

To: Central Pacific Development Company
From: Matt Weir, P.E., T.E., PTOE
Re: *Saratoga Retail Supplemental Traffic Analyses*
Traffic Evaluation
El Dorado Hills, California
Date: July 12, 2018

Per your request and authorization, we have prepared this traffic evaluation for the above referenced project.

Project Understanding

This memorandum documents the results of a supplemental transportation impact analysis completed for Saratoga Retail Phase 2 (the “proposed project” or “project”). The project represents an expansion and completion of the existing retail center located in the northwest corner of the US-50 interchange with El Dorado Hills Boulevard in El Dorado Hills. Kimley-Horn previously completed a traffic impact analysis for the Saratoga Retail Phase 2 project¹. This study was deemed complete by El Dorado County² and was subsequently heard at the December 14, 2017 Planning Commission Meeting. In the Planning Commission’s Findings for Denial³, they state the following as pertains to transportation/traffic:

“The record does not contain sufficient information or analysis to assess the near-term traffic impacts of the Project in order to account for nearby development and anticipated changes in traffic circulation (e.g., completion of the extension of Saratoga Way into the City of Folsom).”

The purpose of this evaluation was to complete a Near-Term (2026) analysis to provide an interim-year snapshot of the worst-case conditions. Conservatively, this analysis assumes the existing geometries for the study intersections, along with traffic volume growth expected by 2026. The Near-Term (2026) volumes were approximated using straight-line growth interpolation between Existing (2017) and Cumulative (2035) volumes per the original traffic study.

The project applicant now proposes to develop the project site with a 5,500 square-foot (sf) retail building and a 4,658-sf restaurant with a drive-thru. Chick-fil-A has been identified as the tenant for the proposed drive-thru restaurant. Access to the site is provided at the existing main site driveway intersection with Saratoga Way. Two additional driveways will serve the site; one full access driveway south of the main site driveway, and one egress-only driveway at the south end of the project site. The project location is shown in **Exhibit 1**, and the proposed project site plan is shown in **Exhibit 2**.

¹ *Transportation Impact Study, Saratoga Retail Phase 2*, Kimley-Horn and Associates, Inc., May 25, 2017.

² Email from Natalie Porter, El Dorado County Community Development Services Planning and Building Department Long Range Planning, September 14, 2017.

³ El Dorado County Community Development Services Planning and Building Department Staff Memo, from Efren Sanchez, Assistant Planner, to Planning Commission, December 28, 2017.

Study Facilities and Analysis Scenarios

The following transportation facilities are included in this evaluation:

Intersections:

1. El Dorado Hills Blvd @ Saratoga Way
2. El Dorado Hills Blvd @ US-50 WB Ramps
3. Latrobe Rd @ US-50 EB Ramps
4. Latrobe Rd @ Town Center Blvd
5. Latrobe Rd @ White Rock Rd
6. White Rock Rd @ Windfield Way
7. White Rock Rd @ Post St
8. Saratoga Way @ Mammouth Way
9. Saratoga Way @ Main Project Dwy
10. Saratoga Way @ Arrowhead Dr

Exhibit 3 illustrates the study intersections facilities, existing traffic control, and existing lane configurations.

Roadway Segment:

1. Saratoga Way, west of El Dorado Hills Boulevard

Freeway Facilities:

1. US-50 Mainline
 - a. Eastbound, west of El Dorado Hills Boulevard/Latrobe Road
 - b. Westbound, west of El Dorado Hills Boulevard/Latrobe Road
 - c. Eastbound, between Latrobe Road off-ramp and Latrobe Road on-ramp
 - d. Westbound, between El Dorado Hills Blvd off-ramp and El Dorado Hills Blvd on-ramp
 - e. Eastbound, east of El Dorado Hills Boulevard/Latrobe Road
 - f. Westbound, east of El Dorado Hills Boulevard/Latrobe Road
2. US-50 Ramps
 - a. Eastbound, diverge to Latrobe Road
 - b. Eastbound, diverge to El Dorado Hills Boulevard
 - c. Eastbound, merge from Latrobe Road
 - d. Westbound, diverge to El Dorado Hills Boulevard/Latrobe Road
 - e. Westbound, merge from El Dorado Hills Boulevard/Latrobe Road

The study freeway facilities are depicted in **Exhibit 4**.

This traffic impact analysis was conducted for the above-listed study facilities for the following scenarios:

- A. Near-Term (2026) Conditions
- B. Near-Term (2026) plus Proposed Project Conditions

Assessment of Proposed Project

Trip Generation

Kimley-Horn completed a trip generation study in a manner consistent with the methodology contained in the *Trip Generation Manual, 9th Edition*, published by the Institute of Transportation Engineers (ITE). In addition, unique local trip generation rate (trips per thousand square feet) were developed using data collected at the following three Chick-Fil-A locations with drive through facilities:

1. 2679 East Bidwell Street, Folsom, CA
2. 4644 Madison Avenue, Sacramento, CA
3. 2354 Sunrise Boulevard, Rancho Cordova, CA

The local trip generation data was collected on April 17, 2018, between the hours of 6:00 A.M. and 9:00 A.M. and 5:00 P.M. and 7:00 P.M. The trip generation data is included in **Appendix A**. The calculated trip generation rates for the proposed project are presented in **Table 1**.

Table 1 – Trip Generation Data

Existing Chick-fil-A Location	Building Floor Area (KSF)	Generation Rate	
		AM	PM
2354 Sunrise Blvd, Rancho Cordova	4.86	11.9	26.8
4644 Madison Ave, Sacramento	4.67	13.3	34.4
2679 E Bidwell St, Folsom	4.48	18.4	54.6
Average		14.5	38.6

The anticipated trip gen characteristics for the proposed project are presented in **Table 2**. As only A.M. and P.M. trip generation data was collected, ITE code 934 (Fast Food Restaurant with Drive Through) was used to approximate the daily trips generated by the restaurant use.

Table 2 – Proposed Project Trip Generation Characteristics

Land Use (ITE Code)	Size (ksf)	Daily Trips	AM Peak-Hour				PM Peak-Hour					
			Total Trips	IN		OUT		Total Trips	IN		OUT	
				%	Trips	%	Trips		%	Trips	%	Trips
Chick-fil-A	4.658	2,312	68	53%	36	47%	32	180	64%	115	36%	65
Shopping Center (820)	5.5	1,032	27	62%	16	38%	11	86	48%	41	52%	45
Subtotal Trips:		3,344	95		52		43	266		156		110
Internal Trip Reduction	5%	-167	-5		-3		-2	-13		-8		-5
Net New Driveway Trips:		3,177	90		49		40	253		148		104
Pass-By/Diverted Trip Reduction	15%	-477	-13		-7		-6	-38		-22		-16
Net New External Trips:		2,700	76		42		34	215		126		89

Source: ITE Trip Generation Manual, 9th Edition, ITE.

AM and PM peak-hour trip generation rates for the Chick-fil-A are based on data collected at three sites in Rancho Cordova, Sacramento, and Folsom.

As shown in **Table 2**, the proposed project is estimated to generate approximately 2,700 new daily trips, with 76 and 215 trips occurring during the A.M. and P.M. peak-hours, respectively.

Trip Distribution

Project traffic was distributed to the roadway network based on existing traffic volumes, output from the County’s travel demand model, and professional judgment. The Near-Term (2026) trip distribution does not route trips along the Saratoga Way extension. The background volumes for this Near-Term (2026) analysis were approximated using a straight-line interpolation between the Existing (2017) and the Cumulative (2035) volumes, which assumes the Saratoga Way connection is in place. In other words, the growth in background volumes includes the connection along Saratoga Way, but no project trips were routed along Saratoga Way. This approach is conservative and is expected to reveal the worst-case conditions by requiring all project trips to travel through the El Dorado Hills Boulevard intersection with Saratoga Way (Intersection #1). The project trip distribution percentages are provided in **Exhibit 5** and the assignment of project trips are depicted in **Exhibit 6**.

Traffic Assessment Methodology

This transportation impact analysis was performed in accordance with the County’s transportation impact study guidelines⁴.

Level of Service Definitions

Analysis of transportation facility significant environmental impacts is based on the concept of Level of Service (LOS). The LOS of a facility is a qualitative measure used to describe operational conditions. LOS ranges from A (best), which represents minimal delay, to F (worst), which represents heavy delay and a facility that is operating at or near its functional capacity. Levels of Service for this study were determined using methods defined in the *Highway Capacity Manual (HCM) 2010*.

Intersection Analysis

The HCM includes procedures for analyzing side-street stop controlled (SSSC), all-way stop controlled (AWSC), and signalized intersections. The SSSC procedure defines LOS as a function of average control delay for each minor street approach movement. Conversely, the AWSC and signalized intersection procedures define LOS as a function of average control delay for the intersection as a whole. **Table 3** presents intersection LOS definitions as defined in the HCM.

Table 3 – Intersection Level of Service Criteria

Level of Service (LOS)	Un-Signalized	Signalized
	Average Control Delay* (sec/veh)	Average Control Delay (sec/veh)
A	≤ 10	≤ 10
B	> 10 – 15	> 10 – 20
C	> 15 – 25	> 20 – 35
D	> 25 – 35	> 35 – 55
E	> 35 – 50	> 55 – 80
F	> 50	> 80

Source: *Highway Capacity Manual, 2010*

* Applied to the worst lane/lane group(s) for SSSC

Due to the close spacing of the El Dorado Hills Boulevard/Latrobe Road intersections in the vicinity of US-50 and along White Rock Road, LOS for Intersections #1-#5 and Intersection #7 was determined using the SimTraffic® micro-simulation analysis software. The existing conditions SimTraffic® models were originally

⁴ *Transportation Impact Study Guidelines*, El Dorado County Community Development Agency, November 2014.

provided by the County for use in this study⁵. These models were validated based on field observations of traffic volumes, driver behavior, lane utilization, and maximum vehicle queue lengths. As a result of these observations, adjustments were incorporated that improve the accuracy of the vehicles' behavior as they position for downstream turns. SimTraffic® measures of effectiveness are compared against the HCM intersection delay thresholds to equate SimTraffic® results to HCM LOS. For this simulation effort, a seed time of 10 minutes was used and 10 runs were averaged to obtain the results. LOS for the remaining study intersections was determined using the Synchro® traffic analysis software.

Roadway Segment Analysis

The HCM also includes procedures for analyzing multilane and two-lane roadway segments. For multilane roadway segments, LOS is determined based on the density of the traffic stream. For two-lane highways, the LOS calculation is dependent on the class of the roadway. Class I two-lane highways are highways that generally have high speeds, Class II two-lane highways are lower speed highways that typically serve scenic routes or areas of rugged terrain, and Class III two-lane highways typically serve moderately developed areas with higher densities of local traffic and access. Specifically, for Class III highways, the percent of free-flow speed, which is the measure representing the ability of vehicles to travel at the posted speed limit, is used to determine LOS. Saratoga Way is either a Class III two-lane or a multilane roadway, depending on the analysis scenario. The LOS criteria for multilane and two-lane roadway segments are shown in **Table 4** and **Table 5**, respectively.

Table 4 – Multi-Lane Roadway Segment Level of Service Criteria

Level of Service (LOS)	Free Flow Speed (mph)	Density (pc/mi/ln)
A	All	> 0 – 11
B	All	> 11 – 18
C	All	> 18 – 26
D	All	> 26 – 35
E	60	> 35 – 40
	55	> 35 – 41
	50	> 35 – 43
	45	> 35 – 45
F (demand exceeds capacity)	60	> 40
	55	> 41
	50	> 43
	45	> 45

Source: Highway Capacity Manual, 2010

Table 5 – Two-Lane Roadway Segment (Class III) Level of Service Criteria

Level of Service (LOS)	Percent Free-Flow Speed (%)
A	> 91.7
B	> 83.3 – 91.7
C	> 75.0 – 83.3
D	> 66.7 – 75.0
E	≤ 66.7

Source: Highway Capacity Manual, 2010

⁵ Email from Natalie Porter, El Dorado County Community Development Agency, October 24, 2014.

Freeway Facility Analysis

Caltrans' traffic study guidelines⁶ specify the use of vehicle density (passenger cars/mile/lane) as the appropriate measure of effectiveness for freeway facilities. The LOS criteria for basic freeway segments and freeway merge/diverge segments are summarized in **Table 6**. We understand that Caltrans District 3 prefers weaving sections to be analyzed using the Leisch Method⁷. As such, the freeway weaving sections in this study are evaluated using this methodology.

Table 6 – Freeway Facility Level of Service Criteria

Level of Service (LOS)	Basic Segments Density (pc/mi/ln)	Merge/Diverge Segments Density (pc/mi/ln)
A	≤ 11	≤ 10
B	> 11 – 18	> 10 – 20
C	> 18 – 26	> 20 – 28
D	> 26 – 35	> 28 – 35
E	> 35 – 45	> 35
F*	> 45*	*

Source: Highway Capacity Manual, 2010

* Demand exceeds capacity

Near-Term (2026) Conditions

As discussed previously, the purpose of this near-term analysis to provide an interim-year snapshot of the conditions anticipated to materialize considering anticipated roadway network changes and the addition of other pending and approved development projects. Near-Term (2026) volumes were approximated using straight-line growth interpolation between Existing (2017) and Cumulative (2035) volumes per the original traffic study. Near-Term (2026) peak-hour turning movement volumes are presented in **Exhibit 7**. Analysis worksheets for this scenario are provided in **Appendix B**.

Intersections

Table 7 presents the intersection operating conditions for this analysis scenario. As indicated in, the study intersections operate from LOS A to LOS F.

Roadway Segment

Table 8 presents the roadway segment operating conditions for this analysis scenario. As indicated in **Table 8**, the study roadway segment operates at LOS C.

Freeway Facilities

Table 9 presents the freeway facility operating conditions for this analysis scenario. As indicated in **Table 9**, the freeway facilities operate from LOS A to LOS E.

⁶ Guide for the Preparation of Traffic Impact Studies, Caltrans, December 2002.

⁷ Procedure for Analysis and Design of Weaving Sections, Federal Highway Administration, February 1984.

Table 7 – Near-Term (2026) Intersection Levels of Service

ID	Intersection	Control	Peak Hour	Near Term (2026)	
				Delay (sec)	LOS
1	El Dorado Hills Blvd @ Saratoga Way/Park Dr	Signal	AM	33.2	C
			PM	70.4	E
2	El Dorado Hills Blvd @ US-50 WB Ramps/ Park Dr	Signal	AM	33.1	C
			PM	58.0	E
3	Latrobe Rd @ US-50 EB Ramps	Signal	AM	15.4	B
			PM	12.0	B
4	Latrobe Rd @ Town Center Blvd	Signal	AM	22.6	C
			PM	84.6	F
5	Latrobe Rd @ White Rock Rd	Signal	AM	57.4	E
			PM	66.0	E
6	White Rock Rd @ Windfield Wy/ Town Center Blvd	Signal	AM	19.7	B
			PM	23.6	C
7	White Rock Rd @ Post St	Signal	AM	86.4	F
			PM	51.5	D
8	Saratoga Wy @ Mammoth Wy/ Walgreens Dwy	SSSC	AM	2.1 (13.4 EB)	B
			PM	3.2 (20.6 EB)	C
9	Saratoga Wy @ Main Project Site Dwy	SSSC	AM	0.4 (9.1 WB)	A
			PM	0.9 (13.6 WB)	B
10	Saratoga Wy @ Arrowhead Dr	SSSC	AM	0.5 (10.9 EB)	B
			PM	0.4 (12.4 EB)	B

Notes:

Side Street Stop Controlled (SSSC) intersection LOS corresponds to the worst approach.

Bolded represents a significant impact.

Table 8 – Near-Term (2026) Roadway Segment Levels of Service

Scenario	Location	Peak-Hour	Analysis Direction	LOS	PFFS (%)	v/c
Near Term (2026)	Saratoga Way, west of El Dorado Hills Blvd	AM	NB	C	82.1	0.13
			SB	C	81.2	0.17
		PM	NB	C	77.3	0.32
			SB	C	81.2	0.11

Notes:

PFFS = Percent Free-Flow Speed, v/c = Volume to Capacity

Table 9 – Near-Term (2026) Freeway Facility Levels of Service

US-50				Near-Term (2026)	
Direction	Segment	Type	Peak Hour	Density ^a	LOS
Eastbound	West of Latrobe Rd Southbound Off- Ramp	Basic	AM	13.9	B
			PM	20.7	C
	Latrobe Rd Southbound Off-Ramp	Diverge	AM	23.6	C
			PM	30.0	D
	El Dorado Hills Blvd Northbound Off-Ramp	Diverge	AM	15.4	B
			PM	27.2	C
	El Dorado Hills Blvd Northbound Off-Ramp to Latrobe Rd On-Ramp	Basic	AM	7.4	A
			PM	14.6	B
	Latrobe Rd On-Ramp to Silva Valley Pkwy Off-Ramp	Weave ^c	AM	-	A
			PM	-	D
Westbound	Silva Valley On-Ramp to El Dorado Hills Blvd Off-Ramp	Weave ^c	AM	-	B
			PM	-	A
	El Dorado Hills Blvd Off-Ramp to El Dorado Hills Blvd On-Ramp	Basic	AM	24.7	C
			PM	21.7	C
	El Dorado Hills Blvd On-Ramp	Merge	AM	36.7	E
			PM	36.4	E
	West of El Dorado Hills Blvd On-Ramp	Basic	AM	22.0	C
			PM	21.9	C

Notes:

a- Density measured in passenger cars/lane/mile (pc/l/mi)

b- **Bold** represents unacceptable operations

c- Weave segment LOS calculated using Leisch Method

Near-Term (2026) Plus Proposed Project Conditions

Peak-hour traffic associated with the proposed project was added to the interpolated Near-Term (2026) Traffic volumes. Impacts were determined by comparing traffic operating conditions associated with the project scenario to traffic operating conditions without the project. Near-Term (2026) plus Proposed Project peak-hour turning movement volumes are presented in **Exhibit 8**. Analysis worksheets for this scenario are provided in **Appendix C**.

Intersections

Table 10 presents the intersection operating conditions for this analysis scenario. As indicated in **Table 10**, the study intersections operate from LOS A to LOS F.

Roadway Segment

Table 11 presents the roadway segment operating conditions for this analysis scenario. As indicated in **Table 11**, the study roadway segment operates at LOS C.

Freeway Facilities

Table 12 presents the freeway facility operating conditions for this analysis scenario. As indicated in **Table 12**, the freeway facilities operate from LOS A to LOS E.

Table 10 - Near-Term (2026) Intersection Levels of Service

ID	Intersection	Control	Peak Hour	Near-Term (2026)		Near-Term (2026) plus Proposed Project	
				Delay (sec)	LOS	Delay (sec)	LOS
1	El Dorado Hills Blvd @ Saratoga Way/Park Dr	Signal	AM	33.2	C	36.9	D
			PM	70.4	E	92.7	F
2	El Dorado Hills Blvd @ US-50 WB Ramps/ Park Dr	Signal	AM	33.1	C	33.7	C
			PM	58.0	E	61.7	E
3	Latrobe Rd @ US-50 EB Ramps	Signal	AM	15.4	B	15.1	B
			PM	12.0	B	12.2	B
4	Latrobe Rd @ Town Center Blvd	Signal	AM	22.6	C	21.4	C
			PM	84.6	F	82.5	F
5	Latrobe Rd @ White Rock Rd	Signal	AM	57.4	E	57.6	E
			PM	66.0	E	65.3	E
6	White Rock Rd @ Windfield Wy/ Town Center Blvd	Signal	AM	19.7	B	19.7	B
			PM	23.6	C	23.7	C
7	White Rock Rd @ Post St	Signal	AM	86.4	F	92.4	F
			PM	51.5	D	50.7	D
8	Saratoga Wy @ Mammouth Wy/ Walgreens Dwy	SSSC	AM	2.1 (13.4 EB)	B	2.0 (15.0 EB)	C
			PM	3.2 (20.6 EB)	C	4.0 (35.8)	E
9	Saratoga Wy @ Main Project Site Dwy	SSSC	AM	0.4 (9.1 WB)	A	1.1 (9.4 WB)	A
			PM	0.9 (13.6 WB)	B	2.2 (19.1 WB)	C
10	Saratoga Wy @ Arrowhead Dr	SSSC	AM	0.5 (10.9 EB)	B	0.5 (10.9 EB)	B
			PM	0.4 (12.4 EB)	B	0.4 (12.5)	B

Notes:

Side Street Stop Controlled (SSSC) intersection LOS corresponds to the worst approach.

Bolded represents unacceptable conditions.

Shaded represents a significant impact.

Table 11 – Near-Term (2026) plus Proposed Project Roadway Segment Levels of Service

Scenario	Location	Peak-Hour	Analysis Direction	LOS	PFFS (%)	v/c
Near Term (2026) plus Project	Saratoga Way, west of El Dorado Hills Blvd	AM	NB	C	81.4	0.15
			SB	C	80.2	0.20
		PM	NB	C	75.1	0.38
			SB	C	77.5	0.21

Notes:

PFFS = Percent Free-Flow Speed, v/c = Volume to Capacity

Table 12 –Near-Term (2026) plus Proposed Project Freeway Facility Levels of Service

US-50				Near-Term (2026)		Near-Term (2026) plus Project	
Direction	Segment	Type	Peak Hour	Density ^a	LOS	Density ^a	LOS
Eastbound	West of Latrobe Rd Southbound Off-Ramp	Basic	AM	13.9	B	14.0	B
			PM	20.7	C	20.9	C
	Latrobe Rd Southbound Off-Ramp	Diverge	AM	23.6	C	23.8	C
			PM	30.0	D	30.5	D
	El Dorado Hills Blvd Northbound Off-Ramp	Diverge	AM	15.4	B	15.6	B
			PM	27.2	C	27.5	C
	El Dorado Hills Blvd Northbound Off-Ramp to Latrobe Rd On-Ramp	Basic	AM	7.4	A	7.4	A
			PM	14.6	B	14.5	B
Latrobe Rd On-Ramp to Silva Valley Pkwy Off-Ramp	Weave ^c	AM	-	A	-	B	
		PM	-	D	-	D	
Westbound	Silva Valley On-Ramp to El Dorado Hills Blvd Off-Ramp	Weave ^c	AM	-	B	-	D
			PM	-	A	-	A
	El Dorado Hills Blvd Off-Ramp to El Dorado Hills Blvd On-Ramp	Basic	AM	24.7	C	24.7	C
			PM	21.7	C	21.7	C
	El Dorado Hills Blvd On-Ramp	Merge	AM	36.7	E	36.8	E
			PM	36.4	E	36.6	E
	West of El Dorado Hills Blvd On-Ramp	Basic	AM	22.0	C	43.4	E
			PM	21.9	C	43.4	E

Notes:

a- Density measured in passenger cars/lane/mile (pc/ln/mi)

b- **Bold** represents unacceptable operations

c- Weave segment LOS calculated using Leisch Method

Impacts and Mitigation

Standards of Significance

Project impacts were determined by comparing conditions with the proposed project to those without the project. Impacts for intersections are created when traffic from the proposed project forces the LOS to fall below a specific threshold. The County’s standards⁸ specify the following:

“Level of Service (LOS) for County-maintained roads and state highways within the unincorporated areas of the county shall not be worse than LOS E in the Community Regions or LOS D in the Rural Centers and Rural Regions...” (El Dorado County General Plan Policy TC-Xd⁹) The study facilities are located within the El Dorado Hills Community Region.

If a project causes the peak hour LOS or volume/capacity ratio on a county road or state highway that would otherwise meet the County standards (without the project) to exceed the values listed in the above text (El Dorado County General Plan Policy TC-Xd⁹), then the impact shall be considered significant.

⁸ *Transportation Impact Study Guidelines*, El Dorado County Community Development Agency, November 2014.

⁹ *El Dorado County General Plan, Transportation and Circulation Element*, July 2004.

If any county road or state highway fails to meet the above listed county standards (El Dorado County General Plan Policy TC-Xd⁹) for peak hour LOS or volume/capacity ratios without the proposed project, and the project will worsen conditions on the road or highway, then the impact shall be considered significant. The term, worsen is defined for the purpose of this paragraph according to General Plan Policy TC-Xe⁹ as follows:

- “A. A 2 percent increase in traffic during the a.m. peak hour, p.m. peak hour, or daily, or*
- B. The addition of 100 or more daily trips, or*
- C. The addition of 10 or more trips during the a.m. peak hour or the p.m. peak hour”*

The Caltrans District 3 standard of significance was applied to intersections at the US-50 interchange with El Dorado Hills Boulevard/Latrobe Road. Caltrans has established a LOS E threshold for the peak 15 minutes for signalized intersections outside “high speed areas.” The US-50 interchange ramp intersections with El Dorado Hills Boulevard/Latrobe Road are not considered to be located in high speed areas, therefore, the LOS E threshold for the peak 15 minutes applies to these facilities.

Near-Term (2026) plus Proposed Project Impacts

As reflected in **Table 10**, **Table 11**, and **Table 12**, the addition of the proposed project results in the following significant impacts:

Intersections

- 11. Intersection #1, El Dorado Hills Boulevard @ Saratoga Way/Park Drive*
As shown in **Table 10**, this intersection operates at LOS E during the PM peak-hour without the project. The addition of the project results in LOS F. ***This is a significant impact.***
- 12. Intersection #4, Latrobe Road and Town Center Boulevard*
As shown in **Table 10**, this intersection operates at LOS F during the PM peak-hour without the project, and the project contributes more than 10 trips during the peak-hour. ***This is a significant impact.***

Roadway Segment

None.

Freeway Facilities

None.

Mitigations:

Intersections

- M1. Intersection #1, El Dorado Hills Blvd @ Saratoga Way/Park Drive*
This intersection operates at LOS E during the PM peak-hour without the project, and the project results in LOS F. Consistent with the findings of the previous Saratoga Retail Phase 2 Cumulative (2035) Conditions analysis¹, the impact at this intersection can be mitigated by off-site improvements including optimization of the Latrobe Road coordinated signal system and the restriping of the westbound Town Center Boulevard approach to include one left-through lane, and two right-turn lanes, with a permitted-overlap phase for the westbound right-turns. The El Dorado Hills Town Center Apartments project is responsible for, among other things, the lane designation and signal phasing mitigations described above. This mitigation affects an approach on a privately-owned roadway, and therefore, the improvement should be coordinated with the County and the property owner. As shown in **Table 13**, this mitigation measure results in the

intersection operating at LOS D during the PM peak-hour. Therefore, *this impact is less than significant*.

M2. Intersection #4, Latrobe Road and Town Center Boulevard

This intersection operates at LOS F during the PM peak-hour without the project, and the project contributes more than 10 trips. Consistent with the findings of the previous Saratoga Retail Phase 2 Cumulative (2035) Conditions analysis¹, the impact at this intersection can be mitigated by optimization of the Latrobe Road coordinated signal system, along with the following improvements: the restriping of the westbound Town Center Boulevard approach to include one left-through lane, and two right-turn lanes, with a permitted-overlap phase for the westbound right-turns. The El Dorado Hills Town Center Apartments project is responsible for, among other things, the lane designation and signal phasing mitigations described above. This mitigation affects an approach on a privately-owned roadway, and therefore, the improvement should be coordinated with the County and the property owner. As shown in **Table 13**, this mitigation measure results in the intersection operating at LOS E during the PM peak-hour. Therefore, *this impact is less than significant*.

Table 13 - Intersection Levels of Service Near-Term (2026) Plus Proposed Project Mitigated Conditions

ID	Intersection	Control	Peak Hour	Near-Term (2026)		Near-Term (2026) plus Proposed Project		Near-Term (2026) plus Proposed Project Mitigated	
				Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
1	El Dorado Hills Blvd @ Saratoga Way/Park Dr	Signal	AM	33.2	C	36.9	D	37.2	D
			PM	70.4	E	92.7	F	46.5	D
2	El Dorado Hills Blvd @ US-50 WB Ramps/ Park	Signal	AM	33.1	C	33.7	C	35.6	D
			PM	58.0	E	61.7	E	49.3	D
3	Latrobe Rd @ US-50 EB Ramps	Signal	AM	15.4	B	15.1	B	14.9	B
			PM	12.0	B	12.2	B	13.4	B
4	Latrobe Rd @ Town Center Blvd	Signal	AM	22.6	C	21.4	C	20.1	C
			PM	84.6	F	82.5	F	66.4	E
5	Latrobe Rd @ White Rock Rd	Signal	AM	57.4	E	57.6	E	56.5	E
			PM	66.0	E	65.3	E	76.6	E
7	White Rock Rd @ Post St	Signal	AM	86.4	F	92.4	F	93.1	F
			PM	51.5	D	50.7	D	60.7	E

Roadway Segment

None.

Freeway Facilities

None.

Other Considerations:

Intersection Queuing Evaluation

Vehicle queuing for critical movements at three (3) of the study intersections was evaluated. The calculated vehicle queues were compared to available vehicle storage lengths. Results of the queuing evaluation are presented in **Table 14**. Analysis sheets that include the anticipated vehicle queues are presented in Appendices B-C. As presented in **Table 14**, the addition of the project and its mitigations adds minimal queuing to the study locations.

Table 14– Intersection Queuing Evaluation Results for Select Locations

Intersection / Analysis Scenario	Movement	AM Peak-Hour		PM Peak-Hour	
		Available Storage (ft)	95 th % Queue (ft)	Available Storage (ft)	95 th % Queue (ft)
#1, El Dorado Hills Blvd @ Saratoga Way	NBL				
Near-Term (2027)		235	143	235	204
Near-Term (2027) plus Project			190		321
Near-Term (2027) plus Project Mitigated			197		250
#2, El Dorado Hills Blvd @ US-50 WB Ramps	NBL				
Near-Term (2027)		750	308	750	416
Near-Term (2027) plus Project			312		433
Near-Term (2027) plus Project Mitigated			336		422
	SBL				
Near-Term (2027)		195	136	195	192
Near-Term (2027) plus Project			133		212
Near-Term (2027) plus Project Mitigated			114		176
	EBL				
Near-Term (2027)		540	124	540	86
Near-Term (2027) plus Project			118		139
Near-Term (2027) plus Project Mitigated			156		147
#3, El Dorado Hills Blvd @ US-50 EB Ramps	EBR				
Near-Term (2027)		415	323	415	128
Near-Term (2027) plus Project			325		125
Near-Term (2027) plus Project Mitigated			315		242

Source: Highway Capacity Manual (HCM) 2010 methodology per Synchro[®] v9.

Notes: For approaches with dual left-turn lanes, the longest queue length is reported.

On-Site Transportation Review

In accordance with the County’s Guidelines, the following aspects of the proposed project were evaluated:

- **Existence of any current traffic problems in the local area such as an intersection in need of a traffic signal**

A planning level assessment of the need for traffic signalization was performed for the un-signalized study intersections. This evaluation was performed consistently with the peak-hour warrant methodologies noted in Section 4C of the California Manual on Uniform Traffic Control Devices (CMUTCD), 2014 Edition (with December 2015 revisions). No intersections warrant a traffic signal under Near-Term (2026) Conditions with and without the addition of the proposed project. Detailed results of this analysis are presented in **Appendix E**.
- **Proximity of proposed site driveway(s) to other driveways or intersections**

As previously noted, access to the site is provided at the existing main site driveway intersection with Saratoga Way (Intersection #9). With the addition of the project, two additional driveways will serve the site; one full-access driveway south of the main site driveway, and one egress-only driveway at the south end of the project site. According to the project site plan (**Exhibit 2**), these two additional driveways are located approximately equidistance from each other and Intersection #9 (approximately 250-feet).

The spacing between consecutive site driveways appears to be adequate and, when combined with the presence of left-turn access from Saratoga Way, these access points will assist in dispersing trips entering and exiting the site. The proposed configuration is advantageous as it reduces the potential for a concentration of trips which should serve to minimize queuing and other operational inefficiencies.

In the previous Saratoga Retail Phase 2 Cumulative (2035) Conditions analysis¹, the left turn access out of Mammouth Way is restricted, due to the Saratoga Way Extension capital improvement project anticipated to be completed prior to the year 2035. However, in this Near-Term (2026) analysis, access is assumed to be maintained. As shown in Table 10, there is an increase in the delay, but the intersection of Saratoga Way and Mammouth Way/Walgreens Driveway (Intersection #8) still operates acceptably per County standards.

