

Rio Americano High School Stadium Improvements Project Draft Environmental Impact Report

SCH Number: 2026010094

Appendix E Local Transportation Analysis



August 2026

Memorandum

To: Suzanne McFerran
AECOM Technical Services, Inc.

From: Stephen Dillon, P.E., T.E.
Tyler Mickelson, P.E.

Re: *Rio Americano High School Stadium Lighting*
DRAFT Local Transportation Analysis
Sacramento County, California

Date: September 1, 2026

In accordance with our Scope of Services, we have prepared this memorandum to document the findings of the Local Transportation Analysis (LTA) to address localized transportation concerns associated with the proposed Rio Americano High School Stadium Lighting (“Project” or “proposed Project”) in Sacramento County, California (the “County”). This LTA specifically addresses the following:

- Delay and queueing at the study intersections
- Capacity on the study roadway segments
- Parking supply and demand
- Qualitative safety analysis focused on local transportation infrastructure

Project Description

Kimley-Horn understands that the Project applicant proposes to install stadium lighting and increase seating capacity to approximately 2,500 attendees at the existing Rio Americano High School football field. The Project would allow various athletic competitions and practices to be scheduled on campus at night rather than relying on off-site locations and/or restricting events to daytime/daylight hours. Kimley-Horn understands that events capable of drawing full capacity attendance would occur up to eight times per year and are considered “peak” events for Rio Americano High School.

The proposed Project is located on the existing Rio Americano High School campus along American River Drive in Sacramento County, near the American River Drive intersection with Saverien Drive. The Project location and study area are shown in **Exhibit 1**. While the Project may enable several sports to shift their activities to night hours, given the range of attendees that could be involved, the primary focus of this analysis is the addition of football game activities (currently held off-site) as “peak” events to existing Friday night traffic conditions near the Rio Americano High School campus.

Analysis Methodology

Intersection Delay Reporting

Intersection delay for this study was calculated by using methods defined in the *Highway Capacity Manual, 7th Edition* (HCM) using Synchro® traffic analysis software. The HCM includes procedures for analyzing side-street stop controlled (SSSC), all-way stop controlled (AWSC), and signalized intersections. The SSSC procedure reports delay as a function of average control delay for the worst (highest amount of delay) minor street approach or movement. The AWSC and signalized intersection procedures are reported as the average control delay for the intersection.

Roadway Segment Volume Reporting

The roadway segment analysis was performed using daily traffic volumes for select study roadway segments proximate to the Rio Americano High School campus. The Project's anticipated effects on roadway segment volumes are reported by adding total Project traffic associated with events to the existing daily traffic volumes.

Existing (2025) Conditions

Exhibit 1 shows the location of the Project site with respect to the surrounding study area. The existing intersection analysis was completed for the following facilities:

Intersections

1. American River Drive at Estates Drive
2. American River Drive at Project Driveway 1
3. American River Drive at Saverien Drive/Project Driveway 2
4. American River Drive at Project Driveway 3
5. American River Drive at Jacob Lane
6. Fair Oaks Boulevard at Saverien Drive

Roadway Segments

1. American River Drive, between Morris Way and Saverien Drive
2. American River Drive, between Saverien Drive and Wixford Way
3. Saverien Drive, between Fair Oaks Boulevard and American River Drive

Intersection turning movement volumes for use in the analysis were collected on a typical Friday between the hours of 2:30 PM – 6:30 PM (four hours total) in August 2025 while local schools were in session. 24-hour roadway segment counts were collected on the same Friday for the study roadway segments. Traffic count data sheets are included in **Attachment A**.

As shown in **Attachment A**, the observed peak-hour for all study intersections is 3:00 PM – 4:00 PM. This time frame is understood to generally align with student pick-up operations at both Rio Americano High School and Jesuit High School. As events associated with the Project are anticipated to typically occur later in the evening, intersection turning movement data reflecting conditions from 5:30 PM – 6:30 PM was used to establish the Existing (2025) baseline operations. **Exhibit 2** displays the existing turning movement volumes, lane geometry, and traffic control for the study intersections.

Current signal timing sheets for Intersection #6 (Fair Oaks Boulevard and Saverien Drive) were obtained from Sacramento County and utilized to establish the Existing (2025) baseline analysis scenario.

Intersection Delay and Roadway Segment Volumes

Using volumes presented in **Exhibit 2**, intersection delay was calculated for the study intersections using methodologies contained in the *Highway Capacity Manual (HCM)*, 7th Edition using the Synchro 12® software. **Table 1** summarizes the existing baseline delay conditions for the study intersections under the Existing (2025) analysis scenario. Summary analysis worksheets can be found in **Attachment B**. **Table 2** summarizes the daily volume for the study roadway segments for Existing (2025) conditions.

Table 1 – Existing (2025) Intersection Delay

ID	Intersection	Peak Hour	Control	Existing (2025)
				Delay (sec)
1	American River Drive @ Estates Drive	PM	AWSC	9.7
2	American River Drive @ Project Driveway 1	PM	SSSC	0.1(10.7 NB)
3	American River Drive @ Saverien Drive/Project Driveway 2	PM	AWSC	9.3
4	American River Drive @ Project Driveway 3	PM	SSSC	0.2(10.9 NB)
5	American River Drive @ Jacob Lane	PM	AWSC	8.5
6	Fair Oaks Blvd @ Saverien Drive	PM	Signal	12.5

Notes: **Bold** represents deficient operations. Shaded represents a project induced deficiency.
Side Street Stop Controlled (SSSC) reported as overall intersection delay followed by worst approach's delay.

Table 2 – Existing (2025) Roadway Segment Volume

Segment Name	Facility Type	Lanes	Daily Traffic Volume
American River Drive between Morris Way and Saverien Drive	Residential collector with frontage	2	5,593
American River Drive between Saverien Drive and Wixford Way	Residential collector with frontage	2	5,600
Saverien Drive between Fair Oaks Boulevard and American River Drive	Residential collector with frontage	2	4,539

Assessment of Proposed Project

Trip Generation, Distribution, and Assignment

The number of trips anticipated to be generated by the proposed Project was approximated using the average football game attendance summarized in **Attachment C**. Football games are expected to produce the largest number of trips to and from the school for regular stadium events. This study focuses on the relocation of varsity home football games to Rio Americano High School, which are expected to occur up to eight times on Friday evenings in the Fall.

As shown in **Attachment C**, the attendance estimate at the August 28, 2025 home game was 3,301 people. This number includes spectators, players, staff, other students, and event employees. Based on reported home game ticket sales for the 2024 and 2025 football seasons provided by the San Juan Unified School District (“SJUSD” or “the District”), 3,301 people represents the maximum observed home game attendance from the past two years. As such, a scenario including this many people is considered conservative and might be expected to occur once per year during Rio Americano High School’s “rivalry game” against nearby Jesuit High School.

The analysis provided herein analyzes both the “general event” of average home football game attendance and a “conservative event” scenario aligning with peak attendance for an event like the Jesuit High School football game. Per the data provided in **Attachment C**, the calculated attendance of an average Rio Americano High School football game is 1,669 people. As attendance for football games could be expected to increase due to games being held on campus and therefore becoming more readily accessible for students and local members of the Rio Americano High School community, the “general event” home football game attendance is established as 2,200 people for the purpose of this analysis.

Ticket sales data in **Attachment C** also shows that attendance is roughly correlated with distance from the visiting school. This analysis assumes 500 attendees will be from the visiting high school under “plus Project” analysis scenarios as existing ticket sales and attendance data does not distinguish between home team and away team spectators.

As detailed in **Table 3**, 2,200 total attendees were assumed for typical “general event” football games with the addition of the Project. 1,700 attendees were assumed as home team supporters and 500 attendees were assumed as visiting team supporters. Five percent of home attendees (85 people) are expected to arrive at or remain on campus prior to the start of the event. 10 percent of home attendees (170 people) are expected to walk or bike, thereby reducing vehicle trips related to the event. These assumptions are based on several factors including:

- Students attending junior varsity games held immediately prior to varsity games will remain at the Project site after junior varsity games end.
- The school's proximity to residential areas, with many homes within a half-mile walking distance to the school campus.
- Existing access from the American River bike path and walking trails, facilitating biking or walking to the school.

Existing traffic data was collected during a Rio Americano High School home football game held at El Camino High School on Friday August 28, 2025 to establish the average vehicle occupancy for high school football game trips. A vehicle occupancy study taken during arrivals at the game documented an average vehicle occupancy of 2.36. A summary of the vehicle occupancy can be found in **Attachment D**.

Given the previously established average vehicle occupancy of 2.36 and the reductions established above, the number of remaining attendees will result in 1,646 Project vehicle trips (823 inbound and 823 outbound).

Table 3 – Project “General Event” Vehicle Trip Generation

Metric	Project Conditions
Total Event Attendances ¹	2200
Home Attendees ²	1700
Visitor Attendees ²	500
Home Attendees Not Driving to Game ³	255
Attendees Traveling by Vehicle	1945
Average Vehicle Occupancy (persons/vehicle) ⁴	2.36
Estimated Vehicles (Friday PM Game)	823

Notes:

1. Based on attendance data provided by the client
2. Based on existing conditions
3. Representative of portion of home attendees to remain on-campus after school for the upcoming football game and attendees to commute to campus either by walking or cycling.
4. Traffic study conducted at El Camino Fundamental HS (NDS, 2025) observed an average vehicle occupancy of 2.36 for a Friday PM football game.

Project trip distribution was based on existing travel patterns, district high school boundaries relative to Rio Americano High School, and engineering judgement. The proposed Project trip distribution percentages and trip assignment are illustrated in **Exhibit 3** and **Exhibit 4** respectively.

Existing (2025) plus Project Conditions

Exhibit 5 displays the intersection turning movement volumes at the study intersections for Existing (2025) plus Project conditions.

Intersection Delay and Roadway Segment Volumes

Using volumes presented in **Exhibit 5**, intersection delay was calculated per the *Highway Capacity Manual (HCM)*, 7th Edition methodologies using the Synchro 12 software. **Table 4** summarizes the delay for the study intersections for Existing (2025) plus Project conditions. Synchro analysis worksheets are provided in **Attachment E**.

As shown in **Table 4**, “general event” football games associated with the Project contribute significant additional delay at Intersection #1 (American River Drive at Estates Drive), Intersection #3 (American River Drive at Saverien Drive/Project Driveway 2), Intersection #4 (American River Drive at Project Driveway 3), and Intersection #6 (Fair Oaks Boulevard at Saverien Drive).

Table 4 – Existing (2025) plus Project Intersection Delay

ID	Intersection	Peak Hour	Control	Existing (2025)	Existing (2025) Plus Project
				Delay (sec)	Delay (sec)
1	American River Drive @ Estates Drive	PM	AWSC	9.7	13.7
2	American River Drive @ Project Driveway 1	PM	SSSC	0.1(10.7 NB)	1.0(11.9 NB)
3	American River Drive @ Saverien Drive/Project Driveway 2	PM	AWSC	9.3	34.7
4	American River Drive @ Project Driveway 3	PM	SSSC	0.2(10.9 NB)	1.9(13.1 NB)
5	American River Drive @ Jacob Lane	PM	AWSC	8.5	9.2
6	Fair Oaks Blvd @ Saverien Drive	PM	Signal	12.5	19.5

Notes: **Bold** represents deficient operations. Shaded represents a project induced deficiency.

Side Street Stop Controlled (SSSC) reported as overall intersection delay followed by worst approach's delay.

Table 5 summarizes the daily volume for the study roadway segments for Existing (2025) plus Project conditions.

Table 5 – Existing (2025) plus Project Roadway Segment Volume

Segment Name	Facility Type	Lanes	Daily Traffic Volume
American River Drive between Morris Way and Saverien Drive	Residential collector with frontage	2	6,004
American River Drive between Saverien Drive and Wixford Way	Residential collector with frontage	2	5,847
Saverien Drive between Fair Oaks Boulevard and American River Drive	Residential collector with frontage	2	5,527

Queueing Analysis

Queueing for select turning movements was analyzed relative to the existing turning movement storage lengths. **Table 6** summarizes the reported 95th-percentile queues for turning movements where the Project is anticipated to contribute additional traffic. Per **Table 6**, the reported queues at Intersection #3 and Intersection #5 are adequately accommodated by existing storage capacity. At Intersection #6, the Existing (2025) plus Project condition exhibits westbound left queue lengths that exceed the available storage. Queueing summary worksheets for all movements for the Existing (2025) scenario are provided in **Attachment B** and summary worksheets for all movements for the Existing (2025) plus Project scenario are provided in **Attachment E**.

Table 6 – 95th-percentile Queues

Intersection / Analysis Scenario	Movement	Available Storage (ft)	PM Peak-Hour
			95 th % Queue (ft)
#3 American River Dr at Saverien Dr/Project Dwy 2	WBL		
Existing (2025)		190	0
Existing (2025) plus Project			25
	EBL		
Existing (2025)		200	25
Existing (2025) plus Project			25
#5 American River Dr at Jacob Ln	EBL		
Existing (2025)		200	25
Existing (2025) plus Project			25
#6 Fair Oaks Blvd at Saverien Dr	WBL		
Existing (2025)		195	65
Existing (2025) plus Project			615
	NBR		
Existing (2025)		150	25
Existing (2025) plus Project			25

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

'Shaded cell indicates queue exceeds storage by > 25' (one vehicle length).

Existing (2025) plus Project Conservative Event Conditions

This scenario evaluates the effects of large attendance “conservative events” at Rio Americano High School. These events would be expected to occur fewer than three times a year. Such events would include highly attended football games (such as rivalry or playoff games) and other large annual events such as graduation ceremonies.

The number of vehicle trips included in this scenario is based on the observed peak home football game attendance from **Attachment C** and the expected number of attendees at a high school graduation ceremony. The highest attended football game was a rivalry game against nearby Jesuit High School with 3,301 people attending. Rio Americano High School is expected to have 480 graduating seniors per year¹. Each student is expected to receive five graduation tickets, with extra tickets available for purchase. Ticket distribution and purchases, combined with faculty and staff attendance, results in an expected graduation attendance of 3,400 people. For the purposes of this analysis, all trip generation, delay, and queueing calculations are based on an expected attendance of 3,400 people for graduation ceremonies. In using an attendance of 3,400 people, the results of this analysis are assumed to also be applicable to other “conservative event” scenarios, such as high attendance football games.

As detailed in **Table 7**, 3,400 total attendees were projected for graduation ceremonies and high attendance football games with the addition of the Project. Five percent of attendees (170 people) are expected to arrive at/remain on campus prior to the start of the event. Five percent of attendees (170 people) are expected to walk or bike, thereby reducing vehicle trips related to the event. These assumptions are based on several factors including:

- Faculty and staff arriving on campus far in advance of the event time in preparation for the graduation ceremony.
- The school's proximity to residential areas, with many homes within a half-mile walking distance to the school campus.

¹ Email correspondence with Suzanne McFerran, AECOM, August 4, 2026.

- Existing access from the American River bike path and walking trails, facilitating biking or walking to the school.

Given the previously established average vehicle occupancy of 2.36 and the reductions established above, the number of remaining attendees will result in 2,590 Project vehicle trips (1,295 inbound and 1,295 outbound).

Table 7 – Project “Conservative Event” Vehicle Trip Generation

Metric	Project Conditions
Total Event Attendances ¹	3,400
Internal Attendees Not Driving ²	340
Attendees Traveling by Vehicle	3,060
Average Vehicle Occupancy (persons/vehicle) ³	2.36
Estimated Vehicle Trips (Graduation)	1,295

Notes:

- Based on assumptions using Student Population and graduation rate.
- Representative of portion of home attendees to remain on-campus after school for the graduation including faculty and staff or attendees that can/would walk to on-campus graduation due to living in close proximity.
- Traffic study conducted at El Camino Fundamental HS (NDS, 2025) observed an average vehicle occupancy of 2.36 for a Friday PM football game. A higher Vehicle Occupancy may be reflected in reality, as other reports show higher vehicle occupancies such as 3.24 persons per vehicle (Jesuit High School Stadium Lighting VMT Analysis, March 10, 2023)

Project trip distribution was based on existing travel patterns, district high school boundaries relative to Rio Americano High School, and engineering judgement. The proposed Project trip distribution percentages are illustrated in **Exhibit 3** and resultant Project trip assignment for “conservative events” are illustrated in **Exhibit 6**.

Exhibit 7 displays the intersection turning movement volumes at the study intersections for Existing (2025) plus Project Conservative Events conditions.

Intersection Delay and Roadway Segment Volumes

Using volumes presented in **Exhibit 7**, intersection delay was calculated per the *Highway Capacity Manual (HCM)*, 7th Edition methodologies using the Synchro 12[®] software. **Table 8** summarizes the delay for the study intersections for Existing (2025) plus Project conditions. Synchro analysis worksheets for all movements are provided in **Attachment F**. As shown in **Table 8**, “conservative events” associated with the Project contribute significant amounts of delay to Intersection #1 (American River Drive at Estates Drive), Intersection #3 (American River Drive at Saverien Drive/Project Driveway 2), Intersection #4 (American River Drive at Project Driveway 3), and Intersection #6 (Fair Oaks Boulevard at Saverien Drive).

Table 8 – Existing (2025) plus Project “Conservative Event” Intersection Delay

ID	Intersection	Peak Hour	Control	Existing (2025)	Existing (2025) plus Project Conservative Events
				Delay (sec)	Delay (sec)
1	American River Drive @ Estates Drive	PM	AWSC	9.7	20.8
2	American River Drive @ Project Driveway 1	PM	SSSC	0.1(10.7 NB)	1.3(13.1 NB)
3	American River Drive @ Saverien Drive/Project Driveway 2	PM	AWSC	9.3	147.0
4	American River Drive @ Project Driveway 3	PM	SSSC	0.2(10.9 NB)	2.6(15.1 NB)
5	American River Drive @ Jacob Lane	PM	AWSC	8.5	9.7
6	Fair Oaks Blvd @ Saverien Drive	PM	Signal	12.5	43.4

Notes: **Bold** represents deficient operations. Shaded represents a project induced deficiency.

Side Street Stop Controlled (SSSC) reported as overall intersection delay followed by worst approach's delay.

Table 9 summarizes the daily volume for the study roadway segments for Existing (2025) plus Project Conservative Event conditions.

Table 9 – Existing (2025) plus Project “Conservative Event” Roadway Segment Volume

Segment Name	Facility Type	Lanes	Daily Traffic Volume
American River Drive between Morris Way and Saverien Drive	Residential collector with frontage	2	6,240
American River Drive between Saverien Drive and Wixford Way	Residential collector with frontage	2	5,988
Saverien Drive between Fair Oaks Boulevard and American River Drive	Residential collector with frontage	2	6,093

Queueing Analysis

Queueing for select turning movements was analyzed relative to the existing turning movement storage lengths. **Table 10** summarizes the reported 95th-percentile queues for turning movements where the Project is anticipated to contribute additional traffic. Per **Table 10**, the reported queues at Intersection #3 and Intersection #5 are adequately accommodated by existing storage capacity. At Intersection #6, the Existing (2025) plus Project Conservative Event condition exhibits westbound left queue lengths that exceed the available storage. Queueing summary worksheets for all movements for the Existing (2025) plus Project Conservative Event scenario are provided in **Attachment F**.

Table 10 – 95th-percentile Queues

Intersection / Analysis Scenario	Movement	Available Storage (ft)	PM Peak-Hour
			95 th % Queue (ft)
#3 American River Dr at Saverien Dr/Project Dwy 2	WBL		
Existing (2025)		190	0
Existing (2025) plus Project			25
Existing (2025) plus Conservative Events Scenario			25
	EBL		
Existing (2025)		200	25
Existing (2025) plus Project			25
Existing (2025) plus Conservative Events Scenario			25
#5 American River Dr at Jacob Ln	EBL		
Existing (2025)		200	25
Existing (2025) plus Project			25
Existing (2025) plus Conservative Events Scenario			25
#6 Fair Oaks Blvd at Saverien Dr	WBL		
Existing (2025)		195	65
Existing (2025) plus Project			615
Existing (2025) plus Conservative Events Scenario			1,055
	NBR		
Existing (2025)		150	25
Existing (2025) plus Project			25
Existing (2025) plus Conservative Events Scenario			25

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

Shaded cell indicates queue exceeds storage by > 25' (one vehicle length).

Existing (2025) plus Project plus Jesuit Game Conditions

This scenario evaluates the effects of a game at Rio Americano High School occurring concurrently with a game at nearby Jesuit High School. Jesuit High School recently installed stadium lights to host home football games on Friday nights at their on-campus stadium. Trip generation and trip assignment from the Jesuit High School Project² was used to develop this analysis scenario. It should be noted that this scenario will rarely occur because Rio Americano and Jesuit games are unlikely to take place at the same time. Therefore, this should be considered a conservative approach.

The proposed Project trip assignment for the additional trips from a concurrent Jesuit game are illustrated in **Exhibit 8**. **Exhibit 9** displays the intersection turning movement volumes at the study intersections for Existing (2025) plus Project plus Jesuit Game Conditions.

Intersection Delay and Roadway Segment Volumes

Based on volumes presented in **Exhibit 9**, intersection approach delays were calculated per the *Highway Capacity Manual (HCM)*, 7th Edition methodologies using the Synchro 12[®] software. **Table 11** summarizes the delay for the study intersections under Existing (2025) plus Project plus Jesuit Game conditions. Synchro analysis worksheets can be found in **Attachment G**. As shown in **Table 11**, Intersection #1 (American River Drive at Estates Drive), Intersection #3 (American River Drive at Saverien Drive/Project Driveway 2), Intersection #4 (American River Drive at Project Driveway 3), and Intersection #6 (Fair Oaks Boulevard at Saverien Drive) are expected to add significant amounts of delay with the addition of the Rio Americano and Jesuit High School games occurring concurrently.

