Appendix TR-2

Local Transportation Analysis

Local Transportation Analysis, Access, and Safety Evaluation

WattEV EIR
Sacramento County, California

January 8, 2024

Prepared for:

WattEV Sacramento, Inc.

Prepared by:

Kimley»Horn

555 Capitol Mall, Suite 300
Sacramento, California 95814

Phone: (916) 858-5800

EXECUTIVE SUMMARY

This report documents the results of a Local Transportation Analysis, Access, and Safety Evaluation completed for the proposed truck charging station and solar development ("proposed project", or "project"). The client intends to develop a solar facility and electric vehicle (EV) truck stop along Bayou Way near Interstate 5 and Power Line Road in Sacramento County, California, on property owned by Sacramento International Airport (SMF). The proposed site will consist of an approximately 100-acre solar field and a 10-acre truck stop charging plaza and store. The project site consists of three parcels; Assessor Parcel Numbers (APNs): 2250010003 (39.12 acres), 2250010035 (37.26 acres), and 2250010006 (39.48 acres).

This analysis was performed in a manner consistent with the Sacramento County *Transportation Analysis Guidelines*[1]. This study was conducted for the study facilities for both No Project and Plus Project conditions under Existing (2023) and Cumulative (2040) scenarios.

Significant findings of this study include:

- The proposed project is estimated to generate 929 total daily trips, with 275 and 276 total trips in the AM and PM peak-hour, respectively for the Existing (2023) scenario.
- The proposed project is estimated to generate 1,769 total daily trips, with 339 and 340 total trips in the AM and PM peak-hour, respectively for the Cumulative (2040) scenario.
- The addition of the project does not result in deficiencies at any study intersections or roadway segments under Existing (2023) plus Project conditions. As defined by the County guidelines, the addition of the project contributes to a deficiency at Intersection #4 (Bayou Way and Power Line Road) under Cumulative (2040) plus Project conditions. The Cumulative (2040) year deficiency will be improved by future intersection modifications that are not formally programmed at the time of this study. It is acceptable that the project should contribute to these improvements via fair share payment to the County. Per Caltrans methodology, the project's fair share responsibility for the intersection improvement is 85%.
- Per data provided by the County, the existing roadway network proximate to the project site has a limited crash history. All study intersections exhibit a crash rate below the current statewide average for intersections of similar type. The project is not anticipated to significantly alter this existing condition.
- Per data provided by Caltrans District 3, all freeway facilities exhibit a crash rate below the statewide average for similar facility types except for Facility C (Interstate 5 mainline, north of Airport Boulevard). The project is not anticipated to significantly alter this existing condition.
- Per truck turning templates presented in Appendix H, roadway widening improvements should be considered at the following existing facilities:
    - East leg of Intersection #3 (Airport Boulevard and Bayou Way)
    - North leg of Intersection #4 (Power Line Road and Bayou Way)
    - North leg of Intersection #5 (Metro Air Parkway and Bayou Way)

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INTRODUCTION

This report documents the results of a Local Transportation Analysis, Access, and Safety Evaluation completed for the proposed truck charging station and solar development ("proposed project", or "project"). The client intends to develop a solar facility and electric vehicle (EV) truck stop along Bayou Way near Interstate 5 (I-5) and Power Line Road in Sacramento County, California, on property owned by Sacramento International Airport (SMF). This analysis was performed in a manner consistent with the Sacramento County *Transportation Analysis Guidelines*[1]. The following sections of this report document the proposed project, analysis methodologies, and general study conclusions.

PROJECT DESCRIPTION

The project site is proposed to consist of an approximately 100-acre solar field and a 10-acre truck stop charging plaza and convenience store along Bayou Way near the Interstate 5 interchange with Power Line Road in Sacramento County, California. The project location and study facilities are shown in **Figure 1** and the project site plan is shown in **Figure 2**. The following transportation facilities are included in this evaluation:

Intersections:

1. Airport Boulevard @ I-5 Northbound Ramps
2. Airport Boulevard @ I-5 Southbound Ramps
3. Airport Boulevard @ Bayou Way
4. Bayou Way @ Power Line Road
5. Metro Air Parkway @ Bayou Way
6. Metro Air Parkway @ I-5 Southbound Ramps
7. Metro Air Parkway @ I-5 Northbound Ramps
8. *Bayou Way @ West Lot Entrance Driveway (plus Project only)*
9. *Bayou Way @ West Lot Exit Driveway (plus Project only)*
10. *Bayou Way @ Passenger Vehicle Driveway (plus Project only)*
11. *Bayou Way @ East Lot Entrance Driveway (plus Project only)*
12. *Bayou Way @ East Lot Exit Driveway (plus Project only)*

Roadway Segments:

A. Bayou Way, between Airport Road and Power Line Road
B. Bayou Way, between Power Line Road and Metro Air Parkway

Freeway Facilities:

C. Interstate 5 mainline, north of Airport Boulevard
D. Interstate 5 mainline, between Airport Boulevard and Metro Air Parkway
E. Interstate 5 mainline, south of Metro Air Parkway

This evaluation was conducted for the aforementioned study facilities for both No Project and Plus Project conditions under Existing (2023) and Cumulative (2040) scenarios. **Figure 3** illustrates the study intersections, existing traffic control, and existing lane configurations.

[1] *Transportation Analysis Guidelines,* Sacramento County, September 10, 2020.

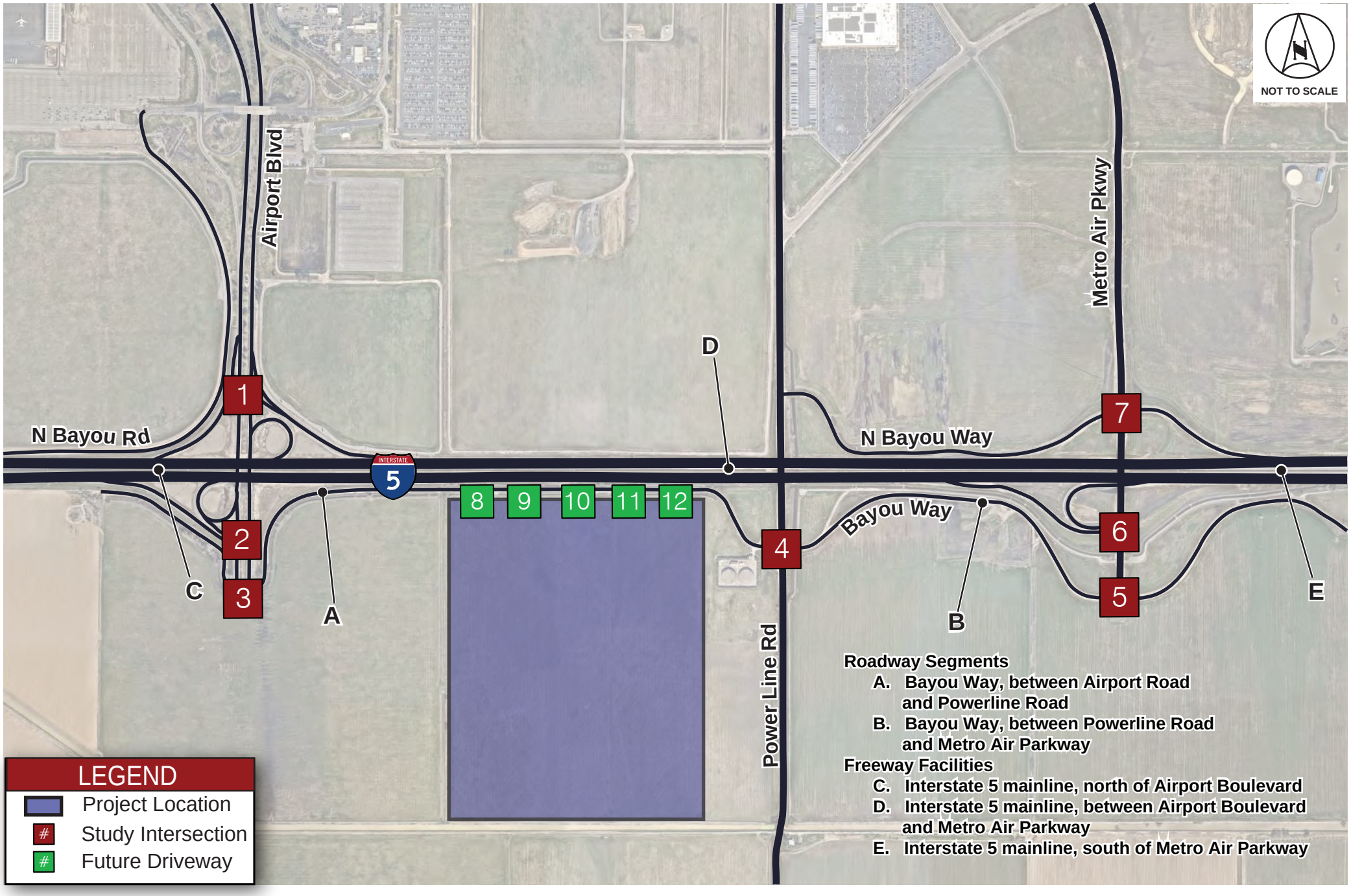

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Figure 1
Project Vicinity Map and Study Facilities

NOT TO SCALE

Site Plan Date: 08/11/2023

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Figure 2
Proposed Project Site Plan

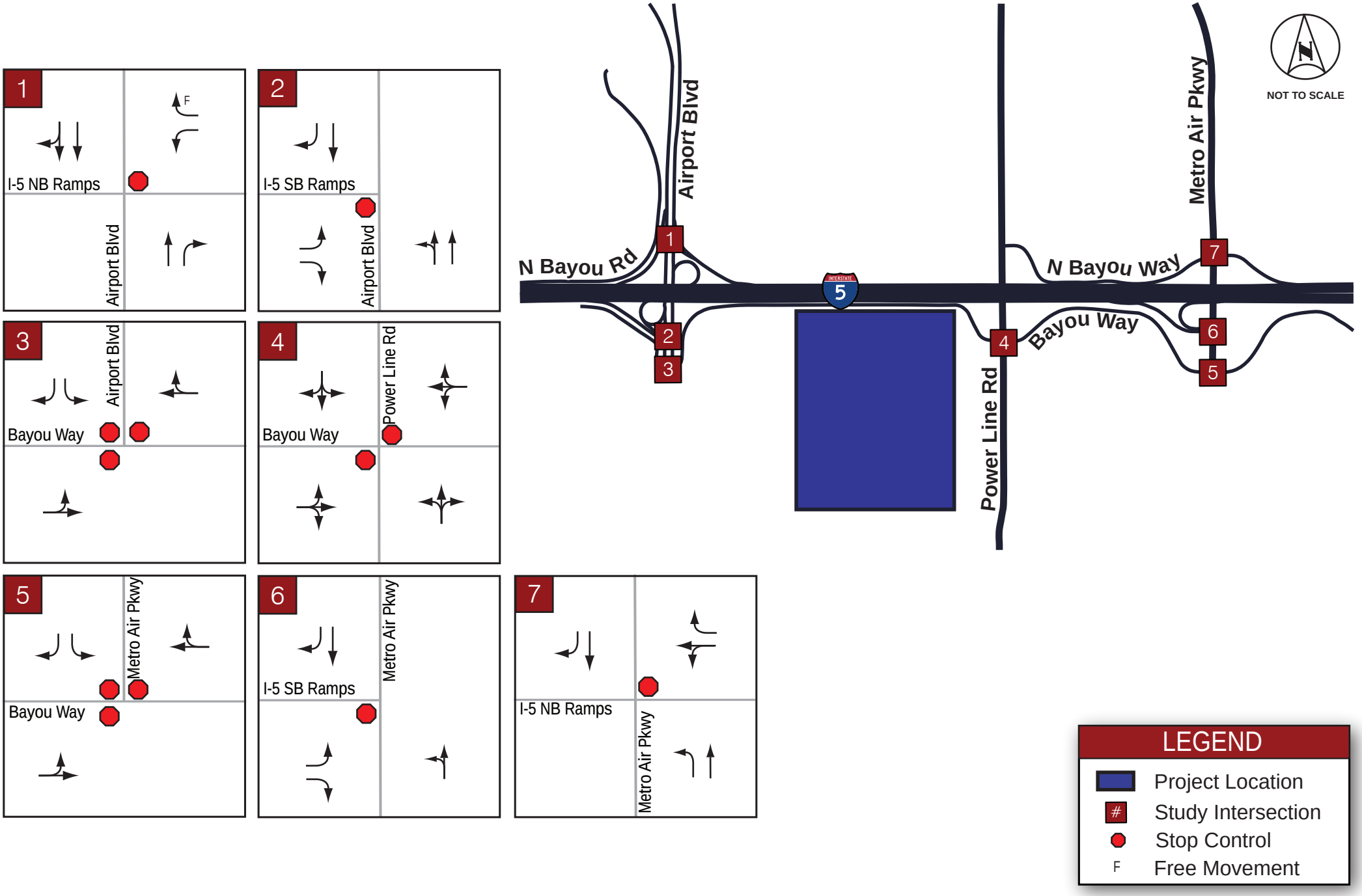

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Figure 3

Existing (2023) Study Intersections, Traffic Control, and Lane Geometry

ASSESSMENT OF PROPOSED PROJECT

Proposed Project Trip Generation and Assignment

The number of trips anticipated to be generated by the proposed project was approximated using input provided by the Client[2], industry data[3,4], and professional judgement. The foundational inputs were data confirming anticipated charger utilization rates and anticipated site operational characteristics in both Existing and Cumulative conditions. As the proposed convenience store is anticipated to function as a second, complementary use to drivers charging their vehicles, it is assumed that these trips are captured as part of the 50% peak-hour charger utilization rate. While the Existing site is anticipated to primarily serve vehicles coming from the nearby freeway, Cumulative site operations will focus more on fleet service to warehouse facilities anticipated to be constructed in the vicinity of Metro Air Parkway. This methodology was discussed and coordinated with Sacramento County DOT staff in Summer 2023[5]. The proposed project trip generation for both Existing and Cumulative Weekday AM and Weekday PM peak-hours is presented in Table 1 and Table 2 respectively.

Table 1 – Existing Proposed Project Trip Generation

Land Use (ITE Code)	Size (KSF/# Chargers)	Daily Trips	AM Peak-Hour					PM Peak-Hour				
			Total Trips	In		Out		Total Trips	In		Out	
				%	Trips	%	Trips		%	Trips	%	Trips
Small Office Building (712)[1]	3.0	43	5	82%	4	18%	1	6	34%	2	66%	4
Electric Vehicle Charging[2]	150 (CCS) [PV]	540	150	50%	75	50%	75	150	50%	75	50%	75
	120 (CCS) [HV]	346	120	50%	60	50%	60	120	50%	60	50%	60
Project Trips:		929	275		139		136	276		137		139

CCS = Combined Charging System, PV = Passenger Vehicles, HV = Heavy Vehicles

[1] Trip Generation Manual, 11th Edition

[2] Assumed 7.5% PV daily, 18% HV daily, 50% peak charger utilization with industry standard recharge times

Table 2 – Cumulative Proposed Project Trip Generation

Land Use (ITE Code)	Size (KSF/# Chargers)	Daily Trips	AM Peak-Hour					PM Peak-Hour				
			Total Trips	In		Out		Total Trips	In		Out	
				%	Trips	%	Trips		%	Trips	%	Trips
Small Office Building (712)[1]	3.0	43	5	82%	4	18%	1	6	34%	2	66%	4
Electric Vehicle Charging[2]	30 (CCS) [PV]	740	110	50%	55	50%	55	110	50%	55	50%	55
	120 (CCS), 24 (MCS) [HV][3]	986	224	50%	112	50%	112	224	50%	112	50%	112
Project Trips:		1,769	339		171		168	340		169		171

CCS = Combined Charging System, MCS = Megawatt Charging System, PV = Passenger Vehicles, HV = Heavy Vehicles

[1] Trip Generation Manual, 11th Edition

[2] Assumed 18% daily (PV & HV), 50% peak charger utilization with industry standard recharge times

[3] CCS chargers for fleet/network service, MCS for regional network service

Project traffic was distributed and assigned to the roadway network for both Existing and Cumulative conditions in collaboration with Sacramento County DOT staff[6] based on anticipated site operating characteristics, local understanding of vehicular patterns in the study area, and professional judgement.

[2] Email correspondence with Emil Youssefzadeh, Watt EV, August 13, 2023.

[3] *"Electric vehicles and the charging infrastructure: a new mindset?"*, PwC, 2021.

[4] *"New Report: Electrify America California Corridor/Urban Q3 2021 EV Charging Utilization Averages 4.8% Per Port (Charger)"*, EVAdoption, January 30, 2022.

[5] Telephone correspondence with Gary Gasperi and Cameron Shew, Sacramento County DOT, July 31, 2023.

[6] Email correspondence with Gary Gasperi, Sacramento County DOT, August 7, 2023.

STUDY METHODOLOGY

Level of Service Definitions

Analysis of transportation facility significant operational performance is based on the concept of Level of Service (LOS). The LOS of a facility is a qualitative measure used to describe operational conditions. LOS ranges from A (best), which represents minimal delay, to F (worst), which represents heavy delay and a facility that is operating at or near its functional capacity. Levels of Service for this study were determined using methods defined in the *Highway Capacity Manual (HCM), 6th Edition*.

Intersection Analysis

The delay metrics presented in this study were determined using methods defined in the *Highway Capacity Manual (HCM)* and appropriate traffic analysis software (Synchro®). Table 3 presents intersection LOS definitions as defined in the HCM.

Table 3 – Intersection Level of Service Criteria

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

Source: Highway Capacity Manual

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

Roadway Segment Analysis

Roadway segments were assessed using the Average Daily Traffic (ADT) and evaluated in accordance with the County's guidelines[1].

Table 4 presents the County's Level of Service thresholds for roadway segments.

Table 4 – Roadway Segment Level of Service Thresholds

Roadway Classification	LOS A	LOS B	LOS C	LOS D	LOS E
2-Lane Arterial (Moderate Access Control)	10,800	12,600	14,400	16,200	18,000
6-Lane Arterial (Moderate Access Control)	32,400	37,800	43,200	48,600	54,000
4-Lane Arterial (High Access Control)	24,000	28,000	32,000	36,000	40,000
2-Lane Rural Road, 24' of pavement, 6' paved shoulders	2,200	4,300	7,100	12,200	20,000
2-Lane Rural Road, <24' of pavement, < 6' paved shoulders	1,000	2,100	3,400	6,000	12,800

Source: Sacramento County Traffic Analysis Guidelines (September 2020)

Queuing Evaluation

Vehicle queuing was evaluated for the AM and PM peak-hours for the following locations:

- All freeway ramp terminals
- Existing and future proposed turn pockets where the project is expected to increase turning movement volumes

Queuing for these locations was approximated using *Simtraffic* computer software. 95th percentile vehicle queues were compared against available vehicle storage lengths to determine if the queues are anticipated to exceed their available storage and adversely affect adjacent through travel lanes.

Signal Warrants

The evaluation of the need for traffic signalization was based on the peak-hour warrant methodologies noted in the current, published edition of the *California Manual on Uniform Traffic Control Devices (CAMUTCD)*.

Passenger Car Equivalent (PCE)

Chapter 12 of the *Highway Capacity Manual (HCM), 6th Edition* provides guidance on translating heavy vehicles into an equivalent number of passenger vehicles. For this assessment, a PCE conversion of 2.0 passenger vehicles per heavy vehicle from Exhibit 12-25 was utilized based on the generally level terrain proximate to the project site. This PCE is reflected in the trip assignment exhibits included in this report.

Analysis Scenarios

As described in the following sections, the LOS analysis was conducted for the intersection and roadway segment study facilities for the following scenarios: Existing (2023) Conditions, Existing (2023) plus Project Conditions, Cumulative (2040) Conditions, and Cumulative (2040) plus Project Conditions.

EXISTING (2023) CONDITIONS

Traffic counts were collected to establish the existing conditions of the study intersections (AM and PM peak-hour TMC) and roadway segments (ADT). In coordination with Sacramento County DOT staff[7], traffic data was collected on Tuesday, July 11, 2023, with intersection turning movement counts collected between 7-9 AM and 4-6 PM. As some legs of Intersection #4 (Bayou Way and Power Line Road) were closed for construction at the time of collection, the County provided peak-hour data for the intersection from a previous March 2022 study[8]. Existing (2023) Conditions AM and PM peak-hour traffic volumes are presented in Figure 4. Traffic count data sheets are provided in Appendix A.

Intersections

Table 5 presents the intersection operating conditions for this scenario. As indicated in Table 5, the study intersections operate within the previously established County threshold[1]. Analysis worksheets are included in Appendix B.

Roadway Segments

Table 6 presents the roadway segment operating conditions for this analysis scenario. As shown, all study roadway segments operate acceptably in accordance with the County's LOS thresholds[1].

[7] Telephone conversation with Gary Gasperi and Cameron Shew, Sacramento County DOT, June 29, 2023.
[8] Email correspondence with Gary Gasperi and Cameron Shew, Sacramento County DOT, July 19, 2023.

Table 5 – Existing (2023) Intersection Delay

ID	Intersection	Peak Hour	Delay Threshold (LOS)	Control	Existing (2023)	
					Delay (sec)	LOS
1	Airport Blvd & I-5 NB Ramps	AM	E	SSSC	4.2(10.4 WBL)	A(B)
		PM			4.0(10.4 WBL)	A(B)
2	Airport Blvd & I-5 SB Ramps	AM	D	SSSC	4.6(7.8 EBL)	A(A)
		PM			6.5(8.7 EBL)	A(A)
3	Airport Blvd & Bayou Way	AM		AWSC	3.3	A
		PM			5.1	A
4	Bayou Way & Power Line Rd	AM		SSSC	4.7(11.6 WBT)	A(B)
		PM			8.3(11.9 EBT)	A(B)
5	Metro Air Pkwy & Bayou Way	AM		AWSC	3.5	A
		PM			5.1	A
6	Metro Air Pkwy & I-5 SB Ramps	AM		SSSC	1.7(5.3 EBL)	A(A)
		PM			2.4(6.8 EBL)	A(A)
7	Metro Air Pkwy & I-5 NB Ramps	AM	E	SSSC	1.9(6.9 WBT)	A(A)
		PM			4.8(9.0 WBR)	A(A)

Note: Side Street Stop Controlled (SSSC) reported as intersection delay followed by worst movement's delay.

Table 6 – Existing (2023) Roadway Segment Operations

ID	Roadway Segment	Facility Type	# of Lanes	Existing (2023)	
				Daily Volume	LOS
A	Bayou Way, between Airport Boulevard and Power Line Road	Rural, 2-lane road, <24' of pavement, <6' shoulders	2	2,155	C
B	Bayou Way, between Power Line Road and Metro Air Parkway	Rural, 2-lane road, <24' of pavement, <6' shoulders	2	1,283	B

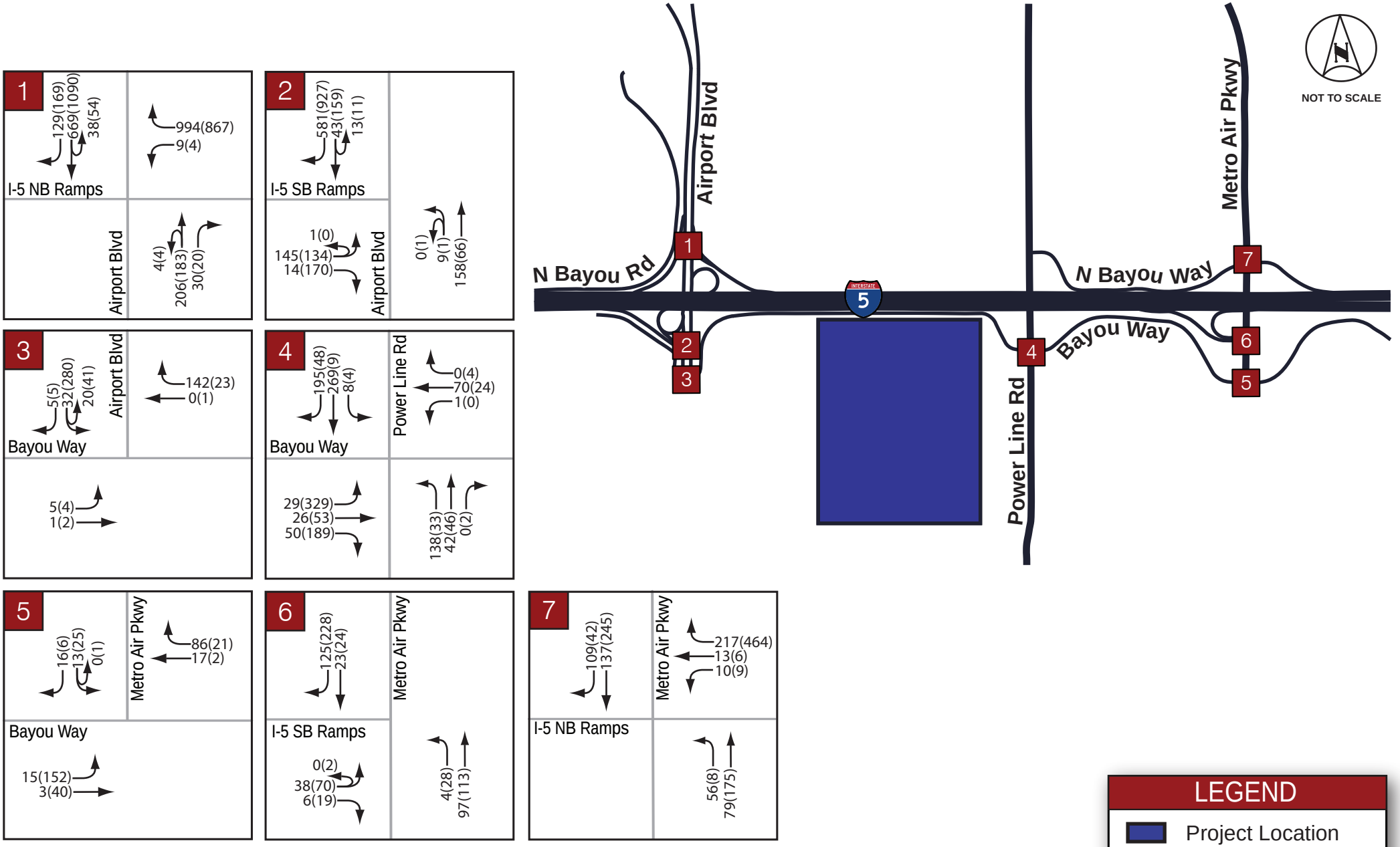

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Figure 4
Existing (2023) Peak-Hour Traffic Volumes

EXISTING (2023) PLUS PROJECT CONDITIONS

Project trips were assigned to the roadway network based on anticipated site operations, local understanding of vehicular patterns in the study area, and professional judgement. Assigned project trips were subsequently added to the Existing (2023) volumes to evaluate operations at the study facilities. Using these volumes, LOS was determined at the study facilities. Project trip distribution for Existing (2023) is illustrated in **Figure 5**. The corresponding trip assignment is shown in **Figure 6.** Existing (2023) plus Project peak-hour traffic volumes are presented in **Figure 7** for the AM and PM peak-hours.

Intersections

Table 7 presents the intersection operating conditions for this scenario. As indicated in **Table 7**, the study intersections operate within the acceptable County threshold[1]. Analysis worksheets are included in **Appendix C**.

Table 7 – Existing (2023) plus Project Intersection Delay

ID	Intersection	Peak Hour	Delay Threshold (LOS)	Control	Existing (2023)		Existing (2023) plus Project	
					Delay (sec)	LOS	Delay (sec)	LOS
1	Airport Blvd & I-5 NB Ramps	AM	E	SSSC	4.2(10.4 WBL)	A(B)	4.2(11.1 WBL)	A(B)
		PM			4.0(10.4 WBL)	A(B)	4.0(11.8 WBL)	A(B)
2	Airport Blvd & I-5 SB Ramps	AM		SSSC	4.6(7.8 EBL)	A(A)	4.6(12.1 EBL)	A(B)
		PM			6.5(8.7 EBL)	A(A)	6.7(13.9 EBL)	A(B)
3	Airport Blvd & Bayou Way	AM		AWSC	3.3	A	4.4	A
		PM			5.1	A	5.4	B
4	Bayou Way & Power Line Rd	AM	D	SSSC	4.7(11.6 WBT)	A(B)	7.8(20.4 WBT)	A(C)
		PM			8.3(11.9 EBT)	A(B)	10.6(14.6 EBT)	B(B)
5	Metro Air Pkwy & Bayou Way	AM		AWSC	3.5	A	3.8	A
		PM			5.1	A	5.1	A
6	Metro Air Pkwy & I-5 SB Ramps	AM		SSSC	1.7(5.3 EBL)	A(A)	2.0(6.8 EBL)	A(A)
		PM			2.4(6.8 EBL)	A(A)	2.7(8.8 EBL)	A(A)
7	Metro Air Pkwy & I-5 NB Ramps	AM	E	SSSC	1.9(6.9 WBT)	A(A)	2.6(7.5 WBT)	A(A)
		PM			4.8(9.0 WBR)	A(A)	5.2(9.7 WBL)	A(A)

Note: Side Street Stop Controlled (SSSC) reported as intersection delay followed by worst movement's delay.
Bold represents unacceptable operations.

Roadway Segments

Table 8 presents the roadway segment operating conditions for this analysis scenario. As shown, all study roadway segments operate acceptably in accordance with the County's LOS thresholds[1].

Table 8 – Existing (2023) plus Project Roadway Segment Operations

ID	Roadway Segment	Facility Type	# of Lanes	Existing (2023)		Existing (2023) plus Project	
				Daily Volume	LOS	Daily Volume	LOS
A	Bayou Way, between Airport Boulevard and Power Line Road	Rural, 2-lane road, <24' of pavement, <6' shoulders	2	2,155	C	3,430	D
B	Bayou Way, between Power Line Road and Metro Air Parkway	Rural, 2-lane road, <24' of pavement, <6' shoulders	2	1,283	B	1,857	B

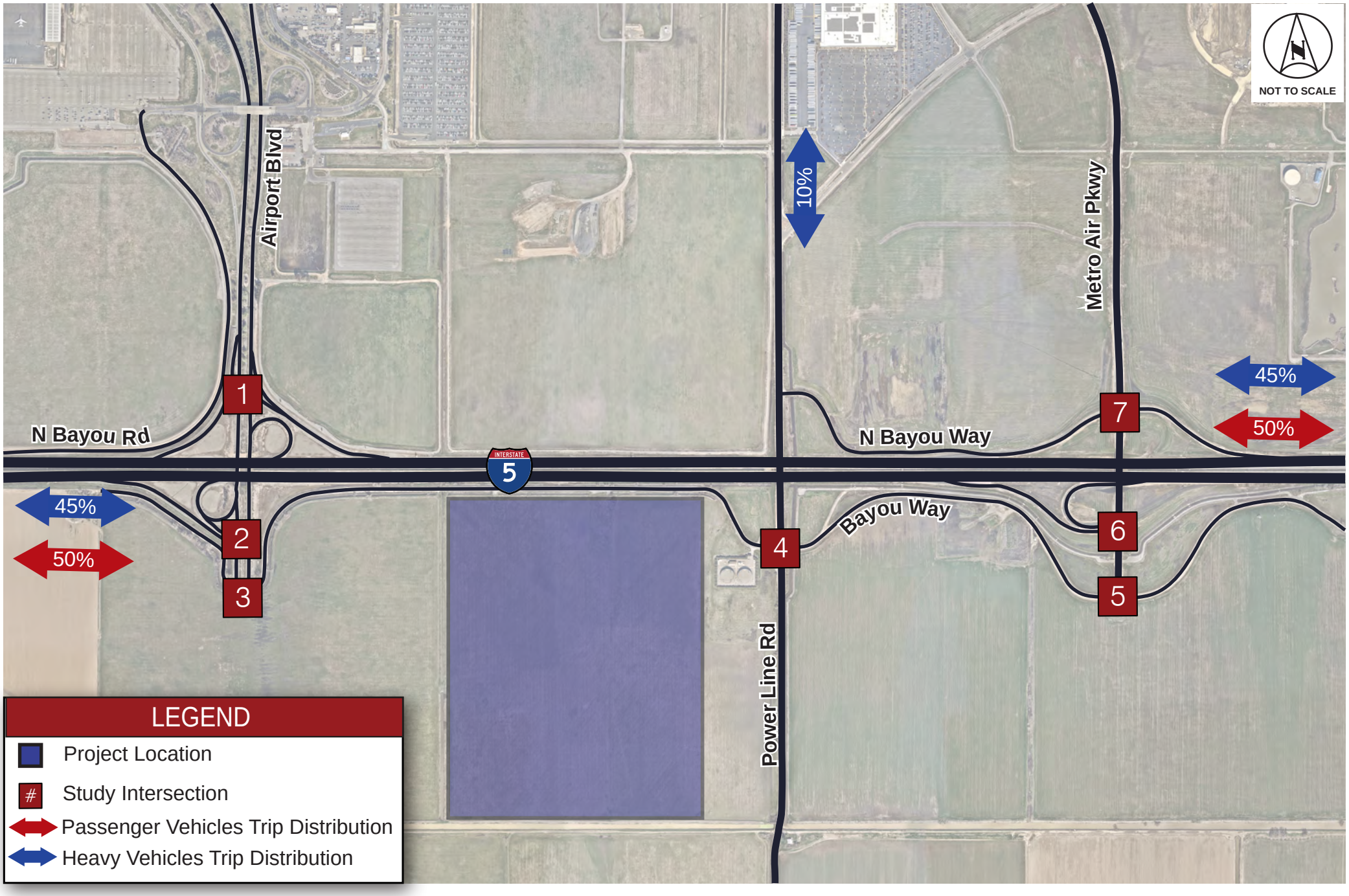

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Figure 5
Existing (2023) Project Trip Distribution

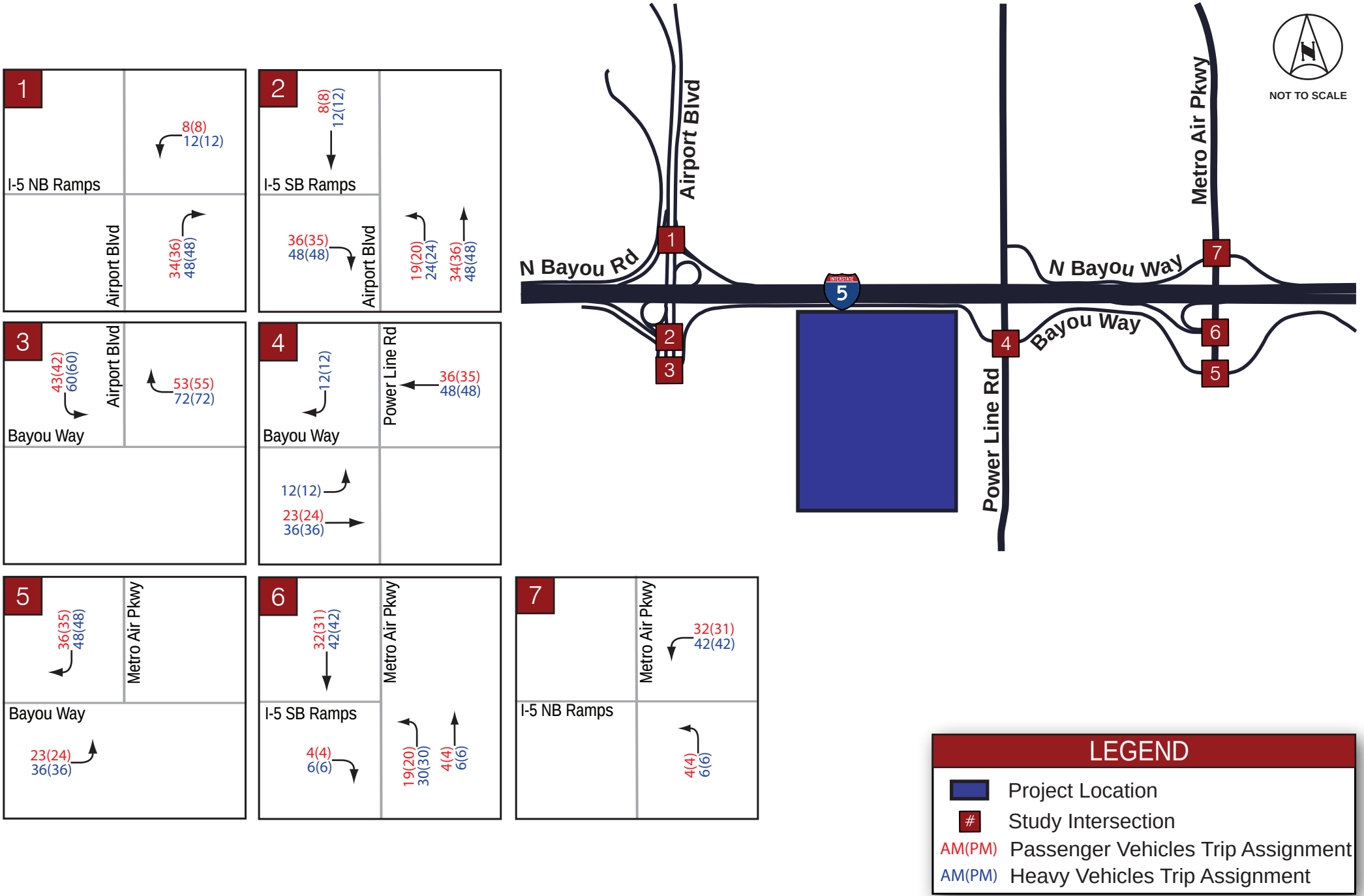

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Figure 6
Existing (2023) Project Trip Assignments

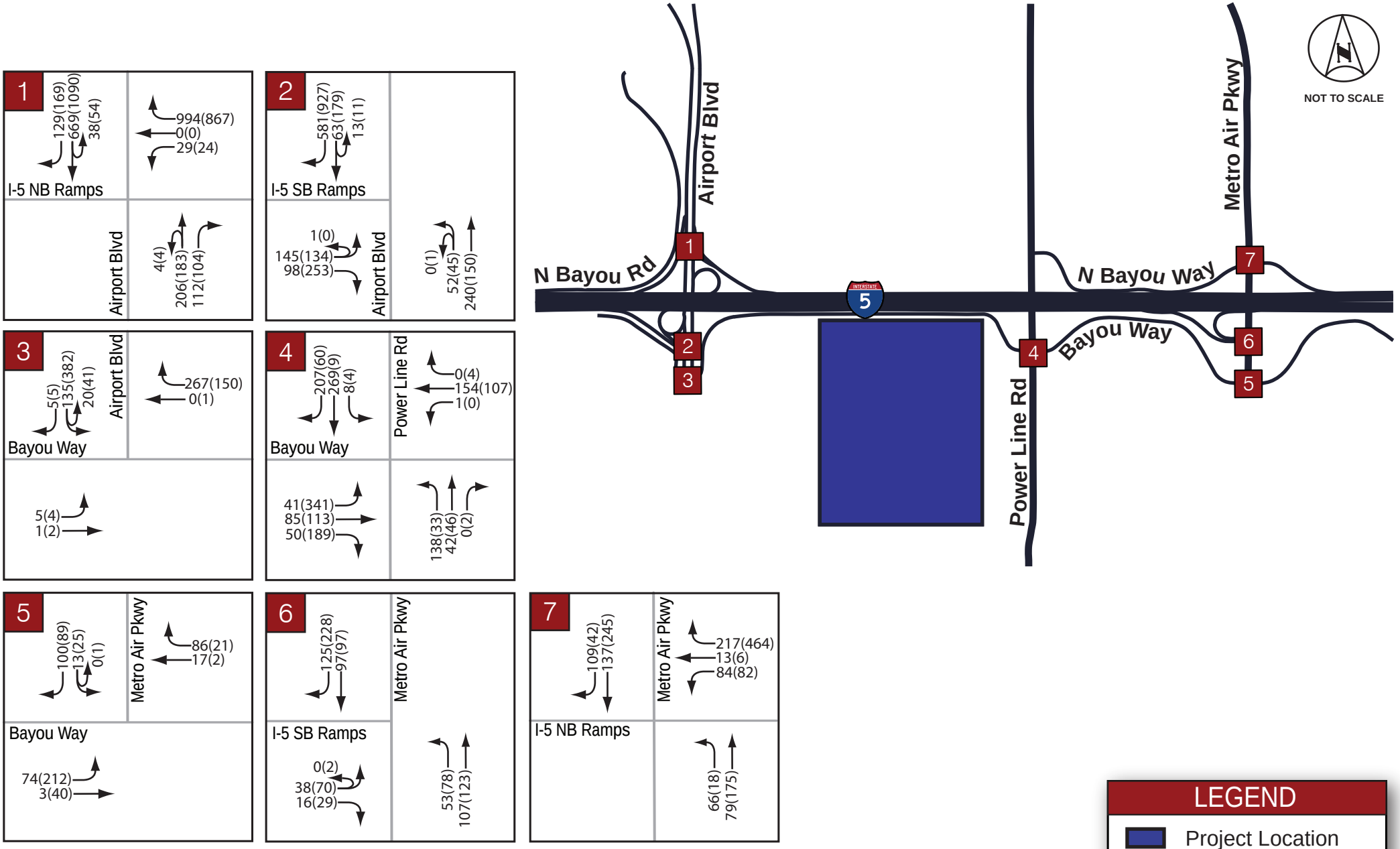

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Figure 7

Existing (2023) plus Project Peak-Hour Traffic Volumes

CUMULATIVE (2040) CONDITIONS

Traffic volumes for the Cumulative (2040) condition were developed using the most recent version of the SACSIM Transportation Demand Model (TDM) in conjunction with Existing (2023) traffic counts. The Cumulative (2040) condition assumes full build-out of all available parcels in proximity to the project site and of the nearby transportation network. In coordination with County staff[9], the Metro Air Parkway interchange with Interstate 5 (Intersection #6 and Intersection #7) was assessed as signalized in the Cumulative (2040) condition with reasonable lane configurations assumed. The County anticipates completion of the signalized interchange in 2025. Figure 8 presents anticipated lane geometries for the Cumulative (2040) analysis scenario. Cumulative (2040) peak-hour traffic volumes are presented in Figure 9 for the AM and PM peak-hours.

Intersections

Table 9 presents the intersection operating conditions for this scenario. As indicated in Table 9, the study intersections operate within the County's established threshold[1]. Analysis worksheets are included in Appendix D.

Table 9 – Cumulative (2040) Intersection Delay

ID	Intersection	Peak Hour	Delay Threshold (LOS)	Control	Cumulative (2040)	
					Delay (sec)	LOS
1	Airport Blvd & I-5 NB Ramps	AM	E	SSSC	7.1(12.2 WBR)	A(B)
		PM			6.1(13.4 WBL)	A(B)
2	Airport Blvd & I-5 SB Ramps	AM	D	SSSC	5.4(8.9 EBL)	A(A)
		PM			6.5(10.7 EBL)	A(B)
3	Airport Blvd & Bayou Way	AM		AWSC	3.5	A
		PM			5.4	A
4	Bayou Way & Power Line Rd	AM		SSSC	6.9(20.1 WBT)	A(C)
		PM			8.5(12.5 EBT)	A(B)
5	Metro Air Pkwy & Bayou Way	AM		AWSC	4.5	A
		PM			5.5	A
6	Metro Air Pkwy & I-5 SB Ramps	AM		Signal	5.8	A
		PM			10.8	B
7	Metro Air Pkwy & I-5 NB Ramps	AM	E	Signal	15.1	B
		PM			12.9	B

Note: Side Street Stop Controlled (SSSC) reported as intersection delay followed by worst movement's delay.

[9] Email correspondence with Cameron Shew, Sacramento County DOT, September 28, 2023.

