontage</u>

Fehr & Peers recommends the following:

- Restripe the northbound through/right lane on the El Don Drive approach to Rocklin Road to be a shared left/through/right lane.
- Install an all-way stop-control at the El Don Drive/Corona Circle/Street A intersection to provide adequate sight distance (refer to discussion below for details).
- Design project driveways to provide outbound vehicle throat depths in accordance with values shown in **Table 25**.

The most northerly project driveway on El Don Drive (identified as study intersection #21) is situated 300 feet south of the stop bar for the northbound El Don Drive stop bar at Rocklin Road. The queuing results in Table 24 indicate that even with the potential operational enhancements in place, the 95th percentile queue during the PM peak hour would be 350 feet. This would mean this driveway would be blocked once or twice during the PM peak hour. It is not possible to relocate the driveway further south due to it being situated directly opposite an existing retail center driveway. While it may be possible to restrict movements at this driveway to right-turns only (while maintaining full access at the opposing driveway), this access concept would require a median gullwing design. In lieu of such an improvement, it is recommended that the City increase the maximum green extension on the El Don Drive approach to Rocklin Road to prevent this level of queue spillback.

Single-Family Residential Street Sight Distance Considerations

El Don Drive features a horizontal curve south of the Corona Circle/Street A intersection. Field observations reveal that this curvature (as well as landscaping on private property) would limit sight distance for outbound (heading westbound) traffic exiting Street A. **Image 4** shows the visibility a

motorist on Street A would have looking left (i.e., to the south). Motorists encounter an all-way stop at the El Don Drive/Foothill Road intersection, which is situated 275 feet south from the Corona Circle/Street A intersection.

Discussions with the project applicant, Fehr & Peers, and City staff led to the following recommendation:

- Install all-way stop control at the El Don Drive/Corona Circle/Street A intersection.

This would result in three all-way stop intersections spaced within a 900-foot segment of El Don Drive. When combined with all-way stops located to the east at Freeman Drive and Ambassador Drive, a total of five all-way stops would be located along the 0.8-mile length of El Don Drive. This may act to further discourage cut-through traffic from using this street.

Figure 15 illustrates the project access recommendations for the South Village.



Image 4: View of El Don Drive looking southbound from Street A (opposite Corona Circle).

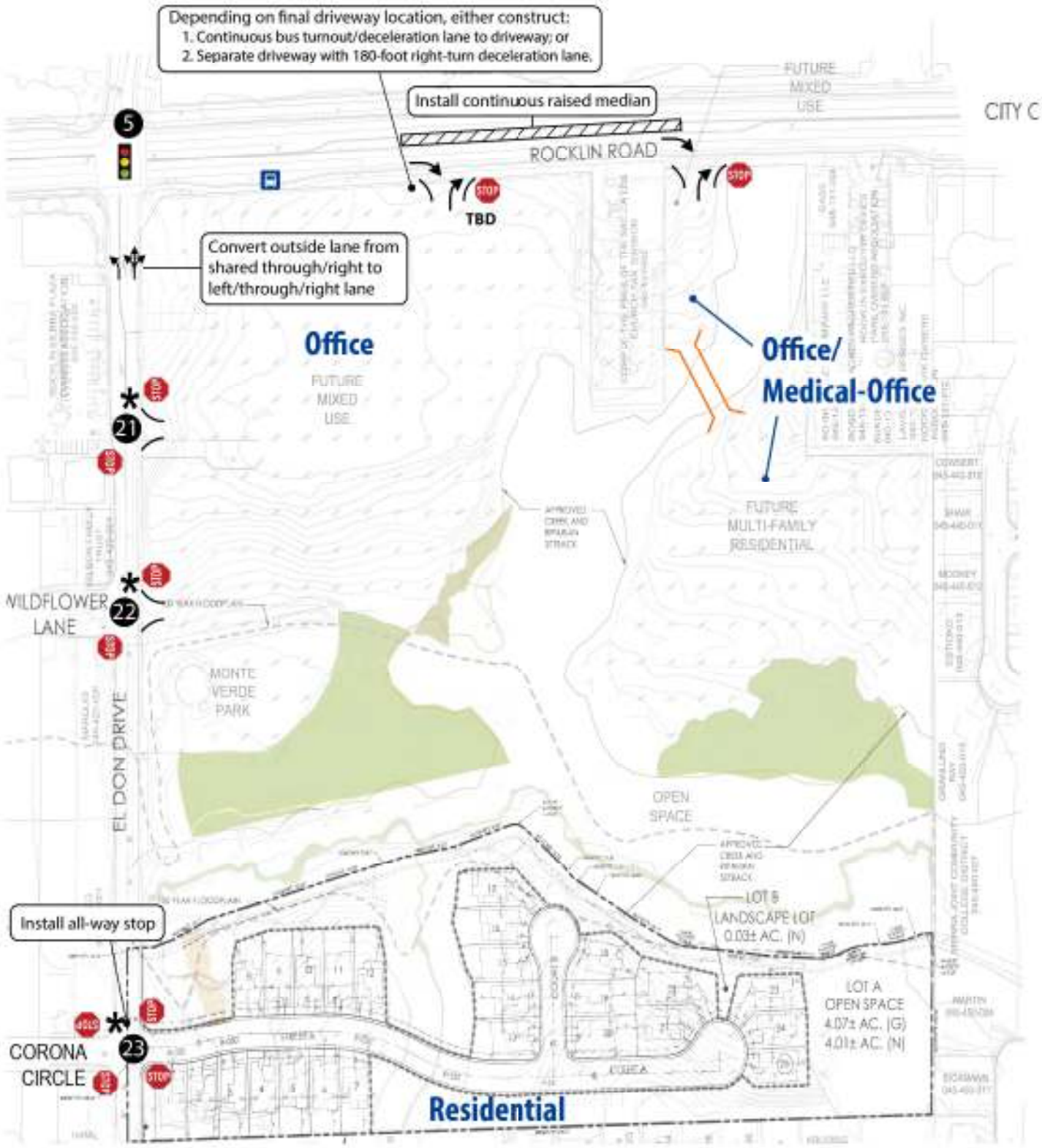


Figure 15

Project Access Recommendations (South Village)

CONDITIONS OF APPROVAL

The following transportation and circulation-related Conditions of Approval are recommended for the proposed project. Conditions of Approval are organized by village.

North Village

1. At the signalized Sierra College Boulevard/Stadium Way/Street A intersection:
   - Construct a 250-foot southbound left-turn lane and 180-foot northbound right-turn lane
   - Provide an exclusive left and a shared through/right lane with 100 feet of storage each on the westbound Street A approach toward Sierra College Boulevard
   - Operate the eastbound and westbound phases with split-phasing
   - Provide a crosswalk across Sierra College Boulevard on the south leg of the intersection
2. At the first internal intersection (Street A/Street B) east of Sierra College Boulevard/Stadium Way/Street A, post stop signs on the northbound and southbound approaches
3. At the unsignalized Sierra College Boulevard/Street G intersection:
   - Construct a 240-foot southbound left-turn lane
   - Construct a 180-foot northbound right-turn deceleration lane
4. Along the Sierra College Boulevard frontage of the retail center:
   - Construct a 170-foot southbound left-turn lane at the northerly retail center driveway
   - Remove the existing northbound left-turn lane into the Sierra College campus
   - Construct a continuous bus turnout / deceleration lane that would begin directly north of Rocklin Road and terminate at the northern retail driveway
   - Design project driveways to provide outbound vehicle throat depths in accordance with recommendations from the *College Park TIS* (Fehr & Peers, 2021)
5. Along the Rocklin Road frontage of the retail center:
   - Formally stripe and add pavement markings to delineate the median lane to be a continuous two-way left-turn lane
   - Design project driveways to provide outbound vehicle throat depths in accordance with recommendations from the *College Park TIS* (Fehr & Peers, 2021)
6. At the signalized Sierra College Boulevard/Rocklin Road intersection:
   - Construct all improvements shown in Figure 13 of the *College Park TIS* (Fehr & Peers, 2021) This includes the following specific added lanes and storage lengths:
     - Westbound approach shall consist of a 120-foot left-turn lane, two through lanes, and a 150-foot right-turn lane.
     - Eastbound approach is widened to add a second 220-foot left-turn lane.

- Northbound approach is widened/restriped to add a third northbound through lane and a right-turn lane with turn lane length to the satisfaction of the City engineer.
- Southbound approach is widened/restriped to add a second southbound left-turn lane with a design whereby the inside turn lane is 200 feet in length while the outside turn lane is 260 feet in length.

7. Pay City CIP/Traffic Mitigation fees and any other applicable road fees

South Village

1. At the signalized Rocklin Road/El Don Drive intersection:
   - Restripe the through/right lane on the northbound El Don Drive approach to be a shared left/through/right lane
2. Along the project frontage of Rocklin Road:
   - Construct a raised median for a distance of 460 feet between the back of the westbound left-turn pocket at El Don Drive and the back of eastbound left-turn pocket at Havenhurst Circle
   - Depending on the final site plan design for the property in the southeast corner of the Rocklin Road/El Don Drive intersection, construct either a continuous bus turnout / deceleration lane into the project driveway, or construct a physically separated driveway with a 180-foot deceleration lane located downstream of the bus turnout
   - Design project driveways to provide outbound vehicle throat depths in accordance with recommendations from the *College Park TIS* (Fehr & Peers, 2021)
3. Along the project frontage of El Don Drive:
   - Install an all-way stop-control at the El Don Drive/Corona Circle/Street A intersection
   - Design project driveways to provide outbound vehicle throat depths in accordance with recommendations from the *College Park TIS* (Fehr & Peers, 2021)
4. Pay City CIP/Traffic Mitigation fees and any other applicable road fees



Technical Appendix to Final Transportation Impact Study for College Park

Prepared for:
City of Rocklin

June 23, 2021

Prepared by:

FEHR & PEERS

RS17-3534

APPENDIX A: CIRCULAR 212 INTERSECTION LOS CALCULATIONS

ID	Intersection	Control Type	LOS - V/C							
			Existing				Existing Plus Project			
			AM		PM		AM		PM	
1	Granite Drive / Rocklin Road	Signal	A	0.472	B	0.603	A	0.563	B	0.636
4	Agular Road / Rocklin Road	Signal	A	0.542	A	0.466	B	0.617	A	0.545
5	El Don Drive / Rocklin Road	Signal	B	0.673	B	0.635	C	0.722	C	0.742
6	Havenhurst Circle / Rocklin Road	Signal	A	0.592	A	0.484	B	0.642	A	0.564
7	Sierra College Blvd / Rocklin Road	Signal	A	0.525	B	0.662	A	0.570	C	0.793
12	Sierra College Blvd / Granite Drive	Signal	A	0.593	A	0.540	B	0.608	A	0.557
16	Sierra College Blvd / Bass Pro Drive	Signal	A	0.496	A	0.329	A	0.528	A	0.372
17	Sierra College Blvd / Stadium Entrance	Signal	A	0.290	A	0.438	A	0.419	A	0.422
19	Sierra College Blvd / El Don Dr	Signal	A	0.401	A	0.444	A	0.446	A	0.476

Shaded cells represent deficient operations (applies to PM peak hour only)

ID	Intersection	Control Type	LOS - V/C							
			Existing Plus Approved Projects No Project				Existing Plus Approved Projects Plus Project			
			AM		PM		AM		PM	
1	Granite Drive / Rocklin Road	Signal	A	0.541	B	0.607	A	0.557	B	0.640
4	Agular Road / Rocklin Road	Signal	B	0.615	A	0.496	B	0.691	A	0.575
5	El Don Drive / Rocklin Road	Signal	B	0.700	B	0.693	C	0.746	C	0.800
6	Havenhurst Circle / Rocklin Road	Signal	B	0.647	A	0.531	B	0.700	B	0.611
7	Sierra College Blvd / Rocklin Road	Signal	B	0.683	D	0.815	C	0.729	E	0.951
12	Sierra College Blvd / Granite Drive	Signal	B	0.641	B	0.638	C	0.656	B	0.653
16	Sierra College Blvd / Bass Pro Drive	Signal	B	0.632	A	0.449	B	0.673	A	0.487
17	Sierra College Blvd / Stadium Entrance	Signal	B	0.633	A	0.577	C	0.708	B	0.615
19	Sierra College Blvd / El Don Dr	Signal	A	0.488	A	0.545	A	0.514	A	0.548

Shaded cells represent deficient operations (applies to PM peak hour only)

With improvements shown on Figure 13, PM peak hour operations improve to LOS B (v/c = 0.615) under existing plus approved projects plus project conditions.

ID	Intersection	Control Type	LOS - V/C							
			Cumulative No Project				Cumulative Plus Project			
			AM		PM		AM		PM	
1	Granite Drive / Rocklin Road	Signal	A	0.593	C	0.757	B	0.608	C	0.761
4	Agular Road / Rocklin Road	Signal	A	0.554	A	0.499	B	0.604	A	0.552
5	El Don Drive / Rocklin Road	Signal	A	0.524	A	0.492	A	0.560	A	0.580
6	Havenhurst Circle / Rocklin Road	Signal	A	0.467	A	0.325	A	0.500	A	0.367
7	Sierra College Blvd / Rocklin Road	Signal	B	0.662	E	0.915	B	0.694	E	0.983
12	Sierra College Blvd / Granite Drive	Signal	C	0.747	D	0.856	C	0.757	D	0.867
15	Sierra College Blvd / Schriber Way	SSSC[1]	D	0.869	B	0.665	D	0.895	B	0.696
16	Sierra College Blvd / Bass Pro Drive	Signal	D	0.828	E	0.970	D	0.855	F	1.008
17	Sierra College Blvd / Stadium Entrance	Signal	C	0.725	C	0.702	D	0.817	C	0.792
19	Sierra College Blvd / El Don Dr	Signal	A	0.548	B	0.652	A	0.567	B	0.673

Shaded cells represent deficient operations (applies to PM peak hour only)

Intersection Level Of Service Report
Intersection 1: Granite Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.472

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	315.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	18	21	16	277	15	113	158	801	7	10	688	525
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	18	21	16	277	15	113	158	801	7	10	688	525
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	4	5	4	66	4	27	37	190	2	2	163	124
Total Analysis Volume [veh/h]	17	20	15	263	14	107	150	759	7	9	652	498
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna
Signal group	0	3	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.472

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 4: Aguilar Road / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.542

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	141	0	28	0	0	0	40	1274	53	9	647	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	2.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	141	0	28	0	0	0	40	1274	53	9	647	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	1.0000	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000
Total 15-Minute Volume [veh/h]	33	0	7	0	0	0	9	302	13	2	153	0
Total Analysis Volume [veh/h]	134	0	27	0	0	0	38	1208	50	9	613	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.542

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 5: El Don Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.673

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			15.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	119	20	23	20	1	71	531	695	62	14	440	121
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	119	20	23	20	1	71	531	695	62	14	440	121
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	28	5	5	5	0	17	126	165	15	3	104	29
Total Analysis Volume [veh/h]	113	19	22	19	1	67	503	659	59	13	417	115
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	7	0	0	3	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.673

Sequence

Ring 1	2	1	3	7	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Havenhurst Circle / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.592

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	15	1	19	41	1	16	357	429	7	15	406	424
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	1	19	41	1	16	357	429	7	15	406	424
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	4	0	5	10	0	4	85	102	2	4	96	101
Total Analysis Volume [veh/h]	14	1	18	39	1	15	339	408	7	14	386	403
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.592

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	5	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.504

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	397	552	63	157	674	200	103	195	191	76	263	174
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	397	552	63	157	674	200	103	195	191	76	263	174
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	94	131	15	37	160	47	24	46	45	18	62	41
Total Analysis Volume [veh/h]	376	523	60	149	639	190	98	185	181	72	249	165
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.504

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 12: Sierra College Blvd / Granite Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.593

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	253	462	86	80	824	64	65	20	103	143	24	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	253	462	86	80	824	64	65	20	103	143	24	33
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	60	109	20	19	195	15	15	5	24	34	6	8
Total Analysis Volume [veh/h]	240	438	82	76	781	61	62	19	98	136	23	31
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.593

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 16: Sierra College Blvd / Bass Pro Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.496

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	740	26	25	1389	7	0	1	103	23	24	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	740	26	25	1389	7	0	1	103	23	24	8
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	0	175	6	6	329	2	0	0	24	5	6	2
Total Analysis Volume [veh/h]	0	702	25	24	1317	7	0	1	98	22	23	8
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.496

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 17: Sierra College Blvd / Stadium Entrance

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.290

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00		50.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	50	738	1099	313	18	18
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	50	738	1099	313	18	18
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	12	175	261	74	4	4
Total Analysis Volume [veh/h]	48	701	1044	297	17	17
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	3	8	4	0	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.290

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 19: Sierra College Blvd / El Don Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.401

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	25	892	5	36	910	25	54	1	35	18	1	44
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	25	892	5	36	910	25	54	1	35	18	1	44
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	6	212	1	9	216	6	13	0	8	4	0	10
Total Analysis Volume [veh/h]	24	847	5	34	865	24	51	1	33	17	1	42
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.401

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 1: Granite Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.603

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	315.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	45	26	27	521	22	200	173	627	18	50	768	503
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	45	26	27	521	22	200	173	627	18	50	768	503
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	11	6	6	123	5	47	41	149	4	12	182	119
Total Analysis Volume [veh/h]	43	25	26	494	21	190	164	594	17	47	728	477
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna
Signal group	0	3	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.603

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 4: Aguilar Road / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.466

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	103	0	19	0	0	0	55	1012	139	15	1085	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	2.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	103	0	19	0	0	0	55	1012	139	15	1085	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	1.0000	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000
Total 15-Minute Volume [veh/h]	24	0	5	0	0	0	13	240	33	4	257	0
Total Analysis Volume [veh/h]	98	0	18	0	0	0	52	959	132	14	1029	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.466

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 5: El Don Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.635

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			15.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	117	9	25	58	13	352	260	656	125	16	619	46
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	117	9	25	58	13	352	260	656	125	16	619	46
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	28	2	6	14	3	83	62	155	30	4	147	11
Total Analysis Volume [veh/h]	111	9	24	55	12	334	246	622	119	15	587	44
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	7	0	0	3	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.635

Sequence

Ring 1	2	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	7	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Havenhurst Circle / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.484

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	5	0	9	335	0	167	71	438	16	14	442	119
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	0	9	335	0	167	71	438	16	14	442	119
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	1	0	2	80	0	40	17	104	4	3	105	28
Total Analysis Volume [veh/h]	5	0	9	318	0	159	67	416	15	13	420	113
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.484

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.713

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	260	834	49	182	630	137	184	250	348	62	190	195
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	260	834	49	182	630	137	184	250	348	62	190	195
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	62	198	12	43	149	32	44	59	82	15	45	46
Total Analysis Volume [veh/h]	246	791	46	173	597	130	174	237	330	59	180	185
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.713

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 12: Sierra College Blvd / Granite Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.540

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	40.00			40.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	176	859	77	54	765	78	153	27	248	101	15	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	176	859	77	54	765	78	153	27	248	101	15	40
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	42	204	18	13	181	18	36	6	59	24	4	9
Total Analysis Volume [veh/h]	167	814	73	51	725	74	145	26	235	96	14	38
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.540

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 16: Sierra College Blvd / Bass Pro Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.329

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	1260	52	28	878	31	1	1	2	52	0	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1260	52	28	878	31	1	1	2	52	0	9
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	0	299	12	7	208	7	0	0	0	12	0	2
Total Analysis Volume [veh/h]	0	1194	49	27	832	29	1	1	2	49	0	9
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.329

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 17: Sierra College Blvd / Stadium Entrance

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.438

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00		50.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	41	1154	895	40	160	56
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	41	1154	895	40	160	56
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	10	274	213	10	38	13
Total Analysis Volume [veh/h]	39	1096	850	38	152	53
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	3	8	4	0	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.438

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 19: Sierra College Blvd / El Don Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.444

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	26	1066	7	64	921	77	33	1	18	10	1	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	26	1066	7	64	921	77	33	1	18	10	1	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	6	253	2	15	219	18	8	0	4	2	0	5
Total Analysis Volume [veh/h]	25	1013	7	61	875	73	31	1	17	10	1	20
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.444

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 1: Granite Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.488

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	315.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	18	21	16	282	15	113	158	873	7	10	730	528
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	18	21	16	282	15	113	158	873	7	10	730	528
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	4	5	4	67	4	27	37	207	2	2	173	125
Total Analysis Volume [veh/h]	17	20	15	267	14	107	150	828	7	9	692	501
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna
Signal group	0	3	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.488

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Version 7.00-04

Intersection Level Of Service Report
Intersection 4: Aguilar Road / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.617

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	141	0	30	0	0	0	40	1500	53	9	759	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	2.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	141	0	30	0	0	0	40	1500	53	9	759	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	1.0000	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000
Total 15-Minute Volume [veh/h]	33	0	7	0	0	0	9	356	13	2	180	0
Total Analysis Volume [veh/h]	134	0	28	0	0	0	38	1422	50	9	720	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.617

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 5: El Don Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.722

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			15.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	141	27	28	20	1	71	535	884	97	59	530	121
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	141	27	28	20	1	71	535	884	97	59	530	121
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	33	6	7	5	0	17	127	210	23	14	126	29
Total Analysis Volume [veh/h]	134	26	27	19	1	67	507	838	92	56	502	115
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	7	0	0	3	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.722

Sequence

Ring 1	2	1	3	7	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Havenhurst Circle / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.585

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	15	1	19	43	1	16	367	546	7	15	531	426
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	1	19	43	1	16	367	546	7	15	531	426
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	4	0	5	10	0	4	87	130	2	4	126	101
Total Analysis Volume [veh/h]	14	1	18	41	1	15	349	519	7	14	504	405
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.585

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	5	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.640

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	405	582	104	197	721	270	140	273	195	99	312	184
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	405	582	104	197	721	270	140	273	195	99	312	184
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	96	138	25	47	171	64	33	65	46	23	74	44
Total Analysis Volume [veh/h]	384	552	99	187	684	256	133	259	185	94	296	174
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.640

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 12: Sierra College Blvd / Granite Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.608

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	255	487	86	80	863	64	65	20	104	143	24	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	255	487	86	80	863	64	65	20	104	143	24	33
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	60	115	20	19	205	15	15	5	25	34	6	8
Total Analysis Volume [veh/h]	242	462	82	76	818	61	62	19	99	136	23	31
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.608

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 16: Sierra College Blvd / Bass Pro Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.528

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	852	26	25	1506	7	0	1	0	23	0	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	852	26	25	1506	7	0	1	0	23	0	8
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	0	202	6	6	357	2	0	0	0	5	0	2
Total Analysis Volume [veh/h]	0	808	25	24	1428	7	0	1	0	22	0	8
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.528

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 17: Sierra College Blvd / Stadium Entrance

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.419

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	125	809	13	14	1202	313	18	0	20	66	0	41
Base Volume Adjustment Factor	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000
Heavy Vehicles Percentage [%]	3.00	3.00	2.00	2.00	3.00	3.00	3.00	2.00	3.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	125	809	10	14	1202	250	18	0	16	66	0	33
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	30	192	2	3	285	59	4	0	4	16	0	8
Total Analysis Volume [veh/h]	119	767	9	13	1139	237	17	0	15	63	0	31
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	3	8	0	0	4	0	2	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.419

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 19: Sierra College Blvd / El Don Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.428

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	45	968	5	36	983	26	57	1	39	18	1	44
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	45	968	5	36	983	26	57	1	39	18	1	44
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	11	230	1	9	233	6	14	0	9	4	0	10
Total Analysis Volume [veh/h]	43	920	5	34	934	25	54	1	37	17	1	42
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.428

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 1: Granite Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.636

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	315.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	45	26	27	525	22	200	173	679	18	50	860	508
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	45	26	27	525	22	200	173	679	18	50	860	508
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	11	6	6	124	5	47	41	161	4	12	204	120
Total Analysis Volume [veh/h]	43	25	26	498	21	190	164	644	17	47	815	482
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna
Signal group	0	3	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.636

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 4: Aguilar Road / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.545

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	103	0	20	0	0	0	55	1153	139	17	1322	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	2.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	103	0	20	0	0	0	55	1153	139	17	1322	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	1.0000	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000
Total 15-Minute Volume [veh/h]	24	0	5	0	0	0	13	273	33	4	313	0
Total Analysis Volume [veh/h]	98	0	19	0	0	0	52	1093	132	16	1253	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.545

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 5: El Don Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.742

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			15.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	181	9	31	58	13	359	264	780	139	29	787	46
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	181	9	31	58	13	359	264	780	139	29	787	46
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	43	2	7	14	3	85	63	185	33	7	187	11
Total Analysis Volume [veh/h]	172	9	29	55	12	340	250	739	132	27	746	44
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	7	0	0	3	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.742

Sequence

Ring 1	2	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Havenhurst Circle / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.517

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	5	0	9	336	0	167	115	614	16	14	579	124
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	0	9	336	0	167	115	614	16	14	579	124
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	1	0	2	80	0	40	27	146	4	3	138	29
Total Analysis Volume [veh/h]	5	0	9	319	0	159	109	583	15	13	550	118
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.517

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.818

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	263	900	75	198	661	172	282	304	373	128	294	237
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	263	900	75	198	661	172	282	304	373	128	294	237
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	62	213	18	47	157	41	67	72	88	30	70	56
Total Analysis Volume [veh/h]	249	853	71	188	627	163	267	288	354	121	279	225
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	D
Intersection V/C	0.818

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 12: Sierra College Blvd / Granite Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.557

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	40.00			40.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	177	913	77	54	808	78	153	27	250	101	15	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	177	913	77	54	808	78	153	27	250	101	15	40
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	42	216	18	13	191	18	36	6	59	24	4	9
Total Analysis Volume [veh/h]	168	866	73	51	766	74	145	26	237	96	14	38
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.557

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 16: Sierra College Blvd / Bass Pro Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.372

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	1425	52	28	1021	31	1	1	2	52	0	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1425	52	28	1021	31	1	1	2	52	0	9
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	0	338	12	7	242	7	0	0	0	12	0	2
Total Analysis Volume [veh/h]	0	1351	49	27	968	29	1	1	2	49	0	9
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.372

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 17: Sierra College Blvd / Stadium Entrance

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.422

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	74	1294	45	48	990	40	160	0	59	40	0	25
Base Volume Adjustment Factor	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000
Heavy Vehicles Percentage [%]	3.00	3.00	2.00	2.00	3.00	3.00	3.00	2.00	3.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	74	1294	36	48	990	32	160	0	47	40	0	20
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	18	307	9	11	235	8	38	0	11	9	0	5
Total Analysis Volume [veh/h]	70	1227	34	46	939	30	152	0	45	38	0	19
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	3	8	0	0	4	0	2	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.422

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 19: Sierra College Blvd / El Don Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.476

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	32	1160	7	64	1040	80	34	1	26	10	1	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	32	1160	7	64	1040	80	34	1	26	10	1	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	8	276	2	15	247	19	8	0	6	2	0	5
Total Analysis Volume [veh/h]	30	1102	7	61	988	76	32	1	25	10	1	20
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.476

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 1: Granite Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.541

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	315.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	20	30	20	390	20	120	170	800	10	10	720	530
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	30	20	390	20	120	170	800	10	10	720	530
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	5	7	5	92	5	28	40	190	2	2	171	126
Total Analysis Volume [veh/h]	19	28	19	370	19	114	161	758	9	9	683	502
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna
Signal group	0	3	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.541

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 4: Aguilar Road / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.615

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	160	0	40	0	0	0	40	1450	60	10	660	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	2.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	160	0	40	0	0	0	40	1450	60	10	660	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	1.0000	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000
Total 15-Minute Volume [veh/h]	38	0	9	0	0	0	9	344	14	2	156	0
Total Analysis Volume [veh/h]	152	0	38	0	0	0	38	1375	57	9	626	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.615

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 5: El Don Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.700

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			15.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	120	30	30	20	10	80	540	950	70	30	470	130
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	120	30	30	20	10	80	540	950	70	30	470	130
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	28	7	7	5	2	19	128	225	17	7	111	31
Total Analysis Volume [veh/h]	114	28	28	19	9	76	512	901	66	28	446	123
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	7	0	0	3	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.700

Sequence

Ring 1	2	1	3	7	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Havenhurst Circle / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.647

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	20	10	30	60	10	20	360	580	10	20	480	430
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	10	30	60	10	20	360	580	10	20	480	430
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	5	2	7	14	2	5	86	138	2	5	114	102
Total Analysis Volume [veh/h]	19	10	29	57	10	19	342	551	10	19	456	409
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.647

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	5	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.703

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	420	610	70	200	680	250	230	220	220	90	280	220
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	420	610	70	200	680	250	230	220	220	90	280	220
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	100	145	17	47	161	59	55	52	52	21	66	52
Total Analysis Volume [veh/h]	398	578	66	190	645	237	218	209	209	85	265	209
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.703

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 12: Sierra College Blvd / Granite Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.641

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	270	500	90	80	900	70	80	30	120	150	30	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	270	500	90	80	900	70	80	30	120	150	30	40
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	64	119	21	19	213	17	19	7	28	36	7	9
Total Analysis Volume [veh/h]	256	474	85	76	853	66	76	28	114	142	28	38
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.641

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 16: Sierra College Blvd / Bass Pro Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.633

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	10	840	30	30	1750	10	10	10	10	30	10	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	840	30	30	1750	10	10	10	10	30	10	10
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	2	199	7	7	415	2	2	2	2	7	2	2
Total Analysis Volume [veh/h]	9	796	28	28	1659	9	9	9	9	28	9	9
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.633

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 17: Sierra College Blvd / Stadium Entrance

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.728

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00		50.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	250	800	1080	710	70	130
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	250	800	1080	710	70	130
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	59	190	257	169	17	31
Total Analysis Volume [veh/h]	238	760	1026	675	67	124
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	3	8	4	0	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.728

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 19: Sierra College Blvd / El Don Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.488

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	30	950	10	30	960	30	70	10	50	60	10	80
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	30	950	10	30	960	30	70	10	50	60	10	80
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	7	226	2	7	228	7	17	2	12	14	2	19
Total Analysis Volume [veh/h]	29	903	10	29	912	29	67	10	48	57	10	76
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.488

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 1: Granite Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.607

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	315.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	50	30	30	530	30	200	200	630	20	60	700	550
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	50	30	30	530	30	200	200	630	20	60	700	550
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	12	7	7	126	7	47	47	149	5	14	166	130
Total Analysis Volume [veh/h]	47	28	28	502	28	190	190	597	19	57	664	521
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna
Signal group	0	3	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.607

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 4: Aguilar Road / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.496

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	120	0	30	0	0	0	60	1040	170	30	1130	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	2.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	120	0	30	0	0	0	60	1040	170	30	1130	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	1.0000	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000
Total 15-Minute Volume [veh/h]	28	0	7	0	0	0	14	246	40	7	268	0
Total Analysis Volume [veh/h]	114	0	28	0	0	0	57	986	161	28	1071	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.496

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 5: El Don Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.693

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			15.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	120	10	30	60	20	360	270	710	130	30	740	50
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	120	10	30	60	20	360	270	710	130	30	740	50
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	28	2	7	14	5	85	64	168	31	7	175	12
Total Analysis Volume [veh/h]	114	9	28	57	19	341	256	673	123	28	702	47
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	7	0	0	3	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.693

Sequence

Ring 1	2	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	7	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Havenhurst Circle / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.531

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	10	0	10	350	0	170	80	510	20	20	515	120
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	0	10	350	0	170	80	510	20	20	515	120
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	2	0	2	83	0	40	19	121	5	5	122	29
Total Analysis Volume [veh/h]	10	0	10	333	0	162	76	485	19	19	489	114
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.531

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.779

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	300	840	80	270	685	180	260	270	340	60	195	250
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	300	840	80	270	685	180	260	270	340	60	195	250
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	71	199	19	64	162	43	62	64	81	14	46	59
Total Analysis Volume [veh/h]	284	796	76	256	649	171	246	256	322	57	185	237
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.779

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 12: Sierra College Blvd / Granite Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.638

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	40.00			40.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	240	910	80	60	880	80	160	30	270	110	20	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	240	910	80	60	880	80	160	30	270	110	20	40
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	57	216	19	14	209	19	38	7	64	26	5	9
Total Analysis Volume [veh/h]	228	863	76	57	834	76	152	28	256	104	19	38
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.638

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 16: Sierra College Blvd / Bass Pro Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.450

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	10	1660	60	50	1040	40	10	10	10	60	10	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	1660	60	50	1040	40	10	10	10	60	10	10
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	2	393	14	12	246	9	2	2	2	14	2	2
Total Analysis Volume [veh/h]	9	1574	57	47	986	38	9	9	9	57	9	9
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.450

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 17: Sierra College Blvd / Stadium Entrance

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.577

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00		50.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	210	1130	895	220	600	260
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	210	1130	895	220	600	260
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	50	268	213	52	143	62
Total Analysis Volume [veh/h]	200	1074	850	209	570	247
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	3	8	4	0	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.577

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 19: Sierra College Blvd / El Don Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.545

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	30	1100	30	130	895	90	40	10	20	20	10	50
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	30	1100	30	130	895	90	40	10	20	20	10	50
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	7	261	7	31	213	21	10	2	5	5	2	12
Total Analysis Volume [veh/h]	29	1045	29	124	850	86	38	10	19	19	10	48
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.545

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 1: Granite Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.557

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	315.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	20	30	20	395	20	120	170	872	10	10	762	533
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	30	20	395	20	120	170	872	10	10	762	533
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	5	7	5	94	5	28	40	207	2	2	181	126
Total Analysis Volume [veh/h]	19	28	19	374	19	114	161	827	9	9	722	505
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna
Signal group	0	3	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.557

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Version 7.00-04

Intersection Level Of Service Report
Intersection 4: Aguilar Road / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.691

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	160	0	42	0	0	0	40	1676	60	10	772	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	2.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	160	0	42	0	0	0	40	1676	60	10	772	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	1.0000	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000
Total 15-Minute Volume [veh/h]	38	0	10	0	0	0	9	397	14	2	183	0
Total Analysis Volume [veh/h]	152	0	40	0	0	0	38	1589	57	9	732	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.691

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 5: El Don Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.746

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			15.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	142	30	35	20	10	80	540	1139	109	76	560	130
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	142	30	35	20	10	80	540	1139	109	76	560	130
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	34	7	8	5	2	19	128	270	26	18	133	31
Total Analysis Volume [veh/h]	135	28	33	19	9	76	512	1080	103	72	531	123
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	7	0	0	3	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.746

Sequence

Ring 1	2	1	3	7	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Havenhurst Circle / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.700

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	20	10	30	62	10	20	370	697	10	20	606	432
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	10	30	62	10	20	370	697	10	20	606	432
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	5	2	7	15	2	5	88	166	2	5	144	103
Total Analysis Volume [veh/h]	19	10	29	59	10	19	352	662	10	19	576	410
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.700

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	5	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.802

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	429	632	116	240	727	320	267	298	224	113	329	235
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	429	632	116	240	727	320	267	298	224	113	329	235
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	102	150	27	57	172	76	63	71	53	27	78	56
Total Analysis Volume [veh/h]	407	599	110	228	689	303	253	283	212	107	312	223
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	D
Intersection V/C	0.802

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 12: Sierra College Blvd / Granite Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.656

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	272	525	90	80	939	70	80	30	121	150	30	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	272	525	90	80	939	70	80	30	121	150	30	40
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	64	124	21	19	223	17	19	7	29	36	7	9
Total Analysis Volume [veh/h]	258	498	85	76	890	66	76	28	115	142	28	38
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.656

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 16: Sierra College Blvd / Bass Pro Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.673

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	10	952	30	30	1867	10	10	10	10	30	10	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	952	30	30	1867	10	10	10	10	30	10	10
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	2	226	7	7	442	2	2	2	2	7	2	2
Total Analysis Volume [veh/h]	9	902	28	28	1770	9	9	9	9	28	9	9
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.673

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 17: Sierra College Blvd / Stadium Entrance

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.708

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	288	871	13	14	1183	710	70	0	132	66	0	41
Base Volume Adjustment Factor	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000
Heavy Vehicles Percentage [%]	3.00	3.00	2.00	2.00	3.00	3.00	3.00	2.00	3.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	288	871	10	14	1183	568	70	0	106	66	0	33
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	68	206	2	3	280	135	17	0	25	16	0	8
Total Analysis Volume [veh/h]	273	826	9	13	1121	538	66	0	100	63	0	31
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	3	8	0	0	4	0	2	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.708

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 19: Sierra College Blvd / El Don Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.514

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	50	1024	10	30	1033	31	73	10	54	60	10	80
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	50	1024	10	30	1033	31	73	10	54	60	10	80
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	12	243	2	7	245	7	17	2	13	14	2	19
Total Analysis Volume [veh/h]	48	973	10	29	981	29	69	10	51	57	10	76
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.514

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 4: Aguilar Road / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.575

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	120	0	31	0	0	0	60	1181	170	32	1367	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	2.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	120	0	31	0	0	0	60	1181	170	32	1367	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	1.0000	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000
Total 15-Minute Volume [veh/h]	28	0	7	0	0	0	14	280	40	8	324	0
Total Analysis Volume [veh/h]	114	0	29	0	0	0	57	1120	161	30	1296	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.575

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 5: El Don Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.800

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			15.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	191	10	38	60	20	360	270	834	148	44	908	50
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	191	10	38	60	20	360	270	834	148	44	908	50
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	45	2	9	14	5	85	64	198	35	10	215	12
Total Analysis Volume [veh/h]	181	9	36	57	19	341	256	791	140	42	861	47
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	7	0	0	3	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.800

Sequence

Ring 1	2	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	7	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Havenhurst Circle / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.611

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	10	0	10	351	0	170	124	688	20	20	653	125
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	0	10	351	0	170	124	688	20	20	653	125
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	2	0	2	83	0	40	29	163	5	5	155	30
Total Analysis Volume [veh/h]	10	0	10	333	0	162	118	654	19	19	620	119
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.611

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.000

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	304	895	116	286	714	215	358	324	367	126	299	302
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	304	895	116	286	714	215	358	324	367	126	299	302
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	72	212	27	68	169	51	85	77	87	30	71	72
Total Analysis Volume [veh/h]	288	848	110	271	677	204	339	307	348	119	283	286
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	E
Intersection V/C	1.000

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 12: Sierra College Blvd / Granite Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.653

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	40.00			40.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	241	964	80	60	923	80	160	30	272	110	20	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	241	964	80	60	923	80	160	30	272	110	20	40
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	57	228	19	14	219	19	38	7	64	26	5	9
Total Analysis Volume [veh/h]	228	914	76	57	875	76	152	28	258	104	19	38
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.653

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 16: Sierra College Blvd / Bass Pro Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.487

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	10	1825	60	50	1183	40	10	10	10	60	10	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	1825	60	50	1183	40	10	10	10	60	10	10
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	2	433	14	12	280	9	2	2	2	14	2	2
Total Analysis Volume [veh/h]	9	1730	57	47	1121	38	9	9	9	57	9	9
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.487

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.615

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	2	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	304	895	116	286	714	215	358	324	367	126	299	302
Base Volume Adjustment Factor	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	304	895	93	286	714	172	358	324	294	126	299	242
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	72	212	22	68	169	41	85	77	70	30	71	57
Total Analysis Volume [veh/h]	288	848	88	271	677	163	339	307	279	119	283	229
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.615

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 17: Sierra College Blvd / Stadium Entrance

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.624

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	1	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	234	1270	45	48	990	220	600	0	261	40	0	25
Base Volume Adjustment Factor	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	234	1270	36	48	990	176	600	0	209	40	0	20
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	55	301	9	11	235	42	142	0	50	9	0	5
Total Analysis Volume [veh/h]	222	1204	34	46	939	167	569	0	198	38	0	19
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	3	8	0	0	4	0	2	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.624

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 19: Sierra College Blvd / El Don Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.548

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	36	1194	30	130	1014	93	41	10	28	20	10	50
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	36	1194	30	130	1014	93	41	10	28	20	10	50
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	9	284	7	31	241	22	10	2	7	5	2	12
Total Analysis Volume [veh/h]	34	1134	29	124	963	88	39	10	27	19	10	48
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.548

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.615

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	2	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	304	895	116	286	714	215	358	324	367	126	299	302
Base Volume Adjustment Factor	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	304	895	93	286	714	172	358	324	294	126	299	242
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	72	212	22	68	169	41	85	77	70	30	71	57
Total Analysis Volume [veh/h]	288	848	88	271	677	163	339	307	279	119	283	229
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.615

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 1: Granite Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.593

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	315.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	20	10	10	208	10	160	190	536	10	30	1170	572
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	10	10	208	10	160	190	536	10	30	1170	572
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	5	2	2	49	2	38	45	127	2	7	277	136
Total Analysis Volume [veh/h]	19	9	9	197	9	152	180	508	9	28	1109	542
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	3	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.593

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 4: Aguilar Road / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.554

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	300	0	78	0	0	0	40	1298	170	43	931	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	2.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	300	0	78	0	0	0	40	1298	170	43	931	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	1.0000	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000
Total 15-Minute Volume [veh/h]	71	0	18	0	0	0	9	308	40	10	221	0
Total Analysis Volume [veh/h]	284	0	74	0	0	0	38	1231	161	41	883	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.554

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 5: El Don Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.524

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			15.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	260	20	20	16	10	89	526	744	90	30	599	149
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	260	20	20	16	10	89	526	744	90	30	599	149
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	62	5	5	4	2	21	125	176	21	7	142	35
Total Analysis Volume [veh/h]	246	19	19	15	9	84	499	705	85	28	568	141
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	7	0	0	3	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.524

Sequence

Ring 1	2	1	3	7	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Havenhurst Circle / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.467

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	20	10	20	38	10	25	506	509	10	20	768	365
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	10	20	38	10	25	506	509	10	20	768	365
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	5	2	5	9	2	6	120	121	2	5	182	87
Total Analysis Volume [veh/h]	19	10	19	36	10	24	481	484	10	19	730	347
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.467

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	5	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.700

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	1	2	0	1	2	0	0	1	0	0
Pocket Length [ft]	250.00	100.00	250.00	240.00	100.00	150.00	225.00	100.00	100.00	225.00	100.00	100.00
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	592	1441	90	171	985	197	113	172	282	110	384	343
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	592	1441	90	171	985	197	113	172	282	110	384	343
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	140	342	21	41	233	47	27	41	67	26	91	81
Total Analysis Volume [veh/h]	561	1366	85	162	934	187	107	163	267	104	364	325
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.700

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 12: Sierra College Blvd / Granite Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.747

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	1	0	1	1	0	1
Pocket Length [ft]	100.00	100.00	100.00	285.00	100.00	190.00	190.00	100.00	190.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	405	1158	178	80	1347	140	90	30	101	178	30	30
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	405	1158	178	80	1347	140	90	30	101	178	30	30
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	96	274	42	19	319	33	21	7	24	42	7	7
Total Analysis Volume [veh/h]	384	1098	169	76	1277	133	85	28	96	169	28	28
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.747

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 15: Sierra College Blvd / Schriber Way

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.892

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	116	1095	10	0	2387	270	230	20	88	0	0	90
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	116	1095	10	0	2387	270	230	20	88	0	0	90
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000	1.0000	0.9480
Total 15-Minute Volume [veh/h]	27	260	2	0	566	64	55	5	21	0	0	21
Total Analysis Volume [veh/h]	110	1038	9	0	2263	256	218	19	83	0	0	85
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Split	Split	Split	Permiss	Split
Signal group	5	2	0	0	6	0	0	4	0	0	0	8
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	D
Intersection V/C	0.892

Sequence

Ring 1	2	-	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 16: Sierra College Blvd / Bass Pro Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.864

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	2	0	0	2	0	1
Pocket Length [ft]	500.00	100.00	50.00	225.00	100.00	100.00	125.00	100.00	100.00	270.00	100.00	100.00
Speed [mph]	50.00			50.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	462	1091	59	110	2135	230	100	20	186	96	50	20
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	462	1091	59	110	2135	230	100	20	186	96	50	20
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	109	259	14	26	506	55	24	5	44	23	12	5
Total Analysis Volume [veh/h]	438	1034	56	104	2024	218	95	19	176	91	47	19
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	D
Intersection V/C	0.864

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 17: Sierra College Blvd / Stadium Entrance

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.849

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	1	1	1	2	0
Pocket Length [ft]	200.00	100.00	250.00	35.00	60.00	100.00
Speed [mph]	50.00		50.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	310	1557	1488	929	55	34
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	310	1557	1488	929	55	34
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	74	370	353	221	13	8
Total Analysis Volume [veh/h]	295	1479	1414	883	52	32
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Phasing & Timing

Control Type	ProtPerm	Permissive	Permissive	Permissive	Split	Split
Signal group	3	8	4	0	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

Movement, Approach, & Intersection Results

Intersection LOS	D
Intersection V/C	0.849

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Version 7.00-04

Intersection Level Of Service Report
Intersection 19: Sierra College Blvd / El Don Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.548

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	25	2003	5	36	1366	25	54	1	35	18	1	44
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	25	2003	5	36	1366	25	54	1	35	18	1	44
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	6	476	1	9	324	6	13	0	8	4	0	10
Total Analysis Volume [veh/h]	24	1903	5	34	1298	24	51	1	33	17	1	42
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.548

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 1: Granite Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.757

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	315.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	30	20	10	745	10	310	330	1200	10	40	833	526
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	30	20	10	745	10	310	330	1200	10	40	833	526
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	7	5	2	177	2	73	78	284	2	9	197	125
Total Analysis Volume [veh/h]	28	19	9	706	9	294	313	1138	9	38	790	499
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	3	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.757

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 4: Aguilar Road / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.499

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	270	0	75	0	0	0	60	1174	320	76	1262	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	2.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	270	0	75	0	0	0	60	1174	320	76	1262	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	1.0000	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000
Total 15-Minute Volume [veh/h]	64	0	18	0	0	0	14	278	76	18	299	0
Total Analysis Volume [veh/h]	256	0	71	0	0	0	57	1113	303	72	1196	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.499

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 5: El Don Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.492

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			15.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	170	10	30	87	20	360	244	844	180	40	800	50
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	170	10	30	87	20	360	244	844	180	40	800	50
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	40	2	7	21	5	85	58	200	43	9	190	12
Total Analysis Volume [veh/h]	161	9	28	82	19	341	231	800	171	38	758	47
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	7	0	0	3	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.492

Sequence

Ring 1	2	1	3	7	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 6: Havenhurst Circle / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.325

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	10	0	10	314	0	166	115	827	20	10	512	146
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	0	10	314	0	166	115	827	20	10	512	146
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	2	0	2	75	0	39	27	196	5	2	122	35
Total Analysis Volume [veh/h]	10	0	10	298	0	158	109	786	19	10	486	139
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.325

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	5	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.982

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	1	2	0	1	2	0	0	1	0	0
Pocket Length [ft]	250.00	100.00	250.00	240.00	100.00	150.00	225.00	100.00	100.00	225.00	100.00	100.00
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	436	1958	220	354	1976	51	186	478	487	60	181	236
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	436	1958	220	354	1976	51	186	478	487	60	181	236
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	103	464	52	84	468	12	44	113	115	14	43	56
Total Analysis Volume [veh/h]	413	1856	209	336	1873	48	176	453	462	57	172	224
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	E
Intersection V/C	0.982

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 12: Sierra College Blvd / Granite Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.856

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	1	0	1	1	0	1
Pocket Length [ft]	100.00	100.00	100.00	285.00	100.00	190.00	190.00	100.00	190.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	183	1308	158	60	1802	120	340	40	439	238	20	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	183	1308	158	60	1802	120	340	40	439	238	20	40
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	43	310	37	14	427	28	81	9	104	56	5	9
Total Analysis Volume [veh/h]	173	1240	150	57	1708	114	322	38	416	226	19	38
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	D
Intersection V/C	0.856

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 15: Sierra College Blvd / Schriber Way

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.678

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	98	2366	10	0	1742	240	220	20	136	0	0	20
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	98	2366	10	0	1742	240	220	20	136	0	0	20
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000	1.0000	0.9480
Total 15-Minute Volume [veh/h]	23	561	2	0	413	57	52	5	32	0	0	5
Total Analysis Volume [veh/h]	93	2243	9	0	1651	228	209	19	129	0	0	19
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Split	Split	Split	Permiss	Split
Signal group	5	2	0	0	6	0	0	4	0	0	0	8
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.678

Sequence

Ring 1	2	-	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 16: Sierra College Blvd / Bass Pro Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.056

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	2	0	0	2	0	1
Pocket Length [ft]	500.00	100.00	50.00	225.00	100.00	100.00	125.00	100.00	100.00	270.00	100.00	100.00
Speed [mph]	50.00			50.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	313	2284	184	90	1648	140	70	110	631	101	50	110
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	313	2284	184	90	1648	140	70	110	631	101	50	110
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	74	541	44	21	391	33	17	26	150	24	12	26
Total Analysis Volume [veh/h]	297	2165	174	85	1562	133	66	104	598	96	47	104
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	F
Intersection V/C	1.056

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 17: Sierra College Blvd / Stadium Entrance

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.702

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	1	1	1	2	0
Pocket Length [ft]	200.00	100.00	250.00	35.00	60.00	100.00
Speed [mph]	50.00		50.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	86	2274	2141	239	507	219
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	86	2274	2141	239	507	219
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	20	540	508	57	120	52
Total Analysis Volume [veh/h]	82	2160	2034	227	482	208
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Split	Split
Signal group	3	8	4	0	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.702

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 19: Sierra College Blvd / El Don Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.652

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	26	2537	7	64	2402	77	33	1	18	10	1	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	26	2537	7	64	2402	77	33	1	18	10	1	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	6	603	2	15	570	18	8	0	4	2	0	5
Total Analysis Volume [veh/h]	25	2410	7	61	2282	73	31	1	17	10	1	20
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.652

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 1: Granite Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.608

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	315.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	20	10	10	213	10	160	190	608	10	30	1212	575
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	10	10	213	10	160	190	608	10	30	1212	575
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	5	2	2	50	2	38	45	144	2	7	287	136
Total Analysis Volume [veh/h]	19	9	9	202	9	152	180	576	9	28	1149	545
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	3	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.608

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 4: Aguilar Road / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.604

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	300	0	80	0	0	0	40	1524	170	43	1043	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	2.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	300	0	80	0	0	0	40	1524	170	43	1043	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	1.0000	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000
Total 15-Minute Volume [veh/h]	71	0	19	0	0	0	9	361	40	10	247	0
Total Analysis Volume [veh/h]	284	0	76	0	0	0	38	1445	161	41	989	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.604

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 5: El Don Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.560

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			15.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	282	20	25	16	10	89	526	933	129	76	689	149
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	282	20	25	16	10	89	526	933	129	76	689	149
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	67	5	6	4	2	21	125	221	31	18	163	35
Total Analysis Volume [veh/h]	267	19	24	15	9	84	499	884	122	72	653	141
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	7	0	0	3	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.560

Sequence

Ring 1	2	1	3	7	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Havenhurst Circle / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.500

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	20	10	20	40	10	25	516	626	10	20	894	367
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	10	20	40	10	25	516	626	10	20	894	367
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	5	2	5	10	2	6	123	149	2	5	212	87
Total Analysis Volume [veh/h]	19	10	19	38	10	24	490	595	10	19	849	349
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.500

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	5	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.733

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	1	2	0	1	2	0	0	1	0	0
Pocket Length [ft]	250.00	100.00	250.00	240.00	100.00	150.00	225.00	100.00	100.00	225.00	100.00	100.00
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	601	1463	136	211	1032	267	150	250	286	133	433	358
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	601	1463	136	211	1032	267	150	250	286	133	433	358
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	142	347	32	50	245	63	36	59	68	32	103	85
Total Analysis Volume [veh/h]	570	1387	129	200	978	253	142	237	271	126	410	339
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.733

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 12: Sierra College Blvd / Granite Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.757

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	1	0	1	1	0	1
Pocket Length [ft]	100.00	100.00	100.00	285.00	100.00	190.00	190.00	100.00	190.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	407	1183	178	80	1386	140	90	30	102	178	30	30
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	407	1183	178	80	1386	140	90	30	102	178	30	30
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	96	280	42	19	328	33	21	7	24	42	7	7
Total Analysis Volume [veh/h]	386	1121	169	76	1314	133	85	28	97	169	28	28
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.757

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 15: Sierra College Blvd / Schriber Way

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.918

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	116	1207	10	0	2504	270	230	20	88	0	0	90
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	116	1207	10	0	2504	270	230	20	88	0	0	90
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000	1.0000	0.9480
Total 15-Minute Volume [veh/h]	27	286	2	0	593	64	55	5	21	0	0	21
Total Analysis Volume [veh/h]	110	1144	9	0	2374	256	218	19	83	0	0	85
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Split	Split	Split	Permiss	Split
Signal group	5	2	0	0	6	0	0	4	0	0	0	8
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	E
Intersection V/C	0.918

Sequence

Ring 1	2	-	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Version 7.00-04

Intersection Level Of Service Report

Intersection 16: Sierra College Blvd / Bass Pro Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.891

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	2	0	0	2	0	1
Pocket Length [ft]	500.00	100.00	50.00	225.00	100.00	100.00	125.00	100.00	100.00	270.00	100.00	100.00
Speed [mph]	50.00			50.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	462	1203	59	110	2252	230	100	20	186	96	50	20
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	462	1203	59	110	2252	230	100	20	186	96	50	20
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	109	285	14	26	534	55	24	5	44	23	12	5
Total Analysis Volume [veh/h]	438	1140	56	104	2135	218	95	19	176	91	47	19
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	D
Intersection V/C	0.891

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 17: Sierra College Blvd / Stadium Entrance

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.817

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	2	0	0	0	0	0
Entry Pocket Length [ft]	200.00	100.00	100.00	250.00	100.00	35.00	60.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	348	1628	13	14	1591	929	55	0	36	66	0	41
Base Volume Adjustment Factor	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	348	1628	10	14	1591	743	55	0	29	66	0	33
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	82	386	2	3	377	176	13	0	7	16	0	8
Total Analysis Volume [veh/h]	330	1543	9	13	1508	704	52	0	27	63	0	31
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	3	8	0	7	4	0	2	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	D
Intersection V/C	0.817

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 19: Sierra College Blvd / El Don Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.567

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	45	2077	5	36	1439	26	57	1	39	18	1	44
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	45	2077	5	36	1439	26	57	1	39	18	1	44
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	11	493	1	9	342	6	14	0	9	4	0	10
Total Analysis Volume [veh/h]	43	1973	5	34	1367	25	54	1	37	17	1	42
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.567

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 1: Granite Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.761

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	315.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	30	20	10	749	10	310	330	1252	10	40	925	531
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	30	20	10	749	10	310	330	1252	10	40	925	531
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	7	5	2	178	2	73	78	297	2	9	219	126
Total Analysis Volume [veh/h]	28	19	9	710	9	294	313	1187	9	38	877	503
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	3	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.761

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 4: Aguilar Road / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.552

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	270	0	76	0	0	0	60	1315	320	78	1499	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	2.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	270	0	76	0	0	0	60	1315	320	78	1499	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	1.0000	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000
Total 15-Minute Volume [veh/h]	64	0	18	0	0	0	14	312	76	18	355	0
Total Analysis Volume [veh/h]	256	0	72	0	0	0	57	1247	303	74	1421	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.552

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 5: El Don Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.580

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			15.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	241	10	38	87	20	360	244	968	198	54	968	50
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	241	10	38	87	20	360	244	968	198	54	968	50
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	57	2	9	21	5	85	58	229	47	13	229	12
Total Analysis Volume [veh/h]	228	9	36	82	19	341	231	918	188	51	918	47
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	7	0	0	3	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.580

Sequence

Ring 1	2	1	3	7	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Havenhurst Circle / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.367

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	10	0	10	315	0	166	159	1005	20	10	650	151
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	0	10	315	0	166	159	1005	20	10	650	151
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	2	0	2	75	0	39	38	239	5	2	154	36
Total Analysis Volume [veh/h]	10	0	10	299	0	158	151	955	19	10	618	143
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.367

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	5	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.053

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	1	2	0	1	2	0	0	1	0	0
Pocket Length [ft]	250.00	100.00	250.00	240.00	100.00	150.00	225.00	100.00	100.00	225.00	100.00	100.00
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	440	2013	256	370	2005	86	284	532	514	126	285	288
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	440	2013	256	370	2005	86	284	532	514	126	285	288
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	104	477	61	88	475	20	67	126	122	30	68	68
Total Analysis Volume [veh/h]	417	1908	243	351	1901	82	269	504	487	119	270	273
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	F
Intersection V/C	1.053

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 12: Sierra College Blvd / Granite Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.867

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	1	0	1	1	0	1
Pocket Length [ft]	100.00	100.00	100.00	285.00	100.00	190.00	190.00	100.00	190.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	184	1362	158	60	1845	120	340	40	441	238	20	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	184	1362	158	60	1845	120	340	40	441	238	20	40
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	44	323	37	14	437	28	81	9	105	56	5	9
Total Analysis Volume [veh/h]	174	1291	150	57	1749	114	322	38	418	226	19	38
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	D
Intersection V/C	0.867

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 15: Sierra College Blvd / Schriber Way

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.710

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	98	2531	10	0	1885	240	220	20	136	0	0	20
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	98	2531	10	0	1885	240	220	20	136	0	0	20
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000	1.0000	0.9480
Total 15-Minute Volume [veh/h]	23	600	2	0	447	57	52	5	32	0	0	5
Total Analysis Volume [veh/h]	93	2399	9	0	1787	228	209	19	129	0	0	19
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Split	Split	Split	Permiss	Split
Signal group	5	2	0	0	6	0	0	4	0	0	0	8
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.710

Sequence

Ring 1	2	-	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 16: Sierra College Blvd / Bass Pro Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.095

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	2	0	0	2	0	1
Pocket Length [ft]	500.00	100.00	50.00	225.00	100.00	100.00	125.00	100.00	100.00	270.00	100.00	100.00
Speed [mph]	50.00			50.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	313	2449	184	90	1791	140	70	110	631	101	50	110
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	313	2449	184	90	1791	140	70	110	631	101	50	110
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	74	580	44	21	424	33	17	26	150	24	12	26
Total Analysis Volume [veh/h]	297	2322	174	85	1698	133	66	104	598	96	47	104
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	F
Intersection V/C	1.095

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 17: Sierra College Blvd / Stadium Entrance

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.792

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	2	0	0	0	0	0
Entry Pocket Length [ft]	200.00	100.00	100.00	250.00	100.00	35.00	60.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	110	2414	45	48	2236	239	507	0	220	40	0	25
Base Volume Adjustment Factor	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000
Heavy Vehicles Percentage [%]	3.00	3.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	110	2414	36	48	2236	191	507	0	176	40	0	20
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	26	572	9	11	530	45	120	0	42	9	0	5
Total Analysis Volume [veh/h]	104	2288	34	46	2120	181	481	0	167	38	0	19
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	3	8	0	7	4	0	2	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.792

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 19: Sierra College Blvd / El Don Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.673

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	32	2631	7	64	2521	80	34	1	26	10	1	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	32	2631	7	64	2521	80	34	1	26	10	1	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	8	625	2	15	599	19	8	0	6	2	0	5
Total Analysis Volume [veh/h]	30	2499	7	61	2395	76	32	1	25	10	1	20
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.673

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

APPENDIX B: EXISTING CONDITIONS LOS CALCULATIONS

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Existing Conditions
AM Peak Hour

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	18	17	93.3%	28.2	16.2	C
	Through	21	20	95.2%	31.8	8.4	C
	Right Turn	16	17	103.1%	11.4	6.9	B
	Subtotal	55	53	96.9%	25.1	4.9	C
SB	Left Turn	277	276	99.6%	24.3	3.2	C
	Through	15	14	96.0%	28.6	14.6	C
	Right Turn	113	118	104.2%	9.0	1.8	A
	Subtotal	405	408	100.8%	20.2	2.9	C
EB	Left Turn	158	160	101.5%	36.5	4.1	D
	Through	801	795	99.2%	12.9	1.1	B
	Right Turn	7	7	102.9%	3.6	4.2	A
	Subtotal	966	962	99.6%	16.7	1.3	B
WB	Left Turn	10	10	100.0%	45.8	14.1	D
	Through	688	684	99.4%	22.5	2.9	C
	Right Turn	525	525	100.0%	8.3	0.6	A
	Subtotal	1,223	1,219	99.7%	16.5	1.6	B
Total		2,649	2,643	99.8%	17.3	1.2	B

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	52	54	104.4%	34.4	7.0	C
	Through						
	Right Turn	265	265	100.0%	29.3	7.0	C
	Subtotal	317	319	100.7%	30.4	6.5	C
EB	Left Turn						
	Through	709	706	99.5%	32.2	9.0	C
	Right Turn	401	401	100.1%	11.5	2.3	B
	Subtotal	1,110	1,107	99.7%	24.7	6.5	C
WB	Left Turn	342	338	98.9%	33.0	5.5	C
	Through	1,021	1,022	100.1%	8.2	1.4	A
	Right Turn						
	Subtotal	1,363	1,360	99.8%	14.2	1.7	B
Total		2,790	2,786	99.9%	20.3	3.0	C

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	602	599	99.5%	33.8	2.5	C
	Through						
	Right Turn	812	808	99.6%	27.4	1.8	C
	Subtotal	1,414	1,407	99.5%	30.2	1.8	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	187	187	99.9%	46.0	8.1	D
	Through	574	578	100.7%	12.6	1.2	B
	Right Turn						
	Subtotal	761	765	100.5%	20.4	2.5	C
WB	Left Turn						
	Through	761	764	100.4%	29.9	4.5	C
	Right Turn	49	49	100.6%	25.4	5.5	C
	Subtotal	810	813	100.4%	29.5	4.4	C
Total		2,985	2,986	100.0%	27.6	1.6	C

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	141	143	101.5%	36.5	3.7	D
	Through						
	Right Turn	28	28	99.3%	12.0	3.9	B
	Subtotal	169	171	101.1%	32.2	2.9	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	40	38	94.3%	41.6	4.4	D
	Through	1,274	1,277	100.2%	4.7	0.5	A
	Right Turn	53	52	98.7%	3.2	1.1	A
	Subtotal	1,367	1,367	100.0%	5.7	0.5	A
WB	Left Turn	9	9	97.8%	45.0	14.8	D
	Through	647	653	100.9%	7.9	1.9	A
	Right Turn						
	Subtotal	656	661	100.8%	8.6	1.9	A
Total		2,192	2,199	100.3%	8.6	0.9	A

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	119	115	96.7%	40.4	4.1	D
	Through	20	21	105.0%	37.1	7.3	D
	Right Turn	23	22	94.8%	15.7	6.3	B
	Subtotal	162	158	97.5%	36.4	2.9	D
SB	Left Turn	20	17	84.5%	43.9	19.3	D
	Through	1	2	150.0%	15.7	26.5	B
	Right Turn	71	77	107.7%	9.3	4.0	A
	Subtotal	92	95	103.2%	15.0	6.8	B
EB	Left Turn	531	529	99.7%	51.8	15.8	D
	Through	695	701	100.9%	21.7	4.7	C
	Right Turn	62	61	97.6%	16.4	4.5	B
	Subtotal	1,288	1,291	100.2%	33.4	8.9	C
WB	Left Turn	14	15	106.4%	47.1	23.5	D
	Through	440	441	100.1%	30.5	3.6	C
	Right Turn	121	125	103.0%	20.7	4.8	C
	Subtotal	575	580	100.9%	28.9	3.8	C
Total		2,117	2,124	100.3%	31.4	6.2	C

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	15	14	93.3%	40.3	14.4	D
	Through	1	1	100.0%	10.0	14.4	B
	Right Turn	19	20	103.2%	6.1	2.3	A
	Subtotal	35	35	98.9%	19.9	5.3	B
SB	Left Turn	41	37	89.5%	38.3	9.1	D
	Through	1	1	70.0%	8.6	18.4	A
	Right Turn	16	17	105.6%	3.6	1.1	A
	Subtotal	58	54	93.6%	28.1	8.9	C
EB	Left Turn	357	354	99.2%	37.1	6.4	D
	Through	429	443	103.2%	6.4	2.3	A
	Right Turn	7	9	121.4%	2.7	3.7	A
	Subtotal	793	805	101.6%	20.1	3.4	C
WB	Left Turn	15	14	92.0%	73.0	28.3	E
	Through	406	410	100.9%	22.8	3.9	C
	Right Turn	424	442	104.3%	28.3	7.2	C
	Subtotal	845	866	102.4%	26.7	5.8	C
Total		1,731	1,760	101.7%	23.4	4.1	C

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	397	409	103.1%	53.6	5.1	D
	Through	552	561	101.7%	36.0	6.2	D
	Right Turn	63	64	102.1%	26.1	10.3	C
	Subtotal	1,012	1,035	102.3%	42.4	5.0	D
SB	Left Turn	157	160	101.6%	60.3	8.6	E
	Through	674	681	101.0%	37.6	4.5	D
	Right Turn	200	205	102.4%	17.9	3.3	B
	Subtotal	1,031	1,045	101.4%	37.0	3.3	D
EB	Left Turn	103	102	99.2%	55.2	7.9	E
	Through	195	197	101.1%	31.7	4.4	C
	Right Turn	191	199	104.1%	13.7	2.7	B
	Subtotal	489	498	101.9%	28.8	4.5	C
WB	Left Turn	76	69	91.1%	71.0	9.9	E
	Through	263	267	101.4%	42.8	5.5	D
	Right Turn	174	183	104.9%	36.4	8.1	D
	Subtotal	513	518	101.0%	44.4	5.7	D
Total		3,045	3,096	101.7%	38.7	3.3	D

Intersection 8 **Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	13	12	88.5%	12.4	9.2	B
	Through						
	Right Turn	1	1	130.0%	0.7	1.1	A
	Subtotal	14	13	91.4%	10.0	6.6	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	414	417	100.8%	2.3	0.5	A
	Right Turn	3	3	96.7%	0.4	1.0	A
	Subtotal	417	420	100.8%	2.3	0.5	A
WB	Left Turn						
	Through	500	505	100.9%	1.5	1.0	A
	Right Turn						
	Subtotal	500	505	100.9%	1.5	1.0	A
Total		931	938	100.7%	1.9	0.6	A

Intersection 9 **Rocklin Manor Central/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	10	11	107.0%	9.6	2.2	A
	Through						
	Right Turn	1	2	180.0%	0.9	1.1	A
	Subtotal	11	13	113.6%	8.8	1.7	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	405	409	100.9%	1.1	0.3	A
	Right Turn	10	10	98.0%	0.0	0.1	A
	Subtotal	415	418	100.8%	1.1	0.3	A
WB	Left Turn						
	Through	490	494	100.8%	0.5	0.1	A
	Right Turn						
	Subtotal	490	494	100.8%	0.5	0.1	A
Total		916	925	101.0%	0.9	0.2	A

Intersection 10 **Rocklin Manor East/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	9	7	81.1%	8.6	5.0	A
	Through						
	Right Turn	2	2	105.0%	0.8	1.0	A
	Subtotal	11	9	85.5%	7.5	5.3	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	404	407	100.8%	0.3	0.1	A
	Right Turn	2	2	120.0%	0.0	0.0	A
	Subtotal	406	410	100.9%	0.3	0.1	A
WB	Left Turn	2	1	55.0%	1.4	2.8	A
	Through	481	486	101.1%	2.5	0.3	A
	Right Turn						
	Subtotal	483	487	100.9%	2.5	0.3	A
Total		900	906	100.7%	1.6	0.2	A

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	386	391	101.3%	10.0	1.3	A
	Through	64	68	106.4%	10.1	0.4	B
	Right Turn						
	Subtotal	450	459	102.0%	10.0	1.1	B
SB	Left Turn						
	Through	43	43	98.8%	9.6	0.8	A
	Right Turn	75	75	99.7%	4.4	1.0	A
	Subtotal	118	117	99.4%	6.2	0.9	A
EB	Left Turn	82	83	101.1%	14.0	2.7	B
	Through						
	Right Turn	306	307	100.3%	10.8	2.9	B
	Subtotal	388	390	100.4%	11.4	2.7	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		956	966	101.1%	10.1	1.2	B

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	253	261	103.0%	34.1	4.2	C
	Through	462	473	102.4%	15.5	2.9	B
	Right Turn	86	86	99.5%	7.5	1.4	A
	Subtotal	801	819	102.3%	20.6	3.0	C
SB	Left Turn	80	83	104.3%	39.2	7.0	D
	Through	824	823	99.8%	24.7	2.8	C
	Right Turn	64	62	96.6%	7.5	1.8	A
	Subtotal	968	968	100.0%	24.8	3.1	C
EB	Left Turn	65	64	98.2%	41.6	9.3	D
	Through	20	19	95.5%	50.6	15.0	D
	Right Turn	103	105	102.2%	13.2	4.3	B
	Subtotal	188	188	100.1%	25.6	3.6	C
WB	Left Turn	143	140	97.9%	38.4	5.2	D
	Through	24	27	112.9%	41.3	13.7	D
	Right Turn	33	31	93.0%	6.1	1.3	A
	Subtotal	200	198	98.9%	33.6	4.8	C
Total		2,157	2,173	100.7%	24.2	2.3	C

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	77	80	103.6%	29.9	4.5	C
	Through	532	546	102.7%	11.1	1.0	B
	Right Turn	132	132	100.0%	3.2	0.2	A
	Subtotal	741	758	102.3%	11.7	1.0	B
SB	Left Turn						
	Through	1,100	1,098	99.8%	16.8	3.3	B
	Right Turn	19	19	100.5%	4.8	1.6	A
	Subtotal	1,119	1,117	99.8%	16.6	3.2	B
EB	Left Turn	7	8	107.1%	30.9	20.2	C
	Through						
	Right Turn	58	60	103.8%	9.5	2.3	A
	Subtotal	65	68	104.2%	12.3	2.7	B
WB	Left Turn	642	643	100.2%	24.5	2.9	C
	Through	73	74	100.7%	25.6	4.2	C
	Right Turn	265	271	102.2%	12.4	1.3	B
	Subtotal	980	988	100.8%	21.4	2.2	C
Total		2,905	2,930	100.9%	16.8	1.6	B

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	754	764	101.4%	13.4	2.1	B
	Right Turn	45	44	97.8%	4.3	2.1	A
	Subtotal	799	808	101.2%	12.9	2.0	B
SB	Left Turn	135	140	103.4%	45.8	2.5	D
	Through	1,169	1,170	100.1%	14.0	1.4	B
	Right Turn	184	179	97.4%	6.5	0.7	A
	Subtotal	1,488	1,439	100.1%	16.1	1.6	B
EB	Left Turn	237	242	102.0%	32.8	3.1	C
	Through	140	145	103.6%	39.5	4.0	D
	Right Turn	195	198	101.4%	26.0	5.6	C
	Subtotal	572	585	102.2%	32.1	2.9	C
WB	Left Turn	57	55	97.0%	39.8	7.1	D
	Through						
	Right Turn	98	95	97.1%	8.3	2.0	A
	Subtotal	155	151	97.1%	19.8	2.3	B
Total		3,014	3,032	100.6%	18.5	1.2	B

Intersection 15 **Sierra College Blvd/Schriber Wy** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	759	768	101.1%	1.5	0.3	A
	Right Turn						
	Subtotal	759	768	101.1%	1.5	0.3	A
SB	Left Turn						
	Through	1,421	1,423	100.1%	3.4	0.2	A
	Right Turn						
	Subtotal	1,421	1,423	100.1%	3.4	0.2	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	40	40	99.3%	6.4	3.2	A
	Subtotal	40	40	99.3%	6.4	3.2	A
Total		2,220	2,230	100.5%	2.8	0.2	A

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	740	746	100.9%	5.8	1.8	A
	Right Turn	26	27	105.0%	4.3	2.1	A
	Subtotal	766	774	101.0%	5.7	1.8	A
SB	Left Turn	25	24	96.8%	20.3	5.0	C
	Through	1,389	1,390	100.1%	5.6	1.3	A
	Right Turn	7	8	112.9%	3.9	0.7	A
	Subtotal	1,421	1,422	100.1%	5.8	1.3	A
EB	Left Turn						
	Through	1	1	120.0%	0.7	2.1	A
	Right Turn						
	Subtotal	1	1	120.0%	0.7	2.1	A
WB	Left Turn	23	19	83.5%	20.0	9.5	C
	Through						
	Right Turn	8	8	98.8%	4.8	3.7	A
	Subtotal	31	27	87.4%	15.5	5.6	B
Total		2,219	2,224	100.2%	5.9	1.3	A

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	50	51	102.4%	28.0	4.9	C
	Through	738	750	101.6%	7.0	1.1	A
	Right Turn						
	Subtotal	788	801	101.6%	8.3	1.1	A
SB	Left Turn						
	Through	1,099	1,113	101.3%	7.4	1.1	A
	Right Turn	313	297	95.0%	7.8	1.1	A
	Subtotal	1,412	1,411	99.9%	7.5	1.0	A
EB	Left Turn	18	18	100.6%	28.4	6.7	C
	Through						
	Right Turn	18	18	98.3%	7.9	3.8	A
	Subtotal	36	36	99.4%	17.8	4.0	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,236	2,247	100.5%	8.0	0.6	A

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	34	32	95.3%	13.0	3.7	B
	Through	778	793	102.0%	4.4	0.5	A
	Right Turn						
	Subtotal	812	826	101.7%	4.8	0.5	A
SB	Left Turn						
	Through	1,029	1,039	101.0%	2.9	0.5	A
	Right Turn	97	100	103.3%	2.8	0.9	A
	Subtotal	1,126	1,140	101.2%	2.9	0.6	A
EB	Left Turn						
	Through						
	Right Turn	2	2	80.0%	2.6	6.2	A
	Subtotal	2	2	80.0%	2.6	6.2	A
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,940	1,967	101.4%	3.7	0.4	A

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	25	26	105.2%	28.2	9.4	C
	Through	892	906	101.6%	8.6	1.6	A
	Right Turn	5	6	120.0%	0.7	0.8	A
	Subtotal	922	939	101.8%	9.2	1.6	A
SB	Left Turn	36	36	100.8%	33.9	5.0	C
	Through	910	917	100.8%	12.7	1.3	B
	Right Turn	25	28	110.8%	10.4	3.2	B
	Subtotal	971	981	101.1%	13.4	1.5	B
EB	Left Turn	54	57	104.8%	23.4	4.8	C
	Through	1	1	60.0%	7.3	15.7	A
	Right Turn	35	37	104.9%	11.6	4.7	B
	Subtotal	90	94	104.3%	19.4	3.4	B
WB	Left Turn	18	17	92.8%	23.5	7.0	C
	Through	1	1	60.0%	4.4	9.6	A
	Right Turn	44	46	105.5%	10.6	2.4	B
	Subtotal	63	64	101.1%	14.4	2.8	B
Total		2,046	2,078	101.5%	11.8	1.3	B

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	162	158	97.3%	1.0	1.6	A
	Right Turn						
	Subtotal	162	158	97.3%	1.0	1.6	A
SB	Left Turn						
	Through	66	66	100.2%	0.3	0.1	A
	Right Turn	10	11	105.0%	0.3	0.3	A
	Subtotal	76	77	100.8%	0.3	0.1	A
EB	Left Turn						
	Through						
	Right Turn	1	1	130.0%	0.0	0.0	A
	Subtotal	1	1	130.0%	0.0	0.0	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		239	236	98.5%	0.9	1.2	A

Intersection 21 **El Don Dr/Southern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	3	3	93.3%	1.4	1.5	A
	Through	149	145	97.3%	1.4	0.1	A
	Right Turn						
	Subtotal	152	148	97.2%	1.5	0.1	A
SB	Left Turn						
	Through	66	66	99.8%	0.2	0.2	A
	Right Turn	1	2	160.0%	0.0	0.0	A
	Subtotal	67	68	100.7%	0.1	0.2	A
EB	Left Turn	13	12	88.5%	5.2	2.3	A
	Through						
	Right Turn	1	2	160.0%	1.2	1.6	A
	Subtotal	14	13	93.6%	5.0	2.2	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		233	228	98.0%	1.3	0.2	A

Intersection 22 **El Don Dr/Wildflower Ln** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	2	2	120.0%	2.6	2.8	A
	Through	137	136	99.1%	5.1	0.2	A
	Right Turn						
	Subtotal	139	138	99.4%	5.1	0.2	A
SB	Left Turn						
	Through	55	57	102.9%	5.6	0.7	A
	Right Turn	12	11	90.8%	3.5	0.9	A
	Subtotal	67	68	100.7%	5.3	0.8	A
EB	Left Turn	15	12	82.0%	4.1	0.5	A
	Through						
	Right Turn	5	5	98.0%	2.3	2.3	A
	Subtotal	20	17	86.0%	3.9	0.6	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		226	223	98.6%	5.1	0.3	A

Intersection 23 **El Don Dr/Corona Cir** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	2	2	80.0%	1.2	2.2	A
	Through	130	128	98.5%	0.1	0.1	A
	Right Turn						
	Subtotal	132	130	98.3%	0.1	0.1	A
SB	Left Turn						
	Through	55	55	100.7%	1.5	0.3	A
	Right Turn	5	5	98.0%	0.5	0.8	A
	Subtotal	60	60	100.5%	1.5	0.3	A
EB	Left Turn	9	10	110.0%	4.3	0.8	A
	Through						
	Right Turn	3	3	103.3%	1.8	1.3	A
	Subtotal	12	13	108.3%	3.9	0.5	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		204	203	99.5%	0.8	0.2	A

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	45	47	103.6%	48.9	7.1	D
	Through	26	25	97.7%	41.9	20.7	D
	Right Turn	27	29	108.9%	21.9	16.7	C
	Subtotal	98	101	103.5%	40.4	8.9	D
SB	Left Turn	521	533	102.2%	32.7	4.6	C
	Through	22	22	99.5%	42.2	13.3	D
	Right Turn	200	204	101.9%	10.9	2.8	B
	Subtotal	743	758	102.0%	27.0	4.2	C
EB	Left Turn	173	168	97.0%	59.7	7.8	E
	Through	627	620	98.9%	23.7	2.6	C
	Right Turn	18	18	98.9%	16.0	10.5	B
	Subtotal	818	806	98.5%	30.9	3.0	C
WB	Left Turn	50	55	109.8%	77.8	14.1	E
	Through	768	776	101.0%	36.3	5.7	D
	Right Turn	503	496	98.6%	13.3	3.5	B
	Subtotal	1,321	1,326	100.4%	29.6	5.5	C
Total		2,980	2,992	100.4%	29.7	4.0	C

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	66	64	96.5%	34.4	9.0	C
	Through	4	4	107.5%	54.4	54.9	D
	Right Turn	306	312	102.1%	47.0	22.0	D
	Subtotal	376	380	101.1%	45.6	19.6	D
EB	Left Turn						
	Through	717	715	99.7%	44.0	12.1	D
	Right Turn	498	503	101.0%	18.7	4.6	B
	Subtotal	1,215	1,218	100.3%	33.7	8.8	C
WB	Left Turn	517	502	97.2%	42.5	8.4	D
	Through	1,162	1,156	100.4%	10.3	2.0	B
	Right Turn						
	Subtotal	1,679	1,659	99.4%	20.0	3.7	B
Total		3,270	3,267	99.9%	28.2	5.0	C

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	555	563	101.5%	35.5	3.3	D
	Through	1	1	110.0%	14.7	26.1	B
	Right Turn	577	565	97.9%	26.0	3.6	C
	Subtotal	1,133	1,130	99.7%	30.7	3.4	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	227	228	100.2%	78.9	29.8	E
	Through	556	559	100.5%	12.7	5.8	B
	Right Turn						
	Subtotal	783	787	100.4%	32.9	14.8	C
WB	Left Turn						
	Through	1,124	1,108	98.5%	59.6	13.3	E
	Right Turn	81	82	101.2%	52.2	16.6	D
	Subtotal	1,205	1,190	98.7%	59.0	13.5	E
Total		3,121	3,106	99.5%	42.5	8.9	D

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	103	102	99.1%	40.7	3.9	D
	Through						
	Right Turn	19	23	119.5%	8.5	3.9	A
	Subtotal	122	125	102.3%	34.6	4.1	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	55	56	101.1%	46.1	4.4	D
	Through	1,012	1,014	100.2%	4.3	0.6	A
	Right Turn	139	133	95.5%	3.2	0.6	A
	Subtotal	1,206	1,203	99.7%	6.5	0.9	A
WB	Left Turn	15	14	94.0%	73.7	36.3	E
	Through	1,085	1,066	98.2%	39.1	33.5	D
	Right Turn						
	Subtotal	1,100	1,080	98.1%	39.7	33.5	D
Total		2,428	2,407	99.1%	22.8	14.7	C

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	117	119	101.5%	47.2	7.2	D
	Through	9	9	102.2%	27.0	19.1	C
	Right Turn	25	27	107.2%	16.7	11.0	B
	Subtotal	151	155	102.5%	41.0	7.6	D
SB	Left Turn	58	57	97.9%	39.0	8.3	D
	Through	13	12	94.6%	39.1	18.6	D
	Right Turn	352	348	98.9%	15.9	3.0	B
	Subtotal	423	417	98.6%	20.0	2.8	C
EB	Left Turn	260	265	101.8%	47.4	6.6	D
	Through	656	658	100.3%	27.4	2.0	C
	Right Turn	125	128	102.6%	22.2	3.9	C
	Subtotal	1,041	1,051	100.9%	31.6	2.0	C
WB	Left Turn	16	16	102.5%	63.7	20.2	E
	Through	619	618	99.8%	32.2	4.2	C
	Right Turn	46	48	105.0%	21.3	5.9	C
	Subtotal	681	683	100.2%	32.2	4.1	C
Total		2,296	2,305	100.4%	30.3	1.8	C

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	5	5	94.0%	29.3	17.0	C
	Through						
	Right Turn	9	10	112.2%	4.7	2.4	A
	Subtotal	14	15	105.7%	15.4	8.1	B
SB	Left Turn	335	344	102.7%	17.5	2.7	B
	Through						
	Right Turn	167	166	99.5%	4.6	0.7	A
	Subtotal	502	510	101.6%	13.3	2.2	B
EB	Left Turn	71	69	97.5%	24.8	6.3	C
	Through	438	431	98.5%	9.8	2.0	A
	Right Turn	16	17	108.1%	4.7	4.2	A
	Subtotal	525	518	98.6%	11.7	2.1	B
WB	Left Turn	14	13	93.6%	35.8	11.9	D
	Through	442	439	99.2%	17.0	3.4	B
	Right Turn	119	120	100.8%	11.5	3.5	B
	Subtotal	575	572	99.4%	16.1	3.4	B
Total		1,616	1,615	99.9%	13.8	2.0	B

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	260	254	97.7%	56.2	6.0	E
	Through	834	839	100.6%	45.4	5.7	D
	Right Turn	49	50	102.9%	40.6	7.1	D
	Subtotal	1,143	1,143	100.0%	47.5	5.2	D
SB	Left Turn	182	187	102.7%	50.2	6.0	D
	Through	630	626	99.4%	29.5	4.0	C
	Right Turn	137	137	99.6%	8.9	1.4	A
	Subtotal	949	950	100.1%	30.9	3.7	C
EB	Left Turn	184	183	99.5%	51.1	4.7	D
	Through	250	255	102.1%	27.6	2.6	C
	Right Turn	348	345	99.1%	12.3	2.1	B
	Subtotal	782	783	100.1%	26.5	2.0	C
WB	Left Turn	62	61	98.4%	58.0	12.7	E
	Through	190	193	101.6%	40.3	4.7	D
	Right Turn	195	193	99.1%	28.8	5.4	C
	Subtotal	447	447	100.1%	37.4	3.8	D
Total		3,321	3,323	100.1%	36.4	2.7	D

Intersection 8 **Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	11	13	117.3%	7.5	2.4	A
	Through						
	Right Turn	1	1	100.0%	0.5	1.1	A
	Subtotal	12	14	115.8%	7.2	2.5	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	466	475	101.9%	2.5	0.3	A
	Right Turn	15	18	119.3%	1.3	0.5	A
	Subtotal	481	493	102.5%	2.4	0.3	A
WB	Left Turn						
	Through	436	439	100.6%	0.6	0.1	A
	Right Turn						
	Subtotal	436	439	100.6%	0.6	0.1	A
Total		929	945	101.8%	1.7	0.2	A

Intersection 9 **Rocklin Manor Central/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	14	13	93.6%	10.7	5.2	B
	Through						
	Right Turn						
	Subtotal	14	13	93.6%	10.7	5.2	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	449	459	102.2%	0.5	0.1	A
	Right Turn	18	16	91.1%	0.2	0.3	A
	Subtotal	467	475	101.8%	0.5	0.1	A
WB	Left Turn	2	1	60.0%	0.1	0.4	A
	Through	422	424	100.5%	0.4	0.1	A
	Right Turn						
	Subtotal	424	425	100.3%	0.4	0.1	A
Total		905	914	101.0%	0.6	0.2	A

Intersection 10 **Rocklin Manor East/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	5	6	110.0%	10.5	8.8	B
	Through						
	Right Turn						
	Subtotal	5	6	110.0%	10.5	8.8	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	439	449	102.3%	0.3	0.0	A
	Right Turn	10	11	105.0%	0.2	0.3	A
	Subtotal	449	460	102.4%	0.3	0.0	A
WB	Left Turn	2	1	70.0%	1.5	3.1	A
	Through	419	420	100.3%	2.1	0.3	A
	Right Turn						
	Subtotal	421	422	100.2%	2.1	0.3	A
Total		875	887	101.4%	1.2	0.2	A

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	356	348	97.7%	7.8	1.3	A
	Through	60	61	101.3%	8.8	0.7	A
	Right Turn						
	Subtotal	416	409	98.2%	7.9	1.2	A
SB	Left Turn						
	Through	47	46	97.2%	9.4	1.3	A
	Right Turn	61	69	113.1%	3.7	1.2	A
	Subtotal	108	115	106.2%	5.8	0.8	A
EB	Left Turn	69	71	102.5%	14.5	3.4	B
	Through						
	Right Turn	369	376	101.9%	10.6	1.4	B
	Subtotal	438	447	102.0%	11.2	1.4	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		962	970	100.8%	9.3	0.8	A

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	176	174	99.0%	38.7	5.0	D
	Through	859	878	102.2%	16.0	2.1	B
	Right Turn	77	75	97.9%	7.6	1.4	A
	Subtotal	1,112	1,128	101.4%	19.0	2.1	B
SB	Left Turn	54	53	98.3%	41.9	7.4	D
	Through	765	764	99.8%	21.9	4.1	C
	Right Turn	78	78	99.7%	6.3	2.3	A
	Subtotal	897	895	99.7%	21.9	3.8	C
EB	Left Turn	153	155	101.1%	30.1	5.9	C
	Through	27	27	99.6%	32.6	6.5	C
	Right Turn	248	254	102.5%	13.7	3.0	B
	Subtotal	428	436	101.8%	20.5	3.1	C
WB	Left Turn	101	99	98.3%	35.4	9.4	D
	Through	15	15	97.3%	34.8	13.0	C
	Right Turn	40	42	106.0%	9.6	4.0	A
	Subtotal	156	156	100.2%	28.3	5.5	C
Total		2,593	2,614	100.8%	20.8	2.5	C

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	269	274	101.9%	39.4	5.9	D
	Through	869	884	101.7%	14.1	1.8	B
	Right Turn	278	274	98.6%	6.1	0.6	A
	Subtotal	1,416	1,432	101.2%	17.5	1.9	B
SB	Left Turn						
	Through	1,104	1,109	100.5%	27.5	4.3	C
	Right Turn	56	57	102.5%	7.4	2.4	A
	Subtotal	1,160	1,166	100.6%	26.5	4.4	C
EB	Left Turn	55	55	100.4%	36.5	8.2	D
	Through						
	Right Turn	293	295	100.5%	14.6	1.7	B
	Subtotal	348	350	100.5%	18.3	2.7	B
WB	Left Turn	437	436	99.8%	26.9	2.8	C
	Through	99	99	100.3%	34.0	6.6	C
	Right Turn	224	228	101.6%	17.1	3.0	B
	Subtotal	760	763	100.4%	24.9	2.4	C
Total		3,684	3,712	100.8%	21.9	2.3	C

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,186	1,187	100.1%	19.6	2.6	B
	Right Turn	105	106	100.9%	8.1	1.8	A
	Subtotal	1,291	1,293	100.1%	18.6	2.6	B
SB	Left Turn	267	264	98.7%	44.8	2.7	D
	Through	757	763	100.7%	14.3	2.0	B
	Right Turn	334	332	99.5%	6.6	0.6	A
	Subtotal	1,358	1,358	100.0%	18.4	1.9	B
EB	Left Turn	394	403	102.3%	43.9	4.9	D
	Through	237	231	97.4%	37.2	5.0	D
	Right Turn	81	83	102.5%	11.9	1.4	B
	Subtotal	712	717	100.7%	38.0	2.8	D
WB	Left Turn	99	99	99.5%	41.7	4.2	D
	Through						
	Right Turn	294	291	99.0%	21.6	3.2	C
	Subtotal	393	390	99.1%	26.6	2.9	C
Total		3,754	3,757	100.1%	23.1	1.7	C

Intersection 15 **Sierra College Blvd/Schriber Wy** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,276	1,276	100.0%	2.0	0.2	A
	Right Turn						
	Subtotal	1,276	1,276	100.0%	2.0	0.2	A
SB	Left Turn						
	Through	937	945	100.8%	2.6	0.3	A
	Right Turn						
	Subtotal	937	945	100.8%	2.6	0.3	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	15	17	114.7%	9.6	7.2	A
	Subtotal	15	17	114.7%	9.6	7.2	A
Total		2,228	2,238	100.5%	2.3	0.1	A

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,260	1,260	100.0%	10.5	1.5	B
	Right Turn	52	52	99.2%	8.5	1.8	A
	Subtotal	1,312	1,312	100.0%	10.4	1.5	B
SB	Left Turn	28	28	98.2%	24.3	9.6	C
	Through	878	882	100.4%	4.8	0.8	A
	Right Turn	31	34	110.6%	3.2	0.6	A
	Subtotal	937	944	100.7%	5.3	0.8	A
EB	Left Turn	1	1	50.0%	0.7	2.3	A
	Through	1	1	100.0%	9.2	23.5	A
	Right Turn	2	3	135.0%	5.0	9.3	A
	Subtotal	4	4	105.0%	13.0	23.5	B
WB	Left Turn	52	50	96.0%	25.6	6.3	C
	Through						
	Right Turn	9	12	130.0%	7.2	3.3	A
	Subtotal	61	62	101.0%	21.9	5.4	C
Total		2,314	2,321	100.3%	8.7	1.3	A

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	41	41	99.3%	38.3	7.9	D
	Through	1,154	1,154	100.0%	12.7	1.0	B
	Right Turn						
	Subtotal	1,195	1,195	100.0%	13.5	1.1	B
SB	Left Turn						
	Through	895	896	100.1%	7.4	1.1	A
	Right Turn	40	43	106.3%	4.6	1.5	A
	Subtotal	935	939	100.4%	7.3	1.1	A
EB	Left Turn	160	155	97.0%	21.6	2.9	C
	Through						
	Right Turn	56	57	101.6%	6.8	1.9	A
	Subtotal	216	212	98.2%	17.8	2.0	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,346	2,346	100.0%	11.4	0.9	B

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	8	8	95.0%	7.0	6.7	A
	Through	1,195	1,197	100.1%	5.4	0.4	A
	Right Turn						
	Subtotal	1,203	1,204	100.1%	5.4	0.4	A
SB	Left Turn						
	Through	937	937	99.9%	2.6	0.4	A
	Right Turn	14	16	110.7%	1.6	1.6	A
	Subtotal	951	952	100.1%	2.6	0.4	A
EB	Left Turn						
	Through						
	Right Turn	12	13	110.0%	5.2	3.0	A
	Subtotal	12	13	110.0%	5.2	3.0	A
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,166	2,170	100.2%	4.2	0.3	A

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	26	24	93.1%	26.8	10.3	C
	Through	1,066	1,061	99.6%	6.5	1.5	A
	Right Turn	7	7	100.0%	1.2	1.9	A
	Subtotal	1,099	1,093	99.4%	7.0	1.5	A
SB	Left Turn	64	63	97.8%	26.1	5.0	C
	Through	921	915	99.3%	6.6	1.4	A
	Right Turn	77	76	98.8%	6.1	1.2	A
	Subtotal	1,062	1,053	99.2%	7.8	1.3	A
EB	Left Turn	33	31	95.2%	23.1	6.8	C
	Through	1	1	130.0%	4.1	9.8	A
	Right Turn	18	21	117.8%	11.4	4.9	B
	Subtotal	52	54	103.7%	18.0	5.6	B
WB	Left Turn	10	11	113.0%	22.0	13.6	C
	Through	1	1	80.0%	5.6	12.6	A
	Right Turn	21	21	101.0%	8.2	3.8	A
	Subtotal	32	33	104.1%	12.3	5.4	B
Total		2,245	2,233	99.5%	7.7	1.3	A

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	151	154	101.8%	2.3	2.5	A
	Right Turn						
	Subtotal	151	154	101.8%	2.3	2.5	A
SB	Left Turn						
	Through	147	150	101.8%	0.5	0.1	A
	Right Turn	7	7	100.0%	0.3	0.4	A
	Subtotal	154	157	101.8%	0.5	0.1	A
EB	Left Turn						
	Through						
	Right Turn	9	9	101.1%	2.6	1.3	A
	Subtotal	9	9	101.1%	2.6	1.3	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		314	320	101.8%	1.5	1.4	A

Intersection 21 **El Don Dr/Southern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	3	3	83.3%	0.8	1.2	A
	Through	117	120	102.6%	1.6	0.3	A
	Right Turn						
	Subtotal	120	123	102.2%	1.6	0.3	A
SB	Left Turn						
	Through	154	156	101.4%	0.3	0.1	A
	Right Turn	2	2	85.0%	0.0	0.0	A
	Subtotal	156	158	101.2%	0.3	0.1	A
EB	Left Turn	34	33	98.2%	5.7	1.0	A
	Through						
	Right Turn	5	5	106.0%	3.2	2.1	A
	Subtotal	39	39	99.2%	5.4	1.0	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		315	319	101.3%	1.5	0.3	A

Intersection 22 **El Don Dr/Wildflower Ln** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	1	1	80.0%	0.3	1.0	A
	Through	111	113	102.2%	5.0	0.2	A
	Right Turn						
	Subtotal	112	114	102.0%	5.0	0.2	A
SB	Left Turn						
	Through	144	146	101.7%	6.3	0.4	A
	Right Turn	15	16	104.0%	4.0	0.4	A
	Subtotal	159	162	101.9%	6.0	0.4	A
EB	Left Turn	9	9	103.3%	3.9	1.4	A
	Through						
	Right Turn	3	3	110.0%	2.0	1.8	A
	Subtotal	12	13	105.0%	3.7	1.3	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		283	289	102.0%	5.5	0.2	A

Intersection 23 **El Don Dr/Corona Cir** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	5	5	106.0%	1.2	1.3	A
	Through	103	106	102.5%	0.1	0.1	A
	Right Turn						
	Subtotal	108	111	102.7%	0.2	0.2	A
SB	Left Turn						
	Through	132	134	101.4%	1.5	0.2	A
	Right Turn	15	17	110.0%	1.2	0.4	A
	Subtotal	147	150	102.3%	1.5	0.1	A
EB	Left Turn	9	8	85.6%	4.6	2.9	A
	Through						
	Right Turn	3	3	110.0%	1.4	1.5	A
	Subtotal	12	11	91.7%	4.4	2.8	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		267	272	102.0%	1.1	0.3	A

APPENDIX C: MIXED-USE TRIP GENERATION, VMT, AND EXISTING PLUS PROJECT AND EXISTING PLUS APPROVED PROJECTS LOS CALCULATIONS

Output from MXD+ Model of Internal Capture for North Village

MXD+ Vehicle Trip Generation Reduction Percent			
	Daily	AM	PM
Internal Capture	7.6%	9.8%	14.4%

Model Inputs

Input Variable	Input Value	Source
MXD specific inputs		
Project Area (Acres)	58.89	GIS
Intersections per Square Mile	180	custom
Employment within 1 mile of Project Site	321	EPA Smart Location Database (2013) - 2010 Scenario
Share of regional employment within a 30 minute trip by transit	0.00396978	EPA Smart Location Database (2013) - 2010 Scenario
Surrounding Household Size	2.54	ACS 2012 (5-year) - All Housing Types
Surrounding Vehicle Ownership	2.38	Census 2000 - All Housing Types
Site Household Size	2.67	Census 2010 - All Housing Types
Site Vehicle Ownership	2.45	ACS 2012 (5-year) - All Housing Types

Base Year Model Results

Land Use	Home Based				
	VT	VMT	HHLD	Avg. Trip Length	VMT/HHLD
Single Family	139,805	1,102,903	15,735	7.89	70.1
Multi-Family	53,570	270,296	5,644	5.05	47.9

Citywide values - calculated by summing up and averaging VMT for all TAZs in the City

	A	B	C	D	E	F	G	H	I	J	K	L
1		2	3	4	5	6		7	8	9	10	11
2	Rocklin_TAZ	HB_P_VT	HB_P_VMT	HBW_P_VT	HBW_P_VMT			HB_P_VT_SF	HB_P_VT_MF	HB_P_VT_AR	HB_P_VMT_SF	HB_P_VMT_MF
70	1603	2,190	16,197	362	3,335	2,190	TRUE	1,826	364	0	9,001	5,196
71	1604	2,297	16,822	504	3,789	2,297	TRUE	2,297	0	0	16,822	0
72												
73	Sum	100,675	1,409,825	88,484	660,550			126,088	27,179	2,796	1,102,903	270,296

Land Use	Home Based Work Attractions				
	VT	VMT	ksf	Avg. Trip Length	VMT / ksf
Office	1469	15227	285.3	10.365	76.2

Citywide values - calculated by summing up and averaging VMT for all TAZs in the City

	M	N	O	P	Q	R	S	T	U	V
		2	3	4	5					
1	RockRin_TAZ	HBW_A_VT	HBW_A_VMT	WO_P_VT	WO_P_VMT	Office_Only_KSF	HBW_A_VT	HBW_A_VMT	WO_P_VT	WO_P_VMT
2	1601	0	0	0	0	0	0	0	0	0
3	1602	56	452	73	566	0	0	0	0	0
4	1603	0	0	0	0	0	0	0	0	0
5	1604	0	0	0	0	0	0	0	0	0
6										
7	Sum	96,372	991,511	19,128	134,145	285.3	1469	15227	297	1981

North Village and South Village calculated Residential VMT

North Village

Land Use	Home-Based						
	VT	VMT	Pop.	HHLD	Avg. Trip Length	VMT/Pop.	VMT/HHLD
Single Family	2,791	22,099		317	7.9		69.7
Multi-Family	2,403	19,699		378	8.1		51.2

South Village

Land Use	Home-Based						
	VT	VMT	Pop.	HHLD	Avg. Trip Length	VMT/Pop.	VMT/HHLD
Single Family	224	1,447		25	6.3		57.9

Example Calculation:
Linked spreadsheet shows that TAZ 516 generated 22,099 Home-based VMT by its single family units. Matches above value.

	A	B	C	D	E	F	G	H	I	J	K
1		2	3	4	5	6		7	8	9	10
2	Rocklin_TAZ	HB_P_VT	HB_P_VMT	HBW_P_VT	HBW_P_VMT			HB_P_VT_SF	HB_P_VT_MF	HB_P_VT_AR	HB_P_VMT_SF
75	517	887	6,535	721	3,144	887	TRUE	887	0	0	6,535
76	518	194	1,367	48	471	194	TRUE	194	0	0	1,367
77	519	1,804	13,598	457	4,530	1,804	TRUE	1,600	204	0	11,998
78	520	314	2,400	105	1,200	314	TRUE	110	204	0	1,275
79	521	0	0	0	0	0	TRUE	0	0	0	0
80	522	120	888	24	268	0	FALSE	0	0	0	0
81	523	0	0	0	0	0	TRUE	0	0	0	0
82	524	3,196	22,868	1,433	10,812	3,196	TRUE	2,791	2,403	0	22,099
83											

Example Calculation:
South Village calculated Office VMT

South Village

Land Use	Total				
	VT	VMT	KSF	Avg. Trip Length	VMT / KSF
Office	785	5,609	53	7.1	105.8

Linked spreadsheet shows that Project TAZ 1605 generated 5609 VMT by its office uses. Matches above value.

	A	B
1		
2		
3	TAZ	T Alexandria
4		DEV
5		
144	1584	0
145	1585	0
146	1586	0
147	1587	0
148	1588	0
149	1589	0
150	1590	0
151	1604	5,609
152	1591	0
153	1592	0
154	1593	0

Future Year Model Results

City of Rocklin

Land Use	Home-Based				
	VT	VMT	HHLD	Avg. Trip Length	VMT/HHLD
Single Family	160,466	1,340,320	21,219	7.7	62.8
Multi-Family	62,924	411,635	13,973	6.4	40.9

Citywide values - calculated by summing up and averaging VMT for all TAZs in the City

	A	B	C	D	E	F	G	H	I	J	K	L
1		2	3	4	5	6		7	8	9	10	11
2	Rocklin_TAZ	HB_P_VT	HB_P_VMT	HBW_P_VT	HBW_P_VMT			HB_P_VT_SF	HB_P_VT_MF	HB_P_VT_AR	HB_P_VMT_SF	HB_P_VMT_MF
162	1581	3,434	34,504	734	6,380	1,434	TRUE	0	3,434	0	0	34,504
163	1582	0	0	0	0	0	TRUE	0	0	0	0	0
164	1583	2,219	19,499	380	4,131	1,339	TRUE	1,181	1,038	0	10,711	7,709
165	1584	370	3,909	284	2,496	370	TRUE	0	370	0	0	5,081
166	1585	0	0	0	0	0	TRUE	0	0	0	0	0
167	1586	2,111	12,738	350	3,431	1,111	TRUE	2,111	0	0	12,738	0
168	1601	204	1,315	56	393	204	TRUE	204	0	0	1,315	0
169	1602	1,460	9,370	420	3,601	1,460	TRUE	980	784	0	6,319	4,162
170	1603	2,199	13,328	915	8,930	1,199	TRUE	1,406	784	0	8,907	4,501
171	1604	2,898	15,799	594	5,417	1,298	TRUE	2,298	0	0	15,799	0
172												
173	Sum	256,144	1,751,315	88,656	564,669			180,469	93,904	1,817	1,340,320	411,635
174												

City of Rocklin

Land Use	Total				
	VT	VMT	KSF	Avg. Trip Length	VMT / KSF
Office	32,580	407,937	3,356	7.8	121.6

Citywide values - calculated by summing up and averaging VMT for all TAZs in the City

	A	B
1		19
2		
3	TAZ	VMT TOTAL
4		
5		OFF
164	1582	12,738
165	1583	0
166	1584	14,018
167	1585	95
168	1594	340
169	1599	297
170	1598	0
171	1601	4,819
172	1602	2,304
173	1603	0
174	1604	0
175		
176	SUM	467,937
177		

North Village and South Village calculated Residential VMT

North Village

Land Use	Home-Based				
	VT	VMT	HHLD	Avg. Trip Length	VMT/HHLD
Single Family	2,797	18,904	377	6.7	50.1
Multi-Family	2,404	14,879	370	6.2	40.2

South Village

Land Use	Home-Based				
	VT	VMT	HHLD	Avg. Trip Length	VMT/HHLD
Single Family	734	5,104	99	6.9	51.5

Example Calculation:
Linked spreadsheet shows that TAZ 524 generated 16,904 Home-based VMT by its single family units. Matches above value.

	A	B	C	D	E	F	G	H	I	J	K
1		2	3	4	5	6		7	8	9	10
2	Rocklin_TAZ	HB_P_VT	HB_P_VMT	HBW_P_VT	HBW_P_VMT			HB_P_VT_SF	HB_P_VT_MF	HB_P_VT_AR	HB_P_VMT_SF
78	520	2,454	16,767	662	5,546	2,354	FALSE	866	1,588	0	5,788
79	521	0	0	0	0	0	TRUE	0	0	0	0
80	522	786	5,281	189	1,785	675	FALSE	675	0	0	4,847
81	523	4,775	33,997	748	6,980	1,775	TRUE	4,775	0	0	33,997
82	524	5,199	31,819	1,408	12,908	5,155	FALSE	2,795	2,404	0	16,904
83	546	3,475	23,832	961	9,193	3,475	TRUE	1,234	2,241	0	8,887
84	562	1,028	8,847	258	2,656	1,028	TRUE	1,028	0	0	8,847

Example Calculation:
South Village calculated Office VMT

South Village

Land Use	Total				
	VT	VMT	KSF	Avg. Trip Length	VMT / KSF
Office	777	5,784	59	7.4	119.2

Linked spreadsheet shows that Project TAZ 1601 generated 5784 VMT by its office uses. Matches above value.

	A	B
1		19
2		
3	TAZ	VMT TOTAL
4		
5		OFF
164	1582	12,738
165	1583	0
166	1584	14,018
167	1585	95
168	1594	340
169	1599	297
170	1598	0
171	1601	5,784
172	1602	2,304
173	1603	0
174	1604	0
175		
176	SUM	494,242
177		

Mixed-Use Trip Generation (MXD+) Model Recalibration and Validation to 2019 Conditions

July 13, 2020

FEHR PEERS

Mixed-Use Trip Generation (MXD+) Model
Recalibration and Validation to 2019 Conditions
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This paper documents the recalibration and validation effort undertaken by Fehr & Peers in 2019-2020 of the MXD+ Tool. This revalidation was necessary given the myriad changes in mobility, technology, and societal behavior that have occurred since MXD+ was originally formulated in the late-2000's. This paper provides a straightforward "nuts and bolts" type description of this process.

MXD+ Model Origin

In the late-2000's, two separate research studies improved the state of practice regarding prediction of trips from mixed-use projects. Studies sponsored by the US EPA (MXD) and the Transportation Research Board (NCHRP 684) developed separate tools for improving trip generation estimates for mixed-use developments. The MXD model was originally derived from 239 mixed-use sites across the country, and validated in 2009 against 22 sites. NC*HRP 684: Enhancing Internal Trip Capture Estimation for Mixed-Use Developments* (2011) was based on six well-known MXD sites.

The principal authors of these original two methods (Reid Ewing at the University of Utah, Brian Bochner at Texas A&M, and Jerry Walters at Fehr & Peers) decided to collaborate on an integrated method that captured the best of both sets of research findings. And thus, MXD+ was created. They published a paper entitled Get*ting Trip Generation Right: Eliminating the Bias Against Mixed-Use Development* (American Planning Association, 2013). According to that paper, MXD+ achieved average errors of 2%, 12%, and 4%, for daily, AM peak hour, and PM peak hour conditions, respectively. These values suggest a good fit between the model's estimation and the counts.

Purpose/Need of Revalidation and Calibration

Excluding the unprecedented changes in travel and economic distress that have occurred in 2020 due to the COVID-19 Pandemic, there have been sweeping changes in travel behavior in the 10-plus years since MXD+ was originally validated. Some of the many examples include increased e-commerce activity, the introduction of ridehailing (i.e., Transportation Network Companies (TNCs), such as Uber and Lyft), increased telecommuting, micromobility (e.g., bikeshare, e-scooters, and microtransit), increased auto ownership, and decreased transit ridership.

Additionally, in 2017, the Institute of Transportation Engineers (ITE) released the 10th Edition of the *Trip Generation Manual*. When compared to the 9th Edition (2012), the 10th Edition demonstrates sizeable decreases in vehicle trip rates for nearly all types of employment uses (due to the replacement of very old data with new data collected after 2010). It also includes several new land use categories (i.e., fast casual restaurant), more overall data, and better definitions for land uses often found in mixed-use sites

Model Recalibration

Model recalibration involved site selection, data collection, and then calibration.

Site Selection

Fehr & Peers selected sites that were geographically diverse, both in terms of locations across the US, and as well as in their place type. They had varying levels of mode choice options, and their site trips were able to be accurately counted. The sites were well understood in terms of occupied land uses, available modes of travel, and other built environment characteristics. This diversity of use type, geographic placement, size allows for the model to be calibrated against a wider set of conditions versus an alternate approach where a more homogeneous set of sites were selected.

Consistent with standard practice in statistical analysis, the selected sites were divided into separate "calibration" and "validation" datasets. Early analysis findings indicated that model accuracy could be improved for weekday AM and PM peak hour conditions through a set of minor adjustments, which are discussed in detail later. The calibration dataset (12 sites) was used to determine the best fit provided by the adjusted set of factors. The validation dataset (4 sites), which was not included in the calibration dataset, were specifically selected to provide a diverse range of geographic settings, modal opportunities, and project sizes, which could be used to test the accuracy of the model. Those results are presented in case study format at the end of this paper.

Figure 1 shows the 12 calibration sites that were selected, as well as the four validation sites. Aside from the four case studies, individual site locations are not disclosed in this article because such information is not necessary to understand the data collection and analysis results. Case in point, transportation planners/engineers routinely use data from the *Trip Generation Manual*, which only discloses the states from which the data was collected. The traffic data collection did not require encroachment onto any private property to place cameras or hose tubes.

Data Collection

Table 1 provides an overview of the size, diversity of uses, and transit proximity of the sites that comprise the calibration database.



Figure 1: MXD+ Calibration and Validation Sites

Table 1 – Overview of MXD+ Calibration Sites

Metric	Range	Average	Median	Total
Acres	4 – 221 acres	50 acres	19 acres	603 acres
Number of Dwelling Units [1]	8 – 1,841 units	563 units	414 units	6,756 units
Retail	0 – 753,000 sq. ft.	168,000 sq. ft.	38,000 sq. ft.	2,013,000 sq. ft.
Office	0 – 1,084,000 sq. ft.	212,000 sq. ft.	41,000 sq. ft.	2,544,000 sq. ft.
Range of Transit Services	None, adjacent street bus stops, on-site transit centers, and nearby/on-site light rail			
Range of Land Uses	➢ Grocery Store ➢ Student Housing ➢ Medical-Office Building ➢ Restaurants	➢ Health Club ➢ Pharmacy ➢ Hotel ➢ Coffee Shop ➢ Library	➢ Schools ➢ Museum ➢ Movie Theater ➢ Bowling Alley ➢ Hospital	
Notes: [1] Over 95% of dwelling units are multi-family. Site with only 8 dwelling units also includes 315 student housing units.				

The average site was 50 acres and consisted of about 563 dwelling units (the vast majority being multi-family) and 380,000 square feet of non-residential space.

The MXD+ tool includes queries from various sources (e.g., US Census, American Community Survey, local travel demand models, etc.) to enable easy importing of built environment and surrounding area travel characteristics and demographic variables. Some of the more important variables are: Employment within a one-mile walk, Percentage of regional employment within a 30 minute transit ride, and site/adjacent area intersection density (a proxy for site walkability and internal trip-making potential), and Average vehicle ownership per household.

Measurement of vehicle trips generated by each site was a critical component of the data collection effort. It was important that the data collection was comprehensive in terms of collecting all types of vehicle trips generated by each site (including project-related vehicles parking on-site or on-street, persons being dropped-off or picked-up by a taxi, TNC, or friend/spouse/coworker, and truck/service deliveries.

To overcome the considerable cost associated with data collection via video cameras, an innovative approach was undertaken whereby collection of a site's travel during its busiest 14 hours can be used to accurately estimate its 24-hour traffic generation. Typically, these 14 hours represent about 90 percent of the land use's total daily trip generation. A factoring process was then performed using the ITE hourly trip generation data (from the *Trip Generation Manual)* to convert the 14 hour counts into 24-hour observations.

In several instances, site characteristics allowed for a multi-day hose tube count (i.e., a pneumatic tube placed across a road that would register a vehicle as it passes over) to be performed. But this was the exception and not the norm since the majority of sites were located in dense, urban environments where tube counts would have likely yielded inaccurate results.

In several cases, site reconnaissance was necessary to better understand site-specific travel behavior. This led to conclusions that on-street parking on one side of the street is project-related, while the other side is not. Other situations involved motorists parking in nearby garages/lots and walking into the MXD. In those instances, pedestrian activity (both at intersections and mid-block) were observed and classified into groups to translate pedestrian groups into vehicle trips.

Seven (7) of the 12 calibration data sites were counted in October 2019. The remaining five were counted as part of prior research efforts, in either 2015 or 2017. **Table 2** shows the number of vehicle trips these sites were observed to generate on a weekday daily basis, and during the AM and PM peak hours.

Table 2 – Trips Generated by MXD+ Calibration Sites

Time Period	External Vehicle Trips [1]		
	Range	Average	Median
Weekday (Daily)	2,383 – 35,825	12,461	9,495
Weekday AM Peak Hour [2]	100 – 2,017	752	518
Weekday PM Peak Hour [3]	181 – 3,381	1,161	712

Notes:
[1] Includes trips to/from the site for all purposes including deliveries, TNC trips, pass-by trips (i.e., already on the adjacent street) in addition to the typical trip types.
[2] AM peak hour represents the site's busiest consecutive 60-minute period of travel between 7 and 9 AM.
[3] PM peak hour represents the site's busiest consecutive 60-minute period of travel between 4 and 6 PM.

Recalibration of MXD+

The land use and built environment variables described above were input into MXD+ for each of the 12 calibration sites. MXD+ then processes that data in the following generalized steps:

- Step 1 – Gross number of vehicle trips are estimated for land uses based on published rates contained in the *Trip Generation Manual, 10th Edition*.[1]
- Step 2 – Built environment and site characteristics variables are used to estimate the likelihood for internal trip-making, and external trips being made by transit and walking/biking.
- Step 3 – The model estimates the number of internal trips made between complementary land uses within the site.
- Step 4 – The model estimates the number of external trips made by transit and walking/biking.

Nearly all data presented in the current *Trip Generation Manual* for the suburban/urban place type were collected at low-density, single-use, homogeneous developments with little or no public transit service, free parking, and little to no convenient pedestrian access. Hence, direct use of those rates for projects not aligned with those built environment factors are likely to result in an

[1] MXD+ is programmed to include trip generation rates (both weighted averages and as derived from fitted curve equations) from the 10th Edition of the *Trip Generation Manual*. Data is input only for the "suburban/urban" land use category, and not for the "rural", "multi-use urban", or "center city core" categories because their corresponding datasets generally have insufficient numbers of sites from which reliable trip generation rates could be derived.

overestimation of vehicle trips. This statement, while obvious, is intended to set the stage for why gross ITE trip generation estimates (without any adjustments) substantially overestimate trips observed at the MXD sites.

The following guidance from Page 14 of the *Trip Generation Handbook* (Institute of Transportation Engineers, 2017) was used in the calibration process:

> *"The trip generation estimate should reflect, to the extent possible, the specific uses within the known or assumed generalized (using zoning) classification."*

Thus, individual uses such as grocery stores, banks, pharmacies, restaurants, health clubs, day-care centers, etc. present at each site were entered separately into MXD+ versus being aggregated into a single 'retail shopping center' category.

In reviewing the preliminary MXD+ results, it was concluded that the daily results were sufficiently accurate so as to not require any adjustments. But for AM and PM peak hour conditions, it was observed that MXD+ tended to underestimate the observed count more often than desired. This was certainly an undesirable outcome because MXD+ applications should be reasonably conservative. If anything, they should err on the side of overestimating actual trips. The means by which internal trips and external non-auto trips were estimated for AM and PM peak hour conditions was quickly identified as a leading culprit.

The following describes the steps for how internal trips and external walk/bike trips for AM and PM peak hour conditions are estimated:

- Step 1 – Apply the MXD+ peak hour factors by trip purpose to the daily predicted probabilities of these trip reductions to obtain AM and PM peak hour percentages.
- Step 2 – Apply the following weighting of the two methods that independently estimate these trip reductions:
    - AM Peak Hour: 10% NCHRP 684 and 90% MXD+
    - PM Peak Hour: 37% NCHRP 684 and 63% MXD+

An iterative statistical analysis was performed to determine which set of peak hour factors for the MXD+ component of this calculation best fit the data from the calibration dataset. The best fit values are shown in **Table 3**.

The *NCHRP 684* procedure has been incorporated by ITE into its Trip Generation Handbook, and is hence known as the "ITE with Internalization". Note that this procedure estimates internal trips only for AM and PM peak hours (and not daily conditions).

Table 3 – Updated MXD+ Peak Hour Factors by Trip Purpose [1]

Predicted Probability [2]	AM Peak Hour			PM Peak Hour		
	HBW [3]	HBO [4]	NHB [5]	HBW [3]	HBO [4]	NHB [5]
Internal Capture	1.10	1.80	1.00	1.00	1.00	1.00
Walking/Biking External	1.20	1.30	1.00	1.00	1.00	1.00
Transit External	1.40	1.10	1.00	1.40	1.00	1.00

Notes:
[1] Source was analysis of data from the 2017 National Household Travel Survey, specifically analyzing the national dataset to understand the relative likelihood of each type of travel choice during weekday AM and PM peak hours, versus on a daily basis.
[2] These factors are multiplicatively applied (by trip purpose) to the daily predicted possibilities for each type of vehicle trip reduction
[3] HBW = Home-based work trip.
[4] HBO = Home-based other trip (e.g., shopping, school, recreation, etc.).
[5] NHB = Non-home-based trip (e.g., from office to deli).

Transparency in calculations is one of the many objectives of MXD+. By virtue of displaying these values here, it is possible for others to replicate MXD+ results, albeit through a substantial amount of data collection and analysis. The original MXD model (from 2011) is available for download from EPA's website (https://www.epa.gov/smartgrowth/mixed-use-trip-generation-model), though it is noted that model does not include the latest land use categories, trip generation rates, and equations from the 10th Edition of the *Trip Generation Manual*. However, that model does form the basis for the daily module of MXD+, but with these aforementioned adjustments added.

The calibration tests focus on the following five specific areas (from least to most statistically complex):

- Aggregate total trips
- Proportion of cases where MXD+ underestimates the actual number of trips
- Average absolute error
- Correlation coefficient[2]
- Percent RMSE[3]

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[2] This statistic measures the relationship between variables. A measure close to 1 means that variables are highly positively correlated; a value of zero suggests no or weak correlation, and a value close to -1 represents strong negative correlation.

[3] This statistic is a measure of the model's accuracy. It is the square root of the mean squared error between the predicted and observed count divided by the mean of the observed count.

Table 4 displays the five calibration statistics for daily, and AM and PM peak hour conditions, as well as the applicable statistical goal/objective for the given calibration statistic.

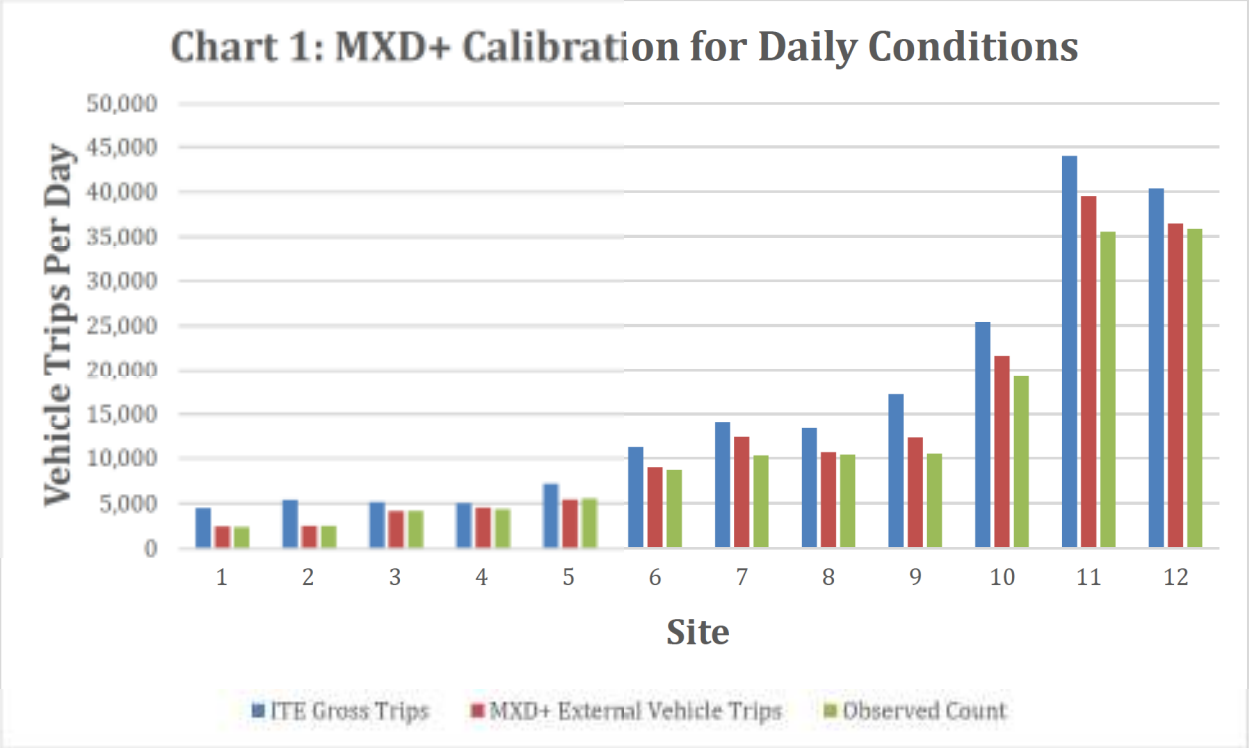
Table 4 – MXD+ Calibration Results

Calibration Statistic	Goal/Objective	Daily	AM Peak Hour	PM Peak Hour
Aggregate Total of MXD+ Vehicle Trip Generation Estimates Versus Actual Counts	As close to zero as possible	+ 7%	- 0.9%	+1.6%
Proportion of Calibration Sites That Were Underestimated by MXD+ [1]	Ideally none	0 of 12	4 of 12	3 of 12
Average Absolute Error	As close to zero as possible	6%	11%	6%
Correlation Coefficient	> 0.88 [2]	1.00	0.99	1.00
Percent RMSE	< 40% [2]	12%	13%	7%

Notes:
[1] Estimates that were within five percent of the actual counts were not considered underestimations since traffic volumes themselves may fluctuate by five percent or more from one day to the next.
[2] Based on statistical measures typically applied in travel demand model development.

Table 4 indicates that MXD+ does an excellent job of fitting the data for all three time periods. Challenges did however arise more frequently during peak hours versus daily conditions. Unique site specific conditions, such as their specific temporal commute patterns, degree of retail tenant success, and presence of TNCs contributed to some of these challenges.

Chart 1 orders the 12 calibration sites from least to greatest number of observed daily trips. Data is then presented for the MXD+ external vehicle trip estimate and the ITE gross trip estimate. At sites 1 – 6, MXD+ predictions are nearly identical to the observed counts. Slightly greater variation occurs at the larger sites (i.e., 7 – 12) for reasons discussed below.



For the 12 sites, MXD+ estimated 160,696 daily external vehicle trips. This represents 7% more trips than the 149,527 daily trips that were counted. This implies that MXD+ is being reasonably conservative.

If these sites had simply been analyzed using ITE gross daily trip estimates (i.e., without any reductions of internal trips or external non-auto trips), the resulting estimate would have been 192,905 daily trips, which is a 29% overestimation versus the counts. This reiterates prior research findings that the use of ITE rates for the suburban/urban place type without any adjustments for internal trips and external non-auto trips would result in a substantial overestimation of a mixed-use site's vehicle trip generation. This is acknowledged on page 8 of the *Trip Generation Handbook* by the following statement: "The application of suburban data in dense or multimodal urban settings can in some cases overestimate motor vehicle demand."

For the 12 calibration sites, the reduction in daily trips caused by internal trip-making and external non-auto travel ranged from 10 to 50 percent, with average/median values near 20 percent. This large range is caused by a number of factors including: mix of land use, presence of transit, and site design, size, and geographic location.

Validation of MXD+

Four case studies from across the US were selected for validation purposes. As noted previously, these sites were excluded from the calibration dataset in order to achieve the statistically desirable independent validation dataset. These sites were specifically chosen, as they are geographically diverse, are of widely varying sizes, and provide widely differing levels of modal travel options.

- **Safeway / Avalon, Bellevue, WA** – This four-acre site is situated in downtown Bellevue, across Lake Washington from downtown Seattle. Despite being only 10 miles from downtown Seattle, a commute to downtown by auto can exceed over an hour. Sound Transit operates fixed-route bus service with stops immediately adjacent to the building. The site is located in a suburban downtown setting with good sidewalk connectivity and heavy pedestrian volumes, but also wide arterial streets, large blocks, and heavy traffic. There no bike routes/lanes nearby. Adjacent land uses include a variety of residential, retail, and employment centers as well as a large regional mall and the Downtown Park. Apartment residents pay $85 to $110 per month for a parking space.
- **Hazard Center, San Diego, CA** – is situated on 16-acres and located five miles north of Downtown San Diego near the intersection of Interstate 8 and State Route 163. All land uses are situated within a ¼-mile walk to the Hazard Center Light Rail Station, which serves the San Diego Trolley Green Line light rail service. This station transports riders to downtown San Diego in about 20 minutes. A bus stop is also situated within ¼ mile of the site. A variety of uses are within a ½-mile walk of the site including Westfield Mission Valley Mall, grocers, employers, and restaurants. The San Diego River multi-use pathway is situated adjacent to this site.
- **Avalon, Alpharetta, GA** – is a quintessential suburban mixed-use project now found in many communities across the country. At a considerable size of 79 acres, it features a vast array of land uses – all of the typical ones found in mixed-use sites plus some other atypical uses such as single-family residential. It is a food & beverage destination with numerous bars and restaurants ranging from fast-food, fast casual, high-turnover sit-down, to quality establishments. Avalon is located directly west of US Highway 19, about 25 miles north of downtown Atlanta. Adjacent transit is limited to a single local bus route that operates on 30 minute headways. Parking is not priced anywhere within Avalon with the exception of the hotel. The site is anchored by Avalon Boulevard, a 1,200-foot long, walkable "Main Street" flanked by ground-floor retail and stacked residential on both sides. Lower density residential, office, and parking extends outwardly from the site's hub, with vehicular access provided by 10 distinct driveways on two public streets. Adjacent land uses are suburban or rural in nature.