² Jesuit High School Stadium Lighting – Local Transportation Analysis, Kimley-Horn, March 2023.

Table 11 – Existing (2025) plus Project plus Jesuit Game Intersection Delay

ID	Intersection	Peak Hour	Control	Existing (2025)	Existing (2025) Plus Project plus Jesuit Game
				Delay (sec)	Delay (sec)
1	American River Drive @ Estates Drive	PM	AWSC	9.7	15.7
2	American River Drive @ Project Driveway 1	PM	SSSC	0.1(10.7 NB)	0.9(12.4 NB)
3	American River Drive @ Saverien Drive/Project Driveway 2	PM	AWSC	9.3	46.4
4	American River Drive @ Project Driveway 3	PM	SSSC	0.2(10.9 NB)	1.8(14.1 NB)
5	American River Drive @ Jacob Lane	PM	AWSC	8.5	9.4
6	Fair Oaks Blvd @ Saverien Drive	PM	Signal	12.5	23.0

Notes: **Bold** represents deficient operations. Shaded represents a project induced deficiency.

Side Street Stop Controlled (SSSC) reported as overall intersection delay followed by worst approach's delay.

Table 12 summarizes the daily volume for the study roadway segments for Existing (2025) plus Project plus Jesuit Game Conditions.

Table 12 – Existing (2025) plus Project plus Jesuit Game Roadway Segment Volume

Segment Name	Facility Type	Lanes	Daily Traffic Volume
American River Drive between Morris Way and Saverien Drive	Residential collector with frontage	2	6,104
American River Drive between Saverien Drive and Wixford Way	Residential collector with frontage	2	5,989
Saverien Drive between Fair Oaks Boulevard and American River Drive	Residential collector with frontage	2	5,610

Queueing Analysis

Queueing for select turning movements was analyzed relative to the existing turning movement storage lengths. **Table 13** summarizes the reported 95th-percentile queues for turning movements where the Project is anticipated to contribute additional traffic. Per **Table 13**, the reported queues at Intersection #3 and Intersection #5 are adequately accommodated by existing storage capacity. At Intersection #6, both the Existing (2025) plus Project and Existing (2025) plus Project plus Jesuit Game conditions exhibit westbound left queue lengths that exceed the available storage. Queueing summary worksheets for all movements for Existing (2025) plus Project plus Jesuit Game conditions are provided in **Attachment G**. The westbound left queue lengths are presented graphically in **Exhibit 10**.

Table 13 – 95th-percentile Queues

Intersection / Analysis Scenario	Movement	Available Storage (ft)	PM Peak-Hour
			95 th % Queue (ft)
#3 American River Dr at Saverien Dr/Project Dwy 2	WBL		
Existing (2025)		190	0
Existing (2025) plus Project			25
Existing (2025) plus Project plus Jesuit Game			25
EBL			
Existing (2025)		200	25
Existing (2025) plus Project			25
Existing (2025) plus Project plus Jesuit Game			25
#5 American River Dr at Jacob Ln	EBL		
Existing (2025)		200	25
Existing (2025) plus Project			25
Existing (2025) plus Project plus Jesuit Game			25
#6 Fair Oaks Blvd at Saverien Dr	WBL		
Existing (2025)		195	65
Existing (2025) plus Project			615
Existing (2025) plus Project plus Jesuit Game			650
NBR			
Existing (2025)		150	25
Existing (2025) plus Project			25
Existing (2025) plus Project plus Jesuit Game			25

Notes: For approaches with dual left-turn lanes, the longest queue length is reported.
Shaded cell indicates queue exceeds storage by > 25' (one vehicle length).

Deficiencies and Improvements

The following is a discussion of each deficiency related to the Project and its associated improvement based on the analysis presented herein.

Deficiencies:

D1. Intersection #3, American River Drive at Saverien Drive/Project Driveway 2

As shown in **Table 1**, this intersection operates with an average delay between 9 and 10 seconds per vehicle under Existing (2025) conditions. **Table 8** shows that the addition of Project traffic associated with a “conservative event” will result in the intersection operating with a delay of approximately 2.5 minutes per vehicle under Existing (2025) plus Project conditions.

D2. Intersection #6, Fair Oaks Boulevard at Saverien Drive (Queueing)

As shown in **Table 6**, additional trips from the Project under Existing (2025) plus Project conditions contribute to a queueing deficiency for the westbound left-turn movement at Intersection #6. The 95th percentile queue length is reported as 615 feet in this scenario. Additionally, as shown in **Table 10**, additional trips from the Project under Existing (2025) plus Project Conservative Event Scenario conditions contribute to a queueing deficiency for the westbound left-turn movement at Intersection #6. The 95th percentile queue length is reported as 1,055 feet in this scenario. **Table 13** reports similar queueing conditions when considering the combined operations for a “general event” and Jesuit High School football game. The queue lengths for all scenarios exceed the existing westbound left-turn pocket storage capacity of 195 feet.

Improvements:

11. *Intersection #3, American River Drive at Saverien Drive/Project Driveway 2*

No specific improvement is identified for the deficiency at this intersection. Intersection #3 operates under AWSC. As “conservative events” related to the Project, such as high school graduation, are expected to occur infrequently at the Rio Americano High School campus, it is not recommended to make significant intersection improvements to accommodate event-related traffic. It is recommended that the School District establish an event traffic management program to limit disturbances to the local community where possible. Physical improvements are not recommended to improve the deficiency at this intersection.

12. *Intersection #6, Fair Oaks Boulevard at Saverien Drive (Queueing)*

It is recommended that the School District coordinate with Sacramento County to modify signal timing for special event days, such as home football games and “conservative events” as outlined in the “plus Project” analysis scenarios. Adjusted signal timing would improve the queue length for the westbound left-turn movement at the intersection. It is recommended The Project remove the existing concrete median ahead of the existing westbound left-turn pocket to accommodate extended vehicle queues caused by frequently occurring events. This modification would allow vehicle queues to stack within the existing two-way left-turn lane (TWLTL) along Fair Oaks Boulevard and limit operational disruptions to westbound through traffic.

Traffic associated with home football games and other “conservative events” at Rio Americano High School will be infrequent annual events. These events will occur approximately 10 times per year. Previous scheduling patterns show that it is uncommon for a game to be played at Rio Americano High School simultaneously with a game being played at the Jesuit High School campus.

Additional Considerations

Parking Supply/Demand Analysis

Rio Americano High School offers both on-site and off-site parking locations. Existing parking locations are shown in **Exhibit 11**. The existing Rio Americano High School has 562 total parking stalls on campus with 537 of those stalls anticipated to be available to event attendees during a Friday evening football game. The remaining 25 spaces are dedicated strictly for EV-charging or handicap stalls. An overflow lot is available on campus and has an estimated 135 additional parking stalls, increasing the total event parking to 672 total publicly available parking stalls. It is understood that Rio Americano High School and Jesuit High School have a memorandum of understanding (MOU) in place regarding the coordination of shared parking access on either campus to accommodate vehicle demand from large events.

As previously noted, a typical Rio Americano High School home football game would generate a peak parking demand of 823 vehicles during “general event” conditions. As summarized in **Table 14**, this parking demand would result in an on-campus parking deficit of 151 parking stalls during a football game for “plus Project” conditions.

Table 14 – “General Event” On-Site Parking Demand vs Capacity

Category	Regular Stalls
PKG-001 ¹	40
PKG-002 ¹	109
PKG-003	17
PKG-004	195
PKG-005 ²	176
PKG-006 ³	135
Total Existing Parking	672
Parking Demand⁴	823
Parking Deficit (Demand – Existing)⁵	151

Notes:

1. Parking lots 1 & 2 are designated for staff only during regular school hours and may require additional access for games.
2. Portions of parking lot 5 were covered by solar panels and total parking stalls had to be estimated for these portions.
3. Parking lot 6 is an overflow lot occupying blacktop and outdoor basketball courts that is available for highly attended games. Total parking stalls were estimated.
4. Parking demand based on expected vehicle trips from Trip Generation.
5. Parking deficit represents an excess of vehicles that on-site, campus parking cannot accommodate.

While there is a lack of available on-site parking at Rio Americano High School relative to demand, street parking can accommodate the remaining vehicles associated “general event” attendance. Street parking capacity was determined using segment length and an allowance of 25-feet of space per vehicle. **Exhibit 11** details the locations of parking lots and parking segments in and around Rio Americano High School. **Table 15** summarizes the available on-street parking near Rio Americano High School.

Table 15 – “General Event” Estimated Off-Site Parking Demand

Segment ID	Segment Length (ft)	Estimated Parking Available
Segment 001	1,539	62
Segment 002	1,529	61
Segment 003	1,894	76
Segment 004	1,370	55
Segment 005	872	35
Segment 006	956	38
Total Off-Site Parking		327
On-Site Parking Deficit		151
Remaining Parking Surplus (Off-Site Parking - Parking Deficit)		176

Notes:

1. Street parking is prohibited along American River Drive from 8 AM-4 PM but is allowed on both sides of the road after 4 PM and available for football games at Rio Americano HS
2. No street parking restrictions along Saverien Dr.
3. Parking available estimated using segment length and a set length of 25 ft per vehicle.

A total of 327 parking spaces are available off-site in proximity to the Rio Americano High School campus. The calculations provided in **Table 15** show that the off-site curb space proximate to the campus would be able to accommodate the remaining 151 “general event” vehicles that are unable to park on campus.

The previously established “conservative event” scenario, such as graduation or a highly attended football game, would generate a peak parking demand of 1,295 vehicles during “plus Project” conditions. As summarized in **Table 16**, this would result in an on-campus parking deficit of 623 parking stalls during “Conservative Event” conditions.

Table 16 – “Conservative Event” On-Site Parking Demand vs Capacity

Category	Regular Stalls
PKG-001 ¹	40
PKG-002 ¹	109
PKG-003	17
PKG-004	195
PKG-005 ²	176
PKG-006 ³	135
Total Existing Parking	672
Parking Demand⁴	1295
Parking Deficit (Demand – Conservative)⁵	623

Notes:

1. Parking lots 1 & 2 are designated for staff only during regular school hours and may require additional access for games.
2. Portions of parking lot 5 were covered by solar panels and total parking stalls had to be estimated for these portions.
3. Parking lot 6 is an overflow lot occupying blacktop and outdoor basketball courts that is available for highly attended games. Total parking stalls were estimated.
4. Parking demand based off of expected vehicle trips from Trip Generation.
5. Parking deficit represents an excess of vehicles that on-site, campus parking cannot accommodate.

As previously established, 327 parking spaces are available off-site in proximity to the Rio Americano High School campus. The 327 street parking spaces would not be sufficient to accommodate the 623 vehicles in excess of the existing on-campus parking supply. **Table 17** shows a remaining deficit of 296 parking spaces. In this instance, it is understood that a conservative event scenario would require coordination between Rio Americano High School and Jesuit High School to utilize parking on the Jesuit High School campus consistent with the terms of their existing MOU.

Additional street parking is available further along American River Drive, Saverien Drive, and other nearby neighborhood streets beyond the 327 spaces reported in this section. The following areas are within a roughly half-mile walk of Rio Americano High School:

- Residential roadways north and south of American River Drive, between Ashton Drive, and Saverien Drive.
- Residential roadways north of American River Drive, between Saverien Drive, and Piccadilly Circle.
- Residential roadways south of American River Drive, between Whitehall Way, and Jacob Lane.

Table 17 – Conservative Event Estimated Off-Site Parking Demand

Segment ID	Segment Length (ft)	Estimated Parking Available
Segment 001	1,539	62
Segment 002	1,529	61
Segment 003	1,894	76
Segment 004	1,370	55
Segment 005	872	35
Segment 006	956	38
Total Off-Site Parking		327
On-Site Parking Deficit		623
Remaining Parking Surplus (Off-Site Parking - Parking Deficit)		296

Notes:

1. Street parking is prohibited along American River Drive from 8 AM-4 PM but is allowed on both sides of the road after 4 PM and available for football games at Rio Americano HS
2. No street parking restrictions along Saverien Dr.
3. Parking available estimated using segment length and a set length of 25 ft per vehicle.

Multimodal Safety

Both directions of American River Drive and Saverien Drive have existing Class II bike lanes in the immediate vicinity of the Rio Americano High School campus. The American River Bike Trail and River Walkway to the south of the Project provides a dedicated multiuse path for pedestrians and cyclists. Both American River Drive and Saverien Drive have existing sidewalks that provide direct pedestrian access to the Project site. The addition of the Project is not expected to affect the existing local bicycle and pedestrian infrastructure. The LTA includes an assessment of Segment #3 to consider pedestrian safety improvements due to event-specific temporary increases in off-site vehicle parking, temporary increases in vehicle traffic along American River Drive and Saverien Drive, and increases in pedestrian crossings on American River Drive. The following observations were made:

- There is over 700-feet of sight distance for vehicles turning left into the Project from the westbound approach. The available sight distance exceeds the Caltrans Highway Design Manual minimum Stopping Sight Distance (SSD) standard of 250 feet for a 35 mph roadway.
- There is approximately 500-feet of sight distance for vehicles looking right and 400 feet of sight distance for vehicles looking left while approaching Intersection #3 (American River Drive at Saverien Drive/Project Driveway 2). These distances satisfy the Caltrans Highway Design Manual minimum Corner Sight Distance (CSD) standard of 305 feet for a 35 mph corridor.
- The closest marked pedestrian crossing to the Rio Americano High School campus on American River Drive is at Intersection #3 (American River Drive at Saverien Drive/Project Driveway 2), an All-Way Stop-Controlled (AWSC) intersection. Unobstructed stopping sight distance is available on all approaches, allowing approaching motorists to clearly see the traffic control devices and pedestrians within the crosswalk.
- No mid-block crossing facilities exist in the immediate Project vicinity. An unsignalized pedestrian crossing is located near the intersection of American River Drive and Tennyson Way, approximately 1,200 feet east of the Rio Americano High School campus.

In the Project vicinity, American River Drive is one lane in either direction with a median two-way, left-turn lane, a posted speed limit of 35 mph, and an average daily volume less than 9,000 vehicles. Based on the FHWA pedestrian crossing guidance³, pedestrian countermeasures that should “always be considered” for this roadway configuration include:

- High-visibility crosswalk markings, parking restrictions on crosswalk approaches, adequate nighttime lighting levels, and crossing warning signs
- Advance Yield Here To (Stop Here For) Pedestrians sign and yield (stop) line

Per the FHWA guidance, other potential crossing treatments include:

- Curb extensions
- Pedestrian refuge island
- Rectangular Rapid-Flashing Beacon (RRFB)
- Pedestrian Hybrid Beacon (PHB)

Typical campus events are not anticipated to generate crowds of similar magnitude to “general event” home football games and are therefore not anticipated to result in substantial offsite parking along American River Drive. As a result, additional pedestrian crossing locations/enhancements along American River Drive are not necessitated by the Project. Improvements recommended by the FHWA guidance are provided for consideration that the School District may implement at their discretion.

Stadium Event Access & Circulation

The following recommendations are made to promote efficient event access and circulation:

- Intersection #3 (American River Drive at Saverien Drive/Project Driveway 2) should serve as the main entrance and exit for attendees using on-site parking. The entryway immediately west of this intersection should be closed to minimize conflict points.
- Intersection #2 (American River Drive at Project Driveway 1) should remain open for attendees and signage should be used to direct attendees to Parking Lot 2 and guide them from Parking Lot 2 to the stadium.
- Intersection #4 (American River Drive at Project Driveway 3) should also function as a secondary entry and exit for attendees. The two access points between Parking Lots 4 and 5 should remain open to facilitate traffic flow, especially in the event of overflow parking.

Traffic control staff should be present to maintain an organized flow of traffic, and signage indicating full parking lots should be displayed once capacity is reached. Additionally, the American River Walkway access point should remain open during events to accommodate attendees who bike or walk to and from the Project. **Exhibit 12** provides marked locations for each recommendation mentioned.

³ *Federal Highway Administration: Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations*, US Department of Transportation, July 2018.

Conclusions

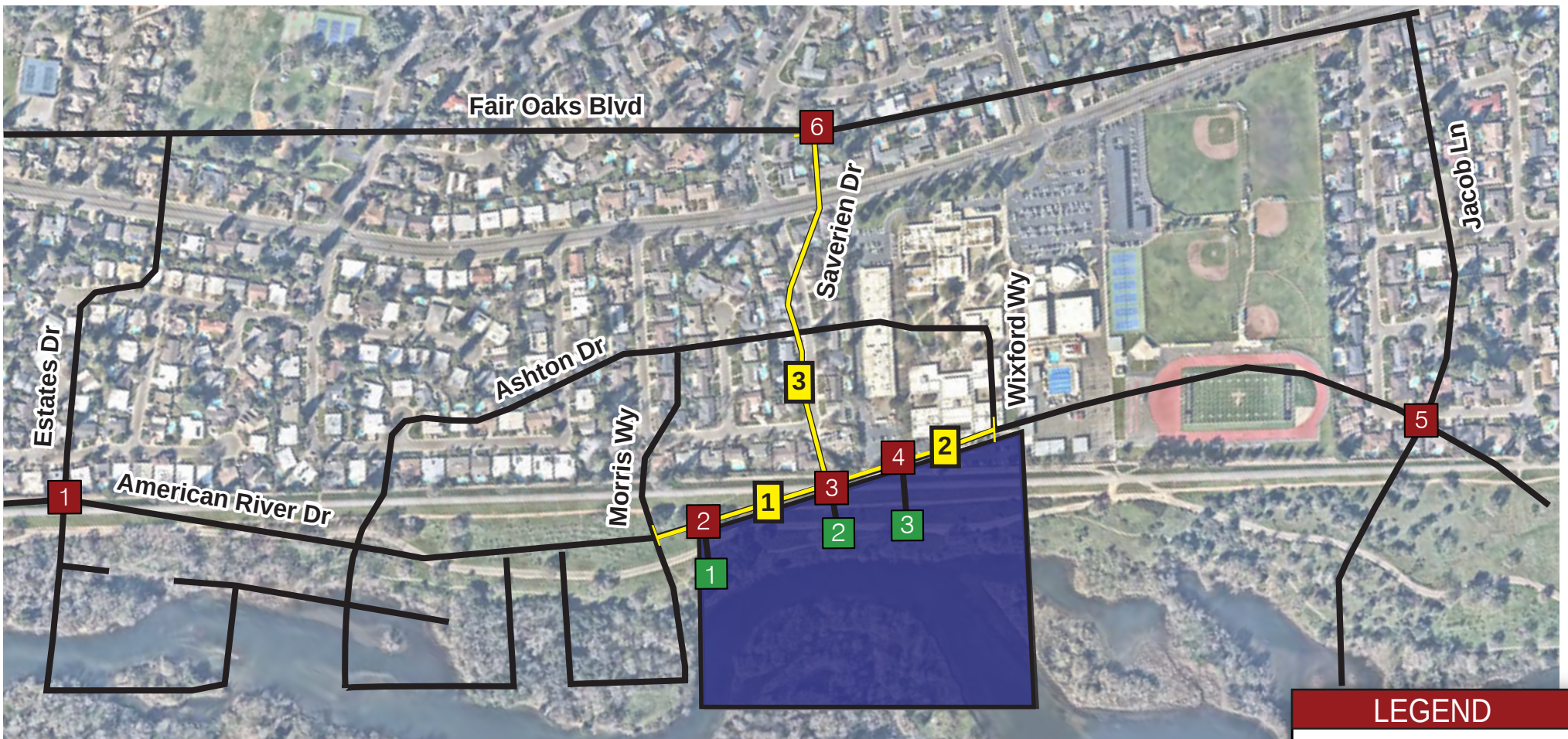
The following conclusions are presented based on the analysis provided herein:

- Friday evening football games at the Rio Americano High School campus are considered a “general event” that might reasonably be anticipated to occur as an outcome of the Project. Events of this size would be expected to occur up to eight times a year. Based on existing ticket data, a Rio Americano High School football game can be expected to typically draw 2,200 attendees. The 2,200 attendees can be expected to generate 1,646 vehicle trips (823 inbound and 823 outbound).
- The addition of “general event” traffic associated with the Project to existing Friday evening traffic patterns at the study intersections is shown to result in a nominal increase in vehicle delay.
- The addition of “general event” traffic associated with the Project to existing Friday daily roadway segment volumes is not shown to significantly increase segment volumes on the study roadway segments.
- As shown in **Table 6**, the addition of “general event” traffic associated with the Project causes the westbound left-turn queue length at Intersection #6 (Fair Oaks Boulevard at Saverien Drive) to exceed the available storage capacity. It is recommended that the School District coordinate with the County on event-specific signal timing patterns to facilitate efficient inbound traffic flow to the Rio Americano High School campus. Additional storage may be provided for this movement by removing the existing concrete median to allow additional queueing in the existing two-way left-turn lane on Fair Oaks Boulevard in advance of the left-turn pocket. The removal of the median is recommended due to “general events,” like football games, to contain the associated queue length.
- “Conservative events”, such as graduation ceremonies and rivalry football games, are reasonably anticipated to occur at the Rio Americano High School campus as an outcome of the Project. Events of this size would be expected to occur fewer than three times a year. Based on student class size and typical graduation ticket disbursement, a graduation ceremony at Rio Americano High School can be expected to draw 3,400 attendees. The 3,400 attendees can be expected to generate 2,590 vehicle trips (1,295 inbound and 1,295 outbound).
- The addition of “conservative event” traffic associated with the Project to existing Friday evening traffic patterns at the study intersections is shown to generally result in a nominal increase in vehicle delay. The addition of “conservative event” traffic is shown to result in an average intersection delay of approximately 2.5 minutes per vehicle at Intersection #3 (American River Drive at Saverien Drive/Project Driveway 2) during Friday evening traffic conditions.
- The addition of “conservative event” traffic associated with the Project to existing Friday daily roadway segment volumes is not shown to significantly increase segment volumes on the study roadway segments.
- As shown in **Table 10**, the addition of “conservative event” traffic associated with the Project causes the westbound left-turn queue length at Intersection #6 (Fair Oaks Boulevard at Saverien Drive) to exceed the available storage capacity. It is recommended that the School District coordinate with the County on event-specific signal timing patterns to facilitate inbound traffic flow to the Rio Americano High School campus. Additional storage may be provided for this movement by removing the existing concrete median to allow additional queueing in the existing two-way left-turn lane on Fair Oaks Boulevard in advance of the left-turn pocket. The removal of the median is recommended in “conservative event” scenarios to contain the associated queue length.
- The combination of “general event” traffic associated with the Project and Jesuit High School football game traffic on top of existing Friday evening traffic patterns at the study intersections is shown to result in a nominal increase in vehicle delay.