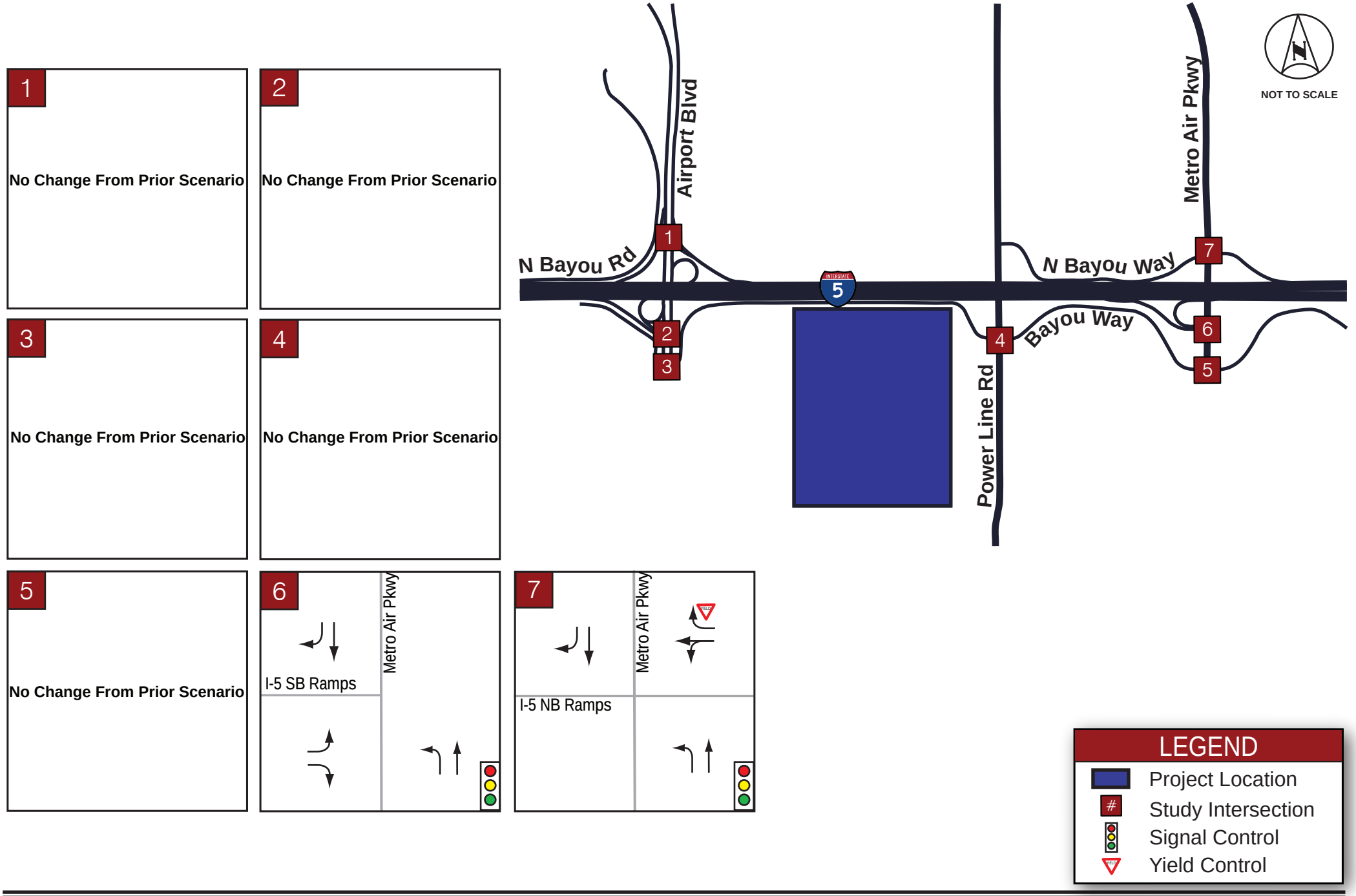

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Figure 8

Cumulative (2040) Study Intersections, Traffic Control, and Lane Geometry

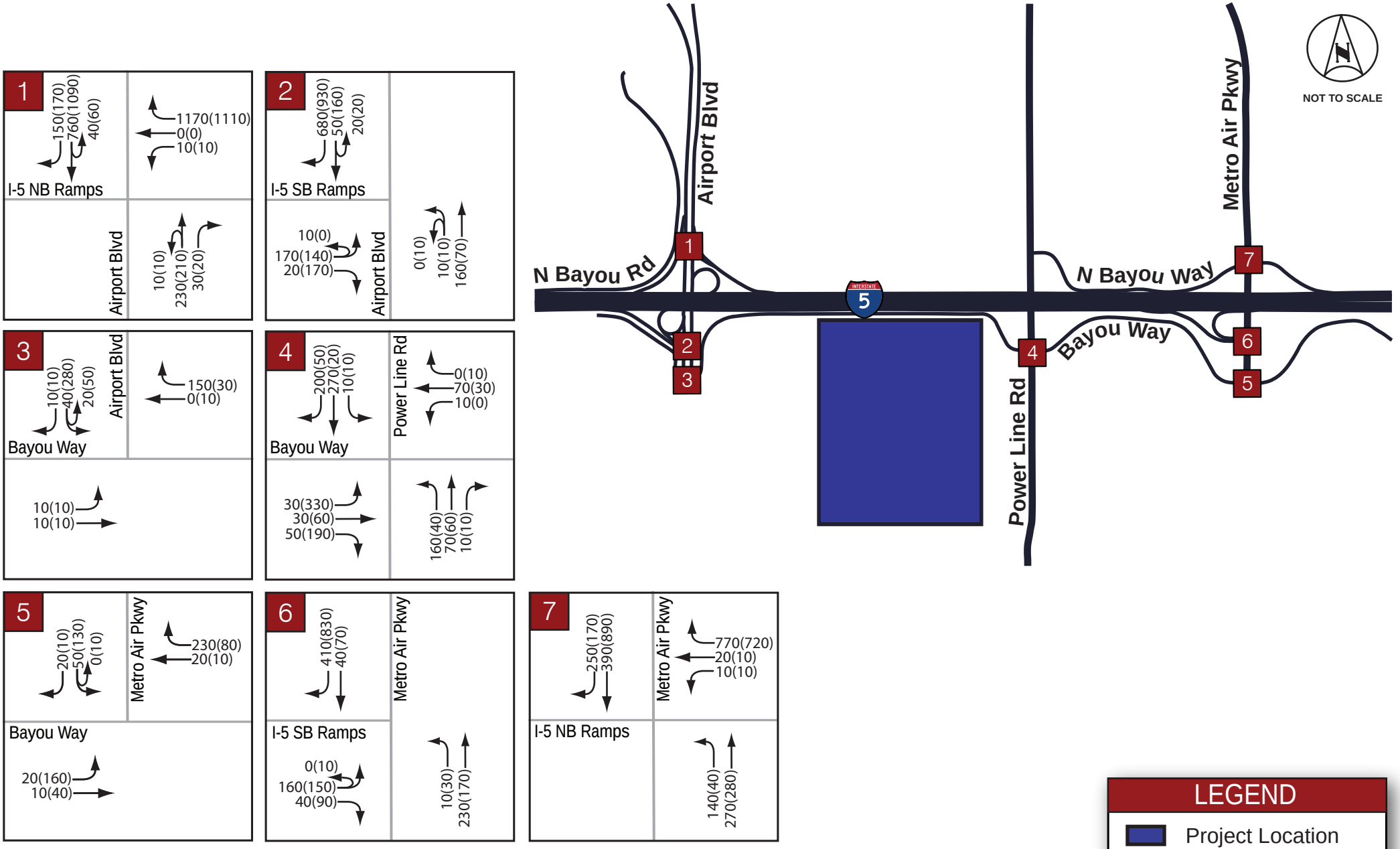

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Figure 9
Cumulative (2040) Peak-Hour Traffic Volumes

Roadway Segments

Table 10 presents the roadway segment operating conditions for this analysis scenario. As shown, all study roadway segments operate acceptably in accordance with the County's LOS thresholds[1].

Table 10 – Cumulative (2040) Roadway Segment Operations

ID	Roadway Segment	Facility Type	# of Lanes	Cumulative (2040)	
				Daily Volume	LOS
A	Bayou Way, between Airport Boulevard and Power Line Road	Rural, 2-lane road, <24' of pavement, <6' shoulders	2	2,200	C
B	Bayou Way, between Power Line Road and Metro Air Parkway	Rural, 2-lane road, <24' of pavement, <6' shoulders	2	1,300	B

CUMULATIVE (2040) PLUS PROJECT CONDITIONS

Project trips were assigned to the roadway network based on anticipated site operations, local understanding of vehicular patterns in the study area, and professional judgement. Assigned project trips were subsequently added to the Cumulative (2040) volumes to evaluate operations at the study facilities. Using these volumes, LOS was determined at the study facilities. Project Trip distribution for Cumulative (2040) is illustrated in Figure 10. The corresponding trip assignment is shown in Figure 11.

Cumulative (2040) plus Project peak-hour traffic volumes are presented in Figure 12 for the AM and PM peak-hours.

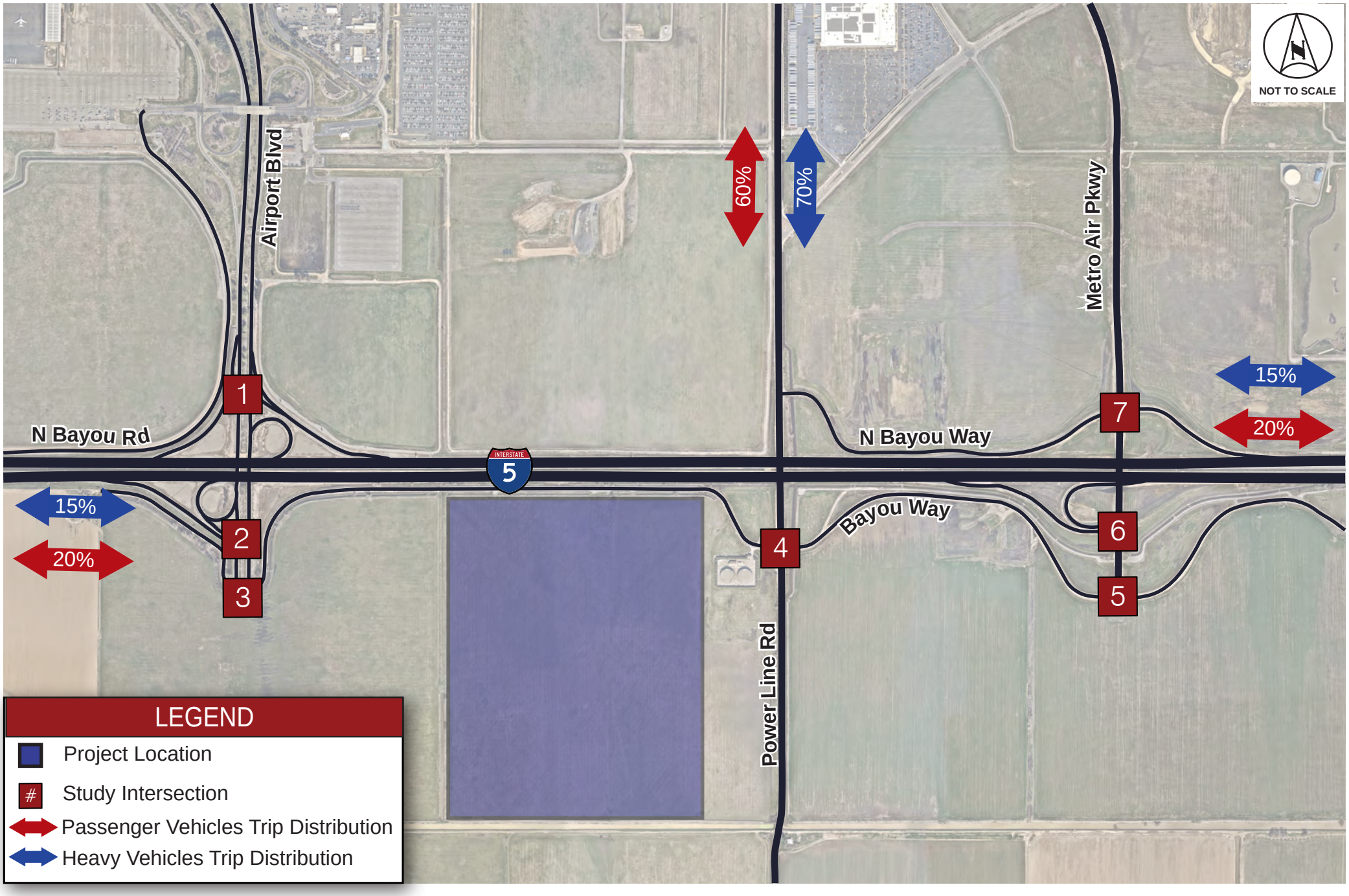

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Figure 10
Cumulative (2040) Project Trip Distribution

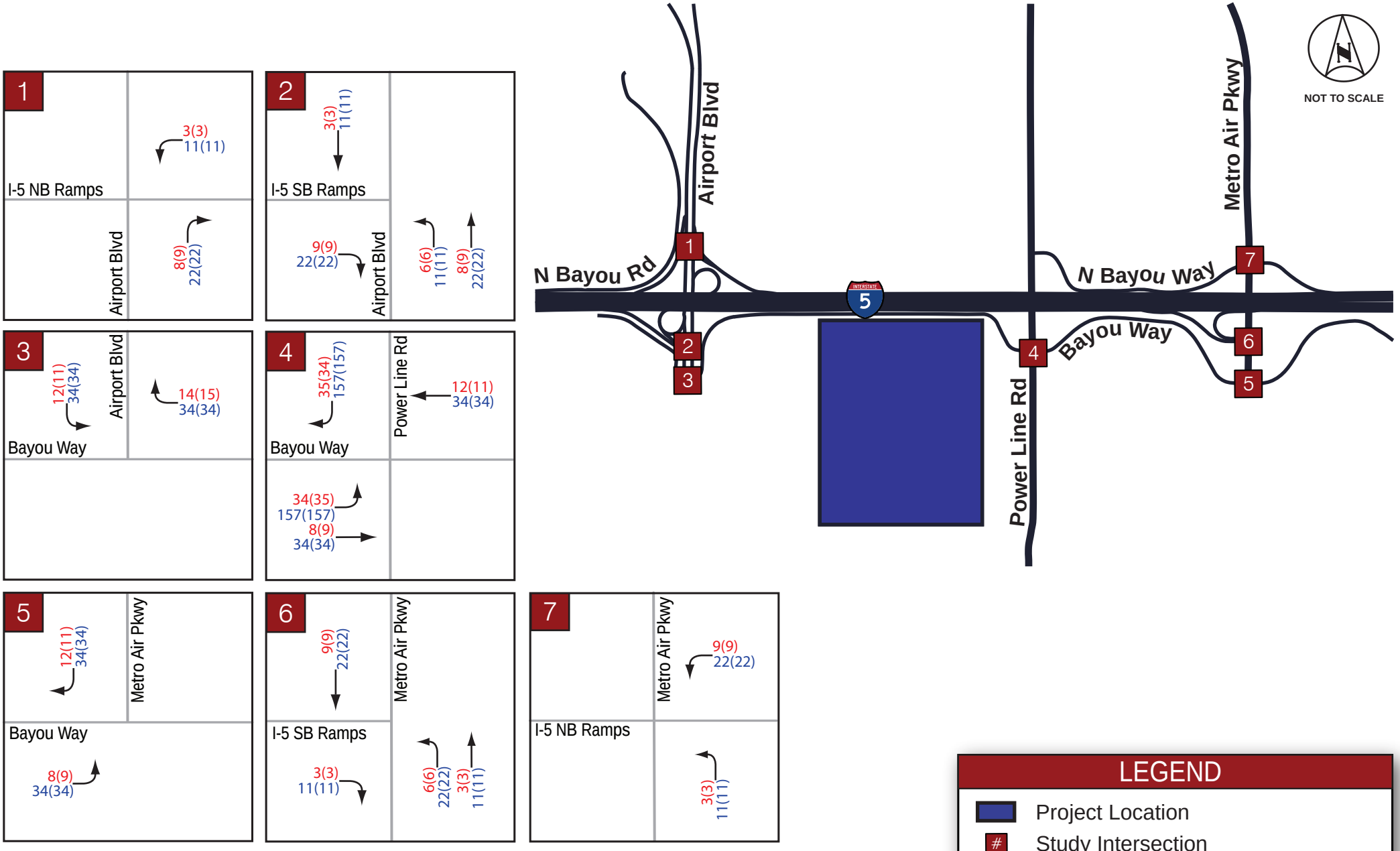

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Figure 11
Cumulative (2040) Project Trip Assignments

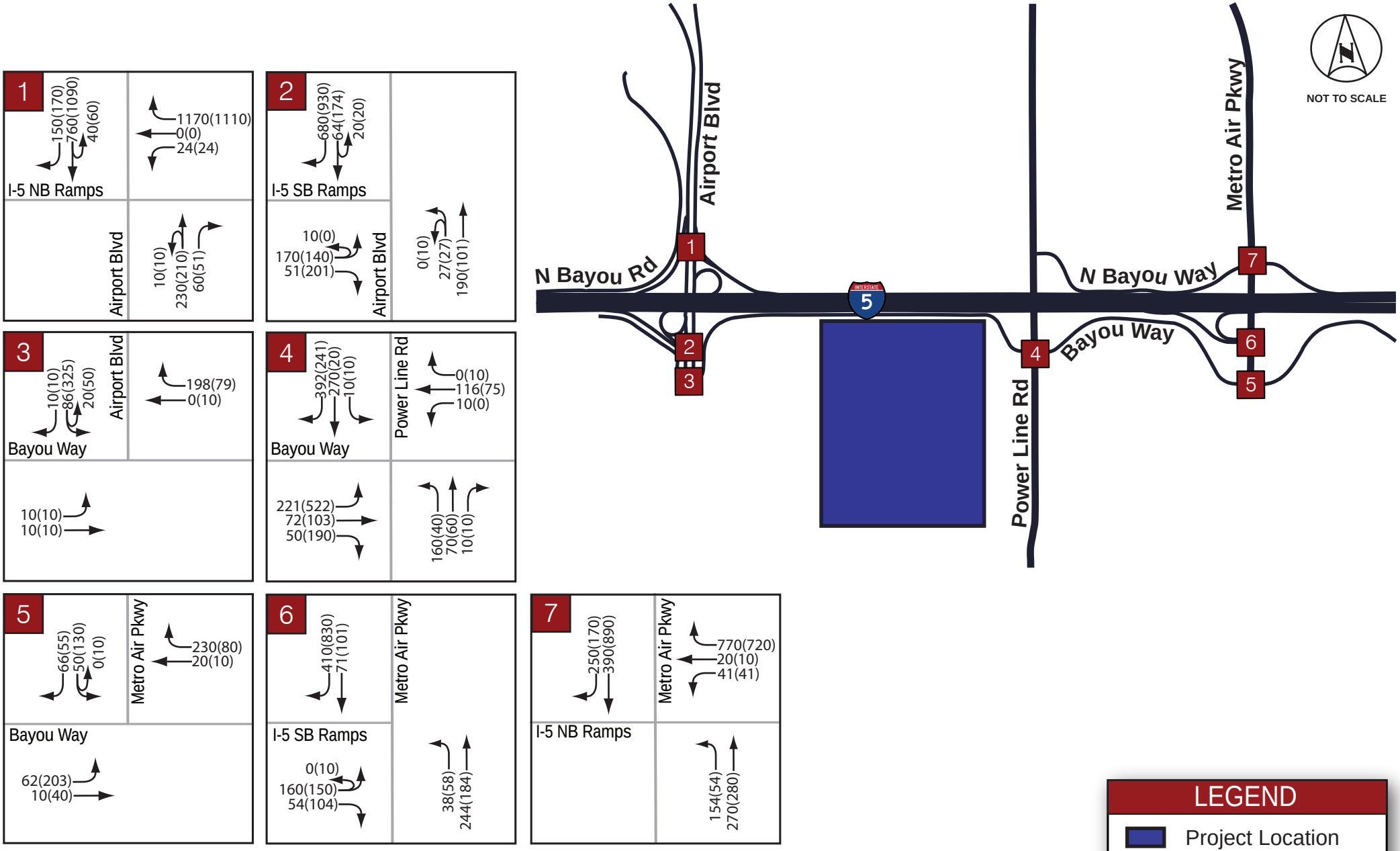

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Figure 12

Cumulative (2040) plus Project Peak-Hour Traffic Volumes

Intersections

Table 11 presents the intersection operating conditions for this scenario. As indicated in Table 11, Intersection # 4 (Bayou Way and Power Line Road) operates beyond the acceptable County threshold[1]. Analysis worksheets are included in Appendix E.

Table 11 – Cumulative (2040) plus Project Intersection Delay

ID	Intersection	Peak Hour	Delay Threshold (LOS)	Control	Cumulative (2040)		Cumulative (2040) plus Project	
					Delay (sec)	LOS	Delay (sec)	LOS
1	Airport Blvd & I-5 NB Ramps	AM	E	SSSC	7.1(12.2 WBR)	A(B)	6.7(13.5 WBL)	A(B)
		PM			6.1(13.4 WBL)	A(B)	5.6(14.4 WBL)	A(B)
2	Airport Blvd & I-5 SB Ramps	AM	D	SSSC	5.4(8.9 EBL)	A(A)	5.2(10.8 EBL)	A(B)
		PM			6.5(10.7 EBL)	A(B)	6.6(12.6 EBL)	A(B)
3	Airport Blvd & Bayou Way	AM		AWSC	3.5	A	4.1	A
		PM			5.4	A	5.6	A
4	Bayou Way & Power Line Rd	AM		SSSC	6.9(20.1 WBT)	A(C)	**83.9(344.2 EBL)**	**F(F)**
		PM			8.5(12.5 EBT)	A(B)	**56.6(90.1 EBT)**	**F(F)**
5	Metro Air Pkwy & Bayou Way	AM		AWSC	4.5	A	4.7	A
		PM			5.5	A	5.9	A
6	Metro Air Pkwy & I-5 SB Ramps	AM		Signal	5.8	A	6.6	A
		PM			10.8	B	13.1	B
7	Metro Air Pkwy & I-5 NB Ramps	AM	E	Signal	15.1	B	12.8	B
		PM			12.9	B	14.2	B

Note: Side Street Stop Controlled (SSSC) reported as intersection delay followed by worst movement's delay.
Bold represents unacceptable operations.

Roadway Segments

Table 12 presents the roadway segment operating conditions for this analysis scenario. As shown, all study roadway segments operate acceptably in accordance with the County's LOS thresholds[1].

Table 12 – Cumulative (2040) plus Project Roadway Segment Operations

ID	Roadway Segment	Facility Type	# of Lanes	Cumulative (2040)		Cumulative (2040) plus Project	
				Daily Volume	LOS	Daily Volume	LOS
A	Bayou Way, between Airport Boulevard and Power Line Road	Rural, 2-lane road, <24' of pavement, <6' shoulders	2	2,200	C	4,955	D
B	Bayou Way, between Power Line Road and Metro Air Parkway	Rural, 2-lane road, <24' of pavement, <6' shoulders	2	1,300	B	2,540	C

OTHER CONSIDERATIONS

Intersection Queueing Evaluation

A queuing study was conducted to evaluate the capacity of the turn lanes at the study intersections. Synchro reports were used to conduct the queuing analysis. The 95th percentile vehicle queues were compared against the existing vehicle storage lengths at select intersection movements to determine if queues are anticipated to exceed their available storage. Results of the queuing evaluation are presented in Table 13. Analysis sheets including the anticipated vehicle queues are presented in Appendices B-E.

Table 13 – Intersection Queuing Evaluation Results

Intersection / Analysis Scenario	Movement	AM Peak-Hour			PM Peak-Hour		
		Available Storage (ft)	95th % Queue (ft)	Maximum Queue (ft)	Available Storage (ft)	95th % Queue (ft)	Maximum Queue (ft)
#1 Airport Blvd & I-5 NB Ramps	**WBL**						
Existing (2023)		380	20	25	380	15	20
Existing (2023) plus Project			35	50		35	40
Cumulative (2040)			145	250		85	110
Cumulative (2040) plus Project			125	190		35	40
#2 Airport Blvd & I-5 SB Ramps	**EBR**						
Existing (2023)		-	45	50	-	60	65
Existing (2023) plus Project			60	60		60	60
Cumulative (2040)			50	50		60	65
Cumulative (2040) plus Project			65	65		60	70
#3 Airport Blvd & Bayou Way	**SBL**						
Existing (2023)		250	50	55	250	80	90
Existing (2023) plus Project			65	75		95	110
Cumulative (2040)			50	50		85	100
Cumulative (2040) plus Project			55	60		90	110
#6 Metro Air Pkwy & I-5 SB Ramps	**EBR**						
Existing (2023)		-	35	40	-	50	50
Existing (2023) plus Project			45	45		60	60
Cumulative (2040)			75	90		60	60
Cumulative (2040) plus Project			60	60		60	60
#7 Metro Air Pkwy @ I-5 NB Ramps	**WBL**						
Existing (2023)		155	40	40	155	75	115
Existing (2023) plus Project			65	80		100	130
Cumulative (2040)			660	660		655	655
Cumulative (2040) plus Project			535	600		620	645
	NBL						
Existing (2023)		105	25	30	105	15	20
Existing (2023) plus Project			25	30		20	30
Cumulative (2040)			80	110		55	65
Cumulative (2040) plus Project			90	105		70	95

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

While the reported westbound left queueing at Intersection #7 (Metro Air Parkway and Interstate 5 Northbound Ramps) under both Cumulative (2040) and Cumulative (2040) plus Project conditions, guidance from the California *Highway Design Manual*[10] indicates that the measured length of the northbound off-ramp from intersection stop bar to striped gore on Interstate 5 provides sufficient decision sight distance for a vehicle traveling 60 mph to stop prior to reaching the back of queue.

[10] Table 201.7, *Highway Design Manual, 7th Edition*, Caltrans, March 20, 2020.

Signal Warrant Analysis

A traffic signal warrant analysis was conducted for unsignalized study intersections included in this assessment under all scenarios using methodologies for Warrant 3 (Peak-Hour) published in the current version of the CAMUTCD[11]. While the Metro Air Parkway interchange with Interstate 5 (Intersection #6 and Intersection #7) is presently unsignalized, the County and Caltrans have determined that signals should be installed at both intersections based on observed queueing[9]. Design work on both signals has been commenced by the County with delivery targeted for 2025. As such, Intersection #6 and Intersection #7 are excluded from the signal warrant analysis.

Table 14 shows the results of the signal warrant analysis. Traffic signal warrant worksheets are provided in Appendix F.

Table 14 – CAMUTCD Signal Warrant Results

ID	Intersection	Control	Peak Hour	Signal Warrant Met?			
				Existing	Existing plus Project	Cumulative	Cumulative plus Project
1	Airport Blvd & I-5 NB Ramps	SSSC	AM	Yes	Yes	Yes	Yes
			PM	Yes	Yes	Yes	Yes
2	Airport Blvd & I-5 SB Ramps	SSSC	AM	No	Yes	No	Yes
			PM	Yes	Yes	Yes	Yes
3	Airport Blvd & Bayou Way	AWSC	AM	No	No	No	No
			PM	No	No	No	No
4	Bayou Way & Power Line Rd	SSSC	AM	No	Yes	No	Yes
			PM	Yes	Yes	Yes	Yes
5	Metro Air Pkwy & Bayou Way	AWSC	AM	No	No	No	No
			PM	No	No	No	No

While three of the five intersections presented in Table 14 satisfy the CAMUTCD Warrant 3, only Intersection #4 (Bayou Way and Power Line Road) exhibits intersection operations below the acceptable County standard under one of the analysis scenarios (Cumulative plus Project). The CAMUTCD[11] also states:

> *"The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal."*

As Intersection #1 and Intersection #2 are found to operate at acceptable levels of delay per County standards[1] both with and without the project under Existing and Cumulative conditions, it is not the sole responsibility of the project to signalize these facilities.

DEFICIENCIES AND IMPROVEMENTS

Standards of Deficiency

Sacramento County *Transportation Analysis Guidelines*[1] were referenced to identify project related deficiencies at the study facilities.

From the County guidelines, the following criteria were used:

> *"Signalized Intersections: A project is considered to have a significant effect if it would:*
> - *Result in a signalized intersection operating at an acceptable LOS to deteriorate to an unacceptable LOS; or*

[11] *Chapter 4C, California Manual on Uniform Traffic Control Devices, 2014 Edition, Revision 6*, Caltrans, March 30, 2021.

- *Increase the average delay by more than 5 seconds at a signalized intersection that is operating at an unacceptable LOS without the project.*

Unsignalized Intersections: A project is considered to have a significant effect if it would:

- *Result in an unsignalized intersection movement/approach operating an acceptable LOS to deteriorate to an unacceptable LOS, and also cause the intersection to meet a traffic signal warrant; or*
- *For an unsignalized intersection that meets a signal warrant, increase the delay by more than 5 seconds at a movement/approach that is operating at an unacceptable LOS without the project.*

Roadways Segments: A project is considered to have a significant effect if it would:

- *Result in a roadway segment operating at an acceptable LOS to deteriorate to an unacceptable LOS.*

Freeway Ramps: A project is considered to have a significant effect if it would:

- *Result in or significantly lengthen ramp queues exceeding storage capacity."*

As specified in the County's guidelines and identified in the Intersection and Roadway Segment analysis tables, the LOS threshold for the study facilities north of Interstate 5 is LOS E while the LOS threshold for study facilities south of Interstate 5 is LOS D. Thresholds have been included for reference in each of the intersection analysis summary tables.

Summary of Deficiencies and Improvements

Existing (2023) plus Project Conditions

As reflected in Table 7 and Table 8, the addition of the project does not result in deficient conditions. As a result, no improvements are required.

Cumulative (2040) plus Project Conditions

As reflected in Table 11, the addition of the project results in a deficiency at one (1) study intersection as defined by the County's standards. The following is a discussion of the deficiency and its associated improvement. Analysis worksheets for this scenario are provided in Appendix G.

Deficiencies:

D1. Intersection #4, Bayou Way and Power Line Road

As shown in Table 11, this intersection operates at LOS F, beyond the County's LOS threshold for Rural intersections, during the AM peak-hour with the addition of the project. Table 14 shows that the addition of the project results in CAMUTCD Warrant 3 being satisfied during the AM peak-hour. As such, this constitutes a significant project induced deficiency.

Improvements:

I1. Intersection #4, Bayou Way and Power Line Road

The ultimate configuration of this intersection is likely to change by the Cumulative year primarily due to proximate development within both Sacramento County and the City of Sacramento. Potential modifications may include signalization, re-routing the east leg of Bayou Way further to the south, a combination of both interventions, or an alternative solution. In coordination with County DOT[12], an improved scenario for the intersection was analyzed assuming installation of a traffic signal. As shown in Table 15, the improvement measure results in the intersection operating at LOS D and B during both the AM and PM peak-hours. Summary sheets showing assumed signal phasing, lane configurations, and volumes are provided in Appendix G.

[12] Email correspondence with Gary Gasperi, Sacramento County DOT, January 4, 2024.

Table 15 – Intersection Levels of Service - Cumulative (2040) plus Project - Improved Conditions

ID	Intersection	Peak Hour	Delay Threshold (LOS)	Control	Cumulative (2040) plus Project*		Cumulative (2040) plus Project - Improved	
					Delay (sec)	LOS	Delay (sec)	LOS
4	Airport South Industrial & Power Line Rd	AM	D	Signal	**83.9(344.2 EBL)**	**F(F)**	44.1	D
		PM			**56.6(90.1 EBT)**	**F(F)**	13.8	B

Note: Side Street Stop Controlled (SSSC) reported as intersection delay followed by worst movement's delay.
Bold represents unacceptable operations.
*Intersection analyzed as SSSC intersection under this scenario

As this modification has not been programmed at the time of this report, it is reasonable that the project contributes to the ultimate future intersection geometry solution through fair share payment to the County. Per Caltrans methodology[13], the project's fair share responsibility for the intersection improvement is 85% based on the relationship between the Project (T), Existing (T_E), and Cumulative plus Project (T_B) peak-hour volumes at the intersection. The AM peak-hour was determined to be the peak-hour of the facility based on total intersection traffic volume. Cumulative plus Project volumes were used for the T_B value as the project land use was not previously considered in the TDM. The formula is provided below:

$$P = \frac{T}{T_B - T_E}$$

Where:

P = Equitable share for the proposed project's traffic impact
T = Vehicle trips generated by the project during the peak-hour of the facility in vehicles per hour, vph
T_B = Forecasted traffic volume on the impacted facility at the time of general plan build-out (e.g. 20-year forecast), vph
T_E = Existing traffic volume on the impacted facility plus other approved projects that will generate traffic that have yet to be constructed/opened, vph

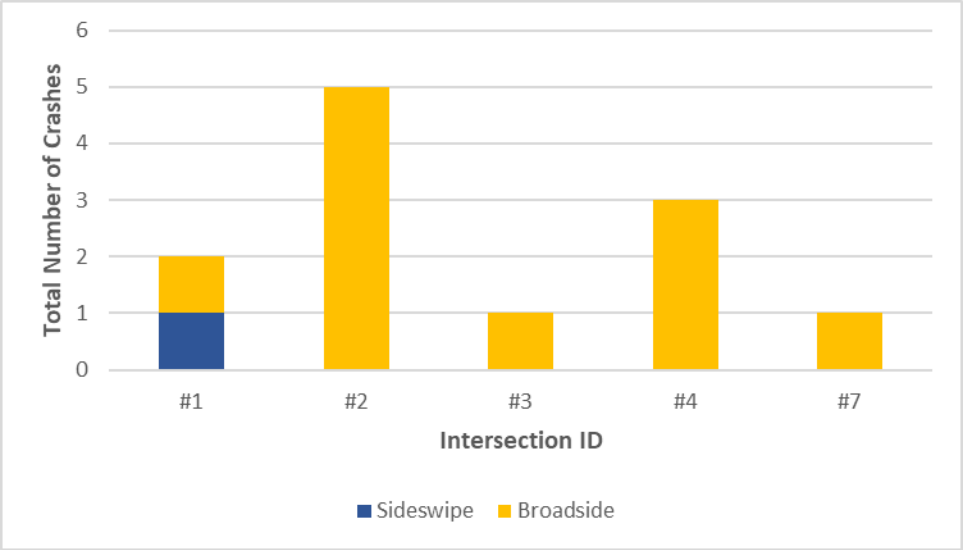
[13] *Guide for the Preparation of Traffic Impact Studies*, Caltrans, December 2002.

ACCESS AND SAFETY EVALUATION

Collision Data

All existing study intersections were investigated for crashes during the five-year period between August 1, 2018, and July 31, 2023. Five-year crash history from existing study intersections is presented based on collision data provided by the County[14]. The number of crashes at each study intersection are presented in Figure 13. The predominant crash type identified at the study intersections was broadside. These documented crashes resulted in one incidence of severe injury and no fatalities. The calculated crash rates for all study intersections fall below the documented state averages for similar facilities[15].

Figure 13 – Study Intersection Crash History (2018-2023)



The study Freeway Facilities were also investigated for crashes during the 3-year period between January 1, 2020 and December 31, 2022. Crash rates from the existing study freeway facilities are presented based on collision data obtained from Caltrans District 3[16]. The crash rates are presented in Table 16. As indicated in Table 16, the crash rates for two of the study freeway facilities (Facility A and Facility B) fall below the statewide averages for similar facilities. Facility C (Interstate 5 mainline, north of Airport Boulevard) exhibits a crash rate higher than the statewide average for similar facilities. The project is not anticipated to significantly alter these existing conditions.

Table 16 – Freeway Facility Crash Rates Summary

ID	Freeway Facilty	Actual Crash Rate[1] (per million vehicle miles)	Average Crash Rate[1] (per million vehicle miles)
C	Interstate 5 mainline, north of Airport Boulevard	0.62	0.53
D	Interstate 5 mainline, between Airport Boulevard and Metro Air Parkway	0.52	0.56
E	Interstate 5 mainline, south of Metro Air Parkway	0.25	0.88

[1] *Request for 3-Year Collision Analysis,* obtained from Caltrans District 3, August 17, 2023

[14] Email correspondence with Noel Pacheco, Sacramento County, August 16, 2023.
[15] *2019 Collision Data on California State Highways*, Caltrans, October 2021.
[16] *Request for 3-Year Collision Analysis*, obtained from Caltrans District 3, August 17,2023.

Proposed Project Access

Per the project site plan provided in Figure 2, truck and passenger vehicle access to the site is proposed to be provided from Bayou Way. The site is proposed to be segmented into three separate operational areas: west truck charging lot, central rest area and passenger vehicle charging lot, and east truck charging lot. Descriptions of access to each operational area are listed below:

- The west truck charging lot will be served via two driveways from Bayou Way. One driveway will be full-ingress while the other will be full-egress. The egress driveway is anticipated to be Side Street Stop Controlled (SSSC).
- The central rest area and passenger vehicle charging lot will be served via one full-access driveway on Bayou Way. The egress driveway is anticipated to be Side Street Stop Controlled (SSSC).
- The east truck charging lot will be served via two driveways from Bayou Way. One driveway will be full-ingress while the other will be full-egress. The egress driveway is anticipated to be Side Street Stop Controlled (SSSC).

The project proposes to widen Bayou Way along the project frontage to accommodate a two-way left-turn lane (TWLTL). While background traffic volumes along Bayou Way are anticipated to be relatively low, providing this additional space for vehicles to accelerate and decelerate will serve to facilitate orderly traffic flow and improve safety within the immediate project vicinity. Operational results for the project driveways are provided in Table 17. Analysis worksheets are provided in Appendix C and Appendix E. As shown in Table 17, all project driveways operate at LOS A.

Table 17 – Project Driveway Delay

ID	Intersection	Peak Hour	Delay Threshold (LOS)	Control	Existing (2023) plus Project		Cumulative (2040) plus Project	
					Delay (sec)	LOS	Delay (sec)	LOS
8	Full Ingress Dwy (West) & Bayou Way	AM	D	SSSC	0.7(2.6 WBL)	A(A)	0.9(2.5 WBL)	A(A)
		PM			0.9(5.2 WBL)	A(A)	1.3(4.7 WBL)	A(A)
9	Full Egress Dwy (West) & Bayou Way	AM		SSSC	1.3(5.9 NBL)	A(A)	1.3(5.5 NBL)	A(A)
		PM			1.5(8.3 NBL)	A(A)	1.6(6.9 NBL)	A(A)
10	Full Access Dwy (Central) & Bayou Way	AM		SSSC	0.4(7.4 NBL)	A(A)	1.1(8.3 NBL)	A(A)
		PM			0.7(9.4 NBL)	A(A)	1.6(9.5 NBL)	A(A)
11	Full Ingress Dwy (East) & Bayou Way	AM		SSSC	0.6(2.4 WBL)	A(A)	0.9(2.6 WBL)	A(A)
		PM			0.8(4.8 WBL)	A(A)	1.2(4.7 WBL)	A(A)
12	Full Egress Dwy (East) & Bayou Way	AM		SSSC	1.1(5.3 NBL)	A(A)	0.8(3.8 NBR)	A(A)
		PM			1.5(7.6 NBL)	A(A)	1.2(6.7 NBR)	A(A)

Note: Side Street Stop Controlled (SSSC) reported as intersection delay followed by worst movement's delay.
Bold represents unacceptable operations.

Per the project site plan (Figure 2), adequate sight distance will be provided on-site to facilitate safe and orderly circulation. The terrain is generally level, and the site plan does not propose structures or signage in locations anticipated to adversely affect vehicles entering and exiting the site. The project roadways are anticipated to allow for adequate access and on-site circulation of emergency vehicles. The number of parking spaces provided meets or exceeds County standards for similar land uses.

Truck Turning Movements

Consistent with the request of County DOT[12], WB-67 truck turning envelopes were developed for all relevant project movements at the study facilities included in this report. These turning movement exhibits are provided in Appendix H. Based on the generated truck turning movement envelopes, roadway widening improvements should be considered at the following existing facilities:

- East leg of Intersection #3 (Airport Boulevard and Bayou Way)
- North leg of Intersection #4 (Power Line Road and Bayou Way)
- North leg of Intersection #5 (Metro Air Parkway and Bayou Way)

CONCLUSIONS

Significant findings of this study include:

- The proposed project is estimated to generate 929 total daily trips, with 275 and 276 total trips in the AM and PM peak-hour, respectively for the Existing (2023) scenario.
- The proposed project is estimated to generate 1,769 total daily trips, with 339 and 340 total trips in the AM and PM peak-hour, respectively for the Cumulative (2040) scenario.
- The addition of the project does not result in deficiencies at any study intersections or roadway segments under Existing (2023) plus Project conditions. As defined by the County guidelines, the addition of the project contributes to a deficiency at Intersection #4 (Bayou Way and Power Line Road) under Cumulative (2040) plus Project conditions. The Cumulative (2040) year deficiency will be improved by future intersection modifications that are not formally programmed at the time of this study. It is acceptable that the project should contribute to these improvements via fair share payment to the County. Per Caltrans methodology[13], the project's fair share responsibility for the intersection improvement is 85%.
- Per data provided by the County, the existing roadway network proximate to the project site has a limited crash history. All study intersections exhibit a crash rate below the current statewide average for intersections of similar type. The project is not anticipated to significantly alter this existing condition.
- Per data provided by Caltrans District 3, all freeway facilities exhibit a crash rate below the statewide average for similar facility types except for Facility C (Interstate 5 mainline, north of Airport Boulevard). The project is not anticipated to significantly alter this existing condition.
- Per truck turning templates presented in Appendix H, roadway widening improvements should be considered at the following existing facilities:
    - East leg of Intersection #3 (Airport Boulevard and Bayou Way)
    - North leg of Intersection #4 (Power Line Road and Bayou Way)
    - North leg of Intersection #5 (Metro Air Parkway and Bayou Way)

Appendix A

Traffic Count Data Sheets

National Data & Surveying Services Intersection Turning Movement Count

Location: Airport Blvd & I-5 NB Ramps
City: Sacramento
Control: 1-Way Stop(WB)

Project ID: 23-070148-001
Date: 7/11/2023

Data - Total

NS/EW Streets:	Airport Blvd				Airport Blvd				I-5 NB Ramps				I-5 NB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	2	1	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	94	19	0	0	132	19	3	0	0	0	0	3	0	251	0	521
7:15 AM	0	80	9	0	0	171	32	7	0	0	0	0	1	0	259	0	559
7:30 AM	0	47	10	0	0	163	30	9	0	0	0	0	2	0	252	0	513
7:45 AM	0	50	4	1	0	159	18	8	0	0	0	0	2	0	234	0	476
8:00 AM	0	51	6	0	0	129	32	7	0	0	0	0	5	0	258	0	488
8:15 AM	0	47	10	3	0	147	29	6	0	0	0	0	3	0	252	0	497
8:30 AM	0	53	9	0	0	162	30	9	0	0	0	0	1	0	246	0	510
8:45 AM	0	55	5	1	0	231	38	16	0	0	0	0	0	0	238	0	584
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	477	72	5	0	1294	228	65	0	0	0	0	17	0	1990	0	4148
APPROACH %'s :	0.00%	86.10%	13.00%	0.90%	0.00%	81.54%	14.37%	4.10%					0.85%	0.00%	99.15%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	206	30	4	0	669	129	38	0	0	0	0	9	0	994	0	2079
PEAK HR FACTOR :	0.000	0.936	0.750	0.333	0.000	0.724	0.849	0.594	0.000	0.000	0.000	0.000	0.450	0.000	0.963	0.000	0.890
		0.968				0.733								0.953			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	2	1	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	49	3	1	0	243	33	9	0	0	0	0	1	0	198	0	537
4:15 PM	0	56	3	2	0	287	44	22	0	0	0	0	2	0	208	0	624
4:30 PM	0	41	7	1	0	311	42	14	0	0	0	0	0	0	227	0	643
4:45 PM	0	37	7	0	0	249	50	9	0	0	0	0	1	0	234	0	587
5:00 PM	0	35	3	1	0	214	32	11	0	0	0	0	0	0	161	0	457
5:15 PM	0	43	5	1	0	146	36	9	0	0	0	0	1	0	172	0	413
5:30 PM	0	32	3	2	0	181	27	11	0	0	0	0	0	0	165	0	421
5:45 PM	0	29	6	0	0	258	41	11	0	0	0	0	3	0	189	0	537
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	322	37	8	0	1889	305	96	0	0	0	0	8	0	1554	0	4219
APPROACH %'s :	0.00%	87.74%	10.08%	2.18%	0.00%	82.49%	13.32%	4.19%					0.51%	0.00%	99.49%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	183	20	4	0	1090	169	54	0	0	0	0	4	0	867	0	2391
PEAK HR FACTOR :	0.000	0.817	0.714	0.500	0.000	0.876	0.845	0.614	0.000	0.000	0.000	0.000	0.500	0.000	0.926	0.000	0.930
		0.848				0.894								0.927			

National Data & Surveying Services Intersection Turning Movement Count

Location: Airport Blvd & I-5 SB Ramps
City: Sacramento
Control: 1-Way Stop(EB)

Project ID: 23-070148-002
Date: 7/11/2023

Data - Total

NS/EW Streets:	Airport Blvd				Airport Blvd				I-5 SB Ramps				I-5 SB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	0	2	1	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	2	83	0	0	0	10	125	3	27	0	2	0	0	0	0	0	252
7:15 AM	2	40	0	0	0	8	161	3	47	0	2	1	0	0	0	0	264
7:30 AM	3	21	0	0	0	15	143	2	33	0	5	0	0	0	0	0	222
7:45 AM	2	14	0	0	0	10	152	5	38	0	5	0	0	0	0	0	226
8:00 AM	1	14	0	0	0	15	111	1	40	0	1	0	0	0	0	0	183
8:15 AM	1	20	0	0	0	11	146	3	39	0	7	0	0	0	0	0	227
8:30 AM	4	13	0	0	0	11	145	4	43	0	3	0	0	0	0	0	223
8:45 AM	2	10	0	0	0	8	227	0	51	0	2	0	0	0	0	0	300
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	17	215	0	0	0	88	1210	21	318	0	27	1	0	0	0	0	1897
APPROACH %'s :	7.33%	92.67%	0.00%	0.00%	0.00%	6.67%	91.74%	1.59%	91.91%	0.00%	7.80%	0.29%					
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	9	158	0	0	0	43	581	13	145	0	14	1	0	0	0	0	964
PEAK HR FACTOR :	0.750	0.476	0.000	0.000	0.000	0.717	0.902	0.650	0.771	0.000	0.700	0.250	0.000	0.000	0.000	0.000	0.913
	0.491				0.926				0.800								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	0	2	1	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	17	0	1	0	26	219	1	37	0	41	0	0	0	0	0	342
4:15 PM	1	23	0	0	0	48	237	4	32	0	44	0	0	0	0	0	389
4:30 PM	0	13	0	0	0	53	256	5	31	0	38	0	0	0	0	0	396
4:45 PM	0	13	0	0	0	32	215	1	34	0	47	0	0	0	0	0	342
5:00 PM	0	7	0	0	0	23	192	2	27	0	42	0	0	0	0	0	293
5:15 PM	0	10	0	0	0	22	123	1	37	0	39	0	0	0	0	0	232
5:30 PM	3	10	0	0	0	20	163	2	25	0	28	0	0	0	0	0	251
5:45 PM	0	11	0	0	0	18	239	2	22	0	18	0	0	0	0	0	310
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	4	104	0	1	0	242	1644	18	245	0	297	0	0	0	0	0	2555
APPROACH %'s :	3.67%	95.41%	0.00%	0.92%	0.00%	12.71%	86.34%	0.95%	45.20%	0.00%	54.80%	0.00%					
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	1	66	0	1	0	159	927	11	134	0	170	0	0	0	0	0	1469
PEAK HR FACTOR :	0.250	0.717	0.000	0.250	0.000	0.750	0.905	0.550	0.905	0.000	0.904	0.000	0.000	0.000	0.000	0.000	0.927
	0.708				0.873				0.938								

National Data & Surveying Services Intersection Turning Movement Count

Location: Airport Blvd & Bayou Way
City: Sacramento
Control: 3-Way Stop(SB/EB/WB)

Project ID: 23-070148-003
Date: 7/11/2023

Data - Total

NS/EW Streets:	Airport Blvd				Airport Blvd				Bayou Way				Bayou Way				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	2	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	7	0	0	5	1	0	0	0	0	0	81	0	94
7:15 AM	0	0	0	0	6	0	0	3	1	0	0	0	0	0	36	0	46
7:30 AM	0	0	0	0	8	0	4	7	1	0	0	0	0	0	16	0	36
7:45 AM	0	0	0	0	11	0	1	5	2	1	0	0	0	0	9	0	29
8:00 AM	0	0	0	0	9	0	1	6	0	0	0	0	0	0	10	0	26
8:15 AM	0	0	0	0	6	0	0	11	2	0	0	0	0	0	7	0	26
8:30 AM	0	0	0	0	6	0	0	9	0	0	0	0	0	0	9	0	24
8:45 AM	0	0	0	0	4	0	2	2	0	1	0	0	0	0	9	0	18
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	57	0	8	48	7	2	0	0	0	0	177	0	299
APPROACH %'s :					50.44%	0.00%	7.08%	42.48%	77.78%	22.22%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	32	0	5	20	5	1	0	0	0	0	142	0	205
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.727	0.000	0.313	0.714	0.625	0.250	0.000	0.000	0.000	0.000	0.438	0.000	0.545
					0.750				0.500				0.438				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	2	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	51	0	1	15	2	0	0	0	0	1	4	0	74
4:15 PM	0	0	0	0	73	0	1	16	2	0	0	0	0	0	3	0	95
4:30 PM	0	0	0	0	83	0	3	8	0	2	0	0	0	0	8	0	104
4:45 PM	0	0	0	0	73	0	0	2	0	0	0	0	0	0	8	0	83
5:00 PM	0	0	0	0	61	0	0	5	0	0	0	0	0	0	4	0	70
5:15 PM	0	0	0	0	60	0	0	4	0	0	0	0	0	0	5	0	69
5:30 PM	0	0	0	0	38	0	0	9	0	0	0	0	0	0	3	0	50
5:45 PM	0	0	0	0	33	0	0	4	0	0	0	0	0	0	7	0	44
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	472	0	5	63	4	2	0	0	0	1	42	0	589
APPROACH %'s :					87.41%	0.00%	0.93%	11.67%	66.67%	33.33%	0.00%	0.00%	0.00%	2.33%	97.67%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	280	0	5	41	4	2	0	0	0	1	23	0	356
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.843	0.000	0.417	0.641	0.500	0.250	0.000	0.000	0.000	0.250	0.719	0.000	0.856
					0.867				0.750				0.750				