- **Southport, West Sacramento, CA** – is a very large (3,000 developed acres), established community situated directly west of downtown Sacramento. It features a wide array of land use types (i.e., residential, jobs, shopping, schools, etc.) often found in self-contained communities. Fixed route bus service is provided on main arterials within the community, and downtown Sacramento can be reached via a five-mile trip. It is geographically isolated from adjacent communities by the Sacramento River and shipping channels, allowing for its trips to be accurately counted via four gateways.

Table 5 displays the land uses present at each validation data site.

Table 5 – Validation Sites Land Uses

Site	Single-Family	Multi-Family	Office	General Retail [1]	Sit-Down Restaurants	Grocery Store	Hotel	Other/Note
Safeway / Avalon Bellevue, WA	-	368 du's	-	15 ksf	8 ksf	55 ksf	-	-
Hazard Center, San Diego, CA	-	120 du's	256 ksf	111 ksf	23 ksf	-	305 rooms	7-screen movie theater
Avalon Alpharetta, GA	100 du's	525 du's	582 ksf	250 ksf	54 ksf	45 ksf	330 rooms	12-screen movie theater
Southport, West Sacramento, CA	6,811 du's	893 du's	80 ksf	387 ksf	15 ksf	54 ksf	-	Elementary & High School, 600 ksf manufacturing

Notes:
[1] Includes wide array of uses such as: cleaners, dance studios, bookstore, financial office, salon, learning center, jewelers, salons, auto detailing, optometry, etc. Banks, gas stations, fast-food restaurants, coffee shops, and fitness studios were estimated separately (based on their specific uses) but included in this land use total for reporting purposes.
du's = dwelling units. ksf = thousand square feet.

Table 6 presents the number of external vehicle trips measured at each validation site in October 2019 versus the estimated number it would generate using MXD+. Footnote 2 in the table highlights an interesting phenomenon associated with the Southport validation case study. Because it is being validation at the gateways to entire community (versus essentially driveways for the other sites), it is necessary to subtract pass-by trips that would visit the retail uses, as those trips would not add traffic to the community gateways. Those values are shown in brackets.

Table 6 – Validation Sites Trip Generation Comparison

Site	Size	External Vehicle Trip Generation					
		Daily		AM Peak Hour		PM Peak Hour	
		October 2019 Count	MXD+ [1]	October 2019 Count	MXD+ [1]	October 2019 Count	MXD+ [1]
Safeway / Avalon Bellevue, WA	4 acres	5,505	5,968 (+8%)	239	254 (+6%)	512	497 (- 3%)
Hazard Center San Diego, CA	16 acres	11,189	12,395 (+11%)	680	696 (+2%)	930	977 (+5%)
Avalon Alpharetta, GA	79 acres	33,301	33,332 (0%)	1,685	1,894 (+12%)	2,543	2,674 (+5%)
Southport West Sacramento, CA	3,000 acres	75,191	78,961 [74,138] [2] (-1.4%)	6,484	5,919 [5,672] [2] (-12.5%)	6,192	8,156 [7,480] [2] (+21%)

Notes:
[1] Values in parentheses represent the percent increase in trips estimated by MXD+ versus the 2019 field measurements.
[2] Values in brackets represent the MXD+ external vehicle trips minus pass-by trips (see text below for explanation). The corresponding percentage (shown in parentheses) represents the percent change in trips estimated by MXD+ (after subtracting pass-by trips) versus the 2019 field measurements.
du's = dwelling units. ksf = thousand square feet.

The following findings are derived from Table 6:

- For the three smaller sites, MXD+ produces a desirable result in which each validation site's external vehicle trips tend to be slightly overestimated. This is preferable to the converse in which MXD+ consistently underestimates actual trips. Accordingly, the results from MXD+ can be considered reasonably, but not overly, conservative.
- The goodness of fit at the Avalon validation site was a particularly important outcome, as the calibration sites were not in that part of the US and also not "manufactured mixed-use" in an otherwise suburban setting.
- Despite the calibration dataset consisting of a maximum site size of 221 acres and 1,840 units, the model's estimate was within 1.4% of the actual count for daily conditions. But AM and PM peak hour validation results did not fare as well. We suspect the AM peak hour underestimation could be associated with the various schools (i.e., three K-8 public schools and a public high school) in the community and their district boundaries (i.e., more

students being transported from outside the community to these schools). The PM peak hour overestimation likely stems from reliance on ITE trip rates for single-family and multi-family uses, which turned out to be substantially higher than was observed in one particular neighborhood[4]. The Southport validation site highlights how use of MXD+ may be considered for very large projects, but it would be prudent to perform spot checks of trip rates, understand school district boundaries, etc.

Table 7 displays the internal trip percentage reductions, and external trips made by transit and walk/bike for each validation site.

Table 7 – Percent Internal Trips and External Non-Auto Trips at Each Validation Site

Site	Percent Reduction in Daily Trips Due to			Percent Reduction in AM Peak Hour Trips Due to			Percent Reduction in PM Peak Hour Trips Due to		
	Internal Trips	External Trips		Internal Trips	External Trips		Internal Trips	External Trips	
		Transit	Bike/ Walk		Transit	Bike/ Walk		Transit	Bike/ Walk
Safeway / Avalon Bellevue, WA	4.1%	6.4%	29.1%	9.2%	6.7%	35.0%	14.2%	6.5%	28.4%
Hazard Center, San Diego, CA	4.7%	4.9%	11.6%	10.1%	5.6%	14.3%	14.1%	5.3%	11.6%
Avalon Alpharetta, GA	5.4%	3.8%	2.3%	9.9%	4.1%	2.9%	12.0%	3.9%	2.3%
Southport, West Sacramento, CA	26.8%	1.8%	0.3%	39.0%	2.0%	0.3%	23.7%	2.2%	0.2%

Notes:
[1] Output from MXD+.

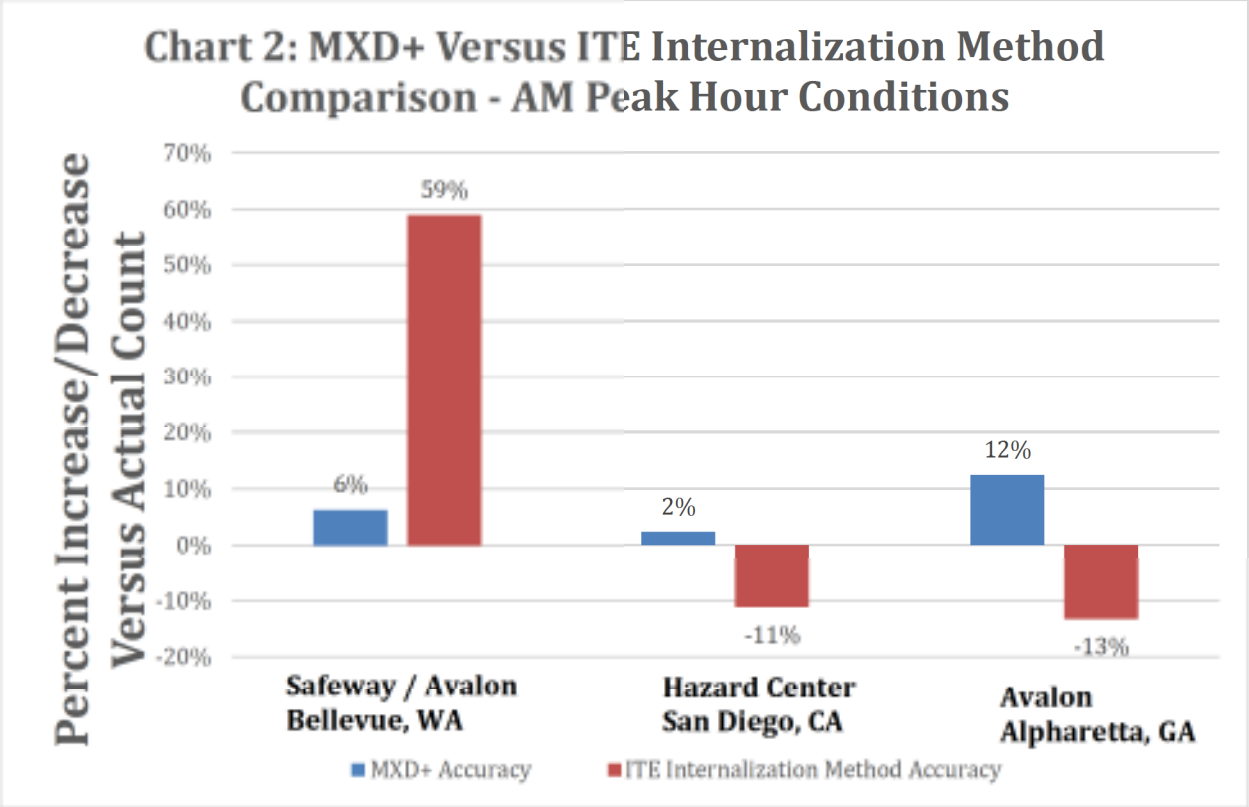
[4] In one neighborhood consisting a combined 325 single-family and multi-family units, the measured vehicle trips entering/exiting the neighborhood during the PM peak hour trip was 51% below the unadjusted ITE trip rates for those uses. When translated to the 7,700 total units in Southport, this resulted in ITE gross trips beginning at a level much higher than was being generated.

The following conclusions are drawn from the results in Table 7:

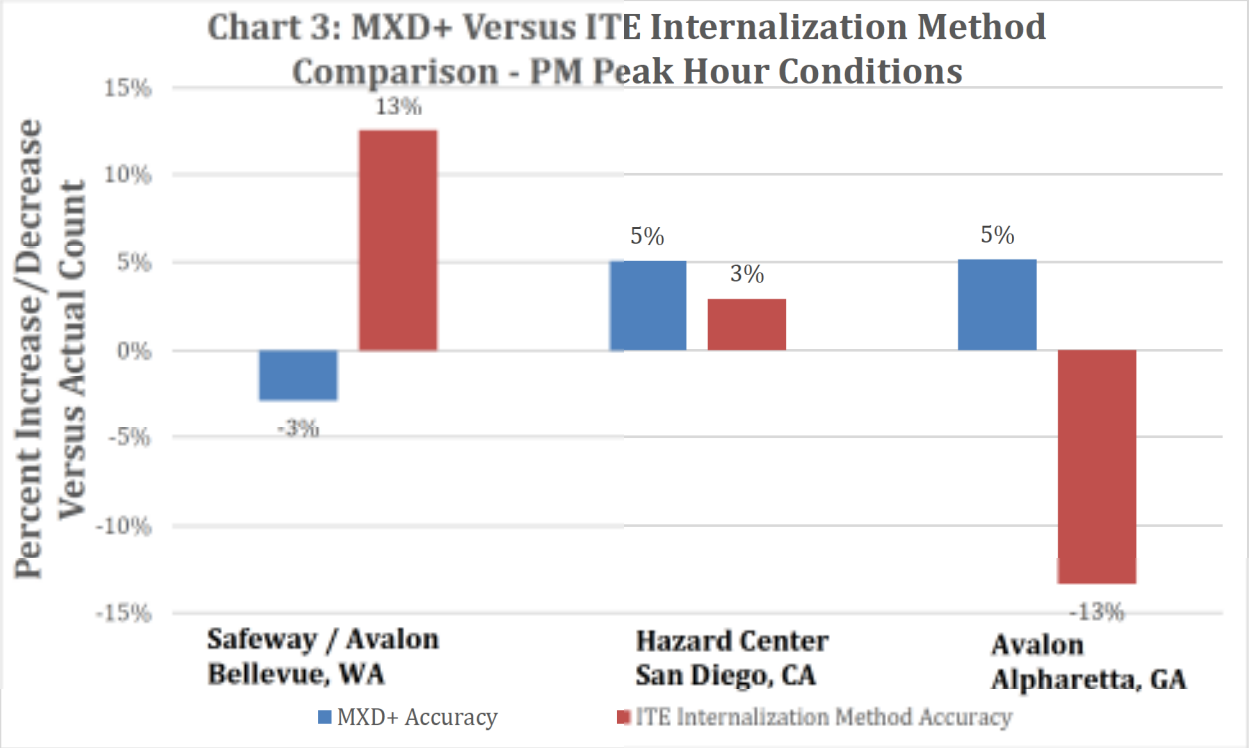
- It is not surprising that the Bellevue, WA site had a large bike/walk percentage given that is situated in Downtown Bellevue, where numerous jobs, retail, and recreation are situated close to the site.
- At the San Diego, CA site, internalization was greatest during the PM peak hour given the full activation of the various retail offerings and conclusion of the office workday.
- Despite the variety of complementary land uses at the Avalon Alpharetta, GA site, only modest levels of internalization were estimated. This is due to the amount of office space (over half a million square feet), which is disproportionately higher than the other uses. The site's jobs-housing balance skews heavily toward non-residential. It should also be noted that about 4% of external trips were assumed to be transit. This would equate to about 140 riders during the PM peak hour, which seems a bit excessive for the fixed-route bus service present.[5]
- At the Southport, CA site, internalization was greatest during the AM peak hour, which is expected given the effects of travel between home and school (to drop off students or work). External travel by transit and walk/bike was modest (less than 2.5%) as expected given that most households are not within walking distance of a bus stop and nearby destinations cannot easily be accessed on foot or by bike.

Charts 2 and 3 show results for AM and PM peak hours, respectively, of how MXD+ performed versus the ITE Internalization Method for the Bellevue, WA, San Diego, CA, and Alpharetta, GA validation sites. The Southport West Sacramento, CA site was excluded for the aforementioned reasons regarding the effects of pass-by traffic, which equally influence results from MXD+ and the ITE Internalization Method.

[5] In situations like this, local knowledge of expected transit ridership could dictate that the analyst modify MXD+ to assume no transit service, with an "off model" approach followed to determine whether any transit reductions are warranted. The presence of transit is a binary choice in MXD+. The type of transit, headways, service duration, and geographic service area are not explicitly considered.



As shown, the MXD+ estimate was closer to the actual count value at all three locations during the AM peak hour, and at two of the three locations during the PM peak hour. During the AM peak hour, the average absolute error was 7% for MXD+ and 28% for the ITE Internalization method. During the PM peak hour, the average absolute error was 4% for MXD+ and 10% for the ITE Internalization method. This clearly indicates that MXD estimates were more accurate than the ITE Internalization Method at the validation data sites.



Conclusions

This study has demonstrated that a minor recalibration of MXD+ has resulted in an analytical tool that accurately estimates the trip generation of mixed-use developments for weekday daily, AM peak hour, and PM peak hour conditions. By focusing the recalibration on 2019 conditions, the model was proven to develop accurate travel estimates despite the myriad changes in travel behavior that have occurred since the model was originally developed. The validation of the model against four mixed-use sites indicates that it may be applied across a wide range of geographies, project sizes, transportation mode availability, and land use mixes.

Paper Contributors

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Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	18	16	89.4%	31.9	10.4	C
	Through	21	22	103.3%	36.4	15.5	D
	Right Turn	16	18	115.0%	13.3	5.1	B
	Subtotal	55	56	102.2%	26.4	7.1	C
SB	Left Turn	282	278	98.6%	25.7	3.2	C
	Through	15	13	88.7%	20.4	8.8	C
	Right Turn	113	112	99.3%	7.9	2.0	A
	Subtotal	410	404	98.4%	20.5	2.5	C
EB	Left Turn	158	167	105.7%	46.6	10.0	D
	Through	873	890	102.0%	15.0	3.1	B
	Right Turn	7	8	112.9%	7.3	7.1	A
	Subtotal	1,038	1,055	102.6%	19.7	4.4	B
WB	Left Turn	10	9	86.0%	48.9	27.4	D
	Through	730	745	102.0%	22.6	3.5	C
	Right Turn	528	525	99.4%	8.3	1.3	A
	Subtotal	1,268	1,278	100.8%	17.0	2.8	B
Total		2,771	2,803	101.1%	18.7	2.2	B

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	68	64	93.7%	31.2	6.1	C
	Through						
	Right Turn	265	269	101.4%	31.1	5.4	C
	Subtotal	333	333	99.8%	31.1	4.9	C
EB	Left Turn						
	Through	786	801	101.9%	39.9	5.9	D
	Right Turn	401	400	99.6%	13.0	2.1	B
	Subtotal	1,187	1,200	101.1%	30.9	4.1	C
WB	Left Turn	406	407	100.3%	39.4	6.9	D
	Through	1,066	1,056	100.0%	7.4	1.5	A
	Right Turn						
	Subtotal	1,472	1,473	100.1%	16.0	2.3	B
Total		2,992	3,006	100.5%	23.9	2.2	C

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	602	593	98.5%	33.2	2.2	C
	Through						
	Right Turn	945	936	99.0%	28.0	2.4	C
	Subtotal	1,547	1,528	98.8%	30.0	2.2	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	187	197	105.5%	52.7	9.7	D
	Through	667	672	100.8%	12.7	1.5	B
	Right Turn						
	Subtotal	854	870	101.8%	21.3	2.8	C
WB	Left Turn						
	Through	870	886	101.8%	34.8	7.5	C
	Right Turn	52	56	108.5%	27.2	6.5	C
	Subtotal	922	942	102.2%	34.4	7.4	C
Total		3,323	3,340	100.5%	28.8	2.8	C

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	141	144	101.9%	34.3	4.9	C
	Through						
	Right Turn	30	31	102.0%	16.6	9.0	B
	Subtotal	171	174	101.9%	31.2	4.8	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	40	37	93.0%	50.4	10.5	D
	Through	1,500	1,494	99.6%	9.3	7.1	A
	Right Turn	53	54	102.1%	5.9	6.0	A
	Subtotal	1,593	1,585	99.5%	10.1	7.2	B
WB	Left Turn	9	9	101.1%	48.3	16.1	D
	Through	759	774	102.0%	9.3	1.5	A
	Right Turn						
	Subtotal	768	783	102.0%	9.6	1.6	A
Total		2,532	2,542	100.4%	11.4	4.5	B

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	141	141	100.0%	43.7	5.7	D
	Through	27	27	99.6%	43.7	11.4	D
	Right Turn	28	30	105.7%	25.0	12.7	C
	Subtotal	196	198	100.8%	40.8	5.9	D
SB	Left Turn	20	21	106.5%	49.0	23.9	D
	Through	1	1	110.0%	23.6	30.3	C
	Right Turn	71	77	107.7%	12.7	5.6	B
	Subtotal	92	99	107.5%	20.5	7.5	C
EB	Left Turn	535	529	98.9%	107.0	36.1	F
	Through	884	876	99.1%	51.3	20.3	D
	Right Turn	97	98	100.6%	46.7	20.3	D
	Subtotal	1,516	1,503	99.1%	71.6	25.9	E
WB	Left Turn	59	56	95.3%	46.6	6.9	D
	Through	530	541	102.1%	31.1	3.9	C
	Right Turn	121	117	97.0%	20.0	6.0	B
	Subtotal	710	715	100.7%	30.5	3.6	C
Total		2,514	2,514	100.0%	56.3	15.8	E

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	15	14	96.0%	42.0	14.2	D
	Through	1	1	100.0%	3.5	11.2	A
	Right Turn	19	22	114.2%	11.1	7.8	B
	Subtotal	35	37	106.0%	23.4	8.9	C
SB	Left Turn	43	46	107.4%	40.6	7.6	D
	Through	1	1	110.0%	1.1	3.4	A
	Right Turn	16	17	106.9%	5.4	1.4	A
	Subtotal	60	64	107.3%	30.4	9.1	C
EB	Left Turn	367	366	99.6%	42.7	11.3	D
	Through	546	548	100.3%	6.9	2.5	A
	Right Turn	7	7	105.7%	4.3	4.1	A
	Subtotal	920	921	100.1%	21.4	6.2	C
WB	Left Turn	15	13	84.7%	56.7	25.2	E
	Through	531	530	99.8%	22.2	5.1	C
	Right Turn	426	435	102.0%	27.7	7.7	C
	Subtotal	972	978	100.6%	25.0	6.0	C
Total		1,987	2,000	100.6%	23.4	5.6	C

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	405	404	99.9%	63.1	7.9	E
	Through	582	575	98.9%	44.5	4.5	D
	Right Turn	104	107	103.0%	36.1	5.8	D
	Subtotal	1,091	1,087	99.6%	50.7	3.9	D
SB	Left Turn	197	206	104.7%	67.3	6.1	E
	Through	721	733	101.6%	43.2	5.9	D
	Right Turn	270	262	97.1%	23.5	5.4	C
	Subtotal	1,188	1,201	101.1%	43.0	4.5	D
EB	Left Turn	140	137	98.0%	63.0	5.4	E
	Through	273	281	102.9%	39.7	6.1	D
	Right Turn	195	198	101.3%	12.7	3.1	B
	Subtotal	608	616	101.3%	35.9	3.4	D
WB	Left Turn	99	102	102.6%	73.7	15.4	E
	Through	312	322	103.1%	55.1	9.5	E
	Right Turn	184	189	102.4%	48.4	13.2	D
	Subtotal	595	612	102.8%	56.1	10.8	E
Total		3,482	3,515	101.0%	46.3	4.3	D

Intersection 8 **North Village Dwy 1-Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	13	13	98.5%	18.5	14.0	C
	Through						
	Right Turn	1	2	170.0%	0.5	1.1	A
	Subtotal	14	15	103.6%	18.2	14.2	C
SB	Left Turn	6	6	96.7%	10.9	8.9	B
	Through						
	Right Turn	39	41	105.6%	9.0	7.2	A
	Subtotal	45	47	104.4%	9.5	6.9	A
EB	Left Turn	26	28	106.2%	8.4	1.8	A
	Through	547	564	103.1%	3.5	0.4	A
	Right Turn	3	4	140.0%	0.8	1.0	A
	Subtotal	576	596	103.4%	3.7	0.4	A
WB	Left Turn						
	Through	543	554	102.0%	1.5	0.9	A
	Right Turn	10	10	102.0%	0.7	1.4	A
	Subtotal	553	564	102.0%	1.5	0.8	A
Total		1,188	1,221	102.8%	3.0	0.7	A

Intersection 9 North Village Dwy 2-Rocklin Manor Central/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	9	85.0%	16.5	9.9	C
	Through						
	Right Turn	1	2	180.0%	0.4	0.9	A
	Subtotal	11	10	93.6%	16.1	10.3	C
SB	Left Turn	2	1	70.0%	11.6	18.2	B
	Through						
	Right Turn	25	25	101.6%	3.9	1.0	A
	Subtotal	27	27	99.3%	5.4	2.5	A
EB	Left Turn	121	127	104.6%	5.3	0.7	A
	Through	423	433	102.3%	2.0	0.3	A
	Right Turn	10	12	122.0%	0.0	0.1	A
	Subtotal	554	571	103.1%	2.6	0.4	A
WB	Left Turn						
	Through	518	529	102.2%	0.6	0.1	A
	Right Turn	10	10	96.0%	0.1	0.1	A
	Subtotal	528	539	102.1%	0.6	0.1	A
Total		1,120	1,148	102.5%	1.9	0.3	A

Intersection 10 Rocklin Manor East/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	9	9	97.8%	14.3	8.0	B
	Through						
	Right Turn	2	2	120.0%	0.4	0.9	A
	Subtotal	11	11	101.8%	13.9	8.4	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	424	434	102.3%	0.3	0.1	A
	Right Turn	2	2	110.0%	0.0	0.1	A
	Subtotal	426	436	102.3%	0.3	0.1	A
WB	Left Turn	2	2	90.0%	0.7	1.8	A
	Through	519	530	102.1%	2.7	0.3	A
	Right Turn						
	Subtotal	521	532	102.1%	2.7	0.3	A
Total		958	979	102.2%	1.8	0.2	A

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	420	426	101.4%	11.8	2.9	B
	Through	64	68	105.5%	10.0	0.9	A
	Right Turn						
	Subtotal	484	494	102.0%	11.5	2.6	B
SB	Left Turn						
	Through	43	41	94.4%	9.7	1.0	A
	Right Turn	79	82	103.7%	4.9	0.5	A
	Subtotal	122	123	100.4%	6.5	0.6	A
EB	Left Turn	83	84	101.2%	13.0	1.2	B
	Through						
	Right Turn	325	332	102.1%	11.0	1.3	B
	Subtotal	408	416	101.9%	11.3	1.2	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,014	1,032	101.8%	10.8	1.4	B

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	255	255	99.9%	32.1	2.7	C
	Through	487	489	100.3%	13.5	1.8	B
	Right Turn	86	83	96.7%	7.0	1.3	A
	Subtotal	828	827	99.8%	18.4	1.6	B
SB	Left Turn	80	84	105.0%	42.0	7.2	D
	Through	863	857	99.3%	22.5	4.4	C
	Right Turn	64	68	105.6%	6.3	1.1	A
	Subtotal	1,007	1,009	100.2%	22.8	4.0	C
EB	Left Turn	65	67	102.8%	42.3	10.8	D
	Through	20	16	79.0%	46.1	12.2	D
	Right Turn	104	109	104.5%	13.3	3.3	B
	Subtotal	189	191	101.2%	25.2	3.9	C
WB	Left Turn	143	148	103.8%	36.8	6.8	D
	Through	24	26	107.1%	42.8	8.0	D
	Right Turn	33	34	102.1%	6.2	2.0	A
	Subtotal	200	208	103.9%	32.4	6.6	C
Total		2,224	2,234	100.5%	22.3	2.9	C

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	82	76	92.8%	29.5	5.8	C
	Through	559	554	99.1%	10.8	1.9	B
	Right Turn	172	172	100.1%	3.2	0.2	A
	Subtotal	813	802	98.7%	11.0	1.4	B
SB	Left Turn						
	Through	1,140	1,146	100.5%	15.0	1.4	B
	Right Turn	19	19	98.9%	4.3	1.3	A
	Subtotal	1,159	1,165	100.5%	14.8	1.4	B
EB	Left Turn	7	7	100.0%	24.2	13.9	C
	Through						
	Right Turn	63	62	98.1%	8.2	2.1	A
	Subtotal	70	69	98.3%	10.3	2.6	B
WB	Left Turn	689	687	99.7%	28.6	5.9	C
	Through	73	71	96.6%	25.1	3.2	C
	Right Turn	265	266	100.4%	13.1	3.5	B
	Subtotal	1,027	1,024	99.7%	24.4	4.9	C
Total		3,069	3,059	99.7%	17.0	2.0	B

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	861	846	98.2%	12.5	1.9	B
	Right Turn	50	54	108.6%	5.6	1.4	A
	Subtotal	911	900	98.8%	12.1	1.8	B
SB	Left Turn	135	132	97.9%	45.1	3.9	D
	Through	1,261	1,277	101.3%	13.8	1.9	B
	Right Turn	184	181	98.4%	6.3	0.7	A
	Subtotal	1,580	1,590	100.7%	15.5	1.4	B
EB	Left Turn	237	234	98.6%	32.7	3.1	C
	Through	140	141	100.4%	39.9	5.9	D
	Right Turn	215	219	101.7%	40.0	17.1	D
	Subtotal	592	593	100.1%	37.3	7.9	D
WB	Left Turn	62	64	102.4%	35.6	8.4	D
	Through						
	Right Turn	98	98	100.2%	9.4	2.0	A
	Subtotal	160	162	101.1%	19.6	4.7	B
Total		3,243	3,245	100.1%	18.9	2.5	B

Intersection 15 **Sierra College Blvd/Schriber Wy** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	871	863	99.1%	1.6	0.1	A
	Right Turn						
	Subtotal	871	863	99.1%	1.6	0.1	A
SB	Left Turn						
	Through	1,538	1,560	101.4%	3.4	0.4	A
	Right Turn						
	Subtotal	1,538	1,560	101.4%	3.4	0.4	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	40	37	91.8%	7.5	2.5	A
	Subtotal	40	37	91.8%	7.5	2.5	A
Total		2,449	2,460	100.5%	2.8	0.3	A

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	852	844	99.1%	6.3	1.6	A
	Right Turn	26	27	104.2%	4.8	3.3	A
	Subtotal	878	871	99.2%	6.3	1.6	A
SB	Left Turn	25	25	101.2%	22.7	8.1	C
	Through	1,506	1,529	101.5%	5.9	1.3	A
	Right Turn	7	8	107.1%	4.2	1.7	A
	Subtotal	1,538	1,562	101.6%	6.2	1.2	A
EB	Left Turn						
	Through	1	1	80.0%	2.0	6.2	A
	Right Turn						
	Subtotal	1	1	80.0%	2.0	6.2	A
WB	Left Turn	23	25	107.8%	20.3	6.5	C
	Through						
	Right Turn	8	10	120.0%	5.4	4.6	A
	Subtotal	31	34	111.0%	17.5	5.8	B
Total		2,448	2,469	100.8%	6.4	1.2	A

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr-North Village Street A** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	125	123	98.5%	43.3	5.4	D
	Through	809	802	99.1%	7.8	1.2	A
	Right Turn	13	12	91.5%	6.0	1.2	A
	Subtotal	947	937	99.0%	12.4	1.7	B
SB	Left Turn	14	14	97.1%	15.1	7.9	B
	Through	1,202	1,214	101.0%	13.6	2.2	B
	Right Turn	313	325	103.8%	12.1	2.3	B
	Subtotal	1,529	1,553	101.5%	13.3	2.0	B
EB	Left Turn	18	16	90.6%	42.2	7.0	D
	Through						
	Right Turn	20	22	109.0%	8.5	4.9	A
	Subtotal	38	38	100.3%	26.5	6.2	C
WB	Left Turn	66	66	99.2%	36.0	7.9	D
	Through						
	Right Turn	41	44	108.0%	6.5	1.4	A
	Subtotal	107	110	102.6%	23.3	6.6	C
Total		2,621	2,638	100.6%	13.6	1.8	B

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	879	872	99.2%	0.5	0.1	A
	Right Turn						
	Subtotal	879	872	99.2%	0.5	0.1	A
SB	Left Turn						
	Through	1,227	1,239	101.0%	4.8	0.5	A
	Right Turn	97	98	100.7%	4.5	0.5	A
	Subtotal	1,324	1,337	101.0%	4.8	0.5	A
EB	Left Turn						
	Through						
	Right Turn	2	1	65.0%	5.0	9.2	A
	Subtotal	2	1	65.0%	5.0	9.2	A
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,205	2,210	100.2%	3.1	0.4	A

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	45	44	98.0%	31.2	8.9	C
	Through	968	974	100.6%	9.1	0.7	A
	Right Turn	5	5	92.0%	5.6	7.9	A
	Subtotal	1,018	1,023	100.4%	10.0	0.9	A
SB	Left Turn	36	37	102.2%	39.9	10.5	D
	Through	983	1,000	101.7%	13.1	1.0	B
	Right Turn	26	25	97.7%	12.6	4.2	B
	Subtotal	1,045	1,062	101.6%	13.9	0.9	B
EB	Left Turn	57	52	90.9%	29.6	4.8	C
	Through	1	2	150.0%	11.0	22.3	B
	Right Turn	39	41	103.8%	12.7	4.2	B
	Subtotal	97	94	96.7%	22.9	5.7	C
WB	Left Turn	18	18	99.4%	29.8	11.3	C
	Through	1	1	100.0%	7.6	14.7	A
	Right Turn	44	41	92.7%	11.9	2.0	B
	Subtotal	63	60	94.8%	16.9	3.8	B
Total		2,223	2,238	100.7%	12.6	0.8	B

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	196	198	100.9%	4.1	2.8	A
	Right Turn						
	Subtotal	196	198	100.9%	4.1	2.8	A
SB	Left Turn						
	Through	115	115	99.7%	0.4	0.1	A
	Right Turn	10	11	107.0%	0.3	0.3	A
	Subtotal	125	125	100.3%	0.4	0.1	A
EB	Left Turn						
	Through						
	Right Turn	1	2	200.0%	1.1	1.4	A
	Subtotal	1	2	200.0%	1.1	1.4	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		322	325	101.0%	2.8	1.9	A

Intersection 21 **El Don Dr/Southern Retail Access-South Village Dwy 2** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	3	3	83.3%	1.1	1.5	A
	Through	173	173	100.1%	1.9	0.9	A
	Right Turn						
	Subtotal	176	176	99.8%	1.9	0.9	A
SB	Left Turn	50	49	97.8%	2.1	0.6	A
	Through	65	66	100.8%	0.1	0.1	A
	Right Turn	1	2	190.0%	0.0	0.1	A
	Subtotal	116	116	100.3%	0.9	0.3	A
EB	Left Turn	13	12	94.6%	5.5	1.5	A
	Through						
	Right Turn	1	1	90.0%	0.8	1.9	A
	Subtotal	14	13	94.3%	5.5	1.4	A
WB	Left Turn	1	1	60.0%	0.5	1.1	A
	Through						
	Right Turn	10	11	108.0%	3.0	1.0	A
	Subtotal	11	11	103.6%	3.0	1.0	A
Total		317	317	99.9%	1.8	0.7	A

Intersection 22 **El Don Dr/Wildflower Ln-South Village Dwy 1** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	2	2	75.0%	0.8	1.7	A
	Through	158	161	101.8%	5.4	0.3	A
	Right Turn	18	20	109.4%	3.3	0.5	A
	Subtotal	178	182	102.3%	5.2	0.4	A
SB	Left Turn						
	Through	55	55	99.3%	5.4	0.5	A
	Right Turn	12	12	99.2%	3.2	1.0	A
	Subtotal	67	67	99.3%	5.0	0.5	A
EB	Left Turn	15	14	90.0%	4.2	0.5	A
	Through						
	Right Turn	5	7	130.0%	2.4	1.0	A
	Subtotal	20	20	100.0%	3.8	0.5	A
WB	Left Turn	1	1	70.0%	0.8	1.6	A
	Through						
	Right Turn	3	3	93.3%	0.9	1.6	A
	Subtotal	4	4	87.5%	1.6	1.9	A
Total		269	272	101.2%	5.0	0.2	A

Intersection 23 **El Don Dr/Corona Cir-South Village Street A** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	2	2	80.0%	0.5	0.6	A
	Through	158	158	99.9%	0.2	0.1	A
	Right Turn	1	2	170.0%	0.0	0.0	A
	Subtotal	161	161	100.1%	0.2	0.0	A
SB	Left Turn	4	5	117.5%	2.9	1.6	A
	Through	52	51	97.3%	1.6	0.2	A
	Right Turn	5	6	112.0%	1.0	0.6	A
	Subtotal	61	61	99.8%	1.7	0.3	A
EB	Left Turn	9	9	97.8%	4.1	1.7	A
	Through						
	Right Turn	3	4	123.3%	2.0	1.5	A
	Subtotal	12	13	104.2%	3.7	1.5	A
WB	Left Turn	3	2	73.3%	2.2	2.4	A
	Through						
	Right Turn	11	14	122.7%	3.3	0.5	A
	Subtotal	14	16	112.1%	3.4	0.5	A
Total		248	250	100.9%	1.0	0.1	A

Intersection 24 **Sierra College Blvd/Street G** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	858	848	98.8%	0.6	0.1	A
	Right Turn	21	23	111.4%	0.5	0.1	A
	Subtotal	879	871	99.1%	0.6	0.1	A
SB	Left Turn	11	10	92.7%	8.8	10.7	A
	Through	1,324	1,337	100.9%	4.4	0.5	A
	Right Turn						
	Subtotal	1,335	1,347	100.9%	4.4	0.5	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	79	79	99.6%	6.3	1.4	A
	Subtotal	79	79	99.6%	6.3	1.4	A
Total		2,293	2,297	100.2%	3.1	0.4	A

Intersection 25 **Sierra College Blvd/North Village Dwy 3** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	862	856	99.3%	3.2	0.2	A
	Right Turn	27	28	102.6%	2.7	0.7	A
	Subtotal	889	884	99.4%	3.2	0.2	A
SB	Left Turn	41	39	96.1%	7.4	2.6	A
	Through	1,188	1,202	101.2%	1.3	0.2	A
	Right Turn						
	Subtotal	1,229	1,241	101.0%	1.5	0.2	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	17	17	98.2%	4.4	1.6	A
	Subtotal	17	17	98.2%	4.4	1.6	A
Total		2,135	2,141	100.3%	2.2	0.1	A

Intersection 26 **South Village Dwy 3/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	3	3	103.3%	2.4	2.6	A
	Subtotal	3	3	103.3%	2.4	2.6	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	976	973	99.7%	1.0	0.1	A
	Right Turn	42	40	94.0%	0.3	0.2	A
	Subtotal	1,018	1,013	99.5%	1.0	0.1	A
WB	Left Turn						
	Through	572	568	99.2%	0.3	0.1	A
	Right Turn						
	Subtotal	572	568	99.2%	0.3	0.1	A
Total		1,593	1,583	99.4%	0.8	0.1	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Existing Plus Project Conditions
AM Peak Hour

Intersection 27 **South Village Dwy 4/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	17	16	93.5%	9.3	7.0	A
	Subtotal	17	16	93.5%	9.3	7.0	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	903	903	100.0%	1.3	0.8	A
	Right Turn	76	74	97.9%	0.5	0.2	A
	Subtotal	979	977	99.8%	1.2	0.8	A
WB	Left Turn						
	Through	572	569	99.5%	2.2	0.2	A
	Right Turn						
	Subtotal	572	569	99.5%	2.2	0.2	A
Total		1,568	1,562	99.6%	1.7	0.5	A

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	45	40	88.9%	46.7	11.2	D
	Through	26	25	96.2%	37.1	14.3	D
	Right Turn	27	31	114.1%	20.8	9.8	C
	Subtotal	98	96	97.8%	35.1	9.3	D
SB	Left Turn	525	527	100.4%	35.1	6.3	D
	Through	22	21	95.5%	37.5	15.6	D
	Right Turn	200	198	98.9%	11.1	2.6	B
	Subtotal	747	746	99.9%	28.8	5.1	C
EB	Left Turn	173	177	102.0%	67.7	16.5	E
	Through	679	689	101.5%	25.1	3.9	C
	Right Turn	18	17	95.6%	8.0	5.5	A
	Subtotal	870	883	101.4%	33.9	6.6	C
WB	Left Turn	50	43	86.2%	70.2	14.8	E
	Through	860	806	93.7%	35.6	3.2	D
	Right Turn	508	482	94.9%	13.1	2.2	B
	Subtotal	1,418	1,331	93.9%	28.4	3.2	C
Total		3,133	3,055	97.5%	30.4	4.1	C

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	71	75	105.4%	30.0	2.3	C
	Through	4	4	90.0%	35.1	28.5	D
	Right Turn	306	308	100.8%	41.4	9.6	D
	Subtotal	381	387	101.5%	39.0	7.9	D
EB	Left Turn						
	Through	773	769	99.5%	62.2	22.2	E
	Right Turn	498	505	101.4%	24.8	11.1	C
	Subtotal	1,271	1,274	100.2%	48.2	17.8	D
WB	Left Turn	649	548	84.5%	49.4	6.1	D
	Through	1,259	1,156	92.6%	9.4	1.0	A
	Right Turn						
	Subtotal	1,908	1,715	89.9%	22.0	2.3	C
Total		3,560	3,375	94.8%	34.4	6.6	C

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	555	543	97.9%	37.4	3.6	D
	Through	1	1	110.0%	2.5	7.9	A
	Right Turn	657	664	101.0%	26.4	3.2	C
	Subtotal	1,213	1,208	99.6%	31.3	3.3	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	227	223	98.3%	73.1	27.9	E
	Through	617	628	101.8%	12.8	5.1	B
	Right Turn						
	Subtotal	844	852	100.9%	29.7	13.1	C
WB	Left Turn						
	Through	1,353	1,175	86.8%	71.7	4.1	E
	Right Turn	89	78	88.1%	69.1	6.9	E
	Subtotal	1,442	1,253	86.9%	71.5	4.2	E
Total		3,499	3,313	94.7%	45.9	4.3	D

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	103	110	107.1%	41.4	4.8	D
	Through						
	Right Turn	20	19	96.0%	8.0	5.9	A
	Subtotal	123	130	105.3%	35.8	3.6	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	55	60	109.6%	46.4	7.4	D
	Through	1,153	1,164	101.0%	5.6	1.3	A
	Right Turn	139	139	99.8%	4.4	1.2	A
	Subtotal	1,347	1,363	101.2%	7.2	1.6	A
WB	Left Turn	17	13	77.6%	269.0	29.1	F
	Through	1,322	1,116	84.4%	215.8	15.4	F
	Right Turn						
	Subtotal	1,339	1,129	84.3%	216.4	15.5	F
Total		2,809	2,622	93.3%	99.5	5.6	F

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	181	168	92.9%	213.7	94.4	F
	Through	9	10	113.3%	180.6	93.3	F
	Right Turn	31	26	85.2%	153.4	83.6	F
	Subtotal	221	205	92.6%	203.7	93.3	F
SB	Left Turn	58	54	93.6%	149.6	48.1	F
	Through	13	12	91.5%	173.6	73.2	F
	Right Turn	359	353	98.4%	94.5	41.3	F
	Subtotal	430	419	97.5%	104.7	41.5	F
EB	Left Turn	264	261	99.0%	75.2	8.4	E
	Through	780	792	101.5%	41.1	6.2	D
	Right Turn	139	138	98.9%	38.7	8.9	D
	Subtotal	1,183	1,191	100.7%	48.3	6.5	D
WB	Left Turn	29	23	80.7%	456.5	83.8	F
	Through	787	664	84.3%	453.3	63.2	F
	Right Turn	46	40	87.2%	409.6	62.1	F
	Subtotal	862	727	84.4%	451.2	63.3	F
Total		2,696	2,542	94.3%	178.4	13.1	F

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	5	4	78.0%	65.8	94.6	E
	Through						
	Right Turn	9	12	127.8%	13.7	21.0	B
	Subtotal	14	15	110.0%	31.5	42.8	C
SB	Left Turn	336	324	96.5%	55.2	31.3	E
	Through						
	Right Turn	167	162	97.0%	57.6	39.0	E
	Subtotal	503	486	96.6%	57.2	29.6	E
EB	Left Turn	115	109	95.0%	59.8	14.7	E
	Through	614	610	99.3%	18.7	2.5	B
	Right Turn	16	15	92.5%	13.7	4.9	B
	Subtotal	745	734	98.5%	24.3	2.8	C
WB	Left Turn	14	15	104.3%	130.4	78.8	F
	Through	579	553	95.5%	115.4	78.6	F
	Right Turn	124	118	95.3%	112.9	86.0	F
	Subtotal	717	686	95.6%	115.2	79.3	F
Total		1,979	1,921	97.1%	60.0	28.4	E

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	263	262	99.6%	153.3	33.0	F
	Through	900	888	98.6%	160.3	33.7	F
	Right Turn	75	73	96.7%	162.7	49.4	F
	Subtotal	1,238	1,222	98.7%	159.0	33.9	F
SB	Left Turn	198	197	99.6%	61.5	8.8	E
	Through	661	666	100.8%	43.8	5.6	D
	Right Turn	172	172	100.0%	14.4	1.9	B
	Subtotal	1,031	1,036	100.5%	42.3	4.1	D
EB	Left Turn	282	272	96.3%	63.6	7.2	E
	Through	304	294	96.8%	35.8	4.6	D
	Right Turn	373	370	99.3%	17.4	4.8	B
	Subtotal	959	936	97.6%	37.0	4.3	D
WB	Left Turn	128	124	96.8%	64.6	8.1	E
	Through	294	296	100.7%	50.7	7.7	D
	Right Turn	237	238	100.6%	45.0	7.8	D
	Subtotal	659	658	99.9%	51.3	6.7	D
Total		3,887	3,852	99.1%	78.4	11.1	E

Intersection 8 **North Village Dwy 1-Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	11	10	89.1%	25.3	34.8	D
	Through						
	Right Turn	1	2	150.0%	1.0	1.2	A
	Subtotal	12	11	94.2%	24.0	35.3	C
SB	Left Turn	11	12	105.5%	9.9	8.6	A
	Through						
	Right Turn	72	75	104.3%	6.0	3.0	A
	Subtotal	83	87	104.5%	6.4	3.2	A
EB	Left Turn	35	32	91.4%	8.0	2.8	A
	Through	527	518	98.3%	3.4	0.6	A
	Right Turn	15	15	98.7%	1.4	1.2	A
	Subtotal	577	565	97.9%	3.6	0.6	A
WB	Left Turn						
	Through	576	580	100.6%	1.2	0.7	A
	Right Turn	11	12	110.0%	0.4	0.2	A
	Subtotal	587	592	100.8%	1.1	0.7	A
Total		1,259	1,255	99.6%	2.8	0.6	A

Intersection 9 North Village Dwy 2-Rocklin Manor Central/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	14	12	86.4%	9.0	4.7	A
	Through						
	Right Turn						
	Subtotal	14	12	86.4%	9.0	4.7	A
SB	Left Turn	11	13	117.3%	12.8	5.5	B
	Through						
	Right Turn	127	130	102.7%	5.1	1.2	A
	Subtotal	138	143	103.8%	5.9	1.2	A
EB	Left Turn	39	36	92.3%	2.9	0.8	A
	Through	482	479	99.3%	1.0	0.3	A
	Right Turn	18	19	103.9%	0.2	0.2	A
	Subtotal	539	533	98.9%	1.1	0.3	A
WB	Left Turn	2	2	95.0%	1.7	2.7	A
	Through	446	450	100.8%	0.5	0.1	A
	Right Turn	3	3	90.0%	0.1	0.1	A
	Subtotal	451	454	100.7%	0.6	0.1	A
Total		1,142	1,143	100.1%	1.6	0.3	A

Intersection 10 Rocklin Manor East/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	5	4	84.0%	4.2	2.2	A
	Through						
	Right Turn						
	Subtotal	5	4	84.0%	4.2	2.2	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	483	478	98.9%	0.4	0.1	A
	Right Turn	10	13	129.0%	0.2	0.4	A
	Subtotal	493	491	99.5%	0.4	0.1	A
WB	Left Turn	2	2	80.0%	1.7	2.7	A
	Through	446	451	101.0%	2.3	0.3	A
	Right Turn						
	Subtotal	448	452	100.9%	2.3	0.2	A
Total		946	947	100.1%	1.3	0.2	A

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	382	384	100.4%	8.0	0.8	A
	Through	60	57	94.8%	9.4	0.8	A
	Right Turn						
	Subtotal	442	440	99.6%	8.2	0.8	A
SB	Left Turn						
	Through	47	49	103.4%	9.6	0.9	A
	Right Turn	62	65	104.2%	4.4	1.0	A
	Subtotal	109	113	103.9%	6.6	0.7	A
EB	Left Turn	74	73	98.2%	16.1	3.3	C
	Through						
	Right Turn	408	398	97.5%	14.0	2.6	B
	Subtotal	482	471	97.6%	14.3	2.6	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,033	1,024	99.1%	10.9	1.5	B

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	177	181	102.2%	37.5	6.7	D
	Through	913	895	98.0%	16.8	2.0	B
	Right Turn	77	76	98.4%	7.5	0.9	A
	Subtotal	1,167	1,151	98.7%	19.3	2.5	B
SB	Left Turn	54	61	112.0%	40.6	10.6	D
	Through	808	794	98.2%	23.6	2.9	C
	Right Turn	78	77	98.7%	7.3	1.4	A
	Subtotal	940	931	99.0%	23.2	2.8	C
EB	Left Turn	153	155	101.4%	32.8	7.1	C
	Through	27	27	98.5%	26.1	10.9	C
	Right Turn	250	255	102.1%	16.1	2.0	B
	Subtotal	430	437	101.6%	22.3	3.4	C
WB	Left Turn	101	97	95.7%	36.5	9.4	D
	Through	15	15	96.7%	29.4	16.9	C
	Right Turn	40	44	108.8%	11.5	4.4	B
	Subtotal	156	155	99.2%	28.8	6.1	C
Total		2,693	2,674	99.3%	21.8	2.4	C

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	275	277	100.7%	38.2	2.9	D
	Through	924	914	98.9%	14.1	2.2	B
	Right Turn	310	305	98.4%	6.1	0.6	A
	Subtotal	1,509	1,496	99.1%	16.8	1.5	B
SB	Left Turn						
	Through	1,149	1,136	98.8%	25.5	3.2	C
	Right Turn	56	55	97.3%	8.2	1.5	A
	Subtotal	1,205	1,190	98.8%	24.7	3.1	C
EB	Left Turn	55	54	98.7%	40.2	9.0	D
	Through						
	Right Turn	298	300	100.5%	17.6	4.2	B
	Subtotal	353	354	100.3%	21.0	4.4	C
WB	Left Turn	482	473	98.1%	28.8	2.5	C
	Through	99	96	97.2%	32.8	4.9	C
	Right Turn	224	224	100.2%	16.9	2.6	B
	Subtotal	805	793	98.6%	26.1	2.5	C
Total		3,872	3,833	99.0%	21.7	1.4	C

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,345	1,316	97.8%	21.2	5.8	C
	Right Turn	111	109	98.6%	7.6	2.7	A
	Subtotal	1,456	1,425	97.9%	20.2	5.6	C
SB	Left Turn	267	257	96.4%	46.9	4.0	D
	Through	852	846	99.3%	15.1	1.0	B
	Right Turn	334	336	100.5%	7.2	0.6	A
	Subtotal	1,453	1,439	99.0%	19.1	1.4	B
EB	Left Turn	394	387	98.3%	43.1	5.8	D
	Through	237	231	97.3%	35.9	3.7	D
	Right Turn	124	128	103.1%	13.3	3.6	B
	Subtotal	755	746	98.8%	35.9	4.3	D
WB	Left Turn	104	105	101.1%	47.7	15.9	D
	Through						
	Right Turn	294	303	102.9%	25.5	7.6	C
	Subtotal	398	408	102.4%	31.8	10.2	C
Total		4,062	4,018	98.9%	24.0	2.9	C

Intersection 15 **Sierra College Blvd/Schriber Wy** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,441	1,411	97.9%	2.1	0.4	A
	Right Turn						
	Subtotal	1,441	1,411	97.9%	2.1	0.4	A
SB	Left Turn						
	Through	1,080	1,079	99.9%	2.6	0.4	A
	Right Turn						
	Subtotal	1,080	1,079	99.9%	2.6	0.4	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	15	15	100.7%	21.8	33.3	C
	Subtotal	15	15	100.7%	21.8	33.3	C
Total		2,536	2,506	98.8%	2.4	0.4	A

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,425	1,400	98.2%	12.0	3.4	B
	Right Turn	52	52	99.8%	9.4	2.8	A
	Subtotal	1,477	1,452	98.3%	11.9	3.3	B
SB	Left Turn	28	26	91.8%	29.9	5.9	C
	Through	1,021	1,019	99.8%	4.9	1.2	A
	Right Turn	31	35	112.9%	3.3	0.8	A
	Subtotal	1,080	1,080	100.0%	5.5	1.3	A
EB	Left Turn	1	1	50.0%	3.3	10.5	A
	Through	1	1	120.0%	11.8	25.7	B
	Right Turn	2	3	155.0%	1.9	2.7	A
	Subtotal	4	5	120.0%	10.7	18.1	B
WB	Left Turn	52	54	102.9%	25.8	7.5	C
	Through						
	Right Turn	9	8	91.1%	12.2	9.7	B
	Subtotal	61	62	101.1%	24.5	6.7	C
Total		2,622	2,598	99.1%	9.6	2.0	A

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr-North Village Street A** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	74	72	97.8%	46.9	3.2	D
	Through	1,294	1,261	97.4%	14.9	1.4	B
	Right Turn	45	43	95.1%	11.7	2.2	B
	Subtotal	1,413	1,376	97.4%	16.6	1.4	B
SB	Left Turn	48	45	93.8%	38.4	15.7	D
	Through	990	993	100.3%	13.5	3.5	B
	Right Turn	40	40	100.0%	6.3	1.4	A
	Subtotal	1,078	1,078	100.0%	14.4	3.2	B
EB	Left Turn	160	163	101.8%	34.5	5.2	C
	Through						
	Right Turn	59	62	105.3%	9.7	2.7	A
	Subtotal	219	225	102.7%	28.2	4.7	C
WB	Left Turn	40	40	100.3%	33.2	7.8	C
	Through						
	Right Turn	25	25	98.0%	8.5	2.7	A
	Subtotal	65	65	99.4%	23.5	5.3	C
Total		2,775	2,743	98.9%	16.8	1.3	B

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,426	1,395	97.8%	0.8	0.1	A
	Right Turn						
	Subtotal	1,426	1,395	97.8%	0.8	0.1	A
SB	Left Turn						
	Through	1,063	1,056	100.3%	4.3	0.7	A
	Right Turn	14	16	112.9%	4.1	0.7	A
	Subtotal	1,077	1,032	100.5%	4.3	0.7	A
EB	Left Turn						
	Through						
	Right Turn	12	11	94.2%	5.2	3.9	A
	Subtotal	12	11	94.2%	5.2	3.9	A
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,515	2,488	98.9%	2.4	0.3	A

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	32	30	93.8%	26.5	5.7	C
	Through	1,160	1,176	101.4%	7.3	2.0	A
	Right Turn	7	7	98.6%	3.0	4.6	A
	Subtotal	1,199	1,213	101.2%	7.7	2.1	A
SB	Left Turn	64	61	94.8%	32.4	7.2	C
	Through	1,040	1,038	99.8%	6.8	0.9	A
	Right Turn	80	76	94.6%	7.5	2.3	A
	Subtotal	1,184	1,174	99.2%	8.0	1.0	A
EB	Left Turn	34	30	87.4%	22.5	5.0	C
	Through	1	1	80.0%	2.8	5.9	A
	Right Turn	26	26	100.8%	9.0	3.3	A
	Subtotal	61	57	93.0%	17.0	3.7	B
WB	Left Turn	10	10	99.0%	19.0	13.4	B
	Through	1	1	80.0%	0.0	0.0	A
	Right Turn	21	24	113.8%	12.5	5.9	B
	Subtotal	32	35	108.1%	15.4	6.8	B
Total		2,476	2,478	100.1%	8.2	1.4	A

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	221	209	94.5%	53.1	23.3	F
	Right Turn						
	Subtotal	221	209	94.5%	53.1	23.3	F
SB	Left Turn						
	Through	164	157	96.0%	0.5	0.1	A
	Right Turn	7	8	107.1%	0.3	0.2	A
	Subtotal	171	165	96.4%	0.5	0.1	A
EB	Left Turn						
	Through						
	Right Turn	9	10	113.3%	2.5	0.4	A
	Subtotal	9	10	113.3%	2.5	0.4	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		401	384	95.7%	29.2	11.0	D

Intersection 21 **El Don Dr/Southern Retail Access-South Village Dwy 2** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	3	2	80.0%	4.5	9.4	A
	Through	138	138	99.9%	55.9	46.8	F
	Right Turn	1	1	120.0%	56.2	81.2	F
	Subtotal	142	141	99.6%	56.3	47.4	F
SB	Left Turn	9	10	106.7%	1.3	1.3	A
	Through	162	155	95.9%	0.2	0.1	A
	Right Turn	2	2	110.0%	0.0	0.0	A
	Subtotal	173	167	96.6%	0.2	0.1	A
EB	Left Turn	34	30	88.5%	134.1	137.8	F
	Through						
	Right Turn	5	3	66.0%	79.9	102.9	F
	Subtotal	39	33	85.6%	126.0	133.0	F
WB	Left Turn	4	3	82.5%	163.4	340.3	F
	Through						
	Right Turn	49	43	87.8%	148.2	195.5	F
	Subtotal	53	46	87.4%	85.5	116.5	F
Total		407	388	95.4%	38.3	32.6	E

Intersection 22 **El Don Dr/Wildflower Ln-South Village Dwy 1** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	1	1	70.0%	0.4	1.2	A
	Through	111	111	99.5%	16.4	20.4	C
	Right Turn	1	1	140.0%	0.6	1.2	A
	Subtotal	113	113	99.6%	16.3	20.4	C
SB	Left Turn						
	Through	156	148	94.6%	5.8	0.3	A
	Right Turn	15	15	97.3%	4.1	0.7	A
	Subtotal	171	162	94.9%	5.6	0.4	A
EB	Left Turn	9	11	116.7%	14.8	22.8	B
	Through						
	Right Turn	3	4	116.7%	1.7	1.5	A
	Subtotal	12	14	116.7%	13.1	20.6	B
WB	Left Turn	3	2	80.0%	1.0	1.3	A
	Through						
	Right Turn	22	22	100.5%	15.0	26.6	B
	Subtotal	25	25	98.0%	14.7	26.5	B
Total		321	313	97.6%	10.3	9.3	B

Intersection 23 **El Don Dr/Corona Cir-South Village Street A** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	5	4	80.0%	1.5	1.3	A
	Through	97	96	98.8%	0.1	0.1	A
	Right Turn	3	3	106.7%	0.0	0.0	A
	Subtotal	105	103	98.1%	0.2	0.2	A
SB	Left Turn	13	12	92.3%	3.4	1.0	A
	Through	134	129	96.4%	1.7	0.2	A
	Right Turn	15	15	102.0%	1.4	0.2	A
	Subtotal	162	157	96.6%	1.8	0.2	A
EB	Left Turn	9	9	94.4%	4.8	2.7	A
	Through						
	Right Turn	3	2	73.3%	1.5	2.2	A
	Subtotal	12	11	89.2%	4.5	2.4	A
WB	Left Turn	2	2	105.0%	2.0	2.6	A
	Through						
	Right Turn	7	8	115.7%	2.9	0.6	A
	Subtotal	9	10	113.3%	3.1	0.7	A
Total		288	280	97.4%	1.4	0.3	A

Intersection 24 **Sierra College Blvd/Street G** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,364	1,331	97.6%	1.0	0.1	A
	Right Turn	62	62	99.7%	0.8	0.1	A
	Subtotal	1,426	1,393	97.7%	1.0	0.1	A
SB	Left Turn	36	36	100.3%	17.1	6.2	C
	Through	1,077	1,081	100.3%	4.1	0.7	A
	Right Turn						
	Subtotal	1,113	1,117	100.3%	4.5	0.7	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	49	51	103.5%	6.7	1.3	A
	Subtotal	49	51	103.5%	6.7	1.3	A
Total		2,588	2,561	98.9%	2.7	0.4	A

Intersection 25 **Sierra College Blvd/North Village Dwy 3** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,376	1,349	98.0%	4.4	0.3	A
	Right Turn	33	35	104.5%	2.5	1.1	A
	Subtotal	1,409	1,384	98.2%	4.3	0.3	A
SB	Left Turn	44	45	101.4%	17.3	7.7	C
	Through	1,031	1,032	100.1%	1.0	0.1	A
	Right Turn						
	Subtotal	1,075	1,077	100.2%	1.6	0.5	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	50	46	91.6%	9.4	4.1	A
	Subtotal	50	46	91.6%	9.4	4.1	A
Total		2,534	2,506	98.9%	3.3	0.3	A

Intersection 26 **South Village Dwy 3/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	32	31	95.9%	8.6	4.1	A
	Subtotal	32	31	95.9%	8.6	4.1	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	870	868	99.8%	3.7	0.5	A
	Right Turn	9	10	107.8%	2.9	1.6	A
	Subtotal	879	878	99.9%	3.7	0.5	A
WB	Left Turn						
	Through	862	759	88.0%	150.6	15.9	F
	Right Turn						
	Subtotal	862	759	88.0%	150.6	15.9	F
Total		1,773	1,667	94.0%	65.8	4.6	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Existing Plus Project Conditions
PM Peak Hour

Intersection 27 South Village Dwy 4/Rocklin Rd Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	80	80	100.3%	10.8	3.8	B
	Subtotal	80	80	100.3%	10.8	3.8	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	878	873	99.4%	2.4	0.3	A
	Right Turn	24	26	107.5%	1.2	0.5	A
	Subtotal	902	899	99.6%	2.4	0.3	A
WB	Left Turn						
	Through	862	796	92.3%	70.7	17.8	F
	Right Turn						
	Subtotal	862	796	92.3%	70.7	17.8	F
Total		1,844	1,775	96.2%	30.5	6.3	D

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	20	102.0%	41.3	10.4	D
	Through	30	29	95.7%	37.7	11.4	D
	Right Turn	20	22	111.0%	22.0	8.7	C
	Subtotal	70	71	101.9%	32.3	7.8	C
SB	Left Turn	390	393	100.8%	29.3	2.5	C
	Through	20	20	100.0%	28.0	11.7	C
	Right Turn	120	121	100.6%	9.0	2.5	A
	Subtotal	530	534	100.8%	24.6	2.7	C
EB	Left Turn	170	170	99.8%	56.1	10.4	E
	Through	800	816	101.9%	20.5	3.7	C
	Right Turn	10	9	90.0%	13.0	10.1	B
	Subtotal	980	994	101.4%	26.4	4.4	C
WB	Left Turn	10	10	102.0%	55.3	15.3	E
	Through	720	715	99.3%	30.0	3.3	C
	Right Turn	530	542	102.3%	9.8	1.5	A
	Subtotal	1,260	1,267	100.5%	21.6	2.1	C
Total		2,840	2,866	100.9%	24.2	2.4	C

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	70	67	96.0%	35.4	7.2	D
	Through						
	Right Turn	270	268	99.2%	32.0	12.3	C
	Subtotal	340	335	98.6%	33.1	10.9	C
EB	Left Turn						
	Through	750	766	102.1%	42.9	14.0	D
	Right Turn	470	472	100.4%	15.7	3.6	B
	Subtotal	1,220	1,238	101.5%	32.5	9.6	C
WB	Left Turn	350	355	101.3%	37.1	9.8	D
	Through	1,050	1,058	100.8%	8.2	1.7	A
	Right Turn						
	Subtotal	1,400	1,413	100.9%	15.8	3.1	B
Total		2,960	2,986	100.9%	24.8	5.4	C

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	610	611	100.1%	33.6	1.9	C
	Through						
	Right Turn	950	938	98.7%	28.4	2.7	C
	Subtotal	1,560	1,548	99.2%	30.5	2.2	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	200	209	104.5%	48.8	5.7	D
	Through	620	630	101.5%	12.6	2.1	B
	Right Turn						
	Subtotal	820	838	102.2%	21.0	2.0	C
WB	Left Turn						
	Through	790	804	101.8%	33.5	6.9	C
	Right Turn	60	59	98.0%	26.0	5.4	C
	Subtotal	850	863	101.5%	33.0	6.6	C
Total		3,230	3,249	100.6%	28.7	2.4	C

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	160	161	100.8%	34.0	4.1	C
	Through						
	Right Turn	40	41	101.5%	12.1	4.1	B
	Subtotal	200	202	101.0%	29.5	3.4	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	40	41	101.5%	44.3	6.2	D
	Through	1,450	1,445	99.6%	5.7	1.1	A
	Right Turn	60	59	98.5%	4.7	1.6	A
	Subtotal	1,550	1,544	99.6%	6.7	1.3	A
WB	Left Turn	10	9	89.0%	34.5	16.0	C
	Through	660	668	101.2%	10.9	2.0	B
	Right Turn						
	Subtotal	670	677	101.0%	11.2	1.9	B
Total		2,420	2,423	100.1%	9.9	1.2	A

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	120	121	100.8%	39.6	4.9	D
	Through	30	33	108.3%	46.0	8.6	D
	Right Turn	30	30	100.7%	21.8	5.5	C
	Subtotal	180	184	102.1%	37.7	4.4	D
SB	Left Turn	20	20	98.5%	47.5	16.8	D
	Through	10	10	96.0%	59.4	18.9	E
	Right Turn	80	81	101.5%	9.8	3.3	A
	Subtotal	110	111	100.5%	20.1	8.2	C
EB	Left Turn	540	542	100.3%	67.2	27.4	E
	Through	950	948	99.7%	32.9	8.9	C
	Right Turn	70	71	100.7%	29.4	10.3	C
	Subtotal	1,560	1,560	100.0%	45.3	15.8	D
WB	Left Turn	30	28	94.7%	44.1	13.3	D
	Through	470	474	100.8%	31.8	3.6	C
	Right Turn	130	140	107.8%	19.9	2.4	B
	Subtotal	630	642	101.9%	30.1	2.5	C
Total		2,480	2,496	100.6%	39.9	9.9	D

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	19	96.5%	42.2	14.1	D
	Through	10	10	100.0%	46.2	23.1	D
	Right Turn	30	30	98.7%	8.6	3.6	A
	Subtotal	60	59	98.2%	23.5	2.1	C
SB	Left Turn	60	62	102.8%	38.3	6.4	D
	Through	10	11	108.0%	37.0	17.7	D
	Right Turn	20	19	93.0%	4.3	1.3	A
	Subtotal	90	91	101.2%	29.9	6.3	C
EB	Left Turn	360	352	97.9%	39.5	5.8	D
	Through	580	570	98.3%	5.3	1.2	A
	Right Turn	10	13	128.0%	2.2	2.0	A
	Subtotal	950	935	98.4%	18.5	2.8	B
WB	Left Turn	20	18	88.5%	71.1	31.0	E
	Through	480	473	98.5%	21.8	5.3	C
	Right Turn	430	433	100.7%	26.2	7.0	C
	Subtotal	930	923	99.3%	24.5	5.8	C
Total		2,030	2,009	98.9%	21.7	3.4	C

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	420	419	99.8%	59.9	5.0	E
	Through	610	620	101.7%	48.3	5.1	D
	Right Turn	70	72	103.3%	40.2	8.0	D
	Subtotal	1,100	1,111	101.0%	52.2	4.0	D
SB	Left Turn	200	200	100.1%	62.6	5.4	E
	Through	680	673	98.9%	47.5	4.2	D
	Right Turn	250	248	99.3%	18.8	2.5	B
	Subtotal	1,130	1,121	99.2%	43.5	3.0	D
EB	Left Turn	230	225	98.0%	55.9	3.1	E
	Through	220	216	98.4%	27.1	4.8	C
	Right Turn	220	217	98.8%	9.8	3.0	A
	Subtotal	670	659	98.4%	31.6	2.6	C
WB	Left Turn	90	91	101.6%	76.8	18.0	E
	Through	280	278	99.3%	69.0	29.6	E
	Right Turn	220	218	99.2%	62.0	30.2	E
	Subtotal	590	588	99.6%	67.4	28.0	E
Total		3,490	3,479	99.7%	48.2	4.9	D

Intersection 8 **North Village Dwy 1-Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	18	92.0%	32.5	33.6	D
	Through						
	Right Turn	20	19	92.5%	6.7	7.3	A
	Subtotal	40	37	92.3%	20.3	22.8	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	480	483	100.5%	2.3	0.5	A
	Right Turn	20	17	87.0%	1.6	0.5	A
	Subtotal	500	500	100.0%	2.3	0.5	A
WB	Left Turn						
	Through	570	568	99.6%	8.6	10.9	A
	Right Turn						
	Subtotal	570	568	99.6%	8.6	10.9	A
Total		1,110	1,105	99.5%	6.1	6.1	A

Intersection 9 North Village Dwy 2-Rocklin Manor Central/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	9	92.0%	20.3	21.2	C
	Through						
	Right Turn	10	10	104.0%	2.6	0.8	A
	Subtotal	20	20	98.0%	12.5	14.1	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	490	493	100.5%	1.2	0.2	A
	Right Turn	10	9	94.0%	0.0	0.1	A
	Subtotal	500	502	100.4%	1.2	0.2	A
WB	Left Turn						
	Through	560	559	99.8%	2.1	4.4	A
	Right Turn						
	Subtotal	560	559	99.8%	2.1	4.4	A
Total		1,080	1,080	100.0%	1.9	2.6	A

Intersection 10 Rocklin Manor East/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	10	97.0%	13.0	6.9	B
	Through						
	Right Turn	10	10	103.0%	5.6	4.5	A
	Subtotal	20	20	100.0%	8.9	1.8	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	490	493	100.7%	0.4	0.1	A
	Right Turn	10	9	91.0%	0.0	0.1	A
	Subtotal	500	502	100.5%	0.4	0.1	A
WB	Left Turn	10	10	102.0%	5.7	3.5	A
	Through	550	548	99.6%	3.4	1.9	A
	Right Turn						
	Subtotal	560	558	99.7%	3.5	1.8	A
Total		1,080	1,081	100.0%	2.2	1.1	A

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	440	438	99.4%	18.5	11.7	C
	Through	80	80	99.4%	13.3	7.8	B
	Right Turn						
	Subtotal	520	517	99.4%	17.8	11.1	C
SB	Left Turn						
	Through	50	46	92.0%	10.1	1.1	B
	Right Turn	100	103	102.8%	5.7	1.0	A
	Subtotal	150	149	99.2%	7.0	0.9	A
EB	Left Turn	100	97	96.5%	15.2	3.1	C
	Through						
	Right Turn	380	387	101.9%	12.5	1.3	B
	Subtotal	480	484	100.8%	13.0	1.6	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,150	1,150	100.0%	14.7	5.7	B

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	270	269	99.5%	38.3	4.9	D
	Through	500	508	101.6%	16.3	1.8	B
	Right Turn	90	100	111.3%	8.3	1.2	A
	Subtotal	860	877	102.0%	21.6	2.0	C
SB	Left Turn	80	81	101.5%	42.6	8.9	D
	Through	900	895	99.4%	25.8	5.0	C
	Right Turn	70	66	94.9%	7.7	2.3	A
	Subtotal	1,050	1,042	99.2%	25.9	5.0	C
EB	Left Turn	80	80	99.9%	40.2	7.1	D
	Through	30	32	107.3%	43.4	10.6	D
	Right Turn	120	119	99.3%	13.2	4.2	B
	Subtotal	230	231	100.5%	26.9	5.2	C
WB	Left Turn	150	151	100.8%	41.6	7.6	D
	Through	30	31	103.3%	47.2	13.3	D
	Right Turn	40	41	103.3%	7.0	1.5	A
	Subtotal	220	224	101.6%	36.1	6.4	D
Total		2,360	2,374	100.6%	25.5	3.6	C

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	100	98	98.2%	33.4	6.0	C
	Through	570	585	102.5%	12.8	2.3	B
	Right Turn	210	206	98.3%	4.1	0.3	A
	Subtotal	880	889	101.0%	13.3	1.8	B
SB	Left Turn						
	Through	1,180	1,177	99.8%	21.1	4.5	C
	Right Turn	20	21	103.0%	5.2	1.4	A
	Subtotal	1,200	1,198	99.8%	20.9	4.4	C
EB	Left Turn	20	21	103.5%	34.9	11.7	C
	Through						
	Right Turn	70	76	108.6%	11.7	5.7	B
	Subtotal	90	97	107.4%	16.5	5.9	B
WB	Left Turn	660	672	101.8%	30.0	5.4	C
	Through	80	82	102.3%	30.5	3.5	C
	Right Turn	270	276	102.0%	15.6	1.4	B
	Subtotal	1,010	1,029	101.9%	26.4	3.8	C
Total		3,180	3,213	101.0%	20.4	2.1	C

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	930	938	100.8%	18.4	3.1	B
	Right Turn	50	51	102.6%	4.2	1.6	A
	Subtotal	980	989	100.9%	17.7	3.0	B
SB	Left Turn	150	151	100.9%	68.4	19.2	E
	Through	1,280	1,287	100.5%	50.1	22.6	D
	Right Turn	190	196	103.3%	25.6	16.0	C
	Subtotal	1,620	1,635	100.9%	48.8	21.6	D
EB	Left Turn	240	245	102.0%	67.7	30.6	E
	Through	160	160	99.8%	65.8	29.9	E
	Right Turn	410	406	99.1%	99.2	43.7	F
	Subtotal	810	811	100.1%	83.8	37.5	F
WB	Left Turn	60	59	99.0%	43.8	9.9	D
	Through						
	Right Turn	110	112	101.7%	9.8	2.4	A
	Subtotal	170	171	100.8%	21.4	4.5	C
Total		3,580	3,605	100.7%	47.2	15.0	D

Intersection 15 **Sierra College Blvd/Schriber Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	9	93.0%	42.3	16.4	D
	Through	840	848	100.9%	4.0	0.6	A
	Right Turn	20	20	100.5%	2.7	1.4	A
	Subtotal	870	877	100.8%	4.6	0.8	A
SB	Left Turn						
	Through	1,720	1,722	100.1%	11.5	1.3	B
	Right Turn	30	33	108.7%	9.4	3.4	A
	Subtotal	1,750	1,755	100.3%	11.5	1.3	B
EB	Left Turn	10	8	82.0%	52.4	27.3	D
	Through	10	9	90.0%	45.5	20.9	D
	Right Turn	10	10	98.0%	25.2	14.5	C
	Subtotal	30	27	90.0%	40.9	11.2	D
WB	Left Turn	60	61	102.2%	39.9	8.3	D
	Through	10	10	101.0%	49.1	22.5	D
	Right Turn	130	134	102.8%	19.3	7.1	B
	Subtotal	200	205	102.6%	27.2	5.6	C
Total		2,850	2,864	100.5%	10.8	1.1	B

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	10	97.0%	34.9	15.7	C
	Through	840	847	100.9%	7.3	1.4	A
	Right Turn	30	29	95.3%	5.4	3.3	A
	Subtotal	880	886	100.6%	7.5	1.4	A
SB	Left Turn	30	33	110.7%	34.9	8.6	C
	Through	1,750	1,749	100.0%	8.5	0.9	A
	Right Turn	10	10	100.0%	2.1	1.3	A
	Subtotal	1,790	1,792	100.1%	8.9	0.9	A
EB	Left Turn	10	10	99.0%	30.6	10.3	C
	Through	10	11	105.0%	27.2	15.9	C
	Right Turn	10	9	91.0%	17.5	14.8	B
	Subtotal	30	30	98.3%	28.9	9.0	C
WB	Left Turn	30	28	94.3%	30.9	8.3	C
	Through	10	10	104.0%	28.6	16.9	C
	Right Turn	10	11	105.0%	7.1	5.1	A
	Subtotal	50	49	98.4%	27.0	7.3	C
Total		2,750	2,757	100.2%	9.0	1.1	A

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr-North Village Street A** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	250	252	100.8%	27.3	1.9	C
	Through	800	804	100.6%	8.2	0.8	A
	Right Turn						
	Subtotal	1,050	1,056	100.6%	13.1	0.7	B
SB	Left Turn						
	Through	1,080	1,071	99.2%	15.8	2.3	B
	Right Turn	710	715	100.7%	15.4	2.6	B
	Subtotal	1,790	1,786	99.8%	15.7	2.2	B
EB	Left Turn	70	66	94.4%	26.7	4.7	C
	Through						
	Right Turn	130	130	99.6%	9.3	2.2	A
	Subtotal	200	196	97.8%	15.3	3.7	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		3,040	3,038	99.9%	14.8	1.4	B

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	1,040	1,046	100.6%	0.4	0.1	A
	Right Turn						
	Subtotal	1,040	1,046	100.6%	0.4	0.1	A
SB	Left Turn						
	Through	1,120	1,107	98.8%	4.1	0.4	A
	Right Turn	100	103	103.0%	3.8	0.8	A
	Subtotal	1,220	1,210	99.2%	4.1	0.4	A
EB	Left Turn						
	Through						
	Right Turn	10	9	92.0%	4.9	2.4	A
	Subtotal	10	9	92.0%	4.9	2.4	A
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,270	2,265	99.8%	2.4	0.2	A

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	30	31	103.3%	36.7	6.4	D
	Through	950	957	100.7%	12.3	2.6	B
	Right Turn	10	10	95.0%	3.1	3.7	A
	Subtotal	990	997	100.7%	12.9	2.5	B
SB	Left Turn	30	28	94.3%	45.7	11.3	D
	Through	960	953	99.3%	15.2	1.8	B
	Right Turn	30	29	95.7%	12.0	5.5	B
	Subtotal	1,020	1,010	99.0%	15.9	1.8	B
EB	Left Turn	70	66	94.3%	28.6	4.6	C
	Through	10	9	88.0%	15.2	10.1	B
	Right Turn	50	52	103.8%	14.6	5.3	B
	Subtotal	130	127	97.5%	22.0	4.6	C
WB	Left Turn	60	60	100.7%	26.0	6.0	C
	Through	10	10	101.0%	33.7	17.4	C
	Right Turn	80	81	101.0%	16.9	3.0	B
	Subtotal	150	151	100.9%	21.4	3.1	C
Total		2,290	2,235	99.8%	15.2	2.0	B

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	180	183	101.8%	2.5	3.0	A
	Right Turn						
	Subtotal	180	183	101.8%	2.5	3.0	A
SB	Left Turn						
	Through	90	89	98.6%	0.4	0.1	A
	Right Turn	10	11	105.0%	0.3	0.3	A
	Subtotal	100	99	99.2%	0.4	0.1	A
EB	Left Turn						
	Through						
	Right Turn	10	10	96.0%	2.8	0.6	A
	Subtotal	10	10	96.0%	2.8	0.6	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		290	292	100.7%	1.9	2.3	A

Intersection 21 **El Don Dr/Southern Retail Access-South Village Dwy 2** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	11	108.0%	3.1	0.7	A
	Through	160	162	100.9%	1.7	0.8	A
	Right Turn						
	Subtotal	170	172	101.4%	1.8	0.7	A
SB	Left Turn						
	Through	90	87	96.2%	0.2	0.1	A
	Right Turn	10	11	110.0%	0.0	0.1	A
	Subtotal	100	98	97.6%	0.2	0.1	A
EB	Left Turn	20	20	101.0%	6.5	2.1	A
	Through						
	Right Turn	10	12	117.0%	3.0	0.7	A
	Subtotal	30	32	106.3%	5.0	1.1	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		300	302	100.6%	1.7	0.6	A

Intersection 22 **El Don Dr/Wildflower Ln-South Village Dwy 1** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	10	102.0%	4.3	1.0	A
	Through	140	141	100.9%	5.5	0.5	A
	Right Turn						
	Subtotal	150	151	100.9%	5.4	0.5	A
SB	Left Turn						
	Through	80	80	99.5%	5.7	0.2	A
	Right Turn	20	19	94.5%	3.7	0.6	A
	Subtotal	100	99	98.5%	5.4	0.3	A
EB	Left Turn	30	31	102.7%	4.2	0.4	A
	Through						
	Right Turn	10	12	123.0%	2.7	0.4	A
	Subtotal	40	43	107.8%	3.8	0.4	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		290	293	101.0%	5.2	0.4	A

Intersection 23 **El Don Dr/Corona Cir-South Village Street A** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	10	9	92.0%	1.8	0.6	A
	Through	140	141	100.9%	0.2	0.1	A
	Right Turn						
	Subtotal	150	150	100.3%	0.3	0.1	A
SB	Left Turn						
	Through	80	78	97.3%	1.4	0.2	A
	Right Turn	10	12	124.0%	1.1	0.4	A
	Subtotal	90	90	100.2%	1.4	0.2	A
EB	Left Turn	10	10	102.0%	4.7	2.2	A
	Through						
	Right Turn	10	12	123.0%	3.0	0.6	A
	Subtotal	20	23	112.5%	3.9	0.9	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		260	263	101.2%	1.0	0.2	A

Intersection 0 **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total							

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	50	47	94.8%	48.5	11.0	D
	Through	30	28	91.7%	45.8	6.7	D
	Right Turn	30	32	106.7%	24.0	12.4	C
	Subtotal	110	107	97.2%	40.8	9.1	D
SB	Left Turn	530	544	102.6%	35.6	6.1	D
	Through	30	31	104.3%	38.4	6.4	D
	Right Turn	200	201	100.5%	9.0	2.3	A
	Subtotal	760	776	102.1%	29.0	4.6	C
EB	Left Turn	200	203	101.4%	74.8	21.6	E
	Through	630	629	99.8%	30.4	6.2	C
	Right Turn	20	22	108.0%	18.4	10.4	B
	Subtotal	850	853	100.4%	40.1	9.6	D
WB	Left Turn	60	59	99.0%	75.0	13.8	E
	Through	700	698	99.8%	37.2	4.0	D
	Right Turn	550	540	98.1%	12.9	2.1	B
	Subtotal	1,310	1,298	99.0%	28.7	3.8	C
Total		3,030	3,034	100.1%	32.4	4.4	C

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	70	70	100.3%	27.5	5.4	C
	Through	10	11	108.0%	75.3	52.5	E
	Right Turn	310	307	98.9%	51.3	25.3	D
	Subtotal	390	388	99.4%	47.7	21.3	D
EB	Left Turn						
	Through	740	728	98.4%	72.4	23.8	E
	Right Turn	500	505	101.1%	31.2	11.6	C
	Subtotal	1,240	1,234	99.5%	56.0	18.6	E
WB	Left Turn	590	592	100.3%	59.8	8.0	E
	Through	1,160	1,150	99.1%	15.6	1.7	B
	Right Turn						
	Subtotal	1,750	1,741	99.5%	31.4	3.9	C
Total		3,380	3,362	99.5%	42.0	7.8	D

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	580	570	98.3%	49.1	7.6	D
	Through	10	11	112.0%	58.5	24.6	E
	Right Turn	600	604	100.6%	31.8	4.9	C
	Subtotal	1,190	1,185	99.6%	40.3	6.0	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	230	230	100.2%	89.4	20.0	F
	Through	580	574	99.0%	13.6	4.0	B
	Right Turn						
	Subtotal	810	805	99.3%	37.1	8.5	D
WB	Left Turn						
	Through	1,170	1,173	100.2%	41.4	8.7	D
	Right Turn	90	94	104.0%	31.9	8.2	C
	Subtotal	1,260	1,267	100.5%	40.7	8.6	D
Total		3,260	3,256	99.9%	39.6	5.3	D

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	120	125	103.8%	42.2	5.1	D
	Through						
	Right Turn	30	31	102.0%	7.3	2.5	A
	Subtotal	150	155	103.4%	34.8	5.7	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	60	55	92.3%	49.5	7.4	D
	Through	1,040	1,032	99.2%	5.7	0.9	A
	Right Turn	170	175	102.7%	4.6	1.3	A
	Subtotal	1,270	1,262	99.3%	7.7	1.3	A
WB	Left Turn	30	28	93.0%	94.7	55.4	F
	Through	1,130	1,139	100.8%	42.6	28.3	D
	Right Turn						
	Subtotal	1,160	1,167	100.6%	43.6	28.7	D
Total		2,580	2,583	100.1%	26.1	14.1	C

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	120	123	102.2%	49.7	7.5	D
	Through	10	9	92.0%	56.6	30.2	E
	Right Turn	30	30	100.3%	19.4	5.5	B
	Subtotal	160	162	101.2%	44.9	5.4	D
SB	Left Turn	60	60	99.5%	47.4	14.5	D
	Through	20	20	99.0%	46.6	19.0	D
	Right Turn	360	367	101.9%	21.1	8.0	C
	Subtotal	440	447	101.5%	26.1	9.6	C
EB	Left Turn	270	264	97.6%	53.1	9.2	D
	Through	710	704	99.1%	32.5	6.4	C
	Right Turn	130	130	99.8%	30.5	8.3	C
	Subtotal	1,110	1,097	98.8%	37.2	6.9	D
WB	Left Turn	30	31	103.3%	59.1	16.2	E
	Through	740	750	101.4%	34.8	5.6	C
	Right Turn	50	51	101.0%	25.5	7.8	C
	Subtotal	820	832	101.5%	35.2	5.7	D
Total		2,530	2,538	100.3%	35.1	4.6	D

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	8	83.0%	21.8	14.6	C
	Through						
	Right Turn	10	10	97.0%	7.8	9.6	A
	Subtotal	20	18	90.0%	15.9	9.6	B
SB	Left Turn	350	353	100.8%	20.9	3.5	C
	Through						
	Right Turn	170	175	102.9%	7.0	1.2	A
	Subtotal	520	528	101.5%	16.4	2.7	B
EB	Left Turn	80	80	99.9%	39.2	7.1	D
	Through	510	508	99.5%	19.6	3.3	B
	Right Turn	20	20	102.0%	16.3	5.0	B
	Subtotal	610	608	99.6%	21.9	3.3	C
WB	Left Turn	20	19	93.5%	46.3	23.3	D
	Through	515	527	102.4%	18.3	2.9	B
	Right Turn	120	118	98.7%	13.7	3.1	B
	Subtotal	655	664	101.4%	18.2	2.6	B
Total		1,805	1,818	100.7%	18.9	2.3	B

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	300	292	97.3%	77.8	12.7	E
	Through	840	825	98.2%	61.5	20.1	E
	Right Turn	80	82	102.9%	54.8	18.6	D
	Subtotal	1,220	1,199	98.3%	65.3	17.9	E
SB	Left Turn	270	265	98.0%	74.0	16.8	E
	Through	685	663	96.8%	39.0	3.6	D
	Right Turn	180	191	105.9%	13.8	1.7	B
	Subtotal	1,135	1,118	98.5%	43.6	5.3	D
EB	Left Turn	260	251	96.6%	63.5	9.5	E
	Through	270	267	98.9%	31.1	4.9	C
	Right Turn	340	351	103.2%	14.5	3.7	B
	Subtotal	870	869	99.9%	34.5	4.5	C
WB	Left Turn	60	60	99.2%	67.9	14.2	E
	Through	195	200	102.6%	57.7	3.7	E
	Right Turn	250	259	103.4%	46.7	10.4	D
	Subtotal	505	518	102.6%	53.5	7.1	D
Total		3,730	3,705	99.3%	50.0	5.2	D

Intersection 8 **North Village Dwy 1-Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	20	98.0%	17.2	13.5	C
	Through						
	Right Turn	10	11	109.0%	4.1	4.3	A
	Subtotal	30	31	101.7%	13.6	9.1	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	520	515	99.1%	2.2	0.3	A
	Right Turn	100	99	99.2%	1.4	0.6	A
	Subtotal	620	614	99.1%	2.1	0.3	A
WB	Left Turn	10	8	83.0%	6.0	5.7	A
	Through	485	501	103.3%	2.0	1.9	A
	Right Turn						
	Subtotal	495	509	102.9%	2.1	1.8	A
Total		1,145	1,154	100.8%	2.4	1.1	A

Intersection 9 North Village Dwy 2-Rocklin Manor Central/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	23	114.0%	13.5	3.6	B
	Through						
	Right Turn						
	Subtotal	20	23	114.0%	13.5	3.6	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	510	505	99.0%	0.7	0.2	A
	Right Turn	20	21	105.0%	0.5	0.3	A
	Subtotal	530	526	99.2%	0.6	0.2	A
WB	Left Turn	10	12	117.0%	2.4	1.7	A
	Through	475	485	102.1%	0.5	0.1	A
	Right Turn						
	Subtotal	485	497	102.4%	0.5	0.1	A
Total		1,035	1,045	101.0%	0.9	0.2	A

Intersection 10 Rocklin Manor East/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	11	108.0%	13.0	12.5	B
	Through						
	Right Turn						
	Subtotal	10	11	108.0%	13.0	12.5	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	500	494	98.9%	0.3	0.1	A
	Right Turn	10	9	90.0%	0.1	0.3	A
	Subtotal	510	503	98.7%	0.3	0.1	A
WB	Left Turn	10	10	101.0%	3.9	2.3	A
	Through	475	487	102.5%	2.5	0.1	A
	Right Turn						
	Subtotal	485	497	102.4%	2.5	0.1	A
Total		1,005	1,011	100.6%	1.5	0.1	A

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	400	406	101.4%	9.3	1.2	A
	Through	90	98	109.3%	10.0	0.9	A
	Right Turn						
	Subtotal	490	504	102.9%	9.4	1.0	A
SB	Left Turn						
	Through	50	46	92.2%	9.5	0.9	A
	Right Turn	80	85	106.1%	4.2	0.7	A
	Subtotal	130	131	100.8%	5.9	0.8	A
EB	Left Turn	80	79	98.1%	15.8	4.0	C
	Through						
	Right Turn	420	415	98.9%	12.8	2.9	B
	Subtotal	500	494	98.8%	13.2	2.9	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,120	1,129	100.8%	10.7	1.3	B

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	240	242	100.7%	44.0	7.0	D
	Through	910	898	98.7%	20.9	4.5	C
	Right Turn	80	79	99.3%	10.5	3.4	B
	Subtotal	1,230	1,219	99.1%	24.7	4.9	C
SB	Left Turn	60	60	99.7%	49.8	10.8	D
	Through	880	890	101.1%	33.1	8.0	C
	Right Turn	80	87	108.1%	10.5	4.1	B
	Subtotal	1,020	1,036	101.6%	32.2	7.6	C
EB	Left Turn	160	152	95.0%	38.6	6.6	D
	Through	30	30	98.3%	36.6	10.6	D
	Right Turn	270	268	99.3%	19.2	4.6	B
	Subtotal	460	450	97.8%	26.8	3.5	C
WB	Left Turn	110	108	98.3%	44.2	10.3	D
	Through	20	20	99.0%	48.0	13.6	D
	Right Turn	40	44	108.8%	12.1	6.2	B
	Subtotal	170	171	100.8%	35.3	7.0	D
Total		2,880	2,876	99.9%	28.4	5.2	C

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	290	289	99.6%	46.7	8.1	D
	Through	970	959	98.9%	19.7	2.5	B
	Right Turn	520	518	99.7%	8.7	0.8	A
	Subtotal	1,780	1,766	99.2%	20.8	2.5	C
SB	Left Turn						
	Through	1,260	1,251	100.1%	35.1	5.6	D
	Right Turn	60	66	109.2%	11.5	3.2	B
	Subtotal	1,320	1,326	100.5%	34.0	5.4	C
EB	Left Turn	60	61	100.8%	43.6	5.5	D
	Through						
	Right Turn	340	347	102.0%	23.3	7.2	C
	Subtotal	400	407	101.8%	26.4	5.9	C
WB	Left Turn	470	468	99.6%	29.8	3.5	C
	Through	110	115	104.4%	39.9	5.0	D
	Right Turn	240	240	99.8%	19.1	2.4	B
	Subtotal	820	823	100.3%	28.1	2.7	C
Total		4,320	4,322	100.0%	26.8	2.5	C

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,580	1,569	99.3%	23.0	3.3	C
	Right Turn	140	140	100.1%	10.9	2.6	B
	Subtotal	1,720	1,709	99.4%	22.0	3.1	C
SB	Left Turn	310	308	99.4%	45.9	5.7	D
	Through	860	863	100.3%	17.1	2.5	B
	Right Turn	340	343	100.9%	8.0	0.8	A
	Subtotal	1,510	1,514	100.3%	20.9	2.2	C
EB	Left Turn	400	400	100.0%	49.2	10.8	D
	Through	350	358	102.2%	42.9	6.6	D
	Right Turn	150	147	97.8%	18.0	3.8	B
	Subtotal	900	904	100.5%	42.1	4.9	D
WB	Left Turn	110	109	99.2%	46.6	8.7	D
	Through						
	Right Turn	310	304	98.1%	26.7	7.2	C
	Subtotal	420	413	98.4%	31.5	5.8	C
Total		4,550	4,541	99.8%	26.6	1.6	C

Intersection 15 **Sierra College Blvd/Schriber Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	11	106.0%	38.6	14.1	D
	Through	1,630	1,626	99.8%	6.6	1.7	A
	Right Turn	50	46	92.4%	5.6	2.2	A
	Subtotal	1,690	1,683	99.6%	6.7	1.7	A
SB	Left Turn						
	Through	1,090	1,090	100.0%	8.9	2.3	A
	Right Turn	30	31	102.3%	5.6	2.7	A
	Subtotal	1,120	1,121	100.1%	8.8	2.2	A
EB	Left Turn	40	37	93.0%	33.5	13.0	C
	Through	10	8	84.0%	24.1	13.7	C
	Right Turn	20	21	103.5%	10.4	4.5	B
	Subtotal	70	66	94.7%	25.1	6.7	C
WB	Left Turn	20	19	95.5%	37.1	13.3	D
	Through	10	9	93.0%	27.5	16.4	C
	Right Turn	50	50	99.4%	18.8	5.2	B
	Subtotal	80	78	97.6%	24.6	4.7	C
Total		2,960	2,948	99.6%	8.4	1.7	A

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	11	109.0%	48.1	23.8	D
	Through	1,660	1,656	99.7%	20.2	6.4	C
	Right Turn	60	58	97.3%	18.9	8.8	B
	Subtotal	1,730	1,725	99.7%	20.3	6.4	C
SB	Left Turn	50	52	104.2%	38.0	9.1	D
	Through	1,040	1,041	100.1%	7.1	3.1	A
	Right Turn	40	37	91.3%	2.2	0.7	A
	Subtotal	1,130	1,130	100.0%	8.7	2.6	A
EB	Left Turn	10	9	85.0%	42.1	14.1	D
	Through	10	10	104.0%	35.1	14.3	D
	Right Turn	10	10	98.0%	9.2	9.5	A
	Subtotal	30	29	95.7%	30.3	9.4	C
WB	Left Turn	60	59	97.7%	38.7	8.0	D
	Through	10	10	101.0%	23.4	17.4	C
	Right Turn	10	11	105.0%	13.4	6.1	B
	Subtotal	80	79	99.0%	34.6	7.3	C
Total		2,970	2,963	99.7%	16.4	4.5	B

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr-North Village Street A** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	210	204	97.0%	52.6	7.9	D
	Through	1,130	1,121	99.2%	21.7	3.0	C
	Right Turn						
	Subtotal	1,340	1,325	98.9%	26.5	2.5	C
SB	Left Turn						
	Through	895	884	98.7%	24.5	3.9	C
	Right Turn	220	228	103.5%	3.9	0.6	A
	Subtotal	1,115	1,111	99.7%	20.2	3.2	C
EB	Left Turn	600	603	100.4%	35.2	8.4	D
	Through						
	Right Turn	260	251	96.7%	27.9	8.9	C
	Subtotal	860	854	99.3%	33.0	8.5	C
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		3,315	3,290	99.3%	26.1	2.7	C

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	1,340	1,323	98.8%	0.6	0.1	A
	Right Turn						
	Subtotal	1,340	1,323	98.8%	0.6	0.1	A
SB	Left Turn						
	Through	1,115	1,095	98.2%	5.1	0.8	A
	Right Turn	40	41	102.8%	4.2	1.1	A
	Subtotal	1,155	1,136	98.4%	5.0	0.8	A
EB	Left Turn						
	Through						
	Right Turn	20	20	100.0%	6.0	4.0	A
	Subtotal	20	20	100.0%	6.0	4.0	A
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,515	2,479	98.6%	2.7	0.5	A

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	30	27	89.7%	34.9	7.9	C
	Through	1,100	1,083	98.5%	11.5	0.9	B
	Right Turn	30	30	100.7%	5.7	1.9	A
	Subtotal	1,160	1,140	98.3%	11.9	0.9	B
SB	Left Turn	130	128	98.5%	31.2	3.9	C
	Through	895	882	98.5%	8.4	2.5	A
	Right Turn	90	90	100.4%	8.9	2.4	A
	Subtotal	1,115	1,101	98.7%	11.1	1.9	B
EB	Left Turn	40	38	94.0%	28.3	7.3	C
	Through	10	11	113.0%	21.6	17.6	C
	Right Turn	20	24	121.0%	12.7	7.0	B
	Subtotal	70	73	104.4%	23.8	5.4	C
WB	Left Turn	20	18	88.5%	36.1	11.1	D
	Through	10	10	101.0%	29.3	9.9	C
	Right Turn	50	51	101.8%	15.0	4.9	B
	Subtotal	80	79	98.4%	21.8	5.0	C
Total		2,425	2,393	98.7%	12.2	1.3	B

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	160	162	101.4%	2.7	2.5	A
	Right Turn						
	Subtotal	160	162	101.4%	2.7	2.5	A
SB	Left Turn						
	Through	170	173	101.5%	0.5	0.1	A
	Right Turn	10	9	94.0%	0.5	0.4	A
	Subtotal	180	182	101.1%	0.5	0.1	A
EB	Left Turn						
	Through						
	Right Turn	10	9	85.0%	3.2	1.7	A
	Subtotal	10	9	85.0%	3.2	1.7	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		350	353	100.8%	1.6	1.2	A

Intersection 21 **El Don Dr/Southern Retail Access-South Village Dwy 2** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	11	105.0%	3.7	1.5	A
	Through	120	124	103.2%	1.6	0.2	A
	Right Turn						
	Subtotal	130	134	103.3%	1.8	0.2	A
SB	Left Turn						
	Through	170	170	99.8%	0.4	0.1	A
	Right Turn	10	10	104.0%	0.0	0.0	A
	Subtotal	180	180	100.0%	0.3	0.1	A
EB	Left Turn	40	39	97.0%	7.5	0.8	A
	Through						
	Right Turn	10	10	103.0%	5.2	2.1	A
	Subtotal	50	49	98.2%	7.1	0.6	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		360	363	100.9%	1.7	0.2	A

Intersection 22 **El Don Dr/Wildflower Ln-South Village Dwy 1** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	8	84.0%	4.4	2.0	A
	Through	110	115	104.7%	5.2	0.3	A
	Right Turn						
	Subtotal	120	124	103.0%	5.2	0.4	A
SB	Left Turn						
	Through	150	149	99.5%	6.8	0.6	A
	Right Turn	30	31	102.7%	4.5	0.7	A
	Subtotal	180	180	100.1%	6.4	0.5	A
EB	Left Turn	20	20	97.5%	4.2	0.7	A
	Through						
	Right Turn	10	11	105.0%	2.5	1.4	A
	Subtotal	30	30	100.0%	3.9	0.7	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		330	334	101.1%	5.7	0.3	A

Intersection 23 **El Don Dr/Corona Cir-South Village Street A** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	10	11	106.0%	2.2	1.0	A
	Through	110	112	101.8%	0.2	0.1	A
	Right Turn						
	Subtotal	120	123	102.2%	0.4	0.2	A
SB	Left Turn						
	Through	140	139	99.4%	1.6	0.2	A
	Right Turn	20	20	102.0%	1.7	0.4	A
	Subtotal	160	160	99.8%	1.6	0.2	A
EB	Left Turn	10	12	120.0%	5.2	2.7	A
	Through						
	Right Turn	10	10	95.0%	3.7	1.5	A
	Subtotal	20	22	107.5%	4.0	0.7	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		300	304	101.2%	1.3	0.2	A

Intersection 0 **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total							

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	19	93.5%	38.2	15.5	D
	Through	30	29	96.3%	36.9	13.5	D
	Right Turn	20	20	98.5%	13.3	6.9	B
	Subtotal	70	67	96.1%	31.3	8.2	C
SB	Left Turn	395	401	101.6%	31.4	2.9	C
	Through	20	18	92.0%	31.9	11.2	C
	Right Turn	120	126	104.7%	9.1	2.4	A
	Subtotal	535	545	101.9%	26.3	2.5	C
EB	Left Turn	170	173	102.0%	53.3	10.0	D
	Through	872	882	101.2%	18.8	5.4	B
	Right Turn	10	10	100.0%	6.3	5.2	A
	Subtotal	1,052	1,066	101.3%	24.4	6.2	C
WB	Left Turn	10	10	104.0%	61.4	32.5	E
	Through	762	761	99.9%	30.3	5.1	C
	Right Turn	533	534	100.1%	11.1	2.0	B
	Subtotal	1,305	1,305	100.0%	22.9	3.5	C
Total		2,962	2,933	100.7%	24.3	4.2	C

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	86	83	96.9%	33.3	6.3	C
	Through						
	Right Turn	270	275	101.9%	28.5	4.2	C
	Subtotal	356	358	100.6%	29.5	4.0	C
EB	Left Turn						
	Through	827	835	100.9%	41.7	9.5	D
	Right Turn	470	472	100.3%	15.0	2.7	B
	Subtotal	1,297	1,306	100.7%	32.0	6.8	C
WB	Left Turn	414	400	96.7%	41.1	8.1	D
	Through	1,095	1,089	99.4%	8.3	1.6	A
	Right Turn						
	Subtotal	1,509	1,489	98.7%	17.3	3.3	B
Total		3,162	3,153	99.7%	24.9	3.0	C

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	610	596	97.7%	32.2	1.5	C
	Through						
	Right Turn	1,083	1,054	97.3%	28.4	1.3	C
	Subtotal	1,693	1,650	97.4%	29.8	1.1	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	200	202	100.8%	46.9	8.2	D
	Through	713	724	101.6%	11.9	1.5	B
	Right Turn						
	Subtotal	913	926	101.4%	19.2	1.6	B
WB	Left Turn						
	Through	899	896	99.6%	44.8	12.7	D
	Right Turn	63	64	101.7%	37.4	13.6	D
	Subtotal	962	960	99.8%	44.3	12.7	D
Total		3,568	3,535	99.1%	31.1	3.6	C

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	160	156	97.5%	34.0	3.8	C
	Through						
	Right Turn	42	43	102.1%	17.6	6.8	B
	Subtotal	202	199	98.5%	30.7	3.9	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	40	39	98.3%	43.5	5.3	D
	Through	1,676	1,650	99.1%	7.3	1.8	A
	Right Turn	60	58	97.2%	5.6	2.6	A
	Subtotal	1,776	1,758	99.0%	8.2	1.9	A
WB	Left Turn	10	9	91.0%	38.3	19.7	D
	Through	772	772	100.0%	15.1	6.1	B
	Right Turn						
	Subtotal	782	781	99.9%	15.5	5.9	B
Total		2,760	2,738	99.2%	12.1	2.4	B

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	142	136	95.6%	47.1	6.7	D
	Through	30	32	106.3%	54.8	9.0	D
	Right Turn	35	39	111.7%	26.9	9.3	C
	Subtotal	207	207	99.9%	43.9	5.7	D
SB	Left Turn	20	20	101.5%	50.1	24.5	D
	Through	10	10	104.0%	38.4	28.6	D
	Right Turn	80	77	96.8%	12.2	5.3	B
	Subtotal	110	108	98.3%	23.5	7.5	C
EB	Left Turn	540	517	95.7%	108.4	27.2	F
	Through	1,139	1,138	99.9%	45.5	12.6	D
	Right Turn	109	107	98.0%	42.9	14.4	D
	Subtotal	1,788	1,762	98.6%	64.1	16.6	E
WB	Left Turn	76	71	93.6%	54.6	10.1	D
	Through	560	574	102.4%	33.3	3.7	C
	Right Turn	130	130	100.3%	22.5	1.9	C
	Subtotal	766	775	101.2%	33.3	3.2	C
Total		2,871	2,852	99.3%	53.1	10.7	D

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	20	100.5%	39.1	13.6	D
	Through	10	10	104.0%	47.7	24.3	D
	Right Turn	30	31	104.3%	14.8	6.6	B
	Subtotal	60	62	103.0%	26.9	7.4	C
SB	Left Turn	62	58	94.0%	41.3	9.6	D
	Through	10	9	86.0%	35.4	19.3	D
	Right Turn	20	19	94.5%	4.5	1.1	A
	Subtotal	92	86	93.3%	32.2	8.0	C
EB	Left Turn	370	366	99.0%	42.0	5.2	D
	Through	697	695	99.7%	9.6	1.7	A
	Right Turn	10	9	94.0%	3.7	1.4	A
	Subtotal	1,077	1,071	99.4%	20.2	3.0	C
WB	Left Turn	20	22	107.5%	77.7	19.3	E
	Through	606	605	99.8%	26.5	4.6	C
	Right Turn	432	435	100.6%	29.0	3.7	C
	Subtotal	1,058	1,061	100.3%	28.6	4.0	C
Total		2,287	2,279	99.7%	24.5	2.6	C

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	429	426	99.3%	80.9	36.8	F
	Through	632	639	101.0%	80.5	39.2	F
	Right Turn	116	119	102.5%	75.0	40.3	E
	Subtotal	1,177	1,134	100.6%	80.1	38.0	F
SB	Left Turn	240	235	98.0%	65.6	11.5	E
	Through	727	729	100.2%	51.8	5.4	D
	Right Turn	320	327	102.2%	27.4	5.0	C
	Subtotal	1,287	1,291	100.3%	48.7	4.1	D
EB	Left Turn	267	266	99.6%	85.5	50.7	F
	Through	298	305	102.4%	37.1	10.0	D
	Right Turn	224	219	97.8%	9.9	1.8	A
	Subtotal	789	790	100.2%	47.2	23.7	D
WB	Left Turn	113	114	100.9%	75.8	12.9	E
	Through	329	330	100.4%	65.2	21.3	E
	Right Turn	235	234	99.7%	72.9	29.8	E
	Subtotal	677	679	100.2%	70.0	22.5	E
Total		3,930	3,943	100.3%	62.7	14.0	E

Intersection 8 **North Village Dwy 1-Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	20	98.5%	66.4	87.1	F
	Through	10	10	100.0%	26.1	25.4	D
	Right Turn	20	21	103.5%	64.2	110.7	F
	Subtotal	50	50	100.8%	61.0	81.9	F
SB	Left Turn	6	7	110.0%	33.2	40.0	D
	Through						
	Right Turn	44	44	100.5%	68.9	124.7	F
	Subtotal	50	51	101.6%	70.1	122.3	F
EB	Left Turn	31	32	102.9%	7.2	4.1	A
	Through	613	617	100.6%	2.6	0.3	A
	Right Turn	20	21	103.5%	1.3	0.7	A
	Subtotal	664	669	100.8%	2.8	0.2	A
WB	Left Turn						
	Through	613	613	99.9%	6.4	8.7	A
	Right Turn	10	11	111.0%	9.4	24.3	A
	Subtotal	623	624	100.1%	6.4	8.8	A
Total		1,387	1,394	100.5%	9.6	11.8	A

Intersection 9 North Village Dwy 2-Rocklin Manor Central/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	10	103.0%	20.8	9.3	C
	Through						
	Right Turn	10	8	84.0%	3.6	2.4	A
	Subtotal	20	19	93.5%	13.5	6.0	B
SB	Left Turn	2	2	100.0%	2.6	5.8	A
	Through						
	Right Turn	25	27	108.8%	4.7	1.7	A
	Subtotal	27	29	108.1%	5.1	1.5	A
EB	Left Turn	121	121	100.0%	5.1	0.9	A
	Through	508	511	100.6%	1.9	0.4	A
	Right Turn	10	10	98.0%	0.2	0.3	A
	Subtotal	639	642	100.5%	2.5	0.5	A
WB	Left Turn						
	Through	588	585	99.5%	0.6	0.1	A
	Right Turn	10	10	102.0%	0.3	0.3	A
	Subtotal	598	595	99.5%	0.6	0.1	A
Total		1,284	1,235	100.1%	1.8	0.4	A

Intersection 10 Rocklin Manor East/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	9	91.0%	14.9	11.1	B
	Through						
	Right Turn	10	13	126.0%	6.8	4.5	A
	Subtotal	20	22	108.5%	10.3	6.0	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	510	509	99.9%	0.3	0.1	A
	Right Turn	10	10	102.0%	0.1	0.1	A
	Subtotal	520	520	99.9%	0.3	0.1	A
WB	Left Turn	10	10	96.0%	5.3	3.9	A
	Through	588	586	99.6%	3.0	0.2	A
	Right Turn						
	Subtotal	598	595	99.6%	3.0	0.2	A
Total		1,138	1,137	99.9%	2.0	0.2	A

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	474	466	98.2%	14.2	3.4	B
	Through	80	87	109.3%	11.4	1.0	B
	Right Turn						
	Subtotal	554	553	99.8%	13.7	3.0	B
SB	Left Turn						
	Through	50	49	98.0%	12.1	1.3	B
	Right Turn	104	109	104.6%	6.4	1.7	A
	Subtotal	154	158	102.5%	8.3	1.5	A
EB	Left Turn	101	96	95.0%	14.6	3.2	B
	Through						
	Right Turn	399	404	101.3%	13.0	3.0	B
	Subtotal	500	500	100.0%	13.3	2.9	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,208	1,211	100.2%	12.8	2.5	B

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	272	264	97.1%	38.4	3.9	D
	Through	525	521	99.2%	15.4	1.3	B
	Right Turn	90	84	92.8%	7.6	0.9	A
	Subtotal	887	869	97.9%	21.5	1.0	C
SB	Left Turn	80	77	96.4%	47.1	6.4	D
	Through	939	934	99.5%	28.3	3.9	C
	Right Turn	70	74	105.7%	8.6	2.0	A
	Subtotal	1,089	1,085	99.7%	28.3	3.7	C
EB	Left Turn	80	79	99.0%	46.5	10.1	D
	Through	30	29	97.0%	43.6	14.1	D
	Right Turn	121	119	98.2%	14.7	5.0	B
	Subtotal	231	227	98.3%	29.4	6.7	C
WB	Left Turn	150	147	98.1%	44.6	6.0	D
	Through	30	29	95.7%	50.7	20.5	D
	Right Turn	40	40	98.8%	7.7	2.6	A
	Subtotal	220	215	97.9%	37.9	5.3	D
Total		2,427	2,396	98.7%	26.8	2.4	C

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	105	107	101.9%	40.6	7.8	D
	Through	597	582	97.5%	16.7	4.1	B
	Right Turn	250	253	101.2%	4.5	0.4	A
	Subtotal	952	942	99.0%	15.8	2.9	B
SB	Left Turn						
	Through	1,220	1,208	99.0%	22.0	4.0	C
	Right Turn	20	22	110.0%	6.8	2.2	A
	Subtotal	1,240	1,230	99.2%	21.7	3.9	C
EB	Left Turn	20	20	98.0%	35.9	8.0	D
	Through						
	Right Turn	75	74	99.2%	9.4	3.3	A
	Subtotal	95	94	98.9%	15.6	4.7	B
WB	Left Turn	707	708	100.1%	30.7	7.3	C
	Through	80	86	107.9%	32.9	6.3	C
	Right Turn	270	269	99.4%	16.5	2.9	B
	Subtotal	1,057	1,053	100.5%	27.2	5.8	C
Total		3,344	3,329	99.5%	21.7	3.1	C

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,037	1,045	100.8%	19.9	2.2	B
	Right Turn	55	59	106.5%	4.9	1.4	A
	Subtotal	1,092	1,104	101.1%	19.2	2.2	B
SB	Left Turn	150	145	96.9%	93.8	37.1	F
	Through	1,372	1,365	99.5%	77.8	43.7	E
	Right Turn	190	182	95.7%	47.7	35.6	D
	Subtotal	1,712	1,692	98.8%	76.1	42.1	E
EB	Left Turn	240	230	95.7%	119.0	54.9	F
	Through	160	161	100.6%	124.3	55.9	F
	Right Turn	430	428	99.6%	168.8	59.2	F
	Subtotal	830	819	98.7%	146.3	56.8	F
WB	Left Turn	65	65	100.0%	47.0	11.6	D
	Through						
	Right Turn	110	112	101.8%	10.0	3.2	A
	Subtotal	175	177	101.1%	23.5	7.9	C
Total		3,809	3,791	99.5%	70.6	23.4	E

Intersection 15 **Sierra College Blvd/Schriber Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	11	108.0%	45.4	12.7	D
	Through	952	963	101.2%	4.2	1.0	A
	Right Turn	20	22	109.0%	3.3	3.6	A
	Subtotal	982	996	101.4%	4.8	1.2	A
SB	Left Turn						
	Through	1,837	1,830	99.6%	11.8	1.6	B
	Right Turn	30	26	87.7%	9.7	3.6	A
	Subtotal	1,867	1,856	99.4%	11.8	1.6	B
EB	Left Turn	10	10	101.0%	61.0	61.7	E
	Through	10	10	96.0%	41.9	19.4	D
	Right Turn	10	9	93.0%	35.8	13.2	D
	Subtotal	30	29	96.7%	46.2	10.5	D
WB	Left Turn	60	59	98.5%	51.5	15.0	D
	Through	10	9	89.0%	43.6	22.2	D
	Right Turn	130	129	98.9%	22.2	17.3	C
	Subtotal	200	197	98.3%	32.3	14.7	C
Total		3,079	3,077	99.9%	11.2	1.5	B

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	8	81.0%	45.1	13.1	D
	Through	952	970	101.8%	10.5	1.9	B
	Right Turn	30	29	95.0%	7.1	1.6	A
	Subtotal	992	1,006	101.4%	10.8	1.9	B
SB	Left Turn	30	31	103.0%	37.2	12.2	D
	Through	1,867	1,859	99.6%	9.6	2.3	A
	Right Turn	10	9	94.0%	2.5	1.2	A
	Subtotal	1,907	1,899	99.6%	10.0	2.5	A
EB	Left Turn	10	9	87.0%	21.8	16.5	C
	Through	10	8	78.0%	32.8	19.6	C
	Right Turn	10	12	116.0%	18.3	10.6	B
	Subtotal	30	28	93.7%	25.1	8.9	C
WB	Left Turn	30	28	94.0%	34.7	6.8	C
	Through	10	11	111.0%	32.5	11.9	C
	Right Turn	10	10	98.0%	8.8	6.5	A
	Subtotal	50	49	98.2%	29.5	3.0	C
Total		2,979	2,982	100.1%	10.9	2.1	B

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr-North Village Street A** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	288	285	98.8%	39.3	4.0	D
	Through	871	881	101.2%	12.1	3.0	B
	Right Turn	13	13	100.0%	10.8	5.8	B
	Subtotal	1,172	1,179	100.6%	18.5	2.5	B
SB	Left Turn	14	13	90.7%	29.8	16.7	C
	Through	1,183	1,177	99.5%	27.2	5.4	C
	Right Turn	710	708	99.7%	15.8	3.4	B
	Subtotal	1,907	1,897	99.5%	23.1	4.1	C
EB	Left Turn	70	71	101.7%	40.8	11.8	D
	Through						
	Right Turn	132	134	101.6%	15.1	3.6	B
	Subtotal	202	205	101.6%	23.8	6.5	C
WB	Left Turn	66	65	98.8%	37.8	11.5	D
	Through						
	Right Turn	41	42	103.4%	7.4	3.1	A
	Subtotal	107	108	100.6%	26.8	9.1	C
Total		3,388	3,339	100.0%	21.6	3.3	C

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,104	1,106	100.2%	0.4	0.1	A
	Right Turn						
	Subtotal	1,104	1,106	100.2%	0.4	0.1	A
SB	Left Turn						
	Through	1,318	1,317	99.9%	6.3	0.5	A
	Right Turn	100	100	99.7%	5.9	0.5	A
	Subtotal	1,418	1,417	99.9%	6.2	0.5	A
EB	Left Turn						
	Through						
	Right Turn	10	9	90.0%	4.1	3.8	A
	Subtotal	10	9	90.0%	4.1	3.8	A
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,532	2,532	100.0%	3.7	0.3	A

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	50	48	96.6%	37.4	9.8	D
	Through	1,024	1,029	100.4%	12.4	2.0	B
	Right Turn	10	11	106.0%	4.7	4.4	A
	Subtotal	1,084	1,037	100.3%	13.3	2.2	B
SB	Left Turn	30	29	95.0%	41.4	13.1	D
	Through	1,033	1,034	100.1%	16.1	3.1	B
	Right Turn	31	32	103.5%	12.7	3.3	B
	Subtotal	1,094	1,094	100.0%	16.5	3.1	B
EB	Left Turn	73	76	104.5%	25.5	3.9	C
	Through	10	9	90.0%	32.1	16.5	C
	Right Turn	54	51	93.7%	15.3	4.2	B
	Subtotal	137	136	99.2%	22.3	2.7	C
WB	Left Turn	60	57	94.2%	24.3	5.7	C
	Through	10	10	99.0%	30.9	18.6	C
	Right Turn	80	80	99.6%	18.4	3.6	B
	Subtotal	150	146	97.4%	21.8	5.0	C
Total		2,465	2,454	100.0%	15.7	2.5	B

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	207	208	100.7%	4.6	3.7	A
	Right Turn						
	Subtotal	207	208	100.7%	4.6	3.7	A
SB	Left Turn						
	Through	144	140	97.2%	0.5	0.1	A
	Right Turn	10	9	94.0%	0.2	0.1	A
	Subtotal	154	149	97.0%	0.4	0.1	A
EB	Left Turn						
	Through						
	Right Turn	10	10	101.0%	2.8	0.6	A
	Subtotal	10	10	101.0%	2.8	0.6	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		371	368	99.2%	3.1	2.4	A

Intersection 21 **El Don Dr/Southern Retail Access-South Village Dwy 2** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	7	71.0%	2.8	2.4	A
	Through	177	180	101.5%	2.6	2.3	A
	Right Turn						
	Subtotal	187	187	99.8%	2.6	2.3	A
SB	Left Turn	50	49	97.0%	2.2	0.7	A
	Through	94	94	99.5%	0.2	0.2	A
	Right Turn	10	10	96.0%	0.0	0.1	A
	Subtotal	154	152	98.4%	0.8	0.2	A
EB	Left Turn	20	19	93.5%	6.6	3.0	A
	Through						
	Right Turn	10	11	108.0%	3.2	0.7	A
	Subtotal	30	30	98.3%	6.0	2.0	A
WB	Left Turn	1	1	50.0%	1.1	1.9	A
	Through						
	Right Turn	10	10	100.0%	3.0	1.6	A
	Subtotal	11	11	95.5%	3.1	1.6	A
Total		382	378	99.0%	2.4	1.4	A

Intersection 22 **El Don Dr/Wildflower Ln-South Village Dwy 1** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	9	90.0%	4.7	2.0	A
	Through	154	157	102.0%	5.4	0.3	A
	Right Turn	18	17	93.3%	3.4	0.5	A
	Subtotal	182	183	100.5%	5.1	0.2	A
SB	Left Turn						
	Through	85	84	98.4%	5.7	0.4	A
	Right Turn	20	21	107.0%	3.6	0.5	A
	Subtotal	105	105	100.0%	5.2	0.5	A
EB	Left Turn	30	28	92.3%	4.1	0.5	A
	Through						
	Right Turn	10	9	85.0%	2.5	0.4	A
	Subtotal	40	36	90.5%	3.6	0.5	A
WB	Left Turn	1	0	30.0%	0.0	0.0	A
	Through						
	Right Turn	3	2	76.7%	1.2	1.4	A
	Subtotal	4	3	65.0%	1.2	1.4	A
Total		331	327	98.7%	5.0	0.2	A

Intersection 23 **El Don Dr/Corona Cir-South Village Street A** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	10	10	104.0%	1.3	1.0	A
	Through	161	158	98.2%	0.2	0.1	A
	Right Turn	1	2	150.0%	0.0	0.0	A
	Subtotal	172	170	98.8%	0.3	0.2	A
SB	Left Turn	4	3	77.5%	2.3	1.6	A
	Through	82	78	95.4%	1.4	0.2	A
	Right Turn	10	10	97.0%	1.3	0.8	A
	Subtotal	96	91	94.8%	1.5	0.2	A
EB	Left Turn	10	10	104.0%	4.4	1.8	A
	Through						
	Right Turn	10	10	104.0%	2.5	0.2	A
	Subtotal	20	21	104.0%	3.8	0.9	A
WB	Left Turn	3	3	90.0%	0.7	1.6	A
	Through						
	Right Turn	11	14	123.6%	2.7	1.1	A
	Subtotal	14	16	116.4%	3.1	0.6	A
Total		302	298	98.7%	1.1	0.2	A

Intersection 24 **Sierra College Blvd/Street G** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	1,083	1,088	100.5%	0.7	0.1	A
	Right Turn	21	19	92.4%	0.5	0.1	A
	Subtotal	1,104	1,108	100.3%	0.6	0.1	A
SB	Left Turn	11	10	90.9%	13.3	6.6	B
	Through	1,418	1,417	99.9%	5.6	0.7	A
	Right Turn						
	Subtotal	1,429	1,427	99.9%	5.7	0.7	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	79	81	102.8%	10.1	3.3	B
	Subtotal	79	81	102.8%	10.1	3.3	B
Total		2,612	2,616	100.1%	3.7	0.5	A

Intersection 25 **Sierra College Blvd/North Village Dwy 3** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,092	1,096	100.3%	3.4	0.2	A
	Right Turn	22	27	121.4%	2.3	0.8	A
	Subtotal	1,114	1,122	100.7%	3.4	0.2	A
SB	Left Turn	41	40	97.8%	12.0	4.8	B
	Through	1,287	1,287	100.0%	1.5	0.2	A
	Right Turn						
	Subtotal	1,328	1,328	100.0%	1.8	0.3	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	12	11	91.7%	8.9	5.7	A
	Subtotal	12	11	91.7%	8.9	5.7	A
Total		2,454	2,461	100.3%	2.6	0.2	A

Intersection 26 **South Village Dwy 3/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	3	3	86.7%	2.1	4.8	A
	Subtotal	3	3	86.7%	2.1	4.8	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,133	1,130	99.7%	1.2	0.2	A
	Right Turn	42	47	112.1%	0.4	0.2	A
	Subtotal	1,175	1,177	100.1%	1.2	0.2	A
WB	Left Turn						
	Through	656	654	99.7%	0.3	0.1	A
	Right Turn						
	Subtotal	656	654	99.7%	0.3	0.1	A
Total		1,834	1,833	99.9%	0.9	0.1	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Existing Plus Approved Plus Project Conditions
AM Peak Hour

Intersection 27 South Village Dwy 4/Rocklin Rd Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	17	17	101.2%	10.9	9.5	B
	Subtotal	17	17	101.2%	10.9	9.5	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,060	1,054	99.5%	1.3	0.6	A
	Right Turn	76	78	103.2%	0.7	0.3	A
	Subtotal	1,136	1,133	99.7%	1.3	0.5	A
WB	Left Turn						
	Through	656	654	99.7%	2.5	0.1	A
	Right Turn						
	Subtotal	656	654	99.7%	2.5	0.1	A
Total		1,809	1,804	99.7%	1.7	0.4	A

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	50	49	97.6%	64.8	18.9	E
	Through	30	32	108.0%	68.2	31.1	E
	Right Turn	30	28	92.0%	42.1	19.0	D
	Subtotal	110	109	98.9%	59.8	17.4	E
SB	Left Turn	534	538	100.7%	84.7	50.8	F
	Through	30	29	95.0%	97.9	51.1	F
	Right Turn	200	206	102.8%	13.4	4.9	B
	Subtotal	764	772	101.1%	67.0	39.7	E
EB	Left Turn	200	184	92.2%	175.4	74.4	F
	Through	682	654	95.9%	90.2	39.0	F
	Right Turn	20	19	93.0%	65.4	31.4	E
	Subtotal	902	857	95.0%	106.2	43.3	F
WB	Left Turn	60	57	94.7%	111.0	35.5	F
	Through	792	768	97.0%	50.2	11.1	D
	Right Turn	555	527	95.0%	21.3	8.4	C
	Subtotal	1,407	1,352	96.1%	41.4	11.0	D
Total		3,183	3,090	97.1%	66.4	24.8	E

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	75	73	97.1%	31.8	4.8	C
	Through	10	9	92.0%	55.0	30.6	D
	Right Turn	310	313	100.9%	61.5	36.7	E
	Subtotal	395	395	99.9%	56.3	31.6	E
EB	Left Turn						
	Through	796	752	94.4%	119.7	13.4	F
	Right Turn	500	473	94.6%	57.1	8.0	E
	Subtotal	1,296	1,225	94.5%	96.7	10.3	F
WB	Left Turn	722	618	85.5%	67.9	3.2	E
	Through	1,257	1,210	96.2%	22.4	7.5	C
	Right Turn						
	Subtotal	1,979	1,827	92.3%	37.7	5.4	D
Total		3,670	3,447	93.9%	61.5	8.4	E

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	580	591	101.8%	64.3	18.6	E
	Through	10	10	103.0%	76.5	38.1	E
	Right Turn	680	680	100.0%	42.1	10.0	D
	Subtotal	1,270	1,231	100.9%	53.1	14.2	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	230	216	94.0%	64.7	12.4	E
	Through	641	618	96.5%	10.5	2.1	B
	Right Turn						
	Subtotal	871	834	95.8%	24.4	5.0	C
WB	Left Turn						
	Through	1,399	1,236	88.3%	55.0	5.0	E
	Right Turn	98	90	91.4%	42.0	7.5	D
	Subtotal	1,497	1,326	88.5%	54.2	5.1	D
Total		3,638	3,441	94.6%	46.2	5.0	D

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	120	118	98.7%	41.7	6.1	D
	Through						
	Right Turn	31	33	106.1%	9.4	3.5	A
	Subtotal	151	151	100.2%	34.0	5.8	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	60	57	94.7%	50.1	9.7	D
	Through	1,181	1,152	98.4%	7.2	1.9	A
	Right Turn	170	168	99.1%	5.7	1.7	A
	Subtotal	1,411	1,387	98.3%	8.7	2.2	A
WB	Left Turn	32	26	82.2%	213.3	30.6	F
	Through	1,367	1,193	87.3%	128.4	14.3	F
	Right Turn						
	Subtotal	1,399	1,219	87.1%	130.4	14.3	F
Total		2,961	2,757	93.1%	63.2	6.6	E