The southern egress-only driveway is positioned just north of the existing Arrowhead Drive intersection (Intersection #10). Due to the anticipated on-site circulation and predominant traffic movements (to/from El Dorado Hills Boulevard), the potential conflicts between Arrowhead Drive and site traffic at this intersection are anticipated to be minimal. It should be noted that the site plan depicts this driveway's movements as right-turns only, thereby further reducing the potential conflicts with Arrowhead Drive.

- ***Adequacy of vehicle parking relative to both the anticipated demand and zoning code requirements***
According to the County's requirements¹⁰, the proposed project is required to provide 35 total parking spaces. As noted in **Exhibit 2**, 63 parking spaces are proposed to be provided.
- ***Adequacy of the project site design to provide at least a 25' minimum required throat depth (MRTD) at project driveways. Include calculation of the MRTD.***
According to the project site plan (Exhibit 2), the two new site driveways provide at least 25-feet of MRTD. This is the throat depth required based on the methodology presented in *Estimation of Maximum Queue Lengths at Unsignalized Intersections* (ITE Journal, November 2001). The southern-most driveway is one-way only, and therefore a MRTD of 25-feet is acceptable. The secondary all-access driveway requires a 25-foot throat depth based on the approach volume, conflicting volume, and percent of right-turns (see data provided in **Appendix E**).
- ***Queuing analysis of "drive-through" facilities***
Chick-fil-A Restaurant
The project site plan (**Exhibit 2**) depicts drive-through queuing space for 15 vehicles with the proposed Chick-fil-A fast-food restaurant. Recently collected drive-through queuing data for three similarly sized Chick-Fil-A restaurants in the City of Rancho Cordova, the County of Sacramento and the City of Folsom reveal a maximum queue of 13 vehicles or 325-feet (see data provided in **Appendix F**). Considering the relatively consistent suburban locations and anticipated uses, the proposed project is expected to be able to accommodate the maximum drive-through queue without spillback into the adjacent drive aisle and avoid impeding on-site pedestrian movements.
- ***On-Site Transportation Review***
The site plan for the proposed project (**Exhibit 2**) was qualitatively reviewed for general access and on-site circulation. According to the site plan, access to the site will be provided from Saratoga Way at the existing main site driveway intersection. Two additional driveways will serve the site; one full access driveway south of the main site driveway, and one egress-only driveway at the south end of

¹⁰ El Dorado County Ordinance Code, Section 130.35.030, November 17, 2004.

the project site. Detailed LOS and delay data were previously reported for the Saratoga Way intersection with the main site driveway (Intersection #9). The combination of these access points, as well as the on-site circulation system appears to provide adequate access to/from Saratoga Way and the surrounding transportation network.

Additional Considerations

▪ **Delivery of Goods and Services**

To address concern that the previous Saratoga Retail Phase 2 analysis did not contain sufficient information or adequately address the potential impacts generated by the Project's plan for product delivery, the site plan (**Exhibit 2**) was modified to include a truck loading space and two RV parking spaces. The truck loading area and RV spaces are located at a centralized location near building #2.

▪ **Pedestrian Access**

To address concerns about the Project's impacts to pedestrian travel, a sidewalk was added along the frontage of Saratoga Way. These changes are reflected in the revised site plan (**Exhibit 2**).

Conclusions

The following are the primary conclusions based on the analyses discussed herein:

- The addition of proposed project results in two significant impacts at the intersection of El Dorado Hills Boulevard and Saratoga Way/Park Drive (Intersection #1), and Latrobe Road and Town Center Boulevard (Intersection #4). With the mitigations described above, all impacts can be mitigated to **less than significant**. There are no impacts to roadway segments or freeway facilities.
- The proposed site plan shows sufficient throat depth, no modifications to driveways are needed.
- According to the methodologies noted in Section 4C.04 of the CMUTCD, a signal warrant is not satisfied for the intersections of Saratoga Way and Mammouth Way (Intersection #8), the Main Project Driveway (Intersection #9), and Arrowhead Drive (Intersection #10) under Near-Term or Near-Term plus Proposed Project Conditions.
- Based on the observed site queue length at three similarly sized Chick-fil-A restaurants located in the City of Rancho Cordova, the County of Sacramento and the City of Folsom, the site plan contains sufficient storage to accommodate the drive through queues.

Attachments:

Exhibit 1 – Project Site Vicinity Map

Exhibit 2 – Proposed Project Site Plan

Exhibit 3 – Study Intersections, Traffic Control, and Lane Geometries

Exhibit 4 – Study Freeway Facilities

Exhibit 5 – Near-Term (2026) Proposed Project Trip Distribution

Exhibit 6 – Near-Term (2026) Proposed Project Trip Assignment

Exhibit 7 – Near-Term (2026) Peak-Hour Volumes

Exhibit 8 – Near-Term (2026) Plus Proposed Project Peak-Hour Volumes

Attachment A – Trip Generation Data Sheets

Attachment B – Analysis Worksheets for Near-Term (2026) Conditions

Attachment C – Analysis Worksheets for Near-Term (2026) Plus Project Conditions

Attachment D – Analysis Worksheets for Near-Term (2026) Plus Project Mitigated Conditions

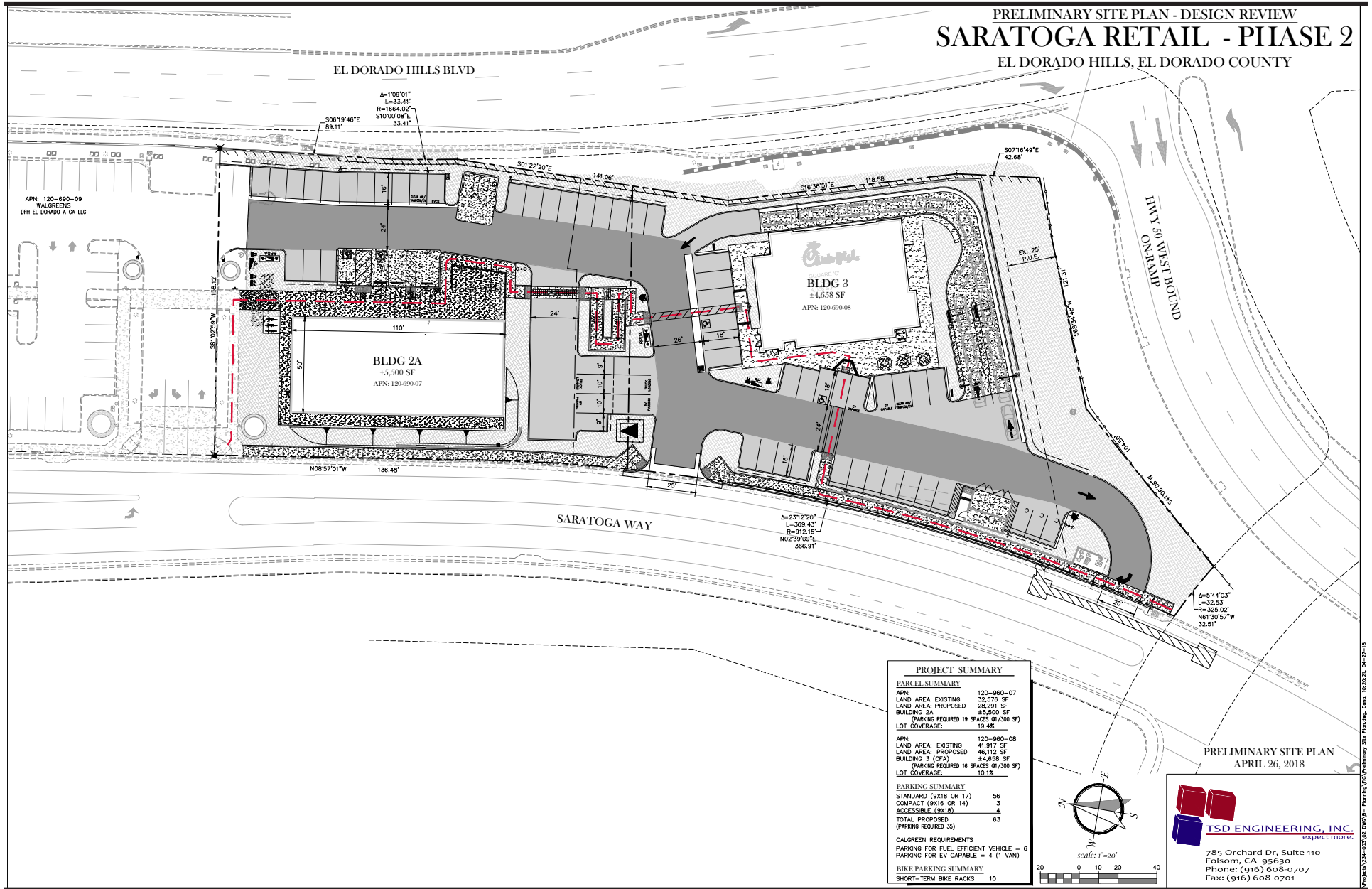
Attachment E – Signal Warrant and MRTD Analysis

Attachment F – Observed Maximum Queue Lengths

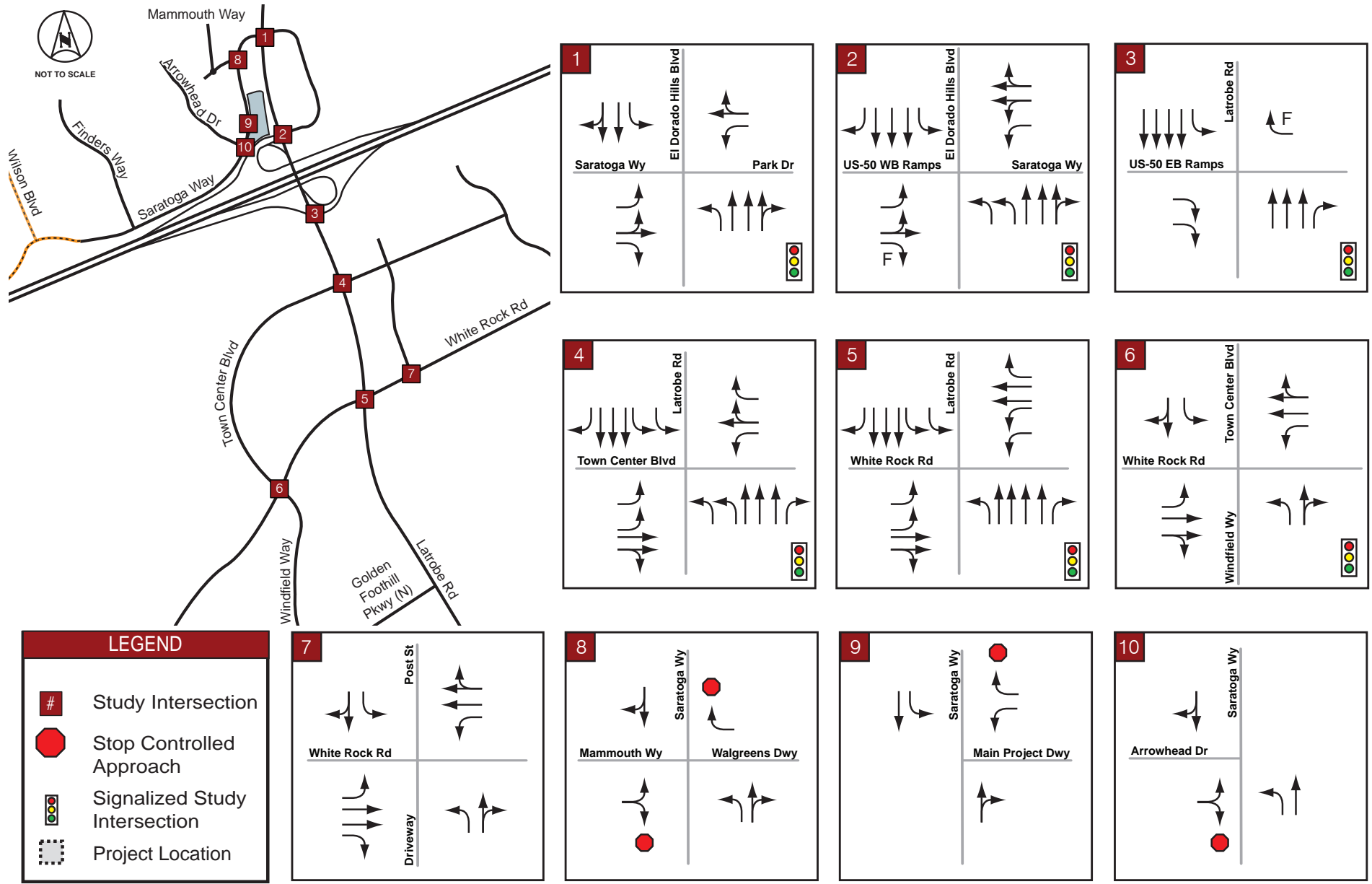
Saratoga Retail - Supplemental Traffic Analyses



Saratoga Retail - Supplemental Traffic Analyses



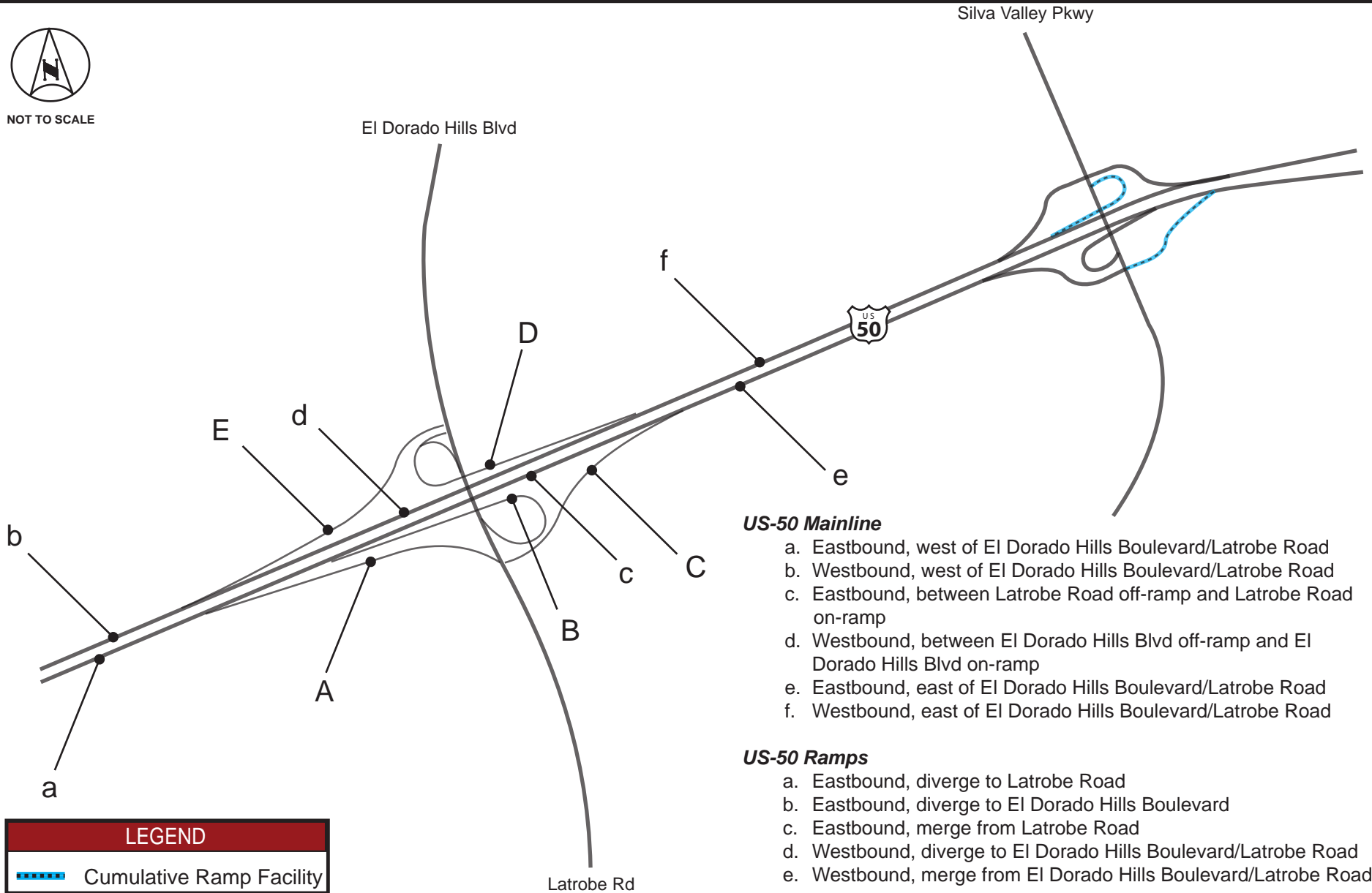
Saratoga Retail - Supplemental Traffic Analyses



Saratoga Retail - Supplemental Traffic Analyses



NOT TO SCALE



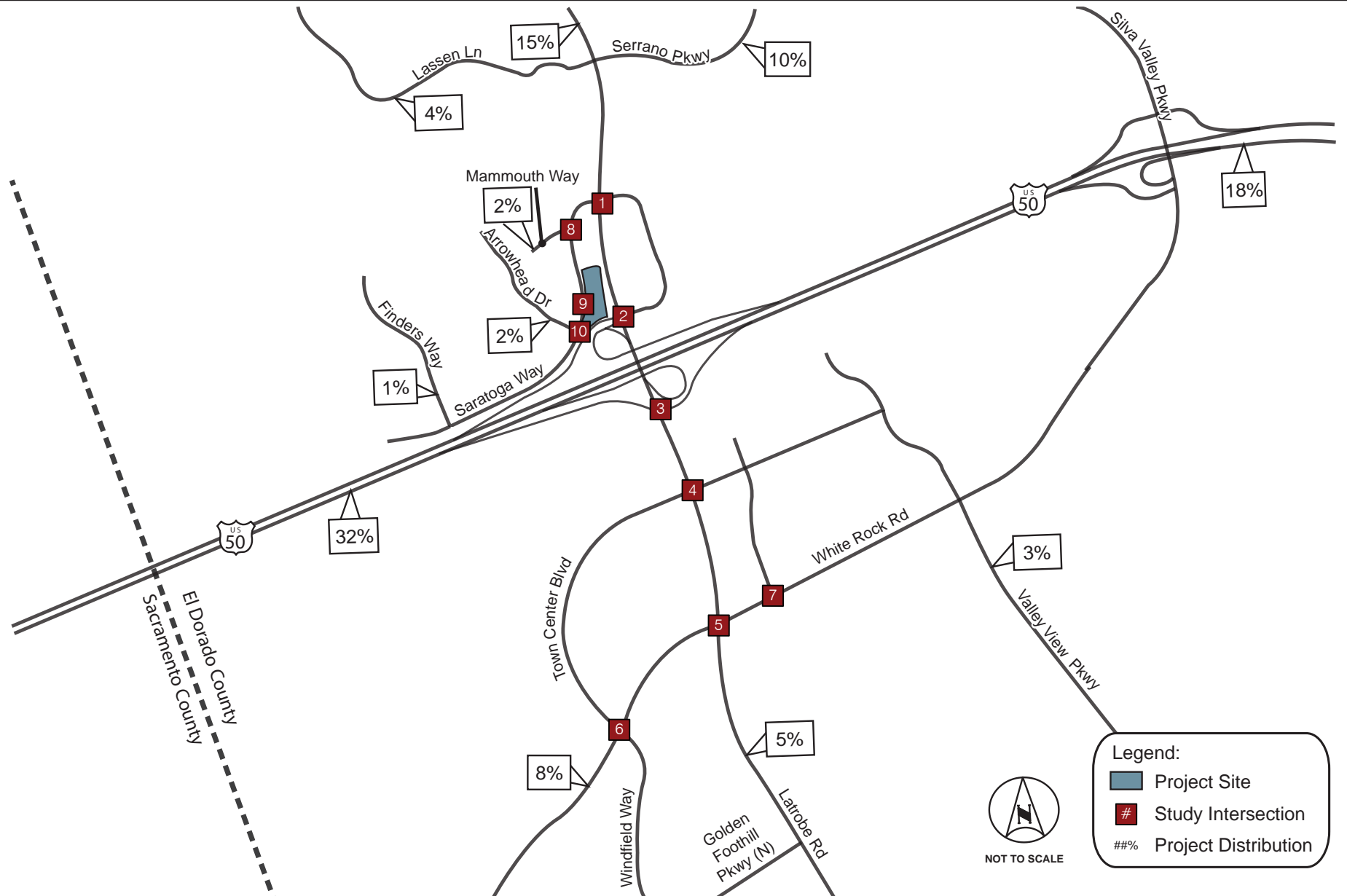
US-50 Mainline

- a. Eastbound, west of El Dorado Hills Boulevard/Latrobe Road
- b. Westbound, west of El Dorado Hills Boulevard/Latrobe Road
- c. Eastbound, between Latrobe Road off-ramp and Latrobe Road on-ramp
- d. Westbound, between El Dorado Hills Blvd off-ramp and El Dorado Hills Blvd on-ramp
- e. Eastbound, east of El Dorado Hills Boulevard/Latrobe Road
- f. Westbound, east of El Dorado Hills Boulevard/Latrobe Road

US-50 Ramps

- a. Eastbound, diverge to Latrobe Road
- b. Eastbound, diverge to El Dorado Hills Boulevard
- c. Eastbound, merge from Latrobe Road
- d. Westbound, diverge to El Dorado Hills Boulevard/Latrobe Road
- e. Westbound, merge from El Dorado Hills Boulevard/Latrobe Road

Saratoga Retail - Supplemental Traffic Analyses



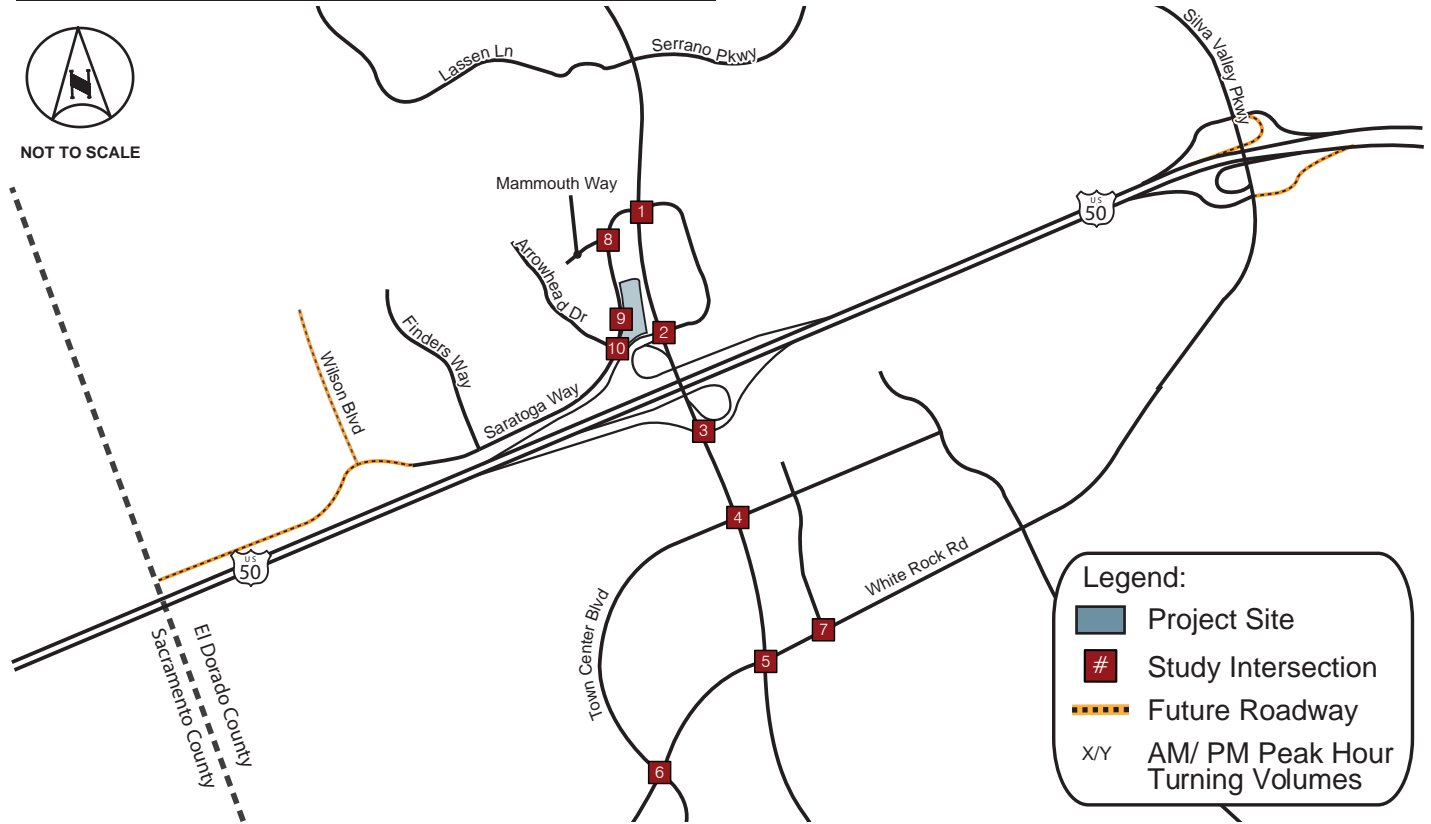
Legend:

- Project Site
- # Study Intersection
- ### Project Distribution



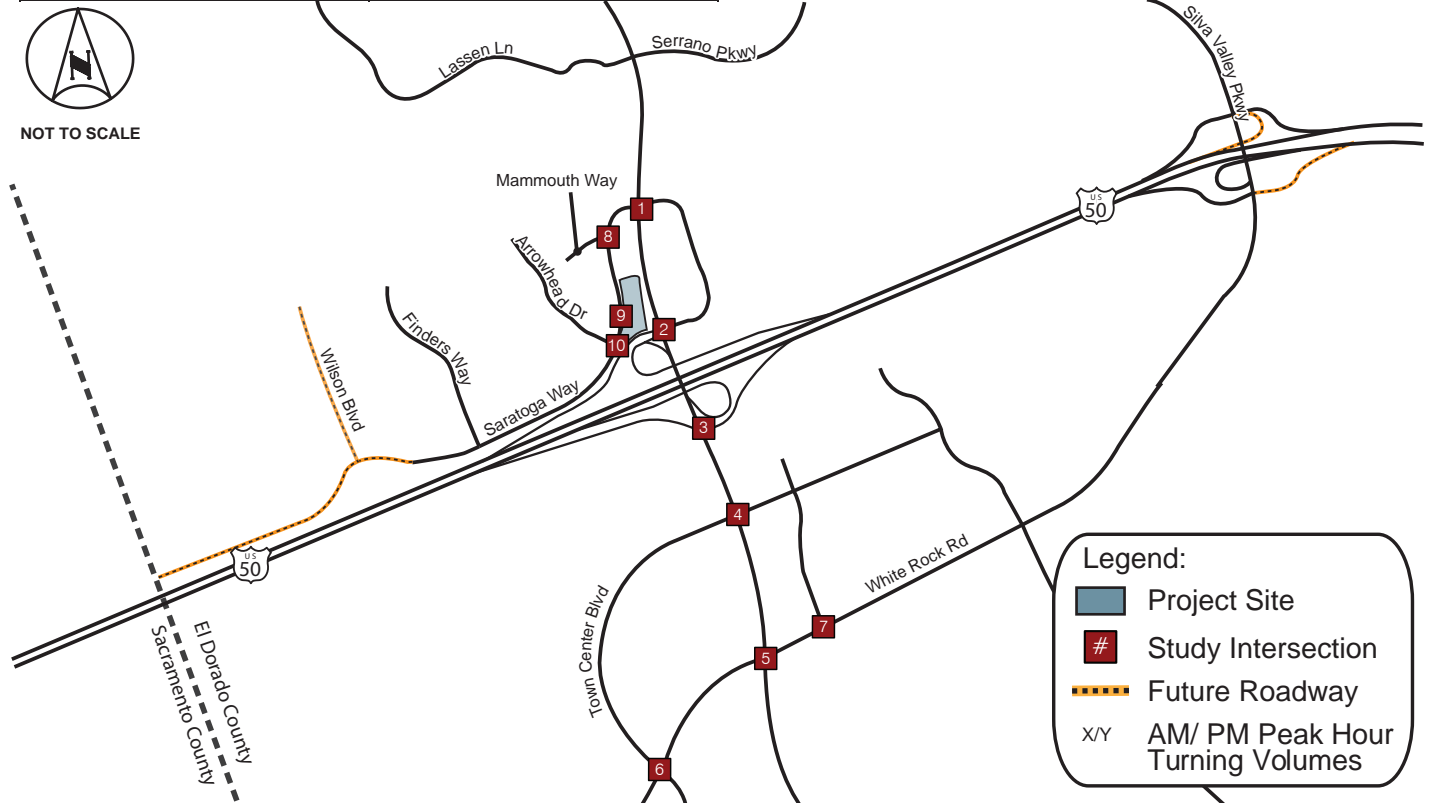
Saratoga Retail - Supplemental Traffic Analyses

1 14 / 43 ↕ Saratoga Wy ↕ 10 / 26 ↕ 29 / 75 ↕ El Dorado Hills Blvd ↕ Park Dr ↕ 33 / 99	2 13 / 34 ↕ US-50 WB Ramps ↕ 10 / 31 ↕ 23 / 68 ↕ El Dorado Hills Blvd ↕ Park Dr	3 6 / 14 ↕ 8 / 21 ↕ El Dorado Hills Blvd ↕ 16 / 48 ↕ US-50 EB Ramps	4 6 / 14 ↕ Latrobe Rd ↕ Town Center Blvd ↕ 7 / 20
5 3 / 7 ↕ 2 / 4 ↕ 1 / 3 ↕ Latrobe Rd ↕ 1 / 4 ↕ White Rock Rd ↕ 2 / 6 ↕ 4 / 10	6 Town Center Blvd ↕ 3 / 7 ↕ White Rock Rd ↕ Windfield Way ↕ 4 / 10	7 Post St ↕ 1 / 4 ↕ White Rock Rd ↕ 1 / 3	8 47 / 142 ↕ Saratoga Way ↕ Walgreens Dwy ↕ 0 / 2 ↕ 39 / 101 ↕ Mammouth Wy ↕ 1 / 2
9 25 / 73 ↕ 23 / 71 ↕ Saratoga Way ↕ 20 / 51 ↕ 0 / 1 ↕ Main Project Dwy ↕ 19 / 52 ↕ 0 / 1 ↕ 1 / 3	10 1 / 2 ↕ 0 / 1 ↕ Saratoga Way ↕ Arrowhead Dr ↕ 0 / 1		