National Data & Surveying Services Intersection Turning Movement Count

Location: Power Line Rd & Bayou Way
City: Sacramento
Control: 2-Way Stop(EB/WB)

Project ID: 23-070148-004
Date: 7/11/2023

Data - Total

NS/EW Streets:	Power Line Rd				Power Line Rd				Bayou Way				Bayou Way				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	71	0	4	0	0	0	0	0	0	1	5	0	3	9	0	1	94
7:15 AM	25	0	1	0	0	0	0	0	0	1	6	0	0	11	0	0	44
7:30 AM	9	0	0	0	0	0	0	0	0	3	4	0	1	7	0	0	24
7:45 AM	10	0	2	0	0	0	0	0	0	5	7	0	3	0	0	0	27
8:00 AM	5	0	0	0	0	0	0	0	0	4	5	0	0	4	0	0	18
8:15 AM	4	0	0	0	0	0	0	0	0	2	5	0	1	3	0	0	15
8:30 AM	9	0	1	0	0	0	0	0	0	2	3	0	6	1	0	0	22
8:45 AM	5	0	2	0	0	0	0	0	0	2	4	0	0	4	0	1	18
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	138	0	10	0	0	0	0	0	0	20	39	0	14	39	0	2	262
APPROACH %'s :	93.24%	0.00%	6.76%	0.00%					0.00%	33.90%	66.10%	0.00%	25.45%	70.91%	0.00%	3.64%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	115	0	7	0	0	0	0	0	0	10	22	0	7	27	0	1	189
PEAK HR FACTOR :	0.405	0.000	0.438	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.786	0.000	0.583	0.614	0.000	0.250	0.503
	0.407				0.000				0.667				0.673				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	2	0	0	0	0	0	0	0	0	27	31	0	2	2	0	0	64
4:15 PM	3	0	4	0	0	0	0	0	0	41	32	0	1	0	0	0	81
4:30 PM	8	0	4	0	0	0	0	0	0	47	34	1	0	2	0	0	96
4:45 PM	5	0	14	0	0	0	0	0	0	51	25	0	3	0	0	0	98
5:00 PM	4	0	1	0	0	0	0	0	0	35	26	0	0	0	0	0	66
5:15 PM	4	0	7	0	0	0	0	0	0	33	27	0	2	1	0	0	74
5:30 PM	2	0	7	0	0	0	0	0	0	20	16	0	5	1	0	0	51
5:45 PM	6	0	6	0	0	0	0	0	0	24	11	0	1	1	0	2	51
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	34	0	43	0	0	0	0	0	0	278	202	1	14	7	0	2	581
APPROACH %'s :	44.16%	0.00%	55.84%	0.00%					0.00%	57.80%	42.00%	0.21%	60.87%	30.43%	0.00%	8.70%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	20	0	23	0	0	0	0	0	0	174	117	1	4	2	0	0	341
PEAK HR FACTOR :	0.625	0.000	0.411	0.000	0.000	0.000	0.000	0.000	0.000	0.853	0.860	0.250	0.333	0.250	0.000	0.000	0.870
	0.566				0.000				0.890				0.500				

National Data & Surveying Services Intersection Turning Movement Count

Location: Metro Air Pkwy & Bayou Way
City: Sacramento
Control: 3-Way Stop(SB/EB/WB)

Project ID: 23-070148-005
Date: 7/11/2023

Data - Total

NS/EW Streets:	Metro Air Pkwy				Metro Air Pkwy				Bayou Way				Bayou Way				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	5	0	2	0	5	2	0	0	0	8	47	0	69
7:15 AM	0	0	0	0	2	0	5	0	2	0	0	0	0	7	18	0	34
7:30 AM	0	0	0	0	2	0	5	0	2	0	0	0	0	2	13	0	24
7:45 AM	0	0	0	0	4	0	4	0	6	1	0	0	0	0	8	0	23
8:00 AM	0	0	0	0	2	0	3	0	3	1	0	0	0	0	5	0	14
8:15 AM	0	0	0	0	5	0	2	0	1	1	0	0	0	2	8	0	19
8:30 AM	0	0	0	0	4	0	8	0	3	1	0	0	0	0	5	0	21
8:45 AM	0	0	0	0	3	0	4	0	5	0	0	0	0	1	5	0	18
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	27	0	33	0	27	6	0	0	0	20	109	0	222
APPROACH %'s :					45.00%	0.00%	55.00%	0.00%	81.82%	18.18%	0.00%	0.00%	0.00%	15.50%	84.50%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	13	0	16	0	15	3	0	0	0	17	86	0	150
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.650	0.000	0.800	0.000	0.625	0.375	0.000	0.000	0.000	0.531	0.457	0.000	0.543
					0.906				0.643				0.468				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	4	0	3	0	24	4	0	0	0	1	5	0	41
4:15 PM	0	0	0	0	2	0	1	1	33	11	0	0	0	0	0	0	48
4:30 PM	0	0	0	0	6	0	1	0	43	9	0	0	0	1	7	0	67
4:45 PM	0	0	0	0	4	0	2	0	47	15	0	0	0	1	5	0	74
5:00 PM	0	0	0	0	5	0	0	0	31	8	0	0	0	0	5	0	49
5:15 PM	0	0	0	0	10	0	3	1	31	8	0	0	0	0	4	0	57
5:30 PM	0	0	0	0	8	0	6	0	26	2	0	0	0	0	7	0	49
5:45 PM	0	0	0	0	8	0	2	0	25	6	0	0	0	2	10	0	53
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	47	0	18	2	260	63	0	0	0	5	43	0	438
APPROACH %'s :					70.15%	0.00%	26.87%	2.99%	80.50%	19.50%	0.00%	0.00%	0.00%	10.42%	89.58%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	25	0	6	1	152	40	0	0	0	2	21	0	247
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.625	0.000	0.500	0.250	0.809	0.667	0.000	0.000	0.000	0.500	0.750	0.000	0.834
					0.571				0.774				0.719				

National Data & Surveying Services Intersection Turning Movement Count

Location: Metro Air Pkwy & I-5 SB Ramps
City: Sacramento
Control: 1-Way Stop(EB)

Project ID: 23-070148-006
Date: 7/11/2023

Data - Total

NS/EW Streets:	Metro Air Pkwy				Metro Air Pkwy				I-5 SB Ramps				I-5 SB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	1	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	3	48	0	0	0	6	28	0	11	0	1	0	0	0	0	0	97
7:15 AM	0	21	0	0	0	7	24	0	11	0	0	0	0	0	0	0	63
7:30 AM	0	15	0	0	0	5	39	0	9	0	2	0	0	0	0	0	70
7:45 AM	1	13	0	0	0	5	34	0	7	0	3	0	0	0	0	0	63
8:00 AM	0	8	0	0	0	5	57	0	7	0	0	0	0	0	0	0	77
8:15 AM	0	9	0	0	0	2	26	0	6	0	5	1	0	0	0	0	49
8:30 AM	3	5	0	0	0	10	29	0	7	0	2	0	0	0	0	0	56
8:45 AM	0	10	0	0	0	5	30	0	7	0	2	0	0	0	0	0	54
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	7	129	0	0	0	45	267	0	65	0	15	1	0	0	0	0	529
APPROACH %'s :	5.15%	94.85%	0.00%	0.00%	0.00%	14.42%	85.58%	0.00%	80.25%	0.00%	18.52%	1.23%					
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	4	97	0	0	0	23	125	0	38	0	6	0	0	0	0	0	293
PEAK HR FACTOR :	0.333	0.505	0.000	0.000	0.000	0.821	0.801	0.000	0.864	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.755
	0.495				0.841				0.917								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	1	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	7	21	0	0	0	7	41	0	13	0	1	0	0	0	0	0	90
4:15 PM	14	21	0	0	0	1	38	0	11	0	2	1	0	0	0	0	88
4:30 PM	19	29	0	0	0	6	27	0	10	0	1	0	0	0	0	0	92
4:45 PM	24	29	0	0	0	3	37	0	13	0	2	0	0	0	0	0	108
5:00 PM	15	22	0	0	0	2	61	0	7	0	5	1	0	0	0	0	113
5:15 PM	9	27	0	0	0	4	29	0	13	0	8	0	0	0	0	0	90
5:30 PM	1	32	0	0	0	10	71	0	18	0	4	0	0	0	0	0	136
5:45 PM	3	32	0	0	0	8	67	0	32	0	2	1	0	0	0	0	145
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	92	213	0	0	0	41	371	0	117	0	25	3	0	0	0	0	862
APPROACH %'s :	30.16%	69.84%	0.00%	0.00%	0.00%	9.95%	90.05%	0.00%	80.69%	0.00%	17.24%	2.07%					
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	28	113	0	0	0	24	228	0	70	0	19	2	0	0	0	0	484
PEAK HR FACTOR :	0.467	0.883	0.000	0.000	0.000	0.600	0.803	0.000	0.547	0.000	0.594	0.500	0.000	0.000	0.000	0.000	0.834
	0.953				0.778				0.650								

National Data & Surveying Services Intersection Turning Movement Count

Location: Metro Air Pkwy & I-5 NB Ramps
City: Sacramento
Control: 1-Way Stop(WB)

Project ID: 23-070148-007
Date: 7/11/2023

Data - Total

NS/EW Streets:	Metro Air Pkwy				Metro Air Pkwy				I-5 NB Ramps				I-5 NB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	0	1	1	0	0	0	0	0	0.5	0.5	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	23	33	0	0	0	30	33	0	0	0	0	0	2	1	69	0	191
7:15 AM	16	19	0	0	0	28	23	0	0	0	0	0	3	2	56	0	147
7:30 AM	10	14	0	0	0	41	25	0	0	0	0	0	4	7	49	0	150
7:45 AM	7	13	0	0	0	38	28	0	0	0	0	0	1	3	43	0	133
8:00 AM	5	10	0	0	0	56	27	0	0	0	0	0	5	2	47	0	152
8:15 AM	7	7	0	0	0	27	13	0	0	0	0	0	3	2	38	0	97
8:30 AM	5	8	0	0	0	33	19	0	0	0	0	0	4	2	34	0	105
8:45 AM	4	12	0	0	0	33	18	0	0	0	0	0	2	5	35	0	109
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	77	116	0	0	0	286	186	0	0	0	0	0	24	24	371	0	1084
APPROACH %'s :	39.90%	60.10%	0.00%	0.00%	0.00%	60.59%	39.41%	0.00%					5.73%	5.73%	88.54%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	56	79	0	0	0	137	109	0	0	0	0	0	10	13	217	0	621
PEAK HR FACTOR :	0.609	0.598	0.000	0.000	0.000	0.835	0.826	0.000	0.000	0.000	0.000	0.000	0.625	0.464	0.786	0.000	0.813
	0.603				0.932								0.833				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	0	1	1	0	0	0	0	0	0.5	0.5	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	2	32	0	0	0	43	17	0	0	0	0	0	4	2	18	0	118
4:15 PM	1	31	0	0	0	35	12	0	0	0	0	0	4	4	21	0	108
4:30 PM	6	33	0	0	0	33	12	0	0	0	0	0	0	0	30	0	114
4:45 PM	8	33	0	0	0	34	6	0	0	0	0	0	6	3	46	0	136
5:00 PM	1	29	0	0	0	61	12	0	0	0	0	0	2	2	57	0	164
5:15 PM	0	40	0	0	0	34	4	0	0	0	0	0	2	0	89	0	169
5:30 PM	3	47	0	0	0	78	13	0	0	0	0	0	0	2	157	0	300
5:45 PM	4	59	0	0	0	72	13	0	0	0	0	0	5	2	161	0	316
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	25	304	0	0	0	390	89	0	0	0	0	0	23	15	579	0	1425
APPROACH %'s :	7.60%	92.40%	0.00%	0.00%	0.00%	81.42%	18.58%	0.00%					3.73%	2.43%	93.84%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	8	175	0	0	0	245	42	0	0	0	0	0	9	6	464	0	949
PEAK HR FACTOR :	0.500	0.742	0.000	0.000	0.000	0.785	0.808	0.000	0.000	0.000	0.000	0.000	0.450	0.750	0.720	0.000	0.751
	0.726				0.788								0.713				

Prepared by NDS/ATD

VOLUME

Bayou Way Bet. Airport Rd & Power Line Rd

Day: Tuesday
Date: 7/11/2023

City: Sacramento
Project #: CA23_070149_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,410	745	2,155

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00			2		2		4		12:00			9		3		12	
0:15			5		0		5		12:15			18		13		31	
0:30			3		3		6		12:30			13		9		22	
0:45			2	12	1	6	3	18	12:45			20	60	9	34	29	94
1:00			2		3		5		13:00			14		7		21	
1:15			2		0		2		13:15			16		10		26	
1:30			4		1		5		13:30			17		5		22	
1:45			1	9	0	4	1	13	13:45			14	61	12	34	26	95
2:00			0		0		0		14:00			19		7		26	
2:15			0		0		0		14:15			31		2		33	
2:30			3		0		3		14:30			67		7		74	
2:45			0	3	1	1	1	4	14:45			112	229	6	22	118	251
3:00			1		2		3		15:00			75		5		80	
3:15			0		3		3		15:15			28		5		33	
3:30			6		8		14		15:30			56		9		65	
3:45			1	8	1	14	2	22	15:45			38	197	9	28	47	225
4:00			2		2		4		16:00			57		4		61	
4:15			0		1		1		16:15			68		3		71	
4:30			2		1		3		16:30			82		11		93	
4:45			2	6	4	8	6	14	16:45			75	282	5	23	80	305
5:00			2		2		4		17:00			64		4		68	
5:15			3		5		8		17:15			65		5		70	
5:30			4		6		10		17:30			36		3		39	
5:45			4	13	6	19	10	32	17:45			33	198	9	21	42	219
6:00			7		7		14		18:00			24		5		29	
6:15			9		34		43		18:15			17		6		23	
6:30			5		66		71		18:30			4		10		14	
6:45			4	25	58	165	62	190	18:45			10	55	11	32	21	87
7:00			6		79		85		19:00			6		2		8	
7:15			7		32		39		19:15			10		3		13	
7:30			8		15		23		19:30			9		2		11	
7:45			12	33	12	138	24	171	19:45			5	30	3	10	8	40
8:00			9		9		18		20:00			2		2		4	
8:15			6		7		13		20:15			4		0		4	
8:30			5		11		16		20:30			7		3		10	
8:45			7	27	9	36	16	63	20:45			5	18	5	10	10	28
9:00			3		4		7		21:00			3		1		4	
9:15			6		7		13		21:15			2		3		5	
9:30			8		9		17		21:30			5		2		7	
9:45			7	24	7	27	14	51	21:45			5	15	1	7	6	22
10:00			5		8		13		22:00			9		3		12	
10:15			9		14		23		22:15			3		3		6	
10:30			6		14		20		22:30			3		4		7	
10:45			8	28	9	45	17	73	22:45			2	17	3	13	5	30
11:00			10		11		21		23:00			4		3		7	
11:15			20		8		28		23:15			2		1		3	
11:30			7		6		13		23:30			2		4		6	
11:45			9	46	10	35	19	81	23:45			6	14	5	13	11	27
TOTALS				234		498		732	TOTALS				1176		247		1423
SPLIT %				32.0%		68.0%		34.0%	SPLIT %				82.6%		17.4%		66.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,410	745	2,155

AM Peak Hour			11:45	6:15	6:15	PM Peak Hour			16:15	12:15	16:15
AM Pk Volume			49	237	261	PM Pk Volume			289	38	312
Pk Hr Factor			0.681	0.750	0.768	Pk Hr Factor			0.881	0.731	0.839
7 - 9 Volume	0	0	60	174	234	4 - 6 Volume	0	0	480	44	524
7 - 9 Peak Hour			7:15	7:00	7:00	4 - 6 Peak Hour			16:15	16:30	16:15
7 - 9 Pk Volume	0	0	36	138	171	4 - 6 Pk Volume	0	0	289	25	312
Pk Hr Factor	0.000	0.000	0.750	0.437	0.503	Pk Hr Factor	0.000	0.000	0.881	0.568	0.839

Prepared by NDS/ATD

VOLUME

Bayou Way Bet. Power Line Rd & Metro Air Pkwy

Day: Tuesday
Date: 7/11/2023

City: Sacramento
Project #: CA23_070149_002

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	977	306	1,283

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00			2		2		4		12:00			3		2		5	
0:15			1		0		1		12:15			17		3		20	
0:30			2		1		3		12:30			9		6		15	
0:45			2	7	1	4	3	11	12:45			4	33	5	16	9	49
1:00			2		0		2		13:00			5		2		7	
1:15			1		1		2		13:15			9		5		14	
1:30			1		0		1		13:30			10		4		14	
1:45			2	6	0	1	2	7	13:45			9	33	5	16	14	49
2:00			0		0		0		14:00			12		6		18	
2:15			0		0		0		14:15			15		1		16	
2:30			1		0		1		14:30			50		4		54	
2:45			0	1	1	1	1	2	14:45			87	164	4	15	91	179
3:00			1		0		1		15:00			50		2		52	
3:15			0		0		0		15:15			21		2		23	
3:30			4		3		7		15:30			35		2		37	
3:45			1	6	1	4	2	10	15:45			23	129	4	10	27	139
4:00			2		0		2		16:00			29		4		33	
4:15			1		1		2		16:15			40		1		41	
4:30			2		1		3		16:30			52		2		54	
4:45			1	6	4	6	5	12	16:45			62	183	2	9	64	192
5:00			0		4		4		17:00			39		0		39	
5:15			3		4		7		17:15			46		3		49	
5:30			2		4		6		17:30			27		6		33	
5:45			5	10	2	14	7	24	17:45			28	140	5	14	33	154
6:00			9		5		14		18:00			20		5		25	
6:15			11		10		21		18:15			14		6		20	
6:30			9		13		22		18:30			3		9		12	
6:45			7	36	13	41	20	77	18:45			6	43	10	30	16	73
7:00			6		11		17		19:00			4		1		5	
7:15			2		6		8		19:15			4		2		6	
7:30			2		7		9		19:30			2		2		4	
7:45			7	17	5	29	12	46	19:45			7	17	1	6	8	23
8:00			5		4		9		20:00			2		2		4	
8:15			1		4		5		20:15			6		2		8	
8:30			4		8		12		20:30			6		1		7	
8:45			8	18	4	20	12	38	20:45			4	18	0	5	4	23
9:00			1		0		1		21:00			3		2		5	
9:15			4		3		7		21:15			5		2		7	
9:30			5		8		13		21:30			4		0		4	
9:45			6	16	3	14	9	30	21:45			2	14	1	5	3	19
10:00			4		8		12		22:00			7		0		7	
10:15			8		6		14		22:15			2		1		3	
10:30			5		2		7		22:30			3		1		4	
10:45			10	27	2	18	12	45	22:45			3	15	0	2	3	17
11:00			5		3		8		23:00			3		3		6	
11:15			7		4		11		23:15			3		1		4	
11:30			9		5		14		23:30			2		3		5	
11:45			5	26	6	18	11	44	23:45			4	12	1	8	5	20
TOTALS				176		170		346	TOTALS				801		136		937
SPLIT %				50.9%		49.1%		27.0%	SPLIT %				85.5%		14.5%		73.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	977	306	1,283

AM Peak Hour			6:00	6:15	6:15	PM Peak Hour		14:30	18:00	14:30
AM Pk Volume			36	47	80	PM Pk Volume		208	30	220
Pk Hr Factor			0.818	0.904	0.909	Pk Hr Factor		0.598	0.750	0.604
7 - 9 Volume	0	0	35	49	84	4 - 6 Volume	0	323	23	346
7 - 9 Peak Hour			8:00	7:00	7:00	4 - 6 Peak Hour		16:30	17:00	16:30
7 - 9 Pk Volume	0	0	18	29	46	4 - 6 Pk Volume	0	199	14	206
Pk Hr Factor	0.000	0.000	0.563	0.659	0.676	Pk Hr Factor	0.000	0.802	0.583	0.805

Appendix B

Analysis Worksheets for Existing (2023) Conditions

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	6:50	6:50	6:50	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	3412	3427	3417	3352	3444	3453	3386
Vehs Exited	3415	3444	3427	3344	3430	3472	3402
Starting Vehs	53	63	54	41	45	60	60
Ending Vehs	50	46	44	49	59	41	44
Travel Distance (mi)	1183	1183	1185	1152	1183	1201	1183
Travel Time (hr)	50.5	51.1	50.7	49.0	50.3	51.3	50.7
Total Delay (hr)	8.2	8.6	8.3	7.8	8.1	8.4	8.3
Total Stops	1097	1125	1108	1100	1097	1136	1112
Fuel Used (gal)	43.2	43.7	43.1	42.1	43.3	43.8	43.3

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	3357	3544	3433	3423
Vehs Exited	3356	3546	3442	3427
Starting Vehs	57	45	51	48
Ending Vehs	58	43	42	43
Travel Distance (mi)	1157	1230	1192	1185
Travel Time (hr)	49.7	53.1	51.2	50.7
Total Delay (hr)	8.1	9.0	8.5	8.3
Total Stops	1105	1173	1116	1116
Fuel Used (gal)	42.7	45.4	43.5	43.4

Interval #0 Information Seeding

Start Time	6:50
End Time	7:00
Total Time (min)	10

Volumes adjusted by Growth Factors.
No data recorded this interval.

Interval #1 Information

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	882	878	867	837	840	851	837
Vehs Exited	881	893	856	832	833	858	849
Starting Vehs	53	63	54	41	45	60	60
Ending Vehs	54	48	65	46	52	53	48
Travel Distance (mi)	300	303	300	281	290	298	299
Travel Time (hr)	12.8	13.2	12.9	11.9	12.2	12.7	12.8
Total Delay (hr)	2.1	2.3	2.1	1.9	1.8	2.1	2.1
Total Stops	284	299	302	269	272	287	300
Fuel Used (gal)	10.9	11.1	11.0	10.3	10.5	10.8	10.9

Interval #1 Information

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	798	933	850	857
Vehs Exited	811	923	855	862
Starting Vehs	57	45	51	48
Ending Vehs	44	55	46	44
Travel Distance (mi)	274	321	297	296
Travel Time (hr)	11.7	14.0	12.8	12.7
Total Delay (hr)	1.9	2.5	2.2	2.1
Total Stops	230	311	252	283
Fuel Used (gal)	10.1	12.1	10.8	10.8

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	871	876	867	858	861	881	893
Vehs Exited	871	863	883	853	847	877	885
Starting Vehs	54	48	65	46	52	53	48
Ending Vehs	54	61	49	51	66	57	56
Travel Distance (mi)	302	298	306	295	294	301	306
Travel Time (hr)	13.0	12.8	13.2	12.7	12.5	13.1	13.2
Total Delay (hr)	2.3	2.2	2.2	2.1	1.9	2.3	2.3
Total Stops	274	273	277	276	277	284	288
Fuel Used (gal)	11.1	11.0	11.2	10.6	10.8	11.1	11.2

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	822	900	848	865
Vehs Exited	820	916	846	865
Starting Vehs	44	55	46	44
Ending Vehs	46	39	48	47
Travel Distance (mi)	284	313	296	300
Travel Time (hr)	12.0	13.5	12.6	12.9
Total Delay (hr)	1.8	2.2	2.0	2.1
Total Stops	272	305	316	279
Fuel Used (gal)	10.4	11.6	10.9	11.0

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	849	858	832	850	853	859	829
Vehs Exited	846	872	840	861	862	862	841
Starting Vehs	54	61	49	51	66	57	56
Ending Vehs	57	47	41	40	57	54	44
Travel Distance (mi)	296	303	289	295	293	302	293
Travel Time (hr)	12.6	13.0	12.3	12.5	12.5	12.8	12.7
Total Delay (hr)	2.0	2.2	2.0	2.0	2.1	2.0	2.2
Total Stops	280	270	257	290	262	311	247
Fuel Used (gal)	11.0	11.2	10.3	10.7	10.8	11.0	10.9

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	837	841	871	848
Vehs Exited	825	840	871	851
Starting Vehs	46	39	48	47
Ending Vehs	58	40	48	42
Travel Distance (mi)	294	294	299	296
Travel Time (hr)	12.7	12.4	13.0	12.7
Total Delay (hr)	2.2	2.0	2.2	2.1
Total Stops	288	276	288	277
Fuel Used (gal)	10.9	10.7	10.9	10.8

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	810	815	851	807	890	862	827
Vehs Exited	817	816	848	798	888	875	827
Starting Vehs	57	47	41	40	57	54	44
Ending Vehs	50	46	44	49	59	41	44
Travel Distance (mi)	284	279	291	281	306	300	285
Travel Time (hr)	12.1	12.0	12.3	11.9	13.1	12.8	12.0
Total Delay (hr)	1.9	1.9	2.0	1.8	2.2	2.1	1.8
Total Stops	259	283	272	265	286	254	277
Fuel Used (gal)	10.2	10.4	10.6	10.3	11.3	10.9	10.3

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	900	870	864	848
Vehs Exited	900	867	870	850
Starting Vehs	58	40	48	42
Ending Vehs	58	43	42	43
Travel Distance (mi)	305	303	300	293
Travel Time (hr)	13.2	13.1	12.8	12.5
Total Delay (hr)	2.2	2.3	2.2	2.0
Total Stops	315	281	260	271
Fuel Used (gal)	11.3	11.0	10.9	10.7

1: Airport Blvd & I-5 NB Ramps Performance by movement

Movement	WBL	WBR	NBT	NBR	SBU	SBT	SBR	All
Denied Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.2
Denied Del/Veh (s)	0.2	0.5	0.0	0.0	0.2	0.4	0.5	0.4
Total Delay (hr)	0.0	1.9	0.0	0.0	0.0	0.5	0.1	2.5
Total Del/Veh (s)	10.4	6.8	0.3	2.3	3.6	2.7	1.7	4.2
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Stop Del/Veh (s)	8.7	0.0	0.0	0.0	3.2	0.0	0.0	0.1

2: Airport Blvd & I-5 SB Ramps Performance by movement

Movement	EBU	EBL	EBR	NBL	NBT	SBU	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)		0.2	3.5	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay (hr)	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.9	1.3
Total Del/Veh (s)		7.8	4.0	2.3	0.6	2.0	1.9	5.5	4.6
Stop Delay (hr)	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Stop Del/Veh (s)		5.4	3.5	0.6	0.3	1.9	0.0	0.0	0.9

3: Bayou Way & Airport Blvd Performance by movement

Movement	EBL	EBT	WBR	SBU	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.2	0.0	0.0	0.0	0.1
Total Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.0	0.2
Total Del/Veh (s)	4.0	6.6	3.6	2.5	4.2	2.2	3.3
Stop Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.0	0.2
Stop Del/Veh (s)	2.5	3.0	2.6	2.3	2.4	2.1	2.4

4: Powerline Rd & Bayou Way Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.1	0.1		0.1	0.2	0.2	0.2	0.2	0.2
Total Delay (hr)	0.1	0.1	0.1	0.0	0.2	0.1	0.1	0.0	0.2	0.8
Total Del/Veh (s)	9.1	11.6	5.3		11.6	3.0	4.1	0.8	2.6	4.7
Stop Delay (hr)	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.3
Stop Del/Veh (s)	6.9	6.2	4.4		6.2	1.3	0.1	0.2	0.0	1.9

5: Bayou Way & Metro Air Pkwy Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.0	0.0	0.1
Total Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.0	0.1
Total Del/Veh (s)	4.5	4.9	6.1	3.1	3.9	1.9	3.5
Stop Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.0	0.1
Stop Del/Veh (s)	2.7	2.3	2.6	2.3	2.4	2.0	2.4

6: Metro Air Pkwy & I-5 SB Ramps Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	4.2	0.0	0.0	0.0	0.0	0.1
Total Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.1	0.1
Total Del/Veh (s)	5.3	2.8	1.7	0.4	0.4	1.9	1.7
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stop Del/Veh (s)	3.3	3.2	0.2	0.2	0.0	0.0	0.6

7: Metro Air Pkwy & I-5 NB Ramps Performance by movement

Movement	WBL	WBT	WBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.4
Denied Del/Veh (s)	0.5	0.6	3.8	0.0	0.0	0.4	3.7	2.1
Total Delay (hr)	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.3
Total Del/Veh (s)	5.6	6.9	3.7	2.0	0.8	0.2	0.3	1.9
Stop Delay (hr)	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2
Stop Del/Veh (s)	3.6	3.5	2.8	0.3	0.1	0.0	0.0	1.1

Total Network Performance

Denied Delay (hr)	0.7
Denied Del/Veh (s)	0.7
Total Delay (hr)	7.7
Total Del/Veh (s)	8.0
Stop Delay (hr)	1.2
Stop Del/Veh (s)	1.3

Intersection: 1: Airport Blvd & I-5 NB Ramps

Movement	WB	WB	SB	SB
Directions Served	LT	R	UT	TR
Maximum Queue (ft)	22	18	55	21
Average Queue (ft)	5	1	14	1
95th Queue (ft)	19	14	44	12
Link Distance (ft)	764	764	639	639
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Airport Blvd & I-5 SB Ramps

Movement	EB	EB	NB	SB	SB	SB
Directions Served	UL	R	LT	UT	T	R
Maximum Queue (ft)	93	46	24	30	6	25
Average Queue (ft)	43	14	1	4	0	1
95th Queue (ft)	74	45	12	21	8	15
Link Distance (ft)	973		286	747	747	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		25				130
Storage Blk Time (%)	17	1				
Queuing Penalty (veh)	2	2				

Intersection: 3: Bayou Way & Airport Blvd

Movement	EB	WB	SB	SB
Directions Served	LT	TR	UL	R
Maximum Queue (ft)	31	73	54	53
Average Queue (ft)	6	38	26	26
95th Queue (ft)	27	60	48	46
Link Distance (ft)	346	617	286	286
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Powerline Rd & Bayou Way

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	78	74	70	8
Average Queue (ft)	38	32	24	0
95th Queue (ft)	64	55	55	7
Link Distance (ft)	678	655	680	639
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Bayou Way & Metro Air Pkwy

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	38	60	30
Average Queue (ft)	14	32	17
95th Queue (ft)	40	49	39
Link Distance (ft)	564	548	480
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Metro Air Pkwy & I-5 SB Ramps

Movement	EB	EB
Directions Served	UL	R
Maximum Queue (ft)	53	37
Average Queue (ft)	23	7
95th Queue (ft)	48	31
Link Distance (ft)	564	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		25
Storage Blk Time (%)	3	0
Queuing Penalty (veh)	0	0

Intersection: 7: Metro Air Pkwy & I-5 NB Ramps

Movement	WB	WB	NB
Directions Served	LT	R	L
Maximum Queue (ft)	37	75	28
Average Queue (ft)	15	39	5
95th Queue (ft)	40	62	22
Link Distance (ft)	792		
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		155	105
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 5

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	4:50	4:50	4:50	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	4354	4381	4354	4318	4458	4368	4318
Vehs Exited	4352	4398	4362	4319	4460	4386	4313
Starting Vehs	64	88	77	84	64	92	88
Ending Vehs	66	71	69	83	62	74	93
Travel Distance (mi)	1554	1581	1563	1558	1592	1573	1572
Travel Time (hr)	72.3	74.0	73.2	73.5	74.5	73.1	73.4
Total Delay (hr)	13.7	14.5	14.2	14.8	14.5	13.8	14.0
Total Stops	2160	2251	2221	2162	2313	2195	2201
Fuel Used (gal)	58.6	59.7	58.6	58.8	60.1	59.1	59.3

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	4334	4373	4369	4364
Vehs Exited	4312	4364	4343	4359
Starting Vehs	75	68	60	72
Ending Vehs	97	77	86	75
Travel Distance (mi)	1549	1577	1575	1569
Travel Time (hr)	72.3	73.5	73.7	73.4
Total Delay (hr)	13.7	14.0	14.3	14.1
Total Stops	2232	2284	2225	2226
Fuel Used (gal)	58.4	59.4	59.0	59.1

Interval #0 Information Seeding

Start Time	4:50
End Time	5:00
Total Time (min)	10

Volumes adjusted by Growth Factors.
No data recorded this interval.

Interval #1 Information

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1117	1114	1129	1097	1096	1106	1033
Vehs Exited	1122	1127	1131	1112	1089	1125	1034
Starting Vehs	64	88	77	84	64	92	88
Ending Vehs	59	75	75	69	71	73	87
Travel Distance (mi)	398	405	403	401	393	403	374
Travel Time (hr)	18.5	19.2	18.8	18.9	18.4	19.1	17.4
Total Delay (hr)	3.5	4.0	3.6	3.8	3.5	3.8	3.3
Total Stops	577	542	580	583	564	567	516
Fuel Used (gal)	15.0	15.3	15.2	15.2	14.7	15.3	14.0

Interval #1 Information

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1048	1124	1114	1093
Vehs Exited	1053	1127	1096	1101
Starting Vehs	75	68	60	72
Ending Vehs	70	65	78	67
Travel Distance (mi)	377	406	402	396
Travel Time (hr)	17.5	19.1	19.0	18.6
Total Delay (hr)	3.3	3.7	3.8	3.6
Total Stops	542	572	580	560
Fuel Used (gal)	14.3	15.3	15.1	14.9

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1024	1101	1091	1102	1157	1108	1099
Vehs Exited	1008	1111	1104	1091	1158	1109	1115
Starting Vehs	59	75	75	69	71	73	87
Ending Vehs	75	65	62	80	70	72	71
Travel Distance (mi)	365	403	399	394	412	396	405
Travel Time (hr)	17.2	18.8	18.8	18.9	19.6	18.4	18.9
Total Delay (hr)	3.5	3.6	3.8	4.1	4.0	3.5	3.6
Total Stops	486	574	570	538	605	526	544
Fuel Used (gal)	13.9	15.1	14.9	14.9	15.7	14.8	15.3

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1120	1136	1099	1099
Vehs Exited	1117	1123	1101	1102
Starting Vehs	70	65	78	67
Ending Vehs	73	78	76	65
Travel Distance (mi)	406	405	402	399
Travel Time (hr)	19.1	19.0	19.0	18.8
Total Delay (hr)	3.7	3.7	3.9	3.7
Total Stops	579	597	583	559
Fuel Used (gal)	15.3	15.4	15.2	15.0

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1119	1090	1096	1069	1097	1081	1095
Vehs Exited	1129	1089	1094	1078	1096	1078	1100
Starting Vehs	75	65	62	80	70	72	71
Ending Vehs	65	66	64	71	71	75	66
Travel Distance (mi)	401	389	387	386	396	377	402
Travel Time (hr)	18.6	18.1	18.2	18.3	18.6	17.4	18.8
Total Delay (hr)	3.5	3.5	3.7	3.7	3.7	3.2	3.6
Total Stops	549	555	524	538	563	549	573
Fuel Used (gal)	15.1	14.8	14.8	14.5	15.0	14.1	15.2

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1071	1048	1081	1082
Vehs Exited	1076	1049	1077	1085
Starting Vehs	73	78	76	65
Ending Vehs	68	77	80	62
Travel Distance (mi)	384	383	387	389
Travel Time (hr)	17.8	17.8	17.9	18.2
Total Delay (hr)	3.3	3.4	3.3	3.5
Total Stops	542	567	540	547
Fuel Used (gal)	14.5	14.4	14.4	14.7

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1094	1076	1038	1050	1108	1073	1091
Vehs Exited	1093	1071	1033	1038	1117	1074	1064
Starting Vehs	65	66	64	71	71	75	66
Ending Vehs	66	71	69	83	62	74	93
Travel Distance (mi)	389	384	374	377	391	397	391
Travel Time (hr)	17.9	18.0	17.3	17.5	18.0	18.3	18.4
Total Delay (hr)	3.2	3.5	3.2	3.2	3.3	3.4	3.6
Total Stops	548	580	547	503	581	553	568
Fuel Used (gal)	14.6	14.5	13.8	14.1	14.8	14.9	14.8

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1095	1065	1075	1075
Vehs Exited	1066	1065	1069	1067
Starting Vehs	68	77	80	62
Ending Vehs	97	77	86	75
Travel Distance (mi)	381	383	385	385
Travel Time (hr)	17.8	17.7	17.8	17.9
Total Delay (hr)	3.4	3.2	3.4	3.3
Total Stops	569	548	522	551
Fuel Used (gal)	14.4	14.4	14.3	14.5

1: Airport Blvd & I-5 NB Ramps Performance by movement

Movement	WBL	WBR	NBT	NBR	SBU	SBT	SBR	All
Denied Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.3
Denied Del/Veh (s)	0.2	0.4	0.0	0.0	0.5	0.6	0.7	0.5
Total Delay (hr)	0.0	1.2	0.0	0.0	0.1	1.2	0.1	2.6
Total Del/Veh (s)	10.4	5.0	0.2	2.2	4.0	3.9	3.2	4.0
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Stop Del/Veh (s)	8.7	0.0	0.0	0.0	2.6	0.1	0.0	0.1

2: Airport Blvd & I-5 SB Ramps Performance by movement

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR	All
Denied Delay (hr)	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2
Denied Del/Veh (s)	0.6	3.3	0.0	0.0	0.0	0.0	0.0	0.4
Total Delay (hr)	0.3	0.3	0.0	0.0	0.0	0.0	2.1	2.7
Total Del/Veh (s)	8.7	5.1	3.9	0.5	1.2	0.7	7.9	6.5
Stop Delay (hr)	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.4
Stop Del/Veh (s)	5.5	4.1	1.7	0.3	0.5	0.0	0.0	1.0

3: Bayou Way & Airport Blvd Performance by movement

Movement	EBL	EBT	WBT	WBR	SBU	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.5
Total Del/Veh (s)	4.7	6.9	5.1	2.9	4.1	5.6	0.6	2.9	5.1
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.3
Stop Del/Veh (s)	3.1	3.4	2.6	2.6	2.9	2.9	0.1	2.6	2.9

4: Powerline Rd & Bayou Way Performance by movement

Movement	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.5	0.5	0.5	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.4
Total Delay (hr)	1.0	0.2	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
Total Del/Veh (s)	10.7	11.9	8.8	6.9	3.9	2.2	0.6	0.6	2.0	0.8	0.3	8.3
Stop Delay (hr)	0.6	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Stop Del/Veh (s)	6.4	6.2	5.9	3.6	3.6	0.3	0.0	0.3	0.1	0.0	0.0	5.0

5: Bayou Way & Metro Air Pkwy Performance by movement

Movement	EBL	EBT	WBT	WBR	SBU	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.2
Total Delay (hr)	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.4
Total Del/Veh (s)	5.4	6.7	7.4	2.8	2.5	4.7	2.6	5.1
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Stop Del/Veh (s)	2.6	2.5	3.2	2.5	2.4	2.9	2.4	2.6

6: Metro Air Pkwy & I-5 SB Ramps Performance by movement

Movement	EBU	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.3	0.2	3.9	0.0	0.0	0.0	0.0	0.2
Total Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.4
Total Del/Veh (s)	4.6	6.8	3.4	2.7	0.8	0.5	2.2	2.4
Stop Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Stop Del/Veh (s)	3.9	4.6	3.3	0.6	0.3	0.0	0.0	0.9

7: Metro Air Pkwy & I-5 NB Ramps Performance by movement

Movement	WBL	WBT	WBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.5
Denied Del/Veh (s)	1.3	1.4	3.5	0.0	0.0	0.3	3.6	1.9
Total Delay (hr)	0.0	0.0	1.2	0.0	0.1	0.0	0.0	1.3
Total Del/Veh (s)	8.6	8.7	9.0	2.9	1.3	0.2	0.1	4.8
Stop Delay (hr)	0.0	0.0	0.9	0.0	0.0	0.0	0.0	1.0
Stop Del/Veh (s)	5.1	4.0	7.0	0.9	0.2	0.0	0.0	3.4

Total Network Performance

Denied Delay (hr)	1.2
Denied Del/Veh (s)	1.0
Total Delay (hr)	13.0
Total Del/Veh (s)	10.5
Stop Delay (hr)	3.3
Stop Del/Veh (s)	2.7

Intersection: 1: Airport Blvd & I-5 NB Ramps

Movement	WB	WB	SB	SB
Directions Served	LT	R	UT	TR
Maximum Queue (ft)	20	20	74	69
Average Queue (ft)	2	1	17	5
95th Queue (ft)	12	15	54	34
Link Distance (ft)	764	764	639	639
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Airport Blvd & I-5 SB Ramps

Movement	EB	EB	NB	SB	SB	SB
Directions Served	L	R	LT	UT	T	R
Maximum Queue (ft)	123	63	3	29	6	32
Average Queue (ft)	52	45	0	2	0	0
95th Queue (ft)	92	58	4	14	6	8
Link Distance (ft)	973		286	747	747	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		25				130
Storage Blk Time (%)	17	16				
Queuing Penalty (veh)	28	21				

Intersection: 3: Bayou Way & Airport Blvd

Movement	EB	WB	SB	SB
Directions Served	LT	TR	UL	R
Maximum Queue (ft)	34	52	86	36
Average Queue (ft)	6	21	52	8
95th Queue (ft)	26	46	76	31
Link Distance (ft)	346	617	286	286
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Powerline Rd & Bayou Way

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	240	40	34	3
Average Queue (ft)	102	19	3	0
95th Queue (ft)	178	44	19	3
Link Distance (ft)	678	655	680	639
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Bayou Way & Metro Air Pkwy

Movement	EB	WB	SB
Directions Served	LT	TR	ULR
Maximum Queue (ft)	74	35	41
Average Queue (ft)	43	18	23
95th Queue (ft)	65	43	44
Link Distance (ft)	564	548	480
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Metro Air Pkwy & I-5 SB Ramps

Movement	EB	EB	NB
Directions Served	UL	R	LT
Maximum Queue (ft)	62	44	31
Average Queue (ft)	32	18	2
95th Queue (ft)	55	49	15
Link Distance (ft)	564		480
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		25	
Storage Blk Time (%)	8	2	
Queuing Penalty (veh)	2	1	

Intersection: 7: Metro Air Pkwy & I-5 NB Ramps

Movement	WB	WB	NB
Directions Served	LT	R	L
Maximum Queue (ft)	115	166	19
Average Queue (ft)	18	87	2
95th Queue (ft)	75	144	13
Link Distance (ft)	792		
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		155	105
Storage Blk Time (%)	0	1	
Queuing Penalty (veh)	0	0	

Network Summary

Network wide Queuing Penalty: 53

Appendix C

Analysis Worksheets for
Existing (2023) plus Project Conditions

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	6:50	6:50	6:50	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	4312	4163	4124	4091	4159	4181	4207
Vehs Exited	4310	4155	4115	4080	4155	4197	4210
Starting Vehs	65	71	62	67	51	80	68
Ending Vehs	67	79	71	78	55	64	65
Travel Distance (mi)	1472	1452	1439	1407	1444	1452	1460
Travel Time (hr)	67.6	66.3	65.9	63.6	66.2	66.8	67.7
Total Delay (hr)	11.8	11.4	11.5	10.5	11.6	11.7	12.3
Total Stops	1897	1980	1908	1822	1946	1969	1890
Fuel Used (gal)	55.4	54.4	53.9	52.7	54.6	54.7	55.1

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	4186	4169	4144	4172
Vehs Exited	4184	4171	4143	4171
Starting Vehs	66	73	60	63
Ending Vehs	68	71	61	65
Travel Distance (mi)	1432	1440	1455	1445
Travel Time (hr)	66.4	65.9	66.4	66.3
Total Delay (hr)	11.9	11.3	11.2	11.5
Total Stops	1910	1938	1920	1919
Fuel Used (gal)	53.9	54.0	54.4	54.3

Interval #0 Information Seeding

Start Time	6:50
End Time	7:00
Total Time (min)	10

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1076	1042	1015	1026	1018	1029	1030
Vehs Exited	1085	1039	999	1033	1007	1045	1031
Starting Vehs	65	71	62	67	51	80	68
Ending Vehs	56	74	78	60	62	64	67
Travel Distance (mi)	368	369	355	352	351	355	360
Travel Time (hr)	16.9	16.8	16.1	15.9	15.9	16.3	16.3
Total Delay (hr)	2.9	2.9	2.8	2.6	2.7	2.8	2.7
Total Stops	480	474	494	472	481	483	454
Fuel Used (gal)	13.9	13.7	13.3	13.2	13.1	13.6	13.4

Interval #1 Information

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	979	1083	984	1029
Vehs Exited	984	1099	973	1028
Starting Vehs	66	73	60	63
Ending Vehs	61	57	71	58
Travel Distance (mi)	334	374	345	356
Travel Time (hr)	15.1	17.5	15.9	16.3
Total Delay (hr)	2.5	3.2	2.8	2.8
Total Stops	433	535	430	472
Fuel Used (gal)	12.5	14.3	12.7	13.4

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1057	1057	1030	1010	1071	1022	1136
Vehs Exited	1053	1068	1032	988	1062	1025	1134
Starting Vehs	56	74	78	60	62	64	67
Ending Vehs	60	63	76	82	71	61	69
Travel Distance (mi)	365	366	359	350	372	359	390
Travel Time (hr)	16.8	17.0	16.6	15.7	17.0	16.4	18.8
Total Delay (hr)	3.0	3.1	2.9	2.6	3.0	2.8	4.0
Total Stops	467	509	484	449	508	500	537
Fuel Used (gal)	13.8	13.8	13.4	13.0	14.2	13.4	15.0

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1106	1050	1073	1060
Vehs Exited	1087	1054	1085	1059
Starting Vehs	61	57	71	58
Ending Vehs	80	53	59	65
Travel Distance (mi)	379	359	377	368
Travel Time (hr)	17.9	16.4	17.2	17.0
Total Delay (hr)	3.5	2.8	2.9	3.1
Total Stops	500	491	511	494
Fuel Used (gal)	14.3	13.6	14.2	13.9