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	191	181	94.8%	184.6	99.8	F
	Through	10	11	109.0%	175.0	104.8	F
	Right Turn	38	39	102.1%	131.5	93.0	F
	Subtotal	239	231	96.5%	176.0	98.0	F
SB	Left Turn	60	56	93.7%	130.9	39.2	F
	Through	20	20	98.0%	143.0	64.4	F
	Right Turn	360	344	95.5%	77.8	38.1	E
	Subtotal	440	420	95.3%	88.3	39.6	F
EB	Left Turn	270	259	95.9%	81.5	17.3	F
	Through	834	818	98.0%	50.1	11.1	D
	Right Turn	148	148	99.9%	46.9	12.1	D
	Subtotal	1,252	1,224	97.8%	56.6	11.6	E
WB	Left Turn	44	39	88.9%	316.0	99.2	F
	Through	908	790	87.0%	317.7	89.2	F
	Right Turn	50	44	87.0%	297.4	88.8	F
	Subtotal	1,002	873	87.1%	316.4	89.4	F
Total		2,933	2,747	93.7%	152.1	28.6	F

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	8	79.0%	54.2	51.7	D
	Through						
	Right Turn	10	10	101.0%	28.0	40.7	C
	Subtotal	20	18	90.0%	41.9	44.5	D
SB	Left Turn	351	349	99.3%	41.2	18.1	D
	Through						
	Right Turn	170	168	98.5%	36.5	21.8	D
	Subtotal	521	516	99.1%	39.4	18.3	D
EB	Left Turn	124	117	94.6%	49.6	8.6	D
	Through	688	669	97.3%	20.3	4.7	C
	Right Turn	20	20	101.0%	15.1	4.6	B
	Subtotal	832	807	96.9%	24.2	4.7	C
WB	Left Turn	20	18	87.5%	108.0	70.5	F
	Through	653	615	94.2%	80.0	64.8	F
	Right Turn	125	118	94.2%	73.2	63.9	E
	Subtotal	798	750	94.0%	79.5	64.3	E
Total		2,171	2,091	96.3%	46.7	25.8	D

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	304	286	94.2%	161.6	62.3	F
	Through	895	837	93.5%	167.1	68.8	F
	Right Turn	116	113	97.0%	168.0	72.8	F
	Subtotal	1,315	1,236	94.0%	166.1	67.6	F
SB	Left Turn	286	275	96.1%	115.4	46.9	F
	Through	714	719	100.7%	51.0	16.2	D
	Right Turn	215	213	99.3%	24.1	15.3	C
	Subtotal	1,215	1,207	99.3%	61.9	23.7	E
EB	Left Turn	358	353	98.6%	110.7	47.8	F
	Through	324	323	99.5%	49.3	17.9	D
	Right Turn	367	354	96.4%	17.6	5.0	B
	Subtotal	1,049	1,029	98.1%	60.7	24.3	E
WB	Left Turn	126	130	102.9%	75.8	19.5	E
	Through	299	291	97.3%	90.3	22.1	F
	Right Turn	302	296	97.9%	97.9	33.3	F
	Subtotal	727	716	98.5%	91.3	25.5	F
Total		4,306	4,139	97.3%	97.8	22.5	F

Intersection 8 **North Village Dwy 1-Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	20	98.0%	23.3	18.2	C
	Through	10	12	122.0%	17.3	8.1	C
	Right Turn	10	13	125.0%	4.4	2.4	A
	Subtotal	40	44	110.8%	16.4	7.9	C
SB	Left Turn	11	12	105.5%	84.0	114.9	F
	Through						
	Right Turn	82	79	96.5%	73.0	108.4	F
	Subtotal	93	91	97.5%	74.9	109.1	F
EB	Left Turn	45	42	92.2%	7.5	2.7	A
	Through	581	566	97.5%	3.2	0.5	A
	Right Turn	100	99	98.9%	2.0	0.4	A
	Subtotal	726	707	97.4%	3.3	0.5	A
WB	Left Turn	10	8	83.0%	3.2	3.0	A
	Through	625	623	99.7%	8.4	11.2	A
	Right Turn	11	11	96.4%	6.2	11.8	A
	Subtotal	646	642	99.4%	8.3	11.0	A
Total		1,505	1,484	98.6%	11.1	12.5	B

Intersection 9 North Village Dwy 2-Rocklin Manor Central/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	18	91.5%	16.8	9.9	C
	Through						
	Right Turn						
	Subtotal	20	18	91.5%	16.8	9.9	C
SB	Left Turn	11	12	104.5%	13.7	7.8	B
	Through						
	Right Turn	127	118	93.1%	5.7	3.9	A
	Subtotal	138	130	94.1%	6.3	4.1	A
EB	Left Turn	39	34	87.9%	3.6	1.4	A
	Through	543	539	99.3%	1.1	0.3	A
	Right Turn	20	18	90.0%	0.6	0.5	A
	Subtotal	602	592	98.3%	1.2	0.3	A
WB	Left Turn	10	10	103.0%	3.2	3.3	A
	Through	499	504	101.0%	0.9	0.9	A
	Right Turn	3	4	123.3%	0.1	0.1	A
	Subtotal	512	518	101.1%	1.0	0.9	A
Total		1,272	1,258	98.9%	1.9	0.9	A

Intersection 10 Rocklin Manor East/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	10	98.0%	10.1	12.5	B
	Through						
	Right Turn						
	Subtotal	10	10	98.0%	10.1	12.5	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	544	537	98.7%	0.4	0.1	A
	Right Turn	10	11	114.0%	0.0	0.1	A
	Subtotal	554	549	99.0%	0.4	0.1	A
WB	Left Turn	10	10	104.0%	6.2	2.9	A
	Through	502	508	101.1%	2.6	0.3	A
	Right Turn						
	Subtotal	512	518	101.2%	2.7	0.3	A
Total		1,076	1,076	100.0%	1.6	0.1	A

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	426	433	101.7%	10.2	1.4	B
	Through	90	95	105.7%	10.3	0.5	B
	Right Turn						
	Subtotal	516	529	102.4%	10.2	1.2	B
SB	Left Turn						
	Through	50	46	92.8%	10.1	1.0	B
	Right Turn	81	77	94.9%	3.9	0.6	A
	Subtotal	131	123	94.1%	6.1	0.7	A
EB	Left Turn	85	86	101.2%	16.5	2.6	C
	Through						
	Right Turn	459	450	98.0%	13.7	3.2	B
	Subtotal	544	536	98.5%	14.1	3.0	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,191	1,137	99.7%	11.6	1.7	B

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	241	232	96.4%	47.6	6.2	D
	Through	964	953	98.9%	20.5	5.2	C
	Right Turn	80	76	95.0%	10.5	2.9	B
	Subtotal	1,285	1,261	98.2%	24.8	4.9	C
SB	Left Turn	60	58	96.0%	55.4	13.9	E
	Through	923	917	99.3%	40.3	16.9	D
	Right Turn	80	80	100.1%	18.7	16.5	B
	Subtotal	1,063	1,054	99.2%	39.3	16.5	D
EB	Left Turn	160	156	97.4%	37.4	5.7	D
	Through	30	30	100.3%	44.2	15.6	D
	Right Turn	272	275	101.0%	19.8	4.1	B
	Subtotal	462	461	99.7%	27.3	4.3	C
WB	Left Turn	110	110	99.6%	51.4	29.4	D
	Through	20	20	102.0%	48.2	16.7	D
	Right Turn	40	39	98.5%	14.2	5.1	B
	Subtotal	170	169	99.6%	43.1	19.7	D
Total		2,980	2,946	98.9%	31.6	9.1	C

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	296	289	97.7%	43.6	6.3	D
	Through	1,025	1,005	98.0%	18.7	2.3	B
	Right Turn	552	541	97.9%	8.4	0.8	A
	Subtotal	1,873	1,834	97.9%	19.6	2.2	B
SB	Left Turn						
	Through	1,305	1,292	99.0%	37.4	6.8	D
	Right Turn	60	60	100.5%	13.5	4.0	B
	Subtotal	1,365	1,352	99.0%	36.3	6.7	D
EB	Left Turn	60	60	99.5%	40.6	7.4	D
	Through						
	Right Turn	345	348	100.8%	21.6	3.1	C
	Subtotal	405	407	100.6%	24.2	2.1	C
WB	Left Turn	515	516	100.2%	32.1	2.2	C
	Through	110	120	108.8%	39.3	6.2	D
	Right Turn	240	238	99.3%	20.8	2.9	C
	Subtotal	865	874	101.1%	29.8	1.6	C
Total		4,508	4,458	99.1%	27.1	2.6	C

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,739	1,690	97.2%	21.1	4.5	C
	Right Turn	146	138	94.7%	10.4	3.2	B
	Subtotal	1,885	1,828	97.0%	20.2	4.3	C
SB	Left Turn	310	309	99.6%	48.0	3.5	D
	Through	955	951	99.6%	18.1	1.6	B
	Right Turn	340	339	99.6%	8.1	0.7	A
	Subtotal	1,605	1,598	99.6%	21.9	1.1	C
EB	Left Turn	400	393	98.3%	49.5	8.8	D
	Through	350	352	100.6%	44.8	3.8	D
	Right Turn	193	195	101.2%	25.0	4.5	C
	Subtotal	943	941	99.8%	42.9	3.4	D
WB	Left Turn	115	114	99.2%	47.9	7.4	D
	Through						
	Right Turn	310	311	100.3%	26.2	5.7	C
	Subtotal	425	425	100.0%	32.1	6.4	C
Total		4,858	4,792	98.6%	26.6	1.7	C

Intersection 15 **Sierra College Blvd/Schriber Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	11	114.0%	35.9	13.8	D
	Through	1,795	1,733	96.5%	6.7	1.7	A
	Right Turn	50	49	97.6%	5.5	3.2	A
	Subtotal	1,855	1,793	96.7%	6.8	1.7	A
SB	Left Turn						
	Through	1,233	1,228	99.6%	9.1	3.2	A
	Right Turn	30	31	102.7%	6.1	2.6	A
	Subtotal	1,263	1,258	99.6%	9.0	3.2	A
EB	Left Turn	40	41	101.5%	48.9	57.5	D
	Through	10	10	95.0%	43.1	27.5	D
	Right Turn	20	19	96.0%	12.4	7.9	B
	Subtotal	70	69	99.0%	36.0	35.4	D
WB	Left Turn	20	19	95.0%	30.2	10.9	C
	Through	10	12	116.0%	36.0	13.9	D
	Right Turn	50	53	106.8%	19.6	5.0	B
	Subtotal	80	84	105.0%	24.3	5.4	C
Total		3,268	3,205	98.1%	8.9	2.8	A

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	11	109.0%	45.4	18.0	D
	Through	1,825	1,767	96.8%	28.3	7.5	C
	Right Turn	60	61	101.8%	28.3	11.3	C
	Subtotal	1,895	1,839	97.0%	28.4	7.5	C
SB	Left Turn	50	46	91.6%	37.6	8.1	D
	Through	1,183	1,180	99.8%	7.4	1.6	A
	Right Turn	40	38	94.8%	2.5	0.4	A
	Subtotal	1,273	1,264	99.3%	8.4	1.4	A
EB	Left Turn	10	8	83.0%	31.1	18.8	C
	Through	10	11	114.0%	47.7	11.9	D
	Right Turn	10	10	104.0%	11.5	8.5	B
	Subtotal	30	30	100.3%	32.6	11.5	C
WB	Left Turn	60	65	108.0%	38.2	8.8	D
	Through	10	11	107.0%	39.6	16.3	D
	Right Turn	10	12	120.0%	11.6	6.4	B
	Subtotal	80	88	109.4%	34.7	7.0	C
Total		3,278	3,220	98.2%	20.5	4.7	C

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr-North Village Street A** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	234	220	94.2%	60.6	12.3	E
	Through	1,270	1,213	95.5%	37.1	4.0	D
	Right Turn	45	45	99.1%	36.2	11.3	D
	Subtotal	1,549	1,478	95.4%	40.5	4.4	D
SB	Left Turn	48	46	96.5%	79.9	15.2	E
	Through	990	992	100.2%	41.6	7.9	D
	Right Turn	220	226	102.9%	5.2	0.8	A
	Subtotal	1,258	1,265	100.5%	36.6	7.0	D
EB	Left Turn	600	598	99.6%	29.3	1.6	C
	Through						
	Right Turn	261	263	100.8%	22.3	2.3	C
	Subtotal	861	861	100.0%	27.2	1.7	C
WB	Left Turn	40	39	98.5%	60.2	14.0	E
	Through						
	Right Turn	25	28	110.8%	13.4	6.5	B
	Subtotal	65	67	103.2%	41.5	12.7	D
Total		3,733	3,670	98.3%	35.9	3.6	D

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,562	1,492	95.5%	0.7	0.1	A
	Right Turn						
	Subtotal	1,562	1,492	95.5%	0.7	0.1	A
SB	Left Turn						
	Through	1,239	1,245	100.5%	9.3	7.9	A
	Right Turn	40	38	95.5%	8.0	5.4	A
	Subtotal	1,279	1,283	100.3%	9.3	7.8	A
EB	Left Turn						
	Through						
	Right Turn	20	18	90.0%	7.7	5.2	A
	Subtotal	20	18	90.0%	7.7	5.2	A
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,861	2,793	97.6%	4.6	3.4	A

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	36	34	95.3%	61.7	43.4	E
	Through	1,194	1,159	97.1%	39.1	54.4	D
	Right Turn	30	32	106.3%	38.9	60.0	D
	Subtotal	1,260	1,225	97.2%	39.7	54.0	D
SB	Left Turn	130	130	100.3%	38.7	8.2	D
	Through	1,014	1,000	98.6%	8.9	2.0	A
	Right Turn	93	98	105.5%	9.4	2.2	A
	Subtotal	1,237	1,229	99.3%	12.2	1.7	B
EB	Left Turn	41	41	99.3%	37.9	16.5	D
	Through	10	9	91.0%	33.6	18.8	C
	Right Turn	28	29	103.9%	19.9	16.0	B
	Subtotal	79	79	99.9%	32.3	15.3	C
WB	Left Turn	20	18	90.0%	29.8	13.0	C
	Through	10	9	92.0%	31.4	15.6	C
	Right Turn	50	51	102.0%	15.0	7.1	B
	Subtotal	80	78	97.8%	19.6	5.2	B
Total		2,656	2,611	98.3%	26.1	26.5	C

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	239	233	97.7%	46.7	28.8	E
	Right Turn						
	Subtotal	239	233	97.7%	46.7	28.8	E
SB	Left Turn						
	Through	192	189	98.2%	0.6	0.1	A
	Right Turn	10	10	95.0%	0.3	0.2	A
	Subtotal	202	198	98.0%	0.6	0.1	A
EB	Left Turn						
	Through						
	Right Turn	10	9	94.0%	3.2	1.1	A
	Subtotal	10	9	94.0%	3.2	1.1	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		451	441	97.7%	24.1	14.7	C

Intersection 21 **El Don Dr/Southern Retail Access-South Village Dwy 2** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	7	68.0%	25.1	35.3	D
	Through	151	155	102.4%	51.4	50.5	F
	Right Turn	1	1	120.0%	8.6	25.2	A
	Subtotal	162	163	100.4%	50.5	49.4	F
SB	Left Turn	9	8	84.4%	35.5	82.8	E
	Through	183	182	99.5%	0.3	0.2	A
	Right Turn	10	9	87.0%	0.1	0.1	A
	Subtotal	202	198	98.2%	1.1	1.6	A
EB	Left Turn	40	36	90.0%	117.9	159.9	F
	Through						
	Right Turn	10	11	107.0%	120.4	216.2	F
	Subtotal	50	47	93.4%	114.1	160.3	F
WB	Left Turn	4	4	102.5%	34.4	100.8	D
	Through						
	Right Turn	48	45	94.6%	93.7	141.5	F
	Subtotal	52	50	95.2%	92.6	141.4	F
Total		466	457	98.1%	36.3	42.2	E

Intersection 22 **El Don Dr/Wildflower Ln-South Village Dwy 1** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	11	109.0%	44.8	121.5	E
	Through	120	121	101.0%	23.5	33.0	C
	Right Turn	1	1	100.0%	0.6	1.3	A
	Subtotal	131	133	101.6%	23.9	35.3	C
SB	Left Turn						
	Through	167	164	98.4%	6.4	0.5	A
	Right Turn	30	32	105.0%	4.2	0.4	A
	Subtotal	197	196	99.4%	6.1	0.6	A
EB	Left Turn	20	19	94.5%	23.0	53.1	C
	Through						
	Right Turn	10	11	114.0%	21.3	40.5	C
	Subtotal	30	30	101.0%	21.4	46.5	C
WB	Left Turn	3	1	40.0%	0.9	1.6	A
	Through						
	Right Turn	22	25	112.7%	17.0	22.5	C
	Subtotal	25	26	104.0%	16.2	21.3	C
Total		383	385	100.6%	15.4	19.4	C

Intersection 23 **El Don Dr/Corona Cir-South Village Street A** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	7	71.0%	1.2	0.7	A
	Through	114	116	102.1%	0.1	0.1	A
	Right Turn	3	4	120.0%	0.0	0.1	A
	Subtotal	127	127	100.1%	0.2	0.1	A
SB	Left Turn	13	12	89.2%	2.4	0.9	A
	Through	147	143	97.3%	1.8	0.3	A
	Right Turn	20	20	101.5%	1.8	0.6	A
	Subtotal	180	175	97.2%	1.9	0.3	A
EB	Left Turn	10	9	94.0%	3.7	3.1	A
	Through						
	Right Turn	10	11	106.0%	4.2	2.2	A
	Subtotal	20	20	100.0%	4.4	1.6	A
WB	Left Turn	2	2	90.0%	2.9	4.1	A
	Through						
	Right Turn	7	6	90.0%	2.3	1.3	A
	Subtotal	9	8	90.0%	3.1	1.5	A
Total		336	330	98.3%	1.4	0.3	A

Intersection 24 **Sierra College Blvd/Street G** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,500	1,431	95.4%	0.9	0.1	A
	Right Turn	62	61	97.9%	0.7	0.2	A
	Subtotal	1,562	1,492	95.5%	0.9	0.1	A
SB	Left Turn	36	35	98.3%	23.5	10.6	C
	Through	1,279	1,284	100.4%	7.9	5.4	A
	Right Turn						
	Subtotal	1,315	1,319	100.3%	8.3	5.4	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	49	48	97.3%	7.4	1.5	A
	Subtotal	49	48	97.3%	7.4	1.5	A
Total		2,926	2,859	97.7%	4.3	2.3	A

Intersection 25 **Sierra College Blvd/North Village Dwy 3** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,522	1,456	95.7%	3.7	0.2	A
	Right Turn	23	20	88.3%	2.7	0.8	A
	Subtotal	1,545	1,477	95.6%	3.6	0.2	A
SB	Left Turn	44	43	98.2%	25.1	11.8	D
	Through	1,215	1,217	100.1%	4.9	6.7	A
	Right Turn						
	Subtotal	1,259	1,260	100.1%	5.6	6.7	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	40	36	90.8%	7.8	2.3	A
	Subtotal	40	36	90.8%	7.8	2.3	A
Total		2,844	2,773	97.5%	4.5	2.9	A

Intersection 26 **South Village Dwy 3/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	32	29	89.1%	10.3	4.9	B
	Subtotal	32	29	89.1%	10.3	4.9	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	957	934	97.6%	3.8	0.4	A
	Right Turn	9	10	111.1%	2.6	1.5	A
	Subtotal	966	944	97.7%	3.8	0.4	A
WB	Left Turn						
	Through	1,002	894	89.2%	101.6	33.6	F
	Right Turn						
	Subtotal	1,002	894	89.2%	101.6	33.6	F
Total		2,000	1,866	93.3%	49.1	15.6	E

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Existing Plus Approved Plus Project Conditions
PM Peak Hour

Intersection 27 South Village Dwy 4/Rocklin Rd Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	80	83	103.1%	13.8	6.2	B
	Subtotal	80	83	103.1%	13.8	6.2	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	965	936	97.0%	2.2	0.3	A
	Right Turn	24	26	107.9%	1.3	0.6	A
	Subtotal	989	962	97.3%	2.2	0.3	A
WB	Left Turn						
	Through	1,002	925	92.4%	44.0	25.4	E
	Right Turn						
	Subtotal	1,002	925	92.4%	44.0	25.4	E
Total		2,071	1,970	95.1%	21.5	11.4	C

APPENDIX D: CUMULATIVE LOS CALCULATIONS

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
AM Peak Hour

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	20	18	90.5%	34.7	12.7	C
	Through	10	10	103.0%	34.9	17.5	C
	Right Turn	10	10	100.0%	9.1	9.2	A
	Subtotal	40	38	96.0%	28.8	9.0	C
SB	Left Turn	208	206	98.9%	29.0	3.6	C
	Through	10	11	110.0%	22.6	11.6	C
	Right Turn	160	162	101.1%	12.7	2.4	B
	Subtotal	378	378	100.1%	21.6	2.7	C
EB	Left Turn	190	193	101.5%	43.6	9.2	D
	Through	536	535	99.8%	10.2	1.6	B
	Right Turn	10	12	120.0%	4.6	3.2	A
	Subtotal	736	740	100.5%	18.3	3.3	B
WB	Left Turn	30	28	92.7%	51.0	10.9	D
	Through	1,170	1,115	95.3%	23.9	2.3	C
	Right Turn	572	558	97.5%	11.8	1.2	B
	Subtotal	1,772	1,701	96.0%	20.4	1.8	C
Total		2,926	2,857	97.6%	20.1	1.5	C

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	95	95	99.9%	58.4	39.2	E
	Through	10	11	114.0%	139.1	75.2	F
	Right Turn	440	433	98.4%	158.2	38.3	F
	Subtotal	545	539	98.9%	142.5	39.2	F
EB	Left Turn						
	Through	513	509	99.2%	37.3	4.0	D
	Right Turn	280	279	99.7%	10.0	1.8	A
	Subtotal	793	788	99.4%	27.8	3.4	C
WB	Left Turn	506	485	95.8%	24.9	8.6	C
	Through	1,434	1,365	95.2%	15.1	1.4	B
	Right Turn						
	Subtotal	1,940	1,850	95.4%	17.7	3.1	B
Total		3,278	3,178	96.9%	41.2	6.4	D

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
AM Peak Hour

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	780	741	94.9%	34.5	5.5	C
	Through	10	9	85.0%	48.1	24.5	D
	Right Turn	979	918	93.8%	30.2	5.0	C
	Subtotal	1,769	1,667	94.2%	32.2	5.2	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	90	89	98.4%	74.6	11.2	E
	Through	518	516	99.6%	9.2	1.2	A
	Right Turn						
	Subtotal	608	605	99.4%	18.2	2.2	B
WB	Left Turn						
	Through	1,160	1,115	96.2%	42.6	6.9	D
	Right Turn	93	92	98.5%	19.3	4.7	B
	Subtotal	1,253	1,207	96.3%	40.8	6.8	D
Total		3,630	3,479	95.8%	32.5	4.2	C

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	300	301	100.3%	34.1	3.5	C
	Through						
	Right Turn	78	80	102.7%	15.1	4.6	B
	Subtotal	378	381	100.8%	29.8	2.5	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	40	38	93.8%	55.2	9.1	E
	Through	1,298	1,250	96.3%	14.1	3.2	B
	Right Turn	170	166	97.8%	9.6	2.6	A
	Subtotal	1,508	1,454	96.4%	14.6	3.0	B
WB	Left Turn	43	39	91.2%	62.6	13.1	E
	Through	931	887	95.2%	19.0	6.5	B
	Right Turn						
	Subtotal	974	926	95.0%	21.0	6.2	C
Total		2,860	2,760	96.5%	19.0	3.1	B

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	260	258	99.3%	40.7	11.7	D
	Through	20	23	114.5%	34.6	16.9	C
	Right Turn	20	19	96.0%	21.7	12.7	C
	Subtotal	300	300	100.1%	39.0	12.3	D
SB	Left Turn	16	15	93.1%	35.4	19.9	D
	Through	10	11	109.0%	31.9	16.1	C
	Right Turn	89	95	106.3%	9.9	3.2	A
	Subtotal	115	120	104.7%	14.6	4.7	B
EB	Left Turn	526	512	97.4%	34.9	6.5	C
	Through	744	713	95.8%	25.1	2.2	C
	Right Turn	90	88	97.8%	15.4	3.0	B
	Subtotal	1,360	1,313	96.5%	28.4	3.0	C
WB	Left Turn	30	26	85.7%	41.9	8.7	D
	Through	599	549	91.6%	22.7	2.8	C
	Right Turn	149	135	90.5%	9.2	1.9	A
	Subtotal	778	709	91.2%	21.1	2.3	C
Total		2,553	2,443	95.7%	27.1	3.3	C

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	20	20	101.5%	27.9	13.7	C
	Through	10	12	120.0%	22.0	10.3	C
	Right Turn	20	20	101.5%	10.2	5.5	B
	Subtotal	50	53	105.2%	19.1	5.4	B
SB	Left Turn	38	38	100.5%	27.0	8.8	C
	Through	10	10	102.0%	26.7	17.6	C
	Right Turn	25	26	103.6%	5.8	1.7	A
	Subtotal	73	74	101.8%	20.1	7.2	C
EB	Left Turn	506	490	96.7%	25.8	4.7	C
	Through	509	484	95.1%	9.2	3.4	A
	Right Turn	10	11	107.0%	8.7	8.0	A
	Subtotal	1,025	984	96.0%	17.5	3.7	B
WB	Left Turn	20	17	83.0%	42.3	13.6	D
	Through	768	695	90.5%	19.5	3.5	B
	Right Turn	365	340	93.2%	12.9	1.3	B
	Subtotal	1,153	1,052	91.2%	17.7	2.4	B
Total		2,301	2,163	94.0%	17.8	2.8	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
AM Peak Hour

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	592	574	96.9%	160.2	43.4	F
	Through	1,441	1,416	98.2%	63.0	15.1	E
	Right Turn	90	92	102.7%	12.1	3.1	B
	Subtotal	2,123	2,082	98.1%	87.6	21.7	F
SB	Left Turn	171	116	67.7%	55.7	5.2	E
	Through	985	683	69.4%	40.4	5.2	D
	Right Turn	197	138	70.2%	19.8	3.7	B
	Subtotal	1,353	937	69.3%	39.5	4.1	D
EB	Left Turn	113	109	96.6%	47.8	6.6	D
	Through	172	162	94.0%	28.3	6.2	C
	Right Turn	282	274	97.3%	13.2	2.4	B
	Subtotal	567	545	96.2%	24.3	2.6	C
WB	Left Turn	110	107	96.8%	188.5	67.6	F
	Through	384	364	94.7%	186.8	58.2	F
	Right Turn	343	331	96.5%	203.3	59.0	F
	Subtotal	837	801	95.7%	194.0	59.6	F
Total		4,880	4,365	89.5%	90.4	17.0	F

Intersection 8 **Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	13	11	86.9%	149.2	91.2	F
	Through						
	Right Turn	1	2	150.0%	11.3	35.8	B
	Subtotal	14	13	91.4%	147.7	91.0	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	430	367	85.3%	2.6	0.3	A
	Right Turn	3	3	103.3%	0.8	0.9	A
	Subtotal	433	370	85.4%	2.5	0.3	A
WB	Left Turn						
	Through	824	796	96.6%	124.8	57.8	F
	Right Turn						
	Subtotal	824	796	96.6%	124.8	57.8	F
Total		1,271	1,178	92.7%	87.1	39.6	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
AM Peak Hour

Intersection 9 **Rocklin Manor Central/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	10	8	83.0%	176.7	214.4	F
	Through						
	Right Turn	1	1	120.0%	5.2	15.6	A
	Subtotal	11	10	86.4%	132.6	200.5	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	421	356	84.6%	0.9	0.1	A
	Right Turn	10	11	111.0%	0.1	0.1	A
	Subtotal	431	367	85.2%	0.9	0.1	A
WB	Left Turn						
	Through	814	799	98.2%	69.0	48.6	F
	Right Turn						
	Subtotal	814	799	98.2%	69.0	48.6	F
Total		1,256	1,176	93.6%	48.2	33.1	E

Intersection 10 **Rocklin Manor East/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	9	7	77.8%	80.4	124.6	F
	Through						
	Right Turn	2	2	120.0%	86.8	266.2	F
	Subtotal	11	9	85.5%	36.1	52.1	E
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	420	354	84.3%	0.2	0.1	A
	Right Turn	2	3	145.0%	0.0	0.0	A
	Subtotal	422	357	84.6%	0.2	0.1	A
WB	Left Turn	2	1	60.0%	11.4	35.5	B
	Through	805	800	99.4%	35.2	52.2	E
	Right Turn						
	Subtotal	807	801	99.3%	35.2	52.2	E
Total		1,240	1,168	94.2%	24.9	36.8	C

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	267	268	100.5%	7.7	1.6	A
	Through						
	Right Turn						
	Subtotal	267	268	100.5%	7.7	1.6	A
SB	Left Turn						
	Through						
	Right Turn	540	539	99.9%	11.8	1.9	B
	Subtotal	540	539	99.9%	11.8	1.9	B
EB	Left Turn	321	274	85.3%	11.4	2.3	B
	Through						
	Right Turn	101	84	83.3%	8.4	1.7	A
	Subtotal	422	358	84.8%	10.6	2.1	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,229	1,166	94.8%	10.5	1.4	B

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	405	283	69.8%	68.5	16.7	F
	Through	1,158	822	71.0%	31.4	9.6	C
	Right Turn	178	121	67.9%	27.8	9.4	C
	Subtotal	1,741	1,225	70.4%	39.6	11.1	D
SB	Left Turn	80	64	80.1%	367.9	62.5	F
	Through	1,347	1,152	85.6%	413.2	81.1	F
	Right Turn	140	119	85.0%	369.9	72.4	F
	Subtotal	1,567	1,336	85.2%	407.3	78.4	F
EB	Left Turn	90	85	94.2%	187.9	158.4	F
	Through	30	27	91.3%	140.3	169.3	F
	Right Turn	101	103	101.9%	94.8	61.1	F
	Subtotal	221	215	97.3%	141.1	121.8	F
WB	Left Turn	178	62	34.7%	1112.7	225.9	F
	Through	30	11	35.0%	932.7	151.3	F
	Right Turn	30	14	46.0%	954.2	305.4	F
	Subtotal	238	86	36.2%	925.0	348.6	F
Total		3,767	2,862	76.0%	239.5	22.8	F

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	119	89	74.5%	109.6	47.6	F
	Through	1,281	996	77.8%	20.2	18.4	C
	Right Turn	161	130	80.6%	9.3	11.2	A
	Subtotal	1,561	1,215	77.8%	26.2	19.0	C
SB	Left Turn						
	Through	1,577	1,256	79.7%	65.4	12.8	E
	Right Turn	100	83	83.4%	23.7	13.4	C
	Subtotal	1,677	1,340	79.9%	62.9	13.0	E
EB	Left Turn	50	46	92.6%	94.1	69.1	F
	Through						
	Right Turn	87	82	93.8%	78.8	67.6	E
	Subtotal	137	128	93.4%	86.9	63.6	F
WB	Left Turn	643	282	43.9%	1210.6	191.2	F
	Through	70	35	49.9%	1058.3	152.3	F
	Right Turn	440	201	45.6%	1014.5	139.1	F
	Subtotal	1,153	518	44.9%	1129.3	167.1	F
Total		4,528	3,200	70.7%	190.6	31.3	F

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,326	1,318	99.4%	28.7	4.5	C
	Right Turn	89	87	97.4%	7.5	1.8	A
	Subtotal	1,415	1,404	99.2%	27.5	4.3	C
SB	Left Turn	150	109	72.3%	199.8	21.6	F
	Through	1,656	1,085	65.5%	190.0	20.9	F
	Right Turn	150	94	62.9%	139.1	16.4	F
	Subtotal	1,956	1,288	65.8%	186.7	20.9	F
EB	Left Turn	640	310	48.5%	999.6	57.9	F
	Through	80	42	52.1%	1006.5	58.2	F
	Right Turn	844	395	46.8%	1061.6	67.7	F
	Subtotal	1,564	747	47.7%	1034.8	64.9	F
WB	Left Turn	157	116	74.1%	390.6	170.9	F
	Through	10	11	112.0%	301.1	161.8	F
	Right Turn	140	139	99.4%	272.0	152.9	F
	Subtotal	307	267	86.8%	324.2	160.4	F
Total		5,242	3,705	70.7%	289.1	15.5	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
AM Peak Hour

Intersection 15 **Sierra College Blvd/Schriber Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	116	114	98.6%	102.7	32.1	F
	Through	1,095	1,074	98.1%	10.9	5.5	B
	Right Turn	10	9	94.0%	7.2	11.1	A
	Subtotal	1,221	1,198	98.1%	19.9	5.9	B
SB	Left Turn						
	Through	2,387	1,435	60.1%	28.6	3.4	C
	Right Turn	270	156	57.7%	33.8	4.2	C
	Subtotal	2,657	1,591	59.9%	29.1	3.2	C
EB	Left Turn	230	242	105.4%	95.3	93.3	F
	Through	20	22	108.5%	58.3	33.6	E
	Right Turn	88	85	96.0%	64.5	74.1	E
	Subtotal	338	349	103.1%	86.7	87.7	F
WB	Left Turn						
	Through						
	Right Turn	90	92	102.0%	27.5	26.2	C
	Subtotal	90	92	102.0%	27.5	26.2	C
Total		4,306	3,229	75.0%	31.0	10.3	C

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	462	451	97.6%	76.2	34.9	F
	Through	1,091	1,069	98.0%	16.8	2.7	B
	Right Turn	59	55	93.1%	11.4	3.0	B
	Subtotal	1,612	1,575	97.7%	34.2	12.6	C
SB	Left Turn	110	67	60.6%	71.8	10.9	E
	Through	2,135	1,320	61.8%	20.1	1.7	C
	Right Turn	230	134	58.0%	18.8	3.2	B
	Subtotal	2,475	1,521	61.4%	22.1	1.8	C
EB	Left Turn	100	101	101.2%	56.2	13.5	E
	Through	20	24	117.5%	51.5	16.8	D
	Right Turn	186	191	102.7%	22.5	4.7	C
	Subtotal	306	316	103.2%	35.8	3.4	D
WB	Left Turn	96	104	107.8%	60.2	7.4	E
	Through	50	51	102.0%	51.7	6.7	D
	Right Turn	20	21	103.5%	13.6	5.1	B
	Subtotal	166	175	105.5%	52.0	5.9	D
Total		4,559	3,587	78.7%	30.1	5.9	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
AM Peak Hour

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	310	302	97.4%	37.3	6.2	D
	Through	1,557	1,523	97.8%	11.8	1.7	B
	Right Turn						
	Subtotal	1,867	1,825	97.7%	15.9	2.5	B
SB	Left Turn						
	Through	1,488	1,016	68.3%	14.9	2.1	B
	Right Turn	929	600	64.6%	16.3	0.8	B
	Subtotal	2,417	1,617	66.9%	15.4	1.4	B
EB	Left Turn	55	51	93.3%	26.5	4.3	C
	Through						
	Right Turn	34	38	111.5%	8.3	2.3	A
	Subtotal	89	89	100.2%	19.2	3.8	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		4,373	3,531	80.7%	15.8	1.4	B

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	1,867	1,829	97.9%	6.1	0.8	A
	Right Turn						
	Subtotal	1,867	1,829	97.9%	6.1	0.8	A
SB	Left Turn						
	Through	1,335	920	68.9%	4.6	0.8	A
	Right Turn	187	132	70.6%	4.4	1.3	A
	Subtotal	1,522	1,053	69.2%	4.6	0.8	A
EB	Left Turn						
	Through						
	Right Turn	18	19	103.9%	5.7	2.0	A
	Subtotal	18	19	103.9%	5.7	2.0	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		3,407	2,900	85.1%	5.6	0.6	A

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	25	21	82.8%	52.5	20.9	D
	Through	2,003	1,995	99.6%	33.4	13.1	C
	Right Turn	5	7	142.0%	3.5	4.5	A
	Subtotal	2,033	2,022	99.5%	33.5	13.1	C
SB	Left Turn	36	26	71.7%	30.1	10.1	C
	Through	1,366	1,068	78.2%	11.5	1.5	B
	Right Turn	25	20	78.8%	9.6	4.9	A
	Subtotal	1,427	1,113	78.0%	11.8	1.3	B
EB	Left Turn	54	52	95.7%	24.2	3.1	C
	Through	1	1	90.0%	1.8	4.1	A
	Right Turn	35	36	103.7%	11.7	4.1	B
	Subtotal	90	89	98.8%	18.6	2.2	B
WB	Left Turn	18	17	93.3%	26.9	9.9	C
	Through	1	1	140.0%	3.8	7.1	A
	Right Turn	44	45	102.5%	15.3	3.4	B
	Subtotal	63	63	100.5%	17.8	3.9	B
Total		3,613	3,288	91.0%	25.4	7.8	C

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	300	300	99.9%	9.4	7.4	A
	Right Turn						
	Subtotal	300	300	99.9%	9.4	7.4	A
SB	Left Turn						
	Through	110	106	96.0%	0.5	0.1	A
	Right Turn	10	12	115.0%	0.5	0.4	A
	Subtotal	120	117	97.6%	0.5	0.1	A
EB	Left Turn						
	Through						
	Right Turn	1	1	70.0%	0.9	1.4	A
	Subtotal	1	1	70.0%	0.9	1.4	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		421	418	99.2%	6.9	5.4	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
AM Peak Hour

Intersection 21 **El Don Dr/Southern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	3	3	86.7%	1.3	1.4	A
	Through	287	287	100.1%	2.7	1.9	A
	Right Turn						
	Subtotal	290	290	100.0%	2.7	1.9	A
SB	Left Turn						
	Through	110	104	94.6%	0.1	0.1	A
	Right Turn	1	2	160.0%	0.0	0.1	A
	Subtotal	111	106	95.2%	0.1	0.1	A
EB	Left Turn	13	12	93.1%	11.9	23.5	B
	Through						
	Right Turn	1	2	160.0%	0.7	1.5	A
	Subtotal	14	14	97.9%	12.1	23.3	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		415	409	98.6%	2.3	1.9	A

Intersection 22 **El Don Dr/Wildflower Ln** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	2	1	45.0%	0.4	1.3	A
	Through	275	275	100.1%	5.8	0.4	A
	Right Turn						
	Subtotal	277	276	99.7%	5.8	0.4	A
SB	Left Turn						
	Through	99	92	93.3%	5.8	0.4	A
	Right Turn	12	13	110.8%	3.7	0.4	A
	Subtotal	111	106	95.2%	5.5	0.4	A
EB	Left Turn	15	15	98.7%	4.3	1.0	A
	Through						
	Right Turn	5	5	102.0%	2.3	2.4	A
	Subtotal	20	20	99.5%	3.9	1.0	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		408	402	98.5%	5.7	0.2	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
AM Peak Hour

Intersection 23 **El Don Dr/Corona Cir** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	2	2	95.0%	0.5	0.8	A
	Through	268	267	99.6%	0.2	0.1	A
	Right Turn						
	Subtotal	270	269	99.6%	0.3	0.1	A
SB	Left Turn						
	Through	99	92	92.5%	1.4	0.2	A
	Right Turn	5	6	110.0%	1.1	1.1	A
	Subtotal	104	97	93.4%	1.4	0.2	A
EB	Left Turn	9	9	95.6%	4.5	1.9	A
	Through						
	Right Turn	3	3	106.7%	1.4	1.5	A
	Subtotal	12	12	98.3%	4.0	1.7	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		386	378	97.8%	0.7	0.2	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
PM Peak Hour

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	30	29	98.0%	60.1	24.8	E
	Through	20	16	80.5%	60.4	34.5	E
	Right Turn	10	10	100.0%	18.2	14.7	B
	Subtotal	60	56	92.5%	55.4	21.8	E
SB	Left Turn	745	730	98.0%	84.7	48.9	F
	Through	10	15	153.0%	96.4	65.1	F
	Right Turn	310	312	100.7%	32.5	30.5	C
	Subtotal	1,065	1,058	99.3%	69.9	43.6	E
EB	Left Turn	330	235	71.1%	541.9	50.2	F
	Through	1,200	917	76.4%	470.2	48.3	F
	Right Turn	10	8	79.0%	442.7	75.6	F
	Subtotal	1,540	1,159	75.3%	485.1	46.0	F
WB	Left Turn	40	35	86.8%	108.5	22.1	F
	Through	833	803	96.4%	59.5	22.9	E
	Right Turn	526	503	95.6%	34.3	20.1	C
	Subtotal	1,399	1,341	95.8%	51.1	22.1	D
Total		4,064	3,613	88.9%	195.8	23.9	F

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	100	94	94.3%	115.3	90.1	F
	Through	10	11	110.0%	178.3	107.7	F
	Right Turn	220	217	98.4%	186.9	131.4	F
	Subtotal	330	322	97.5%	164.0	113.3	F
EB	Left Turn						
	Through	1,185	981	82.8%	71.2	14.5	E
	Right Turn	840	692	82.4%	46.5	2.9	D
	Subtotal	2,025	1,674	82.6%	61.3	9.6	E
WB	Left Turn	671	578	86.1%	63.7	4.9	E
	Through	1,219	1,172	96.1%	17.1	13.2	B
	Right Turn						
	Subtotal	1,890	1,750	92.6%	32.4	10.2	C
Total		4,245	3,745	88.2%	55.7	14.4	E

SimTraffic Post-Processor | **Sierra Villages TIS**
Average Results from 10 Runs | **Cumulative No Project Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	510	506	99.2%	74.8	38.1	E
	Through	10	13	131.0%	76.6	44.1	E
	Right Turn	609	600	98.5%	60.9	39.5	E
	Subtotal	1,129	1,119	99.1%	67.5	38.6	E
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	340	272	80.0%	98.5	13.9	F
	Through	945	795	84.1%	22.6	10.0	C
	Right Turn						
	Subtotal	1,285	1,067	83.1%	42.2	9.9	D
WB	Left Turn						
	Through	1,380	1,253	90.8%	50.0	5.4	D
	Right Turn	163	153	94.1%	31.4	2.7	C
	Subtotal	1,543	1,406	91.1%	48.1	4.9	D
Total		3,957	3,593	90.8%	52.8	14.6	D

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	270	272	100.8%	62.2	16.8	F
	Through						
	Right Turn	75	74	98.4%	20.5	11.2	C
	Subtotal	345	346	100.3%	53.6	16.2	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	60	50	83.0%	122.8	61.9	F
	Through	1,174	1,065	90.7%	20.1	12.2	C
	Right Turn	320	275	86.1%	16.6	12.1	B
	Subtotal	1,554	1,391	89.5%	22.8	13.8	C
WB	Left Turn	76	66	86.7%	215.4	79.4	F
	Through	1,262	1,134	89.8%	117.3	41.6	F
	Right Turn						
	Subtotal	1,338	1,200	89.7%	121.8	42.0	F
Total		3,237	2,936	90.7%	65.4	23.5	E

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	170	167	98.1%	100.0	39.9	F
	Through	10	9	87.0%	66.1	35.2	E
	Right Turn	30	31	103.0%	58.1	36.9	E
	Subtotal	210	206	98.3%	93.3	39.1	F
SB	Left Turn	87	79	91.0%	172.3	123.8	F
	Through	20	21	106.0%	179.0	153.7	F
	Right Turn	360	338	93.8%	125.2	109.2	F
	Subtotal	467	438	93.8%	136.2	112.0	F
EB	Left Turn	244	225	92.0%	67.4	19.6	E
	Through	844	754	89.3%	38.3	17.0	D
	Right Turn	180	167	92.6%	33.7	15.1	C
	Subtotal	1,268	1,145	90.3%	42.8	15.1	D
WB	Left Turn	40	33	81.8%	150.1	116.5	F
	Through	800	717	89.6%	95.0	66.9	F
	Right Turn	50	42	83.8%	16.3	20.1	B
	Subtotal	890	792	88.9%	92.8	65.1	F
Total		2,835	2,581	91.0%	75.7	34.0	E

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	10	104.0%	16.2	12.1	B
	Through						
	Right Turn	10	11	108.0%	6.8	6.9	A
	Subtotal	20	21	106.0%	15.3	6.8	B
SB	Left Turn	314	309	98.5%	15.8	3.5	B
	Through						
	Right Turn	166	170	102.5%	4.0	0.8	A
	Subtotal	480	479	99.9%	11.8	2.4	B
EB	Left Turn	115	106	92.3%	29.4	7.2	C
	Through	827	740	89.4%	17.5	3.3	B
	Right Turn	20	21	102.5%	11.4	5.3	B
	Subtotal	962	866	90.1%	18.9	3.1	B
WB	Left Turn	10	7	71.0%	24.9	17.2	C
	Through	512	414	80.9%	16.4	4.8	B
	Right Turn	146	109	74.8%	5.5	1.3	A
	Subtotal	668	531	79.4%	14.4	4.0	B
Total		2,130	1,897	89.1%	15.8	2.4	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
PM Peak Hour

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	436	303	69.5%	258.6	15.3	F
	Through	1,958	1,281	65.4%	308.2	25.7	F
	Right Turn	220	143	65.0%	340.0	57.5	F
	Subtotal	2,614	1,727	66.0%	301.5	23.5	F
SB	Left Turn	354	286	80.7%	76.7	6.1	E
	Through	1,976	1,577	79.8%	44.9	6.3	D
	Right Turn	51	44	87.1%	26.4	5.1	C
	Subtotal	2,381	1,907	80.1%	49.1	5.0	D
EB	Left Turn	186	156	83.9%	267.1	127.5	F
	Through	478	427	89.4%	52.1	16.1	D
	Right Turn	487	446	91.5%	39.2	9.8	D
	Subtotal	1,151	1,029	89.4%	77.9	25.9	E
WB	Left Turn	60	64	107.0%	115.8	39.1	F
	Through	181	176	97.5%	122.4	57.9	F
	Right Turn	236	223	94.3%	198.0	84.9	F
	Subtotal	477	463	97.1%	155.3	64.6	F
Total		6,623	5,126	77.4%	137.6	10.5	F

Intersection 8 **Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	11	9	80.9%	91.7	119.7	F
	Through						
	Right Turn	1	1	120.0%	17.8	42.4	C
	Subtotal	12	10	84.2%	56.3	78.7	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,037	842	81.2%	5.5	0.5	A
	Right Turn	15	12	77.3%	3.7	2.6	A
	Subtotal	1,052	854	81.1%	5.5	0.5	A
WB	Left Turn						
	Through	466	468	100.4%	50.6	47.3	F
	Right Turn						
	Subtotal	466	468	100.4%	50.6	47.3	F
Total		1,530	1,332	87.0%	22.6	18.2	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
PM Peak Hour

Intersection 9 **Rocklin Manor Central/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	14	15	107.1%	45.3	68.1	E
	Through						
	Right Turn						
	Subtotal	14	15	107.1%	45.3	68.1	E
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,020	827	81.1%	1.9	0.6	A
	Right Turn	18	15	82.2%	0.1	0.2	A
	Subtotal	1,038	842	81.1%	1.9	0.6	A
WB	Left Turn	2	3	130.0%	10.3	19.7	B
	Through	452	461	102.0%	10.6	14.2	B
	Right Turn						
	Subtotal	454	464	102.2%	10.7	14.2	B
Total		1,506	1,321	87.7%	6.1	7.0	A

Intersection 10 **Rocklin Manor East/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	5	4	82.0%	10.6	15.7	B
	Through						
	Right Turn						
	Subtotal	5	4	82.0%	10.6	15.7	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,010	818	81.0%	0.5	0.1	A
	Right Turn	10	9	91.0%	0.1	0.1	A
	Subtotal	1,020	827	81.1%	0.5	0.1	A
WB	Left Turn	2	2	100.0%	5.6	14.5	A
	Through	449	462	102.9%	1.5	0.4	A
	Right Turn						
	Subtotal	451	464	102.8%	1.6	0.4	A
Total		1,476	1,295	87.7%	1.0	0.1	A

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	141	147	104.0%	4.6	0.6	A
	Through						
	Right Turn						
	Subtotal	141	147	104.0%	4.6	0.6	A
SB	Left Turn						
	Through						
	Right Turn	310	318	102.5%	5.0	0.5	A
	Subtotal	310	318	102.5%	5.0	0.5	A
EB	Left Turn	278	231	83.1%	49.7	28.6	E
	Through						
	Right Turn	732	585	79.9%	46.8	25.3	E
	Subtotal	1,010	816	80.8%	47.6	26.3	E
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,461	1,280	87.6%	32.2	17.2	D

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	183	119	65.2%	165.7	51.9	F
	Through	1,308	982	75.1%	58.7	18.6	E
	Right Turn	158	122	77.3%	52.6	18.0	D
	Subtotal	1,649	1,223	74.2%	70.6	22.9	E
SB	Left Turn	60	40	67.0%	667.2	68.7	F
	Through	1,802	1,115	61.9%	787.4	89.6	F
	Right Turn	120	64	53.2%	872.3	92.6	F
	Subtotal	1,982	1,219	61.5%	787.7	87.7	F
EB	Left Turn	340	302	88.8%	300.3	114.9	F
	Through	40	38	96.0%	250.0	75.7	F
	Right Turn	439	424	96.6%	206.7	89.5	F
	Subtotal	819	764	93.3%	242.8	86.9	F
WB	Left Turn	238	160	67.0%	682.1	200.7	F
	Through	20	14	72.0%	659.9	293.7	F
	Right Turn	40	26	66.0%	558.2	83.8	F
	Subtotal	298	200	67.2%	657.6	167.8	F
Total		4,748	3,407	71.8%	384.5	44.1	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
PM Peak Hour

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	294	213	72.4%	283.5	251.2	F
	Through	1,255	906	72.2%	198.2	218.6	F
	Right Turn	446	325	72.9%	140.4	169.3	F
	Subtotal	1,995	1,444	72.4%	197.6	209.2	F
SB	Left Turn						
	Through	2,359	1,627	69.0%	46.9	32.2	D
	Right Turn	170	106	62.3%	30.8	22.4	C
	Subtotal	2,529	1,733	68.5%	46.0	31.7	D
EB	Left Turn	130	78	60.0%	1036.8	452.1	F
	Through						
	Right Turn	361	290	80.3%	530.4	196.4	F
	Subtotal	491	368	74.9%	431.8	303.3	F
WB	Left Turn	580	534	92.0%	286.5	245.7	F
	Through	100	88	88.2%	361.4	279.2	F
	Right Turn	310	283	91.3%	308.8	281.3	F
	Subtotal	990	905	91.4%	303.1	264.5	F
Total		6,005	4,449	74.1%	164.4	86.9	F

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	2,514	1,628	64.8%	36.3	37.6	D
	Right Turn	92	52	56.7%	13.0	9.6	B
	Subtotal	2,606	1,680	64.5%	35.3	35.6	D
SB	Left Turn	270	212	78.7%	84.8	13.9	F
	Through	1,570	1,214	77.3%	22.6	7.5	C
	Right Turn	350	270	77.1%	9.7	1.7	A
	Subtotal	2,190	1,696	77.5%	28.2	6.4	C
EB	Left Turn	360	355	98.6%	107.5	94.5	F
	Through	170	171	100.4%	70.3	41.5	E
	Right Turn	198	200	101.0%	25.2	19.6	C
	Subtotal	728	726	99.7%	70.1	45.1	E
WB	Left Turn	214	211	98.8%	95.9	60.6	F
	Through	10	12	116.0%	103.9	72.1	F
	Right Turn	210	205	97.8%	75.2	49.0	E
	Subtotal	434	428	98.7%	85.9	53.1	F
Total		5,958	4,530	76.0%	42.8	24.2	D

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
PM Peak Hour

Intersection 15 **Sierra College Blvd/Schriber Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	98	68	69.5%	58.4	49.4	E
	Through	2,366	1,459	61.7%	18.2	13.3	B
	Right Turn	10	7	67.0%	15.7	17.3	B
	Subtotal	2,474	1,534	62.0%	19.7	12.8	B
SB	Left Turn						
	Through	1,742	1,436	82.4%	23.3	12.7	C
	Right Turn	240	194	80.6%	21.9	10.9	C
	Subtotal	1,982	1,629	82.2%	23.1	12.4	C
EB	Left Turn	220	205	93.2%	107.0	106.4	F
	Through	20	20	98.5%	110.6	121.4	F
	Right Turn	136	136	100.2%	63.6	75.5	E
	Subtotal	376	361	96.0%	89.2	93.6	F
WB	Left Turn						
	Through						
	Right Turn	20	20	97.5%	51.2	48.8	D
	Subtotal	20	20	97.5%	51.2	48.8	D
Total		4,852	3,543	73.0%	28.1	18.1	C

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	313	206	65.9%	69.4	8.2	F
	Through	2,284	1,356	59.4%	150.7	22.4	F
	Right Turn	184	95	51.5%	259.3	33.2	F
	Subtotal	2,781	1,657	59.6%	147.6	20.0	F
SB	Left Turn	90	75	82.9%	91.7	60.2	F
	Through	1,648	1,382	83.9%	31.3	7.8	C
	Right Turn	140	112	80.0%	28.5	8.2	C
	Subtotal	1,878	1,569	83.5%	34.5	9.9	C
EB	Left Turn	70	65	92.7%	141.9	50.5	F
	Through	110	103	93.8%	108.4	56.4	F
	Right Turn	631	610	96.7%	122.8	65.1	F
	Subtotal	811	778	95.9%	122.3	61.7	F
WB	Left Turn	101	101	100.4%	69.7	18.7	E
	Through	50	55	109.8%	40.9	13.8	D
	Right Turn	110	108	98.3%	33.2	28.3	C
	Subtotal	261	264	101.3%	46.8	10.6	D
Total		5,731	4,268	74.5%	95.2	15.7	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
PM Peak Hour

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	86	57	65.9%	231.3	23.0	F
	Through	2,274	1,481	65.1%	303.3	39.7	F
	Right Turn						
	Subtotal	2,360	1,538	65.2%	300.7	39.0	F
SB	Left Turn						
	Through	2,141	1,816	84.8%	156.5	51.3	F
	Right Turn	239	206	86.2%	120.1	54.6	F
	Subtotal	2,380	2,021	84.9%	152.8	51.6	F
EB	Left Turn	507	216	42.6%	825.6	65.1	F
	Through						
	Right Turn	219	93	42.5%	775.6	65.1	F
	Subtotal	726	309	42.5%	810.8	64.4	F
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		5,466	3,868	70.8%	257.0	30.2	F

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	2,360	1,596	67.6%	123.0	21.1	F
	Right Turn						
	Subtotal	2,360	1,596	67.6%	123.0	21.1	F
SB	Left Turn						
	Through	2,343	1,888	80.6%	9.8	0.5	A
	Right Turn	17	13	78.8%	6.4	3.8	A
	Subtotal	2,360	1,902	80.6%	9.8	0.5	A
EB	Left Turn						
	Through						
	Right Turn	38	35	91.8%	13.4	7.1	B
	Subtotal	38	35	91.8%	13.4	7.1	B
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		4,758	3,532	74.2%	55.8	5.2	F

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	26	20	76.2%	665.2	61.5	F
	Through	2,537	1,779	70.1%	681.1	36.8	F
	Right Turn	7	5	75.7%	632.4	149.1	F
	Subtotal	2,570	1,804	70.2%	680.8	36.9	F
SB	Left Turn	64	53	82.0%	51.5	15.6	D
	Through	2,402	1,978	82.4%	9.9	1.6	A
	Right Turn	77	64	82.7%	13.4	3.5	B
	Subtotal	2,543	2,095	82.4%	11.1	1.4	B
EB	Left Turn	33	33	99.4%	45.8	15.4	D
	Through	1	1	100.0%	21.0	30.2	C
	Right Turn	18	19	103.3%	27.0	18.7	C
	Subtotal	52	52	100.8%	41.2	14.6	D
WB	Left Turn	10	11	106.0%	53.9	29.2	D
	Through	1	1	60.0%	11.5	23.1	B
	Right Turn	21	22	104.3%	37.8	16.2	D
	Subtotal	32	33	103.4%	42.7	17.4	D
Total		5,197	3,984	76.7%	263.5	10.3	F

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	210	209	99.3%	38.6	30.3	E
	Right Turn						
	Subtotal	210	209	99.3%	38.6	30.3	E
SB	Left Turn						
	Through	223	204	91.4%	0.7	0.2	A
	Right Turn	7	7	100.0%	0.4	0.6	A
	Subtotal	230	211	91.7%	0.7	0.2	A
EB	Left Turn						
	Through						
	Right Turn	9	11	116.7%	3.1	1.1	A
	Subtotal	9	11	116.7%	3.1	1.1	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		449	430	95.7%	19.9	17.4	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
PM Peak Hour

Intersection 21 **El Don Dr/Southern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	3	3	86.7%	0.6	1.2	A
	Through	176	178	101.0%	15.5	18.4	C
	Right Turn						
	Subtotal	179	180	100.8%	15.5	18.4	C
SB	Left Turn						
	Through	230	211	91.9%	0.4	0.1	A
	Right Turn	2	3	125.0%	0.0	0.0	A
	Subtotal	232	214	92.2%	0.4	0.1	A
EB	Left Turn	34	33	96.8%	38.3	70.4	E
	Through						
	Right Turn	5	5	104.0%	27.0	77.4	D
	Subtotal	39	38	97.7%	37.6	70.7	E
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		450	432	96.1%	11.8	19.4	B

Intersection 22 **El Don Dr/Wildflower Ln** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	1	1	100.0%	30.8	93.3	D
	Through	170	172	101.4%	19.2	39.5	C
	Right Turn						
	Subtotal	171	173	101.4%	19.5	40.7	C
SB	Left Turn						
	Through	220	203	92.5%	6.7	0.5	A
	Right Turn	15	14	93.3%	4.9	1.1	A
	Subtotal	235	217	92.5%	6.5	0.5	A
EB	Left Turn	9	9	101.1%	5.0	2.9	A
	Through						
	Right Turn	3	3	106.7%	1.5	1.5	A
	Subtotal	12	12	102.5%	4.7	2.9	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		418	403	96.4%	11.7	15.9	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
PM Peak Hour

Intersection 23 **El Don Dr/Corona Cir** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	5	4	80.0%	1.4	1.5	A
	Through	162	166	102.2%	0.2	0.1	A
	Right Turn						
	Subtotal	167	170	101.6%	0.2	0.1	A
SB	Left Turn						
	Through	208	191	91.9%	1.6	0.2	A
	Right Turn	15	14	90.7%	1.2	0.7	A
	Subtotal	223	205	91.8%	1.6	0.2	A
EB	Left Turn	9	8	87.8%	4.9	1.5	A
	Through						
	Right Turn	3	2	76.7%	2.4	2.9	A
	Subtotal	12	10	85.0%	4.9	1.5	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		402	385	95.7%	1.1	0.1	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
AM Peak Hour

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	20	20	99.0%	34.9	9.0	C
	Through	10	12	117.0%	41.7	15.8	D
	Right Turn	10	11	113.0%	6.1	5.9	A
	Subtotal	40	43	107.0%	30.9	9.6	C
SB	Left Turn	213	208	97.6%	28.7	4.7	C
	Through	10	9	92.0%	22.8	14.1	C
	Right Turn	160	161	100.6%	12.9	2.0	B
	Subtotal	383	378	98.7%	22.0	3.1	C
EB	Left Turn	190	192	100.8%	57.8	24.3	E
	Through	608	611	100.4%	13.8	5.2	B
	Right Turn	10	12	119.0%	7.2	7.0	A
	Subtotal	808	814	100.7%	25.0	10.9	C
WB	Left Turn	30	28	93.3%	52.6	10.4	D
	Through	1,212	1,105	91.2%	24.5	4.3	C
	Right Turn	575	538	93.6%	12.4	2.1	B
	Subtotal	1,817	1,671	92.0%	21.1	3.6	C
Total		3,048	2,906	95.3%	22.4	5.2	C

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	111	113	101.7%	56.8	39.6	E
	Through	10	10	95.0%	128.7	76.3	F
	Right Turn	440	428	97.4%	120.8	64.6	F
	Subtotal	561	551	98.2%	109.1	58.7	F
EB	Left Turn						
	Through	590	589	99.8%	58.1	11.5	E
	Right Turn	280	280	99.9%	13.0	2.4	B
	Subtotal	870	868	99.8%	44.3	8.7	D
WB	Left Turn	570	511	89.7%	24.3	4.5	C
	Through	1,479	1,332	90.0%	14.4	2.4	B
	Right Turn						
	Subtotal	2,049	1,843	89.9%	17.3	1.5	B
Total		3,480	3,262	93.7%	38.6	10.9	D

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
AM Peak Hour

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	780	683	87.6%	65.9	10.6	E
	Through	10	8	83.0%	68.5	40.7	E
	Right Turn	1,112	975	87.7%	59.6	10.5	E
	Subtotal	1,902	1,666	87.6%	62.1	10.5	E
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	90	91	101.3%	96.4	34.9	F
	Through	611	611	100.0%	11.5	1.7	B
	Right Turn						
	Subtotal	701	702	100.2%	23.2	7.6	C
WB	Left Turn						
	Through	1,269	1,165	91.8%	42.0	5.4	D
	Right Turn	96	88	91.3%	21.9	4.0	C
	Subtotal	1,365	1,252	91.7%	40.6	5.3	D
Total		3,968	3,621	91.3%	46.0	3.7	D

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	300	289	96.2%	43.5	3.7	D
	Through						
	Right Turn	80	79	99.3%	16.9	5.6	B
	Subtotal	380	368	96.8%	37.8	2.7	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	40	38	95.5%	75.4	10.3	E
	Through	1,524	1,408	92.4%	11.5	2.5	B
	Right Turn	170	152	89.5%	7.4	2.4	A
	Subtotal	1,734	1,598	92.2%	12.3	2.4	B
WB	Left Turn	43	36	84.2%	76.0	13.3	E
	Through	1,043	942	90.3%	19.8	7.6	B
	Right Turn						
	Subtotal	1,086	979	90.1%	21.5	7.8	C
Total		3,200	2,944	92.0%	18.6	3.5	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
AM Peak Hour

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	282	282	100.0%	39.7	8.7	D
	Through	20	20	102.0%	36.1	11.1	D
	Right Turn	25	24	96.8%	19.9	7.2	B
	Subtotal	327	327	99.9%	38.0	8.1	D
SB	Left Turn	16	13	83.8%	32.2	8.4	C
	Through	10	10	103.0%	33.1	18.8	C
	Right Turn	89	87	97.9%	11.8	3.5	B
	Subtotal	115	111	96.3%	17.3	4.3	B
EB	Left Turn	526	497	94.5%	38.0	5.0	D
	Through	933	849	91.0%	31.6	3.8	C
	Right Turn	129	121	93.6%	22.6	4.1	C
	Subtotal	1,588	1,467	92.4%	33.1	3.8	C
WB	Left Turn	76	66	86.2%	39.2	8.6	D
	Through	689	582	84.5%	22.4	3.8	C
	Right Turn	149	126	84.2%	8.7	2.4	A
	Subtotal	914	773	84.6%	21.7	3.1	C
Total		2,944	2,678	91.0%	29.8	2.2	C

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	20	19	96.5%	15.8	11.3	B
	Through	10	11	108.0%	19.9	12.0	B
	Right Turn	20	22	110.0%	8.0	3.4	A
	Subtotal	50	52	104.2%	13.6	6.2	B
SB	Left Turn	40	40	100.0%	22.8	5.6	C
	Through	10	11	111.0%	24.9	13.3	C
	Right Turn	25	26	104.0%	5.5	2.1	A
	Subtotal	75	77	102.8%	18.1	4.1	B
EB	Left Turn	516	475	92.1%	26.7	7.4	C
	Through	626	589	94.2%	10.0	3.7	B
	Right Turn	10	9	91.0%	7.7	8.4	A
	Subtotal	1,152	1,074	93.2%	17.0	4.7	B
WB	Left Turn	20	17	82.5%	34.9	13.5	C
	Through	894	750	83.9%	18.1	5.0	B
	Right Turn	367	298	81.2%	11.3	2.3	B
	Subtotal	1,281	1,065	83.1%	16.5	4.1	B
Total		2,558	2,268	88.6%	16.7	4.2	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
AM Peak Hour

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	601	497	82.6%	226.6	14.1	F
	Through	1,463	1,326	90.7%	83.4	3.6	F
	Right Turn	136	126	92.4%	17.6	5.0	B
	Subtotal	2,200	1,949	88.6%	117.7	4.6	F
SB	Left Turn	211	151	71.7%	56.6	9.3	E
	Through	1,032	708	68.6%	39.0	4.7	D
	Right Turn	267	169	63.4%	23.5	3.9	C
	Subtotal	1,510	1,029	68.1%	39.3	4.0	D
EB	Left Turn	150	140	93.3%	48.3	6.7	D
	Through	250	238	95.0%	31.0	4.4	C
	Right Turn	286	276	96.3%	15.0	3.0	B
	Subtotal	686	653	95.2%	27.6	3.3	C
WB	Left Turn	133	127	95.6%	230.4	75.2	F
	Through	433	414	95.7%	162.7	43.5	F
	Right Turn	358	336	93.7%	178.3	46.4	F
	Subtotal	924	877	94.9%	179.4	41.7	F
Total		5,320	4,507	84.7%	98.4	6.5	F

Intersection 8 **Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	13	9	67.7%	380.4	214.1	F
	Through						
	Right Turn	1	1	100.0%	159.4	246.1	F
	Subtotal	14	10	70.0%	282.9	239.1	F
SB	Left Turn	6	3	53.3%	534.3	260.0	F
	Through						
	Right Turn	44	21	48.6%	601.2	134.6	F
	Subtotal	50	25	49.2%	602.6	141.6	F
EB	Left Turn	31	26	84.8%	18.3	11.6	C
	Through	563	484	86.0%	3.3	0.3	A
	Right Turn	3	3	83.3%	0.9	1.4	A
	Subtotal	597	513	85.9%	4.2	0.9	A
WB	Left Turn						
	Through	867	849	97.9%	93.8	55.6	F
	Right Turn	10	10	104.0%	132.6	87.0	F
	Subtotal	877	860	98.0%	94.1	55.7	F
Total		1,538	1,407	91.5%	70.6	32.0	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
AM Peak Hour

Intersection 9 **Rocklin Manor Central/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	10	8	81.0%	192.1	253.4	F
	Through						
	Right Turn	1	1	120.0%	152.1	279.4	F
	Subtotal	11	9	84.5%	114.1	165.6	F
SB	Left Turn	2	2	100.0%	51.4	61.5	F
	Through						
	Right Turn	25	24	94.4%	133.0	153.2	F
	Subtotal	27	26	94.8%	137.0	151.0	F
EB	Left Turn	121	102	84.0%	31.4	26.2	D
	Through	439	376	85.7%	3.4	4.5	A
	Right Turn	10	10	98.0%	0.1	0.1	A
	Subtotal	570	488	85.5%	9.3	8.6	A
WB	Left Turn						
	Through	842	837	99.4%	45.9	40.3	E
	Right Turn	10	9	88.0%	44.1	31.3	E
	Subtotal	852	846	99.2%	46.0	40.2	E
Total		1,460	1,368	93.7%	34.5	28.3	D

Intersection 10 **Rocklin Manor East/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	9	9	100.0%	83.5	136.4	F
	Through						
	Right Turn	2	3	150.0%	1.2	2.0	A
	Subtotal	11	12	109.1%	31.9	24.8	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	440	376	85.4%	0.2	0.1	A
	Right Turn	2	2	95.0%	0.0	0.0	A
	Subtotal	442	378	85.5%	0.2	0.1	A
WB	Left Turn	2	2	115.0%	10.9	24.0	B
	Through	843	845	100.2%	18.3	24.9	C
	Right Turn						
	Subtotal	845	847	100.2%	18.2	24.9	C
Total		1,298	1,237	95.3%	13.0	17.1	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
AM Peak Hour

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	301	300	99.5%	8.0	1.6	A
	Through						
	Right Turn						
	Subtotal	301	300	99.5%	8.0	1.6	A
SB	Left Turn						
	Through						
	Right Turn	544	551	101.4%	13.7	3.0	B
	Subtotal	544	551	101.4%	13.7	3.0	B
EB	Left Turn	322	279	86.6%	10.8	1.7	B
	Through						
	Right Turn	120	101	83.9%	8.9	1.9	A
	Subtotal	442	379	85.8%	10.3	1.7	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,287	1,230	95.6%	11.4	1.4	B

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	407	273	67.1%	75.9	23.8	F
	Through	1,183	784	66.2%	32.8	15.1	C
	Right Turn	178	116	64.9%	31.1	19.8	C
	Subtotal	1,768	1,172	66.3%	42.8	18.4	D
SB	Left Turn	80	70	87.1%	332.0	108.6	F
	Through	1,386	1,215	87.6%	359.7	108.7	F
	Right Turn	140	128	91.5%	318.8	103.4	F
	Subtotal	1,606	1,413	88.0%	355.1	108.0	F
EB	Left Turn	90	92	101.9%	126.4	32.7	F
	Through	30	26	87.7%	106.6	39.2	F
	Right Turn	102	101	98.6%	80.6	34.7	F
	Subtotal	222	219	98.5%	103.9	21.8	F
WB	Left Turn	178	79	44.2%	1062.9	135.7	F
	Through	30	16	52.3%	934.2	233.0	F
	Right Turn	30	15	48.7%	868.1	131.3	F
	Subtotal	238	109	45.8%	1013.3	118.1	F
Total		3,834	2,912	76.0%	237.6	59.6	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
AM Peak Hour

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	124	90	72.3%	85.5	37.4	F
	Through	1,308	989	75.6%	28.9	52.0	C
	Right Turn	201	153	76.2%	15.0	30.4	B
	Subtotal	1,633	1,232	75.4%	31.7	48.2	C
SB	Left Turn						
	Through	1,617	1,334	82.5%	56.7	6.8	E
	Right Turn	100	87	87.0%	17.3	3.4	B
	Subtotal	1,717	1,421	82.7%	54.2	6.7	D
EB	Left Turn	50	52	104.2%	85.6	106.6	F
	Through						
	Right Turn	92	89	97.1%	38.6	21.8	D
	Subtotal	142	141	99.6%	55.1	34.7	E
WB	Left Turn	690	217	31.4%	1537.6	290.1	F
	Through	70	24	34.0%	1330.6	270.8	F
	Right Turn	440	155	35.2%	1264.9	227.1	F
	Subtotal	1,200	396	33.0%	1443.1	283.6	F
Total		4,692	3,190	68.0%	149.0	37.2	F

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,433	1,351	94.3%	30.1	4.8	C
	Right Turn	94	92	97.6%	9.4	4.0	A
	Subtotal	1,527	1,443	94.5%	28.8	4.7	C
SB	Left Turn	150	103	68.4%	192.4	12.2	F
	Through	1,748	1,102	63.0%	177.8	16.8	F
	Right Turn	150	89	59.4%	132.9	13.7	F
	Subtotal	2,048	1,293	63.1%	175.3	16.1	F
EB	Left Turn	640	313	48.9%	1002.9	59.9	F
	Through	80	40	49.5%	1007.2	58.9	F
	Right Turn	864	398	46.1%	1063.1	66.7	F
	Subtotal	1,584	751	47.4%	1035.5	63.1	F
WB	Left Turn	162	118	73.0%	470.9	134.7	F
	Through	10	10	101.0%	393.0	132.9	F
	Right Turn	140	139	99.4%	371.8	137.6	F
	Subtotal	312	267	85.7%	418.0	137.7	F
Total		5,471	3,754	68.6%	294.9	15.8	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
AM Peak Hour

Intersection 15 **Sierra College Blvd/Schriber Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	116	106	91.1%	98.2	32.4	F
	Through	1,207	1,136	94.1%	12.4	4.9	B
	Right Turn	10	10	100.0%	19.4	20.0	B
	Subtotal	1,333	1,251	93.9%	20.8	5.5	C
SB	Left Turn						
	Through	2,504	1,457	58.2%	29.0	4.7	C
	Right Turn	270	149	55.3%	35.5	5.8	D
	Subtotal	2,774	1,607	57.9%	29.5	4.6	C
EB	Left Turn	230	223	96.9%	142.3	122.3	F
	Through	20	24	117.5%	157.8	149.5	F
	Right Turn	88	86	97.5%	108.7	113.0	F
	Subtotal	338	332	98.3%	135.4	121.1	F
WB	Left Turn						
	Through						
	Right Turn	90	87	96.9%	45.1	68.5	D
	Subtotal	90	87	96.9%	45.1	68.5	D
Total		4,535	3,277	72.3%	37.2	14.0	D

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	462	412	89.2%	58.3	9.9	F
	Through	1,203	1,126	93.6%	20.6	3.8	C
	Right Turn	59	57	96.4%	19.4	5.2	B
	Subtotal	1,724	1,595	92.5%	29.9	4.6	C
SB	Left Turn	110	63	57.2%	65.6	11.5	E
	Through	2,252	1,350	59.9%	18.9	2.2	B
	Right Turn	230	133	58.0%	18.6	4.2	B
	Subtotal	2,592	1,546	59.6%	20.5	2.3	C
EB	Left Turn	100	99	98.8%	60.8	13.5	E
	Through	20	21	105.0%	46.6	9.3	D
	Right Turn	186	190	102.3%	25.3	5.9	C
	Subtotal	306	310	101.3%	38.0	7.2	D
WB	Left Turn	96	97	100.6%	48.6	10.8	D
	Through	50	50	100.8%	49.1	9.9	D
	Right Turn	20	20	100.5%	14.9	7.5	B
	Subtotal	166	167	100.7%	45.3	7.5	D
Total		4,788	3,618	75.6%	27.4	3.0	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
AM Peak Hour

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	348	314	90.1%	49.6	6.2	D
	Through	1,628	1,500	92.1%	17.3	2.6	B
	Right Turn	13	13	101.5%	15.2	5.2	B
	Subtotal	1,989	1,827	91.9%	22.5	2.9	C
SB	Left Turn	14	8	57.9%	38.2	21.1	D
	Through	1,591	1,044	65.6%	19.4	1.8	B
	Right Turn	929	584	62.9%	16.3	1.5	B
	Subtotal	2,534	1,636	64.6%	18.4	1.4	B
EB	Left Turn	55	55	99.8%	36.2	9.8	D
	Through						
	Right Turn	36	38	105.3%	10.0	2.6	A
	Subtotal	91	93	102.0%	25.0	5.6	C
WB	Left Turn	66	67	101.8%	32.1	8.8	C
	Through						
	Right Turn	41	45	110.5%	14.0	5.1	B
	Subtotal	107	113	105.1%	24.9	5.5	C
Total		4,721	3,668	77.7%	20.9	1.7	C

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	1,931	1,766	91.5%	6.6	0.9	A
	Right Turn						
	Subtotal	1,931	1,766	91.5%	6.6	0.9	A
SB	Left Turn						
	Through	1,533	1,043	68.0%	5.8	0.7	A
	Right Turn	187	131	69.9%	5.5	0.6	A
	Subtotal	1,720	1,173	68.2%	5.8	0.7	A
EB	Left Turn						
	Through						
	Right Turn	18	19	102.8%	5.4	2.6	A
	Subtotal	18	19	102.8%	5.4	2.6	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		3,669	2,958	80.6%	6.3	0.6	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
AM Peak Hour

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	45	39	86.7%	176.7	30.3	F
	Through	2,077	1,887	90.9%	93.0	9.1	F
	Right Turn	5	4	86.0%	15.6	12.1	B
	Subtotal	2,127	1,931	90.8%	94.9	8.8	F
SB	Left Turn	36	26	72.8%	39.3	5.9	D
	Through	1,439	1,114	77.4%	12.1	1.7	B
	Right Turn	26	19	74.6%	9.9	4.3	A
	Subtotal	1,501	1,159	77.2%	12.7	1.6	B
EB	Left Turn	57	55	97.0%	30.2	13.3	C
	Through	1	1	80.0%	6.0	12.5	A
	Right Turn	39	38	97.9%	18.1	4.5	B
	Subtotal	97	94	97.2%	24.2	7.2	C
WB	Left Turn	18	17	91.7%	25.2	10.8	C
	Through	1	1	90.0%	4.5	11.6	A
	Right Turn	44	43	98.2%	16.5	4.8	B
	Subtotal	63	61	96.2%	19.5	5.8	B
Total		3,788	3,245	85.7%	61.0	4.8	E

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	327	328	100.2%	5.4	2.9	A
	Right Turn						
	Subtotal	327	328	100.2%	5.4	2.9	A
SB	Left Turn						
	Through	164	153	93.2%	0.6	0.1	A
	Right Turn	10	10	98.0%	0.7	1.0	A
	Subtotal	174	163	93.4%	0.6	0.1	A
EB	Left Turn						
	Through						
	Right Turn	1	1	60.0%	0.5	1.1	A
	Subtotal	1	1	60.0%	0.5	1.1	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		502	491	97.8%	3.9	2.0	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
AM Peak Hour

Intersection 21 **El Don Dr/Southern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	3	3	86.7%	1.9	2.2	A
	Through	304	306	100.8%	1.9	0.5	A
	Right Turn						
	Subtotal	307	309	100.7%	1.9	0.5	A
SB	Left Turn	50	45	90.0%	2.9	1.0	A
	Through	114	108	94.5%	0.1	0.1	A
	Right Turn	1	1	130.0%	0.0	0.0	A
	Subtotal	165	154	93.3%	0.9	0.4	A
EB	Left Turn	13	13	96.2%	6.3	1.9	A
	Through						
	Right Turn	1	2	150.0%	0.8	1.2	A
	Subtotal	14	14	100.0%	6.1	1.9	A
WB	Left Turn	1	1	70.0%	1.4	2.4	A
	Through						
	Right Turn	10	9	92.0%	5.3	5.8	A
	Subtotal	11	10	90.0%	5.3	4.7	A
Total		497	487	98.0%	1.8	0.6	A

Intersection 22 **El Don Dr/Wildflower Ln** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	2	2	100.0%	3.1	4.2	A
	Through	289	294	101.8%	6.2	0.3	A
	Right Turn	18	18	100.6%	4.0	1.1	A
	Subtotal	309	314	101.7%	6.1	0.4	A
SB	Left Turn						
	Through	104	96	92.4%	6.3	1.0	A
	Right Turn	12	13	110.0%	3.7	1.5	A
	Subtotal	116	109	94.2%	6.0	1.0	A
EB	Left Turn	15	13	86.0%	3.7	1.7	A
	Through						
	Right Turn	5	7	142.0%	1.9	1.4	A
	Subtotal	20	20	100.0%	3.5	0.5	A
WB	Left Turn	1	1	70.0%	0.3	0.9	A
	Through						
	Right Turn	3	4	116.7%	2.0	1.2	A
	Subtotal	4	4	105.0%	1.9	1.1	A
Total		449	448	99.7%	5.9	0.3	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
AM Peak Hour

Intersection 23 **El Don Dr/Corona Cir** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	2	2	90.0%	1.0	1.5	A
	Through	289	294	101.8%	0.3	0.1	A
	Right Turn	1	1	120.0%	0.1	0.4	A
	Subtotal	292	297	101.7%	0.3	0.1	A
SB	Left Turn	4	2	55.0%	1.9	2.3	A
	Through	101	95	94.5%	1.5	0.2	A
	Right Turn	5	6	124.0%	1.3	0.6	A
	Subtotal	110	104	94.4%	1.5	0.2	A
EB	Left Turn	9	7	81.1%	5.3	2.5	A
	Through						
	Right Turn	3	4	120.0%	3.5	2.1	A
	Subtotal	12	11	90.8%	5.6	1.5	A
WB	Left Turn	3	2	66.7%	3.6	6.7	A
	Through						
	Right Turn	11	12	105.5%	4.3	2.2	A
	Subtotal	14	14	97.1%	5.0	3.7	A
Total		428	425	99.4%	0.9	0.2	A

Intersection 24 **Sierra College Blvd/Street G** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	1,910	1,744	91.3%	7.0	0.9	A
	Right Turn	21	20	96.7%	6.7	0.9	A
	Subtotal	1,931	1,765	91.4%	7.0	0.9	A
SB	Left Turn	11	8	68.2%	15.6	9.7	C
	Through	1,720	1,173	68.2%	5.3	0.6	A
	Right Turn						
	Subtotal	1,731	1,180	68.2%	5.4	0.7	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	79	75	94.9%	18.4	6.1	C
	Subtotal	79	75	94.9%	18.4	6.1	C
Total		3,741	3,020	80.7%	6.7	0.7	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
AM Peak Hour

Intersection 25 **Sierra College Blvd/North Village Dwy 3** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	1,919	1,754	91.4%	5.1	0.5	A
	Right Turn	22	21	93.2%	3.0	0.8	A
	Subtotal	1,941	1,775	91.4%	5.1	0.5	A
SB	Left Turn	41	27	64.9%	19.6	4.9	C
	Through	1,510	1,033	68.4%	7.5	0.7	A
	Right Turn						
	Subtotal	1,551	1,060	68.3%	7.9	0.8	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	12	13	108.3%	7.9	5.0	A
	Subtotal	12	13	108.3%	7.9	5.0	A
Total		3,504	2,847	81.3%	6.2	0.3	A

Intersection 26 **South Village Dwy 3/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn	3	3	93.3%	2.6	3.0	A
	Subtotal	3	3	93.3%	2.6	3.0	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,208	1,123	92.9%	0.3	0.1	A
	Right Turn	42	40	95.2%	0.1	0.1	A
	Subtotal	1,250	1,163	93.0%	0.3	0.1	A
WB	Left Turn						
	Through	949	805	84.8%	3.9	0.3	A
	Right Turn						
	Subtotal	949	805	84.8%	3.9	0.3	A
Total		2,202	1,971	89.5%	1.8	0.2	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
AM Peak Hour

Intersection 27 **South Village Dwy 4/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn	17	17	97.1%	7.0	4.4	A
	Subtotal	17	17	97.1%	7.0	4.4	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,135	1,057	93.2%	1.4	0.2	A
	Right Turn	76	69	91.3%	1.1	0.4	A
	Subtotal	1,211	1,127	93.0%	1.4	0.2	A
WB	Left Turn						
	Through	949	805	84.8%	2.9	0.2	A
	Right Turn						
	Subtotal	949	805	84.8%	2.9	0.2	A
Total		2,177	1,948	89.5%	2.1	0.2	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	30	27	90.0%	76.9	31.8	E
	Through	20	23	116.5%	87.6	27.8	F
	Right Turn	10	10	100.0%	61.5	49.7	E
	Subtotal	60	60	100.5%	76.8	24.6	E
SB	Left Turn	749	719	96.0%	150.3	66.5	F
	Through	10	15	146.0%	156.1	66.9	F
	Right Turn	310	304	98.1%	74.8	58.1	E
	Subtotal	1,069	1,038	97.1%	128.1	63.9	F
EB	Left Turn	330	210	63.5%	591.4	38.6	F
	Through	1,252	815	65.1%	520.8	32.3	F
	Right Turn	10	6	58.0%	485.3	62.7	F
	Subtotal	1,592	1,030	64.7%	535.7	32.4	F
WB	Left Turn	40	34	85.0%	127.5	22.3	F
	Through	925	822	88.9%	71.3	13.7	E
	Right Turn	531	471	88.7%	44.6	14.6	D
	Subtotal	1,496	1,327	88.7%	63.5	13.8	E
Total		4,217	3,456	81.9%	222.9	18.9	F

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	105	100	95.6%	125.9	93.1	F
	Through	10	12	117.0%	145.5	148.5	F
	Right Turn	220	195	88.4%	183.4	131.8	F
	Subtotal	335	307	91.5%	165.0	118.9	F
EB	Left Turn						
	Through	1,241	920	74.1%	77.6	10.8	E
	Right Turn	840	632	75.2%	49.9	3.6	D
	Subtotal	2,081	1,552	74.6%	66.5	7.1	E
WB	Left Turn	803	620	77.2%	56.6	4.9	E
	Through	1,316	1,185	90.0%	19.0	11.3	B
	Right Turn						
	Subtotal	2,119	1,805	85.2%	32.1	7.7	C
Total		4,535	3,663	80.8%	57.3	11.6	E

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	510	484	95.0%	240.6	51.1	F
	Through	10	14	141.0%	241.4	74.7	F
	Right Turn	689	643	93.4%	218.3	47.0	F
	Subtotal	1,209	1,142	94.4%	228.3	48.7	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	340	238	69.9%	106.9	17.0	F
	Through	1,006	772	76.7%	23.8	7.5	C
	Right Turn						
	Subtotal	1,346	1,009	75.0%	44.3	9.4	D
WB	Left Turn						
	Through	1,609	1,331	82.7%	43.3	6.6	D
	Right Turn	171	146	85.4%	23.5	3.1	C
	Subtotal	1,780	1,477	82.9%	41.5	6.3	D
Total		4,335	3,628	83.7%	101.2	14.0	F

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	270	247	91.5%	231.8	121.3	F
	Through						
	Right Turn	76	73	96.6%	177.7	136.9	F
	Subtotal	346	321	92.6%	219.8	124.6	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	60	48	79.3%	147.8	41.6	F
	Through	1,315	1,095	83.3%	29.4	5.3	C
	Right Turn	320	271	84.7%	24.0	4.6	C
	Subtotal	1,695	1,414	83.4%	32.6	6.4	C
WB	Left Turn	78	53	67.9%	262.6	37.4	F
	Through	1,499	1,230	82.0%	124.4	17.7	F
	Right Turn						
	Subtotal	1,577	1,283	81.4%	129.6	18.5	F
Total		3,618	3,017	83.4%	91.3	18.1	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	241	205	85.1%	222.7	76.8	F
	Through	10	9	92.0%	170.9	65.8	F
	Right Turn	38	31	81.1%	177.8	69.3	F
	Subtotal	289	245	84.8%	215.8	76.2	F
SB	Left Turn	87	74	85.2%	273.3	117.8	F
	Through	20	16	82.0%	270.6	126.4	F
	Right Turn	360	299	83.1%	215.6	108.7	F
	Subtotal	467	390	83.4%	228.4	108.4	F
EB	Left Turn	244	198	81.0%	37.8	7.5	D
	Through	968	807	83.3%	29.7	2.6	C
	Right Turn	198	168	85.1%	28.2	4.8	C
	Subtotal	1,410	1,173	83.2%	30.8	2.6	C
WB	Left Turn	54	43	79.3%	215.5	134.6	F
	Through	968	801	82.7%	178.4	116.2	F
	Right Turn	50	43	86.8%	96.0	86.0	F
	Subtotal	1,072	887	82.7%	175.6	115.0	F
Total		3,238	2,694	83.2%	116.9	48.6	F

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	12	117.0%	20.7	11.8	C
	Through						
	Right Turn	10	10	102.0%	5.6	5.3	A
	Subtotal	20	22	109.5%	15.9	8.9	B
SB	Left Turn	315	306	97.0%	23.0	7.9	C
	Through						
	Right Turn	166	159	95.5%	18.0	41.8	B
	Subtotal	481	464	96.5%	20.2	14.7	C
EB	Left Turn	159	129	81.3%	38.4	11.4	D
	Through	1,005	841	83.7%	35.0	23.7	C
	Right Turn	20	18	88.5%	20.2	15.0	C
	Subtotal	1,184	988	83.5%	35.1	21.7	D
WB	Left Turn	10	8	80.0%	44.0	37.9	D
	Through	650	532	81.8%	32.9	36.4	C
	Right Turn	151	125	83.0%	8.5	5.0	A
	Subtotal	811	665	82.0%	28.6	29.7	C
Total		2,496	2,140	85.7%	30.3	16.0	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	440	353	80.3%	233.1	45.8	F
	Through	2,013	1,516	75.3%	256.9	63.2	F
	Right Turn	256	182	71.2%	255.9	63.2	F
	Subtotal	2,709	2,052	75.7%	252.8	59.9	F
SB	Left Turn	370	306	82.6%	111.2	36.5	F
	Through	2,005	1,641	81.9%	53.2	17.4	D
	Right Turn	86	71	82.0%	36.8	12.2	D
	Subtotal	2,461	2,017	82.0%	62.0	18.4	E
EB	Left Turn	284	222	78.0%	259.4	100.0	F
	Through	532	449	84.4%	73.9	20.2	E
	Right Turn	514	454	88.4%	45.6	14.0	D
	Subtotal	1,330	1,125	84.6%	93.3	25.3	F
WB	Left Turn	126	112	89.0%	223.2	96.0	F
	Through	285	248	87.1%	235.2	77.5	F
	Right Turn	288	242	84.2%	326.7	107.8	F
	Subtotal	699	603	86.3%	269.3	89.5	F
Total		7,199	5,797	80.5%	148.5	14.7	F

Intersection 8 **Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	11	8	71.8%	457.4	378.8	F
	Through						
	Right Turn	1	2	190.0%	57.5	174.3	F
	Subtotal	12	10	81.7%	115.3	244.6	F
SB	Left Turn	11	7	66.4%	544.5	191.3	F
	Through						
	Right Turn	82	54	65.5%	503.9	169.6	F
	Subtotal	93	61	65.6%	461.6	230.5	F
EB	Left Turn	45	38	85.3%	11.4	5.0	B
	Through	1,098	888	80.8%	6.7	0.8	A
	Right Turn	15	12	78.7%	3.1	1.9	A
	Subtotal	1,158	938	81.0%	6.8	0.8	A
WB	Left Turn						
	Through	606	547	90.3%	143.5	66.7	F
	Right Turn	11	10	89.1%	181.0	90.0	F
	Subtotal	617	557	90.2%	144.7	67.4	F
Total		1,880	1,566	83.3%	59.0	19.5	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 9 **Rocklin Manor Central/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	14	12	86.4%	213.9	218.0	F
	Through						
	Right Turn						
	Subtotal	14	12	86.4%	168.4	209.3	F
SB	Left Turn	11	9	82.7%	348.6	163.4	F
	Through						
	Right Turn	127	101	79.4%	342.0	152.7	F
	Subtotal	138	110	79.6%	341.1	154.6	F
EB	Left Turn	39	29	73.1%	6.2	3.2	A
	Through	1,053	853	81.0%	2.8	0.9	A
	Right Turn	18	15	81.7%	0.4	0.4	A
	Subtotal	1,110	897	80.8%	2.8	0.9	A
WB	Left Turn	2	1	65.0%	9.0	11.8	A
	Through	476	456	95.8%	53.8	41.2	F
	Right Turn	3	4	133.3%	93.6	98.4	F
	Subtotal	481	461	95.9%	54.1	40.9	F
Total		1,743	1,480	84.9%	34.9	11.4	D

Intersection 10 **Rocklin Manor East/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	5	5	104.0%	52.0	49.2	F
	Through						
	Right Turn						
	Subtotal	5	5	104.0%	35.8	39.2	E
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,054	855	81.1%	0.8	0.2	A
	Right Turn	10	8	84.0%	0.0	0.1	A
	Subtotal	1,064	863	81.1%	0.8	0.2	A
WB	Left Turn	2	1	60.0%	6.8	21.5	A
	Through	476	465	97.7%	12.4	17.3	B
	Right Turn						
	Subtotal	478	466	97.5%	12.4	17.3	B
Total		1,547	1,334	86.3%	5.4	6.9	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	167	165	98.8%	4.7	0.7	A
	Through						
	Right Turn						
	Subtotal	167	165	98.8%	4.7	0.7	A
SB	Left Turn						
	Through						
	Right Turn	311	304	97.7%	4.5	0.4	A
	Subtotal	311	304	97.7%	4.5	0.4	A
EB	Left Turn	283	229	81.0%	77.2	47.6	F
	Through						
	Right Turn	771	614	79.6%	75.1	48.9	F
	Subtotal	1,054	843	80.0%	75.6	48.4	F
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,532	1,312	85.6%	51.7	33.2	F

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	184	117	63.4%	343.1	469.4	F
	Through	1,362	1,035	76.0%	131.7	225.0	F
	Right Turn	158	119	75.6%	129.0	227.0	F
	Subtotal	1,704	1,271	74.6%	143.9	221.4	F
SB	Left Turn	60	44	73.8%	565.1	89.8	F
	Through	1,845	1,235	67.0%	741.9	293.9	F
	Right Turn	120	72	59.6%	813.6	284.0	F
	Subtotal	2,025	1,351	66.7%	590.7	236.6	F
EB	Left Turn	340	201	59.1%	714.5	525.8	F
	Through	40	28	69.5%	681.6	540.0	F
	Right Turn	441	327	74.2%	532.8	465.7	F
	Subtotal	821	556	67.7%	414.6	289.3	F
WB	Left Turn	238	74	31.3%	1151.8	506.2	F
	Through	20	6	27.5%	920.7	521.0	F
	Right Turn	40	13	32.3%	1016.9	507.3	F
	Subtotal	298	93	31.1%	642.1	572.5	F
Total		4,848	3,271	67.5%	344.4	146.1	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	300	212	70.5%	513.9	774.0	F
	Through	1,310	973	74.3%	423.8	806.4	F
	Right Turn	478	360	75.3%	282.6	539.4	F
	Subtotal	2,088	1,545	74.0%	153.0	112.0	F
SB	Left Turn						
	Through	2,404	1,565	65.1%	228.7	553.2	F
	Right Turn	170	108	63.4%	117.8	275.1	F
	Subtotal	2,574	1,673	65.0%	47.3	37.4	D
EB	Left Turn	130	85	65.7%	923.1	610.0	F
	Through						
	Right Turn	366	289	78.8%	584.3	484.1	F
	Subtotal	496	374	75.4%	373.8	381.2	F
WB	Left Turn	625	523	83.7%	523.4	496.3	F
	Through	100	79	79.0%	747.1	769.8	F
	Right Turn	310	252	81.3%	654.9	729.6	F
	Subtotal	1,035	854	82.5%	412.7	467.6	F
Total		6,193	4,445	71.8%	141.4	82.8	F

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	2,673	1,877	70.2%	71.0	125.9	E
	Right Turn	98	59	60.6%	11.8	2.2	B
	Subtotal	2,771	1,936	69.9%	67.8	117.9	E
SB	Left Turn	270	202	74.6%	79.9	12.3	E
	Through	1,665	1,202	72.2%	19.0	3.9	B
	Right Turn	350	258	73.6%	9.0	2.5	A
	Subtotal	2,285	1,661	72.7%	24.2	4.0	C
EB	Left Turn	360	343	95.3%	185.8	295.8	F
	Through	170	172	101.0%	93.5	87.3	F
	Right Turn	241	242	100.2%	57.4	81.1	E
	Subtotal	771	756	98.1%	95.1	106.5	F
WB	Left Turn	219	217	98.9%	125.0	169.4	F
	Through	10	12	121.0%	112.4	157.6	F
	Right Turn	210	199	94.5%	184.2	392.8	F
	Subtotal	439	427	97.3%	122.9	179.9	F
Total		6,266	4,781	76.3%	61.9	80.6	E

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 15 **Sierra College Blvd/Schriber Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	98	69	70.5%	55.3	18.9	E
	Through	2,531	1,708	67.5%	36.6	51.7	D
	Right Turn	10	6	63.0%	25.4	23.9	C
	Subtotal	2,639	1,783	67.6%	37.2	50.0	D
SB	Left Turn						
	Through	1,885	1,466	77.8%	20.8	5.3	C
	Right Turn	240	201	83.6%	18.6	9.2	B
	Subtotal	2,125	1,667	78.4%	20.5	5.8	C
EB	Left Turn	220	214	97.1%	98.8	147.5	F
	Through	20	20	102.0%	141.7	233.3	F
	Right Turn	136	137	100.8%	41.4	55.9	D
	Subtotal	376	371	98.7%	71.9	95.3	E
WB	Left Turn						
	Through						
	Right Turn	20	22	109.5%	36.9	18.7	D
	Subtotal	20	22	109.5%	36.9	18.7	D
Total		5,160	3,843	74.5%	32.9	30.4	C

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	313	220	70.2%	62.8	16.9	F
	Through	2,449	1,597	65.2%	144.5	82.3	F
	Right Turn	184	106	57.6%	238.1	110.1	F
	Subtotal	2,946	1,923	65.3%	137.3	65.8	F
SB	Left Turn	90	74	81.8%	64.0	17.4	E
	Through	1,791	1,413	78.9%	20.8	4.5	C
	Right Turn	140	116	82.5%	7.6	2.6	A
	Subtotal	2,021	1,602	79.3%	21.8	4.6	C
EB	Left Turn	70	66	94.1%	133.9	120.0	F
	Through	110	112	101.7%	75.9	67.6	E
	Right Turn	631	634	100.5%	21.6	7.9	C
	Subtotal	811	812	100.1%	35.8	16.9	D
WB	Left Turn	101	97	96.2%	63.7	40.1	E
	Through	50	50	99.6%	73.5	91.0	E
	Right Turn	110	113	103.1%	86.0	146.3	F
	Subtotal	261	260	99.8%	67.0	69.9	E
Total		6,039	4,597	76.1%	73.1	29.5	E

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	110	84	76.4%	251.7	68.0	F
	Through	2,414	1,739	72.1%	273.1	102.8	F
	Right Turn	45	31	67.8%	302.0	114.8	F
	Subtotal	2,569	1,854	72.2%	272.5	100.5	F
SB	Left Turn	48	39	81.9%	102.8	60.9	F
	Through	2,236	1,905	85.2%	41.3	9.4	D
	Right Turn	239	203	84.9%	16.8	7.7	B
	Subtotal	2,523	2,147	85.1%	40.0	9.0	D
EB	Left Turn	507	218	42.9%	909.2	229.5	F
	Through						
	Right Turn	220	99	45.0%	814.7	173.3	F
	Subtotal	727	317	43.5%	872.6	195.9	F
WB	Left Turn	40	39	96.3%	95.3	62.2	F
	Through						
	Right Turn	25	26	102.8%	116.1	130.4	F
	Subtotal	65	64	98.8%	113.6	107.3	F
Total		5,884	4,382	74.5%	184.4	25.5	F

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	2,582	1,942	75.2%	91.2	43.0	F
	Right Turn						
	Subtotal	2,582	1,942	75.2%	91.2	43.0	F
SB	Left Turn						
	Through	2,467	2,018	81.8%	11.2	4.6	B
	Right Turn	17	15	90.6%	10.4	4.1	B
	Subtotal	2,484	2,033	81.9%	11.2	4.6	B
EB	Left Turn						
	Through						
	Right Turn	38	37	97.6%	32.8	41.1	D
	Subtotal	38	37	97.6%	32.8	41.1	D
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		5,104	4,012	78.6%	47.6	14.3	E

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	32	25	79.4%	493.4	43.6	F
	Through	2,631	2,102	79.9%	498.3	55.8	F
	Right Turn	7	5	77.1%	552.0	137.1	F
	Subtotal	2,670	2,133	79.9%	498.4	55.8	F
SB	Left Turn	64	54	83.8%	56.5	17.3	E
	Through	2,521	2,104	83.5%	10.4	1.1	B
	Right Turn	80	69	86.4%	13.3	3.7	B
	Subtotal	2,665	2,227	83.6%	11.5	1.2	B
EB	Left Turn	34	38	110.3%	54.8	18.4	D
	Through	1	1	90.0%	0.0	0.0	A
	Right Turn	26	26	100.8%	26.0	10.5	C
	Subtotal	61	65	105.9%	44.2	12.8	D
WB	Left Turn	10	10	98.0%	36.2	19.8	D
	Through	1	1	90.0%	7.2	16.6	A
	Right Turn	21	22	102.9%	27.1	13.0	C
	Subtotal	32	32	100.9%	33.1	8.7	C
Total		5,428	4,457	82.1%	223.4	12.5	F

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	289	249	86.2%	120.3	51.9	F
	Right Turn						
	Subtotal	289	249	86.2%	120.3	51.9	F
SB	Left Turn						
	Through	245	204	83.1%	1.1	1.2	A
	Right Turn	7	7	95.7%	1.9	5.5	A
	Subtotal	252	210	83.5%	1.2	1.4	A
EB	Left Turn						
	Through						
	Right Turn	9	8	85.6%	2.6	1.3	A
	Subtotal	9	8	85.6%	2.6	1.3	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		550	467	84.9%	62.7	27.4	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 21 **El Don Dr/Southern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	3	2	80.0%	37.4	55.5	E
	Through	207	201	97.0%	59.5	29.9	F
	Right Turn	1	1	140.0%	16.0	37.2	C
	Subtotal	211	205	96.9%	59.6	30.1	F
SB	Left Turn	9	7	73.3%	47.3	56.9	E
	Through	243	202	82.9%	1.5	2.4	A
	Right Turn	2	2	95.0%	0.0	0.0	A
	Subtotal	254	210	82.7%	2.1	2.8	A
EB	Left Turn	34	23	66.2%	405.2	252.6	F
	Through						
	Right Turn	5	5	98.0%	330.9	300.0	F
	Subtotal	39	27	70.3%	328.3	261.2	F
WB	Left Turn	4	3	72.5%	306.0	372.2	F
	Through						
	Right Turn	48	30	62.7%	436.0	310.4	F
	Subtotal	52	33	63.5%	345.3	295.6	F
Total		556	475	85.4%	54.8	33.8	F

Intersection 22 **El Don Dr/Wildflower Ln** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	1	0	30.0%	0.0	0.0	A
	Through	180	178	98.8%	39.3	48.0	E
	Right Turn	1	2	150.0%	16.5	49.5	C
	Subtotal	182	180	98.7%	39.4	48.2	E
SB	Left Turn						
	Through	237	197	83.2%	8.5	4.0	A
	Right Turn	15	12	82.0%	6.7	4.3	A
	Subtotal	252	209	83.1%	8.4	3.9	A
EB	Left Turn	9	9	95.6%	22.9	26.7	C
	Through						
	Right Turn	3	4	126.7%	2.1	2.0	A
	Subtotal	12	12	103.3%	19.1	25.2	C
WB	Left Turn	3	2	56.7%	2.7	6.4	A
	Through						
	Right Turn	22	23	102.3%	18.1	22.1	C
	Subtotal	25	24	96.8%	17.8	21.9	C
Total		471	426	90.4%	23.5	24.8	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 23 **El Don Dr/Corona Cir** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	5	4	78.0%	1.7	1.6	A
	Through	166	166	99.8%	0.2	0.1	A
	Right Turn	3	4	133.3%	0.1	0.2	A
	Subtotal	174	174	99.8%	0.2	0.2	A
SB	Left Turn	13	9	72.3%	4.4	2.2	A
	Through	215	182	84.5%	1.7	0.2	A
	Right Turn	15	12	80.0%	1.4	0.3	A
	Subtotal	243	203	83.6%	1.8	0.2	A
EB	Left Turn	9	8	93.3%	4.1	2.6	A
	Through						
	Right Turn	3	3	100.0%	1.4	1.6	A
	Subtotal	12	11	95.0%	4.3	1.5	A
WB	Left Turn	2	2	90.0%	1.5	2.6	A
	Through						
	Right Turn	7	8	111.4%	3.0	1.2	A
	Subtotal	9	10	106.7%	3.3	1.4	A
Total		438	398	90.8%	1.3	0.2	A

Intersection 24 **Sierra College Blvd/Street G** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	2,520	1,888	74.9%	111.5	53.6	F
	Right Turn	62	45	72.4%	91.2	43.0	F
	Subtotal	2,582	1,933	74.9%	111.1	53.1	F
SB	Left Turn	36	27	76.1%	44.7	11.3	E
	Through	2,484	2,033	81.8%	10.0	3.8	B
	Right Turn						
	Subtotal	2,520	2,060	81.8%	10.5	3.7	B
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	49	23	46.5%	641.2	114.5	F
	Subtotal	49	23	46.5%	276.9	299.1	F
Total		5,151	4,016	78.0%	58.0	16.9	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 25 **Sierra College Blvd/North Village Dwy 3** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	2,542	1,931	75.9%	56.1	28.3	F
	Right Turn	23	16	70.9%	61.4	33.0	F
	Subtotal	2,565	1,947	75.9%	56.1	27.9	F
SB	Left Turn	44	32	72.3%	159.0	103.7	F
	Through	2,461	2,020	82.1%	17.1	7.9	C
	Right Turn						
	Subtotal	2,505	2,052	81.9%	18.9	8.9	C
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	40	26	65.5%	528.8	181.0	F
	Subtotal	40	26	65.5%	273.8	270.0	F
Total		5,110	4,025	78.8%	37.7	7.9	E

Intersection 26 **South Village Dwy 3/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn	32	29	90.6%	6.0	3.0	A
	Subtotal	32	29	90.6%	6.0	3.0	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,104	921	83.4%	3.6	0.5	A
	Right Turn	9	8	92.2%	2.6	1.6	A
	Subtotal	1,113	929	83.5%	3.6	0.5	A
WB	Left Turn						
	Through	1,072	896	83.6%	75.7	62.5	F
	Right Turn						
	Subtotal	1,072	896	83.6%	75.7	62.5	F
Total		2,217	1,854	83.6%	34.5	27.3	D

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 27 **South Village Dwy 4/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn	80	81	100.9%	12.2	9.5	B
	Subtotal	80	81	100.9%	12.2	9.5	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,112	924	83.1%	6.1	4.5	A
	Right Turn	24	21	87.5%	4.1	0.8	A
	Subtotal	1,136	945	83.2%	6.1	4.4	A
WB	Left Turn						
	Through	1,072	913	85.2%	16.9	23.3	C
	Right Turn						
	Subtotal	1,072	913	85.2%	16.9	23.3	C
Total		2,288	1,939	84.8%	10.9	9.5	B

RAMP METERING ANALYSIS

Project: College Park
Ramp: I-80 WB Loop On-Ramp at Sierra College Blvd.
Scenario: Cumulative No Project AM Peak Hour

Configuration: 1 metered + 1 HOV
Cumulative Peak Hour Volume: 161

HOV Bypass (%)	15%
Metered Volume (veh/hr)	137
Metering Rate (veh/hr)	240
Discharge Rate (veh/15 min)	60

Storage Length (ft)	450
Storage Lanes	1
Maximum Storage (veh)	15

Time Interval	Hourly Arrival Distribution	Estimated 15-Minute Volumes	Metered 15-Minute min flows	Excess Demand	Accum-ulated Vehicles	Total Delay (veh-hr)	Vehicles Delayed	Total Hourly Volume	Metered Hourly Volume	Cumulative Frcst Volume Total	Existing Count Volume Total		
6:00-6:15	0%	0	0	0	0	0.00	0						
6:15-6:30	0%	0	0	0	0	0.00	0						
6:30-6:45	0%	0	0	0	0	0.00	0						
6:45-7:00	0%	0	0	0	0	0.00	0	0	0				
7:00-7:15	20%	32	27	0	0	0.00	0	32	27	32	26	20%	1.219697
7:15-7:30	23%	38	32	0	0	0.00	0	70	59	38	31	23%	
7:30-7:45	20%	33	28	0	0	0.00	0	102	87	33	27	20%	
7:45-8:00	36%	59	50	0	0	0.00	0	161	137	59	48	36%	
8:00-8:15	0%	0	0	0	0	0.00	0						
8:15-8:30	0%	0	0	0	0	0.00	0						
8:30-8:45	0%	0	0	0	0	0.00	0						
8:45-9:00	0%	0	0	0	0	0.00	0						
9:00-9:15	0%	0	0	0	0	0.00	0						
9:15-9:30	0%	0	0	0	0	0.00	0						
9:30-9:45	0%	0	0	0	0	0.00	0						
9:45-10:00	0%	0	0	0	0	0.00	0						

Maximum Queue (veh)	0
Maximum Queue (ft)	0

RAMP METERING ANALYSIS

Project: College Park
Ramp: I-80 WB Loop On-Ramp at Sierra College Blvd.
Scenario: Cumulative No Project PM Peak Hour

Configuration: 1 metered + 1 HOV
Cumulative Peak Hour Volume: 446

HOV Bypass (%)	15%
Metered Volume (veh/hr)	379
Metering Rate (veh/hr)	400
Discharge Rate (veh/15 min)	100

Storage Length (ft)	450
Storage Lanes	1
Maximum Storage (veh)	15

Time Interval	Hourly Arrival Distribution	Estimated 15-Minute Volumes	Metered 15-Minute min flows	Excess Demand	Accum-ulated Vehicles	Total Delay (veh-hr)	Vehicles Delayed	Total Hourly Volume	Metered Hourly Volume	Cumulative Frcst Volume Total	Existing Count Volume Total		
6:00-6:15	0%	0	0	0	0	0.00	0						
6:15-6:30	0%	0	0	0	0	0.00	0						
6:30-6:45	0%	0	0	0	0	0.00	0						
6:45-7:00	0%	0	0	0	0	0.00	0	0	0				
7:00-7:15	25%	112	95	0	0	0.00	0	112	95	112	70	25%	1.6043165
7:15-7:30	26%	114	97	0	0	0.00	0	226	192	114	71	26%	
7:30-7:45	26%	116	98	0	0	0.00	0	342	290	116	72	26%	
7:45-8:00	23%	104	89	0	0	0.00	0	446	379	104	65	23%	
8:00-8:15	0%	0	0	0	0	0.00	0						
8:15-8:30	0%	0	0	0	0	0.00	0						
8:30-8:45	0%	0	0	0	0	0.00	0						
8:45-9:00	0%	0	0	0	0	0.00	0						
9:00-9:15	0%	0	0	0	0	0.00	0						
9:15-9:30	0%	0	0	0	0	0.00	0						
9:30-9:45	0%	0	0	0	0	0.00	0						
9:45-10:00	0%	0	0	0	0	0.00	0						

Maximum Queue (veh)	0
Maximum Queue (ft)	0

RAMP METERING ANALYSIS

Project: College Park
Ramp: I-80 WB Loop On-Ramp at Sierra College Blvd.
Scenario: Cumulative Plus Project AM Peak Hour

Configuration: 1 metered + 1 HOV
Cumulative Peak Hour Volume: 200

HOV Bypass (%)	15%
Metered Volume (veh/hr)	170
Metering Rate (veh/hr)	240
Discharge Rate (veh/15 min)	60

Storage Length (ft)	450
Storage Lanes	1
Maximum Storage (veh)	15

Time Interval	Hourly Arrival Distribution	Estimated 15-Minute Volumes	Metered 15-Minute min flows	Excess Demand	Accum-ulated Vehicles	Total Delay (veh-hr)	Vehicles Delayed	Total Hourly Volume	Metered Hourly Volume	Cumulative Frcst Volume Total	Existing Count Volume Total		
6:00-6:15	0%	0	0	0	0	0.00	0						
6:15-6:30	0%	0	0	0	0	0.00	0						
6:30-6:45	0%	0	0	0	0	0.00	0						
6:45-7:00	0%	0	0	0	0	0.00	0	0	0				
7:00-7:15	20%	39	33	0	0	0.00	0	39	33	39	26	20%	1.5151515
7:15-7:30	23%	47	40	0	0	0.00	0	86	73	47	31	23%	
7:30-7:45	20%	41	35	0	0	0.00	0	127	108	41	27	20%	
7:45-8:00	36%	73	62	2	2	0.45	62	200	170	73	48	36%	
8:00-8:15	0%	0	0	0	0	0.00	0						
8:15-8:30	0%	0	0	0	0	0.00	0						
8:30-8:45	0%	0	0	0	0	0.00	0						
8:45-9:00	0%	0	0	0	0	0.00	0						
9:00-9:15	0%	0	0	0	0	0.00	0						
9:15-9:30	0%	0	0	0	0	0.00	0						
9:30-9:45	0%	0	0	0	0	0.00	0						
9:45-10:00	0%	0	0	0	0	0.00	0						

Maximum Queue (veh)	2
Maximum Queue (ft)	55

RAMP METERING ANALYSIS

Project: College Park
Ramp: I-80 WB Loop On-Ramp at Sierra College Blvd.
Scenario: Cumulative Plus Project PM Peak Hour

Configuration: 1 metered + 1 HOV
Cumulative Peak Hour Volume: 478

HOV Bypass (%)	15%
Metered Volume (veh/hr)	406
Metering Rate (veh/hr)	400
Discharge Rate (veh/15 min)	100

Storage Length (ft)	450
Storage Lanes	1
Maximum Storage (veh)	15

Time Interval	Hourly Arrival Distribution	Estimated 15-Minute Volumes	Metered 15-Minute min flows	Excess Demand	Accum-ulated Vehicles	Total Delay (veh-hr)	Vehicles Delayed	Total Hourly Volume	Metered Hourly Volume	Cumulative Frcst Volume Total	Existing Count Volume Total		
6:00-6:15	0%	0	0	0	0	0.00	0						
6:15-6:30	0%	0	0	0	0	0.00	0						
6:30-6:45	0%	0	0	0	0	0.00	0						
6:45-7:00	0%	0	0	0	0	0.00	0	0	0				
7:00-7:15	25%	120	102	2	2	0.58	102	120	102	120	70	25%	1.7194245
7:15-7:30	26%	122	104	4	6	1.52	104	242	206	122	71	26%	
7:30-7:45	26%	124	105	5	11	2.83	105	366	311	124	72	26%	
7:45-8:00	23%	112	95	0	6	1.57	95	478	406	112	65	23%	
8:00-8:15	0%	0	0	0	0	0.00	0						
8:15-8:30	0%	0	0	0	0	0.00	0						
8:30-8:45	0%	0	0	0	0	0.00	0						
8:45-9:00	0%	0	0	0	0	0.00	0						
9:00-9:15	0%	0	0	0	0	0.00	0						
9:15-9:30	0%	0	0	0	0	0.00	0						
9:30-9:45	0%	0	0	0	0	0.00	0						
9:45-10:00	0%	0	0	0	0	0.00	0						

Maximum Queue (veh)	11
Maximum Queue (ft)	339

APPENDIX E:

POTENTIAL OPERATIONAL ENHANCEMENTS INTERSECTION LOS CALCULATIONS

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	18	18	98.9%	37.8	10.6	D
	Through	21	21	100.5%	35.7	12.1	D
	Right Turn	16	17	104.4%	11.2	6.3	B
	Subtotal	55	56	101.1%	31.0	6.9	C
SB	Left Turn	282	284	100.6%	26.7	4.0	C
	Through	15	14	96.0%	34.0	8.5	C
	Right Turn	113	111	97.9%	8.0	2.0	A
	Subtotal	410	409	99.7%	21.8	3.1	C
EB	Left Turn	158	162	102.5%	40.7	5.7	D
	Through	873	861	98.6%	12.9	1.9	B
	Right Turn	7	8	117.1%	8.4	8.3	A
	Subtotal	1,038	1,031	99.3%	17.4	2.6	B
WB	Left Turn	10	10	95.0%	50.0	23.2	D
	Through	730	733	100.4%	22.9	3.3	C
	Right Turn	528	538	101.8%	8.7	0.6	A
	Subtotal	1,268	1,230	101.0%	17.0	2.1	B
Total		2,771	2,776	100.2%	18.1	2.1	B

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	68	64	93.5%	30.6	4.4	C
	Through						
	Right Turn	265	264	99.7%	28.0	2.3	C
	Subtotal	333	328	98.4%	28.6	2.0	C
EB	Left Turn						
	Through	786	777	98.8%	23.3	3.9	C
	Right Turn	401	401	100.1%	11.7	1.8	B
	Subtotal	1,187	1,178	99.3%	19.3	2.6	B
WB	Left Turn	406	395	97.3%	49.9	5.6	D
	Through	1,066	1,079	101.2%	8.4	1.1	A
	Right Turn						
	Subtotal	1,472	1,473	100.1%	19.8	2.5	B
Total		2,992	2,979	99.6%	20.7	1.8	C

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	602	611	101.5%	32.5	1.7	C
	Through						
	Right Turn	945	921	97.5%	27.0	1.8	C
	Subtotal	1,547	1,532	99.0%	29.2	1.7	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	187	186	99.5%	40.7	4.3	D
	Through	667	658	98.7%	16.8	1.8	B
	Right Turn						
	Subtotal	854	844	98.9%	21.8	1.3	C
WB	Left Turn						
	Through	870	869	99.8%	30.8	3.5	C
	Right Turn	52	53	101.3%	26.4	7.4	C
	Subtotal	922	921	99.9%	30.5	3.6	C
Total		3,323	3,298	99.2%	27.6	1.5	C

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	141	143	101.3%	35.5	3.0	D
	Through						
	Right Turn	30	30	101.3%	16.0	6.3	B
	Subtotal	171	173	101.3%	31.9	3.0	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	40	40	100.5%	42.8	5.1	D
	Through	1,500	1,471	98.1%	6.0	1.0	A
	Right Turn	53	50	94.9%	5.0	1.8	A
	Subtotal	1,593	1,561	98.0%	6.9	1.0	A
WB	Left Turn	9	12	132.2%	59.5	13.9	E
	Through	759	750	98.8%	10.7	1.9	B
	Right Turn						
	Subtotal	768	762	99.2%	11.3	2.0	B
Total		2,532	2,497	98.6%	10.0	1.1	A

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	141	138	98.2%	40.9	4.6	D
	Through	27	29	105.6%	43.6	7.8	D
	Right Turn	28	27	96.8%	30.2	14.6	C
	Subtotal	196	194	99.0%	39.7	4.3	D
SB	Left Turn	20	18	88.0%	43.4	12.2	D
	Through	1	1	110.0%	16.8	34.7	B
	Right Turn	71	68	95.2%	10.0	3.7	B
	Subtotal	92	86	93.8%	16.4	4.6	B
EB	Left Turn	535	520	97.3%	46.2	13.8	D
	Through	884	882	99.7%	26.4	4.4	C
	Right Turn	97	93	96.2%	23.6	5.8	C
	Subtotal	1,516	1,495	98.6%	33.0	7.2	C
WB	Left Turn	59	61	102.5%	40.8	7.1	D
	Through	530	528	99.7%	34.0	5.2	C
	Right Turn	121	117	96.7%	22.1	3.8	C
	Subtotal	710	706	99.4%	32.7	4.4	C
Total		2,514	2,432	98.7%	32.8	5.2	C

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	15	15	100.0%	36.3	9.7	D
	Through	1	1	100.0%	16.9	35.8	B
	Right Turn	19	21	111.6%	12.4	4.4	B
	Subtotal	35	37	106.3%	22.6	7.4	C
SB	Left Turn	43	43	99.8%	40.0	12.2	D
	Through	1	1	80.0%	10.9	22.9	B
	Right Turn	16	15	93.1%	5.4	2.3	A
	Subtotal	60	59	97.7%	32.6	11.6	C
EB	Left Turn	367	364	99.2%	42.2	5.7	D
	Through	546	536	98.2%	8.1	1.7	A
	Right Turn	7	9	130.0%	5.2	4.9	A
	Subtotal	920	910	98.9%	21.9	3.7	C
WB	Left Turn	15	15	98.0%	70.0	24.8	E
	Through	531	546	102.9%	27.0	6.3	C
	Right Turn	426	421	98.9%	32.6	9.7	C
	Subtotal	972	982	101.1%	30.0	7.7	C
Total		1,987	1,988	100.0%	26.1	5.0	C

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	405	403	99.5%	48.8	7.2	D
	Through	582	577	99.1%	26.9	3.1	C
	Right Turn	104	101	97.2%	15.7	4.1	B
	Subtotal	1,091	1,081	99.1%	34.1	4.1	C
SB	Left Turn	197	202	102.5%	53.7	7.6	D
	Through	721	720	99.9%	39.0	5.6	D
	Right Turn	270	277	102.6%	23.0	5.2	C
	Subtotal	1,188	1,199	101.0%	37.6	4.6	D
EB	Left Turn	140	136	97.2%	51.2	5.0	D
	Through	273	266	97.6%	35.1	5.1	D
	Right Turn	195	196	100.6%	12.2	6.8	B
	Subtotal	608	599	98.5%	32.1	4.2	C
WB	Left Turn	99	102	102.7%	56.0	6.9	E
	Through	312	317	101.7%	38.4	4.9	D
	Right Turn	184	182	98.8%	12.3	3.7	B
	Subtotal	595	601	101.0%	32.4	5.2	C
Total		3,482	3,480	99.9%	34.6	3.6	C

Intersection 8 **North Village Dwy 1-Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	13	12	93.1%	13.5	10.4	B
	Through						
	Right Turn	1	2	150.0%	1.7	2.3	A
	Subtotal	14	14	97.1%	11.8	9.5	B
SB	Left Turn	6	7	113.3%	16.4	18.3	C
	Through						
	Right Turn	39	36	93.1%	5.1	2.5	A
	Subtotal	45	43	95.8%	7.4	3.4	A
EB	Left Turn	26	27	103.8%	6.3	1.6	A
	Through	547	540	98.8%	3.2	0.5	A
	Right Turn	3	3	83.3%	1.5	1.9	A
	Subtotal	576	570	98.9%	3.3	0.6	A
WB	Left Turn						
	Through	543	552	101.6%	0.7	0.3	A
	Right Turn	10	7	73.0%	0.0	0.1	A
	Subtotal	553	559	101.1%	0.7	0.3	A
Total		1,188	1,186	99.8%	2.3	0.4	A

Intersection 9 North Village Dwy 2-Rocklin Manor Central/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	8	80.0%	11.1	6.3	B
	Through						
	Right Turn	1	2	180.0%	0.9	1.2	A
	Subtotal	11	10	89.1%	9.4	4.6	A
SB	Left Turn	2	2	95.0%	5.6	8.6	A
	Through						
	Right Turn	25	28	110.8%	4.9	4.4	A
	Subtotal	27	30	109.6%	5.5	5.0	A
EB	Left Turn	121	125	103.3%	5.2	1.2	A
	Through	423	412	97.4%	2.0	0.3	A
	Right Turn	10	12	116.0%	0.2	0.3	A
	Subtotal	554	549	99.0%	2.7	0.4	A
WB	Left Turn						
	Through	518	525	101.3%	0.6	0.1	A
	Right Turn	10	10	96.0%	0.2	0.1	A
	Subtotal	528	534	101.2%	0.6	0.1	A
Total		1,120	1,122	100.2%	1.8	0.3	A

Intersection 10 Rocklin Manor East/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	9	10	110.0%	6.8	4.9	A
	Through						
	Right Turn	2	2	120.0%	1.0	1.6	A
	Subtotal	11	12	111.8%	6.3	4.8	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	424	411	97.0%	0.3	0.1	A
	Right Turn	2	4	190.0%	0.0	0.1	A
	Subtotal	426	415	97.4%	0.2	0.1	A
WB	Left Turn	2	1	40.0%	2.0	5.5	A
	Through	519	524	101.0%	2.6	0.4	A
	Right Turn						
	Subtotal	521	525	100.7%	2.6	0.4	A
Total		958	952	99.4%	1.7	0.3	A

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	420	418	99.5%	13.1	4.1	B
	Through	64	66	103.8%	10.2	0.8	B
	Right Turn						
	Subtotal	484	484	100.0%	12.8	3.6	B
SB	Left Turn						
	Through	43	45	104.4%	10.6	1.3	B
	Right Turn	79	84	106.2%	5.0	1.6	A
	Subtotal	122	129	105.6%	6.8	1.2	A
EB	Left Turn	83	78	93.4%	13.6	3.8	B
	Through						
	Right Turn	325	316	97.3%	10.9	2.4	B
	Subtotal	408	394	96.5%	11.4	2.6	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,014	1,007	99.3%	11.5	2.6	B

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	255	259	101.6%	32.6	3.7	C
	Through	487	488	100.3%	14.4	3.8	B
	Right Turn	86	81	94.0%	7.2	1.9	A
	Subtotal	828	828	100.0%	19.3	3.0	B
SB	Left Turn	80	85	106.6%	41.6	8.0	D
	Through	863	873	101.1%	23.6	3.8	C
	Right Turn	64	64	99.2%	7.5	2.9	A
	Subtotal	1,007	1,022	101.5%	24.1	3.7	C
EB	Left Turn	65	67	103.5%	38.1	3.9	D
	Through	20	20	98.0%	44.1	16.2	D
	Right Turn	104	110	105.8%	11.9	3.1	B
	Subtotal	189	197	104.2%	24.4	3.1	C
WB	Left Turn	143	132	92.4%	36.4	5.6	D
	Through	24	24	101.7%	42.3	11.6	D
	Right Turn	33	37	113.3%	6.6	2.0	A
	Subtotal	200	194	97.0%	30.8	3.5	C
Total		2,224	2,241	100.8%	23.0	3.0	C

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	82	79	96.3%	31.0	5.8	C
	Through	559	559	99.9%	11.9	1.8	B
	Right Turn	172	163	94.8%	3.3	0.5	A
	Subtotal	813	801	98.5%	12.3	1.2	B
SB	Left Turn						
	Through	1,140	1,151	100.9%	17.6	3.4	B
	Right Turn	19	21	109.5%	5.9	1.5	A
	Subtotal	1,159	1,171	101.1%	17.4	3.4	B
EB	Left Turn	7	8	111.4%	29.8	19.6	C
	Through						
	Right Turn	63	58	92.7%	10.1	2.8	B
	Subtotal	70	66	94.6%	12.4	4.2	B
WB	Left Turn	689	687	99.7%	26.3	3.3	C
	Through	73	74	100.7%	27.2	6.3	C
	Right Turn	265	269	101.5%	14.1	2.6	B
	Subtotal	1,027	1,030	100.3%	23.2	3.1	C
Total		3,069	3,058	100.0%	18.0	2.0	B