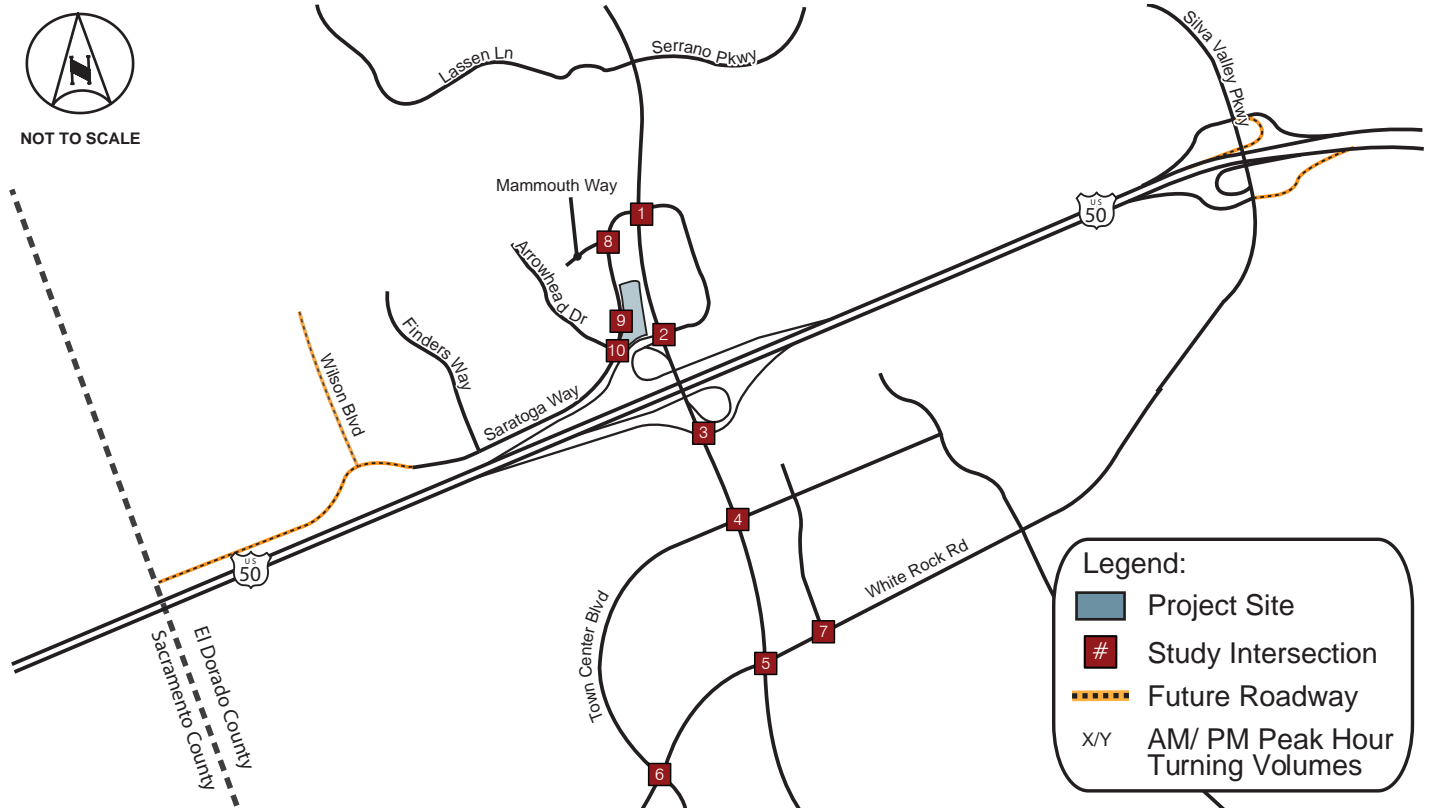
Saratoga Retail - Supplemental Traffic Analyses

<p>1</p> <p>77 / 37 ↔ 1439 / 846 ↔ 168 / 199 ↔ El Dorado Hills Blvd</p> <p>Saratoga Wy</p> <p>112 / 300 ↔ 100 / 54 ↔ 87 / 157 ↔ Park Dr</p> <p>44 / 161 ↔ 63 / 182 ↔ 134 / 206 ↔</p>	<p>2</p> <p>521 / 212 ↔ 1107 / 977 ↔ 31 / 18 ↔ El Dorado Hills Blvd</p> <p>US-50 WB Ramps</p> <p>46 / 44 ↔ 140 / 160 ↔ 107 / 171 ↔ Park Dr</p> <p>129 / 104 ↔ 102 / 99 ↔ 282 / 82 ↔</p>	<p>3</p> <p>1253 / 1019 ↔ 244 / 212 ↔ El Dorado Hills Blvd</p> <p>US-50 EB Ramps</p> <p>263 / 521 ↔</p> <p>1115 / 586 ↔</p>	<p>4</p> <p>355 / 49 ↔ 1510 / 952 ↔ 503 / 604 ↔ Lairobo Rd</p> <p>333 / 697 ↔ 33 / 9 ↔ 101 / 68 ↔ Town Center Blvd</p> <p>30 / 356 ↔ 10 / 36 ↔ 5 / 60 ↔</p>
<p>5</p> <p>479 / 226 ↔ 1034 / 604 ↔ 103 / 251 ↔ Lairobo Rd</p> <p>137 / 202 ↔ 391 / 271 ↔ 401 / 345 ↔ White Rock Rd</p> <p>269 / 450 ↔ 116 / 505 ↔ 78 / 94 ↔</p>	<p>6</p> <p>13 / 27 ↔ 8 / 13 ↔ Town Center Blvd</p> <p>514 / 452 ↔ 498 / 130 ↔ White Rock Rd</p> <p>22 / 15 ↔ 361 / 709 ↔ 130 / 99 ↔ Windfield Way</p>	<p>7</p> <p>126 / 209 ↔ 10 / 13 ↔ 38 / 178 ↔ Post St</p> <p>198 / 174 ↔ 769 / 552 ↔ 40 / 42 ↔ White Rock Rd</p> <p>106 / 248 ↔ 237 / 873 ↔ 14 / 25 ↔</p>	<p>8</p> <p>74 / 69 ↔ 216 / 133 ↔ 3 / 16 ↔ Saratoga Way</p> <p>5 / 32 ↔ 0 / 4 ↔ Walgreens Dwy</p> <p>76 / 87 ↔ 0 / 3 ↔ 1 / 4 ↔ Mammoth Wy</p>
<p>9</p> <p>205 / 104 ↔ 12 / 33 ↔ Saratoga Way</p> <p>7 / 13 ↔ 0 / 6 ↔ Main Project Dwy</p> <p>153 / 419 ↔ 0 / 8 ↔</p>	<p>10</p> <p>1 / 11 ↔ 204 / 99 ↔ Saratoga Way</p> <p>Arrowhead Dr</p> <p>15 / 15 ↔</p> <p>0 / 1 ↔</p> <p>138 / 412 ↔</p>		



Saratoga Retail - Supplemental Traffic Analyses

<p>1</p> <p>91 / 80 ↔ 1437 / 840 ↔ 168 / 199 ↔ El Dorado Hills Blvd</p> <p>Saratoga Wy</p> <p>112 / 300 ↔ 100 / 54 ↔ 87 / 157 ↔ Park Dr</p> <p>54 / 187 ↔ 63 / 182 ↔ 163 / 281 ↔</p> <p>149 / 226 ↔ 698 / 1209 ↔ 15 / 48 ↔</p>	<p>2</p> <p>534 / 246 ↔ 1121 / 1012 ↔ 31 / 18 ↔ El Dorado Hills Blvd</p> <p>US-50 WB Ramps</p> <p>46 / 44 ↔ 140 / 160 ↔ 107 / 171 ↔ Park Dr</p> <p>139 / 135 ↔ 102 / 99 ↔ 282 / 82 ↔</p> <p>509 / 1071 ↔ 676 / 1303 ↔ 153 / 309 ↔</p>	<p>3</p> <p>1259 / 1033 ↔ 252 / 233 ↔ El Dorado Hills Blvd</p> <p>US-50 EB Ramps</p> <p>279 / 569 ↔</p> <p>1115 / 586 ↔</p> <p>1059 / 2114 ↔ 274 / 598 ↔</p>	<p>4</p> <p>355 / 49 ↔ 1516 / 966 ↔ 503 / 604 ↔ Latrobe Rd</p> <p>333 / 697 ↔ 33 / 9 ↔ 101 / 68 ↔ Town Center Blvd</p> <p>30 / 356 ↔ 10 / 36 ↔ 5 / 60 ↔</p> <p>56 / 2 ↔ 969 / 1659 ↔ 93 / 153 ↔</p>
<p>5</p> <p>482 / 233 ↔ 1036 / 608 ↔ 104 / 254 ↔ Latrobe Rd</p> <p>White Rock Rd</p> <p>138 / 206 ↔ 391 / 271 ↔ 401 / 345 ↔</p> <p>273 / 460 ↔ 116 / 505 ↔ 78 / 94 ↔</p> <p>143 / 85 ↔ 707 / 1148 ↔ 137 / 389 ↔</p>	<p>6</p> <p>13 / 27 ↔ 8 / 13 ↔ Town Center Blvd</p> <p>White Rock Rd</p> <p>517 / 459 ↔ 498 / 130 ↔</p> <p>22 / 15 ↔ 365 / 719 ↔ 130 / 99 ↔ Windfield Way</p> <p>69 / 274 ↔ 11 / 11 ↔ 102 / 340 ↔</p>	<p>7</p> <p>126 / 209 ↔ 10 / 113 ↔ 38 / 178 ↔ Post St</p> <p>White Rock Rd</p> <p>198 / 174 ↔ 770 / 556 ↔ 40 / 42 ↔</p> <p>106 / 248 ↔ 238 / 876 ↔ 14 / 25 ↔</p> <p>34 / 56 ↔ 3 / 14 ↔ 20 / 28 ↔</p>	<p>8</p> <p>74 / 69 ↔ 263 / 275 ↔ 3 / 16 ↔ Saratoga Way</p> <p>Mammoth Wy</p> <p>5 / 32 ↔ 0 / 4 ↔</p> <p>76 / 87 ↔ 0 / 3 ↔ 2 / 6 ↔</p> <p>0 / 4 ↔ 199 / 531 ↔</p> <p>Walgreens Dwy</p>
<p>9</p> <p>230 / 177 ↔ 35 / 104 ↔ Saratoga Way</p> <p>Main Project Dwy</p> <p>27 / 64 ↔ 0 / 7 ↔</p> <p>172 / 471 ↔ 0 / 9 ↔</p>	<p>10</p> <p>2 / 13 ↔ 204 / 100 ↔ Saratoga Way</p> <p>Arrowhead Dr</p> <p>16 / 18 ↔ 0 / 1 ↔</p> <p>138 / 413 ↔</p>		



Attachment A
Trip Generation Data Sheets

Chick-Fil-A Vehicular Trip Generation Studies

Tuesday, April 17, 2018

AM	2354 Sunrise Blvd Rancho Cordova	
	In	Out
6:00 AM	0	0
6:15 AM	0	0
6:30 AM	3	3
6:45 AM	4	4
7:00 AM	13	11
7:15 AM	5	6
7:30 AM	7	8
7:45 AM	4	3
8:00 AM	4	3
8:15 AM	7	4
8:30 AM	7	6
8:45 AM	7	7
Totals:	61	55

AM	4644 Madison Ave Sacramento	
	In	Out
6:00 AM	6	3
6:15 AM	3	4
6:30 AM	6	8
6:45 AM	4	3
7:00 AM	12	11
7:15 AM	7	9
7:30 AM	4	3
7:45 AM	10	6
8:00 AM	3	6
8:15 AM	12	3
8:30 AM	12	10
8:45 AM	4	11
Totals:	83	77

AM	2679 E Bidwell St Folsom	
	In	Out
6:00 AM	4	0
6:15 AM	1	0
6:30 AM	4	3
6:45 AM	6	6
7:00 AM	6	7
7:15 AM	9	8
7:30 AM	9	12
7:45 AM	14	6
8:00 AM	7	9
8:15 AM	12	10
8:30 AM	11	11
8:45 AM	14	12
Totals:	97	84

PM	2354 Sunrise Blvd Rancho Cordova	
	In	Out
5:00 PM	13	12
5:15 PM	16	15
5:30 PM	17	20
5:45 PM	12	12
6:00 PM	16	15
6:15 PM	17	14
6:30 PM	17	19
6:45 PM	15	17
Totals:	123	124

PM	4644 Madison Ave Sacramento	
	In	Out
5:00 PM	8	7
5:15 PM	7	8
5:30 PM	26	14
5:45 PM	16	26
6:00 PM	17	16
6:15 PM	22	22
6:30 PM	20	22
6:45 PM	17	22
Totals:	133	137

PM	2679 E Bidwell St Folsom	
	In	Out
5:00 PM	31	30
5:15 PM	32	26
5:30 PM	39	35
5:45 PM	26	30
6:00 PM	35	32
6:15 PM	24	31
6:30 PM	37	35
6:45 PM	28	26
Totals:	252	245

Attachment B
Analysis Worksheets for Near-Term (2026) Conditions

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	6:50	6:50	6:50	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	7920	7967	8024	8016	8062	7919	7995
Vehs Exited	7829	7926	7917	7964	8006	7860	7896
Starting Vehs	313	329	313	313	325	315	327
Ending Vehs	404	370	420	365	381	374	426
Travel Distance (mi)	4633	4687	4685	4733	4743	4660	4688
Travel Time (hr)	394.8	458.8	415.0	391.0	405.2	428.3	423.0
Total Delay (hr)	248.8	310.9	267.2	241.9	256.3	281.7	275.3
Total Stops	14408	14767	14883	14909	15397	15148	14775
Fuel Used (gal)	243.9	260.2	249.9	245.1	248.9	252.3	252.5

Summary of All Intervals

Run Number	7	8	9	Avg
Start Time	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	7879	8060	8101	7997
Vehs Exited	7808	7946	8022	7917
Starting Vehs	334	270	337	312
Ending Vehs	405	384	416	389
Travel Distance (mi)	4627	4712	4713	4688
Travel Time (hr)	391.0	390.7	450.6	414.8
Total Delay (hr)	245.8	242.5	301.7	267.2
Total Stops	14291	14823	14571	14794
Fuel Used (gal)	243.2	245.4	259.3	250.1

Interval #0 Information Seeding

Start Time	6:50
End Time	7:00
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	1961	1916	2021	1999	1990	2006	1989
Vehs Exited	1957	1871	1998	1950	1989	1922	1977
Starting Vehs	313	329	313	313	325	315	327
Ending Vehs	317	374	336	362	326	399	339
Travel Distance (mi)	1155	1124	1164	1174	1159	1173	1174
Travel Time (hr)	82.6	83.1	87.6	84.4	86.2	92.9	87.0
Total Delay (hr)	46.2	47.6	50.8	47.3	49.7	56.1	49.7
Total Stops	3307	3309	3299	3516	3492	3714	3442
Fuel Used (gal)	56.8	55.7	58.4	57.9	58.0	59.0	58.3

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	1940	2003	2020	1986
Vehs Exited	1939	1937	2006	1953
Starting Vehs	334	270	337	312
Ending Vehs	335	336	351	341
Travel Distance (mi)	1142	1167	1163	1159
Travel Time (hr)	81.3	84.6	91.0	86.1
Total Delay (hr)	45.5	47.8	54.2	49.5
Total Stops	3294	3429	3551	3436
Fuel Used (gal)	56.3	58.1	59.6	57.8

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15
Volumes adjusted by PHF, Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	2034	2152	2091	2127	2130	1980	2023
Vehs Exited	1971	2064	2036	2038	2035	1975	1936
Starting Vehs	317	374	336	362	326	399	339
Ending Vehs	380	462	391	451	421	404	426
Travel Distance (mi)	1169	1221	1203	1249	1228	1161	1165
Travel Time (hr)	95.3	114.3	105.4	105.5	102.9	110.2	106.6
Total Delay (hr)	58.4	75.7	67.5	66.5	64.3	73.6	70.2
Total Stops	3640	3951	3979	4051	4090	3816	3734
Fuel Used (gal)	60.5	66.4	63.4	65.1	63.5	63.9	63.1

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15
Volumes adjusted by PHF, Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	2105	2144	2157	2093
Vehs Exited	2035	2079	2068	2021
Starting Vehs	335	336	351	341
Ending Vehs	405	401	440	416
Travel Distance (mi)	1216	1233	1246	1209
Travel Time (hr)	98.6	98.3	113.2	105.0
Total Delay (hr)	60.6	59.7	73.8	67.0
Total Stops	3758	4060	3880	3900
Fuel Used (gal)	62.9	63.1	66.7	63.9

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	1939	1923	1960	1922	2005	1984	2004
Vehs Exited	1921	1959	1952	2001	2010	1973	2011
Starting Vehs	380	462	391	451	421	404	426
Ending Vehs	398	426	399	372	416	415	419
Travel Distance (mi)	1140	1164	1165	1138	1213	1158	1175
Travel Time (hr)	104.0	136.9	113.4	97.2	111.3	117.7	119.8
Total Delay (hr)	68.0	100.1	76.7	61.3	73.3	81.2	82.7
Total Stops	3605	3751	3869	3610	4211	3948	3648
Fuel Used (gal)	61.3	70.0	64.4	59.9	65.5	65.5	66.6

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	1923	1928	1996	1959
Vehs Exited	1913	1978	2023	1971
Starting Vehs	405	401	440	416
Ending Vehs	415	351	413	400
Travel Distance (mi)	1145	1163	1174	1164
Travel Time (hr)	97.5	100.2	123.1	112.1
Total Delay (hr)	61.5	63.6	86.0	75.4
Total Stops	3672	3590	3634	3750
Fuel Used (gal)	60.1	61.7	67.2	64.2

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	1986	1976	1952	1968	1937	1949	1979
Vehs Exited	1980	2032	1931	1975	1972	1990	1972
Starting Vehs	398	426	399	372	416	415	419
Ending Vehs	404	370	420	365	381	374	426
Travel Distance (mi)	1168	1178	1152	1173	1143	1168	1174
Travel Time (hr)	112.9	124.5	108.6	103.8	104.9	107.4	109.6
Total Delay (hr)	76.3	87.4	72.3	66.8	68.9	70.8	72.8
Total Stops	3856	3756	3736	3732	3604	3670	3951
Fuel Used (gal)	65.3	68.1	63.6	62.2	62.0	63.9	64.6

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	1911	1985	1928	1956
Vehs Exited	1921	1952	1925	1963
Starting Vehs	415	351	413	400
Ending Vehs	405	384	416	389
Travel Distance (mi)	1124	1149	1131	1156
Travel Time (hr)	113.6	107.6	123.3	111.6
Total Delay (hr)	78.1	71.5	87.7	75.3
Total Stops	3567	3744	3506	3713
Fuel Used (gal)	63.9	62.5	65.9	64.2

1: El Dorado Hills Blvd & Saratoga Way Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	14.7	0.8
Denied Del/Veh (s)	0.0	0.0	0.0	0.2	0.3	0.3	0.0	0.0	0.0	34.5	35.5	34.0
Total Delay (hr)	0.6	0.9	1.1	1.0	1.5	1.1	1.8	3.4	0.1	3.6	13.4	0.7
Total Del/Veh (s)	46.8	50.7	27.7	42.2	51.4	32.4	55.6	17.1	13.1	76.6	32.3	28.5
Stop Delay (hr)	0.6	0.8	1.1	0.9	1.3	1.0	1.7	2.2	0.0	3.3	9.2	0.5
Stop Del/Veh (s)	44.7	47.0	27.3	39.5	45.1	29.1	50.8	11.1	9.3	70.3	22.1	23.2

1: El Dorado Hills Blvd & Saratoga Way Performance by movement

Movement	All
Denied Delay (hr)	17.1
Denied Del/Veh (s)	19.7
Total Delay (hr)	29.1
Total Del/Veh (s)	33.2
Stop Delay (hr)	22.6
Stop Del/Veh (s)	25.8

2: El Dorado Hills Blvd & US-50 WB Ramps/Saratoga Way Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.2	0.2	1.3	0.6	3.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	1.6	1.4	0.3	3.2	5.2	1.7	8.2	1.7	0.3	0.7	9.1	2.5
Total Del/Veh (s)	43.3	45.5	3.7	101.9	129.6	128.2	56.0	9.1	7.0	68.1	29.0	17.0
Stop Delay (hr)	1.5	1.2	0.0	3.0	4.9	1.7	7.1	0.8	0.2	0.6	5.8	1.0
Stop Del/Veh (s)	40.5	40.8	0.0	96.3	122.8	124.1	48.7	4.3	3.4	60.7	18.3	6.7

2: El Dorado Hills Blvd & US-50 WB Ramps/Saratoga Way Performance by movement

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.1
Total Delay (hr)	35.9
Total Del/Veh (s)	33.1
Stop Delay (hr)	27.7
Stop Del/Veh (s)	25.6

3: Latrobe Road & US 50 EB Ramps Performance by movement

Movement	EBR	WBR	NBT	NBR	SBL	SBT	All
Denied Delay (hr)	0.8	0.0	0.0	0.0	0.0	0.0	0.8
Denied Del/Veh (s)	2.5	0.2	0.0	0.0	0.0	0.0	0.7
Total Delay (hr)	8.2	0.1	2.9	0.8	2.9	3.6	18.5
Total Del/Veh (s)	25.5	0.9	9.9	10.9	41.8	9.9	15.4
Stop Delay (hr)	6.3	0.0	1.0	0.3	2.3	0.8	10.7
Stop Del/Veh (s)	19.4	0.0	3.4	3.8	33.3	2.4	8.9

4: Latrobe Road & Town Center Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	4.0	0.1	0.1	3.4	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.4	0.2	0.0	1.1	0.4	1.6	0.8	8.9	0.2	5.2	6.4	0.5
Total Del/Veh (s)	47.3	55.7	11.2	39.0	40.5	16.5	57.8	33.2	6.6	35.6	14.9	4.9
Stop Delay (hr)	0.4	0.1	0.0	1.0	0.4	1.5	0.7	6.0	0.1	4.3	3.6	0.2
Stop Del/Veh (s)	45.4	52.7	11.3	35.5	36.1	14.8	52.6	22.3	5.3	29.6	8.4	2.3

4: Latrobe Road & Town Center Blvd Performance by movement

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.1
Total Delay (hr)	25.7
Total Del/Veh (s)	22.6
Stop Delay (hr)	18.4
Stop Del/Veh (s)	16.1

5: Latrobe Road & White Rock Road Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	5.8	1.4	0.4	10.4	6.7	0.4	13.9	5.6	0.2	2.0	13.3	4.2
Total Del/Veh (s)	77.2	39.8	19.4	95.7	64.2	9.8	366.3	28.6	4.2	67.2	44.5	30.9
Stop Delay (hr)	5.5	1.2	0.4	9.5	5.7	0.3	13.9	5.0	0.2	1.7	8.9	3.1
Stop Del/Veh (s)	73.4	35.0	18.1	87.4	54.8	7.6	365.5	25.4	4.2	57.5	29.7	22.5

5: Latrobe Road & White Rock Road Performance by movement

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.0
Total Delay (hr)	64.3
Total Del/Veh (s)	57.4
Stop Delay (hr)	55.3
Stop Del/Veh (s)	49.4

7: Driveway/Post St & White Rock Road Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.6	9.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	49.4	41.5	40.2	0.1	0.1	0.1	3.8	0.4	0.3
Total Delay (hr)	1.7	1.1	0.0	2.1	29.4	2.2	0.6	0.0	0.0	0.5	0.1	0.8
Total Del/Veh (s)	53.1	16.4	4.4	198.3	138.6	40.6	65.2	37.6	5.0	44.2	27.2	22.9
Stop Delay (hr)	1.6	0.8	0.0	1.9	24.7	1.6	0.6	0.0	0.0	0.5	0.1	0.8
Stop Del/Veh (s)	49.0	12.3	2.4	178.7	116.3	30.4	63.1	34.9	5.0	41.3	23.8	21.6

7: Driveway/Post St & White Rock Road Performance by movement

Movement	All
Denied Delay (hr)	11.8
Denied Del/Veh (s)	26.2
Total Delay (hr)	38.6
Total Del/Veh (s)	86.4
Stop Delay (hr)	32.6
Stop Del/Veh (s)	72.9

Total Zone Performance

Denied Delay (hr)	30.0
Denied Del/Veh (s)	17.8
Total Delay (hr)	212.5
Total Del/Veh (s)	419.8
Stop Delay (hr)	167.4
Stop Del/Veh (s)	330.7

Intersection: 1: El Dorado Hills Blvd & Saratoga Way

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	TR	L	T	T	TR	L	T	TR
Maximum Queue (ft)	76	134	161	114	292	154	144	156	165	124	341	347
Average Queue (ft)	15	65	76	47	136	80	64	71	75	108	308	314
95th Queue (ft)	52	112	138	97	250	143	128	142	150	152	375	378
Link Distance (ft)		299		482	482		774	774	774		309	309
Upstream Blk Time (%)											22	28
Queuing Penalty (veh)											0	0
Storage Bay Dist (ft)	150		200			250				100		
Storage Blk Time (%)		0								23	29	
Queuing Penalty (veh)		0								169	51	

Intersection: 2: El Dorado Hills Blvd & US-50 WB Ramps/Saratoga Way

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB	SB
Directions Served	L	LT	L	LT	TR	L	L	T	T	TR	L	T
Maximum Queue (ft)	146	190	170	350	175	319	332	144	127	157	197	357
Average Queue (ft)	70	95	78	185	128	194	197	53	54	74	44	199
95th Queue (ft)	124	161	172	386	197	299	308	113	111	134	136	347
Link Distance (ft)	1228	1228		621		646	646	646	646	646		774
Upstream Blk Time (%)				0								
Queuing Penalty (veh)				0								
Storage Bay Dist (ft)			150		150						200	
Storage Blk Time (%)			0	21	14						0	12
Queuing Penalty (veh)			0	37	25						0	4

Intersection: 2: El Dorado Hills Blvd & US-50 WB Ramps/Saratoga Way

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	340	373	225
Average Queue (ft)	155	164	136
95th Queue (ft)	298	317	251
Link Distance (ft)	774	774	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			200
Storage Blk Time (%)		3	1
Queuing Penalty (veh)		14	5

Intersection: 3: Latrobe Road & US 50 EB Ramps

Movement	EB	EB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	R	R	T	T	T	R	L	T	T	T	T
Maximum Queue (ft)	312	362	154	187	275	243	279	306	187	169	105
Average Queue (ft)	198	214	38	58	94	61	167	51	21	26	20
95th Queue (ft)	287	323	117	142	217	162	252	187	106	107	78
Link Distance (ft)	1211		572	572	572			646	646	646	646
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)		450				275	575				
Storage Blk Time (%)		0			0	0					
Queuing Penalty (veh)		0			0	0					

Intersection: 4: Latrobe Road & Town Center Blvd

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB
Directions Served	L	L	T	TR	L	TR	R	L	L	T	T	T
Maximum Queue (ft)	35	70	30	37	124	193	173	58	109	306	368	395
Average Queue (ft)	3	24	8	6	66	80	70	16	25	130	171	208
95th Queue (ft)	18	56	27	24	123	153	138	45	69	253	313	346
Link Distance (ft)			778	778		526	526			839	839	839
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	350	350			100			225	225			
Storage Blk Time (%)					2	6					1	
Queuing Penalty (veh)					5	6					0	

Intersection: 4: Latrobe Road & Town Center Blvd

Movement	NB	SB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	T	R
Maximum Queue (ft)	84	260	265	303	309	323	248
Average Queue (ft)	23	139	155	142	151	160	59
95th Queue (ft)	58	228	237	254	253	271	151
Link Distance (ft)	839			572	572	572	572
Upstream Blk Time (%)				0	0		
Queuing Penalty (veh)				0	0		
Storage Bay Dist (ft)		325	325				
Storage Blk Time (%)		0	0	0			
Queuing Penalty (veh)		0	1	0			

Intersection: 5: Latrobe Road & White Rock Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	TR	L	L	T	T	R	L	T	T
Maximum Queue (ft)	226	242	128	160	182	191	200	332	112	278	368	270
Average Queue (ft)	106	137	47	74	160	176	183	246	47	254	296	102
95th Queue (ft)	200	222	100	139	204	212	236	379	90	339	463	204
Link Distance (ft)			346	346				315	315		278	278
Upstream Blk Time (%)								7		40	64	0
Queuing Penalty (veh)								33		0	0	0
Storage Bay Dist (ft)	325	325			175	175	175			270		
Storage Blk Time (%)	0	0			3	17	14	9		66	61	
Queuing Penalty (veh)	0	0			6	34	28	58		119	90	

Intersection: 5: Latrobe Road & White Rock Road

Movement	NB	NB	NB	B80	B80	B25	B25	SB	SB	SB	SB	SB
Directions Served	T	T	R	T	T	T	T	L	L	T	T	T
Maximum Queue (ft)	198	98	54	323	257	260	238	79	250	466	468	439
Average Queue (ft)	96	18	27	153	60	78	66	25	73	265	267	126
95th Queue (ft)	160	68	55	376	231	323	310	62	228	413	408	393
Link Distance (ft)	278	278		247	247	501	501			839	839	839
Upstream Blk Time (%)	0			28	1	5	2					0
Queuing Penalty (veh)	0			0	0	0	0					0
Storage Bay Dist (ft)			25					225	225			
Storage Blk Time (%)		4	1						0	16		1
Queuing Penalty (veh)		6	2						0	17		3

Intersection: 5: Latrobe Road & White Rock Road

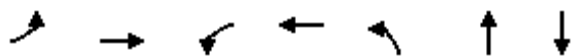
Movement	SB
Directions Served	R
Maximum Queue (ft)	275
Average Queue (ft)	184
95th Queue (ft)	312
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	250
Storage Blk Time (%)	5
Queuing Penalty (veh)	17

Intersection: 7: Driveway/Post St & White Rock Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	104	203	156	74	145	1101	1084	81	38	73	201
Average Queue (ft)	73	56	60	8	49	821	715	29	11	33	66
95th Queue (ft)	116	148	121	39	127	1360	1419	69	31	69	145
Link Distance (ft)		315	315			1064	1064	216	216		408
Upstream Blk Time (%)						38	12				
Queuing Penalty (veh)						0	0				
Storage Bay Dist (ft)	80			110	120					50	
Storage Blk Time (%)	16	1	1	0	0	59				10	20
Queuing Penalty (veh)	19	1	0	0	0	24				14	8

Zone Summary

Zone wide Queuing Penalty: 798



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	24	533	541	559	75	123	23
v/c Ratio	0.12	0.61	0.83	0.23	0.49	0.33	0.14
Control Delay	36.4	34.2	41.1	7.2	60.2	11.0	29.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.4	34.2	41.1	7.2	60.2	11.0	29.2
Queue Length 50th (ft)	10	128	258	50	40	6	5
Queue Length 95th (ft)	45	287	#762	164	127	54	32
Internal Link Dist (ft)		327		554		213	278
Turn Bay Length (ft)	195		190		155		
Base Capacity (vph)	420	1752	1025	3201	257	782	422
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.30	0.53	0.17	0.29	0.16	0.05























Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Saratoga Retail Phase 2
6: Windfield Way/Town Center Blvd & White Rock Rd

Near Term (2026) Conditions

AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 							
Traffic Volume (veh/h)	22	361	130	498	514	0	69	11	102	0	8	13
Future Volume (veh/h)	22	361	130	498	514	0	69	11	102	0	8	13
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	24	392	141	541	559	0	75	12	111	0	9	14
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	349	761	271	578	2473	0	96	25	229	97	27	43
Arrive On Green	0.30	0.30	0.30	0.33	0.70	0.00	0.05	0.16	0.16	0.00	0.04	0.04
Sat Flow, veh/h	847	2562	910	1774	3632	0	1774	157	1450	1263	658	1024
Grp Volume(v), veh/h	24	269	264	541	559	0	75	0	123	0	0	23
Grp Sat Flow(s),veh/h/ln	847	1770	1702	1774	1770	0	1774	0	1607	1263	0	1682
Q Serve(g_s), s	1.5	9.3	9.5	21.9	4.2	0.0	3.1	0.0	5.2	0.0	0.0	1.0
Cycle Q Clear(g_c), s	1.5	9.3	9.5	21.9	4.2	0.0	3.1	0.0	5.2	0.0	0.0	1.0
Prop In Lane	1.00		0.53	1.00		0.00	1.00		0.90	1.00		0.61
Lane Grp Cap(c), veh/h	349	526	506	578	2473	0	96	0	254	97	0	70
V/C Ratio(X)	0.07	0.51	0.52	0.94	0.23	0.00	0.78	0.00	0.48	0.00	0.00	0.33
Avail Cap(c_a), veh/h	555	957	920	1088	4352	0	273	0	378	342	0	395
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	18.8	21.6	21.6	24.2	4.0	0.0	34.6	0.0	28.4	0.0	0.0	34.5
Incr Delay (d2), s/veh	0.1	1.0	1.0	3.3	0.1	0.0	5.1	0.0	0.5	0.0	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	4.7	4.6	11.2	2.0	0.0	1.7	0.0	2.3	0.0	0.0	0.5
LnGrp Delay(d),s/veh	18.9	22.5	22.7	27.4	4.0	0.0	39.6	0.0	28.9	0.0	0.0	35.5
LnGrp LOS	B	C	C	C	A		D		C			D
Approach Vol, veh/h		557			1100			198				23
Approach Delay, s/veh		22.4			15.6			33.0				35.5
Approach LOS		C			B			C				D
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	29.7	28.0		16.3		57.7	8.6	7.7				
Change Period (Y+Rc), s	5.6	6.0		4.6		6.0	4.6	4.6				
Max Green Setting (Gmax), s	45.4	40.0		17.4		91.0	11.4	17.4				
Max Q Clear Time (g_c+I1), s	23.9	11.5		7.2		6.2	5.1	3.0				
Green Ext Time (p_c), s	0.2	10.5		0.2		12.8	0.0	0.3				
Intersection Summary												
HCM 2010 Ctrl Delay				19.7								
HCM 2010 LOS				B								
Notes												

User approved pedestrian interval to be less than phase max green.