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1097	1037	1040	1039	1025	1071	1001
Vehs Exited	1094	1038	1059	1066	1031	1070	1002
Starting Vehs	60	63	76	82	71	61	69
Ending Vehs	63	62	57	55	65	62	68
Travel Distance (mi)	371	363	363	367	355	367	347
Travel Time (hr)	16.9	16.6	16.9	16.5	16.2	16.8	15.9
Total Delay (hr)	2.9	2.8	3.1	2.7	2.7	2.9	2.7
Total Stops	480	503	464	461	475	502	447
Fuel Used (gal)	13.9	13.8	13.8	13.7	13.4	13.7	13.1

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1056	1025	1094	1045
Vehs Exited	1073	1014	1063	1051
Starting Vehs	80	53	59	65
Ending Vehs	63	64	90	62
Travel Distance (mi)	366	356	378	363
Travel Time (hr)	17.1	16.0	17.3	16.6
Total Delay (hr)	3.1	2.6	2.9	2.8
Total Stops	471	452	510	472
Fuel Used (gal)	13.7	13.2	14.1	13.6

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1082	1027	1039	1016	1045	1059	1040
Vehs Exited	1078	1010	1025	993	1055	1057	1043
Starting Vehs	63	62	57	55	65	62	68
Ending Vehs	67	79	71	78	55	64	65
Travel Distance (mi)	368	354	362	338	367	371	362
Travel Time (hr)	17.0	15.9	16.3	15.5	17.1	17.3	16.7
Total Delay (hr)	3.0	2.5	2.7	2.6	3.2	3.2	3.0
Total Stops	470	494	466	440	482	484	452
Fuel Used (gal)	13.9	13.1	13.4	12.8	13.9	14.0	13.7

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1045	1011	993	1034
Vehs Exited	1040	1004	1022	1032
Starting Vehs	63	64	90	62
Ending Vehs	68	71	61	65
Travel Distance (mi)	352	351	355	358
Travel Time (hr)	16.2	15.9	16.1	16.4
Total Delay (hr)	2.7	2.6	2.6	2.8
Total Stops	506	460	469	472
Fuel Used (gal)	13.4	13.0	13.4	13.5

1: Airport Blvd & I-5 NB Ramps Performance by movement

Movement	WBL	WBR	NBT	NBR	SBU	SBT	SBR	All
Denied Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.2
Denied Del/Veh (s)	0.3	0.5	0.0	0.0	0.3	0.4	0.4	0.4
Total Delay (hr)	0.1	2.0	0.0	0.1	0.0	0.4	0.1	2.7
Total Del/Veh (s)	11.1	7.3	0.2	2.3	3.8	2.0	1.4	4.2
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Stop Del/Veh (s)	9.2	0.0	0.0	0.0	3.0	0.0	0.0	0.2

2: Airport Blvd & I-5 SB Ramps Performance by movement

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR	All
Denied Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.5	3.3	0.0	0.0	0.0	0.0	0.0	0.3
Total Delay (hr)	0.5	0.2	0.0	0.0	0.0	0.0	0.8	1.6
Total Del/Veh (s)	12.1	5.3	2.6	0.6	4.4	1.2	4.9	4.6
Stop Delay (hr)	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.6
Stop Del/Veh (s)	9.2	4.4	1.0	0.3	3.8	0.1	0.0	1.6

3: Bayou Way & Airport Blvd Performance by movement

Movement	EBL	EBT	WBR	SBU	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.3	0.0	0.0	0.0	0.1
Total Delay (hr)	0.0	0.0	0.3	0.0	0.2	0.0	0.6
Total Del/Veh (s)	4.1	5.8	4.5	3.7	4.9	2.8	4.4
Stop Delay (hr)	0.0	0.0	0.2	0.0	0.1	0.0	0.4
Stop Del/Veh (s)	2.6	2.7	2.8	3.0	2.8	2.5	2.8

4: Powerline Rd & Bayou Way Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.2	0.2	0.2		0.2	0.2	0.2	0.4	0.4	0.4	0.3
Total Delay (hr)	0.2	0.4	0.2	0.0	0.9	0.2	0.0	0.0	0.2	0.1	2.2
Total Del/Veh (s)	16.5	16.7	10.9		20.4	6.4	2.8	2.9	2.4	1.3	7.8
Stop Delay (hr)	0.2	0.3	0.1	0.0	0.7	0.1	0.0	0.0	0.0	0.0	1.5
Stop Del/Veh (s)	14.0	12.8	9.8		16.5	3.8	0.9	0.2	0.0	0.1	5.3

5: Bayou Way & Metro Air Pkwy Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.1	0.1	0.2	0.0	0.0	0.1
Total Delay (hr)	0.1	0.0	0.0	0.1	0.0	0.1	0.3
Total Del/Veh (s)	4.9	5.9	6.5	3.2	5.0	2.9	3.8
Stop Delay (hr)	0.1	0.0	0.0	0.1	0.0	0.1	0.2
Stop Del/Veh (s)	2.6	2.5	2.7	2.4	2.8	2.4	2.5

6: Metro Air Pkwy & I-5 SB Ramps Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	3.9	0.0	0.0	0.0	0.0	0.2
Total Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.1	0.2
Total Del/Veh (s)	6.8	3.0	2.8	0.9	0.6	2.1	2.0
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Stop Del/Veh (s)	4.8	3.3	0.8	0.3	0.2	0.2	0.8

7: Metro Air Pkwy & I-5 NB Ramps Performance by movement

Movement	WBL	WBT	WBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.4
Denied Del/Veh (s)	0.7	0.8	3.6	0.0	0.0	0.5	3.7	1.9
Total Delay (hr)	0.2	0.0	0.3	0.0	0.0	0.0	0.0	0.5
Total Del/Veh (s)	6.7	7.5	4.1	2.4	0.7	0.3	0.2	2.6
Stop Delay (hr)	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.3
Stop Del/Veh (s)	4.1	3.5	2.8	0.4	0.1	0.0	0.0	1.5

Total Network Performance

Denied Delay (hr)	0.8
Denied Del/Veh (s)	0.7
Total Delay (hr)	10.7
Total Del/Veh (s)	9.1
Stop Delay (hr)	3.3
Stop Del/Veh (s)	2.8

Intersection: 1: Airport Blvd & I-5 NB Ramps

Movement	WB	WB	SB	SB
Directions Served	LT	R	UT	TR
Maximum Queue (ft)	49	203	64	33
Average Queue (ft)	15	8	15	2
95th Queue (ft)	35	119	47	16
Link Distance (ft)	764	764	639	639
Upstream Blk Time (%)		0		
Queuing Penalty (veh)		0		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Airport Blvd & I-5 SB Ramps

Movement	EB	EB	NB	SB	SB	SB
Directions Served	L	R	LT	UT	T	R
Maximum Queue (ft)	133	58	55	61	11	11
Average Queue (ft)	60	43	8	7	0	0
95th Queue (ft)	109	60	35	34	8	8
Link Distance (ft)	973		286	747	747	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		25				130
Storage Blk Time (%)	27	8				
Queuing Penalty (veh)	26	12				

Intersection: 3: Bayou Way & Airport Blvd

Movement	EB	WB	SB	SB
Directions Served	LT	TR	UL	R
Maximum Queue (ft)	31	80	72	53
Average Queue (ft)	5	50	40	26
95th Queue (ft)	25	74	61	50
Link Distance (ft)	346	617	286	286
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Powerline Rd & Bayou Way

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	154	149	101	39
Average Queue (ft)	62	65	43	9
95th Queue (ft)	115	116	77	29
Link Distance (ft)	678	655	680	639
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Bayou Way & Metro Air Pkwy

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	59	63	62
Average Queue (ft)	31	34	33
95th Queue (ft)	52	52	50
Link Distance (ft)	564	548	480
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Metro Air Pkwy & I-5 SB Ramps

Movement	EB	EB	NB
Directions Served	UL	R	LT
Maximum Queue (ft)	58	39	42
Average Queue (ft)	24	15	6
95th Queue (ft)	51	44	27
Link Distance (ft)	564		480
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		25	
Storage Blk Time (%)	5	1	
Queuing Penalty (veh)	1	1	

Intersection: 7: Metro Air Pkwy & I-5 NB Ramps

Movement	WB	WB	NB
Directions Served	LT	R	L
Maximum Queue (ft)	79	76	28
Average Queue (ft)	36	40	6
95th Queue (ft)	61	63	25
Link Distance (ft)	792		
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		155	105
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 40

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	4:50	4:50	4:50	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	4901	4881	4800	4724	4956	4889	4815
Vehs Exited	4917	4875	4793	4713	4947	4919	4819
Starting Vehs	98	80	68	84	69	101	83
Ending Vehs	82	86	75	95	78	71	79
Travel Distance (mi)	1772	1783	1742	1709	1809	1790	1733
Travel Time (hr)	84.5	84.9	82.3	80.4	87.0	85.9	82.5
Total Delay (hr)	17.3	17.5	16.6	15.7	18.5	18.3	17.0
Total Stops	2938	2993	2794	2804	2993	3087	2858
Fuel Used (gal)	67.6	68.1	66.3	64.2	68.9	68.1	66.4

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	4766	4880	4840	4847
Vehs Exited	4749	4900	4853	4848
Starting Vehs	83	89	87	81
Ending Vehs	100	69	74	76
Travel Distance (mi)	1734	1787	1776	1763
Travel Time (hr)	81.8	85.1	84.1	83.9
Total Delay (hr)	16.2	17.5	16.9	17.2
Total Stops	2831	3002	2979	2928
Fuel Used (gal)	66.1	67.9	67.4	67.1

Interval #0 Information Seeding

Start Time	4:50
End Time	5:00
Total Time (min)	10

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1253	1247	1198	1154	1225	1239	1234
Vehs Exited	1254	1246	1180	1153	1214	1263	1236
Starting Vehs	98	80	68	84	69	101	83
Ending Vehs	97	81	86	85	80	77	81
Travel Distance (mi)	455	461	433	421	447	450	445
Travel Time (hr)	21.9	22.0	20.1	19.7	21.8	21.8	21.1
Total Delay (hr)	4.6	4.6	3.8	3.8	4.9	4.7	4.2
Total Stops	755	759	655	696	740	802	747
Fuel Used (gal)	17.3	17.5	16.6	15.9	17.0	17.3	17.0

Interval #1 Information

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1174	1285	1193	1218
Vehs Exited	1173	1290	1210	1222
Starting Vehs	83	89	87	81
Ending Vehs	84	84	70	77
Travel Distance (mi)	428	469	441	445
Travel Time (hr)	20.3	22.6	20.9	21.2
Total Delay (hr)	4.1	4.9	4.2	4.4
Total Stops	709	814	714	734
Fuel Used (gal)	16.4	18.2	16.8	17.0

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1151	1213	1205	1163	1231	1211	1244
Vehs Exited	1154	1218	1212	1177	1223	1193	1260
Starting Vehs	97	81	86	85	80	77	81
Ending Vehs	94	76	79	71	88	95	65
Travel Distance (mi)	414	443	437	420	440	442	445
Travel Time (hr)	19.4	21.0	20.7	19.9	21.0	20.7	21.2
Total Delay (hr)	3.7	4.3	4.2	4.1	4.3	4.1	4.3
Total Stops	677	750	705	669	725	743	733
Fuel Used (gal)	15.7	17.1	16.6	15.8	16.8	16.6	17.1

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1233	1192	1238	1208
Vehs Exited	1239	1210	1220	1209
Starting Vehs	84	84	70	77
Ending Vehs	78	66	88	79
Travel Distance (mi)	442	431	454	437
Travel Time (hr)	21.4	20.2	21.6	20.7
Total Delay (hr)	4.6	3.9	4.4	4.2
Total Stops	756	758	806	728
Fuel Used (gal)	17.1	16.3	17.1	16.6

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1246	1181	1198	1214	1279	1246	1153
Vehs Exited	1258	1178	1196	1201	1285	1267	1138
Starting Vehs	94	76	79	71	88	95	65
Ending Vehs	82	79	81	84	82	74	80
Travel Distance (mi)	450	434	432	441	471	460	420
Travel Time (hr)	21.6	20.7	20.7	20.7	22.6	22.4	20.2
Total Delay (hr)	4.6	4.3	4.3	4.0	4.8	5.1	4.4
Total Stops	751	725	731	764	763	779	704
Fuel Used (gal)	17.3	16.6	16.5	16.7	18.0	17.5	16.1

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1169	1181	1205	1209
Vehs Exited	1160	1183	1209	1209
Starting Vehs	78	66	88	79
Ending Vehs	87	64	84	74
Travel Distance (mi)	427	436	443	441
Travel Time (hr)	19.9	20.8	21.1	21.1
Total Delay (hr)	3.7	4.2	4.4	4.4
Total Stops	668	732	700	732
Fuel Used (gal)	15.9	16.4	16.9	16.8

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1251	1240	1199	1193	1221	1193	1184
Vehs Exited	1251	1233	1205	1182	1225	1196	1185
Starting Vehs	82	79	81	84	82	74	80
Ending Vehs	82	86	75	95	78	71	79
Travel Distance (mi)	453	445	440	428	451	438	424
Travel Time (hr)	21.7	21.2	20.8	20.0	21.5	21.0	20.1
Total Delay (hr)	4.5	4.3	4.2	3.8	4.5	4.4	4.1
Total Stops	755	759	703	675	765	763	674
Fuel Used (gal)	17.3	16.9	16.6	15.8	17.1	16.8	16.2

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1190	1222	1204	1209
Vehs Exited	1177	1217	1214	1208
Starting Vehs	87	64	84	74
Ending Vehs	100	69	74	76
Travel Distance (mi)	437	451	438	440
Travel Time (hr)	20.3	21.5	20.5	20.9
Total Delay (hr)	3.8	4.5	4.0	4.2
Total Stops	698	698	759	722
Fuel Used (gal)	16.7	17.0	16.6	16.7

1: Airport Blvd & I-5 NB Ramps Performance by movement

Movement	WBL	WBR	NBT	NBR	SBU	SBT	SBR	All
Denied Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.3
Denied Del/Veh (s)	0.3	0.5	0.0	0.0	0.4	0.6	0.7	0.5
Total Delay (hr)	0.1	1.3	0.0	0.1	0.0	1.2	0.1	2.8
Total Del/Veh (s)	11.8	5.3	0.2	2.4	3.3	3.8	3.2	4.0
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Stop Del/Veh (s)	10.0	0.0	0.0	0.0	2.0	0.0	0.0	0.2

2: Airport Blvd & I-5 SB Ramps Performance by movement

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR	All
Denied Delay (hr)	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2
Denied Del/Veh (s)	0.7	3.3	0.0	0.0	0.0	0.0	0.0	0.5
Total Delay (hr)	0.5	0.5	0.0	0.0	0.0	0.0	2.0	3.2
Total Del/Veh (s)	13.9	7.1	3.1	0.6	2.5	0.8	7.8	6.7
Stop Delay (hr)	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.8
Stop Del/Veh (s)	10.3	5.6	1.5	0.4	1.8	0.0	0.0	1.7

3: Bayou Way & Airport Blvd Performance by movement

Movement	EBL	EBT	WBT	WBR	SBU	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1		0.2	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.2	0.1	0.6	0.0	0.9
Total Del/Veh (s)	5.2	5.5		3.8	5.1	6.2	2.6	5.4
Stop Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.3	0.0	0.5
Stop Del/Veh (s)	3.5	2.9		2.8	3.5	3.3	2.4	3.2

4: Powerline Rd & Bayou Way Performance by movement

Movement	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.6	0.5	0.6	0.2	0.2	0.1	0.1	0.3	0.2	0.2	0.1	0.4
Total Delay (hr)	1.3	0.5	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6
Total Del/Veh (s)	13.8	14.6	11.9	7.9	4.4	2.3	0.6	0.4	2.0	0.7	0.3	10.6
Stop Delay (hr)	0.9	0.3	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
Stop Del/Veh (s)	9.6	9.1	9.0	4.2	3.5	0.4	0.0	0.0	0.0	0.0	0.0	7.1

5: Bayou Way & Metro Air Pkwy Performance by movement

Movement	EBL	EBT	WBT	WBR	SBU	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.3	0.2	0.1	0.1		0.0	0.0	0.2
Total Delay (hr)	0.3	0.1	0.0	0.0	0.0	0.0	0.1	0.6
Total Del/Veh (s)	5.8	7.0	6.3	2.9		5.0	3.1	5.1
Stop Delay (hr)	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.3
Stop Del/Veh (s)	2.7	2.6	3.2	2.7		2.9	2.5	2.7

6: Metro Air Pkwy & I-5 SB Ramps Performance by movement

Movement	EBU	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.2	4.0	0.0	0.0	0.0	0.0	0.2
Total Delay (hr)	0.0	0.2	0.0	0.1	0.1	0.0	0.2	0.5
Total Del/Veh (s)	7.6	8.8	3.9	3.1	1.3	0.8	2.4	2.7
Stop Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2
Stop Del/Veh (s)	7.3	6.6	3.7	0.8	0.3	0.2	0.2	1.2

7: Metro Air Pkwy & I-5 NB Ramps Performance by movement

Movement	WBL	WBT	WBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.5
Denied Del/Veh (s)	1.3	1.0	3.5	0.0	0.0	0.3	3.6	1.8
Total Delay (hr)	0.2	0.0	1.2	0.0	0.1	0.0	0.0	1.5
Total Del/Veh (s)	9.7	9.4	9.1	2.6	1.3	0.3	0.1	5.2
Stop Delay (hr)	0.1	0.0	0.9	0.0	0.0	0.0	0.0	1.1
Stop Del/Veh (s)	6.1	4.6	7.0	0.6	0.2	0.0	0.0	3.6

Total Network Performance

Denied Delay (hr)	1.3
Denied Del/Veh (s)	1.0
Total Delay (hr)	15.9
Total Del/Veh (s)	11.6
Stop Delay (hr)	5.1
Stop Del/Veh (s)	3.7

Intersection: 1: Airport Blvd & I-5 NB Ramps

Movement	WB	WB	SB	SB
Directions Served	LT	R	UT	TR
Maximum Queue (ft)	36	21	75	60
Average Queue (ft)	12	0	16	4
95th Queue (ft)	31	10	53	30
Link Distance (ft)	764	764	639	639
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Airport Blvd & I-5 SB Ramps

Movement	EB	EB	NB	NB	SB	SB	SB	B8
Directions Served	L	R	LT	T	UT	T	R	T
Maximum Queue (ft)	221	59	51	8	47	7	19	10
Average Queue (ft)	75	48	10	0	4	0	1	0
95th Queue (ft)	158	58	38	8	24	7	18	8
Link Distance (ft)	973		286	286	747	747		234
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		25					130	
Storage Blk Time (%)	26	22						
Queuing Penalty (veh)	65	30						

Intersection: 3: Bayou Way & Airport Blvd

Movement	EB	WB	SB	SB
Directions Served	LT	TR	UL	R
Maximum Queue (ft)	31	69	110	33
Average Queue (ft)	5	39	62	9
95th Queue (ft)	23	60	94	32
Link Distance (ft)	346	617	286	286
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Powerline Rd & Bayou Way

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	288	85	33	14
Average Queue (ft)	128	40	4	1
95th Queue (ft)	227	67	21	8
Link Distance (ft)	678	655	680	639
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Bayou Way & Metro Air Pkwy

Movement	EB	WB	SB
Directions Served	LT	TR	ULR
Maximum Queue (ft)	83	36	65
Average Queue (ft)	49	17	35
95th Queue (ft)	73	42	55
Link Distance (ft)	564	548	480
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Metro Air Pkwy & I-5 SB Ramps

Movement	EB	EB	NB
Directions Served	UL	R	LT
Maximum Queue (ft)	73	55	58
Average Queue (ft)	34	26	10
95th Queue (ft)	61	57	40
Link Distance (ft)	564		480
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		25	
Storage Blk Time (%)	12	3	
Queuing Penalty (veh)	3	2	

Intersection: 7: Metro Air Pkwy & I-5 NB Ramps

Movement	WB	WB	NB
Directions Served	LT	R	L
Maximum Queue (ft)	126	171	30
Average Queue (ft)	42	88	3
95th Queue (ft)	96	152	17
Link Distance (ft)	792		
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		155	105
Storage Blk Time (%)		1	
Queuing Penalty (veh)		1	

Network Summary

Network wide Queuing Penalty: 101

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	6:50	6:50	6:50	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	4803	4621	4766	4763	4674	4808	4696
Vehs Exited	4807	4628	4757	4762	4675	4784	4687
Starting Vehs	81	69	63	84	71	62	65
Ending Vehs	77	62	72	85	70	86	74
Travel Distance (mi)	1692	1614	1677	1678	1637	1687	1637
Travel Time (hr)	76.0	72.3	74.9	75.0	73.8	75.7	73.1
Total Delay (hr)	12.4	11.4	11.9	11.9	12.1	12.2	11.5
Total Stops	2159	2082	2108	2207	2150	2220	2101
Fuel Used (gal)	62.8	59.8	61.9	62.1	61.3	62.5	60.8

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	4716	4756	4692	4730
Vehs Exited	4695	4754	4679	4721
Starting Vehs	55	81	56	58
Ending Vehs	76	83	69	64
Travel Distance (mi)	1658	1665	1638	1658
Travel Time (hr)	74.0	74.5	73.2	74.3
Total Delay (hr)	11.5	11.9	11.4	11.8
Total Stops	2124	2057	2039	2123
Fuel Used (gal)	61.5	61.6	60.7	61.5

Interval #0 Information Seeding

Start Time	6:50
End Time	7:00
Total Time (min)	10

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1171	1183	1200	1159	1132	1208	1211
Vehs Exited	1181	1177	1187	1182	1145	1194	1212
Starting Vehs	81	69	63	84	71	62	65
Ending Vehs	71	75	76	61	58	76	64
Travel Distance (mi)	411	419	416	415	389	420	426
Travel Time (hr)	18.4	18.7	18.5	18.4	17.6	18.9	19.3
Total Delay (hr)	2.9	2.9	2.9	2.8	2.9	2.9	3.2
Total Stops	531	536	526	555	529	563	557
Fuel Used (gal)	15.2	15.4	15.4	15.2	14.6	15.7	15.9

Interval #1 Information

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1132	1220	1157	1175
Vehs Exited	1104	1238	1139	1176
Starting Vehs	55	81	56	58
Ending Vehs	83	63	74	60
Travel Distance (mi)	390	428	393	411
Travel Time (hr)	17.3	19.7	17.7	18.4
Total Delay (hr)	2.6	3.5	2.9	3.0
Total Stops	522	541	498	531
Fuel Used (gal)	14.4	16.1	14.8	15.3

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1191	1179	1183	1229	1191	1161	1160
Vehs Exited	1184	1173	1183	1228	1181	1167	1166
Starting Vehs	71	75	76	61	58	76	64
Ending Vehs	78	81	76	62	68	70	58
Travel Distance (mi)	419	405	426	435	422	413	400
Travel Time (hr)	18.8	18.4	18.9	19.7	19.0	18.4	17.6
Total Delay (hr)	3.0	3.2	2.9	3.4	3.1	3.0	2.6
Total Stops	545	534	550	556	557	525	512
Fuel Used (gal)	15.5	15.1	15.6	15.9	16.0	15.3	14.9

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1193	1253	1186	1191
Vehs Exited	1191	1240	1181	1189
Starting Vehs	83	63	74	60
Ending Vehs	85	76	79	67
Travel Distance (mi)	425	439	417	420
Travel Time (hr)	18.9	19.6	18.6	18.8
Total Delay (hr)	2.9	3.1	2.8	3.0
Total Stops	525	558	548	540
Fuel Used (gal)	15.7	16.2	15.5	15.6

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1233	1124	1198	1196	1186	1193	1160
Vehs Exited	1220	1141	1200	1185	1165	1174	1151
Starting Vehs	78	81	76	62	68	70	58
Ending Vehs	91	64	74	73	89	89	67
Travel Distance (mi)	434	396	425	416	412	415	409
Travel Time (hr)	19.7	17.6	19.2	18.6	18.3	18.5	18.2
Total Delay (hr)	3.3	2.7	3.2	2.9	2.8	2.9	2.8
Total Stops	586	516	537	563	532	557	497
Fuel Used (gal)	16.3	14.8	15.8	15.6	15.2	15.3	15.1

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1164	1140	1173	1173
Vehs Exited	1177	1153	1193	1174
Starting Vehs	85	76	79	67
Ending Vehs	72	63	59	66
Travel Distance (mi)	410	399	411	413
Travel Time (hr)	18.4	17.6	18.4	18.5
Total Delay (hr)	2.9	2.6	2.9	2.9
Total Stops	551	487	506	532
Fuel Used (gal)	15.4	14.6	15.2	15.3

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1208	1135	1185	1179	1165	1246	1165
Vehs Exited	1222	1137	1187	1167	1184	1249	1158
Starting Vehs	91	64	74	73	89	89	67
Ending Vehs	77	62	72	85	70	86	74
Travel Distance (mi)	427	394	409	412	413	439	401
Travel Time (hr)	19.2	17.5	18.3	18.3	18.8	19.9	17.9
Total Delay (hr)	3.2	2.6	2.9	2.8	3.3	3.3	2.8
Total Stops	497	496	495	533	532	575	535
Fuel Used (gal)	15.9	14.5	15.1	15.4	15.5	16.2	14.9

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1227	1143	1176	1180
Vehs Exited	1223	1123	1166	1180
Starting Vehs	72	63	59	66
Ending Vehs	76	83	69	64
Travel Distance (mi)	432	399	417	414
Travel Time (hr)	19.4	17.6	18.4	18.5
Total Delay (hr)	3.1	2.7	2.7	2.9
Total Stops	526	471	487	514
Fuel Used (gal)	16.0	14.6	15.2	15.3

8: Full Ingress Dwy (West) & Bayou Way Performance by movement

Movement	EBT	EBR	WBL	WBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.1	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	0.6	0.3	2.6	0.5	0.7
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0
Stop Del/Veh (s)	0.0	0.0	0.6	0.1	0.1

9: Full Egress Dwy (West) & Bayou Way Performance by movement

Movement	EBT	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.1	0.0
Total Delay (hr)	0.0	0.0	0.1	0.0	0.2
Total Del/Veh (s)	0.3	0.2	5.9	3.5	1.3
Stop Delay (hr)	0.0	0.0	0.1	0.0	0.1
Stop Del/Veh (s)	0.0	0.0	4.1	3.0	0.8

10: Full Access Dwy (Central) & Bayou Way Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	0.2	0.1	2.2	0.1	7.4	3.2	0.4
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stop Del/Veh (s)	0.1	0.1	0.4	0.0	6.0	3.0	0.2

11: Full Ingress Dwy (East) & Bayou Way Performance by movement

Movement	EBT	EBR	WBL	WBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	0.5	0.2	2.4	0.4	0.6
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0
Stop Del/Veh (s)	0.0	0.0	0.4	0.1	0.1

12: Full Egress Dwy (East) & Bayou Way Performance by movement

Movement	EBT	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.2	0.2	0.2	0.2
Total Delay (hr)	0.0	0.0	0.1	0.0	0.1
Total Del/Veh (s)	0.2	0.2	5.3	3.4	1.1
Stop Delay (hr)	0.0	0.0	0.1	0.0	0.1
Stop Del/Veh (s)	0.0	0.0	3.5	2.7	0.7

Total Zone Performance

Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.2
Total Delay (hr)	0.5
Total Del/Veh (s)	218.3
Stop Delay (hr)	0.2
Stop Del/Veh (s)	101.8

Intersection: 8: Full Ingress Dwy (West) & Bayou Way

Movement	WB
Directions Served	L
Maximum Queue (ft)	35
Average Queue (ft)	5
95th Queue (ft)	25
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	50
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 9: Full Egress Dwy (West) & Bayou Way

Movement	NB
Directions Served	LR
Maximum Queue (ft)	73
Average Queue (ft)	36
95th Queue (ft)	59
Link Distance (ft)	271
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Full Access Dwy (Central) & Bayou Way

Movement	WB	NB
Directions Served	L	LR
Maximum Queue (ft)	21	32
Average Queue (ft)	1	13
95th Queue (ft)	11	38
Link Distance (ft)		280
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	50	
Storage Blk Time (%)	0	
Queuing Penalty (veh)	0	

Intersection: 11: Full Ingress Dwy (East) & Bayou Way

Movement	WB
Directions Served	L
Maximum Queue (ft)	32
Average Queue (ft)	5
95th Queue (ft)	23
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	50
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 12: Full Egress Dwy (East) & Bayou Way

Movement	NB
Directions Served	LR
Maximum Queue (ft)	71
Average Queue (ft)	35
95th Queue (ft)	58
Link Distance (ft)	303
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 0

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	4:50	4:50	4:50	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	5614	5500	5631	5484	5559	5480	5643
Vehs Exited	5614	5467	5621	5489	5577	5470	5635
Starting Vehs	96	79	80	96	93	99	77
Ending Vehs	96	112	90	91	75	109	85
Travel Distance (mi)	2068	2028	2081	2018	2042	2011	2086
Travel Time (hr)	95.8	92.5	96.7	93.0	94.4	92.6	96.1
Total Delay (hr)	18.8	17.1	19.2	17.8	18.4	17.6	18.4
Total Stops	3185	3142	3218	3103	3121	3137	3238
Fuel Used (gal)	77.1	74.9	77.9	75.0	76.1	75.0	77.2

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	5561	5529	5506	5547
Vehs Exited	5543	5536	5523	5546
Starting Vehs	71	92	115	85
Ending Vehs	89	85	98	86
Travel Distance (mi)	2041	2044	2033	2045
Travel Time (hr)	94.2	94.4	92.9	94.2
Total Delay (hr)	17.9	18.3	17.2	18.1
Total Stops	3086	3211	3189	3162
Fuel Used (gal)	75.9	76.2	75.2	76.1

Interval #0 Information Seeding

Start Time	4:50
End Time	5:00
Total Time (min)	10

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1433	1391	1365	1420	1352	1328	1427
Vehs Exited	1429	1376	1358	1409	1355	1361	1402
Starting Vehs	96	79	80	96	93	99	77
Ending Vehs	100	94	87	107	90	66	102
Travel Distance (mi)	521	509	502	515	503	491	519
Travel Time (hr)	24.3	23.1	23.3	24.2	23.0	22.4	24.0
Total Delay (hr)	4.9	4.2	4.6	5.0	4.4	4.1	4.7
Total Stops	833	807	755	799	748	767	828
Fuel Used (gal)	19.5	18.7	18.6	19.2	18.6	18.2	19.3

Interval #1 Information

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1350	1435	1426	1392
Vehs Exited	1309	1441	1447	1389
Starting Vehs	71	92	115	85
Ending Vehs	112	86	94	86
Travel Distance (mi)	485	531	532	511
Travel Time (hr)	22.0	24.6	24.5	23.6
Total Delay (hr)	3.9	4.8	4.7	4.5
Total Stops	743	848	825	792
Fuel Used (gal)	17.8	19.9	20.0	19.0

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1382	1378	1432	1329	1426	1373	1453
Vehs Exited	1388	1384	1424	1347	1424	1355	1449
Starting Vehs	100	94	87	107	90	66	102
Ending Vehs	94	88	95	89	92	84	106
Travel Distance (mi)	508	508	526	488	522	495	536
Travel Time (hr)	23.8	23.6	24.9	22.2	24.4	22.5	25.0
Total Delay (hr)	4.8	4.7	5.2	4.1	5.0	4.0	5.1
Total Stops	815	741	843	768	781	791	819
Fuel Used (gal)	19.1	19.0	19.9	18.1	19.5	18.2	19.9

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1444	1432	1323	1398
Vehs Exited	1462	1432	1340	1400
Starting Vehs	112	86	94	86
Ending Vehs	94	86	77	82
Travel Distance (mi)	532	526	497	514
Travel Time (hr)	24.9	24.8	22.6	23.9
Total Delay (hr)	5.1	5.2	4.0	4.7
Total Stops	829	817	799	799
Fuel Used (gal)	20.0	19.7	18.3	19.2

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1436	1318	1426	1360	1365	1423	1380
Vehs Exited	1437	1302	1421	1356	1360	1429	1392
Starting Vehs	94	88	95	89	92	84	106
Ending Vehs	93	104	100	93	97	78	94
Travel Distance (mi)	533	485	530	503	496	529	516
Travel Time (hr)	24.6	22.0	24.8	23.2	22.6	24.8	23.7
Total Delay (hr)	4.8	3.9	5.1	4.4	4.1	5.1	4.4
Total Stops	789	756	857	757	763	826	799
Fuel Used (gal)	19.8	17.9	20.0	18.6	18.4	20.1	19.0

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1370	1342	1414	1380
Vehs Exited	1361	1343	1411	1380
Starting Vehs	94	86	77	82
Ending Vehs	103	85	80	89
Travel Distance (mi)	508	503	518	512
Travel Time (hr)	23.3	23.0	24.0	23.6
Total Delay (hr)	4.3	4.4	4.7	4.5
Total Stops	736	749	825	785
Fuel Used (gal)	18.8	18.7	19.2	19.1

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1363	1413	1408	1375	1416	1356	1383
Vehs Exited	1360	1405	1418	1377	1438	1325	1392
Starting Vehs	93	104	100	93	97	78	94
Ending Vehs	96	112	90	91	75	109	85
Travel Distance (mi)	506	525	523	511	522	496	516
Travel Time (hr)	23.1	23.9	23.7	23.4	24.3	22.8	23.3
Total Delay (hr)	4.3	4.3	4.3	4.3	4.8	4.3	4.2
Total Stops	748	838	763	779	829	753	792
Fuel Used (gal)	18.6	19.3	19.5	19.0	19.5	18.5	19.0

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1397	1320	1343	1376
Vehs Exited	1411	1320	1325	1378
Starting Vehs	103	85	80	89
Ending Vehs	89	85	98	86
Travel Distance (mi)	516	485	486	508
Travel Time (hr)	23.9	22.1	21.8	23.2
Total Delay (hr)	4.6	4.0	3.7	4.3
Total Stops	778	797	740	778
Fuel Used (gal)	19.4	17.9	17.7	18.9

8: Full Ingress Dwy (West) & Bayou Way Performance by movement

Movement	EBT	EBR	WBL	WBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.3	0.3	0.0	0.0	0.2
Total Delay (hr)	0.0	0.0	0.1	0.0	0.1
Total Del/Veh (s)	0.5	0.5	5.2	0.9	0.9
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0
Stop Del/Veh (s)	0.0	0.0	1.2	0.1	0.1

9: Full Egress Dwy (West) & Bayou Way Performance by movement

Movement	EBT	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.1	0.0
Total Delay (hr)	0.0	0.0	0.1	0.1	0.2
Total Del/Veh (s)	0.3	0.3	8.3	7.1	1.5
Stop Delay (hr)	0.0	0.0	0.1	0.0	0.1
Stop Del/Veh (s)	0.0	0.0	4.7	3.7	0.7

10: Full Access Dwy (Central) & Bayou Way Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.0	0.1	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	0.5	0.5	4.9	0.1	9.4	6.6	0.7
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stop Del/Veh (s)	0.0	0.0	1.6	0.0	6.2	3.7	0.2

11: Full Ingress Dwy (East) & Bayou Way Performance by movement

Movement	EBT	EBR	WBL	WBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.1	0.0	0.1
Total Del/Veh (s)	0.3	0.4	4.8	1.0	0.8
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0
Stop Del/Veh (s)	0.0	0.0	1.1	0.2	0.1

12: Full Egress Dwy (East) & Bayou Way Performance by movement

Movement	EBT	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.1	0.2	0.2	0.1
Total Delay (hr)	0.0	0.0	0.1	0.1	0.2
Total Del/Veh (s)	0.4	0.1	7.6	7.0	1.5
Stop Delay (hr)	0.0	0.0	0.1	0.0	0.1
Stop Del/Veh (s)	0.0	0.0	4.1	3.5	0.7

Total Zone Performance

Denied Delay (hr)	0.0
Denied Del/Veh (s)	0.2
Total Delay (hr)	0.8
Total Del/Veh (s)	336.4
Stop Delay (hr)	0.3
Stop Del/Veh (s)	111.5

Intersection: 8: Full Ingress Dwy (West) & Bayou Way

Movement	WB
Directions Served	L
Maximum Queue (ft)	39
Average Queue (ft)	11
95th Queue (ft)	35
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	50
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 9: Full Egress Dwy (West) & Bayou Way

Movement	NB
Directions Served	LR
Maximum Queue (ft)	75
Average Queue (ft)	36
95th Queue (ft)	59
Link Distance (ft)	271
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Full Access Dwy (Central) & Bayou Way

Movement	WB	NB
Directions Served	L	LR
Maximum Queue (ft)	31	36
Average Queue (ft)	4	14
95th Queue (ft)	20	39
Link Distance (ft)		280
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	50	
Storage Blk Time (%)	0	
Queuing Penalty (veh)	0	

Intersection: 11: Full Ingress Dwy (East) & Bayou Way

Movement	WB
Directions Served	L
Maximum Queue (ft)	35
Average Queue (ft)	8
95th Queue (ft)	31
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	50
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 12: Full Egress Dwy (East) & Bayou Way

Movement	NB
Directions Served	LR
Maximum Queue (ft)	69
Average Queue (ft)	36
95th Queue (ft)	57
Link Distance (ft)	303
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 0

Appendix D

Analysis Worksheets for
Cumulative (2040) Conditions

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	6:50	6:50	6:50	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	5353	5437	5318	5274	5393	5517	5387
Vehs Exited	5344	5431	5315	5269	5380	5520	5371
Starting Vehs	92	83	81	80	74	94	86
Ending Vehs	101	89	84	85	87	91	102
Travel Distance (mi)	1792	1829	1782	1763	1790	1847	1802
Travel Time (hr)	88.4	97.1	87.4	87.2	86.7	97.9	91.2
Total Delay (hr)	23.5	30.7	22.9	23.4	21.8	30.8	26.0
Total Stops	2651	2695	2646	2472	2551	2946	2680
Fuel Used (gal)	70.9	73.8	70.0	69.4	70.4	74.6	71.7

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	5244	5342	5461	5373
Vehs Exited	5247	5346	5469	5370
Starting Vehs	84	85	100	83
Ending Vehs	81	81	92	86
Travel Distance (mi)	1769	1795	1839	1801
Travel Time (hr)	85.0	86.8	90.6	89.8
Total Delay (hr)	20.8	21.8	24.1	24.6
Total Stops	2530	2590	2749	2651
Fuel Used (gal)	69.4	70.5	72.4	71.3

Interval #0 Information Seeding

Start Time	6:50
End Time	7:00
Total Time (min)	10

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1377	1376	1312	1284	1345	1407	1347
Vehs Exited	1392	1341	1287	1277	1351	1399	1350
Starting Vehs	92	83	81	80	74	94	86
Ending Vehs	77	118	106	87	68	102	83
Travel Distance (mi)	462	460	432	428	453	465	456
Travel Time (hr)	23.3	25.2	21.1	19.9	21.9	26.1	21.3
Total Delay (hr)	6.5	8.5	5.5	4.4	5.5	9.2	4.9
Total Stops	715	688	666	564	674	747	645
Fuel Used (gal)	18.5	18.7	17.0	16.6	17.8	19.1	17.7

Interval #1 Information

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1285	1373	1373	1351
Vehs Exited	1289	1362	1377	1343
Starting Vehs	84	85	100	83
Ending Vehs	80	96	96	89
Travel Distance (mi)	431	449	463	450
Travel Time (hr)	19.9	21.9	22.9	22.4
Total Delay (hr)	4.3	5.6	6.2	6.1
Total Stops	573	615	714	659
Fuel Used (gal)	16.7	17.8	18.3	17.8

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1258	1376	1353	1340	1362	1365	1384
Vehs Exited	1265	1405	1375	1330	1335	1381	1374
Starting Vehs	77	118	106	87	68	102	83
Ending Vehs	70	89	84	97	95	86	93
Travel Distance (mi)	424	464	459	437	443	460	463
Travel Time (hr)	20.7	26.5	22.8	24.4	21.5	24.0	25.9
Total Delay (hr)	5.4	9.7	6.2	8.5	5.4	7.3	9.1
Total Stops	628	648	714	696	665	752	715
Fuel Used (gal)	16.6	19.3	18.2	17.8	17.4	18.6	19.1

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1331	1359	1365	1348
Vehs Exited	1323	1379	1381	1355
Starting Vehs	80	96	96	89
Ending Vehs	88	76	80	82
Travel Distance (mi)	456	458	466	453
Travel Time (hr)	22.1	23.3	23.4	23.5
Total Delay (hr)	5.6	6.6	6.5	7.0
Total Stops	685	706	669	687
Fuel Used (gal)	17.9	18.4	18.3	18.2

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1310	1337	1357	1333	1313	1374	1319
Vehs Exited	1306	1342	1366	1353	1345	1378	1315
Starting Vehs	70	89	84	97	95	86	93
Ending Vehs	74	84	75	77	63	82	97
Travel Distance (mi)	439	452	455	456	436	460	441
Travel Time (hr)	21.0	22.8	22.9	21.8	21.3	23.5	23.0
Total Delay (hr)	5.2	6.3	6.4	5.4	5.4	6.7	7.0
Total Stops	626	657	672	639	578	710	709
Fuel Used (gal)	17.1	17.9	18.0	17.8	17.2	18.3	17.8

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1328	1283	1383	1335
Vehs Exited	1336	1273	1364	1338
Starting Vehs	88	76	80	82
Ending Vehs	80	86	99	79
Travel Distance (mi)	452	435	460	449
Travel Time (hr)	22.8	20.2	22.5	22.2
Total Delay (hr)	6.4	4.5	5.9	5.9
Total Stops	679	605	659	652
Fuel Used (gal)	18.0	16.9	18.1	17.7

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1408	1348	1296	1317	1373	1371	1337
Vehs Exited	1381	1343	1287	1309	1349	1362	1332
Starting Vehs	74	84	75	77	63	82	97
Ending Vehs	101	89	84	85	87	91	102
Travel Distance (mi)	468	453	436	441	459	461	442
Travel Time (hr)	23.4	22.6	20.6	21.0	22.1	24.2	21.0
Total Delay (hr)	6.5	6.2	4.9	5.0	5.5	7.6	4.9
Total Stops	682	702	594	573	634	737	611
Fuel Used (gal)	18.6	17.9	16.8	17.2	18.0	18.6	17.1

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1300	1327	1340	1340
Vehs Exited	1299	1332	1347	1333
Starting Vehs	80	86	99	79
Ending Vehs	81	81	92	86
Travel Distance (mi)	430	453	451	449
Travel Time (hr)	20.2	21.5	21.8	21.8
Total Delay (hr)	4.6	5.1	5.5	5.6
Total Stops	593	664	707	648
Fuel Used (gal)	16.7	17.4	17.7	17.6

1: Airport Blvd & I-5 NB Ramps Performance by movement

Movement	WBL	WBR	NBT	NBR	SBU	SBT	SBR	All
Denied Delay (hr)	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.3
Denied Del/Veh (s)	0.4	0.6	0.0	0.0	0.3	0.5	0.5	0.5
Total Delay (hr)	0.0	4.0	0.0	0.0	0.0	0.7	0.1	4.9
Total Del/Veh (s)	11.9	12.2	0.3	2.3	4.4	3.4	2.2	7.1
Stop Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2
Stop Del/Veh (s)	9.8	0.3	0.0	0.0	3.9	0.0	0.0	0.2

2: Airport Blvd & I-5 SB Ramps Performance by movement

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	3.5	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay (hr)	0.4	0.0	0.0	0.0	0.0	0.0	1.2	1.7
Total Del/Veh (s)	8.9	4.5	2.2	0.8	2.4	1.8	6.2	5.4
Stop Delay (hr)	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Stop Del/Veh (s)	6.2	3.9	0.5	0.3	2.1	0.0	0.0	1.1

3: Bayou Way & Airport Blvd Performance by movement

Movement	EBL	EBT	WBR	SBU	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.1
Total Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.2
Total Del/Veh (s)	4.4	5.5	3.5	2.8	4.1	0.2	2.1	3.5
Stop Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.2
Stop Del/Veh (s)	2.6	2.5	2.5	2.5	2.4	0.0	2.2	2.5

4: Powerline Rd & Bayou Way Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.4	0.4	0.4	0.3
Total Delay (hr)	0.1	0.1	0.1	0.0	0.4	0.3	0.1	0.0	0.0	0.4	0.1	1.7
Total Del/Veh (s)	14.6	15.9	6.9	15.5	20.1	6.1	6.4	2.5	3.2	5.9	1.7	6.9
Stop Delay (hr)	0.1	0.1	0.1	0.0	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.8
Stop Del/Veh (s)	12.3	10.3	6.0	13.4	14.4	3.4	0.8	1.1	0.2	0.0	0.0	3.1

5: Bayou Way & Metro Air Pkwy Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.3	0.3	0.0	0.0	0.2
Total Delay (hr)	0.0	0.0	0.0	0.3	0.1	0.0	0.5
Total Del/Veh (s)	4.9	5.8	7.1	4.2	5.1	2.9	4.5
Stop Delay (hr)	0.0	0.0	0.0	0.2	0.0	0.0	0.3
Stop Del/Veh (s)	2.9	2.5	2.8	2.6	2.8	2.5	2.7

6: Metro Air Pkwy & I-5 SB Ramps Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.3	3.8	0.0	0.0	0.0	0.0	0.2
Total Delay (hr)	0.4	0.0	0.0	0.3	0.1	0.6	1.5
Total Del/Veh (s)	8.9	4.4	13.9	3.9	6.3	5.5	5.8
Stop Delay (hr)	0.3	0.0	0.0	0.1	0.0	0.2	0.7
Stop Del/Veh (s)	6.5	3.7	11.9	2.0	2.3	1.9	2.9

7: Metro Air Pkwy & I-5 NB Ramps Performance by movement

Movement	WBL	WBT	WBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.9	0.0	0.0	0.1	0.2	1.2
Denied Del/Veh (s)	3.1	3.0	4.1	0.0	0.0	1.0	3.1	2.4
Total Delay (hr)	0.1	0.2	6.3	0.4	0.3	0.6	0.2	8.0
Total Del/Veh (s)	27.9	33.5	29.0	12.1	3.3	5.1	2.8	15.1
Stop Delay (hr)	0.1	0.2	4.9	0.3	0.0	0.2	0.1	5.8
Stop Del/Veh (s)	19.7	25.8	22.7	9.1	0.6	2.0	1.3	10.9

Total Network Performance

Denied Delay (hr)	1.8
Denied Del/Veh (s)	1.2
Total Delay (hr)	22.8
Total Del/Veh (s)	15.1
Stop Delay (hr)	9.5
Stop Del/Veh (s)	6.2

Intersection: 1: Airport Blvd & I-5 NB Ramps

Movement	WB	WB	SB	SB
Directions Served	LT	R	UT	TR
Maximum Queue (ft)	248	352	60	22
Average Queue (ft)	15	17	17	1
95th Queue (ft)	145	190	47	12
Link Distance (ft)	764	764	639	639
Upstream Blk Time (%)	0	0		
Queuing Penalty (veh)	0	0		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Airport Blvd & I-5 SB Ramps

Movement	EB	EB	NB	SB	SB	SB
Directions Served	L	R	LT	UT	T	R
Maximum Queue (ft)	110	47	29	42	19	24
Average Queue (ft)	49	18	2	6	1	1
95th Queue (ft)	86	51	17	27	12	13
Link Distance (ft)	973		286	747	747	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		25				130
Storage Blk Time (%)	22	2				
Queuing Penalty (veh)	4	3				

Intersection: 3: Bayou Way & Airport Blvd

Movement	EB	WB	SB	SB
Directions Served	LT	TR	UL	R
Maximum Queue (ft)	32	68	50	48
Average Queue (ft)	16	38	27	20
95th Queue (ft)	41	59	46	45
Link Distance (ft)	346	617	286	286
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Powerline Rd & Bayou Way

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	88	99	110	36
Average Queue (ft)	41	40	42	6
95th Queue (ft)	72	75	85	25
Link Distance (ft)	678	655	680	639
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Bayou Way & Metro Air Pkwy

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	43	87	59
Average Queue (ft)	19	47	29
95th Queue (ft)	45	72	48
Link Distance (ft)	558	542	481
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Metro Air Pkwy & I-5 SB Ramps

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	R
Maximum Queue (ft)	99	59	37	91	46	128
Average Queue (ft)	45	26	8	38	11	60
95th Queue (ft)	81	57	30	74	36	104
Link Distance (ft)	543			481	843	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		25	100			120
Storage Blk Time (%)	22	3		0		0
Queuing Penalty (veh)	9	5		0		0

Intersection: 7: Metro Air Pkwy & I-5 NB Ramps

Movement	WB	WB	NB	NB	SB	SB
Directions Served	LT	R	L	T	T	R
Maximum Queue (ft)	641	180	106	73	152	84
Average Queue (ft)	257	157	46	14	60	37
95th Queue (ft)	658	221	80	50	117	66
Link Distance (ft)	791			843	582	
Upstream Blk Time (%)	3					
Queuing Penalty (veh)	0					
Storage Bay Dist (ft)		155	105			180
Storage Blk Time (%)	0	34	0		0	
Queuing Penalty (veh)	3	10	1		0	

Network Summary

Network wide Queuing Penalty: 35

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	4:50	4:50	4:50	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	5946	5947	5953	6008	6025	5979	5982
Vehs Exited	5940	5982	5973	6002	6030	5985	5957
Starting Vehs	103	129	137	85	116	115	112
Ending Vehs	109	94	117	91	111	109	137
Travel Distance (mi)	2105	2126	2096	2107	2117	2138	2112
Travel Time (hr)	112.2	109.1	112.6	109.2	108.8	109.8	116.2
Total Delay (hr)	32.5	28.5	33.1	29.3	28.3	28.8	36.2
Total Stops	3621	3653	3520	3692	3642	3611	3368
Fuel Used (gal)	82.8	82.8	82.8	82.4	82.4	83.4	84.0

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	5898	6057	5990	5981
Vehs Exited	5876	6072	5983	5980
Starting Vehs	111	122	96	110
Ending Vehs	133	107	103	110
Travel Distance (mi)	2070	2146	2105	2112
Travel Time (hr)	105.0	110.2	109.5	110.3
Total Delay (hr)	26.3	28.7	29.4	30.1
Total Stops	3492	3697	3593	3588
Fuel Used (gal)	80.7	83.3	82.4	82.7

Interval #0 Information Seeding

Start Time	4:50
End Time	5:00
Total Time (min)	10

Volumes adjusted by Growth Factors.
No data recorded this interval.