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	861	855	99.3%	13.3	2.7	B
	Right Turn	50	51	101.2%	6.1	1.1	A
	Subtotal	911	906	99.4%	12.9	2.6	B
SB	Left Turn	135	130	95.9%	45.4	4.0	D
	Through	1,261	1,266	100.4%	15.2	2.0	B
	Right Turn	184	189	102.6%	6.9	0.9	A
	Subtotal	1,580	1,585	100.3%	16.5	1.9	B
EB	Left Turn	237	234	98.7%	33.9	2.5	C
	Through	140	143	101.9%	38.2	6.1	D
	Right Turn	215	220	102.5%	35.7	10.8	D
	Subtotal	592	597	100.8%	35.7	3.8	D
WB	Left Turn	62	65	104.7%	37.9	5.6	D
	Through						
	Right Turn	98	93	94.5%	10.3	3.7	B
	Subtotal	160	158	98.4%	22.1	4.8	C
Total		3,243	3,245	100.1%	19.4	1.6	B

Intersection 15 **Sierra College Blvd/Schriber Wy** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	871	865	99.3%	1.6	0.2	A
	Right Turn						
	Subtotal	871	865	99.3%	1.6	0.2	A
SB	Left Turn						
	Through	1,538	1,552	100.9%	3.7	0.5	A
	Right Turn						
	Subtotal	1,538	1,552	100.9%	3.7	0.5	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	40	41	102.8%	6.2	1.3	A
	Subtotal	40	41	102.8%	6.2	1.3	A
Total		2,449	2,458	100.4%	3.0	0.3	A

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	852	847	99.4%	7.0	1.3	A
	Right Turn	26	29	110.4%	5.3	1.5	A
	Subtotal	878	876	99.8%	6.9	1.3	A
SB	Left Turn	25	20	81.2%	21.4	10.8	C
	Through	1,506	1,526	101.3%	6.6	1.3	A
	Right Turn	7	7	105.7%	4.2	1.0	A
	Subtotal	1,538	1,554	101.0%	6.7	1.2	A
EB	Left Turn						
	Through	1	1	80.0%	18.7	28.4	B
	Right Turn						
	Subtotal	1	1	80.0%	18.7	28.4	B
WB	Left Turn	23	20	87.4%	21.9	13.7	C
	Through						
	Right Turn	8	9	108.8%	7.3	6.2	A
	Subtotal	31	29	92.9%	15.3	7.1	B
Total		2,448	2,459	100.4%	6.9	0.9	A

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr-North Village Street A** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	125	123	98.3%	43.4	6.9	D
	Through	809	803	99.2%	9.9	1.2	A
	Right Turn	13	14	104.6%	8.1	1.9	A
	Subtotal	947	939	99.2%	14.3	1.5	B
SB	Left Turn	14	13	91.4%	23.5	8.9	C
	Through	1,202	1,207	100.4%	16.8	2.7	B
	Right Turn	313	326	104.0%	15.4	3.2	B
	Subtotal	1,529	1,545	101.0%	16.6	2.7	B
EB	Left Turn	18	20	108.9%	40.8	9.1	D
	Through						
	Right Turn	20	25	122.5%	9.6	4.6	A
	Subtotal	38	44	116.1%	25.4	6.4	C
WB	Left Turn	66	66	99.5%	35.7	5.6	D
	Through						
	Right Turn	41	42	101.2%	6.5	2.2	A
	Subtotal	107	107	100.2%	25.0	3.7	C
Total		2,621	2,635	100.5%	16.2	2.1	B

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	879	868	98.8%	0.6	0.1	A
	Right Turn						
	Subtotal	879	868	98.8%	0.6	0.1	A
SB	Left Turn						
	Through	1,227	1,236	100.7%	5.2	0.7	A
	Right Turn	97	97	100.2%	4.8	0.7	A
	Subtotal	1,324	1,333	100.7%	5.1	0.7	A
EB	Left Turn						
	Through						
	Right Turn	2	2	120.0%	4.9	7.4	A
	Subtotal	2	2	120.0%	4.9	7.4	A
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,205	2,204	100.0%	3.3	0.4	A

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	45	43	95.1%	31.9	4.9	C
	Through	968	959	99.1%	9.1	2.4	A
	Right Turn	5	5	106.0%	0.2	0.5	A
	Subtotal	1,018	1,007	98.9%	10.1	2.3	B
SB	Left Turn	36	35	95.8%	31.5	4.4	C
	Through	983	987	100.4%	13.5	1.3	B
	Right Turn	26	23	90.0%	11.8	4.7	B
	Subtotal	1,045	1,045	100.0%	14.1	1.3	B
EB	Left Turn	57	56	98.9%	27.4	2.4	C
	Through	1	1	100.0%	4.1	13.0	A
	Right Turn	39	39	99.0%	15.1	4.9	B
	Subtotal	97	96	99.0%	22.8	3.0	C
WB	Left Turn	18	14	79.4%	24.1	11.2	C
	Through	1	0	20.0%	0.0	0.0	A
	Right Turn	44	44	99.5%	13.1	5.5	B
	Subtotal	63	58	92.5%	16.0	6.3	B
Total		2,223	2,206	99.2%	12.7	1.6	B

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	196	195	99.3%	1.7	2.2	A
	Right Turn						
	Subtotal	196	195	99.3%	1.7	2.2	A
SB	Left Turn						
	Through	115	113	98.2%	0.4	0.1	A
	Right Turn	10	11	106.0%	0.4	0.3	A
	Subtotal	125	124	98.8%	0.4	0.1	A
EB	Left Turn						
	Through						
	Right Turn	1	1	50.0%	0.5	1.1	A
	Subtotal	1	1	50.0%	0.5	1.1	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		322	319	98.9%	1.2	1.3	A

Intersection 21 **El Don Dr/Southern Retail Access-South Village Dwy 2** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	3	3	103.3%	1.7	1.5	A
	Through	173	172	99.4%	1.8	1.3	A
	Right Turn						
	Subtotal	176	175	99.4%	1.9	1.2	A
SB	Left Turn	50	46	92.4%	2.0	0.4	A
	Through	65	64	98.8%	0.1	0.1	A
	Right Turn	1	2	160.0%	0.0	0.0	A
	Subtotal	116	112	96.6%	0.9	0.2	A
EB	Left Turn	13	13	96.2%	4.4	2.0	A
	Through						
	Right Turn	1	2	180.0%	0.3	0.8	A
	Subtotal	14	14	102.1%	4.3	2.0	A
WB	Left Turn	1	0	0.0%	0.0	0.0	A
	Through						
	Right Turn	10	9	92.0%	2.3	1.0	A
	Subtotal	11	9	83.6%	2.3	1.0	A
Total		317	311	97.9%	1.7	0.7	A

Intersection 22 **El Don Dr/Wildflower Ln-South Village Dwy 1** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	2	2	110.0%	2.1	2.9	A
	Through	158	159	100.7%	5.3	0.4	A
	Right Turn	18	18	99.4%	3.7	0.6	A
	Subtotal	178	179	100.7%	5.1	0.3	A
SB	Left Turn						
	Through	55	54	97.8%	5.5	0.4	A
	Right Turn	12	12	100.0%	3.6	0.6	A
	Subtotal	67	66	98.2%	5.1	0.3	A
EB	Left Turn	15	14	92.0%	4.0	0.5	A
	Through						
	Right Turn	5	8	164.0%	2.3	0.9	A
	Subtotal	20	22	110.0%	3.5	0.3	A
WB	Left Turn	1	0	40.0%	0.3	0.9	A
	Through						
	Right Turn	3	3	110.0%	1.7	1.7	A
	Subtotal	4	4	92.5%	2.0	1.6	A
Total		269	271	100.6%	4.9	0.3	A

Intersection 23 **El Don Dr/Corona Cir-South Village Street A** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	2	1	60.0%	0.7	1.4	A
	Through	158	159	100.7%	0.2	0.1	A
	Right Turn	1	2	200.0%	0.0	0.0	A
	Subtotal	161	162	100.8%	0.2	0.1	A
SB	Left Turn	4	3	70.0%	0.9	1.2	A
	Through	52	53	101.5%	1.4	0.3	A
	Right Turn	5	6	126.0%	0.8	0.8	A
	Subtotal	61	62	101.5%	1.4	0.3	A
EB	Left Turn	9	8	90.0%	4.7	2.1	A
	Through						
	Right Turn	3	4	120.0%	1.0	1.3	A
	Subtotal	12	12	97.5%	4.3	1.9	A
WB	Left Turn	3	2	80.0%	1.1	1.7	A
	Through						
	Right Turn	11	11	102.7%	3.6	1.2	A
	Subtotal	14	14	97.9%	3.7	1.2	A
Total		248	250	100.6%	0.9	0.2	A

Intersection 24 **Sierra College Blvd/Street G** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	858	848	98.8%	0.8	0.1	A
	Right Turn	21	20	95.2%	0.7	0.1	A
	Subtotal	879	868	98.7%	0.8	0.1	A
SB	Left Turn	11	11	97.3%	10.6	12.8	B
	Through	1,324	1,333	100.7%	4.7	0.7	A
	Right Turn						
	Subtotal	1,335	1,344	100.7%	4.8	0.6	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	79	81	102.5%	6.2	1.6	A
	Subtotal	79	81	102.5%	6.2	1.6	A
Total		2,293	2,293	100.0%	3.3	0.3	A

Intersection 25 **Sierra College Blvd/North Village Dwy 3** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	862	852	98.8%	3.6	0.5	A
	Right Turn	27	25	91.9%	3.0	0.9	A
	Subtotal	889	877	98.6%	3.5	0.5	A
SB	Left Turn	41	41	99.0%	7.8	3.7	A
	Through	1,188	1,199	101.0%	1.3	0.2	A
	Right Turn						
	Subtotal	1,229	1,240	100.9%	1.5	0.2	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	17	16	91.8%	4.2	1.8	A
	Subtotal	17	16	91.8%	4.2	1.8	A
Total		2,135	2,132	99.9%	2.4	0.2	A

Intersection 26 **South Village Dwy 3/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	3	3	100.0%	3.0	4.1	A
	Subtotal	3	3	100.0%	3.0	4.1	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	976	959	98.3%	1.0	0.1	A
	Right Turn	42	45	106.0%	0.1	0.1	A
	Subtotal	1,018	1,004	98.6%	1.0	0.1	A
WB	Left Turn						
	Through	572	585	102.2%	0.3	0.1	A
	Right Turn						
	Subtotal	572	585	102.2%	0.3	0.1	A
Total		1,593	1,591	99.9%	0.7	0.1	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Existing Plus Project Conditions
AM Peak Hour

Intersection 27 **South Village Dwy 4/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	17	16	96.5%	5.9	2.4	A
	Subtotal	17	16	96.5%	5.9	2.4	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	903	889	98.4%	1.2	0.6	A
	Right Turn	76	75	98.3%	0.5	0.3	A
	Subtotal	979	964	98.4%	1.1	0.6	A
WB	Left Turn						
	Through	572	585	102.3%	2.6	0.3	A
	Right Turn						
	Subtotal	572	585	102.3%	2.6	0.3	A
Total		1,568	1,565	99.8%	1.7	0.4	A

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	45	42	93.6%	45.7	18.1	D
	Through	26	25	96.5%	47.7	7.8	D
	Right Turn	27	29	108.5%	21.9	8.7	C
	Subtotal	98	97	98.5%	38.5	7.8	D
SB	Left Turn	525	521	99.3%	35.7	4.1	D
	Through	22	21	95.5%	43.6	11.0	D
	Right Turn	200	194	97.0%	11.6	3.5	B
	Subtotal	747	736	98.6%	29.6	3.3	C
EB	Left Turn	173	171	99.0%	65.8	13.9	E
	Through	679	676	99.6%	24.5	3.3	C
	Right Turn	18	18	97.2%	16.2	8.3	B
	Subtotal	870	865	99.4%	32.3	5.4	C
WB	Left Turn	50	48	95.0%	80.9	12.1	F
	Through	860	855	99.4%	38.7	5.8	D
	Right Turn	508	523	103.0%	17.4	3.7	B
	Subtotal	1,418	1,426	100.6%	32.6	5.3	C
Total		3,133	3,124	99.7%	32.0	4.4	C

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	71	72	100.8%	29.3	7.5	C
	Through	4	4	105.0%	31.6	31.1	C
	Right Turn	306	319	104.1%	50.9	11.9	D
	Subtotal	381	394	103.5%	47.4	10.3	D
EB	Left Turn						
	Through	773	785	101.5%	38.3	4.9	D
	Right Turn	498	498	100.0%	25.3	8.7	C
	Subtotal	1,271	1,283	100.9%	33.4	5.4	C
WB	Left Turn	649	647	99.7%	38.8	15.0	D
	Through	1,259	1,254	99.6%	15.8	3.2	B
	Right Turn						
	Subtotal	1,908	1,901	99.6%	23.5	6.9	C
Total		3,560	3,578	100.5%	29.9	3.9	C

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	555	553	99.7%	53.2	12.1	D
	Through	1	0	40.0%	8.6	27.0	A
	Right Turn	657	659	100.2%	42.8	26.7	D
	Subtotal	1,213	1,212	99.9%	47.6	20.0	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	227	227	100.0%	77.8	31.7	E
	Through	617	627	101.6%	19.5	13.9	B
	Right Turn						
	Subtotal	844	854	101.1%	35.3	16.8	D
WB	Left Turn						
	Through	1,353	1,361	100.6%	40.4	9.4	D
	Right Turn	89	90	101.5%	36.2	11.4	D
	Subtotal	1,442	1,451	100.6%	40.2	9.5	D
Total		3,499	3,517	100.5%	41.6	11.3	D

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	103	100	96.7%	51.4	12.5	D
	Through						
	Right Turn	20	20	101.5%	8.6	4.2	A
	Subtotal	123	120	97.5%	45.3	10.6	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	55	55	100.4%	72.3	47.7	E
	Through	1,153	1,165	101.0%	12.0	13.1	B
	Right Turn	139	140	100.5%	9.4	11.2	A
	Subtotal	1,347	1,360	100.9%	14.4	15.4	B
WB	Left Turn	17	20	117.6%	90.8	53.5	F
	Through	1,322	1,321	99.9%	37.9	25.8	D
	Right Turn						
	Subtotal	1,339	1,341	100.1%	38.7	25.9	D
Total		2,809	2,820	100.4%	27.4	16.5	C

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	181	185	102.0%	55.1	9.4	E
	Through	9	11	117.8%	57.5	29.5	E
	Right Turn	31	30	96.1%	51.2	11.6	D
	Subtotal	221	225	101.9%	54.8	8.1	D
SB	Left Turn	58	63	107.8%	53.9	11.3	D
	Through	13	14	106.2%	63.3	20.8	E
	Right Turn	359	366	102.1%	26.5	6.1	C
	Subtotal	430	443	103.0%	31.5	6.4	C
EB	Left Turn	264	264	99.8%	59.5	3.7	E
	Through	780	791	101.4%	37.8	6.8	D
	Right Turn	139	137	98.8%	35.3	8.5	D
	Subtotal	1,183	1,192	100.7%	42.4	5.4	D
WB	Left Turn	29	28	94.8%	71.5	16.7	E
	Through	787	780	99.1%	42.3	6.1	D
	Right Turn	46	47	102.2%	30.9	8.8	C
	Subtotal	862	855	99.2%	42.3	5.2	D
Total		2,696	2,714	100.7%	41.5	3.2	D

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	5	3	64.0%	18.2	19.7	B
	Through						
	Right Turn	9	11	120.0%	5.8	2.6	A
	Subtotal	14	14	100.0%	9.6	8.1	A
SB	Left Turn	336	334	99.4%	23.4	3.5	C
	Through						
	Right Turn	167	168	100.7%	7.9	1.6	A
	Subtotal	503	502	99.9%	18.4	2.3	B
EB	Left Turn	115	120	104.3%	35.9	4.6	D
	Through	614	624	101.6%	18.2	3.0	B
	Right Turn	16	16	98.8%	14.1	6.5	B
	Subtotal	745	760	102.0%	21.0	3.0	C
WB	Left Turn	14	14	100.0%	46.1	17.2	D
	Through	579	578	99.7%	20.3	3.8	C
	Right Turn	124	128	103.1%	16.1	4.8	B
	Subtotal	717	719	100.3%	20.2	3.6	C
Total		1,979	1,995	100.8%	19.9	2.3	B

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	263	260	98.7%	50.3	6.6	D
	Through	900	913	101.4%	30.2	3.4	C
	Right Turn	75	75	99.9%	18.7	5.7	B
	Subtotal	1,238	1,247	100.7%	33.5	2.9	C
SB	Left Turn	198	203	102.5%	46.1	11.8	D
	Through	661	678	102.5%	34.2	4.7	C
	Right Turn	172	169	98.0%	15.3	2.7	B
	Subtotal	1,031	1,049	101.8%	33.4	3.0	C
EB	Left Turn	282	285	101.2%	47.7	8.2	D
	Through	304	307	100.9%	33.4	5.5	C
	Right Turn	373	373	99.9%	15.7	4.5	B
	Subtotal	959	965	100.6%	30.5	3.7	C
WB	Left Turn	128	130	101.4%	50.4	7.0	D
	Through	294	301	102.5%	36.2	4.8	D
	Right Turn	237	235	99.2%	15.8	4.3	B
	Subtotal	659	666	101.1%	37.8	3.7	C
Total		3,887	3,928	101.0%	32.4	1.3	C

Intersection 8 **North Village Dwy 1-Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	11	10	90.9%	8.4	4.5	A
	Through						
	Right Turn	1	2	180.0%	2.0	2.7	A
	Subtotal	12	12	98.3%	8.1	4.3	A
SB	Left Turn	11	11	99.1%	15.2	11.3	C
	Through						
	Right Turn	72	75	104.6%	6.9	5.6	A
	Subtotal	83	86	103.9%	8.0	6.8	A
EB	Left Turn	35	35	99.4%	5.7	2.3	A
	Through	527	532	100.9%	3.4	0.3	A
	Right Turn	15	17	115.3%	2.1	1.0	A
	Subtotal	577	584	101.2%	3.5	0.4	A
WB	Left Turn						
	Through	576	581	100.9%	0.7	0.1	A
	Right Turn	11	10	91.8%	0.1	0.2	A
	Subtotal	587	591	100.7%	0.7	0.1	A
Total		1,259	1,274	101.2%	2.7	0.6	A

Intersection 9 North Village Dwy 2-Rocklin Manor Central/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	14	13	91.4%	9.8	5.8	A
	Through						
	Right Turn						
	Subtotal	14	13	91.4%	9.8	5.8	A
SB	Left Turn	11	10	89.1%	15.9	11.4	C
	Through						
	Right Turn	127	130	102.7%	5.2	1.6	A
	Subtotal	138	140	101.6%	5.9	1.9	A
EB	Left Turn	39	39	100.3%	3.5	1.0	A
	Through	482	486	100.9%	1.1	0.3	A
	Right Turn	18	20	112.2%	0.2	0.4	A
	Subtotal	539	545	101.2%	1.3	0.3	A
WB	Left Turn	2	2	105.0%	1.9	4.8	A
	Through	446	447	100.2%	0.5	0.1	A
	Right Turn	3	4	133.3%	0.1	0.1	A
	Subtotal	451	453	100.5%	0.5	0.1	A
Total		1,142	1,152	100.8%	1.7	0.4	A

Intersection 10 Rocklin Manor East/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	5	6	122.0%	7.0	6.7	A
	Through						
	Right Turn						
	Subtotal	5	6	122.0%	7.0	6.7	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	483	482	99.9%	0.4	0.1	A
	Right Turn	10	12	120.0%	0.1	0.2	A
	Subtotal	493	494	100.3%	0.4	0.1	A
WB	Left Turn	2	2	80.0%	0.8	1.3	A
	Through	446	447	100.3%	2.4	0.3	A
	Right Turn						
	Subtotal	448	449	100.2%	2.4	0.3	A
Total		946	949	100.3%	1.4	0.2	A

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	382	382	99.9%	9.0	1.1	A
	Through	60	57	94.3%	9.2	1.0	A
	Right Turn						
	Subtotal	442	438	99.1%	9.0	1.0	A
SB	Left Turn						
	Through	47	45	94.7%	9.5	0.7	A
	Right Turn	62	63	101.6%	4.1	0.9	A
	Subtotal	109	108	98.6%	6.3	0.6	A
EB	Left Turn	74	76	102.6%	15.8	4.6	C
	Through						
	Right Turn	408	403	98.7%	11.8	2.6	B
	Subtotal	482	478	99.3%	12.5	2.9	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,033	1,024	99.1%	10.3	1.5	B

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	177	178	100.6%	37.8	4.9	D
	Through	913	908	99.5%	17.8	4.5	B
	Right Turn	77	79	102.5%	8.5	2.7	A
	Subtotal	1,167	1,165	99.8%	20.0	4.2	C
SB	Left Turn	54	53	97.4%	40.2	8.9	D
	Through	808	804	99.5%	23.8	4.8	C
	Right Turn	78	83	105.8%	7.3	1.8	A
	Subtotal	940	939	99.9%	23.1	4.7	C
EB	Left Turn	153	154	100.5%	32.8	5.2	C
	Through	27	28	103.0%	31.0	7.7	C
	Right Turn	250	253	101.1%	13.7	2.4	B
	Subtotal	430	434	101.0%	22.0	3.4	C
WB	Left Turn	101	102	100.5%	36.2	9.5	D
	Through	15	17	112.0%	37.6	15.1	D
	Right Turn	40	43	107.0%	11.0	3.6	B
	Subtotal	156	161	103.3%	29.7	8.1	C
Total		2,693	2,699	100.2%	22.0	3.9	C

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	275	284	103.2%	42.3	7.1	D
	Through	924	925	100.1%	16.7	1.6	B
	Right Turn	310	312	100.7%	6.4	0.5	A
	Subtotal	1,509	1,521	100.8%	19.5	2.5	B
SB	Left Turn						
	Through	1,149	1,153	100.3%	32.1	6.1	C
	Right Turn	56	55	97.5%	8.9	2.7	A
	Subtotal	1,205	1,208	100.2%	30.9	5.7	C
EB	Left Turn	55	55	99.5%	38.8	5.8	D
	Through						
	Right Turn	298	302	101.3%	16.7	2.7	B
	Subtotal	353	357	101.0%	20.4	2.4	C
WB	Left Turn	482	485	100.6%	28.1	2.0	C
	Through	99	98	99.0%	36.3	5.1	D
	Right Turn	224	226	100.8%	19.4	3.7	B
	Subtotal	805	809	100.4%	26.7	1.3	C
Total		3,872	3,894	100.6%	24.6	2.5	C

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,345	1,342	99.8%	20.4	3.0	C
	Right Turn	111	119	106.8%	7.4	2.1	A
	Subtotal	1,456	1,461	100.3%	19.4	2.7	B
SB	Left Turn	267	270	101.1%	44.5	4.3	D
	Through	852	859	100.8%	16.7	1.2	B
	Right Turn	334	339	101.6%	7.6	0.6	A
	Subtotal	1,453	1,468	101.0%	19.6	1.2	B
EB	Left Turn	394	398	101.0%	47.6	6.3	D
	Through	237	234	98.9%	33.8	3.4	C
	Right Turn	124	128	103.3%	11.9	1.8	B
	Subtotal	755	760	100.7%	37.6	3.5	D
WB	Left Turn	104	106	101.6%	44.5	5.6	D
	Through						
	Right Turn	294	304	103.5%	23.0	3.6	C
	Subtotal	398	410	103.0%	28.6	3.5	C
Total		4,062	4,099	100.9%	23.9	1.3	C

Intersection 15 **Sierra College Blvd/Schriber Wy** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,441	1,449	100.5%	2.1	0.3	A
	Right Turn						
	Subtotal	1,441	1,449	100.5%	2.1	0.3	A
SB	Left Turn						
	Through	1,080	1,092	101.1%	3.1	0.3	A
	Right Turn						
	Subtotal	1,080	1,092	101.1%	3.1	0.3	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	15	13	88.7%	7.2	4.7	A
	Subtotal	15	13	88.7%	7.2	4.7	A
Total		2,536	2,554	100.7%	2.6	0.2	A

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,425	1,438	100.9%	11.1	1.3	B
	Right Turn	52	51	98.3%	9.5	1.1	A
	Subtotal	1,477	1,489	100.8%	11.0	1.3	B
SB	Left Turn	28	27	97.9%	24.9	7.4	C
	Through	1,021	1,031	101.0%	5.3	1.4	A
	Right Turn	31	33	105.5%	3.6	1.0	A
	Subtotal	1,080	1,091	101.1%	5.7	1.3	A
EB	Left Turn	1	1	50.0%	0.0	0.0	A
	Through	1	1	130.0%	10.2	21.2	B
	Right Turn	2	3	170.0%	3.7	3.5	A
	Subtotal	4	5	130.0%	7.4	8.7	A
WB	Left Turn	52	51	97.7%	27.9	6.1	C
	Through						
	Right Turn	9	9	94.4%	7.2	6.9	A
	Subtotal	61	59	97.2%	25.8	5.9	C
Total		2,622	2,645	100.9%	9.2	1.1	A

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr-North Village Street A** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	74	75	100.7%	51.0	7.0	D
	Through	1,294	1,298	100.3%	15.8	1.7	B
	Right Turn	45	44	96.7%	13.3	2.2	B
	Subtotal	1,413	1,416	100.2%	17.5	1.7	B
SB	Left Turn	48	46	95.2%	40.9	15.2	D
	Through	990	1,006	101.6%	13.3	3.1	B
	Right Turn	40	42	104.5%	6.3	3.6	A
	Subtotal	1,078	1,093	101.4%	14.1	3.2	B
EB	Left Turn	160	161	100.8%	34.7	5.3	C
	Through						
	Right Turn	59	58	98.0%	8.0	1.4	A
	Subtotal	219	219	100.0%	27.3	4.3	C
WB	Left Turn	40	38	94.3%	32.0	7.9	C
	Through						
	Right Turn	25	24	95.6%	9.4	3.9	A
	Subtotal	65	62	94.8%	23.0	5.9	C
Total		2,775	2,790	100.5%	17.1	1.7	B

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,426	1,441	101.1%	1.1	0.2	A
	Right Turn						
	Subtotal	1,426	1,441	101.1%	1.1	0.2	A
SB	Left Turn						
	Through	1,063	1,077	101.3%	4.3	0.4	A
	Right Turn	14	16	116.4%	4.0	0.4	A
	Subtotal	1,077	1,094	101.5%	4.3	0.4	A
EB	Left Turn						
	Through						
	Right Turn	12	14	112.5%	5.1	3.2	A
	Subtotal	12	14	112.5%	5.1	3.2	A
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,515	2,548	101.3%	2.5	0.2	A

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	32	31	96.9%	27.2	8.1	C
	Through	1,160	1,163	100.3%	7.6	1.8	A
	Right Turn	7	8	108.6%	3.1	4.6	A
	Subtotal	1,199	1,202	100.2%	8.1	1.9	A
SB	Left Turn	64	68	105.5%	28.9	6.4	C
	Through	1,040	1,049	100.8%	7.8	1.9	A
	Right Turn	80	81	100.8%	8.3	2.1	A
	Subtotal	1,184	1,197	101.1%	9.0	1.6	A
EB	Left Turn	34	32	94.1%	28.8	5.4	C
	Through	1	1	100.0%	9.6	20.1	A
	Right Turn	26	27	102.3%	10.5	3.9	B
	Subtotal	61	60	97.7%	19.9	3.8	B
WB	Left Turn	10	10	95.0%	27.4	10.3	C
	Through	1	1	120.0%	5.4	17.1	A
	Right Turn	21	21	101.0%	9.5	4.7	A
	Subtotal	32	32	99.7%	16.8	5.4	B
Total		2,476	2,490	100.6%	8.9	1.7	A

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	221	225	101.7%	7.3	3.0	A
	Right Turn						
	Subtotal	221	225	101.7%	7.3	3.0	A
SB	Left Turn						
	Through	164	162	99.0%	0.5	0.1	A
	Right Turn	7	8	114.3%	0.3	0.3	A
	Subtotal	171	170	99.6%	0.5	0.1	A
EB	Left Turn						
	Through						
	Right Turn	9	7	72.2%	2.2	1.3	A
	Subtotal	9	7	72.2%	2.2	1.3	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		401	402	100.1%	4.6	1.9	A

Intersection 21 **El Don Dr/Southern Retail Access-South Village Dwy 2** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	3	2	66.7%	0.7	1.5	A
	Through	138	136	98.8%	2.6	1.6	A
	Right Turn	1	1	140.0%	0.4	0.6	A
	Subtotal	142	140	98.5%	2.6	1.6	A
SB	Left Turn	9	8	92.2%	1.7	1.5	A
	Through	162	156	96.3%	0.2	0.1	A
	Right Turn	2	4	175.0%	0.0	0.0	A
	Subtotal	173	168	97.0%	0.3	0.1	A
EB	Left Turn	34	33	97.1%	7.6	4.2	A
	Through						
	Right Turn	5	6	116.0%	2.9	1.8	A
	Subtotal	39	39	99.5%	7.0	3.8	A
WB	Left Turn	4	5	112.5%	3.4	5.6	A
	Through						
	Right Turn	49	55	111.6%	7.1	6.4	A
	Subtotal	53	59	111.7%	7.2	6.2	A
Total		407	406	99.7%	3.0	1.6	A

Intersection 22 **El Don Dr/Wildflower Ln-South Village Dwy 1** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	1	1	50.0%	0.0	0.0	A
	Through	111	110	98.7%	5.0	0.2	A
	Right Turn	1	1	140.0%	1.1	1.5	A
	Subtotal	113	112	98.7%	5.0	0.2	A
SB	Left Turn						
	Through	156	152	97.4%	6.0	0.3	A
	Right Turn	15	15	98.0%	3.6	0.7	A
	Subtotal	171	167	97.4%	5.8	0.3	A
EB	Left Turn	9	7	80.0%	3.8	1.4	A
	Through						
	Right Turn	3	4	120.0%	1.9	1.4	A
	Subtotal	12	11	90.0%	3.6	0.7	A
WB	Left Turn	3	2	76.7%	1.6	1.4	A
	Through						
	Right Turn	22	22	101.4%	2.4	0.5	A
	Subtotal	25	25	98.4%	2.4	0.4	A
Total		321	314	97.7%	5.2	0.2	A

Intersection 23 **El Don Dr/Corona Cir-South Village Street A** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	5	4	74.0%	1.2	1.3	A
	Through	97	96	98.9%	0.1	0.1	A
	Right Turn	3	3	93.3%	0.0	0.0	A
	Subtotal	105	102	97.5%	0.2	0.1	A
SB	Left Turn	13	12	95.4%	3.4	1.0	A
	Through	134	134	99.6%	1.7	0.2	A
	Right Turn	15	14	94.7%	1.1	0.3	A
	Subtotal	162	160	98.8%	1.8	0.2	A
EB	Left Turn	9	9	96.7%	5.4	2.7	A
	Through						
	Right Turn	3	3	103.3%	1.4	1.5	A
	Subtotal	12	12	98.3%	5.4	2.2	A
WB	Left Turn	2	2	95.0%	2.5	3.2	A
	Through						
	Right Turn	7	7	101.4%	3.3	1.2	A
	Subtotal	9	9	100.0%	3.5	1.2	A
Total		288	283	98.4%	1.4	0.2	A

Intersection 24 **Sierra College Blvd/Street G** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,364	1,373	100.7%	1.4	0.2	A
	Right Turn	62	67	108.2%	1.2	0.2	A
	Subtotal	1,426	1,440	101.0%	1.4	0.2	A
SB	Left Turn	36	34	95.3%	16.8	7.2	C
	Through	1,077	1,093	101.5%	4.0	0.4	A
	Right Turn						
	Subtotal	1,113	1,128	101.3%	4.5	0.5	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	49	49	100.2%	7.4	1.9	A
	Subtotal	49	49	100.2%	7.4	1.9	A
Total		2,588	2,617	101.1%	2.8	0.2	A

Intersection 25 **Sierra College Blvd/North Village Dwy 3** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,376	1,394	101.3%	4.8	0.4	A
	Right Turn	33	31	92.4%	2.9	0.7	A
	Subtotal	1,409	1,424	101.1%	4.8	0.4	A
SB	Left Turn	44	42	94.5%	12.0	4.5	B
	Through	1,031	1,048	101.7%	1.1	0.1	A
	Right Turn						
	Subtotal	1,075	1,090	101.4%	1.5	0.3	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	50	48	95.2%	8.1	3.0	A
	Subtotal	50	48	95.2%	8.1	3.0	A
Total		2,534	2,562	101.1%	3.4	0.3	A

Intersection 26 **South Village Dwy 3/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	32	33	104.4%	9.4	3.9	A
	Subtotal	32	33	104.4%	9.4	3.9	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	870	884	101.6%	3.6	0.4	A
	Right Turn	9	9	100.0%	3.0	1.7	A
	Subtotal	879	893	101.6%	3.6	0.4	A
WB	Left Turn						
	Through	862	857	99.4%	1.1	0.3	A
	Right Turn						
	Subtotal	862	857	99.4%	1.1	0.3	A
Total		1,773	1,783	100.5%	2.5	0.3	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Existing Plus Project Conditions (Mitigated)
PM Peak Hour

Intersection 27 South Village Dwy 4/Rocklin Rd Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	80	79	99.3%	11.9	5.1	B
	Subtotal	80	79	99.3%	11.9	5.1	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	878	891	101.5%	2.2	0.4	A
	Right Turn	24	26	108.8%	1.0	0.7	A
	Subtotal	902	918	101.7%	2.1	0.4	A
WB	Left Turn						
	Through	862	860	99.7%	0.3	0.1	A
	Right Turn						
	Subtotal	862	860	99.7%	0.3	0.1	A
Total		1,844	1,857	100.7%	1.8	0.4	A

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	19	95.0%	37.1	10.5	D
	Through	30	26	88.0%	42.9	14.0	D
	Right Turn	20	20	102.0%	20.1	9.9	C
	Subtotal	70	66	94.0%	33.1	5.9	C
SB	Left Turn	395	390	98.8%	30.9	3.8	C
	Through	20	21	103.5%	28.2	8.7	C
	Right Turn	120	124	103.4%	8.3	1.9	A
	Subtotal	535	535	100.0%	25.4	3.1	C
EB	Left Turn	170	170	100.2%	61.3	13.2	E
	Through	872	880	101.0%	19.9	3.0	B
	Right Turn	10	9	94.0%	6.4	7.2	A
	Subtotal	1,052	1,060	100.8%	26.4	4.5	C
WB	Left Turn	10	8	80.0%	53.9	16.0	D
	Through	762	755	99.1%	31.0	3.2	C
	Right Turn	533	518	97.1%	10.8	2.6	B
	Subtotal	1,305	1,281	98.1%	23.1	3.3	C
Total		2,962	2,942	99.3%	25.1	2.9	C

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	86	87	100.6%	29.4	8.0	C
	Through						
	Right Turn	270	268	99.1%	29.9	6.6	C
	Subtotal	356	354	99.5%	30.0	5.1	C
EB	Left Turn						
	Through	827	832	100.6%	31.8	3.3	C
	Right Turn	470	467	99.4%	19.7	3.8	B
	Subtotal	1,297	1,299	100.2%	27.3	2.8	C
WB	Left Turn	414	414	100.0%	32.6	3.9	C
	Through	1,095	1,067	97.5%	7.3	1.5	A
	Right Turn						
	Subtotal	1,509	1,481	98.2%	14.4	1.2	B
Total		3,162	3,135	99.1%	21.9	1.6	C

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	610	591	96.8%	32.0	0.9	C
	Through						
	Right Turn	1,083	1,065	98.4%	28.9	1.7	C
	Subtotal	1,693	1,656	97.8%	30.0	1.2	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	200	205	102.3%	57.4	12.3	E
	Through	713	719	100.8%	14.5	1.9	B
	Right Turn						
	Subtotal	913	923	101.1%	24.0	4.0	C
WB	Left Turn						
	Through	899	891	99.1%	40.1	7.6	D
	Right Turn	63	64	101.0%	33.5	9.0	C
	Subtotal	962	954	99.2%	39.7	7.5	D
Total		3,568	3,533	99.0%	31.0	2.0	C

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	160	160	99.9%	34.9	3.4	C
	Through						
	Right Turn	42	39	92.9%	18.9	5.4	B
	Subtotal	202	199	98.4%	32.0	3.1	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	40	39	96.8%	52.3	11.6	D
	Through	1,676	1,657	99.4%	7.1	2.3	A
	Right Turn	60	56	93.5%	5.4	1.7	A
	Subtotal	1,776	1,752	99.2%	7.9	2.5	A
WB	Left Turn	10	9	91.0%	57.4	14.3	E
	Through	772	763	98.8%	10.6	3.0	B
	Right Turn						
	Subtotal	782	772	98.7%	11.1	3.0	B
Total		2,760	2,732	99.0%	10.5	2.3	B

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	142	138	96.9%	46.6	7.3	D
	Through	30	33	111.0%	45.5	17.0	D
	Right Turn	35	32	91.4%	34.9	13.5	C
	Subtotal	207	203	98.0%	44.6	8.0	D
SB	Left Turn	20	20	98.0%	39.2	15.2	D
	Through	10	12	116.0%	56.1	21.3	E
	Right Turn	80	78	97.3%	10.9	4.3	B
	Subtotal	110	109	99.1%	19.8	5.7	B
EB	Left Turn	540	524	97.0%	112.9	26.0	F
	Through	1,139	1,124	98.7%	48.5	14.6	D
	Right Turn	109	109	99.8%	44.2	15.5	D
	Subtotal	1,788	1,757	98.3%	67.9	17.6	E
WB	Left Turn	76	78	102.5%	47.9	10.2	D
	Through	560	562	100.4%	32.8	4.8	C
	Right Turn	130	130	100.0%	20.6	4.2	C
	Subtotal	766	770	100.5%	32.2	4.7	C
Total		2,871	2,839	98.9%	54.6	11.1	D

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	19	96.0%	34.1	8.4	C
	Through	10	9	85.0%	36.7	27.6	D
	Right Turn	30	33	108.7%	11.8	6.6	B
	Subtotal	60	60	100.5%	21.2	8.2	C
SB	Left Turn	62	64	102.7%	38.9	5.1	D
	Through	10	12	118.0%	40.5	19.1	D
	Right Turn	20	21	103.0%	4.5	1.0	A
	Subtotal	92	96	104.5%	32.3	5.6	C
EB	Left Turn	370	371	100.3%	40.4	3.4	D
	Through	697	691	99.1%	9.4	1.3	A
	Right Turn	10	10	102.0%	5.5	2.7	A
	Subtotal	1,077	1,072	99.5%	19.7	1.4	B
WB	Left Turn	20	20	98.0%	76.0	24.3	E
	Through	606	601	99.1%	28.7	5.9	C
	Right Turn	432	431	99.8%	33.3	7.5	C
	Subtotal	1,058	1,051	99.4%	31.5	6.5	C
Total		2,287	2,280	99.7%	25.6	2.9	C

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	429	430	100.2%	53.9	3.9	D
	Through	632	649	102.7%	33.7	4.9	C
	Right Turn	116	113	97.0%	18.8	5.7	B
	Subtotal	1,177	1,191	101.2%	39.7	3.7	C
SB	Left Turn	240	245	102.1%	61.2	8.7	E
	Through	727	728	100.1%	43.0	6.0	D
	Right Turn	320	311	97.1%	31.2	7.2	C
	Subtotal	1,287	1,283	99.7%	48.9	4.3	D
EB	Left Turn	267	265	99.4%	50.5	8.9	D
	Through	298	297	99.7%	32.5	5.5	C
	Right Turn	224	228	101.7%	13.1	2.0	B
	Subtotal	789	790	100.2%	32.9	3.3	C
WB	Left Turn	113	109	96.8%	58.0	6.9	E
	Through	329	333	101.3%	41.7	5.9	D
	Right Turn	235	229	97.3%	19.7	3.8	B
	Subtotal	677	671	99.2%	35.6	4.8	D
Total		3,930	3,936	100.2%	38.7	2.2	D

Intersection 8 **North Village Dwy 1-Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	16	80.5%	23.3	10.0	C
	Through	10	10	100.0%	15.0	11.6	C
	Right Turn	20	20	101.0%	7.3	4.2	A
	Subtotal	50	46	92.6%	15.4	4.9	C
SB	Left Turn	6	5	80.0%	12.5	13.2	B
	Through						
	Right Turn	44	47	106.1%	6.3	3.0	A
	Subtotal	50	52	103.0%	7.8	4.0	A
EB	Left Turn	31	28	91.0%	6.4	1.6	A
	Through	613	615	100.3%	3.2	0.4	A
	Right Turn	20	22	109.0%	1.3	0.6	A
	Subtotal	664	665	100.1%	3.3	0.4	A
WB	Left Turn						
	Through	613	608	99.2%	1.0	0.2	A
	Right Turn	10	12	118.0%	0.3	0.3	A
	Subtotal	623	620	99.5%	1.0	0.2	A
Total		1,387	1,383	99.7%	2.8	0.4	A

Intersection 9 — North Village Dwy 2-Rocklin Manor Central/Rocklin Rd — Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	8	80.0%	19.3	15.6	C
	Through						
	Right Turn	10	11	110.0%	2.4	0.3	A
	Subtotal	20	19	95.0%	9.7	6.9	A
SB	Left Turn	2	2	80.0%	10.0	13.7	A
	Through						
	Right Turn	25	25	101.6%	5.2	3.7	A
	Subtotal	27	27	100.0%	6.4	4.1	A
EB	Left Turn	121	119	98.2%	6.1	1.4	A
	Through	508	512	100.7%	2.1	0.4	A
	Right Turn	10	10	95.0%	0.1	0.3	A
	Subtotal	639	640	100.1%	2.9	0.5	A
WB	Left Turn						
	Through	588	584	99.4%	0.7	0.1	A
	Right Turn	10	11	106.0%	0.2	0.3	A
	Subtotal	598	595	99.5%	0.7	0.1	A
Total		1,284	1,231	99.7%	2.0	0.2	A

Intersection 10 — Rocklin Manor East/Rocklin Rd — Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	10	98.0%	19.0	10.4	C
	Through						
	Right Turn	10	11	108.0%	5.8	5.1	A
	Subtotal	20	21	103.0%	13.6	6.1	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	510	514	100.8%	0.3	0.0	A
	Right Turn	10	9	85.0%	0.1	0.1	A
	Subtotal	520	523	100.5%	0.3	0.0	A
WB	Left Turn	10	8	84.0%	4.7	3.4	A
	Through	588	585	99.5%	3.1	0.3	A
	Right Turn						
	Subtotal	598	593	99.2%	3.1	0.3	A
Total		1,138	1,136	99.9%	2.1	0.2	A

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	474	470	99.1%	18.4	9.3	C
	Through	80	77	96.3%	12.7	5.2	B
	Right Turn						
	Subtotal	554	547	98.7%	17.5	8.8	C
SB	Left Turn						
	Through	50	48	96.4%	10.7	1.0	B
	Right Turn	104	101	96.8%	6.1	1.0	A
	Subtotal	154	149	96.7%	7.6	0.7	A
EB	Left Turn	101	100	98.9%	17.9	6.3	C
	Through						
	Right Turn	399	406	101.8%	15.4	6.3	C
	Subtotal	500	506	101.2%	15.9	6.3	C
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,208	1,202	99.5%	15.7	6.5	C

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	272	278	102.2%	39.8	5.3	D
	Through	525	538	102.4%	18.0	4.0	B
	Right Turn	90	93	102.8%	8.7	2.8	A
	Subtotal	887	908	102.4%	23.6	3.8	C
SB	Left Turn	80	81	100.9%	51.8	11.2	D
	Through	939	934	99.4%	32.7	9.1	C
	Right Turn	70	74	105.1%	11.4	6.7	B
	Subtotal	1,089	1,088	99.9%	32.5	8.4	C
EB	Left Turn	80	80	99.4%	50.4	21.6	D
	Through	30	31	101.7%	50.6	13.9	D
	Right Turn	121	128	106.0%	17.4	4.7	B
	Subtotal	231	238	103.2%	32.4	9.1	C
WB	Left Turn	150	145	96.9%	46.3	12.9	D
	Through	30	32	105.7%	49.0	15.1	D
	Right Turn	40	44	109.0%	8.1	2.5	A
	Subtotal	220	221	100.3%	39.0	9.5	D
Total		2,427	2,455	101.1%	29.8	6.3	C

Intersection 13 Sierra College Blvd/Shopping Center-I-80 WB Ramps Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	105	103	98.4%	35.7	6.2	D
	Through	597	614	102.8%	16.0	3.3	B
	Right Turn	250	242	97.0%	4.3	0.4	A
	Subtotal	952	960	100.8%	15.2	3.0	B
SB	Left Turn						
	Through	1,220	1,216	99.6%	22.1	3.0	C
	Right Turn	20	21	103.0%	6.0	0.9	A
	Subtotal	1,240	1,236	99.7%	21.8	3.1	C
EB	Left Turn	20	19	92.5%	32.4	10.6	C
	Through						
	Right Turn	75	76	101.5%	11.1	3.8	B
	Subtotal	95	95	99.6%	16.2	4.5	B
WB	Left Turn	707	705	99.7%	31.8	5.7	C
	Through	80	79	99.1%	29.5	3.5	C
	Right Turn	270	274	101.4%	16.1	3.4	B
	Subtotal	1,057	1,058	100.1%	27.7	4.9	C
Total		3,344	3,349	100.1%	21.7	2.5	C

Intersection 14 Sierra College Blvd/I-80 EB Ramps-Shopping Center Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,037	1,047	101.0%	18.3	2.4	B
	Right Turn	55	53	96.0%	4.3	1.2	A
	Subtotal	1,092	1,100	100.7%	17.6	2.3	B
SB	Left Turn	150	151	100.7%	102.9	42.8	F
	Through	1,372	1,358	99.7%	88.1	42.1	F
	Right Turn	190	194	102.1%	56.4	36.4	E
	Subtotal	1,712	1,713	100.1%	85.8	41.6	F
EB	Left Turn	240	247	102.9%	31.0	4.2	C
	Through	160	158	98.8%	31.2	2.7	C
	Right Turn	430	425	98.9%	34.3	4.2	C
	Subtotal	830	830	100.0%	32.8	2.4	C
WB	Left Turn	65	67	102.3%	46.0	13.4	D
	Through						
	Right Turn	110	109	99.3%	11.6	3.4	B
	Subtotal	175	176	100.4%	24.8	8.5	C
Total		3,809	3,819	100.3%	52.8	19.0	D

Intersection 15 **Sierra College Blvd/Schriber Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	9	93.0%	38.5	23.9	D
	Through	952	958	100.6%	4.3	1.0	A
	Right Turn	20	21	103.5%	3.5	3.0	A
	Subtotal	982	988	100.6%	4.7	1.0	A
SB	Left Turn						
	Through	1,837	1,829	99.6%	13.4	1.6	B
	Right Turn	30	28	93.0%	10.7	5.2	B
	Subtotal	1,867	1,857	99.5%	13.3	1.6	B
EB	Left Turn	10	9	90.0%	33.5	25.8	C
	Through	10	11	107.0%	45.9	10.5	D
	Right Turn	10	9	93.0%	27.9	21.0	C
	Subtotal	30	29	96.7%	40.0	12.2	D
WB	Left Turn	60	62	104.0%	49.2	15.7	D
	Through	10	10	101.0%	44.3	27.2	D
	Right Turn	130	132	101.7%	21.1	9.1	C
	Subtotal	200	205	102.4%	31.0	10.9	C
Total		3,079	3,078	100.0%	12.1	1.8	B

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	10	98.0%	38.3	18.8	D
	Through	952	961	100.9%	11.7	2.8	B
	Right Turn	30	31	103.7%	9.3	4.5	A
	Subtotal	992	1,002	101.0%	11.9	2.8	B
SB	Left Turn	30	29	95.3%	34.8	10.5	C
	Through	1,867	1,854	99.9%	11.2	2.7	B
	Right Turn	10	10	101.0%	3.2	2.1	A
	Subtotal	1,907	1,903	99.8%	11.5	2.6	B
EB	Left Turn	10	8	79.0%	39.1	28.4	D
	Through	10	8	84.0%	23.7	25.9	C
	Right Turn	10	10	104.0%	25.8	15.9	C
	Subtotal	30	27	89.0%	28.5	9.0	C
WB	Left Turn	30	29	97.0%	29.2	7.8	C
	Through	10	11	108.0%	41.3	20.9	D
	Right Turn	10	11	108.0%	9.0	7.0	A
	Subtotal	50	51	101.4%	29.0	5.5	C
Total		2,979	2,982	100.1%	12.1	1.8	B

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr-North Village Street A** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	288	285	98.9%	44.2	7.8	D
	Through	871	882	101.3%	16.4	2.7	B
	Right Turn	13	12	89.2%	9.1	4.4	A
	Subtotal	1,172	1,178	100.5%	22.9	3.2	C
SB	Left Turn	14	15	105.7%	44.3	17.9	D
	Through	1,183	1,182	99.9%	31.1	5.2	C
	Right Turn	710	713	100.5%	16.2	2.0	B
	Subtotal	1,907	1,910	100.1%	25.8	3.7	C
EB	Left Turn	70	66	93.9%	31.7	4.0	C
	Through						
	Right Turn	132	132	100.1%	11.8	1.5	B
	Subtotal	202	198	97.9%	18.1	2.1	B
WB	Left Turn	66	66	99.4%	44.4	10.8	D
	Through						
	Right Turn	41	44	108.0%	9.1	3.3	A
	Subtotal	107	110	102.7%	30.6	8.4	C
Total		3,388	3,396	100.2%	24.4	3.2	C

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,104	1,114	100.9%	0.6	0.1	A
	Right Turn						
	Subtotal	1,104	1,114	100.9%	0.6	0.1	A
SB	Left Turn						
	Through	1,318	1,318	100.0%	7.0	0.8	A
	Right Turn	100	103	102.5%	6.6	0.7	A
	Subtotal	1,418	1,420	100.1%	7.0	0.7	A
EB	Left Turn						
	Through						
	Right Turn	10	8	81.0%	12.9	9.7	B
	Subtotal	10	8	81.0%	12.9	9.7	B
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,532	2,542	100.4%	4.1	0.4	A

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	50	49	98.0%	38.5	4.9	D
	Through	1,024	1,034	101.0%	14.5	2.6	B
	Right Turn	10	11	109.0%	7.6	4.7	A
	Subtotal	1,084	1,094	100.9%	15.5	2.5	B
SB	Left Turn	30	33	111.0%	43.9	13.4	D
	Through	1,033	1,035	100.2%	16.2	1.5	B
	Right Turn	31	30	96.5%	13.3	2.9	B
	Subtotal	1,094	1,098	100.4%	17.0	1.2	B
EB	Left Turn	73	74	101.6%	28.8	5.4	C
	Through	10	8	79.0%	30.7	19.9	C
	Right Turn	54	53	98.7%	16.2	3.6	B
	Subtotal	137	135	98.8%	24.0	3.7	C
WB	Left Turn	60	60	99.2%	25.6	5.2	C
	Through	10	10	99.0%	24.7	13.1	C
	Right Turn	80	79	98.8%	18.0	3.6	B
	Subtotal	150	148	98.9%	21.8	3.3	C
Total		2,465	2,475	100.4%	17.0	1.1	B

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	207	203	97.9%	4.4	2.6	A
	Right Turn						
	Subtotal	207	203	97.9%	4.4	2.6	A
SB	Left Turn						
	Through	144	147	102.1%	0.6	0.2	A
	Right Turn	10	12	116.0%	0.3	0.2	A
	Subtotal	154	159	103.0%	0.5	0.2	A
EB	Left Turn						
	Through						
	Right Turn	10	10	97.0%	3.3	1.8	A
	Subtotal	10	10	97.0%	3.3	1.8	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		371	371	100.0%	2.8	1.6	A

Intersection 21 | **El Don Dr/Southern Retail Access-South Village Dwy 2** | **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	10	98.0%	2.1	1.2	A
	Through	177	172	96.9%	1.9	0.8	A
	Right Turn						
	Subtotal	187	181	97.0%	1.9	0.8	A
SB	Left Turn	50	51	102.2%	2.3	0.5	A
	Through	94	95	101.5%	0.3	0.2	A
	Right Turn	10	11	108.0%	0.1	0.2	A
	Subtotal	154	157	102.1%	1.0	0.3	A
EB	Left Turn	20	21	104.5%	6.8	3.0	A
	Through						
	Right Turn	10	9	91.0%	3.1	0.6	A
	Subtotal	30	30	100.0%	5.7	2.5	A
WB	Left Turn	1	1	100.0%	1.4	2.5	A
	Through						
	Right Turn	10	11	107.0%	3.4	3.3	A
	Subtotal	11	12	106.4%	4.1	3.1	A
Total		382	380	99.6%	2.0	0.9	A

Intersection 22 | **El Don Dr/Wildflower Ln-South Village Dwy 1** | **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	11	108.0%	4.3	1.7	A
	Through	154	150	97.1%	5.4	0.3	A
	Right Turn	18	19	105.6%	4.0	1.2	A
	Subtotal	182	179	98.5%	5.2	0.3	A
SB	Left Turn						
	Through	85	87	101.9%	5.9	0.4	A
	Right Turn	20	19	96.5%	4.0	0.6	A
	Subtotal	105	106	100.9%	5.6	0.4	A
EB	Left Turn	30	29	95.7%	4.3	0.6	A
	Through						
	Right Turn	10	10	103.0%	2.8	0.4	A
	Subtotal	40	39	97.5%	3.9	0.4	A
WB	Left Turn	1	0	40.0%	0.0	0.0	A
	Through						
	Right Turn	3	4	116.7%	1.6	1.4	A
	Subtotal	4	4	97.5%	1.6	1.4	A
Total		331	328	99.1%	5.1	0.3	A

Intersection 23 — **El Don Dr/Corona Cir-South Village Street A** — **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	10	95.0%	1.1	0.7	A
	Through	161	159	98.6%	0.2	0.1	A
	Right Turn	1	2	150.0%	0.0	0.0	A
	Subtotal	172	170	98.7%	0.2	0.1	A
SB	Left Turn	4	5	112.5%	2.5	1.9	A
	Through	82	83	100.7%	1.4	0.2	A
	Right Turn	10	10	98.0%	1.3	0.6	A
	Subtotal	96	97	100.9%	1.5	0.2	A
EB	Left Turn	10	9	93.0%	4.7	1.4	A
	Through						
	Right Turn	10	12	123.0%	3.4	0.8	A
	Subtotal	20	22	108.0%	3.8	0.8	A
WB	Left Turn	3	3	106.7%	3.0	2.2	A
	Through						
	Right Turn	11	11	98.2%	3.4	1.5	A
	Subtotal	14	14	100.0%	3.8	0.8	A
Total		302	302	100.1%	1.1	0.2	A

Intersection 24 — **Sierra College Blvd/Street G** — **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,083	1,093	100.9%	0.8	0.1	A
	Right Turn	21	21	100.5%	0.7	0.1	A
	Subtotal	1,104	1,114	100.9%	0.8	0.1	A
SB	Left Turn	11	11	99.1%	15.4	11.4	C
	Through	1,418	1,421	100.2%	6.4	0.7	A
	Right Turn						
	Subtotal	1,429	1,431	100.2%	6.5	0.7	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	79	79	99.6%	8.1	3.1	A
	Subtotal	79	79	99.6%	8.1	3.1	A
Total		2,612	2,624	100.5%	4.1	0.4	A

Intersection 25 | **Sierra College Blvd/North Village Dwy 3** | **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,092	1,103	101.0%	3.4	0.4	A
	Right Turn	22	22	100.9%	2.8	0.9	A
	Subtotal	1,114	1,125	101.0%	3.4	0.4	A
SB	Left Turn	41	41	99.3%	12.4	5.4	B
	Through	1,287	1,285	99.8%	1.7	0.2	A
	Right Turn						
	Subtotal	1,328	1,325	99.8%	2.1	0.2	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	12	11	88.3%	5.6	3.3	A
	Subtotal	12	11	88.3%	5.6	3.3	A
Total		2,454	2,461	100.3%	2.7	0.3	A

Intersection 26 | **South Village Dwy 3/Rocklin Rd** | **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	3	4	133.3%	5.0	5.5	A
	Subtotal	3	4	133.3%	5.0	5.5	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,133	1,129	99.6%	1.2	0.1	A
	Right Turn	42	40	95.2%	0.3	0.3	A
	Subtotal	1,175	1,169	99.5%	1.2	0.1	A
WB	Left Turn						
	Through	656	652	99.4%	0.4	0.1	A
	Right Turn						
	Subtotal	656	652	99.4%	0.4	0.1	A
Total		1,834	1,825	99.5%	0.9	0.1	A

Intersection 27 — **South Village Dwy 4/Rocklin Rd** — **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	17	18	105.3%	10.0	7.3	B
	Subtotal	17	18	105.3%	10.0	7.3	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,060	1,055	99.6%	1.2	0.2	A
	Right Turn	76	77	101.3%	0.6	0.2	A
	Subtotal	1,136	1,132	99.7%	1.1	0.2	A
WB	Left Turn						
	Through	656	652	99.3%	2.7	0.2	A
	Right Turn						
	Subtotal	656	652	99.3%	2.7	0.2	A
Total		1,809	1,802	99.6%	1.7	0.2	A

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	50	47	94.4%	50.8	10.4	D
	Through	30	27	90.7%	48.8	12.4	D
	Right Turn	30	33	109.0%	21.5	11.0	C
	Subtotal	110	107	97.4%	41.3	7.5	D
SB	Left Turn	534	521	97.6%	35.8	3.4	D
	Through	30	31	103.7%	37.0	8.8	D
	Right Turn	200	203	101.7%	11.5	3.2	B
	Subtotal	764	756	98.9%	29.2	3.0	C
EB	Left Turn	200	201	100.6%	77.5	18.7	E
	Through	682	690	101.2%	29.6	7.9	C
	Right Turn	20	22	108.5%	21.0	10.5	C
	Subtotal	902	913	101.2%	40.4	10.3	D
WB	Left Turn	60	60	99.7%	74.4	14.5	E
	Through	792	797	100.6%	39.6	5.4	D
	Right Turn	555	543	97.7%	16.0	3.7	B
	Subtotal	1,407	1,399	99.5%	32.1	4.9	C
Total		3,183	3,175	99.7%	34.1	4.7	C

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	75	72	95.5%	46.9	26.5	D
	Through	10	9	91.0%	92.1	76.0	F
	Right Turn	310	311	100.3%	102.6	66.3	F
	Subtotal	395	392	99.2%	93.6	57.9	F
EB	Left Turn						
	Through	796	780	98.0%	46.8	11.4	D
	Right Turn	500	502	100.4%	34.1	9.2	C
	Subtotal	1,296	1,282	98.9%	42.0	8.9	D
WB	Left Turn	722	721	99.9%	43.5	6.5	D
	Through	1,257	1,256	99.9%	15.1	2.8	B
	Right Turn						
	Subtotal	1,979	1,977	99.9%	25.5	3.2	C
Total		3,670	3,650	99.5%	38.3	7.1	D

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	580	578	99.6%	80.0	39.3	F
	Through	10	9	93.0%	75.7	54.9	E
	Right Turn	680	685	100.7%	52.0	25.5	D
	Subtotal	1,270	1,271	100.1%	65.2	31.8	E
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	230	217	94.5%	74.8	27.8	E
	Through	641	635	99.1%	17.7	4.6	B
	Right Turn						
	Subtotal	871	853	97.9%	33.3	11.9	C
WB	Left Turn						
	Through	1,399	1,398	99.9%	37.5	6.3	D
	Right Turn	98	99	100.7%	32.4	7.2	C
	Subtotal	1,497	1,497	100.0%	37.1	6.3	D
Total		3,638	3,621	99.5%	46.8	13.6	D

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	120	121	100.7%	43.4	6.2	D
	Through						
	Right Turn	31	31	101.3%	8.7	3.7	A
	Subtotal	151	152	100.8%	35.7	4.7	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	60	60	99.3%	48.9	3.3	D
	Through	1,181	1,178	99.7%	7.2	1.4	A
	Right Turn	170	180	106.1%	5.4	1.1	A
	Subtotal	1,411	1,417	100.5%	8.6	1.2	A
WB	Left Turn	32	29	91.9%	107.2	36.9	F
	Through	1,367	1,356	99.2%	46.0	23.7	D
	Right Turn						
	Subtotal	1,399	1,386	99.1%	47.4	24.3	D
Total		2,961	2,955	99.8%	28.5	12.2	C

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	191	195	102.0%	63.7	38.6	E
	Through	10	11	108.0%	66.5	49.2	E
	Right Turn	38	39	101.8%	52.3	36.6	D
	Subtotal	239	244	102.3%	62.3	37.9	E
SB	Left Turn	60	59	98.2%	79.0	37.3	E
	Through	20	20	98.5%	71.0	46.6	E
	Right Turn	360	363	100.8%	46.0	30.1	D
	Subtotal	440	442	100.3%	52.0	32.6	D
EB	Left Turn	270	263	97.5%	65.7	10.5	E
	Through	834	828	99.3%	40.8	7.9	D
	Right Turn	148	148	100.1%	37.8	10.0	D
	Subtotal	1,252	1,240	99.0%	45.7	7.4	D
WB	Left Turn	44	45	102.5%	67.0	13.8	E
	Through	908	906	99.8%	43.8	8.0	D
	Right Turn	50	47	94.0%	32.2	8.8	C
	Subtotal	1,002	998	99.6%	44.6	7.5	D
Total		2,933	2,924	99.7%	47.9	9.7	D

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	9	93.0%	29.6	17.2	C
	Through						
	Right Turn	10	8	83.0%	7.2	9.3	A
	Subtotal	20	18	88.0%	19.7	13.8	B
SB	Left Turn	351	344	97.9%	26.0	3.8	C
	Through						
	Right Turn	170	168	98.5%	8.5	1.6	A
	Subtotal	521	511	98.1%	20.4	2.9	C
EB	Left Turn	124	120	96.5%	40.1	6.1	D
	Through	688	696	101.1%	20.5	2.2	C
	Right Turn	20	22	107.5%	16.3	7.7	B
	Subtotal	832	837	100.6%	23.1	2.2	C
WB	Left Turn	20	20	98.5%	51.1	6.4	D
	Through	653	651	99.6%	20.5	3.3	C
	Right Turn	125	124	98.8%	18.4	4.5	B
	Subtotal	798	794	99.5%	20.9	3.5	C
Total		2,171	2,159	99.5%	21.6	2.3	C

Intersection 7 — **Sierra College Blvd/Rocklin Rd** — **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	304	309	101.7%	49.6	4.7	D
	Through	895	902	100.8%	37.8	4.1	D
	Right Turn	116	116	99.6%	27.6	7.4	C
	Subtotal	1,315	1,327	100.9%	39.8	3.6	D
SB	Left Turn	286	286	99.9%	55.4	6.8	E
	Through	714	709	99.2%	41.7	3.0	D
	Right Turn	215	209	97.2%	18.6	2.3	B
	Subtotal	1,215	1,203	99.0%	41.0	2.7	D
EB	Left Turn	358	352	98.2%	48.2	7.6	D
	Through	324	328	101.2%	34.0	9.6	C
	Right Turn	367	367	99.9%	20.0	4.3	B
	Subtotal	1,049	1,046	99.7%	33.1	6.1	C
WB	Left Turn	126	127	100.8%	52.2	7.2	D
	Through	299	302	101.0%	40.6	5.8	D
	Right Turn	302	308	102.1%	22.3	4.8	C
	Subtotal	727	737	101.4%	33.5	3.9	C
Total		4,306	4,314	100.2%	37.4	2.2	D

Intersection 8 — **North Village Dwy 1-Rocklin Manor West/Rocklin Rd** — **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	22	108.0%	20.3	7.0	C
	Through	10	11	113.0%	11.7	6.4	B
	Right Turn	10	10	100.0%	6.1	4.8	A
	Subtotal	40	43	107.3%	15.4	4.2	C
SB	Left Turn	11	9	82.7%	32.5	25.2	D
	Through						
	Right Turn	82	82	99.6%	7.2	3.6	A
	Subtotal	93	91	97.6%	9.1	3.6	A
EB	Left Turn	45	47	104.0%	6.3	1.2	A
	Through	581	574	98.7%	2.8	0.4	A
	Right Turn	100	107	106.8%	2.1	0.6	A
	Subtotal	726	727	100.2%	2.9	0.3	A
WB	Left Turn	10	10	103.0%	4.2	2.2	A
	Through	625	634	101.4%	0.9	0.2	A
	Right Turn	11	11	100.9%	0.2	0.2	A
	Subtotal	646	655	101.4%	0.9	0.1	A
Total		1,505	1,516	100.7%	2.8	0.5	A

Intersection 9 — North Village Dwy 2-Rocklin Manor Central/Rocklin Rd — Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	22	111.0%	13.5	5.6	B
	Through						
	Right Turn						
	Subtotal	20	22	111.0%	13.5	5.6	B
SB	Left Turn	11	12	107.3%	16.1	8.5	C
	Through						
	Right Turn	127	125	98.6%	5.2	1.3	A
	Subtotal	138	137	99.3%	6.2	1.9	A
EB	Left Turn	39	38	98.2%	3.2	0.9	A
	Through	543	534	98.3%	1.1	0.3	A
	Right Turn	20	20	101.5%	0.4	0.4	A
	Subtotal	602	592	98.4%	1.2	0.3	A
WB	Left Turn	10	10	99.0%	3.6	2.8	A
	Through	499	505	101.2%	0.6	0.1	A
	Right Turn	3	3	110.0%	0.1	0.2	A
	Subtotal	512	518	101.2%	0.7	0.1	A
Total		1,272	1,270	99.8%	1.8	0.4	A

Intersection 10 — Rocklin Manor East/Rocklin Rd — Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	10	101.0%	13.7	10.6	B
	Through						
	Right Turn						
	Subtotal	10	10	101.0%	13.7	10.6	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	544	532	97.8%	0.4	0.1	A
	Right Turn	10	11	113.0%	0.0	0.1	A
	Subtotal	554	543	98.1%	0.4	0.1	A
WB	Left Turn	10	8	82.0%	4.2	3.7	A
	Through	502	509	101.3%	2.7	0.3	A
	Right Turn						
	Subtotal	512	517	100.9%	2.7	0.3	A
Total		1,076	1,070	99.5%	1.6	0.2	A

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	426	428	100.6%	10.7	1.4	B
	Through	90	93	103.0%	10.2	0.9	B
	Right Turn						
	Subtotal	516	521	101.0%	10.6	1.2	B
SB	Left Turn						
	Through	50	51	102.2%	10.0	0.9	A
	Right Turn	81	83	103.0%	4.9	1.1	A
	Subtotal	131	135	102.7%	6.6	0.9	A
EB	Left Turn	85	86	100.6%	15.8	2.6	C
	Through						
	Right Turn	459	445	96.9%	13.4	2.2	B
	Subtotal	544	530	97.5%	13.8	2.1	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,191	1,136	99.6%	11.7	0.8	B

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	241	236	98.0%	46.4	6.0	D
	Through	964	973	101.0%	21.6	4.4	C
	Right Turn	80	81	101.5%	11.7	3.2	B
	Subtotal	1,285	1,291	100.5%	25.6	4.0	C
SB	Left Turn	60	62	103.0%	54.2	9.3	D
	Through	923	912	98.8%	39.8	9.8	D
	Right Turn	80	84	105.4%	15.5	9.1	B
	Subtotal	1,063	1,058	99.5%	38.7	9.3	D
EB	Left Turn	160	167	104.1%	35.7	5.9	D
	Through	30	33	111.3%	39.7	14.4	D
	Right Turn	272	277	101.9%	21.5	3.1	C
	Subtotal	462	477	103.3%	27.9	3.5	C
WB	Left Turn	110	107	97.6%	56.1	19.5	E
	Through	20	19	94.5%	55.6	18.2	E
	Right Turn	40	41	103.3%	10.7	3.4	B
	Subtotal	170	168	98.6%	45.8	14.5	D
Total		2,980	2,994	100.5%	31.8	5.6	C

Intersection 13 — **Sierra College Blvd/Shopping Center-I-80 WB Ramps** — **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	296	299	101.1%	54.4	11.4	D
	Through	1,025	1,029	100.4%	21.5	3.8	C
	Right Turn	552	552	100.0%	10.3	1.3	B
	Subtotal	1,873	1,830	100.4%	23.6	3.7	C
SB	Left Turn						
	Through	1,305	1,296	99.3%	38.2	8.7	D
	Right Turn	60	60	100.0%	11.6	3.8	B
	Subtotal	1,365	1,356	99.4%	37.0	8.6	D
EB	Left Turn	60	62	104.0%	47.9	12.9	D
	Through						
	Right Turn	345	343	99.3%	22.4	3.9	C
	Subtotal	405	405	100.0%	27.0	4.0	C
WB	Left Turn	515	521	101.1%	31.9	2.7	C
	Through	110	109	99.3%	40.5	4.2	D
	Right Turn	240	240	100.1%	20.3	3.2	C
	Subtotal	865	870	100.6%	29.9	2.2	C
Total		4,508	4,512	100.1%	29.2	3.7	C

Intersection 14 — **Sierra College Blvd/I-80 EB Ramps-Shopping Center** — **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,739	1,741	100.1%	26.8	4.6	C
	Right Turn	146	147	100.7%	12.7	2.0	B
	Subtotal	1,885	1,888	100.1%	25.7	4.3	C
SB	Left Turn	310	308	99.4%	49.7	5.8	D
	Through	955	956	100.1%	21.4	2.2	C
	Right Turn	340	343	100.9%	8.3	0.8	A
	Subtotal	1,605	1,607	100.1%	24.4	2.5	C
EB	Left Turn	400	403	100.8%	43.5	5.0	D
	Through	350	355	101.5%	36.8	2.7	D
	Right Turn	193	199	103.2%	23.8	2.6	C
	Subtotal	943	958	101.6%	36.7	2.0	D
WB	Left Turn	115	109	94.3%	42.8	6.3	D
	Through						
	Right Turn	310	312	100.5%	22.9	5.4	C
	Subtotal	425	420	98.8%	28.2	5.3	C
Total		4,858	4,872	100.3%	27.8	2.3	C

Intersection 15 **Sierra College Blvd/Schriber Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	11	111.0%	26.0	21.8	C
	Through	1,795	1,801	100.3%	9.3	3.9	A
	Right Turn	50	46	92.8%	10.4	5.9	B
	Subtotal	1,855	1,858	100.2%	9.5	3.9	A
SB	Left Turn						
	Through	1,233	1,233	100.0%	10.5	4.8	B
	Right Turn	30	32	105.3%	6.5	3.7	A
	Subtotal	1,263	1,265	100.2%	10.4	4.7	B
EB	Left Turn	40	37	93.3%	127.4	170.4	F
	Through	10	11	110.0%	42.2	25.4	D
	Right Turn	20	20	98.5%	23.3	10.5	C
	Subtotal	70	68	97.1%	87.1	107.8	F
WB	Left Turn	20	20	100.5%	41.7	19.3	D
	Through	10	10	97.0%	33.4	18.8	C
	Right Turn	50	54	107.8%	23.5	8.1	C
	Subtotal	80	84	104.6%	29.4	8.7	C
Total		3,268	3,275	100.2%	11.7	5.4	B

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	8	82.0%	52.9	18.3	D
	Through	1,825	1,825	100.0%	37.6	14.3	D
	Right Turn	60	62	103.8%	43.2	19.2	D
	Subtotal	1,895	1,896	100.0%	37.9	14.4	D
SB	Left Turn	50	50	99.6%	39.0	6.5	D
	Through	1,183	1,182	99.9%	6.1	0.9	A
	Right Turn	40	42	105.0%	2.2	0.5	A
	Subtotal	1,273	1,274	100.0%	7.4	0.9	A
EB	Left Turn	10	10	103.0%	37.4	26.0	D
	Through	10	12	119.0%	37.6	10.9	D
	Right Turn	10	10	98.0%	11.7	7.5	B
	Subtotal	30	32	106.7%	29.9	9.2	C
WB	Left Turn	60	59	98.0%	35.9	6.7	D
	Through	10	8	83.0%	30.9	24.3	C
	Right Turn	10	10	98.0%	22.0	14.0	C
	Subtotal	80	77	96.1%	35.1	5.2	D
Total		3,278	3,278	100.0%	26.0	8.9	C

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr-North Village Street A** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	234	233	99.6%	70.1	22.2	E
	Through	1,270	1,269	99.9%	38.7	4.0	D
	Right Turn	45	47	104.4%	25.5	8.7	C
	Subtotal	1,549	1,549	100.0%	43.1	4.4	D
SB	Left Turn	48	47	98.8%	76.2	21.8	E
	Through	990	978	98.8%	48.5	9.4	D
	Right Turn	220	220	100.1%	5.5	0.9	A
	Subtotal	1,258	1,246	99.0%	41.6	8.7	D
EB	Left Turn	600	606	101.0%	32.4	3.5	C
	Through						
	Right Turn	261	261	100.0%	26.0	4.7	C
	Subtotal	861	867	100.7%	30.5	3.7	C
WB	Left Turn	40	41	101.5%	62.1	17.5	E
	Through						
	Right Turn	25	26	102.4%	15.2	7.7	B
	Subtotal	65	66	101.8%	44.7	13.2	D
Total		3,733	3,729	99.9%	39.7	4.3	D

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,562	1,567	100.3%	1.0	0.1	A
	Right Turn						
	Subtotal	1,562	1,567	100.3%	1.0	0.1	A
SB	Left Turn						
	Through	1,239	1,228	99.1%	6.9	0.8	A
	Right Turn	40	43	108.0%	6.5	0.7	A
	Subtotal	1,279	1,271	99.4%	6.8	0.8	A
EB	Left Turn						
	Through						
	Right Turn	20	19	94.5%	6.0	3.2	A
	Subtotal	20	19	94.5%	6.0	3.2	A
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,861	2,857	99.8%	3.6	0.4	A

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	36	33	92.8%	41.4	12.7	D
	Through	1,194	1,208	101.1%	13.1	2.1	B
	Right Turn	30	30	101.3%	8.8	3.7	A
	Subtotal	1,260	1,272	100.9%	13.6	2.1	B
SB	Left Turn	130	126	97.2%	33.7	5.8	C
	Through	1,014	1,016	100.2%	8.8	1.4	A
	Right Turn	93	95	101.6%	9.9	2.7	A
	Subtotal	1,237	1,237	100.0%	11.6	1.7	B
EB	Left Turn	41	41	99.0%	30.5	4.2	C
	Through	10	9	93.0%	28.4	10.0	C
	Right Turn	28	31	109.3%	14.0	4.3	B
	Subtotal	79	81	101.9%	23.9	3.3	C
WB	Left Turn	20	19	93.5%	32.1	10.3	C
	Through	10	11	110.0%	32.4	17.9	C
	Right Turn	50	53	105.8%	14.9	2.1	B
	Subtotal	80	83	103.3%	21.5	4.4	C
Total		2,656	2,671	100.6%	13.3	1.7	B

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	239	244	102.1%	9.0	12.7	A
	Right Turn						
	Subtotal	239	244	102.1%	9.0	12.7	A
SB	Left Turn						
	Through	192	194	100.9%	0.6	0.1	A
	Right Turn	10	10	98.0%	0.6	0.5	A
	Subtotal	202	204	100.8%	0.6	0.1	A
EB	Left Turn						
	Through						
	Right Turn	10	10	101.0%	2.7	0.6	A
	Subtotal	10	10	101.0%	2.7	0.6	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		451	458	101.5%	5.4	7.9	A

Intersection 21 — **El Don Dr/Southern Retail Access-South Village Dwy 2** — **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	8	75.0%	2.9	1.2	A
	Through	151	154	102.0%	7.3	18.0	A
	Right Turn	1	2	180.0%	0.1	0.4	A
	Subtotal	162	163	100.8%	7.4	18.0	A
SB	Left Turn	9	8	85.6%	5.6	13.5	A
	Through	183	186	101.6%	0.4	0.1	A
	Right Turn	10	11	109.0%	0.1	0.1	A
	Subtotal	202	205	101.2%	0.7	0.9	A
EB	Left Turn	40	43	108.3%	8.0	6.1	A
	Through						
	Right Turn	10	12	117.0%	3.7	1.9	A
	Subtotal	50	55	110.0%	7.1	4.7	A
WB	Left Turn	4	4	102.5%	1.5	1.8	A
	Through						
	Right Turn	48	47	98.1%	17.7	43.7	C
	Subtotal	52	51	98.5%	17.6	43.7	C
Total		466	474	101.7%	6.0	13.3	A

Intersection 22 — **El Don Dr/Wildflower Ln-South Village Dwy 1** — **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	11	107.0%	5.0	2.5	A
	Through	120	123	102.7%	6.0	2.6	A
	Right Turn	1	1	110.0%	0.3	0.8	A
	Subtotal	131	135	103.1%	5.9	2.5	A
SB	Left Turn						
	Through	167	170	101.9%	6.3	0.4	A
	Right Turn	30	32	105.7%	4.6	0.7	A
	Subtotal	197	202	102.5%	6.0	0.3	A
EB	Left Turn	20	20	98.0%	4.1	0.8	A
	Through						
	Right Turn	10	11	114.0%	3.2	1.3	A
	Subtotal	30	31	103.3%	3.9	0.6	A
WB	Left Turn	3	2	73.3%	0.9	1.6	A
	Through						
	Right Turn	22	21	93.2%	3.3	2.6	A
	Subtotal	25	23	90.8%	3.2	2.3	A
Total		383	391	102.0%	5.7	1.1	A

Intersection 23 — **El Don Dr/Corona Cir-South Village Street A** — **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	9	94.0%	2.1	2.1	A
	Through	114	117	103.0%	0.2	0.1	A
	Right Turn	3	4	116.7%	0.0	0.0	A
	Subtotal	127	130	102.6%	0.3	0.2	A
SB	Left Turn	13	14	106.9%	2.8	0.5	A
	Through	147	146	99.1%	1.7	0.2	A
	Right Turn	20	22	110.0%	1.5	0.2	A
	Subtotal	180	182	100.9%	1.8	0.2	A
EB	Left Turn	10	10	102.0%	4.2	1.6	A
	Through						
	Right Turn	10	12	123.0%	3.2	1.8	A
	Subtotal	20	23	112.5%	4.1	0.8	A
WB	Left Turn	2	2	95.0%	2.9	3.6	A
	Through						
	Right Turn	7	7	95.7%	2.7	1.5	A
	Subtotal	9	9	95.6%	3.9	1.6	A
Total		336	343	102.1%	1.5	0.2	A

Intersection 24 — **Sierra College Blvd/Street G** — **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,500	1,505	100.4%	1.4	0.1	A
	Right Turn	62	62	99.5%	1.1	0.2	A
	Subtotal	1,562	1,567	100.3%	1.4	0.1	A
SB	Left Turn	36	34	95.6%	24.6	10.4	C
	Through	1,279	1,270	99.3%	6.4	0.7	A
	Right Turn						
	Subtotal	1,315	1,304	99.2%	6.8	0.7	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	49	49	99.4%	10.7	3.8	B
	Subtotal	49	49	99.4%	10.7	3.8	B
Total		2,926	2,920	99.8%	3.9	0.3	A

Intersection 25 — **Sierra College Blvd/North Village Dwy 3** — **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,522	1,532	100.6%	4.4	0.3	A
	Right Turn	23	23	99.6%	2.7	1.0	A
	Subtotal	1,545	1,555	100.6%	4.3	0.3	A
SB	Left Turn	44	42	96.1%	19.7	9.5	C
	Through	1,215	1,205	99.2%	1.4	0.1	A
	Right Turn						
	Subtotal	1,259	1,247	99.1%	2.0	0.3	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	40	35	87.8%	9.2	3.7	A
	Subtotal	40	35	87.8%	9.2	3.7	A
Total		2,844	2,837	99.8%	3.4	0.3	A

Intersection 26 — **South Village Dwy 3/Rocklin Rd** — **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	32	33	104.1%	10.5	6.2	B
	Subtotal	32	33	104.1%	10.5	6.2	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	957	957	100.0%	3.7	0.4	A
	Right Turn	9	8	87.8%	3.3	1.3	A
	Subtotal	966	965	99.9%	3.6	0.4	A
WB	Left Turn						
	Through	1,002	998	99.6%	1.8	1.0	A
	Right Turn						
	Subtotal	1,002	998	99.6%	1.8	1.0	A
Total		2,000	1,996	99.8%	2.9	0.5	A

SimTraffic Post-Processor — Sierra Villages TIS
Average Results from 10 Runs — Existing Plus Approved Plus Project Conditions (w/ operational enhancements)
Volume and Delay by Movement — PM Peak Hour

Intersection 27 — South Village Dwy 4/Rocklin Rd — Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	80	79	98.8%	16.3	6.1	C
	Subtotal	80	79	98.8%	16.3	6.1	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	965	968	100.4%	2.1	0.3	A
	Right Turn	24	24	100.8%	0.9	0.4	A
	Subtotal	989	993	100.4%	2.0	0.3	A
WB	Left Turn						
	Through	1,002	999	99.7%	0.5	0.2	A
	Right Turn						
	Subtotal	1,002	999	99.7%	0.5	0.2	A
Total		2,071	2,071	100.0%	1.8	0.3	A

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **AM Peak Hour**

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	20	16	81.0%	38.2	8.4	D
	Through	10	11	109.0%	44.1	16.0	D
	Right Turn	10	9	92.0%	6.9	6.0	A
	Subtotal	40	36	90.8%	31.7	6.1	C
SB	Left Turn	213	219	102.6%	28.7	3.8	C
	Through	10	10	102.0%	30.1	19.6	C
	Right Turn	160	166	104.0%	16.6	2.8	B
	Subtotal	383	395	103.2%	23.6	2.6	C
EB	Left Turn	190	190	99.9%	57.8	23.2	E
	Through	608	611	100.5%	14.9	7.4	B
	Right Turn	10	10	99.0%	5.6	3.5	A
	Subtotal	808	811	100.3%	24.8	11.5	C
WB	Left Turn	30	28	92.7%	57.1	17.1	E
	Through	1,212	1,122	92.6%	24.0	3.3	C
	Right Turn	575	530	92.1%	8.1	1.1	A
	Subtotal	1,817	1,680	92.4%	19.6	2.8	B
Total		3,048	2,922	95.9%	21.9	3.7	C

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	111	114	103.0%	40.4	6.8	D
	Through	10	10	102.0%	39.7	19.8	D
	Right Turn	440	446	101.4%	28.1	3.8	C
	Subtotal	561	571	101.7%	31.1	2.8	C
EB	Left Turn						
	Through	590	599	101.6%	42.9	4.4	D
	Right Turn	280	280	100.0%	18.5	2.3	B
	Subtotal	870	879	101.1%	34.5	2.3	C
WB	Left Turn	570	536	94.0%	19.3	3.5	B
	Through	1,479	1,330	89.9%	12.4	2.0	B
	Right Turn						
	Subtotal	2,049	1,865	91.0%	14.5	1.9	B
Total		3,480	3,315	95.3%	23.0	1.5	C

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **AM Peak Hour**

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	780	673	86.3%	42.2	2.0	D
	Through	10	11	111.0%	47.6	10.8	D
	Right Turn	1,112	986	88.7%	29.8	2.0	C
	Subtotal	1,902	1,671	87.8%	35.2	1.3	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	90	87	96.1%	60.7	8.7	E
	Through	611	629	103.0%	15.4	3.4	B
	Right Turn						
	Subtotal	701	716	102.1%	21.3	3.3	C
WB	Left Turn						
	Through	1,269	1,202	94.7%	28.4	3.7	C
	Right Turn	96	91	94.6%	11.6	2.0	B
	Subtotal	1,365	1,292	94.7%	27.2	3.5	C
Total		3,968	3,679	92.7%	29.9	1.2	C

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	300	301	100.2%	43.1	4.2	D
	Through						
	Right Turn	80	79	98.4%	15.5	6.6	B
	Subtotal	380	379	99.8%	37.5	4.6	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	40	36	89.8%	73.7	9.2	E
	Through	1,524	1,427	93.6%	13.3	2.1	B
	Right Turn	170	163	95.6%	9.0	2.5	A
	Subtotal	1,734	1,625	93.7%	14.4	2.0	B
WB	Left Turn	43	34	79.1%	74.7	15.8	E
	Through	1,043	974	93.4%	17.7	4.3	B
	Right Turn						
	Subtotal	1,086	1,008	92.8%	19.2	4.4	B
Total		3,200	3,013	94.1%	18.9	2.5	B

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **AM Peak Hour**

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	282	286	101.5%	33.4	5.1	C
	Through	20	22	110.5%	34.5	11.8	C
	Right Turn	25	26	104.0%	30.0	12.4	C
	Subtotal	327	334	102.2%	33.3	5.4	C
SB	Left Turn	16	17	106.3%	33.6	11.6	C
	Through	10	11	108.0%	27.6	12.3	C
	Right Turn	89	90	101.2%	11.6	3.3	B
	Subtotal	115	118	102.5%	17.2	4.2	B
EB	Left Turn	526	491	93.4%	36.6	3.5	D
	Through	933	871	93.3%	32.1	5.0	C
	Right Turn	129	127	98.8%	23.4	4.4	C
	Subtotal	1,588	1,489	93.8%	33.1	3.3	C
WB	Left Turn	76	64	84.6%	37.6	5.6	D
	Through	689	606	87.9%	20.3	3.7	C
	Right Turn	149	128	85.6%	9.5	2.3	A
	Subtotal	914	798	87.3%	20.1	3.1	C
Total		2,944	2,739	93.0%	28.6	2.2	C

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	20	18	89.5%	39.7	10.9	D
	Through	10	11	106.0%	27.8	15.5	C
	Right Turn	20	20	99.5%	12.1	8.0	B
	Subtotal	50	48	96.8%	26.0	5.3	C
SB	Left Turn	40	38	95.3%	27.9	9.1	C
	Through	10	10	99.0%	29.6	19.4	C
	Right Turn	25	26	102.4%	5.5	1.6	A
	Subtotal	75	74	98.1%	19.8	5.3	B
EB	Left Turn	516	492	95.3%	29.4	6.3	C
	Through	626	598	95.5%	10.4	2.9	B
	Right Turn	10	12	119.0%	6.7	7.6	A
	Subtotal	1,152	1,102	95.6%	18.8	4.2	B
WB	Left Turn	20	15	77.0%	44.3	17.3	D
	Through	894	780	87.2%	21.3	4.7	C
	Right Turn	367	320	87.3%	12.7	2.5	B
	Subtotal	1,281	1,115	87.1%	19.3	3.8	B
Total		2,558	2,339	91.4%	19.2	3.4	B

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **AM Peak Hour**

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	601	511	84.9%	229.5	10.8	F
	Through	1,463	1,334	91.2%	82.0	5.3	F
	Right Turn	136	124	91.4%	18.4	5.2	B
	Subtotal	2,200	1,969	89.5%	117.2	4.3	F
SB	Left Turn	211	152	72.0%	53.9	8.4	D
	Through	1,032	726	70.3%	36.3	4.6	D
	Right Turn	267	181	67.8%	21.6	3.1	C
	Subtotal	1,510	1,059	70.1%	36.3	3.9	D
EB	Left Turn	150	141	93.9%	48.7	7.9	D
	Through	250	242	96.8%	30.7	5.1	C
	Right Turn	286	274	95.9%	13.8	4.7	B
	Subtotal	686	657	95.8%	27.4	4.4	C
WB	Left Turn	133	133	99.9%	95.9	40.3	F
	Through	433	437	100.9%	32.4	1.3	C
	Right Turn	358	360	100.5%	23.5	2.5	C
	Subtotal	924	930	100.6%	38.4	7.5	D
Total		5,320	4,614	86.7%	70.4	1.6	E

Intersection 8 **Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	13	14	103.8%	20.0	21.1	C
	Through						
	Right Turn	1	1	100.0%	0.6	1.2	A
	Subtotal	14	15	103.6%	19.5	21.5	C
SB	Left Turn	6	5	86.7%	23.0	19.5	C
	Through						
	Right Turn	44	47	107.5%	9.0	4.5	A
	Subtotal	50	53	105.0%	10.8	6.1	B
EB	Left Turn	31	25	79.0%	8.4	2.9	A
	Through	563	491	87.1%	3.4	0.3	A
	Right Turn	3	2	76.7%	0.5	0.8	A
	Subtotal	597	517	86.6%	3.7	0.4	A
WB	Left Turn						
	Through	867	868	100.1%	4.3	0.8	A
	Right Turn	10	12	124.0%	3.3	0.7	A
	Subtotal	877	880	100.4%	4.3	0.8	A
Total		1,538	1,464	95.2%	4.5	0.9	A

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **AM Peak Hour**

Intersection 9 **Rocklin Manor Central/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	10	9	93.0%	13.5	11.8	B
	Through						
	Right Turn	1	1	140.0%	0.3	0.8	A
	Subtotal	11	11	97.3%	13.2	12.0	B
SB	Left Turn	2	1	50.0%	0.0	0.0	A
	Through						
	Right Turn	25	24	97.2%	5.1	2.4	A
	Subtotal	27	25	93.7%	5.1	2.4	A
EB	Left Turn	121	102	84.6%	6.8	1.8	A
	Through	439	388	88.3%	1.8	0.4	A
	Right Turn	10	8	78.0%	0.0	0.0	A
	Subtotal	570	498	87.4%	2.7	0.6	A
WB	Left Turn						
	Through	842	848	100.7%	3.1	0.5	A
	Right Turn	10	11	107.0%	2.5	0.4	A
	Subtotal	852	859	100.8%	3.1	0.5	A
Total		1,460	1,393	95.4%	3.1	0.5	A

Intersection 10 **Rocklin Manor East/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	9	8	92.2%	13.3	8.1	B
	Through						
	Right Turn	2	4	185.0%	3.1	5.0	A
	Subtotal	11	12	109.1%	10.1	5.3	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	440	389	88.3%	0.2	0.1	A
	Right Turn	2	2	95.0%	0.0	0.0	A
	Subtotal	442	391	88.4%	0.2	0.1	A
WB	Left Turn	2	2	75.0%	0.4	0.7	A
	Through	843	851	100.9%	2.4	0.4	A
	Right Turn						
	Subtotal	845	852	100.9%	2.4	0.4	A
Total		1,298	1,255	96.7%	1.9	0.3	A

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **AM Peak Hour**

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	301	309	102.7%	9.3	1.4	A
	Through						
	Right Turn						
	Subtotal	301	309	102.7%	9.3	1.4	A
SB	Left Turn						
	Through						
	Right Turn	544	541	99.4%	19.0	9.0	C
	Subtotal	544	541	99.4%	19.0	9.0	C
EB	Left Turn	322	285	88.4%	13.6	2.6	B
	Through						
	Right Turn	120	106	88.6%	11.5	2.2	B
	Subtotal	442	391	88.4%	13.0	2.4	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,287	1,241	96.4%	14.8	4.3	B

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	407	264	64.9%	111.4	30.5	F
	Through	1,183	836	70.7%	52.7	16.3	D
	Right Turn	178	129	72.6%	52.1	19.4	D
	Subtotal	1,768	1,230	69.5%	65.0	19.3	E
SB	Left Turn	80	56	70.3%	726.8	78.1	F
	Through	1,386	863	62.3%	816.3	84.1	F
	Right Turn	140	81	57.7%	786.2	95.8	F
	Subtotal	1,606	1,000	62.3%	809.3	84.0	F
EB	Left Turn	90	82	91.6%	240.6	115.0	F
	Through	30	27	89.7%	207.9	132.0	F
	Right Turn	102	95	92.8%	216.0	122.1	F
	Subtotal	222	204	91.9%	213.1	58.9	F
WB	Left Turn	178	55	31.0%	1299.1	242.8	F
	Through	30	8	27.3%	1141.4	344.5	F
	Right Turn	30	10	31.7%	1034.2	326.0	F
	Subtotal	238	73	30.6%	789.7	557.7	F
Total		3,834	2,506	65.4%	376.7	41.9	F

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	124	107	86.4%	234.7	140.7	F
	Through	1,308	1,056	80.7%	217.2	176.5	F
	Right Turn	201	171	85.2%	165.5	149.4	F
	Subtotal	1,633	1,334	81.7%	211.4	169.7	F
SB	Left Turn						
	Through	1,617	977	60.4%	89.2	13.7	F
	Right Turn	100	60	59.8%	30.1	6.2	C
	Subtotal	1,717	1,037	60.4%	85.5	13.6	F
EB	Left Turn	50	46	91.4%	182.7	129.5	F
	Through						
	Right Turn	92	95	103.7%	130.5	103.5	F
	Subtotal	142	141	99.4%	140.9	57.9	F
WB	Left Turn	690	217	31.4%	1543.1	277.1	F
	Through	70	27	38.7%	1340.2	240.4	F
	Right Turn	440	160	36.3%	1273.1	204.5	F
	Subtotal	1,200	403	33.6%	1426.1	240.2	F
Total		4,692	2,916	62.1%	263.7	98.6	F

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,433	1,304	91.0%	64.9	24.2	E
	Right Turn	94	85	90.9%	30.3	12.1	C
	Subtotal	1,527	1,389	91.0%	62.8	22.8	E
SB	Left Turn	150	79	52.9%	227.7	15.5	F
	Through	1,748	878	50.2%	244.0	28.3	F
	Right Turn	150	62	41.3%	183.5	21.0	F
	Subtotal	2,048	1,020	49.8%	239.3	27.2	F
EB	Left Turn	640	528	82.4%	520.4	158.2	F
	Through	80	69	85.6%	484.7	136.5	F
	Right Turn	864	714	82.7%	508.9	134.7	F
	Subtotal	1,584	1,310	82.7%	512.8	145.7	F
WB	Left Turn	162	87	53.5%	797.5	70.1	F
	Through	10	7	74.0%	683.2	70.4	F
	Right Turn	140	113	80.6%	672.6	61.5	F
	Subtotal	312	207	66.3%	732.3	67.1	F
Total		5,471	3,926	71.8%	278.6	23.0	F

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **AM Peak Hour**

Intersection 15 **Sierra College Blvd/Schriber Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	116	101	86.9%	110.3	42.1	F
	Through	1,207	1,139	94.3%	31.6	15.7	C
	Right Turn	10	10	95.0%	51.4	26.3	D
	Subtotal	1,333	1,249	93.7%	38.2	13.8	D
SB	Left Turn						
	Through	2,504	1,515	60.5%	33.6	3.7	C
	Right Turn	270	150	55.6%	37.8	6.7	D
	Subtotal	2,774	1,665	60.0%	34.0	3.8	C
EB	Left Turn	230	188	81.6%	521.1	246.1	F
	Through	20	17	85.5%	461.6	212.8	F
	Right Turn	88	75	85.2%	428.6	215.4	F
	Subtotal	338	280	82.8%	491.2	233.8	F
WB	Left Turn						
	Through						
	Right Turn	90	79	88.0%	236.9	256.6	F
	Subtotal	90	79	88.0%	236.9	256.6	F
Total		4,535	3,273	72.2%	75.0	24.6	E

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	462	433	93.8%	47.7	5.6	D
	Through	1,203	1,142	94.9%	36.0	30.5	D
	Right Turn	59	55	93.7%	42.9	55.6	D
	Subtotal	1,724	1,630	94.6%	39.2	23.8	D
SB	Left Turn	110	71	64.9%	62.6	19.7	E
	Through	2,252	1,386	61.5%	19.1	3.4	B
	Right Turn	230	138	59.9%	8.7	2.8	A
	Subtotal	2,592	1,595	61.5%	20.1	2.9	C
EB	Left Turn	100	89	88.6%	155.9	170.1	F
	Through	20	20	98.5%	106.0	124.4	F
	Right Turn	186	196	105.1%	41.4	62.0	D
	Subtotal	306	304	99.3%	77.9	96.7	E
WB	Left Turn	96	90	94.1%	47.0	10.9	D
	Through	50	49	98.4%	50.8	13.8	D
	Right Turn	20	23	113.5%	29.1	29.3	C
	Subtotal	166	162	97.7%	43.9	11.7	D
Total		4,788	3,691	77.1%	34.7	15.5	C

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **AM Peak Hour**

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	348	311	89.4%	56.3	10.5	E
	Through	1,628	1,542	94.7%	19.2	2.9	B
	Right Turn	13	14	103.8%	11.6	3.8	B
	Subtotal	1,989	1,867	93.9%	25.2	4.4	C
SB	Left Turn	14	8	56.4%	50.8	14.4	D
	Through	1,591	1,074	67.5%	22.0	1.9	C
	Right Turn	929	591	63.6%	18.3	1.3	B
	Subtotal	2,534	1,673	66.0%	20.8	1.4	C
EB	Left Turn	55	55	99.5%	40.0	8.1	D
	Through						
	Right Turn	36	38	105.6%	10.1	3.4	B
	Subtotal	91	93	101.9%	28.9	5.2	C
WB	Left Turn	66	62	94.4%	35.8	3.1	D
	Through						
	Right Turn	41	42	101.2%	20.6	10.1	C
	Subtotal	107	104	97.0%	29.5	5.1	C
Total		4,721	3,736	79.1%	23.6	2.5	C

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,931	1,802	93.3%	6.1	0.9	A
	Right Turn						
	Subtotal	1,931	1,802	93.3%	6.1	0.9	A
SB	Left Turn						
	Through	1,533	1,071	69.9%	5.8	1.0	A
	Right Turn	187	125	67.1%	5.5	1.0	A
	Subtotal	1,720	1,197	69.6%	5.8	1.0	A
EB	Left Turn						
	Through						
	Right Turn	18	15	82.2%	6.4	3.5	A
	Subtotal	18	15	82.2%	6.4	3.5	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		3,669	3,014	82.1%	6.0	0.6	A

SimTraffic Post-Processor | **Sierra Villages TIS**
Average Results from 10 Runs | **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement | **AM Peak Hour**

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	45	42	94.0%	148.8	48.3	F
	Through	2,077	1,895	91.2%	87.6	5.2	F
	Right Turn	5	6	114.0%	14.6	17.2	B
	Subtotal	2,127	1,943	91.3%	88.9	5.1	F
SB	Left Turn	36	30	81.9%	33.2	8.2	C
	Through	1,439	1,124	78.1%	11.3	1.3	B
	Right Turn	26	22	83.1%	11.8	3.4	B
	Subtotal	1,501	1,175	78.3%	11.8	1.5	B
EB	Left Turn	57	52	91.6%	28.3	6.3	C
	Through	1	1	110.0%	8.0	14.4	A
	Right Turn	39	39	100.3%	13.1	4.1	B
	Subtotal	97	92	95.3%	22.3	4.0	C
WB	Left Turn	18	18	98.9%	21.4	11.0	C
	Through	1	1	110.0%	0.7	2.2	A
	Right Turn	44	49	110.2%	16.7	4.4	B
	Subtotal	63	67	107.0%	18.6	4.9	B
Total		3,788	3,278	86.5%	58.2	2.1	E

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	327	333	101.9%	4.5	2.1	A
	Right Turn						
	Subtotal	327	333	101.9%	4.5	2.1	A
SB	Left Turn						
	Through	164	157	95.6%	0.7	0.2	A
	Right Turn	10	11	113.0%	0.8	0.9	A
	Subtotal	174	168	96.6%	0.7	0.3	A
EB	Left Turn						
	Through						
	Right Turn	1	1	80.0%	0.5	1.1	A
	Subtotal	1	1	80.0%	0.5	1.1	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		502	502	100.0%	3.3	1.5	A

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **AM Peak Hour**

Intersection 21 **El Don Dr/Southern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	3	3	86.7%	1.6	1.8	A
	Through	304	310	101.9%	1.9	0.4	A
	Right Turn						
	Subtotal	307	312	101.7%	1.9	0.4	A
SB	Left Turn	50	46	92.0%	3.5	1.9	A
	Through	114	112	98.1%	0.1	0.1	A
	Right Turn	1	1	110.0%	0.0	0.1	A
	Subtotal	165	159	96.3%	1.1	0.7	A
EB	Left Turn	13	13	97.7%	8.5	3.5	A
	Through						
	Right Turn	1	2	180.0%	1.6	2.1	A
	Subtotal	14	15	103.6%	8.0	3.6	A
WB	Left Turn	1	1	60.0%	1.8	4.6	A
	Through						
	Right Turn	10	11	109.0%	4.0	2.5	A
	Subtotal	11	12	104.5%	4.1	2.7	A
Total		497	497	100.0%	1.9	0.4	A

Intersection 22 **El Don Dr/Wildflower Ln** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	2	2	75.0%	1.8	2.5	A
	Through	289	296	102.2%	6.4	0.6	A
	Right Turn	18	17	96.1%	4.8	1.1	A
	Subtotal	309	314	101.7%	6.3	0.6	A
SB	Left Turn						
	Through	104	100	96.5%	5.9	0.6	A
	Right Turn	12	13	110.0%	3.4	0.9	A
	Subtotal	116	114	97.9%	5.7	0.7	A
EB	Left Turn	15	15	98.0%	4.4	0.6	A
	Through						
	Right Turn	5	6	110.0%	2.1	1.3	A
	Subtotal	20	20	101.0%	4.0	0.4	A
WB	Left Turn	1	0	30.0%	0.3	0.9	A
	Through						
	Right Turn	3	4	123.3%	2.5	1.8	A
	Subtotal	4	4	100.0%	2.5	1.8	A
Total		449	452	100.7%	6.0	0.6	A

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **AM Peak Hour**

Intersection 23 **El Don Dr/Corona Cir** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	2	1	65.0%	0.8	1.2	A
	Through	289	291	100.7%	0.3	0.1	A
	Right Turn	1	1	140.0%	0.0	0.0	A
	Subtotal	292	294	100.6%	0.3	0.1	A
SB	Left Turn	4	4	95.0%	2.1	2.1	A
	Through	101	97	96.4%	1.6	0.3	A
	Right Turn	5	5	98.0%	1.0	0.8	A
	Subtotal	110	106	96.5%	1.7	0.4	A
EB	Left Turn	9	10	107.8%	6.5	4.0	A
	Through						
	Right Turn	3	4	136.7%	1.3	1.4	A
	Subtotal	12	14	115.0%	5.5	2.3	A
WB	Left Turn	3	2	60.0%	1.3	2.7	A
	Through						
	Right Turn	11	12	109.1%	4.0	1.6	A
	Subtotal	14	14	98.6%	4.1	1.5	A
Total		428	427	99.9%	1.0	0.1	A

Intersection 24 **Sierra College Blvd/Street G** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	1,910	1,784	93.4%	6.4	1.0	A
	Right Turn	21	17	82.9%	6.1	0.9	A
	Subtotal	1,931	1,802	93.3%	6.4	1.0	A
SB	Left Turn	11	8	71.8%	10.3	8.5	B
	Through	1,720	1,197	69.6%	5.4	1.0	A
	Right Turn						
	Subtotal	1,731	1,205	69.6%	5.4	1.0	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	79	79	100.3%	18.0	5.6	C
	Subtotal	79	79	100.3%	18.0	5.6	C
Total		3,741	3,086	82.5%	6.4	0.7	A

SimTraffic Post-Processor | **Sierra Villages TIS**
Average Results from 10 Runs | **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement | **AM Peak Hour**

Intersection 25 **Sierra College Blvd/North Village Dwy 3** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	1,919	1,792	93.4%	4.6	0.5	A
	Right Turn	22	19	84.5%	3.1	1.2	A
	Subtotal	1,941	1,810	93.3%	4.6	0.5	A
SB	Left Turn	41	28	67.1%	24.7	6.3	C
	Through	1,510	1,058	70.0%	7.5	1.2	A
	Right Turn						
	Subtotal	1,551	1,085	70.0%	7.9	1.4	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	12	11	92.5%	8.5	8.1	A
	Subtotal	12	11	92.5%	8.5	8.1	A
Total		3,504	2,907	82.9%	6.0	0.8	A

Intersection 26 **South Village Dwy 3/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn	3	3	93.3%	12.3	15.5	B
	Subtotal	3	3	93.3%	12.3	15.5	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,208	1,147	95.0%	0.2	0.0	A
	Right Turn	42	38	90.0%	0.1	0.1	A
	Subtotal	1,250	1,185	94.8%	0.2	0.0	A
WB	Left Turn						
	Through	949	831	87.6%	3.9	0.4	A
	Right Turn						
	Subtotal	949	831	87.6%	3.9	0.4	A
Total		2,202	2,019	91.7%	1.8	0.1	A

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **AM Peak Hour**

Intersection 27 **South Village Dwy 4/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn	17	19	113.5%	5.4	3.4	A
	Subtotal	17	19	113.5%	5.4	3.4	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,135	1,077	94.9%	1.3	0.2	A
	Right Turn	76	73	96.3%	1.0	0.4	A
	Subtotal	1,211	1,150	95.0%	1.3	0.2	A
WB	Left Turn						
	Through	949	832	87.6%	3.0	0.3	A
	Right Turn						
	Subtotal	949	832	87.6%	3.0	0.3	A
Total		2,177	2,001	91.9%	2.1	0.2	A

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **PM Peak Hour**

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	30	30	100.0%	52.4	29.7	D
	Through	20	24	118.0%	63.0	22.6	E
	Right Turn	10	8	82.0%	29.6	23.4	C
	Subtotal	60	62	103.0%	56.5	20.6	E
SB	Left Turn	749	729	97.4%	84.3	25.8	F
	Through	10	13	129.0%	109.5	51.6	F
	Right Turn	310	322	103.9%	29.5	11.3	C
	Subtotal	1,069	1,064	99.6%	68.5	21.5	E
EB	Left Turn	330	211	63.9%	560.5	39.8	F
	Through	1,252	860	68.7%	483.3	38.7	F
	Right Turn	10	7	67.0%	461.0	76.3	F
	Subtotal	1,592	1,078	67.7%	499.4	38.3	F
WB	Left Turn	40	36	90.0%	98.9	30.4	F
	Through	925	880	95.1%	44.0	17.1	D
	Right Turn	531	519	97.7%	9.3	5.8	A
	Subtotal	1,496	1,434	95.9%	32.8	14.2	C
Total		4,217	3,638	86.3%	185.2	12.9	F

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	105	99	94.3%	62.8	6.0	E
	Through	10	10	101.0%	35.0	35.5	C
	Right Turn	220	223	101.5%	28.7	14.9	C
	Subtotal	335	332	99.2%	38.9	10.3	D
EB	Left Turn						
	Through	1,241	968	78.0%	47.8	5.1	D
	Right Turn	840	659	78.5%	52.1	4.7	D
	Subtotal	2,081	1,627	78.2%	49.6	4.3	D
WB	Left Turn	803	754	93.9%	42.0	7.0	D
	Through	1,316	1,263	95.9%	8.6	1.0	A
	Right Turn						
	Subtotal	2,119	2,017	95.2%	21.1	2.7	C
Total		4,535	3,976	87.7%	34.0	2.0	C

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **PM Peak Hour**

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	510	510	100.0%	57.6	3.8	E
	Through	10	14	137.0%	32.4	16.3	C
	Right Turn	689	700	101.6%	30.2	14.1	C
	Subtotal	1,209	1,224	101.2%	41.6	9.3	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	340	262	77.0%	77.8	10.0	E
	Through	1,006	798	79.3%	12.0	2.3	B
	Right Turn						
	Subtotal	1,346	1,060	78.7%	27.5	3.4	C
WB	Left Turn						
	Through	1,609	1,507	93.7%	22.6	5.5	C
	Right Turn	171	162	94.5%	12.7	3.8	B
	Subtotal	1,780	1,669	93.8%	21.7	5.3	C
Total		4,335	3,952	91.2%	29.7	5.5	C

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	270	270	100.1%	58.1	11.5	F
	Through						
	Right Turn	76	81	106.4%	15.6	5.4	B
	Subtotal	346	351	101.5%	48.6	9.9	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	60	50	83.8%	91.4	17.4	F
	Through	1,315	1,158	88.1%	17.2	4.7	B
	Right Turn	320	287	89.8%	13.4	3.5	B
	Subtotal	1,695	1,496	88.2%	19.2	4.6	B
WB	Left Turn	78	74	94.6%	109.5	28.1	F
	Through	1,499	1,395	93.1%	38.5	26.9	D
	Right Turn						
	Subtotal	1,577	1,469	93.1%	42.1	26.8	D
Total		3,618	3,316	91.6%	32.3	13.2	C

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	241	237	98.5%	40.2	9.6	D
	Through	10	12	116.0%	43.7	14.8	D
	Right Turn	38	34	89.5%	34.1	9.8	C
	Subtotal	289	283	97.9%	39.6	9.2	D
SB	Left Turn	87	78	89.9%	188.3	63.6	F
	Through	20	19	96.5%	192.6	94.0	F
	Right Turn	360	351	97.5%	134.7	65.9	F
	Subtotal	467	449	96.1%	147.1	65.2	F
EB	Left Turn	244	215	88.0%	34.9	4.8	C
	Through	968	849	87.7%	31.5	6.3	C
	Right Turn	198	179	90.2%	27.4	4.0	C
	Subtotal	1,410	1,242	88.1%	31.5	4.5	C
WB	Left Turn	54	48	89.4%	46.0	8.4	D
	Through	968	877	90.6%	28.5	4.5	C
	Right Turn	50	47	93.2%	8.3	1.9	A
	Subtotal	1,072	972	90.7%	28.4	4.5	C
Total		3,238	2,946	91.0%	48.6	8.3	D

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	10	9	94.0%	15.8	10.1	B
	Through						
	Right Turn	10	12	122.0%	14.0	13.6	B
	Subtotal	20	22	108.0%	15.6	8.2	B
SB	Left Turn	315	319	101.1%	40.4	24.2	D
	Through						
	Right Turn	166	165	99.2%	6.6	4.0	A
	Subtotal	481	483	100.5%	28.6	16.0	C
EB	Left Turn	159	135	85.1%	79.9	72.8	E
	Through	1,005	862	85.8%	97.3	107.1	F
	Right Turn	20	20	99.0%	59.8	70.6	E
	Subtotal	1,184	1,017	85.9%	94.2	101.4	F
WB	Left Turn	10	8	83.0%	43.8	16.9	D
	Through	650	553	85.0%	18.8	3.6	B
	Right Turn	151	133	88.3%	7.6	1.1	A
	Subtotal	811	694	85.6%	17.1	3.2	B
Total		2,496	2,216	88.8%	48.8	35.2	D

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **PM Peak Hour**

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	440	333	75.6%	229.4	18.4	F
	Through	2,013	1,471	73.1%	266.0	24.4	F
	Right Turn	256	184	71.9%	285.7	43.0	F
	Subtotal	2,709	1,988	73.4%	261.6	22.0	F
SB	Left Turn	370	313	84.5%	129.7	65.2	F
	Through	2,005	1,698	84.7%	57.5	21.5	E
	Right Turn	86	71	82.3%	43.1	21.5	D
	Subtotal	2,461	2,082	84.6%	68.5	28.7	E
EB	Left Turn	284	213	75.1%	362.1	131.8	F
	Through	532	474	89.0%	92.2	14.3	F
	Right Turn	514	458	89.1%	60.5	23.7	E
	Subtotal	1,330	1,145	86.1%	125.2	16.6	F
WB	Left Turn	126	124	98.3%	133.3	67.2	F
	Through	285	288	101.1%	60.3	28.5	E
	Right Turn	288	291	101.1%	72.2	51.7	E
	Subtotal	699	703	100.6%	78.8	43.1	E
Total		7,199	5,917	82.2%	139.0	10.7	F

Intersection 8 **Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	11	9	83.6%	26.4	15.7	D
	Through						
	Right Turn	1	2	160.0%	4.2	10.3	A
	Subtotal	12	11	90.0%	24.4	14.9	C
SB	Left Turn	11	9	80.0%	47.0	89.2	E
	Through						
	Right Turn	82	81	98.8%	18.4	27.6	C
	Subtotal	93	90	96.6%	22.0	34.6	C
EB	Left Turn	45	33	74.2%	10.3	2.2	B
	Through	1,098	924	84.1%	7.5	1.5	A
	Right Turn	15	14	92.7%	3.6	1.8	A
	Subtotal	1,158	971	83.8%	7.6	1.5	A
WB	Left Turn						
	Through	606	623	102.9%	8.4	18.5	A
	Right Turn	11	10	90.9%	8.0	18.6	A
	Subtotal	617	633	102.6%	8.4	18.5	A
Total		1,880	1,705	90.7%	8.8	8.9	A

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **PM Peak Hour**

Intersection 9 **Rocklin Manor Central/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	14	16	115.0%	19.7	11.5	C
	Through						
	Right Turn						
	Subtotal	14	16	115.0%	19.7	11.5	C
SB	Left Turn	11	11	99.1%	31.9	22.4	D
	Through						
	Right Turn	127	131	103.5%	14.0	10.0	B
	Subtotal	138	142	103.1%	15.5	10.4	C
EB	Left Turn	39	31	78.2%	4.7	2.0	A
	Through	1,053	888	84.3%	3.3	0.7	A
	Right Turn	18	16	91.1%	0.8	0.7	A
	Subtotal	1,110	934	84.2%	3.3	0.8	A
WB	Left Turn	2	2	95.0%	8.1	13.3	A
	Through	476	486	102.1%	2.8	3.3	A
	Right Turn	3	3	106.7%	1.3	0.2	A
	Subtotal	481	491	102.1%	2.8	3.4	A
Total		1,743	1,584	90.9%	4.4	2.2	A

Intersection 10 **Rocklin Manor East/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	5	6	114.0%	17.3	22.3	C
	Through						
	Right Turn						
	Subtotal	5	6	114.0%	17.3	22.3	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,054	888	84.2%	1.0	0.6	A
	Right Turn	10	10	100.0%	0.0	0.1	A
	Subtotal	1,064	898	84.4%	1.0	0.6	A
WB	Left Turn	2	1	45.0%	3.1	7.5	A
	Through	476	485	101.9%	1.2	0.1	A
	Right Turn						
	Subtotal	478	486	101.7%	1.3	0.1	A
Total		1,547	1,389	89.8%	1.2	0.4	A

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **PM Peak Hour**

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	167	162	97.2%	4.7	0.6	A
	Through						
	Right Turn						
	Subtotal	167	162	97.2%	4.7	0.6	A
SB	Left Turn						
	Through						
	Right Turn	311	321	103.1%	4.7	0.3	A
	Subtotal	311	321	103.1%	4.7	0.3	A
EB	Left Turn	283	227	80.3%	104.2	77.8	F
	Through						
	Right Turn	771	631	81.9%	101.4	76.6	F
	Subtotal	1,054	859	81.5%	102.2	76.7	F
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,532	1,342	87.6%	67.7	49.1	F

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	184	132	71.5%	167.6	24.2	F
	Through	1,362	1,094	80.4%	54.0	8.0	D
	Right Turn	158	124	78.5%	49.3	9.4	D
	Subtotal	1,704	1,350	79.2%	64.8	10.0	E
SB	Left Turn	60	44	73.2%	565.9	34.2	F
	Through	1,845	1,263	68.4%	654.0	61.2	F
	Right Turn	120	77	63.9%	717.7	71.7	F
	Subtotal	2,025	1,384	68.3%	655.7	59.6	F
EB	Left Turn	340	226	66.4%	764.8	343.1	F
	Through	40	29	73.3%	740.3	411.3	F
	Right Turn	441	354	80.2%	495.1	277.5	F
	Subtotal	821	609	74.1%	603.2	298.6	F
WB	Left Turn	238	83	34.8%	1144.6	499.3	F
	Through	20	8	42.0%	1007.0	542.6	F
	Right Turn	40	14	33.8%	988.1	522.5	F
	Subtotal	298	105	35.2%	498.8	536.1	F
Total		4,848	3,447	71.1%	374.2	62.6	F

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	300	218	72.5%	180.2	119.0	F
	Through	1,310	1,008	76.9%	144.7	149.0	F
	Right Turn	478	363	76.0%	96.7	119.1	F
	Subtotal	2,088	1,589	76.1%	139.1	138.2	F
SB	Left Turn						
	Through	2,404	1,640	68.2%	46.2	5.3	D
	Right Turn	170	102	59.7%	30.3	5.4	C
	Subtotal	2,574	1,742	67.7%	45.2	5.2	D
EB	Left Turn	130	92	70.5%	723.0	472.7	F
	Through						
	Right Turn	366	306	83.6%	475.1	202.7	F
	Subtotal	496	398	80.2%	411.2	209.2	F
WB	Left Turn	625	597	95.5%	174.2	181.0	F
	Through	100	86	86.1%	278.1	216.2	F
	Right Turn	310	291	93.8%	180.3	190.7	F
	Subtotal	1,035	974	94.1%	180.0	185.1	F
Total		6,193	4,702	75.9%	137.3	66.5	F

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	2,673	1,861	69.6%	32.9	9.6	C
	Right Turn	98	64	65.4%	18.4	6.1	B
	Subtotal	2,771	1,925	69.5%	32.5	9.3	C
SB	Left Turn	270	220	81.3%	73.4	9.0	E
	Through	1,665	1,307	78.5%	19.4	3.6	B
	Right Turn	350	271	77.5%	6.8	1.0	A
	Subtotal	2,285	1,798	78.7%	23.7	2.8	C
EB	Left Turn	360	348	96.5%	154.9	141.4	F
	Through	170	166	97.4%	143.6	96.7	F
	Right Turn	241	232	96.4%	99.1	94.3	F
	Subtotal	771	745	96.7%	132.4	108.6	F
WB	Left Turn	219	212	96.8%	88.2	54.1	F
	Through	10	11	113.0%	87.6	67.8	F
	Right Turn	210	204	97.2%	70.2	56.8	E
	Subtotal	439	427	97.4%	80.3	55.3	F
Total		6,266	4,896	78.1%	48.1	21.3	D

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **PM Peak Hour**

Intersection 15 **Sierra College Blvd/Schriber Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	98	69	70.1%	48.2	9.9	D
	Through	2,531	1,697	67.1%	20.3	4.1	C
	Right Turn	10	6	63.0%	23.1	16.2	C
	Subtotal	2,639	1,772	67.2%	21.5	3.7	C
SB	Left Turn						
	Through	1,885	1,557	82.6%	27.3	6.4	C
	Right Turn	240	198	82.3%	27.6	7.2	C
	Subtotal	2,125	1,755	82.6%	27.3	6.4	C
EB	Left Turn	220	214	97.4%	65.8	23.9	E
	Through	20	21	105.5%	62.3	25.1	E
	Right Turn	136	136	99.8%	32.3	17.2	C
	Subtotal	376	371	98.7%	53.1	20.1	D
WB	Left Turn						
	Through						
	Right Turn	20	21	102.5%	37.9	11.1	D
	Subtotal	20	21	102.5%	37.9	11.1	D
Total		5,160	3,918	75.9%	27.5	6.5	C

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	313	218	69.6%	60.2	5.4	F
	Through	2,449	1,599	65.3%	124.6	14.2	F
	Right Turn	184	107	58.1%	210.2	36.9	F
	Subtotal	2,946	1,923	65.3%	121.7	13.9	F
SB	Left Turn	90	78	86.4%	79.4	32.9	E
	Through	1,791	1,503	83.9%	21.8	3.8	C
	Right Turn	140	118	84.6%	8.5	2.0	A
	Subtotal	2,021	1,699	84.1%	24.0	4.9	C
EB	Left Turn	70	65	92.9%	90.2	46.3	F
	Through	110	109	98.6%	49.2	6.9	D
	Right Turn	631	635	100.6%	22.3	4.0	C
	Subtotal	811	808	99.6%	31.2	5.6	C
WB	Left Turn	101	107	105.6%	58.9	8.2	E
	Through	50	48	96.8%	47.1	9.0	D
	Right Turn	110	104	94.2%	32.8	6.2	C
	Subtotal	261	259	99.1%	46.0	4.7	D
Total		6,039	4,689	77.6%	65.3	5.4	E

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **PM Peak Hour**

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	110	81	73.4%	243.2	12.7	F
	Through	2,414	1,733	71.8%	244.5	24.9	F
	Right Turn	45	29	63.8%	276.0	66.6	F
	Subtotal	2,569	1,843	71.7%	244.9	24.4	F
SB	Left Turn	48	42	87.3%	81.6	15.1	F
	Through	2,236	1,991	89.0%	41.9	6.0	D
	Right Turn	239	207	86.6%	16.7	2.9	B
	Subtotal	2,523	2,240	88.8%	40.3	5.6	D
EB	Left Turn	507	216	42.5%	855.8	138.5	F
	Through						
	Right Turn	220	96	43.6%	790.6	132.6	F
	Subtotal	727	312	42.8%	837.4	138.8	F
WB	Left Turn	40	39	98.3%	59.0	16.2	E
	Through						
	Right Turn	25	25	101.6%	70.2	41.2	E
	Subtotal	65	65	99.5%	61.8	21.3	E
Total		5,884	4,458	75.8%	173.1	14.2	F

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	2,582	1,930	74.8%	79.3	13.1	F
	Right Turn						
	Subtotal	2,582	1,930	74.8%	79.3	13.1	F
SB	Left Turn						
	Through	2,467	2,083	84.4%	16.3	12.3	C
	Right Turn	17	18	107.1%	14.5	10.2	B
	Subtotal	2,484	2,101	84.6%	16.3	12.3	C
EB	Left Turn						
	Through						
	Right Turn	38	37	98.4%	45.8	65.1	E
	Subtotal	38	37	98.4%	45.8	65.1	E
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		5,104	4,069	79.7%	45.1	6.2	E

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	32	25	77.8%	538.9	65.7	F
	Through	2,631	2,026	77.0%	544.6	53.3	F
	Right Turn	7	6	87.1%	511.7	164.4	F
	Subtotal	2,670	2,057	77.0%	544.6	53.3	F
SB	Left Turn	64	55	86.4%	56.4	11.2	E
	Through	2,521	2,163	85.8%	10.6	1.7	B
	Right Turn	80	69	85.8%	13.2	3.7	B
	Subtotal	2,665	2,287	85.8%	11.8	1.8	B
EB	Left Turn	34	31	92.4%	59.5	17.7	E
	Through	1	1	90.0%	17.1	34.6	B
	Right Turn	26	25	94.6%	31.5	10.0	C
	Subtotal	61	57	93.3%	47.5	13.0	D
WB	Left Turn	10	10	95.0%	48.9	19.6	D
	Through	1	1	70.0%	21.8	37.5	C
	Right Turn	21	25	119.0%	40.3	17.4	D
	Subtotal	32	35	110.0%	44.0	12.8	D
Total		5,428	4,436	81.7%	230.2	27.6	F

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	289	283	98.1%	4.6	2.8	A
	Right Turn						
	Subtotal	289	283	98.1%	4.6	2.8	A
SB	Left Turn						
	Through	245	222	90.6%	0.7	0.1	A
	Right Turn	7	7	100.0%	0.9	1.4	A
	Subtotal	252	229	90.9%	0.7	0.1	A
EB	Left Turn						
	Through						
	Right Turn	9	10	114.4%	2.7	1.0	A
	Subtotal	9	10	114.4%	2.7	1.0	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		550	523	95.0%	2.8	1.6	A

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **PM Peak Hour**

Intersection 21 **El Don Dr/Southern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	3	2	76.7%	1.5	1.8	A
	Through	207	198	95.8%	1.5	0.1	A
	Right Turn	1	1	70.0%	0.0	0.0	A
	Subtotal	211	201	95.4%	1.5	0.1	A
SB	Left Turn	9	8	88.9%	2.7	3.1	A
	Through	243	220	90.5%	0.3	0.1	A
	Right Turn	2	3	130.0%	0.0	0.0	A
	Subtotal	254	230	90.7%	0.3	0.1	A
EB	Left Turn	34	35	104.1%	7.8	2.8	A
	Through						
	Right Turn	5	4	78.0%	2.0	1.5	A
	Subtotal	39	39	100.8%	7.4	2.8	A
WB	Left Turn	4	4	95.0%	3.9	5.0	A
	Through						
	Right Turn	48	50	103.1%	3.3	0.7	A
	Subtotal	52	53	102.5%	3.7	1.0	A
Total		556	524	94.3%	1.7	0.3	A

Intersection 22 **El Don Dr/Wildflower Ln** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	1	0	20.0%	0.0	0.0	A
	Through	180	173	96.3%	5.4	0.3	A
	Right Turn	1	1	110.0%	1.0	1.6	A
	Subtotal	182	175	96.0%	5.4	0.3	A
SB	Left Turn						
	Through	237	214	90.4%	6.9	0.6	A
	Right Turn	15	13	86.0%	4.9	1.2	A
	Subtotal	252	227	90.1%	6.8	0.6	A
EB	Left Turn	9	7	74.4%	3.7	1.5	A
	Through						
	Right Turn	3	3	106.7%	2.0	2.3	A
	Subtotal	12	10	82.5%	4.0	0.6	A
WB	Left Turn	3	3	90.0%	1.7	1.5	A
	Through						
	Right Turn	22	21	96.8%	2.5	0.4	A
	Subtotal	25	24	96.0%	2.5	0.3	A
Total		471	436	92.5%	6.0	0.4	A

Intersection 23 **El Don Dr/Corona Cir** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	5	5	90.0%	1.9	2.2	A
	Through	166	160	96.1%	0.2	0.2	A
	Right Turn	3	4	126.7%	0.0	0.0	A
	Subtotal	174	168	96.4%	0.3	0.2	A
SB	Left Turn	13	13	102.3%	3.2	1.0	A
	Through	215	192	89.4%	1.8	0.2	A
	Right Turn	15	14	96.0%	1.4	0.4	A
	Subtotal	243	220	90.5%	1.8	0.2	A
EB	Left Turn	9	8	93.3%	5.5	1.7	A
	Through						
	Right Turn	3	3	83.3%	1.2	1.7	A
	Subtotal	12	11	90.8%	5.3	1.7	A
WB	Left Turn	2	2	80.0%	0.7	1.6	A
	Through						
	Right Turn	7	7	97.1%	2.7	2.0	A
	Subtotal	9	8	93.3%	2.8	2.0	A
Total		438	407	92.9%	1.4	0.2	A

Intersection 24 **Sierra College Blvd/Street G** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	2,520	1,877	74.5%	97.4	12.1	F
	Right Turn	62	45	71.9%	80.4	10.6	F
	Subtotal	2,582	1,922	74.4%	97.0	12.1	F
SB	Left Turn	36	31	85.6%	48.6	19.4	E
	Through	2,484	2,103	84.7%	13.6	7.0	B
	Right Turn						
	Subtotal	2,520	2,134	84.7%	14.0	7.1	B
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	49	23	47.6%	490.6	189.4	F
	Subtotal	49	23	47.6%	358.4	252.0	F
Total		5,151	4,079	79.2%	53.4	7.0	F

SimTraffic Post-Processor | **Sierra Villages TIS**
Average Results from 10 Runs | **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 25 **Sierra College Blvd/North Village Dwy 3** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	2,542	1,919	75.5%	49.1	10.3	E
	Right Turn	23	16	70.9%	41.0	21.9	E
	Subtotal	2,565	1,936	75.5%	49.1	10.3	E
SB	Left Turn	44	34	76.1%	82.7	22.4	F
	Through	2,461	2,080	84.5%	23.0	17.7	C
	Right Turn						
	Subtotal	2,505	2,113	84.4%	24.0	17.4	C
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	40	25	62.5%	573.2	135.9	F
	Subtotal	40	25	62.5%	503.0	218.3	F
Total		5,110	4,074	79.7%	38.2	8.9	E

Intersection 26 **South Village Dwy 3/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn	32	32	99.1%	11.0	23.1	B
	Subtotal	32	32	99.1%	11.0	23.1	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,104	967	87.6%	10.1	13.2	B
	Right Turn	9	7	77.8%	2.9	1.9	A
	Subtotal	1,113	974	87.5%	10.1	13.2	B
WB	Left Turn						
	Through	1,072	970	90.5%	1.2	0.2	A
	Right Turn						
	Subtotal	1,072	970	90.5%	1.2	0.2	A
Total		2,217	1,975	89.1%	5.4	5.9	A

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **PM Peak Hour**

Intersection 27 **South Village Dwy 4/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn	80	70	87.8%	100.4	153.3	F
	Subtotal	80	70	87.8%	100.4	153.3	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,112	968	87.0%	29.2	42.3	D
	Right Turn	24	22	91.3%	17.8	30.2	C
	Subtotal	1,136	990	87.1%	28.8	41.8	D
WB	Left Turn						
	Through	1,072	974	90.8%	0.4	0.1	A
	Right Turn						
	Subtotal	1,072	974	90.8%	0.4	0.1	A
Total		2,288	2,033	88.9%	14.2	18.1	B



APPENDIX A: CIRCULAR 212 INTERSECTION LOS CALCULATIONS

ID	Intersection	Control Type	LOS - V/C							
			Existing				Existing Plus Project			
			AM		PM		AM		PM	
1	Granite Drive / Rocklin Road	Signal	A	0.472	B	0.603	A	0.563	B	0.636
4	Agular Road / Rocklin Road	Signal	A	0.542	A	0.466	B	0.617	A	0.545
5	El Don Drive / Rocklin Road	Signal	B	0.673	B	0.635	C	0.722	C	0.742
6	Havenhurst Circle / Rocklin Road	Signal	A	0.592	A	0.484	B	0.642	A	0.564
7	Sierra College Blvd / Rocklin Road	Signal	A	0.525	B	0.662	A	0.570	C	0.793
12	Sierra College Blvd / Granite Drive	Signal	A	0.593	A	0.540	B	0.608	A	0.557
16	Sierra College Blvd / Bass Pro Drive	Signal	A	0.496	A	0.329	A	0.528	A	0.372
17	Sierra College Blvd / Stadium Entrance	Signal	A	0.290	A	0.438	A	0.419	A	0.422
19	Sierra College Blvd / El Don Dr	Signal	A	0.401	A	0.444	A	0.446	A	0.476

Shaded cells represent deficient operations (applies to PM peak hour only)

ID	Intersection	Control Type	LOS - V/C							
			Existing Plus Approved Projects No Project				Existing Plus Approved Projects Plus Project			
			AM		PM		AM		PM	
1	Granite Drive / Rocklin Road	Signal	A	0.541	B	0.607	A	0.557	B	0.640
4	Agular Road / Rocklin Road	Signal	B	0.615	A	0.496	B	0.691	A	0.575
5	El Don Drive / Rocklin Road	Signal	B	0.700	B	0.693	C	0.746	C	0.800
6	Havenhurst Circle / Rocklin Road	Signal	B	0.647	A	0.531	B	0.700	B	0.611
7	Sierra College Blvd / Rocklin Road	Signal	B	0.683	D	0.815	C	0.729	E	0.951
12	Sierra College Blvd / Granite Drive	Signal	B	0.641	B	0.638	C	0.656	B	0.653
16	Sierra College Blvd / Bass Pro Drive	Signal	B	0.632	A	0.449	B	0.673	A	0.487
17	Sierra College Blvd / Stadium Entrance	Signal	B	0.633	A	0.577	C	0.708	B	0.615
19	Sierra College Blvd / El Don Dr	Signal	A	0.488	A	0.545	A	0.514	A	0.548

Shaded cells represent deficient operations (applies to PM peak hour only)

With improvements shown on Figure 13, PM peak hour operations improve to LOS B (v/c = 0.615) under existing plus approved projects plus project conditions.