- The combination of “general event” traffic associated with the Project and Jesuit High School football game traffic on top of existing Friday daily roadway segment volumes is not shown to significantly increase segment volumes on the study roadway segments.
- As shown in **Table 13**, the addition of “general event” traffic associated with the Project and Jesuit High School football game traffic causes the westbound left-turn queue length at Intersection #6 (Fair Oaks Boulevard at Saverien Drive) to exceed the available storage capacity. Additional storage can be provided for this movement by removing the existing concrete median to allow additional queueing in the existing two-way left-turn lane on Fair Oaks Boulevard in advance of the left-turn pocket. The removal of the median is recommended due to “general events,” like reoccurring football games, to contain the associated queue length.
- As summarized in **Table 14**, a “general event” assumed to draw 823 attendee vehicles would have an excess parking demand of 151 vehicles more than can be accommodated on the Rio Americano High School campus. As summarized in **Table 15**, this excess parking demand can be satisfied using street parking in close proximity to the Rio Americano High School campus.
- As summarized in **Table 16**, a “conservative event” assumed to draw 1,295 attendee vehicles would have an excess parking demand of 623 vehicles more than can be accommodated on the Rio Americano High School campus. As summarized in **Table 17**, this excess parking demand can partially be satisfied using street parking in close proximity to the Rio Americano High School campus. A “conservative event” scenario might also require coordination between the School District and Jesuit High School regarding implementation of their shared campus parking MOU.
- It is recommended that at Intersection #3 (American River Drive at Saverien Drive/Project Driveway 2) the School District consider implementing high-visibility crosswalk markings, parking restrictions on crosswalk approaches, crossing warning signs, and/or “Advance Yield Here To (Stop Here For) Pedestrians” signage. These improvements are recommendations that the School District may implement at their discretion after further study.
- Event-specific signal timing can be coordinated between the School District and Sacramento County to decrease intersection delays during “conservative events” associated with the Project. Stadium and event access should be regulated and controlled by event staff to ensure safety for those in attendance while minimizing neighborhood traffic impacts. It is recommended that the School District develop an event traffic management plan for strategic off-site staffing targeted at minimizing disruptions to the local community.
- Impacts from non-football events or events with lower expected attendance are projected to generate minimal additional traffic and parking demand for Rio Americano High School. This includes other athletics games that average fewer attendees than a “general event”.

Attachments:

- Exhibit 1** – Project Vicinity Map
 - Exhibit 2** – Existing (2025) Volumes, Lane Geometry, and Traffic Control
 - Exhibit 3** – Project Trip Distribution
 - Exhibit 4** – Project Trip Assignment
 - Exhibit 5** – Existing (2025) plus Project Volumes, Lane Geometry, and Traffic Control
 - Exhibit 6** – Existing (2025) plus Project Conservative Event Project Trip Assignment
 - Exhibit 7** – Existing (2025) plus Project Conservative Event Volumes, Lane Geometry, and Traffic Control
 - Exhibit 8** – Jesuit Game Trip Assignment
 - Exhibit 9** – Existing (2025) plus Project plus Jesuit Game Volumes, Lane Geometry, and Traffic Control
 - Exhibit 10** – Intersection #6 Left Turn 95th Percentile Queueing
 - Exhibit 11** – On-Site and Off-Site Parking Study Map
 - Exhibit 12** – Event Stadium Access and Circulation Map
-
- Attachment A** – Intersection Turning Movement Counts and Study Roadway Segment Volumes
 - Attachment B** – Existing (2025) Analysis Worksheets
 - Attachment C** – Rio Americano High School Football Attendance Counts
 - Attachment D** – Average Vehicle Occupancy Study
 - Attachment E** – Existing (2025) Plus Project Analysis Worksheets
 - Attachment F** – Existing (2025) Plus Project “Conservative Event” Analysis Worksheets
 - Attachment G** – Existing (2025) Plus Project Plus Jesuit Game Analysis Worksheets



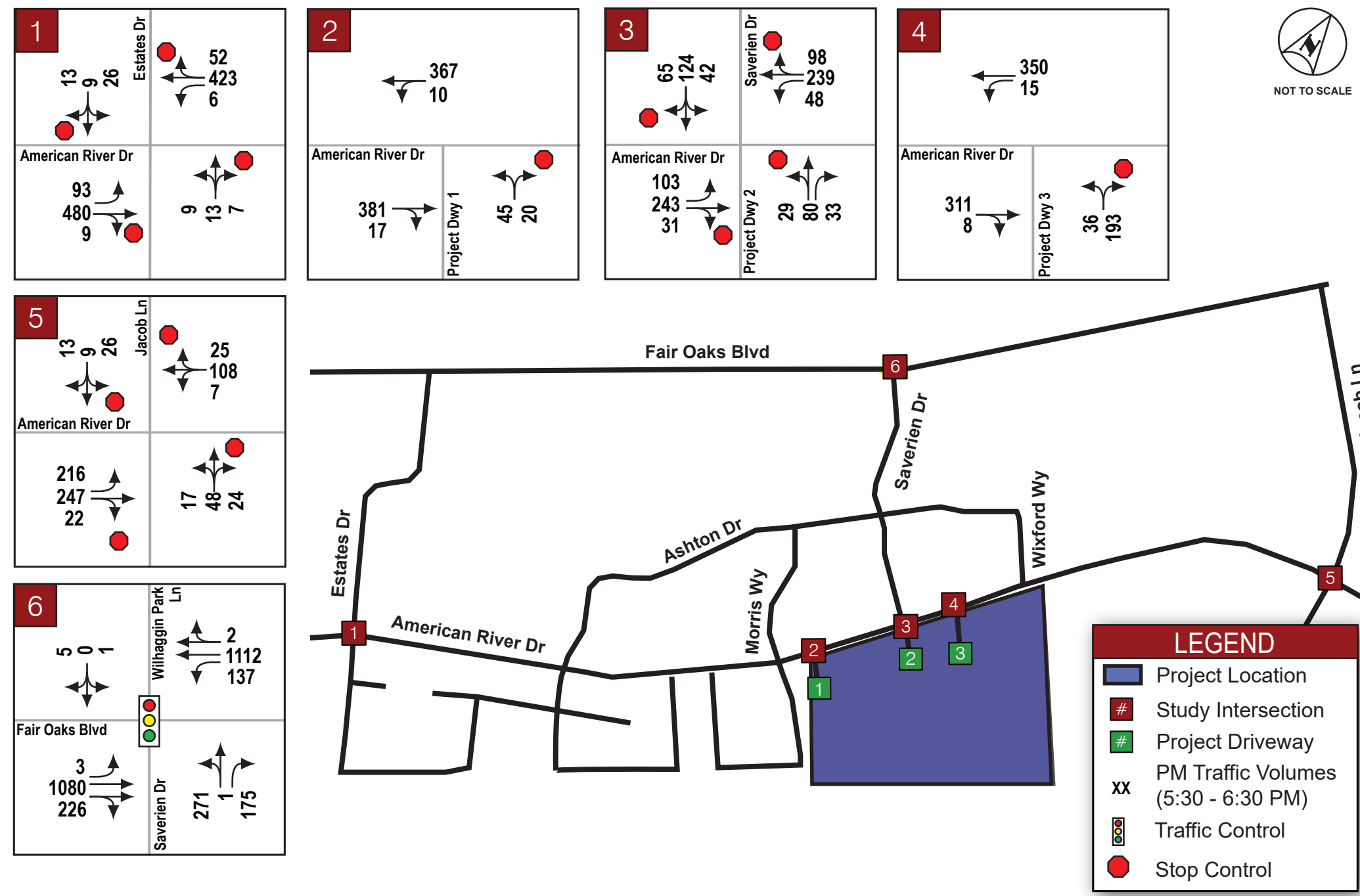
LEGEND

Project Location

Study Intersection

Project Driveway

Study Segment





LEGEND

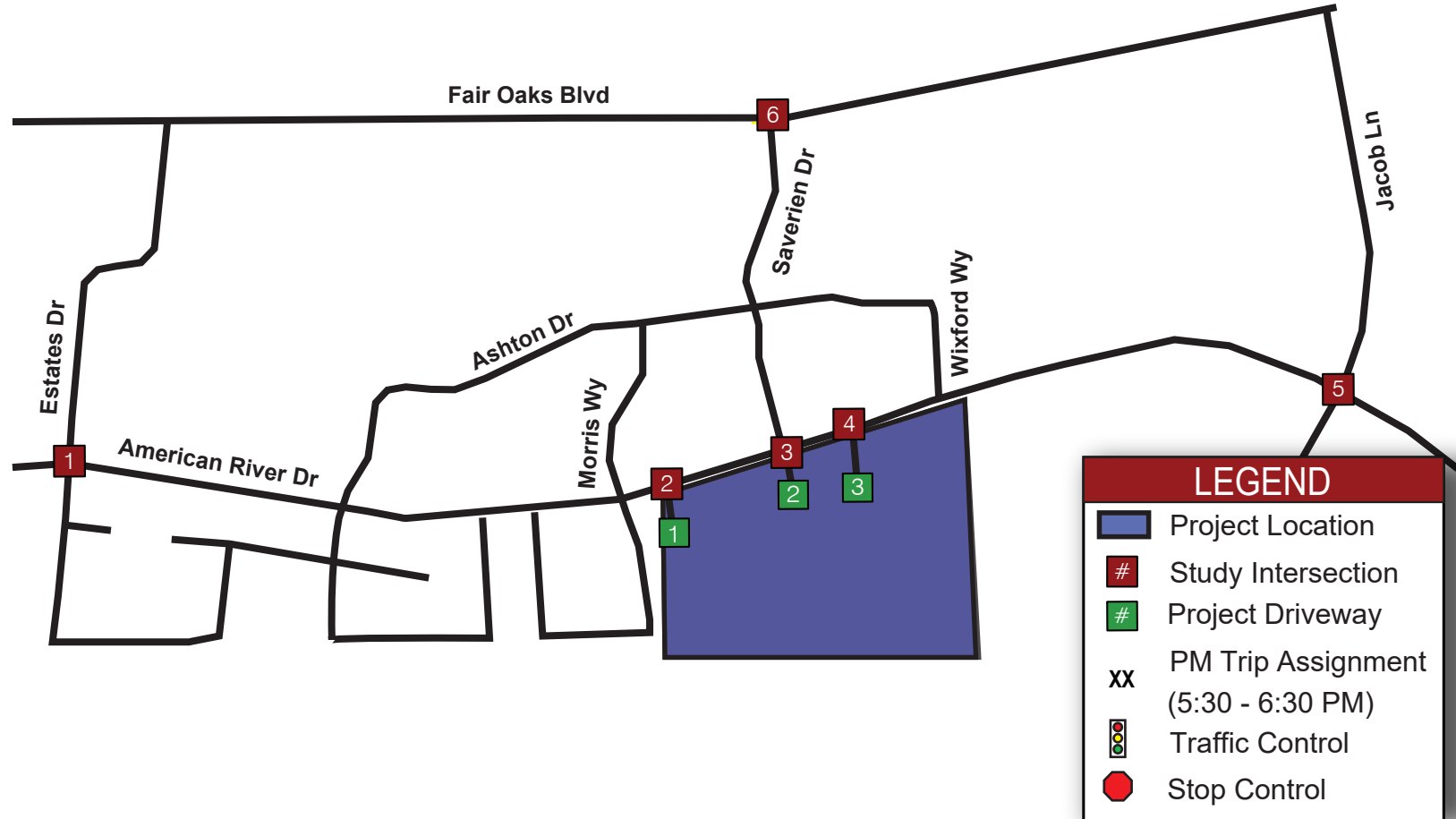
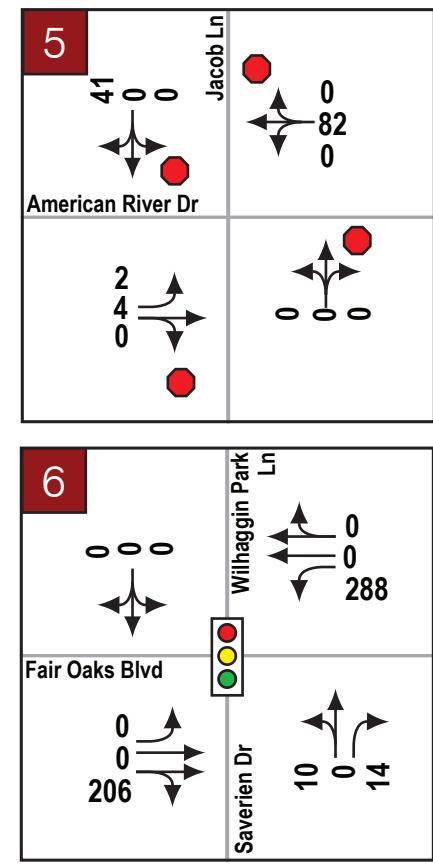
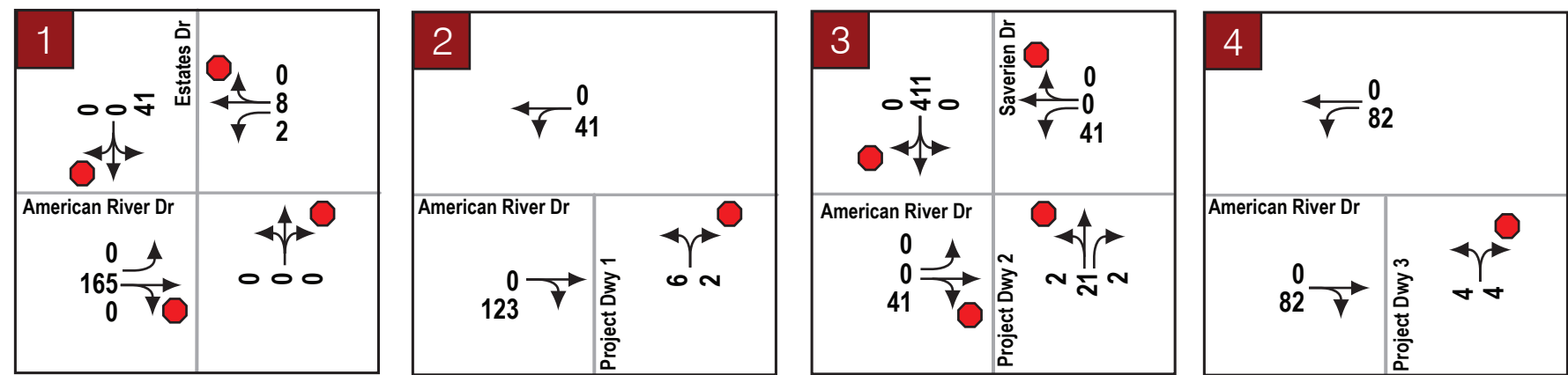
Project Location