Saratoga Retail Phase 2
 8: Saratoga Way & Mammouth Way/Walgreens Dwy

Near Term (2026) Conditions

AM Peak

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕			↕	
Traffic Vol, veh/h	76	0	1	0	0	5	0	160	0	3	216	74
Future Vol, veh/h	76	0	1	0	0	5	0	160	0	3	216	74
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	83	0	1	0	0	5	0	174	0	3	235	80

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	459	456	275	456	496	174	315	0	0	174	0	0
Stage 1	282	282	-	174	174	-	-	-	-	-	-	-
Stage 2	177	174	-	282	322	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	512	501	764	515	475	869	1245	-	-	1403	-	-
Stage 1	725	678	-	828	755	-	-	-	-	-	-	-
Stage 2	825	755	-	725	651	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	508	499	764	513	474	869	1245	-	-	1403	-	-
Mov Cap-2 Maneuver	508	499	-	513	474	-	-	-	-	-	-	-
Stage 1	725	676	-	828	755	-	-	-	-	-	-	-
Stage 2	820	755	-	722	649	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	13.4		9.2		0		0.1	
HCM LOS	B		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1245	-	-	510	869	1403	-
HCM Lane V/C Ratio	-	-	-	0.164	0.006	0.002	-
HCM Control Delay (s)	0	-	-	13.4	9.2	7.6	-
HCM Lane LOS	A	-	-	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.6	0	0	-

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖		↖	↗
Traffic Vol, veh/h	0	7	153	0	12	205
Future Vol, veh/h	0	7	153	0	12	205
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	8	166	0	13	223

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	415	166	0	0	166	0
Stage 1	166	-	-	-	-	-
Stage 2	249	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	594	878	-	-	1412	-
Stage 1	863	-	-	-	-	-
Stage 2	792	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	589	878	-	-	1412	-
Mov Cap-2 Maneuver	589	-	-	-	-	-
Stage 1	863	-	-	-	-	-
Stage 2	785	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	0.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	-	878	1412
HCM Lane V/C Ratio	-	-	0.009	0.009
HCM Control Delay (s)	-	-	0	9.1
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

Saratoga Retail Phase 2
 10: Saratoga Way & Arrowhead Dr

Near Term (2026) Conditions
 AM Peak

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		W	↑	↑	
Traffic Vol, veh/h	15	0	0	138	204	1
Future Vol, veh/h	15	0	0	138	204	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	0	0	150	222	1

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	372	222	223	0	-	0
Stage 1	222	-	-	-	-	-
Stage 2	150	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	629	818	1346	-	-	-
Stage 1	815	-	-	-	-	-
Stage 2	878	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	629	818	1346	-	-	-
Mov Cap-2 Maneuver	629	-	-	-	-	-
Stage 1	815	-	-	-	-	-
Stage 2	878	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1346	-	629	-	-
HCM Lane V/C Ratio	-	-	0.026	-	-
HCM Control Delay (s)	0	-	10.9	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	6:50	6:50	6:50	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	9107	9307	8954	9332	9077	9360	9155
Vehs Exited	8821	9096	8803	9165	8854	9174	9033
Starting Vehs	387	473	476	441	465	432	486
Ending Vehs	673	684	627	608	688	618	608
Travel Distance (mi)	4946	5027	4842	5042	4893	5041	5010
Travel Time (hr)	866.0	792.4	885.1	696.6	819.4	732.2	946.4
Total Delay (hr)	708.8	632.7	731.0	536.8	664.3	571.6	786.8
Total Stops	20937	20601	20585	20673	20365	19826	20837
Fuel Used (gal)	364.2	351.2	366.5	329.2	352.6	337.1	383.6

Summary of All Intervals

Run Number	7	8	9	Avg
Start Time	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	9040	9281	9243	9184
Vehs Exited	8900	9031	9015	8988
Starting Vehs	490	402	419	440
Ending Vehs	630	652	647	634
Travel Distance (mi)	4960	4989	5011	4976
Travel Time (hr)	828.5	705.0	823.9	809.6
Total Delay (hr)	671.0	546.2	664.6	651.4
Total Stops	20036	19577	20203	20360
Fuel Used (gal)	356.4	328.2	356.7	352.6

Interval #0 Information Seeding

Start Time	6:50
End Time	7:00
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	2388	2401	2330	2403	2248	2376	2354
Vehs Exited	2228	2344	2259	2345	2240	2283	2275
Starting Vehs	387	473	476	441	465	432	486
Ending Vehs	547	530	547	499	473	525	565
Travel Distance (mi)	1282	1289	1244	1280	1246	1259	1289
Travel Time (hr)	126.6	120.6	139.1	113.7	129.9	114.8	148.7
Total Delay (hr)	85.8	79.4	99.3	73.0	90.4	74.5	107.8
Total Stops	4869	4801	4876	4495	4816	4588	5284
Fuel Used (gal)	72.0	71.2	73.7	69.3	72.1	68.9	77.0

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	2324	2307	2368	2345
Vehs Exited	2328	2224	2305	2281
Starting Vehs	490	402	419	440
Ending Vehs	486	485	482	513
Travel Distance (mi)	1299	1249	1276	1271
Travel Time (hr)	126.8	113.3	133.5	126.7
Total Delay (hr)	85.7	73.6	93.0	86.2
Total Stops	4834	4599	5058	4818
Fuel Used (gal)	72.7	67.7	73.5	71.8

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15
Volumes adjusted by PHF, Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	2307	2449	2378	2537	2456	2438	2403
Vehs Exited	2191	2362	2261	2406	2306	2411	2394
Starting Vehs	547	530	547	499	473	525	565
Ending Vehs	663	617	664	630	623	552	574
Travel Distance (mi)	1245	1298	1233	1337	1257	1290	1310
Travel Time (hr)	201.6	161.1	206.8	158.8	178.2	166.5	193.6
Total Delay (hr)	162.2	119.7	167.4	116.3	138.2	125.3	151.9
Total Stops	5308	5185	5480	5514	5056	5139	5152
Fuel Used (gal)	87.7	80.5	88.9	80.7	82.7	81.7	88.4

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15
Volumes adjusted by PHF, Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	2362	2427	2414	2418
Vehs Exited	2247	2341	2312	2322
Starting Vehs	486	485	482	513
Ending Vehs	601	571	584	604
Travel Distance (mi)	1255	1279	1294	1280
Travel Time (hr)	175.1	160.7	180.0	178.2
Total Delay (hr)	135.0	119.7	138.7	137.4
Total Stops	4868	4896	4982	5161
Fuel Used (gal)	82.3	79.8	84.1	83.7

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	2274	2240	2039	2288	2271	2256	2317
Vehs Exited	2277	2242	2067	2300	2242	2246	2194
Starting Vehs	663	617	664	630	623	552	574
Ending Vehs	660	615	636	618	652	562	697
Travel Distance (mi)	1229	1226	1155	1262	1235	1239	1217
Travel Time (hr)	246.1	224.0	249.4	192.3	227.0	206.8	262.8
Total Delay (hr)	206.8	185.1	212.8	152.3	187.8	167.4	223.8
Total Stops	5415	5331	5012	5492	5297	4987	5146
Fuel Used (gal)	97.5	92.9	96.8	86.9	94.0	88.9	100.3

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	2203	2284	2236	2239
Vehs Exited	2175	2223	2257	2220
Starting Vehs	601	571	584	604
Ending Vehs	629	632	563	625
Travel Distance (mi)	1216	1231	1222	1223
Travel Time (hr)	237.3	200.2	222.2	226.8
Total Delay (hr)	198.7	161.3	183.3	187.9
Total Stops	5045	4936	4961	5166
Fuel Used (gal)	94.9	87.2	92.4	93.2

Interval #4 Information

Start Time	7:45
End Time	8:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	2138	2217	2207	2104	2102	2290	2081
Vehs Exited	2125	2148	2216	2114	2066	2234	2170
Starting Vehs	660	615	636	618	652	562	697
Ending Vehs	673	684	627	608	688	618	608
Travel Distance (mi)	1189	1215	1209	1163	1155	1253	1194
Travel Time (hr)	291.7	286.8	289.8	231.9	284.3	244.1	341.4
Total Delay (hr)	254.1	248.5	251.4	195.2	247.8	204.4	303.4
Total Stops	5345	5284	5217	5172	5196	5112	5255
Fuel Used (gal)	107.0	106.6	107.1	92.2	103.8	97.6	117.9

Interval #4 Information

Start Time	7:45
End Time	8:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	2151	2263	2225	2174
Vehs Exited	2150	2243	2141	2160
Starting Vehs	629	632	563	625
Ending Vehs	630	652	647	634
Travel Distance (mi)	1191	1231	1220	1202
Travel Time (hr)	289.4	230.8	288.2	277.8
Total Delay (hr)	251.7	191.7	249.5	239.8
Total Stops	5289	5146	5202	5223
Fuel Used (gal)	106.5	93.6	106.8	103.9

1: El Dorado Hills Blvd & Saratoga Way/Park Drive Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	8.8	2.8	16.5	0.0	0.0	0.0	29.9	125.6	5.6
Denied Del/Veh (s)	0.0	0.0	0.1	194.1	193.1	196.7	0.0	0.0	0.0	535.1	528.4	531.3
Total Delay (hr)	2.9	3.7	2.7	13.4	1.5	6.1	2.5	10.2	0.3	6.0	12.3	0.2
Total Del/Veh (s)	64.0	70.5	45.4	338.1	117.7	84.0	71.1	30.3	22.4	153.8	74.4	22.2
Stop Delay (hr)	2.6	3.2	2.6	13.3	1.4	5.7	2.2	6.7	0.2	5.8	11.0	0.2
Stop Del/Veh (s)	58.9	62.5	42.7	334.1	110.0	79.2	63.2	20.1	15.4	148.6	66.8	19.7

1: El Dorado Hills Blvd & Saratoga Way/Park Drive Performance by movement

Movement	All
Denied Delay (hr)	189.3
Denied Del/Veh (s)	192.8
Total Delay (hr)	61.7
Total Del/Veh (s)	70.4
Stop Delay (hr)	55.0
Stop Del/Veh (s)	62.8

2: El Dorado Hills Blvd & US-50 WB Ramps/Saratoga Way Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.2	0.1	3.6	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	1.1	1.0	0.1	2.6	2.6	0.8	13.1	5.5	1.2	1.4	37.5	0.9
Total Del/Veh (s)	35.0	36.3	2.9	53.2	56.3	65.0	44.5	16.4	14.4	325.5	177.3	19.1
Stop Delay (hr)	1.0	0.9	0.0	2.4	2.3	0.8	10.3	2.8	0.7	1.4	34.7	0.6
Stop Del/Veh (s)	32.3	32.0	0.0	48.6	50.4	61.4	34.8	8.4	8.0	316.8	164.0	12.4

2: El Dorado Hills Blvd & US-50 WB Ramps/Saratoga Way Performance by movement

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.2
Total Delay (hr)	67.9
Total Del/Veh (s)	58.0
Stop Delay (hr)	57.8
Stop Del/Veh (s)	49.4

3: Latrobe Road & US 50 EB Ramps Performance by movement

Movement	EBR	WBR	NBT	NBR	SBL	SBT	All
Denied Delay (hr)	0.2	0.1	0.0	0.0	0.0	0.0	0.2
Denied Del/Veh (s)	1.1	0.4	0.0	0.0	0.0	0.0	0.2
Total Delay (hr)	1.8	0.2	6.5	2.0	2.5	2.9	15.8
Total Del/Veh (s)	10.8	1.5	11.4	12.3	56.0	12.4	12.0
Stop Delay (hr)	1.2	0.0	1.3	0.4	2.1	0.6	5.6
Stop Del/Veh (s)	7.3	0.0	2.3	2.6	47.8	2.4	4.2

4: Latrobe Road & Town Center Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.4	0.0	0.0	0.1	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	3.5	0.2	0.3	4.3	0.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	8.2	0.7	0.4	1.5	0.2	13.0	0.1	65.9	0.5	10.3	4.6	0.0
Total Del/Veh (s)	78.4	59.5	20.8	72.8	81.8	63.8	178.8	149.3	13.1	68.0	19.2	3.1
Stop Delay (hr)	7.6	0.6	0.4	1.4	0.2	12.4	0.1	54.2	0.4	9.0	3.2	0.0
Stop Del/Veh (s)	73.0	56.1	19.6	67.2	75.6	60.8	156.3	122.8	10.7	59.2	13.1	1.8

4: Latrobe Road & Town Center Blvd Performance by movement

Movement	All
Denied Delay (hr)	0.9
Denied Del/Veh (s)	0.7
Total Delay (hr)	105.4
Total Del/Veh (s)	84.6
Stop Delay (hr)	89.5
Stop Del/Veh (s)	71.7

5: Latrobe Road & White Rock Road Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	19.6	6.4	0.9	6.1	4.1	1.7	2.1	25.2	3.9	4.6	6.5	0.9
Total Del/Veh (s)	170.0	47.6	35.8	62.1	53.7	30.4	78.8	79.2	35.4	72.1	40.7	15.1
Stop Delay (hr)	19.0	5.3	0.8	5.5	3.5	1.6	1.9	23.0	3.6	4.2	4.8	0.7
Stop Del/Veh (s)	164.6	39.9	32.0	55.8	46.3	27.9	74.6	72.3	33.4	64.8	30.3	12.6

5: Latrobe Road & White Rock Road Performance by movement

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.0
Total Delay (hr)	81.9
Total Del/Veh (s)	66.0
Stop Delay (hr)	74.0
Stop Del/Veh (s)	59.7

7: Driveway/Post St & White Rock Road Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	8.1	0.6	9.1
Denied Del/Veh (s)	0.0	0.0	0.0	2.9	0.5	0.4	0.1	0.1	0.1	155.8	146.6	155.4
Total Delay (hr)	5.2	5.3	0.1	0.7	6.0	1.0	0.7	0.2	0.1	8.4	0.4	6.1
Total Del/Veh (s)	76.4	22.8	10.0	66.1	37.6	19.3	48.0	32.9	12.7	169.3	119.2	108.7
Stop Delay (hr)	4.7	3.5	0.0	0.7	4.4	0.7	0.7	0.1	0.1	8.1	0.4	5.7
Stop Del/Veh (s)	69.8	15.3	5.9	59.2	27.5	15.0	45.6	30.2	12.6	161.9	109.8	102.1

7: Driveway/Post St & White Rock Road Performance by movement

Movement	All
Denied Delay (hr)	17.9
Denied Del/Veh (s)	27.1
Total Delay (hr)	34.1
Total Del/Veh (s)	51.5
Stop Delay (hr)	29.1
Stop Del/Veh (s)	44.0

Total Zone Performance

Denied Delay (hr)	208.5
Denied Del/Veh (s)	125.6
Total Delay (hr)	366.9
Total Del/Veh (s)	890.1
Stop Delay (hr)	310.9
Stop Del/Veh (s)	754.3

Intersection: 1: El Dorado Hills Blvd & Saratoga Way/Park Drive

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	TR	L	T	T	TR	L	T	TR
Maximum Queue (ft)	175	333	225	504	504	248	315	326	312	125	355	334
Average Queue (ft)	117	234	149	357	337	111	173	186	190	111	322	251
95th Queue (ft)	208	374	270	626	608	204	278	292	297	165	362	408
Link Distance (ft)		324		482	482		778	778	778		309	309
Upstream Blk Time (%)		10		38	29						75	14
Queuing Penalty (veh)		54		0	0						0	0
Storage Bay Dist (ft)	150		200			250				100		
Storage Blk Time (%)	1	28	8			0	1			34	63	
Queuing Penalty (veh)	6	81	27			0	2			147	128	

Intersection: 2: El Dorado Hills Blvd & US-50 WB Ramps/Saratoga Way

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB	SB
Directions Served	L	LT	L	LT	TR	L	L	T	T	TR	L	T
Maximum Queue (ft)	93	159	153	174	244	438	454	249	258	312	224	819
Average Queue (ft)	51	80	78	96	117	289	295	136	143	164	50	775
95th Queue (ft)	86	133	139	166	198	409	416	217	225	262	192	912
Link Distance (ft)	1293	1293			621	641	641	641	641	641		778
Upstream Blk Time (%)												45
Queuing Penalty (veh)												187
Storage Bay Dist (ft)			150	150							200	
Storage Blk Time (%)			0	2	4						0	85
Queuing Penalty (veh)			0	2	9						0	16

Intersection: 2: El Dorado Hills Blvd & US-50 WB Ramps/Saratoga Way

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	810	803	204
Average Queue (ft)	687	344	58
95th Queue (ft)	972	738	148
Link Distance (ft)	778	778	
Upstream Blk Time (%)	7	1	
Queuing Penalty (veh)	28	4	
Storage Bay Dist (ft)			200
Storage Blk Time (%)		2	0
Queuing Penalty (veh)		3	0

Intersection: 3: Latrobe Road & US 50 EB Ramps

Movement	EB	EB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	R	R	T	T	T	R	L	T	T	T	T
Maximum Queue (ft)	168	85	407	488	489	278	168	248	106	93	68
Average Queue (ft)	76	41	80	107	144	85	76	78	34	28	12
95th Queue (ft)	128	70	243	300	332	200	134	179	84	72	44
Link Distance (ft)	1211		572	572	572			641	641	641	641
Upstream Blk Time (%)			0	0	0						
Queuing Penalty (veh)			0	0	1						
Storage Bay Dist (ft)		450				275	575				
Storage Blk Time (%)					0	0					
Queuing Penalty (veh)					2	0					

Intersection: 4: Latrobe Road & Town Center Blvd

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB
Directions Served	L	L	T	TR	L	TR	R	L	L	T	T	T
Maximum Queue (ft)	327	344	300	120	125	488	490	3	71	878	887	881
Average Queue (ft)	157	217	41	49	90	294	297	0	4	748	775	786
95th Queue (ft)	284	327	186	101	169	466	468	3	40	1007	998	994
Link Distance (ft)			778	778		526	526			839	839	839
Upstream Blk Time (%)						3	3			7	8	17
Queuing Penalty (veh)						0	0			32	37	76
Storage Bay Dist (ft)	350	350			100			225	225			
Storage Blk Time (%)	0	1	0		2	59				52		
Queuing Penalty (veh)	0	0	2		9	41				1		

Intersection: 4: Latrobe Road & Town Center Blvd

Movement	NB	SB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	T	R
Maximum Queue (ft)	882	333	342	426	212	205	43
Average Queue (ft)	259	226	237	174	106	101	10
95th Queue (ft)	844	327	333	342	187	185	33
Link Distance (ft)	839			572	572	572	572
Upstream Blk Time (%)	4			0			
Queuing Penalty (veh)	18			1			
Storage Bay Dist (ft)		325	325				
Storage Blk Time (%)		0	1	1			
Queuing Penalty (veh)		1	3	4			

Intersection: 5: Latrobe Road & White Rock Road

Movement	EB	EB	EB	EB	B40	B40	WB	WB	WB	WB	WB	NB
Directions Served	L	L	T	TR	T	T	L	L	T	T	R	L
Maximum Queue (ft)	337	346	415	341	590	380	180	188	199	296	263	278
Average Queue (ft)	263	289	310	183	266	25	129	138	102	123	103	116
95th Queue (ft)	393	404	497	305	710	206	189	195	194	219	203	273
Link Distance (ft)			346	346	559	559				315	315	
Upstream Blk Time (%)	1	19	38	1	19	0				0	0	0
Queuing Penalty (veh)	0	0	203	4	102	3				2	1	0
Storage Bay Dist (ft)	325	325					175	175	175			270
Storage Blk Time (%)	8	33	22				0	4	2	1		0
Queuing Penalty (veh)	20	84	101				1	5	3	4		1

Intersection: 5: Latrobe Road & White Rock Road

Movement	NB	NB	NB	NB	NB	B80	B80	B25	B25	SB	SB	SB
Directions Served	T	T	T	T	R	T	T	T	T	L	L	T
Maximum Queue (ft)	373	352	350	362	66	299	325	392	400	177	239	302
Average Queue (ft)	282	263	260	222	49	139	159	146	163	79	89	130
95th Queue (ft)	417	373	359	401	60	384	411	499	533	148	178	251
Link Distance (ft)	278	278	278	278		247	247	501	501			839
Upstream Blk Time (%)	25	20	20	11		18	24	4	14			
Queuing Penalty (veh)	0	0	0	0		0	0	0	0			
Storage Bay Dist (ft)					25					225	225	
Storage Blk Time (%)	27			20	40					0	0	1
Queuing Penalty (veh)	23			80	118					0	1	4

Intersection: 5: Latrobe Road & White Rock Road

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	292	162	179
Average Queue (ft)	135	18	39
95th Queue (ft)	248	98	120
Link Distance (ft)	839	839	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			250
Storage Blk Time (%)		0	0
Queuing Penalty (veh)		0	0

Intersection: 7: Driveway/Post St & White Rock Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	104	350	361	124	144	448	320	110	70	75	447
Average Queue (ft)	100	255	233	19	49	237	136	42	22	73	401
95th Queue (ft)	118	383	377	81	122	395	259	88	54	79	526
Link Distance (ft)		315	315			585	585	216	216		408
Upstream Blk Time (%)		6	3			0	0				73
Queuing Penalty (veh)		38	17			0	0				0
Storage Bay Dist (ft)	80			110	120					50	
Storage Blk Time (%)	53	9	20	0	0	33				80	8
Queuing Penalty (veh)	237	24	5	0	0	14				182	15

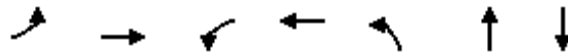
Zone Summary

Zone wide Queuing Penalty: 2215

Saratoga Retail Phase 2
 6: Windfield Way/Town Center Blvd & White Rock Rd

Near Term (2026) Conditions

PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	16	879	141	491	298	382	43
v/c Ratio	0.05	0.72	0.63	0.25	0.70	0.50	0.25
Control Delay	30.9	33.8	59.9	14.8	47.6	5.1	27.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.9	33.8	59.9	14.8	47.6	5.1	27.2
Queue Length 50th (ft)	6	226	80	75	161	5	8
Queue Length 95th (ft)	33	#549	211	205	389	63	47
Internal Link Dist (ft)		327		554		213	278
Turn Bay Length (ft)	195		190		155		
Base Capacity (vph)	451	1786	430	2690	746	1192	368
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.49	0.33	0.18	0.40	0.32	0.12





















Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Saratoga Retail Phase 2
6: Windfield Way/Town Center Blvd & White Rock Rd

Near Term (2026) Conditions

PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	709	99	130	452	0	274	11	340	0	13	27
Future Volume (veh/h)	15	709	99	130	452	0	274	11	340	0	13	27
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	16	771	108	141	491	0	298	12	370	0	14	29
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	441	1208	169	176	1973	0	351	15	474	91	28	58
Arrive On Green	0.39	0.39	0.39	0.10	0.56	0.00	0.20	0.31	0.31	0.00	0.05	0.05
Sat Flow, veh/h	902	3119	437	1774	3632	0	1774	50	1541	997	542	1123
Grp Volume(v), veh/h	16	437	442	141	491	0	298	0	382	0	0	43
Grp Sat Flow(s),veh/h/ln	902	1770	1786	1774	1770	0	1774	0	1591	997	0	1665
Q Serve(g_s), s	0.9	15.8	15.8	6.1	5.6	0.0	12.7	0.0	17.2	0.0	0.0	2.0
Cycle Q Clear(g_c), s	0.9	15.8	15.8	6.1	5.6	0.0	12.7	0.0	17.2	0.0	0.0	2.0
Prop In Lane	1.00		0.24	1.00		0.00	1.00		0.97	1.00		0.67
Lane Grp Cap(c), veh/h	441	685	692	176	1973	0	351	0	490	91	0	86
V/C Ratio(X)	0.04	0.64	0.64	0.80	0.25	0.00	0.85	0.00	0.78	0.00	0.00	0.50
Avail Cap(c_a), veh/h	584	967	975	460	3102	0	798	0	490	235	0	326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	15.0	19.6	19.6	34.7	9.0	0.0	30.4	0.0	24.8	0.0	0.0	36.3
Incr Delay (d2), s/veh	0.0	1.2	1.2	3.2	0.1	0.0	5.7	0.0	7.2	0.0	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	7.9	8.0	3.2	2.8	0.0	6.8	0.0	8.5	0.0	0.0	0.9
LnGrp Delay(d),s/veh	15.1	20.9	20.9	37.9	9.0	0.0	36.2	0.0	32.0	0.0	0.0	38.0
LnGrp LOS	B	C	C	D	A		D		C			D
Approach Vol, veh/h		895			632			680				43
Approach Delay, s/veh		20.8			15.5			33.8				38.0
Approach LOS		C			B			C				D
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	13.4	36.5		28.8		49.9	20.2	8.7				
Change Period (Y+Rc), s	5.6	6.0		4.6		6.0	4.6	4.6				
Max Green Setting (Gmax), s	20.4	43.0		15.4		69.0	35.4	15.4				
Max Q Clear Time (g_c+I1), s	8.1	17.8		19.2		7.6	14.7	4.0				
Green Ext Time (p_c), s	0.0	12.6		0.0		17.5	0.9	0.1				
Intersection Summary												
HCM 2010 Ctrl Delay			23.6									
HCM 2010 LOS			C									
Notes												

User approved pedestrian interval to be less than phase max green.

Saratoga Retail Phase 2
 8: Saratoga Way & Mammouth Way/Walgreens Dwy

Near Term (2026) Conditions

PM Peak

Intersection												
Int Delay, s/veh	3.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕			↕	
Traffic Vol, veh/h	87	3	4	0	4	32	2	430	0	16	133	69
Future Vol, veh/h	87	3	4	0	4	32	2	430	0	16	133	69
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	95	3	4	0	4	35	2	467	0	17	145	75

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	708	689	182	693	726	467	220	0	0	467	0	0
Stage 1	217	217	-	472	472	-	-	-	-	-	-	-
Stage 2	491	472	-	221	254	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	350	369	861	358	351	596	1349	-	-	1094	-	-
Stage 1	785	723	-	573	559	-	-	-	-	-	-	-
Stage 2	559	559	-	781	697	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	322	362	861	349	344	596	1349	-	-	1094	-	-
Mov Cap-2 Maneuver	322	362	-	349	344	-	-	-	-	-	-	-
Stage 1	784	710	-	572	558	-	-	-	-	-	-	-
Stage 2	522	558	-	760	684	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	20.6		12		0		0.6	
HCM LOS	C		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1349	-	-	332	551	1094	-
HCM Lane V/C Ratio	0.002	-	-	0.308	0.071	0.016	-
HCM Control Delay (s)	7.7	-	-	20.6	12	8.3	0
HCM Lane LOS	A	-	-	C	B	A	A
HCM 95th %tile Q(veh)	0	-	-	1.3	0.2	0	-

Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	13	419	8	33	104
Future Vol, veh/h	6	13	419	8	33	104
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	14	455	9	36	113

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	645	460	0	0	464	0
Stage 1	460	-	-	-	-	-
Stage 2	185	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	437	601	-	-	1097	-
Stage 1	636	-	-	-	-	-
Stage 2	847	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	423	601	-	-	1097	-
Mov Cap-2 Maneuver	423	-	-	-	-	-
Stage 1	636	-	-	-	-	-
Stage 2	819	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.9	0	2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	423	601	1097
HCM Lane V/C Ratio	-	-	0.015	0.024	0.033
HCM Control Delay (s)	-	-	13.6	11.1	8.4
HCM Lane LOS	-	-	B	B	A
HCM 95th %tile Q(veh)	-	-	0	0.1	0.1

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		W	↑	↑	
Traffic Vol, veh/h	15	1	0	412	99	11
Future Vol, veh/h	15	1	0	412	99	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	1	0	448	108	12

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	562	114	120	0	-	0
Stage 1	114	-	-	-	-	-
Stage 2	448	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	488	939	1468	-	-	-
Stage 1	911	-	-	-	-	-
Stage 2	644	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	488	939	1468	-	-	-
Mov Cap-2 Maneuver	488	-	-	-	-	-
Stage 1	911	-	-	-	-	-
Stage 2	644	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1468	-	503	-	-
HCM Lane V/C Ratio	-	-	0.035	-	-
HCM Control Delay (s)	0	-	12.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

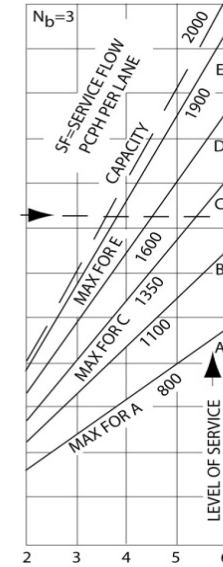
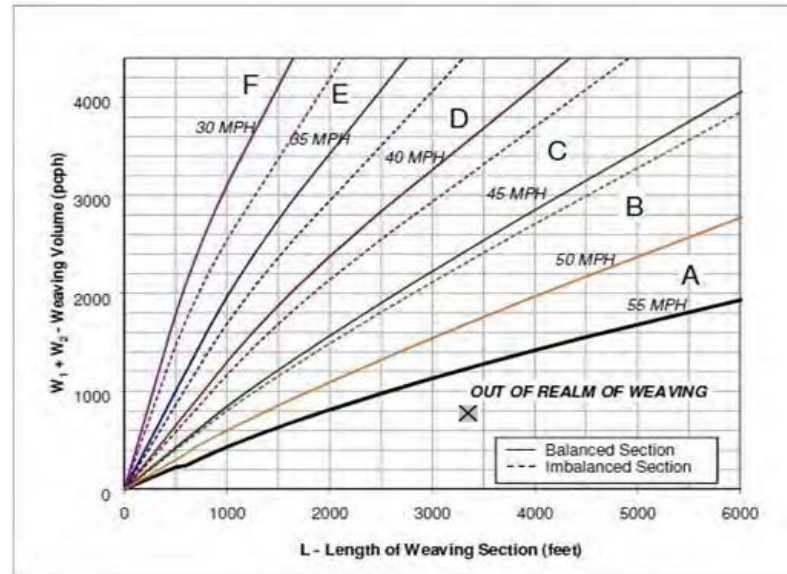
WB US-50, East of El Dorado Hills Blvd Off Ramp, Near-Term (2026) Conditons (PM)

Number of Entering Mainline Lanes	Nb	3
Number of Lanes in Weaving Section	N	4
Length of Weaving Section (feet)	L	3425

Nb=NUMBER OF BASIC LANES ON APPROACH
SEE CHART FOR DEFINITION OF OTHER TERMS

Total Weaving Section (V)		On ramp to Mainline (W1)		Mainline to Off ramp (W2)	
Volume (vph)	3,119	Volume (vph)	392	Volume (vph)	285
Truck Percentage	2%	Truck Percentage	2%	Truck Percentage	2%
PCE for Trucks	1.5	PCE for Trucks	1.5	PCE for Trucks	1.5
Volume (pcph)	3,150	Volume (pcph)	396	Volume (pcph)	288

W1 + W2	684
In between	
Speed 1	50
Speed 2	55
Interpolated Weaving Speed (Sw, mph)	54.8
Weaving Intensity Factor (k)	1.00
Service Volume ((SV, pcph)	
$SV = (1/N) * [V + (k-1) * \min(W1, W2)]$	788
Level of Service (LOS)	A



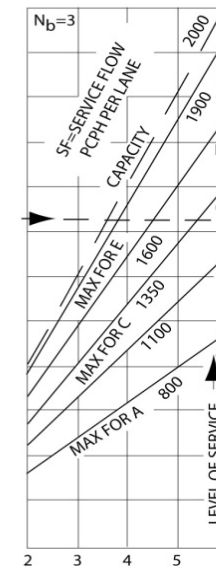
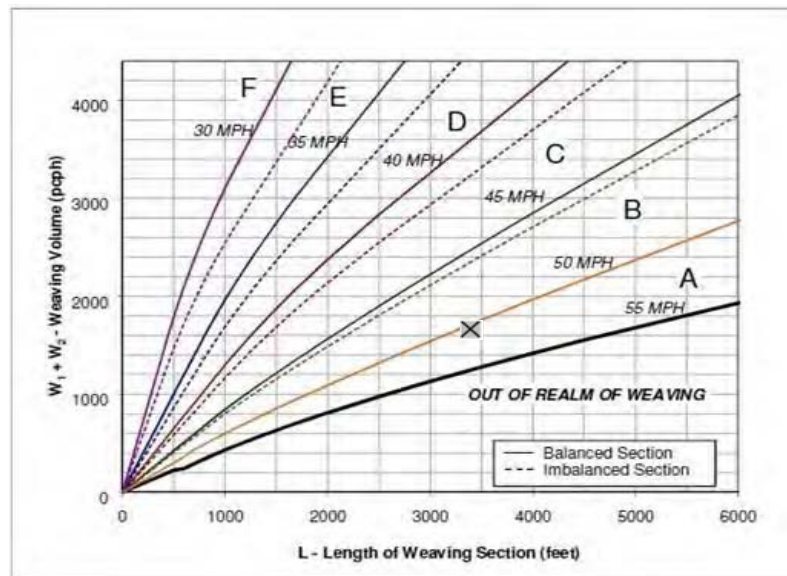
WB US-50, East of El Dorado Hills Blvd Off Ramp, Near-Term (2026) Conditons (AM)