ID	Intersection	Control Type	LOS - V/C							
			Cumulative No Project				Cumulative Plus Project			
			AM		PM		AM		PM	
1	Granite Drive / Rocklin Road	Signal	A	0.593	C	0.757	B	0.608	C	0.761
4	Agular Road / Rocklin Road	Signal	A	0.554	A	0.499	B	0.604	A	0.552
5	El Don Drive / Rocklin Road	Signal	A	0.524	A	0.492	A	0.560	A	0.580
6	Havenhurst Circle / Rocklin Road	Signal	A	0.467	A	0.325	A	0.500	A	0.367
7	Sierra College Blvd / Rocklin Road	Signal	B	0.662	E	0.915	B	0.694	E	0.983
12	Sierra College Blvd / Granite Drive	Signal	C	0.747	D	0.856	C	0.757	D	0.867
15	Sierra College Blvd / Schriber Way	SSSC[1]	D	0.869	B	0.665	D	0.895	B	0.696
16	Sierra College Blvd / Bass Pro Drive	Signal	D	0.828	E	0.970	D	0.855	F	1.008
17	Sierra College Blvd / Stadium Entrance	Signal	C	0.725	C	0.702	D	0.817	C	0.792
19	Sierra College Blvd / El Don Dr	Signal	A	0.548	B	0.652	A	0.567	B	0.673

Shaded cells represent deficient operations (applies to PM peak hour only)

Intersection Level Of Service Report
Intersection 1: Granite Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.472

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	315.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	18	21	16	277	15	113	158	801	7	10	688	525
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	18	21	16	277	15	113	158	801	7	10	688	525
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	4	5	4	66	4	27	37	190	2	2	163	124
Total Analysis Volume [veh/h]	17	20	15	263	14	107	150	759	7	9	652	498
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna
Signal group	0	3	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.472

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 4: Aguilar Road / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.542

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	141	0	28	0	0	0	40	1274	53	9	647	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	2.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	141	0	28	0	0	0	40	1274	53	9	647	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	1.0000	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000
Total 15-Minute Volume [veh/h]	33	0	7	0	0	0	9	302	13	2	153	0
Total Analysis Volume [veh/h]	134	0	27	0	0	0	38	1208	50	9	613	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.542

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 5: El Don Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.673

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			15.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	119	20	23	20	1	71	531	695	62	14	440	121
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	119	20	23	20	1	71	531	695	62	14	440	121
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	28	5	5	5	0	17	126	165	15	3	104	29
Total Analysis Volume [veh/h]	113	19	22	19	1	67	503	659	59	13	417	115
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	7	0	0	3	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.673

Sequence

Ring 1	2	1	3	7	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Havenhurst Circle / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.592

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	15	1	19	41	1	16	357	429	7	15	406	424
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	1	19	41	1	16	357	429	7	15	406	424
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	4	0	5	10	0	4	85	102	2	4	96	101
Total Analysis Volume [veh/h]	14	1	18	39	1	15	339	408	7	14	386	403
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.592

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	5	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.504

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	397	552	63	157	674	200	103	195	191	76	263	174
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	397	552	63	157	674	200	103	195	191	76	263	174
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	94	131	15	37	160	47	24	46	45	18	62	41
Total Analysis Volume [veh/h]	376	523	60	149	639	190	98	185	181	72	249	165
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.504

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 12: Sierra College Blvd / Granite Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.593

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	253	462	86	80	824	64	65	20	103	143	24	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	253	462	86	80	824	64	65	20	103	143	24	33
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	60	109	20	19	195	15	15	5	24	34	6	8
Total Analysis Volume [veh/h]	240	438	82	76	781	61	62	19	98	136	23	31
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.593

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 16: Sierra College Blvd / Bass Pro Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.496

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	740	26	25	1389	7	0	1	103	23	24	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	740	26	25	1389	7	0	1	103	23	24	8
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	0	175	6	6	329	2	0	0	24	5	6	2
Total Analysis Volume [veh/h]	0	702	25	24	1317	7	0	1	98	22	23	8
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.496

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 17: Sierra College Blvd / Stadium Entrance

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.290

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00		50.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	50	738	1099	313	18	18
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	50	738	1099	313	18	18
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	12	175	261	74	4	4
Total Analysis Volume [veh/h]	48	701	1044	297	17	17
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	3	8	4	0	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.290

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Version 7.00-04

Intersection Level Of Service Report
Intersection 19: Sierra College Blvd / El Don Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.401

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	25	892	5	36	910	25	54	1	35	18	1	44
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	25	892	5	36	910	25	54	1	35	18	1	44
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	6	212	1	9	216	6	13	0	8	4	0	10
Total Analysis Volume [veh/h]	24	847	5	34	865	24	51	1	33	17	1	42
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.401

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 1: Granite Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.603

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	315.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	45	26	27	521	22	200	173	627	18	50	768	503
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	45	26	27	521	22	200	173	627	18	50	768	503
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	11	6	6	123	5	47	41	149	4	12	182	119
Total Analysis Volume [veh/h]	43	25	26	494	21	190	164	594	17	47	728	477
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna
Signal group	0	3	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.603

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 4: Aguilar Road / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.466

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	103	0	19	0	0	0	55	1012	139	15	1085	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	2.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	103	0	19	0	0	0	55	1012	139	15	1085	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	1.0000	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000
Total 15-Minute Volume [veh/h]	24	0	5	0	0	0	13	240	33	4	257	0
Total Analysis Volume [veh/h]	98	0	18	0	0	0	52	959	132	14	1029	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.466

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 5: El Don Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.635

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			15.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	117	9	25	58	13	352	260	656	125	16	619	46
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	117	9	25	58	13	352	260	656	125	16	619	46
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	28	2	6	14	3	83	62	155	30	4	147	11
Total Analysis Volume [veh/h]	111	9	24	55	12	334	246	622	119	15	587	44
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	7	0	0	3	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.635

Sequence

Ring 1	2	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	7	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Havenhurst Circle / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.484

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	5	0	9	335	0	167	71	438	16	14	442	119
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	0	9	335	0	167	71	438	16	14	442	119
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	1	0	2	80	0	40	17	104	4	3	105	28
Total Analysis Volume [veh/h]	5	0	9	318	0	159	67	416	15	13	420	113
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.484

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Version 7.00-04

Intersection Level Of Service Report
Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.713

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	260	834	49	182	630	137	184	250	348	62	190	195
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	260	834	49	182	630	137	184	250	348	62	190	195
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	62	198	12	43	149	32	44	59	82	15	45	46
Total Analysis Volume [veh/h]	246	791	46	173	597	130	174	237	330	59	180	185
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.713

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 12: Sierra College Blvd / Granite Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.540

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	40.00			40.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	176	859	77	54	765	78	153	27	248	101	15	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	176	859	77	54	765	78	153	27	248	101	15	40
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	42	204	18	13	181	18	36	6	59	24	4	9
Total Analysis Volume [veh/h]	167	814	73	51	725	74	145	26	235	96	14	38
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.540

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 16: Sierra College Blvd / Bass Pro Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.329

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	1260	52	28	878	31	1	1	2	52	0	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1260	52	28	878	31	1	1	2	52	0	9
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	0	299	12	7	208	7	0	0	0	12	0	2
Total Analysis Volume [veh/h]	0	1194	49	27	832	29	1	1	2	49	0	9
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.329

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 17: Sierra College Blvd / Stadium Entrance

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.438

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00		50.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	41	1154	895	40	160	56
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	41	1154	895	40	160	56
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	10	274	213	10	38	13
Total Analysis Volume [veh/h]	39	1096	850	38	152	53
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	3	8	4	0	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.438

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Version 7.00-04

Intersection Level Of Service Report
Intersection 19: Sierra College Blvd / El Don Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.444

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	26	1066	7	64	921	77	33	1	18	10	1	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	26	1066	7	64	921	77	33	1	18	10	1	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	6	253	2	15	219	18	8	0	4	2	0	5
Total Analysis Volume [veh/h]	25	1013	7	61	875	73	31	1	17	10	1	20
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.444

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 1: Granite Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.488

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	315.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	18	21	16	282	15	113	158	873	7	10	730	528
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	18	21	16	282	15	113	158	873	7	10	730	528
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	4	5	4	67	4	27	37	207	2	2	173	125
Total Analysis Volume [veh/h]	17	20	15	267	14	107	150	828	7	9	692	501
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna
Signal group	0	3	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.488

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Version 7.00-04

Intersection Level Of Service Report
Intersection 4: Aguilar Road / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.617

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	141	0	30	0	0	0	40	1500	53	9	759	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	2.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	141	0	30	0	0	0	40	1500	53	9	759	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	1.0000	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000
Total 15-Minute Volume [veh/h]	33	0	7	0	0	0	9	356	13	2	180	0
Total Analysis Volume [veh/h]	134	0	28	0	0	0	38	1422	50	9	720	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.617

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 5: El Don Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.722

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			15.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	141	27	28	20	1	71	535	884	97	59	530	121
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	141	27	28	20	1	71	535	884	97	59	530	121
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	33	6	7	5	0	17	127	210	23	14	126	29
Total Analysis Volume [veh/h]	134	26	27	19	1	67	507	838	92	56	502	115
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	7	0	0	3	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.722

Sequence

Ring 1	2	1	3	7	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Havenhurst Circle / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.585

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	15	1	19	43	1	16	367	546	7	15	531	426
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	1	19	43	1	16	367	546	7	15	531	426
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	4	0	5	10	0	4	87	130	2	4	126	101
Total Analysis Volume [veh/h]	14	1	18	41	1	15	349	519	7	14	504	405
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.585

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	5	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.640

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	405	582	104	197	721	270	140	273	195	99	312	184
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	405	582	104	197	721	270	140	273	195	99	312	184
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	96	138	25	47	171	64	33	65	46	23	74	44
Total Analysis Volume [veh/h]	384	552	99	187	684	256	133	259	185	94	296	174
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.640

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 12: Sierra College Blvd / Granite Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.608

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	255	487	86	80	863	64	65	20	104	143	24	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	255	487	86	80	863	64	65	20	104	143	24	33
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	60	115	20	19	205	15	15	5	25	34	6	8
Total Analysis Volume [veh/h]	242	462	82	76	818	61	62	19	99	136	23	31
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.608

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 16: Sierra College Blvd / Bass Pro Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.528

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	852	26	25	1506	7	0	1	0	23	0	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	852	26	25	1506	7	0	1	0	23	0	8
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	0	202	6	6	357	2	0	0	0	5	0	2
Total Analysis Volume [veh/h]	0	808	25	24	1428	7	0	1	0	22	0	8
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.528

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 17: Sierra College Blvd / Stadium Entrance

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.419

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	125	809	13	14	1202	313	18	0	20	66	0	41
Base Volume Adjustment Factor	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000
Heavy Vehicles Percentage [%]	3.00	3.00	2.00	2.00	3.00	3.00	3.00	2.00	3.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	125	809	10	14	1202	250	18	0	16	66	0	33
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	30	192	2	3	285	59	4	0	4	16	0	8
Total Analysis Volume [veh/h]	119	767	9	13	1139	237	17	0	15	63	0	31
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	3	8	0	0	4	0	2	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.419

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 19: Sierra College Blvd / El Don Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.428

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	45	968	5	36	983	26	57	1	39	18	1	44
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	45	968	5	36	983	26	57	1	39	18	1	44
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	11	230	1	9	233	6	14	0	9	4	0	10
Total Analysis Volume [veh/h]	43	920	5	34	934	25	54	1	37	17	1	42
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.428

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 1: Granite Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.636

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	315.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	45	26	27	525	22	200	173	679	18	50	860	508
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	45	26	27	525	22	200	173	679	18	50	860	508
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	11	6	6	124	5	47	41	161	4	12	204	120
Total Analysis Volume [veh/h]	43	25	26	498	21	190	164	644	17	47	815	482
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna
Signal group	0	3	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.636

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 4: Aguilar Road / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.545

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	103	0	20	0	0	0	55	1153	139	17	1322	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	2.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	103	0	20	0	0	0	55	1153	139	17	1322	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	1.0000	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000
Total 15-Minute Volume [veh/h]	24	0	5	0	0	0	13	273	33	4	313	0
Total Analysis Volume [veh/h]	98	0	19	0	0	0	52	1093	132	16	1253	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.545

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 5: El Don Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.742

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			15.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	181	9	31	58	13	359	264	780	139	29	787	46
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	181	9	31	58	13	359	264	780	139	29	787	46
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	43	2	7	14	3	85	63	185	33	7	187	11
Total Analysis Volume [veh/h]	172	9	29	55	12	340	250	739	132	27	746	44
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	7	0	0	3	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.742

Sequence

Ring 1	2	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Havenhurst Circle / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.517

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	5	0	9	336	0	167	115	614	16	14	579	124
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	0	9	336	0	167	115	614	16	14	579	124
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	1	0	2	80	0	40	27	146	4	3	138	29
Total Analysis Volume [veh/h]	5	0	9	319	0	159	109	583	15	13	550	118
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.517

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.818

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	263	900	75	198	661	172	282	304	373	128	294	237
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	263	900	75	198	661	172	282	304	373	128	294	237
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	62	213	18	47	157	41	67	72	88	30	70	56
Total Analysis Volume [veh/h]	249	853	71	188	627	163	267	288	354	121	279	225
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	D
Intersection V/C	0.818

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 12: Sierra College Blvd / Granite Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.557

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	40.00			40.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	177	913	77	54	808	78	153	27	250	101	15	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	177	913	77	54	808	78	153	27	250	101	15	40
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	42	216	18	13	191	18	36	6	59	24	4	9
Total Analysis Volume [veh/h]	168	866	73	51	766	74	145	26	237	96	14	38
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.557

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 16: Sierra College Blvd / Bass Pro Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.372

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	1425	52	28	1021	31	1	1	2	52	0	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1425	52	28	1021	31	1	1	2	52	0	9
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	0	338	12	7	242	7	0	0	0	12	0	2
Total Analysis Volume [veh/h]	0	1351	49	27	968	29	1	1	2	49	0	9
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.372

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 17: Sierra College Blvd / Stadium Entrance

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.422

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	74	1294	45	48	990	40	160	0	59	40	0	25
Base Volume Adjustment Factor	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000
Heavy Vehicles Percentage [%]	3.00	3.00	2.00	2.00	3.00	3.00	3.00	2.00	3.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	74	1294	36	48	990	32	160	0	47	40	0	20
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	18	307	9	11	235	8	38	0	11	9	0	5
Total Analysis Volume [veh/h]	70	1227	34	46	939	30	152	0	45	38	0	19
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	3	8	0	0	4	0	2	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.422

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 19: Sierra College Blvd / El Don Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.476

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	32	1160	7	64	1040	80	34	1	26	10	1	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	32	1160	7	64	1040	80	34	1	26	10	1	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	8	276	2	15	247	19	8	0	6	2	0	5
Total Analysis Volume [veh/h]	30	1102	7	61	988	76	32	1	25	10	1	20
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.476

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 1: Granite Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.541

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	315.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	20	30	20	390	20	120	170	800	10	10	720	530
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	30	20	390	20	120	170	800	10	10	720	530
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	5	7	5	92	5	28	40	190	2	2	171	126
Total Analysis Volume [veh/h]	19	28	19	370	19	114	161	758	9	9	683	502
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna
Signal group	0	3	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.541

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Version 7.00-04

Intersection Level Of Service Report
Intersection 4: Aguilar Road / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.615

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	160	0	40	0	0	0	40	1450	60	10	660	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	2.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	160	0	40	0	0	0	40	1450	60	10	660	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	1.0000	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000
Total 15-Minute Volume [veh/h]	38	0	9	0	0	0	9	344	14	2	156	0
Total Analysis Volume [veh/h]	152	0	38	0	0	0	38	1375	57	9	626	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.615

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 5: El Don Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.700

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			15.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	120	30	30	20	10	80	540	950	70	30	470	130
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	120	30	30	20	10	80	540	950	70	30	470	130
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	28	7	7	5	2	19	128	225	17	7	111	31
Total Analysis Volume [veh/h]	114	28	28	19	9	76	512	901	66	28	446	123
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	7	0	0	3	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.700

Sequence

Ring 1	2	1	3	7	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Havenhurst Circle / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.647

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	20	10	30	60	10	20	360	580	10	20	480	430
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	10	30	60	10	20	360	580	10	20	480	430
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	5	2	7	14	2	5	86	138	2	5	114	102
Total Analysis Volume [veh/h]	19	10	29	57	10	19	342	551	10	19	456	409
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.647

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	5	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.703

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	420	610	70	200	680	250	230	220	220	90	280	220
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	420	610	70	200	680	250	230	220	220	90	280	220
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	100	145	17	47	161	59	55	52	52	21	66	52
Total Analysis Volume [veh/h]	398	578	66	190	645	237	218	209	209	85	265	209
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.703

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 12: Sierra College Blvd / Granite Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.641

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	270	500	90	80	900	70	80	30	120	150	30	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	270	500	90	80	900	70	80	30	120	150	30	40
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	64	119	21	19	213	17	19	7	28	36	7	9
Total Analysis Volume [veh/h]	256	474	85	76	853	66	76	28	114	142	28	38
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.641

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 16: Sierra College Blvd / Bass Pro Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.633

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	10	840	30	30	1750	10	10	10	10	30	10	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	840	30	30	1750	10	10	10	10	30	10	10
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	2	199	7	7	415	2	2	2	2	7	2	2
Total Analysis Volume [veh/h]	9	796	28	28	1659	9	9	9	9	28	9	9
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.633

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 17: Sierra College Blvd / Stadium Entrance

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.728

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00		50.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	250	800	1080	710	70	130
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	250	800	1080	710	70	130
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	59	190	257	169	17	31
Total Analysis Volume [veh/h]	238	760	1026	675	67	124
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	3	8	4	0	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.728

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 19: Sierra College Blvd / El Don Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.488

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	30	950	10	30	960	30	70	10	50	60	10	80
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	30	950	10	30	960	30	70	10	50	60	10	80
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	7	226	2	7	228	7	17	2	12	14	2	19
Total Analysis Volume [veh/h]	29	903	10	29	912	29	67	10	48	57	10	76
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.488

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Version 7.00-04

Intersection Level Of Service Report
Intersection 1: Granite Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.607

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	315.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	50	30	30	530	30	200	200	630	20	60	700	550
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	50	30	30	530	30	200	200	630	20	60	700	550
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	12	7	7	126	7	47	47	149	5	14	166	130
Total Analysis Volume [veh/h]	47	28	28	502	28	190	190	597	19	57	664	521
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna
Signal group	0	3	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.607

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 4: Aguilar Road / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.496

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	120	0	30	0	0	0	60	1040	170	30	1130	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	2.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	120	0	30	0	0	0	60	1040	170	30	1130	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	1.0000	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000
Total 15-Minute Volume [veh/h]	28	0	7	0	0	0	14	246	40	7	268	0
Total Analysis Volume [veh/h]	114	0	28	0	0	0	57	986	161	28	1071	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.496

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 5: El Don Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.693

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			15.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	120	10	30	60	20	360	270	710	130	30	740	50
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	120	10	30	60	20	360	270	710	130	30	740	50
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	28	2	7	14	5	85	64	168	31	7	175	12
Total Analysis Volume [veh/h]	114	9	28	57	19	341	256	673	123	28	702	47
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	7	0	0	3	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.693

Sequence

Ring 1	2	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	7	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Havenhurst Circle / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.531

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	10	0	10	350	0	170	80	510	20	20	515	120
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	0	10	350	0	170	80	510	20	20	515	120
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	2	0	2	83	0	40	19	121	5	5	122	29
Total Analysis Volume [veh/h]	10	0	10	333	0	162	76	485	19	19	489	114
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.531

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.779

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	300	840	80	270	685	180	260	270	340	60	195	250
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	300	840	80	270	685	180	260	270	340	60	195	250
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	71	199	19	64	162	43	62	64	81	14	46	59
Total Analysis Volume [veh/h]	284	796	76	256	649	171	246	256	322	57	185	237
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.779

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 12: Sierra College Blvd / Granite Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.638

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	40.00			40.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	240	910	80	60	880	80	160	30	270	110	20	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	240	910	80	60	880	80	160	30	270	110	20	40
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	57	216	19	14	209	19	38	7	64	26	5	9
Total Analysis Volume [veh/h]	228	863	76	57	834	76	152	28	256	104	19	38
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.638

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report

Intersection 16: Sierra College Blvd / Bass Pro Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.450

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	10	1660	60	50	1040	40	10	10	10	60	10	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	1660	60	50	1040	40	10	10	10	60	10	10
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	2	393	14	12	246	9	2	2	2	14	2	2
Total Analysis Volume [veh/h]	9	1574	57	47	986	38	9	9	9	57	9	9
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.450

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 17: Sierra College Blvd / Stadium Entrance

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.577

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00		50.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	210	1130	895	220	600	260
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	210	1130	895	220	600	260
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	50	268	213	52	143	62
Total Analysis Volume [veh/h]	200	1074	850	209	570	247
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	3	8	4	0	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.577

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 19: Sierra College Blvd / El Don Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.545

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	30	1100	30	130	895	90	40	10	20	20	10	50
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	30	1100	30	130	895	90	40	10	20	20	10	50
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	7	261	7	31	213	21	10	2	5	5	2	12
Total Analysis Volume [veh/h]	29	1045	29	124	850	86	38	10	19	19	10	48
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.545

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 1: Granite Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.557

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	315.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	20	30	20	395	20	120	170	872	10	10	762	533
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	30	20	395	20	120	170	872	10	10	762	533
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	5	7	5	94	5	28	40	207	2	2	181	126
Total Analysis Volume [veh/h]	19	28	19	374	19	114	161	827	9	9	722	505
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna
Signal group	0	3	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.557

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 4: Aguilar Road / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.691

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	160	0	42	0	0	0	40	1676	60	10	772	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	2.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	160	0	42	0	0	0	40	1676	60	10	772	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	1.0000	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000
Total 15-Minute Volume [veh/h]	38	0	10	0	0	0	9	397	14	2	183	0
Total Analysis Volume [veh/h]	152	0	40	0	0	0	38	1589	57	9	732	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.691

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 5: El Don Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.746

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			15.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	142	30	35	20	10	80	540	1139	109	76	560	130
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	142	30	35	20	10	80	540	1139	109	76	560	130
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	34	7	8	5	2	19	128	270	26	18	133	31
Total Analysis Volume [veh/h]	135	28	33	19	9	76	512	1080	103	72	531	123
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	7	0	0	3	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.746

Sequence

Ring 1	2	1	3	7	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Havenhurst Circle / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.700

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	20	10	30	62	10	20	370	697	10	20	606	432
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	10	30	62	10	20	370	697	10	20	606	432
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	5	2	7	15	2	5	88	166	2	5	144	103
Total Analysis Volume [veh/h]	19	10	29	59	10	19	352	662	10	19	576	410
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.700

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	5	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.802

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	429	632	116	240	727	320	267	298	224	113	329	235
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	429	632	116	240	727	320	267	298	224	113	329	235
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	102	150	27	57	172	76	63	71	53	27	78	56
Total Analysis Volume [veh/h]	407	599	110	228	689	303	253	283	212	107	312	223
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	D
Intersection V/C	0.802

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 12: Sierra College Blvd / Granite Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.656

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	272	525	90	80	939	70	80	30	121	150	30	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	272	525	90	80	939	70	80	30	121	150	30	40
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	64	124	21	19	223	17	19	7	29	36	7	9
Total Analysis Volume [veh/h]	258	498	85	76	890	66	76	28	115	142	28	38
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.656

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 16: Sierra College Blvd / Bass Pro Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.673

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	10	952	30	30	1867	10	10	10	10	30	10	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	952	30	30	1867	10	10	10	10	30	10	10
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	2	226	7	7	442	2	2	2	2	7	2	2
Total Analysis Volume [veh/h]	9	902	28	28	1770	9	9	9	9	28	9	9
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.673

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 17: Sierra College Blvd / Stadium Entrance

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.708

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	288	871	13	14	1183	710	70	0	132	66	0	41
Base Volume Adjustment Factor	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000
Heavy Vehicles Percentage [%]	3.00	3.00	2.00	2.00	3.00	3.00	3.00	2.00	3.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	288	871	10	14	1183	568	70	0	106	66	0	33
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	68	206	2	3	280	135	17	0	25	16	0	8
Total Analysis Volume [veh/h]	273	826	9	13	1121	538	66	0	100	63	0	31
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	3	8	0	0	4	0	2	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.708

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 19: Sierra College Blvd / El Don Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.514

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	50	1024	10	30	1033	31	73	10	54	60	10	80
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	50	1024	10	30	1033	31	73	10	54	60	10	80
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	12	243	2	7	245	7	17	2	13	14	2	19
Total Analysis Volume [veh/h]	48	973	10	29	981	29	69	10	51	57	10	76
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.514

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 4: Aguilar Road / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.575

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	120	0	31	0	0	0	60	1181	170	32	1367	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	2.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	120	0	31	0	0	0	60	1181	170	32	1367	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	1.0000	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000
Total 15-Minute Volume [veh/h]	28	0	7	0	0	0	14	280	40	8	324	0
Total Analysis Volume [veh/h]	114	0	29	0	0	0	57	1120	161	30	1296	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.575

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 5: El Don Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.800

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			15.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	191	10	38	60	20	360	270	834	148	44	908	50
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	191	10	38	60	20	360	270	834	148	44	908	50
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	45	2	9	14	5	85	64	198	35	10	215	12
Total Analysis Volume [veh/h]	181	9	36	57	19	341	256	791	140	42	861	47
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	7	0	0	3	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.800

Sequence

Ring 1	2	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	7	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Havenhurst Circle / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.611

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	10	0	10	351	0	170	124	688	20	20	653	125
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	0	10	351	0	170	124	688	20	20	653	125
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	2	0	2	83	0	40	29	163	5	5	155	30
Total Analysis Volume [veh/h]	10	0	10	333	0	162	118	654	19	19	620	119
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.611

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.000

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	304	895	116	286	714	215	358	324	367	126	299	302
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	304	895	116	286	714	215	358	324	367	126	299	302
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	72	212	27	68	169	51	85	77	87	30	71	72
Total Analysis Volume [veh/h]	288	848	110	271	677	204	339	307	348	119	283	286
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	E
Intersection V/C	1.000

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 12: Sierra College Blvd / Granite Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.653

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	40.00			40.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	241	964	80	60	923	80	160	30	272	110	20	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	241	964	80	60	923	80	160	30	272	110	20	40
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	57	228	19	14	219	19	38	7	64	26	5	9
Total Analysis Volume [veh/h]	228	914	76	57	875	76	152	28	258	104	19	38
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.653

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 16: Sierra College Blvd / Bass Pro Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.487

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	50.00			50.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	10	1825	60	50	1183	40	10	10	10	60	10	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	1825	60	50	1183	40	10	10	10	60	10	10
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	2	433	14	12	280	9	2	2	2	14	2	2
Total Analysis Volume [veh/h]	9	1730	57	47	1121	38	9	9	9	57	9	9
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.487

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.615

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	2	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	304	895	116	286	714	215	358	324	367	126	299	302
Base Volume Adjustment Factor	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	304	895	93	286	714	172	358	324	294	126	299	242
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	72	212	22	68	169	41	85	77	70	30	71	57
Total Analysis Volume [veh/h]	288	848	88	271	677	163	339	307	279	119	283	229
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.615

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 17: Sierra College Blvd / Stadium Entrance

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.624

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	1	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	234	1270	45	48	990	220	600	0	261	40	0	25
Base Volume Adjustment Factor	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	234	1270	36	48	990	176	600	0	209	40	0	20
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	55	301	9	11	235	42	142	0	50	9	0	5
Total Analysis Volume [veh/h]	222	1204	34	46	939	167	569	0	198	38	0	19
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	3	8	0	0	4	0	2	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.624

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 19: Sierra College Blvd / El Don Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.548

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	36	1194	30	130	1014	93	41	10	28	20	10	50
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	36	1194	30	130	1014	93	41	10	28	20	10	50
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	9	284	7	31	241	22	10	2	7	5	2	12
Total Analysis Volume [veh/h]	34	1134	29	124	963	88	39	10	27	19	10	48
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.548

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.615

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	2	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	304	895	116	286	714	215	358	324	367	126	299	302
Base Volume Adjustment Factor	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	304	895	93	286	714	172	358	324	294	126	299	242
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	72	212	22	68	169	41	85	77	70	30	71	57
Total Analysis Volume [veh/h]	288	848	88	271	677	163	339	307	279	119	283	229
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.615

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 1: Granite Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.593

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	315.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	20	10	10	208	10	160	190	536	10	30	1170	572
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	10	10	208	10	160	190	536	10	30	1170	572
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	5	2	2	49	2	38	45	127	2	7	277	136
Total Analysis Volume [veh/h]	19	9	9	197	9	152	180	508	9	28	1109	542
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	3	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.593

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 4: Aguilar Road / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.554

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	300	0	78	0	0	0	40	1298	170	43	931	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	2.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	300	0	78	0	0	0	40	1298	170	43	931	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	1.0000	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000
Total 15-Minute Volume [veh/h]	71	0	18	0	0	0	9	308	40	10	221	0
Total Analysis Volume [veh/h]	284	0	74	0	0	0	38	1231	161	41	883	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.554

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 5: El Don Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.524

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			15.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	260	20	20	16	10	89	526	744	90	30	599	149
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	260	20	20	16	10	89	526	744	90	30	599	149
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	62	5	5	4	2	21	125	176	21	7	142	35
Total Analysis Volume [veh/h]	246	19	19	15	9	84	499	705	85	28	568	141
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	7	0	0	3	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.524

Sequence

Ring 1	2	1	3	7	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Havenhurst Circle / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.467

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	20	10	20	38	10	25	506	509	10	20	768	365
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	10	20	38	10	25	506	509	10	20	768	365
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	5	2	5	9	2	6	120	121	2	5	182	87
Total Analysis Volume [veh/h]	19	10	19	36	10	24	481	484	10	19	730	347
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.467

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	5	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.700

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	1	2	0	1	2	0	0	1	0	0
Pocket Length [ft]	250.00	100.00	250.00	240.00	100.00	150.00	225.00	100.00	100.00	225.00	100.00	100.00
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	592	1441	90	171	985	197	113	172	282	110	384	343
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	592	1441	90	171	985	197	113	172	282	110	384	343
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	140	342	21	41	233	47	27	41	67	26	91	81
Total Analysis Volume [veh/h]	561	1366	85	162	934	187	107	163	267	104	364	325
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.700

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 12: Sierra College Blvd / Granite Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.747

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	1	0	1	1	0	1
Pocket Length [ft]	100.00	100.00	100.00	285.00	100.00	190.00	190.00	100.00	190.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	405	1158	178	80	1347	140	90	30	101	178	30	30
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	405	1158	178	80	1347	140	90	30	101	178	30	30
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	96	274	42	19	319	33	21	7	24	42	7	7
Total Analysis Volume [veh/h]	384	1098	169	76	1277	133	85	28	96	169	28	28
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.747

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 15: Sierra College Blvd / Schriber Way

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.892

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	116	1095	10	0	2387	270	230	20	88	0	0	90
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	116	1095	10	0	2387	270	230	20	88	0	0	90
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000	1.0000	0.9480
Total 15-Minute Volume [veh/h]	27	260	2	0	566	64	55	5	21	0	0	21
Total Analysis Volume [veh/h]	110	1038	9	0	2263	256	218	19	83	0	0	85
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Split	Split	Split	Permiss	Split
Signal group	5	2	0	0	6	0	0	4	0	0	0	8
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	D
Intersection V/C	0.892

Sequence

Ring 1	2	-	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Version 7.00-04

Intersection Level Of Service Report

Intersection 16: Sierra College Blvd / Bass Pro Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.864

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	2	0	0	2	0	1
Pocket Length [ft]	500.00	100.00	50.00	225.00	100.00	100.00	125.00	100.00	100.00	270.00	100.00	100.00
Speed [mph]	50.00			50.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	462	1091	59	110	2135	230	100	20	186	96	50	20
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	462	1091	59	110	2135	230	100	20	186	96	50	20
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	109	259	14	26	506	55	24	5	44	23	12	5
Total Analysis Volume [veh/h]	438	1034	56	104	2024	218	95	19	176	91	47	19
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	D
Intersection V/C	0.864

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 17: Sierra College Blvd / Stadium Entrance

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.849

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	1	1	1	2	0
Pocket Length [ft]	200.00	100.00	250.00	35.00	60.00	100.00
Speed [mph]	50.00		50.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	310	1557	1488	929	55	34
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	310	1557	1488	929	55	34
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	74	370	353	221	13	8
Total Analysis Volume [veh/h]	295	1479	1414	883	52	32
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Phasing & Timing

Control Type	ProtPerm	Permissive	Permissive	Permissive	Split	Split
Signal group	3	8	4	0	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

Movement, Approach, & Intersection Results

Intersection LOS	D
Intersection V/C	0.849

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 19: Sierra College Blvd / El Don Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.548

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	25	2003	5	36	1366	25	54	1	35	18	1	44
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	25	2003	5	36	1366	25	54	1	35	18	1	44
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	6	476	1	9	324	6	13	0	8	4	0	10
Total Analysis Volume [veh/h]	24	1903	5	34	1298	24	51	1	33	17	1	42
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.548

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 1: Granite Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.757

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	315.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	30	20	10	745	10	310	330	1200	10	40	833	526
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	30	20	10	745	10	310	330	1200	10	40	833	526
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	7	5	2	177	2	73	78	284	2	9	197	125
Total Analysis Volume [veh/h]	28	19	9	706	9	294	313	1138	9	38	790	499
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	3	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.757

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 4: Aguilar Road / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.499

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	270	0	75	0	0	0	60	1174	320	76	1262	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	2.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	270	0	75	0	0	0	60	1174	320	76	1262	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	1.0000	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000
Total 15-Minute Volume [veh/h]	64	0	18	0	0	0	14	278	76	18	299	0
Total Analysis Volume [veh/h]	256	0	71	0	0	0	57	1113	303	72	1196	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.499

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 5: El Don Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.492

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			15.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	170	10	30	87	20	360	244	844	180	40	800	50
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	170	10	30	87	20	360	244	844	180	40	800	50
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	40	2	7	21	5	85	58	200	43	9	190	12
Total Analysis Volume [veh/h]	161	9	28	82	19	341	231	800	171	38	758	47
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	7	0	0	3	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.492

Sequence

Ring 1	2	1	3	7	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 6: Havenhurst Circle / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.325

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	10	0	10	314	0	166	115	827	20	10	512	146
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	0	10	314	0	166	115	827	20	10	512	146
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	2	0	2	75	0	39	27	196	5	2	122	35
Total Analysis Volume [veh/h]	10	0	10	298	0	158	109	786	19	10	486	139
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.325

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	5	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.982

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	1	2	0	1	2	0	0	1	0	0
Pocket Length [ft]	250.00	100.00	250.00	240.00	100.00	150.00	225.00	100.00	100.00	225.00	100.00	100.00
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	436	1958	220	354	1976	51	186	478	487	60	181	236
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	436	1958	220	354	1976	51	186	478	487	60	181	236
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	103	464	52	84	468	12	44	113	115	14	43	56
Total Analysis Volume [veh/h]	413	1856	209	336	1873	48	176	453	462	57	172	224
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	E
Intersection V/C	0.982

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 12: Sierra College Blvd / Granite Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.856

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	1	0	1	1	0	1
Pocket Length [ft]	100.00	100.00	100.00	285.00	100.00	190.00	190.00	100.00	190.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	183	1308	158	60	1802	120	340	40	439	238	20	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	183	1308	158	60	1802	120	340	40	439	238	20	40
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	43	310	37	14	427	28	81	9	104	56	5	9
Total Analysis Volume [veh/h]	173	1240	150	57	1708	114	322	38	416	226	19	38
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	D
Intersection V/C	0.856

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 15: Sierra College Blvd / Schriber Way

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.678

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	98	2366	10	0	1742	240	220	20	136	0	0	20
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	98	2366	10	0	1742	240	220	20	136	0	0	20
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000	1.0000	0.9480
Total 15-Minute Volume [veh/h]	23	561	2	0	413	57	52	5	32	0	0	5
Total Analysis Volume [veh/h]	93	2243	9	0	1651	228	209	19	129	0	0	19
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Split	Split	Split	Permiss	Split
Signal group	5	2	0	0	6	0	0	4	0	0	0	8
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.678

Sequence

Ring 1	2	-	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 16: Sierra College Blvd / Bass Pro Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.056

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	2	0	0	2	0	1
Pocket Length [ft]	500.00	100.00	50.00	225.00	100.00	100.00	125.00	100.00	100.00	270.00	100.00	100.00
Speed [mph]	50.00			50.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	313	2284	184	90	1648	140	70	110	631	101	50	110
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	313	2284	184	90	1648	140	70	110	631	101	50	110
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	74	541	44	21	391	33	17	26	150	24	12	26
Total Analysis Volume [veh/h]	297	2165	174	85	1562	133	66	104	598	96	47	104
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	F
Intersection V/C	1.056

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 17: Sierra College Blvd / Stadium Entrance

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.702

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	1	1	1	2	0
Pocket Length [ft]	200.00	100.00	250.00	35.00	60.00	100.00
Speed [mph]	50.00		50.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	86	2274	2141	239	507	219
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	86	2274	2141	239	507	219
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	20	540	508	57	120	52
Total Analysis Volume [veh/h]	82	2160	2034	227	482	208
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Split	Split
Signal group	3	8	4	0	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.702

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 19: Sierra College Blvd / El Don Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.652

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	26	2537	7	64	2402	77	33	1	18	10	1	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	26	2537	7	64	2402	77	33	1	18	10	1	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	6	603	2	15	570	18	8	0	4	2	0	5
Total Analysis Volume [veh/h]	25	2410	7	61	2282	73	31	1	17	10	1	20
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.652

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 1: Granite Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.608

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	315.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	20	10	10	213	10	160	190	608	10	30	1212	575
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	10	10	213	10	160	190	608	10	30	1212	575
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	5	2	2	50	2	38	45	144	2	7	287	136
Total Analysis Volume [veh/h]	19	9	9	202	9	152	180	576	9	28	1149	545
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	3	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.608

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 4: Aguilar Road / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.604

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	300	0	80	0	0	0	40	1524	170	43	1043	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	2.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	300	0	80	0	0	0	40	1524	170	43	1043	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	1.0000	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000
Total 15-Minute Volume [veh/h]	71	0	19	0	0	0	9	361	40	10	247	0
Total Analysis Volume [veh/h]	284	0	76	0	0	0	38	1445	161	41	989	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.604

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 5: El Don Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.560

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			15.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	282	20	25	16	10	89	526	933	129	76	689	149
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	282	20	25	16	10	89	526	933	129	76	689	149
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	67	5	6	4	2	21	125	221	31	18	163	35
Total Analysis Volume [veh/h]	267	19	24	15	9	84	499	884	122	72	653	141
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	7	0	0	3	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.560

Sequence

Ring 1	2	1	3	7	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Havenhurst Circle / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.500

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	20	10	20	40	10	25	516	626	10	20	894	367
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	10	20	40	10	25	516	626	10	20	894	367
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	5	2	5	10	2	6	123	149	2	5	212	87
Total Analysis Volume [veh/h]	19	10	19	38	10	24	490	595	10	19	849	349
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.500

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	5	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report

Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.733

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	1	2	0	1	2	0	0	1	0	0
Pocket Length [ft]	250.00	100.00	250.00	240.00	100.00	150.00	225.00	100.00	100.00	225.00	100.00	100.00
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	601	1463	136	211	1032	267	150	250	286	133	433	358
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	601	1463	136	211	1032	267	150	250	286	133	433	358
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	142	347	32	50	245	63	36	59	68	32	103	85
Total Analysis Volume [veh/h]	570	1387	129	200	978	253	142	237	271	126	410	339
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.733

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Version 7.00-04

Intersection Level Of Service Report

Intersection 12: Sierra College Blvd / Granite Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.757

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	1	0	1	1	0	1
Pocket Length [ft]	100.00	100.00	100.00	285.00	100.00	190.00	190.00	100.00	190.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	407	1183	178	80	1386	140	90	30	102	178	30	30
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	407	1183	178	80	1386	140	90	30	102	178	30	30
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	96	280	42	19	328	33	21	7	24	42	7	7
Total Analysis Volume [veh/h]	386	1121	169	76	1314	133	85	28	97	169	28	28
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.757

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 15: Sierra College Blvd / Schriber Way

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.918

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	116	1207	10	0	2504	270	230	20	88	0	0	90
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	116	1207	10	0	2504	270	230	20	88	0	0	90
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000	1.0000	0.9480
Total 15-Minute Volume [veh/h]	27	286	2	0	593	64	55	5	21	0	0	21
Total Analysis Volume [veh/h]	110	1144	9	0	2374	256	218	19	83	0	0	85
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Split	Split	Split	Permiss	Split
Signal group	5	2	0	0	6	0	0	4	0	0	0	8
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	E
Intersection V/C	0.918

Sequence

Ring 1	2	-	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Version 7.00-04

Intersection Level Of Service Report

Intersection 16: Sierra College Blvd / Bass Pro Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.891

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	2	0	0	2	0	1
Pocket Length [ft]	500.00	100.00	50.00	225.00	100.00	100.00	125.00	100.00	100.00	270.00	100.00	100.00
Speed [mph]	50.00			50.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	462	1203	59	110	2252	230	100	20	186	96	50	20
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	462	1203	59	110	2252	230	100	20	186	96	50	20
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	109	285	14	26	534	55	24	5	44	23	12	5
Total Analysis Volume [veh/h]	438	1140	56	104	2135	218	95	19	176	91	47	19
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	D
Intersection V/C	0.891

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 17: Sierra College Blvd / Stadium Entrance

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.817

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	2	0	0	0	0	0
Entry Pocket Length [ft]	200.00	100.00	100.00	250.00	100.00	35.00	60.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	348	1628	13	14	1591	929	55	0	36	66	0	41
Base Volume Adjustment Factor	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	348	1628	10	14	1591	743	55	0	29	66	0	33
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	82	386	2	3	377	176	13	0	7	16	0	8
Total Analysis Volume [veh/h]	330	1543	9	13	1508	704	52	0	27	63	0	31
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	3	8	0	7	4	0	2	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	D
Intersection V/C	0.817

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 19: Sierra College Blvd / El Don Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.567

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	45	2077	5	36	1439	26	57	1	39	18	1	44
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	45	2077	5	36	1439	26	57	1	39	18	1	44
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	11	493	1	9	342	6	14	0	9	4	0	10
Total Analysis Volume [veh/h]	43	1973	5	34	1367	25	54	1	37	17	1	42
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.567

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Version 7.00-04

Intersection Level Of Service Report
Intersection 1: Granite Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.761

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	315.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	30	20	10	749	10	310	330	1252	10	40	925	531
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	30	20	10	749	10	310	330	1252	10	40	925	531
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	7	5	2	178	2	73	78	297	2	9	219	126
Total Analysis Volume [veh/h]	28	19	9	710	9	294	313	1187	9	38	877	503
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	3	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.761

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 4: Aguilar Road / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.552

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	270	0	76	0	0	0	60	1315	320	78	1499	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	2.00	3.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	270	0	76	0	0	0	60	1315	320	78	1499	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	1.0000	0.9480	1.0000	1.0000	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000
Total 15-Minute Volume [veh/h]	64	0	18	0	0	0	14	312	76	18	355	0
Total Analysis Volume [veh/h]	256	0	72	0	0	0	57	1247	303	74	1421	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	0	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.552

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 5: El Don Drive / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.580

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			15.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	241	10	38	87	20	360	244	968	198	54	968	50
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	241	10	38	87	20	360	244	968	198	54	968	50
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	57	2	9	21	5	85	58	229	47	13	229	12
Total Analysis Volume [veh/h]	228	9	36	82	19	341	231	918	188	51	918	47
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	7	0	0	3	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lag	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.580

Sequence

Ring 1	2	1	3	7	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 6: Havenhurst Circle / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.367

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	10	0	10	315	0	166	159	1005	20	10	650	151
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	0	10	315	0	166	159	1005	20	10	650	151
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	2	0	2	75	0	39	38	239	5	2	154	36
Total Analysis Volume [veh/h]	10	0	10	299	0	158	151	955	19	10	618	143
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	8	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	A
Intersection V/C	0.367

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	5	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: Sierra College Blvd / Rocklin Road

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.053

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	1	2	0	1	2	0	0	1	0	0
Pocket Length [ft]	250.00	100.00	250.00	240.00	100.00	150.00	225.00	100.00	100.00	225.00	100.00	100.00
Speed [mph]	50.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			No		

Volumes

Name												
Base Volume Input [veh/h]	440	2013	256	370	2005	86	284	532	514	126	285	288
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	440	2013	256	370	2005	86	284	532	514	126	285	288
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	104	477	61	88	475	20	67	126	122	30	68	68
Total Analysis Volume [veh/h]	417	1908	243	351	1901	82	269	504	487	119	270	273
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	F
Intersection V/C	1.053

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 12: Sierra College Blvd / Granite Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.867

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	1	0	1	1	0	1
Pocket Length [ft]	100.00	100.00	100.00	285.00	100.00	190.00	190.00	100.00	190.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	184	1362	158	60	1845	120	340	40	441	238	20	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	184	1362	158	60	1845	120	340	40	441	238	20	40
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	44	323	37	14	437	28	81	9	105	56	5	9
Total Analysis Volume [veh/h]	174	1291	150	57	1749	114	322	38	418	226	19	38
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	D
Intersection V/C	0.867

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 15: Sierra College Blvd / Schriber Way

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.710

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	98	2531	10	0	1885	240	220	20	136	0	0	20
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	98	2531	10	0	1885	240	220	20	136	0	0	20
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	1.0000	0.9480	0.9480	0.9480	0.9480	0.9480	1.0000	1.0000	0.9480
Total 15-Minute Volume [veh/h]	23	600	2	0	447	57	52	5	32	0	0	5
Total Analysis Volume [veh/h]	93	2399	9	0	1787	228	209	19	129	0	0	19
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Split	Split	Split	Permiss	Split
Signal group	5	2	0	0	6	0	0	4	0	0	0	8
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.710

Sequence

Ring 1	2	-	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Generated with PTV VISTRO

Version 7.00-04

Intersection Level Of Service Report
Intersection 16: Sierra College Blvd / Bass Pro Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.095

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	2	0	0	2	0	1
Pocket Length [ft]	500.00	100.00	50.00	225.00	100.00	100.00	125.00	100.00	100.00	270.00	100.00	100.00
Speed [mph]	50.00			50.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			Yes		

Volumes

Name												
Base Volume Input [veh/h]	313	2449	184	90	1791	140	70	110	631	101	50	110
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	313	2449	184	90	1791	140	70	110	631	101	50	110
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	74	580	44	21	424	33	17	26	150	24	12	26
Total Analysis Volume [veh/h]	297	2322	174	85	1698	133	66	104	598	96	47	104
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	7	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

Intersection LOS	F
Intersection V/C	1.095

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 17: Sierra College Blvd / Stadium Entrance

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.792

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	2	0	0	0	0	0
Entry Pocket Length [ft]	200.00	100.00	100.00	250.00	100.00	35.00	60.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	110	2414	45	48	2236	239	507	0	220	40	0	25
Base Volume Adjustment Factor	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	0.8000
Heavy Vehicles Percentage [%]	3.00	3.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	110	2414	36	48	2236	191	507	0	176	40	0	20
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480	0.9480
Total 15-Minute Volume [veh/h]	26	572	9	11	530	45	120	0	42	9	0	5
Total Analysis Volume [veh/h]	104	2288	34	46	2120	181	481	0	167	38	0	19
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	3	8	0	7	4	0	2	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	C
Intersection V/C	0.792

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 19: Sierra College Blvd / El Don Dr

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	Circular 212 Planning	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.673

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	32	2631	7	64	2521	80	34	1	26	10	1	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	32	2631	7	64	2521	80	34	1	26	10	1	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Total 15-Minute Volume [veh/h]	8	625	2	15	599	19	8	0	6	2	0	5
Total Analysis Volume [veh/h]	30	2499	7	61	2395	76	32	1	25	10	1	20
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

Intersection LOS	B
Intersection V/C	0.673

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

APPENDIX B: EXISTING CONDITIONS LOS CALCULATIONS

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Existing Conditions
AM Peak Hour

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	18	17	93.3%	28.2	16.2	C
	Through	21	20	95.2%	31.8	8.4	C
	Right Turn	16	17	103.1%	11.4	6.9	B
	Subtotal	55	53	96.9%	25.1	4.9	C
SB	Left Turn	277	276	99.6%	24.3	3.2	C
	Through	15	14	96.0%	28.6	14.6	C
	Right Turn	113	118	104.2%	9.0	1.8	A
	Subtotal	405	408	100.8%	20.2	2.9	C
EB	Left Turn	158	160	101.5%	36.5	4.1	D
	Through	801	795	99.2%	12.9	1.1	B
	Right Turn	7	7	102.9%	3.6	4.2	A
	Subtotal	966	962	99.6%	16.7	1.3	B
WB	Left Turn	10	10	100.0%	45.8	14.1	D
	Through	688	684	99.4%	22.5	2.9	C
	Right Turn	525	525	100.0%	8.3	0.6	A
	Subtotal	1,223	1,219	99.7%	16.5	1.6	B
Total		2,649	2,643	99.8%	17.3	1.2	B

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	52	54	104.4%	34.4	7.0	C
	Through						
	Right Turn	265	265	100.0%	29.3	7.0	C
	Subtotal	317	319	100.7%	30.4	6.5	C
EB	Left Turn						
	Through	709	706	99.5%	32.2	9.0	C
	Right Turn	401	401	100.1%	11.5	2.3	B
	Subtotal	1,110	1,107	99.7%	24.7	6.5	C
WB	Left Turn	342	338	98.9%	33.0	5.5	C
	Through	1,021	1,022	100.1%	8.2	1.4	A
	Right Turn						
	Subtotal	1,363	1,360	99.8%	14.2	1.7	B
Total		2,790	2,786	99.9%	20.3	3.0	C

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	602	599	99.5%	33.8	2.5	C
	Through						
	Right Turn	812	808	99.6%	27.4	1.8	C
	Subtotal	1,414	1,407	99.5%	30.2	1.8	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	187	187	99.9%	46.0	8.1	D
	Through	574	578	100.7%	12.6	1.2	B
	Right Turn						
	Subtotal	761	765	100.5%	20.4	2.5	C
WB	Left Turn						
	Through	761	764	100.4%	29.9	4.5	C
	Right Turn	49	49	100.6%	25.4	5.5	C
	Subtotal	810	813	100.4%	29.5	4.4	C
Total		2,985	2,986	100.0%	27.6	1.6	C

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	141	143	101.5%	36.5	3.7	D
	Through						
	Right Turn	28	28	99.3%	12.0	3.9	B
	Subtotal	169	171	101.1%	32.2	2.9	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	40	38	94.3%	41.6	4.4	D
	Through	1,274	1,277	100.2%	4.7	0.5	A
	Right Turn	53	52	98.7%	3.2	1.1	A
	Subtotal	1,367	1,367	100.0%	5.7	0.5	A
WB	Left Turn	9	9	97.8%	45.0	14.8	D
	Through	647	653	100.9%	7.9	1.9	A
	Right Turn						
	Subtotal	656	661	100.8%	8.6	1.9	A
Total		2,192	2,199	100.3%	8.6	0.9	A

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	119	115	96.7%	40.4	4.1	D
	Through	20	21	105.0%	37.1	7.3	D
	Right Turn	23	22	94.8%	15.7	6.3	B
	Subtotal	162	158	97.5%	36.4	2.9	D
SB	Left Turn	20	17	84.5%	43.9	19.3	D
	Through	1	2	150.0%	15.7	26.5	B
	Right Turn	71	77	107.7%	9.3	4.0	A
	Subtotal	92	95	103.2%	15.0	6.8	B
EB	Left Turn	531	529	99.7%	51.8	15.8	D
	Through	695	701	100.9%	21.7	4.7	C
	Right Turn	62	61	97.6%	16.4	4.5	B
	Subtotal	1,288	1,291	100.2%	33.4	8.9	C
WB	Left Turn	14	15	106.4%	47.1	23.5	D
	Through	440	441	100.1%	30.5	3.6	C
	Right Turn	121	125	103.0%	20.7	4.8	C
	Subtotal	575	580	100.9%	28.9	3.8	C
Total		2,117	2,124	100.3%	31.4	6.2	C

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	15	14	93.3%	40.3	14.4	D
	Through	1	1	100.0%	10.0	14.4	B
	Right Turn	19	20	103.2%	6.1	2.3	A
	Subtotal	35	35	98.9%	19.9	5.3	B
SB	Left Turn	41	37	89.5%	38.3	9.1	D
	Through	1	1	70.0%	8.6	18.4	A
	Right Turn	16	17	105.6%	3.6	1.1	A
	Subtotal	58	54	93.6%	28.1	8.9	C
EB	Left Turn	357	354	99.2%	37.1	6.4	D
	Through	429	443	103.2%	6.4	2.3	A
	Right Turn	7	9	121.4%	2.7	3.7	A
	Subtotal	793	805	101.6%	20.1	3.4	C
WB	Left Turn	15	14	92.0%	73.0	28.3	E
	Through	406	410	100.9%	22.8	3.9	C
	Right Turn	424	442	104.3%	28.3	7.2	C
	Subtotal	845	866	102.4%	26.7	5.8	C
Total		1,731	1,760	101.7%	23.4	4.1	C

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	397	409	103.1%	53.6	5.1	D
	Through	552	561	101.7%	36.0	6.2	D
	Right Turn	63	64	102.1%	26.1	10.3	C
	Subtotal	1,012	1,035	102.3%	42.4	5.0	D
SB	Left Turn	157	160	101.6%	60.3	8.6	E
	Through	674	681	101.0%	37.6	4.5	D
	Right Turn	200	205	102.4%	17.9	3.3	B
	Subtotal	1,031	1,045	101.4%	37.0	3.3	D
EB	Left Turn	103	102	99.2%	55.2	7.9	E
	Through	195	197	101.1%	31.7	4.4	C
	Right Turn	191	199	104.1%	13.7	2.7	B
	Subtotal	489	498	101.9%	28.8	4.5	C
WB	Left Turn	76	69	91.1%	71.0	9.9	E
	Through	263	267	101.4%	42.8	5.5	D
	Right Turn	174	183	104.9%	36.4	8.1	D
	Subtotal	513	518	101.0%	44.4	5.7	D
Total		3,045	3,096	101.7%	38.7	3.3	D

Intersection 8 **Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	13	12	88.5%	12.4	9.2	B
	Through						
	Right Turn	1	1	130.0%	0.7	1.1	A
	Subtotal	14	13	91.4%	10.0	6.6	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	414	417	100.8%	2.3	0.5	A
	Right Turn	3	3	96.7%	0.4	1.0	A
	Subtotal	417	420	100.8%	2.3	0.5	A
WB	Left Turn						
	Through	500	505	100.9%	1.5	1.0	A
	Right Turn						
	Subtotal	500	505	100.9%	1.5	1.0	A
Total		931	938	100.7%	1.9	0.6	A

Intersection 9 **Rocklin Manor Central/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	10	11	107.0%	9.6	2.2	A
	Through						
	Right Turn	1	2	180.0%	0.9	1.1	A
	Subtotal	11	13	113.6%	8.8	1.7	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	405	409	100.9%	1.1	0.3	A
	Right Turn	10	10	98.0%	0.0	0.1	A
	Subtotal	415	418	100.8%	1.1	0.3	A
WB	Left Turn						
	Through	490	494	100.8%	0.5	0.1	A
	Right Turn						
	Subtotal	490	494	100.8%	0.5	0.1	A
Total		916	925	101.0%	0.9	0.2	A

Intersection 10 **Rocklin Manor East/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	9	7	81.1%	8.6	5.0	A
	Through						
	Right Turn	2	2	105.0%	0.8	1.0	A
	Subtotal	11	9	85.5%	7.5	5.3	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	404	407	100.8%	0.3	0.1	A
	Right Turn	2	2	120.0%	0.0	0.0	A
	Subtotal	406	410	100.9%	0.3	0.1	A
WB	Left Turn	2	1	55.0%	1.4	2.8	A
	Through	481	486	101.1%	2.5	0.3	A
	Right Turn						
	Subtotal	483	487	100.9%	2.5	0.3	A
Total		900	906	100.7%	1.6	0.2	A

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	386	391	101.3%	10.0	1.3	A
	Through	64	68	106.4%	10.1	0.4	B
	Right Turn						
	Subtotal	450	459	102.0%	10.0	1.1	B
SB	Left Turn						
	Through	43	43	98.8%	9.6	0.8	A
	Right Turn	75	75	99.7%	4.4	1.0	A
	Subtotal	118	117	99.4%	6.2	0.9	A
EB	Left Turn	82	83	101.1%	14.0	2.7	B
	Through						
	Right Turn	306	307	100.3%	10.8	2.9	B
	Subtotal	388	390	100.4%	11.4	2.7	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		956	966	101.1%	10.1	1.2	B

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	253	261	103.0%	34.1	4.2	C
	Through	462	473	102.4%	15.5	2.9	B
	Right Turn	86	86	99.5%	7.5	1.4	A
	Subtotal	801	819	102.3%	20.6	3.0	C
SB	Left Turn	80	83	104.3%	39.2	7.0	D
	Through	824	823	99.8%	24.7	2.8	C
	Right Turn	64	62	96.6%	7.5	1.8	A
	Subtotal	968	968	100.0%	24.8	3.1	C
EB	Left Turn	65	64	98.2%	41.6	9.3	D
	Through	20	19	95.5%	50.6	15.0	D
	Right Turn	103	105	102.2%	13.2	4.3	B
	Subtotal	188	188	100.1%	25.6	3.6	C
WB	Left Turn	143	140	97.9%	38.4	5.2	D
	Through	24	27	112.9%	41.3	13.7	D
	Right Turn	33	31	93.0%	6.1	1.3	A
	Subtotal	200	198	98.9%	33.6	4.8	C
Total		2,157	2,173	100.7%	24.2	2.3	C

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	77	80	103.6%	29.9	4.5	C
	Through	532	546	102.7%	11.1	1.0	B
	Right Turn	132	132	100.0%	3.2	0.2	A
	Subtotal	741	758	102.3%	11.7	1.0	B
SB	Left Turn						
	Through	1,100	1,098	99.8%	16.8	3.3	B
	Right Turn	19	19	100.5%	4.8	1.6	A
	Subtotal	1,119	1,117	99.8%	16.6	3.2	B
EB	Left Turn	7	8	107.1%	30.9	20.2	C
	Through						
	Right Turn	58	60	103.8%	9.5	2.3	A
	Subtotal	65	68	104.2%	12.3	2.7	B
WB	Left Turn	642	643	100.2%	24.5	2.9	C
	Through	73	74	100.7%	25.6	4.2	C
	Right Turn	265	271	102.2%	12.4	1.3	B
	Subtotal	980	988	100.8%	21.4	2.2	C
Total		2,905	2,930	100.9%	16.8	1.6	B

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	754	764	101.4%	13.4	2.1	B
	Right Turn	45	44	97.8%	4.3	2.1	A
	Subtotal	799	808	101.2%	12.9	2.0	B
SB	Left Turn	135	140	103.4%	45.8	2.5	D
	Through	1,169	1,170	100.1%	14.0	1.4	B
	Right Turn	184	179	97.4%	6.5	0.7	A
	Subtotal	1,488	1,439	100.1%	16.1	1.6	B
EB	Left Turn	237	242	102.0%	32.8	3.1	C
	Through	140	145	103.6%	39.5	4.0	D
	Right Turn	195	198	101.4%	26.0	5.6	C
	Subtotal	572	585	102.2%	32.1	2.9	C
WB	Left Turn	57	55	97.0%	39.8	7.1	D
	Through						
	Right Turn	98	95	97.1%	8.3	2.0	A
	Subtotal	155	151	97.1%	19.8	2.3	B
Total		3,014	3,032	100.6%	18.5	1.2	B

Intersection 15 **Sierra College Blvd/Schriber Wy** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	759	768	101.1%	1.5	0.3	A
	Right Turn						
	Subtotal	759	768	101.1%	1.5	0.3	A
SB	Left Turn						
	Through	1,421	1,423	100.1%	3.4	0.2	A
	Right Turn						
	Subtotal	1,421	1,423	100.1%	3.4	0.2	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	40	40	99.3%	6.4	3.2	A
	Subtotal	40	40	99.3%	6.4	3.2	A
Total		2,220	2,230	100.5%	2.8	0.2	A

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	740	746	100.9%	5.8	1.8	A
	Right Turn	26	27	105.0%	4.3	2.1	A
	Subtotal	766	774	101.0%	5.7	1.8	A
SB	Left Turn	25	24	96.8%	20.3	5.0	C
	Through	1,389	1,390	100.1%	5.6	1.3	A
	Right Turn	7	8	112.9%	3.9	0.7	A
	Subtotal	1,421	1,422	100.1%	5.8	1.3	A
EB	Left Turn						
	Through	1	1	120.0%	0.7	2.1	A
	Right Turn						
	Subtotal	1	1	120.0%	0.7	2.1	A
WB	Left Turn	23	19	83.5%	20.0	9.5	C
	Through						
	Right Turn	8	8	98.8%	4.8	3.7	A
	Subtotal	31	27	87.4%	15.5	5.6	B
Total		2,219	2,224	100.2%	5.9	1.3	A

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	50	51	102.4%	28.0	4.9	C
	Through	738	750	101.6%	7.0	1.1	A
	Right Turn						
	Subtotal	788	801	101.6%	8.3	1.1	A
SB	Left Turn						
	Through	1,099	1,113	101.3%	7.4	1.1	A
	Right Turn	313	297	95.0%	7.8	1.1	A
	Subtotal	1,412	1,411	99.9%	7.5	1.0	A
EB	Left Turn	18	18	100.6%	28.4	6.7	C
	Through						
	Right Turn	18	18	98.3%	7.9	3.8	A
	Subtotal	36	36	99.4%	17.8	4.0	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,236	2,247	100.5%	8.0	0.6	A

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	34	32	95.3%	13.0	3.7	B
	Through	778	793	102.0%	4.4	0.5	A
	Right Turn						
	Subtotal	812	826	101.7%	4.8	0.5	A
SB	Left Turn						
	Through	1,029	1,039	101.0%	2.9	0.5	A
	Right Turn	97	100	103.3%	2.8	0.9	A
	Subtotal	1,126	1,140	101.2%	2.9	0.6	A
EB	Left Turn						
	Through						
	Right Turn	2	2	80.0%	2.6	6.2	A
	Subtotal	2	2	80.0%	2.6	6.2	A
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,940	1,967	101.4%	3.7	0.4	A

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	25	26	105.2%	28.2	9.4	C
	Through	892	906	101.6%	8.6	1.6	A
	Right Turn	5	6	120.0%	0.7	0.8	A
	Subtotal	922	939	101.8%	9.2	1.6	A
SB	Left Turn	36	36	100.8%	33.9	5.0	C
	Through	910	917	100.8%	12.7	1.3	B
	Right Turn	25	28	110.8%	10.4	3.2	B
	Subtotal	971	981	101.1%	13.4	1.5	B
EB	Left Turn	54	57	104.8%	23.4	4.8	C
	Through	1	1	60.0%	7.3	15.7	A
	Right Turn	35	37	104.9%	11.6	4.7	B
	Subtotal	90	94	104.3%	19.4	3.4	B
WB	Left Turn	18	17	92.8%	23.5	7.0	C
	Through	1	1	60.0%	4.4	9.6	A
	Right Turn	44	46	105.5%	10.6	2.4	B
	Subtotal	63	64	101.1%	14.4	2.8	B
Total		2,046	2,078	101.5%	11.8	1.3	B

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	162	158	97.3%	1.0	1.6	A
	Right Turn						
	Subtotal	162	158	97.3%	1.0	1.6	A
SB	Left Turn						
	Through	66	66	100.2%	0.3	0.1	A
	Right Turn	10	11	105.0%	0.3	0.3	A
	Subtotal	76	77	100.8%	0.3	0.1	A
EB	Left Turn						
	Through						
	Right Turn	1	1	130.0%	0.0	0.0	A
	Subtotal	1	1	130.0%	0.0	0.0	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		239	236	98.5%	0.9	1.2	A

Intersection 21 **El Don Dr/Southern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	3	3	93.3%	1.4	1.5	A
	Through	149	145	97.3%	1.4	0.1	A
	Right Turn						
	Subtotal	152	148	97.2%	1.5	0.1	A
SB	Left Turn						
	Through	66	66	99.8%	0.2	0.2	A
	Right Turn	1	2	160.0%	0.0	0.0	A
	Subtotal	67	68	100.7%	0.1	0.2	A
EB	Left Turn	13	12	88.5%	5.2	2.3	A
	Through						
	Right Turn	1	2	160.0%	1.2	1.6	A
	Subtotal	14	13	93.6%	5.0	2.2	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		233	228	98.0%	1.3	0.2	A

Intersection 22 **El Don Dr/Wildflower Ln** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	2	2	120.0%	2.6	2.8	A
	Through	137	136	99.1%	5.1	0.2	A
	Right Turn						
	Subtotal	139	138	99.4%	5.1	0.2	A
SB	Left Turn						
	Through	55	57	102.9%	5.6	0.7	A
	Right Turn	12	11	90.8%	3.5	0.9	A
	Subtotal	67	68	100.7%	5.3	0.8	A
EB	Left Turn	15	12	82.0%	4.1	0.5	A
	Through						
	Right Turn	5	5	98.0%	2.3	2.3	A
	Subtotal	20	17	86.0%	3.9	0.6	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		226	223	98.6%	5.1	0.3	A

Intersection 23 **El Don Dr/Corona Cir** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	2	2	80.0%	1.2	2.2	A
	Through	130	128	98.5%	0.1	0.1	A
	Right Turn						
	Subtotal	132	130	98.3%	0.1	0.1	A
SB	Left Turn						
	Through	55	55	100.7%	1.5	0.3	A
	Right Turn	5	5	98.0%	0.5	0.8	A
	Subtotal	60	60	100.5%	1.5	0.3	A
EB	Left Turn	9	10	110.0%	4.3	0.8	A
	Through						
	Right Turn	3	3	103.3%	1.8	1.3	A
	Subtotal	12	13	108.3%	3.9	0.5	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		204	203	99.5%	0.8	0.2	A

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	45	47	103.6%	48.9	7.1	D
	Through	26	25	97.7%	41.9	20.7	D
	Right Turn	27	29	108.9%	21.9	16.7	C
	Subtotal	98	101	103.5%	40.4	8.9	D
SB	Left Turn	521	533	102.2%	32.7	4.6	C
	Through	22	22	99.5%	42.2	13.3	D
	Right Turn	200	204	101.9%	10.9	2.8	B
	Subtotal	743	758	102.0%	27.0	4.2	C
EB	Left Turn	173	168	97.0%	59.7	7.8	E
	Through	627	620	98.9%	23.7	2.6	C
	Right Turn	18	18	98.9%	16.0	10.5	B
	Subtotal	818	806	98.5%	30.9	3.0	C
WB	Left Turn	50	55	109.8%	77.8	14.1	E
	Through	768	776	101.0%	36.3	5.7	D
	Right Turn	503	496	98.6%	13.3	3.5	B
	Subtotal	1,321	1,326	100.4%	29.6	5.5	C
Total		2,980	2,992	100.4%	29.7	4.0	C

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	66	64	96.5%	34.4	9.0	C
	Through	4	4	107.5%	54.4	54.9	D
	Right Turn	306	312	102.1%	47.0	22.0	D
	Subtotal	376	380	101.1%	45.6	19.6	D
EB	Left Turn						
	Through	717	715	99.7%	44.0	12.1	D
	Right Turn	498	503	101.0%	18.7	4.6	B
	Subtotal	1,215	1,218	100.3%	33.7	8.8	C
WB	Left Turn	517	502	97.2%	42.5	8.4	D
	Through	1,162	1,156	100.4%	10.3	2.0	B
	Right Turn						
	Subtotal	1,679	1,659	99.4%	20.0	3.7	B
Total		3,270	3,267	99.9%	28.2	5.0	C

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	555	563	101.5%	35.5	3.3	D
	Through	1	1	110.0%	14.7	26.1	B
	Right Turn	577	565	97.9%	26.0	3.6	C
	Subtotal	1,133	1,130	99.7%	30.7	3.4	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	227	228	100.2%	78.9	29.8	E
	Through	556	559	100.5%	12.7	5.8	B
	Right Turn						
	Subtotal	783	787	100.4%	32.9	14.8	C
WB	Left Turn						
	Through	1,124	1,108	98.5%	59.6	13.3	E
	Right Turn	81	82	101.2%	52.2	16.6	D
	Subtotal	1,205	1,190	98.7%	59.0	13.5	E
Total		3,121	3,106	99.5%	42.5	8.9	D

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	103	102	99.1%	40.7	3.9	D
	Through						
	Right Turn	19	23	119.5%	8.5	3.9	A
	Subtotal	122	125	102.3%	34.6	4.1	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	55	56	101.1%	46.1	4.4	D
	Through	1,012	1,014	100.2%	4.3	0.6	A
	Right Turn	139	133	95.5%	3.2	0.6	A
	Subtotal	1,206	1,203	99.7%	6.5	0.9	A
WB	Left Turn	15	14	94.0%	73.7	36.3	E
	Through	1,085	1,066	98.2%	39.1	33.5	D
	Right Turn						
	Subtotal	1,100	1,080	98.1%	39.7	33.5	D
Total		2,428	2,407	99.1%	22.8	14.7	C

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	117	119	101.5%	47.2	7.2	D
	Through	9	9	102.2%	27.0	19.1	C
	Right Turn	25	27	107.2%	16.7	11.0	B
	Subtotal	151	155	102.5%	41.0	7.6	D
SB	Left Turn	58	57	97.9%	39.0	8.3	D
	Through	13	12	94.6%	39.1	18.6	D
	Right Turn	352	348	98.9%	15.9	3.0	B
	Subtotal	423	417	98.6%	20.0	2.8	C
EB	Left Turn	260	265	101.8%	47.4	6.6	D
	Through	656	658	100.3%	27.4	2.0	C
	Right Turn	125	128	102.6%	22.2	3.9	C
	Subtotal	1,041	1,051	100.9%	31.6	2.0	C
WB	Left Turn	16	16	102.5%	63.7	20.2	E
	Through	619	618	99.8%	32.2	4.2	C
	Right Turn	46	48	105.0%	21.3	5.9	C
	Subtotal	681	683	100.2%	32.2	4.1	C
Total		2,296	2,305	100.4%	30.3	1.8	C

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	5	5	94.0%	29.3	17.0	C
	Through						
	Right Turn	9	10	112.2%	4.7	2.4	A
	Subtotal	14	15	105.7%	15.4	8.1	B
SB	Left Turn	335	344	102.7%	17.5	2.7	B
	Through						
	Right Turn	167	166	99.5%	4.6	0.7	A
	Subtotal	502	510	101.6%	13.3	2.2	B
EB	Left Turn	71	69	97.5%	24.8	6.3	C
	Through	438	431	98.5%	9.8	2.0	A
	Right Turn	16	17	108.1%	4.7	4.2	A
	Subtotal	525	518	98.6%	11.7	2.1	B
WB	Left Turn	14	13	93.6%	35.8	11.9	D
	Through	442	439	99.2%	17.0	3.4	B
	Right Turn	119	120	100.8%	11.5	3.5	B
	Subtotal	575	572	99.4%	16.1	3.4	B
Total		1,616	1,615	99.9%	13.8	2.0	B

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	260	254	97.7%	56.2	6.0	E
	Through	834	839	100.6%	45.4	5.7	D
	Right Turn	49	50	102.9%	40.6	7.1	D
	Subtotal	1,143	1,143	100.0%	47.5	5.2	D
SB	Left Turn	182	187	102.7%	50.2	6.0	D
	Through	630	626	99.4%	29.5	4.0	C
	Right Turn	137	137	99.6%	8.9	1.4	A
	Subtotal	949	950	100.1%	30.9	3.7	C
EB	Left Turn	184	183	99.5%	51.1	4.7	D
	Through	250	255	102.1%	27.6	2.6	C
	Right Turn	348	345	99.1%	12.3	2.1	B
	Subtotal	782	783	100.1%	26.5	2.0	C
WB	Left Turn	62	61	98.4%	58.0	12.7	E
	Through	190	193	101.6%	40.3	4.7	D
	Right Turn	195	193	99.1%	28.8	5.4	C
	Subtotal	447	447	100.1%	37.4	3.8	D
Total		3,321	3,323	100.1%	36.4	2.7	D

Intersection 8 **Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	11	13	117.3%	7.5	2.4	A
	Through						
	Right Turn	1	1	100.0%	0.5	1.1	A
	Subtotal	12	14	115.8%	7.2	2.5	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	466	475	101.9%	2.5	0.3	A
	Right Turn	15	18	119.3%	1.3	0.5	A
	Subtotal	481	493	102.5%	2.4	0.3	A
WB	Left Turn						
	Through	436	439	100.6%	0.6	0.1	A
	Right Turn						
	Subtotal	436	439	100.6%	0.6	0.1	A
Total		929	945	101.8%	1.7	0.2	A

Intersection 9 **Rocklin Manor Central/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	14	13	93.6%	10.7	5.2	B
	Through						
	Right Turn						
	Subtotal	14	13	93.6%	10.7	5.2	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	449	459	102.2%	0.5	0.1	A
	Right Turn	18	16	91.1%	0.2	0.3	A
	Subtotal	467	475	101.8%	0.5	0.1	A
WB	Left Turn	2	1	60.0%	0.1	0.4	A
	Through	422	424	100.5%	0.4	0.1	A
	Right Turn						
	Subtotal	424	425	100.3%	0.4	0.1	A
Total		905	914	101.0%	0.6	0.2	A

Intersection 10 **Rocklin Manor East/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	5	6	110.0%	10.5	8.8	B
	Through						
	Right Turn						
	Subtotal	5	6	110.0%	10.5	8.8	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	439	449	102.3%	0.3	0.0	A
	Right Turn	10	11	105.0%	0.2	0.3	A
	Subtotal	449	460	102.4%	0.3	0.0	A
WB	Left Turn	2	1	70.0%	1.5	3.1	A
	Through	419	420	100.3%	2.1	0.3	A
	Right Turn						
	Subtotal	421	422	100.2%	2.1	0.3	A
Total		875	887	101.4%	1.2	0.2	A

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	356	348	97.7%	7.8	1.3	A
	Through	60	61	101.3%	8.8	0.7	A
	Right Turn						
	Subtotal	416	409	98.2%	7.9	1.2	A
SB	Left Turn						
	Through	47	46	97.2%	9.4	1.3	A
	Right Turn	61	69	113.1%	3.7	1.2	A
	Subtotal	108	115	106.2%	5.8	0.8	A
EB	Left Turn	69	71	102.5%	14.5	3.4	B
	Through						
	Right Turn	369	376	101.9%	10.6	1.4	B
	Subtotal	438	447	102.0%	11.2	1.4	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		962	970	100.8%	9.3	0.8	A

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	176	174	99.0%	38.7	5.0	D
	Through	859	878	102.2%	16.0	2.1	B
	Right Turn	77	75	97.9%	7.6	1.4	A
	Subtotal	1,112	1,128	101.4%	19.0	2.1	B
SB	Left Turn	54	53	98.3%	41.9	7.4	D
	Through	765	764	99.8%	21.9	4.1	C
	Right Turn	78	78	99.7%	6.3	2.3	A
	Subtotal	897	895	99.7%	21.9	3.8	C
EB	Left Turn	153	155	101.1%	30.1	5.9	C
	Through	27	27	99.6%	32.6	6.5	C
	Right Turn	248	254	102.5%	13.7	3.0	B
	Subtotal	428	436	101.8%	20.5	3.1	C
WB	Left Turn	101	99	98.3%	35.4	9.4	D
	Through	15	15	97.3%	34.8	13.0	C
	Right Turn	40	42	106.0%	9.6	4.0	A
	Subtotal	156	156	100.2%	28.3	5.5	C
Total		2,593	2,614	100.8%	20.8	2.5	C

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	269	274	101.9%	39.4	5.9	D
	Through	869	884	101.7%	14.1	1.8	B
	Right Turn	278	274	98.6%	6.1	0.6	A
	Subtotal	1,416	1,432	101.2%	17.5	1.9	B
SB	Left Turn						
	Through	1,104	1,109	100.5%	27.5	4.3	C
	Right Turn	56	57	102.5%	7.4	2.4	A
	Subtotal	1,160	1,166	100.6%	26.5	4.4	C
EB	Left Turn	55	55	100.4%	36.5	8.2	D
	Through						
	Right Turn	293	295	100.5%	14.6	1.7	B
	Subtotal	348	350	100.5%	18.3	2.7	B
WB	Left Turn	437	436	99.8%	26.9	2.8	C
	Through	99	99	100.3%	34.0	6.6	C
	Right Turn	224	228	101.6%	17.1	3.0	B
	Subtotal	760	763	100.4%	24.9	2.4	C
Total		3,684	3,712	100.8%	21.9	2.3	C

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,186	1,187	100.1%	19.6	2.6	B
	Right Turn	105	106	100.9%	8.1	1.8	A
	Subtotal	1,291	1,293	100.1%	18.6	2.6	B
SB	Left Turn	267	264	98.7%	44.8	2.7	D
	Through	757	763	100.7%	14.3	2.0	B
	Right Turn	334	332	99.5%	6.6	0.6	A
	Subtotal	1,358	1,358	100.0%	18.4	1.9	B
EB	Left Turn	394	403	102.3%	43.9	4.9	D
	Through	237	231	97.4%	37.2	5.0	D
	Right Turn	81	83	102.5%	11.9	1.4	B
	Subtotal	712	717	100.7%	38.0	2.8	D
WB	Left Turn	99	99	99.5%	41.7	4.2	D
	Through						
	Right Turn	294	291	99.0%	21.6	3.2	C
	Subtotal	393	390	99.1%	26.6	2.9	C
Total		3,754	3,757	100.1%	23.1	1.7	C

Intersection 15 **Sierra College Blvd/Schriber Wy** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,276	1,276	100.0%	2.0	0.2	A
	Right Turn						
	Subtotal	1,276	1,276	100.0%	2.0	0.2	A
SB	Left Turn						
	Through	937	945	100.8%	2.6	0.3	A
	Right Turn						
	Subtotal	937	945	100.8%	2.6	0.3	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	15	17	114.7%	9.6	7.2	A
	Subtotal	15	17	114.7%	9.6	7.2	A
Total		2,228	2,238	100.5%	2.3	0.1	A

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,260	1,260	100.0%	10.5	1.5	B
	Right Turn	52	52	99.2%	8.5	1.8	A
	Subtotal	1,312	1,312	100.0%	10.4	1.5	B
SB	Left Turn	28	28	98.2%	24.3	9.6	C
	Through	878	882	100.4%	4.8	0.8	A
	Right Turn	31	34	110.6%	3.2	0.6	A
	Subtotal	937	944	100.7%	5.3	0.8	A
EB	Left Turn	1	1	50.0%	0.7	2.3	A
	Through	1	1	100.0%	9.2	23.5	A
	Right Turn	2	3	135.0%	5.0	9.3	A
	Subtotal	4	4	105.0%	13.0	23.5	B
WB	Left Turn	52	50	96.0%	25.6	6.3	C
	Through						
	Right Turn	9	12	130.0%	7.2	3.3	A
	Subtotal	61	62	101.0%	21.9	5.4	C
Total		2,314	2,321	100.3%	8.7	1.3	A

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	41	41	99.3%	38.3	7.9	D
	Through	1,154	1,154	100.0%	12.7	1.0	B
	Right Turn						
	Subtotal	1,195	1,195	100.0%	13.5	1.1	B
SB	Left Turn						
	Through	895	896	100.1%	7.4	1.1	A
	Right Turn	40	43	106.3%	4.6	1.5	A
	Subtotal	935	939	100.4%	7.3	1.1	A
EB	Left Turn	160	155	97.0%	21.6	2.9	C
	Through						
	Right Turn	56	57	101.6%	6.8	1.9	A
	Subtotal	216	212	98.2%	17.8	2.0	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,346	2,346	100.0%	11.4	0.9	B

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	8	8	95.0%	7.0	6.7	A
	Through	1,195	1,197	100.1%	5.4	0.4	A
	Right Turn						
	Subtotal	1,203	1,204	100.1%	5.4	0.4	A
SB	Left Turn						
	Through	937	937	99.9%	2.6	0.4	A
	Right Turn	14	16	110.7%	1.6	1.6	A
	Subtotal	951	952	100.1%	2.6	0.4	A
EB	Left Turn						
	Through						
	Right Turn	12	13	110.0%	5.2	3.0	A
	Subtotal	12	13	110.0%	5.2	3.0	A
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,166	2,170	100.2%	4.2	0.3	A

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	26	24	93.1%	26.8	10.3	C
	Through	1,066	1,061	99.6%	6.5	1.5	A
	Right Turn	7	7	100.0%	1.2	1.9	A
	Subtotal	1,099	1,093	99.4%	7.0	1.5	A
SB	Left Turn	64	63	97.8%	26.1	5.0	C
	Through	921	915	99.3%	6.6	1.4	A
	Right Turn	77	76	98.8%	6.1	1.2	A
	Subtotal	1,062	1,053	99.2%	7.8	1.3	A
EB	Left Turn	33	31	95.2%	23.1	6.8	C
	Through	1	1	130.0%	4.1	9.8	A
	Right Turn	18	21	117.8%	11.4	4.9	B
	Subtotal	52	54	103.7%	18.0	5.6	B
WB	Left Turn	10	11	113.0%	22.0	13.6	C
	Through	1	1	80.0%	5.6	12.6	A
	Right Turn	21	21	101.0%	8.2	3.8	A
	Subtotal	32	33	104.1%	12.3	5.4	B
Total		2,245	2,233	99.5%	7.7	1.3	A

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	151	154	101.8%	2.3	2.5	A
	Right Turn						
	Subtotal	151	154	101.8%	2.3	2.5	A
SB	Left Turn						
	Through	147	150	101.8%	0.5	0.1	A
	Right Turn	7	7	100.0%	0.3	0.4	A
	Subtotal	154	157	101.8%	0.5	0.1	A
EB	Left Turn						
	Through						
	Right Turn	9	9	101.1%	2.6	1.3	A
	Subtotal	9	9	101.1%	2.6	1.3	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		314	320	101.8%	1.5	1.4	A

Intersection 21 **El Don Dr/Southern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	3	3	83.3%	0.8	1.2	A
	Through	117	120	102.6%	1.6	0.3	A
	Right Turn						
	Subtotal	120	123	102.2%	1.6	0.3	A
SB	Left Turn						
	Through	154	156	101.4%	0.3	0.1	A
	Right Turn	2	2	85.0%	0.0	0.0	A
	Subtotal	156	158	101.2%	0.3	0.1	A
EB	Left Turn	34	33	98.2%	5.7	1.0	A
	Through						
	Right Turn	5	5	106.0%	3.2	2.1	A
	Subtotal	39	39	99.2%	5.4	1.0	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		315	319	101.3%	1.5	0.3	A

Intersection 22 **El Don Dr/Wildflower Ln** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	1	1	80.0%	0.3	1.0	A
	Through	111	113	102.2%	5.0	0.2	A
	Right Turn						
	Subtotal	112	114	102.0%	5.0	0.2	A
SB	Left Turn						
	Through	144	146	101.7%	6.3	0.4	A
	Right Turn	15	16	104.0%	4.0	0.4	A
	Subtotal	159	162	101.9%	6.0	0.4	A
EB	Left Turn	9	9	103.3%	3.9	1.4	A
	Through						
	Right Turn	3	3	110.0%	2.0	1.8	A
	Subtotal	12	13	105.0%	3.7	1.3	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		283	289	102.0%	5.5	0.2	A

Intersection 23 **El Don Dr/Corona Cir** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	5	5	106.0%	1.2	1.3	A
	Through	103	106	102.5%	0.1	0.1	A
	Right Turn						
	Subtotal	108	111	102.7%	0.2	0.2	A
SB	Left Turn						
	Through	132	134	101.4%	1.5	0.2	A
	Right Turn	15	17	110.0%	1.2	0.4	A
	Subtotal	147	150	102.3%	1.5	0.1	A
EB	Left Turn	9	8	85.6%	4.6	2.9	A
	Through						
	Right Turn	3	3	110.0%	1.4	1.5	A
	Subtotal	12	11	91.7%	4.4	2.8	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		267	272	102.0%	1.1	0.3	A

APPENDIX C: MIXED-USE TRIP GENERATION, VMT, AND EXISTING PLUS PROJECT AND EXISTING PLUS APPROVED PROJECTS LOS CALCULATIONS

Output from MXD+ Model of Internal Capture for North Village

MXD+ Vehicle Trip Generation Reduction Percent			
	Daily	AM	PM
Internal Capture	7.6%	9.8%	14.4%

Model Inputs

Input Variable	Input Value	Source
MXD specific inputs		
Project Area (Acres)	58.89	GIS
Intersections per Square Mile	180	custom
Employment within 1 mile of Project Site	321	EPA Smart Location Database (2013) - 2010 Scenario
Share of regional employment within a 30 minute trip by transit	0.00396978	EPA Smart Location Database (2013) - 2010 Scenario
Surrounding Household Size	2.54	ACS 2012 (5-year) - All Housing Types
Surrounding Vehicle Ownership	2.38	Census 2000 - All Housing Types
Site Household Size	2.67	Census 2010 - All Housing Types
Site Vehicle Ownership	2.45	ACS 2012 (5-year) - All Housing Types

Base Year Model Results

Land Use	Home Based				
	VT	VMT	HHLD	Avg. Trip Length	VMT/HHLD
Single Family	139,805	1,102,903	15,735	7.89	70.1
Multi-Family	53,570	270,296	5,644	5.05	47.9

Citywide values - calculated by summing up and averaging VMT for all TAZs in the City

	A	B	C	D	E	F	G	H	I	J	K	L
1		2	3	4	5	6		7	8	9	10	11
2	Rocklin_TAZ	HB_P_VT	HB_P_VMT	HBW_P_VT	HBW_P_VMT			HB_P_VT_SF	HB_P_VT_MF	HB_P_VT_AR	HB_P_VMT_SF	HB_P_VMT_MF
70	1603	2,190	16,197	362	3,335	2,190	TRUE	1,826	364	0	9,001	5,196
71	1604	2,297	16,822	504	3,789	2,297	TRUE	2,297	0	0	16,822	0
72												
73	Sum	100,675	1,409,825	88,484	660,550			126,088	27,179	2,796	1,102,903	270,296

Land Use	Home Based Work Attractions				
	VT	VMT	ksf	Avg. Trip Length	VMT / ksf
Office	1469	15227	285.3	10.365	76.2

Citywide values - calculated by summing up and averaging VMT for all TAZs in the City

	M	N	O	P	Q	R	S	T	U	V
		2	3	4	5					
1	RockRin_TAZ	HBW_A_VT	HBW_A_VMT	WO_P_VT	WO_P_VMT	Office_Only_KSF	HBW_A_VT	HBW_A_VMT	WO_P_VT	WO_P_VMT
2	1601	0	0	0	0	0	0	0	0	0
3	1602	56	452	73	566	0	0	0	0	0
4	1603	0	0	0	0	0	0	0	0	0
5	1604	0	0	0	0	0	0	0	0	0
6										
7	Sum	96,372	991,511	19,128	134,145	285.3	1469	15227	297	1981

North Village and South Village calculated Residential VMT

North Village

Land Use	Home-Based						
	VT	VMT	Pop.	HHLD	Avg. Trip Length	VMT/Pop.	VMT/HHLD
Single Family	2,791	22,099		317	7.9		69.7
Multi-Family	2,403	19,699		378	8.1		51.2

South Village

Land Use	Home-Based						
	VT	VMT	Pop.	HHLD	Avg. Trip Length	VMT/Pop.	VMT/HHLD
Single Family	224	1,447		25	6.3		57.9

Example Calculation:
Linked spreadsheet shows that TAZ 516 generated 22,099 Home-based VMT by its single family units. Matches above value.

	A	B	C	D	E	F	G	H	I	J	K
1		2	3	4	5	6		7	8	9	10
2	Rocklin_TAZ	HB_P_VT	HB_P_VMT	HBW_P_VT	HBW_P_VMT			HB_P_VT_SF	HB_P_VT_MF	HB_P_VT_AR	HB_P_VMT_SF
75	517	887	6,535	721	3,144	887	TRUE	887	0	0	6,535
76	518	194	1,367	48	471	194	TRUE	194	0	0	1,367
77	519	1,804	13,598	457	4,530	1,804	TRUE	1,600	204	0	11,998
78	520	314	2,400	105	1,200	314	TRUE	110	204	0	1,275
79	521	0	0	0	0	0	TRUE	0	0	0	0
80	522	120	888	24	268	0	FALSE	0	0	0	0
81	523	0	0	0	0	0	TRUE	0	0	0	0
82	524	3,196	22,868	1,433	10,812	3,196	TRUE	2,791	2,403	0	22,099
83											

Example Calculation:
South Village calculated Office VMT

South Village

Land Use	Total				
	VT	VMT	KSF	Avg. Trip Length	VMT / KSF
Office	785	5,609	53	7.1	105.8

Linked spreadsheet shows that Project TAZ 1605 generated 5609 VMT by its office uses. Matches above value.

	A	B
1		
2		
3	TAZ	T Alexandria
4		DEV
5		
144	1584	0
145	1585	0
146	1586	0
147	1587	0
148	1588	0
149	1589	0
150	1590	0
151	1604	5,609
152	1591	0
153	1592	0
154	1593	0

Future Year Model Results

City of Rocklin

Land Use	Home-Based				
	VT	VMT	HHLD	Avg. Trip Length	VMT/HHLD
Single Family	160,466	1,340,320	21,219	7.7	62.8
Multi-Family	62,924	411,635	13,973	6.4	40.9

Citywide values - calculated by summing up and averaging VMT for all TAZs in the City

	A	B	C	D	E	F	G	H	I	J	K	L
1		2	3	4	5	6		7	8	9	10	11
2	Rocklin_TAZ	HB_P_VT	HB_P_VMT	HBW_P_VT	HBW_P_VMT			HB_P_VT_SF	HB_P_VT_MF	HB_P_VT_AR	HB_P_VMT_SF	HB_P_VMT_MF
162	1581	3,434	34,504	734	6,380	1,434	TRUE	0	3,434	0	0	34,504
163	1582	0	0	0	0	0	TRUE	0	0	0	0	0
164	1583	2,219	19,499	380	4,131	1,339	TRUE	1,181	1,038	0	10,711	7,709
165	1584	370	3,909	284	2,496	370	TRUE	0	370	0	0	5,081
166	1585	0	0	0	0	0	TRUE	0	0	0	0	0
167	1586	2,111	12,738	350	3,431	1,111	TRUE	2,111	0	0	12,738	0
168	1601	204	1,315	56	393	204	TRUE	204	0	0	1,315	0
169	1602	1,460	9,370	420	3,601	1,460	TRUE	980	784	0	6,319	4,162
170	1603	2,199	13,328	915	8,930	1,199	TRUE	1,406	784	0	8,907	4,501
171	1604	2,898	15,799	594	5,417	1,298	TRUE	2,298	0	0	15,799	0
172												
173	Sum	256,144	1,751,315	88,656	564,669			180,469	93,904	1,817	1,340,320	411,635
174												

City of Rocklin

Land Use	Total				
	VT	VMT	KSF	Avg. Trip Length	VMT / KSF
Office	32,580	407,937	3,356	7.8	121.6

Citywide values - calculated by summing up and averaging VMT for all TAZs in the City

	A	B
1		19
2		
3	TAZ	VMT TOTAL
4		
5		OFF
164	1582	12,738
165	1583	0
166	1584	14,018
167	1585	95
168	1594	340
169	1599	297
170	1598	0
171	1601	4,819
172	1602	2,304
173	1603	0
174	1604	0
175		
176	SUM	467,937
177		

North Village and South Village calculated Residential VMT

North Village

Land Use	Home-Based				
	VT	VMT	HHLD	Avg. Trip Length	VMT/HHLD
Single Family	2,797	18,904	377	6.7	50.1
Multi-Family	2,404	14,879	370	6.2	40.2

South Village

Land Use	Home-Based				
	VT	VMT	HHLD	Avg. Trip Length	VMT/HHLD
Single Family	734	5,104	99	6.9	51.5

Example Calculation:
Linked spreadsheet shows that TAZ 524 generated 16,904 Home-based VMT by its single family units. Matches above value.

	A	B	C	D	E	F	G	H	I	J	K
1		2	3	4	5	6		7	8	9	10
2	Rocklin_TAZ	HB_P_VT	HB_P_VMT	HBW_P_VT	HBW_P_VMT			HB_P_VT_SF	HB_P_VT_MF	HB_P_VT_AR	HB_P_VMT_SF
78	520	2,454	16,767	662	5,546	2,354	FALSE	866	1,588	0	5,788
79	521	0	0	0	0	0	TRUE	0	0	0	0
80	522	786	5,281	189	1,785	675	FALSE	675	0	0	4,847
81	523	4,775	33,997	748	6,980	1,775	TRUE	4,775	0	0	33,997
82	524	5,199	31,819	1,408	12,908	5,155	FALSE	2,795	2,404	0	16,904
83	546	3,475	23,832	961	9,193	3,475	TRUE	1,234	2,241	0	8,887
84	562	1,028	8,847	258	2,656	1,028	TRUE	1,028	0	0	8,847

Example Calculation:
South Village calculated Office VMT

South Village

Land Use	Total				
	VT	VMT	KSF	Avg. Trip Length	VMT / KSF
Office	777	5,784	59	7.4	119.2

Linked spreadsheet shows that Project TAZ 1601 generated 5784 VMT by its office uses. Matches above value.

	A	B
1		19
2		
3	TAZ	VMT TOTAL
4		
5		OFF
164	1582	12,738
165	1583	0
166	1584	14,018
167	1585	95
168	1594	340
169	1599	297
170	1598	0
171	1601	5,784
172	1602	2,304
173	1603	0
174	1604	0
175		
176	SUM	494,242
177		

Mixed-Use Trip Generation (MXD+) Model Recalibration and Validation to 2019 Conditions

July 13, 2020

FEHR PEERS

Mixed-Use Trip Generation (MXD+) Model
Recalibration and Validation to 2019 Conditions
July 13, 2020

This paper documents the recalibration and validation effort undertaken by Fehr & Peers in 2019-2020 of the MXD+ Tool. This revalidation was necessary given the myriad changes in mobility, technology, and societal behavior that have occurred since MXD+ was originally formulated in the late-2000's. This paper provides a straightforward "nuts and bolts" type description of this process.

MXD+ Model Origin

In the late-2000's, two separate research studies improved the state of practice regarding prediction of trips from mixed-use projects. Studies sponsored by the US EPA (MXD) and the Transportation Research Board (NCHRP 684) developed separate tools for improving trip generation estimates for mixed-use developments. The MXD model was originally derived from 239 mixed-use sites across the country, and validated in 2009 against 22 sites. NC*HRP 684: Enhancing Internal Trip Capture Estimation for Mixed-Use Developments* (2011) was based on six well-known MXD sites.

The principal authors of these original two methods (Reid Ewing at the University of Utah, Brian Bochner at Texas A&M, and Jerry Walters at Fehr & Peers) decided to collaborate on an integrated method that captured the best of both sets of research findings. And thus, MXD+ was created. They published a paper entitled Get*ting Trip Generation Right: Eliminating the Bias Against Mixed-Use Development* (American Planning Association, 2013). According to that paper, MXD+ achieved average errors of 2%, 12%, and 4%, for daily, AM peak hour, and PM peak hour conditions, respectively. These values suggest a good fit between the model's estimation and the counts.

Purpose/Need of Revalidation and Calibration

Excluding the unprecedented changes in travel and economic distress that have occurred in 2020 due to the COVID-19 Pandemic, there have been sweeping changes in travel behavior in the 10-plus years since MXD+ was originally validated. Some of the many examples include increased e-commerce activity, the introduction of ridehailing (i.e., Transportation Network Companies (TNCs), such as Uber and Lyft), increased telecommuting, micromobility (e.g., bikeshare, e-scooters, and microtransit), increased auto ownership, and decreased transit ridership.

Additionally, in 2017, the Institute of Transportation Engineers (ITE) released the 10th Edition of the *Trip Generation Manual*. When compared to the 9th Edition (2012), the 10th Edition demonstrates sizeable decreases in vehicle trip rates for nearly all types of employment uses (due to the replacement of very old data with new data collected after 2010). It also includes several new land use categories (i.e., fast casual restaurant), more overall data, and better definitions for land uses often found in mixed-use sites

Model Recalibration

Model recalibration involved site selection, data collection, and then calibration.

Site Selection

Fehr & Peers selected sites that were geographically diverse, both in terms of locations across the US, and as well as in their place type. They had varying levels of mode choice options, and their site trips were able to be accurately counted. The sites were well understood in terms of occupied land uses, available modes of travel, and other built environment characteristics. This diversity of use type, geographic placement, size allows for the model to be calibrated against a wider set of conditions versus an alternate approach where a more homogeneous set of sites were selected.

Consistent with standard practice in statistical analysis, the selected sites were divided into separate "calibration" and "validation" datasets. Early analysis findings indicated that model accuracy could be improved for weekday AM and PM peak hour conditions through a set of minor adjustments, which are discussed in detail later. The calibration dataset (12 sites) was used to determine the best fit provided by the adjusted set of factors. The validation dataset (4 sites), which was not included in the calibration dataset, were specifically selected to provide a diverse range of geographic settings, modal opportunities, and project sizes, which could be used to test the accuracy of the model. Those results are presented in case study format at the end of this paper.

Figure 1 shows the 12 calibration sites that were selected, as well as the four validation sites. Aside from the four case studies, individual site locations are not disclosed in this article because such information is not necessary to understand the data collection and analysis results. Case in point, transportation planners/engineers routinely use data from the *Trip Generation Manual*, which only discloses the states from which the data was collected. The traffic data collection did not require encroachment onto any private property to place cameras or hose tubes.

Data Collection

Table 1 provides an overview of the size, diversity of uses, and transit proximity of the sites that comprise the calibration database.



Figure 1: MXD+ Calibration and Validation Sites

Table 1 – Overview of MXD+ Calibration Sites

Metric	Range	Average	Median	Total
Acres	4 – 221 acres	50 acres	19 acres	603 acres
Number of Dwelling Units [1]	8 – 1,841 units	563 units	414 units	6,756 units
Retail	0 – 753,000 sq. ft.	168,000 sq. ft.	38,000 sq. ft.	2,013,000 sq. ft.
Office	0 – 1,084,000 sq. ft.	212,000 sq. ft.	41,000 sq. ft.	2,544,000 sq. ft.
Range of Transit Services	None, adjacent street bus stops, on-site transit centers, and nearby/on-site light rail			
Range of Land Uses	➢ Grocery Store ➢ Student Housing ➢ Medical-Office Building ➢ Restaurants	➢ Health Club ➢ Pharmacy ➢ Hotel ➢ Coffee Shop ➢ Library	➢ Schools ➢ Museum ➢ Movie Theater ➢ Bowling Alley ➢ Hospital	
Notes: [1] Over 95% of dwelling units are multi-family. Site with only 8 dwelling units also includes 315 student housing units.				

The average site was 50 acres and consisted of about 563 dwelling units (the vast majority being multi-family) and 380,000 square feet of non-residential space.

The MXD+ tool includes queries from various sources (e.g., US Census, American Community Survey, local travel demand models, etc.) to enable easy importing of built environment and surrounding area travel characteristics and demographic variables. Some of the more important variables are: Employment within a one-mile walk, Percentage of regional employment within a 30 minute transit ride, and site/adjacent area intersection density (a proxy for site walkability and internal trip-making potential), and Average vehicle ownership per household.

Measurement of vehicle trips generated by each site was a critical component of the data collection effort. It was important that the data collection was comprehensive in terms of collecting all types of vehicle trips generated by each site (including project-related vehicles parking on-site or on-street, persons being dropped-off or picked-up by a taxi, TNC, or friend/spouse/coworker, and truck/service deliveries.

To overcome the considerable cost associated with data collection via video cameras, an innovative approach was undertaken whereby collection of a site's travel during its busiest 14 hours can be used to accurately estimate its 24-hour traffic generation. Typically, these 14 hours represent about 90 percent of the land use's total daily trip generation. A factoring process was then performed using the ITE hourly trip generation data (from the *Trip Generation Manual)* to convert the 14 hour counts into 24-hour observations.

In several instances, site characteristics allowed for a multi-day hose tube count (i.e., a pneumatic tube placed across a road that would register a vehicle as it passes over) to be performed. But this was the exception and not the norm since the majority of sites were located in dense, urban environments where tube counts would have likely yielded inaccurate results.

In several cases, site reconnaissance was necessary to better understand site-specific travel behavior. This led to conclusions that on-street parking on one side of the street is project-related, while the other side is not. Other situations involved motorists parking in nearby garages/lots and walking into the MXD. In those instances, pedestrian activity (both at intersections and mid-block) were observed and classified into groups to translate pedestrian groups into vehicle trips.

Seven (7) of the 12 calibration data sites were counted in October 2019. The remaining five were counted as part of prior research efforts, in either 2015 or 2017. **Table 2** shows the number of vehicle trips these sites were observed to generate on a weekday daily basis, and during the AM and PM peak hours.

Table 2 – Trips Generated by MXD+ Calibration Sites

Time Period	External Vehicle Trips [1]		
	Range	Average	Median
Weekday (Daily)	2,383 – 35,825	12,461	9,495
Weekday AM Peak Hour [2]	100 – 2,017	752	518
Weekday PM Peak Hour [3]	181 – 3,381	1,161	712

Notes:
[1] Includes trips to/from the site for all purposes including deliveries, TNC trips, pass-by trips (i.e., already on the adjacent street) in addition to the typical trip types.
[2] AM peak hour represents the site's busiest consecutive 60-minute period of travel between 7 and 9 AM.
[3] PM peak hour represents the site's busiest consecutive 60-minute period of travel between 4 and 6 PM.

Recalibration of MXD+

The land use and built environment variables described above were input into MXD+ for each of the 12 calibration sites. MXD+ then processes that data in the following generalized steps:

- Step 1 – Gross number of vehicle trips are estimated for land uses based on published rates contained in the *Trip Generation Manual, 10th Edition*.[1]
- Step 2 – Built environment and site characteristics variables are used to estimate the likelihood for internal trip-making, and external trips being made by transit and walking/biking.
- Step 3 – The model estimates the number of internal trips made between complementary land uses within the site.
- Step 4 – The model estimates the number of external trips made by transit and walking/biking.

Nearly all data presented in the current *Trip Generation Manual* for the suburban/urban place type were collected at low-density, single-use, homogeneous developments with little or no public transit service, free parking, and little to no convenient pedestrian access. Hence, direct use of those rates for projects not aligned with those built environment factors are likely to result in an

[1] MXD+ is programmed to include trip generation rates (both weighted averages and as derived from fitted curve equations) from the 10th Edition of the *Trip Generation Manual*. Data is input only for the "suburban/urban" land use category, and not for the "rural", "multi-use urban", or "center city core" categories because their corresponding datasets generally have insufficient numbers of sites from which reliable trip generation rates could be derived.

overestimation of vehicle trips. This statement, while obvious, is intended to set the stage for why gross ITE trip generation estimates (without any adjustments) substantially overestimate trips observed at the MXD sites.

The following guidance from Page 14 of the *Trip Generation Handbook* (Institute of Transportation Engineers, 2017) was used in the calibration process:

> *"The trip generation estimate should reflect, to the extent possible, the specific uses within the known or assumed generalized (using zoning) classification."*

Thus, individual uses such as grocery stores, banks, pharmacies, restaurants, health clubs, day-care centers, etc. present at each site were entered separately into MXD+ versus being aggregated into a single 'retail shopping center' category.

In reviewing the preliminary MXD+ results, it was concluded that the daily results were sufficiently accurate so as to not require any adjustments. But for AM and PM peak hour conditions, it was observed that MXD+ tended to underestimate the observed count more often than desired. This was certainly an undesirable outcome because MXD+ applications should be reasonably conservative. If anything, they should err on the side of overestimating actual trips. The means by which internal trips and external non-auto trips were estimated for AM and PM peak hour conditions was quickly identified as a leading culprit.

The following describes the steps for how internal trips and external walk/bike trips for AM and PM peak hour conditions are estimated:

- Step 1 – Apply the MXD+ peak hour factors by trip purpose to the daily predicted probabilities of these trip reductions to obtain AM and PM peak hour percentages.
- Step 2 – Apply the following weighting of the two methods that independently estimate these trip reductions:
    - AM Peak Hour: 10% NCHRP 684 and 90% MXD+
    - PM Peak Hour: 37% NCHRP 684 and 63% MXD+

An iterative statistical analysis was performed to determine which set of peak hour factors for the MXD+ component of this calculation best fit the data from the calibration dataset. The best fit values are shown in **Table 3**.

The *NCHRP 684* procedure has been incorporated by ITE into its Trip Generation Handbook, and is hence known as the "ITE with Internalization". Note that this procedure estimates internal trips only for AM and PM peak hours (and not daily conditions).

Table 3 – Updated MXD+ Peak Hour Factors by Trip Purpose [1]

Predicted Probability [2]	AM Peak Hour			PM Peak Hour		
	HBW [3]	HBO [4]	NHB [5]	HBW [3]	HBO [4]	NHB [5]
Internal Capture	1.10	1.80	1.00	1.00	1.00	1.00
Walking/Biking External	1.20	1.30	1.00	1.00	1.00	1.00
Transit External	1.40	1.10	1.00	1.40	1.00	1.00

Notes:
[1] Source was analysis of data from the 2017 National Household Travel Survey, specifically analyzing the national dataset to understand the relative likelihood of each type of travel choice during weekday AM and PM peak hours, versus on a daily basis.
[2] These factors are multiplicatively applied (by trip purpose) to the daily predicted possibilities for each type of vehicle trip reduction
[3] HBW = Home-based work trip.
[4] HBO = Home-based other trip (e.g., shopping, school, recreation, etc.).
[5] NHB = Non-home-based trip (e.g., from office to deli).

Transparency in calculations is one of the many objectives of MXD+. By virtue of displaying these values here, it is possible for others to replicate MXD+ results, albeit through a substantial amount of data collection and analysis. The original MXD model (from 2011) is available for download from EPA's website (https://www.epa.gov/smartgrowth/mixed-use-trip-generation-model), though it is noted that model does not include the latest land use categories, trip generation rates, and equations from the 10th Edition of the *Trip Generation Manual*. However, that model does form the basis for the daily module of MXD+, but with these aforementioned adjustments added.

The calibration tests focus on the following five specific areas (from least to most statistically complex):

- Aggregate total trips
- Proportion of cases where MXD+ underestimates the actual number of trips
- Average absolute error
- Correlation coefficient[2]
- Percent RMSE[3]

---

[2] This statistic measures the relationship between variables. A measure close to 1 means that variables are highly positively correlated; a value of zero suggests no or weak correlation, and a value close to -1 represents strong negative correlation.

[3] This statistic is a measure of the model's accuracy. It is the square root of the mean squared error between the predicted and observed count divided by the mean of the observed count.

Table 4 displays the five calibration statistics for daily, and AM and PM peak hour conditions, as well as the applicable statistical goal/objective for the given calibration statistic.

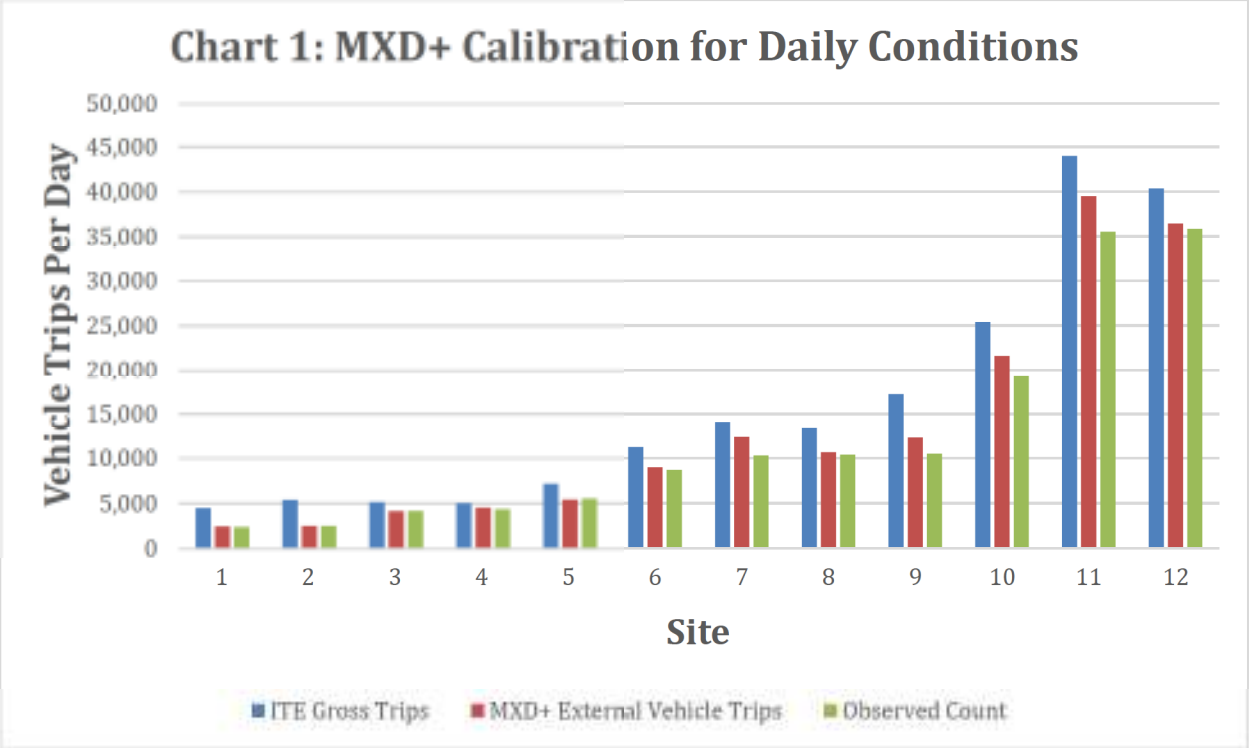
Table 4 – MXD+ Calibration Results

Calibration Statistic	Goal/Objective	Daily	AM Peak Hour	PM Peak Hour
Aggregate Total of MXD+ Vehicle Trip Generation Estimates Versus Actual Counts	As close to zero as possible	+ 7%	- 0.9%	+1.6%
Proportion of Calibration Sites That Were Underestimated by MXD+ [1]	Ideally none	0 of 12	4 of 12	3 of 12
Average Absolute Error	As close to zero as possible	6%	11%	6%
Correlation Coefficient	> 0.88 [2]	1.00	0.99	1.00
Percent RMSE	< 40% [2]	12%	13%	7%

Notes:
[1] Estimates that were within five percent of the actual counts were not considered underestimations since traffic volumes themselves may fluctuate by five percent or more from one day to the next.
[2] Based on statistical measures typically applied in travel demand model development.

Table 4 indicates that MXD+ does an excellent job of fitting the data for all three time periods. Challenges did however arise more frequently during peak hours versus daily conditions. Unique site specific conditions, such as their specific temporal commute patterns, degree of retail tenant success, and presence of TNCs contributed to some of these challenges.

Chart 1 orders the 12 calibration sites from least to greatest number of observed daily trips. Data is then presented for the MXD+ external vehicle trip estimate and the ITE gross trip estimate. At sites 1 – 6, MXD+ predictions are nearly identical to the observed counts. Slightly greater variation occurs at the larger sites (i.e., 7 – 12) for reasons discussed below.



For the 12 sites, MXD+ estimated 160,696 daily external vehicle trips. This represents 7% more trips than the 149,527 daily trips that were counted. This implies that MXD+ is being reasonably conservative.

If these sites had simply been analyzed using ITE gross daily trip estimates (i.e., without any reductions of internal trips or external non-auto trips), the resulting estimate would have been 192,905 daily trips, which is a 29% overestimation versus the counts. This reiterates prior research findings that the use of ITE rates for the suburban/urban place type without any adjustments for internal trips and external non-auto trips would result in a substantial overestimation of a mixed-use site's vehicle trip generation. This is acknowledged on page 8 of the *Trip Generation Handbook* by the following statement: "The application of suburban data in dense or multimodal urban settings can in some cases overestimate motor vehicle demand."

For the 12 calibration sites, the reduction in daily trips caused by internal trip-making and external non-auto travel ranged from 10 to 50 percent, with average/median values near 20 percent. This large range is caused by a number of factors including: mix of land use, presence of transit, and site design, size, and geographic location.

Validation of MXD+

Four case studies from across the US were selected for validation purposes. As noted previously, these sites were excluded from the calibration dataset in order to achieve the statistically desirable independent validation dataset. These sites were specifically chosen, as they are geographically diverse, are of widely varying sizes, and provide widely differing levels of modal travel options.

- **Safeway / Avalon, Bellevue, WA** – This four-acre site is situated in downtown Bellevue, across Lake Washington from downtown Seattle. Despite being only 10 miles from downtown Seattle, a commute to downtown by auto can exceed over an hour. Sound Transit operates fixed-route bus service with stops immediately adjacent to the building. The site is located in a suburban downtown setting with good sidewalk connectivity and heavy pedestrian volumes, but also wide arterial streets, large blocks, and heavy traffic. There no bike routes/lanes nearby. Adjacent land uses include a variety of residential, retail, and employment centers as well as a large regional mall and the Downtown Park. Apartment residents pay $85 to $110 per month for a parking space.
- **Hazard Center, San Diego, CA** – is situated on 16-acres and located five miles north of Downtown San Diego near the intersection of Interstate 8 and State Route 163. All land uses are situated within a ¼-mile walk to the Hazard Center Light Rail Station, which serves the San Diego Trolley Green Line light rail service. This station transports riders to downtown San Diego in about 20 minutes. A bus stop is also situated within ¼ mile of the site. A variety of uses are within a ½-mile walk of the site including Westfield Mission Valley Mall, grocers, employers, and restaurants. The San Diego River multi-use pathway is situated adjacent to this site.
- **Avalon, Alpharetta, GA** – is a quintessential suburban mixed-use project now found in many communities across the country. At a considerable size of 79 acres, it features a vast array of land uses – all of the typical ones found in mixed-use sites plus some other atypical uses such as single-family residential. It is a food & beverage destination with numerous bars and restaurants ranging from fast-food, fast casual, high-turnover sit-down, to quality establishments. Avalon is located directly west of US Highway 19, about 25 miles north of downtown Atlanta. Adjacent transit is limited to a single local bus route that operates on 30 minute headways. Parking is not priced anywhere within Avalon with the exception of the hotel. The site is anchored by Avalon Boulevard, a 1,200-foot long, walkable "Main Street" flanked by ground-floor retail and stacked residential on both sides. Lower density residential, office, and parking extends outwardly from the site's hub, with vehicular access provided by 10 distinct driveways on two public streets. Adjacent land uses are suburban or rural in nature.

- **Southport, West Sacramento, CA** – is a very large (3,000 developed acres), established community situated directly west of downtown Sacramento. It features a wide array of land use types (i.e., residential, jobs, shopping, schools, etc.) often found in self-contained communities. Fixed route bus service is provided on main arterials within the community, and downtown Sacramento can be reached via a five-mile trip. It is geographically isolated from adjacent communities by the Sacramento River and shipping channels, allowing for its trips to be accurately counted via four gateways.

Table 5 displays the land uses present at each validation data site.

Table 5 – Validation Sites Land Uses

Site	Single-Family	Multi-Family	Office	General Retail [1]	Sit-Down Restaurants	Grocery Store	Hotel	Other/Note
Safeway / Avalon Bellevue, WA	-	368 du's	-	15 ksf	8 ksf	55 ksf	-	-
Hazard Center, San Diego, CA	-	120 du's	256 ksf	111 ksf	23 ksf	-	305 rooms	7-screen movie theater
Avalon Alpharetta, GA	100 du's	525 du's	582 ksf	250 ksf	54 ksf	45 ksf	330 rooms	12-screen movie theater
Southport, West Sacramento, CA	6,811 du's	893 du's	80 ksf	387 ksf	15 ksf	54 ksf	-	Elementary & High School, 600 ksf manufacturing

Notes:
[1] Includes wide array of uses such as: cleaners, dance studios, bookstore, financial office, salon, learning center, jewelers, salons, auto detailing, optometry, etc. Banks, gas stations, fast-food restaurants, coffee shops, and fitness studios were estimated separately (based on their specific uses) but included in this land use total for reporting purposes.
du's = dwelling units. ksf = thousand square feet.

Table 6 presents the number of external vehicle trips measured at each validation site in October 2019 versus the estimated number it would generate using MXD+. Footnote 2 in the table highlights an interesting phenomenon associated with the Southport validation case study. Because it is being validation at the gateways to entire community (versus essentially driveways for the other sites), it is necessary to subtract pass-by trips that would visit the retail uses, as those trips would not add traffic to the community gateways. Those values are shown in brackets.

Table 6 – Validation Sites Trip Generation Comparison

Site	Size	External Vehicle Trip Generation					
		Daily		AM Peak Hour		PM Peak Hour	
		October 2019 Count	MXD+ [1]	October 2019 Count	MXD+ [1]	October 2019 Count	MXD+ [1]
Safeway / Avalon Bellevue, WA	4 acres	5,505	5,968 (+8%)	239	254 (+6%)	512	497 (- 3%)
Hazard Center San Diego, CA	16 acres	11,189	12,395 (+11%)	680	696 (+2%)	930	977 (+5%)
Avalon Alpharetta, GA	79 acres	33,301	33,332 (0%)	1,685	1,894 (+12%)	2,543	2,674 (+5%)
Southport West Sacramento, CA	3,000 acres	75,191	78,961 [74,138] [2] (-1.4%)	6,484	5,919 [5,672] [2] (-12.5%)	6,192	8,156 [7,480] [2] (+21%)

Notes:
[1] Values in parentheses represent the percent increase in trips estimated by MXD+ versus the 2019 field measurements.
[2] Values in brackets represent the MXD+ external vehicle trips minus pass-by trips (see text below for explanation). The corresponding percentage (shown in parentheses) represents the percent change in trips estimated by MXD+ (after subtracting pass-by trips) versus the 2019 field measurements.
du's = dwelling units. ksf = thousand square feet.

The following findings are derived from Table 6:

- For the three smaller sites, MXD+ produces a desirable result in which each validation site's external vehicle trips tend to be slightly overestimated. This is preferable to the converse in which MXD+ consistently underestimates actual trips. Accordingly, the results from MXD+ can be considered reasonably, but not overly, conservative.
- The goodness of fit at the Avalon validation site was a particularly important outcome, as the calibration sites were not in that part of the US and also not "manufactured mixed-use" in an otherwise suburban setting.
- Despite the calibration dataset consisting of a maximum site size of 221 acres and 1,840 units, the model's estimate was within 1.4% of the actual count for daily conditions. But AM and PM peak hour validation results did not fare as well. We suspect the AM peak hour underestimation could be associated with the various schools (i.e., three K-8 public schools and a public high school) in the community and their district boundaries (i.e., more

students being transported from outside the community to these schools). The PM peak hour overestimation likely stems from reliance on ITE trip rates for single-family and multi-family uses, which turned out to be substantially higher than was observed in one particular neighborhood[4]. The Southport validation site highlights how use of MXD+ may be considered for very large projects, but it would be prudent to perform spot checks of trip rates, understand school district boundaries, etc.