Interval #1 Information

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1484	1547	1467	1498	1454	1494	1461
Vehs Exited	1505	1565	1488	1465	1470	1501	1477
Starting Vehs	103	129	137	85	116	115	112
Ending Vehs	82	111	116	118	100	108	96
Travel Distance (mi)	528	554	517	515	511	538	521
Travel Time (hr)	26.2	29.5	27.7	26.8	25.6	29.0	26.0
Total Delay (hr)	6.2	8.6	8.1	7.4	6.2	8.5	6.3
Total Stops	861	948	864	978	799	979	810
Fuel Used (gal)	20.2	21.8	20.6	20.5	19.7	21.4	20.2

Interval #1 Information

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1435	1525	1500	1486
Vehs Exited	1451	1521	1493	1493
Starting Vehs	111	122	96	110
Ending Vehs	95	126	103	103
Travel Distance (mi)	508	536	530	526
Travel Time (hr)	25.9	27.8	27.2	27.2
Total Delay (hr)	6.6	7.4	7.1	7.2
Total Stops	818	967	872	891
Fuel Used (gal)	20.1	20.8	20.7	20.6

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1521	1480	1555	1514	1525	1490	1552
Vehs Exited	1485	1494	1550	1530	1515	1476	1520
Starting Vehs	82	111	116	118	100	108	96
Ending Vehs	118	97	121	102	110	122	128
Travel Distance (mi)	531	530	548	535	534	526	542
Travel Time (hr)	28.1	27.1	28.3	27.0	27.6	26.1	32.8
Total Delay (hr)	8.2	7.0	7.5	6.8	7.3	6.3	12.2
Total Stops	910	951	912	918	935	855	830
Fuel Used (gal)	20.8	20.7	21.1	20.6	20.9	20.3	22.2

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1502	1506	1525	1514
Vehs Exited	1504	1521	1519	1511
Starting Vehs	95	126	103	103
Ending Vehs	93	111	109	106
Travel Distance (mi)	528	528	531	533
Travel Time (hr)	27.0	26.6	28.0	27.9
Total Delay (hr)	6.9	6.5	7.7	7.6
Total Stops	923	892	921	903
Fuel Used (gal)	20.5	20.5	20.8	20.8

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1472	1475	1462	1554	1513	1480	1490
Vehs Exited	1466	1472	1473	1568	1524	1499	1490
Starting Vehs	118	97	121	102	110	122	128
Ending Vehs	124	100	110	88	99	103	128
Travel Distance (mi)	526	530	520	551	525	537	523
Travel Time (hr)	27.3	27.1	28.1	29.2	27.6	27.0	31.1
Total Delay (hr)	7.4	7.0	8.4	8.4	7.5	6.7	11.4
Total Stops	934	931	889	969	944	892	853
Fuel Used (gal)	20.7	20.5	20.6	21.6	20.5	20.8	21.4

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1403	1509	1526	1491
Vehs Exited	1407	1526	1510	1495
Starting Vehs	93	111	109	106
Ending Vehs	89	94	125	100
Travel Distance (mi)	495	533	529	527
Travel Time (hr)	24.3	26.8	27.6	27.6
Total Delay (hr)	5.5	6.6	7.5	7.6
Total Stops	789	863	935	899
Fuel Used (gal)	19.1	20.5	20.9	20.7

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1469	1445	1469	1442	1533	1515	1479
Vehs Exited	1484	1451	1462	1439	1521	1509	1470
Starting Vehs	124	100	110	88	99	103	128
Ending Vehs	109	94	117	91	111	109	137
Travel Distance (mi)	521	512	512	506	547	538	526
Travel Time (hr)	30.5	25.4	28.5	26.1	28.0	27.7	26.3
Total Delay (hr)	10.8	5.9	9.1	6.8	7.3	7.4	6.4
Total Stops	916	823	855	827	964	885	875
Fuel Used (gal)	21.1	19.8	20.4	19.7	21.3	20.9	20.2

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1558	1517	1439	1486
Vehs Exited	1514	1504	1461	1480
Starting Vehs	89	94	125	100
Ending Vehs	133	107	103	110
Travel Distance (mi)	540	549	515	526
Travel Time (hr)	27.8	29.0	26.6	27.6
Total Delay (hr)	7.3	8.2	7.1	7.6
Total Stops	962	975	865	894
Fuel Used (gal)	21.0	21.5	20.0	20.6

1: Airport Blvd & I-5 NB Ramps Performance by movement

Movement	WBL	WBR	NBT	NBR	SBU	SBT	SBR	All
Denied Delay (hr)	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.4
Denied Del/Veh (s)	0.4	0.6	0.0	0.0	0.5	0.6	0.7	0.5
Total Delay (hr)	0.0	3.0	0.0	0.0	0.1	1.3	0.2	4.6
Total Del/Veh (s)	13.4	9.8	0.2	2.2	3.8	4.1	3.7	6.1
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Stop Del/Veh (s)	11.3	0.1	0.0	0.0	2.3	0.1	0.0	0.2

2: Airport Blvd & I-5 SB Ramps Performance by movement

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR	All
Denied Delay (hr)	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2
Denied Del/Veh (s)	0.5	3.3	0.0	0.0	0.0	0.0	0.0	0.4
Total Delay (hr)	0.4	0.3	0.0	0.0	0.0	0.0	2.0	2.8
Total Del/Veh (s)	10.7	5.7	3.6	0.6	1.7	0.9	7.8	6.5
Stop Delay (hr)	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.5
Stop Del/Veh (s)	7.5	4.6	2.0	0.3	0.9	0.0	0.0	1.3

3: Bayou Way & Airport Blvd Performance by movement

Movement	EBL	EBT	WBT	WBR	SBU	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.5	0.0	0.6
Total Del/Veh (s)	5.2	6.1	7.1	3.1	4.7	5.8	2.9	5.4
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.4
Stop Del/Veh (s)	3.4	3.0	3.7	2.7	3.2	3.1	2.6	3.1

4: Powerline Rd & Bayou Way Performance by movement

Movement	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.5	0.5	0.5	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.4
Total Delay (hr)	1.1	0.2	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9
Total Del/Veh (s)	11.6	12.5	9.7	7.2	3.8	2.1	0.8	0.4	2.0	0.7	0.3	8.5
Stop Delay (hr)	0.7	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Stop Del/Veh (s)	7.4	7.0	6.9	3.9	3.5	0.2	0.0	0.0	0.2	0.0	0.0	5.4

5: Bayou Way & Metro Air Pkwy Performance by movement

Movement	EBL	EBT	WBT	WBR	SBU	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.1
Total Delay (hr)	0.3	0.1	0.0	0.1	0.0	0.2	0.0	0.7
Total Del/Veh (s)	6.0	7.3	6.6	3.4	4.8	6.0	4.3	5.5
Stop Delay (hr)	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.4
Stop Del/Veh (s)	3.2	3.2	3.1	2.8	3.7	3.4	3.1	3.2

6: Metro Air Pkwy & I-5 SB Ramps Performance by movement

Movement	EBU	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.5	0.4	3.7	0.0	0.0	0.0	0.0	0.3
Total Delay (hr)	0.0	0.6	0.1	0.2	0.3	0.2	2.8	4.2
Total Del/Veh (s)	12.7	14.5	5.6	22.3	4.3	9.9	12.1	10.8
Stop Delay (hr)	0.0	0.5	0.1	0.2	0.2	0.1	1.2	2.2
Stop Del/Veh (s)	11.2	11.5	4.3	20.1	2.5	3.9	5.1	5.6

7: Metro Air Pkwy & I-5 NB Ramps Performance by movement

Movement	WBL	WBT	WBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.9	0.0	0.0	0.4	0.2	1.5
Denied Del/Veh (s)	3.8	3.3	4.6	0.0	0.0	1.6	3.1	2.5
Total Delay (hr)	0.1	0.1	6.1	0.2	0.2	1.0	0.1	7.8
Total Del/Veh (s)	36.9	37.3	30.2	15.6	2.3	4.2	1.8	12.9
Stop Delay (hr)	0.1	0.1	4.9	0.1	0.0	0.3	0.0	5.6
Stop Del/Veh (s)	30.7	28.5	24.3	13.1	0.5	1.2	0.5	9.2

Total Network Performance

Denied Delay (hr)	2.3
Denied Del/Veh (s)	1.4
Total Delay (hr)	27.8
Total Del/Veh (s)	16.4
Stop Delay (hr)	11.8
Stop Del/Veh (s)	7.0

Intersection: 1: Airport Blvd & I-5 NB Ramps

Movement	WB	WB	SB	SB
Directions Served	LT	R	UT	TR
Maximum Queue (ft)	107	301	79	118
Average Queue (ft)	9	13	22	6
95th Queue (ft)	85	165	60	74
Link Distance (ft)	764	764	639	639
Upstream Blk Time (%)	0	0		0
Queuing Penalty (veh)	0	0		0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Airport Blvd & I-5 SB Ramps

Movement	EB	EB	NB	SB	SB	SB	B8
Directions Served	L	R	LT	UT	T	R	T
Maximum Queue (ft)	152	65	35	52	26	32	2
Average Queue (ft)	59	47	4	3	1	2	0
95th Queue (ft)	105	60	20	23	16	18	2
Link Distance (ft)	973		286	747	747		234
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		25				130	
Storage Blk Time (%)	22	16					
Queuing Penalty (veh)	37	23					

Intersection: 3: Bayou Way & Airport Blvd

Movement	EB	WB	SB	SB
Directions Served	LT	TR	UL	R
Maximum Queue (ft)	36	44	97	31
Average Queue (ft)	15	23	56	15
95th Queue (ft)	41	47	84	39
Link Distance (ft)	346	617	286	286
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Powerline Rd & Bayou Way

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	242	55	33	15
Average Queue (ft)	107	23	4	1
95th Queue (ft)	191	49	20	8
Link Distance (ft)	678	655	680	639
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Bayou Way & Metro Air Pkwy

Movement	EB	WB	SB
Directions Served	LT	TR	ULR
Maximum Queue (ft)	87	60	72
Average Queue (ft)	46	32	39
95th Queue (ft)	73	53	61
Link Distance (ft)	558	542	481
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Metro Air Pkwy & I-5 SB Ramps

Movement	EB	EB	NB	NB	SB	SB
Directions Served	UL	R	L	T	T	R
Maximum Queue (ft)	157	57	59	97	348	214
Average Queue (ft)	63	39	24	40	60	143
95th Queue (ft)	123	58	52	78	232	225
Link Distance (ft)	543			481	843	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		25	100			120
Storage Blk Time (%)	33	7	0	0		11
Queuing Penalty (veh)	29	12	0	0		8

Intersection: 7: Metro Air Pkwy & I-5 NB Ramps

Movement	WB	WB	NB	NB	SB	SB
Directions Served	LT	R	L	T	T	R
Maximum Queue (ft)	631	180	62	71	223	54
Average Queue (ft)	254	155	24	12	85	17
95th Queue (ft)	653	222	51	45	182	46
Link Distance (ft)	791			843	582	
Upstream Blk Time (%)	4					
Queuing Penalty (veh)	0					
Storage Bay Dist (ft)		155	105			180
Storage Blk Time (%)	1	35		0	1	
Queuing Penalty (veh)	4	7		0	1	

Network Summary

Network wide Queuing Penalty: 122

Appendix E

Analysis Worksheets for
Cumulative (2040) plus Project Conditions

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	6:50	6:50	6:50	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	5887	5946	5903	6021	5936	5966	6043
Vehs Exited	5863	5963	5894	6019	5919	5957	6019
Starting Vehs	112	129	126	113	117	123	123
Ending Vehs	136	112	135	115	134	132	147
Travel Distance (mi)	1953	1983	1976	2019	1989	1994	2003
Travel Time (hr)	199.7	202.4	144.7	138.9	168.1	173.0	139.8
Total Delay (hr)	125.4	126.9	69.5	62.4	92.6	97.0	63.6
Total Stops	3054	3136	3117	3077	3045	3325	3296
Fuel Used (gal)	99.7	101.6	87.9	88.3	93.9	95.5	87.6

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	5936	5939	5865	5940
Vehs Exited	5896	5901	5844	5927
Starting Vehs	95	106	117	113
Ending Vehs	135	144	138	125
Travel Distance (mi)	1968	1960	1965	1981
Travel Time (hr)	127.8	194.8	141.2	163.0
Total Delay (hr)	52.8	120.2	66.6	87.7
Total Stops	3239	3116	3022	3139
Fuel Used (gal)	83.7	99.0	86.4	92.4

Interval #0 Information Seeding

Start Time	6:50
End Time	7:00
Total Time (min)	10

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1489	1522	1521	1569	1459	1518	1608
Vehs Exited	1475	1519	1509	1535	1460	1510	1596
Starting Vehs	112	129	126	113	117	123	123
Ending Vehs	126	132	138	147	116	131	135
Travel Distance (mi)	499	505	506	525	483	506	526
Travel Time (hr)	36.9	38.9	29.9	27.9	36.1	32.1	32.8
Total Delay (hr)	17.9	19.6	10.6	8.1	17.7	12.8	12.7
Total Stops	836	910	852	861	688	911	1004
Fuel Used (gal)	22.2	22.9	21.0	21.3	21.8	21.5	22.4

Interval #1 Information

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1475	1492	1425	1506
Vehs Exited	1444	1467	1421	1492
Starting Vehs	95	106	117	113
Ending Vehs	126	131	121	130
Travel Distance (mi)	487	485	471	499
Travel Time (hr)	26.5	35.8	32.9	33.0
Total Delay (hr)	8.1	17.3	15.1	14.0
Total Stops	888	822	768	851
Fuel Used (gal)	19.7	21.8	20.6	21.5

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1453	1497	1462	1462	1504	1475	1510
Vehs Exited	1457	1518	1478	1487	1513	1456	1502
Starting Vehs	126	132	138	147	116	131	135
Ending Vehs	122	111	122	122	107	150	143
Travel Distance (mi)	483	505	493	491	512	490	496
Travel Time (hr)	46.1	48.6	36.5	32.3	42.2	37.0	34.9
Total Delay (hr)	27.7	29.4	17.7	13.7	22.8	18.4	16.0
Total Stops	674	780	820	748	807	860	785
Fuel Used (gal)	23.8	25.1	21.9	21.0	23.8	22.2	21.7

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1510	1453	1493	1482
Vehs Exited	1509	1457	1479	1485
Starting Vehs	126	131	121	130
Ending Vehs	127	127	135	121
Travel Distance (mi)	507	483	498	496
Travel Time (hr)	30.6	45.6	37.4	39.1
Total Delay (hr)	11.3	27.2	18.4	20.3
Total Stops	832	794	766	786
Fuel Used (gal)	21.1	23.9	22.3	22.7

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1435	1431	1440	1508	1439	1452	1452
Vehs Exited	1419	1431	1448	1508	1419	1480	1458
Starting Vehs	122	111	122	122	107	150	143
Ending Vehs	138	111	114	122	127	122	137
Travel Distance (mi)	475	477	480	509	482	491	491
Travel Time (hr)	53.9	52.6	36.9	36.9	42.2	47.9	34.2
Total Delay (hr)	35.7	34.5	18.7	17.6	23.9	29.1	15.6
Total Stops	720	681	691	764	738	810	766
Fuel Used (gal)	25.3	25.3	22.1	22.7	23.0	24.9	21.4

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1441	1459	1501	1452
Vehs Exited	1454	1465	1513	1457
Starting Vehs	127	127	135	121
Ending Vehs	114	121	123	118
Travel Distance (mi)	478	489	507	488
Travel Time (hr)	32.5	54.2	36.1	42.7
Total Delay (hr)	14.3	35.6	16.8	24.2
Total Stops	752	729	758	743
Fuel Used (gal)	20.4	25.8	22.4	23.3

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1510	1496	1480	1482	1534	1521	1473
Vehs Exited	1512	1495	1459	1489	1527	1511	1463
Starting Vehs	138	111	114	122	127	122	137
Ending Vehs	136	112	135	115	134	132	147
Travel Distance (mi)	495	497	496	494	512	507	490
Travel Time (hr)	62.8	62.4	41.3	41.7	47.6	56.0	37.9
Total Delay (hr)	44.0	43.4	22.4	23.0	28.1	36.8	19.2
Total Stops	824	765	754	704	812	744	741
Fuel Used (gal)	28.5	28.3	23.0	23.3	25.3	27.0	22.1

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1510	1535	1446	1497
Vehs Exited	1489	1512	1431	1486
Starting Vehs	114	121	123	118
Ending Vehs	135	144	138	125
Travel Distance (mi)	497	504	489	498
Travel Time (hr)	38.1	59.2	34.8	48.2
Total Delay (hr)	19.1	40.1	16.3	29.2
Total Stops	767	771	730	762
Fuel Used (gal)	22.5	27.6	21.1	24.9

1: Airport Blvd & I-5 NB Ramps Performance by movement

Movement	WBL	WBR	NBT	NBR	SBU	SBT	SBR	All
Denied Delay (hr)	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.3
Denied Del/Veh (s)	0.3	0.6	0.0	0.0	0.3	0.5	0.5	0.5
Total Delay (hr)	0.1	3.9	0.0	0.0	0.0	0.6	0.1	4.8
Total Del/Veh (s)	13.5	12.0	0.3	2.3	4.5	2.7	1.9	6.7
Stop Delay (hr)	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2
Stop Del/Veh (s)	11.3	0.3	0.0	0.0	3.7	0.0	0.0	0.3

2: Airport Blvd & I-5 SB Ramps Performance by movement

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.3	3.4	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay (hr)	0.5	0.1	0.0	0.0	0.0	0.0	1.1	1.8
Total Del/Veh (s)	10.8	4.9	2.5	0.7	3.1	1.2	5.7	5.2
Stop Delay (hr)	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.5
Stop Del/Veh (s)	8.1	4.2	0.8	0.3	2.5	0.1	0.0	1.4

3: Bayou Way & Airport Blvd Performance by movement

Movement	EBL	EBT	WBR	SBU	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.2	0.0	0.0	0.0	0.1
Total Delay (hr)	0.0	0.0	0.2	0.0	0.1	0.0	0.4
Total Del/Veh (s)	4.5	5.9	4.1	3.3	4.6	2.7	4.1
Stop Delay (hr)	0.0	0.0	0.2	0.0	0.1	0.0	0.3
Stop Del/Veh (s)	2.8	2.6	2.8	2.7	2.7	2.5	2.7

4: Powerline Rd & Bayou Way Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	21.2	6.9	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	34.1
Denied Del/Veh (s)	354.1	356.2	394.8	0.2	0.2	0.2	0.2	0.2	0.5	0.6	0.6	88.6
Total Delay (hr)	16.8	5.2	4.1	0.2	3.3	0.7	0.2	0.0	0.0	0.3	0.3	31.1
Total Del/Veh (s)	344.2	318.7	335.9	78.5	102.4	14.7	9.2	8.7	4.1	4.2	2.5	83.9
Stop Delay (hr)	17.4	5.4	4.3	0.2	3.2	0.5	0.1	0.0	0.0	0.0	0.0	31.2
Stop Del/Veh (s)	356.8	329.6	349.7	77.1	99.6	11.7	6.0	6.8	0.4	0.0	0.1	84.0

5: Bayou Way & Metro Air Pkwy Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.2	0.3	0.3	0.0	0.0	0.0	0.2
Total Delay (hr)	0.1	0.0	0.0	0.3	0.1	0.0	0.1	0.6
Total Del/Veh (s)	5.1	6.4	7.1	4.5	5.5	0.6	3.7	4.7
Stop Delay (hr)	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.4
Stop Del/Veh (s)	2.9	2.8	2.9	2.8	3.0	0.2	2.8	2.9

6: Metro Air Pkwy & I-5 SB Ramps Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.4	3.7	0.0	0.0	0.0	0.0	0.3
Total Delay (hr)	0.5	0.1	0.2	0.3	0.1	0.7	1.8
Total Del/Veh (s)	10.1	4.7	14.6	4.2	6.6	6.1	6.6
Stop Delay (hr)	0.3	0.1	0.1	0.2	0.1	0.3	1.1
Stop Del/Veh (s)	7.5	3.9	12.5	2.5	3.0	2.6	3.9

7: Metro Air Pkwy & I-5 NB Ramps Performance by movement

Movement	WBL	WBT	WBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.7	0.0	0.0	0.1	0.2	1.1
Denied Del/Veh (s)	1.9	1.9	3.4	0.0	0.0	1.0	3.3	2.1
Total Delay (hr)	0.3	0.1	4.6	0.6	0.2	0.8	0.2	6.9
Total Del/Veh (s)	27.4	27.4	21.6	13.6	3.2	6.6	3.0	12.8
Stop Delay (hr)	0.2	0.1	3.2	0.4	0.1	0.4	0.1	4.6
Stop Del/Veh (s)	20.3	18.7	14.9	10.5	1.1	3.5	1.7	8.5

Total Network Performance

Denied Delay (hr)	35.7
Denied Del/Veh (s)	21.4
Total Delay (hr)	52.0
Total Del/Veh (s)	30.9
Stop Delay (hr)	39.4
Stop Del/Veh (s)	23.4

Intersection: 1: Airport Blvd & I-5 NB Ramps

Movement	WB	WB	SB	SB
Directions Served	LT	R	UT	TR
Maximum Queue (ft)	187	316	56	50
Average Queue (ft)	17	23	16	3
95th Queue (ft)	125	229	46	24
Link Distance (ft)	764	764	639	639
Upstream Blk Time (%)	0	0		
Queuing Penalty (veh)	0	0		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Airport Blvd & I-5 SB Ramps

Movement	EB	EB	NB	SB	SB	SB
Directions Served	L	R	LT	UT	T	R
Maximum Queue (ft)	134	56	47	38	12	24
Average Queue (ft)	57	34	5	7	0	1
95th Queue (ft)	104	61	26	28	9	10
Link Distance (ft)	973		286	747	747	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		25				130
Storage Blk Time (%)	26	4				
Queuing Penalty (veh)	13	7				

Intersection: 3: Bayou Way & Airport Blvd

Movement	EB	WB	SB	SB
Directions Served	LT	TR	UL	R
Maximum Queue (ft)	34	86	60	46
Average Queue (ft)	15	45	34	19
95th Queue (ft)	41	70	53	46
Link Distance (ft)	346	617	286	286
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Powerline Rd & Bayou Way

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	725	260	189	60
Average Queue (ft)	645	122	75	16
95th Queue (ft)	853	259	144	43
Link Distance (ft)	678	655	680	639
Upstream Blk Time (%)	80			
Queuing Penalty (veh)	0			
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Bayou Way & Metro Air Pkwy

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	61	89	68
Average Queue (ft)	31	49	35
95th Queue (ft)	53	75	54
Link Distance (ft)	558	542	481
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Metro Air Pkwy & I-5 SB Ramps

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	R
Maximum Queue (ft)	102	52	63	94	60	145
Average Queue (ft)	47	30	26	43	19	71
95th Queue (ft)	86	57	57	78	51	122
Link Distance (ft)	543			481	843	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		25	100			120
Storage Blk Time (%)	25	4	0	0		1
Queuing Penalty (veh)	14	7	0	0		0

Intersection: 7: Metro Air Pkwy & I-5 NB Ramps

Movement	WB	WB	NB	NB	SB	SB
Directions Served	LT	R	L	T	T	R
Maximum Queue (ft)	593	180	105	84	173	104
Average Queue (ft)	211	151	53	24	78	42
95th Queue (ft)	532	220	90	66	140	78
Link Distance (ft)	791			843	582	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		155	105			180
Storage Blk Time (%)	0	27	0	0	0	
Queuing Penalty (veh)	1	17	1	0	0	

Network Summary

Network wide Queuing Penalty: 61

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	4:50	4:50	4:50	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	6593	6643	6619	6620	6503	6646	6628
Vehs Exited	6603	6655	6576	6647	6473	6655	6590
Starting Vehs	152	145	105	152	91	155	115
Ending Vehs	142	133	148	125	121	146	153
Travel Distance (mi)	2313	2318	2304	2317	2272	2334	2302
Travel Time (hr)	164.0	168.4	150.3	184.0	129.4	140.8	175.1
Total Delay (hr)	76.2	80.2	62.7	95.9	43.1	52.1	87.6
Total Stops	3850	3905	4291	3773	4112	4144	3879
Fuel Used (gal)	101.2	102.3	97.1	105.2	92.1	96.2	103.3

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	6613	6606	6509	6599
Vehs Exited	6602	6606	6506	6590
Starting Vehs	140	139	142	129
Ending Vehs	151	139	145	135
Travel Distance (mi)	2328	2311	2276	2308
Travel Time (hr)	145.9	179.4	136.7	157.4
Total Delay (hr)	57.5	91.5	50.3	69.7
Total Stops	3782	3901	3895	3955
Fuel Used (gal)	97.4	104.6	93.3	99.3

Interval #0 Information Seeding

Start Time	4:50
End Time	5:00
Total Time (min)	10

Volumes adjusted by Growth Factors.
No data recorded this interval.

Interval #1 Information

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1650	1682	1635	1659	1646	1694	1681
Vehs Exited	1682	1682	1594	1654	1600	1717	1656
Starting Vehs	152	145	105	152	91	155	115
Ending Vehs	120	145	146	157	137	132	140
Travel Distance (mi)	588	594	564	572	572	597	581
Travel Time (hr)	32.7	36.4	31.0	37.4	29.7	35.5	35.5
Total Delay (hr)	10.4	13.9	9.6	15.7	8.0	12.8	13.4
Total Stops	1160	1060	1111	987	1068	1127	1100
Fuel Used (gal)	23.7	24.5	22.4	24.1	22.5	24.4	24.0

Interval #1 Information

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1578	1728	1624	1657
Vehs Exited	1589	1707	1651	1653
Starting Vehs	140	139	142	129
Ending Vehs	129	160	115	135
Travel Distance (mi)	559	599	576	580
Travel Time (hr)	31.2	39.9	35.1	34.5
Total Delay (hr)	10.0	17.1	13.2	12.4
Total Stops	972	1146	892	1058
Fuel Used (gal)	22.5	25.9	23.7	23.8

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1627	1624	1615	1697	1659	1633	1707
Vehs Exited	1608	1629	1625	1704	1659	1629	1700
Starting Vehs	120	145	146	157	137	132	140
Ending Vehs	139	140	136	150	137	136	147
Travel Distance (mi)	568	561	572	598	582	569	594
Travel Time (hr)	34.7	45.0	34.4	42.3	30.5	34.8	48.2
Total Delay (hr)	13.2	23.6	12.5	19.6	8.5	13.2	25.6
Total Stops	972	1072	1159	1050	1074	889	1040
Fuel Used (gal)	23.5	25.7	23.3	26.0	22.9	23.7	27.3

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1681	1644	1646	1654
Vehs Exited	1671	1648	1624	1648
Starting Vehs	129	160	115	135
Ending Vehs	139	156	137	142
Travel Distance (mi)	584	578	570	578
Travel Time (hr)	34.1	41.4	34.8	38.0
Total Delay (hr)	11.9	19.4	13.1	16.1
Total Stops	1070	1001	1077	1037
Fuel Used (gal)	23.8	25.1	23.5	24.5

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1682	1622	1734	1625	1651	1610	1628
Vehs Exited	1688	1634	1712	1644	1671	1622	1637
Starting Vehs	139	140	136	150	137	136	147
Ending Vehs	133	128	158	131	117	124	138
Travel Distance (mi)	593	564	600	573	580	572	570
Travel Time (hr)	47.1	42.6	39.6	48.6	33.6	33.3	46.8
Total Delay (hr)	24.7	21.1	16.8	26.8	11.5	11.5	25.1
Total Stops	923	873	1064	883	1087	1030	868
Fuel Used (gal)	27.2	25.5	25.5	26.9	23.8	23.2	26.4

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1681	1665	1626	1654
Vehs Exited	1662	1696	1644	1660
Starting Vehs	139	156	137	142
Ending Vehs	158	125	119	131
Travel Distance (mi)	592	589	575	581
Travel Time (hr)	39.3	48.8	34.3	41.4
Total Delay (hr)	16.8	26.5	12.5	19.3
Total Stops	888	951	950	948
Fuel Used (gal)	25.3	27.6	23.5	25.5

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1634	1715	1635	1639	1547	1709	1612
Vehs Exited	1625	1710	1645	1645	1543	1687	1597
Starting Vehs	133	128	158	131	117	124	138
Ending Vehs	142	133	148	125	121	146	153
Travel Distance (mi)	563	599	569	574	539	595	557
Travel Time (hr)	49.4	44.4	45.3	55.7	35.6	37.2	44.7
Total Delay (hr)	27.9	21.6	23.7	33.8	15.1	14.6	23.5
Total Stops	795	900	957	853	883	1098	871
Fuel Used (gal)	26.7	26.6	25.9	28.2	22.9	24.9	25.6

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1673	1569	1613	1633
Vehs Exited	1680	1555	1587	1629
Starting Vehs	158	125	119	131
Ending Vehs	151	139	145	135
Travel Distance (mi)	593	545	554	569
Travel Time (hr)	41.3	49.2	32.5	43.5
Total Delay (hr)	18.8	28.6	11.5	21.9
Total Stops	852	803	976	894
Fuel Used (gal)	25.7	26.0	22.6	25.5

1: Airport Blvd & I-5 NB Ramps Performance by movement

Movement	WBL	WBR	NBT	NBR	SBU	SBT	SBR	All
Denied Delay (hr)	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.4
Denied Del/Veh (s)	0.4	0.6	0.0	0.0	0.5	0.6	0.6	0.5
Total Delay (hr)	0.1	2.7	0.0	0.0	0.1	1.2	0.2	4.3
Total Del/Veh (s)	14.4	8.8	0.3	2.3	4.0	3.9	3.3	5.6
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Stop Del/Veh (s)	12.4	0.1	0.0	0.0	2.6	0.1	0.0	0.2

2: Airport Blvd & I-5 SB Ramps Performance by movement

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR	All
Denied Delay (hr)	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2
Denied Del/Veh (s)	0.6	3.3	0.0	0.0	0.0	0.0	0.0	0.5
Total Delay (hr)	0.5	0.4	0.0	0.0	0.0	0.0	2.0	3.0
Total Del/Veh (s)	12.6	6.3	3.4	0.6	2.1	0.9	7.9	6.6
Stop Delay (hr)	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.7
Stop Del/Veh (s)	9.1	5.0	1.8	0.4	1.3	0.0	0.0	1.5

3: Bayou Way & Airport Blvd Performance by movement

Movement	EBL	EBT	WBT	WBR	SBU	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.1	0.1	0.6	0.0	0.8
Total Del/Veh (s)	5.5	6.8	7.4	3.6	5.0	6.2	2.8	5.6
Stop Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.3	0.0	0.5
Stop Del/Veh (s)	3.7	3.3	3.8	2.9	3.6	3.4	2.5	3.3

4: Powerline Rd & Bayou Way Performance by movement

Movement	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	12.2	2.4	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.0
Denied Del/Veh (s)	83.7	88.5	83.4	0.2	0.2	0.1	0.1	0.1	0.3	0.3	0.2	53.5
Total Delay (hr)	12.6	2.5	4.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	19.8
Total Del/Veh (s)	88.7	90.1	86.6	11.3	6.6	3.8	1.1	0.4	2.7	2.1	1.0	56.6
Stop Delay (hr)	14.1	2.7	5.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.1
Stop Del/Veh (s)	99.7	100.1	98.9	7.7	5.9	1.7	0.0	0.0	0.2	0.0	0.0	63.1

5: Bayou Way & Metro Air Pkwy Performance by movement

Movement	EBL	EBT	WBT	WBR	SBU	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.1
Total Delay (hr)	0.4	0.1	0.0	0.1	0.0	0.2	0.1	0.9
Total Del/Veh (s)	6.4	7.7	6.7	3.7	5.3	6.6	4.4	5.9
Stop Delay (hr)	0.2	0.0	0.0	0.1	0.0	0.1	0.1	0.5
Stop Del/Veh (s)	3.4	3.3	3.2	3.1	4.0	3.7	3.1	3.4

6: Metro Air Pkwy & I-5 SB Ramps Performance by movement

Movement	EBU	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.5	0.5	3.8	0.0	0.0	0.0	0.0	0.3
Total Delay (hr)	0.0	0.7	0.2	0.3	0.3	0.3	3.6	5.5
Total Del/Veh (s)	14.2	16.3	6.4	21.3	4.3	11.7	15.4	13.1
Stop Delay (hr)	0.0	0.6	0.1	0.3	0.2	0.1	1.7	3.1
Stop Del/Veh (s)	12.5	13.2	5.1	18.9	2.6	4.6	7.3	7.3

7: Metro Air Pkwy & I-5 NB Ramps Performance by movement

Movement	WBL	WBT	WBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.8	0.0	0.0	0.4	0.2	1.4
Denied Del/Veh (s)	2.9	3.1	3.9	0.0	0.0	1.5	3.1	2.2
Total Delay (hr)	0.5	0.1	5.8	0.4	0.3	1.7	0.1	8.9
Total Del/Veh (s)	37.0	41.0	28.5	23.8	3.1	6.8	2.5	14.2
Stop Delay (hr)	0.4	0.1	4.5	0.3	0.1	0.6	0.0	6.0
Stop Del/Veh (s)	29.5	32.0	21.9	21.0	1.0	2.5	1.0	9.6

Total Network Performance

Denied Delay (hr)	21.1
Denied Del/Veh (s)	11.4
Total Delay (hr)	48.6
Total Del/Veh (s)	26.0
Stop Delay (hr)	34.4
Stop Del/Veh (s)	18.4

Intersection: 1: Airport Blvd & I-5 NB Ramps

Movement	WB	WB	SB	SB
Directions Served	LT	R	UT	TR
Maximum Queue (ft)	40	135	87	96
Average Queue (ft)	14	5	22	5
95th Queue (ft)	33	84	61	70
Link Distance (ft)	764	764	639	639
Upstream Blk Time (%)		0		0
Queuing Penalty (veh)		0		0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Airport Blvd & I-5 SB Ramps

Movement	EB	EB	NB	SB	SB	SB	B8
Directions Served	L	R	LT	UT	T	R	T
Maximum Queue (ft)	152	66	49	45	12	24	3
Average Queue (ft)	70	48	7	5	1	1	0
95th Queue (ft)	123	59	31	27	10	15	3
Link Distance (ft)	973		286	747	747		234
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		25				130	
Storage Blk Time (%)	26	19					
Queuing Penalty (veh)	52	26					

Intersection: 3: Bayou Way & Airport Blvd

Movement	EB	WB	SB	SB
Directions Served	LT	TR	UL	R
Maximum Queue (ft)	45	72	110	31
Average Queue (ft)	17	34	60	10
95th Queue (ft)	44	56	90	33
Link Distance (ft)	346	617	286	286
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Powerline Rd & Bayou Way

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	730	80	59	31
Average Queue (ft)	608	40	12	4
95th Queue (ft)	891	68	41	19
Link Distance (ft)	678	655	680	639
Upstream Blk Time (%)	63			
Queuing Penalty (veh)	0			
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Bayou Way & Metro Air Pkwy

Movement	EB	WB	SB
Directions Served	LT	TR	ULR
Maximum Queue (ft)	95	60	87
Average Queue (ft)	51	33	45
95th Queue (ft)	78	54	70
Link Distance (ft)	558	542	481
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Metro Air Pkwy & I-5 SB Ramps

Movement	EB	EB	NB	NB	SB	SB
Directions Served	UL	R	L	T	T	R
Maximum Queue (ft)	157	56	80	102	418	215
Average Queue (ft)	68	41	36	39	106	166
95th Queue (ft)	129	58	65	81	319	245
Link Distance (ft)	543			481	843	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		25	100			120
Storage Blk Time (%)	36	9	0	0	0	18
Queuing Penalty (veh)	38	14	0	0	0	19

Intersection: 7: Metro Air Pkwy & I-5 NB Ramps

Movement	WB	WB	NB	NB	SB	SB
Directions Served	LT	R	L	T	T	R
Maximum Queue (ft)	641	180	91	105	300	122
Average Queue (ft)	266	162	33	28	124	28
95th Queue (ft)	617	217	69	77	235	72
Link Distance (ft)	791			843	582	
Upstream Blk Time (%)	2					
Queuing Penalty (veh)	0					
Storage Bay Dist (ft)		155	105			180
Storage Blk Time (%)	0	37	0	0	2	
Queuing Penalty (veh)	2	19	1	0	3	

Network Summary

Network wide Queuing Penalty: 173

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	6:50	6:50	6:50	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	6769	6757	6757	6722	6861	6858	6917
Vehs Exited	6783	6765	6730	6688	6870	6844	6899
Starting Vehs	120	125	99	92	112	105	107
Ending Vehs	106	117	126	126	103	119	125
Travel Distance (mi)	2271	2262	2263	2246	2312	2297	2312
Travel Time (hr)	118.3	117.4	116.9	112.1	116.5	117.9	119.1
Total Delay (hr)	33.4	33.0	32.6	28.4	30.6	31.9	32.8
Total Stops	4232	4245	4232	4034	4219	4369	4453
Fuel Used (gal)	91.7	91.5	91.4	89.5	92.8	92.3	93.3

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	6798	6639	6640	6770
Vehs Exited	6804	6636	6640	6768
Starting Vehs	111	108	106	103
Ending Vehs	105	111	106	110
Travel Distance (mi)	2291	2228	2232	2271
Travel Time (hr)	116.6	111.8	120.3	116.7
Total Delay (hr)	31.1	28.7	36.9	31.9
Total Stops	4294	4150	4182	4239
Fuel Used (gal)	92.3	89.2	91.3	91.5

Interval #0 Information Seeding

Start Time	6:50
End Time	7:00
Total Time (min)	10

Volumes adjusted by Growth Factors.
No data recorded this interval.