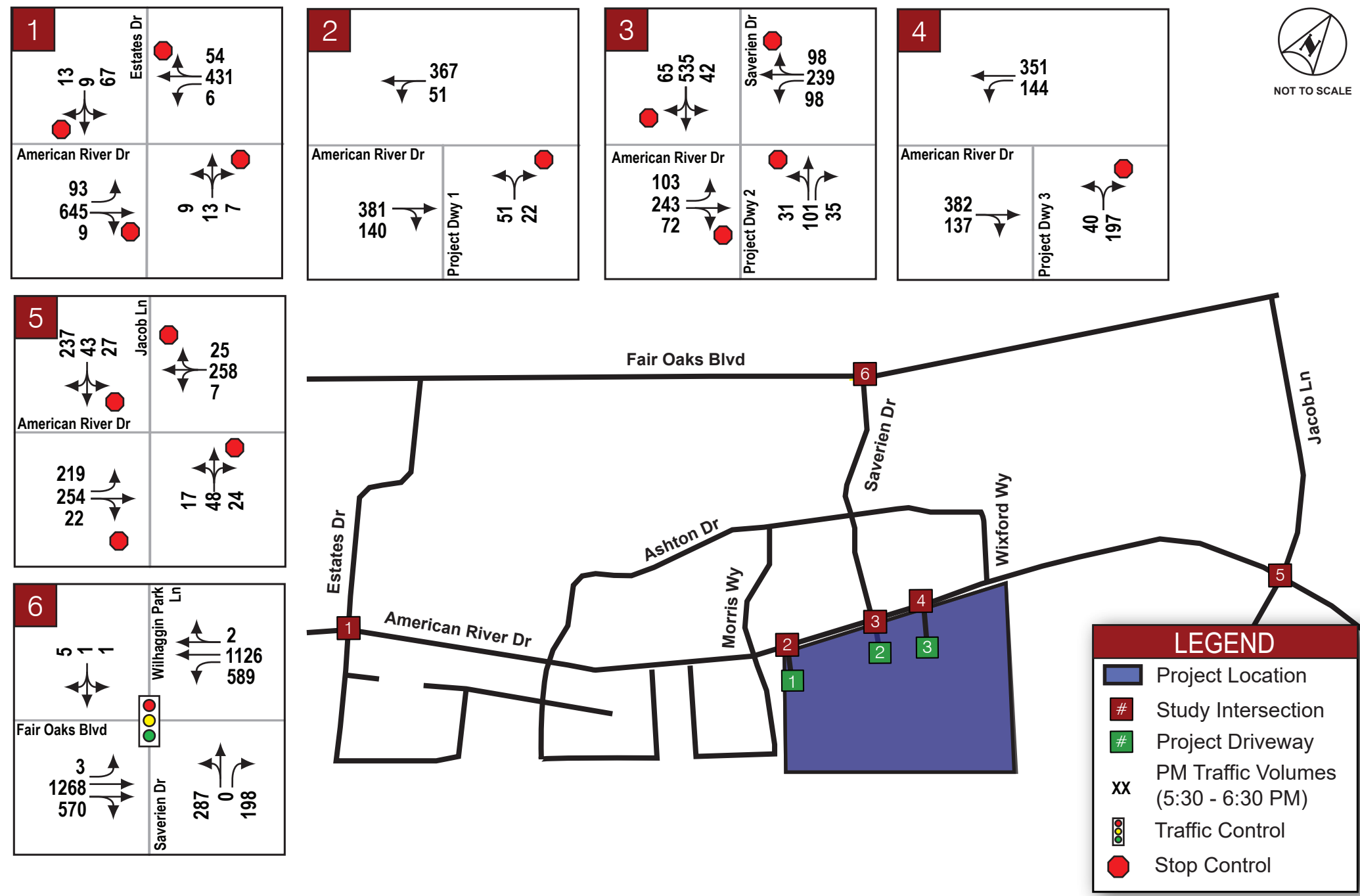
Study Intersection

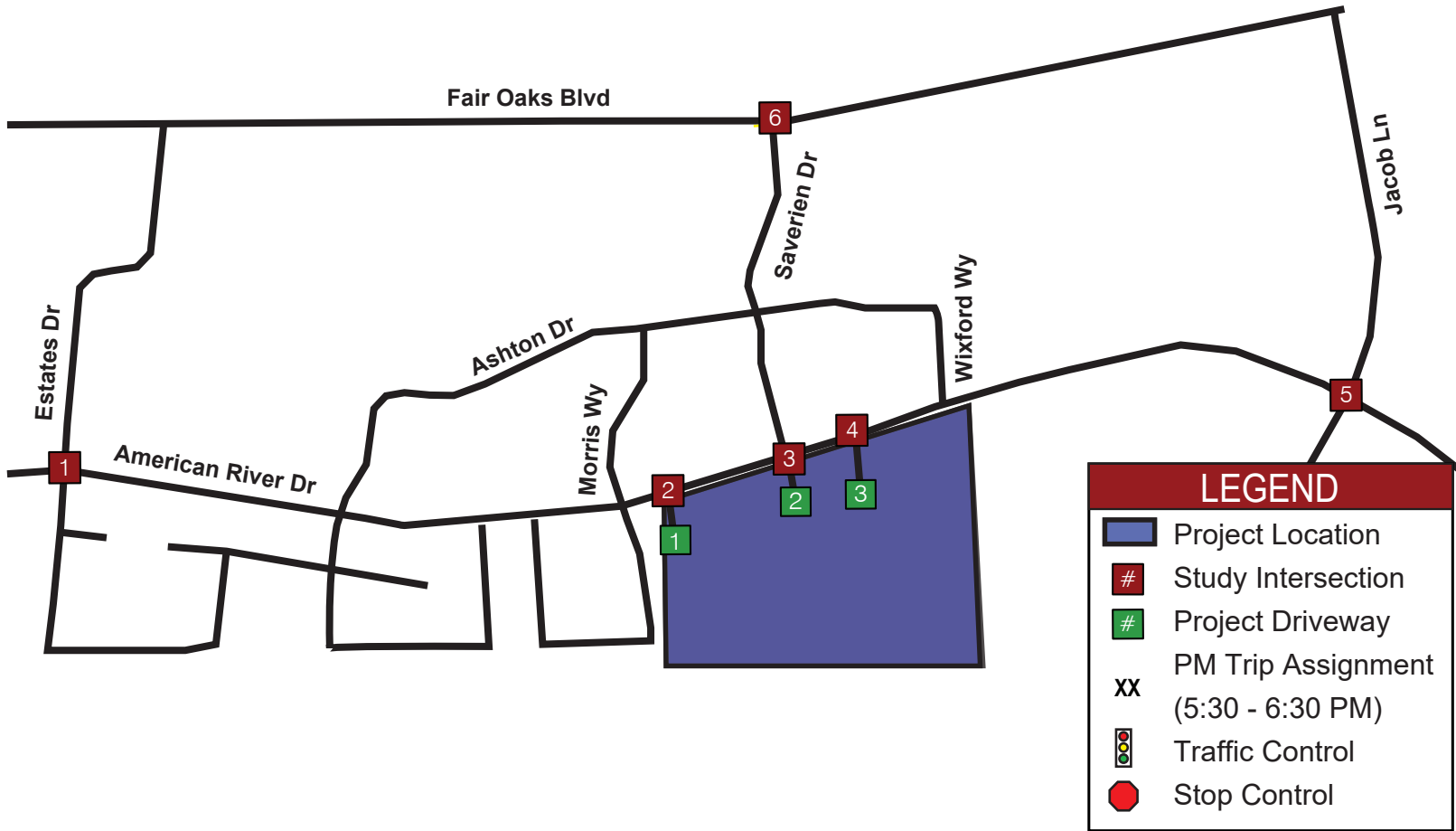
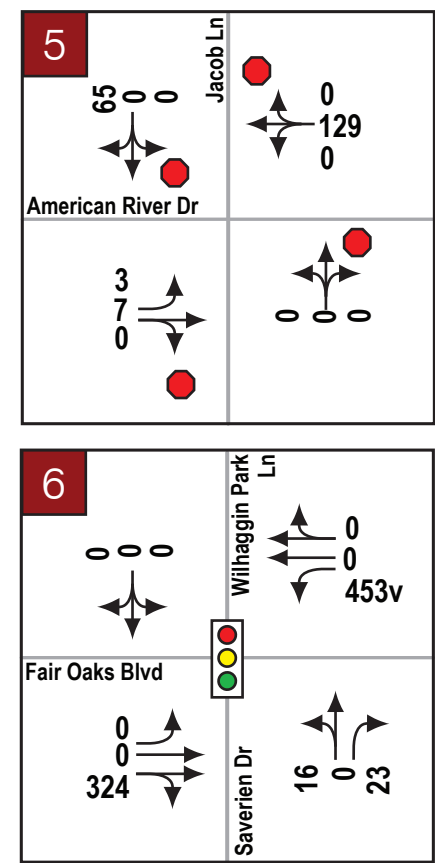
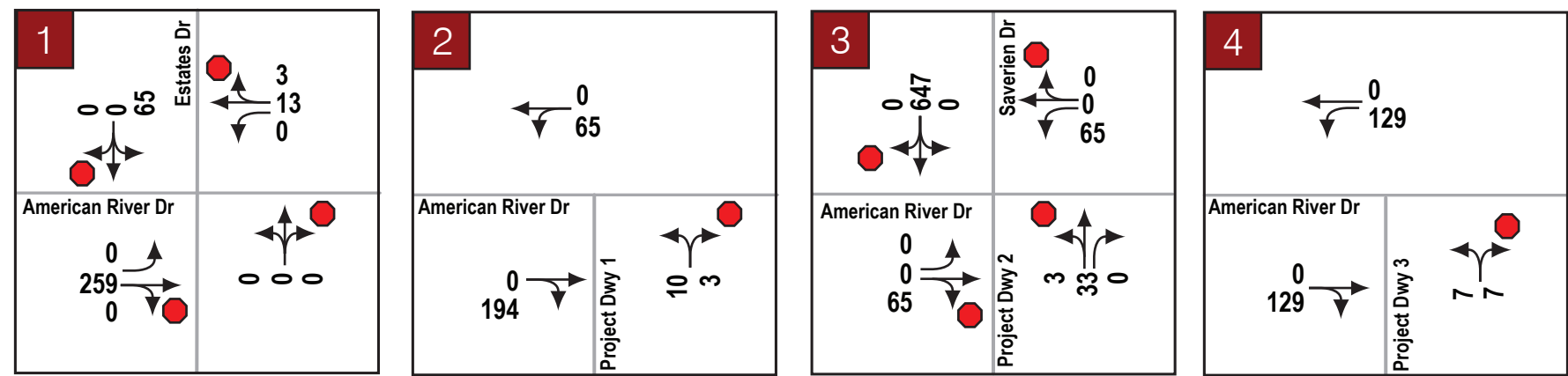
Project Driveway

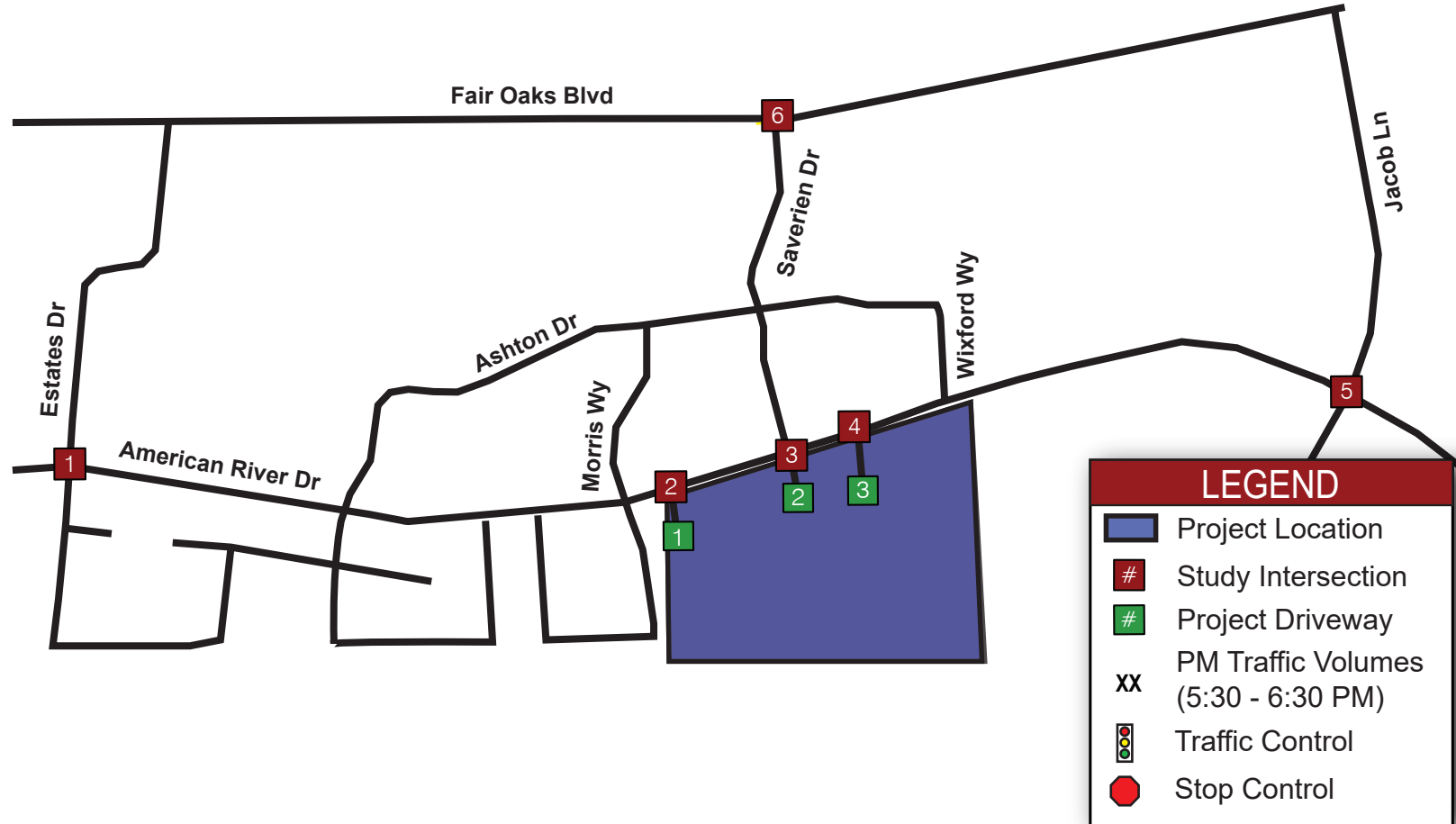
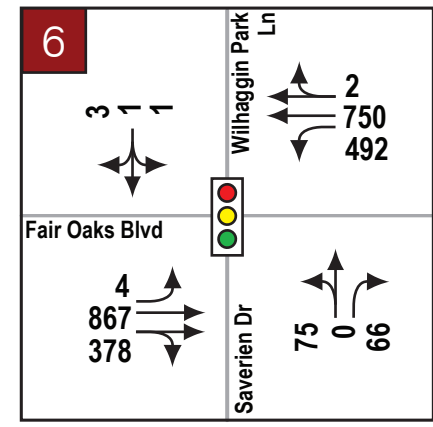
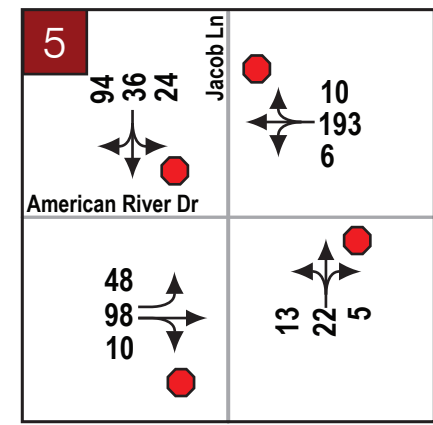
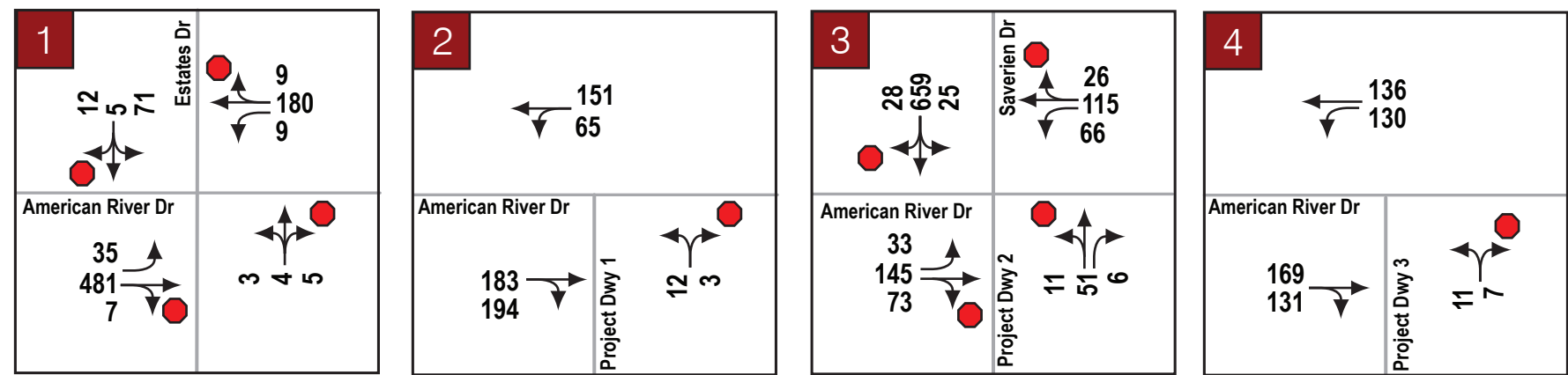
Study Segment

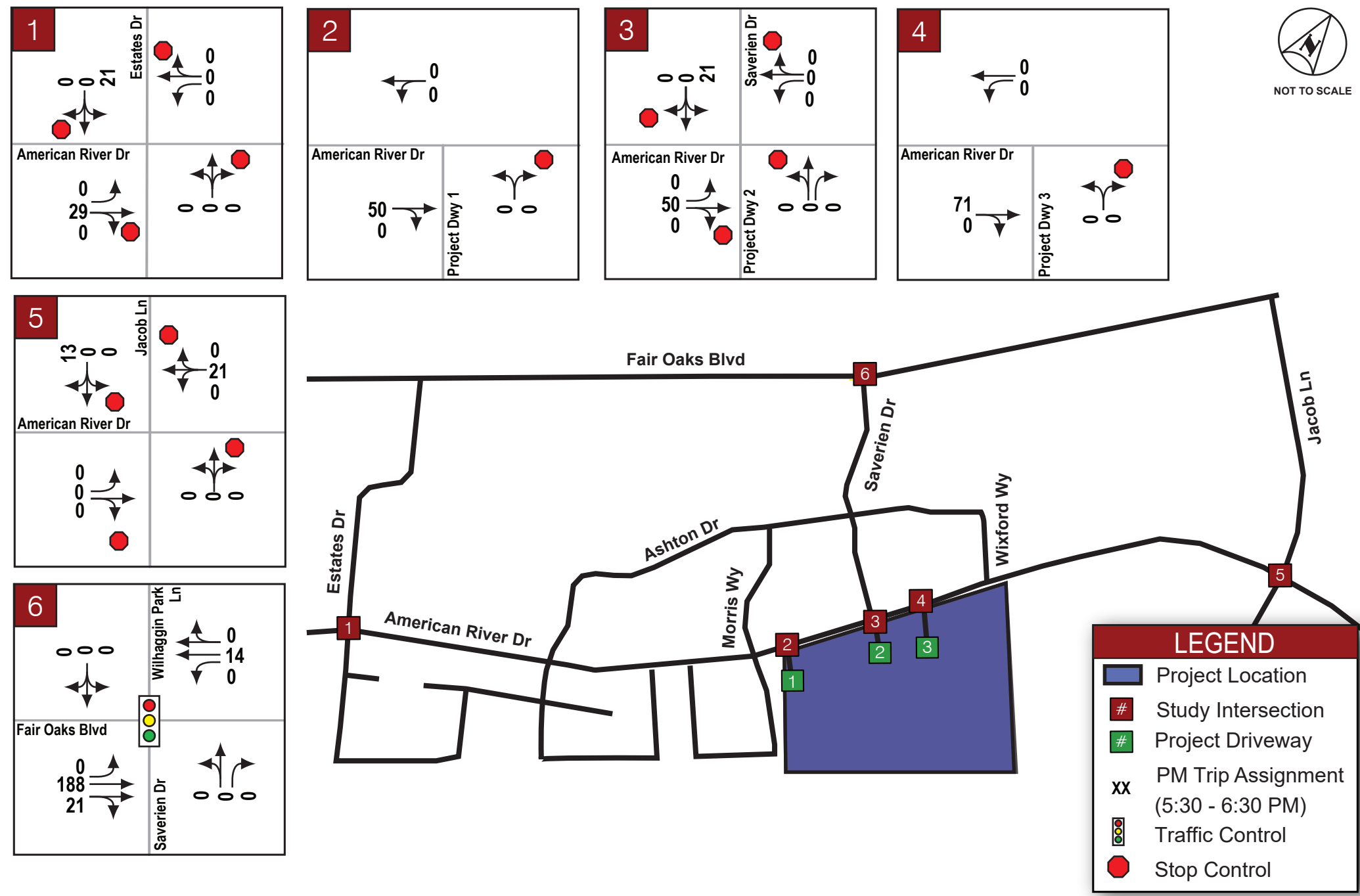
AM(PM) Trip Distribution

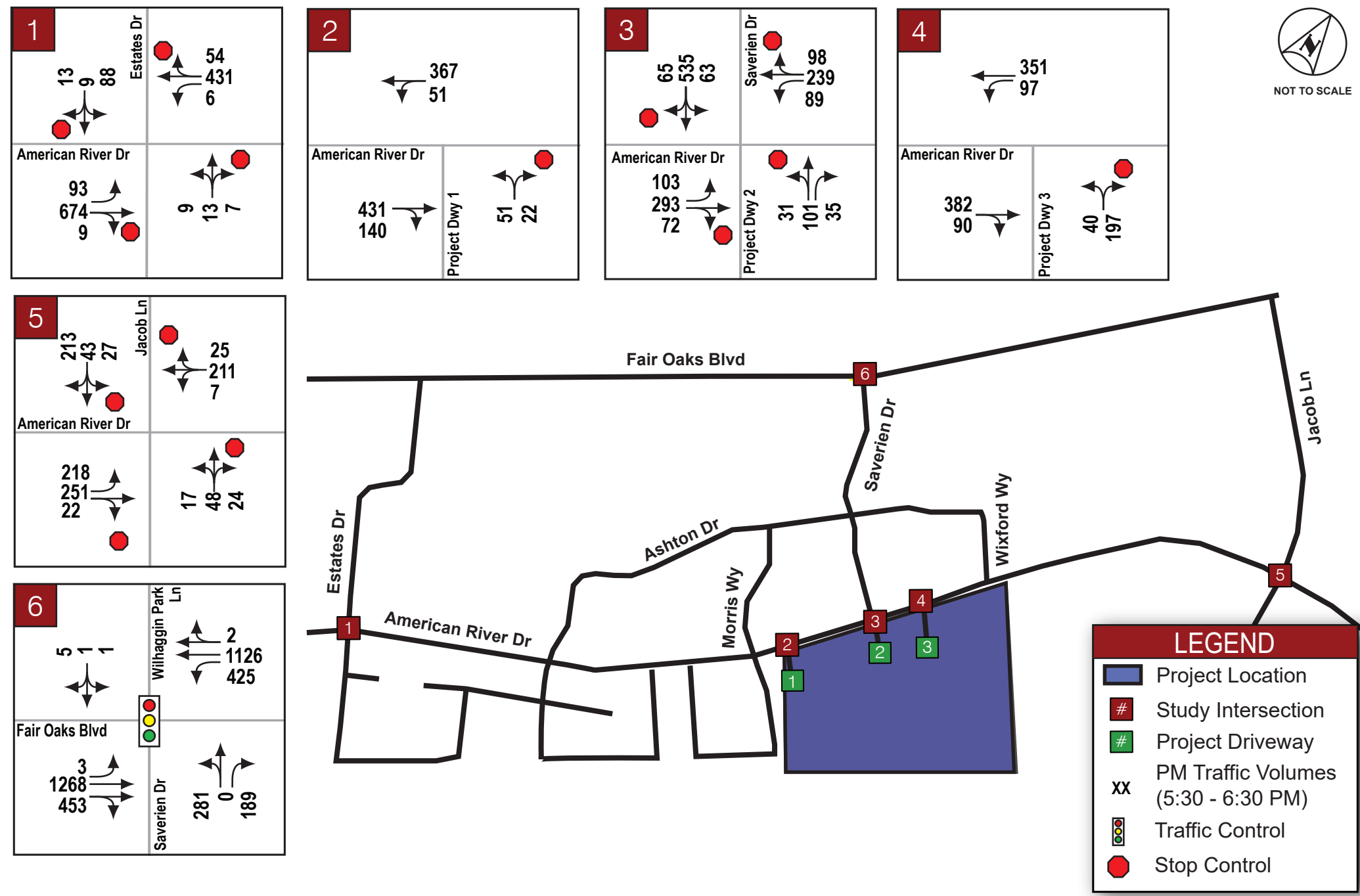




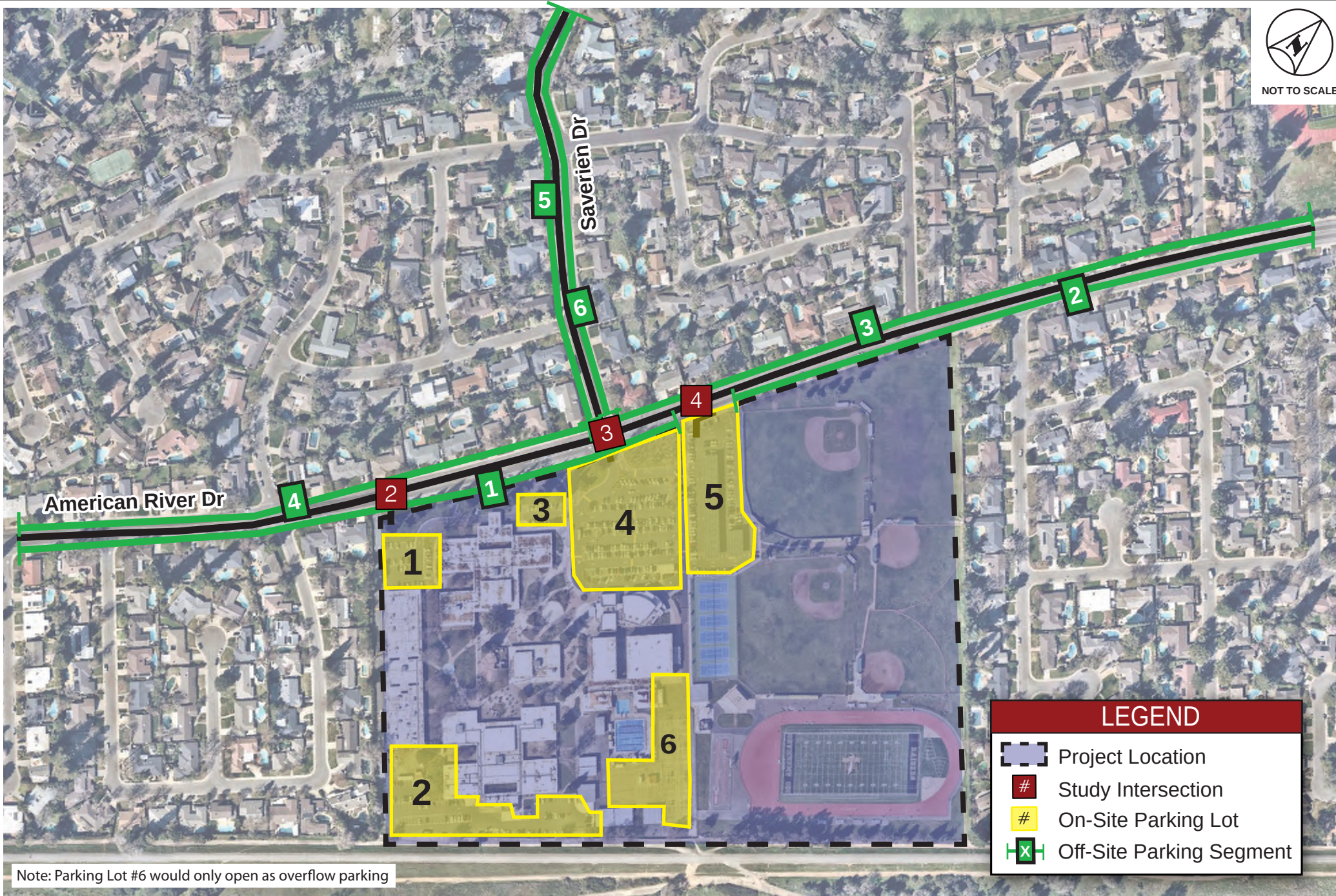














LEGEND

Project Location

Study Intersection

Parking Lot

IMPROVEMENTS SUMMARY

1

Ensure adequate traffic operations and pedestrian safety by having event staff present at Intersection #3 to direct traffic and ensure pedestrians are able to cross safely.