Number of Entering Mainline Lanes	N _b	3
Number of Lanes in Weaving Section	N	4
Length of Weaving Section (feet)	L	3425

N_b=NUMBER OF BASIC LANES ON APPROACH
SEE CHART FOR DEFINITION OF OTHER TERMS

Total Weaving Section (V)		On ramp to Mainline (W1)		Mainline to Off ramp (W2)	
Volume (vph)	3,638	Volume (vph)	1,054	Volume (vph)	513
Truck Percentage	2%	Truck Percentage	2%	Truck Percentage	2%
PCE for Trucks	1.5	PCE for Trucks	1.5	PCE for Trucks	1.5
Volume (pcph)	3,674	Volume (pcph)	1,065	Volume (pcph)	518

W1 + W2	1,583
In between	
Speed 1	45
Speed 2	50
Interpolated Weaving Speed (S _w , mph)	46.8
Weaving Intensity Factor (k)	1.40
Service Volume ((SV, pcph)	
$SV = (1/N) * [V + (k-1) * \min(W1, W2)]$	970
Level of Service (LOS)	B



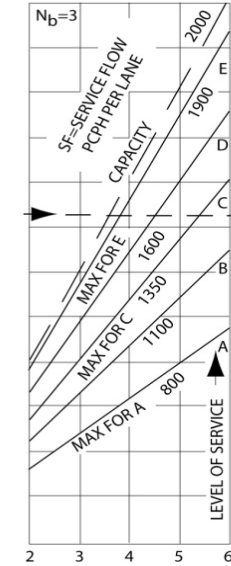
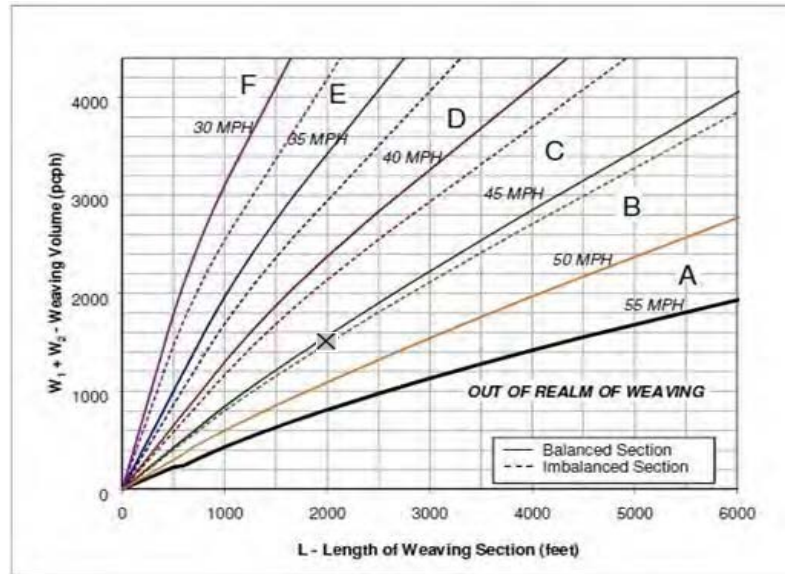
EB US-50, East of Latrobe Rd On Ramp, Near-Term (2026) Conditons (PM)

Number of Entering Mainline Lanes	Nb	3
Number of Lanes in Weaving Section	N	4
Length of Weaving Section (feet)	L	2000

Nb=NUMBER OF BASIC LANES ON APPROACH
SEE CHART FOR DEFINITION OF OTHER TERMS

Total Weaving Section (V)		On ramp to Mainline (W1)		Mainline to Off ramp (W2)	
Volume (vph)	3,789	Volume (vph)	810	Volume (vph)	706
Truck Percentage	4%	Truck Percentage	2%	Truck Percentage	2%
PCE for Trucks	1.5	PCE for Trucks	1.5	PCE for Trucks	1.5
Volume (pcph)	3,865	Volume (pcph)	818	Volume (pcph)	713

W1 + W2	1,531
In between	
Speed 1	45
Speed 2	50
Interpolated Weaving Speed (Sw, mph)	45.4
Weaving Intensity Factor (k)	1.60
Service Volume ((SV, pcph)	
$SV = (1/N) * [V + (k-1) * \min(W1, W2)]$	1,073
Level of Service (LOS)	D



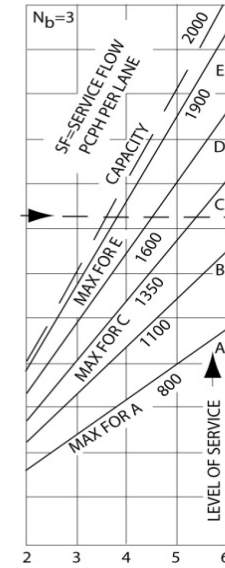
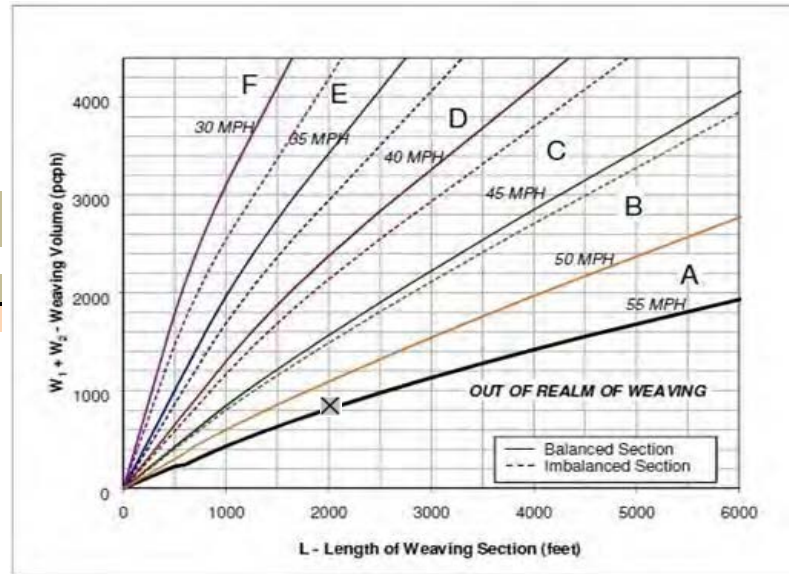
EB US-50, East of Latrobe Rd On Ramp, Near Term (2026) Conditons (AM)

Number of Entering Mainline Lanes	N _b	3
Number of Lanes in Weaving Section	N	4
Length of Weaving Section (feet)	L	2000

N_b=NUMBER OF BASIC LANES ON APPROACH
SEE CHART FOR DEFINITION OF OTHER TERMS

Total Weaving Section (V)		On ramp to Mainline (W1)		Mainline to Off ramp (W2)	
Volume (vph)	1,993	Volume (vph)	518	Volume (vph)	272
Truck Percentage	4%	Truck Percentage	2%	Truck Percentage	2%
PCE for Trucks	1.5	PCE for Trucks	1.5	PCE for Trucks	1.5
Volume (pcph)	2,033	Volume (pcph)	523	Volume (pcph)	275

W1 + W2	798
In between	
Speed 1	50
Speed 2	55
Interpolated Weaving Speed (S _w , mph)	50.0
Weaving Intensity Factor (k)	1.00
Service Volume ((SV, pcph)	
$SV = (1/N) * [V + (k-1) * \min(W1, W2)]$	508
Level of Service (LOS)	A



Segment Inputs				Near-Term Conditions														
				Flow Inputs		AM LOS Performance Measures					PM LOS Performance Measures							
	Length	Number of Lanes	Interchange Density	PM		V _p	FFS	S	D	LOS	V _p	FFS	S	D	LOS			
				AM Peak	Peak											(pc/h/ln)	(mi/h)	(mi/h)
	(ft)	(N)	(l/mi)	(veh/h)	(veh/h)	(pc/h/ln)	(mi/h)	(mi/h)	(pc/mi/ln)		(pc/h/ln)	(mi/h)	(mi/h)	(pc/mi/ln)				
West EastD	West of Latrobe Rd SB Off Ramp	6690	3	0.33	2,853	4,086	1044.03	74.12	75	74.9785	13.924	B	1495.239	74.12	75	72.285	20.7	C
	Latrobe Rd NB Off Ramp to Latrobe Rd On Ramp	1990	3	0.50	1,475	2,979	539.764	73.6	75	72.6552	7.4291	A	1090.141	73.6	75	74.9101	14.553	B
	El Dorado Hills Blvd Off Ramp to El Dorado Hills Blvd On Ramp	3565	2	0.50	3,125	2,834	1715.35	73.6	75	69.3351	24.74	C	1555.62	73.6	75	71.5825	21.732	C
	West of El Dorado Hills Blvd On Ramp	5890	3	0.33	4,295	4,277	1571.72	74.12	75	71.3816	22.019	C	1565.134	74.12	75	71.4645	21.901	C
Universal Inputs:																		
	PHF	0.92																
	(P _T)	2%																
	f _{HV}	0.99009901																

Near Term Conditions																																			
Segment Inputs			AM Flow Inputs			AM LOS Performance Measures											PM Flow Inputs			PM LOS Performance Measures															
	Number of Lanes	Number of Ramp Lanes	Length of Acceleration Lane (L _a)	Downstream	Upstream	Ramp	v _D	v _F	v _R	v _F /S _{FR}	P _{FM}	v ₁₂	Capacity	v ₃	v _{12a}	v/c	D	LOS	Downstream	Upstream	Ramp	v _D	v _F	v _R	v _F /S _{FR}	P _{FM}	v ₁₂	Capacity	v ₃	v _{12a}	v/c	D	LOS		
				Volume (D)	Volume (F)	Volume (R)													Volume (D)	Volume (F)	Volume (R)														
	(N)		(ft)	(veh/h)	(veh/h)	(veh/h)	(pc/h)	(pc/h)	(pc/h)			(pc/h/ln)	(veh/h)						(veh/h)	(veh/h)	(veh/h)	(pc/h)	(pc/hr)	(pc/h)			(pc/h/ln)	(veh/h)							
≥ ∞ El Dorado Hills Blvd On Ramp	2	1	795	4295	3125	1170	4715	3431	1284	98	1	3430.7	4800	0	2573	3431	0.9823	36.678	E	4277	2834	1443	4695	3111	1584	89	1	3111.2	4800	0	2333	3111	0.9782	36.386	E
Universal Inputs: Length 1500 (ft) S _{FR} 70 (mi/h) S _{RA} 35 (mi/h) PHF 0.92 P _i 2% P _{uv} 0.99009901																																			

Segment Inputs				Near Term Conditions																														
	Number of Lanes	Number of Ramp Lanes	Length of Deceleration Lane (L _D)		AM Flow Inputs										PM Flow Inputs			PM LOS Performance Measures																
			L _{EQ} (ft)	Lane (L _D) (ft)	Downstream Volume (veh/h)	Upstream Volume (veh/h)	Ramp Volume (veh/h)	v _D (pc/h/ln)	v _F (pc/h/ln)	v _R (pc/h/ln)	P _{FD}	v ₁₂ (pc/h/ln)	Capacity	v ₃	v _{12a}	v/c	D	LOS	Downstream Volume (D) (veh/h)	Upstream Volume (F) (veh/h)	Ramp Volume (R) (veh/h)	v _D (pc/h/ln)	v _F (pc/h/ln)	v _R (pc/h/ln)	P _{FD}	v ₁₂ (pc/h/ln)	Capacity	v ₃	v _{12a}	v/c	D	LOS		
EB Latrobe SB Off Ramp	3	1	993	140	1738	2853	1115	294.446	3194.1	1248.3	0.5928	2401.8	7200	396	1801	2402	0.4436	23.647	C	3691	4277	586	583.293	4788.4	656.07	0.6024	3145.3	7200	822	2359	3145	0.6651	30.041	D
Latrobe NB Off Ramp	3	1	-	140	1475	1738	263	-	1945.8	294.45	0.6978	1446.8	7200	499	1085	1447	0.2703	15.434	B	3170	3691	521	-	4132.3	583.29	0.6299	2818.7	7200	1314	2114	2819	0.5739	27.233	C

Universal Inputs:
 Leng 1500 (ft)
 S_{FF} 70 (mi/h)
 S_{FR} 35 (mi/h)
 PHF 0.92
 P_u 6%
 P_{uv} 0.970873786

Attachment C

Analysis Worksheets for Near-Term (2026) Plus Project Conditions

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	6:50	6:50	6:50	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	7950	8039	8086	8069	7940	7982	8030
Vehs Exited	7862	7984	7981	7973	7814	7929	7951
Starting Vehs	371	336	332	342	310	321	351
Ending Vehs	459	391	437	438	436	374	430
Travel Distance (mi)	4649	4719	4752	4732	4615	4676	4705
Travel Time (hr)	477.7	448.8	447.0	502.8	482.7	399.7	456.6
Total Delay (hr)	330.8	299.8	297.1	353.6	336.6	252.3	308.1
Total Stops	14833	15165	14755	15222	14635	14853	14563
Fuel Used (gal)	264.1	259.7	259.8	272.6	263.6	247.2	259.9

Summary of All Intervals

Run Number	7	8	9	Avg
Start Time	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	7961	8109	8048	8017
Vehs Exited	7849	8043	7993	7937
Starting Vehs	293	317	370	330
Ending Vehs	405	383	425	417
Travel Distance (mi)	4654	4752	4697	4695
Travel Time (hr)	463.7	501.0	522.7	470.3
Total Delay (hr)	316.7	351.0	374.3	322.0
Total Stops	14440	15256	14763	14850
Fuel Used (gal)	259.5	272.2	276.1	263.5

Interval #0 Information Seeding

Start Time	6:50
End Time	7:00
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	2001	2025	1970	2009	1971	1906	1959
Vehs Exited	1994	1997	1937	1952	1904	1906	1968
Starting Vehs	371	336	332	342	310	321	351
Ending Vehs	378	364	365	399	377	321	342
Travel Distance (mi)	1150	1169	1175	1152	1149	1108	1159
Travel Time (hr)	92.5	93.4	91.4	98.2	88.7	78.2	88.6
Total Delay (hr)	56.1	56.4	54.2	61.8	52.4	43.3	52.1
Total Stops	3526	3783	3434	3578	3564	3320	3553
Fuel Used (gal)	59.2	60.0	59.2	60.1	57.8	54.4	58.4

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	1991	2062	2042	1989
Vehs Exited	1928	1967	2060	1961
Starting Vehs	293	317	370	330
Ending Vehs	356	412	352	366
Travel Distance (mi)	1150	1172	1210	1159
Travel Time (hr)	89.8	94.7	95.4	91.1
Total Delay (hr)	53.4	57.4	57.2	54.4
Total Stops	3502	3738	3573	3557
Fuel Used (gal)	58.1	60.1	62.0	58.9

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15
Volumes adjusted by PHF, Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	2103	2040	2123	2132	2079	2099	2147
Vehs Exited	2007	2015	2068	2096	2055	2017	2081
Starting Vehs	378	364	365	399	377	321	342
Ending Vehs	474	389	420	435	401	403	408
Travel Distance (mi)	1210	1213	1220	1248	1218	1218	1262
Travel Time (hr)	111.0	113.2	107.9	127.6	117.5	100.6	107.0
Total Delay (hr)	72.8	75.0	69.6	88.1	79.1	62.2	67.2
Total Stops	3828	3852	3821	4092	3755	3823	3856
Fuel Used (gal)	65.5	66.3	65.1	70.4	67.5	63.7	65.6

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15
Volumes adjusted by PHF, Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	2097	2069	2071	2096
Vehs Exited	2063	2064	2035	2046
Starting Vehs	356	412	352	366
Ending Vehs	390	417	388	403
Travel Distance (mi)	1232	1239	1196	1225
Travel Time (hr)	114.7	124.1	123.2	114.7
Total Delay (hr)	76.0	85.1	85.4	76.1
Total Stops	3647	3996	3761	3842
Fuel Used (gal)	66.6	69.5	67.8	66.8

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	1929	2038	1983	1916	2010	1987	1956
Vehs Exited	1942	1994	1996	1943	1980	2015	1974
Starting Vehs	474	389	420	435	401	403	408
Ending Vehs	461	433	407	408	431	375	390
Travel Distance (mi)	1140	1187	1172	1130	1162	1166	1141
Travel Time (hr)	129.7	119.2	116.0	138.6	132.8	109.8	124.7
Total Delay (hr)	93.6	81.8	79.1	102.9	95.9	73.0	88.4
Total Stops	3748	3909	3706	3762	3829	3790	3425
Fuel Used (gal)	67.6	67.1	65.9	69.8	69.2	64.1	66.2

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	1931	1960	2024	1970
Vehs Exited	1937	1983	1969	1973
Starting Vehs	390	417	388	403
Ending Vehs	384	394	443	406
Travel Distance (mi)	1141	1152	1142	1153
Travel Time (hr)	127.1	134.7	142.3	127.5
Total Delay (hr)	91.1	98.2	105.9	91.0
Total Stops	3611	3618	3793	3720
Fuel Used (gal)	67.0	69.1	70.8	67.7

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	1917	1936	2010	2012	1880	1990	1968
Vehs Exited	1919	1978	1980	1982	1875	1991	1928
Starting Vehs	461	433	407	408	431	375	390
Ending Vehs	459	391	437	438	436	374	430
Travel Distance (mi)	1148	1149	1186	1202	1087	1185	1142
Travel Time (hr)	144.5	123.0	131.7	138.3	143.7	111.1	136.3
Total Delay (hr)	108.2	86.6	94.4	100.7	109.2	73.7	100.3
Total Stops	3731	3621	3794	3790	3487	3920	3729
Fuel Used (gal)	71.7	66.3	69.6	72.3	69.1	65.0	69.7

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	1942	2018	1911	1958
Vehs Exited	1921	2029	1929	1953
Starting Vehs	384	394	443	406
Ending Vehs	405	383	425	417
Travel Distance (mi)	1132	1189	1149	1157
Travel Time (hr)	132.1	147.6	161.9	137.0
Total Delay (hr)	96.3	110.3	125.7	100.5
Total Stops	3680	3904	3636	3730
Fuel Used (gal)	67.8	73.4	75.5	70.0

1: El Dorado Hills Blvd & Saratoga Way Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	44.5	2.8
Denied Del/Veh (s)	0.0	0.0	0.0	0.2	0.2	0.3	0.0	0.0	0.0	107.1	107.3	106.9
Total Delay (hr)	0.7	0.9	1.3	1.2	1.5	1.1	2.5	3.6	0.0	3.8	15.0	0.8
Total Del/Veh (s)	48.2	49.7	27.4	45.8	53.3	32.5	59.9	18.1	12.5	82.3	37.8	32.7
Stop Delay (hr)	0.7	0.9	1.2	1.1	1.4	1.0	2.3	2.4	0.0	3.5	10.8	0.7
Stop Del/Veh (s)	45.9	45.7	26.8	42.8	47.1	29.0	54.6	12.4	9.0	76.0	27.2	26.8

1: El Dorado Hills Blvd & Saratoga Way Performance by movement

Movement	All
Denied Delay (hr)	52.4
Denied Del/Veh (s)	58.5
Total Delay (hr)	32.6
Total Del/Veh (s)	36.9
Stop Delay (hr)	26.1
Stop Del/Veh (s)	29.6

2: El Dorado Hills Blvd & US-50 WB Ramps/Saratoga Way Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.2	0.2	2.1	1.1	4.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	1.8	1.3	0.3	3.6	5.9	1.8	8.5	1.7	0.3	0.7	8.2	2.5
Total Del/Veh (s)	43.5	45.7	3.8	119.9	143.3	148.1	58.4	8.7	6.7	71.3	26.5	17.2
Stop Delay (hr)	1.6	1.2	0.0	3.4	5.6	1.7	7.4	0.7	0.1	0.6	5.2	1.1
Stop Del/Veh (s)	40.5	41.0	0.0	113.8	136.2	143.7	50.8	3.9	3.1	64.5	16.8	7.5

2: El Dorado Hills Blvd & US-50 WB Ramps/Saratoga Way Performance by movement

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.2
Total Delay (hr)	36.5
Total Del/Veh (s)	33.7
Stop Delay (hr)	28.8
Stop Del/Veh (s)	26.6

3: Latrobe Road & US 50 EB Ramps Performance by movement

Movement	EBR	WBR	NBT	NBR	SBL	SBT	All
Denied Delay (hr)	0.8	0.0	0.0	0.0	0.0	0.0	0.8
Denied Del/Veh (s)	2.6	0.2	0.0	0.0	0.0	0.0	0.7
Total Delay (hr)	8.1	0.1	2.9	0.8	2.9	3.3	18.0
Total Del/Veh (s)	25.3	1.0	9.7	10.3	40.8	9.3	15.1
Stop Delay (hr)	6.1	0.0	0.9	0.3	2.3	0.8	10.4
Stop Del/Veh (s)	19.2	0.0	3.1	3.4	32.6	2.1	8.7

4: Latrobe Road & Town Center Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	4.0	0.1	0.1	3.2	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.4	0.1	0.0	1.1	0.4	1.5	0.7	8.6	0.2	4.8	5.9	0.5
Total Del/Veh (s)	44.4	44.8	12.7	39.3	40.3	16.0	55.0	31.5	6.4	33.7	13.8	4.6
Stop Delay (hr)	0.4	0.1	0.0	1.0	0.3	1.4	0.7	5.6	0.1	4.0	3.2	0.2
Stop Del/Veh (s)	42.5	41.8	12.7	35.8	35.8	14.3	49.9	20.8	5.2	28.0	7.5	2.3

4: Latrobe Road & Town Center Blvd Performance by movement

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.1
Total Delay (hr)	24.2
Total Del/Veh (s)	21.4
Stop Delay (hr)	17.2
Stop Del/Veh (s)	15.2

5: Latrobe Road & White Rock Road Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	5.9	1.4	0.4	10.4	7.5	0.3	14.0	5.7	0.2	2.1	12.4	4.5
Total Del/Veh (s)	76.0	38.8	17.7	94.2	70.8	9.3	369.4	28.7	5.1	69.8	42.5	32.2
Stop Delay (hr)	5.6	1.2	0.4	9.4	6.5	0.2	13.9	5.1	0.2	1.9	8.3	3.3
Stop Del/Veh (s)	72.3	34.2	16.3	85.8	61.5	7.2	369.0	25.5	5.0	60.7	28.5	23.8

5: Latrobe Road & White Rock Road Performance by movement

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.0
Total Delay (hr)	64.7
Total Del/Veh (s)	57.6
Stop Delay (hr)	56.0
Stop Del/Veh (s)	49.9

7: Driveway/Post St & White Rock Road Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.9	16.4	4.4	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	74.2	75.8	77.0	0.1	0.1	0.1	3.9	0.3	0.3
Total Delay (hr)	1.7	1.2	0.0	2.4	31.8	2.3	0.6	0.0	0.0	0.5	0.1	0.8
Total Del/Veh (s)	52.5	16.2	4.3	204.5	152.1	43.4	72.1	46.8	4.7	41.7	36.4	21.8
Stop Delay (hr)	1.5	0.9	0.0	2.1	26.8	1.7	0.6	0.0	0.0	0.4	0.1	0.8
Stop Del/Veh (s)	48.7	12.0	2.4	183.9	128.0	32.2	70.1	43.8	4.8	38.7	32.2	20.5

7: Driveway/Post St & White Rock Road Performance by movement

Movement	All
Denied Delay (hr)	21.7
Denied Del/Veh (s)	47.5
Total Delay (hr)	41.4
Total Del/Veh (s)	92.4
Stop Delay (hr)	35.0
Stop Del/Veh (s)	78.0

Total Zone Performance

Denied Delay (hr)	75.3
Denied Del/Veh (s)	44.4
Total Delay (hr)	217.8
Total Del/Veh (s)	428.5
Stop Delay (hr)	173.4
Stop Del/Veh (s)	341.2

Intersection: 1: El Dorado Hills Blvd & Saratoga Way

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	TR	L	T	T	TR	L	T	TR
Maximum Queue (ft)	65	163	183	135	267	211	147	159	162	124	346	357
Average Queue (ft)	17	70	89	57	140	108	66	70	72	105	316	321
95th Queue (ft)	47	122	161	114	231	190	127	137	144	153	363	361
Link Distance (ft)		299		482	482		774	774	774		309	309
Upstream Blk Time (%)											31	36
Queuing Penalty (veh)											0	0
Storage Bay Dist (ft)	150		200			250				100		
Storage Blk Time (%)		0	1			0				25	34	
Queuing Penalty (veh)		0	1			0				186	59	

Intersection: 2: El Dorado Hills Blvd & US-50 WB Ramps/Saratoga Way

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB	SB
Directions Served	L	LT	L	LT	TR	L	L	T	T	TR	L	T
Maximum Queue (ft)	135	183	174	392	175	335	342	133	138	158	224	343
Average Queue (ft)	72	95	82	210	135	201	203	53	54	72	41	182
95th Queue (ft)	118	159	183	435	206	307	312	106	111	130	133	325
Link Distance (ft)	1228	1228		621		646	646	646	646	646		774
Upstream Blk Time (%)				2								
Queuing Penalty (veh)				0								
Storage Bay Dist (ft)			150		150						200	
Storage Blk Time (%)			1	28	17							9
Queuing Penalty (veh)			2	49	31							3

Intersection: 2: El Dorado Hills Blvd & US-50 WB Ramps/Saratoga Way

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	298	340	225
Average Queue (ft)	136	150	140
95th Queue (ft)	274	302	254
Link Distance (ft)	774	774	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			200
Storage Blk Time (%)		2	2
Queuing Penalty (veh)		10	9

Intersection: 3: Latrobe Road & US 50 EB Ramps

Movement	EB	EB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	R	R	T	T	T	R	L	T	T	T	T
Maximum Queue (ft)	367	362	166	211	284	236	304	270	72	231	110
Average Queue (ft)	198	212	34	57	87	55	173	45	19	27	18
95th Queue (ft)	302	325	114	144	216	152	261	156	50	112	76
Link Distance (ft)	1211		572	572	572			646	646	646	646
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)		450				275	575				
Storage Blk Time (%)	0				0	0					
Queuing Penalty (veh)	0				1	0					

Intersection: 4: Latrobe Road & Town Center Blvd

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB
Directions Served	L	L	T	TR	L	TR	R	L	L	T	T	T
Maximum Queue (ft)	17	74	34	33	124	190	164	53	114	271	328	408
Average Queue (ft)	1	27	8	6	67	78	71	16	26	122	166	204
95th Queue (ft)	11	61	29	25	118	144	132	44	79	233	296	347
Link Distance (ft)			778	778		526	526			839	839	839
Upstream Blk Time (%)	0											
Queuing Penalty (veh)	0											
Storage Bay Dist (ft)	350	350			100			225	225			
Storage Blk Time (%)					3	4			0	0		
Queuing Penalty (veh)					7	4			0	0		

Intersection: 4: Latrobe Road & Town Center Blvd

Movement	NB	SB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	T	R
Maximum Queue (ft)	83	252	257	280	278	297	224
Average Queue (ft)	24	128	145	127	141	153	54
95th Queue (ft)	58	216	229	225	235	255	134
Link Distance (ft)	839			572	572	572	572
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		325	325				
Storage Blk Time (%)				0			
Queuing Penalty (veh)				1			

Intersection: 5: Latrobe Road & White Rock Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	TR	L	L	T	T	R	L	T	T
Maximum Queue (ft)	214	232	138	167	182	191	200	335	122	278	372	246
Average Queue (ft)	110	140	45	70	158	173	183	252	48	253	299	96
95th Queue (ft)	201	219	109	129	205	211	236	384	101	339	466	186
Link Distance (ft)			346	346				315	315		278	278
Upstream Blk Time (%)								8		41	66	0
Queuing Penalty (veh)								40		0	0	0
Storage Bay Dist (ft)	325	325			175	175	175			270		
Storage Blk Time (%)	0	0			3	16	14	12		67	63	
Queuing Penalty (veh)	0	0			6	32	28	73		120	92	

Intersection: 5: Latrobe Road & White Rock Road

Movement	NB	NB	NB	B80	B80	B25	B25	SB	SB	SB	SB	SB
Directions Served	T	T	R	T	T	T	T	L	L	T	T	T
Maximum Queue (ft)	179	148	58	320	232	379	358	88	250	428	432	446
Average Queue (ft)	99	24	30	186	58	127	113	27	71	244	246	134
95th Queue (ft)	160	88	59	423	228	414	401	71	221	391	392	406
Link Distance (ft)	278	278		247	247	501	501			839	839	839
Upstream Blk Time (%)				44	1	6	3					
Queuing Penalty (veh)				0	0	0	0					
Storage Bay Dist (ft)			25					225	225			
Storage Blk Time (%)		6	2						0	13		0
Queuing Penalty (veh)		8	3						0	14		2

Intersection: 5: Latrobe Road & White Rock Road

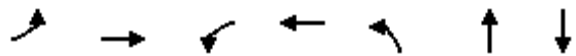
Movement	SB
Directions Served	R
Maximum Queue (ft)	275
Average Queue (ft)	183
95th Queue (ft)	316
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	250
Storage Blk Time (%)	6
Queuing Penalty (veh)	21

Intersection: 7: Driveway/Post St & White Rock Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	104	192	150	58	145	1110	1090	87	43	74	178
Average Queue (ft)	75	58	64	8	56	894	786	29	12	30	68
95th Queue (ft)	117	155	123	36	140	1337	1420	71	32	66	137
Link Distance (ft)		315	315			1064	1064	216	216		408
Upstream Blk Time (%)						43	14				
Queuing Penalty (veh)						0	0				
Storage Bay Dist (ft)	80			110	120					50	
Storage Blk Time (%)	15	2	1		0	61				8	22
Queuing Penalty (veh)	18	2	0		2	25				11	8

Zone Summary

Zone wide Queuing Penalty: 865



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	24	538	541	562	75	123	23
v/c Ratio	0.12	0.61	0.83	0.23	0.49	0.33	0.14
Control Delay	36.4	34.2	41.2	7.2	60.5	11.0	29.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.4	34.2	41.2	7.2	60.5	11.0	29.3
Queue Length 50th (ft)	10	130	259	51	40	6	5
Queue Length 95th (ft)	45	290	#762	164	127	55	32
Internal Link Dist (ft)		327		554		213	278
Turn Bay Length (ft)	195		190		155		
Base Capacity (vph)	418	1750	1022	3199	256	780	421
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.31	0.53	0.18	0.29	0.16	0.05

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	365	130	498	517	0	69	11	102	0	8	13
Future Volume (veh/h)	22	365	130	498	517	0	69	11	102	0	8	13
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	24	397	141	541	562	0	75	12	111	0	9	14
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	349	768	269	578	2477	0	96	25	229	97	27	43
Arrive On Green	0.30	0.30	0.30	0.33	0.70	0.00	0.05	0.16	0.16	0.00	0.04	0.04
Sat Flow, veh/h	845	2571	902	1774	3632	0	1774	157	1450	1263	658	1024
Grp Volume(v), veh/h	24	272	266	541	562	0	75	0	123	0	0	23
Grp Sat Flow(s),veh/h/ln	845	1770	1704	1774	1770	0	1774	0	1607	1263	0	1682
Q Serve(g_s), s	1.5	9.5	9.7	22.0	4.2	0.0	3.1	0.0	5.2	0.0	0.0	1.0
Cycle Q Clear(g_c), s	1.5	9.5	9.7	22.0	4.2	0.0	3.1	0.0	5.2	0.0	0.0	1.0
Prop In Lane	1.00		0.53	1.00		0.00	1.00		0.90	1.00		0.61
Lane Grp Cap(c), veh/h	349	528	509	578	2477	0	96	0	253	97	0	70
V/C Ratio(X)	0.07	0.51	0.52	0.94	0.23	0.00	0.78	0.00	0.49	0.00	0.00	0.33
Avail Cap(c_a), veh/h	552	953	917	1084	4334	0	272	0	376	340	0	394
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	18.8	21.6	21.7	24.3	4.0	0.0	34.7	0.0	28.6	0.0	0.0	34.6
Incr Delay (d2), s/veh	0.1	1.0	1.0	3.3	0.1	0.0	5.1	0.0	0.5	0.0	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	4.7	4.7	11.2	2.0	0.0	1.7	0.0	2.3	0.0	0.0	0.5
LnGrp Delay(d),s/veh	18.9	22.6	22.7	27.6	4.0	0.0	39.8	0.0	29.1	0.0	0.0	35.6
LnGrp LOS	B	C	C	C	A		D		C			D
Approach Vol, veh/h		562			1103			198				23
Approach Delay, s/veh		22.5			15.6			33.1				35.6
Approach LOS		C			B			C				D
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	29.8	28.2		16.3		58.0	8.6	7.7				
Change Period (Y+Rc), s	5.6	6.0		4.6		6.0	4.6	4.6				
Max Green Setting (Gmax), s	45.4	40.0		17.4		91.0	11.4	17.4				
Max Q Clear Time (g_c+l1), s	24.0	11.7		7.2		6.2	5.1	3.0				
Green Ext Time (p_c), s	0.2	10.5		0.2		13.0	0.0	0.3				
Intersection Summary												
HCM 2010 Ctrl Delay				19.7								
HCM 2010 LOS				B								
Notes												

User approved pedestrian interval to be less than phase max green.