Table 7 displays the internal trip percentage reductions, and external trips made by transit and walk/bike for each validation site.

Table 7 – Percent Internal Trips and External Non-Auto Trips at Each Validation Site

Site	Percent Reduction in Daily Trips Due to			Percent Reduction in AM Peak Hour Trips Due to			Percent Reduction in PM Peak Hour Trips Due to		
	Internal Trips	External Trips		Internal Trips	External Trips		Internal Trips	External Trips	
		Transit	Bike/ Walk		Transit	Bike/ Walk		Transit	Bike/ Walk
Safeway / Avalon Bellevue, WA	4.1%	6.4%	29.1%	9.2%	6.7%	35.0%	14.2%	6.5%	28.4%
Hazard Center, San Diego, CA	4.7%	4.9%	11.6%	10.1%	5.6%	14.3%	14.1%	5.3%	11.6%
Avalon Alpharetta, GA	5.4%	3.8%	2.3%	9.9%	4.1%	2.9%	12.0%	3.9%	2.3%
Southport, West Sacramento, CA	26.8%	1.8%	0.3%	39.0%	2.0%	0.3%	23.7%	2.2%	0.2%

Notes:
[1] Output from MXD+.

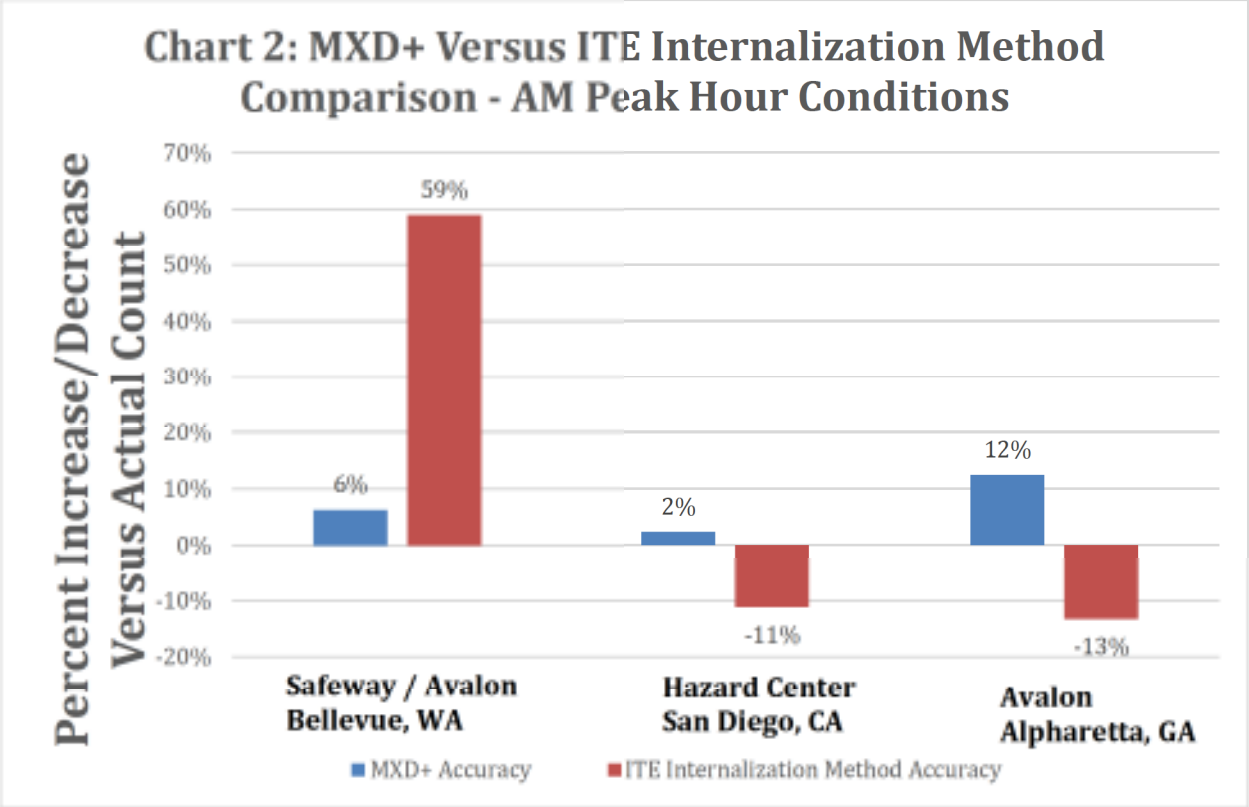
[4] In one neighborhood consisting a combined 325 single-family and multi-family units, the measured vehicle trips entering/exiting the neighborhood during the PM peak hour trip was 51% below the unadjusted ITE trip rates for those uses. When translated to the 7,700 total units in Southport, this resulted in ITE gross trips beginning at a level much higher than was being generated.

The following conclusions are drawn from the results in Table 7:

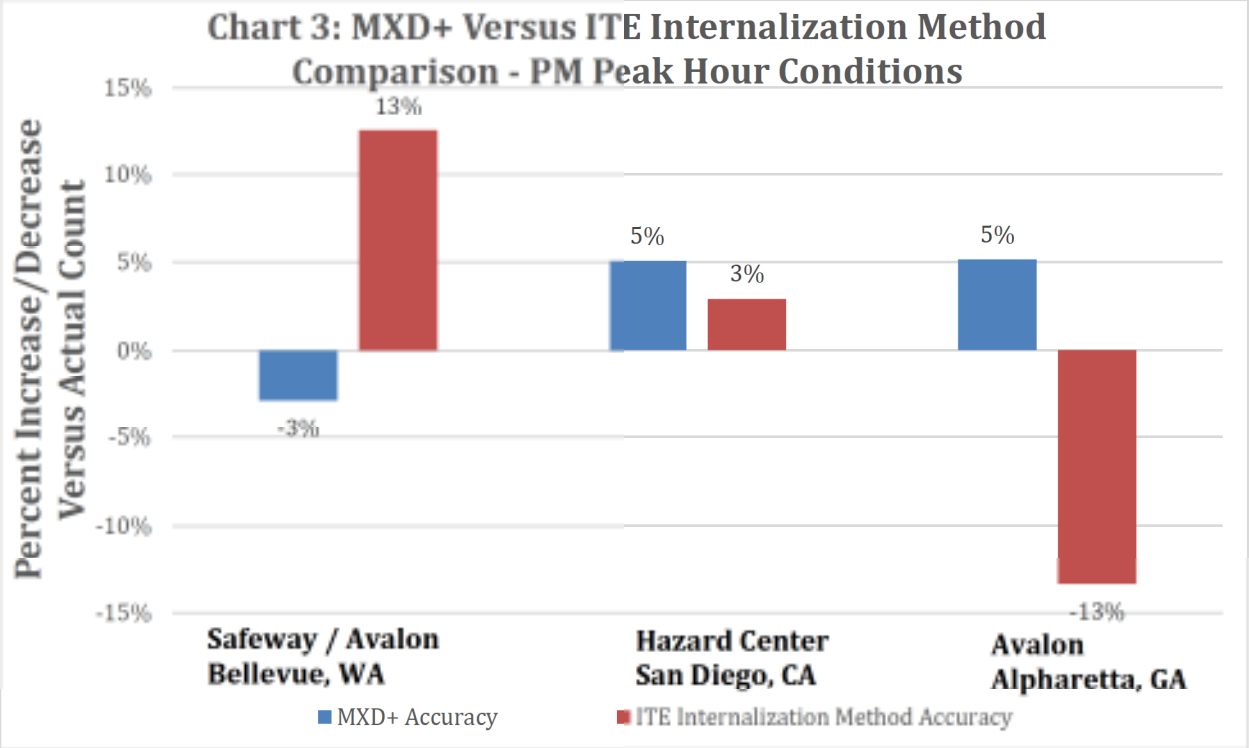
- It is not surprising that the Bellevue, WA site had a large bike/walk percentage given that is situated in Downtown Bellevue, where numerous jobs, retail, and recreation are situated close to the site.
- At the San Diego, CA site, internalization was greatest during the PM peak hour given the full activation of the various retail offerings and conclusion of the office workday.
- Despite the variety of complementary land uses at the Avalon Alpharetta, GA site, only modest levels of internalization were estimated. This is due to the amount of office space (over half a million square feet), which is disproportionately higher than the other uses. The site's jobs-housing balance skews heavily toward non-residential. It should also be noted that about 4% of external trips were assumed to be transit. This would equate to about 140 riders during the PM peak hour, which seems a bit excessive for the fixed-route bus service present.[5]
- At the Southport, CA site, internalization was greatest during the AM peak hour, which is expected given the effects of travel between home and school (to drop off students or work). External travel by transit and walk/bike was modest (less than 2.5%) as expected given that most households are not within walking distance of a bus stop and nearby destinations cannot easily be accessed on foot or by bike.

Charts 2 and 3 show results for AM and PM peak hours, respectively, of how MXD+ performed versus the ITE Internalization Method for the Bellevue, WA, San Diego, CA, and Alpharetta, GA validation sites. The Southport West Sacramento, CA site was excluded for the aforementioned reasons regarding the effects of pass-by traffic, which equally influence results from MXD+ and the ITE Internalization Method.

[5] In situations like this, local knowledge of expected transit ridership could dictate that the analyst modify MXD+ to assume no transit service, with an "off model" approach followed to determine whether any transit reductions are warranted. The presence of transit is a binary choice in MXD+. The type of transit, headways, service duration, and geographic service area are not explicitly considered.



As shown, the MXD+ estimate was closer to the actual count value at all three locations during the AM peak hour, and at two of the three locations during the PM peak hour. During the AM peak hour, the average absolute error was 7% for MXD+ and 28% for the ITE Internalization method. During the PM peak hour, the average absolute error was 4% for MXD+ and 10% for the ITE Internalization method. This clearly indicates that MXD estimates were more accurate than the ITE Internalization Method at the validation data sites.



Conclusions

This study has demonstrated that a minor recalibration of MXD+ has resulted in an analytical tool that accurately estimates the trip generation of mixed-use developments for weekday daily, AM peak hour, and PM peak hour conditions. By focusing the recalibration on 2019 conditions, the model was proven to develop accurate travel estimates despite the myriad changes in travel behavior that have occurred since the model was originally developed. The validation of the model against four mixed-use sites indicates that it may be applied across a wide range of geographies, project sizes, transportation mode availability, and land use mixes.

Paper Contributors

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Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	18	16	89.4%	31.9	10.4	C
	Through	21	22	103.3%	36.4	15.5	D
	Right Turn	16	18	115.0%	13.3	5.1	B
	Subtotal	55	56	102.2%	26.4	7.1	C
SB	Left Turn	282	278	98.6%	25.7	3.2	C
	Through	15	13	88.7%	20.4	8.8	C
	Right Turn	113	112	99.3%	7.9	2.0	A
	Subtotal	410	404	98.4%	20.5	2.5	C
EB	Left Turn	158	167	105.7%	46.6	10.0	D
	Through	873	890	102.0%	15.0	3.1	B
	Right Turn	7	8	112.9%	7.3	7.1	A
	Subtotal	1,038	1,055	102.6%	19.7	4.4	B
WB	Left Turn	10	9	86.0%	48.9	27.4	D
	Through	730	745	102.0%	22.6	3.5	C
	Right Turn	528	525	99.4%	8.3	1.3	A
	Subtotal	1,268	1,278	100.8%	17.0	2.8	B
Total		2,771	2,803	101.1%	18.7	2.2	B

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	68	64	93.7%	31.2	6.1	C
	Through						
	Right Turn	265	269	101.4%	31.1	5.4	C
	Subtotal	333	333	99.8%	31.1	4.9	C
EB	Left Turn						
	Through	786	801	101.9%	39.9	5.9	D
	Right Turn	401	400	99.6%	13.0	2.1	B
	Subtotal	1,187	1,200	101.1%	30.9	4.1	C
WB	Left Turn	406	407	100.3%	39.4	6.9	D
	Through	1,066	1,056	100.0%	7.4	1.5	A
	Right Turn						
	Subtotal	1,472	1,473	100.1%	16.0	2.3	B
Total		2,992	3,006	100.5%	23.9	2.2	C

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	602	593	98.5%	33.2	2.2	C
	Through						
	Right Turn	945	936	99.0%	28.0	2.4	C
	Subtotal	1,547	1,528	98.8%	30.0	2.2	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	187	197	105.5%	52.7	9.7	D
	Through	667	672	100.8%	12.7	1.5	B
	Right Turn						
	Subtotal	854	870	101.8%	21.3	2.8	C
WB	Left Turn						
	Through	870	886	101.8%	34.8	7.5	C
	Right Turn	52	56	108.5%	27.2	6.5	C
	Subtotal	922	942	102.2%	34.4	7.4	C
Total		3,323	3,340	100.5%	28.8	2.8	C

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	141	144	101.9%	34.3	4.9	C
	Through						
	Right Turn	30	31	102.0%	16.6	9.0	B
	Subtotal	171	174	101.9%	31.2	4.8	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	40	37	93.0%	50.4	10.5	D
	Through	1,500	1,494	99.6%	9.3	7.1	A
	Right Turn	53	54	102.1%	5.9	6.0	A
	Subtotal	1,593	1,585	99.5%	10.1	7.2	B
WB	Left Turn	9	9	101.1%	48.3	16.1	D
	Through	759	774	102.0%	9.3	1.5	A
	Right Turn						
	Subtotal	768	783	102.0%	9.6	1.6	A
Total		2,532	2,542	100.4%	11.4	4.5	B

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	141	141	100.0%	43.7	5.7	D
	Through	27	27	99.6%	43.7	11.4	D
	Right Turn	28	30	105.7%	25.0	12.7	C
	Subtotal	196	198	100.8%	40.8	5.9	D
SB	Left Turn	20	21	106.5%	49.0	23.9	D
	Through	1	1	110.0%	23.6	30.3	C
	Right Turn	71	77	107.7%	12.7	5.6	B
	Subtotal	92	99	107.5%	20.5	7.5	C
EB	Left Turn	535	529	98.9%	107.0	36.1	F
	Through	884	876	99.1%	51.3	20.3	D
	Right Turn	97	98	100.6%	46.7	20.3	D
	Subtotal	1,516	1,503	99.1%	71.6	25.9	E
WB	Left Turn	59	56	95.3%	46.6	6.9	D
	Through	530	541	102.1%	31.1	3.9	C
	Right Turn	121	117	97.0%	20.0	6.0	B
	Subtotal	710	715	100.7%	30.5	3.6	C
Total		2,514	2,514	100.0%	56.3	15.8	E

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	15	14	96.0%	42.0	14.2	D
	Through	1	1	100.0%	3.5	11.2	A
	Right Turn	19	22	114.2%	11.1	7.8	B
	Subtotal	35	37	106.0%	23.4	8.9	C
SB	Left Turn	43	46	107.4%	40.6	7.6	D
	Through	1	1	110.0%	1.1	3.4	A
	Right Turn	16	17	106.9%	5.4	1.4	A
	Subtotal	60	64	107.3%	30.4	9.1	C
EB	Left Turn	367	366	99.6%	42.7	11.3	D
	Through	546	548	100.3%	6.9	2.5	A
	Right Turn	7	7	105.7%	4.3	4.1	A
	Subtotal	920	921	100.1%	21.4	6.2	C
WB	Left Turn	15	13	84.7%	56.7	25.2	E
	Through	531	530	99.8%	22.2	5.1	C
	Right Turn	426	435	102.0%	27.7	7.7	C
	Subtotal	972	978	100.6%	25.0	6.0	C
Total		1,987	2,000	100.6%	23.4	5.6	C

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	405	404	99.9%	63.1	7.9	E
	Through	582	575	98.9%	44.5	4.5	D
	Right Turn	104	107	103.0%	36.1	5.8	D
	Subtotal	1,091	1,087	99.6%	50.7	3.9	D
SB	Left Turn	197	206	104.7%	67.3	6.1	E
	Through	721	733	101.6%	43.2	5.9	D
	Right Turn	270	262	97.1%	23.5	5.4	C
	Subtotal	1,188	1,201	101.1%	43.0	4.5	D
EB	Left Turn	140	137	98.0%	63.0	5.4	E
	Through	273	281	102.9%	39.7	6.1	D
	Right Turn	195	198	101.3%	12.7	3.1	B
	Subtotal	608	616	101.3%	35.9	3.4	D
WB	Left Turn	99	102	102.6%	73.7	15.4	E
	Through	312	322	103.1%	55.1	9.5	E
	Right Turn	184	189	102.4%	48.4	13.2	D
	Subtotal	595	612	102.8%	56.1	10.8	E
Total		3,482	3,515	101.0%	46.3	4.3	D

Intersection 8 **North Village Dwy 1-Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	13	13	98.5%	18.5	14.0	C
	Through						
	Right Turn	1	2	170.0%	0.5	1.1	A
	Subtotal	14	15	103.6%	18.2	14.2	C
SB	Left Turn	6	6	96.7%	10.9	8.9	B
	Through						
	Right Turn	39	41	105.6%	9.0	7.2	A
	Subtotal	45	47	104.4%	9.5	6.9	A
EB	Left Turn	26	28	106.2%	8.4	1.8	A
	Through	547	564	103.1%	3.5	0.4	A
	Right Turn	3	4	140.0%	0.8	1.0	A
	Subtotal	576	596	103.4%	3.7	0.4	A
WB	Left Turn						
	Through	543	554	102.0%	1.5	0.9	A
	Right Turn	10	10	102.0%	0.7	1.4	A
	Subtotal	553	564	102.0%	1.5	0.8	A
Total		1,188	1,221	102.8%	3.0	0.7	A

Intersection 9 North Village Dwy 2-Rocklin Manor Central/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	9	85.0%	16.5	9.9	C
	Through						
	Right Turn	1	2	180.0%	0.4	0.9	A
	Subtotal	11	10	93.6%	16.1	10.3	C
SB	Left Turn	2	1	70.0%	11.6	18.2	B
	Through						
	Right Turn	25	25	101.6%	3.9	1.0	A
	Subtotal	27	27	99.3%	5.4	2.5	A
EB	Left Turn	121	127	104.6%	5.3	0.7	A
	Through	423	433	102.3%	2.0	0.3	A
	Right Turn	10	12	122.0%	0.0	0.1	A
	Subtotal	554	571	103.1%	2.6	0.4	A
WB	Left Turn						
	Through	518	529	102.2%	0.6	0.1	A
	Right Turn	10	10	96.0%	0.1	0.1	A
	Subtotal	528	539	102.1%	0.6	0.1	A
Total		1,120	1,148	102.5%	1.9	0.3	A

Intersection 10 Rocklin Manor East/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	9	9	97.8%	14.3	8.0	B
	Through						
	Right Turn	2	2	120.0%	0.4	0.9	A
	Subtotal	11	11	101.8%	13.9	8.4	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	424	434	102.3%	0.3	0.1	A
	Right Turn	2	2	110.0%	0.0	0.1	A
	Subtotal	426	436	102.3%	0.3	0.1	A
WB	Left Turn	2	2	90.0%	0.7	1.8	A
	Through	519	530	102.1%	2.7	0.3	A
	Right Turn						
	Subtotal	521	532	102.1%	2.7	0.3	A
Total		958	979	102.2%	1.8	0.2	A

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	420	426	101.4%	11.8	2.9	B
	Through	64	68	105.5%	10.0	0.9	A
	Right Turn						
	Subtotal	484	494	102.0%	11.5	2.6	B
SB	Left Turn						
	Through	43	41	94.4%	9.7	1.0	A
	Right Turn	79	82	103.7%	4.9	0.5	A
	Subtotal	122	123	100.4%	6.5	0.6	A
EB	Left Turn	83	84	101.2%	13.0	1.2	B
	Through						
	Right Turn	325	332	102.1%	11.0	1.3	B
	Subtotal	408	416	101.9%	11.3	1.2	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,014	1,032	101.8%	10.8	1.4	B

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	255	255	99.9%	32.1	2.7	C
	Through	487	489	100.3%	13.5	1.8	B
	Right Turn	86	83	96.7%	7.0	1.3	A
	Subtotal	828	827	99.8%	18.4	1.6	B
SB	Left Turn	80	84	105.0%	42.0	7.2	D
	Through	863	857	99.3%	22.5	4.4	C
	Right Turn	64	68	105.6%	6.3	1.1	A
	Subtotal	1,007	1,009	100.2%	22.8	4.0	C
EB	Left Turn	65	67	102.8%	42.3	10.8	D
	Through	20	16	79.0%	46.1	12.2	D
	Right Turn	104	109	104.5%	13.3	3.3	B
	Subtotal	189	191	101.2%	25.2	3.9	C
WB	Left Turn	143	148	103.8%	36.8	6.8	D
	Through	24	26	107.1%	42.8	8.0	D
	Right Turn	33	34	102.1%	6.2	2.0	A
	Subtotal	200	208	103.9%	32.4	6.6	C
Total		2,224	2,234	100.5%	22.3	2.9	C

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	82	76	92.8%	29.5	5.8	C
	Through	559	554	99.1%	10.8	1.9	B
	Right Turn	172	172	100.1%	3.2	0.2	A
	Subtotal	813	802	98.7%	11.0	1.4	B
SB	Left Turn						
	Through	1,140	1,146	100.5%	15.0	1.4	B
	Right Turn	19	19	98.9%	4.3	1.3	A
	Subtotal	1,159	1,165	100.5%	14.8	1.4	B
EB	Left Turn	7	7	100.0%	24.2	13.9	C
	Through						
	Right Turn	63	62	98.1%	8.2	2.1	A
	Subtotal	70	69	98.3%	10.3	2.6	B
WB	Left Turn	689	687	99.7%	28.6	5.9	C
	Through	73	71	96.6%	25.1	3.2	C
	Right Turn	265	266	100.4%	13.1	3.5	B
	Subtotal	1,027	1,024	99.7%	24.4	4.9	C
Total		3,069	3,059	99.7%	17.0	2.0	B

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	861	846	98.2%	12.5	1.9	B
	Right Turn	50	54	108.6%	5.6	1.4	A
	Subtotal	911	900	98.8%	12.1	1.8	B
SB	Left Turn	135	132	97.9%	45.1	3.9	D
	Through	1,261	1,277	101.3%	13.8	1.9	B
	Right Turn	184	181	98.4%	6.3	0.7	A
	Subtotal	1,580	1,590	100.7%	15.5	1.4	B
EB	Left Turn	237	234	98.6%	32.7	3.1	C
	Through	140	141	100.4%	39.9	5.9	D
	Right Turn	215	219	101.7%	40.0	17.1	D
	Subtotal	592	593	100.1%	37.3	7.9	D
WB	Left Turn	62	64	102.4%	35.6	8.4	D
	Through						
	Right Turn	98	98	100.2%	9.4	2.0	A
	Subtotal	160	162	101.1%	19.6	4.7	B
Total		3,243	3,245	100.1%	18.9	2.5	B

Intersection 15 **Sierra College Blvd/Schriber Wy** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	871	863	99.1%	1.6	0.1	A
	Right Turn						
	Subtotal	871	863	99.1%	1.6	0.1	A
SB	Left Turn						
	Through	1,538	1,560	101.4%	3.4	0.4	A
	Right Turn						
	Subtotal	1,538	1,560	101.4%	3.4	0.4	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	40	37	91.8%	7.5	2.5	A
	Subtotal	40	37	91.8%	7.5	2.5	A
Total		2,449	2,460	100.5%	2.8	0.3	A

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	852	844	99.1%	6.3	1.6	A
	Right Turn	26	27	104.2%	4.8	3.3	A
	Subtotal	878	871	99.2%	6.3	1.6	A
SB	Left Turn	25	25	101.2%	22.7	8.1	C
	Through	1,506	1,529	101.5%	5.9	1.3	A
	Right Turn	7	8	107.1%	4.2	1.7	A
	Subtotal	1,538	1,562	101.6%	6.2	1.2	A
EB	Left Turn						
	Through	1	1	80.0%	2.0	6.2	A
	Right Turn						
	Subtotal	1	1	80.0%	2.0	6.2	A
WB	Left Turn	23	25	107.8%	20.3	6.5	C
	Through						
	Right Turn	8	10	120.0%	5.4	4.6	A
	Subtotal	31	34	111.0%	17.5	5.8	B
Total		2,448	2,469	100.8%	6.4	1.2	A

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr-North Village Street A** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	125	123	98.5%	43.3	5.4	D
	Through	809	802	99.1%	7.8	1.2	A
	Right Turn	13	12	91.5%	6.0	1.2	A
	Subtotal	947	937	99.0%	12.4	1.7	B
SB	Left Turn	14	14	97.1%	15.1	7.9	B
	Through	1,202	1,214	101.0%	13.6	2.2	B
	Right Turn	313	325	103.8%	12.1	2.3	B
	Subtotal	1,529	1,553	101.5%	13.3	2.0	B
EB	Left Turn	18	16	90.6%	42.2	7.0	D
	Through						
	Right Turn	20	22	109.0%	8.5	4.9	A
	Subtotal	38	38	100.3%	26.5	6.2	C
WB	Left Turn	66	66	99.2%	36.0	7.9	D
	Through						
	Right Turn	41	44	108.0%	6.5	1.4	A
	Subtotal	107	110	102.6%	23.3	6.6	C
Total		2,621	2,638	100.6%	13.6	1.8	B

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	879	872	99.2%	0.5	0.1	A
	Right Turn						
	Subtotal	879	872	99.2%	0.5	0.1	A
SB	Left Turn						
	Through	1,227	1,239	101.0%	4.8	0.5	A
	Right Turn	97	98	100.7%	4.5	0.5	A
	Subtotal	1,324	1,337	101.0%	4.8	0.5	A
EB	Left Turn						
	Through						
	Right Turn	2	1	65.0%	5.0	9.2	A
	Subtotal	2	1	65.0%	5.0	9.2	A
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,205	2,210	100.2%	3.1	0.4	A

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	45	44	98.0%	31.2	8.9	C
	Through	968	974	100.6%	9.1	0.7	A
	Right Turn	5	5	92.0%	5.6	7.9	A
	Subtotal	1,018	1,023	100.4%	10.0	0.9	A
SB	Left Turn	36	37	102.2%	39.9	10.5	D
	Through	983	1,000	101.7%	13.1	1.0	B
	Right Turn	26	25	97.7%	12.6	4.2	B
	Subtotal	1,045	1,062	101.6%	13.9	0.9	B
EB	Left Turn	57	52	90.9%	29.6	4.8	C
	Through	1	2	150.0%	11.0	22.3	B
	Right Turn	39	41	103.8%	12.7	4.2	B
	Subtotal	97	94	96.7%	22.9	5.7	C
WB	Left Turn	18	18	99.4%	29.8	11.3	C
	Through	1	1	100.0%	7.6	14.7	A
	Right Turn	44	41	92.7%	11.9	2.0	B
	Subtotal	63	60	94.8%	16.9	3.8	B
Total		2,223	2,238	100.7%	12.6	0.8	B

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	196	198	100.9%	4.1	2.8	A
	Right Turn						
	Subtotal	196	198	100.9%	4.1	2.8	A
SB	Left Turn						
	Through	115	115	99.7%	0.4	0.1	A
	Right Turn	10	11	107.0%	0.3	0.3	A
	Subtotal	125	125	100.3%	0.4	0.1	A
EB	Left Turn						
	Through						
	Right Turn	1	2	200.0%	1.1	1.4	A
	Subtotal	1	2	200.0%	1.1	1.4	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		322	325	101.0%	2.8	1.9	A

Intersection 21 **El Don Dr/Southern Retail Access-South Village Dwy 2** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	3	3	83.3%	1.1	1.5	A
	Through	173	173	100.1%	1.9	0.9	A
	Right Turn						
	Subtotal	176	176	99.8%	1.9	0.9	A
SB	Left Turn	50	49	97.8%	2.1	0.6	A
	Through	65	66	100.8%	0.1	0.1	A
	Right Turn	1	2	190.0%	0.0	0.1	A
	Subtotal	116	116	100.3%	0.9	0.3	A
EB	Left Turn	13	12	94.6%	5.5	1.5	A
	Through						
	Right Turn	1	1	90.0%	0.8	1.9	A
	Subtotal	14	13	94.3%	5.5	1.4	A
WB	Left Turn	1	1	60.0%	0.5	1.1	A
	Through						
	Right Turn	10	11	108.0%	3.0	1.0	A
	Subtotal	11	11	103.6%	3.0	1.0	A
Total		317	317	99.9%	1.8	0.7	A

Intersection 22 **El Don Dr/Wildflower Ln-South Village Dwy 1** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	2	2	75.0%	0.8	1.7	A
	Through	158	161	101.8%	5.4	0.3	A
	Right Turn	18	20	109.4%	3.3	0.5	A
	Subtotal	178	182	102.3%	5.2	0.4	A
SB	Left Turn						
	Through	55	55	99.3%	5.4	0.5	A
	Right Turn	12	12	99.2%	3.2	1.0	A
	Subtotal	67	67	99.3%	5.0	0.5	A
EB	Left Turn	15	14	90.0%	4.2	0.5	A
	Through						
	Right Turn	5	7	130.0%	2.4	1.0	A
	Subtotal	20	20	100.0%	3.8	0.5	A
WB	Left Turn	1	1	70.0%	0.8	1.6	A
	Through						
	Right Turn	3	3	93.3%	0.9	1.6	A
	Subtotal	4	4	87.5%	1.6	1.9	A
Total		269	272	101.2%	5.0	0.2	A

Intersection 23 **El Don Dr/Corona Cir-South Village Street A** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	2	2	80.0%	0.5	0.6	A
	Through	158	158	99.9%	0.2	0.1	A
	Right Turn	1	2	170.0%	0.0	0.0	A
	Subtotal	161	161	100.1%	0.2	0.0	A
SB	Left Turn	4	5	117.5%	2.9	1.6	A
	Through	52	51	97.3%	1.6	0.2	A
	Right Turn	5	6	112.0%	1.0	0.6	A
	Subtotal	61	61	99.8%	1.7	0.3	A
EB	Left Turn	9	9	97.8%	4.1	1.7	A
	Through						
	Right Turn	3	4	123.3%	2.0	1.5	A
	Subtotal	12	13	104.2%	3.7	1.5	A
WB	Left Turn	3	2	73.3%	2.2	2.4	A
	Through						
	Right Turn	11	14	122.7%	3.3	0.5	A
	Subtotal	14	16	112.1%	3.4	0.5	A
Total		248	250	100.9%	1.0	0.1	A

Intersection 24 **Sierra College Blvd/Street G** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	858	848	98.8%	0.6	0.1	A
	Right Turn	21	23	111.4%	0.5	0.1	A
	Subtotal	879	871	99.1%	0.6	0.1	A
SB	Left Turn	11	10	92.7%	8.8	10.7	A
	Through	1,324	1,337	100.9%	4.4	0.5	A
	Right Turn						
	Subtotal	1,335	1,347	100.9%	4.4	0.5	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	79	79	99.6%	6.3	1.4	A
	Subtotal	79	79	99.6%	6.3	1.4	A
Total		2,293	2,297	100.2%	3.1	0.4	A

Intersection 25 **Sierra College Blvd/North Village Dwy 3** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	862	856	99.3%	3.2	0.2	A
	Right Turn	27	28	102.6%	2.7	0.7	A
	Subtotal	889	884	99.4%	3.2	0.2	A
SB	Left Turn	41	39	96.1%	7.4	2.6	A
	Through	1,188	1,202	101.2%	1.3	0.2	A
	Right Turn						
	Subtotal	1,229	1,241	101.0%	1.5	0.2	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	17	17	98.2%	4.4	1.6	A
	Subtotal	17	17	98.2%	4.4	1.6	A
Total		2,135	2,141	100.3%	2.2	0.1	A

Intersection 26 **South Village Dwy 3/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	3	3	103.3%	2.4	2.6	A
	Subtotal	3	3	103.3%	2.4	2.6	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	976	973	99.7%	1.0	0.1	A
	Right Turn	42	40	94.0%	0.3	0.2	A
	Subtotal	1,018	1,013	99.5%	1.0	0.1	A
WB	Left Turn						
	Through	572	568	99.2%	0.3	0.1	A
	Right Turn						
	Subtotal	572	568	99.2%	0.3	0.1	A
Total		1,593	1,583	99.4%	0.8	0.1	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Existing Plus Project Conditions
AM Peak Hour

Intersection 27 **South Village Dwy 4/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	17	16	93.5%	9.3	7.0	A
	Subtotal	17	16	93.5%	9.3	7.0	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	903	903	100.0%	1.3	0.8	A
	Right Turn	76	74	97.9%	0.5	0.2	A
	Subtotal	979	977	99.8%	1.2	0.8	A
WB	Left Turn						
	Through	572	569	99.5%	2.2	0.2	A
	Right Turn						
	Subtotal	572	569	99.5%	2.2	0.2	A
Total		1,568	1,562	99.6%	1.7	0.5	A

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	45	40	88.9%	46.7	11.2	D
	Through	26	25	96.2%	37.1	14.3	D
	Right Turn	27	31	114.1%	20.8	9.8	C
	Subtotal	98	96	97.8%	35.1	9.3	D
SB	Left Turn	525	527	100.4%	35.1	6.3	D
	Through	22	21	95.5%	37.5	15.6	D
	Right Turn	200	198	98.9%	11.1	2.6	B
	Subtotal	747	746	99.9%	28.8	5.1	C
EB	Left Turn	173	177	102.0%	67.7	16.5	E
	Through	679	689	101.5%	25.1	3.9	C
	Right Turn	18	17	95.6%	8.0	5.5	A
	Subtotal	870	883	101.4%	33.9	6.6	C
WB	Left Turn	50	43	86.2%	70.2	14.8	E
	Through	860	806	93.7%	35.6	3.2	D
	Right Turn	508	482	94.9%	13.1	2.2	B
	Subtotal	1,418	1,331	93.9%	28.4	3.2	C
Total		3,133	3,055	97.5%	30.4	4.1	C

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	71	75	105.4%	30.0	2.3	C
	Through	4	4	90.0%	35.1	28.5	D
	Right Turn	306	308	100.8%	41.4	9.6	D
	Subtotal	381	387	101.5%	39.0	7.9	D
EB	Left Turn						
	Through	773	769	99.5%	62.2	22.2	E
	Right Turn	498	505	101.4%	24.8	11.1	C
	Subtotal	1,271	1,274	100.2%	48.2	17.8	D
WB	Left Turn	649	548	84.5%	49.4	6.1	D
	Through	1,259	1,156	92.6%	9.4	1.0	A
	Right Turn						
	Subtotal	1,908	1,715	89.9%	22.0	2.3	C
Total		3,560	3,375	94.8%	34.4	6.6	C

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	555	543	97.9%	37.4	3.6	D
	Through	1	1	110.0%	2.5	7.9	A
	Right Turn	657	664	101.0%	26.4	3.2	C
	Subtotal	1,213	1,208	99.6%	31.3	3.3	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	227	223	98.3%	73.1	27.9	E
	Through	617	628	101.8%	12.8	5.1	B
	Right Turn						
	Subtotal	844	852	100.9%	29.7	13.1	C
WB	Left Turn						
	Through	1,353	1,175	86.8%	71.7	4.1	E
	Right Turn	89	78	88.1%	69.1	6.9	E
	Subtotal	1,442	1,253	86.9%	71.5	4.2	E
Total		3,499	3,313	94.7%	45.9	4.3	D

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	103	110	107.1%	41.4	4.8	D
	Through						
	Right Turn	20	19	96.0%	8.0	5.9	A
	Subtotal	123	130	105.3%	35.8	3.6	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	55	60	109.6%	46.4	7.4	D
	Through	1,153	1,164	101.0%	5.6	1.3	A
	Right Turn	139	139	99.8%	4.4	1.2	A
	Subtotal	1,347	1,363	101.2%	7.2	1.6	A
WB	Left Turn	17	13	77.6%	269.0	29.1	F
	Through	1,322	1,116	84.4%	215.8	15.4	F
	Right Turn						
	Subtotal	1,339	1,129	84.3%	216.4	15.5	F
Total		2,809	2,622	93.3%	99.5	5.6	F

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	181	168	92.9%	213.7	94.4	F
	Through	9	10	113.3%	180.6	93.3	F
	Right Turn	31	26	85.2%	153.4	83.6	F
	Subtotal	221	205	92.6%	203.7	93.3	F
SB	Left Turn	58	54	93.6%	149.6	48.1	F
	Through	13	12	91.5%	173.6	73.2	F
	Right Turn	359	353	98.4%	94.5	41.3	F
	Subtotal	430	419	97.5%	104.7	41.5	F
EB	Left Turn	264	261	99.0%	75.2	8.4	E
	Through	780	792	101.5%	41.1	6.2	D
	Right Turn	139	138	98.9%	38.7	8.9	D
	Subtotal	1,183	1,191	100.7%	48.3	6.5	D
WB	Left Turn	29	23	80.7%	456.5	83.8	F
	Through	787	664	84.3%	453.3	63.2	F
	Right Turn	46	40	87.2%	409.6	62.1	F
	Subtotal	862	727	84.4%	451.2	63.3	F
Total		2,696	2,542	94.3%	178.4	13.1	F

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	5	4	78.0%	65.8	94.6	E
	Through						
	Right Turn	9	12	127.8%	13.7	21.0	B
	Subtotal	14	15	110.0%	31.5	42.8	C
SB	Left Turn	336	324	96.5%	55.2	31.3	E
	Through						
	Right Turn	167	162	97.0%	57.6	39.0	E
	Subtotal	503	486	96.6%	57.2	29.6	E
EB	Left Turn	115	109	95.0%	59.8	14.7	E
	Through	614	610	99.3%	18.7	2.5	B
	Right Turn	16	15	92.5%	13.7	4.9	B
	Subtotal	745	734	98.5%	24.3	2.8	C
WB	Left Turn	14	15	104.3%	130.4	78.8	F
	Through	579	553	95.5%	115.4	78.6	F
	Right Turn	124	118	95.3%	112.9	86.0	F
	Subtotal	717	686	95.6%	115.2	79.3	F
Total		1,979	1,921	97.1%	60.0	28.4	E

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	263	262	99.6%	153.3	33.0	F
	Through	900	888	98.6%	160.3	33.7	F
	Right Turn	75	73	96.7%	162.7	49.4	F
	Subtotal	1,238	1,222	98.7%	159.0	33.9	F
SB	Left Turn	198	197	99.6%	61.5	8.8	E
	Through	661	666	100.8%	43.8	5.6	D
	Right Turn	172	172	100.0%	14.4	1.9	B
	Subtotal	1,031	1,036	100.5%	42.3	4.1	D
EB	Left Turn	282	272	96.3%	63.6	7.2	E
	Through	304	294	96.8%	35.8	4.6	D
	Right Turn	373	370	99.3%	17.4	4.8	B
	Subtotal	959	936	97.6%	37.0	4.3	D
WB	Left Turn	128	124	96.8%	64.6	8.1	E
	Through	294	296	100.7%	50.7	7.7	D
	Right Turn	237	238	100.6%	45.0	7.8	D
	Subtotal	659	658	99.9%	51.3	6.7	D
Total		3,887	3,852	99.1%	78.4	11.1	E

Intersection 8 **North Village Dwy 1-Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	11	10	89.1%	25.3	34.8	D
	Through						
	Right Turn	1	2	150.0%	1.0	1.2	A
	Subtotal	12	11	94.2%	24.0	35.3	C
SB	Left Turn	11	12	105.5%	9.9	8.6	A
	Through						
	Right Turn	72	75	104.3%	6.0	3.0	A
	Subtotal	83	87	104.5%	6.4	3.2	A
EB	Left Turn	35	32	91.4%	8.0	2.8	A
	Through	527	518	98.3%	3.4	0.6	A
	Right Turn	15	15	98.7%	1.4	1.2	A
	Subtotal	577	565	97.9%	3.6	0.6	A
WB	Left Turn						
	Through	576	580	100.6%	1.2	0.7	A
	Right Turn	11	12	110.0%	0.4	0.2	A
	Subtotal	587	592	100.8%	1.1	0.7	A
Total		1,259	1,255	99.6%	2.8	0.6	A

Intersection 9 North Village Dwy 2-Rocklin Manor Central/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	14	12	86.4%	9.0	4.7	A
	Through						
	Right Turn						
	Subtotal	14	12	86.4%	9.0	4.7	A
SB	Left Turn	11	13	117.3%	12.8	5.5	B
	Through						
	Right Turn	127	130	102.7%	5.1	1.2	A
	Subtotal	138	143	103.8%	5.9	1.2	A
EB	Left Turn	39	36	92.3%	2.9	0.8	A
	Through	482	479	99.3%	1.0	0.3	A
	Right Turn	18	19	103.9%	0.2	0.2	A
	Subtotal	539	533	98.9%	1.1	0.3	A
WB	Left Turn	2	2	95.0%	1.7	2.7	A
	Through	446	450	100.8%	0.5	0.1	A
	Right Turn	3	3	90.0%	0.1	0.1	A
	Subtotal	451	454	100.7%	0.6	0.1	A
Total		1,142	1,143	100.1%	1.6	0.3	A

Intersection 10 Rocklin Manor East/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	5	4	84.0%	4.2	2.2	A
	Through						
	Right Turn						
	Subtotal	5	4	84.0%	4.2	2.2	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	483	478	98.9%	0.4	0.1	A
	Right Turn	10	13	129.0%	0.2	0.4	A
	Subtotal	493	491	99.5%	0.4	0.1	A
WB	Left Turn	2	2	80.0%	1.7	2.7	A
	Through	446	451	101.0%	2.3	0.3	A
	Right Turn						
	Subtotal	448	452	100.9%	2.3	0.2	A
Total		946	947	100.1%	1.3	0.2	A

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	382	384	100.4%	8.0	0.8	A
	Through	60	57	94.8%	9.4	0.8	A
	Right Turn						
	Subtotal	442	440	99.6%	8.2	0.8	A
SB	Left Turn						
	Through	47	49	103.4%	9.6	0.9	A
	Right Turn	62	65	104.2%	4.4	1.0	A
	Subtotal	109	113	103.9%	6.6	0.7	A
EB	Left Turn	74	73	98.2%	16.1	3.3	C
	Through						
	Right Turn	408	398	97.5%	14.0	2.6	B
	Subtotal	482	471	97.6%	14.3	2.6	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,033	1,024	99.1%	10.9	1.5	B

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	177	181	102.2%	37.5	6.7	D
	Through	913	895	98.0%	16.8	2.0	B
	Right Turn	77	76	98.4%	7.5	0.9	A
	Subtotal	1,167	1,151	98.7%	19.3	2.5	B
SB	Left Turn	54	61	112.0%	40.6	10.6	D
	Through	808	794	98.2%	23.6	2.9	C
	Right Turn	78	77	98.7%	7.3	1.4	A
	Subtotal	940	931	99.0%	23.2	2.8	C
EB	Left Turn	153	155	101.4%	32.8	7.1	C
	Through	27	27	98.5%	26.1	10.9	C
	Right Turn	250	255	102.1%	16.1	2.0	B
	Subtotal	430	437	101.6%	22.3	3.4	C
WB	Left Turn	101	97	95.7%	36.5	9.4	D
	Through	15	15	96.7%	29.4	16.9	C
	Right Turn	40	44	108.8%	11.5	4.4	B
	Subtotal	156	155	99.2%	28.8	6.1	C
Total		2,693	2,674	99.3%	21.8	2.4	C

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	275	277	100.7%	38.2	2.9	D
	Through	924	914	98.9%	14.1	2.2	B
	Right Turn	310	305	98.4%	6.1	0.6	A
	Subtotal	1,509	1,496	99.1%	16.8	1.5	B
SB	Left Turn						
	Through	1,149	1,136	98.8%	25.5	3.2	C
	Right Turn	56	55	97.3%	8.2	1.5	A
	Subtotal	1,205	1,190	98.8%	24.7	3.1	C
EB	Left Turn	55	54	98.7%	40.2	9.0	D
	Through						
	Right Turn	298	300	100.5%	17.6	4.2	B
	Subtotal	353	354	100.3%	21.0	4.4	C
WB	Left Turn	482	473	98.1%	28.8	2.5	C
	Through	99	96	97.2%	32.8	4.9	C
	Right Turn	224	224	100.2%	16.9	2.6	B
	Subtotal	805	793	98.6%	26.1	2.5	C
Total		3,872	3,833	99.0%	21.7	1.4	C

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,345	1,316	97.8%	21.2	5.8	C
	Right Turn	111	109	98.6%	7.6	2.7	A
	Subtotal	1,456	1,425	97.9%	20.2	5.6	C
SB	Left Turn	267	257	96.4%	46.9	4.0	D
	Through	852	846	99.3%	15.1	1.0	B
	Right Turn	334	336	100.5%	7.2	0.6	A
	Subtotal	1,453	1,439	99.0%	19.1	1.4	B
EB	Left Turn	394	387	98.3%	43.1	5.8	D
	Through	237	231	97.3%	35.9	3.7	D
	Right Turn	124	128	103.1%	13.3	3.6	B
	Subtotal	755	746	98.8%	35.9	4.3	D
WB	Left Turn	104	105	101.1%	47.7	15.9	D
	Through						
	Right Turn	294	303	102.9%	25.5	7.6	C
	Subtotal	398	408	102.4%	31.8	10.2	C
Total		4,062	4,018	98.9%	24.0	2.9	C

Intersection 15 **Sierra College Blvd/Schriber Wy** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,441	1,411	97.9%	2.1	0.4	A
	Right Turn						
	Subtotal	1,441	1,411	97.9%	2.1	0.4	A
SB	Left Turn						
	Through	1,080	1,079	99.9%	2.6	0.4	A
	Right Turn						
	Subtotal	1,080	1,079	99.9%	2.6	0.4	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	15	15	100.7%	21.8	33.3	C
	Subtotal	15	15	100.7%	21.8	33.3	C
Total		2,536	2,506	98.8%	2.4	0.4	A

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,425	1,400	98.2%	12.0	3.4	B
	Right Turn	52	52	99.8%	9.4	2.8	A
	Subtotal	1,477	1,452	98.3%	11.9	3.3	B
SB	Left Turn	28	26	91.8%	29.9	5.9	C
	Through	1,021	1,019	99.8%	4.9	1.2	A
	Right Turn	31	35	112.9%	3.3	0.8	A
	Subtotal	1,080	1,080	100.0%	5.5	1.3	A
EB	Left Turn	1	1	50.0%	3.3	10.5	A
	Through	1	1	120.0%	11.8	25.7	B
	Right Turn	2	3	155.0%	1.9	2.7	A
	Subtotal	4	5	120.0%	10.7	18.1	B
WB	Left Turn	52	54	102.9%	25.8	7.5	C
	Through						
	Right Turn	9	8	91.1%	12.2	9.7	B
	Subtotal	61	62	101.1%	24.5	6.7	C
Total		2,622	2,598	99.1%	9.6	2.0	A

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr-North Village Street A** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	74	72	97.8%	46.9	3.2	D
	Through	1,294	1,261	97.4%	14.9	1.4	B
	Right Turn	45	43	95.1%	11.7	2.2	B
	Subtotal	1,413	1,376	97.4%	16.6	1.4	B
SB	Left Turn	48	45	93.8%	38.4	15.7	D
	Through	990	993	100.3%	13.5	3.5	B
	Right Turn	40	40	100.0%	6.3	1.4	A
	Subtotal	1,078	1,078	100.0%	14.4	3.2	B
EB	Left Turn	160	163	101.8%	34.5	5.2	C
	Through						
	Right Turn	59	62	105.3%	9.7	2.7	A
	Subtotal	219	225	102.7%	28.2	4.7	C
WB	Left Turn	40	40	100.3%	33.2	7.8	C
	Through						
	Right Turn	25	25	98.0%	8.5	2.7	A
	Subtotal	65	65	99.4%	23.5	5.3	C
Total		2,775	2,743	98.9%	16.8	1.3	B

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,426	1,395	97.8%	0.8	0.1	A
	Right Turn						
	Subtotal	1,426	1,395	97.8%	0.8	0.1	A
SB	Left Turn						
	Through	1,063	1,056	100.3%	4.3	0.7	A
	Right Turn	14	16	112.9%	4.1	0.7	A
	Subtotal	1,077	1,032	100.5%	4.3	0.7	A
EB	Left Turn						
	Through						
	Right Turn	12	11	94.2%	5.2	3.9	A
	Subtotal	12	11	94.2%	5.2	3.9	A
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,515	2,488	98.9%	2.4	0.3	A

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	32	30	93.8%	26.5	5.7	C
	Through	1,160	1,176	101.4%	7.3	2.0	A
	Right Turn	7	7	98.6%	3.0	4.6	A
	Subtotal	1,199	1,213	101.2%	7.7	2.1	A
SB	Left Turn	64	61	94.8%	32.4	7.2	C
	Through	1,040	1,038	99.8%	6.8	0.9	A
	Right Turn	80	76	94.6%	7.5	2.3	A
	Subtotal	1,184	1,174	99.2%	8.0	1.0	A
EB	Left Turn	34	30	87.4%	22.5	5.0	C
	Through	1	1	80.0%	2.8	5.9	A
	Right Turn	26	26	100.8%	9.0	3.3	A
	Subtotal	61	57	93.0%	17.0	3.7	B
WB	Left Turn	10	10	99.0%	19.0	13.4	B
	Through	1	1	80.0%	0.0	0.0	A
	Right Turn	21	24	113.8%	12.5	5.9	B
	Subtotal	32	35	108.1%	15.4	6.8	B
Total		2,476	2,478	100.1%	8.2	1.4	A

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	221	209	94.5%	53.1	23.3	F
	Right Turn						
	Subtotal	221	209	94.5%	53.1	23.3	F
SB	Left Turn						
	Through	164	157	96.0%	0.5	0.1	A
	Right Turn	7	8	107.1%	0.3	0.2	A
	Subtotal	171	165	96.4%	0.5	0.1	A
EB	Left Turn						
	Through						
	Right Turn	9	10	113.3%	2.5	0.4	A
	Subtotal	9	10	113.3%	2.5	0.4	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		401	384	95.7%	29.2	11.0	D

Intersection 21 **El Don Dr/Southern Retail Access-South Village Dwy 2** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	3	2	80.0%	4.5	9.4	A
	Through	138	138	99.9%	55.9	46.8	F
	Right Turn	1	1	120.0%	56.2	81.2	F
	Subtotal	142	141	99.6%	56.3	47.4	F
SB	Left Turn	9	10	106.7%	1.3	1.3	A
	Through	162	155	95.9%	0.2	0.1	A
	Right Turn	2	2	110.0%	0.0	0.0	A
	Subtotal	173	167	96.6%	0.2	0.1	A
EB	Left Turn	34	30	88.5%	134.1	137.8	F
	Through						
	Right Turn	5	3	66.0%	79.9	102.9	F
	Subtotal	39	33	85.6%	126.0	133.0	F
WB	Left Turn	4	3	82.5%	163.4	340.3	F
	Through						
	Right Turn	49	43	87.8%	148.2	195.5	F
	Subtotal	53	46	87.4%	85.5	116.5	F
Total		407	388	95.4%	38.3	32.6	E

Intersection 22 **El Don Dr/Wildflower Ln-South Village Dwy 1** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	1	1	70.0%	0.4	1.2	A
	Through	111	111	99.5%	16.4	20.4	C
	Right Turn	1	1	140.0%	0.6	1.2	A
	Subtotal	113	113	99.6%	16.3	20.4	C
SB	Left Turn						
	Through	156	148	94.6%	5.8	0.3	A
	Right Turn	15	15	97.3%	4.1	0.7	A
	Subtotal	171	162	94.9%	5.6	0.4	A
EB	Left Turn	9	11	116.7%	14.8	22.8	B
	Through						
	Right Turn	3	4	116.7%	1.7	1.5	A
	Subtotal	12	14	116.7%	13.1	20.6	B
WB	Left Turn	3	2	80.0%	1.0	1.3	A
	Through						
	Right Turn	22	22	100.5%	15.0	26.6	B
	Subtotal	25	25	98.0%	14.7	26.5	B
Total		321	313	97.6%	10.3	9.3	B

Intersection 23 **El Don Dr/Corona Cir-South Village Street A** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	5	4	80.0%	1.5	1.3	A
	Through	97	96	98.8%	0.1	0.1	A
	Right Turn	3	3	106.7%	0.0	0.0	A
	Subtotal	105	103	98.1%	0.2	0.2	A
SB	Left Turn	13	12	92.3%	3.4	1.0	A
	Through	134	129	96.4%	1.7	0.2	A
	Right Turn	15	15	102.0%	1.4	0.2	A
	Subtotal	162	157	96.6%	1.8	0.2	A
EB	Left Turn	9	9	94.4%	4.8	2.7	A
	Through						
	Right Turn	3	2	73.3%	1.5	2.2	A
	Subtotal	12	11	89.2%	4.5	2.4	A
WB	Left Turn	2	2	105.0%	2.0	2.6	A
	Through						
	Right Turn	7	8	115.7%	2.9	0.6	A
	Subtotal	9	10	113.3%	3.1	0.7	A
Total		288	280	97.4%	1.4	0.3	A

Intersection 24 **Sierra College Blvd/Street G** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,364	1,331	97.6%	1.0	0.1	A
	Right Turn	62	62	99.7%	0.8	0.1	A
	Subtotal	1,426	1,393	97.7%	1.0	0.1	A
SB	Left Turn	36	36	100.3%	17.1	6.2	C
	Through	1,077	1,081	100.3%	4.1	0.7	A
	Right Turn						
	Subtotal	1,113	1,117	100.3%	4.5	0.7	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	49	51	103.5%	6.7	1.3	A
	Subtotal	49	51	103.5%	6.7	1.3	A
Total		2,588	2,561	98.9%	2.7	0.4	A

Intersection 25 **Sierra College Blvd/North Village Dwy 3** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,376	1,349	98.0%	4.4	0.3	A
	Right Turn	33	35	104.5%	2.5	1.1	A
	Subtotal	1,409	1,384	98.2%	4.3	0.3	A
SB	Left Turn	44	45	101.4%	17.3	7.7	C
	Through	1,031	1,032	100.1%	1.0	0.1	A
	Right Turn						
	Subtotal	1,075	1,077	100.2%	1.6	0.5	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	50	46	91.6%	9.4	4.1	A
	Subtotal	50	46	91.6%	9.4	4.1	A
Total		2,534	2,506	98.9%	3.3	0.3	A

Intersection 26 **South Village Dwy 3/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	32	31	95.9%	8.6	4.1	A
	Subtotal	32	31	95.9%	8.6	4.1	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	870	868	99.8%	3.7	0.5	A
	Right Turn	9	10	107.8%	2.9	1.6	A
	Subtotal	879	878	99.9%	3.7	0.5	A
WB	Left Turn						
	Through	862	759	88.0%	150.6	15.9	F
	Right Turn						
	Subtotal	862	759	88.0%	150.6	15.9	F
Total		1,773	1,667	94.0%	65.8	4.6	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Existing Plus Project Conditions
PM Peak Hour

Intersection 27 South Village Dwy 4/Rocklin Rd Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	80	80	100.3%	10.8	3.8	B
	Subtotal	80	80	100.3%	10.8	3.8	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	878	873	99.4%	2.4	0.3	A
	Right Turn	24	26	107.5%	1.2	0.5	A
	Subtotal	902	899	99.6%	2.4	0.3	A
WB	Left Turn						
	Through	862	796	92.3%	70.7	17.8	F
	Right Turn						
	Subtotal	862	796	92.3%	70.7	17.8	F
Total		1,844	1,775	96.2%	30.5	6.3	D

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	20	102.0%	41.3	10.4	D
	Through	30	29	95.7%	37.7	11.4	D
	Right Turn	20	22	111.0%	22.0	8.7	C
	Subtotal	70	71	101.9%	32.3	7.8	C
SB	Left Turn	390	393	100.8%	29.3	2.5	C
	Through	20	20	100.0%	28.0	11.7	C
	Right Turn	120	121	100.6%	9.0	2.5	A
	Subtotal	530	534	100.8%	24.6	2.7	C
EB	Left Turn	170	170	99.8%	56.1	10.4	E
	Through	800	816	101.9%	20.5	3.7	C
	Right Turn	10	9	90.0%	13.0	10.1	B
	Subtotal	980	994	101.4%	26.4	4.4	C
WB	Left Turn	10	10	102.0%	55.3	15.3	E
	Through	720	715	99.3%	30.0	3.3	C
	Right Turn	530	542	102.3%	9.8	1.5	A
	Subtotal	1,260	1,267	100.5%	21.6	2.1	C
Total		2,840	2,866	100.9%	24.2	2.4	C

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	70	67	96.0%	35.4	7.2	D
	Through						
	Right Turn	270	268	99.2%	32.0	12.3	C
	Subtotal	340	335	98.6%	33.1	10.9	C
EB	Left Turn						
	Through	750	766	102.1%	42.9	14.0	D
	Right Turn	470	472	100.4%	15.7	3.6	B
	Subtotal	1,220	1,238	101.5%	32.5	9.6	C
WB	Left Turn	350	355	101.3%	37.1	9.8	D
	Through	1,050	1,058	100.8%	8.2	1.7	A
	Right Turn						
	Subtotal	1,400	1,413	100.9%	15.8	3.1	B
Total		2,960	2,986	100.9%	24.8	5.4	C

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	610	611	100.1%	33.6	1.9	C
	Through						
	Right Turn	950	938	98.7%	28.4	2.7	C
	Subtotal	1,560	1,548	99.2%	30.5	2.2	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	200	209	104.5%	48.8	5.7	D
	Through	620	630	101.5%	12.6	2.1	B
	Right Turn						
	Subtotal	820	838	102.2%	21.0	2.0	C
WB	Left Turn						
	Through	790	804	101.8%	33.5	6.9	C
	Right Turn	60	59	98.0%	26.0	5.4	C
	Subtotal	850	863	101.5%	33.0	6.6	C
Total		3,230	3,249	100.6%	28.7	2.4	C

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	160	161	100.8%	34.0	4.1	C
	Through						
	Right Turn	40	41	101.5%	12.1	4.1	B
	Subtotal	200	202	101.0%	29.5	3.4	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	40	41	101.5%	44.3	6.2	D
	Through	1,450	1,445	99.6%	5.7	1.1	A
	Right Turn	60	59	98.5%	4.7	1.6	A
	Subtotal	1,550	1,544	99.6%	6.7	1.3	A
WB	Left Turn	10	9	89.0%	34.5	16.0	C
	Through	660	668	101.2%	10.9	2.0	B
	Right Turn						
	Subtotal	670	677	101.0%	11.2	1.9	B
Total		2,420	2,423	100.1%	9.9	1.2	A

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	120	121	100.8%	39.6	4.9	D
	Through	30	33	108.3%	46.0	8.6	D
	Right Turn	30	30	100.7%	21.8	5.5	C
	Subtotal	180	184	102.1%	37.7	4.4	D
SB	Left Turn	20	20	98.5%	47.5	16.8	D
	Through	10	10	96.0%	59.4	18.9	E
	Right Turn	80	81	101.5%	9.8	3.3	A
	Subtotal	110	111	100.5%	20.1	8.2	C
EB	Left Turn	540	542	100.3%	67.2	27.4	E
	Through	950	948	99.7%	32.9	8.9	C
	Right Turn	70	71	100.7%	29.4	10.3	C
	Subtotal	1,560	1,560	100.0%	45.3	15.8	D
WB	Left Turn	30	28	94.7%	44.1	13.3	D
	Through	470	474	100.8%	31.8	3.6	C
	Right Turn	130	140	107.8%	19.9	2.4	B
	Subtotal	630	642	101.9%	30.1	2.5	C
Total		2,480	2,496	100.6%	39.9	9.9	D

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	19	96.5%	42.2	14.1	D
	Through	10	10	100.0%	46.2	23.1	D
	Right Turn	30	30	98.7%	8.6	3.6	A
	Subtotal	60	59	98.2%	23.5	2.1	C
SB	Left Turn	60	62	102.8%	38.3	6.4	D
	Through	10	11	108.0%	37.0	17.7	D
	Right Turn	20	19	93.0%	4.3	1.3	A
	Subtotal	90	91	101.2%	29.9	6.3	C
EB	Left Turn	360	352	97.9%	39.5	5.8	D
	Through	580	570	98.3%	5.3	1.2	A
	Right Turn	10	13	128.0%	2.2	2.0	A
	Subtotal	950	935	98.4%	18.5	2.8	B
WB	Left Turn	20	18	88.5%	71.1	31.0	E
	Through	480	473	98.5%	21.8	5.3	C
	Right Turn	430	433	100.7%	26.2	7.0	C
	Subtotal	930	923	99.3%	24.5	5.8	C
Total		2,030	2,009	98.9%	21.7	3.4	C

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	420	419	99.8%	59.9	5.0	E
	Through	610	620	101.7%	48.3	5.1	D
	Right Turn	70	72	103.3%	40.2	8.0	D
	Subtotal	1,100	1,111	101.0%	52.2	4.0	D
SB	Left Turn	200	200	100.1%	62.6	5.4	E
	Through	680	673	98.9%	47.5	4.2	D
	Right Turn	250	248	99.3%	18.8	2.5	B
	Subtotal	1,130	1,121	99.2%	43.5	3.0	D
EB	Left Turn	230	225	98.0%	55.9	3.1	E
	Through	220	216	98.4%	27.1	4.8	C
	Right Turn	220	217	98.8%	9.8	3.0	A
	Subtotal	670	659	98.4%	31.6	2.6	C
WB	Left Turn	90	91	101.6%	76.8	18.0	E
	Through	280	278	99.3%	69.0	29.6	E
	Right Turn	220	218	99.2%	62.0	30.2	E
	Subtotal	590	588	99.6%	67.4	28.0	E
Total		3,490	3,479	99.7%	48.2	4.9	D

Intersection 8 **North Village Dwy 1-Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	18	92.0%	32.5	33.6	D
	Through						
	Right Turn	20	19	92.5%	6.7	7.3	A
	Subtotal	40	37	92.3%	20.3	22.8	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	480	483	100.5%	2.3	0.5	A
	Right Turn	20	17	87.0%	1.6	0.5	A
	Subtotal	500	500	100.0%	2.3	0.5	A
WB	Left Turn						
	Through	570	568	99.6%	8.6	10.9	A
	Right Turn						
	Subtotal	570	568	99.6%	8.6	10.9	A
Total		1,110	1,105	99.5%	6.1	6.1	A

Intersection 9 North Village Dwy 2-Rocklin Manor Central/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	9	92.0%	20.3	21.2	C
	Through						
	Right Turn	10	10	104.0%	2.6	0.8	A
	Subtotal	20	20	98.0%	12.5	14.1	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	490	493	100.5%	1.2	0.2	A
	Right Turn	10	9	94.0%	0.0	0.1	A
	Subtotal	500	502	100.4%	1.2	0.2	A
WB	Left Turn						
	Through	560	559	99.8%	2.1	4.4	A
	Right Turn						
	Subtotal	560	559	99.8%	2.1	4.4	A
Total		1,080	1,080	100.0%	1.9	2.6	A

Intersection 10 Rocklin Manor East/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	10	97.0%	13.0	6.9	B
	Through						
	Right Turn	10	10	103.0%	5.6	4.5	A
	Subtotal	20	20	100.0%	8.9	1.8	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	490	493	100.7%	0.4	0.1	A
	Right Turn	10	9	91.0%	0.0	0.1	A
	Subtotal	500	502	100.5%	0.4	0.1	A
WB	Left Turn	10	10	102.0%	5.7	3.5	A
	Through	550	548	99.6%	3.4	1.9	A
	Right Turn						
	Subtotal	560	558	99.7%	3.5	1.8	A
Total		1,080	1,081	100.0%	2.2	1.1	A

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	440	438	99.4%	18.5	11.7	C
	Through	80	80	99.4%	13.3	7.8	B
	Right Turn						
	Subtotal	520	517	99.4%	17.8	11.1	C
SB	Left Turn						
	Through	50	46	92.0%	10.1	1.1	B
	Right Turn	100	103	102.8%	5.7	1.0	A
	Subtotal	150	149	99.2%	7.0	0.9	A
EB	Left Turn	100	97	96.5%	15.2	3.1	C
	Through						
	Right Turn	380	387	101.9%	12.5	1.3	B
	Subtotal	480	484	100.8%	13.0	1.6	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,150	1,150	100.0%	14.7	5.7	B

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	270	269	99.5%	38.3	4.9	D
	Through	500	508	101.6%	16.3	1.8	B
	Right Turn	90	100	111.3%	8.3	1.2	A
	Subtotal	860	877	102.0%	21.6	2.0	C
SB	Left Turn	80	81	101.5%	42.6	8.9	D
	Through	900	895	99.4%	25.8	5.0	C
	Right Turn	70	66	94.9%	7.7	2.3	A
	Subtotal	1,050	1,042	99.2%	25.9	5.0	C
EB	Left Turn	80	80	99.9%	40.2	7.1	D
	Through	30	32	107.3%	43.4	10.6	D
	Right Turn	120	119	99.3%	13.2	4.2	B
	Subtotal	230	231	100.5%	26.9	5.2	C
WB	Left Turn	150	151	100.8%	41.6	7.6	D
	Through	30	31	103.3%	47.2	13.3	D
	Right Turn	40	41	103.3%	7.0	1.5	A
	Subtotal	220	224	101.6%	36.1	6.4	D
Total		2,360	2,374	100.6%	25.5	3.6	C

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	100	98	98.2%	33.4	6.0	C
	Through	570	585	102.5%	12.8	2.3	B
	Right Turn	210	206	98.3%	4.1	0.3	A
	Subtotal	880	889	101.0%	13.3	1.8	B
SB	Left Turn						
	Through	1,180	1,177	99.8%	21.1	4.5	C
	Right Turn	20	21	103.0%	5.2	1.4	A
	Subtotal	1,200	1,198	99.8%	20.9	4.4	C
EB	Left Turn	20	21	103.5%	34.9	11.7	C
	Through						
	Right Turn	70	76	108.6%	11.7	5.7	B
	Subtotal	90	97	107.4%	16.5	5.9	B
WB	Left Turn	660	672	101.8%	30.0	5.4	C
	Through	80	82	102.3%	30.5	3.5	C
	Right Turn	270	276	102.0%	15.6	1.4	B
	Subtotal	1,010	1,029	101.9%	26.4	3.8	C
Total		3,180	3,213	101.0%	20.4	2.1	C

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	930	938	100.8%	18.4	3.1	B
	Right Turn	50	51	102.6%	4.2	1.6	A
	Subtotal	980	989	100.9%	17.7	3.0	B
SB	Left Turn	150	151	100.9%	68.4	19.2	E
	Through	1,280	1,287	100.5%	50.1	22.6	D
	Right Turn	190	196	103.3%	25.6	16.0	C
	Subtotal	1,620	1,635	100.9%	48.8	21.6	D
EB	Left Turn	240	245	102.0%	67.7	30.6	E
	Through	160	160	99.8%	65.8	29.9	E
	Right Turn	410	406	99.1%	99.2	43.7	F
	Subtotal	810	811	100.1%	83.8	37.5	F
WB	Left Turn	60	59	99.0%	43.8	9.9	D
	Through						
	Right Turn	110	112	101.7%	9.8	2.4	A
	Subtotal	170	171	100.8%	21.4	4.5	C
Total		3,580	3,605	100.7%	47.2	15.0	D

Intersection 15 **Sierra College Blvd/Schriber Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	9	93.0%	42.3	16.4	D
	Through	840	848	100.9%	4.0	0.6	A
	Right Turn	20	20	100.5%	2.7	1.4	A
	Subtotal	870	877	100.8%	4.6	0.8	A
SB	Left Turn						
	Through	1,720	1,722	100.1%	11.5	1.3	B
	Right Turn	30	33	108.7%	9.4	3.4	A
	Subtotal	1,750	1,755	100.3%	11.5	1.3	B
EB	Left Turn	10	8	82.0%	52.4	27.3	D
	Through	10	9	90.0%	45.5	20.9	D
	Right Turn	10	10	98.0%	25.2	14.5	C
	Subtotal	30	27	90.0%	40.9	11.2	D
WB	Left Turn	60	61	102.2%	39.9	8.3	D
	Through	10	10	101.0%	49.1	22.5	D
	Right Turn	130	134	102.8%	19.3	7.1	B
	Subtotal	200	205	102.6%	27.2	5.6	C
Total		2,850	2,864	100.5%	10.8	1.1	B

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	10	97.0%	34.9	15.7	C
	Through	840	847	100.9%	7.3	1.4	A
	Right Turn	30	29	95.3%	5.4	3.3	A
	Subtotal	880	886	100.6%	7.5	1.4	A
SB	Left Turn	30	33	110.7%	34.9	8.6	C
	Through	1,750	1,749	100.0%	8.5	0.9	A
	Right Turn	10	10	100.0%	2.1	1.3	A
	Subtotal	1,790	1,792	100.1%	8.9	0.9	A
EB	Left Turn	10	10	99.0%	30.6	10.3	C
	Through	10	11	105.0%	27.2	15.9	C
	Right Turn	10	9	91.0%	17.5	14.8	B
	Subtotal	30	30	98.3%	28.9	9.0	C
WB	Left Turn	30	28	94.3%	30.9	8.3	C
	Through	10	10	104.0%	28.6	16.9	C
	Right Turn	10	11	105.0%	7.1	5.1	A
	Subtotal	50	49	98.4%	27.0	7.3	C
Total		2,750	2,757	100.2%	9.0	1.1	A

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr-North Village Street A** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	250	252	100.8%	27.3	1.9	C
	Through	800	804	100.6%	8.2	0.8	A
	Right Turn						
	Subtotal	1,050	1,056	100.6%	13.1	0.7	B
SB	Left Turn						
	Through	1,080	1,071	99.2%	15.8	2.3	B
	Right Turn	710	715	100.7%	15.4	2.6	B
	Subtotal	1,790	1,786	99.8%	15.7	2.2	B
EB	Left Turn	70	66	94.4%	26.7	4.7	C
	Through						
	Right Turn	130	130	99.6%	9.3	2.2	A
	Subtotal	200	196	97.8%	15.3	3.7	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		3,040	3,038	99.9%	14.8	1.4	B

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	1,040	1,046	100.6%	0.4	0.1	A
	Right Turn						
	Subtotal	1,040	1,046	100.6%	0.4	0.1	A
SB	Left Turn						
	Through	1,120	1,107	98.8%	4.1	0.4	A
	Right Turn	100	103	103.0%	3.8	0.8	A
	Subtotal	1,220	1,210	99.2%	4.1	0.4	A
EB	Left Turn						
	Through						
	Right Turn	10	9	92.0%	4.9	2.4	A
	Subtotal	10	9	92.0%	4.9	2.4	A
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,270	2,265	99.8%	2.4	0.2	A

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	30	31	103.3%	36.7	6.4	D
	Through	950	957	100.7%	12.3	2.6	B
	Right Turn	10	10	95.0%	3.1	3.7	A
	Subtotal	990	997	100.7%	12.9	2.5	B
SB	Left Turn	30	28	94.3%	45.7	11.3	D
	Through	960	953	99.3%	15.2	1.8	B
	Right Turn	30	29	95.7%	12.0	5.5	B
	Subtotal	1,020	1,010	99.0%	15.9	1.8	B
EB	Left Turn	70	66	94.3%	28.6	4.6	C
	Through	10	9	88.0%	15.2	10.1	B
	Right Turn	50	52	103.8%	14.6	5.3	B
	Subtotal	130	127	97.5%	22.0	4.6	C
WB	Left Turn	60	60	100.7%	26.0	6.0	C
	Through	10	10	101.0%	33.7	17.4	C
	Right Turn	80	81	101.0%	16.9	3.0	B
	Subtotal	150	151	100.9%	21.4	3.1	C
Total		2,290	2,235	99.8%	15.2	2.0	B

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	180	183	101.8%	2.5	3.0	A
	Right Turn						
	Subtotal	180	183	101.8%	2.5	3.0	A
SB	Left Turn						
	Through	90	89	98.6%	0.4	0.1	A
	Right Turn	10	11	105.0%	0.3	0.3	A
	Subtotal	100	99	99.2%	0.4	0.1	A
EB	Left Turn						
	Through						
	Right Turn	10	10	96.0%	2.8	0.6	A
	Subtotal	10	10	96.0%	2.8	0.6	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		290	292	100.7%	1.9	2.3	A

Intersection 21 **El Don Dr/Southern Retail Access-South Village Dwy 2** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	11	108.0%	3.1	0.7	A
	Through	160	162	100.9%	1.7	0.8	A
	Right Turn						
	Subtotal	170	172	101.4%	1.8	0.7	A
SB	Left Turn						
	Through	90	87	96.2%	0.2	0.1	A
	Right Turn	10	11	110.0%	0.0	0.1	A
	Subtotal	100	98	97.6%	0.2	0.1	A
EB	Left Turn	20	20	101.0%	6.5	2.1	A
	Through						
	Right Turn	10	12	117.0%	3.0	0.7	A
	Subtotal	30	32	106.3%	5.0	1.1	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		300	302	100.6%	1.7	0.6	A

Intersection 22 **El Don Dr/Wildflower Ln-South Village Dwy 1** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	10	102.0%	4.3	1.0	A
	Through	140	141	100.9%	5.5	0.5	A
	Right Turn						
	Subtotal	150	151	100.9%	5.4	0.5	A
SB	Left Turn						
	Through	80	80	99.5%	5.7	0.2	A
	Right Turn	20	19	94.5%	3.7	0.6	A
	Subtotal	100	99	98.5%	5.4	0.3	A
EB	Left Turn	30	31	102.7%	4.2	0.4	A
	Through						
	Right Turn	10	12	123.0%	2.7	0.4	A
	Subtotal	40	43	107.8%	3.8	0.4	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		290	293	101.0%	5.2	0.4	A

Intersection 23 **El Don Dr/Corona Cir-South Village Street A** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	10	9	92.0%	1.8	0.6	A
	Through	140	141	100.9%	0.2	0.1	A
	Right Turn						
	Subtotal	150	150	100.3%	0.3	0.1	A
SB	Left Turn						
	Through	80	78	97.3%	1.4	0.2	A
	Right Turn	10	12	124.0%	1.1	0.4	A
	Subtotal	90	90	100.2%	1.4	0.2	A
EB	Left Turn	10	10	102.0%	4.7	2.2	A
	Through						
	Right Turn	10	12	123.0%	3.0	0.6	A
	Subtotal	20	23	112.5%	3.9	0.9	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		260	263	101.2%	1.0	0.2	A

Intersection 0 **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total							

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	50	47	94.8%	48.5	11.0	D
	Through	30	28	91.7%	45.8	6.7	D
	Right Turn	30	32	106.7%	24.0	12.4	C
	Subtotal	110	107	97.2%	40.8	9.1	D
SB	Left Turn	530	544	102.6%	35.6	6.1	D
	Through	30	31	104.3%	38.4	6.4	D
	Right Turn	200	201	100.5%	9.0	2.3	A
	Subtotal	760	776	102.1%	29.0	4.6	C
EB	Left Turn	200	203	101.4%	74.8	21.6	E
	Through	630	629	99.8%	30.4	6.2	C
	Right Turn	20	22	108.0%	18.4	10.4	B
	Subtotal	850	853	100.4%	40.1	9.6	D
WB	Left Turn	60	59	99.0%	75.0	13.8	E
	Through	700	698	99.8%	37.2	4.0	D
	Right Turn	550	540	98.1%	12.9	2.1	B
	Subtotal	1,310	1,298	99.0%	28.7	3.8	C
Total		3,030	3,034	100.1%	32.4	4.4	C

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	70	70	100.3%	27.5	5.4	C
	Through	10	11	108.0%	75.3	52.5	E
	Right Turn	310	307	98.9%	51.3	25.3	D
	Subtotal	390	388	99.4%	47.7	21.3	D
EB	Left Turn						
	Through	740	728	98.4%	72.4	23.8	E
	Right Turn	500	505	101.1%	31.2	11.6	C
	Subtotal	1,240	1,234	99.5%	56.0	18.6	E
WB	Left Turn	590	592	100.3%	59.8	8.0	E
	Through	1,160	1,150	99.1%	15.6	1.7	B
	Right Turn						
	Subtotal	1,750	1,741	99.5%	31.4	3.9	C
Total		3,380	3,362	99.5%	42.0	7.8	D

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	580	570	98.3%	49.1	7.6	D
	Through	10	11	112.0%	58.5	24.6	E
	Right Turn	600	604	100.6%	31.8	4.9	C
	Subtotal	1,190	1,185	99.6%	40.3	6.0	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	230	230	100.2%	89.4	20.0	F
	Through	580	574	99.0%	13.6	4.0	B
	Right Turn						
	Subtotal	810	805	99.3%	37.1	8.5	D
WB	Left Turn						
	Through	1,170	1,173	100.2%	41.4	8.7	D
	Right Turn	90	94	104.0%	31.9	8.2	C
	Subtotal	1,260	1,267	100.5%	40.7	8.6	D
Total		3,260	3,256	99.9%	39.6	5.3	D

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	120	125	103.8%	42.2	5.1	D
	Through						
	Right Turn	30	31	102.0%	7.3	2.5	A
	Subtotal	150	155	103.4%	34.8	5.7	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	60	55	92.3%	49.5	7.4	D
	Through	1,040	1,032	99.2%	5.7	0.9	A
	Right Turn	170	175	102.7%	4.6	1.3	A
	Subtotal	1,270	1,262	99.3%	7.7	1.3	A
WB	Left Turn	30	28	93.0%	94.7	55.4	F
	Through	1,130	1,139	100.8%	42.6	28.3	D
	Right Turn						
	Subtotal	1,160	1,167	100.6%	43.6	28.7	D
Total		2,580	2,583	100.1%	26.1	14.1	C

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	120	123	102.2%	49.7	7.5	D
	Through	10	9	92.0%	56.6	30.2	E
	Right Turn	30	30	100.3%	19.4	5.5	B
	Subtotal	160	162	101.2%	44.9	5.4	D
SB	Left Turn	60	60	99.5%	47.4	14.5	D
	Through	20	20	99.0%	46.6	19.0	D
	Right Turn	360	367	101.9%	21.1	8.0	C
	Subtotal	440	447	101.5%	26.1	9.6	C
EB	Left Turn	270	264	97.6%	53.1	9.2	D
	Through	710	704	99.1%	32.5	6.4	C
	Right Turn	130	130	99.8%	30.5	8.3	C
	Subtotal	1,110	1,097	98.8%	37.2	6.9	D
WB	Left Turn	30	31	103.3%	59.1	16.2	E
	Through	740	750	101.4%	34.8	5.6	C
	Right Turn	50	51	101.0%	25.5	7.8	C
	Subtotal	820	832	101.5%	35.2	5.7	D
Total		2,530	2,538	100.3%	35.1	4.6	D

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	8	83.0%	21.8	14.6	C
	Through						
	Right Turn	10	10	97.0%	7.8	9.6	A
	Subtotal	20	18	90.0%	15.9	9.6	B
SB	Left Turn	350	353	100.8%	20.9	3.5	C
	Through						
	Right Turn	170	175	102.9%	7.0	1.2	A
	Subtotal	520	528	101.5%	16.4	2.7	B
EB	Left Turn	80	80	99.9%	39.2	7.1	D
	Through	510	508	99.5%	19.6	3.3	B
	Right Turn	20	20	102.0%	16.3	5.0	B
	Subtotal	610	608	99.6%	21.9	3.3	C
WB	Left Turn	20	19	93.5%	46.3	23.3	D
	Through	515	527	102.4%	18.3	2.9	B
	Right Turn	120	118	98.7%	13.7	3.1	B
	Subtotal	655	664	101.4%	18.2	2.6	B
Total		1,805	1,818	100.7%	18.9	2.3	B

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	300	292	97.3%	77.8	12.7	E
	Through	840	825	98.2%	61.5	20.1	E
	Right Turn	80	82	102.9%	54.8	18.6	D
	Subtotal	1,220	1,199	98.3%	65.3	17.9	E
SB	Left Turn	270	265	98.0%	74.0	16.8	E
	Through	685	663	96.8%	39.0	3.6	D
	Right Turn	180	191	105.9%	13.8	1.7	B
	Subtotal	1,135	1,118	98.5%	43.6	5.3	D
EB	Left Turn	260	251	96.6%	63.5	9.5	E
	Through	270	267	98.9%	31.1	4.9	C
	Right Turn	340	351	103.2%	14.5	3.7	B
	Subtotal	870	869	99.9%	34.5	4.5	C
WB	Left Turn	60	60	99.2%	67.9	14.2	E
	Through	195	200	102.6%	57.7	3.7	E
	Right Turn	250	259	103.4%	46.7	10.4	D
	Subtotal	505	518	102.6%	53.5	7.1	D
Total		3,730	3,705	99.3%	50.0	5.2	D

Intersection 8 **North Village Dwy 1-Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	20	98.0%	17.2	13.5	C
	Through						
	Right Turn	10	11	109.0%	4.1	4.3	A
	Subtotal	30	31	101.7%	13.6	9.1	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	520	515	99.1%	2.2	0.3	A
	Right Turn	100	99	99.2%	1.4	0.6	A
	Subtotal	620	614	99.1%	2.1	0.3	A
WB	Left Turn	10	8	83.0%	6.0	5.7	A
	Through	485	501	103.3%	2.0	1.9	A
	Right Turn						
	Subtotal	495	509	102.9%	2.1	1.8	A
Total		1,145	1,154	100.8%	2.4	1.1	A

Intersection 9 North Village Dwy 2-Rocklin Manor Central/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	23	114.0%	13.5	3.6	B
	Through						
	Right Turn						
	Subtotal	20	23	114.0%	13.5	3.6	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	510	505	99.0%	0.7	0.2	A
	Right Turn	20	21	105.0%	0.5	0.3	A
	Subtotal	530	526	99.2%	0.6	0.2	A
WB	Left Turn	10	12	117.0%	2.4	1.7	A
	Through	475	485	102.1%	0.5	0.1	A
	Right Turn						
	Subtotal	485	497	102.4%	0.5	0.1	A
Total		1,035	1,045	101.0%	0.9	0.2	A

Intersection 10 Rocklin Manor East/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	11	108.0%	13.0	12.5	B
	Through						
	Right Turn						
	Subtotal	10	11	108.0%	13.0	12.5	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	500	494	98.9%	0.3	0.1	A
	Right Turn	10	9	90.0%	0.1	0.3	A
	Subtotal	510	503	98.7%	0.3	0.1	A
WB	Left Turn	10	10	101.0%	3.9	2.3	A
	Through	475	487	102.5%	2.5	0.1	A
	Right Turn						
	Subtotal	485	497	102.4%	2.5	0.1	A
Total		1,005	1,011	100.6%	1.5	0.1	A

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	400	406	101.4%	9.3	1.2	A
	Through	90	98	109.3%	10.0	0.9	A
	Right Turn						
	Subtotal	490	504	102.9%	9.4	1.0	A
SB	Left Turn						
	Through	50	46	92.2%	9.5	0.9	A
	Right Turn	80	85	106.1%	4.2	0.7	A
	Subtotal	130	131	100.8%	5.9	0.8	A
EB	Left Turn	80	79	98.1%	15.8	4.0	C
	Through						
	Right Turn	420	415	98.9%	12.8	2.9	B
	Subtotal	500	494	98.8%	13.2	2.9	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,120	1,129	100.8%	10.7	1.3	B

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	240	242	100.7%	44.0	7.0	D
	Through	910	898	98.7%	20.9	4.5	C
	Right Turn	80	79	99.3%	10.5	3.4	B
	Subtotal	1,230	1,219	99.1%	24.7	4.9	C
SB	Left Turn	60	60	99.7%	49.8	10.8	D
	Through	880	890	101.1%	33.1	8.0	C
	Right Turn	80	87	108.1%	10.5	4.1	B
	Subtotal	1,020	1,036	101.6%	32.2	7.6	C
EB	Left Turn	160	152	95.0%	38.6	6.6	D
	Through	30	30	98.3%	36.6	10.6	D
	Right Turn	270	268	99.3%	19.2	4.6	B
	Subtotal	460	450	97.8%	26.8	3.5	C
WB	Left Turn	110	108	98.3%	44.2	10.3	D
	Through	20	20	99.0%	48.0	13.6	D
	Right Turn	40	44	108.8%	12.1	6.2	B
	Subtotal	170	171	100.8%	35.3	7.0	D
Total		2,880	2,876	99.9%	28.4	5.2	C

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	290	289	99.6%	46.7	8.1	D
	Through	970	959	98.9%	19.7	2.5	B
	Right Turn	520	518	99.7%	8.7	0.8	A
	Subtotal	1,780	1,766	99.2%	20.8	2.5	C
SB	Left Turn						
	Through	1,260	1,251	100.1%	35.1	5.6	D
	Right Turn	60	66	109.2%	11.5	3.2	B
	Subtotal	1,320	1,326	100.5%	34.0	5.4	C
EB	Left Turn	60	61	100.8%	43.6	5.5	D
	Through						
	Right Turn	340	347	102.0%	23.3	7.2	C
	Subtotal	400	407	101.8%	26.4	5.9	C
WB	Left Turn	470	468	99.6%	29.8	3.5	C
	Through	110	115	104.4%	39.9	5.0	D
	Right Turn	240	240	99.8%	19.1	2.4	B
	Subtotal	820	823	100.3%	28.1	2.7	C
Total		4,320	4,322	100.0%	26.8	2.5	C

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,580	1,569	99.3%	23.0	3.3	C
	Right Turn	140	140	100.1%	10.9	2.6	B
	Subtotal	1,720	1,709	99.4%	22.0	3.1	C
SB	Left Turn	310	308	99.4%	45.9	5.7	D
	Through	860	863	100.3%	17.1	2.5	B
	Right Turn	340	343	100.9%	8.0	0.8	A
	Subtotal	1,510	1,514	100.3%	20.9	2.2	C
EB	Left Turn	400	400	100.0%	49.2	10.8	D
	Through	350	358	102.2%	42.9	6.6	D
	Right Turn	150	147	97.8%	18.0	3.8	B
	Subtotal	900	904	100.5%	42.1	4.9	D
WB	Left Turn	110	109	99.2%	46.6	8.7	D
	Through						
	Right Turn	310	304	98.1%	26.7	7.2	C
	Subtotal	420	413	98.4%	31.5	5.8	C
Total		4,550	4,541	99.8%	26.6	1.6	C

Intersection 15 **Sierra College Blvd/Schriber Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	11	106.0%	38.6	14.1	D
	Through	1,630	1,626	99.8%	6.6	1.7	A
	Right Turn	50	46	92.4%	5.6	2.2	A
	Subtotal	1,690	1,683	99.6%	6.7	1.7	A
SB	Left Turn						
	Through	1,090	1,090	100.0%	8.9	2.3	A
	Right Turn	30	31	102.3%	5.6	2.7	A
	Subtotal	1,120	1,121	100.1%	8.8	2.2	A
EB	Left Turn	40	37	93.0%	33.5	13.0	C
	Through	10	8	84.0%	24.1	13.7	C
	Right Turn	20	21	103.5%	10.4	4.5	B
	Subtotal	70	66	94.7%	25.1	6.7	C
WB	Left Turn	20	19	95.5%	37.1	13.3	D
	Through	10	9	93.0%	27.5	16.4	C
	Right Turn	50	50	99.4%	18.8	5.2	B
	Subtotal	80	78	97.6%	24.6	4.7	C
Total		2,960	2,948	99.6%	8.4	1.7	A

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	11	109.0%	48.1	23.8	D
	Through	1,660	1,656	99.7%	20.2	6.4	C
	Right Turn	60	58	97.3%	18.9	8.8	B
	Subtotal	1,730	1,725	99.7%	20.3	6.4	C
SB	Left Turn	50	52	104.2%	38.0	9.1	D
	Through	1,040	1,041	100.1%	7.1	3.1	A
	Right Turn	40	37	91.3%	2.2	0.7	A
	Subtotal	1,130	1,130	100.0%	8.7	2.6	A
EB	Left Turn	10	9	85.0%	42.1	14.1	D
	Through	10	10	104.0%	35.1	14.3	D
	Right Turn	10	10	98.0%	9.2	9.5	A
	Subtotal	30	29	95.7%	30.3	9.4	C
WB	Left Turn	60	59	97.7%	38.7	8.0	D
	Through	10	10	101.0%	23.4	17.4	C
	Right Turn	10	11	105.0%	13.4	6.1	B
	Subtotal	80	79	99.0%	34.6	7.3	C
Total		2,970	2,963	99.7%	16.4	4.5	B

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr-North Village Street A** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	210	204	97.0%	52.6	7.9	D
	Through	1,130	1,121	99.2%	21.7	3.0	C
	Right Turn						
	Subtotal	1,340	1,325	98.9%	26.5	2.5	C
SB	Left Turn						
	Through	895	884	98.7%	24.5	3.9	C
	Right Turn	220	228	103.5%	3.9	0.6	A
	Subtotal	1,115	1,111	99.7%	20.2	3.2	C
EB	Left Turn	600	603	100.4%	35.2	8.4	D
	Through						
	Right Turn	260	251	96.7%	27.9	8.9	C
	Subtotal	860	854	99.3%	33.0	8.5	C
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		3,315	3,290	99.3%	26.1	2.7	C

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	1,340	1,323	98.8%	0.6	0.1	A
	Right Turn						
	Subtotal	1,340	1,323	98.8%	0.6	0.1	A
SB	Left Turn						
	Through	1,115	1,095	98.2%	5.1	0.8	A
	Right Turn	40	41	102.8%	4.2	1.1	A
	Subtotal	1,155	1,136	98.4%	5.0	0.8	A
EB	Left Turn						
	Through						
	Right Turn	20	20	100.0%	6.0	4.0	A
	Subtotal	20	20	100.0%	6.0	4.0	A
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,515	2,479	98.6%	2.7	0.5	A

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	30	27	89.7%	34.9	7.9	C
	Through	1,100	1,083	98.5%	11.5	0.9	B
	Right Turn	30	30	100.7%	5.7	1.9	A
	Subtotal	1,160	1,140	98.3%	11.9	0.9	B
SB	Left Turn	130	128	98.5%	31.2	3.9	C
	Through	895	882	98.5%	8.4	2.5	A
	Right Turn	90	90	100.4%	8.9	2.4	A
	Subtotal	1,115	1,101	98.7%	11.1	1.9	B
EB	Left Turn	40	38	94.0%	28.3	7.3	C
	Through	10	11	113.0%	21.6	17.6	C
	Right Turn	20	24	121.0%	12.7	7.0	B
	Subtotal	70	73	104.4%	23.8	5.4	C
WB	Left Turn	20	18	88.5%	36.1	11.1	D
	Through	10	10	101.0%	29.3	9.9	C
	Right Turn	50	51	101.8%	15.0	4.9	B
	Subtotal	80	79	98.4%	21.8	5.0	C
Total		2,425	2,393	98.7%	12.2	1.3	B

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	160	162	101.4%	2.7	2.5	A
	Right Turn						
	Subtotal	160	162	101.4%	2.7	2.5	A
SB	Left Turn						
	Through	170	173	101.5%	0.5	0.1	A
	Right Turn	10	9	94.0%	0.5	0.4	A
	Subtotal	180	182	101.1%	0.5	0.1	A
EB	Left Turn						
	Through						
	Right Turn	10	9	85.0%	3.2	1.7	A
	Subtotal	10	9	85.0%	3.2	1.7	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		350	353	100.8%	1.6	1.2	A

Intersection 21 **El Don Dr/Southern Retail Access-South Village Dwy 2** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	11	105.0%	3.7	1.5	A
	Through	120	124	103.2%	1.6	0.2	A
	Right Turn						
	Subtotal	130	134	103.3%	1.8	0.2	A
SB	Left Turn						
	Through	170	170	99.8%	0.4	0.1	A
	Right Turn	10	10	104.0%	0.0	0.0	A
	Subtotal	180	180	100.0%	0.3	0.1	A
EB	Left Turn	40	39	97.0%	7.5	0.8	A
	Through						
	Right Turn	10	10	103.0%	5.2	2.1	A
	Subtotal	50	49	98.2%	7.1	0.6	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		360	363	100.9%	1.7	0.2	A

Intersection 22 **El Don Dr/Wildflower Ln-South Village Dwy 1** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	8	84.0%	4.4	2.0	A
	Through	110	115	104.7%	5.2	0.3	A
	Right Turn						
	Subtotal	120	124	103.0%	5.2	0.4	A
SB	Left Turn						
	Through	150	149	99.5%	6.8	0.6	A
	Right Turn	30	31	102.7%	4.5	0.7	A
	Subtotal	180	180	100.1%	6.4	0.5	A
EB	Left Turn	20	20	97.5%	4.2	0.7	A
	Through						
	Right Turn	10	11	105.0%	2.5	1.4	A
	Subtotal	30	30	100.0%	3.9	0.7	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		330	334	101.1%	5.7	0.3	A

Intersection 23 **El Don Dr/Corona Cir-South Village Street A** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	10	11	106.0%	2.2	1.0	A
	Through	110	112	101.8%	0.2	0.1	A
	Right Turn						
	Subtotal	120	123	102.2%	0.4	0.2	A
SB	Left Turn						
	Through	140	139	99.4%	1.6	0.2	A
	Right Turn	20	20	102.0%	1.7	0.4	A
	Subtotal	160	160	99.8%	1.6	0.2	A
EB	Left Turn	10	12	120.0%	5.2	2.7	A
	Through						
	Right Turn	10	10	95.0%	3.7	1.5	A
	Subtotal	20	22	107.5%	4.0	0.7	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		300	304	101.2%	1.3	0.2	A

Intersection 0 **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total							

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	19	93.5%	38.2	15.5	D
	Through	30	29	96.3%	36.9	13.5	D
	Right Turn	20	20	98.5%	13.3	6.9	B
	Subtotal	70	67	96.1%	31.3	8.2	C
SB	Left Turn	395	401	101.6%	31.4	2.9	C
	Through	20	18	92.0%	31.9	11.2	C
	Right Turn	120	126	104.7%	9.1	2.4	A
	Subtotal	535	545	101.9%	26.3	2.5	C
EB	Left Turn	170	173	102.0%	53.3	10.0	D
	Through	872	882	101.2%	18.8	5.4	B
	Right Turn	10	10	100.0%	6.3	5.2	A
	Subtotal	1,052	1,066	101.3%	24.4	6.2	C
WB	Left Turn	10	10	104.0%	61.4	32.5	E
	Through	762	761	99.9%	30.3	5.1	C
	Right Turn	533	534	100.1%	11.1	2.0	B
	Subtotal	1,305	1,305	100.0%	22.9	3.5	C
Total		2,962	2,933	100.7%	24.3	4.2	C

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	86	83	96.9%	33.3	6.3	C
	Through						
	Right Turn	270	275	101.9%	28.5	4.2	C
	Subtotal	356	358	100.6%	29.5	4.0	C
EB	Left Turn						
	Through	827	835	100.9%	41.7	9.5	D
	Right Turn	470	472	100.3%	15.0	2.7	B
	Subtotal	1,297	1,306	100.7%	32.0	6.8	C
WB	Left Turn	414	400	96.7%	41.1	8.1	D
	Through	1,095	1,089	99.4%	8.3	1.6	A
	Right Turn						
	Subtotal	1,509	1,489	98.7%	17.3	3.3	B
Total		3,162	3,153	99.7%	24.9	3.0	C

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	610	596	97.7%	32.2	1.5	C
	Through						
	Right Turn	1,083	1,054	97.3%	28.4	1.3	C
	Subtotal	1,693	1,650	97.4%	29.8	1.1	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	200	202	100.8%	46.9	8.2	D
	Through	713	724	101.6%	11.9	1.5	B
	Right Turn						
	Subtotal	913	926	101.4%	19.2	1.6	B
WB	Left Turn						
	Through	899	896	99.6%	44.8	12.7	D
	Right Turn	63	64	101.7%	37.4	13.6	D
	Subtotal	962	960	99.8%	44.3	12.7	D
Total		3,568	3,535	99.1%	31.1	3.6	C

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	160	156	97.5%	34.0	3.8	C
	Through						
	Right Turn	42	43	102.1%	17.6	6.8	B
	Subtotal	202	199	98.5%	30.7	3.9	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	40	39	98.3%	43.5	5.3	D
	Through	1,676	1,650	99.1%	7.3	1.8	A
	Right Turn	60	58	97.2%	5.6	2.6	A
	Subtotal	1,776	1,758	99.0%	8.2	1.9	A
WB	Left Turn	10	9	91.0%	38.3	19.7	D
	Through	772	772	100.0%	15.1	6.1	B
	Right Turn						
	Subtotal	782	781	99.9%	15.5	5.9	B
Total		2,760	2,738	99.2%	12.1	2.4	B

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	142	136	95.6%	47.1	6.7	D
	Through	30	32	106.3%	54.8	9.0	D
	Right Turn	35	39	111.7%	26.9	9.3	C
	Subtotal	207	207	99.9%	43.9	5.7	D
SB	Left Turn	20	20	101.5%	50.1	24.5	D
	Through	10	10	104.0%	38.4	28.6	D
	Right Turn	80	77	96.8%	12.2	5.3	B
	Subtotal	110	108	98.3%	23.5	7.5	C
EB	Left Turn	540	517	95.7%	108.4	27.2	F
	Through	1,139	1,138	99.9%	45.5	12.6	D
	Right Turn	109	107	98.0%	42.9	14.4	D
	Subtotal	1,788	1,762	98.6%	64.1	16.6	E
WB	Left Turn	76	71	93.6%	54.6	10.1	D
	Through	560	574	102.4%	33.3	3.7	C
	Right Turn	130	130	100.3%	22.5	1.9	C
	Subtotal	766	775	101.2%	33.3	3.2	C
Total		2,871	2,852	99.3%	53.1	10.7	D

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	20	100.5%	39.1	13.6	D
	Through	10	10	104.0%	47.7	24.3	D
	Right Turn	30	31	104.3%	14.8	6.6	B
	Subtotal	60	62	103.0%	26.9	7.4	C
SB	Left Turn	62	58	94.0%	41.3	9.6	D
	Through	10	9	86.0%	35.4	19.3	D
	Right Turn	20	19	94.5%	4.5	1.1	A
	Subtotal	92	86	93.3%	32.2	8.0	C
EB	Left Turn	370	366	99.0%	42.0	5.2	D
	Through	697	695	99.7%	9.6	1.7	A
	Right Turn	10	9	94.0%	3.7	1.4	A
	Subtotal	1,077	1,071	99.4%	20.2	3.0	C
WB	Left Turn	20	22	107.5%	77.7	19.3	E
	Through	606	605	99.8%	26.5	4.6	C
	Right Turn	432	435	100.6%	29.0	3.7	C
	Subtotal	1,058	1,061	100.3%	28.6	4.0	C
Total		2,287	2,279	99.7%	24.5	2.6	C

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	429	426	99.3%	80.9	36.8	F
	Through	632	639	101.0%	80.5	39.2	F
	Right Turn	116	119	102.5%	75.0	40.3	E
	Subtotal	1,177	1,134	100.6%	80.1	38.0	F
SB	Left Turn	240	235	98.0%	65.6	11.5	E
	Through	727	729	100.2%	51.8	5.4	D
	Right Turn	320	327	102.2%	27.4	5.0	C
	Subtotal	1,287	1,291	100.3%	48.7	4.1	D
EB	Left Turn	267	266	99.6%	85.5	50.7	F
	Through	298	305	102.4%	37.1	10.0	D
	Right Turn	224	219	97.8%	9.9	1.8	A
	Subtotal	789	790	100.2%	47.2	23.7	D
WB	Left Turn	113	114	100.9%	75.8	12.9	E
	Through	329	330	100.4%	65.2	21.3	E
	Right Turn	235	234	99.7%	72.9	29.8	E
	Subtotal	677	679	100.2%	70.0	22.5	E
Total		3,930	3,943	100.3%	62.7	14.0	E

Intersection 8 **North Village Dwy 1-Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	20	98.5%	66.4	87.1	F
	Through	10	10	100.0%	26.1	25.4	D
	Right Turn	20	21	103.5%	64.2	110.7	F
	Subtotal	50	50	100.8%	61.0	81.9	F
SB	Left Turn	6	7	110.0%	33.2	40.0	D
	Through						
	Right Turn	44	44	100.5%	68.9	124.7	F
	Subtotal	50	51	101.6%	70.1	122.3	F
EB	Left Turn	31	32	102.9%	7.2	4.1	A
	Through	613	617	100.6%	2.6	0.3	A
	Right Turn	20	21	103.5%	1.3	0.7	A
	Subtotal	664	669	100.8%	2.8	0.2	A
WB	Left Turn						
	Through	613	613	99.9%	6.4	8.7	A
	Right Turn	10	11	111.0%	9.4	24.3	A
	Subtotal	623	624	100.1%	6.4	8.8	A
Total		1,387	1,394	100.5%	9.6	11.8	A

Intersection 9 North Village Dwy 2-Rocklin Manor Central/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	10	103.0%	20.8	9.3	C
	Through						
	Right Turn	10	8	84.0%	3.6	2.4	A
	Subtotal	20	19	93.5%	13.5	6.0	B
SB	Left Turn	2	2	100.0%	2.6	5.8	A
	Through						
	Right Turn	25	27	108.8%	4.7	1.7	A
	Subtotal	27	29	108.1%	5.1	1.5	A
EB	Left Turn	121	121	100.0%	5.1	0.9	A
	Through	508	511	100.6%	1.9	0.4	A
	Right Turn	10	10	98.0%	0.2	0.3	A
	Subtotal	639	642	100.5%	2.5	0.5	A
WB	Left Turn						
	Through	588	585	99.5%	0.6	0.1	A
	Right Turn	10	10	102.0%	0.3	0.3	A
	Subtotal	598	595	99.5%	0.6	0.1	A
Total		1,284	1,235	100.1%	1.8	0.4	A

Intersection 10 Rocklin Manor East/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	9	91.0%	14.9	11.1	B
	Through						
	Right Turn	10	13	126.0%	6.8	4.5	A
	Subtotal	20	22	108.5%	10.3	6.0	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	510	509	99.9%	0.3	0.1	A
	Right Turn	10	10	102.0%	0.1	0.1	A
	Subtotal	520	520	99.9%	0.3	0.1	A
WB	Left Turn	10	10	96.0%	5.3	3.9	A
	Through	588	586	99.6%	3.0	0.2	A
	Right Turn						
	Subtotal	598	595	99.6%	3.0	0.2	A
Total		1,138	1,137	99.9%	2.0	0.2	A

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	474	466	98.2%	14.2	3.4	B
	Through	80	87	109.3%	11.4	1.0	B
	Right Turn						
	Subtotal	554	553	99.8%	13.7	3.0	B
SB	Left Turn						
	Through	50	49	98.0%	12.1	1.3	B
	Right Turn	104	109	104.6%	6.4	1.7	A
	Subtotal	154	158	102.5%	8.3	1.5	A
EB	Left Turn	101	96	95.0%	14.6	3.2	B
	Through						
	Right Turn	399	404	101.3%	13.0	3.0	B
	Subtotal	500	500	100.0%	13.3	2.9	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,208	1,211	100.2%	12.8	2.5	B

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	272	264	97.1%	38.4	3.9	D
	Through	525	521	99.2%	15.4	1.3	B
	Right Turn	90	84	92.8%	7.6	0.9	A
	Subtotal	887	869	97.9%	21.5	1.0	C
SB	Left Turn	80	77	96.4%	47.1	6.4	D
	Through	939	934	99.5%	28.3	3.9	C
	Right Turn	70	74	105.7%	8.6	2.0	A
	Subtotal	1,089	1,085	99.7%	28.3	3.7	C
EB	Left Turn	80	79	99.0%	46.5	10.1	D
	Through	30	29	97.0%	43.6	14.1	D
	Right Turn	121	119	98.2%	14.7	5.0	B
	Subtotal	231	227	98.3%	29.4	6.7	C
WB	Left Turn	150	147	98.1%	44.6	6.0	D
	Through	30	29	95.7%	50.7	20.5	D
	Right Turn	40	40	98.8%	7.7	2.6	A
	Subtotal	220	215	97.9%	37.9	5.3	D
Total		2,427	2,396	98.7%	26.8	2.4	C

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	105	107	101.9%	40.6	7.8	D
	Through	597	582	97.5%	16.7	4.1	B
	Right Turn	250	253	101.2%	4.5	0.4	A
	Subtotal	952	942	99.0%	15.8	2.9	B
SB	Left Turn						
	Through	1,220	1,208	99.0%	22.0	4.0	C
	Right Turn	20	22	110.0%	6.8	2.2	A
	Subtotal	1,240	1,230	99.2%	21.7	3.9	C
EB	Left Turn	20	20	98.0%	35.9	8.0	D
	Through						
	Right Turn	75	74	99.2%	9.4	3.3	A
	Subtotal	95	94	98.9%	15.6	4.7	B
WB	Left Turn	707	708	100.1%	30.7	7.3	C
	Through	80	86	107.9%	32.9	6.3	C
	Right Turn	270	269	99.4%	16.5	2.9	B
	Subtotal	1,057	1,053	100.5%	27.2	5.8	C
Total		3,344	3,329	99.5%	21.7	3.1	C

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,037	1,045	100.8%	19.9	2.2	B
	Right Turn	55	59	106.5%	4.9	1.4	A
	Subtotal	1,092	1,104	101.1%	19.2	2.2	B
SB	Left Turn	150	145	96.9%	93.8	37.1	F
	Through	1,372	1,365	99.5%	77.8	43.7	E
	Right Turn	190	182	95.7%	47.7	35.6	D
	Subtotal	1,712	1,692	98.8%	76.1	42.1	E
EB	Left Turn	240	230	95.7%	119.0	54.9	F
	Through	160	161	100.6%	124.3	55.9	F
	Right Turn	430	428	99.6%	168.8	59.2	F
	Subtotal	830	819	98.7%	146.3	56.8	F
WB	Left Turn	65	65	100.0%	47.0	11.6	D
	Through						
	Right Turn	110	112	101.8%	10.0	3.2	A
	Subtotal	175	177	101.1%	23.5	7.9	C
Total		3,809	3,791	99.5%	70.6	23.4	E

Intersection 15 **Sierra College Blvd/Schriber Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	11	108.0%	45.4	12.7	D
	Through	952	963	101.2%	4.2	1.0	A
	Right Turn	20	22	109.0%	3.3	3.6	A
	Subtotal	982	996	101.4%	4.8	1.2	A
SB	Left Turn						
	Through	1,837	1,830	99.6%	11.8	1.6	B
	Right Turn	30	26	87.7%	9.7	3.6	A
	Subtotal	1,867	1,856	99.4%	11.8	1.6	B
EB	Left Turn	10	10	101.0%	61.0	61.7	E
	Through	10	10	96.0%	41.9	19.4	D
	Right Turn	10	9	93.0%	35.8	13.2	D
	Subtotal	30	29	96.7%	46.2	10.5	D
WB	Left Turn	60	59	98.5%	51.5	15.0	D
	Through	10	9	89.0%	43.6	22.2	D
	Right Turn	130	129	98.9%	22.2	17.3	C
	Subtotal	200	197	98.3%	32.3	14.7	C
Total		3,079	3,077	99.9%	11.2	1.5	B

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	8	81.0%	45.1	13.1	D
	Through	952	970	101.8%	10.5	1.9	B
	Right Turn	30	29	95.0%	7.1	1.6	A
	Subtotal	992	1,006	101.4%	10.8	1.9	B
SB	Left Turn	30	31	103.0%	37.2	12.2	D
	Through	1,867	1,859	99.6%	9.6	2.3	A
	Right Turn	10	9	94.0%	2.5	1.2	A
	Subtotal	1,907	1,899	99.6%	10.0	2.5	A
EB	Left Turn	10	9	87.0%	21.8	16.5	C
	Through	10	8	78.0%	32.8	19.6	C
	Right Turn	10	12	116.0%	18.3	10.6	B
	Subtotal	30	28	93.7%	25.1	8.9	C
WB	Left Turn	30	28	94.0%	34.7	6.8	C
	Through	10	11	111.0%	32.5	11.9	C
	Right Turn	10	10	98.0%	8.8	6.5	A
	Subtotal	50	49	98.2%	29.5	3.0	C
Total		2,979	2,982	100.1%	10.9	2.1	B

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr-North Village Street A** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	288	285	98.8%	39.3	4.0	D
	Through	871	881	101.2%	12.1	3.0	B
	Right Turn	13	13	100.0%	10.8	5.8	B
	Subtotal	1,172	1,179	100.6%	18.5	2.5	B
SB	Left Turn	14	13	90.7%	29.8	16.7	C
	Through	1,183	1,177	99.5%	27.2	5.4	C
	Right Turn	710	708	99.7%	15.8	3.4	B
	Subtotal	1,907	1,897	99.5%	23.1	4.1	C
EB	Left Turn	70	71	101.7%	40.8	11.8	D
	Through						
	Right Turn	132	134	101.6%	15.1	3.6	B
	Subtotal	202	205	101.6%	23.8	6.5	C
WB	Left Turn	66	65	98.8%	37.8	11.5	D
	Through						
	Right Turn	41	42	103.4%	7.4	3.1	A
	Subtotal	107	108	100.6%	26.8	9.1	C
Total		3,388	3,339	100.0%	21.6	3.3	C

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,104	1,106	100.2%	0.4	0.1	A
	Right Turn						
	Subtotal	1,104	1,106	100.2%	0.4	0.1	A
SB	Left Turn						
	Through	1,318	1,317	99.9%	6.3	0.5	A
	Right Turn	100	100	99.7%	5.9	0.5	A
	Subtotal	1,418	1,417	99.9%	6.2	0.5	A
EB	Left Turn						
	Through						
	Right Turn	10	9	90.0%	4.1	3.8	A
	Subtotal	10	9	90.0%	4.1	3.8	A
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,532	2,532	100.0%	3.7	0.3	A

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	50	48	96.6%	37.4	9.8	D
	Through	1,024	1,029	100.4%	12.4	2.0	B
	Right Turn	10	11	106.0%	4.7	4.4	A
	Subtotal	1,084	1,037	100.3%	13.3	2.2	B
SB	Left Turn	30	29	95.0%	41.4	13.1	D
	Through	1,033	1,034	100.1%	16.1	3.1	B
	Right Turn	31	32	103.5%	12.7	3.3	B
	Subtotal	1,094	1,094	100.0%	16.5	3.1	B
EB	Left Turn	73	76	104.5%	25.5	3.9	C
	Through	10	9	90.0%	32.1	16.5	C
	Right Turn	54	51	93.7%	15.3	4.2	B
	Subtotal	137	136	99.2%	22.3	2.7	C
WB	Left Turn	60	57	94.2%	24.3	5.7	C
	Through	10	10	99.0%	30.9	18.6	C
	Right Turn	80	80	99.6%	18.4	3.6	B
	Subtotal	150	146	97.4%	21.8	5.0	C
Total		2,465	2,454	100.0%	15.7	2.5	B

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	207	208	100.7%	4.6	3.7	A
	Right Turn						
	Subtotal	207	208	100.7%	4.6	3.7	A
SB	Left Turn						
	Through	144	140	97.2%	0.5	0.1	A
	Right Turn	10	9	94.0%	0.2	0.1	A
	Subtotal	154	149	97.0%	0.4	0.1	A
EB	Left Turn						
	Through						
	Right Turn	10	10	101.0%	2.8	0.6	A
	Subtotal	10	10	101.0%	2.8	0.6	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		371	368	99.2%	3.1	2.4	A

Intersection 21 **El Don Dr/Southern Retail Access-South Village Dwy 2** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	7	71.0%	2.8	2.4	A
	Through	177	180	101.5%	2.6	2.3	A
	Right Turn						
	Subtotal	187	187	99.8%	2.6	2.3	A
SB	Left Turn	50	49	97.0%	2.2	0.7	A
	Through	94	94	99.5%	0.2	0.2	A
	Right Turn	10	10	96.0%	0.0	0.1	A
	Subtotal	154	152	98.4%	0.8	0.2	A
EB	Left Turn	20	19	93.5%	6.6	3.0	A
	Through						
	Right Turn	10	11	108.0%	3.2	0.7	A
	Subtotal	30	30	98.3%	6.0	2.0	A
WB	Left Turn	1	1	50.0%	1.1	1.9	A
	Through						
	Right Turn	10	10	100.0%	3.0	1.6	A
	Subtotal	11	11	95.5%	3.1	1.6	A
Total		382	378	99.0%	2.4	1.4	A

Intersection 22 **El Don Dr/Wildflower Ln-South Village Dwy 1** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	9	90.0%	4.7	2.0	A
	Through	154	157	102.0%	5.4	0.3	A
	Right Turn	18	17	93.3%	3.4	0.5	A
	Subtotal	182	183	100.5%	5.1	0.2	A
SB	Left Turn						
	Through	85	84	98.4%	5.7	0.4	A
	Right Turn	20	21	107.0%	3.6	0.5	A
	Subtotal	105	105	100.0%	5.2	0.5	A
EB	Left Turn	30	28	92.3%	4.1	0.5	A
	Through						
	Right Turn	10	9	85.0%	2.5	0.4	A
	Subtotal	40	36	90.5%	3.6	0.5	A
WB	Left Turn	1	0	30.0%	0.0	0.0	A
	Through						
	Right Turn	3	2	76.7%	1.2	1.4	A
	Subtotal	4	3	65.0%	1.2	1.4	A
Total		331	327	98.7%	5.0	0.2	A

Intersection 23 **El Don Dr/Corona Cir-South Village Street A** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	10	10	104.0%	1.3	1.0	A
	Through	161	158	98.2%	0.2	0.1	A
	Right Turn	1	2	150.0%	0.0	0.0	A
	Subtotal	172	170	98.8%	0.3	0.2	A
SB	Left Turn	4	3	77.5%	2.3	1.6	A
	Through	82	78	95.4%	1.4	0.2	A
	Right Turn	10	10	97.0%	1.3	0.8	A
	Subtotal	96	91	94.8%	1.5	0.2	A
EB	Left Turn	10	10	104.0%	4.4	1.8	A
	Through						
	Right Turn	10	10	104.0%	2.5	0.2	A
	Subtotal	20	21	104.0%	3.8	0.9	A
WB	Left Turn	3	3	90.0%	0.7	1.6	A
	Through						
	Right Turn	11	14	123.6%	2.7	1.1	A
	Subtotal	14	16	116.4%	3.1	0.6	A
Total		302	298	98.7%	1.1	0.2	A

Intersection 24 **Sierra College Blvd/Street G** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	1,083	1,088	100.5%	0.7	0.1	A
	Right Turn	21	19	92.4%	0.5	0.1	A
	Subtotal	1,104	1,108	100.3%	0.6	0.1	A
SB	Left Turn	11	10	90.9%	13.3	6.6	B
	Through	1,418	1,417	99.9%	5.6	0.7	A
	Right Turn						
	Subtotal	1,429	1,427	99.9%	5.7	0.7	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	79	81	102.8%	10.1	3.3	B
	Subtotal	79	81	102.8%	10.1	3.3	B
Total		2,612	2,616	100.1%	3.7	0.5	A

Intersection 25 **Sierra College Blvd/North Village Dwy 3** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,092	1,096	100.3%	3.4	0.2	A
	Right Turn	22	27	121.4%	2.3	0.8	A
	Subtotal	1,114	1,122	100.7%	3.4	0.2	A
SB	Left Turn	41	40	97.8%	12.0	4.8	B
	Through	1,287	1,287	100.0%	1.5	0.2	A
	Right Turn						
	Subtotal	1,328	1,328	100.0%	1.8	0.3	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	12	11	91.7%	8.9	5.7	A
	Subtotal	12	11	91.7%	8.9	5.7	A
Total		2,454	2,461	100.3%	2.6	0.2	A

Intersection 26 **South Village Dwy 3/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	3	3	86.7%	2.1	4.8	A
	Subtotal	3	3	86.7%	2.1	4.8	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,133	1,130	99.7%	1.2	0.2	A
	Right Turn	42	47	112.1%	0.4	0.2	A
	Subtotal	1,175	1,177	100.1%	1.2	0.2	A
WB	Left Turn						
	Through	656	654	99.7%	0.3	0.1	A
	Right Turn						
	Subtotal	656	654	99.7%	0.3	0.1	A
Total		1,834	1,833	99.9%	0.9	0.1	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Existing Plus Approved Plus Project Conditions
AM Peak Hour

Intersection 27 South Village Dwy 4/Rocklin Rd Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	17	17	101.2%	10.9	9.5	B
	Subtotal	17	17	101.2%	10.9	9.5	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,060	1,054	99.5%	1.3	0.6	A
	Right Turn	76	78	103.2%	0.7	0.3	A
	Subtotal	1,136	1,133	99.7%	1.3	0.5	A
WB	Left Turn						
	Through	656	654	99.7%	2.5	0.1	A
	Right Turn						
	Subtotal	656	654	99.7%	2.5	0.1	A
Total		1,809	1,804	99.7%	1.7	0.4	A

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	50	49	97.6%	64.8	18.9	E
	Through	30	32	108.0%	68.2	31.1	E
	Right Turn	30	28	92.0%	42.1	19.0	D
	Subtotal	110	109	98.9%	59.8	17.4	E
SB	Left Turn	534	538	100.7%	84.7	50.8	F
	Through	30	29	95.0%	97.9	51.1	F
	Right Turn	200	206	102.8%	13.4	4.9	B
	Subtotal	764	772	101.1%	67.0	39.7	E
EB	Left Turn	200	184	92.2%	175.4	74.4	F
	Through	682	654	95.9%	90.2	39.0	F
	Right Turn	20	19	93.0%	65.4	31.4	E
	Subtotal	902	857	95.0%	106.2	43.3	F
WB	Left Turn	60	57	94.7%	111.0	35.5	F
	Through	792	768	97.0%	50.2	11.1	D
	Right Turn	555	527	95.0%	21.3	8.4	C
	Subtotal	1,407	1,352	96.1%	41.4	11.0	D
Total		3,183	3,090	97.1%	66.4	24.8	E

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	75	73	97.1%	31.8	4.8	C
	Through	10	9	92.0%	55.0	30.6	D
	Right Turn	310	313	100.9%	61.5	36.7	E
	Subtotal	395	395	99.9%	56.3	31.6	E
EB	Left Turn						
	Through	796	752	94.4%	119.7	13.4	F
	Right Turn	500	473	94.6%	57.1	8.0	E
	Subtotal	1,296	1,225	94.5%	96.7	10.3	F
WB	Left Turn	722	618	85.5%	67.9	3.2	E
	Through	1,257	1,210	96.2%	22.4	7.5	C
	Right Turn						
	Subtotal	1,979	1,827	92.3%	37.7	5.4	D
Total		3,670	3,447	93.9%	61.5	8.4	E

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	580	591	101.8%	64.3	18.6	E
	Through	10	10	103.0%	76.5	38.1	E
	Right Turn	680	680	100.0%	42.1	10.0	D
	Subtotal	1,270	1,231	100.9%	53.1	14.2	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	230	216	94.0%	64.7	12.4	E
	Through	641	618	96.5%	10.5	2.1	B
	Right Turn						
	Subtotal	871	834	95.8%	24.4	5.0	C
WB	Left Turn						
	Through	1,399	1,236	88.3%	55.0	5.0	E
	Right Turn	98	90	91.4%	42.0	7.5	D
	Subtotal	1,497	1,326	88.5%	54.2	5.1	D
Total		3,638	3,441	94.6%	46.2	5.0	D

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	120	118	98.7%	41.7	6.1	D
	Through						
	Right Turn	31	33	106.1%	9.4	3.5	A
	Subtotal	151	151	100.2%	34.0	5.8	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	60	57	94.7%	50.1	9.7	D
	Through	1,181	1,152	98.4%	7.2	1.9	A
	Right Turn	170	168	99.1%	5.7	1.7	A
	Subtotal	1,411	1,387	98.3%	8.7	2.2	A
WB	Left Turn	32	26	82.2%	213.3	30.6	F
	Through	1,367	1,193	87.3%	128.4	14.3	F
	Right Turn						
	Subtotal	1,399	1,219	87.1%	130.4	14.3	F
Total		2,961	2,757	93.1%	63.2	6.6	E

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	191	181	94.8%	184.6	99.8	F
	Through	10	11	109.0%	175.0	104.8	F
	Right Turn	38	39	102.1%	131.5	93.0	F
	Subtotal	239	231	96.5%	176.0	98.0	F
SB	Left Turn	60	56	93.7%	130.9	39.2	F
	Through	20	20	98.0%	143.0	64.4	F
	Right Turn	360	344	95.5%	77.8	38.1	E
	Subtotal	440	420	95.3%	88.3	39.6	F
EB	Left Turn	270	259	95.9%	81.5	17.3	F
	Through	834	818	98.0%	50.1	11.1	D
	Right Turn	148	148	99.9%	46.9	12.1	D
	Subtotal	1,252	1,224	97.8%	56.6	11.6	E
WB	Left Turn	44	39	88.9%	316.0	99.2	F
	Through	908	790	87.0%	317.7	89.2	F
	Right Turn	50	44	87.0%	297.4	88.8	F
	Subtotal	1,002	873	87.1%	316.4	89.4	F
Total		2,933	2,747	93.7%	152.1	28.6	F

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	8	79.0%	54.2	51.7	D
	Through						
	Right Turn	10	10	101.0%	28.0	40.7	C
	Subtotal	20	18	90.0%	41.9	44.5	D
SB	Left Turn	351	349	99.3%	41.2	18.1	D
	Through						
	Right Turn	170	168	98.5%	36.5	21.8	D
	Subtotal	521	516	99.1%	39.4	18.3	D
EB	Left Turn	124	117	94.6%	49.6	8.6	D
	Through	688	669	97.3%	20.3	4.7	C
	Right Turn	20	20	101.0%	15.1	4.6	B
	Subtotal	832	807	96.9%	24.2	4.7	C
WB	Left Turn	20	18	87.5%	108.0	70.5	F
	Through	653	615	94.2%	80.0	64.8	F
	Right Turn	125	118	94.2%	73.2	63.9	E
	Subtotal	798	750	94.0%	79.5	64.3	E
Total		2,171	2,091	96.3%	46.7	25.8	D

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	304	286	94.2%	161.6	62.3	F
	Through	895	837	93.5%	167.1	68.8	F
	Right Turn	116	113	97.0%	168.0	72.8	F
	Subtotal	1,315	1,236	94.0%	166.1	67.6	F
SB	Left Turn	286	275	96.1%	115.4	46.9	F
	Through	714	719	100.7%	51.0	16.2	D
	Right Turn	215	213	99.3%	24.1	15.3	C
	Subtotal	1,215	1,207	99.3%	61.9	23.7	E
EB	Left Turn	358	353	98.6%	110.7	47.8	F
	Through	324	323	99.5%	49.3	17.9	D
	Right Turn	367	354	96.4%	17.6	5.0	B
	Subtotal	1,049	1,029	98.1%	60.7	24.3	E
WB	Left Turn	126	130	102.9%	75.8	19.5	E
	Through	299	291	97.3%	90.3	22.1	F
	Right Turn	302	296	97.9%	97.9	33.3	F
	Subtotal	727	716	98.5%	91.3	25.5	F
Total		4,306	4,139	97.3%	97.8	22.5	F

Intersection 8 **North Village Dwy 1-Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	20	98.0%	23.3	18.2	C
	Through	10	12	122.0%	17.3	8.1	C
	Right Turn	10	13	125.0%	4.4	2.4	A
	Subtotal	40	44	110.8%	16.4	7.9	C
SB	Left Turn	11	12	105.5%	84.0	114.9	F
	Through						
	Right Turn	82	79	96.5%	73.0	108.4	F
	Subtotal	93	91	97.5%	74.9	109.1	F
EB	Left Turn	45	42	92.2%	7.5	2.7	A
	Through	581	566	97.5%	3.2	0.5	A
	Right Turn	100	99	98.9%	2.0	0.4	A
	Subtotal	726	707	97.4%	3.3	0.5	A
WB	Left Turn	10	8	83.0%	3.2	3.0	A
	Through	625	623	99.7%	8.4	11.2	A
	Right Turn	11	11	96.4%	6.2	11.8	A
	Subtotal	646	642	99.4%	8.3	11.0	A
Total		1,505	1,484	98.6%	11.1	12.5	B

Intersection 9 North Village Dwy 2-Rocklin Manor Central/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	18	91.5%	16.8	9.9	C
	Through						
	Right Turn						
	Subtotal	20	18	91.5%	16.8	9.9	C
SB	Left Turn	11	12	104.5%	13.7	7.8	B
	Through						
	Right Turn	127	118	93.1%	5.7	3.9	A
	Subtotal	138	130	94.1%	6.3	4.1	A
EB	Left Turn	39	34	87.9%	3.6	1.4	A
	Through	543	539	99.3%	1.1	0.3	A
	Right Turn	20	18	90.0%	0.6	0.5	A
	Subtotal	602	592	98.3%	1.2	0.3	A
WB	Left Turn	10	10	103.0%	3.2	3.3	A
	Through	499	504	101.0%	0.9	0.9	A
	Right Turn	3	4	123.3%	0.1	0.1	A
	Subtotal	512	518	101.1%	1.0	0.9	A
Total		1,272	1,258	98.9%	1.9	0.9	A