2

Utilize the presence of event staff and signage at key locations throughout the parking lots to direct traffic, facilitate pedestrian movements, and communicate parking availability. Event staff should be aware of parking lot capacity and communicate to attendees when lots are at or nearing capacity and direct traffic as needed to maintain optimal traffic flow.

3

Ensure attendees using Parking Lot #2 are able to access stadium directly and provide signage or staffing as needed to guide pedestrians towards stadium.

4

Block off regular traffic from entering past this point.

5

Use signs or event staff to direct traffic to Parking Lot #2 at the back of the school.

6

Keep River Walk Way access point open for attendees walking or cycling to the game using the River Walkway.

7

Traffic should flow and follow the existing markings found on the parking lot. Additional A-Frame signs can be used to make traffic flow direction more readily apparent.

8

Pedestrians should use existing pedestrian infrastructure to navigate to the stadium from the parking lots or street safely. A-Frame signs can and should be in place to direct pedestrians to the stadium.

Attachment A

Intersection Turning Movement and Study Roadway Segment Volumes

National Data & Surveying Services

Intersection Turning Movement Count

Location: Estates Dr & American River Dr
 City: Sacramento
 Control: 4-Way Stop

Project ID: 25-070187-001
 Date: 8/29/2025

Data - Total

NS/EW Streets:	Estates Dr				Estates Dr				American River Dr				American River Dr				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
2:30 PM	3	1	0	0	1	3	1	0	18	76	2	0	0	89	4	0	198
2:45 PM	1	2	1	0	3	5	2	0	18	85	3	0	0	45	0	0	165
3:00 PM	1	4	1	0	2	3	2	0	14	122	1	0	0	99	2	0	251
3:15 PM	3	2	4	0	8	3	2	0	21	147	3	0	1	97	1	0	292
3:30 PM	1	1	0	0	11	1	6	0	22	124	2	0	1	131	25	0	325
3:45 PM	4	6	2	0	5	2	3	0	36	87	3	0	3	96	24	1	272
4:00 PM	3	0	1	0	0	2	3	0	30	85	1	0	2	45	4	0	176
4:15 PM	2	1	0	0	2	3	1	0	25	83	2	0	1	38	3	0	161
4:30 PM	1	3	2	0	2	3	4	0	26	86	3	0	0	37	5	0	172
4:45 PM	1	2	2	0	1	2	2	0	20	100	1	0	3	43	2	0	179
5:00 PM	1	3	0	0	3	2	2	0	24	90	2	1	2	49	3	0	182
5:15 PM	2	1	1	0	2	5	2	0	21	77	4	0	1	43	1	0	160
5:30 PM	2	0	1	0	0	1	3	0	9	60	0	0	5	55	2	0	138
5:45 PM	0	0	2	0	0	1	2	0	12	55	3	1	1	44	2	0	123
6:00 PM	0	2	2	0	3	2	2	0	5	68	1	1	3	37	1	0	127
6:15 PM	1	2	0	0	3	1	5	0	7	39	3	0	0	31	1	0	93
TOTAL VOLUMES :	NL 26	NT 30	NR 19	NU 0	SL 46	ST 39	SR 42	SU 0	EL 308	ET 1384	ER 34	EU 3	WL 23	WT 979	WR 80	WU 1	TOTAL 3014
APPROACH %'s :	34.67%	40.00%	25.33%	0.00%	36.22%	30.71%	33.07%	0.00%	17.81%	80.05%	1.97%	0.17%	2.12%	90.40%	7.39%	0.09%	
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	9	13	7	0	26	9	13	0	93	480	9	0	5	423	52	1	1140
PEAK HR FACTOR :	0.563	0.542	0.438	0.000	0.591	0.750	0.542	0.000	0.646	0.816	0.750	0.000	0.417	0.807	0.520	0.250	0.877
	0.604				0.667				0.851				0.766				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Rio Americano High School W Dwy & American River Dr
 City: Sacramento
 Control: 1-Way Stop(NB)

Project ID: 25-070187-002
 Date: 8/29/2025

Data - Total

NS/EW Streets:	Rio Americano High School W Dwy				Rio Americano High School W Dwy				American River Dr				American River Dr				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
2:30 PM	2	0	9	0	0	0	0	0	0	82	1	0	0	85	0	0	179
2:45 PM	1	0	1	0	0	0	0	0	0	79	1	0	1	43	0	1	127
3:00 PM	4	0	3	0	0	0	0	0	0	94	2	1	3	97	0	1	205
3:15 PM	7	0	1	0	0	0	0	0	0	103	5	0	2	91	0	0	209
3:30 PM	24	0	5	0	0	0	0	0	0	94	7	3	2	100	0	0	235
3:45 PM	10	0	11	0	0	0	0	0	0	90	3	1	2	74	0	0	191
4:00 PM	8	0	8	0	0	0	0	0	0	73	0	0	0	38	0	0	127
4:15 PM	1	0	2	0	0	0	0	0	0	79	0	0	0	40	0	0	122
4:30 PM	1	0	4	0	0	0	0	0	0	80	1	0	0	35	0	0	121
4:45 PM	2	0	3	0	0	0	0	0	0	86	0	0	0	42	0	0	133
5:00 PM	3	0	0	0	0	0	0	0	0	75	0	0	0	38	0	0	116
5:15 PM	1	0	1	0	0	0	0	0	0	81	0	0	0	46	0	0	129
5:30 PM	0	0	0	0	0	0	0	0	0	53	0	0	0	54	0	0	107
5:45 PM	2	0	0	0	0	0	0	0	0	37	0	0	0	44	0	0	83
6:00 PM	0	0	0	0	0	0	0	0	0	61	0	0	0	36	0	0	97
6:15 PM	0	0	0	0	0	0	0	0	0	32	0	0	0	17	0	0	49
TOTAL VOLUMES :	NL 66	NT 0	NR 48	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 1199	ER 20	EU 5	WL 10	WT 880	WR 0	WU 2	TOTAL 2230
APPROACH %'s :	57.89%	0.00%	42.11%	0.00%					0.00%	97.96%	1.63%	0.41%	1.12%	98.65%	0.00%	0.22%	
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	45	0	20	0	0	0	0	0	0	381	17	5	9	362	0	1	840
PEAK HR FACTOR :	0.469	0.000	0.455	0.000	0.000	0.000	0.000	0.000	0.000	0.925	0.607	0.417	0.750	0.905	0.000	0.250	0.894
	0.560								0.933				0.912				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Rio Americano High School E Dwy/Saverien Dr & American River Dr
 City: Sacramento
 Control: 4-Way Stop

Project ID: 25-070187-003
 Date: 8/29/2025

Data - Total

NS/EW Streets:	Rio Americano High School E Dwy/Saverien Dr				Rio Americano High School E Dwy/Saverien Dr				American River Dr				American River Dr				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0.5 NL	0.5 NT	1 NR	0 NU	0 SL	1 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
2:30 PM	28	34	52	0	8	9	16	0	25	60	3	1	3	38	6	0	283
2:45 PM	9	18	7	0	13	19	10	0	11	59	8	0	3	26	3	1	187
3:00 PM	2	16	1	0	8	31	17	0	19	62	7	0	5	88	31	0	287
3:15 PM	5	9	0	0	12	37	17	0	20	69	8	0	15	76	23	0	291
3:30 PM	8	26	29	0	10	29	18	0	23	38	9	0	20	35	27	0	272
3:45 PM	14	29	3	0	12	27	13	0	41	74	7	0	8	40	17	0	285
4:00 PM	4	14	0	0	8	16	9	0	27	52	4	0	3	26	9	0	172
4:15 PM	3	4	0	0	5	7	12	1	17	61	3	0	1	24	4	0	142
4:30 PM	1	8	0	0	3	6	9	0	23	60	2	0	2	23	11	0	148
4:45 PM	8	18	1	0	13	12	8	0	15	67	5	0	4	29	8	0	188
5:00 PM	1	16	1	0	8	7	8	0	15	60	4	0	2	27	8	0	157
5:15 PM	0	1	0	0	5	2	12	0	19	59	0	0	0	35	8	0	141
5:30 PM	0	1	0	0	1	2	8	0	11	45	2	0	0	46	8	0	124
5:45 PM	1	0	1	0	8	7	10	0	7	25	4	0	0	32	10	0	105
6:00 PM	6	16	1	0	7	2	7	0	12	46	2	0	1	25	2	0	127
6:15 PM	1	1	1	0	9	1	3	0	3	29	0	0	0	12	6	0	66
TOTAL VOLUMES :	91	211	97	0	130	214	177	1	288	866	68	1	67	582	181	1	2975
APPROACH %'s :	22.81%	52.88%	24.31%	0.00%	24.90%	41.00%	33.91%	0.19%	23.55%	70.81%	5.56%	0.08%	8.06%	70.04%	21.78%	0.12%	
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	29	80	33	0	42	124	65	0	103	243	31	0	48	239	98	0	1135
PEAK HR FACTOR :	0.518	0.690	0.284	0.000	0.875	0.838	0.903	0.000	0.628	0.821	0.861	0.000	0.600	0.679	0.790	0.000	0.975
	0.563				0.875				0.773				0.776				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Rio Americano High School E/W Parking Lot & American River Dr
 City: Sacramento
 Control: 1-Way Stop(NB)

Project ID: 25-070187-004
 Date: 8/29/2025

Data - Total

NS/EW Streets:		Rio Americano High School E/W Parking Lot				Rio Americano High School E/W Parking Lot				American River Dr					American River Dr								
PM		NORTHBOUND				SOUTHBOUND				EASTBOUND					WESTBOUND					NORTHBOUND			TOTAL
		0 NL	0 NT	1 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 ER2	0 WL	1 WT	0 WR	0 WU	0 WL2	0 N2L2	0 N2R2	0 N2U2	
	2:30 PM	0	0	0	0	0	0	0	0	118	0	2	0	0	45	0	0	0	0	0	0	0	165
	2:45 PM	0	0	0	0	0	0	0	0	78	0	0	0	0	33	0	0	0	0	0	0	111	
	3:00 PM	0	0	1	0	0	0	0	0	71	0	0	2	3	129	0	0	0	4	12	1	223	
	3:15 PM	0	0	1	0	0	0	0	0	70	6	1	0	7	106	0	0	0	2	4	0	197	
	3:30 PM	5	0	49	0	0	0	0	0	80	0	0	0	4	68	0	0	0	6	77	0	289	
	3:45 PM	2	0	16	0	0	0	0	0	90	0	0	0	1	47	0	0	0	16	33	0	205	
	4:00 PM	3	0	1	0	0	0	0	0	61	0	0	0	0	30	0	0	0	5	6	0	106	
	4:15 PM	0	0	2	0	0	0	0	0	66	0	0	0	0	30	0	0	0	0	3	0	101	
	4:30 PM	2	0	1	0	0	0	0	0	63	0	0	0	0	31	0	1	0	2	4	0	104	
	4:45 PM	1	0	1	0	0	0	0	0	78	0	0	0	0	37	0	0	0	3	8	0	128	
	5:00 PM	0	0	0	0	0	0	0	0	72	0	0	0	1	34	0	0	0	3	3	0	113	
	5:15 PM	0	0	0	0	0	0	0	0	64	0	0	0	0	42	0	0	1	1	3	0	111	
	5:30 PM	0	0	0	0	0	0	0	0	44	0	0	2	0	52	0	0	0	2	0	0	100	
	5:45 PM	1	0	0	0	0	0	0	0	34	0	0	0	0	40	0	0	1	1	0	0	77	
	6:00 PM	0	0	0	0	0	0	0	0	53	0	0	0	0	28	0	0	0	0	0	0	81	
	6:15 PM	0	0	0	0	0	0	0	0	38	0	2	0	0	16	0	0	0	0	0	0	56	
TOTAL VOLUMES : APPROACH %'s :		NL 14 16.28%	NT 0 0.00%	NR 72 83.72%	NU 0 0.00%	SL 0	ST 0	SR 0	SU 0	EL 0 0.00%	ET 1080 98.63%	ER 6 0.55%	EU 5 0.46%	ER2 4 0.37%	WL 16 2.03%	WT 768 97.59%	WR 0 0.00%	WU 1 0.13%	WL2 2 0.25%	N2L2 45 22.61%	N2R2 153 76.88%	N2U2 1 0.50%	TOTAL 2167
PEAK HR :		03:00 PM - 04:00 PM																					TOTAL
PEAK HR VOL :		7	0	67	0	0	0	0	0	0	311	6	1	2	15	350	0	0	0	28	126	1	914
PEAK HR FACTOR :		0.350	0.000	0.342	0.000	0.000	0.000	0.000	0.000	0.000	0.864	0.250 0.889	0.250	0.250	0.536	0.678	0.000 0.691	0.000	0.000	0.438	0.409	0.250	0.791

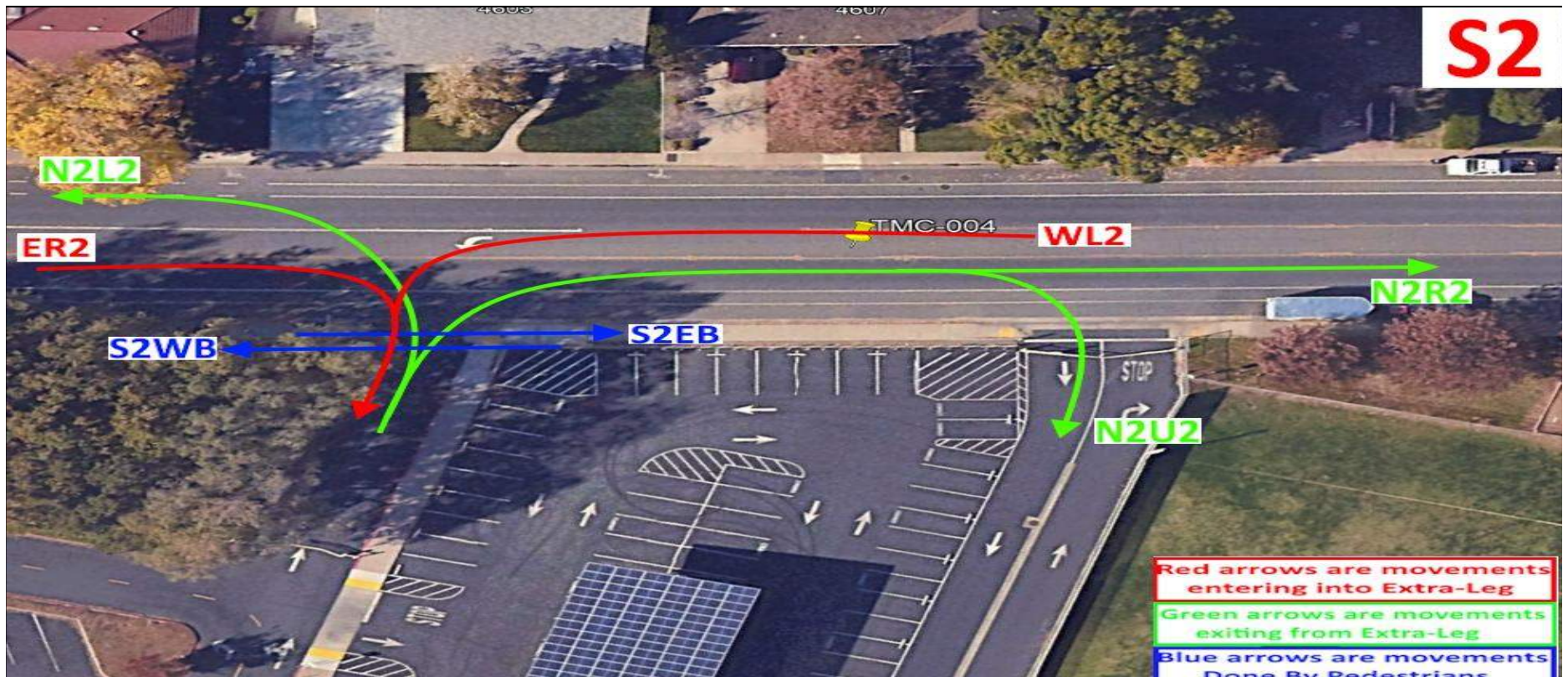
Explanation for extra leg movements

Movements entering the extra leg

- ER2 Movements coming from EB on American River Dr entering into the Extra Leg (Rio Americano High School W Parking Lot)
- WL2 Movements coming from WB on American River Dr entering into the Extra Leg (Rio Americano High School W Parking Lot)

Movements exiting the extra leg

- N2L2 Movements exiting from Extra Leg (Rio Americano High School W Parking Lot) entering into American River Dr WB.
- N2R2 Movements exiting from Extra Leg (Rio Americano High School W Parking Lot) entering into American River Dr EB.
- N2U2 Movements exiting from Extra Leg (Rio Americano High School W Parking Lot) entering into Rio Americano High School E Parking Lot SB.