Saratoga Retail Phase 2
 8: Saratoga Way & Mammouth Way/Walgreens Dwy

Near Term (2026) plus Project Conditions

AM Peak

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕			↕	
Traffic Vol, veh/h	76	0	2	0	0	5	0	199	0	3	263	74
Future Vol, veh/h	76	0	2	0	0	5	0	199	0	3	263	74
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	83	0	2	0	0	5	0	216	0	3	286	80

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	552	549	326	550	589	216	366	0	0	216	0	0
Stage 1	333	333	-	216	216	-	-	-	-	-	-	-
Stage 2	219	216	-	334	373	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	444	443	715	446	421	824	1193	-	-	1354	-	-
Stage 1	681	644	-	786	724	-	-	-	-	-	-	-
Stage 2	783	724	-	680	618	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	440	442	715	444	420	824	1193	-	-	1354	-	-
Mov Cap-2 Maneuver	440	442	-	444	420	-	-	-	-	-	-	-
Stage 1	681	642	-	786	724	-	-	-	-	-	-	-
Stage 2	778	724	-	676	616	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	15		9.4		0		0.1	
HCM LOS	C		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1193	-	-	444	824	1354	-
HCM Lane V/C Ratio	-	-	-	0.191	0.007	0.002	-
HCM Control Delay (s)	0	-	-	15	9.4	7.7	-
HCM Lane LOS	A	-	-	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0	0	-

Intersection						
Int Delay, s/veh	1.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	27	172	0	35	230
Future Vol, veh/h	0	27	172	0	35	230
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	29	187	0	38	250

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	513	187	0	0	187	0
Stage 1	187	-	-	-	-	-
Stage 2	326	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	521	855	-	-	1387	-
Stage 1	845	-	-	-	-	-
Stage 2	731	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	507	855	-	-	1387	-
Mov Cap-2 Maneuver	507	-	-	-	-	-
Stage 1	845	-	-	-	-	-
Stage 2	711	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.4	0	1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	-	855	1387
HCM Lane V/C Ratio	-	-	0.034	0.027
HCM Control Delay (s)	-	-	0	9.4
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	0	0	138	204	2
Future Vol, veh/h	16	0	0	138	204	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	0	0	150	222	2

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	373	223	224	0	0
Stage 1	223	-	-	-	-
Stage 2	150	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	628	817	1345	-	-
Stage 1	814	-	-	-	-
Stage 2	878	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	628	817	1345	-	-
Mov Cap-2 Maneuver	628	-	-	-	-
Stage 1	814	-	-	-	-
Stage 2	878	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1345	-	628	-	-
HCM Lane V/C Ratio	-	-	0.028	-	-
HCM Control Delay (s)	0	-	10.9	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	6:50	6:50	6:50	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	9188	9171	9126	9159	9083	9344	9212
Vehs Exited	9022	8998	8944	8999	8914	9255	9031
Starting Vehs	469	452	487	475	499	452	497
Ending Vehs	635	625	669	635	668	541	678
Travel Distance (mi)	4992	5000	4951	4967	4980	5094	5006
Travel Time (hr)	907.6	910.2	1084.9	864.0	956.5	857.6	976.9
Total Delay (hr)	747.7	750.6	926.7	705.3	797.7	694.9	817.2
Total Stops	20612	20527	21609	20148	20894	20361	21091
Fuel Used (gal)	375.1	376.2	414.1	364.3	386.3	368.3	392.6

Summary of All Intervals

Run Number	7	8	9	Avg
Start Time	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	9243	9429	9145	9206
Vehs Exited	9050	9187	8893	9028
Starting Vehs	447	443	460	462
Ending Vehs	640	685	712	646
Travel Distance (mi)	5026	5098	4979	5009
Travel Time (hr)	962.3	811.8	1169.8	950.2
Total Delay (hr)	802.3	648.8	1010.9	790.2
Total Stops	21943	20305	22071	20953
Fuel Used (gal)	390.2	357.5	435.8	386.0

Interval #0 Information Seeding

Start Time	6:50
End Time	7:00
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	2390	2252	2316	2357	2310	2377	2346
Vehs Exited	2369	2193	2229	2296	2338	2304	2296
Starting Vehs	469	452	487	475	499	452	497
Ending Vehs	490	511	574	536	471	525	547
Travel Distance (mi)	1284	1234	1252	1263	1282	1301	1283
Travel Time (hr)	130.1	137.9	146.5	130.3	136.7	124.6	137.7
Total Delay (hr)	88.9	98.4	106.6	90.0	95.8	83.2	96.8
Total Stops	4920	4536	5174	4485	5060	4752	4929
Fuel Used (gal)	73.3	73.5	75.4	72.2	75.1	72.6	74.7

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	2351	2305	2408	2337
Vehs Exited	2206	2236	2210	2267
Starting Vehs	447	443	460	462
Ending Vehs	592	512	658	534
Travel Distance (mi)	1255	1250	1229	1263
Travel Time (hr)	133.1	127.2	159.6	136.4
Total Delay (hr)	93.2	87.2	120.2	96.0
Total Stops	4982	4759	4998	4864
Fuel Used (gal)	73.4	71.7	78.3	74.0

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15
Volumes adjusted by PHF, Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	2438	2477	2379	2479	2395	2467	2381
Vehs Exited	2284	2398	2268	2322	2252	2328	2261
Starting Vehs	490	511	574	536	471	525	547
Ending Vehs	644	590	685	693	614	664	667
Travel Distance (mi)	1282	1304	1262	1302	1275	1293	1250
Travel Time (hr)	183.8	188.6	234.2	187.1	196.2	206.0	211.5
Total Delay (hr)	142.6	147.0	193.9	145.4	155.4	164.6	171.6
Total Stops	5193	5090	5604	5210	5020	5353	5076
Fuel Used (gal)	85.1	87.0	95.8	86.2	87.0	90.5	90.9

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15
Volumes adjusted by PHF, Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	2448	2386	2369	2422
Vehs Exited	2345	2297	2244	2295
Starting Vehs	592	512	658	534
Ending Vehs	695	601	783	656
Travel Distance (mi)	1266	1292	1274	1280
Travel Time (hr)	222.4	180.7	257.0	206.7
Total Delay (hr)	181.8	139.4	216.6	165.8
Total Stops	5499	5001	5830	5293
Fuel Used (gal)	93.4	84.5	101.9	90.2

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	2220	2284	2192	2232	2261	2269	2301
Vehs Exited	2194	2174	2212	2287	2216	2313	2303
Starting Vehs	644	590	685	693	614	664	667
Ending Vehs	670	700	665	638	659	620	665
Travel Distance (mi)	1208	1225	1220	1244	1241	1265	1255
Travel Time (hr)	263.9	262.1	311.0	240.6	269.9	257.7	282.4
Total Delay (hr)	225.4	223.2	272.1	200.8	230.4	217.3	242.3
Total Stops	5187	5447	5494	5283	5609	5268	5603
Fuel Used (gal)	100.2	100.7	111.9	96.9	103.2	101.8	106.9

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	2255	2282	2058	2230
Vehs Exited	2206	2291	2135	2232
Starting Vehs	695	601	783	656
Ending Vehs	744	592	706	662
Travel Distance (mi)	1252	1261	1196	1237
Travel Time (hr)	277.8	233.0	345.2	274.4
Total Delay (hr)	238.2	192.6	307.0	234.9
Total Stops	5668	5042	5394	5402
Fuel Used (gal)	105.9	95.5	119.2	104.2

Interval #4 Information

Start Time	7:45
End Time	8:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	2140	2158	2239	2091	2117	2231	2184
Vehs Exited	2175	2233	2235	2094	2108	2310	2171
Starting Vehs	670	700	665	638	659	620	665
Ending Vehs	635	625	669	635	668	541	678
Travel Distance (mi)	1217	1237	1218	1158	1183	1234	1218
Travel Time (hr)	329.8	321.7	393.3	306.0	353.7	269.4	345.4
Total Delay (hr)	290.7	282.0	354.1	269.1	316.0	229.8	306.5
Total Stops	5312	5454	5337	5170	5205	4988	5483
Fuel Used (gal)	116.5	114.9	130.9	109.0	121.0	103.4	120.0

Interval #4 Information

Start Time	7:45
End Time	8:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	2189	2456	2310	2210
Vehs Exited	2293	2363	2304	2227
Starting Vehs	744	592	706	662
Ending Vehs	640	685	712	646
Travel Distance (mi)	1252	1296	1280	1229
Travel Time (hr)	329.0	270.9	407.9	332.7
Total Delay (hr)	289.2	229.5	367.1	293.4
Total Stops	5794	5503	5849	5407
Fuel Used (gal)	117.5	105.8	136.4	117.5

1: El Dorado Hills Blvd & Saratoga Way/Park Drive Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	10.9	3.9	23.1	0.0	0.0	0.0	41.3	170.1	16.7
Denied Del/Veh (s)	0.0	0.0	0.0	247.9	251.0	261.3	0.0	0.0	0.0	736.4	724.6	726.3
Total Delay (hr)	3.9	4.0	5.5	15.3	2.0	8.4	14.4	10.7	0.3	6.2	12.9	0.4
Total Del/Veh (s)	73.6	80.0	68.8	414.4	148.3	112.9	224.5	31.7	25.7	177.9	94.6	29.5
Stop Delay (hr)	3.6	3.6	5.3	15.1	1.9	8.1	13.6	6.8	0.2	6.1	11.8	0.4
Stop Del/Veh (s)	67.3	71.0	65.9	409.8	140.2	108.0	212.6	20.2	17.9	173.0	86.7	26.0

1: El Dorado Hills Blvd & Saratoga Way/Park Drive Performance by movement

Movement	All
Denied Delay (hr)	266.0
Denied Del/Veh (s)	253.8
Total Delay (hr)	84.0
Total Del/Veh (s)	92.7
Stop Delay (hr)	76.3
Stop Del/Veh (s)	84.2

2: El Dorado Hills Blvd & US-50 WB Ramps/Saratoga Way Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.1	3.6	0.8	0.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	1.5	0.9	0.1	3.0	2.9	1.0	13.8	7.1	1.3	1.5	38.8	0.9
Total Del/Veh (s)	38.8	34.5	3.1	60.2	65.4	79.7	47.0	19.8	15.9	392.1	194.2	19.6
Stop Delay (hr)	1.4	0.8	0.0	2.8	2.6	1.0	10.9	3.9	0.8	1.5	36.4	0.6
Stop Del/Veh (s)	36.0	30.2	0.0	55.4	59.2	76.1	37.0	11.0	9.0	386.2	182.0	13.1

2: El Dorado Hills Blvd & US-50 WB Ramps/Saratoga Way Performance by movement

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.2
Total Delay (hr)	72.9
Total Del/Veh (s)	61.7
Stop Delay (hr)	62.6
Stop Del/Veh (s)	53.0

3: Latrobe Road & US 50 EB Ramps Performance by movement

Movement	EBR	WBR	NBT	NBR	SBL	SBT	All
Denied Delay (hr)	0.2	0.1	0.0	0.0	0.0	0.0	0.3
Denied Del/Veh (s)	1.1	0.5	0.0	0.0	0.0	0.0	0.2
Total Delay (hr)	1.8	0.3	6.6	2.1	2.6	2.8	16.2
Total Del/Veh (s)	10.6	1.6	11.7	13.0	59.1	12.6	12.2
Stop Delay (hr)	1.2	0.0	1.4	0.5	2.2	0.6	5.9
Stop Del/Veh (s)	7.1	0.0	2.4	3.2	50.8	2.5	4.4

4: Latrobe Road & Town Center Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.4	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	3.5	0.2	0.3	3.3	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	8.2	0.6	0.3	1.4	0.2	11.9	0.1	64.2	0.5	9.7	4.7	0.0
Total Del/Veh (s)	78.9	59.2	16.3	73.7	83.7	59.8	123.0	143.5	13.3	67.3	19.8	2.8
Stop Delay (hr)	7.6	0.6	0.3	1.3	0.2	11.3	0.1	52.6	0.4	8.5	3.2	0.0
Stop Del/Veh (s)	73.6	56.0	15.1	68.1	78.0	56.9	105.2	117.6	11.0	58.7	13.6	1.6

4: Latrobe Road & Town Center Blvd Performance by movement

Movement	All
Denied Delay (hr)	0.5
Denied Del/Veh (s)	0.4
Total Delay (hr)	101.9
Total Del/Veh (s)	82.5
Stop Delay (hr)	86.2
Stop Del/Veh (s)	69.8

5: Latrobe Road & White Rock Road Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	20.1	6.3	0.8	6.0	3.8	1.9	1.7	24.7	3.8	4.4	6.0	0.9
Total Del/Veh (s)	167.1	47.8	35.0	61.1	51.0	33.2	72.6	78.3	34.9	70.2	38.8	15.1
Stop Delay (hr)	19.4	5.3	0.7	5.4	3.2	1.8	1.6	22.6	3.6	4.0	4.4	0.7
Stop Del/Veh (s)	161.3	40.0	31.2	54.9	43.6	30.7	68.5	71.6	33.0	63.2	28.6	12.5

5: Latrobe Road & White Rock Road Performance by movement

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.0
Total Delay (hr)	80.6
Total Del/Veh (s)	65.3
Stop Delay (hr)	72.8
Stop Del/Veh (s)	59.1

7: Driveway/Post St & White Rock Road Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	8.4	0.6	10.0
Denied Del/Veh (s)	0.0	0.0	0.0	3.1	0.5	0.4	0.1	0.1	0.1	165.2	159.1	166.9
Total Delay (hr)	4.9	5.3	0.1	0.8	5.8	1.0	0.8	0.1	0.1	8.0	0.4	6.0
Total Del/Veh (s)	76.7	22.9	10.3	71.7	36.4	20.7	52.5	32.5	11.6	163.6	122.8	106.6
Stop Delay (hr)	4.5	3.6	0.0	0.7	4.2	0.8	0.8	0.1	0.1	7.7	0.4	5.7
Stop Del/Veh (s)	70.3	15.3	5.9	64.5	26.5	16.1	50.1	29.9	11.4	156.2	114.0	100.0

7: Driveway/Post St & White Rock Road Performance by movement

Movement	All
Denied Delay (hr)	19.2
Denied Del/Veh (s)	29.1
Total Delay (hr)	33.5
Total Del/Veh (s)	50.7
Stop Delay (hr)	28.6
Stop Del/Veh (s)	43.3

Total Zone Performance

Denied Delay (hr)	286.2
Denied Del/Veh (s)	169.5
Total Delay (hr)	389.3
Total Del/Veh (s)	943.2
Stop Delay (hr)	332.5
Stop Del/Veh (s)	805.5

Intersection: 1: El Dorado Hills Blvd & Saratoga Way/Park Drive

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	TR	L	T	T	TR	L	T	TR
Maximum Queue (ft)	174	340	225	512	522	275	624	575	462	125	351	336
Average Queue (ft)	130	288	196	400	392	249	392	279	208	110	323	255
95th Queue (ft)	217	401	280	635	653	321	755	592	363	168	359	421
Link Distance (ft)		324		482	482		778	778	778		309	309
Upstream Blk Time (%)		22		45	44		6	0	0		83	15
Queuing Penalty (veh)		145		0	0		28	1	0		0	0
Storage Bay Dist (ft)	150		200			250				100		
Storage Blk Time (%)	4	32	29			54	1			32	69	
Queuing Penalty (veh)	21	121	107			220	1			136	141	

Intersection: 2: El Dorado Hills Blvd & US-50 WB Ramps/Saratoga Way

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB	SB
Directions Served	L	LT	L	LT	TR	L	L	T	T	TR	L	T
Maximum Queue (ft)	124	168	154	172	301	464	463	326	317	328	224	821
Average Queue (ft)	65	82	77	100	133	305	310	161	163	184	58	792
95th Queue (ft)	110	139	144	169	302	431	433	281	273	295	212	854
Link Distance (ft)	1293	1293			621	641	641	641	641	641		778
Upstream Blk Time (%)					0	0	0	0				54
Queuing Penalty (veh)					0	0	0	0				237
Storage Bay Dist (ft)			150	150							200	
Storage Blk Time (%)			1	4	7						0	88
Queuing Penalty (veh)			1	5	18						0	16

Intersection: 2: El Dorado Hills Blvd & US-50 WB Ramps/Saratoga Way

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	811	810	211
Average Queue (ft)	722	326	61
95th Queue (ft)	938	730	156
Link Distance (ft)	778	778	
Upstream Blk Time (%)	10	1	
Queuing Penalty (veh)	44	5	
Storage Bay Dist (ft)			200
Storage Blk Time (%)		1	0
Queuing Penalty (veh)		3	0

Intersection: 3: Latrobe Road & US 50 EB Ramps

Movement	EB	EB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	R	R	T	T	T	R	L	T	T	T	T
Maximum Queue (ft)	155	93	391	546	569	299	158	251	104	91	74
Average Queue (ft)	77	43	82	123	154	101	82	77	33	26	11
95th Queue (ft)	125	76	233	332	376	228	139	183	82	72	46
Link Distance (ft)	1211		572	572	572			641	641	641	641
Upstream Blk Time (%)			0	0	0						
Queuing Penalty (veh)			0	1	1						
Storage Bay Dist (ft)		450				275	575				
Storage Blk Time (%)					1	0					
Queuing Penalty (veh)					3	2					

Intersection: 4: Latrobe Road & Town Center Blvd

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB
Directions Served	L	L	T	TR	L	TR	R	L	L	T	T	T
Maximum Queue (ft)	318	343	231	117	125	447	444	2	67	880	881	877
Average Queue (ft)	156	213	28	45	85	279	283	0	3	735	755	766
95th Queue (ft)	273	322	131	91	165	434	438	3	39	1016	1008	1004
Link Distance (ft)			778	778		526	526			839	839	839
Upstream Blk Time (%)						1	1			7	9	15
Queuing Penalty (veh)						0	0			32	41	69
Storage Bay Dist (ft)	350	350			100			225	225			
Storage Blk Time (%)	0	0	0		1	57				50		
Queuing Penalty (veh)	0	0	1		4	40				1		

Intersection: 4: Latrobe Road & Town Center Blvd

Movement	NB	SB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	T	R
Maximum Queue (ft)	876	329	343	441	269	246	81
Average Queue (ft)	254	209	222	171	115	108	11
95th Queue (ft)	831	307	315	334	203	202	39
Link Distance (ft)	839			572	572	572	572
Upstream Blk Time (%)	3			0	0		
Queuing Penalty (veh)	16			1	0		
Storage Bay Dist (ft)		325	325				
Storage Blk Time (%)		0	1	1			
Queuing Penalty (veh)		1	4	7			

Intersection: 5: Latrobe Road & White Rock Road

Movement	EB	EB	EB	EB	B40	B40	WB	WB	WB	WB	WB	NB
Directions Served	L	L	T	TR	T	T	L	L	T	T	R	L
Maximum Queue (ft)	337	346	412	364	548	406	179	189	198	272	277	278
Average Queue (ft)	271	292	315	185	287	34	128	137	101	116	109	115
95th Queue (ft)	404	409	499	318	746	249	188	197	199	212	225	279
Link Distance (ft)			346	346	559	559				315	315	
Upstream Blk Time (%)	1	22	38	1	23	0				1	0	0
Queuing Penalty (veh)	0	0	208	4	124	2				2	1	0
Storage Bay Dist (ft)	325	325					175	175	175			270
Storage Blk Time (%)	12	37	22				1	3	2	1		0
Queuing Penalty (veh)	30	96	104				1	5	2	4		0

Intersection: 5: Latrobe Road & White Rock Road

Movement	NB	NB	NB	NB	NB	B80	B80	B25	B25	SB	SB	SB
Directions Served	T	T	T	T	R	T	T	T	T	L	L	T
Maximum Queue (ft)	369	347	338	354	66	306	319	415	435	165	208	282
Average Queue (ft)	273	253	256	219	49	137	151	167	180	78	85	123
95th Queue (ft)	414	360	362	399	62	387	406	542	569	150	174	236
Link Distance (ft)	278	278	278	278		247	247	501	501			839
Upstream Blk Time (%)	26	20	22	11		20	24	5	17			
Queuing Penalty (veh)	0	0	0	0		0	0	0	0			
Storage Bay Dist (ft)					25					225	225	
Storage Blk Time (%)	27			19	41					0	0	1
Queuing Penalty (veh)	23			75	119					0	0	3

Intersection: 5: Latrobe Road & White Rock Road

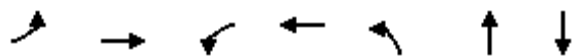
Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	279	197	196
Average Queue (ft)	128	18	35
95th Queue (ft)	242	103	123
Link Distance (ft)	839	839	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			250
Storage Blk Time (%)		0	0
Queuing Penalty (veh)		0	0

Intersection: 7: Driveway/Post St & White Rock Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	105	352	370	135	145	406	340	104	68	75	457
Average Queue (ft)	101	252	229	17	51	224	143	42	20	73	399
95th Queue (ft)	116	373	368	75	123	363	264	85	52	80	525
Link Distance (ft)		315	315			585	585	216	216		408
Upstream Blk Time (%)		5	3			0					69
Queuing Penalty (veh)		29	15			0					0
Storage Bay Dist (ft)	80			110	120					50	
Storage Blk Time (%)	54	11	20	0	1	31				80	11
Queuing Penalty (veh)	242	27	5	0	2	13				183	20

Zone Summary

Zone wide Queuing Penalty: 2817



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	16	890	141	499	298	382	43
v/c Ratio	0.05	0.72	0.63	0.26	0.70	0.50	0.25
Control Delay	30.9	33.7	60.2	14.8	48.0	5.1	27.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.9	33.7	60.2	14.8	48.0	5.1	27.3
Queue Length 50th (ft)	6	231	81	76	162	5	8
Queue Length 95th (ft)	33	#561	211	208	389	63	47
Internal Link Dist (ft)		327		554		213	278
Turn Bay Length (ft)	195		190		155		
Base Capacity (vph)	443	1768	425	2683	738	1190	365
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.50	0.33	0.19	0.40	0.32	0.12

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	719	99	130	459	0	274	11	340	0	13	27
Future Volume (veh/h)	15	719	99	130	459	0	274	11	340	0	13	27
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	16	782	108	141	499	0	298	12	370	0	14	29
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	440	1218	168	176	1979	0	351	15	473	91	28	58
Arrive On Green	0.39	0.39	0.39	0.10	0.56	0.00	0.20	0.31	0.31	0.00	0.05	0.05
Sat Flow, veh/h	895	3125	431	1774	3632	0	1774	50	1541	997	542	1123
Grp Volume(v), veh/h	16	443	447	141	499	0	298	0	382	0	0	43
Grp Sat Flow(s),veh/h/ln	895	1770	1787	1774	1770	0	1774	0	1591	997	0	1665
Q Serve(g_s), s	0.9	16.2	16.2	6.2	5.7	0.0	12.8	0.0	17.4	0.0	0.0	2.0
Cycle Q Clear(g_c), s	0.9	16.2	16.2	6.2	5.7	0.0	12.8	0.0	17.4	0.0	0.0	2.0
Prop In Lane	1.00		0.24	1.00		0.00	1.00		0.97	1.00		0.67
Lane Grp Cap(c), veh/h	440	690	696	176	1979	0	351	0	489	91	0	86
V/C Ratio(X)	0.04	0.64	0.64	0.80	0.25	0.00	0.85	0.00	0.78	0.00	0.00	0.50
Avail Cap(c_a), veh/h	576	959	969	456	3079	0	792	0	489	233	0	323
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	15.0	19.7	19.7	35.0	9.0	0.0	30.7	0.0	25.1	0.0	0.0	36.6
Incr Delay (d2), s/veh	0.0	1.3	1.2	3.2	0.1	0.0	5.8	0.0	7.4	0.0	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	8.1	8.2	3.2	2.8	0.0	6.9	0.0	8.6	0.0	0.0	1.0
LnGrp Delay(d),s/veh	15.1	21.0	20.9	38.2	9.1	0.0	36.5	0.0	32.4	0.0	0.0	38.3
LnGrp LOS	B	C	C	D	A		D		C			D
Approach Vol, veh/h		906			640			680				43
Approach Delay, s/veh		20.8			15.5			34.2				38.3
Approach LOS		C			B			C				D
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	13.4	36.9		29.0		50.4	20.3	8.7				
Change Period (Y+Rc), s	5.6	6.0		4.6		6.0	4.6	4.6				
Max Green Setting (Gmax), s	20.4	43.0		15.4		69.0	35.4	15.4				
Max Q Clear Time (g_c+I1), s	8.2	18.2		19.4		7.7	14.8	4.0				
Green Ext Time (p_c), s	0.0	12.7		0.0		17.9	0.8	0.1				
Intersection Summary												
HCM 2010 Ctrl Delay			23.7									
HCM 2010 LOS			C									
Notes												

Saratoga Retail Phase 2
 8: Saratoga Way & Mammouth Way/Walgreens Dwy

Near Term (2026) plus Project Conditions

PM Peak

Intersection												
Int Delay, s/veh	4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕			↕	
Traffic Vol, veh/h	87	3	6	0	4	32	4	531	0	16	275	69
Future Vol, veh/h	87	3	6	0	4	32	4	531	0	16	275	69
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	95	3	7	0	4	35	4	577	0	17	299	75

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	976	957	336	962	995	577	374	0	0	577	0	0
Stage 1	371	371	-	586	586	-	-	-	-	-	-	-
Stage 2	605	586	-	376	409	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	230	258	706	235	245	516	1184	-	-	996	-	-
Stage 1	649	620	-	496	497	-	-	-	-	-	-	-
Stage 2	485	497	-	645	596	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	207	251	706	226	239	516	1184	-	-	996	-	-
Mov Cap-2 Maneuver	207	251	-	226	239	-	-	-	-	-	-	-
Stage 1	647	606	-	494	495	-	-	-	-	-	-	-
Stage 2	447	495	-	622	583	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	35.8		13.6		0.1		0.4	
HCM LOS	E		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1184	-	-	218	457	996	-
HCM Lane V/C Ratio	0.004	-	-	0.479	0.086	0.017	-
HCM Control Delay (s)	8.1	-	-	35.8	13.6	8.7	0
HCM Lane LOS	A	-	-	E	B	A	A
HCM 95th %tile Q(veh)	0	-	-	2.4	0.3	0.1	-

Intersection						
Int Delay, s/veh	2.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	64	471	9	104	177
Future Vol, veh/h	7	64	471	9	104	177
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	70	512	10	113	192

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	935	517	0	0	522	0
Stage 1	517	-	-	-	-	-
Stage 2	418	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	295	558	-	-	1044	-
Stage 1	598	-	-	-	-	-
Stage 2	664	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	263	558	-	-	1044	-
Mov Cap-2 Maneuver	263	-	-	-	-	-
Stage 1	598	-	-	-	-	-
Stage 2	592	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.1	0	3.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	- 263 558	1044	-
HCM Lane V/C Ratio	-	- 0.029 0.125	0.108	-
HCM Control Delay (s)	-	- 19.1 12.4	8.9	-
HCM Lane LOS	-	- C B	A	-
HCM 95th %tile Q(veh)	-	- 0.1 0.4	0.4	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	1	0	413	100	13
Future Vol, veh/h	18	1	0	413	100	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	1	0	449	109	14

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	565	116	123	0	-	0
Stage 1	116	-	-	-	-	-
Stage 2	449	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	486	936	1464	-	-	-
Stage 1	909	-	-	-	-	-
Stage 2	643	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	486	936	1464	-	-	-
Mov Cap-2 Maneuver	486	-	-	-	-	-
Stage 1	909	-	-	-	-	-
Stage 2	643	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1464	-	499	-	-
HCM Lane V/C Ratio	-	-	0.041	-	-
HCM Control Delay (s)	0	-	12.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

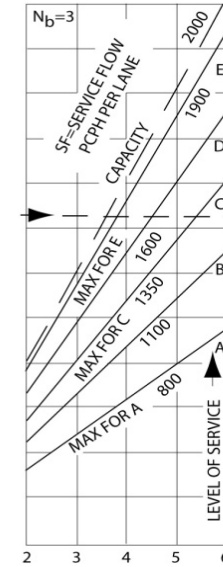
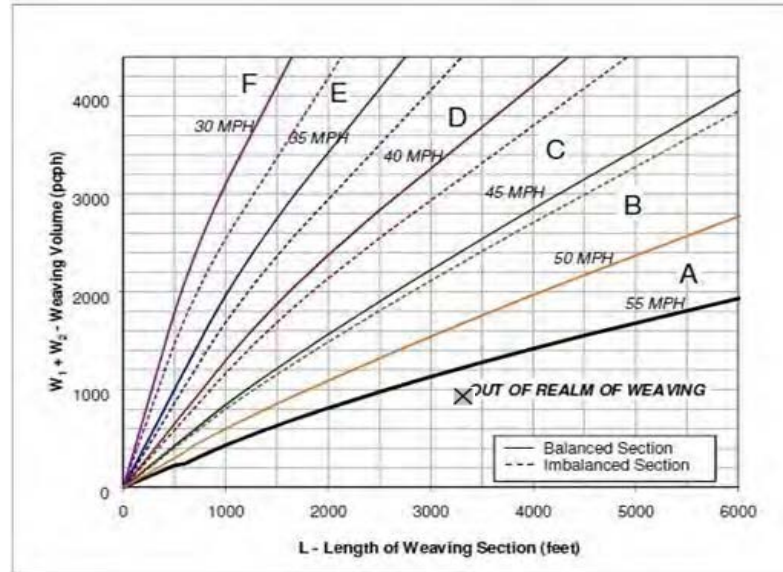
WB US-50, East of El Dorado Hills Blvd Off Ramp, Near-Term (2026) plus Project Conditons (PM)

Number of Entering Mainline Lanes	N _b	3
Number of Lanes in Weaving Section	N	4
Length of Weaving Section (feet)	L	3425

N_b=NUMBER OF BASIC LANES ON APPROACH
SEE CHART FOR DEFINITION OF OTHER TERMS

Total Weaving Section (V)		On ramp to Mainline (W1)		Mainline to Off ramp (W2)	
Volume (vph)	3,142	Volume (vph)	392	Volume (vph)	316
Truck Percentage	2%	Truck Percentage	2%	Truck Percentage	2%
PCE for Trucks	1.5	PCE for Trucks	1.5	PCE for Trucks	1.5
Volume (pcph)	3,173	Volume (pcph)	396	Volume (pcph)	319

W1 + W2	715
In between	
Speed 1	50
Speed 2	55
Interpolated Weaving Speed (S _w , mph)	54.8
Weaving Intensity Factor (k)	1.00
Service Volume ((SV, pcph)	
SV = (1/N)*[V+(k-1)*min(W1,W2)]	793
Level of Service (LOS)	A



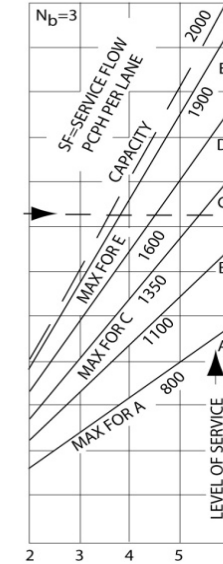
WB US-50, East of El Dorado Hills Blvd Off Ramp, Near-Term (2026) plus Project Conditons (AM)