Intersection 10 Rocklin Manor East/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	10	98.0%	10.1	12.5	B
	Through						
	Right Turn						
	Subtotal	10	10	98.0%	10.1	12.5	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	544	537	98.7%	0.4	0.1	A
	Right Turn	10	11	114.0%	0.0	0.1	A
	Subtotal	554	549	99.0%	0.4	0.1	A
WB	Left Turn	10	10	104.0%	6.2	2.9	A
	Through	502	508	101.1%	2.6	0.3	A
	Right Turn						
	Subtotal	512	518	101.2%	2.7	0.3	A
Total		1,076	1,076	100.0%	1.6	0.1	A

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	426	433	101.7%	10.2	1.4	B
	Through	90	95	105.7%	10.3	0.5	B
	Right Turn						
	Subtotal	516	529	102.4%	10.2	1.2	B
SB	Left Turn						
	Through	50	46	92.8%	10.1	1.0	B
	Right Turn	81	77	94.9%	3.9	0.6	A
	Subtotal	131	123	94.1%	6.1	0.7	A
EB	Left Turn	85	86	101.2%	16.5	2.6	C
	Through						
	Right Turn	459	450	98.0%	13.7	3.2	B
	Subtotal	544	536	98.5%	14.1	3.0	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,191	1,137	99.7%	11.6	1.7	B

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	241	232	96.4%	47.6	6.2	D
	Through	964	953	98.9%	20.5	5.2	C
	Right Turn	80	76	95.0%	10.5	2.9	B
	Subtotal	1,285	1,261	98.2%	24.8	4.9	C
SB	Left Turn	60	58	96.0%	55.4	13.9	E
	Through	923	917	99.3%	40.3	16.9	D
	Right Turn	80	80	100.1%	18.7	16.5	B
	Subtotal	1,063	1,054	99.2%	39.3	16.5	D
EB	Left Turn	160	156	97.4%	37.4	5.7	D
	Through	30	30	100.3%	44.2	15.6	D
	Right Turn	272	275	101.0%	19.8	4.1	B
	Subtotal	462	461	99.7%	27.3	4.3	C
WB	Left Turn	110	110	99.6%	51.4	29.4	D
	Through	20	20	102.0%	48.2	16.7	D
	Right Turn	40	39	98.5%	14.2	5.1	B
	Subtotal	170	169	99.6%	43.1	19.7	D
Total		2,980	2,946	98.9%	31.6	9.1	C

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	296	289	97.7%	43.6	6.3	D
	Through	1,025	1,005	98.0%	18.7	2.3	B
	Right Turn	552	541	97.9%	8.4	0.8	A
	Subtotal	1,873	1,834	97.9%	19.6	2.2	B
SB	Left Turn						
	Through	1,305	1,292	99.0%	37.4	6.8	D
	Right Turn	60	60	100.5%	13.5	4.0	B
	Subtotal	1,365	1,352	99.0%	36.3	6.7	D
EB	Left Turn	60	60	99.5%	40.6	7.4	D
	Through						
	Right Turn	345	348	100.8%	21.6	3.1	C
	Subtotal	405	407	100.6%	24.2	2.1	C
WB	Left Turn	515	516	100.2%	32.1	2.2	C
	Through	110	120	108.8%	39.3	6.2	D
	Right Turn	240	238	99.3%	20.8	2.9	C
	Subtotal	865	874	101.1%	29.8	1.6	C
Total		4,508	4,458	99.1%	27.1	2.6	C

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,739	1,690	97.2%	21.1	4.5	C
	Right Turn	146	138	94.7%	10.4	3.2	B
	Subtotal	1,885	1,828	97.0%	20.2	4.3	C
SB	Left Turn	310	309	99.6%	48.0	3.5	D
	Through	955	951	99.6%	18.1	1.6	B
	Right Turn	340	339	99.6%	8.1	0.7	A
	Subtotal	1,605	1,598	99.6%	21.9	1.1	C
EB	Left Turn	400	393	98.3%	49.5	8.8	D
	Through	350	352	100.6%	44.8	3.8	D
	Right Turn	193	195	101.2%	25.0	4.5	C
	Subtotal	943	941	99.8%	42.9	3.4	D
WB	Left Turn	115	114	99.2%	47.9	7.4	D
	Through						
	Right Turn	310	311	100.3%	26.2	5.7	C
	Subtotal	425	425	100.0%	32.1	6.4	C
Total		4,858	4,792	98.6%	26.6	1.7	C

Intersection 15 **Sierra College Blvd/Schriber Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	11	114.0%	35.9	13.8	D
	Through	1,795	1,733	96.5%	6.7	1.7	A
	Right Turn	50	49	97.6%	5.5	3.2	A
	Subtotal	1,855	1,793	96.7%	6.8	1.7	A
SB	Left Turn						
	Through	1,233	1,228	99.6%	9.1	3.2	A
	Right Turn	30	31	102.7%	6.1	2.6	A
	Subtotal	1,263	1,258	99.6%	9.0	3.2	A
EB	Left Turn	40	41	101.5%	48.9	57.5	D
	Through	10	10	95.0%	43.1	27.5	D
	Right Turn	20	19	96.0%	12.4	7.9	B
	Subtotal	70	69	99.0%	36.0	35.4	D
WB	Left Turn	20	19	95.0%	30.2	10.9	C
	Through	10	12	116.0%	36.0	13.9	D
	Right Turn	50	53	106.8%	19.6	5.0	B
	Subtotal	80	84	105.0%	24.3	5.4	C
Total		3,268	3,205	98.1%	8.9	2.8	A

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	11	109.0%	45.4	18.0	D
	Through	1,825	1,767	96.8%	28.3	7.5	C
	Right Turn	60	61	101.8%	28.3	11.3	C
	Subtotal	1,895	1,839	97.0%	28.4	7.5	C
SB	Left Turn	50	46	91.6%	37.6	8.1	D
	Through	1,183	1,180	99.8%	7.4	1.6	A
	Right Turn	40	38	94.8%	2.5	0.4	A
	Subtotal	1,273	1,264	99.3%	8.4	1.4	A
EB	Left Turn	10	8	83.0%	31.1	18.8	C
	Through	10	11	114.0%	47.7	11.9	D
	Right Turn	10	10	104.0%	11.5	8.5	B
	Subtotal	30	30	100.3%	32.6	11.5	C
WB	Left Turn	60	65	108.0%	38.2	8.8	D
	Through	10	11	107.0%	39.6	16.3	D
	Right Turn	10	12	120.0%	11.6	6.4	B
	Subtotal	80	88	109.4%	34.7	7.0	C
Total		3,278	3,220	98.2%	20.5	4.7	C

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr-North Village Street A** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	234	220	94.2%	60.6	12.3	E
	Through	1,270	1,213	95.5%	37.1	4.0	D
	Right Turn	45	45	99.1%	36.2	11.3	D
	Subtotal	1,549	1,478	95.4%	40.5	4.4	D
SB	Left Turn	48	46	96.5%	79.9	15.2	E
	Through	990	992	100.2%	41.6	7.9	D
	Right Turn	220	226	102.9%	5.2	0.8	A
	Subtotal	1,258	1,265	100.5%	36.6	7.0	D
EB	Left Turn	600	598	99.6%	29.3	1.6	C
	Through						
	Right Turn	261	263	100.8%	22.3	2.3	C
	Subtotal	861	861	100.0%	27.2	1.7	C
WB	Left Turn	40	39	98.5%	60.2	14.0	E
	Through						
	Right Turn	25	28	110.8%	13.4	6.5	B
	Subtotal	65	67	103.2%	41.5	12.7	D
Total		3,733	3,670	98.3%	35.9	3.6	D

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,562	1,492	95.5%	0.7	0.1	A
	Right Turn						
	Subtotal	1,562	1,492	95.5%	0.7	0.1	A
SB	Left Turn						
	Through	1,239	1,245	100.5%	9.3	7.9	A
	Right Turn	40	38	95.5%	8.0	5.4	A
	Subtotal	1,279	1,283	100.3%	9.3	7.8	A
EB	Left Turn						
	Through						
	Right Turn	20	18	90.0%	7.7	5.2	A
	Subtotal	20	18	90.0%	7.7	5.2	A
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,861	2,793	97.6%	4.6	3.4	A

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	36	34	95.3%	61.7	43.4	E
	Through	1,194	1,159	97.1%	39.1	54.4	D
	Right Turn	30	32	106.3%	38.9	60.0	D
	Subtotal	1,260	1,225	97.2%	39.7	54.0	D
SB	Left Turn	130	130	100.3%	38.7	8.2	D
	Through	1,014	1,000	98.6%	8.9	2.0	A
	Right Turn	93	98	105.5%	9.4	2.2	A
	Subtotal	1,237	1,229	99.3%	12.2	1.7	B
EB	Left Turn	41	41	99.3%	37.9	16.5	D
	Through	10	9	91.0%	33.6	18.8	C
	Right Turn	28	29	103.9%	19.9	16.0	B
	Subtotal	79	79	99.9%	32.3	15.3	C
WB	Left Turn	20	18	90.0%	29.8	13.0	C
	Through	10	9	92.0%	31.4	15.6	C
	Right Turn	50	51	102.0%	15.0	7.1	B
	Subtotal	80	78	97.8%	19.6	5.2	B
Total		2,656	2,611	98.3%	26.1	26.5	C

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	239	233	97.7%	46.7	28.8	E
	Right Turn						
	Subtotal	239	233	97.7%	46.7	28.8	E
SB	Left Turn						
	Through	192	189	98.2%	0.6	0.1	A
	Right Turn	10	10	95.0%	0.3	0.2	A
	Subtotal	202	198	98.0%	0.6	0.1	A
EB	Left Turn						
	Through						
	Right Turn	10	9	94.0%	3.2	1.1	A
	Subtotal	10	9	94.0%	3.2	1.1	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		451	441	97.7%	24.1	14.7	C

Intersection 21 **El Don Dr/Southern Retail Access-South Village Dwy 2** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	7	68.0%	25.1	35.3	D
	Through	151	155	102.4%	51.4	50.5	F
	Right Turn	1	1	120.0%	8.6	25.2	A
	Subtotal	162	163	100.4%	50.5	49.4	F
SB	Left Turn	9	8	84.4%	35.5	82.8	E
	Through	183	182	99.5%	0.3	0.2	A
	Right Turn	10	9	87.0%	0.1	0.1	A
	Subtotal	202	198	98.2%	1.1	1.6	A
EB	Left Turn	40	36	90.0%	117.9	159.9	F
	Through						
	Right Turn	10	11	107.0%	120.4	216.2	F
	Subtotal	50	47	93.4%	114.1	160.3	F
WB	Left Turn	4	4	102.5%	34.4	100.8	D
	Through						
	Right Turn	48	45	94.6%	93.7	141.5	F
	Subtotal	52	50	95.2%	92.6	141.4	F
Total		466	457	98.1%	36.3	42.2	E

Intersection 22 **El Don Dr/Wildflower Ln-South Village Dwy 1** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	11	109.0%	44.8	121.5	E
	Through	120	121	101.0%	23.5	33.0	C
	Right Turn	1	1	100.0%	0.6	1.3	A
	Subtotal	131	133	101.6%	23.9	35.3	C
SB	Left Turn						
	Through	167	164	98.4%	6.4	0.5	A
	Right Turn	30	32	105.0%	4.2	0.4	A
	Subtotal	197	196	99.4%	6.1	0.6	A
EB	Left Turn	20	19	94.5%	23.0	53.1	C
	Through						
	Right Turn	10	11	114.0%	21.3	40.5	C
	Subtotal	30	30	101.0%	21.4	46.5	C
WB	Left Turn	3	1	40.0%	0.9	1.6	A
	Through						
	Right Turn	22	25	112.7%	17.0	22.5	C
	Subtotal	25	26	104.0%	16.2	21.3	C
Total		383	385	100.6%	15.4	19.4	C

Intersection 23 **El Don Dr/Corona Cir-South Village Street A** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	7	71.0%	1.2	0.7	A
	Through	114	116	102.1%	0.1	0.1	A
	Right Turn	3	4	120.0%	0.0	0.1	A
	Subtotal	127	127	100.1%	0.2	0.1	A
SB	Left Turn	13	12	89.2%	2.4	0.9	A
	Through	147	143	97.3%	1.8	0.3	A
	Right Turn	20	20	101.5%	1.8	0.6	A
	Subtotal	180	175	97.2%	1.9	0.3	A
EB	Left Turn	10	9	94.0%	3.7	3.1	A
	Through						
	Right Turn	10	11	106.0%	4.2	2.2	A
	Subtotal	20	20	100.0%	4.4	1.6	A
WB	Left Turn	2	2	90.0%	2.9	4.1	A
	Through						
	Right Turn	7	6	90.0%	2.3	1.3	A
	Subtotal	9	8	90.0%	3.1	1.5	A
Total		336	330	98.3%	1.4	0.3	A

Intersection 24 **Sierra College Blvd/Street G** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,500	1,431	95.4%	0.9	0.1	A
	Right Turn	62	61	97.9%	0.7	0.2	A
	Subtotal	1,562	1,492	95.5%	0.9	0.1	A
SB	Left Turn	36	35	98.3%	23.5	10.6	C
	Through	1,279	1,284	100.4%	7.9	5.4	A
	Right Turn						
	Subtotal	1,315	1,319	100.3%	8.3	5.4	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	49	48	97.3%	7.4	1.5	A
	Subtotal	49	48	97.3%	7.4	1.5	A
Total		2,926	2,859	97.7%	4.3	2.3	A

Intersection 25 **Sierra College Blvd/North Village Dwy 3** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,522	1,456	95.7%	3.7	0.2	A
	Right Turn	23	20	88.3%	2.7	0.8	A
	Subtotal	1,545	1,477	95.6%	3.6	0.2	A
SB	Left Turn	44	43	98.2%	25.1	11.8	D
	Through	1,215	1,217	100.1%	4.9	6.7	A
	Right Turn						
	Subtotal	1,259	1,260	100.1%	5.6	6.7	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	40	36	90.8%	7.8	2.3	A
	Subtotal	40	36	90.8%	7.8	2.3	A
Total		2,844	2,773	97.5%	4.5	2.9	A

Intersection 26 **South Village Dwy 3/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	32	29	89.1%	10.3	4.9	B
	Subtotal	32	29	89.1%	10.3	4.9	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	957	934	97.6%	3.8	0.4	A
	Right Turn	9	10	111.1%	2.6	1.5	A
	Subtotal	966	944	97.7%	3.8	0.4	A
WB	Left Turn						
	Through	1,002	894	89.2%	101.6	33.6	F
	Right Turn						
	Subtotal	1,002	894	89.2%	101.6	33.6	F
Total		2,000	1,866	93.3%	49.1	15.6	E

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Existing Plus Approved Plus Project Conditions
PM Peak Hour

Intersection 27 South Village Dwy 4/Rocklin Rd Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	80	83	103.1%	13.8	6.2	B
	Subtotal	80	83	103.1%	13.8	6.2	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	965	936	97.0%	2.2	0.3	A
	Right Turn	24	26	107.9%	1.3	0.6	A
	Subtotal	989	962	97.3%	2.2	0.3	A
WB	Left Turn						
	Through	1,002	925	92.4%	44.0	25.4	E
	Right Turn						
	Subtotal	1,002	925	92.4%	44.0	25.4	E
Total		2,071	1,970	95.1%	21.5	11.4	C

APPENDIX D: CUMULATIVE LOS CALCULATIONS

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
AM Peak Hour

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	20	18	90.5%	34.7	12.7	C
	Through	10	10	103.0%	34.9	17.5	C
	Right Turn	10	10	100.0%	9.1	9.2	A
	Subtotal	40	38	96.0%	28.8	9.0	C
SB	Left Turn	208	206	98.9%	29.0	3.6	C
	Through	10	11	110.0%	22.6	11.6	C
	Right Turn	160	162	101.1%	12.7	2.4	B
	Subtotal	378	378	100.1%	21.6	2.7	C
EB	Left Turn	190	193	101.5%	43.6	9.2	D
	Through	536	535	99.8%	10.2	1.6	B
	Right Turn	10	12	120.0%	4.6	3.2	A
	Subtotal	736	740	100.5%	18.3	3.3	B
WB	Left Turn	30	28	92.7%	51.0	10.9	D
	Through	1,170	1,115	95.3%	23.9	2.3	C
	Right Turn	572	558	97.5%	11.8	1.2	B
	Subtotal	1,772	1,701	96.0%	20.4	1.8	C
Total		2,926	2,857	97.6%	20.1	1.5	C

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	95	95	99.9%	58.4	39.2	E
	Through	10	11	114.0%	139.1	75.2	F
	Right Turn	440	433	98.4%	158.2	38.3	F
	Subtotal	545	539	98.9%	142.5	39.2	F
EB	Left Turn						
	Through	513	509	99.2%	37.3	4.0	D
	Right Turn	280	279	99.7%	10.0	1.8	A
	Subtotal	793	788	99.4%	27.8	3.4	C
WB	Left Turn	506	485	95.8%	24.9	8.6	C
	Through	1,434	1,365	95.2%	15.1	1.4	B
	Right Turn						
	Subtotal	1,940	1,850	95.4%	17.7	3.1	B
Total		3,278	3,178	96.9%	41.2	6.4	D

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
AM Peak Hour

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	780	741	94.9%	34.5	5.5	C
	Through	10	9	85.0%	48.1	24.5	D
	Right Turn	979	918	93.8%	30.2	5.0	C
	Subtotal	1,769	1,667	94.2%	32.2	5.2	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	90	89	98.4%	74.6	11.2	E
	Through	518	516	99.6%	9.2	1.2	A
	Right Turn						
	Subtotal	608	605	99.4%	18.2	2.2	B
WB	Left Turn						
	Through	1,160	1,115	96.2%	42.6	6.9	D
	Right Turn	93	92	98.5%	19.3	4.7	B
	Subtotal	1,253	1,207	96.3%	40.8	6.8	D
Total		3,630	3,479	95.8%	32.5	4.2	C

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	300	301	100.3%	34.1	3.5	C
	Through						
	Right Turn	78	80	102.7%	15.1	4.6	B
	Subtotal	378	381	100.8%	29.8	2.5	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	40	38	93.8%	55.2	9.1	E
	Through	1,298	1,250	96.3%	14.1	3.2	B
	Right Turn	170	166	97.8%	9.6	2.6	A
	Subtotal	1,508	1,454	96.4%	14.6	3.0	B
WB	Left Turn	43	39	91.2%	62.6	13.1	E
	Through	931	887	95.2%	19.0	6.5	B
	Right Turn						
	Subtotal	974	926	95.0%	21.0	6.2	C
Total		2,860	2,760	96.5%	19.0	3.1	B

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	260	258	99.3%	40.7	11.7	D
	Through	20	23	114.5%	34.6	16.9	C
	Right Turn	20	19	96.0%	21.7	12.7	C
	Subtotal	300	300	100.1%	39.0	12.3	D
SB	Left Turn	16	15	93.1%	35.4	19.9	D
	Through	10	11	109.0%	31.9	16.1	C
	Right Turn	89	95	106.3%	9.9	3.2	A
	Subtotal	115	120	104.7%	14.6	4.7	B
EB	Left Turn	526	512	97.4%	34.9	6.5	C
	Through	744	713	95.8%	25.1	2.2	C
	Right Turn	90	88	97.8%	15.4	3.0	B
	Subtotal	1,360	1,313	96.5%	28.4	3.0	C
WB	Left Turn	30	26	85.7%	41.9	8.7	D
	Through	599	549	91.6%	22.7	2.8	C
	Right Turn	149	135	90.5%	9.2	1.9	A
	Subtotal	778	709	91.2%	21.1	2.3	C
Total		2,553	2,443	95.7%	27.1	3.3	C

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	20	20	101.5%	27.9	13.7	C
	Through	10	12	120.0%	22.0	10.3	C
	Right Turn	20	20	101.5%	10.2	5.5	B
	Subtotal	50	53	105.2%	19.1	5.4	B
SB	Left Turn	38	38	100.5%	27.0	8.8	C
	Through	10	10	102.0%	26.7	17.6	C
	Right Turn	25	26	103.6%	5.8	1.7	A
	Subtotal	73	74	101.8%	20.1	7.2	C
EB	Left Turn	506	490	96.7%	25.8	4.7	C
	Through	509	484	95.1%	9.2	3.4	A
	Right Turn	10	11	107.0%	8.7	8.0	A
	Subtotal	1,025	984	96.0%	17.5	3.7	B
WB	Left Turn	20	17	83.0%	42.3	13.6	D
	Through	768	695	90.5%	19.5	3.5	B
	Right Turn	365	340	93.2%	12.9	1.3	B
	Subtotal	1,153	1,052	91.2%	17.7	2.4	B
Total		2,301	2,163	94.0%	17.8	2.8	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
AM Peak Hour

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	592	574	96.9%	160.2	43.4	F
	Through	1,441	1,416	98.2%	63.0	15.1	E
	Right Turn	90	92	102.7%	12.1	3.1	B
	Subtotal	2,123	2,082	98.1%	87.6	21.7	F
SB	Left Turn	171	116	67.7%	55.7	5.2	E
	Through	985	683	69.4%	40.4	5.2	D
	Right Turn	197	138	70.2%	19.8	3.7	B
	Subtotal	1,353	937	69.3%	39.5	4.1	D
EB	Left Turn	113	109	96.6%	47.8	6.6	D
	Through	172	162	94.0%	28.3	6.2	C
	Right Turn	282	274	97.3%	13.2	2.4	B
	Subtotal	567	545	96.2%	24.3	2.6	C
WB	Left Turn	110	107	96.8%	188.5	67.6	F
	Through	384	364	94.7%	186.8	58.2	F
	Right Turn	343	331	96.5%	203.3	59.0	F
	Subtotal	837	801	95.7%	194.0	59.6	F
Total		4,880	4,365	89.5%	90.4	17.0	F

Intersection 8 **Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	13	11	86.9%	149.2	91.2	F
	Through						
	Right Turn	1	2	150.0%	11.3	35.8	B
	Subtotal	14	13	91.4%	147.7	91.0	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	430	367	85.3%	2.6	0.3	A
	Right Turn	3	3	103.3%	0.8	0.9	A
	Subtotal	433	370	85.4%	2.5	0.3	A
WB	Left Turn						
	Through	824	796	96.6%	124.8	57.8	F
	Right Turn						
	Subtotal	824	796	96.6%	124.8	57.8	F
Total		1,271	1,178	92.7%	87.1	39.6	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
AM Peak Hour

Intersection 9 **Rocklin Manor Central/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	10	8	83.0%	176.7	214.4	F
	Through						
	Right Turn	1	1	120.0%	5.2	15.6	A
	Subtotal	11	10	86.4%	132.6	200.5	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	421	356	84.6%	0.9	0.1	A
	Right Turn	10	11	111.0%	0.1	0.1	A
	Subtotal	431	367	85.2%	0.9	0.1	A
WB	Left Turn						
	Through	814	799	98.2%	69.0	48.6	F
	Right Turn						
	Subtotal	814	799	98.2%	69.0	48.6	F
Total		1,256	1,176	93.6%	48.2	33.1	E

Intersection 10 **Rocklin Manor East/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	9	7	77.8%	80.4	124.6	F
	Through						
	Right Turn	2	2	120.0%	86.8	266.2	F
	Subtotal	11	9	85.5%	36.1	52.1	E
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	420	354	84.3%	0.2	0.1	A
	Right Turn	2	3	145.0%	0.0	0.0	A
	Subtotal	422	357	84.6%	0.2	0.1	A
WB	Left Turn	2	1	60.0%	11.4	35.5	B
	Through	805	800	99.4%	35.2	52.2	E
	Right Turn						
	Subtotal	807	801	99.3%	35.2	52.2	E
Total		1,240	1,168	94.2%	24.9	36.8	C

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	267	268	100.5%	7.7	1.6	A
	Through						
	Right Turn						
	Subtotal	267	268	100.5%	7.7	1.6	A
SB	Left Turn						
	Through						
	Right Turn	540	539	99.9%	11.8	1.9	B
	Subtotal	540	539	99.9%	11.8	1.9	B
EB	Left Turn	321	274	85.3%	11.4	2.3	B
	Through						
	Right Turn	101	84	83.3%	8.4	1.7	A
	Subtotal	422	358	84.8%	10.6	2.1	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,229	1,166	94.8%	10.5	1.4	B

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	405	283	69.8%	68.5	16.7	F
	Through	1,158	822	71.0%	31.4	9.6	C
	Right Turn	178	121	67.9%	27.8	9.4	C
	Subtotal	1,741	1,225	70.4%	39.6	11.1	D
SB	Left Turn	80	64	80.1%	367.9	62.5	F
	Through	1,347	1,152	85.6%	413.2	81.1	F
	Right Turn	140	119	85.0%	369.9	72.4	F
	Subtotal	1,567	1,336	85.2%	407.3	78.4	F
EB	Left Turn	90	85	94.2%	187.9	158.4	F
	Through	30	27	91.3%	140.3	169.3	F
	Right Turn	101	103	101.9%	94.8	61.1	F
	Subtotal	221	215	97.3%	141.1	121.8	F
WB	Left Turn	178	62	34.7%	1112.7	225.9	F
	Through	30	11	35.0%	932.7	151.3	F
	Right Turn	30	14	46.0%	954.2	305.4	F
	Subtotal	238	86	36.2%	925.0	348.6	F
Total		3,767	2,862	76.0%	239.5	22.8	F

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	119	89	74.5%	109.6	47.6	F
	Through	1,281	996	77.8%	20.2	18.4	C
	Right Turn	161	130	80.6%	9.3	11.2	A
	Subtotal	1,561	1,215	77.8%	26.2	19.0	C
SB	Left Turn						
	Through	1,577	1,256	79.7%	65.4	12.8	E
	Right Turn	100	83	83.4%	23.7	13.4	C
	Subtotal	1,677	1,340	79.9%	62.9	13.0	E
EB	Left Turn	50	46	92.6%	94.1	69.1	F
	Through						
	Right Turn	87	82	93.8%	78.8	67.6	E
	Subtotal	137	128	93.4%	86.9	63.6	F
WB	Left Turn	643	282	43.9%	1210.6	191.2	F
	Through	70	35	49.9%	1058.3	152.3	F
	Right Turn	440	201	45.6%	1014.5	139.1	F
	Subtotal	1,153	518	44.9%	1129.3	167.1	F
Total		4,528	3,200	70.7%	190.6	31.3	F

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,326	1,318	99.4%	28.7	4.5	C
	Right Turn	89	87	97.4%	7.5	1.8	A
	Subtotal	1,415	1,404	99.2%	27.5	4.3	C
SB	Left Turn	150	109	72.3%	199.8	21.6	F
	Through	1,656	1,085	65.5%	190.0	20.9	F
	Right Turn	150	94	62.9%	139.1	16.4	F
	Subtotal	1,956	1,288	65.8%	186.7	20.9	F
EB	Left Turn	640	310	48.5%	999.6	57.9	F
	Through	80	42	52.1%	1006.5	58.2	F
	Right Turn	844	395	46.8%	1061.6	67.7	F
	Subtotal	1,564	747	47.7%	1034.8	64.9	F
WB	Left Turn	157	116	74.1%	390.6	170.9	F
	Through	10	11	112.0%	301.1	161.8	F
	Right Turn	140	139	99.4%	272.0	152.9	F
	Subtotal	307	267	86.8%	324.2	160.4	F
Total		5,242	3,705	70.7%	289.1	15.5	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
AM Peak Hour

Intersection 15 **Sierra College Blvd/Schriber Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	116	114	98.6%	102.7	32.1	F
	Through	1,095	1,074	98.1%	10.9	5.5	B
	Right Turn	10	9	94.0%	7.2	11.1	A
	Subtotal	1,221	1,198	98.1%	19.9	5.9	B
SB	Left Turn						
	Through	2,387	1,435	60.1%	28.6	3.4	C
	Right Turn	270	156	57.7%	33.8	4.2	C
	Subtotal	2,657	1,591	59.9%	29.1	3.2	C
EB	Left Turn	230	242	105.4%	95.3	93.3	F
	Through	20	22	108.5%	58.3	33.6	E
	Right Turn	88	85	96.0%	64.5	74.1	E
	Subtotal	338	349	103.1%	86.7	87.7	F
WB	Left Turn						
	Through						
	Right Turn	90	92	102.0%	27.5	26.2	C
	Subtotal	90	92	102.0%	27.5	26.2	C
Total		4,306	3,229	75.0%	31.0	10.3	C

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	462	451	97.6%	76.2	34.9	F
	Through	1,091	1,069	98.0%	16.8	2.7	B
	Right Turn	59	55	93.1%	11.4	3.0	B
	Subtotal	1,612	1,575	97.7%	34.2	12.6	C
SB	Left Turn	110	67	60.6%	71.8	10.9	E
	Through	2,135	1,320	61.8%	20.1	1.7	C
	Right Turn	230	134	58.0%	18.8	3.2	B
	Subtotal	2,475	1,521	61.4%	22.1	1.8	C
EB	Left Turn	100	101	101.2%	56.2	13.5	E
	Through	20	24	117.5%	51.5	16.8	D
	Right Turn	186	191	102.7%	22.5	4.7	C
	Subtotal	306	316	103.2%	35.8	3.4	D
WB	Left Turn	96	104	107.8%	60.2	7.4	E
	Through	50	51	102.0%	51.7	6.7	D
	Right Turn	20	21	103.5%	13.6	5.1	B
	Subtotal	166	175	105.5%	52.0	5.9	D
Total		4,559	3,587	78.7%	30.1	5.9	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
AM Peak Hour

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	310	302	97.4%	37.3	6.2	D
	Through	1,557	1,523	97.8%	11.8	1.7	B
	Right Turn						
	Subtotal	1,867	1,825	97.7%	15.9	2.5	B
SB	Left Turn						
	Through	1,488	1,016	68.3%	14.9	2.1	B
	Right Turn	929	600	64.6%	16.3	0.8	B
	Subtotal	2,417	1,617	66.9%	15.4	1.4	B
EB	Left Turn	55	51	93.3%	26.5	4.3	C
	Through						
	Right Turn	34	38	111.5%	8.3	2.3	A
	Subtotal	89	89	100.2%	19.2	3.8	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		4,373	3,531	80.7%	15.8	1.4	B

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	1,867	1,829	97.9%	6.1	0.8	A
	Right Turn						
	Subtotal	1,867	1,829	97.9%	6.1	0.8	A
SB	Left Turn						
	Through	1,335	920	68.9%	4.6	0.8	A
	Right Turn	187	132	70.6%	4.4	1.3	A
	Subtotal	1,522	1,053	69.2%	4.6	0.8	A
EB	Left Turn						
	Through						
	Right Turn	18	19	103.9%	5.7	2.0	A
	Subtotal	18	19	103.9%	5.7	2.0	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		3,407	2,900	85.1%	5.6	0.6	A

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	25	21	82.8%	52.5	20.9	D
	Through	2,003	1,995	99.6%	33.4	13.1	C
	Right Turn	5	7	142.0%	3.5	4.5	A
	Subtotal	2,033	2,022	99.5%	33.5	13.1	C
SB	Left Turn	36	26	71.7%	30.1	10.1	C
	Through	1,366	1,068	78.2%	11.5	1.5	B
	Right Turn	25	20	78.8%	9.6	4.9	A
	Subtotal	1,427	1,113	78.0%	11.8	1.3	B
EB	Left Turn	54	52	95.7%	24.2	3.1	C
	Through	1	1	90.0%	1.8	4.1	A
	Right Turn	35	36	103.7%	11.7	4.1	B
	Subtotal	90	89	98.8%	18.6	2.2	B
WB	Left Turn	18	17	93.3%	26.9	9.9	C
	Through	1	1	140.0%	3.8	7.1	A
	Right Turn	44	45	102.5%	15.3	3.4	B
	Subtotal	63	63	100.5%	17.8	3.9	B
Total		3,613	3,288	91.0%	25.4	7.8	C

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	300	300	99.9%	9.4	7.4	A
	Right Turn						
	Subtotal	300	300	99.9%	9.4	7.4	A
SB	Left Turn						
	Through	110	106	96.0%	0.5	0.1	A
	Right Turn	10	12	115.0%	0.5	0.4	A
	Subtotal	120	117	97.6%	0.5	0.1	A
EB	Left Turn						
	Through						
	Right Turn	1	1	70.0%	0.9	1.4	A
	Subtotal	1	1	70.0%	0.9	1.4	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		421	418	99.2%	6.9	5.4	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
AM Peak Hour

Intersection 21 **El Don Dr/Southern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	3	3	86.7%	1.3	1.4	A
	Through	287	287	100.1%	2.7	1.9	A
	Right Turn						
	Subtotal	290	290	100.0%	2.7	1.9	A
SB	Left Turn						
	Through	110	104	94.6%	0.1	0.1	A
	Right Turn	1	2	160.0%	0.0	0.1	A
	Subtotal	111	106	95.2%	0.1	0.1	A
EB	Left Turn	13	12	93.1%	11.9	23.5	B
	Through						
	Right Turn	1	2	160.0%	0.7	1.5	A
	Subtotal	14	14	97.9%	12.1	23.3	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		415	409	98.6%	2.3	1.9	A

Intersection 22 **El Don Dr/Wildflower Ln** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	2	1	45.0%	0.4	1.3	A
	Through	275	275	100.1%	5.8	0.4	A
	Right Turn						
	Subtotal	277	276	99.7%	5.8	0.4	A
SB	Left Turn						
	Through	99	92	93.3%	5.8	0.4	A
	Right Turn	12	13	110.8%	3.7	0.4	A
	Subtotal	111	106	95.2%	5.5	0.4	A
EB	Left Turn	15	15	98.7%	4.3	1.0	A
	Through						
	Right Turn	5	5	102.0%	2.3	2.4	A
	Subtotal	20	20	99.5%	3.9	1.0	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		408	402	98.5%	5.7	0.2	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
AM Peak Hour

Intersection 23 **El Don Dr/Corona Cir** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	2	2	95.0%	0.5	0.8	A
	Through	268	267	99.6%	0.2	0.1	A
	Right Turn						
	Subtotal	270	269	99.6%	0.3	0.1	A
SB	Left Turn						
	Through	99	92	92.5%	1.4	0.2	A
	Right Turn	5	6	110.0%	1.1	1.1	A
	Subtotal	104	97	93.4%	1.4	0.2	A
EB	Left Turn	9	9	95.6%	4.5	1.9	A
	Through						
	Right Turn	3	3	106.7%	1.4	1.5	A
	Subtotal	12	12	98.3%	4.0	1.7	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		386	378	97.8%	0.7	0.2	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
PM Peak Hour

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	30	29	98.0%	60.1	24.8	E
	Through	20	16	80.5%	60.4	34.5	E
	Right Turn	10	10	100.0%	18.2	14.7	B
	Subtotal	60	56	92.5%	55.4	21.8	E
SB	Left Turn	745	730	98.0%	84.7	48.9	F
	Through	10	15	153.0%	96.4	65.1	F
	Right Turn	310	312	100.7%	32.5	30.5	C
	Subtotal	1,065	1,058	99.3%	69.9	43.6	E
EB	Left Turn	330	235	71.1%	541.9	50.2	F
	Through	1,200	917	76.4%	470.2	48.3	F
	Right Turn	10	8	79.0%	442.7	75.6	F
	Subtotal	1,540	1,159	75.3%	485.1	46.0	F
WB	Left Turn	40	35	86.8%	108.5	22.1	F
	Through	833	803	96.4%	59.5	22.9	E
	Right Turn	526	503	95.6%	34.3	20.1	C
	Subtotal	1,399	1,341	95.8%	51.1	22.1	D
Total		4,064	3,613	88.9%	195.8	23.9	F

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	100	94	94.3%	115.3	90.1	F
	Through	10	11	110.0%	178.3	107.7	F
	Right Turn	220	217	98.4%	186.9	131.4	F
	Subtotal	330	322	97.5%	164.0	113.3	F
EB	Left Turn						
	Through	1,185	981	82.8%	71.2	14.5	E
	Right Turn	840	692	82.4%	46.5	2.9	D
	Subtotal	2,025	1,674	82.6%	61.3	9.6	E
WB	Left Turn	671	578	86.1%	63.7	4.9	E
	Through	1,219	1,172	96.1%	17.1	13.2	B
	Right Turn						
	Subtotal	1,890	1,750	92.6%	32.4	10.2	C
Total		4,245	3,745	88.2%	55.7	14.4	E

SimTraffic Post-Processor | **Sierra Villages TIS**
Average Results from 10 Runs | **Cumulative No Project Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	510	506	99.2%	74.8	38.1	E
	Through	10	13	131.0%	76.6	44.1	E
	Right Turn	609	600	98.5%	60.9	39.5	E
	Subtotal	1,129	1,119	99.1%	67.5	38.6	E
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	340	272	80.0%	98.5	13.9	F
	Through	945	795	84.1%	22.6	10.0	C
	Right Turn						
	Subtotal	1,285	1,067	83.1%	42.2	9.9	D
WB	Left Turn						
	Through	1,380	1,253	90.8%	50.0	5.4	D
	Right Turn	163	153	94.1%	31.4	2.7	C
	Subtotal	1,543	1,406	91.1%	48.1	4.9	D
Total		3,957	3,593	90.8%	52.8	14.6	D

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	270	272	100.8%	62.2	16.8	F
	Through						
	Right Turn	75	74	98.4%	20.5	11.2	C
	Subtotal	345	346	100.3%	53.6	16.2	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	60	50	83.0%	122.8	61.9	F
	Through	1,174	1,065	90.7%	20.1	12.2	C
	Right Turn	320	275	86.1%	16.6	12.1	B
	Subtotal	1,554	1,391	89.5%	22.8	13.8	C
WB	Left Turn	76	66	86.7%	215.4	79.4	F
	Through	1,262	1,134	89.8%	117.3	41.6	F
	Right Turn						
	Subtotal	1,338	1,200	89.7%	121.8	42.0	F
Total		3,237	2,936	90.7%	65.4	23.5	E

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	170	167	98.1%	100.0	39.9	F
	Through	10	9	87.0%	66.1	35.2	E
	Right Turn	30	31	103.0%	58.1	36.9	E
	Subtotal	210	206	98.3%	93.3	39.1	F
SB	Left Turn	87	79	91.0%	172.3	123.8	F
	Through	20	21	106.0%	179.0	153.7	F
	Right Turn	360	338	93.8%	125.2	109.2	F
	Subtotal	467	438	93.8%	136.2	112.0	F
EB	Left Turn	244	225	92.0%	67.4	19.6	E
	Through	844	754	89.3%	38.3	17.0	D
	Right Turn	180	167	92.6%	33.7	15.1	C
	Subtotal	1,268	1,145	90.3%	42.8	15.1	D
WB	Left Turn	40	33	81.8%	150.1	116.5	F
	Through	800	717	89.6%	95.0	66.9	F
	Right Turn	50	42	83.8%	16.3	20.1	B
	Subtotal	890	792	88.9%	92.8	65.1	F
Total		2,835	2,581	91.0%	75.7	34.0	E

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	10	104.0%	16.2	12.1	B
	Through						
	Right Turn	10	11	108.0%	6.8	6.9	A
	Subtotal	20	21	106.0%	15.3	6.8	B
SB	Left Turn	314	309	98.5%	15.8	3.5	B
	Through						
	Right Turn	166	170	102.5%	4.0	0.8	A
	Subtotal	480	479	99.9%	11.8	2.4	B
EB	Left Turn	115	106	92.3%	29.4	7.2	C
	Through	827	740	89.4%	17.5	3.3	B
	Right Turn	20	21	102.5%	11.4	5.3	B
	Subtotal	962	866	90.1%	18.9	3.1	B
WB	Left Turn	10	7	71.0%	24.9	17.2	C
	Through	512	414	80.9%	16.4	4.8	B
	Right Turn	146	109	74.8%	5.5	1.3	A
	Subtotal	668	531	79.4%	14.4	4.0	B
Total		2,130	1,897	89.1%	15.8	2.4	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
PM Peak Hour

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	436	303	69.5%	258.6	15.3	F
	Through	1,958	1,281	65.4%	308.2	25.7	F
	Right Turn	220	143	65.0%	340.0	57.5	F
	Subtotal	2,614	1,727	66.0%	301.5	23.5	F
SB	Left Turn	354	286	80.7%	76.7	6.1	E
	Through	1,976	1,577	79.8%	44.9	6.3	D
	Right Turn	51	44	87.1%	26.4	5.1	C
	Subtotal	2,381	1,907	80.1%	49.1	5.0	D
EB	Left Turn	186	156	83.9%	267.1	127.5	F
	Through	478	427	89.4%	52.1	16.1	D
	Right Turn	487	446	91.5%	39.2	9.8	D
	Subtotal	1,151	1,029	89.4%	77.9	25.9	E
WB	Left Turn	60	64	107.0%	115.8	39.1	F
	Through	181	176	97.5%	122.4	57.9	F
	Right Turn	236	223	94.3%	198.0	84.9	F
	Subtotal	477	463	97.1%	155.3	64.6	F
Total		6,623	5,126	77.4%	137.6	10.5	F

Intersection 8 **Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	11	9	80.9%	91.7	119.7	F
	Through						
	Right Turn	1	1	120.0%	17.8	42.4	C
	Subtotal	12	10	84.2%	56.3	78.7	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,037	842	81.2%	5.5	0.5	A
	Right Turn	15	12	77.3%	3.7	2.6	A
	Subtotal	1,052	854	81.1%	5.5	0.5	A
WB	Left Turn						
	Through	466	468	100.4%	50.6	47.3	F
	Right Turn						
	Subtotal	466	468	100.4%	50.6	47.3	F
Total		1,530	1,332	87.0%	22.6	18.2	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
PM Peak Hour

Intersection 9 **Rocklin Manor Central/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	14	15	107.1%	45.3	68.1	E
	Through						
	Right Turn						
	Subtotal	14	15	107.1%	45.3	68.1	E
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,020	827	81.1%	1.9	0.6	A
	Right Turn	18	15	82.2%	0.1	0.2	A
	Subtotal	1,038	842	81.1%	1.9	0.6	A
WB	Left Turn	2	3	130.0%	10.3	19.7	B
	Through	452	461	102.0%	10.6	14.2	B
	Right Turn						
	Subtotal	454	464	102.2%	10.7	14.2	B
Total		1,506	1,321	87.7%	6.1	7.0	A

Intersection 10 **Rocklin Manor East/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	5	4	82.0%	10.6	15.7	B
	Through						
	Right Turn						
	Subtotal	5	4	82.0%	10.6	15.7	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,010	818	81.0%	0.5	0.1	A
	Right Turn	10	9	91.0%	0.1	0.1	A
	Subtotal	1,020	827	81.1%	0.5	0.1	A
WB	Left Turn	2	2	100.0%	5.6	14.5	A
	Through	449	462	102.9%	1.5	0.4	A
	Right Turn						
	Subtotal	451	464	102.8%	1.6	0.4	A
Total		1,476	1,295	87.7%	1.0	0.1	A

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	141	147	104.0%	4.6	0.6	A
	Through						
	Right Turn						
	Subtotal	141	147	104.0%	4.6	0.6	A
SB	Left Turn						
	Through						
	Right Turn	310	318	102.5%	5.0	0.5	A
	Subtotal	310	318	102.5%	5.0	0.5	A
EB	Left Turn	278	231	83.1%	49.7	28.6	E
	Through						
	Right Turn	732	585	79.9%	46.8	25.3	E
	Subtotal	1,010	816	80.8%	47.6	26.3	E
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,461	1,280	87.6%	32.2	17.2	D

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	183	119	65.2%	165.7	51.9	F
	Through	1,308	982	75.1%	58.7	18.6	E
	Right Turn	158	122	77.3%	52.6	18.0	D
	Subtotal	1,649	1,223	74.2%	70.6	22.9	E
SB	Left Turn	60	40	67.0%	667.2	68.7	F
	Through	1,802	1,115	61.9%	787.4	89.6	F
	Right Turn	120	64	53.2%	872.3	92.6	F
	Subtotal	1,982	1,219	61.5%	787.7	87.7	F
EB	Left Turn	340	302	88.8%	300.3	114.9	F
	Through	40	38	96.0%	250.0	75.7	F
	Right Turn	439	424	96.6%	206.7	89.5	F
	Subtotal	819	764	93.3%	242.8	86.9	F
WB	Left Turn	238	160	67.0%	682.1	200.7	F
	Through	20	14	72.0%	659.9	293.7	F
	Right Turn	40	26	66.0%	558.2	83.8	F
	Subtotal	298	200	67.2%	657.6	167.8	F
Total		4,748	3,407	71.8%	384.5	44.1	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
PM Peak Hour

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	294	213	72.4%	283.5	251.2	F
	Through	1,255	906	72.2%	198.2	218.6	F
	Right Turn	446	325	72.9%	140.4	169.3	F
	Subtotal	1,995	1,444	72.4%	197.6	209.2	F
SB	Left Turn						
	Through	2,359	1,627	69.0%	46.9	32.2	D
	Right Turn	170	106	62.3%	30.8	22.4	C
	Subtotal	2,529	1,733	68.5%	46.0	31.7	D
EB	Left Turn	130	78	60.0%	1036.8	452.1	F
	Through						
	Right Turn	361	290	80.3%	530.4	196.4	F
	Subtotal	491	368	74.9%	431.8	303.3	F
WB	Left Turn	580	534	92.0%	286.5	245.7	F
	Through	100	88	88.2%	361.4	279.2	F
	Right Turn	310	283	91.3%	308.8	281.3	F
	Subtotal	990	905	91.4%	303.1	264.5	F
Total		6,005	4,449	74.1%	164.4	86.9	F

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	2,514	1,628	64.8%	36.3	37.6	D
	Right Turn	92	52	56.7%	13.0	9.6	B
	Subtotal	2,606	1,680	64.5%	35.3	35.6	D
SB	Left Turn	270	212	78.7%	84.8	13.9	F
	Through	1,570	1,214	77.3%	22.6	7.5	C
	Right Turn	350	270	77.1%	9.7	1.7	A
	Subtotal	2,190	1,696	77.5%	28.2	6.4	C
EB	Left Turn	360	355	98.6%	107.5	94.5	F
	Through	170	171	100.4%	70.3	41.5	E
	Right Turn	198	200	101.0%	25.2	19.6	C
	Subtotal	728	726	99.7%	70.1	45.1	E
WB	Left Turn	214	211	98.8%	95.9	60.6	F
	Through	10	12	116.0%	103.9	72.1	F
	Right Turn	210	205	97.8%	75.2	49.0	E
	Subtotal	434	428	98.7%	85.9	53.1	F
Total		5,958	4,530	76.0%	42.8	24.2	D

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
PM Peak Hour

Intersection 15 **Sierra College Blvd/Schriber Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	98	68	69.5%	58.4	49.4	E
	Through	2,366	1,459	61.7%	18.2	13.3	B
	Right Turn	10	7	67.0%	15.7	17.3	B
	Subtotal	2,474	1,534	62.0%	19.7	12.8	B
SB	Left Turn						
	Through	1,742	1,436	82.4%	23.3	12.7	C
	Right Turn	240	194	80.6%	21.9	10.9	C
	Subtotal	1,982	1,629	82.2%	23.1	12.4	C
EB	Left Turn	220	205	93.2%	107.0	106.4	F
	Through	20	20	98.5%	110.6	121.4	F
	Right Turn	136	136	100.2%	63.6	75.5	E
	Subtotal	376	361	96.0%	89.2	93.6	F
WB	Left Turn						
	Through						
	Right Turn	20	20	97.5%	51.2	48.8	D
	Subtotal	20	20	97.5%	51.2	48.8	D
Total		4,852	3,543	73.0%	28.1	18.1	C

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	313	206	65.9%	69.4	8.2	F
	Through	2,284	1,356	59.4%	150.7	22.4	F
	Right Turn	184	95	51.5%	259.3	33.2	F
	Subtotal	2,781	1,657	59.6%	147.6	20.0	F
SB	Left Turn	90	75	82.9%	91.7	60.2	F
	Through	1,648	1,382	83.9%	31.3	7.8	C
	Right Turn	140	112	80.0%	28.5	8.2	C
	Subtotal	1,878	1,569	83.5%	34.5	9.9	C
EB	Left Turn	70	65	92.7%	141.9	50.5	F
	Through	110	103	93.8%	108.4	56.4	F
	Right Turn	631	610	96.7%	122.8	65.1	F
	Subtotal	811	778	95.9%	122.3	61.7	F
WB	Left Turn	101	101	100.4%	69.7	18.7	E
	Through	50	55	109.8%	40.9	13.8	D
	Right Turn	110	108	98.3%	33.2	28.3	C
	Subtotal	261	264	101.3%	46.8	10.6	D
Total		5,731	4,268	74.5%	95.2	15.7	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
PM Peak Hour

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	86	57	65.9%	231.3	23.0	F
	Through	2,274	1,481	65.1%	303.3	39.7	F
	Right Turn						
	Subtotal	2,360	1,538	65.2%	300.7	39.0	F
SB	Left Turn						
	Through	2,141	1,816	84.8%	156.5	51.3	F
	Right Turn	239	206	86.2%	120.1	54.6	F
	Subtotal	2,380	2,021	84.9%	152.8	51.6	F
EB	Left Turn	507	216	42.6%	825.6	65.1	F
	Through						
	Right Turn	219	93	42.5%	775.6	65.1	F
	Subtotal	726	309	42.5%	810.8	64.4	F
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		5,466	3,868	70.8%	257.0	30.2	F

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	2,360	1,596	67.6%	123.0	21.1	F
	Right Turn						
	Subtotal	2,360	1,596	67.6%	123.0	21.1	F
SB	Left Turn						
	Through	2,343	1,888	80.6%	9.8	0.5	A
	Right Turn	17	13	78.8%	6.4	3.8	A
	Subtotal	2,360	1,902	80.6%	9.8	0.5	A
EB	Left Turn						
	Through						
	Right Turn	38	35	91.8%	13.4	7.1	B
	Subtotal	38	35	91.8%	13.4	7.1	B
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		4,758	3,532	74.2%	55.8	5.2	F

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	26	20	76.2%	665.2	61.5	F
	Through	2,537	1,779	70.1%	681.1	36.8	F
	Right Turn	7	5	75.7%	632.4	149.1	F
	Subtotal	2,570	1,804	70.2%	680.8	36.9	F
SB	Left Turn	64	53	82.0%	51.5	15.6	D
	Through	2,402	1,978	82.4%	9.9	1.6	A
	Right Turn	77	64	82.7%	13.4	3.5	B
	Subtotal	2,543	2,095	82.4%	11.1	1.4	B
EB	Left Turn	33	33	99.4%	45.8	15.4	D
	Through	1	1	100.0%	21.0	30.2	C
	Right Turn	18	19	103.3%	27.0	18.7	C
	Subtotal	52	52	100.8%	41.2	14.6	D
WB	Left Turn	10	11	106.0%	53.9	29.2	D
	Through	1	1	60.0%	11.5	23.1	B
	Right Turn	21	22	104.3%	37.8	16.2	D
	Subtotal	32	33	103.4%	42.7	17.4	D
Total		5,197	3,984	76.7%	263.5	10.3	F

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	210	209	99.3%	38.6	30.3	E
	Right Turn						
	Subtotal	210	209	99.3%	38.6	30.3	E
SB	Left Turn						
	Through	223	204	91.4%	0.7	0.2	A
	Right Turn	7	7	100.0%	0.4	0.6	A
	Subtotal	230	211	91.7%	0.7	0.2	A
EB	Left Turn						
	Through						
	Right Turn	9	11	116.7%	3.1	1.1	A
	Subtotal	9	11	116.7%	3.1	1.1	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		449	430	95.7%	19.9	17.4	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
PM Peak Hour

Intersection 21 **El Don Dr/Southern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	3	3	86.7%	0.6	1.2	A
	Through	176	178	101.0%	15.5	18.4	C
	Right Turn						
	Subtotal	179	180	100.8%	15.5	18.4	C
SB	Left Turn						
	Through	230	211	91.9%	0.4	0.1	A
	Right Turn	2	3	125.0%	0.0	0.0	A
	Subtotal	232	214	92.2%	0.4	0.1	A
EB	Left Turn	34	33	96.8%	38.3	70.4	E
	Through						
	Right Turn	5	5	104.0%	27.0	77.4	D
	Subtotal	39	38	97.7%	37.6	70.7	E
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		450	432	96.1%	11.8	19.4	B

Intersection 22 **El Don Dr/Wildflower Ln** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	1	1	100.0%	30.8	93.3	D
	Through	170	172	101.4%	19.2	39.5	C
	Right Turn						
	Subtotal	171	173	101.4%	19.5	40.7	C
SB	Left Turn						
	Through	220	203	92.5%	6.7	0.5	A
	Right Turn	15	14	93.3%	4.9	1.1	A
	Subtotal	235	217	92.5%	6.5	0.5	A
EB	Left Turn	9	9	101.1%	5.0	2.9	A
	Through						
	Right Turn	3	3	106.7%	1.5	1.5	A
	Subtotal	12	12	102.5%	4.7	2.9	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		418	403	96.4%	11.7	15.9	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative No Project Conditions
PM Peak Hour

Intersection 23 **El Don Dr/Corona Cir** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	5	4	80.0%	1.4	1.5	A
	Through	162	166	102.2%	0.2	0.1	A
	Right Turn						
	Subtotal	167	170	101.6%	0.2	0.1	A
SB	Left Turn						
	Through	208	191	91.9%	1.6	0.2	A
	Right Turn	15	14	90.7%	1.2	0.7	A
	Subtotal	223	205	91.8%	1.6	0.2	A
EB	Left Turn	9	8	87.8%	4.9	1.5	A
	Through						
	Right Turn	3	2	76.7%	2.4	2.9	A
	Subtotal	12	10	85.0%	4.9	1.5	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		402	385	95.7%	1.1	0.1	A

SimTraffic Post-Processor
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Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	20	20	99.0%	34.9	9.0	C
	Through	10	12	117.0%	41.7	15.8	D
	Right Turn	10	11	113.0%	6.1	5.9	A
	Subtotal	40	43	107.0%	30.9	9.6	C
SB	Left Turn	213	208	97.6%	28.7	4.7	C
	Through	10	9	92.0%	22.8	14.1	C
	Right Turn	160	161	100.6%	12.9	2.0	B
	Subtotal	383	378	98.7%	22.0	3.1	C
EB	Left Turn	190	192	100.8%	57.8	24.3	E
	Through	608	611	100.4%	13.8	5.2	B
	Right Turn	10	12	119.0%	7.2	7.0	A
	Subtotal	808	814	100.7%	25.0	10.9	C
WB	Left Turn	30	28	93.3%	52.6	10.4	D
	Through	1,212	1,105	91.2%	24.5	4.3	C
	Right Turn	575	538	93.6%	12.4	2.1	B
	Subtotal	1,817	1,671	92.0%	21.1	3.6	C
Total		3,048	2,906	95.3%	22.4	5.2	C

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	111	113	101.7%	56.8	39.6	E
	Through	10	10	95.0%	128.7	76.3	F
	Right Turn	440	428	97.4%	120.8	64.6	F
	Subtotal	561	551	98.2%	109.1	58.7	F
EB	Left Turn						
	Through	590	589	99.8%	58.1	11.5	E
	Right Turn	280	280	99.9%	13.0	2.4	B
	Subtotal	870	868	99.8%	44.3	8.7	D
WB	Left Turn	570	511	89.7%	24.3	4.5	C
	Through	1,479	1,332	90.0%	14.4	2.4	B
	Right Turn						
	Subtotal	2,049	1,843	89.9%	17.3	1.5	B
Total		3,480	3,262	93.7%	38.6	10.9	D

SimTraffic Post-Processor
Average Results from 10 Runs
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Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	780	683	87.6%	65.9	10.6	E
	Through	10	8	83.0%	68.5	40.7	E
	Right Turn	1,112	975	87.7%	59.6	10.5	E
	Subtotal	1,902	1,666	87.6%	62.1	10.5	E
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	90	91	101.3%	96.4	34.9	F
	Through	611	611	100.0%	11.5	1.7	B
	Right Turn						
	Subtotal	701	702	100.2%	23.2	7.6	C
WB	Left Turn						
	Through	1,269	1,165	91.8%	42.0	5.4	D
	Right Turn	96	88	91.3%	21.9	4.0	C
	Subtotal	1,365	1,252	91.7%	40.6	5.3	D
Total		3,968	3,621	91.3%	46.0	3.7	D

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	300	289	96.2%	43.5	3.7	D
	Through						
	Right Turn	80	79	99.3%	16.9	5.6	B
	Subtotal	380	368	96.8%	37.8	2.7	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	40	38	95.5%	75.4	10.3	E
	Through	1,524	1,408	92.4%	11.5	2.5	B
	Right Turn	170	152	89.5%	7.4	2.4	A
	Subtotal	1,734	1,598	92.2%	12.3	2.4	B
WB	Left Turn	43	36	84.2%	76.0	13.3	E
	Through	1,043	942	90.3%	19.8	7.6	B
	Right Turn						
	Subtotal	1,086	979	90.1%	21.5	7.8	C
Total		3,200	2,944	92.0%	18.6	3.5	B

SimTraffic Post-Processor
Average Results from 10 Runs
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Sierra Villages TIS
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Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	282	282	100.0%	39.7	8.7	D
	Through	20	20	102.0%	36.1	11.1	D
	Right Turn	25	24	96.8%	19.9	7.2	B
	Subtotal	327	327	99.9%	38.0	8.1	D
SB	Left Turn	16	13	83.8%	32.2	8.4	C
	Through	10	10	103.0%	33.1	18.8	C
	Right Turn	89	87	97.9%	11.8	3.5	B
	Subtotal	115	111	96.3%	17.3	4.3	B
EB	Left Turn	526	497	94.5%	38.0	5.0	D
	Through	933	849	91.0%	31.6	3.8	C
	Right Turn	129	121	93.6%	22.6	4.1	C
	Subtotal	1,588	1,467	92.4%	33.1	3.8	C
WB	Left Turn	76	66	86.2%	39.2	8.6	D
	Through	689	582	84.5%	22.4	3.8	C
	Right Turn	149	126	84.2%	8.7	2.4	A
	Subtotal	914	773	84.6%	21.7	3.1	C
Total		2,944	2,678	91.0%	29.8	2.2	C

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	20	19	96.5%	15.8	11.3	B
	Through	10	11	108.0%	19.9	12.0	B
	Right Turn	20	22	110.0%	8.0	3.4	A
	Subtotal	50	52	104.2%	13.6	6.2	B
SB	Left Turn	40	40	100.0%	22.8	5.6	C
	Through	10	11	111.0%	24.9	13.3	C
	Right Turn	25	26	104.0%	5.5	2.1	A
	Subtotal	75	77	102.8%	18.1	4.1	B
EB	Left Turn	516	475	92.1%	26.7	7.4	C
	Through	626	589	94.2%	10.0	3.7	B
	Right Turn	10	9	91.0%	7.7	8.4	A
	Subtotal	1,152	1,074	93.2%	17.0	4.7	B
WB	Left Turn	20	17	82.5%	34.9	13.5	C
	Through	894	750	83.9%	18.1	5.0	B
	Right Turn	367	298	81.2%	11.3	2.3	B
	Subtotal	1,281	1,065	83.1%	16.5	4.1	B
Total		2,558	2,268	88.6%	16.7	4.2	B

SimTraffic Post-Processor
Average Results from 10 Runs
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Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	601	497	82.6%	226.6	14.1	F
	Through	1,463	1,326	90.7%	83.4	3.6	F
	Right Turn	136	126	92.4%	17.6	5.0	B
	Subtotal	2,200	1,949	88.6%	117.7	4.6	F
SB	Left Turn	211	151	71.7%	56.6	9.3	E
	Through	1,032	708	68.6%	39.0	4.7	D
	Right Turn	267	169	63.4%	23.5	3.9	C
	Subtotal	1,510	1,029	68.1%	39.3	4.0	D
EB	Left Turn	150	140	93.3%	48.3	6.7	D
	Through	250	238	95.0%	31.0	4.4	C
	Right Turn	286	276	96.3%	15.0	3.0	B
	Subtotal	686	653	95.2%	27.6	3.3	C
WB	Left Turn	133	127	95.6%	230.4	75.2	F
	Through	433	414	95.7%	162.7	43.5	F
	Right Turn	358	336	93.7%	178.3	46.4	F
	Subtotal	924	877	94.9%	179.4	41.7	F
Total		5,320	4,507	84.7%	98.4	6.5	F

Intersection 8 **Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	13	9	67.7%	380.4	214.1	F
	Through						
	Right Turn	1	1	100.0%	159.4	246.1	F
	Subtotal	14	10	70.0%	282.9	239.1	F
SB	Left Turn	6	3	53.3%	534.3	260.0	F
	Through						
	Right Turn	44	21	48.6%	601.2	134.6	F
	Subtotal	50	25	49.2%	602.6	141.6	F
EB	Left Turn	31	26	84.8%	18.3	11.6	C
	Through	563	484	86.0%	3.3	0.3	A
	Right Turn	3	3	83.3%	0.9	1.4	A
	Subtotal	597	513	85.9%	4.2	0.9	A
WB	Left Turn						
	Through	867	849	97.9%	93.8	55.6	F
	Right Turn	10	10	104.0%	132.6	87.0	F
	Subtotal	877	860	98.0%	94.1	55.7	F
Total		1,538	1,407	91.5%	70.6	32.0	F

SimTraffic Post-Processor
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Intersection 9 **Rocklin Manor Central/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	10	8	81.0%	192.1	253.4	F
	Through						
	Right Turn	1	1	120.0%	152.1	279.4	F
	Subtotal	11	9	84.5%	114.1	165.6	F
SB	Left Turn	2	2	100.0%	51.4	61.5	F
	Through						
	Right Turn	25	24	94.4%	133.0	153.2	F
	Subtotal	27	26	94.8%	137.0	151.0	F
EB	Left Turn	121	102	84.0%	31.4	26.2	D
	Through	439	376	85.7%	3.4	4.5	A
	Right Turn	10	10	98.0%	0.1	0.1	A
	Subtotal	570	488	85.5%	9.3	8.6	A
WB	Left Turn						
	Through	842	837	99.4%	45.9	40.3	E
	Right Turn	10	9	88.0%	44.1	31.3	E
	Subtotal	852	846	99.2%	46.0	40.2	E
Total		1,460	1,368	93.7%	34.5	28.3	D

Intersection 10 **Rocklin Manor East/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	9	9	100.0%	83.5	136.4	F
	Through						
	Right Turn	2	3	150.0%	1.2	2.0	A
	Subtotal	11	12	109.1%	31.9	24.8	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	440	376	85.4%	0.2	0.1	A
	Right Turn	2	2	95.0%	0.0	0.0	A
	Subtotal	442	378	85.5%	0.2	0.1	A
WB	Left Turn	2	2	115.0%	10.9	24.0	B
	Through	843	845	100.2%	18.3	24.9	C
	Right Turn						
	Subtotal	845	847	100.2%	18.2	24.9	C
Total		1,298	1,237	95.3%	13.0	17.1	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
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Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	301	300	99.5%	8.0	1.6	A
	Through						
	Right Turn						
	Subtotal	301	300	99.5%	8.0	1.6	A
SB	Left Turn						
	Through						
	Right Turn	544	551	101.4%	13.7	3.0	B
	Subtotal	544	551	101.4%	13.7	3.0	B
EB	Left Turn	322	279	86.6%	10.8	1.7	B
	Through						
	Right Turn	120	101	83.9%	8.9	1.9	A
	Subtotal	442	379	85.8%	10.3	1.7	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,287	1,230	95.6%	11.4	1.4	B

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	407	273	67.1%	75.9	23.8	F
	Through	1,183	784	66.2%	32.8	15.1	C
	Right Turn	178	116	64.9%	31.1	19.8	C
	Subtotal	1,768	1,172	66.3%	42.8	18.4	D
SB	Left Turn	80	70	87.1%	332.0	108.6	F
	Through	1,386	1,215	87.6%	359.7	108.7	F
	Right Turn	140	128	91.5%	318.8	103.4	F
	Subtotal	1,606	1,413	88.0%	355.1	108.0	F
EB	Left Turn	90	92	101.9%	126.4	32.7	F
	Through	30	26	87.7%	106.6	39.2	F
	Right Turn	102	101	98.6%	80.6	34.7	F
	Subtotal	222	219	98.5%	103.9	21.8	F
WB	Left Turn	178	79	44.2%	1062.9	135.7	F
	Through	30	16	52.3%	934.2	233.0	F
	Right Turn	30	15	48.7%	868.1	131.3	F
	Subtotal	238	109	45.8%	1013.3	118.1	F
Total		3,834	2,912	76.0%	237.6	59.6	F

SimTraffic Post-Processor
Average Results from 10 Runs
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Sierra Villages TIS
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Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	124	90	72.3%	85.5	37.4	F
	Through	1,308	989	75.6%	28.9	52.0	C
	Right Turn	201	153	76.2%	15.0	30.4	B
	Subtotal	1,633	1,232	75.4%	31.7	48.2	C
SB	Left Turn						
	Through	1,617	1,334	82.5%	56.7	6.8	E
	Right Turn	100	87	87.0%	17.3	3.4	B
	Subtotal	1,717	1,421	82.7%	54.2	6.7	D
EB	Left Turn	50	52	104.2%	85.6	106.6	F
	Through						
	Right Turn	92	89	97.1%	38.6	21.8	D
	Subtotal	142	141	99.6%	55.1	34.7	E
WB	Left Turn	690	217	31.4%	1537.6	290.1	F
	Through	70	24	34.0%	1330.6	270.8	F
	Right Turn	440	155	35.2%	1264.9	227.1	F
	Subtotal	1,200	396	33.0%	1443.1	283.6	F
Total		4,692	3,190	68.0%	149.0	37.2	F

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,433	1,351	94.3%	30.1	4.8	C
	Right Turn	94	92	97.6%	9.4	4.0	A
	Subtotal	1,527	1,443	94.5%	28.8	4.7	C
SB	Left Turn	150	103	68.4%	192.4	12.2	F
	Through	1,748	1,102	63.0%	177.8	16.8	F
	Right Turn	150	89	59.4%	132.9	13.7	F
	Subtotal	2,048	1,293	63.1%	175.3	16.1	F
EB	Left Turn	640	313	48.9%	1002.9	59.9	F
	Through	80	40	49.5%	1007.2	58.9	F
	Right Turn	864	398	46.1%	1063.1	66.7	F
	Subtotal	1,584	751	47.4%	1035.5	63.1	F
WB	Left Turn	162	118	73.0%	470.9	134.7	F
	Through	10	10	101.0%	393.0	132.9	F
	Right Turn	140	139	99.4%	371.8	137.6	F
	Subtotal	312	267	85.7%	418.0	137.7	F
Total		5,471	3,754	68.6%	294.9	15.8	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
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Intersection 15 **Sierra College Blvd/Schriber Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	116	106	91.1%	98.2	32.4	F
	Through	1,207	1,136	94.1%	12.4	4.9	B
	Right Turn	10	10	100.0%	19.4	20.0	B
	Subtotal	1,333	1,251	93.9%	20.8	5.5	C
SB	Left Turn						
	Through	2,504	1,457	58.2%	29.0	4.7	C
	Right Turn	270	149	55.3%	35.5	5.8	D
	Subtotal	2,774	1,607	57.9%	29.5	4.6	C
EB	Left Turn	230	223	96.9%	142.3	122.3	F
	Through	20	24	117.5%	157.8	149.5	F
	Right Turn	88	86	97.5%	108.7	113.0	F
	Subtotal	338	332	98.3%	135.4	121.1	F
WB	Left Turn						
	Through						
	Right Turn	90	87	96.9%	45.1	68.5	D
	Subtotal	90	87	96.9%	45.1	68.5	D
Total		4,535	3,277	72.3%	37.2	14.0	D

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	462	412	89.2%	58.3	9.9	F
	Through	1,203	1,126	93.6%	20.6	3.8	C
	Right Turn	59	57	96.4%	19.4	5.2	B
	Subtotal	1,724	1,595	92.5%	29.9	4.6	C
SB	Left Turn	110	63	57.2%	65.6	11.5	E
	Through	2,252	1,350	59.9%	18.9	2.2	B
	Right Turn	230	133	58.0%	18.6	4.2	B
	Subtotal	2,592	1,546	59.6%	20.5	2.3	C
EB	Left Turn	100	99	98.8%	60.8	13.5	E
	Through	20	21	105.0%	46.6	9.3	D
	Right Turn	186	190	102.3%	25.3	5.9	C
	Subtotal	306	310	101.3%	38.0	7.2	D
WB	Left Turn	96	97	100.6%	48.6	10.8	D
	Through	50	50	100.8%	49.1	9.9	D
	Right Turn	20	20	100.5%	14.9	7.5	B
	Subtotal	166	167	100.7%	45.3	7.5	D
Total		4,788	3,618	75.6%	27.4	3.0	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
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Intersection 17 **Sierra College Blvd/Stadium Entrance Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	348	314	90.1%	49.6	6.2	D
	Through	1,628	1,500	92.1%	17.3	2.6	B
	Right Turn	13	13	101.5%	15.2	5.2	B
	Subtotal	1,989	1,827	91.9%	22.5	2.9	C
SB	Left Turn	14	8	57.9%	38.2	21.1	D
	Through	1,591	1,044	65.6%	19.4	1.8	B
	Right Turn	929	584	62.9%	16.3	1.5	B
	Subtotal	2,534	1,636	64.6%	18.4	1.4	B
EB	Left Turn	55	55	99.8%	36.2	9.8	D
	Through						
	Right Turn	36	38	105.3%	10.0	2.6	A
	Subtotal	91	93	102.0%	25.0	5.6	C
WB	Left Turn	66	67	101.8%	32.1	8.8	C
	Through						
	Right Turn	41	45	110.5%	14.0	5.1	B
	Subtotal	107	113	105.1%	24.9	5.5	C
Total		4,721	3,668	77.7%	20.9	1.7	C

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	1,931	1,766	91.5%	6.6	0.9	A
	Right Turn						
	Subtotal	1,931	1,766	91.5%	6.6	0.9	A
SB	Left Turn						
	Through	1,533	1,043	68.0%	5.8	0.7	A
	Right Turn	187	131	69.9%	5.5	0.6	A
	Subtotal	1,720	1,173	68.2%	5.8	0.7	A
EB	Left Turn						
	Through						
	Right Turn	18	19	102.8%	5.4	2.6	A
	Subtotal	18	19	102.8%	5.4	2.6	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		3,669	2,958	80.6%	6.3	0.6	A

SimTraffic Post-Processor
Average Results from 10 Runs
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Sierra Villages TIS
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Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	45	39	86.7%	176.7	30.3	F
	Through	2,077	1,887	90.9%	93.0	9.1	F
	Right Turn	5	4	86.0%	15.6	12.1	B
	Subtotal	2,127	1,931	90.8%	94.9	8.8	F
SB	Left Turn	36	26	72.8%	39.3	5.9	D
	Through	1,439	1,114	77.4%	12.1	1.7	B
	Right Turn	26	19	74.6%	9.9	4.3	A
	Subtotal	1,501	1,159	77.2%	12.7	1.6	B
EB	Left Turn	57	55	97.0%	30.2	13.3	C
	Through	1	1	80.0%	6.0	12.5	A
	Right Turn	39	38	97.9%	18.1	4.5	B
	Subtotal	97	94	97.2%	24.2	7.2	C
WB	Left Turn	18	17	91.7%	25.2	10.8	C
	Through	1	1	90.0%	4.5	11.6	A
	Right Turn	44	43	98.2%	16.5	4.8	B
	Subtotal	63	61	96.2%	19.5	5.8	B
Total		3,788	3,245	85.7%	61.0	4.8	E

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	327	328	100.2%	5.4	2.9	A
	Right Turn						
	Subtotal	327	328	100.2%	5.4	2.9	A
SB	Left Turn						
	Through	164	153	93.2%	0.6	0.1	A
	Right Turn	10	10	98.0%	0.7	1.0	A
	Subtotal	174	163	93.4%	0.6	0.1	A
EB	Left Turn						
	Through						
	Right Turn	1	1	60.0%	0.5	1.1	A
	Subtotal	1	1	60.0%	0.5	1.1	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		502	491	97.8%	3.9	2.0	A

SimTraffic Post-Processor
Average Results from 10 Runs
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Sierra Villages TIS
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AM Peak Hour

Intersection 21 **El Don Dr/Southern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	3	3	86.7%	1.9	2.2	A
	Through	304	306	100.8%	1.9	0.5	A
	Right Turn						
	Subtotal	307	309	100.7%	1.9	0.5	A
SB	Left Turn	50	45	90.0%	2.9	1.0	A
	Through	114	108	94.5%	0.1	0.1	A
	Right Turn	1	1	130.0%	0.0	0.0	A
	Subtotal	165	154	93.3%	0.9	0.4	A
EB	Left Turn	13	13	96.2%	6.3	1.9	A
	Through						
	Right Turn	1	2	150.0%	0.8	1.2	A
	Subtotal	14	14	100.0%	6.1	1.9	A
WB	Left Turn	1	1	70.0%	1.4	2.4	A
	Through						
	Right Turn	10	9	92.0%	5.3	5.8	A
	Subtotal	11	10	90.0%	5.3	4.7	A
Total		497	487	98.0%	1.8	0.6	A

Intersection 22 **El Don Dr/Wildflower Ln** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	2	2	100.0%	3.1	4.2	A
	Through	289	294	101.8%	6.2	0.3	A
	Right Turn	18	18	100.6%	4.0	1.1	A
	Subtotal	309	314	101.7%	6.1	0.4	A
SB	Left Turn						
	Through	104	96	92.4%	6.3	1.0	A
	Right Turn	12	13	110.0%	3.7	1.5	A
	Subtotal	116	109	94.2%	6.0	1.0	A
EB	Left Turn	15	13	86.0%	3.7	1.7	A
	Through						
	Right Turn	5	7	142.0%	1.9	1.4	A
	Subtotal	20	20	100.0%	3.5	0.5	A
WB	Left Turn	1	1	70.0%	0.3	0.9	A
	Through						
	Right Turn	3	4	116.7%	2.0	1.2	A
	Subtotal	4	4	105.0%	1.9	1.1	A
Total		449	448	99.7%	5.9	0.3	A

SimTraffic Post-Processor
Average Results from 10 Runs
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Sierra Villages TIS
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Intersection 23 **El Don Dr/Corona Cir** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	2	2	90.0%	1.0	1.5	A
	Through	289	294	101.8%	0.3	0.1	A
	Right Turn	1	1	120.0%	0.1	0.4	A
	Subtotal	292	297	101.7%	0.3	0.1	A
SB	Left Turn	4	2	55.0%	1.9	2.3	A
	Through	101	95	94.5%	1.5	0.2	A
	Right Turn	5	6	124.0%	1.3	0.6	A
	Subtotal	110	104	94.4%	1.5	0.2	A
EB	Left Turn	9	7	81.1%	5.3	2.5	A
	Through						
	Right Turn	3	4	120.0%	3.5	2.1	A
	Subtotal	12	11	90.8%	5.6	1.5	A
WB	Left Turn	3	2	66.7%	3.6	6.7	A
	Through						
	Right Turn	11	12	105.5%	4.3	2.2	A
	Subtotal	14	14	97.1%	5.0	3.7	A
Total		428	425	99.4%	0.9	0.2	A

Intersection 24 **Sierra College Blvd/Street G** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	1,910	1,744	91.3%	7.0	0.9	A
	Right Turn	21	20	96.7%	6.7	0.9	A
	Subtotal	1,931	1,765	91.4%	7.0	0.9	A
SB	Left Turn	11	8	68.2%	15.6	9.7	C
	Through	1,720	1,173	68.2%	5.3	0.6	A
	Right Turn						
	Subtotal	1,731	1,180	68.2%	5.4	0.7	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	79	75	94.9%	18.4	6.1	C
	Subtotal	79	75	94.9%	18.4	6.1	C
Total		3,741	3,020	80.7%	6.7	0.7	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
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Intersection 25 **Sierra College Blvd/North Village Dwy 3** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	1,919	1,754	91.4%	5.1	0.5	A
	Right Turn	22	21	93.2%	3.0	0.8	A
	Subtotal	1,941	1,775	91.4%	5.1	0.5	A
SB	Left Turn	41	27	64.9%	19.6	4.9	C
	Through	1,510	1,033	68.4%	7.5	0.7	A
	Right Turn						
	Subtotal	1,551	1,060	68.3%	7.9	0.8	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	12	13	108.3%	7.9	5.0	A
	Subtotal	12	13	108.3%	7.9	5.0	A
Total		3,504	2,847	81.3%	6.2	0.3	A

Intersection 26 **South Village Dwy 3/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn	3	3	93.3%	2.6	3.0	A
	Subtotal	3	3	93.3%	2.6	3.0	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,208	1,123	92.9%	0.3	0.1	A
	Right Turn	42	40	95.2%	0.1	0.1	A
	Subtotal	1,250	1,163	93.0%	0.3	0.1	A
WB	Left Turn						
	Through	949	805	84.8%	3.9	0.3	A
	Right Turn						
	Subtotal	949	805	84.8%	3.9	0.3	A
Total		2,202	1,971	89.5%	1.8	0.2	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
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Intersection 27 **South Village Dwy 4/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn	17	17	97.1%	7.0	4.4	A
	Subtotal	17	17	97.1%	7.0	4.4	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,135	1,057	93.2%	1.4	0.2	A
	Right Turn	76	69	91.3%	1.1	0.4	A
	Subtotal	1,211	1,127	93.0%	1.4	0.2	A
WB	Left Turn						
	Through	949	805	84.8%	2.9	0.2	A
	Right Turn						
	Subtotal	949	805	84.8%	2.9	0.2	A
Total		2,177	1,948	89.5%	2.1	0.2	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
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Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	30	27	90.0%	76.9	31.8	E
	Through	20	23	116.5%	87.6	27.8	F
	Right Turn	10	10	100.0%	61.5	49.7	E
	Subtotal	60	60	100.5%	76.8	24.6	E
SB	Left Turn	749	719	96.0%	150.3	66.5	F
	Through	10	15	146.0%	156.1	66.9	F
	Right Turn	310	304	98.1%	74.8	58.1	E
	Subtotal	1,069	1,038	97.1%	128.1	63.9	F
EB	Left Turn	330	210	63.5%	591.4	38.6	F
	Through	1,252	815	65.1%	520.8	32.3	F
	Right Turn	10	6	58.0%	485.3	62.7	F
	Subtotal	1,592	1,030	64.7%	535.7	32.4	F
WB	Left Turn	40	34	85.0%	127.5	22.3	F
	Through	925	822	88.9%	71.3	13.7	E
	Right Turn	531	471	88.7%	44.6	14.6	D
	Subtotal	1,496	1,327	88.7%	63.5	13.8	E
Total		4,217	3,456	81.9%	222.9	18.9	F

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	105	100	95.6%	125.9	93.1	F
	Through	10	12	117.0%	145.5	148.5	F
	Right Turn	220	195	88.4%	183.4	131.8	F
	Subtotal	335	307	91.5%	165.0	118.9	F
EB	Left Turn						
	Through	1,241	920	74.1%	77.6	10.8	E
	Right Turn	840	632	75.2%	49.9	3.6	D
	Subtotal	2,081	1,552	74.6%	66.5	7.1	E
WB	Left Turn	803	620	77.2%	56.6	4.9	E
	Through	1,316	1,185	90.0%	19.0	11.3	B
	Right Turn						
	Subtotal	2,119	1,805	85.2%	32.1	7.7	C
Total		4,535	3,663	80.8%	57.3	11.6	E

SimTraffic Post-Processor
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Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	510	484	95.0%	240.6	51.1	F
	Through	10	14	141.0%	241.4	74.7	F
	Right Turn	689	643	93.4%	218.3	47.0	F
	Subtotal	1,209	1,142	94.4%	228.3	48.7	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	340	238	69.9%	106.9	17.0	F
	Through	1,006	772	76.7%	23.8	7.5	C
	Right Turn						
	Subtotal	1,346	1,009	75.0%	44.3	9.4	D
WB	Left Turn						
	Through	1,609	1,331	82.7%	43.3	6.6	D
	Right Turn	171	146	85.4%	23.5	3.1	C
	Subtotal	1,780	1,477	82.9%	41.5	6.3	D
Total		4,335	3,628	83.7%	101.2	14.0	F

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	270	247	91.5%	231.8	121.3	F
	Through						
	Right Turn	76	73	96.6%	177.7	136.9	F
	Subtotal	346	321	92.6%	219.8	124.6	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	60	48	79.3%	147.8	41.6	F
	Through	1,315	1,095	83.3%	29.4	5.3	C
	Right Turn	320	271	84.7%	24.0	4.6	C
	Subtotal	1,695	1,414	83.4%	32.6	6.4	C
WB	Left Turn	78	53	67.9%	262.6	37.4	F
	Through	1,499	1,230	82.0%	124.4	17.7	F
	Right Turn						
	Subtotal	1,577	1,283	81.4%	129.6	18.5	F
Total		3,618	3,017	83.4%	91.3	18.1	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
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Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	241	205	85.1%	222.7	76.8	F
	Through	10	9	92.0%	170.9	65.8	F
	Right Turn	38	31	81.1%	177.8	69.3	F
	Subtotal	289	245	84.8%	215.8	76.2	F
SB	Left Turn	87	74	85.2%	273.3	117.8	F
	Through	20	16	82.0%	270.6	126.4	F
	Right Turn	360	299	83.1%	215.6	108.7	F
	Subtotal	467	390	83.4%	228.4	108.4	F
EB	Left Turn	244	198	81.0%	37.8	7.5	D
	Through	968	807	83.3%	29.7	2.6	C
	Right Turn	198	168	85.1%	28.2	4.8	C
	Subtotal	1,410	1,173	83.2%	30.8	2.6	C
WB	Left Turn	54	43	79.3%	215.5	134.6	F
	Through	968	801	82.7%	178.4	116.2	F
	Right Turn	50	43	86.8%	96.0	86.0	F
	Subtotal	1,072	887	82.7%	175.6	115.0	F
Total		3,238	2,694	83.2%	116.9	48.6	F

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	12	117.0%	20.7	11.8	C
	Through						
	Right Turn	10	10	102.0%	5.6	5.3	A
	Subtotal	20	22	109.5%	15.9	8.9	B
SB	Left Turn	315	306	97.0%	23.0	7.9	C
	Through						
	Right Turn	166	159	95.5%	18.0	41.8	B
	Subtotal	481	464	96.5%	20.2	14.7	C
EB	Left Turn	159	129	81.3%	38.4	11.4	D
	Through	1,005	841	83.7%	35.0	23.7	C
	Right Turn	20	18	88.5%	20.2	15.0	C
	Subtotal	1,184	988	83.5%	35.1	21.7	D
WB	Left Turn	10	8	80.0%	44.0	37.9	D
	Through	650	532	81.8%	32.9	36.4	C
	Right Turn	151	125	83.0%	8.5	5.0	A
	Subtotal	811	665	82.0%	28.6	29.7	C
Total		2,496	2,140	85.7%	30.3	16.0	C

SimTraffic Post-Processor
Average Results from 10 Runs
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Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	440	353	80.3%	233.1	45.8	F
	Through	2,013	1,516	75.3%	256.9	63.2	F
	Right Turn	256	182	71.2%	255.9	63.2	F
	Subtotal	2,709	2,052	75.7%	252.8	59.9	F
SB	Left Turn	370	306	82.6%	111.2	36.5	F
	Through	2,005	1,641	81.9%	53.2	17.4	D
	Right Turn	86	71	82.0%	36.8	12.2	D
	Subtotal	2,461	2,017	82.0%	62.0	18.4	E
EB	Left Turn	284	222	78.0%	259.4	100.0	F
	Through	532	449	84.4%	73.9	20.2	E
	Right Turn	514	454	88.4%	45.6	14.0	D
	Subtotal	1,330	1,125	84.6%	93.3	25.3	F
WB	Left Turn	126	112	89.0%	223.2	96.0	F
	Through	285	248	87.1%	235.2	77.5	F
	Right Turn	288	242	84.2%	326.7	107.8	F
	Subtotal	699	603	86.3%	269.3	89.5	F
Total		7,199	5,797	80.5%	148.5	14.7	F

Intersection 8 **Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	11	8	71.8%	457.4	378.8	F
	Through						
	Right Turn	1	2	190.0%	57.5	174.3	F
	Subtotal	12	10	81.7%	115.3	244.6	F
SB	Left Turn	11	7	66.4%	544.5	191.3	F
	Through						
	Right Turn	82	54	65.5%	503.9	169.6	F
	Subtotal	93	61	65.6%	461.6	230.5	F
EB	Left Turn	45	38	85.3%	11.4	5.0	B
	Through	1,098	888	80.8%	6.7	0.8	A
	Right Turn	15	12	78.7%	3.1	1.9	A
	Subtotal	1,158	938	81.0%	6.8	0.8	A
WB	Left Turn						
	Through	606	547	90.3%	143.5	66.7	F
	Right Turn	11	10	89.1%	181.0	90.0	F
	Subtotal	617	557	90.2%	144.7	67.4	F
Total		1,880	1,566	83.3%	59.0	19.5	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 9 **Rocklin Manor Central/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	14	12	86.4%	213.9	218.0	F
	Through						
	Right Turn						
	Subtotal	14	12	86.4%	168.4	209.3	F
SB	Left Turn	11	9	82.7%	348.6	163.4	F
	Through						
	Right Turn	127	101	79.4%	342.0	152.7	F
	Subtotal	138	110	79.6%	341.1	154.6	F
EB	Left Turn	39	29	73.1%	6.2	3.2	A
	Through	1,053	853	81.0%	2.8	0.9	A
	Right Turn	18	15	81.7%	0.4	0.4	A
	Subtotal	1,110	897	80.8%	2.8	0.9	A
WB	Left Turn	2	1	65.0%	9.0	11.8	A
	Through	476	456	95.8%	53.8	41.2	F
	Right Turn	3	4	133.3%	93.6	98.4	F
	Subtotal	481	461	95.9%	54.1	40.9	F
Total		1,743	1,480	84.9%	34.9	11.4	D

Intersection 10 **Rocklin Manor East/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	5	5	104.0%	52.0	49.2	F
	Through						
	Right Turn						
	Subtotal	5	5	104.0%	35.8	39.2	E
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,054	855	81.1%	0.8	0.2	A
	Right Turn	10	8	84.0%	0.0	0.1	A
	Subtotal	1,064	863	81.1%	0.8	0.2	A
WB	Left Turn	2	1	60.0%	6.8	21.5	A
	Through	476	465	97.7%	12.4	17.3	B
	Right Turn						
	Subtotal	478	466	97.5%	12.4	17.3	B
Total		1,547	1,334	86.3%	5.4	6.9	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	167	165	98.8%	4.7	0.7	A
	Through						
	Right Turn						
	Subtotal	167	165	98.8%	4.7	0.7	A
SB	Left Turn						
	Through						
	Right Turn	311	304	97.7%	4.5	0.4	A
	Subtotal	311	304	97.7%	4.5	0.4	A
EB	Left Turn	283	229	81.0%	77.2	47.6	F
	Through						
	Right Turn	771	614	79.6%	75.1	48.9	F
	Subtotal	1,054	843	80.0%	75.6	48.4	F
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,532	1,312	85.6%	51.7	33.2	F

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	184	117	63.4%	343.1	469.4	F
	Through	1,362	1,035	76.0%	131.7	225.0	F
	Right Turn	158	119	75.6%	129.0	227.0	F
	Subtotal	1,704	1,271	74.6%	143.9	221.4	F
SB	Left Turn	60	44	73.8%	565.1	89.8	F
	Through	1,845	1,235	67.0%	741.9	293.9	F
	Right Turn	120	72	59.6%	813.6	284.0	F
	Subtotal	2,025	1,351	66.7%	590.7	236.6	F
EB	Left Turn	340	201	59.1%	714.5	525.8	F
	Through	40	28	69.5%	681.6	540.0	F
	Right Turn	441	327	74.2%	532.8	465.7	F
	Subtotal	821	556	67.7%	414.6	289.3	F
WB	Left Turn	238	74	31.3%	1151.8	506.2	F
	Through	20	6	27.5%	920.7	521.0	F
	Right Turn	40	13	32.3%	1016.9	507.3	F
	Subtotal	298	93	31.1%	642.1	572.5	F
Total		4,848	3,271	67.5%	344.4	146.1	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	300	212	70.5%	513.9	774.0	F
	Through	1,310	973	74.3%	423.8	806.4	F
	Right Turn	478	360	75.3%	282.6	539.4	F
	Subtotal	2,088	1,545	74.0%	153.0	112.0	F
SB	Left Turn						
	Through	2,404	1,565	65.1%	228.7	553.2	F
	Right Turn	170	108	63.4%	117.8	275.1	F
	Subtotal	2,574	1,673	65.0%	47.3	37.4	D
EB	Left Turn	130	85	65.7%	923.1	610.0	F
	Through						
	Right Turn	366	289	78.8%	584.3	484.1	F
	Subtotal	496	374	75.4%	373.8	381.2	F
WB	Left Turn	625	523	83.7%	523.4	496.3	F
	Through	100	79	79.0%	747.1	769.8	F
	Right Turn	310	252	81.3%	654.9	729.6	F
	Subtotal	1,035	854	82.5%	412.7	467.6	F
Total		6,193	4,445	71.8%	141.4	82.8	F

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	2,673	1,877	70.2%	71.0	125.9	E
	Right Turn	98	59	60.6%	11.8	2.2	B
	Subtotal	2,771	1,936	69.9%	67.8	117.9	E
SB	Left Turn	270	202	74.6%	79.9	12.3	E
	Through	1,665	1,202	72.2%	19.0	3.9	B
	Right Turn	350	258	73.6%	9.0	2.5	A
	Subtotal	2,285	1,661	72.7%	24.2	4.0	C
EB	Left Turn	360	343	95.3%	185.8	295.8	F
	Through	170	172	101.0%	93.5	87.3	F
	Right Turn	241	242	100.2%	57.4	81.1	E
	Subtotal	771	756	98.1%	95.1	106.5	F
WB	Left Turn	219	217	98.9%	125.0	169.4	F
	Through	10	12	121.0%	112.4	157.6	F
	Right Turn	210	199	94.5%	184.2	392.8	F
	Subtotal	439	427	97.3%	122.9	179.9	F
Total		6,266	4,781	76.3%	61.9	80.6	E

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 15 **Sierra College Blvd/Schriber Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	98	69	70.5%	55.3	18.9	E
	Through	2,531	1,708	67.5%	36.6	51.7	D
	Right Turn	10	6	63.0%	25.4	23.9	C
	Subtotal	2,639	1,783	67.6%	37.2	50.0	D
SB	Left Turn						
	Through	1,885	1,466	77.8%	20.8	5.3	C
	Right Turn	240	201	83.6%	18.6	9.2	B
	Subtotal	2,125	1,667	78.4%	20.5	5.8	C
EB	Left Turn	220	214	97.1%	98.8	147.5	F
	Through	20	20	102.0%	141.7	233.3	F
	Right Turn	136	137	100.8%	41.4	55.9	D
	Subtotal	376	371	98.7%	71.9	95.3	E
WB	Left Turn						
	Through						
	Right Turn	20	22	109.5%	36.9	18.7	D
	Subtotal	20	22	109.5%	36.9	18.7	D
Total		5,160	3,843	74.5%	32.9	30.4	C

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	313	220	70.2%	62.8	16.9	F
	Through	2,449	1,597	65.2%	144.5	82.3	F
	Right Turn	184	106	57.6%	238.1	110.1	F
	Subtotal	2,946	1,923	65.3%	137.3	65.8	F
SB	Left Turn	90	74	81.8%	64.0	17.4	E
	Through	1,791	1,413	78.9%	20.8	4.5	C
	Right Turn	140	116	82.5%	7.6	2.6	A
	Subtotal	2,021	1,602	79.3%	21.8	4.6	C
EB	Left Turn	70	66	94.1%	133.9	120.0	F
	Through	110	112	101.7%	75.9	67.6	E
	Right Turn	631	634	100.5%	21.6	7.9	C
	Subtotal	811	812	100.1%	35.8	16.9	D
WB	Left Turn	101	97	96.2%	63.7	40.1	E
	Through	50	50	99.6%	73.5	91.0	E
	Right Turn	110	113	103.1%	86.0	146.3	F
	Subtotal	261	260	99.8%	67.0	69.9	E
Total		6,039	4,597	76.1%	73.1	29.5	E

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	110	84	76.4%	251.7	68.0	F
	Through	2,414	1,739	72.1%	273.1	102.8	F
	Right Turn	45	31	67.8%	302.0	114.8	F
	Subtotal	2,569	1,854	72.2%	272.5	100.5	F
SB	Left Turn	48	39	81.9%	102.8	60.9	F
	Through	2,236	1,905	85.2%	41.3	9.4	D
	Right Turn	239	203	84.9%	16.8	7.7	B
	Subtotal	2,523	2,147	85.1%	40.0	9.0	D
EB	Left Turn	507	218	42.9%	909.2	229.5	F
	Through						
	Right Turn	220	99	45.0%	814.7	173.3	F
	Subtotal	727	317	43.5%	872.6	195.9	F
WB	Left Turn	40	39	96.3%	95.3	62.2	F
	Through						
	Right Turn	25	26	102.8%	116.1	130.4	F
	Subtotal	65	64	98.8%	113.6	107.3	F
Total		5,884	4,382	74.5%	184.4	25.5	F

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	2,582	1,942	75.2%	91.2	43.0	F
	Right Turn						
	Subtotal	2,582	1,942	75.2%	91.2	43.0	F
SB	Left Turn						
	Through	2,467	2,018	81.8%	11.2	4.6	B
	Right Turn	17	15	90.6%	10.4	4.1	B
	Subtotal	2,484	2,033	81.9%	11.2	4.6	B
EB	Left Turn						
	Through						
	Right Turn	38	37	97.6%	32.8	41.1	D
	Subtotal	38	37	97.6%	32.8	41.1	D
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		5,104	4,012	78.6%	47.6	14.3	E

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	32	25	79.4%	493.4	43.6	F
	Through	2,631	2,102	79.9%	498.3	55.8	F
	Right Turn	7	5	77.1%	552.0	137.1	F
	Subtotal	2,670	2,133	79.9%	498.4	55.8	F
SB	Left Turn	64	54	83.8%	56.5	17.3	E
	Through	2,521	2,104	83.5%	10.4	1.1	B
	Right Turn	80	69	86.4%	13.3	3.7	B
	Subtotal	2,665	2,227	83.6%	11.5	1.2	B
EB	Left Turn	34	38	110.3%	54.8	18.4	D
	Through	1	1	90.0%	0.0	0.0	A
	Right Turn	26	26	100.8%	26.0	10.5	C
	Subtotal	61	65	105.9%	44.2	12.8	D
WB	Left Turn	10	10	98.0%	36.2	19.8	D
	Through	1	1	90.0%	7.2	16.6	A
	Right Turn	21	22	102.9%	27.1	13.0	C
	Subtotal	32	32	100.9%	33.1	8.7	C
Total		5,428	4,457	82.1%	223.4	12.5	F

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	289	249	86.2%	120.3	51.9	F
	Right Turn						
	Subtotal	289	249	86.2%	120.3	51.9	F
SB	Left Turn						
	Through	245	204	83.1%	1.1	1.2	A
	Right Turn	7	7	95.7%	1.9	5.5	A
	Subtotal	252	210	83.5%	1.2	1.4	A
EB	Left Turn						
	Through						
	Right Turn	9	8	85.6%	2.6	1.3	A
	Subtotal	9	8	85.6%	2.6	1.3	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		550	467	84.9%	62.7	27.4	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 21 **El Don Dr/Southern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	3	2	80.0%	37.4	55.5	E
	Through	207	201	97.0%	59.5	29.9	F
	Right Turn	1	1	140.0%	16.0	37.2	C
	Subtotal	211	205	96.9%	59.6	30.1	F
SB	Left Turn	9	7	73.3%	47.3	56.9	E
	Through	243	202	82.9%	1.5	2.4	A
	Right Turn	2	2	95.0%	0.0	0.0	A
	Subtotal	254	210	82.7%	2.1	2.8	A
EB	Left Turn	34	23	66.2%	405.2	252.6	F
	Through						
	Right Turn	5	5	98.0%	330.9	300.0	F
	Subtotal	39	27	70.3%	328.3	261.2	F
WB	Left Turn	4	3	72.5%	306.0	372.2	F
	Through						
	Right Turn	48	30	62.7%	436.0	310.4	F
	Subtotal	52	33	63.5%	345.3	295.6	F
Total		556	475	85.4%	54.8	33.8	F

Intersection 22 **El Don Dr/Wildflower Ln** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	1	0	30.0%	0.0	0.0	A
	Through	180	178	98.8%	39.3	48.0	E
	Right Turn	1	2	150.0%	16.5	49.5	C
	Subtotal	182	180	98.7%	39.4	48.2	E
SB	Left Turn						
	Through	237	197	83.2%	8.5	4.0	A
	Right Turn	15	12	82.0%	6.7	4.3	A
	Subtotal	252	209	83.1%	8.4	3.9	A
EB	Left Turn	9	9	95.6%	22.9	26.7	C
	Through						
	Right Turn	3	4	126.7%	2.1	2.0	A
	Subtotal	12	12	103.3%	19.1	25.2	C
WB	Left Turn	3	2	56.7%	2.7	6.4	A
	Through						
	Right Turn	22	23	102.3%	18.1	22.1	C
	Subtotal	25	24	96.8%	17.8	21.9	C
Total		471	426	90.4%	23.5	24.8	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 23 **El Don Dr/Corona Cir** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	5	4	78.0%	1.7	1.6	A
	Through	166	166	99.8%	0.2	0.1	A
	Right Turn	3	4	133.3%	0.1	0.2	A
	Subtotal	174	174	99.8%	0.2	0.2	A
SB	Left Turn	13	9	72.3%	4.4	2.2	A
	Through	215	182	84.5%	1.7	0.2	A
	Right Turn	15	12	80.0%	1.4	0.3	A
	Subtotal	243	203	83.6%	1.8	0.2	A
EB	Left Turn	9	8	93.3%	4.1	2.6	A
	Through						
	Right Turn	3	3	100.0%	1.4	1.6	A
	Subtotal	12	11	95.0%	4.3	1.5	A
WB	Left Turn	2	2	90.0%	1.5	2.6	A
	Through						
	Right Turn	7	8	111.4%	3.0	1.2	A
	Subtotal	9	10	106.7%	3.3	1.4	A
Total		438	398	90.8%	1.3	0.2	A

Intersection 24 **Sierra College Blvd/Street G** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	2,520	1,888	74.9%	111.5	53.6	F
	Right Turn	62	45	72.4%	91.2	43.0	F
	Subtotal	2,582	1,933	74.9%	111.1	53.1	F
SB	Left Turn	36	27	76.1%	44.7	11.3	E
	Through	2,484	2,033	81.8%	10.0	3.8	B
	Right Turn						
	Subtotal	2,520	2,060	81.8%	10.5	3.7	B
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	49	23	46.5%	641.2	114.5	F
	Subtotal	49	23	46.5%	276.9	299.1	F
Total		5,151	4,016	78.0%	58.0	16.9	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 25 **Sierra College Blvd/North Village Dwy 3** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	2,542	1,931	75.9%	56.1	28.3	F
	Right Turn	23	16	70.9%	61.4	33.0	F
	Subtotal	2,565	1,947	75.9%	56.1	27.9	F
SB	Left Turn	44	32	72.3%	159.0	103.7	F
	Through	2,461	2,020	82.1%	17.1	7.9	C
	Right Turn						
	Subtotal	2,505	2,052	81.9%	18.9	8.9	C
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	40	26	65.5%	528.8	181.0	F
	Subtotal	40	26	65.5%	273.8	270.0	F
Total		5,110	4,025	78.8%	37.7	7.9	E

Intersection 26 **South Village Dwy 3/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn	32	29	90.6%	6.0	3.0	A
	Subtotal	32	29	90.6%	6.0	3.0	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,104	921	83.4%	3.6	0.5	A
	Right Turn	9	8	92.2%	2.6	1.6	A
	Subtotal	1,113	929	83.5%	3.6	0.5	A
WB	Left Turn						
	Through	1,072	896	83.6%	75.7	62.5	F
	Right Turn						
	Subtotal	1,072	896	83.6%	75.7	62.5	F
Total		2,217	1,854	83.6%	34.5	27.3	D

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 27 **South Village Dwy 4/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn	80	81	100.9%	12.2	9.5	B
	Subtotal	80	81	100.9%	12.2	9.5	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,112	924	83.1%	6.1	4.5	A
	Right Turn	24	21	87.5%	4.1	0.8	A
	Subtotal	1,136	945	83.2%	6.1	4.4	A
WB	Left Turn						
	Through	1,072	913	85.2%	16.9	23.3	C
	Right Turn						
	Subtotal	1,072	913	85.2%	16.9	23.3	C
Total		2,288	1,939	84.8%	10.9	9.5	B

RAMP METERING ANALYSIS

Project: College Park
Ramp: I-80 WB Loop On-Ramp at Sierra College Blvd.
Scenario: Cumulative No Project AM Peak Hour

Configuration: 1 metered + 1 HOV
Cumulative Peak Hour Volume: 161

HOV Bypass (%)	15%
Metered Volume (veh/hr)	137
Metering Rate (veh/hr)	240
Discharge Rate (veh/15 min)	60

Storage Length (ft)	450
Storage Lanes	1
Maximum Storage (veh)	15

Time Interval	Hourly Arrival Distribution	Estimated 15-Minute Volumes	Metered 15-Minute min flows	Excess Demand	Accum-ulated Vehicles	Total Delay (veh-hr)	Vehicles Delayed	Total Hourly Volume	Metered Hourly Volume	Cumulative Frcst Volume Total	Existing Count Volume Total		
6:00-6:15	0%	0	0	0	0	0.00	0						
6:15-6:30	0%	0	0	0	0	0.00	0						
6:30-6:45	0%	0	0	0	0	0.00	0						
6:45-7:00	0%	0	0	0	0	0.00	0	0	0				
7:00-7:15	20%	32	27	0	0	0.00	0	32	27	32	26	20%	1.219697
7:15-7:30	23%	38	32	0	0	0.00	0	70	59	38	31	23%	
7:30-7:45	20%	33	28	0	0	0.00	0	102	87	33	27	20%	
7:45-8:00	36%	59	50	0	0	0.00	0	161	137	59	48	36%	
8:00-8:15	0%	0	0	0	0	0.00	0						
8:15-8:30	0%	0	0	0	0	0.00	0						
8:30-8:45	0%	0	0	0	0	0.00	0						
8:45-9:00	0%	0	0	0	0	0.00	0						
9:00-9:15	0%	0	0	0	0	0.00	0						
9:15-9:30	0%	0	0	0	0	0.00	0						
9:30-9:45	0%	0	0	0	0	0.00	0						
9:45-10:00	0%	0	0	0	0	0.00	0						

Maximum Queue (veh)	0
Maximum Queue (ft)	0

RAMP METERING ANALYSIS

Project: College Park
Ramp: I-80 WB Loop On-Ramp at Sierra College Blvd.
Scenario: Cumulative No Project PM Peak Hour

Configuration: 1 metered + 1 HOV
Cumulative Peak Hour Volume: 446

HOV Bypass (%)	15%
Metered Volume (veh/hr)	379
Metering Rate (veh/hr)	400
Discharge Rate (veh/15 min)	100

Storage Length (ft)	450
Storage Lanes	1
Maximum Storage (veh)	15

Time Interval	Hourly Arrival Distribution	Estimated 15-Minute Volumes	Metered 15-Minute min flows	Excess Demand	Accum-ulated Vehicles	Total Delay (veh-hr)	Vehicles Delayed	Total Hourly Volume	Metered Hourly Volume	Cumulative Frcst Volume Total	Existing Count Volume Total		
6:00-6:15	0%	0	0	0	0	0.00	0						
6:15-6:30	0%	0	0	0	0	0.00	0						
6:30-6:45	0%	0	0	0	0	0.00	0						
6:45-7:00	0%	0	0	0	0	0.00	0	0	0				
7:00-7:15	25%	112	95	0	0	0.00	0	112	95	112	70	25%	1.6043165
7:15-7:30	26%	114	97	0	0	0.00	0	226	192	114	71	26%	
7:30-7:45	26%	116	98	0	0	0.00	0	342	290	116	72	26%	
7:45-8:00	23%	104	89	0	0	0.00	0	446	379	104	65	23%	
8:00-8:15	0%	0	0	0	0	0.00	0						
8:15-8:30	0%	0	0	0	0	0.00	0						
8:30-8:45	0%	0	0	0	0	0.00	0						
8:45-9:00	0%	0	0	0	0	0.00	0						
9:00-9:15	0%	0	0	0	0	0.00	0						
9:15-9:30	0%	0	0	0	0	0.00	0						
9:30-9:45	0%	0	0	0	0	0.00	0						
9:45-10:00	0%	0	0	0	0	0.00	0						

Maximum Queue (veh)	0
Maximum Queue (ft)	0

RAMP METERING ANALYSIS

Project: College Park
Ramp: I-80 WB Loop On-Ramp at Sierra College Blvd.
Scenario: Cumulative Plus Project AM Peak Hour

Configuration: 1 metered + 1 HOV
Cumulative Peak Hour Volume: 200

HOV Bypass (%)	15%
Metered Volume (veh/hr)	170
Metering Rate (veh/hr)	240
Discharge Rate (veh/15 min)	60

Storage Length (ft)	450
Storage Lanes	1
Maximum Storage (veh)	15

Time Interval	Hourly Arrival Distribution	Estimated 15-Minute Volumes	Metered 15-Minute min flows	Excess Demand	Accum-ulated Vehicles	Total Delay (veh-hr)	Vehicles Delayed	Total Hourly Volume	Metered Hourly Volume	Cumulative Frcst Volume Total	Existing Count Volume Total		
6:00-6:15	0%	0	0	0	0	0.00	0						
6:15-6:30	0%	0	0	0	0	0.00	0						
6:30-6:45	0%	0	0	0	0	0.00	0						
6:45-7:00	0%	0	0	0	0	0.00	0	0	0				
7:00-7:15	20%	39	33	0	0	0.00	0	39	33	39	26	20%	1.5151515
7:15-7:30	23%	47	40	0	0	0.00	0	86	73	47	31	23%	
7:30-7:45	20%	41	35	0	0	0.00	0	127	108	41	27	20%	
7:45-8:00	36%	73	62	2	2	0.45	62	200	170	73	48	36%	
8:00-8:15	0%	0	0	0	0	0.00	0						
8:15-8:30	0%	0	0	0	0	0.00	0						
8:30-8:45	0%	0	0	0	0	0.00	0						
8:45-9:00	0%	0	0	0	0	0.00	0						
9:00-9:15	0%	0	0	0	0	0.00	0						
9:15-9:30	0%	0	0	0	0	0.00	0						
9:30-9:45	0%	0	0	0	0	0.00	0						
9:45-10:00	0%	0	0	0	0	0.00	0						

Maximum Queue (veh)	2
Maximum Queue (ft)	55

RAMP METERING ANALYSIS

Project: College Park
Ramp: I-80 WB Loop On-Ramp at Sierra College Blvd.
Scenario: Cumulative Plus Project PM Peak Hour

Configuration: 1 metered + 1 HOV
Cumulative Peak Hour Volume: 478

HOV Bypass (%)	15%
Metered Volume (veh/hr)	406
Metering Rate (veh/hr)	400
Discharge Rate (veh/15 min)	100

Storage Length (ft)	450
Storage Lanes	1
Maximum Storage (veh)	15

Time Interval	Hourly Arrival Distribution	Estimated 15-Minute Volumes	Metered 15-Minute min flows	Excess Demand	Accum-ulated Vehicles	Total Delay (veh-hr)	Vehicles Delayed	Total Hourly Volume	Metered Hourly Volume	Cumulative Frcst Volume Total	Existing Count Volume Total		
6:00-6:15	0%	0	0	0	0	0.00	0						
6:15-6:30	0%	0	0	0	0	0.00	0						
6:30-6:45	0%	0	0	0	0	0.00	0						
6:45-7:00	0%	0	0	0	0	0.00	0	0	0				
7:00-7:15	25%	120	102	2	2	0.58	102	120	102	120	70	25%	1.7194245
7:15-7:30	26%	122	104	4	6	1.52	104	242	206	122	71	26%	
7:30-7:45	26%	124	105	5	11	2.83	105	366	311	124	72	26%	
7:45-8:00	23%	112	95	0	6	1.57	95	478	406	112	65	23%	
8:00-8:15	0%	0	0	0	0	0.00	0						
8:15-8:30	0%	0	0	0	0	0.00	0						
8:30-8:45	0%	0	0	0	0	0.00	0						
8:45-9:00	0%	0	0	0	0	0.00	0						
9:00-9:15	0%	0	0	0	0	0.00	0						
9:15-9:30	0%	0	0	0	0	0.00	0						
9:30-9:45	0%	0	0	0	0	0.00	0						
9:45-10:00	0%	0	0	0	0	0.00	0						

Maximum Queue (veh)	11
Maximum Queue (ft)	339

APPENDIX E:

POTENTIAL OPERATIONAL ENHANCEMENTS INTERSECTION LOS CALCULATIONS

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	18	18	98.9%	37.8	10.6	D
	Through	21	21	100.5%	35.7	12.1	D
	Right Turn	16	17	104.4%	11.2	6.3	B
	Subtotal	55	56	101.1%	31.0	6.9	C
SB	Left Turn	282	284	100.6%	26.7	4.0	C
	Through	15	14	96.0%	34.0	8.5	C
	Right Turn	113	111	97.9%	8.0	2.0	A
	Subtotal	410	409	99.7%	21.8	3.1	C
EB	Left Turn	158	162	102.5%	40.7	5.7	D
	Through	873	861	98.6%	12.9	1.9	B
	Right Turn	7	8	117.1%	8.4	8.3	A
	Subtotal	1,038	1,031	99.3%	17.4	2.6	B
WB	Left Turn	10	10	95.0%	50.0	23.2	D
	Through	730	733	100.4%	22.9	3.3	C
	Right Turn	528	538	101.8%	8.7	0.6	A
	Subtotal	1,268	1,230	101.0%	17.0	2.1	B
Total		2,771	2,776	100.2%	18.1	2.1	B

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	68	64	93.5%	30.6	4.4	C
	Through						
	Right Turn	265	264	99.7%	28.0	2.3	C
	Subtotal	333	328	98.4%	28.6	2.0	C
EB	Left Turn						
	Through	786	777	98.8%	23.3	3.9	C
	Right Turn	401	401	100.1%	11.7	1.8	B
	Subtotal	1,187	1,178	99.3%	19.3	2.6	B
WB	Left Turn	406	395	97.3%	49.9	5.6	D
	Through	1,066	1,079	101.2%	8.4	1.1	A
	Right Turn						
	Subtotal	1,472	1,473	100.1%	19.8	2.5	B
Total		2,992	2,979	99.6%	20.7	1.8	C

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	602	611	101.5%	32.5	1.7	C
	Through						
	Right Turn	945	921	97.5%	27.0	1.8	C
	Subtotal	1,547	1,532	99.0%	29.2	1.7	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	187	186	99.5%	40.7	4.3	D
	Through	667	658	98.7%	16.8	1.8	B
	Right Turn						
	Subtotal	854	844	98.9%	21.8	1.3	C
WB	Left Turn						
	Through	870	869	99.8%	30.8	3.5	C
	Right Turn	52	53	101.3%	26.4	7.4	C
	Subtotal	922	921	99.9%	30.5	3.6	C
Total		3,323	3,298	99.2%	27.6	1.5	C

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	141	143	101.3%	35.5	3.0	D
	Through						
	Right Turn	30	30	101.3%	16.0	6.3	B
	Subtotal	171	173	101.3%	31.9	3.0	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	40	40	100.5%	42.8	5.1	D
	Through	1,500	1,471	98.1%	6.0	1.0	A
	Right Turn	53	50	94.9%	5.0	1.8	A
	Subtotal	1,593	1,561	98.0%	6.9	1.0	A
WB	Left Turn	9	12	132.2%	59.5	13.9	E
	Through	759	750	98.8%	10.7	1.9	B
	Right Turn						
	Subtotal	768	762	99.2%	11.3	2.0	B
Total		2,532	2,497	98.6%	10.0	1.1	A

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	141	138	98.2%	40.9	4.6	D
	Through	27	29	105.6%	43.6	7.8	D
	Right Turn	28	27	96.8%	30.2	14.6	C
	Subtotal	196	194	99.0%	39.7	4.3	D
SB	Left Turn	20	18	88.0%	43.4	12.2	D
	Through	1	1	110.0%	16.8	34.7	B
	Right Turn	71	68	95.2%	10.0	3.7	B
	Subtotal	92	86	93.8%	16.4	4.6	B
EB	Left Turn	535	520	97.3%	46.2	13.8	D
	Through	884	882	99.7%	26.4	4.4	C
	Right Turn	97	93	96.2%	23.6	5.8	C
	Subtotal	1,516	1,495	98.6%	33.0	7.2	C
WB	Left Turn	59	61	102.5%	40.8	7.1	D
	Through	530	528	99.7%	34.0	5.2	C
	Right Turn	121	117	96.7%	22.1	3.8	C
	Subtotal	710	706	99.4%	32.7	4.4	C
Total		2,514	2,432	98.7%	32.8	5.2	C

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	15	15	100.0%	36.3	9.7	D
	Through	1	1	100.0%	16.9	35.8	B
	Right Turn	19	21	111.6%	12.4	4.4	B
	Subtotal	35	37	106.3%	22.6	7.4	C
SB	Left Turn	43	43	99.8%	40.0	12.2	D
	Through	1	1	80.0%	10.9	22.9	B
	Right Turn	16	15	93.1%	5.4	2.3	A
	Subtotal	60	59	97.7%	32.6	11.6	C
EB	Left Turn	367	364	99.2%	42.2	5.7	D
	Through	546	536	98.2%	8.1	1.7	A
	Right Turn	7	9	130.0%	5.2	4.9	A
	Subtotal	920	910	98.9%	21.9	3.7	C
WB	Left Turn	15	15	98.0%	70.0	24.8	E
	Through	531	546	102.9%	27.0	6.3	C
	Right Turn	426	421	98.9%	32.6	9.7	C
	Subtotal	972	982	101.1%	30.0	7.7	C
Total		1,987	1,988	100.0%	26.1	5.0	C

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	405	403	99.5%	48.8	7.2	D
	Through	582	577	99.1%	26.9	3.1	C
	Right Turn	104	101	97.2%	15.7	4.1	B
	Subtotal	1,091	1,081	99.1%	34.1	4.1	C
SB	Left Turn	197	202	102.5%	53.7	7.6	D
	Through	721	720	99.9%	39.0	5.6	D
	Right Turn	270	277	102.6%	23.0	5.2	C
	Subtotal	1,188	1,199	101.0%	37.6	4.6	D
EB	Left Turn	140	136	97.2%	51.2	5.0	D
	Through	273	266	97.6%	35.1	5.1	D
	Right Turn	195	196	100.6%	12.2	6.8	B
	Subtotal	608	599	98.5%	32.1	4.2	C
WB	Left Turn	99	102	102.7%	56.0	6.9	E
	Through	312	317	101.7%	38.4	4.9	D
	Right Turn	184	182	98.8%	12.3	3.7	B
	Subtotal	595	601	101.0%	32.4	5.2	C
Total		3,482	3,480	99.9%	34.6	3.6	C

Intersection 8 **North Village Dwy 1-Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	13	12	93.1%	13.5	10.4	B
	Through						
	Right Turn	1	2	150.0%	1.7	2.3	A
	Subtotal	14	14	97.1%	11.8	9.5	B
SB	Left Turn	6	7	113.3%	16.4	18.3	C
	Through						
	Right Turn	39	36	93.1%	5.1	2.5	A
	Subtotal	45	43	95.8%	7.4	3.4	A
EB	Left Turn	26	27	103.8%	6.3	1.6	A
	Through	547	540	98.8%	3.2	0.5	A
	Right Turn	3	3	83.3%	1.5	1.9	A
	Subtotal	576	570	98.9%	3.3	0.6	A
WB	Left Turn						
	Through	543	552	101.6%	0.7	0.3	A
	Right Turn	10	7	73.0%	0.0	0.1	A
	Subtotal	553	559	101.1%	0.7	0.3	A
Total		1,188	1,186	99.8%	2.3	0.4	A

Intersection 9 North Village Dwy 2-Rocklin Manor Central/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	8	80.0%	11.1	6.3	B
	Through						
	Right Turn	1	2	180.0%	0.9	1.2	A
	Subtotal	11	10	89.1%	9.4	4.6	A
SB	Left Turn	2	2	95.0%	5.6	8.6	A
	Through						
	Right Turn	25	28	110.8%	4.9	4.4	A
	Subtotal	27	30	109.6%	5.5	5.0	A
EB	Left Turn	121	125	103.3%	5.2	1.2	A
	Through	423	412	97.4%	2.0	0.3	A
	Right Turn	10	12	116.0%	0.2	0.3	A
	Subtotal	554	549	99.0%	2.7	0.4	A
WB	Left Turn						
	Through	518	525	101.3%	0.6	0.1	A
	Right Turn	10	10	96.0%	0.2	0.1	A
	Subtotal	528	534	101.2%	0.6	0.1	A
Total		1,120	1,122	100.2%	1.8	0.3	A

Intersection 10 Rocklin Manor East/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	9	10	110.0%	6.8	4.9	A
	Through						
	Right Turn	2	2	120.0%	1.0	1.6	A
	Subtotal	11	12	111.8%	6.3	4.8	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	424	411	97.0%	0.3	0.1	A
	Right Turn	2	4	190.0%	0.0	0.1	A
	Subtotal	426	415	97.4%	0.2	0.1	A
WB	Left Turn	2	1	40.0%	2.0	5.5	A
	Through	519	524	101.0%	2.6	0.4	A
	Right Turn						
	Subtotal	521	525	100.7%	2.6	0.4	A
Total		958	952	99.4%	1.7	0.3	A

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	420	418	99.5%	13.1	4.1	B
	Through	64	66	103.8%	10.2	0.8	B
	Right Turn						
	Subtotal	484	484	100.0%	12.8	3.6	B
SB	Left Turn						
	Through	43	45	104.4%	10.6	1.3	B
	Right Turn	79	84	106.2%	5.0	1.6	A
	Subtotal	122	129	105.6%	6.8	1.2	A
EB	Left Turn	83	78	93.4%	13.6	3.8	B
	Through						
	Right Turn	325	316	97.3%	10.9	2.4	B
	Subtotal	408	394	96.5%	11.4	2.6	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,014	1,007	99.3%	11.5	2.6	B

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	255	259	101.6%	32.6	3.7	C
	Through	487	488	100.3%	14.4	3.8	B
	Right Turn	86	81	94.0%	7.2	1.9	A
	Subtotal	828	828	100.0%	19.3	3.0	B
SB	Left Turn	80	85	106.6%	41.6	8.0	D
	Through	863	873	101.1%	23.6	3.8	C
	Right Turn	64	64	99.2%	7.5	2.9	A
	Subtotal	1,007	1,022	101.5%	24.1	3.7	C
EB	Left Turn	65	67	103.5%	38.1	3.9	D
	Through	20	20	98.0%	44.1	16.2	D
	Right Turn	104	110	105.8%	11.9	3.1	B
	Subtotal	189	197	104.2%	24.4	3.1	C
WB	Left Turn	143	132	92.4%	36.4	5.6	D
	Through	24	24	101.7%	42.3	11.6	D
	Right Turn	33	37	113.3%	6.6	2.0	A
	Subtotal	200	194	97.0%	30.8	3.5	C
Total		2,224	2,241	100.8%	23.0	3.0	C

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	82	79	96.3%	31.0	5.8	C
	Through	559	559	99.9%	11.9	1.8	B
	Right Turn	172	163	94.8%	3.3	0.5	A
	Subtotal	813	801	98.5%	12.3	1.2	B
SB	Left Turn						
	Through	1,140	1,151	100.9%	17.6	3.4	B
	Right Turn	19	21	109.5%	5.9	1.5	A
	Subtotal	1,159	1,171	101.1%	17.4	3.4	B
EB	Left Turn	7	8	111.4%	29.8	19.6	C
	Through						
	Right Turn	63	58	92.7%	10.1	2.8	B
	Subtotal	70	66	94.6%	12.4	4.2	B
WB	Left Turn	689	687	99.7%	26.3	3.3	C
	Through	73	74	100.7%	27.2	6.3	C
	Right Turn	265	269	101.5%	14.1	2.6	B
	Subtotal	1,027	1,030	100.3%	23.2	3.1	C
Total		3,069	3,058	100.0%	18.0	2.0	B

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	861	855	99.3%	13.3	2.7	B
	Right Turn	50	51	101.2%	6.1	1.1	A
	Subtotal	911	906	99.4%	12.9	2.6	B
SB	Left Turn	135	130	95.9%	45.4	4.0	D
	Through	1,261	1,266	100.4%	15.2	2.0	B
	Right Turn	184	189	102.6%	6.9	0.9	A
	Subtotal	1,580	1,585	100.3%	16.5	1.9	B
EB	Left Turn	237	234	98.7%	33.9	2.5	C
	Through	140	143	101.9%	38.2	6.1	D
	Right Turn	215	220	102.5%	35.7	10.8	D
	Subtotal	592	597	100.8%	35.7	3.8	D
WB	Left Turn	62	65	104.7%	37.9	5.6	D
	Through						
	Right Turn	98	93	94.5%	10.3	3.7	B
	Subtotal	160	158	98.4%	22.1	4.8	C
Total		3,243	3,245	100.1%	19.4	1.6	B

Intersection 15 **Sierra College Blvd/Schriber Wy** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	871	865	99.3%	1.6	0.2	A
	Right Turn						
	Subtotal	871	865	99.3%	1.6	0.2	A
SB	Left Turn						
	Through	1,538	1,552	100.9%	3.7	0.5	A
	Right Turn						
	Subtotal	1,538	1,552	100.9%	3.7	0.5	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	40	41	102.8%	6.2	1.3	A
	Subtotal	40	41	102.8%	6.2	1.3	A
Total		2,449	2,458	100.4%	3.0	0.3	A

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	852	847	99.4%	7.0	1.3	A
	Right Turn	26	29	110.4%	5.3	1.5	A
	Subtotal	878	876	99.8%	6.9	1.3	A
SB	Left Turn	25	20	81.2%	21.4	10.8	C
	Through	1,506	1,526	101.3%	6.6	1.3	A
	Right Turn	7	7	105.7%	4.2	1.0	A
	Subtotal	1,538	1,554	101.0%	6.7	1.2	A
EB	Left Turn						
	Through	1	1	80.0%	18.7	28.4	B
	Right Turn						
	Subtotal	1	1	80.0%	18.7	28.4	B
WB	Left Turn	23	20	87.4%	21.9	13.7	C
	Through						
	Right Turn	8	9	108.8%	7.3	6.2	A
	Subtotal	31	29	92.9%	15.3	7.1	B
Total		2,448	2,459	100.4%	6.9	0.9	A

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr-North Village Street A** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	125	123	98.3%	43.4	6.9	D
	Through	809	803	99.2%	9.9	1.2	A
	Right Turn	13	14	104.6%	8.1	1.9	A
	Subtotal	947	939	99.2%	14.3	1.5	B
SB	Left Turn	14	13	91.4%	23.5	8.9	C
	Through	1,202	1,207	100.4%	16.8	2.7	B
	Right Turn	313	326	104.0%	15.4	3.2	B
	Subtotal	1,529	1,545	101.0%	16.6	2.7	B
EB	Left Turn	18	20	108.9%	40.8	9.1	D
	Through						
	Right Turn	20	25	122.5%	9.6	4.6	A
	Subtotal	38	44	116.1%	25.4	6.4	C
WB	Left Turn	66	66	99.5%	35.7	5.6	D
	Through						
	Right Turn	41	42	101.2%	6.5	2.2	A
	Subtotal	107	107	100.2%	25.0	3.7	C
Total		2,621	2,635	100.5%	16.2	2.1	B

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	879	868	98.8%	0.6	0.1	A
	Right Turn						
	Subtotal	879	868	98.8%	0.6	0.1	A
SB	Left Turn						
	Through	1,227	1,236	100.7%	5.2	0.7	A
	Right Turn	97	97	100.2%	4.8	0.7	A
	Subtotal	1,324	1,333	100.7%	5.1	0.7	A
EB	Left Turn						
	Through						
	Right Turn	2	2	120.0%	4.9	7.4	A
	Subtotal	2	2	120.0%	4.9	7.4	A
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,205	2,204	100.0%	3.3	0.4	A

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	45	43	95.1%	31.9	4.9	C
	Through	968	959	99.1%	9.1	2.4	A
	Right Turn	5	5	106.0%	0.2	0.5	A
	Subtotal	1,018	1,007	98.9%	10.1	2.3	B
SB	Left Turn	36	35	95.8%	31.5	4.4	C
	Through	983	987	100.4%	13.5	1.3	B
	Right Turn	26	23	90.0%	11.8	4.7	B
	Subtotal	1,045	1,045	100.0%	14.1	1.3	B
EB	Left Turn	57	56	98.9%	27.4	2.4	C
	Through	1	1	100.0%	4.1	13.0	A
	Right Turn	39	39	99.0%	15.1	4.9	B
	Subtotal	97	96	99.0%	22.8	3.0	C
WB	Left Turn	18	14	79.4%	24.1	11.2	C
	Through	1	0	20.0%	0.0	0.0	A
	Right Turn	44	44	99.5%	13.1	5.5	B
	Subtotal	63	58	92.5%	16.0	6.3	B
Total		2,223	2,206	99.2%	12.7	1.6	B