National Data & Surveying Services

Intersection Turning Movement Count

Location: Jacob Ln & American River Dr
City: Sacramento
Control: 4-Way Stop

Project ID: 25-070187-005
Date: 8/29/2025

Data - Total

NS/EW Streets:	Jacob Ln				Jacob Ln				American River Dr				American River Dr				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
2:30 PM	2	7	1	0	6	9	20	0	47	35	5	0	1	21	2	0	156
2:45 PM	7	6	3	0	7	2	32	1	16	26	4	0	5	13	12	0	134
3:00 PM	9	14	0	0	9	10	47	0	41	42	6	0	2	23	5	0	208
3:15 PM	5	11	0	0	3	8	48	1	22	33	7	0	2	26	7	0	173
3:30 PM	3	13	13	0	9	20	46	0	89	76	4	0	3	31	4	0	311
3:45 PM	0	10	11	0	5	5	18	0	64	96	5	0	0	28	9	0	251
4:00 PM	2	3	4	0	4	9	11	0	17	39	1	0	2	7	5	0	104
4:15 PM	0	7	4	0	2	8	9	0	18	38	4	0	3	9	4	0	106
4:30 PM	3	7	4	0	4	9	5	0	22	34	6	0	0	15	2	0	111
4:45 PM	3	5	0	0	7	5	8	0	27	41	2	0	6	15	4	0	123
5:00 PM	4	7	2	0	3	5	8	0	20	44	2	0	1	20	4	0	120
5:15 PM	3	2	3	0	1	6	9	0	19	39	4	0	1	21	2	0	110
5:30 PM	3	9	2	0	4	11	2	0	14	25	3	0	3	36	4	0	116
5:45 PM	5	1	1	0	6	3	13	0	6	20	3	0	1	8	4	0	71
6:00 PM	4	7	1	0	6	13	4	0	14	26	4	0	1	16	2	1	99
6:15 PM	1	5	1	0	8	9	10	0	11	20	0	0	0	4	0	0	69
TOTAL VOLUMES :	54	114	50	0	84	132	290	2	447	634	60	0	31	293	70	1	2262
APPROACH %'s :	24.77%	52.29%	22.94%	0.00%	16.54%	25.98%	57.09%	0.39%	39.18%	55.57%	5.26%	0.00%	7.85%	74.18%	17.72%	0.25%	
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	17	48	24	0	26	43	159	1	216	247	22	0	7	108	25	0	943
PEAK HR FACTOR :	0.472	0.857	0.462	0.000	0.722	0.538	0.828	0.250	0.607	0.643	0.786	0.000	0.583	0.871	0.694	0.000	0.758
	0.767				0.763				0.717				0.921				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Saverien Dr/Wilhaggin Park Ln & Fair Oaks Blvd
 City: Sacramento
 Control: Signalized

Project ID: 25-070187-006
 Date: 8/29/2025

Data - Total

NS/EW Streets:	Saverien Dr/Wilhaggin Park Ln				Saverien Dr/Wilhaggin Park Ln				Fair Oaks Blvd				Fair Oaks Blvd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0.5 NL	0.5 NT	1 NR	0 NU	0 SL	1 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	
2:30 PM	57	1	22	0	0	0	1	0	0	229	24	0	9	196	0	0	539
2:45 PM	23	0	15	0	0	0	1	0	2	285	41	0	17	218	0	0	602
3:00 PM	43	0	33	0	0	0	2	0	0	265	39	0	38	270	0	1	691
3:15 PM	31	0	21	0	1	0	2	0	0	276	75	0	38	330	1	0	775
3:30 PM	89	0	60	0	0	1	1	0	2	262	73	0	46	281	0	0	815
3:45 PM	108	0	61	0	0	0	0	0	1	277	39	0	14	231	1	0	732
4:00 PM	31	0	28	0	0	0	0	0	0	259	26	0	15	229	0	0	588
4:15 PM	14	0	18	0	0	0	1	0	2	242	18	0	11	212	0	0	518
4:30 PM	24	0	19	0	2	0	2	0	2	260	22	0	13	245	2	0	591
4:45 PM	43	0	13	0	2	0	0	0	0	254	33	0	14	212	0	0	571
5:00 PM	25	0	19	0	0	0	0	0	0	273	25	0	8	223	1	0	574
5:15 PM	28	0	13	0	0	0	0	0	1	275	13	0	9	214	2	0	555
5:30 PM	13	0	10	0	1	0	1	0	1	269	12	0	9	185	2	0	503
5:45 PM	17	0	12	0	0	1	2	0	0	201	19	0	12	192	0	0	456
6:00 PM	14	0	17	0	0	0	0	0	1	202	13	0	10	198	0	0	455
6:15 PM	15	0	4	0	0	0	0	0	2	195	10	0	8	175	0	0	409
TOTAL VOLUMES :	NL 575	NT 1	NR 365	NU 0	SL 6	ST 2	SR 13	SU 0	EL 14	ET 4024	ER 482	EU 0	WL 271	WT 3611	WR 9	WU 1	TOTAL 9374
APPROACH %'s :	61.11%	0.11%	38.79%	0.00%	28.57%	9.52%	61.90%	0.00%	0.31%	89.03%	10.66%	0.00%	6.96%	92.78%	0.23%	0.03%	
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	271	0	175	0	1	1	5	0	3	1080	226	0	136	1112	2	1	3013
PEAK HR FACTOR :	0.627	0.000	0.717	0.000	0.250	0.250	0.625	0.000	0.375	0.975	0.753	0.000	0.739	0.842	0.500	0.250	0.924
	0.660				0.583				0.932				0.848				

VOLUME

American River Dr Bet Rio Americano High School E Dwy/Saverien Dr & Wixford Way

Day: Friday

City: Sacramento

Date: 8/29/2025

Project #: CA25_070188_002

DAILY TOTALS						NB				SB				EB				WB				Total				DAILY TOTALS					
						0				0				2,950				2,650				5,600									
15-Minutes Interval												Hourly Intervals																			
TIME	NB	SB	EB	WB	TOTAL	TIME	NB	SB	EB	WB	TOTAL	TIME	NB	SB	EB	WB	TOTAL														
0:00			3	2	5	12:00			32	40	72	00:00	01:00		5	5	10														
0:15			0	1	1	12:15			31	60	91	01:00	02:00		1	3	4														
0:30			2	1	3	12:30			40	22	62	02:00	03:00		1	0	1														
0:45			0	1	1	12:45			68	31	99	03:00	04:00		2	0	2														
1:00			0	2	2	13:00			45	28	73	04:00	05:00		2	8	10														
1:15			0	1	1	13:15			36	45	81	05:00	06:00		6	26	32														
1:30			1	0	1	13:30			41	38	79	06:00	07:00		26	54	80														
1:45			0	0	0	13:45			28	27	55	07:00	08:00		171	291	462														
2:00			0	0	0	14:00			43	27	70	08:00	09:00		307	418	725														
2:15			1	0	1	14:15			40	32	72	09:00	10:00		148	209	357														
2:30			0	0	0	14:30			118	45	163	10:00	11:00		82	126	208														
2:45			0	0	0	14:45			78	33	111	11:00	12:00		120	106	226														
3:00			1	0	1	15:00			84	132	216	12:00	13:00		171	153	324														
3:15			1	0	1	15:15			75	113	188	13:00	14:00		150	138	288														
3:30			0	0	0	15:30			206	72	278	14:00	15:00		279	137	416														
3:45			0	0	0	15:45			139	48	187	15:00	16:00		504	365	869														
4:00			0	2	2	16:00			68	30	98	16:00	17:00		295	129	424														
4:15			0	0	0	16:15			71	30	101	17:00	18:00		220	171	391														
4:30			0	5	5	16:30			69	32	101	18:00	19:00		152	88	240														
4:45			2	1	3	16:45			87	37	124	19:00	20:00		95	73	168														
5:00			0	5	5	17:00			75	35	110	20:00	21:00		69	53	122														
5:15			1	4	5	17:15			67	43	110	21:00	22:00		68	49	117														
5:30			3	8	11	17:30			44	52	96	22:00	23:00		51	36	87														
5:45			2	9	11	17:45			34	41	75	23:00	00:00		25	12	37														
6:00			1	5	6	18:00			53	28	81	STATISTICS																			
6:15			6	7	13	18:15			38	16	54		NB	SB	EB	WB	TOTAL														
6:30			7	22	29	18:30			34	25	59	Peak Period	00:00	to	12:00																
6:45			12	20	32	18:45			27	19	46	Volume			871	1246	2117														
7:00			23	37	60	19:00			29	18	47	Peak Hour			7:30	7:30	7:30														

7:15		44	80	124	19:15		24	18	42	Peak Volume		331	479	810	
7:30		49	73	122	19:30		16	20	36	Peak Hour Factor		0.646	0.634	0.703	
7:45		55	101	156	19:45		26	17	43						
8:00		99	189	288	20:00		18	13	31	Peak Period	12:00 to 00:00				
8:15		128	116	244	20:15		12	13	25	Volume		2079	1404	3483	
8:30		38	44	82	20:30		18	14	32	Peak Hour		15:00	15:00	15:00	
8:45		42	69	111	20:45		21	13	34	Peak Volume		504	365	869	
9:00		44	82	126	21:00		17	12	29	Peak Hour Factor		0.612	0.691	0.781	
9:15		45	63	108	21:15		15	15	30						
9:30		27	34	61	21:30		23	9	32	Peak Period	07:00 to 09:00				
9:45		32	30	62	21:45		13	13	26	Volume		478	709	1187	
10:00		22	31	53	22:00		19	8	27	Peak Hour		7:30	7:30	7:30	
10:15		15	34	49	22:15		10	17	27	Peak Volume		331	479	810	
10:30		26	26	52	22:30		11	5	16	Peak Hour Factor		0.646	0.634	0.703	
10:45		19	35	54	22:45		11	6	17						
11:00		21	25	46	23:00		11	3	14	Peak Period	16:00 to 18:00				
11:15		34	19	53	23:15		5	3	8	Volume		515	300	815	
11:30		30	32	62	23:30		7	3	10	Peak Hour		16:15	17:00	16:30	
11:45		35	30	65	23:45		2	3	5	Peak Volume		302	171	445	
TOTALS	0	0	871	1246	2117	TOTALS	0	0	2079	1404	3483	Peak Hour Factor	0.868	0.822	0.897
SPLIT %	0%	0%	41%	59%	38%	SPLIT %	0%	0%	60%	40%	62%				



VOLUME

Saverien Dr Bet Fair Oaks Blvd & American River Dr

Day: Friday

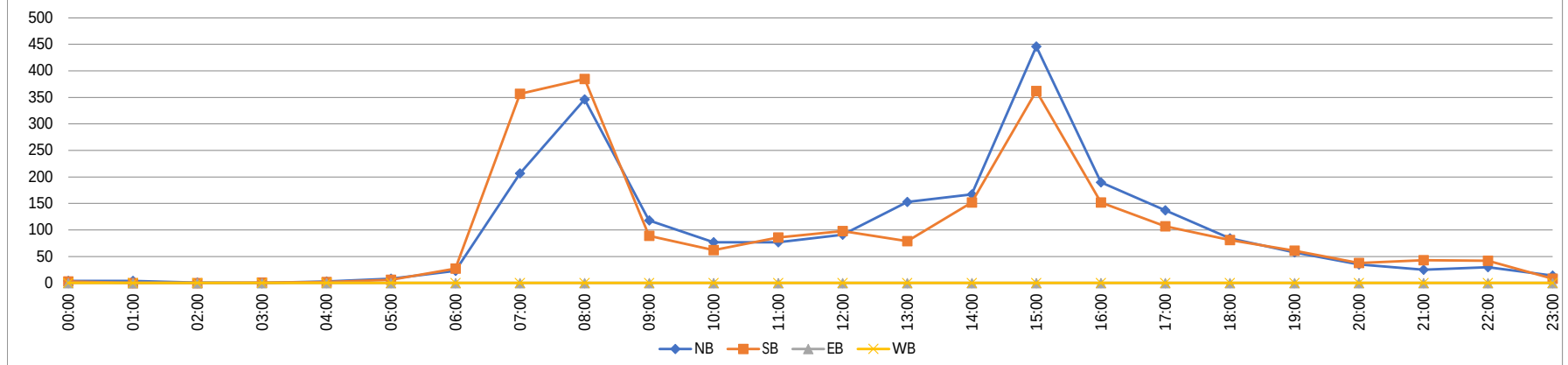
Date: 8/29/2025

City: Sacramento

Project #: CA25_070188_003

DAILY TOTALS						NB				SB				EB				WB				Total		DAILY TOTALS							
						2,298				2,241				0				0				4,539									
15-Minutes Interval												Hourly Intervals																			
TIME	NB	SB	EB	WB	TOTAL	TIME	NB	SB	EB	WB	TOTAL	TIME		NB	SB	EB	WB	TOTAL													
0:00	2	2			4	12:00	19	25			44	00:00	01:00	4	3			7													
0:15	1	0			1	12:15	24	33			57	01:00	02:00	4	0			4													
0:30	1	0			1	12:30	26	24			50	02:00	03:00	1	0			1													
0:45	0	1			1	12:45	22	16			38	03:00	04:00	0	1			1													
1:00	2	0			2	13:00	48	22			70	04:00	05:00	3	2			5													
1:15	1	0			1	13:15	44	26			70	05:00	06:00	8	6			14													
1:30	0	0			0	13:30	33	22			55	06:00	07:00	23	27			50													
1:45	1	0			1	13:45	28	9			37	07:00	08:00	207	357			564													
2:00	0	0			0	14:00	22	21			43	08:00	09:00	346	385			731													
2:15	1	0			1	14:15	28	40			68	09:00	10:00	118	89			207													
2:30	0	0			0	14:30	79	33			112	10:00	11:00	77	62			139													
2:45	0	0			0	14:45	38	58			96	11:00	12:00	77	86			163													
3:00	0	0			0	15:00	76	77			153	12:00	13:00	91	98			189													
3:15	0	1			1	15:15	52	113			165	13:00	14:00	153	79			232													
3:30	0	0			0	15:30	149	119			268	14:00	15:00	167	152			319													
3:45	0	0			0	15:45	169	53			222	15:00	16:00	446	362			808													
4:00	0	0			0	16:00	59	41			100	16:00	17:00	190	152			342													
4:15	1	1			2	16:15	32	29			61	17:00	18:00	137	107			244													
4:30	0	0			0	16:30	43	35			78	18:00	19:00	84	81			165													
4:45	2	1			3	16:45	56	47			103	19:00	20:00	58	61			119													
5:00	1	0			1	17:00	44	33			77	20:00	21:00	35	38			73													
5:15	2	0			2	17:15	41	22			63	21:00	22:00	25	43			68													
5:30	3	2			5	17:30	23	21			44	22:00	23:00	30	42			72													
5:45	2	4			6	17:45	29	31			60	23:00	00:00	14	8			22													
6:00	10	3			13	18:00	31	23			54	STATISTICS																			
6:15	4	7			11	18:15	19	18			37			NB	SB	EB	WB	TOTAL													
6:30	3	6			9	18:30	23	21			44	Peak Period		00:00	to 12:00																
6:45	6	11			17	18:45	11	19			30	Volume		868	1018			1886													
7:00	18	41			59	19:00	18	22			40	Peak Hour		7:30	7:30			7:30													

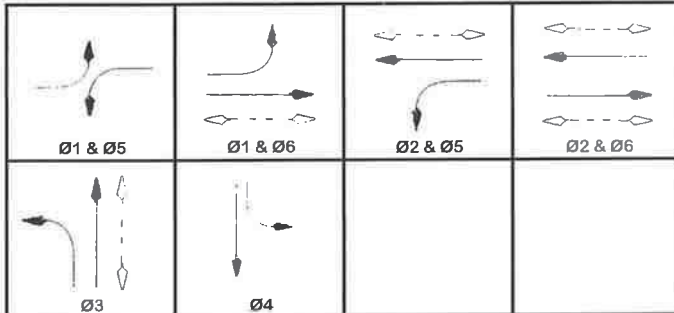
7:15	61	94			155	19:15	15	15		30	Peak Volume Peak Hour Factor	387	548		935	
7:30	64	82			146	19:30	9	10		19		0.691	0.662		0.717	
7:45	64	140			204	19:45	16	14		30						
8:00	119	207			326	20:00	16	10		26	Peak Period Volume Peak Hour Peak Volume Peak Hour Factor	12:00	to	00:00		
8:15	140	119			259	20:15	4	13		17		1430	1223		2653	
8:30	54	34			88	20:30	11	7		18		15:00	14:45		15:00	
8:45	33	25			58	20:45	4	8		12		446	367		808	
9:00	41	22			63	21:00	2	8		10	Peak Hour Factor	0.660	0.771		0.754	
9:15	35	22			57	21:15	5	11		16						
9:30	15	22			37	21:30	7	10		17		Peak Period	07:00	to	09:00	
9:45	27	23			50	21:45	11	14		25		553	742		1295	
10:00	23	20			43	22:00	8	18		26	Peak Hour	7:30	7:30		7:30	
10:15	15	13			28	22:15	12	13		25	Peak Volume	387	548		935	
10:30	18	17			35	22:30	6	4		10	Peak Hour Factor	0.691	0.662		0.717	
10:45	21	12			33	22:45	4	7		11						
11:00	19	21			40	23:00	3	3		6	Peak Period Volume Peak Hour Peak Volume	16:00	to	18:00		
11:15	23	28			51	23:15	3	2		5		327	259		586	
11:30	22	19			41	23:30	4	2		6		16:00	16:00		16:00	
11:45	13	18			31	23:45	4	1		5		190	152		342	
TOTALS	868	1018	0	0	1886	TOTALS	1430	1223	0	0	2653	Peak Hour Factor	0.805	0.809		0.830
SPLIT %	46%	54%	0%	0%	42%	SPLIT %	54%	46%	0%	0%	58%					



Econolite ASC/3 (TS template v6.2.0 9-12-2019)



N



Location:	Fair Oaks Blvd & Saverien Dr / Wilhaggin Park Ln					
Intersection #:	102	IP Addr:	0	0	0	0
Date:	6/3/24			Initial:	[Signature]	

Main Menu = [A]
 Sub Menu = [ESC]
 Toggle Fwd [YES] or [0]
 Toggle Back [NO] or [8]
 Next Data = [D]

Next Page = [+]
 Status Display = [E]
 Help = [F]
 Enter = [ENT]
 Special Function =

TIMING PLAN	1	Phase Timing MM-2-1														
Direction	E→N	W/B	N/B	S/B	W→S	E/B										
PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MIN GRN	3	3	3	10*	3	3										
BK MGRN																
CS MGRN																
DLY GRN																
WALK		7	7			7										
WALK2																
WALK MAX																
PED CLR		10	20			11										
PD CLR2																
PC MAX																
PED CO																
VEH EXT	1.0	1.0	1.0	1.0	1.0	1.0										
VH EXT2																
MAX 1	25	70	40	40	25	70										
MAX 2	12	24	18	18	12	24										
MAX 3	12	55	45	15	30	55										
DYM MAX																
DYM STP																
YELLOW	3.5	5.0	3.5	3.5	3.5	4.8										
RED CLR	0.6	0.0	1.2	1.5	0.6	0.0										
RED MAX																
RED RVT	2.0	2.0	2.0	2.0	2.0	2.0										
ACT B4																
SEC/ACT																
MAX INT																
TIME B4																
CARS WT																
STPTDUC																
TTREDUC																
MIN GAP																

* Memo to file- 8/16/18

VOLUME

American River Dr Bet Morris Way & Rio Americano High School E Dwy/Saverien Dr

Day: Friday

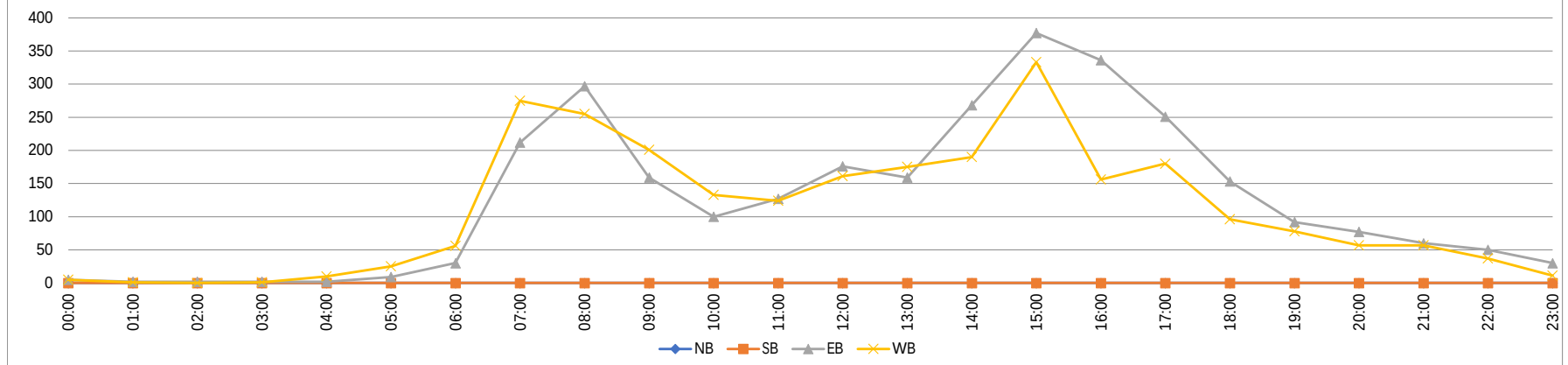
City: Sacramento

Date: 8/29/2025

Project #: CA25_070188_001

DAILY TOTALS						NB				SB				EB				WB				Total				DAILY TOTALS					
						0				0				2,976				2,617				5,593									
15-Minutes Interval												Hourly Intervals																			
TIME	NB	SB	EB	WB	TOTAL	TIME	NB	SB	EB	WB	TOTAL	TIME	NB	SB	EB	WB	TOTAL														
0:00			2	2	4	12:00			34	41	75	00:00	01:00		5	5	10														
0:15			1	1	2	12:15			33	56	89	01:00	02:00		2	1	3														
0:30			2	1	3	12:30			39	32	71	02:00	03:00		2	0	2														
0:45			0	1	1	12:45			70	32	102	03:00	04:00		2	1	3														
1:00			0	0	0	13:00			39	42	81	04:00	05:00		2	10	12														
1:15			0	1	1	13:15			36	51	87	05:00	06:00		9	25	34														
1:30			1	0	1	13:30			47	53	100	06:00	07:00		30	56	86														
1:45			1	0	1	13:45			37	29	66	07:00	08:00		212	275	487														
2:00			0	0	0	14:00			45	30	75	08:00	09:00		297	255	552														
2:15			2	0	2	14:15			56	32	88	09:00	10:00		159	201	360														
2:30			0	0	0	14:30			89	83	172	10:00	11:00		100	133	233														
2:45			0	0	0	14:45			78	45	123	11:00	12:00		127	124	251														
3:00			1	0	1	15:00			88	107	195	12:00	13:00		176	161	337														
3:15			1	1	2	15:15			97	98	195	13:00	14:00		159	175	334														
3:30			0	0	0	15:30			70	61	131	14:00	15:00		268	190	458														
3:45			0	0	0	15:45			122	67	189	15:00	16:00		377	333	710														
4:00			0	2	2	16:00			83	39	122	16:00	17:00		336	156	492														
4:15			0	1	1	16:15			81	39	120	17:00	18:00		251	180	431														
4:30			0	5	5	16:30			85	33	118	18:00	19:00		153	96	249														
4:45			2	2	4	16:45			87	45	132	19:00	20:00		92	78	170														
5:00			1	3	4	17:00			79	36	115	20:00	21:00		77	57	134														
5:15			2	4	6	17:15			78	47	125	21:00	22:00		60	57	117														
5:30			4	8	12	17:30			58	54	112	22:00	23:00		50	37	87														
5:45			2	10	12	17:45			36	43	79	23:00	00:00		30	11	41														
6:00			4	4	8	18:00			60	38	98	STATISTICS																			
6:15			8	8	16	18:15			32	16	48		NB	SB	EB	WB	TOTAL														
6:30			6	21	27	18:30			35	23	58	Peak Period	00:00	to	12:00																
6:45			12	23	35	18:45			26	19	45	Volume			947	1086	2033														
7:00			32	33	65	19:00			28	20	48	Peak Hour			7:30	7:30	7:30														