Interval #1 Information

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1720	1795	1654	1638	1748	1710	1741
Vehs Exited	1721	1805	1644	1627	1750	1697	1719
Starting Vehs	120	125	99	92	112	105	107
Ending Vehs	119	115	109	103	110	118	129
Travel Distance (mi)	577	598	551	543	587	565	581
Travel Time (hr)	28.6	31.7	29.4	27.0	29.3	28.9	30.2
Total Delay (hr)	7.0	9.5	8.9	6.7	7.5	7.6	8.6
Total Stops	970	1155	1086	953	1095	1100	1118
Fuel Used (gal)	22.9	24.4	22.6	21.9	23.6	22.8	23.5

Interval #1 Information

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1674	1685	1733	1709
Vehs Exited	1660	1694	1686	1700
Starting Vehs	111	108	106	103
Ending Vehs	125	99	153	111
Travel Distance (mi)	553	570	569	569
Travel Time (hr)	27.6	28.1	31.9	29.3
Total Delay (hr)	7.1	6.8	10.7	8.0
Total Stops	1026	980	1176	1064
Fuel Used (gal)	22.4	22.8	23.7	23.1

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1674	1707	1681	1710	1774	1640	1781
Vehs Exited	1674	1682	1664	1683	1761	1661	1780
Starting Vehs	119	115	109	103	110	118	129
Ending Vehs	119	140	126	130	123	97	130
Travel Distance (mi)	565	574	564	570	597	563	589
Travel Time (hr)	30.4	30.6	29.2	28.1	31.0	29.5	31.0
Total Delay (hr)	9.4	9.3	8.2	6.9	8.8	8.5	9.0
Total Stops	1132	1102	1072	1062	1111	1096	1130
Fuel Used (gal)	22.9	23.5	22.7	22.4	24.4	22.6	24.0

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1762	1756	1623	1712
Vehs Exited	1781	1734	1691	1711
Starting Vehs	125	99	153	111
Ending Vehs	106	121	85	111
Travel Distance (mi)	591	583	563	576
Travel Time (hr)	31.0	30.0	33.0	30.4
Total Delay (hr)	9.0	8.2	11.8	8.9
Total Stops	1127	1173	956	1095
Fuel Used (gal)	24.1	23.5	23.7	23.4

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1656	1609	1690	1700	1678	1706	1641
Vehs Exited	1661	1640	1720	1718	1699	1683	1687
Starting Vehs	119	140	126	130	123	97	130
Ending Vehs	114	109	96	112	102	120	84
Travel Distance (mi)	557	543	569	568	571	564	564
Travel Time (hr)	28.1	28.2	29.1	28.8	29.2	28.9	28.4
Total Delay (hr)	7.3	7.7	7.9	7.6	8.0	7.7	7.3
Total Stops	1056	1018	1042	999	1059	1018	1097
Fuel Used (gal)	22.4	22.0	23.1	22.7	22.9	22.5	22.7

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1663	1555	1667	1654
Vehs Exited	1647	1587	1635	1666
Starting Vehs	106	121	85	111
Ending Vehs	122	89	117	97
Travel Distance (mi)	564	532	553	559
Travel Time (hr)	28.5	26.5	28.5	28.4
Total Delay (hr)	7.4	6.6	7.9	7.5
Total Stops	1032	960	1058	1032
Fuel Used (gal)	22.5	21.3	22.5	22.4

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1719	1646	1732	1674	1661	1802	1754
Vehs Exited	1727	1638	1702	1660	1660	1803	1713
Starting Vehs	114	109	96	112	102	120	84
Ending Vehs	106	117	126	126	103	119	125
Travel Distance (mi)	572	547	579	565	557	606	578
Travel Time (hr)	31.2	26.9	29.2	28.2	27.1	30.6	29.5
Total Delay (hr)	9.8	6.5	7.6	7.1	6.3	8.0	7.8
Total Stops	1074	970	1032	1020	954	1155	1108
Fuel Used (gal)	23.7	21.6	23.0	22.6	22.0	24.5	23.2

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1699	1643	1617	1695
Vehs Exited	1716	1621	1628	1685
Starting Vehs	122	89	117	97
Ending Vehs	105	111	106	110
Travel Distance (mi)	582	544	547	568
Travel Time (hr)	29.4	27.3	26.8	28.6
Total Delay (hr)	7.7	7.1	6.5	7.4
Total Stops	1109	1037	992	1046
Fuel Used (gal)	23.3	21.6	21.5	22.7

8: Full Ingress Dwy (West) & Bayou Way Performance by movement

Movement	EBT	EBR	WBL	WBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.2	0.0	0.0	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	0.5	0.3	2.5	0.5	0.9
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0
Stop Del/Veh (s)	0.0	0.0	0.4	0.1	0.1

9: Full Egress Dwy (West) & Bayou Way Performance by movement

Movement	EBT	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.1	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.1	0.1
Total Del/Veh (s)	0.3	0.2	5.5	3.4	1.3
Stop Delay (hr)	0.0	0.0	0.0	0.1	0.1
Stop Del/Veh (s)	0.0	0.0	3.7	2.7	0.8

10: Full Access Dwy (Central) & Bayou Way Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.1	0.0
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	0.3	0.2	2.6	0.3	8.3	3.5	1.1
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Stop Del/Veh (s)	0.2	0.1	0.7	0.0	6.6	3.1	0.6

11: Full Ingress Dwy (East) & Bayou Way Performance by movement

Movement	EBT	WBL	WBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.1	0.0	0.1
Total Del/Veh (s)	0.2	2.6	0.6	0.9
Stop Delay (hr)	0.0	0.0	0.0	0.0
Stop Del/Veh (s)	0.1	0.5	0.0	0.1

12: Full Egress Dwy (East) & Bayou Way Performance by movement

Movement	EBT	WBT	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.3	0.2	0.2
Total Delay (hr)	0.0	0.0	0.1	0.2
Total Del/Veh (s)	0.3	0.1	3.8	0.8
Stop Delay (hr)	0.0	0.0	0.1	0.1
Stop Del/Veh (s)	0.0	0.0	3.1	0.5

Total Zone Performance

Denied Delay (hr)	0.7
Denied Del/Veh (s)	1.2
Total Delay (hr)	7.9
Total Del/Veh (s)	1349.8
Stop Delay (hr)	4.8
Stop Del/Veh (s)	814.7

Intersection: 8: Full Ingress Dwy (West) & Bayou Way

Movement	WB	WB
Directions Served	L	T
Maximum Queue (ft)	45	8
Average Queue (ft)	8	0
95th Queue (ft)	32	8
Link Distance (ft)		393
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	50	
Storage Blk Time (%)	0	
Queuing Penalty (veh)	0	

Intersection: 9: Full Egress Dwy (West) & Bayou Way

Movement	NB
Directions Served	LR
Maximum Queue (ft)	71
Average Queue (ft)	37
95th Queue (ft)	60
Link Distance (ft)	353
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Full Access Dwy (Central) & Bayou Way

Movement	WB	NB
Directions Served	L	LR
Maximum Queue (ft)	33	58
Average Queue (ft)	8	29
95th Queue (ft)	31	50
Link Distance (ft)		347
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	50	
Storage Blk Time (%)	0	
Queuing Penalty (veh)	0	

Intersection: 11: Full Ingress Dwy (East) & Bayou Way

Movement	WB
Directions Served	L
Maximum Queue (ft)	54
Average Queue (ft)	15
95th Queue (ft)	44
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	50
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 12: Full Egress Dwy (East) & Bayou Way

Movement	NB
Directions Served	LR
Maximum Queue (ft)	65
Average Queue (ft)	36
95th Queue (ft)	56
Link Distance (ft)	381
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	4:50	4:50	4:50	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	7524	7522	7332	7447	7529	7556	7519
Vehs Exited	7541	7508	7315	7431	7486	7542	7533
Starting Vehs	137	137	110	134	123	124	138
Ending Vehs	120	151	127	150	166	138	124
Travel Distance (mi)	2670	2640	2593	2640	2673	2665	2668
Travel Time (hr)	135.9	135.5	128.1	131.8	143.0	136.5	135.0
Total Delay (hr)	36.8	37.4	32.1	33.9	43.8	37.5	36.1
Total Stops	4715	4685	4500	4451	4813	5020	4697
Fuel Used (gal)	104.4	104.3	100.5	102.9	106.3	104.8	104.2

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	7405	7529	7384	7474
Vehs Exited	7404	7521	7407	7469
Starting Vehs	120	132	146	122
Ending Vehs	121	140	123	128
Travel Distance (mi)	2618	2655	2617	2644
Travel Time (hr)	130.4	134.8	131.8	134.3
Total Delay (hr)	33.2	36.1	34.4	36.1
Total Stops	4509	4888	4583	4687
Fuel Used (gal)	102.3	104.6	102.5	103.7

Interval #0 Information Seeding

Start Time	4:50
End Time	5:00
Total Time (min)	10

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1822	1861	1797	1823	1893	1877	1899
Vehs Exited	1832	1861	1795	1831	1876	1855	1886
Starting Vehs	137	137	110	134	123	124	138
Ending Vehs	127	137	112	126	140	146	151
Travel Distance (mi)	650	653	636	644	677	663	674
Travel Time (hr)	31.9	33.3	31.1	32.0	36.8	32.1	34.2
Total Delay (hr)	7.8	9.1	7.5	8.1	11.7	7.6	9.2
Total Stops	1090	1190	1079	1076	1240	1119	1198
Fuel Used (gal)	24.9	25.7	24.6	25.3	26.8	25.5	26.3

Interval #1 Information

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1780	1933	1892	1857
Vehs Exited	1784	1934	1896	1855
Starting Vehs	120	132	146	122
Ending Vehs	116	131	142	123
Travel Distance (mi)	635	679	679	659
Travel Time (hr)	30.8	36.1	34.4	33.3
Total Delay (hr)	7.3	10.6	9.2	8.8
Total Stops	1053	1344	1172	1154
Fuel Used (gal)	24.5	27.3	26.5	25.8

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1890	1873	1905	1860	1842	1918	1888
Vehs Exited	1861	1874	1875	1848	1833	1936	1892
Starting Vehs	127	137	112	126	140	146	151
Ending Vehs	156	136	142	138	149	128	147
Travel Distance (mi)	663	666	673	655	653	684	671
Travel Time (hr)	33.7	33.9	32.8	32.6	34.3	35.9	33.8
Total Delay (hr)	9.1	9.2	8.0	8.3	10.1	10.6	9.1
Total Stops	1203	1157	1138	1131	1161	1342	1193
Fuel Used (gal)	26.1	26.3	25.9	25.7	25.9	27.2	26.0

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1860	1896	1802	1873
Vehs Exited	1843	1898	1831	1868
Starting Vehs	116	131	142	123
Ending Vehs	133	129	113	136
Travel Distance (mi)	655	664	642	663
Travel Time (hr)	32.3	33.3	31.5	33.4
Total Delay (hr)	8.0	8.7	7.6	8.9
Total Stops	1117	1239	1084	1178
Fuel Used (gal)	25.7	26.0	24.9	26.0

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1895	1877	1782	1875	1895	1894	1864
Vehs Exited	1922	1877	1793	1891	1895	1900	1881
Starting Vehs	156	136	142	138	149	128	147
Ending Vehs	129	136	131	122	149	122	130
Travel Distance (mi)	682	657	634	671	661	662	662
Travel Time (hr)	36.3	33.6	31.5	34.0	34.2	34.5	33.9
Total Delay (hr)	11.0	9.1	8.0	9.1	9.7	9.8	9.3
Total Stops	1309	1196	1111	1078	1155	1332	1182
Fuel Used (gal)	27.1	25.9	24.8	25.9	26.2	26.1	26.0

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1855	1825	1927	1869
Vehs Exited	1841	1834	1909	1872
Starting Vehs	133	129	113	136
Ending Vehs	147	120	131	124
Travel Distance (mi)	644	652	682	661
Travel Time (hr)	32.1	32.3	34.7	33.7
Total Delay (hr)	8.2	8.2	9.4	9.2
Total Stops	1123	1159	1197	1178
Fuel Used (gal)	25.2	25.5	27.0	26.0

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1917	1911	1848	1889	1899	1867	1868
Vehs Exited	1926	1896	1852	1861	1882	1851	1874
Starting Vehs	129	136	131	122	149	122	130
Ending Vehs	120	151	127	150	166	138	124
Travel Distance (mi)	675	663	650	670	683	656	661
Travel Time (hr)	33.9	34.6	32.8	33.1	37.7	33.9	33.0
Total Delay (hr)	8.9	10.0	8.6	8.3	12.4	9.5	8.5
Total Stops	1113	1142	1172	1166	1257	1227	1124
Fuel Used (gal)	26.3	26.4	25.3	26.0	27.4	25.9	25.8

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1910	1875	1763	1873
Vehs Exited	1936	1855	1771	1869
Starting Vehs	147	120	131	124
Ending Vehs	121	140	123	128
Travel Distance (mi)	684	660	613	661
Travel Time (hr)	35.2	33.0	31.2	33.8
Total Delay (hr)	9.7	8.6	8.3	9.3
Total Stops	1216	1146	1130	1172
Fuel Used (gal)	27.0	25.7	24.1	26.0

8: Full Ingress Dwy (West) & Bayou Way Performance by movement

Movement	EBT	EBR	WBL	WBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.3	0.3	0.0	0.0	0.2
Total Delay (hr)	0.1	0.0	0.1	0.0	0.2
Total Del/Veh (s)	0.6	0.8	4.7	0.8	1.3
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0
Stop Del/Veh (s)	0.0	0.0	0.9	0.1	0.2

9: Full Egress Dwy (West) & Bayou Way Performance by movement

Movement	EBT	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.2	0.2	0.0
Total Delay (hr)	0.0	0.0	0.1	0.1	0.2
Total Del/Veh (s)	0.4	0.4	6.9	6.1	1.6
Stop Delay (hr)	0.0	0.0	0.0	0.1	0.1
Stop Del/Veh (s)	0.0	0.1	4.3	3.5	0.8

10: Full Access Dwy (Central) & Bayou Way Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Delay (hr)	0.1	0.0	0.1	0.0	0.0	0.1	0.3
Total Del/Veh (s)	0.8	0.7	4.5	0.3	9.5	6.8	1.6
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Stop Del/Veh (s)	0.1	0.1	1.2	0.0	7.2	4.4	0.7

11: Full Ingress Dwy (East) & Bayou Way Performance by movement

Movement	EBT	WBL	WBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.1	0.0	0.2
Total Del/Veh (s)	0.6	4.7	0.5	1.2
Stop Delay (hr)	0.0	0.0	0.0	0.0
Stop Del/Veh (s)	0.1	1.2	0.0	0.2

12: Full Egress Dwy (East) & Bayou Way Performance by movement

Movement	EBT	WBT	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.2	0.1	0.1
Total Delay (hr)	0.1	0.0	0.2	0.3
Total Del/Veh (s)	0.5	0.1	6.7	1.2
Stop Delay (hr)	0.0	0.0	0.1	0.1
Stop Del/Veh (s)	0.0	0.0	4.0	0.6

Total Zone Performance

Denied Delay (hr)	0.8
Denied Del/Veh (s)	1.3
Total Delay (hr)	6.1
Total Del/Veh (s)	845.2
Stop Delay (hr)	3.0
Stop Del/Veh (s)	418.7

Intersection: 8: Full Ingress Dwy (West) & Bayou Way

Movement	WB
Directions Served	L
Maximum Queue (ft)	49
Average Queue (ft)	16
95th Queue (ft)	43
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	50
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 9: Full Egress Dwy (West) & Bayou Way

Movement	EB	NB
Directions Served	T	LR
Maximum Queue (ft)	5	80
Average Queue (ft)	0	39
95th Queue (ft)	5	65
Link Distance (ft)	393	353
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Full Access Dwy (Central) & Bayou Way

Movement	EB	WB	WB	NB
Directions Served	TR	L	T	LR
Maximum Queue (ft)	5	48	8	66
Average Queue (ft)	0	13	0	30
95th Queue (ft)	5	40	0	55
Link Distance (ft)	258		273	347
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		50		
Storage Blk Time (%)		0		
Queuing Penalty (veh)		0		

Intersection: 11: Full Ingress Dwy (East) & Bayou Way

Movement	EB	WB
Directions Served	TR	L
Maximum Queue (ft)	2	57
Average Queue (ft)	0	26
95th Queue (ft)	2	53
Link Distance (ft)	273	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		50
Storage Blk Time (%)		0
Queuing Penalty (veh)		1

Intersection: 12: Full Egress Dwy (East) & Bayou Way

Movement	NB
Directions Served	LR
Maximum Queue (ft)	73
Average Queue (ft)	40
95th Queue (ft)	62
Link Distance (ft)	381
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Appendix F

MUTCD Peak-Hour Signal Warrant Worksheets

Kimley»Horn

PEAK HOUR SIGNAL WARRANT ANALYSIS (Warrant #3, California MUTCD 2014 Edition)

INT #1

PROJECT NAME: ***Watt EV***

SCENARIO: ***Existing***

COMMENTS:

MAJOR STREET: ***Airport Blvd*** ☑ NB/SB ☐ EB/WB # OF APPROACH LANES: 2

MINOR STREET: ***I-5 Northbound Ramps*** ☐ NB/SB ☑ EB/WB # OF APPROACH LANES: 1

THE STUDY INTERSECTION HAS MORE THAN THREE APPROACHES (Y OR N): Y

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): N

	AM		PM	
WORST CASE DELAY FOR MINOR STREET APPROACH:	10.4	sec/veh	10.4	sec/veh
	2.90	veh-hr	2.52	veh-hr

			MAJOR STREET			MINOR STREET				
			NB Approach	SB Approach	Total	EB Approach	WB Approach	Heavy Leg	Total	Intersection Total
06:00 AM	TO	07:00 AM			0			0	0	0
07:00 AM	TO	08:00 AM	240	836	1076	0	1003	1003	1003	2079
08:00 AM	TO	09:00 AM			0			0	0	0
09:00 AM	TO	10:00 AM			0			0	0	0
10:00 AM	TO	11:00 AM			0			0	0	0
11:00 AM	TO	12:00 PM			0			0	0	0
12:00 PM	TO	01:00 PM			0			0	0	0
01:00 PM	TO	02:00 PM			0			0	0	0
02:00 PM	TO	03:00 PM			0			0	0	0
03:00 PM	TO	04:00 PM			0			0	0	0
04:00 PM	TO	05:00 PM			0			0	0	0
05:00 PM	TO	06:00 PM	207	1313	1520	0	871	871	871	2391
06:00 PM	TO	07:00 PM			0			0	0	0
07:00 PM	TO	08:00 PM			0			0	0	0
08:00 PM	TO	09:00 PM			0			0	0	0
09:00 PM	TO	10:00 PM			0			0	0	0

	MAJOR STREET	MINOR STREET		INTERSECTION
	Total	Heavy Leg	Total	Total
AM MAX	1076	1003	1003	2079
PM MAX	1520	871	871	2391

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Existing AM
Intersection: Airport Blvd AND I-5 Northbound Ramps
Comments:

	PART A or PART B	SATISFIED	**YES**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

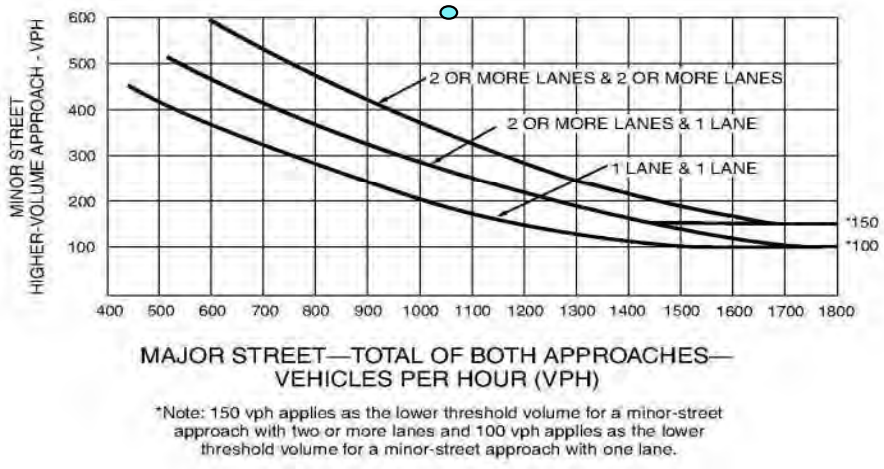
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	Yes

PART B SATISFIED **Yes**

APPROACH LANES	One	2 or More
Both Approaches - Major Street		1076
Highest Approach - Minor Street	1003	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Existing PM
Intersection: Airport Blvd AND I-5 Northbound Ramps
Comments:

	PART A or PART B	SATISFIED	**YES**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

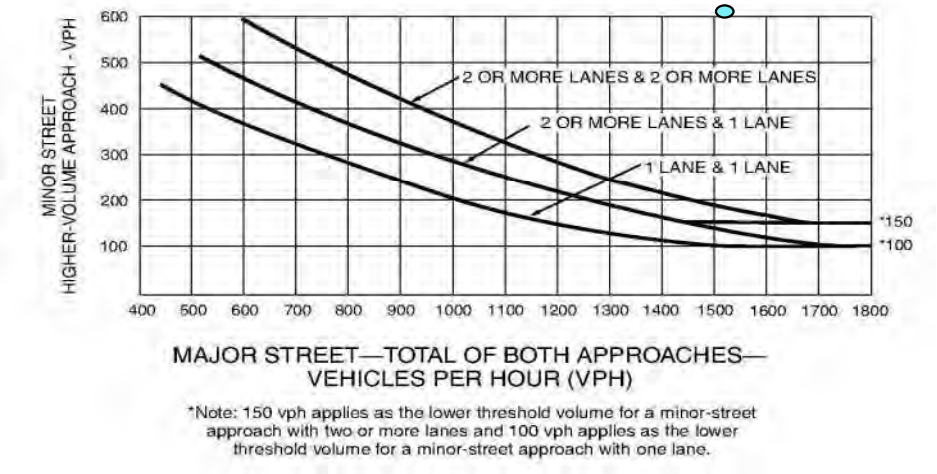
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	Yes

PART B SATISFIED **Yes**

APPROACH LANES	One	2 or More
Both Approaches - Major Street		1520
Highest Approach - Minor Street	871	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

PEAK HOUR SIGNAL WARRANT ANALYSIS (Warrant #3, California MUTCD 2014 Edition)

INT #2

PROJECT NAME: ***Watt EV***

SCENARIO: ***Existing***

COMMENTS:

MAJOR STREET: ***Airport Boulevard*** ☑ NB/SB ☐ EB/WB # OF APPROACH LANES: 1

MINOR STREET: ***I-5 Southbound Ramps*** ☐ NB/SB ☑ EB/WB # OF APPROACH LANES: 1

THE STUDY INTERSECTION HAS MORE THAN THREE APPROACHES (Y OR N): Y

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): N

	AM		PM	
WORST CASE DELAY FOR MINOR STREET APPROACH:	7.8	sec/veh	8.7	sec/veh
	0.35	veh-hr	0.73	veh-hr

			MAJOR STREET			MINOR STREET				
			NB Approach	SB Approach	Total	EB Approach	WB Approach	Heavy Leg	Total	Intersection Total
06:00 AM	TO	07:00 AM			0			0	0	0
07:00 AM	TO	08:00 AM	167	637	804	160	0	160	160	964
08:00 AM	TO	09:00 AM			0			0	0	0
09:00 AM	TO	10:00 AM			0			0	0	0
10:00 AM	TO	11:00 AM			0			0	0	0
11:00 AM	TO	12:00 PM			0			0	0	0
12:00 PM	TO	01:00 PM			0			0	0	0
01:00 PM	TO	02:00 PM			0			0	0	0
02:00 PM	TO	03:00 PM			0			0	0	0
03:00 PM	TO	04:00 PM			0			0	0	0
04:00 PM	TO	05:00 PM			0			0	0	0
05:00 PM	TO	06:00 PM	68	1097	1165	304	0	304	304	1469
06:00 PM	TO	07:00 PM			0			0	0	0
07:00 PM	TO	08:00 PM			0			0	0	0
08:00 PM	TO	09:00 PM			0			0	0	0
09:00 PM	TO	10:00 PM			0			0	0	0

	MAJOR STREET	MINOR STREET		INTERSECTION
	Total	Heavy Leg	Total	Total
AM MAX	804	160	160	964
PM MAX	1165	304	304	1469

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Existing AM
Intersection: Airport Boulevard AND I-5 Southbound Ramps
Comments:

	PART A or PART B	SATISFIED	**NO**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

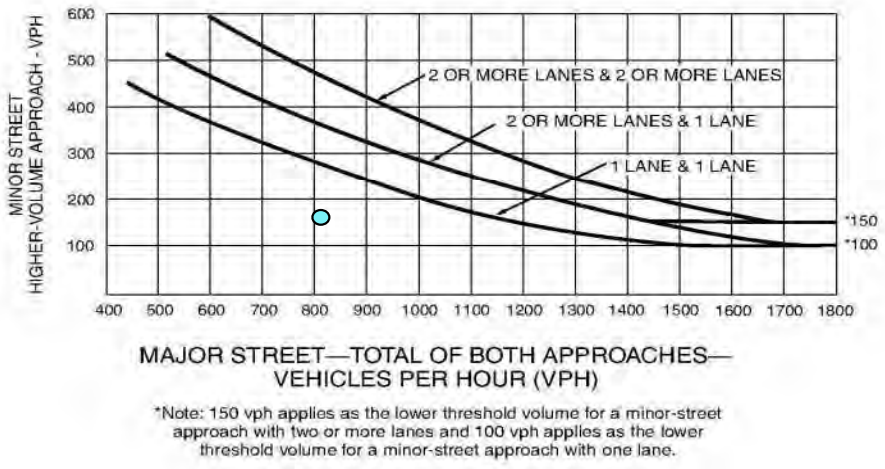
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	Yes

PART B SATISFIED **No**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	804	
Highest Approach - Minor Street	160	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Existing PM
Intersection: Airport Boulevard AND I-5 Southbound Ramps
Comments:

	PART A or PART B	SATISFIED	**YES**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

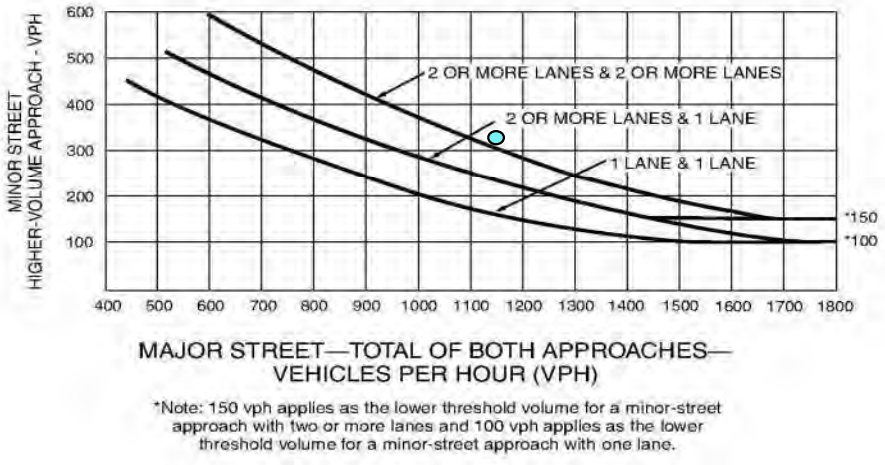
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	Yes

PART B SATISFIED **Yes**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	1165	
Highest Approach - Minor Street	304	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



Kimley»Horn

PEAK HOUR SIGNAL WARRANT ANALYSIS (Warrant #3, California MUTCD 2014 Edition)

INT #3

PROJECT NAME: ***Watt EV***

SCENARIO: ***Existing***

COMMENTS:

MAJOR STREET: ***Airport Boulevard*** ☑ NB/SB ☐ EB/WB # OF APPROACH LANES: 2

MINOR STREET: ***Bayou Way*** ☐ NB/SB ☑ EB/WB # OF APPROACH LANES: 1

THE STUDY INTERSECTION HAS MORE THAN THREE APPROACHES (Y OR N): Y

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): N

WORST CASE DELAY FOR MINOR STREET APPROACH:	AM		PM	
	3.3	sec/veh	5.1	sec/veh
	0.13	veh-hr	0.03	veh-hr

			MAJOR STREET			MINOR STREET				
			NB Approach	SB Approach	Total	EB Approach	WB Approach	Heavy Leg	Total	Intersection Total
06:00 AM	TO	07:00 AM			0			0	0	0
07:00 AM	TO	08:00 AM	0	57	57	6	142	142	148	205
08:00 AM	TO	09:00 AM			0			0	0	0
09:00 AM	TO	10:00 AM			0			0	0	0
10:00 AM	TO	11:00 AM			0			0	0	0
11:00 AM	TO	12:00 PM			0			0	0	0
12:00 PM	TO	01:00 PM			0			0	0	0
01:00 PM	TO	02:00 PM			0			0	0	0
02:00 PM	TO	03:00 PM			0			0	0	0
03:00 PM	TO	04:00 PM			0			0	0	0
04:00 PM	TO	05:00 PM			0			0	0	0
05:00 PM	TO	06:00 PM	0	326	326	6	24	24	30	356
06:00 PM	TO	07:00 PM			0			0	0	0
07:00 PM	TO	08:00 PM			0			0	0	0
08:00 PM	TO	09:00 PM			0			0	0	0
09:00 PM	TO	10:00 PM			0			0	0	0

	MAJOR STREET	MINOR STREET		INTERSECTION
	Total	Heavy Leg	Total	Total
AM MAX	57	142	148	205
PM MAX	326	24	30	356

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Existing AM
Intersection: Airport Boulevard AND Bayou Way
Comments:

	PART A or PART B	SATISFIED	**NO**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

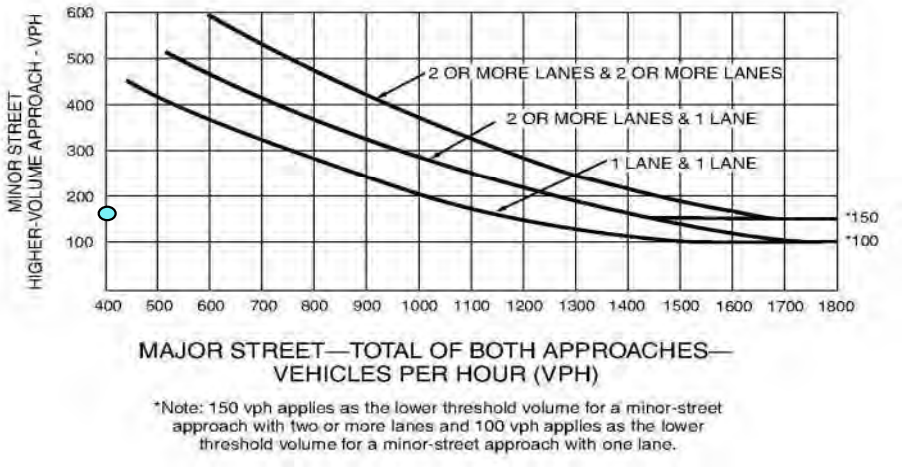
1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND — No
2. The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND — Yes
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches. — No

PART B SATISFIED **No**

APPROACH LANES	One	2 or More
Both Approaches - Major Street		57
Highest Approach - Minor Street	142	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Existing PM
Intersection: Airport Boulevard AND Bayou Way
Comments:

	PART A or PART B	SATISFIED	**NO**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

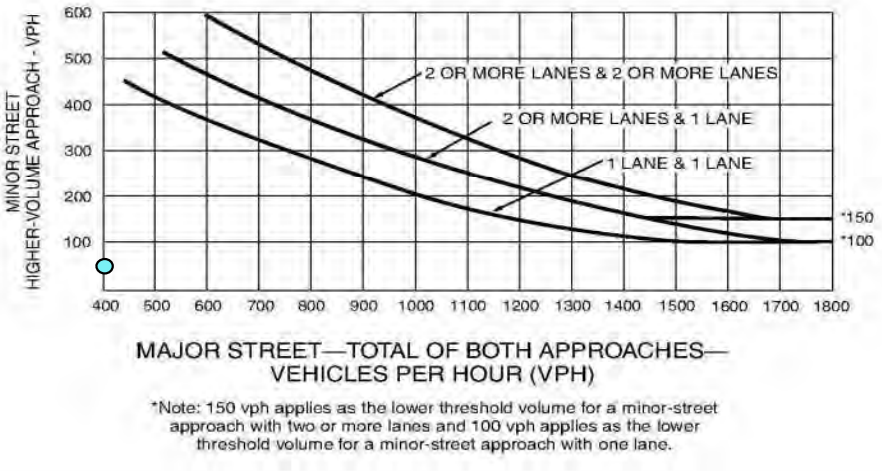
1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND — No
2. The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND — No
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches. — No

PART B SATISFIED **No**

APPROACH LANES	One	2 or More
Both Approaches - Major Street		326
Highest Approach - Minor Street	24	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



Kimley»Horn

PEAK HOUR SIGNAL WARRANT ANALYSIS (Warrant #3, California MUTCD 2014 Edition)

INT #4

PROJECT NAME: ***WattEV***

SCENARIO: ***Existing***

COMMENTS:

MAJOR STREET: ***Powerline Road*** ☑ NB/SB ☐ EB/WB # OF APPROACH LANES: 1

MINOR STREET: ***Bayou Way*** ☐ NB/SB ☑ EB/WB # OF APPROACH LANES: 1

THE STUDY INTERSECTION HAS MORE THAN THREE APPROACHES (Y OR N): Y

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): Y

WORST CASE DELAY FOR MINOR STREET APPROACH:	AM		PM	
	11.6	sec/veh	11.9	sec/veh
	0.34	veh-hr	1.89	veh-hr

			MAJOR STREET			MINOR STREET				
			NB Approach	SB Approach	Total	EB Approach	WB Approach	Heavy Leg	Total	Intersection Total
06:00 AM	TO	07:00 AM			0			0	0	0
07:00 AM	TO	08:00 AM	180	472	652	105	71	105	176	828
08:00 AM	TO	09:00 AM			0			0	0	0
09:00 AM	TO	10:00 AM			0			0	0	0
10:00 AM	TO	11:00 AM			0			0	0	0
11:00 AM	TO	12:00 PM			0			0	0	0
12:00 PM	TO	01:00 PM			0			0	0	0
01:00 PM	TO	02:00 PM			0			0	0	0
02:00 PM	TO	03:00 PM			0			0	0	0
03:00 PM	TO	04:00 PM			0			0	0	0
04:00 PM	TO	05:00 PM			0			0	0	0
05:00 PM	TO	06:00 PM	81	61	142	571	28	571	599	741
06:00 PM	TO	07:00 PM			0			0	0	0
07:00 PM	TO	08:00 PM			0			0	0	0
08:00 PM	TO	09:00 PM			0			0	0	0
09:00 PM	TO	10:00 PM			0			0	0	0

	MAJOR STREET	MINOR STREET		INTERSECTION
	Total	Heavy Leg	Total	Total
AM MAX	652	105	176	828
PM MAX	142	571	599	741

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Existing AM
Intersection: Powerline Road AND Bayou Way
Comments:

	PART A or PART B	SATISFIED	**NO**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

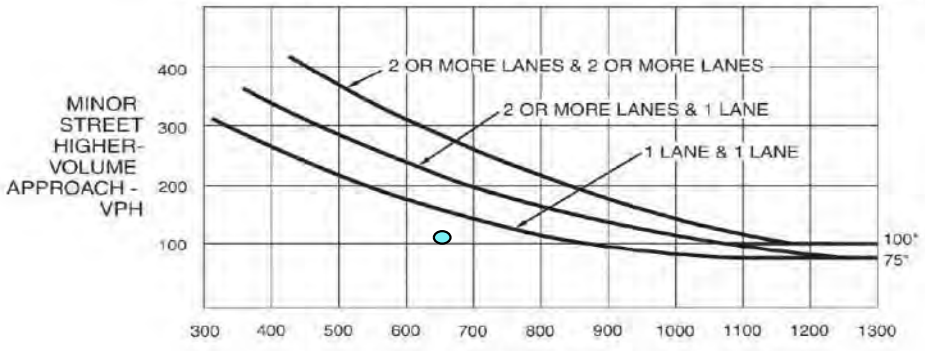
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	Yes

PART B SATISFIED **NO**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	652	
Highest Approach - Minor Street	105	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Existing PM
Intersection: Powerline Road AND Bayou Way
Comments:

PART A or PART B	SATISFIED	**YES**

PART A
(All parts 1, 2, and 3 below must be satisfied) — SATISFIED **NO**

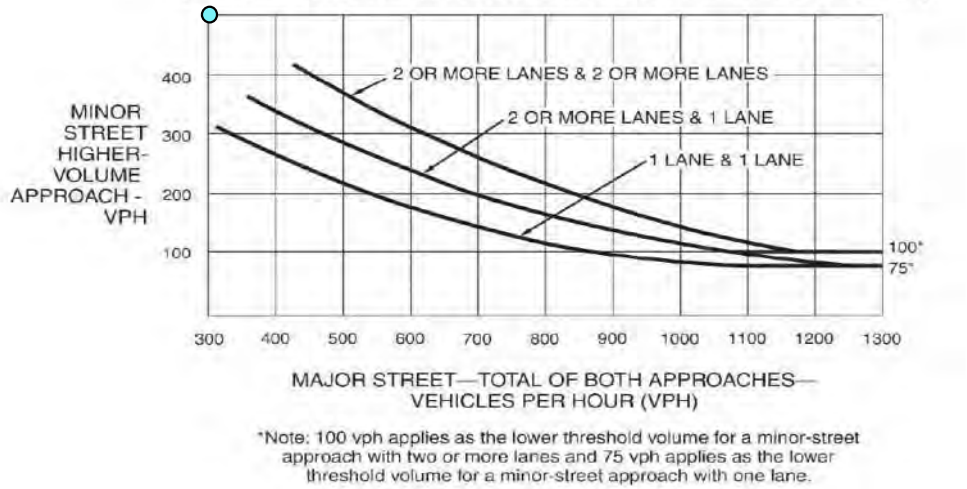
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	No

PART B — SATISFIED **Yes**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	142	
Highest Approach - Minor Street	571	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

11/6/2023

Kimley»Horn

PEAK HOUR SIGNAL WARRANT ANALYSIS (Warrant #3, California MUTCD 2014 Edition)

INT #5

PROJECT NAME: ***Watt EV***

SCENARIO: ***Existing***

COMMENTS:

MAJOR STREET: ***Metro Air Parkway*** ☑ NB/SB ☐ EB/WB # OF APPROACH LANES: 1

MINOR STREET: ***Bayou Way*** ☐ NB/SB ☑ EB/WB # OF APPROACH LANES: 1

THE STUDY INTERSECTION HAS MORE THAN THREE APPROACHES (Y OR N): Y

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): N

WORST CASE DELAY FOR MINOR STREET APPROACH:	AM		PM	
	3.5	sec/veh	5.1	sec/veh
	0.10	veh-hr	0.27	veh-hr

			MAJOR STREET			MINOR STREET				
			NB Approach	SB Approach	Total	EB Approach	WB Approach	Heavy Leg	Total	Intersection Total
06:00 AM	TO	07:00 AM			0			0	0	0
07:00 AM	TO	08:00 AM	0	29	29	18	103	103	121	150
08:00 AM	TO	09:00 AM			0			0	0	0
09:00 AM	TO	10:00 AM			0			0	0	0
10:00 AM	TO	11:00 AM			0			0	0	0
11:00 AM	TO	12:00 PM			0			0	0	0
12:00 PM	TO	01:00 PM			0			0	0	0
01:00 PM	TO	02:00 PM			0			0	0	0
02:00 PM	TO	03:00 PM			0			0	0	0
03:00 PM	TO	04:00 PM			0			0	0	0
04:00 PM	TO	05:00 PM			0			0	0	0
05:00 PM	TO	06:00 PM	0	32	32	192	0	192	192	224
06:00 PM	TO	07:00 PM			0			0	0	0
07:00 PM	TO	08:00 PM			0			0	0	0
08:00 PM	TO	09:00 PM			0			0	0	0
09:00 PM	TO	10:00 PM			0			0	0	0

	MAJOR STREET	MINOR STREET		INTERSECTION
	Total	Heavy Leg	Total	Total
AM MAX	29	103	121	150
PM MAX	32	192	192	224

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Existing AM
Intersection: Metro Air Parkway AND Bayou Way
Comments:

	PART A or PART B	SATISFIED	**NO**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

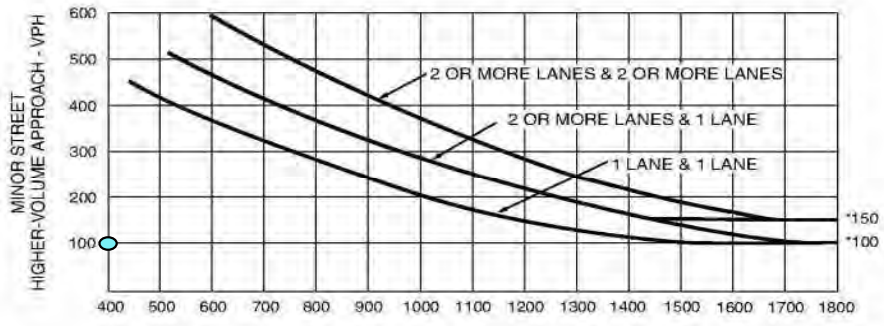
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	No

PART B SATISFIED **No**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	29	
Highest Approach - Minor Street	103	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Existing PM
Intersection: Metro Air Parkway AND Bayou Way
Comments:

	PART A or PART B	SATISFIED	**NO**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

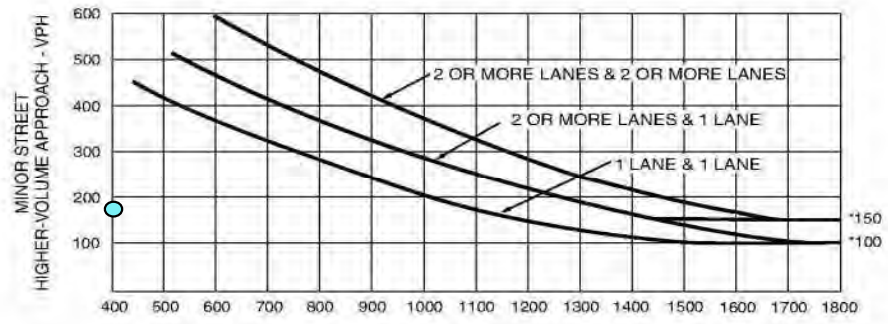
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	No

PART B SATISFIED **No**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	32	
Highest Approach - Minor Street	192	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

PEAK HOUR SIGNAL WARRANT ANALYSIS (Warrant #3, California MUTCD 2014 Edition)

INT #1

PROJECT NAME: ***WattEV***

SCENARIO: ***Existing PP***

COMMENTS:

MAJOR STREET: ***Airport Boulevard*** ☑ NB/SB ☐ EB/WB # OF APPROACH LANES: 2

MINOR STREET: ***I-5 Northbound Ramps*** ☐ NB/SB ☑ EB/WB # OF APPROACH LANES: 1

THE STUDY INTERSECTION HAS MORE THAN THREE APPROACHES (Y OR N): Y

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): N

WORST CASE DELAY FOR MINOR STREET APPROACH:	AM		PM	
	11.1	sec/veh	11.8	sec/veh
	3.15	veh-hr	2.92	veh-hr

			MAJOR STREET			MINOR STREET				
			NB Approach	SB Approach	Total	EB Approach	WB Approach	Heavy Leg	Total	Intersection Total
06:00 AM	TO	07:00 AM			0			0	0	0
07:00 AM	TO	08:00 AM	322	836	1158	0	1023	1023	1023	2181
08:00 AM	TO	09:00 AM			0			0	0	0
09:00 AM	TO	10:00 AM			0			0	0	0
10:00 AM	TO	11:00 AM			0			0	0	0
11:00 AM	TO	12:00 PM			0			0	0	0
12:00 PM	TO	01:00 PM			0			0	0	0
01:00 PM	TO	02:00 PM			0			0	0	0
02:00 PM	TO	03:00 PM			0			0	0	0
03:00 PM	TO	04:00 PM			0			0	0	0
04:00 PM	TO	05:00 PM			0			0	0	0
05:00 PM	TO	06:00 PM	291	1313	1604	0	891	891	891	2495
06:00 PM	TO	07:00 PM			0			0	0	0
07:00 PM	TO	08:00 PM			0			0	0	0
08:00 PM	TO	09:00 PM			0			0	0	0
09:00 PM	TO	10:00 PM			0			0	0	0

	MAJOR STREET	MINOR STREET		INTERSECTION
	Total	Heavy Leg	Total	Total
AM MAX	1158	1023	1023	2181
PM MAX	1604	891	891	2495

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Existing PP AM
Intersection: Airport Boulevard AND I-5 Northbound Ramps
Comments:

	PART A or PART B	SATISFIED	**YES**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

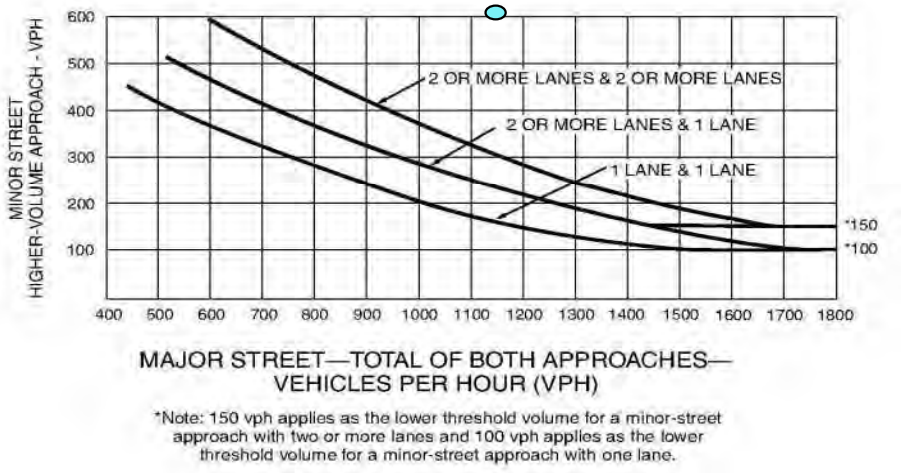
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	Yes

PART B SATISFIED **Yes**

APPROACH LANES	One	2 or More
Both Approaches - Major Street		1158
Highest Approach - Minor Street	1023	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Existing PP PM
Intersection: Airport Boulevard AND I-5 Northbound Ramps
Comments:

	PART A or PART B	SATISFIED	**YES**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

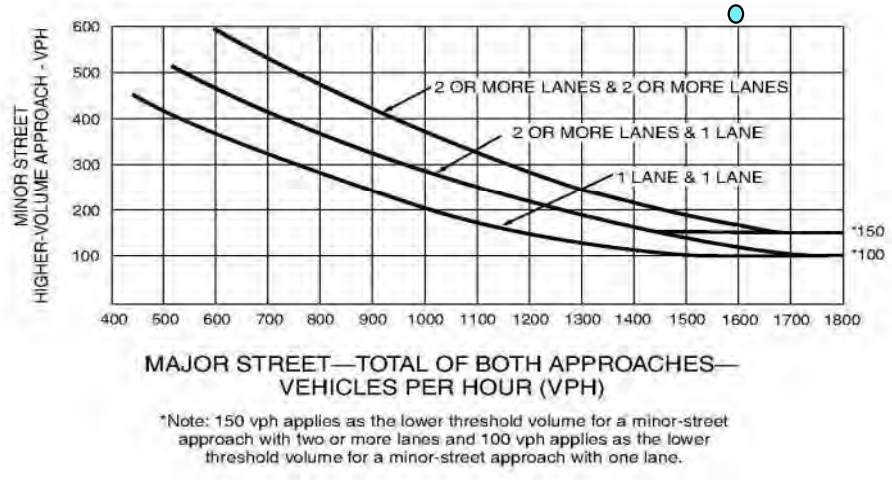
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	Yes

PART B SATISFIED **Yes**

APPROACH LANES	One	2 or More
Both Approaches - Major Street		1604
Highest Approach - Minor Street	891	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

PEAK HOUR SIGNAL WARRANT ANALYSIS (Warrant #3, California MUTCD 2014 Edition)

INT #2

PROJECT NAME: ***WattEV***

SCENARIO: ***Existing PP***

COMMENTS:

MAJOR STREET: ***Airport Boulevard*** ☑ NB/SB ☐ EB/WB # OF APPROACH LANES: 1

MINOR STREET: ***I-5 Southbound Ramps*** ☐ NB/SB ☑ EB/WB # OF APPROACH LANES: 1

THE STUDY INTERSECTION HAS MORE THAN THREE APPROACHES (Y OR N): Y

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): N

WORST CASE DELAY FOR MINOR STREET APPROACH:	AM		PM	
	12.1	sec/veh	13.9	sec/veh
	0.82	veh-hr	1.49	veh-hr

			MAJOR STREET			MINOR STREET				
			NB Approach	SB Approach	Total	EB Approach	WB Approach	Heavy Leg	Total	Intersection Total
06:00 AM	TO	07:00 AM			0			0	0	0
07:00 AM	TO	08:00 AM	292	657	949	243	0	243	243	1192
08:00 AM	TO	09:00 AM			0			0	0	0
09:00 AM	TO	10:00 AM			0			0	0	0
10:00 AM	TO	11:00 AM			0			0	0	0
11:00 AM	TO	12:00 PM			0			0	0	0
12:00 PM	TO	01:00 PM			0			0	0	0
01:00 PM	TO	02:00 PM			0			0	0	0
02:00 PM	TO	03:00 PM			0			0	0	0
03:00 PM	TO	04:00 PM			0			0	0	0
04:00 PM	TO	05:00 PM			0			0	0	0
05:00 PM	TO	06:00 PM	196	1117	1313	387	0	387	387	1700
06:00 PM	TO	07:00 PM			0			0	0	0
07:00 PM	TO	08:00 PM			0			0	0	0
08:00 PM	TO	09:00 PM			0			0	0	0
09:00 PM	TO	10:00 PM			0			0	0	0

	MAJOR STREET	MINOR STREET		INTERSECTION
	Total	Heavy Leg	Total	Total
AM MAX	949	243	243	1192
PM MAX	1313	387	387	1700

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Existing PP AM
Intersection: Airport Boulevard AND I-5 Southbound Ramps
Comments:

	PART A or PART B	SATISFIED	**YES**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

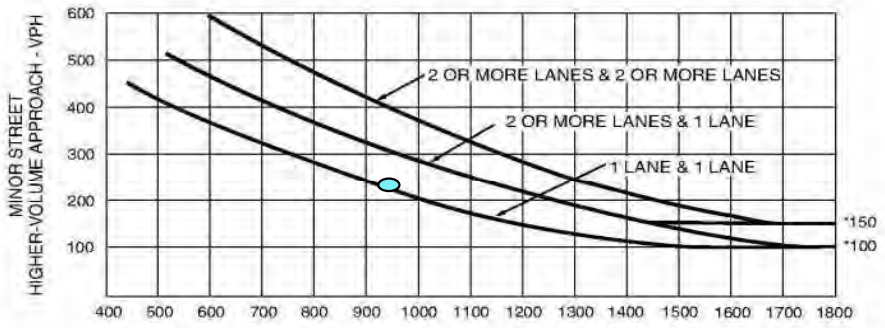
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	Yes

PART B SATISFIED **Yes**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	949	
Highest Approach - Minor Street	243	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Existing PP PM
Intersection: Airport Boulevard AND I-5 Southbound Ramps
Comments:

	PART A or PART B	SATISFIED	**YES**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