Number of Entering Mainline Lanes	N _b	3
Number of Lanes in Weaving Section	N	4
Length of Weaving Section (feet)	L	3425

N_b=NUMBER OF BASIC LANES ON APPROACH
SEE CHART FOR DEFINITION OF OTHER TERMS

Total Weaving Section (V)		On ramp to Mainline (W1)		Mainline to Off ramp (W2)	
Volume (vph)	3,646	Volume (vph)	1,054	Volume (vph)	523
Truck Percentage	2%	Truck Percentage	2%	Truck Percentage	2%
PCE for Trucks	1.5	PCE for Trucks	1.5	PCE for Trucks	1.5
Volume (pcph)	3,682	Volume (pcph)	1,065	Volume (pcph)	528

W1 + W2	1,593
In between	
Speed 1	45
Speed 2	50
Interpolated Weaving Speed (S _w , mph)	46.8
Weaving Intensity Factor (k)	1.40
Service Volume ((SV, pcph)	
$SV = (1/N) * [V + (k-1) * \min(W1, W2)]$	973
Level of Service (LOS)	D

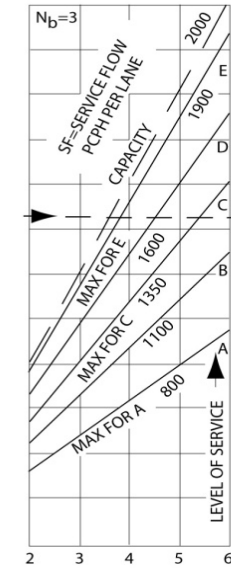
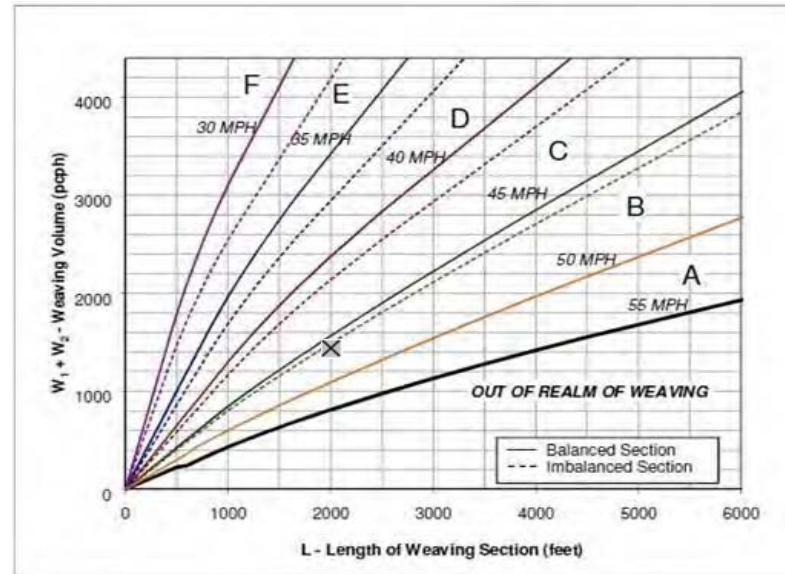


Number of Entering Mainline Lanes Nb 3
 Number of Lanes in Weaving Section N 4
 Length of Weaving Section (feet) L 2000

Nb=NUMBER OF BASIC LANES ON APPROACH
 SEE CHART FOR DEFINITION OF OTHER TERMS

Total Weaving Section (V)		On ramp to Mainline (W1)		Mainline to Off ramp (W2)	
Volume (vph)	3,802	Volume (vph)	831	Volume (vph)	706
Truck Percentage	4%	Truck Percentage	2%	Truck Percentage	2%
PCE for Trucks	1.5	PCE for Trucks	1.5	PCE for Trucks	1.5
Volume (pcph)	3,878	Volume (pcph)	839	Volume (pcph)	713

W1 + W2 1,552
 In between
 Speed 1 45
 Speed 2 50
 Interpolated Weaving Speed (Sw, mph) 45.4
 Weaving Intensity Factor (k) 1.60
 Service Volume ((SV, pcph)
 $SV = (1/N) * [V + (k-1) * \min(W1, W2)]$ 1,076
 Level of Service (LOS) D



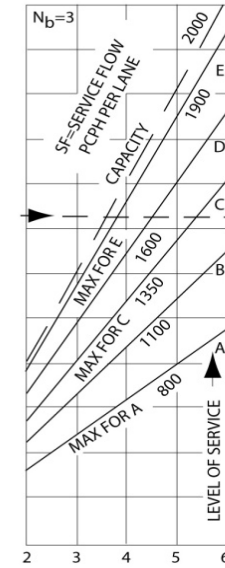
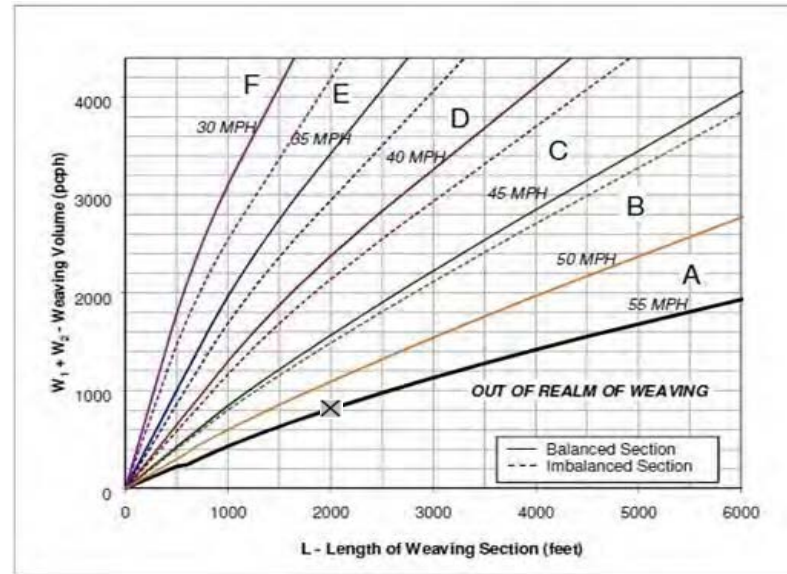
EB US-50, East of Latrobe Rd On Ramp, Near-Term (2026) plus Project Conditions (AM)

Number of Entering Mainline Lanes	Nb	3
Number of Lanes in Weaving Section	N	4
Length of Weaving Section (feet)	L	2000

Nb=NUMBER OF BASIC LANES ON APPROACH
SEE CHART FOR DEFINITION OF OTHER TERMS

Total Weaving Section (V)		On ramp to Mainline (W1)		Mainline to Off ramp (W2)	
Volume (vph)	1,998	Volume (vph)	526	Volume (vph)	272
Truck Percentage	4%	Truck Percentage	2%	Truck Percentage	2%
PCE for Trucks	1.5	PCE for Trucks	1.5	PCE for Trucks	1.5
Volume (pcph)	2,038	Volume (pcph)	531	Volume (pcph)	275

W1 + W2	806
In between	
Speed 1	50
Speed 2	55
Interpolated Weaving Speed (Sw, mph)	50.0
Weaving Intensity Factor (k)	1.00
Service Volume ((SV, pcph)	
$SV = (1/N) * [V + (k-1) * \min(W1, W2)]$	509
Level of Service (LOS)	B



Segment Inputs				Near-Term plus Project Conditions														
				Flow Inputs		AM LOS Performance Measures					PM LOS Performance Measures							
	Length	Number of Lanes	Interchange Density	PM		V _p	FFS	S	D	LOS	V _p	FFS	S	D	LOS			
				AM Peak	Peak											(pc/h/ln)	(mi/h)	(mi/h)
	(ft)	(N)	(l/mi)	(veh/h)	(veh/h)	(pc/h/ln)	(mi/h)	(mi/h)	(pc/mi/ln)		(pc/h/ln)	(mi/h)	(mi/h)	(pc/mi/ln)				
West EastD	West of Latrobe Rd SB Off Ramp	6690	3	0.33	2,866	4,126	1048.79	74.12	75	74.9736	13.989	B	1509.877	74.12	75	72.1221	20.9	C
	Latrobe Rd NB Off Ramp to Latrobe Rd On Ramp	1990	3	0.50	1,472	2,971	538.667	73.6	75	72.644	7.4152	A	1087.214	73.6	75	74.9158	14.512	B
	El Dorado Hills Blvd Off Ramp to El Dorado Hills Blvd On Ramp	3565	2	0.50	3,123	2,826	1714.26	73.6	75	69.3525	24.718	C	1551.228	73.6	75	71.6364	21.654	C
	West of El Dorado Hills Blvd On Ramp	5890	2	0.33	4,306	4,303	2363.62	74.12	75	54.4158	43.436	E	2361.973	74.12	75	54.4655	43.366	E
Universal Inputs:																		
PHF 0.92																		
(P _T) 2%																		
f _{HV} 0.99009901																		

Near-Term plus Project Conditions																																			
Segment Inputs			AM Flow Inputs			AM LOS Performance Measures										PM Flow Inputs			PM LOS Performance Measures																
	Number of Lanes	Number of Ramp Lanes	Length of Acceleration Lane (L _a)	Downstream	Upstream	Ramp	v _D	v _F	v _R	v _F /S _{FR}	P _{FM}	v ₁₂	Capacity	v ₃	v _{12a}	v/c	D	LOS	Downstream	Upstream	Ramp	v _D	v _F	v _R	v _F /S _{FR}	P _{FM}	v ₁₂	Capacity	v ₃	v _{12a}	v/c	D	LOS		
				Volume (D)	Volume (F)	Volume (R)													Volume (D)	Volume (F)	Volume (R)														
	(N)		(ft)	(veh/h)	(veh/h)	(veh/h)	(pc/h)	(pc/h)	(pc/h)			(pc/h/ln)							(veh/h)	(veh/h)	(veh/h)	(pc/h)	(pc/hr)	(pc/h)			(pc/h/ln)								
≥ ∅ El Dorado Hills Blvd On Ramp	2	1	795	4306	3123	1183	4727	3429	1299	98	1	3428.5	4800	0	2571	3429	0.9848	36.765	E	4303	2826	1477	4724	3102	1621	89	1	3102.5	4800	0	2327	3102	0.9842	36.591	E
Universal Inputs: Length 1500 (ft) S _{FR} 70 (mi/h) S _{RA} 35 (mi/h) PHF 0.92 P _i 2% P _{av} 0.99009901																																			

Segment Inputs				Near-Term plus Project Conditions																														
Segment	Number of Lanes	Number of Ramp Lanes	Length of Deceleration Lane (L _D)		AM Flow Inputs											PM Flow Inputs			PM LOS Performance Measures															
			L _{EQ} (ft)	L _D (ft)	Downstream Volume (veh/h)	Upstream Volume (veh/h)	Ramp Volume (veh/h)	v _D (pc/h/ln)	v _F (pc/h/ln)	v _R (pc/h/ln)	P _{FD}	v ₁₂ (pc/h/ln)	Capacity	v ₃	v _{12a}	v/c	D	LOS	Downstream Volume (D) (veh/h)	Upstream Volume (F) (veh/h)	Ramp Volume (R) (veh/h)	v _D (pc/h/ln)	v _F (pc/h/ln)	v _R (pc/h/ln)	P _{FD}	v ₁₂ (pc/h/ln)	Capacity	v ₃	v _{12a}	v/c	D	LOS		
EB Latrobe SB Off Ramp	3	1	1086	140	1751	2866	1115	312.359	3208.7	1248.3	0.5952	2415.1	7200	397	1811	2415	0.4456	23.762	C	3717	4303	586	637.033	4817.5	656.07	0.6098	3193.6	7200	812	2395	3194	0.6691	30.457	D
Latrobe NB Off Ramp	3	1	-	140	1472	1751	279	-	1960.4	312.36	0.6966	1460.4	7200	500	1095	1460	0.2723	15.551	B	3148	3717	569	-	4161.4	637.03	0.6267	2845.6	7200	1316	2134	2846	0.578	27.464	C

Universal Inputs:
 Leng 1500 (ft)
 S_{IF} 70 (mi/h)
 S_{IR} 35 (mi/h)
 PHF 0.92
 P₁ 6%
 P_{IR} 0.970873786

Attachment D

Analysis Worksheets for Near-Term (2026) Plus Project Mitigated Conditions

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	6:50	6:50	6:50	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	8015	8020	8067	7959	7940	7945	8197
Vehs Exited	7907	7969	8031	7827	7834	7842	8125
Starting Vehs	292	337	345	296	327	318	374
Ending Vehs	400	388	381	428	433	421	446
Travel Distance (mi)	4682	4702	4764	4670	4603	4678	4837
Travel Time (hr)	415.2	491.2	419.0	419.6	444.7	511.0	495.6
Total Delay (hr)	267.0	342.8	268.7	271.7	299.2	363.6	343.2
Total Stops	13968	14961	14615	14436	14187	14775	15189
Fuel Used (gal)	249.5	268.5	253.6	251.7	254.1	272.1	272.5

Summary of All Intervals

Run Number	7	8	9	Avg
Start Time	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	8002	7925	7990	8003
Vehs Exited	7918	7811	7982	7927
Starting Vehs	319	315	339	324
Ending Vehs	403	429	347	401
Travel Distance (mi)	4693	4664	4705	4700
Travel Time (hr)	481.0	471.8	463.5	461.3
Total Delay (hr)	332.6	324.8	315.0	312.9
Total Stops	14496	14698	14586	14589
Fuel Used (gal)	265.4	262.6	260.8	261.1

Interval #0 Information Seeding

Start Time	6:50
End Time	7:00
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	1976	2000	1992	1977	1979	1979	2045
Vehs Exited	1919	1940	1996	1931	1959	1934	2019
Starting Vehs	292	337	345	296	327	318	374
Ending Vehs	349	397	341	342	347	363	400
Travel Distance (mi)	1128	1141	1182	1129	1156	1164	1192
Travel Time (hr)	82.6	95.6	88.3	82.2	85.3	95.1	92.7
Total Delay (hr)	46.7	59.7	51.0	46.2	48.9	58.3	55.2
Total Stops	3405	3751	3376	3247	3304	3394	3497
Fuel Used (gal)	55.7	59.7	59.5	56.0	57.3	60.1	60.2

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	1980	1900	1943	1971
Vehs Exited	1935	1861	1957	1945
Starting Vehs	319	315	339	324
Ending Vehs	364	354	325	349
Travel Distance (mi)	1131	1116	1142	1148
Travel Time (hr)	89.6	88.1	93.3	89.3
Total Delay (hr)	53.7	53.1	57.1	53.0
Total Stops	3391	3334	3477	3412
Fuel Used (gal)	57.7	56.8	59.2	58.2

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15
Volumes adjusted by PHF, Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	2074	2043	2080	2070	2108	2136	2110
Vehs Exited	2017	2015	2037	1983	2044	2067	2085
Starting Vehs	349	397	341	342	347	363	400
Ending Vehs	406	425	384	429	411	432	425
Travel Distance (mi)	1216	1193	1188	1201	1211	1210	1234
Travel Time (hr)	104.8	123.8	102.2	113.7	105.8	123.1	121.0
Total Delay (hr)	66.3	86.0	64.5	75.6	67.5	84.9	82.2
Total Stops	3693	3766	3626	3926	3788	3906	3954
Fuel Used (gal)	64.0	67.7	62.1	66.1	64.2	68.3	68.3

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15
Volumes adjusted by PHF, Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	2170	2081	2173	2105
Vehs Exited	2053	2001	2122	2043
Starting Vehs	364	354	325	349
Ending Vehs	481	434	376	417
Travel Distance (mi)	1249	1203	1262	1217
Travel Time (hr)	121.2	122.9	114.7	115.3
Total Delay (hr)	81.8	84.8	75.0	76.9
Total Stops	3848	4113	3875	3849
Fuel Used (gal)	69.3	68.2	67.4	66.6

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	1941	2012	2014	1941	1889	1906	2020
Vehs Exited	1973	2032	1983	2018	1923	1967	1986
Starting Vehs	406	425	384	429	411	432	425
Ending Vehs	374	405	415	352	377	371	459
Travel Distance (mi)	1156	1191	1179	1186	1114	1169	1199
Travel Time (hr)	117.1	137.7	111.3	115.0	118.9	141.5	135.9
Total Delay (hr)	80.4	100.0	74.3	77.7	83.6	104.7	98.1
Total Stops	3408	3737	3729	3730	3540	3743	3938
Fuel Used (gal)	64.7	71.2	64.5	66.3	64.4	71.1	70.4

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	1954	1941	1954	1955
Vehs Exited	2002	2011	1936	1982
Starting Vehs	481	434	376	417
Ending Vehs	433	364	394	390
Travel Distance (mi)	1170	1177	1132	1168
Travel Time (hr)	133.1	129.7	123.9	126.4
Total Delay (hr)	96.0	92.5	88.0	89.5
Total Stops	3762	3696	3548	3682
Fuel Used (gal)	69.1	68.6	65.8	67.6

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	2024	1965	1981	1971	1964	1924	2022
Vehs Exited	1998	1982	2015	1895	1908	1874	2035
Starting Vehs	374	405	415	352	377	371	459
Ending Vehs	400	388	381	428	433	421	446
Travel Distance (mi)	1182	1177	1214	1153	1122	1135	1212
Travel Time (hr)	110.7	134.1	117.3	108.7	134.7	151.4	146.0
Total Delay (hr)	73.6	97.1	79.0	72.3	99.3	115.6	107.8
Total Stops	3462	3707	3884	3533	3555	3732	3800
Fuel Used (gal)	65.1	69.9	67.4	63.3	68.2	72.6	73.6

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	1898	2003	1920	1961
Vehs Exited	1928	1938	1967	1953
Starting Vehs	433	364	394	390
Ending Vehs	403	429	347	401
Travel Distance (mi)	1143	1168	1169	1167
Travel Time (hr)	137.1	131.2	131.5	130.3
Total Delay (hr)	101.1	94.4	94.8	93.5
Total Stops	3495	3555	3686	3644
Fuel Used (gal)	69.3	69.1	68.5	68.7

1: El Dorado Hills Blvd & Saratoga Way Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2	44.6	3.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.2	0.3	0.3	0.0	0.0	0.0	108.8	108.8	105.5
Total Delay (hr)	0.8	1.0	1.4	1.1	1.6	1.1	2.6	3.5	0.0	3.9	15.0	0.9
Total Del/Veh (s)	49.5	50.5	28.6	45.8	54.2	32.8	62.0	17.6	12.7	82.6	37.9	34.1
Stop Delay (hr)	0.7	0.9	1.3	1.0	1.4	1.0	2.4	2.4	0.0	3.6	10.8	0.8
Stop Del/Veh (s)	47.2	46.7	28.0	43.1	48.0	29.3	56.7	12.1	10.3	76.3	27.3	28.3

1: El Dorado Hills Blvd & Saratoga Way Performance by movement

Movement	All
Denied Delay (hr)	52.8
Denied Del/Veh (s)	59.2
Total Delay (hr)	32.8
Total Del/Veh (s)	37.2
Stop Delay (hr)	26.3
Stop Del/Veh (s)	29.9

2: El Dorado Hills Blvd & US-50 WB Ramps/Saratoga Way Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.2	0.2	1.9	1.2	4.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	1.6	1.3	0.3	4.0	6.9	2.4	9.4	1.6	0.3	0.6	7.7	2.5
Total Del/Veh (s)	43.6	45.5	3.9	133.1	167.0	181.3	62.7	8.3	6.6	73.2	24.9	17.1
Stop Delay (hr)	1.5	1.2	0.0	3.8	6.5	2.4	8.2	0.7	0.1	0.6	4.8	1.1
Stop Del/Veh (s)	40.7	40.7	0.0	126.6	159.2	176.5	54.7	3.7	3.0	67.1	15.7	7.6

2: El Dorado Hills Blvd & US-50 WB Ramps/Saratoga Way Performance by movement

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.2
Total Delay (hr)	38.7
Total Del/Veh (s)	35.6
Stop Delay (hr)	31.0
Stop Del/Veh (s)	28.5

3: Latrobe Road & US 50 EB Ramps Performance by movement

Movement	EBR	WBR	NBT	NBR	SBL	SBT	All
Denied Delay (hr)	0.8	0.0	0.0	0.0	0.0	0.0	0.8
Denied Del/Veh (s)	2.5	0.2	0.0	0.0	0.0	0.0	0.7
Total Delay (hr)	7.9	0.1	2.9	0.8	2.9	3.3	17.8
Total Del/Veh (s)	24.9	0.9	9.5	10.5	41.1	9.3	14.9
Stop Delay (hr)	6.0	0.0	0.9	0.3	2.3	0.8	10.3
Stop Del/Veh (s)	18.9	0.0	3.0	4.0	33.3	2.3	8.6

4: Latrobe Road & Town Center Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	4.0	0.1	0.1	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.4	0.1	0.0	1.2	0.4	1.0	0.7	8.6	0.2	4.3	5.3	0.4
Total Del/Veh (s)	44.0	46.9	12.0	42.1	42.8	10.8	51.4	31.1	6.4	30.7	12.5	4.1
Stop Delay (hr)	0.4	0.1	0.0	1.1	0.3	0.9	0.7	5.7	0.1	3.6	2.8	0.2
Stop Del/Veh (s)	42.1	43.6	12.0	38.5	37.8	9.5	46.5	20.5	5.2	25.5	6.6	2.1

4: Latrobe Road & Town Center Blvd Performance by movement

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.1
Total Delay (hr)	22.7
Total Del/Veh (s)	20.1
Stop Delay (hr)	15.9
Stop Del/Veh (s)	14.1

5: Latrobe Road & White Rock Road Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	6.2	1.4	0.4	10.2	7.5	0.4	12.8	5.5	0.2	1.9	13.0	4.2
Total Del/Veh (s)	78.9	40.3	18.0	94.8	71.4	9.9	342.8	27.5	4.0	67.3	43.8	30.5
Stop Delay (hr)	5.9	1.2	0.4	9.3	6.5	0.3	12.7	4.9	0.2	1.7	8.8	3.1
Stop Del/Veh (s)	75.1	35.6	16.6	86.5	62.0	7.6	342.3	24.3	4.1	58.2	29.6	22.6

5: Latrobe Road & White Rock Road Performance by movement

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.0
Total Delay (hr)	63.6
Total Del/Veh (s)	56.5
Stop Delay (hr)	55.0
Stop Del/Veh (s)	48.8

7: Driveway/Post St & White Rock Road Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.7	12.4	3.3	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	61.5	56.6	56.0	0.1	0.1	0.1	3.8	0.3	0.3
Total Delay (hr)	1.6	1.2	0.0	2.4	31.9	2.5	0.8	0.0	0.0	0.4	0.1	0.7
Total Del/Veh (s)	55.3	18.0	4.1	216.3	150.2	44.0	78.4	43.5	4.4	42.8	29.8	19.1
Stop Delay (hr)	1.5	0.9	0.0	2.2	26.9	1.8	0.8	0.0	0.0	0.4	0.1	0.6
Stop Del/Veh (s)	51.4	13.6	2.2	195.2	126.6	32.6	76.2	40.9	4.4	39.9	26.2	17.8

7: Driveway/Post St & White Rock Road Performance by movement

Movement	All
Denied Delay (hr)	16.4
Denied Del/Veh (s)	35.9
Total Delay (hr)	41.9
Total Del/Veh (s)	93.1
Stop Delay (hr)	35.4
Stop Del/Veh (s)	78.8

Total Zone Performance

Denied Delay (hr)	70.2
Denied Del/Veh (s)	41.5
Total Delay (hr)	217.9
Total Del/Veh (s)	427.9
Stop Delay (hr)	174.0
Stop Del/Veh (s)	341.7

Intersection: 1: El Dorado Hills Blvd & Saratoga Way

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	TR	L	T	T	TR	L	T	TR
Maximum Queue (ft)	88	145	183	133	258	230	147	163	156	125	352	348
Average Queue (ft)	18	71	87	50	138	111	63	66	68	107	317	321
95th Queue (ft)	56	123	153	101	235	197	122	130	133	152	368	363
Link Distance (ft)		299		482	482		774	774	774		309	309
Upstream Blk Time (%)											31	37
Queuing Penalty (veh)											0	0
Storage Bay Dist (ft)	150		200			250				100		
Storage Blk Time (%)		0	0			0				25	33	
Queuing Penalty (veh)		1	0			1				185	57	

Intersection: 2: El Dorado Hills Blvd & US-50 WB Ramps/Saratoga Way

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB	SB
Directions Served	L	LT	L	LT	TR	L	L	T	T	TR	L	T
Maximum Queue (ft)	136	191	174	474	173	334	339	131	127	155	162	339
Average Queue (ft)	66	95	83	251	141	212	216	51	50	71	36	163
95th Queue (ft)	119	156	185	518	209	328	336	110	107	128	114	307
Link Distance (ft)	1228	1228		621		646	646	646	646	646		774
Upstream Blk Time (%)				2								
Queuing Penalty (veh)				0								
Storage Bay Dist (ft)			150		150						200	
Storage Blk Time (%)			1	37	26						0	8
Queuing Penalty (veh)			2	64	48						0	3

Intersection: 2: El Dorado Hills Blvd & US-50 WB Ramps/Saratoga Way

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	294	334	225
Average Queue (ft)	115	133	133
95th Queue (ft)	246	282	245
Link Distance (ft)	774	774	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			200
Storage Blk Time (%)		2	2
Queuing Penalty (veh)		8	8

Intersection: 3: Latrobe Road & US 50 EB Ramps

Movement	EB	EB	NB	NB	NB	NB	SB	SB	SB	SB	SB	
Directions Served	R	R	T	T	T	R	L	T	T	T	T	
Maximum Queue (ft)	331	352	163	205	301	218	287	232	68	119	67	
Average Queue (ft)	193	205	35	62	90	59	170	49	20	25	17	
95th Queue (ft)	290	315	116	155	227	165	255	156	54	84	50	
Link Distance (ft)	1211		561	561	561			646	646	646	646	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	450							275	575			
Storage Blk Time (%)					0			0				
Queuing Penalty (veh)					1			0				

Intersection: 4: Latrobe Road & Town Center Blvd

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	
Directions Served	L	L	T	TR	LT	R	R	L	L	T	T	T	
Maximum Queue (ft)	26	62	32	30	173	135	144	63	101	282	433	466	
Average Queue (ft)	2	23	8	6	87	49	59	17	25	119	159	195	
95th Queue (ft)	14	54	28	23	153	101	115	46	61	231	321	342	
Link Distance (ft)			778	778	526	526	526			839	839	839	
Upstream Blk Time (%)													
Queuing Penalty (veh)													
Storage Bay Dist (ft)	350	350						225	225				
Storage Blk Time (%)										1			
Queuing Penalty (veh)										0			

Intersection: 4: Latrobe Road & Town Center Blvd

Movement	NB	SB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	T	R
Maximum Queue (ft)	71	229	241	239	252	287	149
Average Queue (ft)	24	116	131	111	120	126	40
95th Queue (ft)	55	190	203	195	213	232	105
Link Distance (ft)	839			561	561	561	561
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		325	325				
Storage Blk Time (%)			0	0			
Queuing Penalty (veh)			0	0			

Intersection: 5: Latrobe Road & White Rock Road

Movement	EB	EB	EB	EB	B40	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	TR	T	L	L	T	T	R	L	T
Maximum Queue (ft)	242	260	174	160	12	182	191	200	333	147	278	370
Average Queue (ft)	117	147	50	74	0	158	173	184	259	52	242	274
95th Queue (ft)	221	240	121	133	12	205	212	234	386	107	340	457
Link Distance (ft)			346	346	559				315	315		278
Upstream Blk Time (%)	0	0	0						8	0	35	54
Queuing Penalty (veh)	0	0	0						36	0	0	0
Storage Bay Dist (ft)	325	325				175	175	175				270
Storage Blk Time (%)	0	0	0			3	17	13	13		56	51
Queuing Penalty (veh)	0	0	0			6	34	25	76		101	74

Intersection: 5: Latrobe Road & White Rock Road

Movement	NB	NB	NB	NB	B80	B80	B25	B25	SB	SB	SB	SB
Directions Served	T	T	T	R	T	T	T	T	L	L	T	T
Maximum Queue (ft)	241	180	104	53	314	256	227	227	82	249	426	422
Average Queue (ft)	101	96	19	28	149	62	84	73	23	78	257	260
95th Queue (ft)	198	156	69	56	389	239	326	312	61	239	398	396
Link Distance (ft)	278	278	278		247	247	501	501			839	839
Upstream Blk Time (%)	0				33	1	3	1				
Queuing Penalty (veh)	0				0	0	0	0				
Storage Bay Dist (ft)				25					225	225		
Storage Blk Time (%)			4	1							0	14
Queuing Penalty (veh)			6	2							0	15

Intersection: 5: Latrobe Road & White Rock Road

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	485	275
Average Queue (ft)	119	176
95th Queue (ft)	390	304
Link Distance (ft)	839	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		250
Storage Blk Time (%)	0	4
Queuing Penalty (veh)	2	15

Intersection: 7: Driveway/Post St & White Rock Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	104	190	148	54	145	1106	1089	121	41	75	167
Average Queue (ft)	75	56	64	7	51	886	791	39	10	31	61
95th Queue (ft)	119	145	120	33	130	1350	1420	98	30	69	128
Link Distance (ft)		315	315			1064	1064	216	216		408
Upstream Blk Time (%)						46	13	0			
Queuing Penalty (veh)						0	0	0			
Storage Bay Dist (ft)	80			110	120					50	
Storage Blk Time (%)	15	2	1		0	62				9	19
Queuing Penalty (veh)	18	2	0		1	25				13	7

Zone Summary

Zone wide Queuing Penalty: 839

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	6:50	6:50	6:50	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	9486	9774	9831	9573	9746	9830	9768
Vehs Exited	9230	9590	9700	9418	9561	9615	9550
Starting Vehs	449	384	471	474	406	395	428
Ending Vehs	705	568	602	629	591	610	646
Travel Distance (mi)	5165	5358	5355	5224	5321	5310	5343
Travel Time (hr)	828.6	675.5	631.7	694.5	622.8	597.0	811.4
Total Delay (hr)	664.2	505.0	460.8	528.7	453.7	427.7	641.8
Total Stops	21409	21193	20835	21921	20893	19362	22919
Fuel Used (gal)	362.5	335.0	325.6	334.5	320.8	316.8	366.0

Summary of All Intervals

Run Number	7	8	9	Avg
Start Time	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	9743	9564	9893	9720
Vehs Exited	9550	9474	9676	9535
Starting Vehs	438	443	450	426
Ending Vehs	631	533	667	613
Travel Distance (mi)	5269	5313	5374	5303
Travel Time (hr)	760.8	709.7	649.0	698.1
Total Delay (hr)	592.8	541.1	477.9	529.4
Total Stops	22116	20464	22754	21389
Fuel Used (gal)	352.8	341.7	330.1	338.6

Interval #0 Information Seeding

Start Time	6:50
End Time	7:00
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	2432	2501	2422	2378	2403	2388	2525
Vehs Exited	2341	2351	2439	2334	2343	2314	2355
Starting Vehs	449	384	471	474	406	395	428
Ending Vehs	540	534	454	518	466	469	598
Travel Distance (mi)	1331	1340	1328	1312	1307	1292	1347
Travel Time (hr)	134.0	123.0	117.4	127.3	110.3	116.3	139.5
Total Delay (hr)	91.8	80.5	74.9	85.8	68.9	75.3	96.9
Total Stops	4904	4986	4624	5068	4445	4474	5172
Fuel Used (gal)	75.4	73.2	72.3	73.3	69.6	70.8	77.7

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	2449	2424	2487	2437
Vehs Exited	2374	2331	2393	2357
Starting Vehs	438	443	450	426
Ending Vehs	513	536	544	515
Travel Distance (mi)	1306	1333	1363	1326
Travel Time (hr)	128.4	123.0	126.6	124.6
Total Delay (hr)	86.8	80.8	83.4	82.5
Total Stops	4753	4763	5024	4824
Fuel Used (gal)	74.0	73.5	75.0	73.5