7:15			72	70	142	19:15			24	20	44	Peak Volume		318	314	632	
7:30			49	86	135	19:30			16	19	35	Peak Hour Factor		0.716	0.913	0.868	
7:45			59	86	145	19:45			24	19	43						
8:00			99	71	170	20:00			22	8	30	Peak Period	12:00	to	00:00		
8:15			111	71	182	20:15			12	16	28	Volume			2029	1531	3560
8:30			41	51	92	20:30			21	17	38	Peak Hour			15:00	14:30	15:00
8:45			46	62	108	20:45			22	16	38	Peak Volume			377	333	710
9:00			47	70	117	21:00			14	14	28	Peak Hour Factor			0.773	0.778	0.910
9:15			50	52	102	21:15			14	17	31						
9:30			31	43	74	21:30			18	11	29	Peak Period	07:00	to	09:00		
9:45			31	36	67	21:45			14	15	29	Volume			509	530	1039
10:00			32	30	62	22:00			15	10	25	Peak Hour			7:30	7:30	7:30
10:15			19	36	55	22:15			15	20	35	Peak Volume			318	314	632
10:30			27	29	56	22:30			13	3	16	Peak Hour Factor			0.716	0.913	0.868
10:45			22	38	60	22:45			7	4	11						
11:00			28	29	57	23:00			13	4	17	Peak Period	16:00	to	18:00		
11:15			37	24	61	23:15			6	3	9	Volume			587	336	923
11:30			29	40	69	23:30			9	3	12	Peak Hour			16:00	16:45	16:00
11:45			33	31	64	23:45			2	1	3	Peak Volume			336	182	492
TOTALS	0	0	947	1086	2033	TOTALS	0	0	2029	1531	3560	Peak Hour Factor			0.966	0.843	0.932
SPLIT %	0%	0%	47%	53%	36%	SPLIT %	0%	0%	57%	43%	64%						



Attachment B

Existing (2025) Analysis Worksheets

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	222	7	9	167	6	3	4	5	6	5	12
Future Vol, veh/h	35	222	7	9	167	6	3	4	5	6	5	12
Peak Hour Factor	0.85	0.85	0.85	0.77	0.77	0.77	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	41	261	8	12	217	8	4	6	7	9	7	17
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay, s/veh	10	9.6	8.2	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	25%	100%	0%	100%	0%	26%
Vol Thru, %	33%	0%	97%	0%	97%	22%
Vol Right, %	42%	0%	3%	0%	3%	52%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	12	35	229	9	173	23
LT Vol	3	35	0	9	0	6
Through Vol	4	0	222	0	167	5
RT Vol	5	0	7	0	6	12
Lane Flow Rate	17	41	269	12	225	33
Geometry Grp	2	5	5	5	5	2
Degree of Util (X)	0.024	0.061	0.361	0.018	0.305	0.045
Departure Headway (Hd)	5.051	5.344	4.821	5.41	4.884	4.964
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	708	672	749	664	737	721
Service Time	3.084	3.061	2.538	3.127	2.601	2.995
HCM Lane V/C Ratio	0.024	0.061	0.359	0.018	0.305	0.046
HCM Control Delay, s/veh	8.2	8.4	10.2	8.2	9.7	8.2
HCM Lane LOS	A	A	B	A	A	A
HCM 95th-tile Q	0.1	0.2	1.6	0.1	1.3	0.1

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	183	0	0	151	2	0
Future Vol, veh/h	183	0	0	151	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	91	91	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	197	0	0	166	3	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	197
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.12
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.218
Pot Cap-1 Maneuver	-	-	1376
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1376
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	10.68
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	636	-	-	1376	-
HCM Lane V/C Ratio	0.004	-	-	-	-
HCM Ctrl Dly (s/v)	10.7	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Intersection Delay, s/veh	9.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	33	145	8	1	115	26	8	18	3	25	12	28
Future Vol, veh/h	33	145	8	1	115	26	8	18	3	25	12	28
Peak Hour Factor	0.77	0.77	0.77	0.78	0.78	0.78	0.70	0.70	0.70	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	188	10	1	147	33	11	26	4	28	14	32
Number of Lanes	1	1	0	1	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	2
HCM Control Delay, s/veh	9.4	9.3	8.8	9.2
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	31%	0%	100%	0%	100%	0%	38%
Vol Thru, %	69%	0%	0%	95%	0%	82%	18%
Vol Right, %	0%	100%	0%	5%	0%	18%	43%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	26	3	33	153	1	141	65
LT Vol	8	0	33	0	1	0	25
Through Vol	18	0	0	145	0	115	12
RT Vol	0	3	0	8	0	26	28
Lane Flow Rate	37	4	43	199	1	181	74
Geometry Grp	5	5	5	5	5	5	4b
Degree of Util (X)	0.06	0.006	0.066	0.274	0.002	0.248	0.112
Departure Headway (Hd)	5.81	4.95	5.511	4.972	5.575	4.943	5.437
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	615	721	650	721	642	725	658
Service Time	3.556	2.696	3.245	2.706	3.311	2.679	3.48
HCM Lane V/C Ratio	0.06	0.006	0.066	0.276	0.002	0.25	0.112
HCM Control Delay, s/veh	8.9	7.7	8.6	9.6	8.3	9.3	9.2
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0.2	0	0.2	1.1	0	1	0.4

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑		↘	↑	↘	
Traffic Vol, veh/h	169	2	1	136	4	0
Future Vol, veh/h	169	2	1	136	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	190	2	1	194	6	0
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	192	0	388	191
Stage 1	-	-	-	-	191	-
Stage 2	-	-	-	-	197	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1381	-	615	851
Stage 1	-	-	-	-	841	-
Stage 2	-	-	-	-	836	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1381	-	615	851
Mov Cap-2 Maneuver	-	-	-	-	615	-
Stage 1	-	-	-	-	841	-
Stage 2	-	-	-	-	835	-
Approach	EB		WB		NB	
HCM Ctrl Dly, s/v	0		0.06		10.91	
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	615	-	-	1381	-	
HCM Lane V/C Ratio	0.009	-	-	0.001	-	
HCM Ctrl Dly (s/v)	10.9	-	-	7.6	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	0	-	-	0	-	

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	91	10	6	64	10	13	22	5	24	36	29
Future Vol, veh/h	45	91	10	6	64	10	13	22	5	24	36	29
Peak Hour Factor	0.72	0.72	0.72	0.92	0.92	0.92	0.77	0.77	0.77	0.76	0.76	0.76
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	63	126	14	7	70	11	17	29	6	32	47	38
Number of Lanes	1	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	2
HCM Control Delay, s/veh	8.8	8.2	8.1	8.4
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	33%	100%	0%	8%	27%
Vol Thru, %	55%	0%	90%	80%	40%
Vol Right, %	13%	0%	10%	13%	33%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	40	45	101	80	89
LT Vol	13	45	0	6	24
Through Vol	22	0	91	64	36
RT Vol	5	0	10	10	29
Lane Flow Rate	52	63	140	87	117
Geometry Grp	2	5	5	4a	2
Degree of Util (X)	0.069	0.096	0.192	0.111	0.148
Departure Headway (Hd)	4.765	5.508	4.936	4.614	4.556
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	752	651	728	777	788
Service Time	2.794	3.235	2.663	2.645	2.58
HCM Lane V/C Ratio	0.069	0.097	0.192	0.112	0.148
HCM Control Delay, s/veh	8.1	8.8	8.8	8.2	8.4
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.2	0.3	0.7	0.4	0.5



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	4	990	46	884	84	61	6
v/c Ratio	0.03	0.56	0.24	0.42	0.28	0.19	0.02
Control Delay (s/veh)	38.0	15.2	34.3	10.0	26.6	9.4	25.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.0	15.2	34.3	10.0	26.6	9.4	25.0
Queue Length 50th (ft)	1	106	11	48	20	0	0
Queue Length 95th (ft)	14	382	63	279	66	17	11
Internal Link Dist (ft)		788		231	623		152
Turn Bay Length (ft)	160		195			150	
Base Capacity (vph)	897	3270	897	3300	1391	1257	1315
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	0.00	0.30	0.05	0.27	0.06	0.05	0.00
Intersection Summary							

Rio Americano HS - LTA
6: Saverien Dr & Fair Oaks Blvd

Existing (2025)
PM Friday Night, School Year

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	867	54	39	750	2	59	0	43	1	1	3
Future Volume (veh/h)	4	867	54	39	750	2	59	0	43	1	1	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	932	58	46	882	2	84	0	61	1	1	4
Peak Hour Factor	0.93	0.93	0.93	0.85	0.85	0.85	0.70	0.70	0.70	0.70	0.70	0.70
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	135	1203	75	135	1288	3	143	0	127	4	4	18
Arrive On Green	0.08	0.35	0.35	0.08	0.35	0.35	0.08	0.00	0.08	0.02	0.02	0.02
Sat Flow, veh/h	1781	3398	211	1781	3637	8	1781	0	1585	276	276	1105
Grp Volume(v), veh/h	4	487	503	46	431	453	84	0	61	6	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1832	1781	1777	1869	1781	0	1585	1658	0	0
Q Serve(g_s), s	0.1	9.7	9.7	1.0	8.2	8.2	1.8	0.0	1.5	0.1	0.0	0.0
Cycle Q Clear(g_c), s	0.1	9.7	9.7	1.0	8.2	8.2	1.8	0.0	1.5	0.1	0.0	0.0
Prop In Lane	1.00		0.12	1.00		0.00	1.00		1.00	0.17		0.67
Lane Grp Cap(c), veh/h	135	629	649	135	629	662	143	0	127	27	0	0
V/C Ratio(X)	0.03	0.77	0.77	0.34	0.68	0.68	0.59	0.00	0.48	0.22	0.00	0.00
Avail Cap(c_a), veh/h	1163	3134	3232	1163	3134	3297	1809	0	1610	1671	0	0
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	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.0	11.4	11.4	17.4	10.9	10.9	17.6	0.0	17.5	19.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	0.8	0.6	0.5	0.5	1.4	0.0	1.0	1.6	0.0	0.0
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	0.0	3.0	3.1	0.4	2.5	2.6	0.7	0.0	0.5	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.0	12.2	12.2	18.0	11.4	11.4	19.0	0.0	18.5	20.8	0.0	0.0
LnGrp LOS	B	B	B	B	B	B	B		B	C		
Approach Vol, veh/h	994			930			145			6		
Approach Delay, s/veh	12.2			11.7			18.8			20.8		
Approach LOS	B			B			B			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	19.1		5.6	7.1	19.1		7.9				
Change Period (Y+Rc), s	4.1	5.0		5.0	4.1	5.0		4.7				
Max Green Setting (Gmax), s	25.9	70.0		40.0	25.9	70.0		40.3				
Max Q Clear Time (g_c+I1), s	2.1	10.2		2.1	3.0	11.7		3.8				
Green Ext Time (p_c), s	0.0	2.0		0.0	0.0	2.4		0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh				12.5								
HCM 7th LOS				B								

Attachment C

Rio Americano High School Football Attendance Counts

Season	Date	Matchup / Notes	Tickets Sold	Band Attendance	Comp / Will Call	Total Attendance
Fall 2024	45527	Home Game	1442	0	200+	1642+
Fall 2024	45562	Home Game	1058	100+	200+	1358+
Fall 2024	45583	Home Game	1432	100+	200+	1732+
Fall 2024	45597	Home Game	1023	0	200+	1223+
Fall 2025	45898	Rio vs Jesuit	3197	0	200+	3397+
Fall 2025	45919	Rio vs Vista del Lago	1154	120	50	1324
Fall 2025	45933	Rio vs Bella Vista	1488	120	50	1658
Fall 2025	45954	Rio vs Inderkum	968	0	50	1018

Attendance data provided by client

Attachment D

Average Vehicle Occupancy Study

Prepared by National Data & Surveying Services

Average Vehicle Occupancy

Location: El Camino Fundamental HS
City: Sacramento, CA

Date: 8/29/2025
Day: Friday

Time	Vehicle Occupancy					
	1 (Driver Only)	2 (Driver with 1 Passenger)	3 (Driver with 2 Passengers)	4 (Driver with 3 Passengers)	5 (Driver with 4 Passengers)	6+ (Driver with 5 or more Passengers)
6:30 PM	15	10	9	2	1	0
6:45 PM	39	41	18	12	5	2
7:00 PM	35	49	27	10	10	4
7:15 PM	29	39	28	14	11	2
7:30 PM	25	23	14	12	1	2
7:45 PM	16	35	12	6	4	2
Total Vehicles	159	197	108	56	32	12

Total # of People	1333
Total # of Vehicles	564
Avg. Vehicle Occupancy	2.36

Attachment E

Existing (2025) Plus Project Analysis Worksheets

Intersection	
Intersection Delay, s/veh	13.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	387	7	9	175	8	3	4	5	47	5	12
Future Vol, veh/h	35	387	7	9	175	8	3	4	5	47	5	12
Peak Hour Factor	0.85	0.85	0.85	0.77	0.77	0.77	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	41	455	8	12	227	10	4	6	7	67	7	17
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay, s/veh	16.1	10.7	8.9	9.8
HCM LOS	C	B	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	25%	100%	0%	100%	0%	73%
Vol Thru, %	33%	0%	98%	0%	96%	8%
Vol Right, %	42%	0%	2%	0%	4%	19%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	12	35	394	9	183	64
LT Vol	3	35	0	9	0	47
Through Vol	4	0	387	0	175	5
RT Vol	5	0	7	0	8	12
Lane Flow Rate	17	41	464	12	238	91
Geometry Grp	2	5	5	5	5	2
Degree of Util (X)	0.028	0.064	0.65	0.019	0.347	0.146
Departure Headway (Hd)	5.78	5.567	5.051	5.798	5.263	5.757
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	623	641	714	614	680	618
Service Time	3.78	3.322	2.806	3.564	3.029	3.836
HCM Lane V/C Ratio	0.027	0.064	0.65	0.02	0.35	0.147
HCM Control Delay, s/veh	8.9	8.7	16.8	8.7	10.8	9.8
HCM Lane LOS	A	A	C	A	B	A
HCM 95th-tile Q	0.1	0.2	4.8	0.1	1.6	0.5

Intersection						
Int Delay, s/veh	1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	183	123	41	151	8	2
Future Vol, veh/h	183	123	41	151	8	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	91	91	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	197	132	45	166	11	3
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	329	0	519	263
Stage 1	-	-	-	-	263	-
Stage 2	-	-	-	-	256	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1230	-	517	776
Stage 1	-	-	-	-	781	-
Stage 2	-	-	-	-	787	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1230	-	498	776
Mov Cap-2 Maneuver	-	-	-	-	498	-
Stage 1	-	-	-	-	781	-
Stage 2	-	-	-	-	758	-
Approach	EB		WB		NB	
HCM Ctrl Dly, s/v	0		1.72		11.89	
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	537	-	-	1230	-	
HCM Lane V/C Ratio	0.027	-	-	0.037	-	
HCM Ctrl Dly (s/v)	11.9	-	-	8	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-	

Rio Americano HS - LTA
3: Project Dwy 2/Saverien Dr & American River Dr

Existing (2025) plus Project
PM Friday Night, School Year

Intersection	
Intersection Delay, s/veh	34.7
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	33	145	49	42	115	26	10	39	5	25	423	28
Future Vol, veh/h	33	145	49	42	115	26	10	39	5	25	423	28
Peak Hour Factor	0.77	0.77	0.77	0.78	0.78	0.78	0.70	0.70	0.70	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	188	64	54	147	33	14	56	7	28	481	32
Number of Lanes	1	1	0	1	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	2
HCM Control Delay, s/veh	15.7	13.5	11.5	57.5
HCM LOS	C	B	B	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	20%	0%	100%	0%	100%	0%	5%
Vol Thru, %	80%	0%	0%	75%	0%	82%	89%
Vol Right, %	0%	100%	0%	25%	0%	18%	6%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	49	5	33	194	42	141	476
LT Vol	10	0	33	0	42	0	25
Through Vol	39	0	0	145	0	115	423
RT Vol	0	5	0	49	0	26	28
Lane Flow Rate	70	7	43	252	54	181	541
Geometry Grp	5	5	5	5	5	5	4b
Degree of Util (X)	0.148	0.013	0.092	0.493	0.118	0.363	0.975
Departure Headway (Hd)	7.61	6.785	7.739	7.045	7.882	7.235	6.486
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	470	526	462	511	454	495	563
Service Time	5.374	4.548	5.497	4.801	5.642	4.995	4.486
HCM Lane V/C Ratio	0.149	0.013	0.093	0.493	0.119	0.366	0.961
HCM Control Delay, s/veh	11.7	9.6	11.3	16.5	11.7	14.1	57.5
HCM Lane LOS	B	A	B	C	B	B	F
HCM 95th-tile Q	0.5	0	0.3	2.7	0.4	1.6	13.4

Rio Americano HS - LTA
4: Project Dwy 3 & American River Dr

Existing (2025) plus Project
PM Friday Night, School Year

Intersection						
Int Delay, s/veh	1.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑		↘	↑	↘	
Traffic Vol, veh/h	169	84	83	136	8	4
Future Vol, veh/h	169	84	83	136	8	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	190	94	119	194	11	6
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	284	0	669	237
Stage 1	-	-	-	-	237	-
Stage 2	-	-	-	-	431	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1278	-	423	802
Stage 1	-	-	-	-	802	-
Stage 2	-	-	-	-	655	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1278	-	384	802
Mov Cap-2 Maneuver	-	-	-	-	384	-
Stage 1	-	-	-	-	802	-
Stage 2	-	-	-	-	594	-
Approach	EB		WB		NB	
HCM Ctrl Dly, s/v	0		3.07		13.05	
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	465	-	-	1278	-	
HCM Lane V/C Ratio	0.037	-	-	0.093	-	
HCM Ctrl Dly (s/v)	13	-	-	8.1	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	0.1	-	-	0.3	-	

Intersection	
Intersection Delay, s/veh	9.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	47	95	10	6	146	10	13	22	5	24	36	70
Future Vol, veh/h	47	95	10	6	146	10	13	22	5	24	36	70
Peak Hour Factor	0.72	0.72	0.72	0.92	0.92	0.92	0.77	0.77	0.77	0.76	0.76	0.76
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	65	132	14	7	159	11	17	29	6	32	47	92
Number of Lanes	1	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	2
HCM Control Delay, s/veh	9.3	9.3	8.6	9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	33%	100%	0%	4%	18%
Vol Thru, %	55%	0%	90%	90%	28%
Vol Right, %	13%	0%	10%	6%	54%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	40	47	105	162	130
LT Vol	13	47	0	6	24
Through Vol	22	0	95	146	36
RT Vol	5	0	10	10	70
Lane Flow Rate	52	65	146	176	171
Geometry Grp	2	5	5	4a	2
Degree of Util (X)	0.073	0.104	0.209	0.235	0.221
Departure Headway (Hd)	5.09	5.733	5.163	4.805	4.657
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	700	623	693	745	768
Service Time	3.15	3.484	2.913	2.856	2.703
HCM Lane V/C Ratio	0.074	0.104	0.211	0.236	0.223
HCM Control Delay, s/veh	8.6	9.2	9.3	9.3	9
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.2	0.3	0.8	0.9	0.8



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	4	1212	385	884	99	81	6
v/c Ratio	0.06	0.78	0.81	0.33	0.48	0.32	0.03
Control Delay (s/veh)	60.0	28.1	52.4	6.8	52.1	13.7	39.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	60.0	28.1	52.4	6.8	52.1	13.7	39.5
Queue Length 50th (ft)	2	298	206	60	56	0	1
Queue Length 95th (ft)	17	613	#613	265	108	23	13
Internal Link Dist (ft)		788		231	623		152
Turn Bay Length (ft)	160		195			150	
Base Capacity (vph)	474	2481	474	2724	738	707	698
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	0.01	0.49	0.81	0.32	0.13	0.11	0.01

Intersection Summary

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

Rio Americano HS - LTA
6: Saverien Dr & Fair Oaks Blvd

Existing (2025) plus Project
PM Friday Night, School Year

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	867	260	327	750	2	69	0	57	1	1	3
Future Volume (veh/h)	4	867	260	327	750	2	69	0	57	1	1	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	932	280	385	882	2	99	0	81	1	1	4
Peak Hour Factor	0.93	0.93	0.93	0.85	0.85	0.85	0.70	0.70	0.70	0.70	0.70	0.70
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	76	1066	319	427	2157	5	148	0	132	4	4	17
Arrive On Green	0.04	0.40	0.40	0.24	0.59	0.59	0.08	0.00	0.08	0.02	0.02	0.02
Sat Flow, veh/h	1781	2695	807	1781	3637	8	1781	0	1585	276	276	1105
Grp Volume(v), veh/h	4	614	598	385	431	453	99	0	81	6	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1725	1781	1777	1869	1781	0	1585	1658	0	0
Q Serve(g_s), s	0.2	22.6	22.7	14.8	9.2	9.2	3.8	0.0	3.5	0.3	0.0	0.0
Cycle Q Clear(g_c), s	0.2	22.6	22.7	14.8	9.2	9.2	3.8	0.0	3.5	0.3	0.0	0.0
Prop In Lane	1.00		0.47	1.00		0.00	1.00		1.00	0.17		0.67
Lane Grp Cap(c), veh/h	76	703	682	427	1054	1108	148	0	132	26	0	0
V/C Ratio(X)	0.05	0.87	0.88	0.90	0.41	0.41	0.67	0.00	0.62	0.23	0.00	0.00
Avail Cap(c_a), veh/h	652	1758	1707	652	1758	1849	1015	0	903	937	0	0
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	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	32.5	19.7	19.8	26.1	7.7	7.7	31.5	0.0	31.3	34.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	1.4	1.5	8.0	0.1	0.1	1.9	0.0	1.7	1.6	0.0	0.0
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	0.1	8.7	8.5	6.9	2.9	3.1	1.7	0.0	1.4	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.6	21.1	21.2	34.1	7.8	7.8	33.4	0.0	33.1	36.0	0.0	0.0
LnGrp LOS	C	C	C	C	A	A	C		C	D		
Approach Vol, veh/h	1216			1269			180			6		
Approach Delay, s/veh	21.2			15.8			33.3			36.0		
Approach LOS	C			B			C			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	47.0		6.1	21.1	33.0		10.6				
Change Period (Y+Rc), s	4.1	5.0		5.0	4.1	5.0		4.7				
Max Green Setting (Gmax), s	25.9	70.0		40.0	25.9	70.0		40.3				
Max Q Clear Time (g_c+I1), s	2.2	11.2		2.3	16.8	24.7		5.8				
Green Ext Time (p_c), s	0.0	2.0		0.0	0.1	3.3		0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh				19.5								
HCM 7th LOS				B								