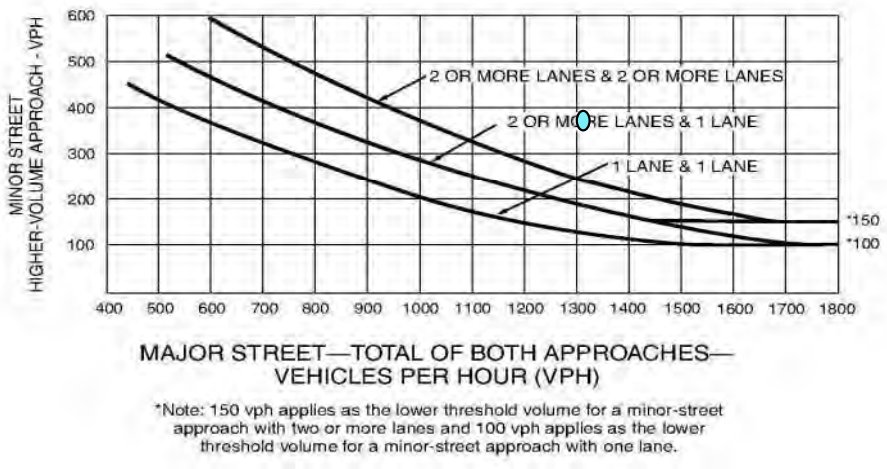
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	Yes

PART B SATISFIED **Yes**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	1313	
Highest Approach - Minor Street	387	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

PEAK HOUR SIGNAL WARRANT ANALYSIS (Warrant #3, California MUTCD 2014 Edition)

INT #3

PROJECT NAME: ***WattEV***

SCENARIO: ***Existing PP***

COMMENTS:

MAJOR STREET: ***Airport Boulevard*** ☑ NB/SB ☐ EB/WB # OF APPROACH LANES: 2

MINOR STREET: ***Bayou Way*** ☐ NB/SB ☑ EB/WB # OF APPROACH LANES: 1

THE STUDY INTERSECTION HAS MORE THAN THREE APPROACHES (Y OR N): Y

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): N

	AM		PM	
WORST CASE DELAY FOR MINOR STREET APPROACH:	3.3	sec/veh	5.1	sec/veh
	0.24	veh-hr	0.21	veh-hr

			MAJOR STREET			MINOR STREET				
			NB Approach	SB Approach	Total	EB Approach	WB Approach	Heavy Leg	Total	Intersection Total
06:00 AM	TO	07:00 AM			0			0	0	0
07:00 AM	TO	08:00 AM	0	160	160	6	267	267	273	433
08:00 AM	TO	09:00 AM			0			0	0	0
09:00 AM	TO	10:00 AM			0			0	0	0
10:00 AM	TO	11:00 AM			0			0	0	0
11:00 AM	TO	12:00 PM			0			0	0	0
12:00 PM	TO	01:00 PM			0			0	0	0
01:00 PM	TO	02:00 PM			0			0	0	0
02:00 PM	TO	03:00 PM			0			0	0	0
03:00 PM	TO	04:00 PM			0			0	0	0
04:00 PM	TO	05:00 PM			0			0	0	0
05:00 PM	TO	06:00 PM	0	428	428	6	151	151	157	585
06:00 PM	TO	07:00 PM			0			0	0	0
07:00 PM	TO	08:00 PM			0			0	0	0
08:00 PM	TO	09:00 PM			0			0	0	0
09:00 PM	TO	10:00 PM			0			0	0	0

	MAJOR STREET	MINOR STREET		INTERSECTION
	Total	Heavy Leg	Total	Total
AM MAX	160	267	273	433
PM MAX	428	151	157	585

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Existing PP AM
Intersection: Airport Boulevard AND Bayou Way
Comments:

	PART A or PART B	SATISFIED	**NO**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

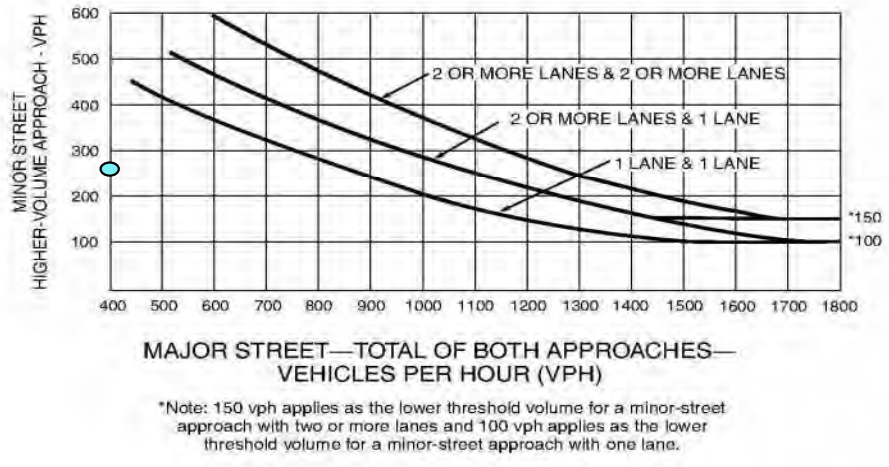
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	No

PART B SATISFIED **No**

APPROACH LANES	One	2 or More
Both Approaches - Major Street		160
Highest Approach - Minor Street	267	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Existing PP PM
Intersection: Airport Boulevard AND Bayou Way
Comments:

	PART A or PART B	SATISFIED	**NO**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

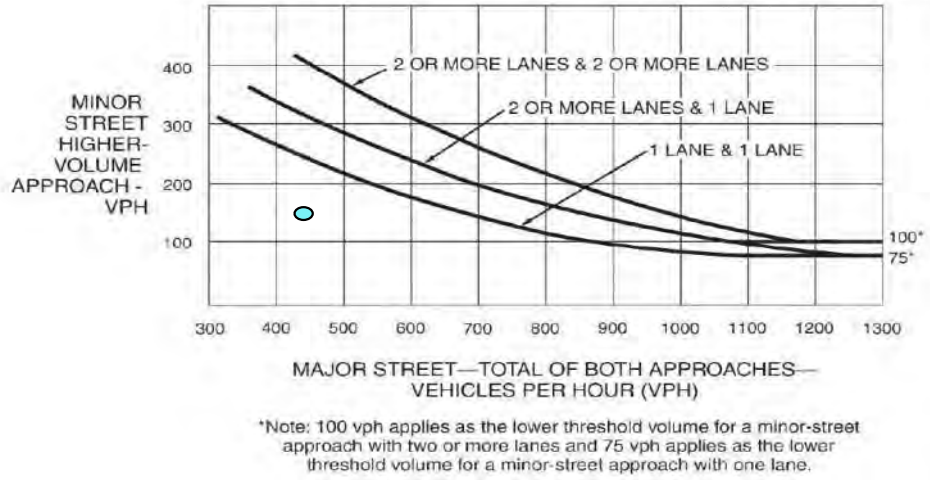
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	No

PART B SATISFIED **No**

APPROACH LANES	One	2 or More
Both Approaches - Major Street		428
Highest Approach - Minor Street	151	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

PEAK HOUR SIGNAL WARRANT ANALYSIS (Warrant #3, California MUTCD 2014 Edition)

INT #4

PROJECT NAME: ***WattEV***

SCENARIO: ***Existing PP***

COMMENTS:

MAJOR STREET: ***Powerline Road*** ☑ NB/SB ☐ EB/WB # OF APPROACH LANES: 1

MINOR STREET: ***Bayou Way*** ☐ NB/SB ☑ EB/WB # OF APPROACH LANES: 1

THE STUDY INTERSECTION HAS MORE THAN THREE APPROACHES (Y OR N): Y

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): Y

WORST CASE DELAY FOR MINOR STREET APPROACH:	AM		PM	
	20.4	sec/veh	14.6	sec/veh
	1.00	veh-hr	2.61	veh-hr

			MAJOR STREET			MINOR STREET				
			NB Approach	SB Approach	Total	EB Approach	WB Approach	Heavy Leg	Total	Intersection Total
06:00 AM	TO	07:00 AM			0			0	0	0
07:00 AM	TO	08:00 AM	180	484	664	176	155	176	331	995
08:00 AM	TO	09:00 AM			0			0	0	0
09:00 AM	TO	10:00 AM			0			0	0	0
10:00 AM	TO	11:00 AM			0			0	0	0
11:00 AM	TO	12:00 PM			0			0	0	0
12:00 PM	TO	01:00 PM			0			0	0	0
01:00 PM	TO	02:00 PM			0			0	0	0
02:00 PM	TO	03:00 PM			0			0	0	0
03:00 PM	TO	04:00 PM			0			0	0	0
04:00 PM	TO	05:00 PM			0			0	0	0
05:00 PM	TO	06:00 PM	81	73	154	643	111	643	754	908
06:00 PM	TO	07:00 PM			0			0	0	0
07:00 PM	TO	08:00 PM			0			0	0	0
08:00 PM	TO	09:00 PM			0			0	0	0
09:00 PM	TO	10:00 PM			0			0	0	0

	MAJOR STREET	MINOR STREET		INTERSECTION
	Total	Heavy Leg	Total	Total
AM MAX	664	176	331	995
PM MAX	154	643	754	908

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Existing PP AM
Intersection: Powerline Road AND Bayou Way
Comments:

	PART A or PART B	SATISFIED	**YES**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

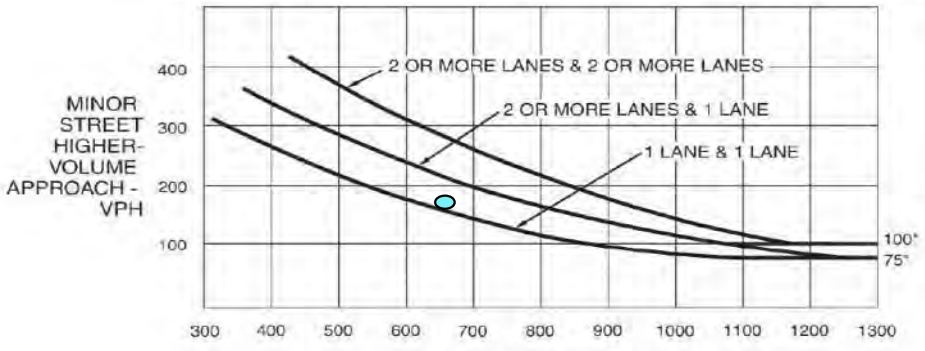
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	Yes

PART B SATISFIED **Yes**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	664	
Highest Approach - Minor Street	176	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Existing PP PM
Intersection: Powerline Road AND Bayou Way
Comments:

	PART A or PART B	SATISFIED	**YES**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

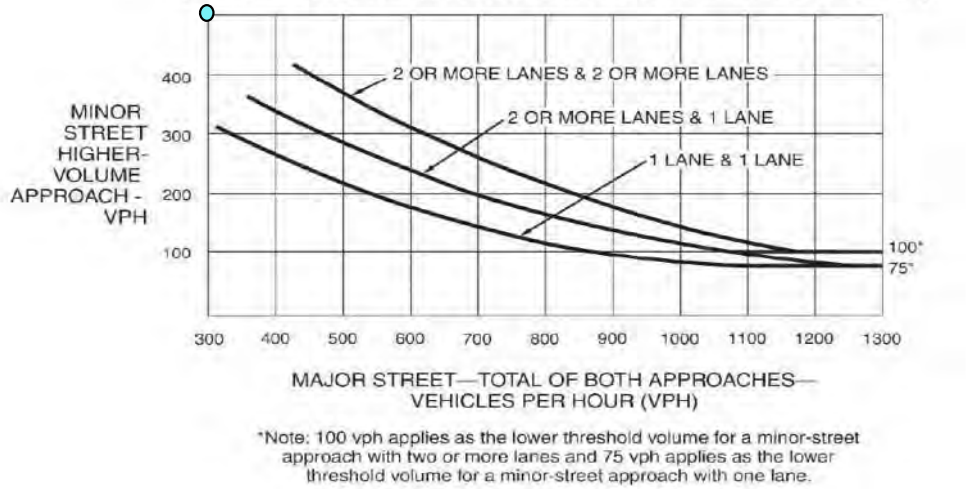
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	Yes

PART B SATISFIED **Yes**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	154	
Highest Approach - Minor Street	643	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

PEAK HOUR SIGNAL WARRANT ANALYSIS (Warrant #3, California MUTCD 2014 Edition)

INT #5

PROJECT NAME: ***Watt EV***

SCENARIO: ***Existing PP***

COMMENTS:

MAJOR STREET: ***Metro Air Parkway*** ☑ NB/SB ☐ EB/WB # OF APPROACH LANES: 1

MINOR STREET: ***Bayou Way*** ☐ NB/SB ☑ EB/WB # OF APPROACH LANES: 1

THE STUDY INTERSECTION HAS MORE THAN THREE APPROACHES (Y OR N): Y

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): N

WORST CASE DELAY FOR MINOR STREET APPROACH:	AM		PM	
	3.5	sec/veh	5.1	sec/veh
	0.10	veh-hr	0.36	veh-hr

			MAJOR STREET			MINOR STREET				
			NB Approach	SB Approach	Total	EB Approach	WB Approach	Heavy Leg	Total	Intersection Total
06:00 AM	TO	07:00 AM			0			0	0	0
07:00 AM	TO	08:00 AM	0	113	113	77	103	103	180	293
08:00 AM	TO	09:00 AM			0			0	0	0
09:00 AM	TO	10:00 AM			0			0	0	0
10:00 AM	TO	11:00 AM			0			0	0	0
11:00 AM	TO	12:00 PM			0			0	0	0
12:00 PM	TO	01:00 PM			0			0	0	0
01:00 PM	TO	02:00 PM			0			0	0	0
02:00 PM	TO	03:00 PM			0			0	0	0
03:00 PM	TO	04:00 PM			0			0	0	0
04:00 PM	TO	05:00 PM			0			0	0	0
05:00 PM	TO	06:00 PM	0	115	115	252	23	252	275	390
06:00 PM	TO	07:00 PM			0			0	0	0
07:00 PM	TO	08:00 PM			0			0	0	0
08:00 PM	TO	09:00 PM			0			0	0	0
09:00 PM	TO	10:00 PM			0			0	0	0

	MAJOR STREET	MINOR STREET		INTERSECTION
	Total	Heavy Leg	Total	Total
AM MAX	113	103	180	293
PM MAX	115	252	275	390

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Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Existing PP AM
Intersection: Metro Air Parkway AND Bayou Way
Comments:

	PART A or PART B	SATISFIED	**NO**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

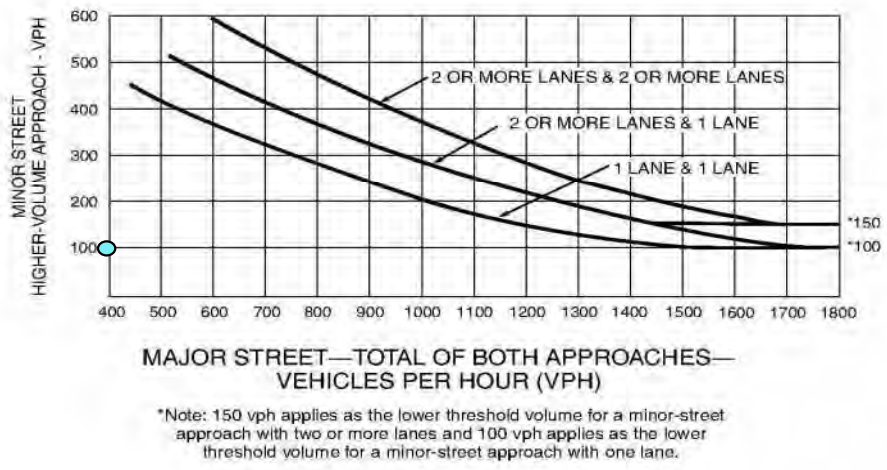
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	No

PART B SATISFIED **No**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	113	
Highest Approach - Minor Street	103	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Existing PP PM
Intersection: Metro Air Parkway AND Bayou Way
Comments:

	PART A or PART B	SATISFIED	**NO**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

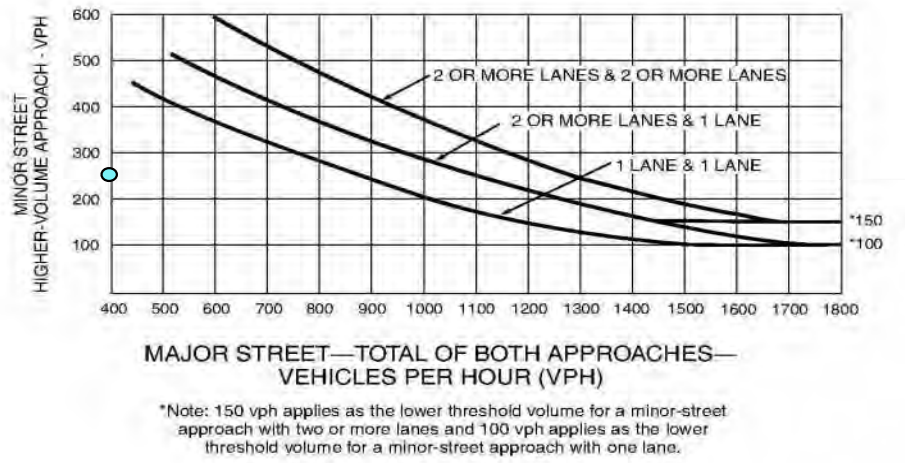
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	No

PART B SATISFIED **No**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	115	
Highest Approach - Minor Street	252	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



Kimley»Horn

PEAK HOUR SIGNAL WARRANT ANALYSIS (Warrant #3, California MUTCD 2014 Edition)

INT #1

PROJECT NAME: ***Watt EV***

SCENARIO: ***Cumulative***

COMMENTS:

MAJOR STREET: ***Airport Blvd*** ☑ NB/SB ☐ EB/WB # OF APPROACH LANES: 2

MINOR STREET: ***I-5 Northbound Ramps*** ☐ NB/SB ☑ EB/WB # OF APPROACH LANES: 1

THE STUDY INTERSECTION HAS MORE THAN THREE APPROACHES (Y OR N): Y

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): N

	AM		PM	
WORST CASE DELAY FOR MINOR STREET APPROACH:	12.2	sec/veh	13.4	sec/veh
	4.00	veh-hr	4.17	veh-hr

			MAJOR STREET			MINOR STREET				
			NB Approach	SB Approach	Total	EB Approach	WB Approach	Heavy Leg	Total	Intersection Total
06:00 AM	TO	07:00 AM			0			0	0	0
07:00 AM	TO	08:00 AM	270	950	1220	0	1180	1180	1180	2400
08:00 AM	TO	09:00 AM			0			0	0	0
09:00 AM	TO	10:00 AM			0			0	0	0
10:00 AM	TO	11:00 AM			0			0	0	0
11:00 AM	TO	12:00 PM			0			0	0	0
12:00 PM	TO	01:00 PM			0			0	0	0
01:00 PM	TO	02:00 PM			0			0	0	0
02:00 PM	TO	03:00 PM			0			0	0	0
03:00 PM	TO	04:00 PM			0			0	0	0
04:00 PM	TO	05:00 PM			0			0	0	0
05:00 PM	TO	06:00 PM	240	1320	1560	0	1120	1120	1120	2680
06:00 PM	TO	07:00 PM			0			0	0	0
07:00 PM	TO	08:00 PM			0			0	0	0
08:00 PM	TO	09:00 PM			0			0	0	0
09:00 PM	TO	10:00 PM			0			0	0	0

	MAJOR STREET	MINOR STREET		INTERSECTION
	Total	Heavy Leg	Total	Total
AM MAX	1220	1180	1180	2400
PM MAX	1560	1120	1120	2680

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Cumulative AM
Intersection: Airport Blvd AND I-5 Northbound Ramps
Comments:

	PART A or PART B	SATISFIED	**YES**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

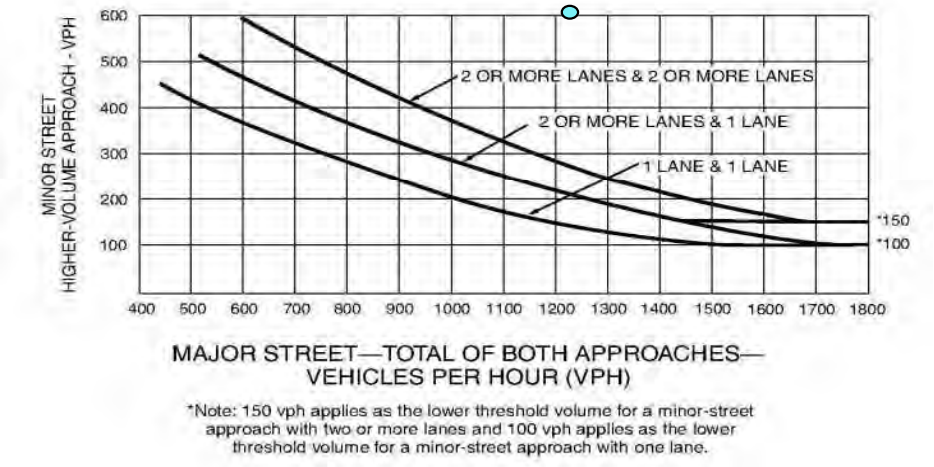
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	Yes

PART B SATISFIED **Yes**

APPROACH LANES	One	2 or More
Both Approaches - Major Street		1220
Highest Approach - Minor Street	1180	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Cumulative PM
Intersection: Airport Blvd AND I-5 Northbound Ramps
Comments:

	PART A or PART B	SATISFIED	**YES**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **YES**

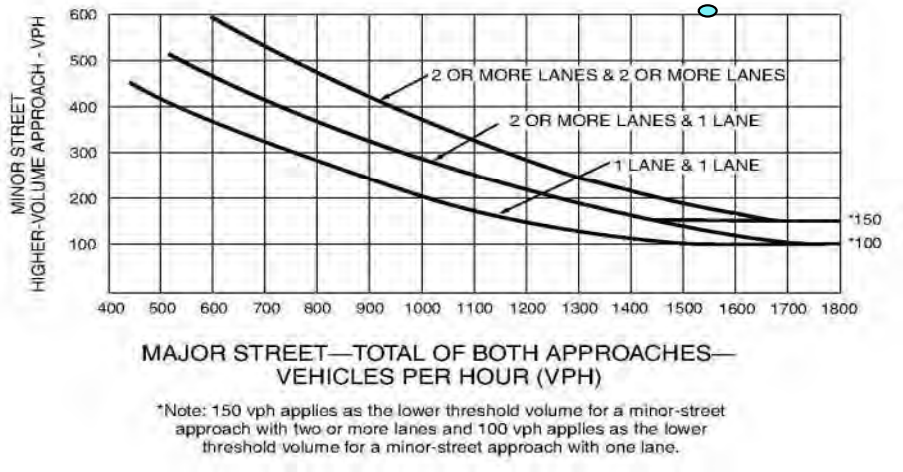
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	Yes
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	Yes

PART B SATISFIED **Yes**

APPROACH LANES	One	2 or More
Both Approaches - Major Street		1560
Highest Approach - Minor Street	1120	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



11/6/2023

Kimley»Horn

PEAK HOUR SIGNAL WARRANT ANALYSIS (Warrant #3, California MUTCD 2014 Edition)

INT #2

PROJECT NAME: ***Watt EV***

SCENARIO: ***Cumulative***

COMMENTS:

MAJOR STREET: ***Airport Boulevard*** ☑ NB/SB ☐ EB/WB # OF APPROACH LANES: 1

MINOR STREET: ***I-5 Southbound Ramps*** ☐ NB/SB ☑ EB/WB # OF APPROACH LANES: 1

THE STUDY INTERSECTION HAS MORE THAN THREE APPROACHES (Y OR N): Y

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): N

WORST CASE DELAY FOR MINOR STREET APPROACH:	AM		PM	
	8.9	sec/veh	10.7	sec/veh
	0.49	veh-hr	0.92	veh-hr

			MAJOR STREET			MINOR STREET				
			NB Approach	SB Approach	Total	EB Approach	WB Approach	Heavy Leg	Total	Intersection Total
06:00 AM	TO	07:00 AM			0			0	0	0
07:00 AM	TO	08:00 AM	170	750	920	200	0	200	200	1120
08:00 AM	TO	09:00 AM			0			0	0	0
09:00 AM	TO	10:00 AM			0			0	0	0
10:00 AM	TO	11:00 AM			0			0	0	0
11:00 AM	TO	12:00 PM			0			0	0	0
12:00 PM	TO	01:00 PM			0			0	0	0
01:00 PM	TO	02:00 PM			0			0	0	0
02:00 PM	TO	03:00 PM			0			0	0	0
03:00 PM	TO	04:00 PM			0			0	0	0
04:00 PM	TO	05:00 PM			0			0	0	0
05:00 PM	TO	06:00 PM	90	1110	1200	310	0	310	310	1510
06:00 PM	TO	07:00 PM			0			0	0	0
07:00 PM	TO	08:00 PM			0			0	0	0
08:00 PM	TO	09:00 PM			0			0	0	0
09:00 PM	TO	10:00 PM			0			0	0	0

	MAJOR STREET	MINOR STREET		INTERSECTION
	Total	Heavy Leg	Total	Total
AM MAX	920	200	200	1120
PM MAX	1200	310	310	1510

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Cumulative AM
Intersection: Airport Boulevard AND I-5 Southbound Ramps
Comments:

	PART A or PART B	SATISFIED	**NO**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

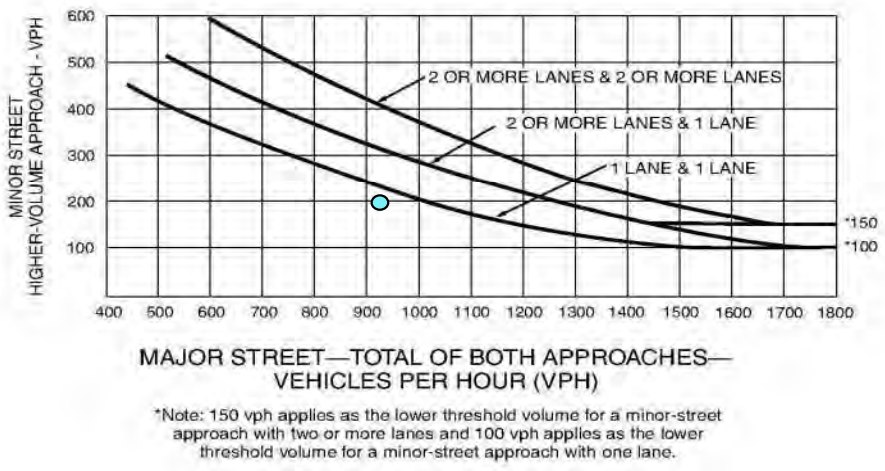
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	Yes

PART B SATISFIED **No**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	920	
Highest Approach - Minor Street	200	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Cumulative PM
Intersection: Airport Boulevard AND I-5 Southbound Ramps
Comments:

	PART A or PART B	SATISFIED	**YES**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

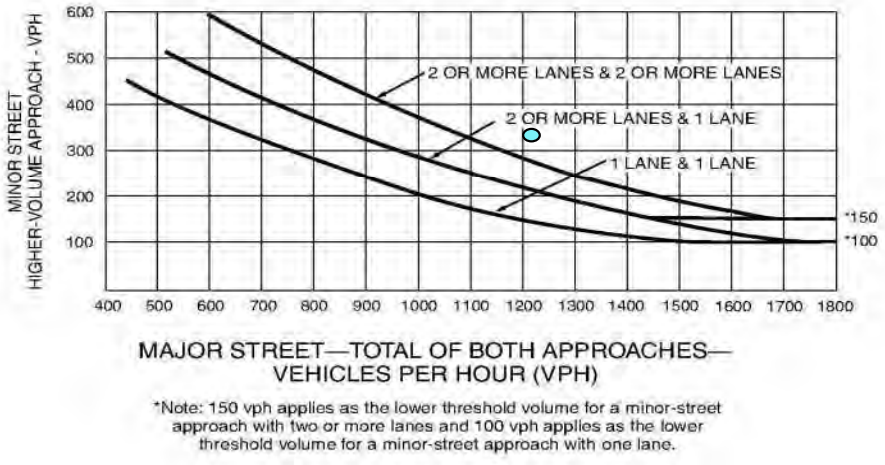
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	Yes

PART B SATISFIED **Yes**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	1200	
Highest Approach - Minor Street	310	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



11/6/2023

Kimley»Horn

PEAK HOUR SIGNAL WARRANT ANALYSIS (Warrant #3, California MUTCD 2014 Edition)

INT #3

PROJECT NAME: ***Watt EV***

SCENARIO: ***Cumulative***

COMMENTS:

MAJOR STREET: ***Airport Boulevard*** ☑ NB/SB ☐ EB/WB # OF APPROACH LANES: 2

MINOR STREET: ***Bayou Way*** ☐ NB/SB ☑ EB/WB # OF APPROACH LANES: 1

THE STUDY INTERSECTION HAS MORE THAN THREE APPROACHES (Y OR N): Y

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): N

WORST CASE DELAY FOR MINOR STREET APPROACH:	AM		PM	
	3.5	sec/veh	5.4	sec/veh
	0.15	veh-hr	0.06	veh-hr

			MAJOR STREET			MINOR STREET				
			NB Approach	SB Approach	Total	EB Approach	WB Approach	Heavy Leg	Total	Intersection Total
06:00 AM	TO	07:00 AM			0			0	0	0
07:00 AM	TO	08:00 AM	0	70	70	20	150	150	170	240
08:00 AM	TO	09:00 AM			0			0	0	0
09:00 AM	TO	10:00 AM			0			0	0	0
10:00 AM	TO	11:00 AM			0			0	0	0
11:00 AM	TO	12:00 PM			0			0	0	0
12:00 PM	TO	01:00 PM			0			0	0	0
01:00 PM	TO	02:00 PM			0			0	0	0
02:00 PM	TO	03:00 PM			0			0	0	0
03:00 PM	TO	04:00 PM			0			0	0	0
04:00 PM	TO	05:00 PM			0			0	0	0
05:00 PM	TO	06:00 PM	0	340	340	20	40	40	60	400
06:00 PM	TO	07:00 PM			0			0	0	0
07:00 PM	TO	08:00 PM			0			0	0	0
08:00 PM	TO	09:00 PM			0			0	0	0
09:00 PM	TO	10:00 PM			0			0	0	0

	MAJOR STREET	MINOR STREET		INTERSECTION
	Total	Heavy Leg	Total	Total
AM MAX	70	150	170	240
PM MAX	340	40	60	400

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Cumulative AM
Intersection: Airport Boulevard AND Bayou Way
Comments:

	PART A or PART B	SATISFIED	**NO**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

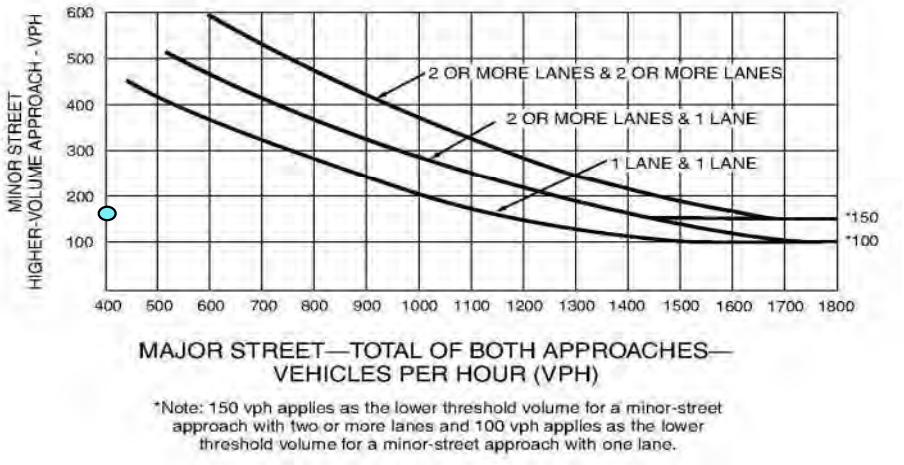
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	No

PART B SATISFIED **No**

APPROACH LANES	One	2 or More
Both Approaches - Major Street		70
Highest Approach - Minor Street	150	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Cumulative PM
Intersection: Airport Boulevard AND Bayou Way
Comments:

	PART A or PART B	SATISFIED	**NO**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

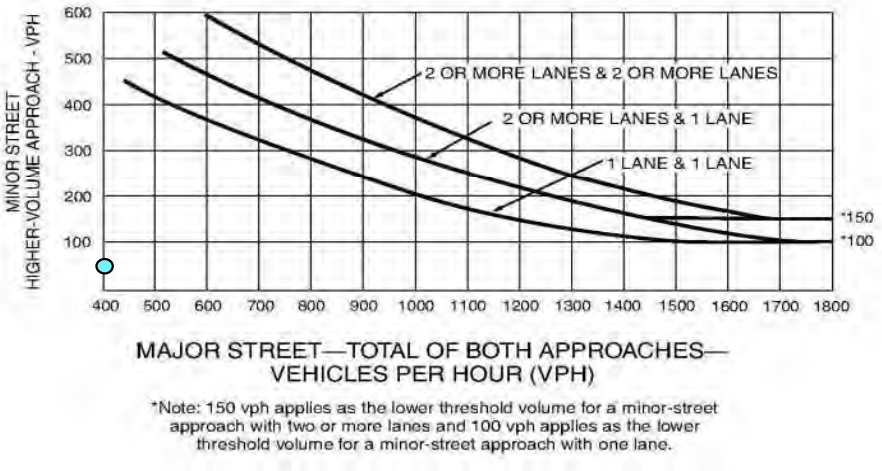
1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND — No
2. The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND — No
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches. — No

PART B SATISFIED **No**

APPROACH LANES	One	2 or More
Both Approaches - Major Street		340
Highest Approach - Minor Street	40	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

PEAK HOUR SIGNAL WARRANT ANALYSIS (Warrant #3, California MUTCD 2014 Edition)

INT #4

PROJECT NAME: ***WattEV***

SCENARIO: ***Cumulative***

COMMENTS:

MAJOR STREET: ***Powerline Road*** ☑ NB/SB ☐ EB/WB # OF APPROACH LANES: 1

MINOR STREET: ***Bayou Way*** ☐ NB/SB ☑ EB/WB # OF APPROACH LANES: 1

THE STUDY INTERSECTION HAS MORE THAN THREE APPROACHES (Y OR N): Y

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): Y

WORST CASE DELAY FOR MINOR STREET APPROACH:	AM		PM	
	20.1	sec/veh	12.5	sec/veh
	0.61	veh-hr	2.01	veh-hr

			MAJOR STREET			MINOR STREET				
			NB Approach	SB Approach	Total	EB Approach	WB Approach	Heavy Leg	Total	Intersection Total
06:00 AM	TO	07:00 AM			0			0	0	0
07:00 AM	TO	08:00 AM	240	480	720	110	80	110	190	910
08:00 AM	TO	09:00 AM			0			0	0	0
09:00 AM	TO	10:00 AM			0			0	0	0
10:00 AM	TO	11:00 AM			0			0	0	0
11:00 AM	TO	12:00 PM			0			0	0	0
12:00 PM	TO	01:00 PM			0			0	0	0
01:00 PM	TO	02:00 PM			0			0	0	0
02:00 PM	TO	03:00 PM			0			0	0	0
03:00 PM	TO	04:00 PM			0			0	0	0
04:00 PM	TO	05:00 PM			0			0	0	0
05:00 PM	TO	06:00 PM	110	80	190	580	40	580	620	810
06:00 PM	TO	07:00 PM			0			0	0	0
07:00 PM	TO	08:00 PM			0			0	0	0
08:00 PM	TO	09:00 PM			0			0	0	0
09:00 PM	TO	10:00 PM			0			0	0	0

	MAJOR STREET	MINOR STREET		INTERSECTION
	Total	Heavy Leg	Total	Total
AM MAX	720	110	190	910
PM MAX	190	580	620	810

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Cumulative AM
Intersection: Powerline Road AND Bayou Way
Comments:

	PART A or PART B	SATISFIED	**NO**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

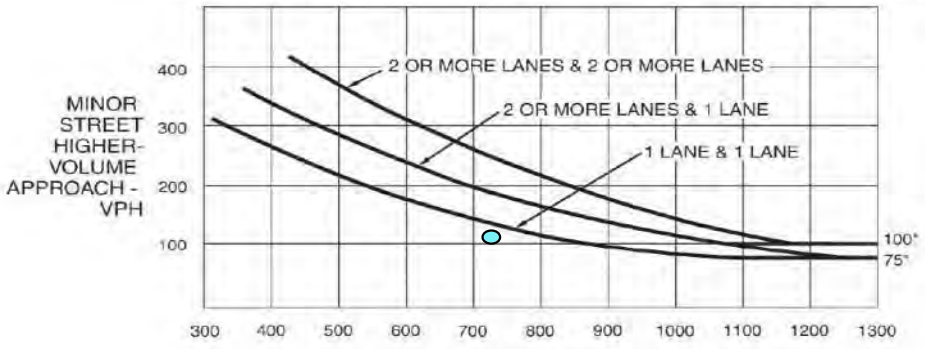
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	Yes

PART B SATISFIED **NO**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	720	
Highest Approach - Minor Street	110	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Cumulative PM
Intersection: Powerline Road AND Bayou Way
Comments:

	PART A or PART B	SATISFIED	**YES**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

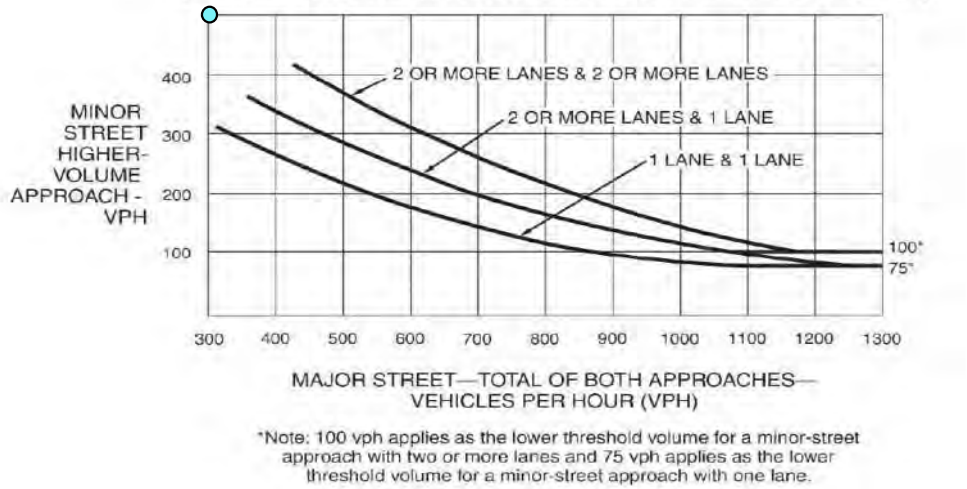
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	Yes

PART B SATISFIED **Yes**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	190	
Highest Approach - Minor Street	580	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

PEAK HOUR SIGNAL WARRANT ANALYSIS (Warrant #3, California MUTCD 2014 Edition)

INT #5

PROJECT NAME: ***Watt EV***

SCENARIO: ***Cumulative***

COMMENTS:

MAJOR STREET: ***Metro Air Parkway*** ☑ NB/SB ☐ EB/WB # OF APPROACH LANES: 1

MINOR STREET: ***Bayou Way*** ☐ NB/SB ☑ EB/WB # OF APPROACH LANES: 1

THE STUDY INTERSECTION HAS MORE THAN THREE APPROACHES (Y OR N): Y

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): N

WORST CASE DELAY FOR MINOR STREET APPROACH:	AM		PM	
	4.5	sec/veh	5.5	sec/veh
	0.31	veh-hr	0.31	veh-hr

			MAJOR STREET			MINOR STREET				
			NB Approach	SB Approach	Total	EB Approach	WB Approach	Heavy Leg	Total	Intersection Total
06:00 AM	TO	07:00 AM			0			0	0	0
07:00 AM	TO	08:00 AM	0	70	70	30	250	250	280	350
08:00 AM	TO	09:00 AM			0			0	0	0
09:00 AM	TO	10:00 AM			0			0	0	0
10:00 AM	TO	11:00 AM			0			0	0	0
11:00 AM	TO	12:00 PM			0			0	0	0
12:00 PM	TO	01:00 PM			0			0	0	0
01:00 PM	TO	02:00 PM			0			0	0	0
02:00 PM	TO	03:00 PM			0			0	0	0
03:00 PM	TO	04:00 PM			0			0	0	0
04:00 PM	TO	05:00 PM			0			0	0	0
05:00 PM	TO	06:00 PM	0	150	150	200	90	200	290	440
06:00 PM	TO	07:00 PM			0			0	0	0
07:00 PM	TO	08:00 PM			0			0	0	0
08:00 PM	TO	09:00 PM			0			0	0	0
09:00 PM	TO	10:00 PM			0			0	0	0

	MAJOR STREET	MINOR STREET		INTERSECTION
	Total	Heavy Leg	Total	Total
AM MAX	70	250	280	350
PM MAX	150	200	290	440

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Cumulative AM
Intersection: Metro Air Parkway AND Bayou Way
Comments:

	PART A or PART B	SATISFIED	**NO**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

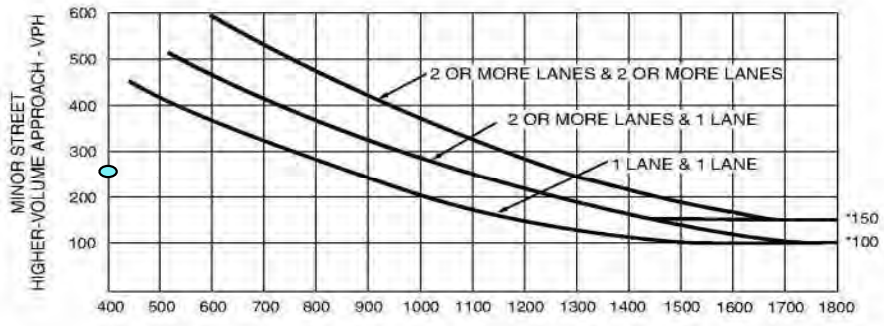
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	No

PART B SATISFIED **No**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	70	
Highest Approach - Minor Street	250	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

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Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Cumulative PM
Intersection: Metro Air Parkway AND Bayou Way
Comments:

	PART A or PART B	SATISFIED	**NO**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

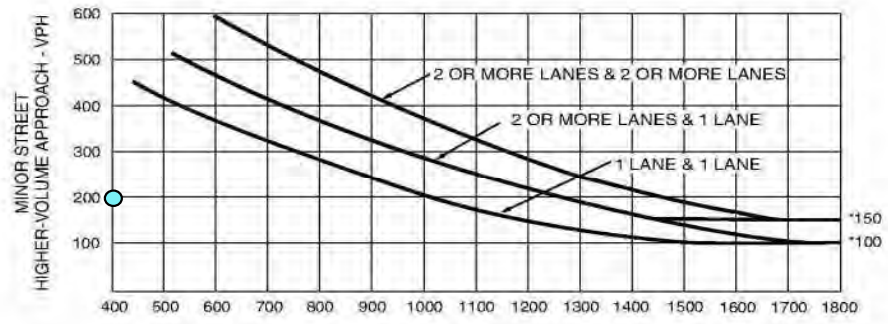
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	No

PART B SATISFIED **No**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	150	
Highest Approach - Minor Street	200	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

PEAK HOUR SIGNAL WARRANT ANALYSIS (Warrant #3, California MUTCD 2014 Edition)

INT #1

PROJECT NAME: ***WattEV***

SCENARIO: ***Cumulative PP***

COMMENTS:

MAJOR STREET: ***Airport Boulevard*** ☑ NB/SB ☐ EB/WB # OF APPROACH LANES: 2

MINOR STREET: ***I-5 Northbound Ramps*** ☐ NB/SB ☑ EB/WB # OF APPROACH LANES: 1

THE STUDY INTERSECTION HAS MORE THAN THREE APPROACHES (Y OR N): Y

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): N

	AM		PM	
WORST CASE DELAY FOR MINOR STREET APPROACH:	13.5	sec/veh	14.4	sec/veh
	4.48	veh-hr	4.54	veh-hr

			MAJOR STREET			MINOR STREET				
			NB Approach	SB Approach	Total	EB Approach	WB Approach	Heavy Leg	Total	Intersection Total
06:00 AM	TO	07:00 AM			0			0	0	0
07:00 AM	TO	08:00 AM	300	950	1250	0	1194	1194	1194	2444
08:00 AM	TO	09:00 AM			0			0	0	0
09:00 AM	TO	10:00 AM			0			0	0	0
10:00 AM	TO	11:00 AM			0			0	0	0
11:00 AM	TO	12:00 PM			0			0	0	0
12:00 PM	TO	01:00 PM			0			0	0	0
01:00 PM	TO	02:00 PM			0			0	0	0
02:00 PM	TO	03:00 PM			0			0	0	0
03:00 PM	TO	04:00 PM			0			0	0	0
04:00 PM	TO	05:00 PM			0			0	0	0
05:00 PM	TO	06:00 PM	271	1320	1591	0	1134	1134	1134	2725
06:00 PM	TO	07:00 PM			0			0	0	0
07:00 PM	TO	08:00 PM			0			0	0	0
08:00 PM	TO	09:00 PM			0			0	0	0
09:00 PM	TO	10:00 PM			0			0	0	0

	MAJOR STREET	MINOR STREET		INTERSECTION
	Total	Heavy Leg	Total	Total
AM MAX	1250	1194	1194	2444
PM MAX	1591	1134	1134	2725

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Cumulative PP AM
Intersection: Airport Boulevard AND I-5 Northbound Ramps
Comments:

	PART A or PART B	SATISFIED	**YES**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **YES**

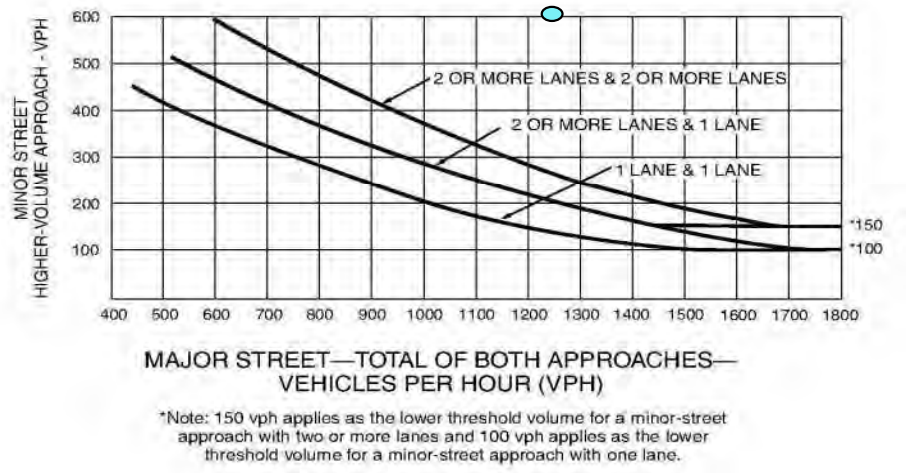
1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND — Yes
2. The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND — Yes
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches. — Yes