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15
Volumes adjusted by PHF, Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	2493	2485	2678	2555	2612	2636	2587
Vehs Exited	2376	2485	2592	2422	2497	2551	2469
Starting Vehs	540	534	454	518	466	469	598
Ending Vehs	657	534	540	651	581	554	716
Travel Distance (mi)	1330	1353	1440	1347	1396	1418	1374
Travel Time (hr)	190.5	154.2	154.7	160.3	146.3	147.2	179.7
Total Delay (hr)	148.0	110.7	108.9	117.3	101.6	101.8	136.0
Total Stops	5424	5247	5588	5627	5361	5157	6045
Fuel Used (gal)	88.5	80.6	83.7	81.5	79.9	81.3	87.2

Interval #2 Information Recording

Start Time	7:15
End Time	7:30
Total Time (min)	15
Volumes adjusted by PHF, Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	2652	2531	2559	2579
Vehs Exited	2489	2467	2481	2481
Starting Vehs	513	536	544	515
Ending Vehs	676	600	622	605
Travel Distance (mi)	1376	1374	1356	1376
Travel Time (hr)	180.0	168.1	155.7	163.7
Total Delay (hr)	135.9	124.2	112.3	119.7
Total Stops	6033	5560	5802	5582
Fuel Used (gal)	87.3	84.6	81.1	83.6

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	2331	2423	2381	2268	2401	2396	2315
Vehs Exited	2344	2348	2383	2320	2308	2433	2330
Starting Vehs	657	534	540	651	581	554	716
Ending Vehs	644	609	538	599	674	517	701
Travel Distance (mi)	1302	1334	1326	1284	1310	1321	1310
Travel Time (hr)	235.0	192.9	164.8	182.4	172.9	152.3	230.0
Total Delay (hr)	193.5	150.5	122.5	141.6	131.3	110.3	188.2
Total Stops	5560	5513	5194	5496	5458	4816	5772
Fuel Used (gal)	97.0	89.0	82.4	85.2	83.2	79.9	96.5

Interval #3 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	2260	2328	2466	2354
Vehs Exited	2342	2307	2410	2352
Starting Vehs	676	600	622	605
Ending Vehs	594	621	678	614
Travel Distance (mi)	1311	1296	1363	1316
Travel Time (hr)	218.0	193.7	176.5	191.8
Total Delay (hr)	176.4	152.6	133.2	150.0
Total Stops	5722	5071	6011	5459
Fuel Used (gal)	94.8	87.7	86.7	88.2

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	2230	2365	2350	2372	2330	2410	2341
Vehs Exited	2169	2406	2286	2342	2413	2317	2396
Starting Vehs	644	609	538	599	674	517	701
Ending Vehs	705	568	602	629	591	610	646
Travel Distance (mi)	1202	1331	1261	1282	1309	1280	1312
Travel Time (hr)	269.1	205.5	194.8	224.5	193.3	181.1	262.3
Total Delay (hr)	231.0	163.3	154.5	183.9	151.8	140.3	220.7
Total Stops	5521	5447	5429	5730	5629	4915	5930
Fuel Used (gal)	101.6	92.1	87.2	94.5	88.1	84.7	104.6

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	2382	2281	2381	2343
Vehs Exited	2345	2369	2392	2342
Starting Vehs	594	621	678	614
Ending Vehs	631	533	667	613
Travel Distance (mi)	1276	1310	1292	1285
Travel Time (hr)	234.5	225.0	190.2	218.0
Total Delay (hr)	193.7	183.5	149.0	177.2
Total Stops	5608	5070	5917	5521
Fuel Used (gal)	96.6	95.9	87.4	93.3

1: El Dorado Hills Blvd & Saratoga Way/Park Drive Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.6	47.4	4.4
Denied Del/Veh (s)	0.0	0.0	0.0	0.2	0.4	0.3	0.0	0.0	0.0	191.1	196.6	200.9
Total Delay (hr)	2.7	3.3	2.3	1.8	0.5	1.4	3.6	10.6	0.4	4.8	15.2	1.0
Total Del/Veh (s)	48.2	65.4	27.7	38.9	29.8	17.1	56.0	31.4	26.7	101.0	74.1	51.4
Stop Delay (hr)	2.4	2.9	2.1	1.6	0.4	1.2	3.1	6.9	0.3	4.5	13.2	0.9
Stop Del/Veh (s)	42.8	57.4	25.0	35.6	23.9	13.9	48.0	20.5	19.4	95.4	64.0	47.1

1: El Dorado Hills Blvd & Saratoga Way/Park Drive Performance by movement

Movement	All
Denied Delay (hr)	62.4
Denied Del/Veh (s)	58.8
Total Delay (hr)	47.5
Total Del/Veh (s)	46.5
Stop Delay (hr)	39.4
Stop Del/Veh (s)	38.5

2: El Dorado Hills Blvd & US-50 WB Ramps/Saratoga Way Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.2	0.1	3.5	0.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	2.4	1.9	0.1	3.0	2.8	0.9	11.0	3.7	0.8	1.2	33.6	1.9
Total Del/Veh (s)	62.1	67.4	3.0	58.3	62.6	64.2	36.6	10.2	9.6	232.3	124.7	31.2
Stop Delay (hr)	2.2	1.8	0.0	2.7	2.6	0.8	7.9	1.5	0.3	1.1	29.3	1.4
Stop Del/Veh (s)	58.6	61.9	0.0	53.6	56.5	60.5	26.4	4.1	4.0	219.2	108.5	23.0

2: El Dorado Hills Blvd & US-50 WB Ramps/Saratoga Way Performance by movement

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.2
Total Delay (hr)	63.3
Total Del/Veh (s)	49.3
Stop Delay (hr)	51.7
Stop Del/Veh (s)	40.3

3: Latrobe Road & US 50 EB Ramps Performance by movement

Movement	EBR	WBR	NBT	NBR	SBL	SBT	All
Denied Delay (hr)	0.2	0.1	0.0	0.0	0.0	0.0	0.3
Denied Del/Veh (s)	1.1	0.4	0.0	0.0	0.0	0.0	0.2
Total Delay (hr)	3.5	0.2	6.7	2.2	3.4	2.8	19.0
Total Del/Veh (s)	21.2	1.5	11.5	13.8	58.5	10.2	13.4
Stop Delay (hr)	2.9	0.0	2.0	0.7	2.8	0.8	9.2
Stop Del/Veh (s)	17.5	0.0	3.4	4.4	48.4	2.8	6.5

4: Latrobe Road & Town Center Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.3	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	3.5	0.2	0.3	0.2	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	5.5	0.4	0.3	1.5	0.1	8.3	0.1	50.4	0.5	15.4	3.8	0.0
Total Del/Veh (s)	53.8	41.3	15.7	74.9	67.1	40.7	87.4	109.4	13.3	94.5	14.2	1.3
Stop Delay (hr)	5.1	0.4	0.3	1.4	0.1	7.2	0.1	39.5	0.4	13.7	2.4	0.0
Stop Del/Veh (s)	49.6	38.2	14.8	71.3	62.0	35.5	73.1	85.7	10.6	84.1	9.2	0.8

4: Latrobe Road & Town Center Blvd Performance by movement

Movement	All
Denied Delay (hr)	0.4
Denied Del/Veh (s)	0.3
Total Delay (hr)	86.4
Total Del/Veh (s)	66.4
Stop Delay (hr)	70.7
Stop Del/Veh (s)	54.3

5: Latrobe Road & White Rock Road Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	15.7	18.8	2.5	4.4	3.9	1.2	2.3	21.9	3.9	18.3	4.7	0.5
Total Del/Veh (s)	121.9	130.2	95.1	47.4	52.9	22.8	95.2	68.4	35.8	255.3	27.1	7.8
Stop Delay (hr)	14.7	17.4	2.3	3.8	3.3	1.1	2.2	19.9	3.5	17.8	3.5	0.4
Stop Del/Veh (s)	114.5	120.2	88.7	40.9	45.2	20.4	91.5	62.1	32.8	247.9	20.5	5.9

5: Latrobe Road & White Rock Road Performance by movement

Movement	All
Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.0
Total Delay (hr)	98.0
Total Del/Veh (s)	76.6
Stop Delay (hr)	90.0
Stop Del/Veh (s)	70.3

7: Driveway/Post St & White Rock Road Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	23.4	1.8	25.6
Denied Del/Veh (s)	0.0	0.0	0.0	2.9	0.5	0.4	0.2	0.1	0.1	447.7	451.9	438.3
Total Delay (hr)	7.4	5.8	0.1	1.0	6.3	1.1	1.1	0.2	0.1	9.4	0.5	6.9
Total Del/Veh (s)	106.9	24.4	12.2	79.4	39.6	22.2	62.7	45.1	14.5	226.5	165.9	152.3
Stop Delay (hr)	6.9	3.7	0.0	0.9	4.7	0.9	1.0	0.1	0.1	9.2	0.4	6.6
Stop Del/Veh (s)	99.4	15.3	7.0	72.1	29.5	17.6	60.2	41.9	14.3	219.7	156.7	146.1

7: Driveway/Post St & White Rock Road Performance by movement

Movement	All
Denied Delay (hr)	50.8
Denied Del/Veh (s)	75.7
Total Delay (hr)	39.8
Total Del/Veh (s)	60.7
Stop Delay (hr)	34.5
Stop Del/Veh (s)	52.6

Total Zone Performance

Denied Delay (hr)	114.2
Denied Del/Veh (s)	67.2
Total Delay (hr)	354.2
Total Del/Veh (s)	843.4
Stop Delay (hr)	295.5
Stop Del/Veh (s)	703.6

Intersection: 1: El Dorado Hills Blvd & Saratoga Way/Park Drive

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	TR	L	T	T	TR	L	T	TR
Maximum Queue (ft)	174	332	225	212	293	266	301	301	312	125	353	336
Average Queue (ft)	111	197	143	86	127	148	159	169	178	115	314	281
95th Queue (ft)	206	337	257	170	224	250	262	268	279	158	379	385
Link Distance (ft)		324		482	482		778	778	778		309	309
Upstream Blk Time (%)		3									61	17
Queuing Penalty (veh)		20									0	0
Storage Bay Dist (ft)	150		200			250				100		
Storage Blk Time (%)	1	19	4			2	0			25	60	
Queuing Penalty (veh)	4	74	16			6	1			108	121	

Intersection: 2: El Dorado Hills Blvd & US-50 WB Ramps/Saratoga Way

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB	SB
Directions Served	L	LT	L	LT	TR	L	L	T	T	TR	L	T
Maximum Queue (ft)	169	218	157	174	282	447	454	257	260	285	224	827
Average Queue (ft)	86	121	92	116	135	274	279	97	99	122	46	677
95th Queue (ft)	147	195	152	182	229	421	422	222	198	223	176	938
Link Distance (ft)	1293	1293			621	641	641	641	641	641		778
Upstream Blk Time (%)						0	0	0				15
Queuing Penalty (veh)						2	3	0				67
Storage Bay Dist (ft)			150	150							200	
Storage Blk Time (%)			0	2	5							74
Queuing Penalty (veh)			0	3	12							14

Intersection: 2: El Dorado Hills Blvd & US-50 WB Ramps/Saratoga Way

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	800	776	225
Average Queue (ft)	567	411	105
95th Queue (ft)	893	741	209
Link Distance (ft)	778	778	
Upstream Blk Time (%)	2	0	
Queuing Penalty (veh)	11	1	
Storage Bay Dist (ft)			200
Storage Blk Time (%)		3	1
Queuing Penalty (veh)		9	3

Intersection: 3: Latrobe Road & US 50 EB Ramps

Movement	EB	EB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	R	R	T	T	T	R	L	T	T	T	T
Maximum Queue (ft)	274	178	280	294	348	284	322	330	181	97	26
Average Queue (ft)	137	57	93	126	187	143	166	48	8	2	2
95th Queue (ft)	242	111	194	243	305	253	260	212	91	50	12
Link Distance (ft)	1211		561	561	561			641	641	641	641
Upstream Blk Time (%)			0	0	0			0			
Queuing Penalty (veh)			0	0	0			0			
Storage Bay Dist (ft)		450				275	575				
Storage Blk Time (%)					1	0	0	0			
Queuing Penalty (veh)					5	1	0	0			

Intersection: 4: Latrobe Road & Town Center Blvd

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB
Directions Served	L	L	T	TR	LT	R	R	L	L	T	T	T
Maximum Queue (ft)	232	284	148	110	216	383	392	5	67	858	864	887
Average Queue (ft)	114	172	23	43	74	220	233	0	4	618	680	702
95th Queue (ft)	198	257	94	85	164	337	349	4	40	973	1001	999
Link Distance (ft)			778	778	526	526	526			839	839	839
Upstream Blk Time (%)					0	0				1	2	5
Queuing Penalty (veh)					0	0				4	9	23
Storage Bay Dist (ft)	350	350						225	225			
Storage Blk Time (%)	0	0	0							36		
Queuing Penalty (veh)	0	0	0							1		

Intersection: 4: Latrobe Road & Town Center Blvd

Movement	NB	SB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	T	R
Maximum Queue (ft)	701	335	349	538	215	164	26
Average Queue (ft)	200	270	287	290	56	41	3
95th Queue (ft)	704	368	386	619	143	118	14
Link Distance (ft)	839			561	561	561	561
Upstream Blk Time (%)	1			6			
Queuing Penalty (veh)	6			25			
Storage Bay Dist (ft)		325	325				
Storage Blk Time (%)		3	8	9			
Queuing Penalty (veh)		9	28	55			

Intersection: 5: Latrobe Road & White Rock Road

Movement	EB	EB	EB	EB	B40	B40	WB	WB	WB	WB	WB	NB
Directions Served	L	L	T	TR	T	T	L	L	T	T	R	L
Maximum Queue (ft)	335	346	420	420	551	504	175	187	196	276	210	266
Average Queue (ft)	246	312	361	346	265	160	118	124	98	123	96	102
95th Queue (ft)	384	414	483	471	673	477	175	187	177	210	176	236
Link Distance (ft)			346	346	559	559				315	315	
Upstream Blk Time (%)	1	10	37	39	10	1				0		0
Queuing Penalty (veh)	0	0	200	211	53	6				1		0
Storage Bay Dist (ft)	325	325					175	175	175			270
Storage Blk Time (%)	3	18	37				0	1	1	1		0
Queuing Penalty (veh)	8	46	174				0	2	1	6		0

Intersection: 5: Latrobe Road & White Rock Road

Movement	NB	NB	NB	NB	NB	B80	B80	B25	B25	SB	SB	SB
Directions Served	T	T	T	T	R	T	T	T	T	L	L	T
Maximum Queue (ft)	355	325	332	365	70	229	274	313	336	237	250	566
Average Queue (ft)	248	231	250	238	49	102	125	125	143	179	187	245
95th Queue (ft)	389	333	358	397	60	337	373	464	504	283	301	654
Link Distance (ft)	278	278	278	278		247	247	501	501			839
Upstream Blk Time (%)	17	9	17	12		11	20	3	14			4
Queuing Penalty (veh)	0	0	0	0		0	0	0	0			14
Storage Bay Dist (ft)					25					225	225	
Storage Blk Time (%)	18			17	38					20	33	1
Queuing Penalty (veh)	15			66	113					42	67	2

Intersection: 5: Latrobe Road & White Rock Road

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	365	84	66
Average Queue (ft)	102	12	9
95th Queue (ft)	272	52	41
Link Distance (ft)	839	839	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			250
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Driveway/Post St & White Rock Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	105	354	359	124	144	499	447	132	77	75	450
Average Queue (ft)	103	331	308	18	54	264	162	51	21	73	424
95th Queue (ft)	108	373	384	83	128	434	324	105	57	79	453
Link Distance (ft)		315	315			585	585	216	216		408
Upstream Blk Time (%)		16	5			0	0				88
Queuing Penalty (veh)		92	30			0	0				0
Storage Bay Dist (ft)	80			110	120					50	
Storage Blk Time (%)	73	5	19	0	1	35				86	7
Queuing Penalty (veh)	325	12	5	0	2	15				195	14

Zone Summary

Zone wide Queuing Penalty: 2358

Attachment E
Signal Warrant and MRTD Analysis

Saratoga Retail Phase 2

Scenario Report

Scenario: NearTerm NP AM
Command: Default Command
Volume: NearTerm NP AM
Geometry: EX
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: Default Configuration

 Saratoga Retail Phase 2

Signal Warrant Summary Report

Intersection	Base Met [Del / Vol]	Future Met [Del / Vol]
# 8 INT 8	No / No	??? / ???
# 9 INT 9	No / No	??? / ???
# 10 INT 10	No / No	??? / ???

Saratoga Retail Phase 2

Peak Hour Delay Signal Warrant Report

Intersection #8 INT 8

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	1	0	0	1	0	0	0	0	1	0	0	0
Initial Vol:	0	0	160	3	216	74	76	0	1	0	0	5
ApproachDel:	xxxxxx			xxxxxx			12.2			8.7		

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.3]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=77]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=535]

FAIL - Total volume less than 650 for intersection with less than four approaches.

Approach[westbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.0]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=5]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=535]

FAIL - Total volume less than 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Saratoga Retail Phase 2

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #8 INT 8

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound						
Movement:	L	T	R	L	R	L	T	R	L	R	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign						
Lanes:	1	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	
Initial Vol:	0	0	160			3	216	74			76	0	1			0	0				5	
Major Street Volume:											453											
Minor Approach Volume:											77											
Minor Approach Volume Threshold:	558																					

SIGNAL WARRANT DISCLAIMER

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Saratoga Retail Phase 2

Peak Hour Delay Signal Warrant Report

Intersection #9 INT 9

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign							
Lanes:	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1
Initial Vol:	0	153	0			12	205	0			0	0	0	0		0	0			7
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				9.1							

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.0]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=7]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=377]

FAIL - Total volume less than 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Saratoga Retail Phase 2

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #9 INT 9

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	T	R		L	T	R		L	T	R		L	T	R					
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign							
Lanes:	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1
Initial Vol:	0	153	0	0	12	205	0	0	0	0	0	0	0	0	0	7				
Major Street Volume:													370							
Minor Approach Volume:													7							
Minor Approach Volume Threshold:													802							

SIGNAL WARRANT DISCLAIMER

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Saratoga Retail Phase 2

Peak Hour Delay Signal Warrant Report

Intersection #10 INT 10

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	1	0	1	0	0	0	1	0	0	0	0	0
Initial Vol:	0	138	0	0	204	1	15	0	0	0	0	0
ApproachDel:	xxxxxxx			xxxxxxx			10.8			xxxxxxx		

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.0]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=15]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=358]

FAIL - Total volume less than 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Saratoga Retail Phase 2

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #10 INT 10

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	1	0	1	0	0	0	1	0	0	0	0	0
Initial Vol:	0	138	0	0	204	1	15	0	0	0	0	0
Major Street Volume:							343					
Minor Approach Volume:							15					
Minor Approach Volume Threshold:							653					

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Saratoga Retail Phase 2

Scenario Report

Scenario: NearTerm NP PM
Command: Default Command
Volume: NearTerm NP PM
Geometry: EX
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: Default Configuration

Saratoga Retail Phase 2

Signal Warrant Summary Report

Intersection	Base Met [Del / Vol]	Future Met [Del / Vol]
# 8 INT 8	No / No	??? / ???
# 9 INT 9	No / No	??? / ???
# 10 INT 10	No / No	??? / ???

Saratoga Retail Phase 2

Peak Hour Delay Signal Warrant Report

Intersection #8 INT 8

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	1	0	0	1	0	0	0	0	1	0	0	1
Initial Vol:	2	430	0	16	133	69	87	3	4	0	4	32
ApproachDel:	xxxxxx			xxxxxx			20.4			12.0		

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.5]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=94]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=780]

FAIL - Total volume less than 650 for intersection with less than four approaches.

Approach[westbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.1]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=36]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=780]

FAIL - Total volume less than 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Saratoga Retail Phase 2

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #8 INT 8

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound									
Movement:	L	T	R	L	R	L	T	R	L	R	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign									
Lanes:	1	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1	0
Initial Vol:	2	430		0		16	133	69			87	3	4			0	4	32							
Major Street Volume:											650														
Minor Approach Volume:											94														
Minor Approach Volume Threshold:	433																								

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Saratoga Retail Phase 2

Peak Hour Delay Signal Warrant Report

Intersection #9 INT 9

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Lanes:	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1
Initial Vol:	0	419		8		33	104		0		0	0		0		6	0		13	
ApproachDel:	xxxxxxx					xxxxxxx					xxxxxxx					11.9				

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.1]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=19]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=583]

FAIL - Total volume less than 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Saratoga Retail Phase 2

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #9 INT 9

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Lanes:	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1
Initial Vol:	0	419		8		33	104		0		0	0		0		6	0		13	
Major Street Volume:											564									
Minor Approach Volume:											19									
Minor Approach Volume Threshold:	620																			

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Saratoga Retail Phase 2

Peak Hour Delay Signal Warrant Report

Intersection #10 INT 10

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound				South Bound				East Bound				West Bound						
Movement:	L	T	R		L	T	R		L	T	R		L	T	R				
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign						
Lanes:	1	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
Initial Vol:	0	412	0		0	99	11		15	0	1		0	0	0				
ApproachDel:	xxxxxx				xxxxxx				12.4				xxxxxx						

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.1]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=16]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=538]

FAIL - Total volume less than 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Saratoga Retail Phase 2

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #10 INT 10

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	1	0	1	0	0	0	0	0	1	0	0	0
Initial Vol:	0	412	0	0	99	11	15	0	1	0	0	0
Major Street Volume:	522											
Minor Approach Volume:	16											
Minor Approach Volume Threshold:	509											

SIGNAL WARRANT DISCLAIMER

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Saratoga Retail Phase 2

Scenario Report

Scenario: NearTerm PP AM
Command: Default Command
Volume: NearTerm PP AM
Geometry: EX
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: Default Configuration

Saratoga Retail Phase 2

Signal Warrant Summary Report

Intersection	Base Met [Del / Vol]	Future Met [Del / Vol]
# 8 INT 8	No / No	??? / ???
# 9 INT 9	No / No	??? / ???
# 10 INT 10	No / No	??? / ???

Saratoga Retail Phase 2

Peak Hour Delay Signal Warrant Report

Intersection #8 INT 8

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	1	0	0	1	0	0	0	0	1	0	0	0
Initial Vol:	0	199	0	3	263	74	76	0	2	0	0	5
ApproachDel:	xxxxxx			xxxxxx			14.9			9.4		

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.3]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=78]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=622]

FAIL - Total volume less than 650 for intersection with less than four approaches.

Approach[westbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.0]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=5]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=622]

FAIL - Total volume less than 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Saratoga Retail Phase 2

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #8 INT 8

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound						
Movement:	L	T	R	L	R	L	T	R	L	R	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign						
Lanes:	1	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	
Initial Vol:	0	199		0		3	263		74		76	0		2		0	0		0		5	
Major Street Volume:											539											
Minor Approach Volume:											78											
Minor Approach Volume Threshold:	498																					

SIGNAL WARRANT DISCLAIMER

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Saratoga Retail Phase 2

Peak Hour Delay Signal Warrant Report

Intersection #9 INT 9

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0	0	1	0	0	0	0	0	0	0	0	0
Initial Vol:	0	172	0	35	230	0	0	0	0	0	0	27
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			9.3		

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.1]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=27]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=464]

FAIL - Total volume less than 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Saratoga Retail Phase 2

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #9 INT 9

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	T	R		L	T	R		L	T	R		L	T	R					
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign							
Lanes:	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1
Initial Vol:	0	172	0		35	230	0		0	0	0		0	0	0		0	0	0	27
Major Street Volume:													437							
Minor Approach Volume:													27							
Minor Approach Volume Threshold:													730							

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Saratoga Retail Phase 2

Peak Hour Delay Signal Warrant Report

Intersection #10 INT 10

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	1	0	1	0	0	0	0	0	1	0	0	0
Initial Vol:	0	138	0	0	204	2	0	16	0	0	0	0
ApproachDel:	xxxxxxx			xxxxxxx			11.6			xxxxxxx		

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.1]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=16]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=360]

FAIL - Total volume less than 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Saratoga Retail Phase 2

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #10 INT 10

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	1	0	1	0	0	0	1	0	0	0	0	0
Initial Vol:	0	138	0	0	204	2	0	16	0	0	0	0
Major Street Volume:							344					
Minor Approach Volume:							16					
Minor Approach Volume Threshold:							652					

SIGNAL WARRANT DISCLAIMER

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Saratoga Retail Phase 2

Scenario Report

Scenario: NearTerm PP PM
Command: Default Command
Volume: NearTerm PP PM
Geometry: EX
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Path
Routes: Default Route
Configuration: Default Configuration

 Saratoga Retail Phase 2

Signal Warrant Summary Report

Intersection	Base Met [Del / Vol]	Future Met [Del / Vol]
# 8 INT 8	No / No	??? / ???
# 9 INT 9	No / No	??? / ???
# 10 INT 10	No / No	??? / ???

Saratoga Retail Phase 2

Peak Hour Delay Signal Warrant Report

Intersection #8 INT 8

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	1	0	0	1	0	0	0	0	1	0	0	1
Initial Vol:	4	531	0	16	275	69	87	3	6	0	4	32
ApproachDel:	xxxxxx			xxxxxx			35.0			13.5		

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.9]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=96]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=1027]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[westbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.1]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=36]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=1027]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

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Saratoga Retail Phase 2

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #8 INT 8

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound									
Movement:	L	T	R	L	R	L	T	R	L	R	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign									
Lanes:	1	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1	0
Initial Vol:	4	531		0		16	275	69			87	3	6			0	4		32						
Major Street Volume:											895														
Minor Approach Volume:											96														
Minor Approach Volume Threshold:	323																								

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Saratoga Retail Phase 2

Peak Hour Delay Signal Warrant Report

Intersection #9 INT 9

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	T	R		L	T	R		L	T	R		L	T	R					
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign							
Lanes:	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1
Initial Vol:	0	471	9		104	177	0		0	0	0	0		7	0	64				
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				12.9							

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.3]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=71]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=832]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Saratoga Retail Phase 2

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #9 INT 9

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound									
Movement:	L	T	R	L	R	L	T	R	L	R	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign									
Lanes:	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1
Initial Vol:	0	471		9		104	177		0		0	0		0		7	0		0		64				
Major Street Volume:											761														
Minor Approach Volume:											71														
Minor Approach Volume Threshold:	492																								

SIGNAL WARRANT DISCLAIMER

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Saratoga Retail Phase 2

Peak Hour Delay Signal Warrant Report

Intersection #10 INT 10

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	1	0	0	0	0	1	0	0	1	0	0	0
Initial Vol:	0	413	0	0	100	13	18	0	1	0	0	0
ApproachDel:	xxxxxx			xxxxxx			12.5			xxxxxx		

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.1]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=19]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=545]

FAIL - Total volume less than 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Saratoga Retail Phase 2

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #10 INT 10

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	1	0	1	0	0	0	0	0	1	0	0	0
Initial Vol:	0	413	0	0	100	13	18	0	1	0	0	0
Major Street Volume:	526											
Minor Approach Volume:	19											
Minor Approach Volume Threshold:	506											

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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MRTD Calculations for Near (2026) plus Project Conditions

INT	Control	Movement	Peak Hour	Approach Volume	RT %	Major Street				Max Queue Calculations (ft)	Required Storage (ft)	Minimum Required Throat Depth (veh)
						Posted Speed (mph)	Lanes	Conflicting Volume for left-turns	Conflicting Volume for Right Turns			
All Access Secondary	SSSC	Minor-street shared Left/through/right (1)	AM	19	95%	45	2	384	154	-6.42	25	1
			PM	49	96%			617	433	-2.11	25	1

Attachment F
Observed Maximum Queue Lengths

Queue Study

Location: 2679 E. Bidwell St Day: Tuesday
 City: Folsom Date: 4/17/2018

Location 001	
Time	Maximum Queue
6:00 AM	0
6:15 AM	0
6:30 AM	2
6:45 AM	1
7:00 AM	2
7:15 AM	1
7:30 AM	2
7:45 AM	2
8:00 AM	1
8:15 AM	2
8:30 AM	2
8:45 AM	4
11:00 AM	6
11:15 AM	10
11:30 AM	11
11:45 AM	8
12:00 PM	10
12:15 PM	9
12:30 PM	10
12:45 PM	8
5:00 PM	7
5:15 PM	9
5:30 PM	10
5:45 PM	7
6:00 PM	13
6:15 PM	13
6:30 PM	10
6:45 PM	12

Location: 4644 Madison Ave Day: Tuesday
 City: Sacramento Date: 4/17/2018

Location 002	
Time	Maximum Queue
6:00 AM	1
6:15 AM	2
6:30 AM	2
6:45 AM	3
7:00 AM	1
7:15 AM	2
7:30 AM	2
7:45 AM	2
8:00 AM	2
8:15 AM	2
8:30 AM	4
8:45 AM	2
11:00 AM	2
11:15 AM	3
11:30 AM	4
11:45 AM	3
12:00 PM	6
12:15 PM	5
12:30 PM	9
12:45 PM	9
5:00 PM	2
5:15 PM	3
5:30 PM	4
5:45 PM	7
6:00 PM	5
6:15 PM	5
6:30 PM	6
6:45 PM	6

Location: 2354 Sunrise Blvd Day: Tuesday
 City: Rancho Cordova Date: 4/17/2018

Location 003	
Time	Maximum Queue
6:00 AM	0
6:15 AM	0
6:30 AM	2
6:45 AM	3
7:00 AM	3
7:15 AM	2
7:30 AM	2
7:45 AM	1
8:00 AM	2
8:15 AM	3
8:30 AM	3
8:45 AM	3
11:00 AM	3
11:15 AM	3
11:30 AM	5
11:45 AM	4
12:00 PM	5
12:15 PM	4
12:30 PM	5
12:45 PM	4
5:00 PM	3
5:15 PM	2
5:30 PM	3
5:45 PM	4
6:00 PM	3
6:15 PM	3
6:30 PM	2
6:45 PM	3

DRIVE-THRU QUEUE OBSERVATIONS

Location: 2679 E. Bidwell St
City: Folsom

Day: Friday
Date: 4/13/2018

Time	Maximum Queue
11:00 AM	8
11:15 AM	4
11:30 AM	5
11:45 AM	9
12:00 PM	7
12:15 PM	10
12:30 PM	6
12:45 PM	7
1:00 PM	6
1:15 PM	6
1:30 PM	4
1:45 PM	4

Location: 2679 E. Bidwell St
City: Folsom

Day: Saturday
Date: 4/14/2018

Time	Maximum Queue
11:00 AM	7
11:15 AM	6
11:30 AM	11
11:45 AM	10
12:00 PM	9
12:15 PM	8
12:30 PM	8
12:45 PM	12
1:00 PM	13
1:15 PM	10
1:30 PM	11
1:45 PM	11

DRIVE-THRU QUEUE OBSERVATIONS

Location: 4644 Madison Ave **Day:** Friday
City: Sacramento **Date:** 4/13/2018

Location: 4644 Madison Ave **Day:** Saturday
City: Sacramento **Date:** 4/14/2018

Time	Maximum Queue
11:00 AM	5
11:15 AM	3
11:30 AM	4
11:45 AM	3
12:00 PM	4
12:15 PM	4
12:30 PM	5
12:45 PM	4
1:00 PM	6
1:15 PM	8
1:30 PM	5
1:45 PM	4

Time	Maximum Queue
11:00 AM	5
11:15 AM	4
11:30 AM	5
11:45 AM	4
12:00 PM	3
12:15 PM	9
12:30 PM	6
12:45 PM	10
1:00 PM	7
1:15 PM	6
1:30 PM	4
1:45 PM	5

DRIVE-THRU QUEUE OBSERVATIONS

Location: 2354 Sunrise Blvd. **Day:** Friday
City: Rancho Cordova **Date:** 4/13/2018

Location: 2354 Sunrise Blvd. **Day:** Saturday
City: Rancho Cordova **Date:** 4/14/2018

Time	Maximum Queue
11:00 AM	3
11:15 AM	4
11:30 AM	6
11:45 AM	4
12:00 PM	4
12:15 PM	7
12:30 PM	4
12:45 PM	7
1:00 PM	4
1:15 PM	4
1:30 PM	5
1:45 PM	5

Time	Maximum Queue
11:00 AM	3
11:15 AM	4
11:30 AM	7
11:45 AM	4
12:00 PM	10
12:15 PM	7
12:30 PM	3
12:45 PM	7
1:00 PM	10
1:15 PM	7
1:30 PM	3
1:45 PM	5