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	196	195	99.3%	1.7	2.2	A
	Right Turn						
	Subtotal	196	195	99.3%	1.7	2.2	A
SB	Left Turn						
	Through	115	113	98.2%	0.4	0.1	A
	Right Turn	10	11	106.0%	0.4	0.3	A
	Subtotal	125	124	98.8%	0.4	0.1	A
EB	Left Turn						
	Through						
	Right Turn	1	1	50.0%	0.5	1.1	A
	Subtotal	1	1	50.0%	0.5	1.1	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		322	319	98.9%	1.2	1.3	A

Intersection 21 **El Don Dr/Southern Retail Access-South Village Dwy 2** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	3	3	103.3%	1.7	1.5	A
	Through	173	172	99.4%	1.8	1.3	A
	Right Turn						
	Subtotal	176	175	99.4%	1.9	1.2	A
SB	Left Turn	50	46	92.4%	2.0	0.4	A
	Through	65	64	98.8%	0.1	0.1	A
	Right Turn	1	2	160.0%	0.0	0.0	A
	Subtotal	116	112	96.6%	0.9	0.2	A
EB	Left Turn	13	13	96.2%	4.4	2.0	A
	Through						
	Right Turn	1	2	180.0%	0.3	0.8	A
	Subtotal	14	14	102.1%	4.3	2.0	A
WB	Left Turn	1	0	0.0%	0.0	0.0	A
	Through						
	Right Turn	10	9	92.0%	2.3	1.0	A
	Subtotal	11	9	83.6%	2.3	1.0	A
Total		317	311	97.9%	1.7	0.7	A

Intersection 22 **El Don Dr/Wildflower Ln-South Village Dwy 1** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	2	2	110.0%	2.1	2.9	A
	Through	158	159	100.7%	5.3	0.4	A
	Right Turn	18	18	99.4%	3.7	0.6	A
	Subtotal	178	179	100.7%	5.1	0.3	A
SB	Left Turn						
	Through	55	54	97.8%	5.5	0.4	A
	Right Turn	12	12	100.0%	3.6	0.6	A
	Subtotal	67	66	98.2%	5.1	0.3	A
EB	Left Turn	15	14	92.0%	4.0	0.5	A
	Through						
	Right Turn	5	8	164.0%	2.3	0.9	A
	Subtotal	20	22	110.0%	3.5	0.3	A
WB	Left Turn	1	0	40.0%	0.3	0.9	A
	Through						
	Right Turn	3	3	110.0%	1.7	1.7	A
	Subtotal	4	4	92.5%	2.0	1.6	A
Total		269	271	100.6%	4.9	0.3	A

Intersection 23 **El Don Dr/Corona Cir-South Village Street A** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	2	1	60.0%	0.7	1.4	A
	Through	158	159	100.7%	0.2	0.1	A
	Right Turn	1	2	200.0%	0.0	0.0	A
	Subtotal	161	162	100.8%	0.2	0.1	A
SB	Left Turn	4	3	70.0%	0.9	1.2	A
	Through	52	53	101.5%	1.4	0.3	A
	Right Turn	5	6	126.0%	0.8	0.8	A
	Subtotal	61	62	101.5%	1.4	0.3	A
EB	Left Turn	9	8	90.0%	4.7	2.1	A
	Through						
	Right Turn	3	4	120.0%	1.0	1.3	A
	Subtotal	12	12	97.5%	4.3	1.9	A
WB	Left Turn	3	2	80.0%	1.1	1.7	A
	Through						
	Right Turn	11	11	102.7%	3.6	1.2	A
	Subtotal	14	14	97.9%	3.7	1.2	A
Total		248	250	100.6%	0.9	0.2	A

Intersection 24 **Sierra College Blvd/Street G** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	858	848	98.8%	0.8	0.1	A
	Right Turn	21	20	95.2%	0.7	0.1	A
	Subtotal	879	868	98.7%	0.8	0.1	A
SB	Left Turn	11	11	97.3%	10.6	12.8	B
	Through	1,324	1,333	100.7%	4.7	0.7	A
	Right Turn						
	Subtotal	1,335	1,344	100.7%	4.8	0.6	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	79	81	102.5%	6.2	1.6	A
	Subtotal	79	81	102.5%	6.2	1.6	A
Total		2,293	2,293	100.0%	3.3	0.3	A

Intersection 25 **Sierra College Blvd/North Village Dwy 3** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	862	852	98.8%	3.6	0.5	A
	Right Turn	27	25	91.9%	3.0	0.9	A
	Subtotal	889	877	98.6%	3.5	0.5	A
SB	Left Turn	41	41	99.0%	7.8	3.7	A
	Through	1,188	1,199	101.0%	1.3	0.2	A
	Right Turn						
	Subtotal	1,229	1,240	100.9%	1.5	0.2	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	17	16	91.8%	4.2	1.8	A
	Subtotal	17	16	91.8%	4.2	1.8	A
Total		2,135	2,132	99.9%	2.4	0.2	A

Intersection 26 **South Village Dwy 3/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	3	3	100.0%	3.0	4.1	A
	Subtotal	3	3	100.0%	3.0	4.1	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	976	959	98.3%	1.0	0.1	A
	Right Turn	42	45	106.0%	0.1	0.1	A
	Subtotal	1,018	1,004	98.6%	1.0	0.1	A
WB	Left Turn						
	Through	572	585	102.2%	0.3	0.1	A
	Right Turn						
	Subtotal	572	585	102.2%	0.3	0.1	A
Total		1,593	1,591	99.9%	0.7	0.1	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Existing Plus Project Conditions
AM Peak Hour

Intersection 27 **South Village Dwy 4/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	17	16	96.5%	5.9	2.4	A
	Subtotal	17	16	96.5%	5.9	2.4	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	903	889	98.4%	1.2	0.6	A
	Right Turn	76	75	98.3%	0.5	0.3	A
	Subtotal	979	964	98.4%	1.1	0.6	A
WB	Left Turn						
	Through	572	585	102.3%	2.6	0.3	A
	Right Turn						
	Subtotal	572	585	102.3%	2.6	0.3	A
Total		1,568	1,565	99.8%	1.7	0.4	A

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	45	42	93.6%	45.7	18.1	D
	Through	26	25	96.5%	47.7	7.8	D
	Right Turn	27	29	108.5%	21.9	8.7	C
	Subtotal	98	97	98.5%	38.5	7.8	D
SB	Left Turn	525	521	99.3%	35.7	4.1	D
	Through	22	21	95.5%	43.6	11.0	D
	Right Turn	200	194	97.0%	11.6	3.5	B
	Subtotal	747	736	98.6%	29.6	3.3	C
EB	Left Turn	173	171	99.0%	65.8	13.9	E
	Through	679	676	99.6%	24.5	3.3	C
	Right Turn	18	18	97.2%	16.2	8.3	B
	Subtotal	870	865	99.4%	32.3	5.4	C
WB	Left Turn	50	48	95.0%	80.9	12.1	F
	Through	860	855	99.4%	38.7	5.8	D
	Right Turn	508	523	103.0%	17.4	3.7	B
	Subtotal	1,418	1,426	100.6%	32.6	5.3	C
Total		3,133	3,124	99.7%	32.0	4.4	C

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	71	72	100.8%	29.3	7.5	C
	Through	4	4	105.0%	31.6	31.1	C
	Right Turn	306	319	104.1%	50.9	11.9	D
	Subtotal	381	394	103.5%	47.4	10.3	D
EB	Left Turn						
	Through	773	785	101.5%	38.3	4.9	D
	Right Turn	498	498	100.0%	25.3	8.7	C
	Subtotal	1,271	1,283	100.9%	33.4	5.4	C
WB	Left Turn	649	647	99.7%	38.8	15.0	D
	Through	1,259	1,254	99.6%	15.8	3.2	B
	Right Turn						
	Subtotal	1,908	1,901	99.6%	23.5	6.9	C
Total		3,560	3,578	100.5%	29.9	3.9	C

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	555	553	99.7%	53.2	12.1	D
	Through	1	0	40.0%	8.6	27.0	A
	Right Turn	657	659	100.2%	42.8	26.7	D
	Subtotal	1,213	1,212	99.9%	47.6	20.0	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	227	227	100.0%	77.8	31.7	E
	Through	617	627	101.6%	19.5	13.9	B
	Right Turn						
	Subtotal	844	854	101.1%	35.3	16.8	D
WB	Left Turn						
	Through	1,353	1,361	100.6%	40.4	9.4	D
	Right Turn	89	90	101.5%	36.2	11.4	D
	Subtotal	1,442	1,451	100.6%	40.2	9.5	D
Total		3,499	3,517	100.5%	41.6	11.3	D

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	103	100	96.7%	51.4	12.5	D
	Through						
	Right Turn	20	20	101.5%	8.6	4.2	A
	Subtotal	123	120	97.5%	45.3	10.6	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	55	55	100.4%	72.3	47.7	E
	Through	1,153	1,165	101.0%	12.0	13.1	B
	Right Turn	139	140	100.5%	9.4	11.2	A
	Subtotal	1,347	1,360	100.9%	14.4	15.4	B
WB	Left Turn	17	20	117.6%	90.8	53.5	F
	Through	1,322	1,321	99.9%	37.9	25.8	D
	Right Turn						
	Subtotal	1,339	1,341	100.1%	38.7	25.9	D
Total		2,809	2,820	100.4%	27.4	16.5	C

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	181	185	102.0%	55.1	9.4	E
	Through	9	11	117.8%	57.5	29.5	E
	Right Turn	31	30	96.1%	51.2	11.6	D
	Subtotal	221	225	101.9%	54.8	8.1	D
SB	Left Turn	58	63	107.8%	53.9	11.3	D
	Through	13	14	106.2%	63.3	20.8	E
	Right Turn	359	366	102.1%	26.5	6.1	C
	Subtotal	430	443	103.0%	31.5	6.4	C
EB	Left Turn	264	264	99.8%	59.5	3.7	E
	Through	780	791	101.4%	37.8	6.8	D
	Right Turn	139	137	98.8%	35.3	8.5	D
	Subtotal	1,183	1,192	100.7%	42.4	5.4	D
WB	Left Turn	29	28	94.8%	71.5	16.7	E
	Through	787	780	99.1%	42.3	6.1	D
	Right Turn	46	47	102.2%	30.9	8.8	C
	Subtotal	862	855	99.2%	42.3	5.2	D
Total		2,696	2,714	100.7%	41.5	3.2	D

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	5	3	64.0%	18.2	19.7	B
	Through						
	Right Turn	9	11	120.0%	5.8	2.6	A
	Subtotal	14	14	100.0%	9.6	8.1	A
SB	Left Turn	336	334	99.4%	23.4	3.5	C
	Through						
	Right Turn	167	168	100.7%	7.9	1.6	A
	Subtotal	503	502	99.9%	18.4	2.3	B
EB	Left Turn	115	120	104.3%	35.9	4.6	D
	Through	614	624	101.6%	18.2	3.0	B
	Right Turn	16	16	98.8%	14.1	6.5	B
	Subtotal	745	760	102.0%	21.0	3.0	C
WB	Left Turn	14	14	100.0%	46.1	17.2	D
	Through	579	578	99.7%	20.3	3.8	C
	Right Turn	124	128	103.1%	16.1	4.8	B
	Subtotal	717	719	100.3%	20.2	3.6	C
Total		1,979	1,995	100.8%	19.9	2.3	B

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	263	260	98.7%	50.3	6.6	D
	Through	900	913	101.4%	30.2	3.4	C
	Right Turn	75	75	99.9%	18.7	5.7	B
	Subtotal	1,238	1,247	100.7%	33.5	2.9	C
SB	Left Turn	198	203	102.5%	46.1	11.8	D
	Through	661	678	102.5%	34.2	4.7	C
	Right Turn	172	169	98.0%	15.3	2.7	B
	Subtotal	1,031	1,049	101.8%	33.4	3.0	C
EB	Left Turn	282	285	101.2%	47.7	8.2	D
	Through	304	307	100.9%	33.4	5.5	C
	Right Turn	373	373	99.9%	15.7	4.5	B
	Subtotal	959	965	100.6%	30.5	3.7	C
WB	Left Turn	128	130	101.4%	50.4	7.0	D
	Through	294	301	102.5%	36.2	4.8	D
	Right Turn	237	235	99.2%	15.8	4.3	B
	Subtotal	659	666	101.1%	37.8	3.7	C
Total		3,887	3,928	101.0%	32.4	1.3	C

Intersection 8 **North Village Dwy 1-Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	11	10	90.9%	8.4	4.5	A
	Through						
	Right Turn	1	2	180.0%	2.0	2.7	A
	Subtotal	12	12	98.3%	8.1	4.3	A
SB	Left Turn	11	11	99.1%	15.2	11.3	C
	Through						
	Right Turn	72	75	104.6%	6.9	5.6	A
	Subtotal	83	86	103.9%	8.0	6.8	A
EB	Left Turn	35	35	99.4%	5.7	2.3	A
	Through	527	532	100.9%	3.4	0.3	A
	Right Turn	15	17	115.3%	2.1	1.0	A
	Subtotal	577	584	101.2%	3.5	0.4	A
WB	Left Turn						
	Through	576	581	100.9%	0.7	0.1	A
	Right Turn	11	10	91.8%	0.1	0.2	A
	Subtotal	587	591	100.7%	0.7	0.1	A
Total		1,259	1,274	101.2%	2.7	0.6	A

Intersection 9 North Village Dwy 2-Rocklin Manor Central/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	14	13	91.4%	9.8	5.8	A
	Through						
	Right Turn						
	Subtotal	14	13	91.4%	9.8	5.8	A
SB	Left Turn	11	10	89.1%	15.9	11.4	C
	Through						
	Right Turn	127	130	102.7%	5.2	1.6	A
	Subtotal	138	140	101.6%	5.9	1.9	A
EB	Left Turn	39	39	100.3%	3.5	1.0	A
	Through	482	486	100.9%	1.1	0.3	A
	Right Turn	18	20	112.2%	0.2	0.4	A
	Subtotal	539	545	101.2%	1.3	0.3	A
WB	Left Turn	2	2	105.0%	1.9	4.8	A
	Through	446	447	100.2%	0.5	0.1	A
	Right Turn	3	4	133.3%	0.1	0.1	A
	Subtotal	451	453	100.5%	0.5	0.1	A
Total		1,142	1,152	100.8%	1.7	0.4	A

Intersection 10 Rocklin Manor East/Rocklin Rd **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	5	6	122.0%	7.0	6.7	A
	Through						
	Right Turn						
	Subtotal	5	6	122.0%	7.0	6.7	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	483	482	99.9%	0.4	0.1	A
	Right Turn	10	12	120.0%	0.1	0.2	A
	Subtotal	493	494	100.3%	0.4	0.1	A
WB	Left Turn	2	2	80.0%	0.8	1.3	A
	Through	446	447	100.3%	2.4	0.3	A
	Right Turn						
	Subtotal	448	449	100.2%	2.4	0.3	A
Total		946	949	100.3%	1.4	0.2	A

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	382	382	99.9%	9.0	1.1	A
	Through	60	57	94.3%	9.2	1.0	A
	Right Turn						
	Subtotal	442	438	99.1%	9.0	1.0	A
SB	Left Turn						
	Through	47	45	94.7%	9.5	0.7	A
	Right Turn	62	63	101.6%	4.1	0.9	A
	Subtotal	109	108	98.6%	6.3	0.6	A
EB	Left Turn	74	76	102.6%	15.8	4.6	C
	Through						
	Right Turn	408	403	98.7%	11.8	2.6	B
	Subtotal	482	478	99.3%	12.5	2.9	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,033	1,024	99.1%	10.3	1.5	B

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	177	178	100.6%	37.8	4.9	D
	Through	913	908	99.5%	17.8	4.5	B
	Right Turn	77	79	102.5%	8.5	2.7	A
	Subtotal	1,167	1,165	99.8%	20.0	4.2	C
SB	Left Turn	54	53	97.4%	40.2	8.9	D
	Through	808	804	99.5%	23.8	4.8	C
	Right Turn	78	83	105.8%	7.3	1.8	A
	Subtotal	940	939	99.9%	23.1	4.7	C
EB	Left Turn	153	154	100.5%	32.8	5.2	C
	Through	27	28	103.0%	31.0	7.7	C
	Right Turn	250	253	101.1%	13.7	2.4	B
	Subtotal	430	434	101.0%	22.0	3.4	C
WB	Left Turn	101	102	100.5%	36.2	9.5	D
	Through	15	17	112.0%	37.6	15.1	D
	Right Turn	40	43	107.0%	11.0	3.6	B
	Subtotal	156	161	103.3%	29.7	8.1	C
Total		2,693	2,699	100.2%	22.0	3.9	C

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	275	284	103.2%	42.3	7.1	D
	Through	924	925	100.1%	16.7	1.6	B
	Right Turn	310	312	100.7%	6.4	0.5	A
	Subtotal	1,509	1,521	100.8%	19.5	2.5	B
SB	Left Turn						
	Through	1,149	1,153	100.3%	32.1	6.1	C
	Right Turn	56	55	97.5%	8.9	2.7	A
	Subtotal	1,205	1,208	100.2%	30.9	5.7	C
EB	Left Turn	55	55	99.5%	38.8	5.8	D
	Through						
	Right Turn	298	302	101.3%	16.7	2.7	B
	Subtotal	353	357	101.0%	20.4	2.4	C
WB	Left Turn	482	485	100.6%	28.1	2.0	C
	Through	99	98	99.0%	36.3	5.1	D
	Right Turn	224	226	100.8%	19.4	3.7	B
	Subtotal	805	809	100.4%	26.7	1.3	C
Total		3,872	3,894	100.6%	24.6	2.5	C

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,345	1,342	99.8%	20.4	3.0	C
	Right Turn	111	119	106.8%	7.4	2.1	A
	Subtotal	1,456	1,461	100.3%	19.4	2.7	B
SB	Left Turn	267	270	101.1%	44.5	4.3	D
	Through	852	859	100.8%	16.7	1.2	B
	Right Turn	334	339	101.6%	7.6	0.6	A
	Subtotal	1,453	1,468	101.0%	19.6	1.2	B
EB	Left Turn	394	398	101.0%	47.6	6.3	D
	Through	237	234	98.9%	33.8	3.4	C
	Right Turn	124	128	103.3%	11.9	1.8	B
	Subtotal	755	760	100.7%	37.6	3.5	D
WB	Left Turn	104	106	101.6%	44.5	5.6	D
	Through						
	Right Turn	294	304	103.5%	23.0	3.6	C
	Subtotal	398	410	103.0%	28.6	3.5	C
Total		4,062	4,099	100.9%	23.9	1.3	C

Intersection 15 **Sierra College Blvd/Schriber Wy** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,441	1,449	100.5%	2.1	0.3	A
	Right Turn						
	Subtotal	1,441	1,449	100.5%	2.1	0.3	A
SB	Left Turn						
	Through	1,080	1,092	101.1%	3.1	0.3	A
	Right Turn						
	Subtotal	1,080	1,092	101.1%	3.1	0.3	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	15	13	88.7%	7.2	4.7	A
	Subtotal	15	13	88.7%	7.2	4.7	A
Total		2,536	2,554	100.7%	2.6	0.2	A

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,425	1,438	100.9%	11.1	1.3	B
	Right Turn	52	51	98.3%	9.5	1.1	A
	Subtotal	1,477	1,489	100.8%	11.0	1.3	B
SB	Left Turn	28	27	97.9%	24.9	7.4	C
	Through	1,021	1,031	101.0%	5.3	1.4	A
	Right Turn	31	33	105.5%	3.6	1.0	A
	Subtotal	1,080	1,091	101.1%	5.7	1.3	A
EB	Left Turn	1	1	50.0%	0.0	0.0	A
	Through	1	1	130.0%	10.2	21.2	B
	Right Turn	2	3	170.0%	3.7	3.5	A
	Subtotal	4	5	130.0%	7.4	8.7	A
WB	Left Turn	52	51	97.7%	27.9	6.1	C
	Through						
	Right Turn	9	9	94.4%	7.2	6.9	A
	Subtotal	61	59	97.2%	25.8	5.9	C
Total		2,622	2,645	100.9%	9.2	1.1	A

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr-North Village Street A** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	74	75	100.7%	51.0	7.0	D
	Through	1,294	1,298	100.3%	15.8	1.7	B
	Right Turn	45	44	96.7%	13.3	2.2	B
	Subtotal	1,413	1,416	100.2%	17.5	1.7	B
SB	Left Turn	48	46	95.2%	40.9	15.2	D
	Through	990	1,006	101.6%	13.3	3.1	B
	Right Turn	40	42	104.5%	6.3	3.6	A
	Subtotal	1,078	1,093	101.4%	14.1	3.2	B
EB	Left Turn	160	161	100.8%	34.7	5.3	C
	Through						
	Right Turn	59	58	98.0%	8.0	1.4	A
	Subtotal	219	219	100.0%	27.3	4.3	C
WB	Left Turn	40	38	94.3%	32.0	7.9	C
	Through						
	Right Turn	25	24	95.6%	9.4	3.9	A
	Subtotal	65	62	94.8%	23.0	5.9	C
Total		2,775	2,790	100.5%	17.1	1.7	B

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,426	1,441	101.1%	1.1	0.2	A
	Right Turn						
	Subtotal	1,426	1,441	101.1%	1.1	0.2	A
SB	Left Turn						
	Through	1,063	1,077	101.3%	4.3	0.4	A
	Right Turn	14	16	116.4%	4.0	0.4	A
	Subtotal	1,077	1,094	101.5%	4.3	0.4	A
EB	Left Turn						
	Through						
	Right Turn	12	14	112.5%	5.1	3.2	A
	Subtotal	12	14	112.5%	5.1	3.2	A
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,515	2,548	101.3%	2.5	0.2	A

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	32	31	96.9%	27.2	8.1	C
	Through	1,160	1,163	100.3%	7.6	1.8	A
	Right Turn	7	8	108.6%	3.1	4.6	A
	Subtotal	1,199	1,202	100.2%	8.1	1.9	A
SB	Left Turn	64	68	105.5%	28.9	6.4	C
	Through	1,040	1,049	100.8%	7.8	1.9	A
	Right Turn	80	81	100.8%	8.3	2.1	A
	Subtotal	1,184	1,197	101.1%	9.0	1.6	A
EB	Left Turn	34	32	94.1%	28.8	5.4	C
	Through	1	1	100.0%	9.6	20.1	A
	Right Turn	26	27	102.3%	10.5	3.9	B
	Subtotal	61	60	97.7%	19.9	3.8	B
WB	Left Turn	10	10	95.0%	27.4	10.3	C
	Through	1	1	120.0%	5.4	17.1	A
	Right Turn	21	21	101.0%	9.5	4.7	A
	Subtotal	32	32	99.7%	16.8	5.4	B
Total		2,476	2,490	100.6%	8.9	1.7	A

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	221	225	101.7%	7.3	3.0	A
	Right Turn						
	Subtotal	221	225	101.7%	7.3	3.0	A
SB	Left Turn						
	Through	164	162	99.0%	0.5	0.1	A
	Right Turn	7	8	114.3%	0.3	0.3	A
	Subtotal	171	170	99.6%	0.5	0.1	A
EB	Left Turn						
	Through						
	Right Turn	9	7	72.2%	2.2	1.3	A
	Subtotal	9	7	72.2%	2.2	1.3	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		401	402	100.1%	4.6	1.9	A

Intersection 21 **El Don Dr/Southern Retail Access-South Village Dwy 2** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	3	2	66.7%	0.7	1.5	A
	Through	138	136	98.8%	2.6	1.6	A
	Right Turn	1	1	140.0%	0.4	0.6	A
	Subtotal	142	140	98.5%	2.6	1.6	A
SB	Left Turn	9	8	92.2%	1.7	1.5	A
	Through	162	156	96.3%	0.2	0.1	A
	Right Turn	2	4	175.0%	0.0	0.0	A
	Subtotal	173	168	97.0%	0.3	0.1	A
EB	Left Turn	34	33	97.1%	7.6	4.2	A
	Through						
	Right Turn	5	6	116.0%	2.9	1.8	A
	Subtotal	39	39	99.5%	7.0	3.8	A
WB	Left Turn	4	5	112.5%	3.4	5.6	A
	Through						
	Right Turn	49	55	111.6%	7.1	6.4	A
	Subtotal	53	59	111.7%	7.2	6.2	A
Total		407	406	99.7%	3.0	1.6	A

Intersection 22 **El Don Dr/Wildflower Ln-South Village Dwy 1** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	1	1	50.0%	0.0	0.0	A
	Through	111	110	98.7%	5.0	0.2	A
	Right Turn	1	1	140.0%	1.1	1.5	A
	Subtotal	113	112	98.7%	5.0	0.2	A
SB	Left Turn						
	Through	156	152	97.4%	6.0	0.3	A
	Right Turn	15	15	98.0%	3.6	0.7	A
	Subtotal	171	167	97.4%	5.8	0.3	A
EB	Left Turn	9	7	80.0%	3.8	1.4	A
	Through						
	Right Turn	3	4	120.0%	1.9	1.4	A
	Subtotal	12	11	90.0%	3.6	0.7	A
WB	Left Turn	3	2	76.7%	1.6	1.4	A
	Through						
	Right Turn	22	22	101.4%	2.4	0.5	A
	Subtotal	25	25	98.4%	2.4	0.4	A
Total		321	314	97.7%	5.2	0.2	A

Intersection 23 **El Don Dr/Corona Cir-South Village Street A** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	5	4	74.0%	1.2	1.3	A
	Through	97	96	98.9%	0.1	0.1	A
	Right Turn	3	3	93.3%	0.0	0.0	A
	Subtotal	105	102	97.5%	0.2	0.1	A
SB	Left Turn	13	12	95.4%	3.4	1.0	A
	Through	134	134	99.6%	1.7	0.2	A
	Right Turn	15	14	94.7%	1.1	0.3	A
	Subtotal	162	160	98.8%	1.8	0.2	A
EB	Left Turn	9	9	96.7%	5.4	2.7	A
	Through						
	Right Turn	3	3	103.3%	1.4	1.5	A
	Subtotal	12	12	98.3%	5.4	2.2	A
WB	Left Turn	2	2	95.0%	2.5	3.2	A
	Through						
	Right Turn	7	7	101.4%	3.3	1.2	A
	Subtotal	9	9	100.0%	3.5	1.2	A
Total		288	283	98.4%	1.4	0.2	A

Intersection 24 **Sierra College Blvd/Street G** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,364	1,373	100.7%	1.4	0.2	A
	Right Turn	62	67	108.2%	1.2	0.2	A
	Subtotal	1,426	1,440	101.0%	1.4	0.2	A
SB	Left Turn	36	34	95.3%	16.8	7.2	C
	Through	1,077	1,093	101.5%	4.0	0.4	A
	Right Turn						
	Subtotal	1,113	1,128	101.3%	4.5	0.5	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	49	49	100.2%	7.4	1.9	A
	Subtotal	49	49	100.2%	7.4	1.9	A
Total		2,588	2,617	101.1%	2.8	0.2	A

Intersection 25 **Sierra College Blvd/North Village Dwy 3** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,376	1,394	101.3%	4.8	0.4	A
	Right Turn	33	31	92.4%	2.9	0.7	A
	Subtotal	1,409	1,424	101.1%	4.8	0.4	A
SB	Left Turn	44	42	94.5%	12.0	4.5	B
	Through	1,031	1,048	101.7%	1.1	0.1	A
	Right Turn						
	Subtotal	1,075	1,090	101.4%	1.5	0.3	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	50	48	95.2%	8.1	3.0	A
	Subtotal	50	48	95.2%	8.1	3.0	A
Total		2,534	2,562	101.1%	3.4	0.3	A

Intersection 26 **South Village Dwy 3/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	32	33	104.4%	9.4	3.9	A
	Subtotal	32	33	104.4%	9.4	3.9	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	870	884	101.6%	3.6	0.4	A
	Right Turn	9	9	100.0%	3.0	1.7	A
	Subtotal	879	893	101.6%	3.6	0.4	A
WB	Left Turn						
	Through	862	857	99.4%	1.1	0.3	A
	Right Turn						
	Subtotal	862	857	99.4%	1.1	0.3	A
Total		1,773	1,783	100.5%	2.5	0.3	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Sierra Villages TIS
Existing Plus Project Conditions (Mitigated)
PM Peak Hour

Intersection 27 South Village Dwy 4/Rocklin Rd Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	80	79	99.3%	11.9	5.1	B
	Subtotal	80	79	99.3%	11.9	5.1	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	878	891	101.5%	2.2	0.4	A
	Right Turn	24	26	108.8%	1.0	0.7	A
	Subtotal	902	918	101.7%	2.1	0.4	A
WB	Left Turn						
	Through	862	860	99.7%	0.3	0.1	A
	Right Turn						
	Subtotal	862	860	99.7%	0.3	0.1	A
Total		1,844	1,857	100.7%	1.8	0.4	A

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	19	95.0%	37.1	10.5	D
	Through	30	26	88.0%	42.9	14.0	D
	Right Turn	20	20	102.0%	20.1	9.9	C
	Subtotal	70	66	94.0%	33.1	5.9	C
SB	Left Turn	395	390	98.8%	30.9	3.8	C
	Through	20	21	103.5%	28.2	8.7	C
	Right Turn	120	124	103.4%	8.3	1.9	A
	Subtotal	535	535	100.0%	25.4	3.1	C
EB	Left Turn	170	170	100.2%	61.3	13.2	E
	Through	872	880	101.0%	19.9	3.0	B
	Right Turn	10	9	94.0%	6.4	7.2	A
	Subtotal	1,052	1,060	100.8%	26.4	4.5	C
WB	Left Turn	10	8	80.0%	53.9	16.0	D
	Through	762	755	99.1%	31.0	3.2	C
	Right Turn	533	518	97.1%	10.8	2.6	B
	Subtotal	1,305	1,281	98.1%	23.1	3.3	C
Total		2,962	2,942	99.3%	25.1	2.9	C

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	86	87	100.6%	29.4	8.0	C
	Through						
	Right Turn	270	268	99.1%	29.9	6.6	C
	Subtotal	356	354	99.5%	30.0	5.1	C
EB	Left Turn						
	Through	827	832	100.6%	31.8	3.3	C
	Right Turn	470	467	99.4%	19.7	3.8	B
	Subtotal	1,297	1,299	100.2%	27.3	2.8	C
WB	Left Turn	414	414	100.0%	32.6	3.9	C
	Through	1,095	1,067	97.5%	7.3	1.5	A
	Right Turn						
	Subtotal	1,509	1,481	98.2%	14.4	1.2	B
Total		3,162	3,135	99.1%	21.9	1.6	C

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	610	591	96.8%	32.0	0.9	C
	Through						
	Right Turn	1,083	1,065	98.4%	28.9	1.7	C
	Subtotal	1,693	1,656	97.8%	30.0	1.2	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	200	205	102.3%	57.4	12.3	E
	Through	713	719	100.8%	14.5	1.9	B
	Right Turn						
	Subtotal	913	923	101.1%	24.0	4.0	C
WB	Left Turn						
	Through	899	891	99.1%	40.1	7.6	D
	Right Turn	63	64	101.0%	33.5	9.0	C
	Subtotal	962	954	99.2%	39.7	7.5	D
Total		3,568	3,533	99.0%	31.0	2.0	C

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	160	160	99.9%	34.9	3.4	C
	Through						
	Right Turn	42	39	92.9%	18.9	5.4	B
	Subtotal	202	199	98.4%	32.0	3.1	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	40	39	96.8%	52.3	11.6	D
	Through	1,676	1,657	99.4%	7.1	2.3	A
	Right Turn	60	56	93.5%	5.4	1.7	A
	Subtotal	1,776	1,752	99.2%	7.9	2.5	A
WB	Left Turn	10	9	91.0%	57.4	14.3	E
	Through	772	763	98.8%	10.6	3.0	B
	Right Turn						
	Subtotal	782	772	98.7%	11.1	3.0	B
Total		2,760	2,732	99.0%	10.5	2.3	B

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	142	138	96.9%	46.6	7.3	D
	Through	30	33	111.0%	45.5	17.0	D
	Right Turn	35	32	91.4%	34.9	13.5	C
	Subtotal	207	203	98.0%	44.6	8.0	D
SB	Left Turn	20	20	98.0%	39.2	15.2	D
	Through	10	12	116.0%	56.1	21.3	E
	Right Turn	80	78	97.3%	10.9	4.3	B
	Subtotal	110	109	99.1%	19.8	5.7	B
EB	Left Turn	540	524	97.0%	112.9	26.0	F
	Through	1,139	1,124	98.7%	48.5	14.6	D
	Right Turn	109	109	99.8%	44.2	15.5	D
	Subtotal	1,788	1,757	98.3%	67.9	17.6	E
WB	Left Turn	76	78	102.5%	47.9	10.2	D
	Through	560	562	100.4%	32.8	4.8	C
	Right Turn	130	130	100.0%	20.6	4.2	C
	Subtotal	766	770	100.5%	32.2	4.7	C
Total		2,871	2,839	98.9%	54.6	11.1	D

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	19	96.0%	34.1	8.4	C
	Through	10	9	85.0%	36.7	27.6	D
	Right Turn	30	33	108.7%	11.8	6.6	B
	Subtotal	60	60	100.5%	21.2	8.2	C
SB	Left Turn	62	64	102.7%	38.9	5.1	D
	Through	10	12	118.0%	40.5	19.1	D
	Right Turn	20	21	103.0%	4.5	1.0	A
	Subtotal	92	96	104.5%	32.3	5.6	C
EB	Left Turn	370	371	100.3%	40.4	3.4	D
	Through	697	691	99.1%	9.4	1.3	A
	Right Turn	10	10	102.0%	5.5	2.7	A
	Subtotal	1,077	1,072	99.5%	19.7	1.4	B
WB	Left Turn	20	20	98.0%	76.0	24.3	E
	Through	606	601	99.1%	28.7	5.9	C
	Right Turn	432	431	99.8%	33.3	7.5	C
	Subtotal	1,058	1,051	99.4%	31.5	6.5	C
Total		2,287	2,280	99.7%	25.6	2.9	C

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	429	430	100.2%	53.9	3.9	D
	Through	632	649	102.7%	33.7	4.9	C
	Right Turn	116	113	97.0%	18.8	5.7	B
	Subtotal	1,177	1,191	101.2%	39.7	3.7	C
SB	Left Turn	240	245	102.1%	61.2	8.7	E
	Through	727	728	100.1%	43.0	6.0	D
	Right Turn	320	311	97.1%	31.2	7.2	C
	Subtotal	1,287	1,283	99.7%	48.9	4.3	D
EB	Left Turn	267	265	99.4%	50.5	8.9	D
	Through	298	297	99.7%	32.5	5.5	C
	Right Turn	224	228	101.7%	13.1	2.0	B
	Subtotal	789	790	100.2%	32.9	3.3	C
WB	Left Turn	113	109	96.8%	58.0	6.9	E
	Through	329	333	101.3%	41.7	5.9	D
	Right Turn	235	229	97.3%	19.7	3.8	B
	Subtotal	677	671	99.2%	35.6	4.8	D
Total		3,930	3,936	100.2%	38.7	2.2	D

Intersection 8 **North Village Dwy 1-Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	16	80.5%	23.3	10.0	C
	Through	10	10	100.0%	15.0	11.6	C
	Right Turn	20	20	101.0%	7.3	4.2	A
	Subtotal	50	46	92.6%	15.4	4.9	C
SB	Left Turn	6	5	80.0%	12.5	13.2	B
	Through						
	Right Turn	44	47	106.1%	6.3	3.0	A
	Subtotal	50	52	103.0%	7.8	4.0	A
EB	Left Turn	31	28	91.0%	6.4	1.6	A
	Through	613	615	100.3%	3.2	0.4	A
	Right Turn	20	22	109.0%	1.3	0.6	A
	Subtotal	664	665	100.1%	3.3	0.4	A
WB	Left Turn						
	Through	613	608	99.2%	1.0	0.2	A
	Right Turn	10	12	118.0%	0.3	0.3	A
	Subtotal	623	620	99.5%	1.0	0.2	A
Total		1,387	1,383	99.7%	2.8	0.4	A

Intersection 9 — North Village Dwy 2-Rocklin Manor Central/Rocklin Rd — Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	8	80.0%	19.3	15.6	C
	Through						
	Right Turn	10	11	110.0%	2.4	0.3	A
	Subtotal	20	19	95.0%	9.7	6.9	A
SB	Left Turn	2	2	80.0%	10.0	13.7	A
	Through						
	Right Turn	25	25	101.6%	5.2	3.7	A
	Subtotal	27	27	100.0%	6.4	4.1	A
EB	Left Turn	121	119	98.2%	6.1	1.4	A
	Through	508	512	100.7%	2.1	0.4	A
	Right Turn	10	10	95.0%	0.1	0.3	A
	Subtotal	639	640	100.1%	2.9	0.5	A
WB	Left Turn						
	Through	588	584	99.4%	0.7	0.1	A
	Right Turn	10	11	106.0%	0.2	0.3	A
	Subtotal	598	595	99.5%	0.7	0.1	A
Total		1,284	1,231	99.7%	2.0	0.2	A

Intersection 10 — Rocklin Manor East/Rocklin Rd — Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	10	98.0%	19.0	10.4	C
	Through						
	Right Turn	10	11	108.0%	5.8	5.1	A
	Subtotal	20	21	103.0%	13.6	6.1	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	510	514	100.8%	0.3	0.0	A
	Right Turn	10	9	85.0%	0.1	0.1	A
	Subtotal	520	523	100.5%	0.3	0.0	A
WB	Left Turn	10	8	84.0%	4.7	3.4	A
	Through	588	585	99.5%	3.1	0.3	A
	Right Turn						
	Subtotal	598	593	99.2%	3.1	0.3	A
Total		1,138	1,136	99.9%	2.1	0.2	A

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	474	470	99.1%	18.4	9.3	C
	Through	80	77	96.3%	12.7	5.2	B
	Right Turn						
	Subtotal	554	547	98.7%	17.5	8.8	C
SB	Left Turn						
	Through	50	48	96.4%	10.7	1.0	B
	Right Turn	104	101	96.8%	6.1	1.0	A
	Subtotal	154	149	96.7%	7.6	0.7	A
EB	Left Turn	101	100	98.9%	17.9	6.3	C
	Through						
	Right Turn	399	406	101.8%	15.4	6.3	C
	Subtotal	500	506	101.2%	15.9	6.3	C
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,208	1,202	99.5%	15.7	6.5	C

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	272	278	102.2%	39.8	5.3	D
	Through	525	538	102.4%	18.0	4.0	B
	Right Turn	90	93	102.8%	8.7	2.8	A
	Subtotal	887	908	102.4%	23.6	3.8	C
SB	Left Turn	80	81	100.9%	51.8	11.2	D
	Through	939	934	99.4%	32.7	9.1	C
	Right Turn	70	74	105.1%	11.4	6.7	B
	Subtotal	1,089	1,088	99.9%	32.5	8.4	C
EB	Left Turn	80	80	99.4%	50.4	21.6	D
	Through	30	31	101.7%	50.6	13.9	D
	Right Turn	121	128	106.0%	17.4	4.7	B
	Subtotal	231	238	103.2%	32.4	9.1	C
WB	Left Turn	150	145	96.9%	46.3	12.9	D
	Through	30	32	105.7%	49.0	15.1	D
	Right Turn	40	44	109.0%	8.1	2.5	A
	Subtotal	220	221	100.3%	39.0	9.5	D
Total		2,427	2,455	101.1%	29.8	6.3	C

Intersection 13 Sierra College Blvd/Shopping Center-I-80 WB Ramps Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	105	103	98.4%	35.7	6.2	D
	Through	597	614	102.8%	16.0	3.3	B
	Right Turn	250	242	97.0%	4.3	0.4	A
	Subtotal	952	960	100.8%	15.2	3.0	B
SB	Left Turn						
	Through	1,220	1,216	99.6%	22.1	3.0	C
	Right Turn	20	21	103.0%	6.0	0.9	A
	Subtotal	1,240	1,236	99.7%	21.8	3.1	C
EB	Left Turn	20	19	92.5%	32.4	10.6	C
	Through						
	Right Turn	75	76	101.5%	11.1	3.8	B
	Subtotal	95	95	99.6%	16.2	4.5	B
WB	Left Turn	707	705	99.7%	31.8	5.7	C
	Through	80	79	99.1%	29.5	3.5	C
	Right Turn	270	274	101.4%	16.1	3.4	B
	Subtotal	1,057	1,058	100.1%	27.7	4.9	C
Total		3,344	3,349	100.1%	21.7	2.5	C

Intersection 14 Sierra College Blvd/I-80 EB Ramps-Shopping Center Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,037	1,047	101.0%	18.3	2.4	B
	Right Turn	55	53	96.0%	4.3	1.2	A
	Subtotal	1,092	1,100	100.7%	17.6	2.3	B
SB	Left Turn	150	151	100.7%	102.9	42.8	F
	Through	1,372	1,358	99.7%	88.1	42.1	F
	Right Turn	190	194	102.1%	56.4	36.4	E
	Subtotal	1,712	1,713	100.1%	85.8	41.6	F
EB	Left Turn	240	247	102.9%	31.0	4.2	C
	Through	160	158	98.8%	31.2	2.7	C
	Right Turn	430	425	98.9%	34.3	4.2	C
	Subtotal	830	830	100.0%	32.8	2.4	C
WB	Left Turn	65	67	102.3%	46.0	13.4	D
	Through						
	Right Turn	110	109	99.3%	11.6	3.4	B
	Subtotal	175	176	100.4%	24.8	8.5	C
Total		3,809	3,819	100.3%	52.8	19.0	D

Intersection 15 **Sierra College Blvd/Schriber Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	9	93.0%	38.5	23.9	D
	Through	952	958	100.6%	4.3	1.0	A
	Right Turn	20	21	103.5%	3.5	3.0	A
	Subtotal	982	988	100.6%	4.7	1.0	A
SB	Left Turn						
	Through	1,837	1,829	99.6%	13.4	1.6	B
	Right Turn	30	28	93.0%	10.7	5.2	B
	Subtotal	1,867	1,857	99.5%	13.3	1.6	B
EB	Left Turn	10	9	90.0%	33.5	25.8	C
	Through	10	11	107.0%	45.9	10.5	D
	Right Turn	10	9	93.0%	27.9	21.0	C
	Subtotal	30	29	96.7%	40.0	12.2	D
WB	Left Turn	60	62	104.0%	49.2	15.7	D
	Through	10	10	101.0%	44.3	27.2	D
	Right Turn	130	132	101.7%	21.1	9.1	C
	Subtotal	200	205	102.4%	31.0	10.9	C
Total		3,079	3,078	100.0%	12.1	1.8	B

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	10	98.0%	38.3	18.8	D
	Through	952	961	100.9%	11.7	2.8	B
	Right Turn	30	31	103.7%	9.3	4.5	A
	Subtotal	992	1,002	101.0%	11.9	2.8	B
SB	Left Turn	30	29	95.3%	34.8	10.5	C
	Through	1,867	1,854	99.9%	11.2	2.7	B
	Right Turn	10	10	101.0%	3.2	2.1	A
	Subtotal	1,907	1,903	99.8%	11.5	2.6	B
EB	Left Turn	10	8	79.0%	39.1	28.4	D
	Through	10	8	84.0%	23.7	25.9	C
	Right Turn	10	10	104.0%	25.8	15.9	C
	Subtotal	30	27	89.0%	28.5	9.0	C
WB	Left Turn	30	29	97.0%	29.2	7.8	C
	Through	10	11	108.0%	41.3	20.9	D
	Right Turn	10	11	108.0%	9.0	7.0	A
	Subtotal	50	51	101.4%	29.0	5.5	C
Total		2,979	2,982	100.1%	12.1	1.8	B

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr-North Village Street A** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	288	285	98.9%	44.2	7.8	D
	Through	871	882	101.3%	16.4	2.7	B
	Right Turn	13	12	89.2%	9.1	4.4	A
	Subtotal	1,172	1,178	100.5%	22.9	3.2	C
SB	Left Turn	14	15	105.7%	44.3	17.9	D
	Through	1,183	1,182	99.9%	31.1	5.2	C
	Right Turn	710	713	100.5%	16.2	2.0	B
	Subtotal	1,907	1,910	100.1%	25.8	3.7	C
EB	Left Turn	70	66	93.9%	31.7	4.0	C
	Through						
	Right Turn	132	132	100.1%	11.8	1.5	B
	Subtotal	202	198	97.9%	18.1	2.1	B
WB	Left Turn	66	66	99.4%	44.4	10.8	D
	Through						
	Right Turn	41	44	108.0%	9.1	3.3	A
	Subtotal	107	110	102.7%	30.6	8.4	C
Total		3,388	3,396	100.2%	24.4	3.2	C

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,104	1,114	100.9%	0.6	0.1	A
	Right Turn						
	Subtotal	1,104	1,114	100.9%	0.6	0.1	A
SB	Left Turn						
	Through	1,318	1,318	100.0%	7.0	0.8	A
	Right Turn	100	103	102.5%	6.6	0.7	A
	Subtotal	1,418	1,420	100.1%	7.0	0.7	A
EB	Left Turn						
	Through						
	Right Turn	10	8	81.0%	12.9	9.7	B
	Subtotal	10	8	81.0%	12.9	9.7	B
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,532	2,542	100.4%	4.1	0.4	A

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	50	49	98.0%	38.5	4.9	D
	Through	1,024	1,034	101.0%	14.5	2.6	B
	Right Turn	10	11	109.0%	7.6	4.7	A
	Subtotal	1,084	1,094	100.9%	15.5	2.5	B
SB	Left Turn	30	33	111.0%	43.9	13.4	D
	Through	1,033	1,035	100.2%	16.2	1.5	B
	Right Turn	31	30	96.5%	13.3	2.9	B
	Subtotal	1,094	1,098	100.4%	17.0	1.2	B
EB	Left Turn	73	74	101.6%	28.8	5.4	C
	Through	10	8	79.0%	30.7	19.9	C
	Right Turn	54	53	98.7%	16.2	3.6	B
	Subtotal	137	135	98.8%	24.0	3.7	C
WB	Left Turn	60	60	99.2%	25.6	5.2	C
	Through	10	10	99.0%	24.7	13.1	C
	Right Turn	80	79	98.8%	18.0	3.6	B
	Subtotal	150	148	98.9%	21.8	3.3	C
Total		2,465	2,475	100.4%	17.0	1.1	B

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	207	203	97.9%	4.4	2.6	A
	Right Turn						
	Subtotal	207	203	97.9%	4.4	2.6	A
SB	Left Turn						
	Through	144	147	102.1%	0.6	0.2	A
	Right Turn	10	12	116.0%	0.3	0.2	A
	Subtotal	154	159	103.0%	0.5	0.2	A
EB	Left Turn						
	Through						
	Right Turn	10	10	97.0%	3.3	1.8	A
	Subtotal	10	10	97.0%	3.3	1.8	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		371	371	100.0%	2.8	1.6	A

Intersection 21 | **El Don Dr/Southern Retail Access-South Village Dwy 2** | **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	10	98.0%	2.1	1.2	A
	Through	177	172	96.9%	1.9	0.8	A
	Right Turn						
	Subtotal	187	181	97.0%	1.9	0.8	A
SB	Left Turn	50	51	102.2%	2.3	0.5	A
	Through	94	95	101.5%	0.3	0.2	A
	Right Turn	10	11	108.0%	0.1	0.2	A
	Subtotal	154	157	102.1%	1.0	0.3	A
EB	Left Turn	20	21	104.5%	6.8	3.0	A
	Through						
	Right Turn	10	9	91.0%	3.1	0.6	A
	Subtotal	30	30	100.0%	5.7	2.5	A
WB	Left Turn	1	1	100.0%	1.4	2.5	A
	Through						
	Right Turn	10	11	107.0%	3.4	3.3	A
	Subtotal	11	12	106.4%	4.1	3.1	A
Total		382	380	99.6%	2.0	0.9	A

Intersection 22 | **El Don Dr/Wildflower Ln-South Village Dwy 1** | **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	11	108.0%	4.3	1.7	A
	Through	154	150	97.1%	5.4	0.3	A
	Right Turn	18	19	105.6%	4.0	1.2	A
	Subtotal	182	179	98.5%	5.2	0.3	A
SB	Left Turn						
	Through	85	87	101.9%	5.9	0.4	A
	Right Turn	20	19	96.5%	4.0	0.6	A
	Subtotal	105	106	100.9%	5.6	0.4	A
EB	Left Turn	30	29	95.7%	4.3	0.6	A
	Through						
	Right Turn	10	10	103.0%	2.8	0.4	A
	Subtotal	40	39	97.5%	3.9	0.4	A
WB	Left Turn	1	0	40.0%	0.0	0.0	A
	Through						
	Right Turn	3	4	116.7%	1.6	1.4	A
	Subtotal	4	4	97.5%	1.6	1.4	A
Total		331	328	99.1%	5.1	0.3	A

Intersection 23 — **El Don Dr/Corona Cir-South Village Street A** — **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	10	95.0%	1.1	0.7	A
	Through	161	159	98.6%	0.2	0.1	A
	Right Turn	1	2	150.0%	0.0	0.0	A
	Subtotal	172	170	98.7%	0.2	0.1	A
SB	Left Turn	4	5	112.5%	2.5	1.9	A
	Through	82	83	100.7%	1.4	0.2	A
	Right Turn	10	10	98.0%	1.3	0.6	A
	Subtotal	96	97	100.9%	1.5	0.2	A
EB	Left Turn	10	9	93.0%	4.7	1.4	A
	Through						
	Right Turn	10	12	123.0%	3.4	0.8	A
	Subtotal	20	22	108.0%	3.8	0.8	A
WB	Left Turn	3	3	106.7%	3.0	2.2	A
	Through						
	Right Turn	11	11	98.2%	3.4	1.5	A
	Subtotal	14	14	100.0%	3.8	0.8	A
Total		302	302	100.1%	1.1	0.2	A

Intersection 24 — **Sierra College Blvd/Street G** — **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,083	1,093	100.9%	0.8	0.1	A
	Right Turn	21	21	100.5%	0.7	0.1	A
	Subtotal	1,104	1,114	100.9%	0.8	0.1	A
SB	Left Turn	11	11	99.1%	15.4	11.4	C
	Through	1,418	1,421	100.2%	6.4	0.7	A
	Right Turn						
	Subtotal	1,429	1,431	100.2%	6.5	0.7	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	79	79	99.6%	8.1	3.1	A
	Subtotal	79	79	99.6%	8.1	3.1	A
Total		2,612	2,624	100.5%	4.1	0.4	A

Intersection 25 | **Sierra College Blvd/North Village Dwy 3** | **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,092	1,103	101.0%	3.4	0.4	A
	Right Turn	22	22	100.9%	2.8	0.9	A
	Subtotal	1,114	1,125	101.0%	3.4	0.4	A
SB	Left Turn	41	41	99.3%	12.4	5.4	B
	Through	1,287	1,285	99.8%	1.7	0.2	A
	Right Turn						
	Subtotal	1,328	1,325	99.8%	2.1	0.2	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	12	11	88.3%	5.6	3.3	A
	Subtotal	12	11	88.3%	5.6	3.3	A
Total		2,454	2,461	100.3%	2.7	0.3	A

Intersection 26 | **South Village Dwy 3/Rocklin Rd** | **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	3	4	133.3%	5.0	5.5	A
	Subtotal	3	4	133.3%	5.0	5.5	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,133	1,129	99.6%	1.2	0.1	A
	Right Turn	42	40	95.2%	0.3	0.3	A
	Subtotal	1,175	1,169	99.5%	1.2	0.1	A
WB	Left Turn						
	Through	656	652	99.4%	0.4	0.1	A
	Right Turn						
	Subtotal	656	652	99.4%	0.4	0.1	A
Total		1,834	1,825	99.5%	0.9	0.1	A

Intersection 27 — **South Village Dwy 4/Rocklin Rd** — **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	17	18	105.3%	10.0	7.3	B
	Subtotal	17	18	105.3%	10.0	7.3	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,060	1,055	99.6%	1.2	0.2	A
	Right Turn	76	77	101.3%	0.6	0.2	A
	Subtotal	1,136	1,132	99.7%	1.1	0.2	A
WB	Left Turn						
	Through	656	652	99.3%	2.7	0.2	A
	Right Turn						
	Subtotal	656	652	99.3%	2.7	0.2	A
Total		1,809	1,802	99.6%	1.7	0.2	A

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	50	47	94.4%	50.8	10.4	D
	Through	30	27	90.7%	48.8	12.4	D
	Right Turn	30	33	109.0%	21.5	11.0	C
	Subtotal	110	107	97.4%	41.3	7.5	D
SB	Left Turn	534	521	97.6%	35.8	3.4	D
	Through	30	31	103.7%	37.0	8.8	D
	Right Turn	200	203	101.7%	11.5	3.2	B
	Subtotal	764	756	98.9%	29.2	3.0	C
EB	Left Turn	200	201	100.6%	77.5	18.7	E
	Through	682	690	101.2%	29.6	7.9	C
	Right Turn	20	22	108.5%	21.0	10.5	C
	Subtotal	902	913	101.2%	40.4	10.3	D
WB	Left Turn	60	60	99.7%	74.4	14.5	E
	Through	792	797	100.6%	39.6	5.4	D
	Right Turn	555	543	97.7%	16.0	3.7	B
	Subtotal	1,407	1,399	99.5%	32.1	4.9	C
Total		3,183	3,175	99.7%	34.1	4.7	C

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	75	72	95.5%	46.9	26.5	D
	Through	10	9	91.0%	92.1	76.0	F
	Right Turn	310	311	100.3%	102.6	66.3	F
	Subtotal	395	392	99.2%	93.6	57.9	F
EB	Left Turn						
	Through	796	780	98.0%	46.8	11.4	D
	Right Turn	500	502	100.4%	34.1	9.2	C
	Subtotal	1,296	1,282	98.9%	42.0	8.9	D
WB	Left Turn	722	721	99.9%	43.5	6.5	D
	Through	1,257	1,256	99.9%	15.1	2.8	B
	Right Turn						
	Subtotal	1,979	1,977	99.9%	25.5	3.2	C
Total		3,670	3,650	99.5%	38.3	7.1	D

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	580	578	99.6%	80.0	39.3	F
	Through	10	9	93.0%	75.7	54.9	E
	Right Turn	680	685	100.7%	52.0	25.5	D
	Subtotal	1,270	1,271	100.1%	65.2	31.8	E
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	230	217	94.5%	74.8	27.8	E
	Through	641	635	99.1%	17.7	4.6	B
	Right Turn						
	Subtotal	871	853	97.9%	33.3	11.9	C
WB	Left Turn						
	Through	1,399	1,398	99.9%	37.5	6.3	D
	Right Turn	98	99	100.7%	32.4	7.2	C
	Subtotal	1,497	1,497	100.0%	37.1	6.3	D
Total		3,638	3,621	99.5%	46.8	13.6	D

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	120	121	100.7%	43.4	6.2	D
	Through						
	Right Turn	31	31	101.3%	8.7	3.7	A
	Subtotal	151	152	100.8%	35.7	4.7	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	60	60	99.3%	48.9	3.3	D
	Through	1,181	1,178	99.7%	7.2	1.4	A
	Right Turn	170	180	106.1%	5.4	1.1	A
	Subtotal	1,411	1,417	100.5%	8.6	1.2	A
WB	Left Turn	32	29	91.9%	107.2	36.9	F
	Through	1,367	1,356	99.2%	46.0	23.7	D
	Right Turn						
	Subtotal	1,399	1,386	99.1%	47.4	24.3	D
Total		2,961	2,955	99.8%	28.5	12.2	C

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	191	195	102.0%	63.7	38.6	E
	Through	10	11	108.0%	66.5	49.2	E
	Right Turn	38	39	101.8%	52.3	36.6	D
	Subtotal	239	244	102.3%	62.3	37.9	E
SB	Left Turn	60	59	98.2%	79.0	37.3	E
	Through	20	20	98.5%	71.0	46.6	E
	Right Turn	360	363	100.8%	46.0	30.1	D
	Subtotal	440	442	100.3%	52.0	32.6	D
EB	Left Turn	270	263	97.5%	65.7	10.5	E
	Through	834	828	99.3%	40.8	7.9	D
	Right Turn	148	148	100.1%	37.8	10.0	D
	Subtotal	1,252	1,240	99.0%	45.7	7.4	D
WB	Left Turn	44	45	102.5%	67.0	13.8	E
	Through	908	906	99.8%	43.8	8.0	D
	Right Turn	50	47	94.0%	32.2	8.8	C
	Subtotal	1,002	998	99.6%	44.6	7.5	D
Total		2,933	2,924	99.7%	47.9	9.7	D

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	9	93.0%	29.6	17.2	C
	Through						
	Right Turn	10	8	83.0%	7.2	9.3	A
	Subtotal	20	18	88.0%	19.7	13.8	B
SB	Left Turn	351	344	97.9%	26.0	3.8	C
	Through						
	Right Turn	170	168	98.5%	8.5	1.6	A
	Subtotal	521	511	98.1%	20.4	2.9	C
EB	Left Turn	124	120	96.5%	40.1	6.1	D
	Through	688	696	101.1%	20.5	2.2	C
	Right Turn	20	22	107.5%	16.3	7.7	B
	Subtotal	832	837	100.6%	23.1	2.2	C
WB	Left Turn	20	20	98.5%	51.1	6.4	D
	Through	653	651	99.6%	20.5	3.3	C
	Right Turn	125	124	98.8%	18.4	4.5	B
	Subtotal	798	794	99.5%	20.9	3.5	C
Total		2,171	2,159	99.5%	21.6	2.3	C

Intersection 7 — **Sierra College Blvd/Rocklin Rd** — **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	304	309	101.7%	49.6	4.7	D
	Through	895	902	100.8%	37.8	4.1	D
	Right Turn	116	116	99.6%	27.6	7.4	C
	Subtotal	1,315	1,327	100.9%	39.8	3.6	D
SB	Left Turn	286	286	99.9%	55.4	6.8	E
	Through	714	709	99.2%	41.7	3.0	D
	Right Turn	215	209	97.2%	18.6	2.3	B
	Subtotal	1,215	1,203	99.0%	41.0	2.7	D
EB	Left Turn	358	352	98.2%	48.2	7.6	D
	Through	324	328	101.2%	34.0	9.6	C
	Right Turn	367	367	99.9%	20.0	4.3	B
	Subtotal	1,049	1,046	99.7%	33.1	6.1	C
WB	Left Turn	126	127	100.8%	52.2	7.2	D
	Through	299	302	101.0%	40.6	5.8	D
	Right Turn	302	308	102.1%	22.3	4.8	C
	Subtotal	727	737	101.4%	33.5	3.9	C
Total		4,306	4,314	100.2%	37.4	2.2	D

Intersection 8 — **North Village Dwy 1-Rocklin Manor West/Rocklin Rd** — **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	22	108.0%	20.3	7.0	C
	Through	10	11	113.0%	11.7	6.4	B
	Right Turn	10	10	100.0%	6.1	4.8	A
	Subtotal	40	43	107.3%	15.4	4.2	C
SB	Left Turn	11	9	82.7%	32.5	25.2	D
	Through						
	Right Turn	82	82	99.6%	7.2	3.6	A
	Subtotal	93	91	97.6%	9.1	3.6	A
EB	Left Turn	45	47	104.0%	6.3	1.2	A
	Through	581	574	98.7%	2.8	0.4	A
	Right Turn	100	107	106.8%	2.1	0.6	A
	Subtotal	726	727	100.2%	2.9	0.3	A
WB	Left Turn	10	10	103.0%	4.2	2.2	A
	Through	625	634	101.4%	0.9	0.2	A
	Right Turn	11	11	100.9%	0.2	0.2	A
	Subtotal	646	655	101.4%	0.9	0.1	A
Total		1,505	1,516	100.7%	2.8	0.5	A

Intersection 9 — North Village Dwy 2-Rocklin Manor Central/Rocklin Rd — Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	20	22	111.0%	13.5	5.6	B
	Through						
	Right Turn						
	Subtotal	20	22	111.0%	13.5	5.6	B
SB	Left Turn	11	12	107.3%	16.1	8.5	C
	Through						
	Right Turn	127	125	98.6%	5.2	1.3	A
	Subtotal	138	137	99.3%	6.2	1.9	A
EB	Left Turn	39	38	98.2%	3.2	0.9	A
	Through	543	534	98.3%	1.1	0.3	A
	Right Turn	20	20	101.5%	0.4	0.4	A
	Subtotal	602	592	98.4%	1.2	0.3	A
WB	Left Turn	10	10	99.0%	3.6	2.8	A
	Through	499	505	101.2%	0.6	0.1	A
	Right Turn	3	3	110.0%	0.1	0.2	A
	Subtotal	512	518	101.2%	0.7	0.1	A
Total		1,272	1,270	99.8%	1.8	0.4	A

Intersection 10 — Rocklin Manor East/Rocklin Rd — Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	10	101.0%	13.7	10.6	B
	Through						
	Right Turn						
	Subtotal	10	10	101.0%	13.7	10.6	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	544	532	97.8%	0.4	0.1	A
	Right Turn	10	11	113.0%	0.0	0.1	A
	Subtotal	554	543	98.1%	0.4	0.1	A
WB	Left Turn	10	8	82.0%	4.2	3.7	A
	Through	502	509	101.3%	2.7	0.3	A
	Right Turn						
	Subtotal	512	517	100.9%	2.7	0.3	A
Total		1,076	1,070	99.5%	1.6	0.2	A

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	426	428	100.6%	10.7	1.4	B
	Through	90	93	103.0%	10.2	0.9	B
	Right Turn						
	Subtotal	516	521	101.0%	10.6	1.2	B
SB	Left Turn						
	Through	50	51	102.2%	10.0	0.9	A
	Right Turn	81	83	103.0%	4.9	1.1	A
	Subtotal	131	135	102.7%	6.6	0.9	A
EB	Left Turn	85	86	100.6%	15.8	2.6	C
	Through						
	Right Turn	459	445	96.9%	13.4	2.2	B
	Subtotal	544	530	97.5%	13.8	2.1	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,191	1,136	99.6%	11.7	0.8	B

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	241	236	98.0%	46.4	6.0	D
	Through	964	973	101.0%	21.6	4.4	C
	Right Turn	80	81	101.5%	11.7	3.2	B
	Subtotal	1,285	1,291	100.5%	25.6	4.0	C
SB	Left Turn	60	62	103.0%	54.2	9.3	D
	Through	923	912	98.8%	39.8	9.8	D
	Right Turn	80	84	105.4%	15.5	9.1	B
	Subtotal	1,063	1,058	99.5%	38.7	9.3	D
EB	Left Turn	160	167	104.1%	35.7	5.9	D
	Through	30	33	111.3%	39.7	14.4	D
	Right Turn	272	277	101.9%	21.5	3.1	C
	Subtotal	462	477	103.3%	27.9	3.5	C
WB	Left Turn	110	107	97.6%	56.1	19.5	E
	Through	20	19	94.5%	55.6	18.2	E
	Right Turn	40	41	103.3%	10.7	3.4	B
	Subtotal	170	168	98.6%	45.8	14.5	D
Total		2,980	2,994	100.5%	31.8	5.6	C

Intersection 13 — **Sierra College Blvd/Shopping Center-I-80 WB Ramps** — **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	296	299	101.1%	54.4	11.4	D
	Through	1,025	1,029	100.4%	21.5	3.8	C
	Right Turn	552	552	100.0%	10.3	1.3	B
	Subtotal	1,873	1,830	100.4%	23.6	3.7	C
SB	Left Turn						
	Through	1,305	1,296	99.3%	38.2	8.7	D
	Right Turn	60	60	100.0%	11.6	3.8	B
	Subtotal	1,365	1,356	99.4%	37.0	8.6	D
EB	Left Turn	60	62	104.0%	47.9	12.9	D
	Through						
	Right Turn	345	343	99.3%	22.4	3.9	C
	Subtotal	405	405	100.0%	27.0	4.0	C
WB	Left Turn	515	521	101.1%	31.9	2.7	C
	Through	110	109	99.3%	40.5	4.2	D
	Right Turn	240	240	100.1%	20.3	3.2	C
	Subtotal	865	870	100.6%	29.9	2.2	C
Total		4,508	4,512	100.1%	29.2	3.7	C

Intersection 14 — **Sierra College Blvd/I-80 EB Ramps-Shopping Center** — **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,739	1,741	100.1%	26.8	4.6	C
	Right Turn	146	147	100.7%	12.7	2.0	B
	Subtotal	1,885	1,888	100.1%	25.7	4.3	C
SB	Left Turn	310	308	99.4%	49.7	5.8	D
	Through	955	956	100.1%	21.4	2.2	C
	Right Turn	340	343	100.9%	8.3	0.8	A
	Subtotal	1,605	1,607	100.1%	24.4	2.5	C
EB	Left Turn	400	403	100.8%	43.5	5.0	D
	Through	350	355	101.5%	36.8	2.7	D
	Right Turn	193	199	103.2%	23.8	2.6	C
	Subtotal	943	958	101.6%	36.7	2.0	D
WB	Left Turn	115	109	94.3%	42.8	6.3	D
	Through						
	Right Turn	310	312	100.5%	22.9	5.4	C
	Subtotal	425	420	98.8%	28.2	5.3	C
Total		4,858	4,872	100.3%	27.8	2.3	C

Intersection 15 **Sierra College Blvd/Schriber Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	11	111.0%	26.0	21.8	C
	Through	1,795	1,801	100.3%	9.3	3.9	A
	Right Turn	50	46	92.8%	10.4	5.9	B
	Subtotal	1,855	1,858	100.2%	9.5	3.9	A
SB	Left Turn						
	Through	1,233	1,233	100.0%	10.5	4.8	B
	Right Turn	30	32	105.3%	6.5	3.7	A
	Subtotal	1,263	1,265	100.2%	10.4	4.7	B
EB	Left Turn	40	37	93.3%	127.4	170.4	F
	Through	10	11	110.0%	42.2	25.4	D
	Right Turn	20	20	98.5%	23.3	10.5	C
	Subtotal	70	68	97.1%	87.1	107.8	F
WB	Left Turn	20	20	100.5%	41.7	19.3	D
	Through	10	10	97.0%	33.4	18.8	C
	Right Turn	50	54	107.8%	23.5	8.1	C
	Subtotal	80	84	104.6%	29.4	8.7	C
Total		3,268	3,275	100.2%	11.7	5.4	B

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	8	82.0%	52.9	18.3	D
	Through	1,825	1,825	100.0%	37.6	14.3	D
	Right Turn	60	62	103.8%	43.2	19.2	D
	Subtotal	1,895	1,896	100.0%	37.9	14.4	D
SB	Left Turn	50	50	99.6%	39.0	6.5	D
	Through	1,183	1,182	99.9%	6.1	0.9	A
	Right Turn	40	42	105.0%	2.2	0.5	A
	Subtotal	1,273	1,274	100.0%	7.4	0.9	A
EB	Left Turn	10	10	103.0%	37.4	26.0	D
	Through	10	12	119.0%	37.6	10.9	D
	Right Turn	10	10	98.0%	11.7	7.5	B
	Subtotal	30	32	106.7%	29.9	9.2	C
WB	Left Turn	60	59	98.0%	35.9	6.7	D
	Through	10	8	83.0%	30.9	24.3	C
	Right Turn	10	10	98.0%	22.0	14.0	C
	Subtotal	80	77	96.1%	35.1	5.2	D
Total		3,278	3,278	100.0%	26.0	8.9	C

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr-North Village Street A** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	234	233	99.6%	70.1	22.2	E
	Through	1,270	1,269	99.9%	38.7	4.0	D
	Right Turn	45	47	104.4%	25.5	8.7	C
	Subtotal	1,549	1,549	100.0%	43.1	4.4	D
SB	Left Turn	48	47	98.8%	76.2	21.8	E
	Through	990	978	98.8%	48.5	9.4	D
	Right Turn	220	220	100.1%	5.5	0.9	A
	Subtotal	1,258	1,246	99.0%	41.6	8.7	D
EB	Left Turn	600	606	101.0%	32.4	3.5	C
	Through						
	Right Turn	261	261	100.0%	26.0	4.7	C
	Subtotal	861	867	100.7%	30.5	3.7	C
WB	Left Turn	40	41	101.5%	62.1	17.5	E
	Through						
	Right Turn	25	26	102.4%	15.2	7.7	B
	Subtotal	65	66	101.8%	44.7	13.2	D
Total		3,733	3,729	99.9%	39.7	4.3	D

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,562	1,567	100.3%	1.0	0.1	A
	Right Turn						
	Subtotal	1,562	1,567	100.3%	1.0	0.1	A
SB	Left Turn						
	Through	1,239	1,228	99.1%	6.9	0.8	A
	Right Turn	40	43	108.0%	6.5	0.7	A
	Subtotal	1,279	1,271	99.4%	6.8	0.8	A
EB	Left Turn						
	Through						
	Right Turn	20	19	94.5%	6.0	3.2	A
	Subtotal	20	19	94.5%	6.0	3.2	A
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,861	2,857	99.8%	3.6	0.4	A

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	36	33	92.8%	41.4	12.7	D
	Through	1,194	1,208	101.1%	13.1	2.1	B
	Right Turn	30	30	101.3%	8.8	3.7	A
	Subtotal	1,260	1,272	100.9%	13.6	2.1	B
SB	Left Turn	130	126	97.2%	33.7	5.8	C
	Through	1,014	1,016	100.2%	8.8	1.4	A
	Right Turn	93	95	101.6%	9.9	2.7	A
	Subtotal	1,237	1,237	100.0%	11.6	1.7	B
EB	Left Turn	41	41	99.0%	30.5	4.2	C
	Through	10	9	93.0%	28.4	10.0	C
	Right Turn	28	31	109.3%	14.0	4.3	B
	Subtotal	79	81	101.9%	23.9	3.3	C
WB	Left Turn	20	19	93.5%	32.1	10.3	C
	Through	10	11	110.0%	32.4	17.9	C
	Right Turn	50	53	105.8%	14.9	2.1	B
	Subtotal	80	83	103.3%	21.5	4.4	C
Total		2,656	2,671	100.6%	13.3	1.7	B

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	239	244	102.1%	9.0	12.7	A
	Right Turn						
	Subtotal	239	244	102.1%	9.0	12.7	A
SB	Left Turn						
	Through	192	194	100.9%	0.6	0.1	A
	Right Turn	10	10	98.0%	0.6	0.5	A
	Subtotal	202	204	100.8%	0.6	0.1	A
EB	Left Turn						
	Through						
	Right Turn	10	10	101.0%	2.7	0.6	A
	Subtotal	10	10	101.0%	2.7	0.6	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		451	458	101.5%	5.4	7.9	A

Intersection 21 — **El Don Dr/Southern Retail Access-South Village Dwy 2** — **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	8	75.0%	2.9	1.2	A
	Through	151	154	102.0%	7.3	18.0	A
	Right Turn	1	2	180.0%	0.1	0.4	A
	Subtotal	162	163	100.8%	7.4	18.0	A
SB	Left Turn	9	8	85.6%	5.6	13.5	A
	Through	183	186	101.6%	0.4	0.1	A
	Right Turn	10	11	109.0%	0.1	0.1	A
	Subtotal	202	205	101.2%	0.7	0.9	A
EB	Left Turn	40	43	108.3%	8.0	6.1	A
	Through						
	Right Turn	10	12	117.0%	3.7	1.9	A
	Subtotal	50	55	110.0%	7.1	4.7	A
WB	Left Turn	4	4	102.5%	1.5	1.8	A
	Through						
	Right Turn	48	47	98.1%	17.7	43.7	C
	Subtotal	52	51	98.5%	17.6	43.7	C
Total		466	474	101.7%	6.0	13.3	A

Intersection 22 — **El Don Dr/Wildflower Ln-South Village Dwy 1** — **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	11	107.0%	5.0	2.5	A
	Through	120	123	102.7%	6.0	2.6	A
	Right Turn	1	1	110.0%	0.3	0.8	A
	Subtotal	131	135	103.1%	5.9	2.5	A
SB	Left Turn						
	Through	167	170	101.9%	6.3	0.4	A
	Right Turn	30	32	105.7%	4.6	0.7	A
	Subtotal	197	202	102.5%	6.0	0.3	A
EB	Left Turn	20	20	98.0%	4.1	0.8	A
	Through						
	Right Turn	10	11	114.0%	3.2	1.3	A
	Subtotal	30	31	103.3%	3.9	0.6	A
WB	Left Turn	3	2	73.3%	0.9	1.6	A
	Through						
	Right Turn	22	21	93.2%	3.3	2.6	A
	Subtotal	25	23	90.8%	3.2	2.3	A
Total		383	391	102.0%	5.7	1.1	A

Intersection 23 — **El Don Dr/Corona Cir-South Village Street A** — **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	9	94.0%	2.1	2.1	A
	Through	114	117	103.0%	0.2	0.1	A
	Right Turn	3	4	116.7%	0.0	0.0	A
	Subtotal	127	130	102.6%	0.3	0.2	A
SB	Left Turn	13	14	106.9%	2.8	0.5	A
	Through	147	146	99.1%	1.7	0.2	A
	Right Turn	20	22	110.0%	1.5	0.2	A
	Subtotal	180	182	100.9%	1.8	0.2	A
EB	Left Turn	10	10	102.0%	4.2	1.6	A
	Through						
	Right Turn	10	12	123.0%	3.2	1.8	A
	Subtotal	20	23	112.5%	4.1	0.8	A
WB	Left Turn	2	2	95.0%	2.9	3.6	A
	Through						
	Right Turn	7	7	95.7%	2.7	1.5	A
	Subtotal	9	9	95.6%	3.9	1.6	A
Total		336	343	102.1%	1.5	0.2	A

Intersection 24 — **Sierra College Blvd/Street G** — **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,500	1,505	100.4%	1.4	0.1	A
	Right Turn	62	62	99.5%	1.1	0.2	A
	Subtotal	1,562	1,567	100.3%	1.4	0.1	A
SB	Left Turn	36	34	95.6%	24.6	10.4	C
	Through	1,279	1,270	99.3%	6.4	0.7	A
	Right Turn						
	Subtotal	1,315	1,304	99.2%	6.8	0.7	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	49	49	99.4%	10.7	3.8	B
	Subtotal	49	49	99.4%	10.7	3.8	B
Total		2,926	2,920	99.8%	3.9	0.3	A

Intersection 25 — **Sierra College Blvd/North Village Dwy 3** — **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,522	1,532	100.6%	4.4	0.3	A
	Right Turn	23	23	99.6%	2.7	1.0	A
	Subtotal	1,545	1,555	100.6%	4.3	0.3	A
SB	Left Turn	44	42	96.1%	19.7	9.5	C
	Through	1,215	1,205	99.2%	1.4	0.1	A
	Right Turn						
	Subtotal	1,259	1,247	99.1%	2.0	0.3	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	40	35	87.8%	9.2	3.7	A
	Subtotal	40	35	87.8%	9.2	3.7	A
Total		2,844	2,837	99.8%	3.4	0.3	A

Intersection 26 — **South Village Dwy 3/Rocklin Rd** — **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	32	33	104.1%	10.5	6.2	B
	Subtotal	32	33	104.1%	10.5	6.2	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	957	957	100.0%	3.7	0.4	A
	Right Turn	9	8	87.8%	3.3	1.3	A
	Subtotal	966	965	99.9%	3.6	0.4	A
WB	Left Turn						
	Through	1,002	998	99.6%	1.8	1.0	A
	Right Turn						
	Subtotal	1,002	998	99.6%	1.8	1.0	A
Total		2,000	1,996	99.8%	2.9	0.5	A

SimTraffic Post-Processor — Sierra Villages TIS
Average Results from 10 Runs — Existing Plus Approved Plus Project Conditions (w/ operational enhancements)
Volume and Delay by Movement — PM Peak Hour

Intersection 27 — South Village Dwy 4/Rocklin Rd — Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	80	79	98.8%	16.3	6.1	C
	Subtotal	80	79	98.8%	16.3	6.1	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	965	968	100.4%	2.1	0.3	A
	Right Turn	24	24	100.8%	0.9	0.4	A
	Subtotal	989	993	100.4%	2.0	0.3	A
WB	Left Turn						
	Through	1,002	999	99.7%	0.5	0.2	A
	Right Turn						
	Subtotal	1,002	999	99.7%	0.5	0.2	A
Total		2,071	2,071	100.0%	1.8	0.3	A

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **AM Peak Hour**

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	20	16	81.0%	38.2	8.4	D
	Through	10	11	109.0%	44.1	16.0	D
	Right Turn	10	9	92.0%	6.9	6.0	A
	Subtotal	40	36	90.8%	31.7	6.1	C
SB	Left Turn	213	219	102.6%	28.7	3.8	C
	Through	10	10	102.0%	30.1	19.6	C
	Right Turn	160	166	104.0%	16.6	2.8	B
	Subtotal	383	395	103.2%	23.6	2.6	C
EB	Left Turn	190	190	99.9%	57.8	23.2	E
	Through	608	611	100.5%	14.9	7.4	B
	Right Turn	10	10	99.0%	5.6	3.5	A
	Subtotal	808	811	100.3%	24.8	11.5	C
WB	Left Turn	30	28	92.7%	57.1	17.1	E
	Through	1,212	1,122	92.6%	24.0	3.3	C
	Right Turn	575	530	92.1%	8.1	1.1	A
	Subtotal	1,817	1,680	92.4%	19.6	2.8	B
Total		3,048	2,922	95.9%	21.9	3.7	C

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	111	114	103.0%	40.4	6.8	D
	Through	10	10	102.0%	39.7	19.8	D
	Right Turn	440	446	101.4%	28.1	3.8	C
	Subtotal	561	571	101.7%	31.1	2.8	C
EB	Left Turn						
	Through	590	599	101.6%	42.9	4.4	D
	Right Turn	280	280	100.0%	18.5	2.3	B
	Subtotal	870	879	101.1%	34.5	2.3	C
WB	Left Turn	570	536	94.0%	19.3	3.5	B
	Through	1,479	1,330	89.9%	12.4	2.0	B
	Right Turn						
	Subtotal	2,049	1,865	91.0%	14.5	1.9	B
Total		3,480	3,315	95.3%	23.0	1.5	C

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	780	673	86.3%	42.2	2.0	D
	Through	10	11	111.0%	47.6	10.8	D
	Right Turn	1,112	986	88.7%	29.8	2.0	C
	Subtotal	1,902	1,671	87.8%	35.2	1.3	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	90	87	96.1%	60.7	8.7	E
	Through	611	629	103.0%	15.4	3.4	B
	Right Turn						
	Subtotal	701	716	102.1%	21.3	3.3	C
WB	Left Turn						
	Through	1,269	1,202	94.7%	28.4	3.7	C
	Right Turn	96	91	94.6%	11.6	2.0	B
	Subtotal	1,365	1,292	94.7%	27.2	3.5	C
Total		3,968	3,679	92.7%	29.9	1.2	C

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	300	301	100.2%	43.1	4.2	D
	Through						
	Right Turn	80	79	98.4%	15.5	6.6	B
	Subtotal	380	379	99.8%	37.5	4.6	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	40	36	89.8%	73.7	9.2	E
	Through	1,524	1,427	93.6%	13.3	2.1	B
	Right Turn	170	163	95.6%	9.0	2.5	A
	Subtotal	1,734	1,625	93.7%	14.4	2.0	B
WB	Left Turn	43	34	79.1%	74.7	15.8	E
	Through	1,043	974	93.4%	17.7	4.3	B
	Right Turn						
	Subtotal	1,086	1,008	92.8%	19.2	4.4	B
Total		3,200	3,013	94.1%	18.9	2.5	B

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **AM Peak Hour**

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	282	286	101.5%	33.4	5.1	C
	Through	20	22	110.5%	34.5	11.8	C
	Right Turn	25	26	104.0%	30.0	12.4	C
	Subtotal	327	334	102.2%	33.3	5.4	C
SB	Left Turn	16	17	106.3%	33.6	11.6	C
	Through	10	11	108.0%	27.6	12.3	C
	Right Turn	89	90	101.2%	11.6	3.3	B
	Subtotal	115	118	102.5%	17.2	4.2	B
EB	Left Turn	526	491	93.4%	36.6	3.5	D
	Through	933	871	93.3%	32.1	5.0	C
	Right Turn	129	127	98.8%	23.4	4.4	C
	Subtotal	1,588	1,489	93.8%	33.1	3.3	C
WB	Left Turn	76	64	84.6%	37.6	5.6	D
	Through	689	606	87.9%	20.3	3.7	C
	Right Turn	149	128	85.6%	9.5	2.3	A
	Subtotal	914	798	87.3%	20.1	3.1	C
Total		2,944	2,739	93.0%	28.6	2.2	C

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	20	18	89.5%	39.7	10.9	D
	Through	10	11	106.0%	27.8	15.5	C
	Right Turn	20	20	99.5%	12.1	8.0	B
	Subtotal	50	48	96.8%	26.0	5.3	C
SB	Left Turn	40	38	95.3%	27.9	9.1	C
	Through	10	10	99.0%	29.6	19.4	C
	Right Turn	25	26	102.4%	5.5	1.6	A
	Subtotal	75	74	98.1%	19.8	5.3	B
EB	Left Turn	516	492	95.3%	29.4	6.3	C
	Through	626	598	95.5%	10.4	2.9	B
	Right Turn	10	12	119.0%	6.7	7.6	A
	Subtotal	1,152	1,102	95.6%	18.8	4.2	B
WB	Left Turn	20	15	77.0%	44.3	17.3	D
	Through	894	780	87.2%	21.3	4.7	C
	Right Turn	367	320	87.3%	12.7	2.5	B
	Subtotal	1,281	1,115	87.1%	19.3	3.8	B
Total		2,558	2,339	91.4%	19.2	3.4	B

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **AM Peak Hour**

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	601	511	84.9%	229.5	10.8	F
	Through	1,463	1,334	91.2%	82.0	5.3	F
	Right Turn	136	124	91.4%	18.4	5.2	B
	Subtotal	2,200	1,969	89.5%	117.2	4.3	F
SB	Left Turn	211	152	72.0%	53.9	8.4	D
	Through	1,032	726	70.3%	36.3	4.6	D
	Right Turn	267	181	67.8%	21.6	3.1	C
	Subtotal	1,510	1,059	70.1%	36.3	3.9	D
EB	Left Turn	150	141	93.9%	48.7	7.9	D
	Through	250	242	96.8%	30.7	5.1	C
	Right Turn	286	274	95.9%	13.8	4.7	B
	Subtotal	686	657	95.8%	27.4	4.4	C
WB	Left Turn	133	133	99.9%	95.9	40.3	F
	Through	433	437	100.9%	32.4	1.3	C
	Right Turn	358	360	100.5%	23.5	2.5	C
	Subtotal	924	930	100.6%	38.4	7.5	D
Total		5,320	4,614	86.7%	70.4	1.6	E

Intersection 8 **Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	13	14	103.8%	20.0	21.1	C
	Through						
	Right Turn	1	1	100.0%	0.6	1.2	A
	Subtotal	14	15	103.6%	19.5	21.5	C
SB	Left Turn	6	5	86.7%	23.0	19.5	C
	Through						
	Right Turn	44	47	107.5%	9.0	4.5	A
	Subtotal	50	53	105.0%	10.8	6.1	B
EB	Left Turn	31	25	79.0%	8.4	2.9	A
	Through	563	491	87.1%	3.4	0.3	A
	Right Turn	3	2	76.7%	0.5	0.8	A
	Subtotal	597	517	86.6%	3.7	0.4	A
WB	Left Turn						
	Through	867	868	100.1%	4.3	0.8	A
	Right Turn	10	12	124.0%	3.3	0.7	A
	Subtotal	877	880	100.4%	4.3	0.8	A
Total		1,538	1,464	95.2%	4.5	0.9	A

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **AM Peak Hour**

Intersection 9 **Rocklin Manor Central/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	10	9	93.0%	13.5	11.8	B
	Through						
	Right Turn	1	1	140.0%	0.3	0.8	A
	Subtotal	11	11	97.3%	13.2	12.0	B
SB	Left Turn	2	1	50.0%	0.0	0.0	A
	Through						
	Right Turn	25	24	97.2%	5.1	2.4	A
	Subtotal	27	25	93.7%	5.1	2.4	A
EB	Left Turn	121	102	84.6%	6.8	1.8	A
	Through	439	388	88.3%	1.8	0.4	A
	Right Turn	10	8	78.0%	0.0	0.0	A
	Subtotal	570	498	87.4%	2.7	0.6	A
WB	Left Turn						
	Through	842	848	100.7%	3.1	0.5	A
	Right Turn	10	11	107.0%	2.5	0.4	A
	Subtotal	852	859	100.8%	3.1	0.5	A
Total		1,460	1,393	95.4%	3.1	0.5	A

Intersection 10 **Rocklin Manor East/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	9	8	92.2%	13.3	8.1	B
	Through						
	Right Turn	2	4	185.0%	3.1	5.0	A
	Subtotal	11	12	109.1%	10.1	5.3	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	440	389	88.3%	0.2	0.1	A
	Right Turn	2	2	95.0%	0.0	0.0	A
	Subtotal	442	391	88.4%	0.2	0.1	A
WB	Left Turn	2	2	75.0%	0.4	0.7	A
	Through	843	851	100.9%	2.4	0.4	A
	Right Turn						
	Subtotal	845	852	100.9%	2.4	0.4	A
Total		1,298	1,255	96.7%	1.9	0.3	A

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **AM Peak Hour**

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	301	309	102.7%	9.3	1.4	A
	Through						
	Right Turn						
	Subtotal	301	309	102.7%	9.3	1.4	A
SB	Left Turn						
	Through						
	Right Turn	544	541	99.4%	19.0	9.0	C
	Subtotal	544	541	99.4%	19.0	9.0	C
EB	Left Turn	322	285	88.4%	13.6	2.6	B
	Through						
	Right Turn	120	106	88.6%	11.5	2.2	B
	Subtotal	442	391	88.4%	13.0	2.4	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,287	1,241	96.4%	14.8	4.3	B

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	407	264	64.9%	111.4	30.5	F
	Through	1,183	836	70.7%	52.7	16.3	D
	Right Turn	178	129	72.6%	52.1	19.4	D
	Subtotal	1,768	1,230	69.5%	65.0	19.3	E
SB	Left Turn	80	56	70.3%	726.8	78.1	F
	Through	1,386	863	62.3%	816.3	84.1	F
	Right Turn	140	81	57.7%	786.2	95.8	F
	Subtotal	1,606	1,000	62.3%	809.3	84.0	F
EB	Left Turn	90	82	91.6%	240.6	115.0	F
	Through	30	27	89.7%	207.9	132.0	F
	Right Turn	102	95	92.8%	216.0	122.1	F
	Subtotal	222	204	91.9%	213.1	58.9	F
WB	Left Turn	178	55	31.0%	1299.1	242.8	F
	Through	30	8	27.3%	1141.4	344.5	F
	Right Turn	30	10	31.7%	1034.2	326.0	F
	Subtotal	238	73	30.6%	789.7	557.7	F
Total		3,834	2,506	65.4%	376.7	41.9	F

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	124	107	86.4%	234.7	140.7	F
	Through	1,308	1,056	80.7%	217.2	176.5	F
	Right Turn	201	171	85.2%	165.5	149.4	F
	Subtotal	1,633	1,334	81.7%	211.4	169.7	F
SB	Left Turn						
	Through	1,617	977	60.4%	89.2	13.7	F
	Right Turn	100	60	59.8%	30.1	6.2	C
	Subtotal	1,717	1,037	60.4%	85.5	13.6	F
EB	Left Turn	50	46	91.4%	182.7	129.5	F
	Through						
	Right Turn	92	95	103.7%	130.5	103.5	F
	Subtotal	142	141	99.4%	140.9	57.9	F
WB	Left Turn	690	217	31.4%	1543.1	277.1	F
	Through	70	27	38.7%	1340.2	240.4	F
	Right Turn	440	160	36.3%	1273.1	204.5	F
	Subtotal	1,200	403	33.6%	1426.1	240.2	F
Total		4,692	2,916	62.1%	263.7	98.6	F

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,433	1,304	91.0%	64.9	24.2	E
	Right Turn	94	85	90.9%	30.3	12.1	C
	Subtotal	1,527	1,389	91.0%	62.8	22.8	E
SB	Left Turn	150	79	52.9%	227.7	15.5	F
	Through	1,748	878	50.2%	244.0	28.3	F
	Right Turn	150	62	41.3%	183.5	21.0	F
	Subtotal	2,048	1,020	49.8%	239.3	27.2	F
EB	Left Turn	640	528	82.4%	520.4	158.2	F
	Through	80	69	85.6%	484.7	136.5	F
	Right Turn	864	714	82.7%	508.9	134.7	F
	Subtotal	1,584	1,310	82.7%	512.8	145.7	F
WB	Left Turn	162	87	53.5%	797.5	70.1	F
	Through	10	7	74.0%	683.2	70.4	F
	Right Turn	140	113	80.6%	672.6	61.5	F
	Subtotal	312	207	66.3%	732.3	67.1	F
Total		5,471	3,926	71.8%	278.6	23.0	F

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **AM Peak Hour**

Intersection 15 **Sierra College Blvd/Schriber Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	116	101	86.9%	110.3	42.1	F
	Through	1,207	1,139	94.3%	31.6	15.7	C
	Right Turn	10	10	95.0%	51.4	26.3	D
	Subtotal	1,333	1,249	93.7%	38.2	13.8	D
SB	Left Turn						
	Through	2,504	1,515	60.5%	33.6	3.7	C
	Right Turn	270	150	55.6%	37.8	6.7	D
	Subtotal	2,774	1,665	60.0%	34.0	3.8	C
EB	Left Turn	230	188	81.6%	521.1	246.1	F
	Through	20	17	85.5%	461.6	212.8	F
	Right Turn	88	75	85.2%	428.6	215.4	F
	Subtotal	338	280	82.8%	491.2	233.8	F
WB	Left Turn						
	Through						
	Right Turn	90	79	88.0%	236.9	256.6	F
	Subtotal	90	79	88.0%	236.9	256.6	F
Total		4,535	3,273	72.2%	75.0	24.6	E

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	462	433	93.8%	47.7	5.6	D
	Through	1,203	1,142	94.9%	36.0	30.5	D
	Right Turn	59	55	93.7%	42.9	55.6	D
	Subtotal	1,724	1,630	94.6%	39.2	23.8	D
SB	Left Turn	110	71	64.9%	62.6	19.7	E
	Through	2,252	1,386	61.5%	19.1	3.4	B
	Right Turn	230	138	59.9%	8.7	2.8	A
	Subtotal	2,592	1,595	61.5%	20.1	2.9	C
EB	Left Turn	100	89	88.6%	155.9	170.1	F
	Through	20	20	98.5%	106.0	124.4	F
	Right Turn	186	196	105.1%	41.4	62.0	D
	Subtotal	306	304	99.3%	77.9	96.7	E
WB	Left Turn	96	90	94.1%	47.0	10.9	D
	Through	50	49	98.4%	50.8	13.8	D
	Right Turn	20	23	113.5%	29.1	29.3	C
	Subtotal	166	162	97.7%	43.9	11.7	D
Total		4,788	3,691	77.1%	34.7	15.5	C

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **AM Peak Hour**

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	348	311	89.4%	56.3	10.5	E
	Through	1,628	1,542	94.7%	19.2	2.9	B
	Right Turn	13	14	103.8%	11.6	3.8	B
	Subtotal	1,989	1,867	93.9%	25.2	4.4	C
SB	Left Turn	14	8	56.4%	50.8	14.4	D
	Through	1,591	1,074	67.5%	22.0	1.9	C
	Right Turn	929	591	63.6%	18.3	1.3	B
	Subtotal	2,534	1,673	66.0%	20.8	1.4	C
EB	Left Turn	55	55	99.5%	40.0	8.1	D
	Through						
	Right Turn	36	38	105.6%	10.1	3.4	B
	Subtotal	91	93	101.9%	28.9	5.2	C
WB	Left Turn	66	62	94.4%	35.8	3.1	D
	Through						
	Right Turn	41	42	101.2%	20.6	10.1	C
	Subtotal	107	104	97.0%	29.5	5.1	C
Total		4,721	3,736	79.1%	23.6	2.5	C

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,931	1,802	93.3%	6.1	0.9	A
	Right Turn						
	Subtotal	1,931	1,802	93.3%	6.1	0.9	A
SB	Left Turn						
	Through	1,533	1,071	69.9%	5.8	1.0	A
	Right Turn	187	125	67.1%	5.5	1.0	A
	Subtotal	1,720	1,197	69.6%	5.8	1.0	A
EB	Left Turn						
	Through						
	Right Turn	18	15	82.2%	6.4	3.5	A
	Subtotal	18	15	82.2%	6.4	3.5	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		3,669	3,014	82.1%	6.0	0.6	A

SimTraffic Post-Processor | **Sierra Villages TIS**
Average Results from 10 Runs | **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement | **AM Peak Hour**

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	45	42	94.0%	148.8	48.3	F
	Through	2,077	1,895	91.2%	87.6	5.2	F
	Right Turn	5	6	114.0%	14.6	17.2	B
	Subtotal	2,127	1,943	91.3%	88.9	5.1	F
SB	Left Turn	36	30	81.9%	33.2	8.2	C
	Through	1,439	1,124	78.1%	11.3	1.3	B
	Right Turn	26	22	83.1%	11.8	3.4	B
	Subtotal	1,501	1,175	78.3%	11.8	1.5	B
EB	Left Turn	57	52	91.6%	28.3	6.3	C
	Through	1	1	110.0%	8.0	14.4	A
	Right Turn	39	39	100.3%	13.1	4.1	B
	Subtotal	97	92	95.3%	22.3	4.0	C
WB	Left Turn	18	18	98.9%	21.4	11.0	C
	Through	1	1	110.0%	0.7	2.2	A
	Right Turn	44	49	110.2%	16.7	4.4	B
	Subtotal	63	67	107.0%	18.6	4.9	B
Total		3,788	3,278	86.5%	58.2	2.1	E

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	327	333	101.9%	4.5	2.1	A
	Right Turn						
	Subtotal	327	333	101.9%	4.5	2.1	A
SB	Left Turn						
	Through	164	157	95.6%	0.7	0.2	A
	Right Turn	10	11	113.0%	0.8	0.9	A
	Subtotal	174	168	96.6%	0.7	0.3	A
EB	Left Turn						
	Through						
	Right Turn	1	1	80.0%	0.5	1.1	A
	Subtotal	1	1	80.0%	0.5	1.1	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		502	502	100.0%	3.3	1.5	A

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **AM Peak Hour**

Intersection 21 **El Don Dr/Southern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	3	3	86.7%	1.6	1.8	A
	Through	304	310	101.9%	1.9	0.4	A
	Right Turn						
	Subtotal	307	312	101.7%	1.9	0.4	A
SB	Left Turn	50	46	92.0%	3.5	1.9	A
	Through	114	112	98.1%	0.1	0.1	A
	Right Turn	1	1	110.0%	0.0	0.1	A
	Subtotal	165	159	96.3%	1.1	0.7	A
EB	Left Turn	13	13	97.7%	8.5	3.5	A
	Through						
	Right Turn	1	2	180.0%	1.6	2.1	A
	Subtotal	14	15	103.6%	8.0	3.6	A
WB	Left Turn	1	1	60.0%	1.8	4.6	A
	Through						
	Right Turn	10	11	109.0%	4.0	2.5	A
	Subtotal	11	12	104.5%	4.1	2.7	A
Total		497	497	100.0%	1.9	0.4	A

Intersection 22 **El Don Dr/Wildflower Ln** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	2	2	75.0%	1.8	2.5	A
	Through	289	296	102.2%	6.4	0.6	A
	Right Turn	18	17	96.1%	4.8	1.1	A
	Subtotal	309	314	101.7%	6.3	0.6	A
SB	Left Turn						
	Through	104	100	96.5%	5.9	0.6	A
	Right Turn	12	13	110.0%	3.4	0.9	A
	Subtotal	116	114	97.9%	5.7	0.7	A
EB	Left Turn	15	15	98.0%	4.4	0.6	A
	Through						
	Right Turn	5	6	110.0%	2.1	1.3	A
	Subtotal	20	20	101.0%	4.0	0.4	A
WB	Left Turn	1	0	30.0%	0.3	0.9	A
	Through						
	Right Turn	3	4	123.3%	2.5	1.8	A
	Subtotal	4	4	100.0%	2.5	1.8	A
Total		449	452	100.7%	6.0	0.6	A

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **AM Peak Hour**

Intersection 23 **El Don Dr/Corona Cir** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	2	1	65.0%	0.8	1.2	A
	Through	289	291	100.7%	0.3	0.1	A
	Right Turn	1	1	140.0%	0.0	0.0	A
	Subtotal	292	294	100.6%	0.3	0.1	A
SB	Left Turn	4	4	95.0%	2.1	2.1	A
	Through	101	97	96.4%	1.6	0.3	A
	Right Turn	5	5	98.0%	1.0	0.8	A
	Subtotal	110	106	96.5%	1.7	0.4	A
EB	Left Turn	9	10	107.8%	6.5	4.0	A
	Through						
	Right Turn	3	4	136.7%	1.3	1.4	A
	Subtotal	12	14	115.0%	5.5	2.3	A
WB	Left Turn	3	2	60.0%	1.3	2.7	A
	Through						
	Right Turn	11	12	109.1%	4.0	1.6	A
	Subtotal	14	14	98.6%	4.1	1.5	A
Total		428	427	99.9%	1.0	0.1	A

Intersection 24 **Sierra College Blvd/Street G** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	1,910	1,784	93.4%	6.4	1.0	A
	Right Turn	21	17	82.9%	6.1	0.9	A
	Subtotal	1,931	1,802	93.3%	6.4	1.0	A
SB	Left Turn	11	8	71.8%	10.3	8.5	B
	Through	1,720	1,197	69.6%	5.4	1.0	A
	Right Turn						
	Subtotal	1,731	1,205	69.6%	5.4	1.0	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	79	79	100.3%	18.0	5.6	C
	Subtotal	79	79	100.3%	18.0	5.6	C
Total		3,741	3,086	82.5%	6.4	0.7	A

SimTraffic Post-Processor | **Sierra Villages TIS**
Average Results from 10 Runs | **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement | **AM Peak Hour**

Intersection 25 **Sierra College Blvd/North Village Dwy 3** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	1,919	1,792	93.4%	4.6	0.5	A
	Right Turn	22	19	84.5%	3.1	1.2	A
	Subtotal	1,941	1,810	93.3%	4.6	0.5	A
SB	Left Turn	41	28	67.1%	24.7	6.3	C
	Through	1,510	1,058	70.0%	7.5	1.2	A
	Right Turn						
	Subtotal	1,551	1,085	70.0%	7.9	1.4	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	12	11	92.5%	8.5	8.1	A
	Subtotal	12	11	92.5%	8.5	8.1	A
Total		3,504	2,907	82.9%	6.0	0.8	A

Intersection 26 **South Village Dwy 3/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn	3	3	93.3%	12.3	15.5	B
	Subtotal	3	3	93.3%	12.3	15.5	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,208	1,147	95.0%	0.2	0.0	A
	Right Turn	42	38	90.0%	0.1	0.1	A
	Subtotal	1,250	1,185	94.8%	0.2	0.0	A
WB	Left Turn						
	Through	949	831	87.6%	3.9	0.4	A
	Right Turn						
	Subtotal	949	831	87.6%	3.9	0.4	A
Total		2,202	2,019	91.7%	1.8	0.1	A

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **AM Peak Hour**

Intersection 27 **South Village Dwy 4/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn	17	19	113.5%	5.4	3.4	A
	Subtotal	17	19	113.5%	5.4	3.4	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,135	1,077	94.9%	1.3	0.2	A
	Right Turn	76	73	96.3%	1.0	0.4	A
	Subtotal	1,211	1,150	95.0%	1.3	0.2	A
WB	Left Turn						
	Through	949	832	87.6%	3.0	0.3	A
	Right Turn						
	Subtotal	949	832	87.6%	3.0	0.3	A
Total		2,177	2,001	91.9%	2.1	0.2	A

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **PM Peak Hour**

Intersection 1 **Granite Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	30	30	100.0%	52.4	29.7	D
	Through	20	24	118.0%	63.0	22.6	E
	Right Turn	10	8	82.0%	29.6	23.4	C
	Subtotal	60	62	103.0%	56.5	20.6	E
SB	Left Turn	749	729	97.4%	84.3	25.8	F
	Through	10	13	129.0%	109.5	51.6	F
	Right Turn	310	322	103.9%	29.5	11.3	C
	Subtotal	1,069	1,064	99.6%	68.5	21.5	E
EB	Left Turn	330	211	63.9%	560.5	39.8	F
	Through	1,252	860	68.7%	483.3	38.7	F
	Right Turn	10	7	67.0%	461.0	76.3	F
	Subtotal	1,592	1,078	67.7%	499.4	38.3	F
WB	Left Turn	40	36	90.0%	98.9	30.4	F
	Through	925	880	95.1%	44.0	17.1	D
	Right Turn	531	519	97.7%	9.3	5.8	A
	Subtotal	1,496	1,434	95.9%	32.8	14.2	C
Total		4,217	3,638	86.3%	185.2	12.9	F

Intersection 2 **I-80 WB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	105	99	94.3%	62.8	6.0	E
	Through	10	10	101.0%	35.0	35.5	C
	Right Turn	220	223	101.5%	28.7	14.9	C
	Subtotal	335	332	99.2%	38.9	10.3	D
EB	Left Turn						
	Through	1,241	968	78.0%	47.8	5.1	D
	Right Turn	840	659	78.5%	52.1	4.7	D
	Subtotal	2,081	1,627	78.2%	49.6	4.3	D
WB	Left Turn	803	754	93.9%	42.0	7.0	D
	Through	1,316	1,263	95.9%	8.6	1.0	A
	Right Turn						
	Subtotal	2,119	2,017	95.2%	21.1	2.7	C
Total		4,535	3,976	87.7%	34.0	2.0	C

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **PM Peak Hour**

Intersection 3 **I-80 EB Ramps/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	510	510	100.0%	57.6	3.8	E
	Through	10	14	137.0%	32.4	16.3	C
	Right Turn	689	700	101.6%	30.2	14.1	C
	Subtotal	1,209	1,224	101.2%	41.6	9.3	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	340	262	77.0%	77.8	10.0	E
	Through	1,006	798	79.3%	12.0	2.3	B
	Right Turn						
	Subtotal	1,346	1,060	78.7%	27.5	3.4	C
WB	Left Turn						
	Through	1,609	1,507	93.7%	22.6	5.5	C
	Right Turn	171	162	94.5%	12.7	3.8	B
	Subtotal	1,780	1,669	93.8%	21.7	5.3	C
Total		4,335	3,952	91.2%	29.7	5.5	C

Intersection 4 **Aguilar Rd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	270	270	100.1%	58.1	11.5	F
	Through						
	Right Turn	76	81	106.4%	15.6	5.4	B
	Subtotal	346	351	101.5%	48.6	9.9	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	60	50	83.8%	91.4	17.4	F
	Through	1,315	1,158	88.1%	17.2	4.7	B
	Right Turn	320	287	89.8%	13.4	3.5	B
	Subtotal	1,695	1,496	88.2%	19.2	4.6	B
WB	Left Turn	78	74	94.6%	109.5	28.1	F
	Through	1,499	1,395	93.1%	38.5	26.9	D
	Right Turn						
	Subtotal	1,577	1,469	93.1%	42.1	26.8	D
Total		3,618	3,316	91.6%	32.3	13.2	C

Intersection 5 **Campus Dr-El Don Dr/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	241	237	98.5%	40.2	9.6	D
	Through	10	12	116.0%	43.7	14.8	D
	Right Turn	38	34	89.5%	34.1	9.8	C
	Subtotal	289	283	97.9%	39.6	9.2	D
SB	Left Turn	87	78	89.9%	188.3	63.6	F
	Through	20	19	96.5%	192.6	94.0	F
	Right Turn	360	351	97.5%	134.7	65.9	F
	Subtotal	467	449	96.1%	147.1	65.2	F
EB	Left Turn	244	215	88.0%	34.9	4.8	C
	Through	968	849	87.7%	31.5	6.3	C
	Right Turn	198	179	90.2%	27.4	4.0	C
	Subtotal	1,410	1,242	88.1%	31.5	4.5	C
WB	Left Turn	54	48	89.4%	46.0	8.4	D
	Through	968	877	90.6%	28.5	4.5	C
	Right Turn	50	47	93.2%	8.3	1.9	A
	Subtotal	1,072	972	90.7%	28.4	4.5	C
Total		3,238	2,946	91.0%	48.6	8.3	D

Intersection 6 **Havenhurst Circle/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	10	9	94.0%	15.8	10.1	B
	Through						
	Right Turn	10	12	122.0%	14.0	13.6	B
	Subtotal	20	22	108.0%	15.6	8.2	B
SB	Left Turn	315	319	101.1%	40.4	24.2	D
	Through						
	Right Turn	166	165	99.2%	6.6	4.0	A
	Subtotal	481	483	100.5%	28.6	16.0	C
EB	Left Turn	159	135	85.1%	79.9	72.8	E
	Through	1,005	862	85.8%	97.3	107.1	F
	Right Turn	20	20	99.0%	59.8	70.6	E
	Subtotal	1,184	1,017	85.9%	94.2	101.4	F
WB	Left Turn	10	8	83.0%	43.8	16.9	D
	Through	650	553	85.0%	18.8	3.6	B
	Right Turn	151	133	88.3%	7.6	1.1	A
	Subtotal	811	694	85.6%	17.1	3.2	B
Total		2,496	2,216	88.8%	48.8	35.2	D

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **PM Peak Hour**

Intersection 7 **Sierra College Blvd/Rocklin Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	440	333	75.6%	229.4	18.4	F
	Through	2,013	1,471	73.1%	266.0	24.4	F
	Right Turn	256	184	71.9%	285.7	43.0	F
	Subtotal	2,709	1,988	73.4%	261.6	22.0	F
SB	Left Turn	370	313	84.5%	129.7	65.2	F
	Through	2,005	1,698	84.7%	57.5	21.5	E
	Right Turn	86	71	82.3%	43.1	21.5	D
	Subtotal	2,461	2,082	84.6%	68.5	28.7	E
EB	Left Turn	284	213	75.1%	362.1	131.8	F
	Through	532	474	89.0%	92.2	14.3	F
	Right Turn	514	458	89.1%	60.5	23.7	E
	Subtotal	1,330	1,145	86.1%	125.2	16.6	F
WB	Left Turn	126	124	98.3%	133.3	67.2	F
	Through	285	288	101.1%	60.3	28.5	E
	Right Turn	288	291	101.1%	72.2	51.7	E
	Subtotal	699	703	100.6%	78.8	43.1	E
Total		7,199	5,917	82.2%	139.0	10.7	F

Intersection 8 **Rocklin Manor West/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	11	9	83.6%	26.4	15.7	D
	Through						
	Right Turn	1	2	160.0%	4.2	10.3	A
	Subtotal	12	11	90.0%	24.4	14.9	C
SB	Left Turn	11	9	80.0%	47.0	89.2	E
	Through						
	Right Turn	82	81	98.8%	18.4	27.6	C
	Subtotal	93	90	96.6%	22.0	34.6	C
EB	Left Turn	45	33	74.2%	10.3	2.2	B
	Through	1,098	924	84.1%	7.5	1.5	A
	Right Turn	15	14	92.7%	3.6	1.8	A
	Subtotal	1,158	971	83.8%	7.6	1.5	A
WB	Left Turn						
	Through	606	623	102.9%	8.4	18.5	A
	Right Turn	11	10	90.9%	8.0	18.6	A
	Subtotal	617	633	102.6%	8.4	18.5	A
Total		1,880	1,705	90.7%	8.8	8.9	A

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **PM Peak Hour**

Intersection 9 **Rocklin Manor Central/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	14	16	115.0%	19.7	11.5	C
	Through						
	Right Turn						
	Subtotal	14	16	115.0%	19.7	11.5	C
SB	Left Turn	11	11	99.1%	31.9	22.4	D
	Through						
	Right Turn	127	131	103.5%	14.0	10.0	B
	Subtotal	138	142	103.1%	15.5	10.4	C
EB	Left Turn	39	31	78.2%	4.7	2.0	A
	Through	1,053	888	84.3%	3.3	0.7	A
	Right Turn	18	16	91.1%	0.8	0.7	A
	Subtotal	1,110	934	84.2%	3.3	0.8	A
WB	Left Turn	2	2	95.0%	8.1	13.3	A
	Through	476	486	102.1%	2.8	3.3	A
	Right Turn	3	3	106.7%	1.3	0.2	A
	Subtotal	481	491	102.1%	2.8	3.4	A
Total		1,743	1,584	90.9%	4.4	2.2	A

Intersection 10 **Rocklin Manor East/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	5	6	114.0%	17.3	22.3	C
	Through						
	Right Turn						
	Subtotal	5	6	114.0%	17.3	22.3	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,054	888	84.2%	1.0	0.6	A
	Right Turn	10	10	100.0%	0.0	0.1	A
	Subtotal	1,064	898	84.4%	1.0	0.6	A
WB	Left Turn	2	1	45.0%	3.1	7.5	A
	Through	476	485	101.9%	1.2	0.1	A
	Right Turn						
	Subtotal	478	486	101.7%	1.3	0.1	A
Total		1,547	1,389	89.8%	1.2	0.4	A

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **PM Peak Hour**

Intersection 11 **Barton Rd/Rocklin Rd** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	167	162	97.2%	4.7	0.6	A
	Through						
	Right Turn						
	Subtotal	167	162	97.2%	4.7	0.6	A
SB	Left Turn						
	Through						
	Right Turn	311	321	103.1%	4.7	0.3	A
	Subtotal	311	321	103.1%	4.7	0.3	A
EB	Left Turn	283	227	80.3%	104.2	77.8	F
	Through						
	Right Turn	771	631	81.9%	101.4	76.6	F
	Subtotal	1,054	859	81.5%	102.2	76.7	F
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,532	1,342	87.6%	67.7	49.1	F

Intersection 12 **Sierra College Blvd/Granite Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	184	132	71.5%	167.6	24.2	F
	Through	1,362	1,094	80.4%	54.0	8.0	D
	Right Turn	158	124	78.5%	49.3	9.4	D
	Subtotal	1,704	1,350	79.2%	64.8	10.0	E
SB	Left Turn	60	44	73.2%	565.9	34.2	F
	Through	1,845	1,263	68.4%	654.0	61.2	F
	Right Turn	120	77	63.9%	717.7	71.7	F
	Subtotal	2,025	1,384	68.3%	655.7	59.6	F
EB	Left Turn	340	226	66.4%	764.8	343.1	F
	Through	40	29	73.3%	740.3	411.3	F
	Right Turn	441	354	80.2%	495.1	277.5	F
	Subtotal	821	609	74.1%	603.2	298.6	F
WB	Left Turn	238	83	34.8%	1144.6	499.3	F
	Through	20	8	42.0%	1007.0	542.6	F
	Right Turn	40	14	33.8%	988.1	522.5	F
	Subtotal	298	105	35.2%	498.8	536.1	F
Total		4,848	3,447	71.1%	374.2	62.6	F

Intersection 13 **Sierra College Blvd/Shopping Center-I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	300	218	72.5%	180.2	119.0	F
	Through	1,310	1,008	76.9%	144.7	149.0	F
	Right Turn	478	363	76.0%	96.7	119.1	F
	Subtotal	2,088	1,589	76.1%	139.1	138.2	F
SB	Left Turn						
	Through	2,404	1,640	68.2%	46.2	5.3	D
	Right Turn	170	102	59.7%	30.3	5.4	C
	Subtotal	2,574	1,742	67.7%	45.2	5.2	D
EB	Left Turn	130	92	70.5%	723.0	472.7	F
	Through						
	Right Turn	366	306	83.6%	475.1	202.7	F
	Subtotal	496	398	80.2%	411.2	209.2	F
WB	Left Turn	625	597	95.5%	174.2	181.0	F
	Through	100	86	86.1%	278.1	216.2	F
	Right Turn	310	291	93.8%	180.3	190.7	F
	Subtotal	1,035	974	94.1%	180.0	185.1	F
Total		6,193	4,702	75.9%	137.3	66.5	F

Intersection 14 **Sierra College Blvd/I-80 EB Ramps-Shopping Center** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	2,673	1,861	69.6%	32.9	9.6	C
	Right Turn	98	64	65.4%	18.4	6.1	B
	Subtotal	2,771	1,925	69.5%	32.5	9.3	C
SB	Left Turn	270	220	81.3%	73.4	9.0	E
	Through	1,665	1,307	78.5%	19.4	3.6	B
	Right Turn	350	271	77.5%	6.8	1.0	A
	Subtotal	2,285	1,798	78.7%	23.7	2.8	C
EB	Left Turn	360	348	96.5%	154.9	141.4	F
	Through	170	166	97.4%	143.6	96.7	F
	Right Turn	241	232	96.4%	99.1	94.3	F
	Subtotal	771	745	96.7%	132.4	108.6	F
WB	Left Turn	219	212	96.8%	88.2	54.1	F
	Through	10	11	113.0%	87.6	67.8	F
	Right Turn	210	204	97.2%	70.2	56.8	E
	Subtotal	439	427	97.4%	80.3	55.3	F
Total		6,266	4,896	78.1%	48.1	21.3	D

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **PM Peak Hour**

Intersection 15 **Sierra College Blvd/Schriber Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	98	69	70.1%	48.2	9.9	D
	Through	2,531	1,697	67.1%	20.3	4.1	C
	Right Turn	10	6	63.0%	23.1	16.2	C
	Subtotal	2,639	1,772	67.2%	21.5	3.7	C
SB	Left Turn						
	Through	1,885	1,557	82.6%	27.3	6.4	C
	Right Turn	240	198	82.3%	27.6	7.2	C
	Subtotal	2,125	1,755	82.6%	27.3	6.4	C
EB	Left Turn	220	214	97.4%	65.8	23.9	E
	Through	20	21	105.5%	62.3	25.1	E
	Right Turn	136	136	99.8%	32.3	17.2	C
	Subtotal	376	371	98.7%	53.1	20.1	D
WB	Left Turn						
	Through						
	Right Turn	20	21	102.5%	37.9	11.1	D
	Subtotal	20	21	102.5%	37.9	11.1	D
Total		5,160	3,918	75.9%	27.5	6.5	C

Intersection 16 **Sierra College Blvd/Dominguez Rd-Bass Pro Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	313	218	69.6%	60.2	5.4	F
	Through	2,449	1,599	65.3%	124.6	14.2	F
	Right Turn	184	107	58.1%	210.2	36.9	F
	Subtotal	2,946	1,923	65.3%	121.7	13.9	F
SB	Left Turn	90	78	86.4%	79.4	32.9	E
	Through	1,791	1,503	83.9%	21.8	3.8	C
	Right Turn	140	118	84.6%	8.5	2.0	A
	Subtotal	2,021	1,699	84.1%	24.0	4.9	C
EB	Left Turn	70	65	92.9%	90.2	46.3	F
	Through	110	109	98.6%	49.2	6.9	D
	Right Turn	631	635	100.6%	22.3	4.0	C
	Subtotal	811	808	99.6%	31.2	5.6	C
WB	Left Turn	101	107	105.6%	58.9	8.2	E
	Through	50	48	96.8%	47.1	9.0	D
	Right Turn	110	104	94.2%	32.8	6.2	C
	Subtotal	261	259	99.1%	46.0	4.7	D
Total		6,039	4,689	77.6%	65.3	5.4	E

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **PM Peak Hour**

Intersection 17 **Sierra College Blvd/Stadium Entrance Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	110	81	73.4%	243.2	12.7	F
	Through	2,414	1,733	71.8%	244.5	24.9	F
	Right Turn	45	29	63.8%	276.0	66.6	F
	Subtotal	2,569	1,843	71.7%	244.9	24.4	F
SB	Left Turn	48	42	87.3%	81.6	15.1	F
	Through	2,236	1,991	89.0%	41.9	6.0	D
	Right Turn	239	207	86.6%	16.7	2.9	B
	Subtotal	2,523	2,240	88.8%	40.3	5.6	D
EB	Left Turn	507	216	42.5%	855.8	138.5	F
	Through						
	Right Turn	220	96	43.6%	790.6	132.6	F
	Subtotal	727	312	42.8%	837.4	138.8	F
WB	Left Turn	40	39	98.3%	59.0	16.2	E
	Through						
	Right Turn	25	25	101.6%	70.2	41.2	E
	Subtotal	65	65	99.5%	61.8	21.3	E
Total		5,884	4,458	75.8%	173.1	14.2	F

Intersection 18 **Sierra College Blvd/Campus Dr** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	2,582	1,930	74.8%	79.3	13.1	F
	Right Turn						
	Subtotal	2,582	1,930	74.8%	79.3	13.1	F
SB	Left Turn						
	Through	2,467	2,083	84.4%	16.3	12.3	C
	Right Turn	17	18	107.1%	14.5	10.2	B
	Subtotal	2,484	2,101	84.6%	16.3	12.3	C
EB	Left Turn						
	Through						
	Right Turn	38	37	98.4%	45.8	65.1	E
	Subtotal	38	37	98.4%	45.8	65.1	E
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		5,104	4,069	79.7%	45.1	6.2	E

Intersection 19 **Sierra College Dr/El Don Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	32	25	77.8%	538.9	65.7	F
	Through	2,631	2,026	77.0%	544.6	53.3	F
	Right Turn	7	6	87.1%	511.7	164.4	F
	Subtotal	2,670	2,057	77.0%	544.6	53.3	F
SB	Left Turn	64	55	86.4%	56.4	11.2	E
	Through	2,521	2,163	85.8%	10.6	1.7	B
	Right Turn	80	69	85.8%	13.2	3.7	B
	Subtotal	2,665	2,287	85.8%	11.8	1.8	B
EB	Left Turn	34	31	92.4%	59.5	17.7	E
	Through	1	1	90.0%	17.1	34.6	B
	Right Turn	26	25	94.6%	31.5	10.0	C
	Subtotal	61	57	93.3%	47.5	13.0	D
WB	Left Turn	10	10	95.0%	48.9	19.6	D
	Through	1	1	70.0%	21.8	37.5	C
	Right Turn	21	25	119.0%	40.3	17.4	D
	Subtotal	32	35	110.0%	44.0	12.8	D
Total		5,428	4,436	81.7%	230.2	27.6	F

Intersection 20 **El Don Dr/Northern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	289	283	98.1%	4.6	2.8	A
	Right Turn						
	Subtotal	289	283	98.1%	4.6	2.8	A
SB	Left Turn						
	Through	245	222	90.6%	0.7	0.1	A
	Right Turn	7	7	100.0%	0.9	1.4	A
	Subtotal	252	229	90.9%	0.7	0.1	A
EB	Left Turn						
	Through						
	Right Turn	9	10	114.4%	2.7	1.0	A
	Subtotal	9	10	114.4%	2.7	1.0	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		550	523	95.0%	2.8	1.6	A

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **PM Peak Hour**

Intersection 21 **El Don Dr/Southern Retail Access** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	3	2	76.7%	1.5	1.8	A
	Through	207	198	95.8%	1.5	0.1	A
	Right Turn	1	1	70.0%	0.0	0.0	A
	Subtotal	211	201	95.4%	1.5	0.1	A
SB	Left Turn	9	8	88.9%	2.7	3.1	A
	Through	243	220	90.5%	0.3	0.1	A
	Right Turn	2	3	130.0%	0.0	0.0	A
	Subtotal	254	230	90.7%	0.3	0.1	A
EB	Left Turn	34	35	104.1%	7.8	2.8	A
	Through						
	Right Turn	5	4	78.0%	2.0	1.5	A
	Subtotal	39	39	100.8%	7.4	2.8	A
WB	Left Turn	4	4	95.0%	3.9	5.0	A
	Through						
	Right Turn	48	50	103.1%	3.3	0.7	A
	Subtotal	52	53	102.5%	3.7	1.0	A
Total		556	524	94.3%	1.7	0.3	A

Intersection 22 **El Don Dr/Wildflower Ln** **All-way Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	1	0	20.0%	0.0	0.0	A
	Through	180	173	96.3%	5.4	0.3	A
	Right Turn	1	1	110.0%	1.0	1.6	A
	Subtotal	182	175	96.0%	5.4	0.3	A
SB	Left Turn						
	Through	237	214	90.4%	6.9	0.6	A
	Right Turn	15	13	86.0%	4.9	1.2	A
	Subtotal	252	227	90.1%	6.8	0.6	A
EB	Left Turn	9	7	74.4%	3.7	1.5	A
	Through						
	Right Turn	3	3	106.7%	2.0	2.3	A
	Subtotal	12	10	82.5%	4.0	0.6	A
WB	Left Turn	3	3	90.0%	1.7	1.5	A
	Through						
	Right Turn	22	21	96.8%	2.5	0.4	A
	Subtotal	25	24	96.0%	2.5	0.3	A
Total		471	436	92.5%	6.0	0.4	A

Intersection 23 **El Don Dr/Corona Cir** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn	5	5	90.0%	1.9	2.2	A
	Through	166	160	96.1%	0.2	0.2	A
	Right Turn	3	4	126.7%	0.0	0.0	A
	Subtotal	174	168	96.4%	0.3	0.2	A
SB	Left Turn	13	13	102.3%	3.2	1.0	A
	Through	215	192	89.4%	1.8	0.2	A
	Right Turn	15	14	96.0%	1.4	0.4	A
	Subtotal	243	220	90.5%	1.8	0.2	A
EB	Left Turn	9	8	93.3%	5.5	1.7	A
	Through						
	Right Turn	3	3	83.3%	1.2	1.7	A
	Subtotal	12	11	90.8%	5.3	1.7	A
WB	Left Turn	2	2	80.0%	0.7	1.6	A
	Through						
	Right Turn	7	7	97.1%	2.7	2.0	A
	Subtotal	9	8	93.3%	2.8	2.0	A
Total		438	407	92.9%	1.4	0.2	A

Intersection 24 **Sierra College Blvd/Street G** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	2,520	1,877	74.5%	97.4	12.1	F
	Right Turn	62	45	71.9%	80.4	10.6	F
	Subtotal	2,582	1,922	74.4%	97.0	12.1	F
SB	Left Turn	36	31	85.6%	48.6	19.4	E
	Through	2,484	2,103	84.7%	13.6	7.0	B
	Right Turn						
	Subtotal	2,520	2,134	84.7%	14.0	7.1	B
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	49	23	47.6%	490.6	189.4	F
	Subtotal	49	23	47.6%	358.4	252.0	F
Total		5,151	4,079	79.2%	53.4	7.0	F

SimTraffic Post-Processor | **Sierra Villages TIS**
Average Results from 10 Runs | **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 25 **Sierra College Blvd/North Village Dwy 3** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through	2,542	1,919	75.5%	49.1	10.3	E
	Right Turn	23	16	70.9%	41.0	21.9	E
	Subtotal	2,565	1,936	75.5%	49.1	10.3	E
SB	Left Turn	44	34	76.1%	82.7	22.4	F
	Through	2,461	2,080	84.5%	23.0	17.7	C
	Right Turn						
	Subtotal	2,505	2,113	84.4%	24.0	17.4	C
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn	40	25	62.5%	573.2	135.9	F
	Subtotal	40	25	62.5%	503.0	218.3	F
Total		5,110	4,074	79.7%	38.2	8.9	E

Intersection 26 **South Village Dwy 3/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn	32	32	99.1%	11.0	23.1	B
	Subtotal	32	32	99.1%	11.0	23.1	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,104	967	87.6%	10.1	13.2	B
	Right Turn	9	7	77.8%	2.9	1.9	A
	Subtotal	1,113	974	87.5%	10.1	13.2	B
WB	Left Turn						
	Through	1,072	970	90.5%	1.2	0.2	A
	Right Turn						
	Subtotal	1,072	970	90.5%	1.2	0.2	A
Total		2,217	1,975	89.1%	5.4	5.9	A

SimTraffic Post-Processor **Sierra Villages TIS**
Average Results from 10 Runs **Cumulative Plus Project Conditions (Improved)**
Volume and Delay by Movement **PM Peak Hour**

Intersection 27 **South Village Dwy 4/Rocklin Rd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	Total Delay (sec/veh) LOS
NB	Left Turn						
	Through						
	Right Turn	80	70	87.8%	100.4	153.3	F
	Subtotal	80	70	87.8%	100.4	153.3	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,112	968	87.0%	29.2	42.3	D
	Right Turn	24	22	91.3%	17.8	30.2	C
	Subtotal	1,136	990	87.1%	28.8	41.8	D
WB	Left Turn						
	Through	1,072	974	90.8%	0.4	0.1	A
	Right Turn						
	Subtotal	1,072	974	90.8%	0.4	0.1	A
Total		2,288	2,033	88.9%	14.2	18.1	B