Attachment F

Existing (2025) Plus Project “Conservative Event” Analysis Worksheets

Intersection	
Intersection Delay, s/veh	20.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	481	7	9	180	9	3	4	5	71	5	12
Future Vol, veh/h	35	481	7	9	180	9	3	4	5	71	5	12
Peak Hour Factor	0.85	0.85	0.85	0.77	0.77	0.77	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	41	566	8	12	234	12	4	6	7	101	7	17
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay, s/veh	27	11.7	9.5	10.9
HCM LOS	D	B	A	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	25%	100%	0%	100%	0%	81%
Vol Thru, %	33%	0%	99%	0%	95%	6%
Vol Right, %	42%	0%	1%	0%	5%	14%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	12	35	488	9	189	88
LT Vol	3	35	0	9	0	71
Through Vol	4	0	481	0	180	5
RT Vol	5	0	7	0	9	12
Lane Flow Rate	17	41	574	12	245	126
Geometry Grp	2	5	5	5	5	2
Degree of Util (X)	0.03	0.066	0.829	0.02	0.383	0.217
Departure Headway (Hd)	6.244	5.813	5.199	6.162	5.623	6.213
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	575	620	689	583	643	581
Service Time	4.262	3.513	2.998	3.876	3.336	4.225
HCM Lane V/C Ratio	0.03	0.066	0.833	0.021	0.381	0.217
HCM Control Delay, s/veh	9.5	8.9	28.3	9	11.8	10.9
HCM Lane LOS	A	A	D	A	B	B
HCM 95th-tile Q	0.1	0.2	9	0.1	1.8	0.8

Rio Americano HS - LTA
2: Project Dwy 1 & American River Dr

Existing (2025) plus Project Conservative Event
PM Friday Night, School Year

Intersection						
Int Delay, s/veh	1.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	183	194	65	151	12	3
Future Vol, veh/h	183	194	65	151	12	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	91	91	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	197	209	71	166	17	4
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	405	0	610	301
Stage 1	-	-	-	-	301	-
Stage 2	-	-	-	-	309	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1153	-	458	739
Stage 1	-	-	-	-	751	-
Stage 2	-	-	-	-	745	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1153	-	429	739
Mov Cap-2 Maneuver	-	-	-	-	429	-
Stage 1	-	-	-	-	751	-
Stage 2	-	-	-	-	699	-
Approach	EB		WB		NB	
HCM Ctrl Dly, s/v	0		2.51		13.05	
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	469	-	-	1153	-	
HCM Lane V/C Ratio	0.046	-	-	0.062	-	
HCM Ctrl Dly (s/v)	13	-	-	8.3	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	0.1	-	-	0.2	-	

Intersection												
Intersection Delay, s/veh	147											
Intersection LOS	F											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	33	145	73	66	115	26	11	51	6	25	659	28
Future Vol, veh/h	33	145	73	66	115	26	11	51	6	25	659	28
Peak Hour Factor	0.77	0.77	0.77	0.78	0.78	0.78	0.70	0.70	0.70	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	188	95	85	147	33	16	73	9	28	749	32
Number of Lanes	1	1	0	1	1	0	0	1	1	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	2			2			1			2		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			2			2			2		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	2			1			2			2		
HCM Control Delay, s/veh	20			15.7			13.2			257.3		
HCM LOS	C			C			B			F		
Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1					
Vol Left, %	18%	0%	100%	0%	100%	0%	4%					
Vol Thru, %	82%	0%	0%	67%	0%	82%	93%					
Vol Right, %	0%	100%	0%	33%	0%	18%	4%					
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop					
Traffic Vol by Lane	62	6	33	218	66	141	712					
LT Vol	11	0	33	0	66	0	25					
Through Vol	51	0	0	145	0	115	659					
RT Vol	0	6	0	73	0	26	28					
Lane Flow Rate	89	9	43	283	85	181	809					
Geometry Grp	5	5	5	5	5	5	4b					
Degree of Util (X)	0.191	0.017	0.093	0.558	0.187	0.369	1.509					
Departure Headway (Hd)	8.659	7.837	9.108	8.344	9.327	8.67	6.714					
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Cap	417	460	396	436	388	418	542					
Service Time	6.359	5.537	6.808	6.044	7.027	6.37	4.758					
HCM Lane V/C Ratio	0.213	0.02	0.109	0.649	0.219	0.433	1.493					
HCM Control Delay, s/veh	13.4	10.7	12.7	21.1	14.2	16.4	257.3					
HCM Lane LOS	B	B	B	C	B	C	F					
HCM 95th-tile Q	0.7	0.1	0.3	3.3	0.7	1.7	41.2					

Rio Americano HS - LTA
4: Project Dwy 3 & American River Dr

Existing (2025) plus Project Conservative Event
PM Friday Night, School Year

Intersection						
Int Delay, s/veh	2.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑		↘	↑	↘	
Traffic Vol, veh/h	169	131	130	136	11	7
Future Vol, veh/h	169	131	130	136	11	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	190	147	186	194	16	10
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	337	0	829	263
Stage 1	-	-	-	-	263	-
Stage 2	-	-	-	-	566	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1222	-	340	775
Stage 1	-	-	-	-	781	-
Stage 2	-	-	-	-	568	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1222	-	289	775
Mov Cap-2 Maneuver	-	-	-	-	289	-
Stage 1	-	-	-	-	781	-
Stage 2	-	-	-	-	482	-
Approach	EB	WB		NB		
HCM Ctrl Dly, s/v	0	4.14		15.11		
HCM LOS				C		
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	382	-	-	1222	-	
HCM Lane V/C Ratio	0.067	-	-	0.152	-	
HCM Ctrl Dly (s/v)	15.1	-	-	8.5	-	
HCM Lane LOS	C	-	-	A	-	
HCM 95th %tile Q(veh)	0.2	-	-	0.5	-	

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	48	98	10	6	193	10	13	22	5	24	36	94
Future Vol, veh/h	48	98	10	6	193	10	13	22	5	24	36	94
Peak Hour Factor	0.72	0.72	0.72	0.92	0.92	0.92	0.77	0.77	0.77	0.76	0.76	0.76
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	67	136	14	7	210	11	17	29	6	32	47	124
Number of Lanes	1	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	2
HCM Control Delay, s/veh	9.5	10.2	8.8	9.6
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	33%	100%	0%	3%	16%
Vol Thru, %	55%	0%	91%	92%	23%
Vol Right, %	13%	0%	9%	5%	61%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	40	48	108	209	154
LT Vol	13	48	0	6	24
Through Vol	22	0	98	193	36
RT Vol	5	0	10	10	94
Lane Flow Rate	52	67	150	227	203
Geometry Grp	2	5	5	4a	2
Degree of Util (X)	0.076	0.109	0.221	0.31	0.268
Departure Headway (Hd)	5.29	5.875	5.306	4.909	4.754
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	670	606	672	727	750
Service Time	3.378	3.649	3.079	2.981	2.818
HCM Lane V/C Ratio	0.078	0.111	0.223	0.312	0.271
HCM Control Delay, s/veh	8.8	9.4	9.6	10.2	9.6
HCM Lane LOS	A	A	A	B	A
HCM 95th-tile Q	0.2	0.4	0.8	1.3	1.1



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	4	1338	579	884	107	94	6
v/c Ratio	0.07	0.72	1.50	0.32	0.58	0.38	0.04
Control Delay (s/veh)	65.3	24.9	273.5	6.3	64.2	14.2	42.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	65.3	24.9	273.5	6.3	64.2	14.2	42.0
Queue Length 50th (ft)	3	353	~539	62	73	0	1
Queue Length 95th (ft)	18	708	#1053	264	120	22	14
Internal Link Dist (ft)		788		231	623		152
Turn Bay Length (ft)	160		195			150	
Base Capacity (vph)	385	2004	385	2769	600	599	568
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	0.01	0.67	1.50	0.32	0.18	0.16	0.01

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Rio Americano HS - LTA
6: Saverien Dr & Fair Oaks Blvd

Existing (2025) plus Project Conservative Event
PM Friday Night, School Year

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	867	378	492	750	2	75	0	66	1	1	3
Future Volume (veh/h)	4	867	378	492	750	2	75	0	66	1	1	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	932	406	579	882	2	107	0	94	1	1	4
Peak Hour Factor	0.93	0.93	0.93	0.85	0.85	0.85	0.70	0.70	0.70	0.70	0.70	0.70
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	57	1033	446	490	2440	6	146	0	130	4	4	17
Arrive On Green	0.03	0.43	0.43	0.28	0.67	0.67	0.08	0.00	0.08	0.02	0.02	0.02
Sat Flow, veh/h	1781	2417	1042	1781	3637	8	1781	0	1585	276	276	1105
Grp Volume(v), veh/h	4	682	656	579	431	453	107	0	94	6	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1683	1781	1777	1869	1781	0	1585	1658	0	0
Q Serve(g_s), s	0.2	33.6	34.4	25.9	9.9	9.9	5.5	0.0	5.4	0.3	0.0	0.0
Cycle Q Clear(g_c), s	0.2	33.6	34.4	25.9	9.9	9.9	5.5	0.0	5.4	0.3	0.0	0.0
Prop In Lane	1.00		0.62	1.00		0.00	1.00		1.00	0.17		0.67
Lane Grp Cap(c), veh/h	57	760	719	490	1192	1254	146	0	130	26	0	0
V/C Ratio(X)	0.07	0.90	0.91	1.18	0.36	0.36	0.73	0.00	0.72	0.23	0.00	0.00
Avail Cap(c_a), veh/h	490	1321	1251	490	1321	1390	763	0	679	704	0	0
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	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	44.2	25.0	25.3	34.1	6.7	6.7	42.2	0.0	42.1	45.8	0.0	0.0
Incr Delay (d2), s/veh	0.2	2.2	3.0	100.9	0.1	0.1	2.6	0.0	2.8	1.7	0.0	0.0
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	0.1	13.8	13.6	24.6	3.3	3.4	2.5	0.0	2.2	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.4	27.2	28.2	135.0	6.8	6.8	44.8	0.0	44.9	47.5	0.0	0.0
LnGrp LOS	D	C	C	F	A	A	D		D	D		
Approach Vol, veh/h	1342			1463			201			6		
Approach Delay, s/veh	27.8			57.6			44.9			47.5		
Approach LOS	C			E			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	68.1		6.5	30.0	45.2		12.4				
Change Period (Y+Rc), s	4.1	5.0		5.0	4.1	5.0		4.7				
Max Green Setting (Gmax), s	25.9	70.0		40.0	25.9	70.0		40.3				
Max Q Clear Time (g_c+I1), s	2.2	11.9		2.3	27.9	36.4		7.5				
Green Ext Time (p_c), s	0.0	2.0		0.0	0.0	3.8		0.3				
Intersection Summary												
HCM 7th Control Delay, s/veh				43.4								
HCM 7th LOS				D								

Attachment G

Existing (2025) Plus Project Plus Jesuit Game Analysis Worksheets

Intersection	
Intersection Delay, s/veh	15.7
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	416	7	9	175	8	3	4	5	68	5	12
Future Vol, veh/h	35	416	7	9	175	8	3	4	5	68	5	12
Peak Hour Factor	0.85	0.85	0.85	0.77	0.77	0.77	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	41	489	8	12	227	10	4	6	7	97	7	17
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay, s/veh	19.1	11.2	9.2	10.5
HCM LOS	C	B	A	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	25%	100%	0%	100%	0%	80%
Vol Thru, %	33%	0%	98%	0%	96%	6%
Vol Right, %	42%	0%	2%	0%	4%	14%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	12	35	423	9	183	85
LT Vol	3	35	0	9	0	68
Through Vol	4	0	416	0	175	5
RT Vol	5	0	7	0	8	12
Lane Flow Rate	17	41	498	12	238	121
Geometry Grp	2	5	5	5	5	2
Degree of Util (X)	0.029	0.065	0.713	0.019	0.358	0.202
Departure Headway (Hd)	5.99	5.675	5.16	5.951	5.416	5.996
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	601	626	697	595	656	602
Service Time	3.994	3.458	2.942	3.75	3.214	3.997
HCM Lane V/C Ratio	0.028	0.065	0.714	0.02	0.363	0.201
HCM Control Delay, s/veh	9.2	8.9	19.9	8.9	11.3	10.5
HCM Lane LOS	A	A	C	A	B	B
HCM 95th-tile Q	0.1	0.2	6	0.1	1.6	0.8

Intersection						
Int Delay, s/veh	0.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	233	123	41	151	8	2
Future Vol, veh/h	233	123	41	151	8	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	91	91	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	251	132	45	166	11	3
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	383	0	573	317
Stage 1	-	-	-	-	317	-
Stage 2	-	-	-	-	256	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1176	-	481	724
Stage 1	-	-	-	-	739	-
Stage 2	-	-	-	-	787	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1176	-	463	724
Mov Cap-2 Maneuver	-	-	-	-	463	-
Stage 1	-	-	-	-	739	-
Stage 2	-	-	-	-	757	-
Approach	EB		WB		NB	
HCM Ctrl Dly, s/v	0		1.75		12.43	
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	499	-	-	1176	-	
HCM Lane V/C Ratio	0.029	-	-	0.038	-	
HCM Ctrl Dly (s/v)	12.4	-	-	8.2	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-	

Intersection

Intersection Delay, s/veh 46.4

Intersection LOS E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	33	195	49	42	115	26	10	39	5	46	423	28
Future Vol, veh/h	33	195	49	42	115	26	10	39	5	46	423	28
Peak Hour Factor	0.77	0.77	0.77	0.78	0.78	0.78	0.70	0.70	0.70	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	253	64	54	147	33	14	56	7	52	481	32
Number of Lanes	1	1	0	1	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	2	2
HCM Control Delay, s/veh	20.5	14.3	12.1	81
HCM LOS	C	B	B	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	20%	0%	100%	0%	100%	0%	9%
Vol Thru, %	80%	0%	0%	80%	0%	82%	85%
Vol Right, %	0%	100%	0%	20%	0%	18%	6%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	49	5	33	244	42	141	497
LT Vol	10	0	33	0	42	0	46
Through Vol	39	0	0	195	0	115	423
RT Vol	0	5	0	49	0	26	28
Lane Flow Rate	70	7	43	317	54	181	565
Geometry Grp	5	5	5	5	5	5	4b
Degree of Util (X)	0.153	0.014	0.093	0.629	0.121	0.374	1.058
Departure Headway (Hd)	8.124	7.294	8.004	7.345	8.328	7.677	6.747
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	444	494	450	494	433	472	542
Service Time	5.824	4.994	5.704	5.045	6.028	5.377	4.747
HCM Lane V/C Ratio	0.158	0.014	0.096	0.642	0.125	0.383	1.042
HCM Control Delay, s/veh	12.3	10.1	11.5	21.7	12.2	14.9	81
HCM Lane LOS	B	B	B	C	B	B	F
HCM 95th-tile Q	0.5	0	0.3	4.3	0.4	1.7	16.6

Intersection						
Int Delay, s/veh	1.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑		↘	↑	↘	
Traffic Vol, veh/h	240	84	83	136	8	4
Future Vol, veh/h	240	84	83	136	8	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	270	94	119	194	11	6
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	364	0	748	317
Stage 1	-	-	-	-	317	-
Stage 2	-	-	-	-	431	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1195	-	380	724
Stage 1	-	-	-	-	738	-
Stage 2	-	-	-	-	655	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1195	-	342	724
Mov Cap-2 Maneuver	-	-	-	-	342	-
Stage 1	-	-	-	-	738	-
Stage 2	-	-	-	-	590	-
Approach	EB		WB		NB	
HCM Ctrl Dly, s/v	0		3.16		14.05	
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	415	-	-	1195	-	
HCM Lane V/C Ratio	0.041	-	-	0.099	-	
HCM Ctrl Dly (s/v)	14	-	-	8.3	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	0.1	-	-	0.3	-	

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	47	95	10	6	167	10	13	22	5	24	36	83
Future Vol, veh/h	47	95	10	6	167	10	13	22	5	24	36	83
Peak Hour Factor	0.72	0.72	0.72	0.92	0.92	0.92	0.77	0.77	0.77	0.76	0.76	0.76
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	65	132	14	7	182	11	17	29	6	32	47	109
Number of Lanes	1	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	2
HCM Control Delay, s/veh	9.4	9.7	8.7	9.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	33%	100%	0%	3%	17%
Vol Thru, %	55%	0%	90%	91%	25%
Vol Right, %	13%	0%	10%	5%	58%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	40	47	105	183	143
LT Vol	13	47	0	6	24
Through Vol	22	0	95	167	36
RT Vol	5	0	10	10	83
Lane Flow Rate	52	65	146	199	188
Geometry Grp	2	5	5	4a	2
Degree of Util (X)	0.075	0.105	0.212	0.268	0.245
Departure Headway (Hd)	5.178	5.803	5.232	4.856	4.69
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	687	615	683	736	762
Service Time	3.248	3.565	2.993	2.917	2.742
HCM Lane V/C Ratio	0.076	0.106	0.214	0.27	0.247
HCM Control Delay, s/veh	8.7	9.3	9.4	9.7	9.3
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.2	0.4	0.8	1.1	1



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	4	1436	385	901	99	81	6
v/c Ratio	0.07	0.74	1.04	0.32	0.58	0.36	0.04
Control Delay (s/veh)	67.3	25.2	105.7	6.1	67.3	15.2	43.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	67.3	25.2	105.7	6.1	67.3	15.2	43.0
Queue Length 50th (ft)	3	396	298	62	75	0	1
Queue Length 95th (ft)	18	800	#646	270	113	22	14
Internal Link Dist (ft)		788		231	623		152
Turn Bay Length (ft)	160		195			150	
Base Capacity (vph)	370	1945	370	2805	576	570	546
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	0.01	0.74	1.04	0.32	0.17	0.14	0.01

Intersection Summary

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

Rio Americano HS - LTA
6: Saverien Dr & Fair Oaks Blvd

Existing (2025) plus Project plus Jesuit Game
PM Friday Night, School Year

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	1055	281	327	764	2	69	0	57	1	1	3
Future Volume (veh/h)	4	1055	281	327	764	2	69	0	57	1	1	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	1134	302	385	899	2	99	0	81	1	1	4
Peak Hour Factor	0.93	0.93	0.93	0.85	0.85	0.85	0.70	0.70	0.70	0.70	0.70	0.70
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	62	1262	333	419	2381	5	141	0	125	4	4	17
Arrive On Green	0.03	0.45	0.45	0.24	0.65	0.65	0.08	0.00	0.08	0.02	0.02	0.02
Sat Flow, veh/h	1781	2782	733	1781	3638	8	1781	0	1585	276	276	1105
Grp Volume(v), veh/h	4	720	716	385	439	462	99	0	81	6	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1738	1781	1777	1869	1781	0	1585	1658	0	0
Q Serve(g_s), s	0.2	32.3	33.2	18.3	9.8	9.8	4.7	0.0	4.3	0.3	0.0	0.0
Cycle Q Clear(g_c), s	0.2	32.3	33.2	18.3	9.8	9.8	4.7	0.0	4.3	0.3	0.0	0.0
Prop In Lane	1.00		0.42	1.00		0.00	1.00		1.00	0.17		0.67
Lane Grp Cap(c), veh/h	62	806	789	419	1163	1223	141	0	125	26	0	0
V/C Ratio(X)	0.06	0.89	0.91	0.92	0.38	0.38	0.70	0.00	0.65	0.23	0.00	0.00
Avail Cap(c_a), veh/h	531	1432	1401	531	1432	1507	827	0	736	764	0	0
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	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	40.6	21.8	22.0	32.4	6.9	6.9	39.0	0.0	38.8	42.2	0.0	0.0
Incr Delay (d2), s/veh	0.2	1.5	2.1	16.5	0.1	0.1	2.4	0.0	2.1	1.7	0.0	0.0
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	0.1	12.8	13.0	9.6	3.2	3.4	2.1	0.0	1.7	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.7	23.3	24.2	48.9	7.0	7.0	41.4	0.0	40.9	43.9	0.0	0.0
LnGrp LOS	D	C	C	D	A	A	D		D	D		
Approach Vol, veh/h		1440			1286			180			6	
Approach Delay, s/veh		23.8			19.5			41.2			43.9	
Approach LOS		C			B			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	61.8		6.3	24.5	44.4		11.5				
Change Period (Y+Rc), s	4.1	5.0		5.0	4.1	5.0		4.7				
Max Green Setting (Gmax), s	25.9	70.0		40.0	25.9	70.0		40.3				
Max Q Clear Time (g_c+I1), s	2.2	11.8		2.3	20.3	35.2		6.7				
Green Ext Time (p_c), s	0.0	2.1		0.0	0.1	4.2		0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh			23.0									
HCM 7th LOS			C									