PART B SATISFIED **Yes**

APPROACH LANES	One	2 or More
Both Approaches - Major Street		1250
Highest Approach - Minor Street	1194	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Cumulative PP PM
Intersection: Airport Boulevard AND I-5 Northbound Ramps
Comments:

	PART A or PART B	SATISFIED	**YES**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **YES**

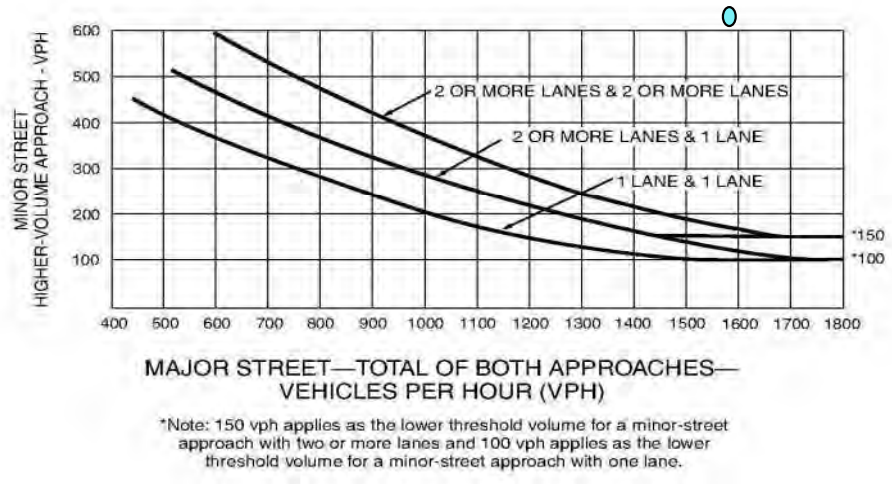
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	Yes
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	Yes

PART B SATISFIED **Yes**

APPROACH LANES	One	2 or More
Both Approaches - Major Street		1591
Highest Approach - Minor Street	1134	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

PEAK HOUR SIGNAL WARRANT ANALYSIS (Warrant #3, California MUTCD 2014 Edition)

INT #2

PROJECT NAME: ***WattEV***

SCENARIO: ***Cumulative PP***

COMMENTS:

MAJOR STREET: ***Airport Boulevard*** ☑ NB/SB ☐ EB/WB # OF APPROACH LANES: 1

MINOR STREET: ***I-5 Southbound Ramps*** ☐ NB/SB ☑ EB/WB # OF APPROACH LANES: 1

THE STUDY INTERSECTION HAS MORE THAN THREE APPROACHES (Y OR N): Y

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): N

	AM		PM	
WORST CASE DELAY FOR MINOR STREET APPROACH:	10.8	sec/veh	12.6	sec/veh
	0.69	veh-hr	1.19	veh-hr

			MAJOR STREET			MINOR STREET				
			NB Approach	SB Approach	Total	EB Approach	WB Approach	Heavy Leg	Total	Intersection Total
06:00 AM	TO	07:00 AM			0			0	0	0
07:00 AM	TO	08:00 AM	217	764	981	231	0	231	231	1212
08:00 AM	TO	09:00 AM			0			0	0	0
09:00 AM	TO	10:00 AM			0			0	0	0
10:00 AM	TO	11:00 AM			0			0	0	0
11:00 AM	TO	12:00 PM			0			0	0	0
12:00 PM	TO	01:00 PM			0			0	0	0
01:00 PM	TO	02:00 PM			0			0	0	0
02:00 PM	TO	03:00 PM			0			0	0	0
03:00 PM	TO	04:00 PM			0			0	0	0
04:00 PM	TO	05:00 PM			0			0	0	0
05:00 PM	TO	06:00 PM	138	1124	1262	341	0	341	341	1603
06:00 PM	TO	07:00 PM			0			0	0	0
07:00 PM	TO	08:00 PM			0			0	0	0
08:00 PM	TO	09:00 PM			0			0	0	0
09:00 PM	TO	10:00 PM			0			0	0	0

	MAJOR STREET	MINOR STREET		INTERSECTION
	Total	Heavy Leg	Total	Total
AM MAX	981	231	231	1212
PM MAX	1262	341	341	1603

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Cumulative PP AM
Intersection: Airport Boulevard AND I-5 Southbound Ramps
Comments:

	PART A or PART B	SATISFIED	**YES**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

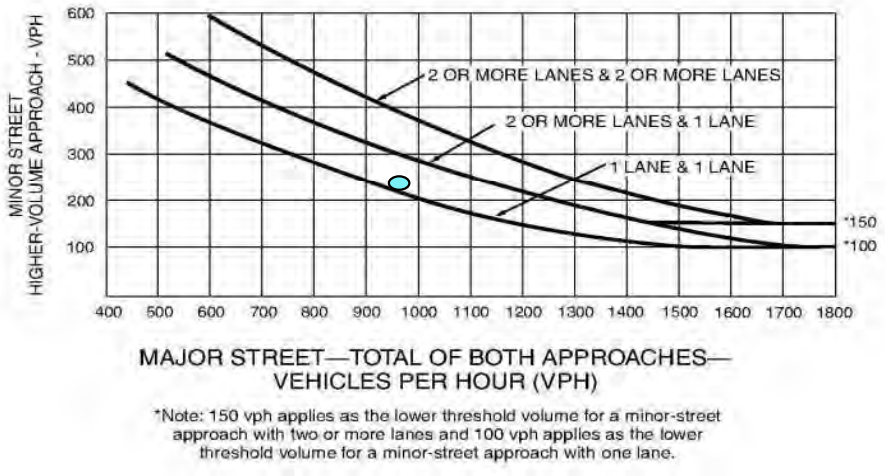
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	Yes

PART B SATISFIED **Yes**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	981	
Highest Approach - Minor Street	231	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Cumulative PP PM
Intersection: Airport Boulevard AND I-5 Southbound Ramps
Comments:

	PART A or PART B	SATISFIED	**YES**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

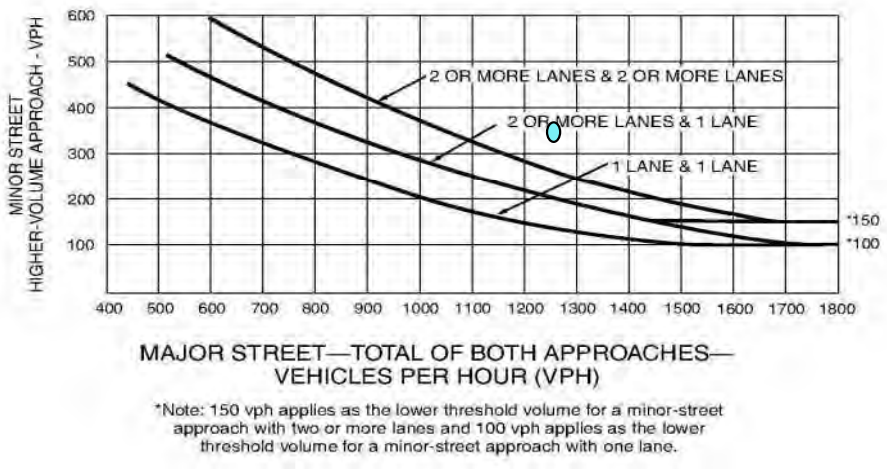
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	Yes

PART B SATISFIED **Yes**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	1262	
Highest Approach - Minor Street	341	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

PEAK HOUR SIGNAL WARRANT ANALYSIS (Warrant #3, California MUTCD 2014 Edition)

INT #3

PROJECT NAME: ***WattEV***

SCENARIO: ***Cumulative PP***

COMMENTS:

MAJOR STREET: ***Airport Boulevard*** ☑ NB/SB ☐ EB/WB # OF APPROACH LANES: 2

MINOR STREET: ***Bayou Way*** ☐ NB/SB ☑ EB/WB # OF APPROACH LANES: 1

THE STUDY INTERSECTION HAS MORE THAN THREE APPROACHES (Y OR N): Y

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): N

	AM		PM	
WORST CASE DELAY FOR MINOR STREET APPROACH:	4.1	sec/veh	5.6	sec/veh
	0.23	veh-hr	0.14	veh-hr

			MAJOR STREET			MINOR STREET				
			NB Approach	SB Approach	Total	EB Approach	WB Approach	Heavy Leg	Total	Intersection Total
06:00 AM	TO	07:00 AM			0			0	0	0
07:00 AM	TO	08:00 AM	0	116	116	20	198	198	218	334
08:00 AM	TO	09:00 AM			0			0	0	0
09:00 AM	TO	10:00 AM			0			0	0	0
10:00 AM	TO	11:00 AM			0			0	0	0
11:00 AM	TO	12:00 PM			0			0	0	0
12:00 PM	TO	01:00 PM			0			0	0	0
01:00 PM	TO	02:00 PM			0			0	0	0
02:00 PM	TO	03:00 PM			0			0	0	0
03:00 PM	TO	04:00 PM			0			0	0	0
04:00 PM	TO	05:00 PM			0			0	0	0
05:00 PM	TO	06:00 PM	0	385	385	20	89	89	109	494
06:00 PM	TO	07:00 PM			0			0	0	0
07:00 PM	TO	08:00 PM			0			0	0	0
08:00 PM	TO	09:00 PM			0			0	0	0
09:00 PM	TO	10:00 PM			0			0	0	0

	MAJOR STREET	MINOR STREET		INTERSECTION
	Total	Heavy Leg	Total	Total
AM MAX	116	198	218	334
PM MAX	385	89	109	494

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Cumulative PP AM
Intersection: Airport Boulevard AND Bayou Way
Comments:

	PART A or PART B	SATISFIED	**NO**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

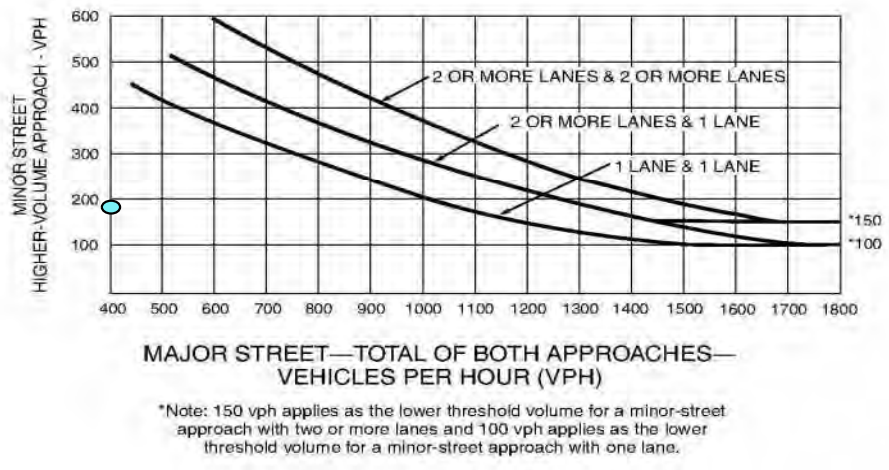
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	No

PART B SATISFIED **No**

APPROACH LANES	One	2 or More
Both Approaches - Major Street		116
Highest Approach - Minor Street	198	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Cumulative PP PM
Intersection: Airport Boulevard AND Bayou Way
Comments:

	PART A or PART B	SATISFIED	**NO**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

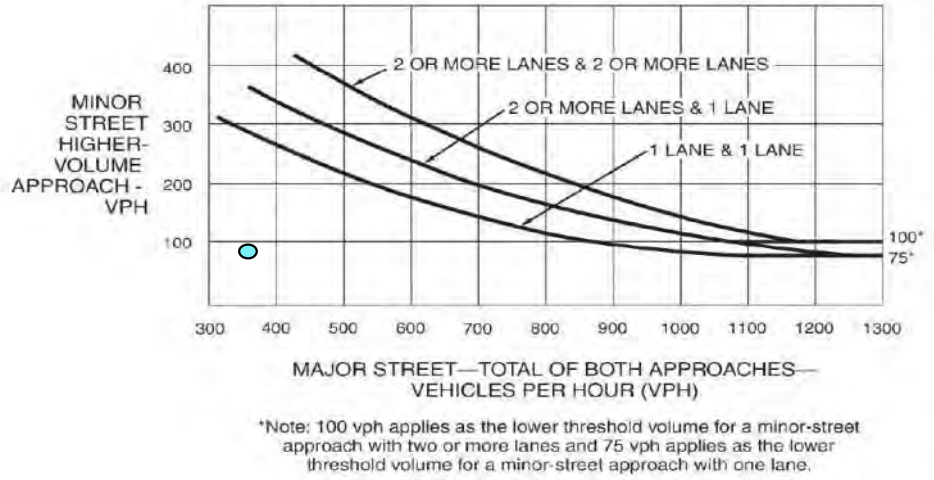
1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND — No
2. The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND — No
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches. — No

PART B SATISFIED **No**

APPROACH LANES	One	2 or More
Both Approaches - Major Street		385
Highest Approach - Minor Street	89	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

PEAK HOUR SIGNAL WARRANT ANALYSIS (Warrant #3, California MUTCD 2014 Edition)

INT #4

PROJECT NAME: ***WattEV***

SCENARIO: ***Cumulative PP***

COMMENTS:

MAJOR STREET: ***Powerline Road*** ☑ NB/SB ☐ EB/WB # OF APPROACH LANES: 1

MINOR STREET: ***Bayou Way*** ☐ NB/SB ☑ EB/WB # OF APPROACH LANES: 1

THE STUDY INTERSECTION HAS MORE THAN THREE APPROACHES (Y OR N): Y

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): Y

WORST CASE DELAY FOR MINOR STREET APPROACH:	AM		PM	
	344.2	sec/veh	90.1	sec/veh
	32.79	veh-hr	20.40	veh-hr

			MAJOR STREET			MINOR STREET				
			NB Approach	SB Approach	Total	EB Approach	WB Approach	Heavy Leg	Total	Intersection Total
06:00 AM	TO	07:00 AM			0			0	0	0
07:00 AM	TO	08:00 AM	240	672	912	343	126	343	469	1381
08:00 AM	TO	09:00 AM			0			0	0	0
09:00 AM	TO	10:00 AM			0			0	0	0
10:00 AM	TO	11:00 AM			0			0	0	0
11:00 AM	TO	12:00 PM			0			0	0	0
12:00 PM	TO	01:00 PM			0			0	0	0
01:00 PM	TO	02:00 PM			0			0	0	0
02:00 PM	TO	03:00 PM			0			0	0	0
03:00 PM	TO	04:00 PM			0			0	0	0
04:00 PM	TO	05:00 PM			0			0	0	0
05:00 PM	TO	06:00 PM	110	271	381	815	85	815	900	1281
06:00 PM	TO	07:00 PM			0			0	0	0
07:00 PM	TO	08:00 PM			0			0	0	0
08:00 PM	TO	09:00 PM			0			0	0	0
09:00 PM	TO	10:00 PM			0			0	0	0

	MAJOR STREET	MINOR STREET		INTERSECTION
	Total	Heavy Leg	Total	Total
AM MAX	912	343	469	1381
PM MAX	381	815	900	1281

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Cumulative PP AM
Intersection: Powerline Road AND Bayou Way
Comments:

	PART A or PART B	SATISFIED	**YES**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **YES**

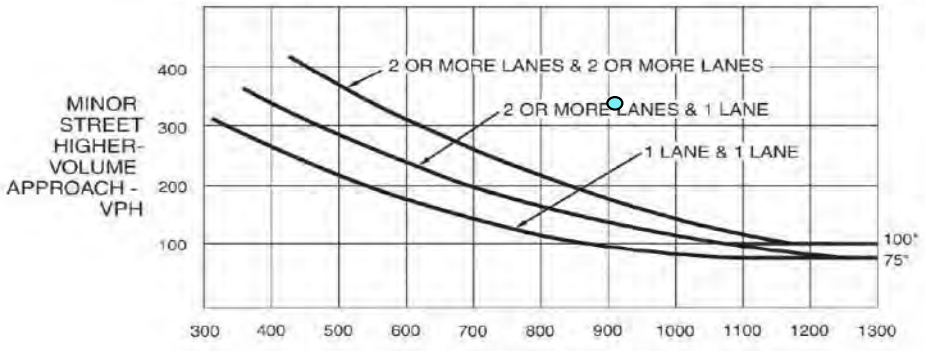
1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND — Yes
2. The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND — Yes
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches. — Yes

PART B SATISFIED **Yes**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	912	
Highest Approach - Minor Street	343	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Cumulative PP PM
Intersection: Powerline Road AND Bayou Way
Comments:

	PART A or PART B	SATISFIED	**YES**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **YES**

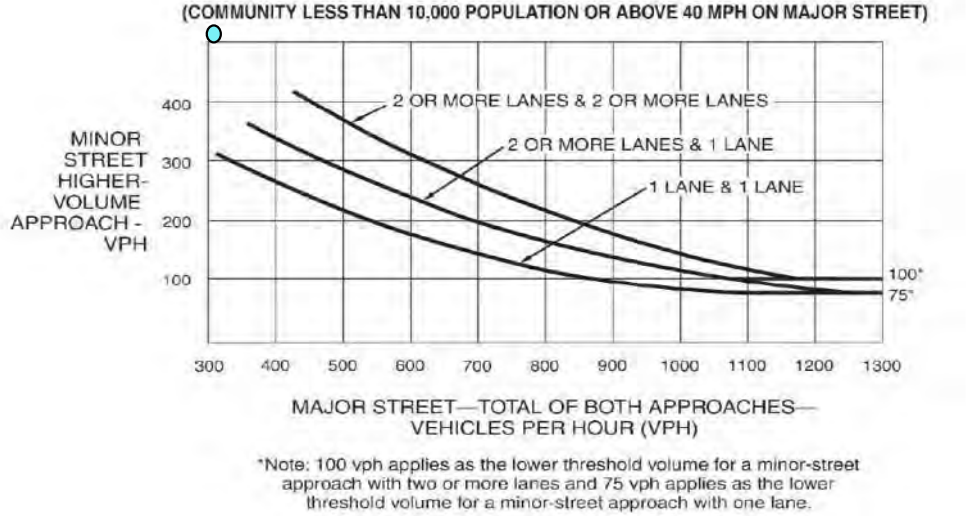
1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND — Yes
2. The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND — Yes
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches. — Yes

PART B SATISFIED **Yes**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	381	
Highest Approach - Minor Street	815	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

PEAK HOUR SIGNAL WARRANT ANALYSIS (Warrant #3, California MUTCD 2014 Edition)

INT #5

PROJECT NAME: ***Watt EV***

SCENARIO: ***Cumulative PP***

COMMENTS:

MAJOR STREET: ***Metro Air Parkway*** ☑ NB/SB ☐ EB/WB # OF APPROACH LANES: 1

MINOR STREET: ***Bayou Way*** ☐ NB/SB ☑ EB/WB # OF APPROACH LANES: 1

THE STUDY INTERSECTION HAS MORE THAN THREE APPROACHES (Y OR N): Y

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): N

WORST CASE DELAY FOR MINOR STREET APPROACH:	AM		PM	
	4.7	sec/veh	5.9	sec/veh
	0.33	veh-hr	0.40	veh-hr

			MAJOR STREET			MINOR STREET				
			NB Approach	SB Approach	Total	EB Approach	WB Approach	Heavy Leg	Total	Intersection Total
06:00 AM	TO	07:00 AM			0			0	0	0
07:00 AM	TO	08:00 AM	0	116	116	72	250	250	322	438
08:00 AM	TO	09:00 AM			0			0	0	0
09:00 AM	TO	10:00 AM			0			0	0	0
10:00 AM	TO	11:00 AM			0			0	0	0
11:00 AM	TO	12:00 PM			0			0	0	0
12:00 PM	TO	01:00 PM			0			0	0	0
01:00 PM	TO	02:00 PM			0			0	0	0
02:00 PM	TO	03:00 PM			0			0	0	0
03:00 PM	TO	04:00 PM			0			0	0	0
04:00 PM	TO	05:00 PM			0			0	0	0
05:00 PM	TO	06:00 PM	0	195	195	243	90	243	333	528
06:00 PM	TO	07:00 PM			0			0	0	0
07:00 PM	TO	08:00 PM			0			0	0	0
08:00 PM	TO	09:00 PM			0			0	0	0
09:00 PM	TO	10:00 PM			0			0	0	0

	MAJOR STREET	MINOR STREET		INTERSECTION
	Total	Heavy Leg	Total	Total
AM MAX	116	250	322	438
PM MAX	195	243	333	528

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Cumulative PP AM
Intersection: Metro Air Parkway AND Bayou Way
Comments:

	PART A or PART B	SATISFIED	**NO**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

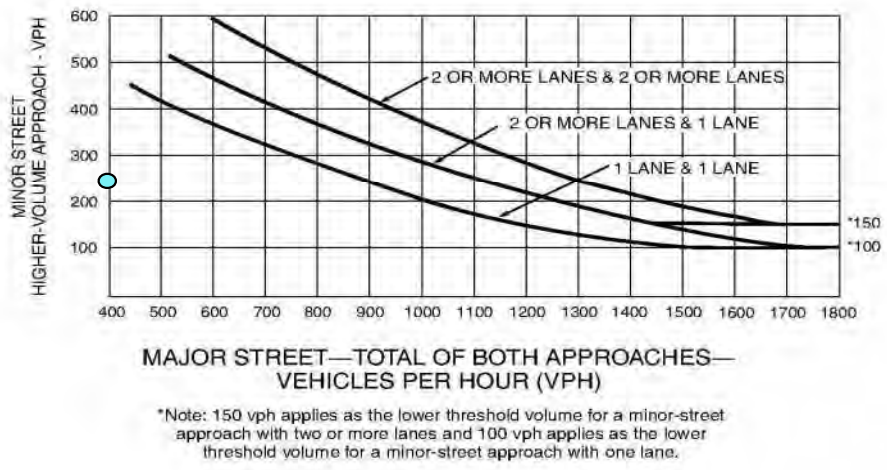
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	No

PART B SATISFIED **No**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	116	
Highest Approach - Minor Street	250	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Cumulative PP PM
Intersection: Metro Air Parkway AND Bayou Way
Comments:

	PART A or PART B	SATISFIED	**NO**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

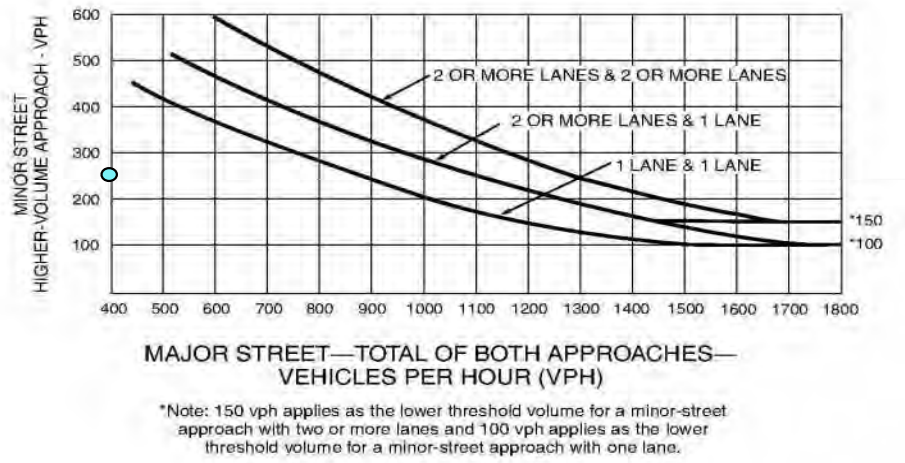
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	No

PART B SATISFIED **No**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	195	
Highest Approach - Minor Street	243	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-3. Warrant 3, Peak Hour



Appendix G

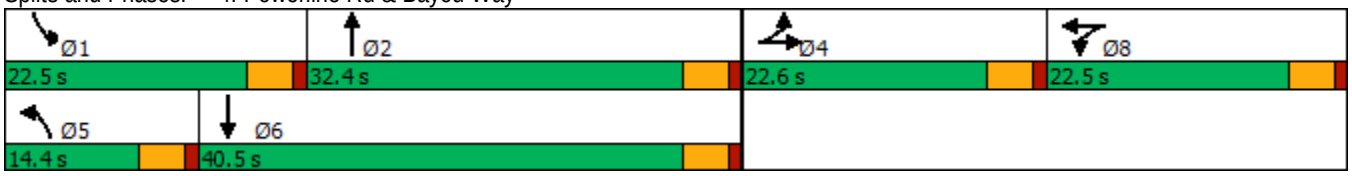
Analysis Worksheets for Cumulative (2040) Improved Intersections Conditions

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	221	72	50	10	116	5	160	70	10	10	270	392
Future Volume (vph)	221	72	50	10	116	5	160	70	10	10	270	392
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	0		0	200		0	200		0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.939			0.995			0.981			0.911	
Flt Protected	0.950				0.996		0.950			0.950		
Satd. Flow (prot)	1770	1749	0	0	1846	0	1770	1827	0	1770	1697	0
Flt Permitted	0.950				0.996		0.950			0.950		
Satd. Flow (perm)	1770	1749	0	0	1846	0	1770	1827	0	1770	1697	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31			2			7			82	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		706			685			708			669	
Travel Time (s)		16.0			15.6			16.1			15.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	221	72	50	10	116	5	160	70	10	10	270	392
Shared Lane Traffic (%)												
Lane Group Flow (vph)	221	122	0	0	131	0	160	80	0	10	662	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		22.5	22.5	
Total Split (s)	22.6	22.6		22.5	22.5		14.4	32.4		22.5	40.5	
Total Split (%)	22.6%	22.6%		22.5%	22.5%		14.4%	32.4%		22.5%	40.5%	
Maximum Green (s)	18.1	18.1		18.0	18.0		9.9	27.9		18.0	36.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5			4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0		0	0	
Act Effct Green (s)	15.3	15.3			11.7		9.9	39.9		6.1	36.2	
Actuated g/C Ratio	0.17	0.17			0.13		0.11	0.44		0.07	0.40	
v/c Ratio	0.74	0.38			0.55		0.83	0.10		0.08	0.92	
Control Delay	52.6	29.2			46.2		75.7	16.3		43.8	44.0	
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay	52.6	29.2			46.2		75.7	16.3		43.8	44.0	
LOS	D	C			D		E	B		D	D	
Approach Delay		44.3			46.2			55.9			44.0	
Approach LOS		D			D			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 91.2			
Natural Cycle: 100			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 46.3		Intersection LOS: D	
Intersection Capacity Utilization 81.3%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 4: Powerline Rd & Bayou Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	522	103	190	5	75	10	40	60	10	10	20	241
Future Volume (vph)	522	103	190	5	75	10	40	60	10	10	20	241
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	0		0	200		0	200		0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.903			0.985			0.979			0.861	
Flt Protected	0.950				0.997		0.950			0.950		
Satd. Flow (prot)	1770	1682	0	0	1829	0	1770	1824	0	1770	1604	0
Flt Permitted	0.950				0.997		0.950			0.950		
Satd. Flow (perm)	1770	1682	0	0	1829	0	1770	1824	0	1770	1604	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		110			5			7			241	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		706			685			708			669	
Travel Time (s)		16.0			15.6			16.1			15.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	522	103	190	5	75	10	40	60	10	10	20	241
Shared Lane Traffic (%)												
Lane Group Flow (vph)	522	293	0	0	90	0	40	70	0	10	261	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	44.0	44.0		22.5	22.5		10.0	24.0		9.5	23.5	
Total Split (%)	44.0%	44.0%		22.5%	22.5%		10.0%	24.0%		9.5%	23.5%	
Maximum Green (s)	39.5	39.5		18.0	18.0		5.5	19.5		5.0	19.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5			4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Min		None	Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	25.3	25.3			9.7		6.8	12.7		6.1	9.1	
Actuated g/C Ratio	0.42	0.42			0.16		0.11	0.21		0.10	0.15	
v/c Ratio	0.71	0.38			0.30		0.20	0.18		0.06	0.59	
Control Delay	22.7	10.7			31.7		38.1	24.9		37.6	12.4	
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay	22.7	10.7			31.7		38.1	24.9		37.6	12.4	
LOS	C	B			C		D	C		D	B	
Approach Delay		18.4			31.7			29.7			13.3	
Approach LOS		B			C			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 60.6			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 19.2		Intersection LOS: B	
Intersection Capacity Utilization 66.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 4: Powerline Rd & Bayou Way

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	6:50	6:50	6:50	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	6001	6076	5979	6037	6035	6126	6040
Vehs Exited	5985	6104	5981	6071	6016	6114	6046
Starting Vehs	122	128	110	127	110	117	128
Ending Vehs	138	100	108	93	129	129	122
Travel Distance (mi)	1981	2019	1998	2017	2009	2041	2004
Travel Time (hr)	144.3	123.2	113.0	115.9	115.4	124.1	112.0
Total Delay (hr)	68.9	46.3	37.0	39.3	39.2	46.4	35.7
Total Stops	3813	3878	3898	3910	3895	4221	3947
Fuel Used (gal)	89.0	85.5	82.0	83.5	83.2	86.6	81.8

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	6023	6073	5922	6029
Vehs Exited	5995	6054	5920	6032
Starting Vehs	96	112	114	107
Ending Vehs	124	131	116	113
Travel Distance (mi)	2001	2002	1987	2006
Travel Time (hr)	117.4	119.1	112.4	119.7
Total Delay (hr)	41.2	42.9	36.9	43.4
Total Stops	4124	4102	3824	3959
Fuel Used (gal)	83.0	83.7	81.0	83.9

Interval #0 Information Seeding

Start Time	6:50
End Time	7:00
Total Time (min)	10

Volumes adjusted by Growth Factors.
No data recorded this interval.

Interval #1 Information

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1535	1535	1545	1503	1529	1516	1608
Vehs Exited	1534	1551	1522	1520	1540	1509	1618
Starting Vehs	122	128	110	127	110	117	128
Ending Vehs	123	112	133	110	99	124	118
Travel Distance (mi)	513	515	516	515	507	506	529
Travel Time (hr)	34.1	33.0	28.9	27.5	30.3	31.2	31.6
Total Delay (hr)	14.6	13.4	9.3	7.9	11.1	11.8	11.3
Total Stops	1023	991	981	942	983	1062	1118
Fuel Used (gal)	22.2	22.1	21.1	20.9	21.3	21.4	22.3

Interval #1 Information

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1488	1524	1443	1522
Vehs Exited	1460	1517	1443	1520
Starting Vehs	96	112	114	107
Ending Vehs	124	119	114	111
Travel Distance (mi)	492	498	478	507
Travel Time (hr)	27.2	30.4	29.4	30.4
Total Delay (hr)	8.5	11.4	11.3	11.1
Total Stops	1040	1094	985	1022
Fuel Used (gal)	20.1	21.1	20.1	21.3

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1482	1548	1475	1518	1513	1531	1509
Vehs Exited	1493	1555	1510	1529	1517	1517	1512
Starting Vehs	123	112	133	110	99	124	118
Ending Vehs	112	105	98	99	95	138	115
Travel Distance (mi)	492	513	500	497	513	505	498
Travel Time (hr)	34.1	34.0	29.5	28.8	27.9	32.1	27.4
Total Delay (hr)	15.3	14.5	10.5	9.9	8.5	12.9	8.4
Total Stops	866	950	1034	953	983	1107	949
Fuel Used (gal)	21.6	22.3	20.7	20.5	20.8	21.8	20.2

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1512	1512	1500	1508
Vehs Exited	1512	1515	1507	1516
Starting Vehs	124	119	114	111
Ending Vehs	124	116	107	104
Travel Distance (mi)	508	501	506	503
Travel Time (hr)	29.5	29.0	28.3	30.0
Total Delay (hr)	10.1	9.9	9.0	10.9
Total Stops	982	1060	965	985
Fuel Used (gal)	21.0	20.8	20.6	21.0

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1421	1461	1454	1519	1426	1480	1458
Vehs Exited	1408	1467	1457	1502	1403	1516	1457
Starting Vehs	112	105	98	99	95	138	115
Ending Vehs	125	99	95	116	118	102	116
Travel Distance (mi)	469	485	483	503	472	500	491
Travel Time (hr)	35.8	27.3	27.1	30.7	26.0	30.2	26.3
Total Delay (hr)	17.9	8.9	8.8	11.6	8.1	11.1	7.7
Total Stops	865	936	915	1088	886	1041	963
Fuel Used (gal)	21.3	20.0	20.1	21.3	19.1	21.3	19.8

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1479	1489	1525	1470
Vehs Exited	1497	1500	1531	1473
Starting Vehs	124	116	107	104
Ending Vehs	106	105	101	101
Travel Distance (mi)	493	497	513	491
Travel Time (hr)	29.9	27.9	28.4	29.0
Total Delay (hr)	11.2	9.0	8.9	10.3
Total Stops	1057	984	931	962
Fuel Used (gal)	20.5	20.2	20.9	20.4

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1563	1532	1505	1497	1567	1599	1465
Vehs Exited	1550	1531	1492	1520	1556	1572	1459
Starting Vehs	125	99	95	116	118	102	116
Ending Vehs	138	100	108	93	129	129	122
Travel Distance (mi)	506	507	499	501	518	531	485
Travel Time (hr)	40.2	28.8	27.5	28.9	31.2	30.6	26.8
Total Delay (hr)	21.0	9.6	8.4	9.9	11.5	10.5	8.3
Total Stops	1059	1001	968	927	1043	1011	917
Fuel Used (gal)	23.8	21.0	20.1	20.9	21.9	22.1	19.5

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1544	1548	1454	1524
Vehs Exited	1526	1522	1439	1516
Starting Vehs	106	105	101	101
Ending Vehs	124	131	116	113
Travel Distance (mi)	507	506	490	505
Travel Time (hr)	30.8	31.8	26.3	30.3
Total Delay (hr)	11.4	12.6	7.7	11.1
Total Stops	1045	964	943	987
Fuel Used (gal)	21.4	21.6	19.4	21.2

4: Powerline Rd & Bayou Way Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.9	1.3
Denied Del/Veh (s)	3.6	0.7	0.8	0.1	0.2	0.3	3.7	0.6	0.6	16.6	12.0	11.5
Total Delay (hr)	2.2	0.6	0.2	0.1	1.2	0.0	2.3	0.3	0.0	0.1	4.5	5.8
Total Del/Veh (s)	35.8	31.6	14.1	37.7	36.2	15.3	50.2	12.8	4.3	58.4	59.7	51.2
Stop Delay (hr)	2.0	0.5	0.2	0.1	1.0	0.0	2.2	0.2	0.0	0.1	3.5	4.6
Stop Del/Veh (s)	32.0	27.3	12.2	34.5	31.5	13.1	46.8	10.2	3.3	49.6	46.5	40.7

4: Powerline Rd & Bayou Way Performance by movement

Movement	All
Denied Delay (hr)	2.6
Denied Del/Veh (s)	6.8
Total Delay (hr)	17.3
Total Del/Veh (s)	44.1
Stop Delay (hr)	14.4
Stop Del/Veh (s)	36.7

Total Zone Performance

Denied Delay (hr)	2.6
Denied Del/Veh (s)	6.8
Total Delay (hr)	17.3
Total Del/Veh (s)	2489.7
Stop Delay (hr)	14.4
Stop Del/Veh (s)	2069.9

Intersection: 4: Powerline Rd & Bayou Way

Movement	EB	EB	WB	NB	NB	SB	SB
Directions Served	L	TR	LTR	L	TR	L	TR
Maximum Queue (ft)	218	223	155	201	135	166	639
Average Queue (ft)	123	67	79	110	36	16	409
95th Queue (ft)	196	143	135	183	103	89	693
Link Distance (ft)		671	649		675		633
Upstream Blk Time (%)							13
Queuing Penalty (veh)							0
Storage Bay Dist (ft)	200			200		200	
Storage Blk Time (%)	1	0		1			41
Queuing Penalty (veh)	2	0		1			4

Zone Summary

Zone wide Queuing Penalty: 7

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	4:50	4:50	4:50	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	6625	6659	6710	6676	6583	6668	6733
Vehs Exited	6649	6677	6686	6689	6569	6667	6709
Starting Vehs	143	127	104	129	92	128	115
Ending Vehs	119	109	128	116	106	129	139
Travel Distance (mi)	2317	2321	2336	2325	2293	2323	2339
Travel Time (hr)	122.0	125.4	130.2	126.0	126.2	126.3	137.4
Total Delay (hr)	34.0	37.1	41.4	37.5	39.1	37.9	48.4
Total Stops	4237	4318	4529	4442	4276	4457	4422
Fuel Used (gal)	92.1	93.0	94.2	92.7	92.5	92.9	96.3

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	6637	6648	6441	6635
Vehs Exited	6628	6668	6433	6639
Starting Vehs	124	147	120	119
Ending Vehs	133	127	128	119
Travel Distance (mi)	2325	2325	2246	2315
Travel Time (hr)	122.7	134.6	117.4	126.8
Total Delay (hr)	34.3	46.2	32.0	38.8
Total Stops	4242	4313	4094	4327
Fuel Used (gal)	92.5	95.3	88.5	93.0

Interval #0 Information Seeding

Start Time	4:50
End Time	5:00
Total Time (min)	10

Volumes adjusted by Growth Factors.
No data recorded this interval.

Interval #1 Information

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1651	1701	1634	1667	1641	1699	1717
Vehs Exited	1679	1702	1592	1661	1600	1705	1689
Starting Vehs	143	127	104	129	92	128	115
Ending Vehs	115	126	146	135	133	122	143
Travel Distance (mi)	586	599	564	573	573	590	593
Travel Time (hr)	31.3	31.7	31.3	32.0	29.6	34.6	32.2
Total Delay (hr)	9.0	8.9	9.9	10.2	7.9	12.0	9.6
Total Stops	1165	1106	1069	1130	1023	1189	1204
Fuel Used (gal)	23.5	23.8	22.7	23.0	22.6	24.1	23.7

Interval #1 Information

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1558	1715	1596	1657
Vehs Exited	1567	1710	1631	1654
Starting Vehs	124	147	120	119
Ending Vehs	115	152	85	125
Travel Distance (mi)	548	600	565	579
Travel Time (hr)	28.5	36.1	29.4	31.7
Total Delay (hr)	7.7	13.2	7.9	9.6
Total Stops	986	1180	1003	1105
Fuel Used (gal)	21.7	25.0	22.2	23.2

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1612	1643	1627	1708	1678	1665	1751
Vehs Exited	1623	1647	1645	1713	1686	1647	1750
Starting Vehs	115	126	146	135	133	122	143
Ending Vehs	104	122	128	130	125	140	144
Travel Distance (mi)	567	564	578	603	585	575	607
Travel Time (hr)	29.1	32.8	32.4	33.4	31.0	30.2	38.0
Total Delay (hr)	7.6	11.3	10.3	10.5	8.8	8.4	14.9
Total Stops	976	1203	1106	1228	1020	1041	1117
Fuel Used (gal)	22.3	23.1	23.4	24.2	23.4	22.9	25.4

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1696	1678	1593	1667
Vehs Exited	1688	1684	1568	1665
Starting Vehs	115	152	85	125
Ending Vehs	123	146	110	127
Travel Distance (mi)	593	588	552	581
Travel Time (hr)	32.0	36.2	29.2	32.4
Total Delay (hr)	9.4	13.9	8.2	10.3
Total Stops	1104	1077	1032	1086
Fuel Used (gal)	23.9	24.4	21.8	23.5

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1728	1617	1791	1662	1672	1582	1649
Vehs Exited	1713	1624	1765	1681	1680	1608	1660
Starting Vehs	104	122	128	130	125	140	144
Ending Vehs	119	115	154	111	117	114	133
Travel Distance (mi)	595	563	614	576	582	560	578
Travel Time (hr)	31.4	29.5	35.2	30.6	33.0	28.9	36.1
Total Delay (hr)	8.9	8.0	11.9	8.6	10.9	7.7	14.2
Total Stops	1100	1008	1227	1036	1146	1054	1023
Fuel Used (gal)	23.7	22.5	25.1	22.9	23.8	22.0	24.5

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1674	1680	1626	1669
Vehs Exited	1658	1720	1627	1670
Starting Vehs	123	146	110	127
Ending Vehs	139	106	109	120
Travel Distance (mi)	583	594	568	581
Travel Time (hr)	30.2	34.0	29.4	31.8
Total Delay (hr)	8.0	11.4	7.9	9.7
Total Stops	1040	1114	1045	1079
Fuel Used (gal)	23.2	24.5	22.3	23.4

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	1634	1698	1658	1639	1592	1722	1616
Vehs Exited	1634	1704	1684	1634	1603	1707	1610
Starting Vehs	119	115	154	111	117	114	133
Ending Vehs	119	109	128	116	106	129	139
Travel Distance (mi)	569	594	578	572	553	598	561
Travel Time (hr)	30.2	31.4	31.3	30.0	32.6	32.6	31.2
Total Delay (hr)	8.5	8.8	9.3	8.1	11.5	9.8	9.8
Total Stops	996	1001	1127	1048	1087	1173	1078
Fuel Used (gal)	22.6	23.6	23.1	22.6	22.8	23.9	22.7

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	1709	1575	1626	1648
Vehs Exited	1715	1554	1607	1643
Starting Vehs	139	106	109	120
Ending Vehs	133	127	128	119
Travel Distance (mi)	601	544	561	573
Travel Time (hr)	32.0	28.4	29.3	30.9
Total Delay (hr)	9.2	7.8	8.0	9.1
Total Stops	1112	942	1014	1058
Fuel Used (gal)	23.9	21.4	22.2	22.9

4: Powerline Rd & Bayou Way Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.5	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	3.3	1.6	1.5	0.3	0.2	0.2	4.0	0.2	0.2	3.6	0.3	0.3
Total Delay (hr)	2.2	0.3	0.4	0.0	0.6	0.0	0.3	0.3	0.0	0.1	0.1	0.5
Total Del/Veh (s)	15.1	12.3	6.7	31.3	28.4	12.6	31.4	18.7	6.9	32.8	20.6	7.3
Stop Delay (hr)	1.6	0.2	0.2	0.0	0.5	0.0	0.3	0.3	0.0	0.1	0.1	0.4
Stop Del/Veh (s)	10.6	7.3	3.7	27.8	24.4	11.2	29.2	15.6	5.9	30.3	16.3	5.6

4: Powerline Rd & Bayou Way Performance by movement

Movement	All
Denied Delay (hr)	0.7
Denied Del/Veh (s)	1.9
Total Delay (hr)	5.0
Total Del/Veh (s)	13.8
Stop Delay (hr)	3.7
Stop Del/Veh (s)	10.3

Total Zone Performance

Denied Delay (hr)	0.7
Denied Del/Veh (s)	1.9
Total Delay (hr)	5.0
Total Del/Veh (s)	2228.9
Stop Delay (hr)	3.7
Stop Del/Veh (s)	1655.7

Intersection: 4: Powerline Rd & Bayou Way

Movement	EB	EB	WB	NB	NB	SB	SB
Directions Served	L	TR	LTR	L	TR	L	TR
Maximum Queue (ft)	224	337	127	72	89	45	154
Average Queue (ft)	151	93	57	28	36	11	66
95th Queue (ft)	232	232	102	60	74	37	119
Link Distance (ft)		671	649		675		633
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	200			200		200	
Storage Blk Time (%)	3	0					0
Queuing Penalty (veh)	10	0					0

Zone Summary

Zone wide Queuing Penalty: 10

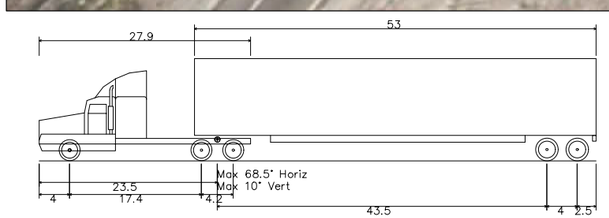
Appendix H

WB-67 Truck Turning Movement Exhibits

AIRPORT BOULEVARD

INTERSTATE 5 NB RAMPS

WB-67
AASHTO 2018 (US)



WB-67 – Interstate Semi-Trailer	
Overall Length	73.501ft
Overall Width	8.500ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.334ft
Max Track Width	8.500ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	28.40°

EXHIBIT 1 - INTERSTATE 5 NB RAMPS/AIRPORT BOULEVARD

– INTERSECTION WIDENING

– SURVEY LIMIT

GRAPHIC SCALE IN FEET
0 10 20 40

1/2 SIZE OF ORIGINAL SCALE

NORTH

Kimley»Horn

555 CAPITOL MALL, SUITE 300, SACRAMENTO, CA 95814
PHONE: 916-858-5800 FAX: 916-608-0885
WWW.KIMLEY-HORN.COM

WB-67 – Interstate Semi-Trailer	
Overall Length	73.501ft
Overall Width	8.500ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.334ft
Max Track Width	8.500ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	28.40°

EXHIBIT 2 - INTERSTATE 5 SB RAMPS/AIRPORT BOULEVARD

– INTERSECTION WIDENING

– SURVEY LIMIT

GRAPHIC SCALE IN FEET
0 10 20 40

1/2 SIZE OF ORIGINAL SCALE

NORTH

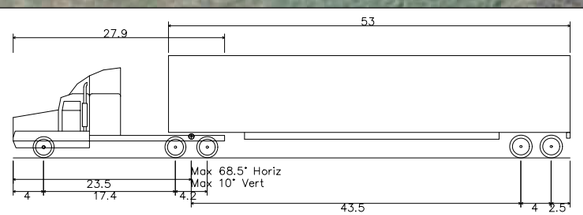
Kimley»Horn

555 CAPITOL MALL, SUITE 300, SACRAMENTO, CA 95814
PHONE: 916-858-5800 FAX: 916-608-0885
WWW.KIMLEY-HORN.COM

AIRPORT BOULEVARD

BAYOU WAY

WB-67
AASHTO 2018 (US)



WB-67 - Interstate Semi-Trailer	
Overall Length	73.501ft
Overall Width	8.500ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.334ft
Max Track Width	8.500ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	28.40°

EXHIBIT 3 - BAYOU WAY/AIRPORT BOULEVARD

– INTERSECTION WIDENING

– SURVEY LIMIT

GRAPHIC SCALE IN FEET
0 10 20 40

1/2 SIZE OF ORIGINAL SCALE

NORTH

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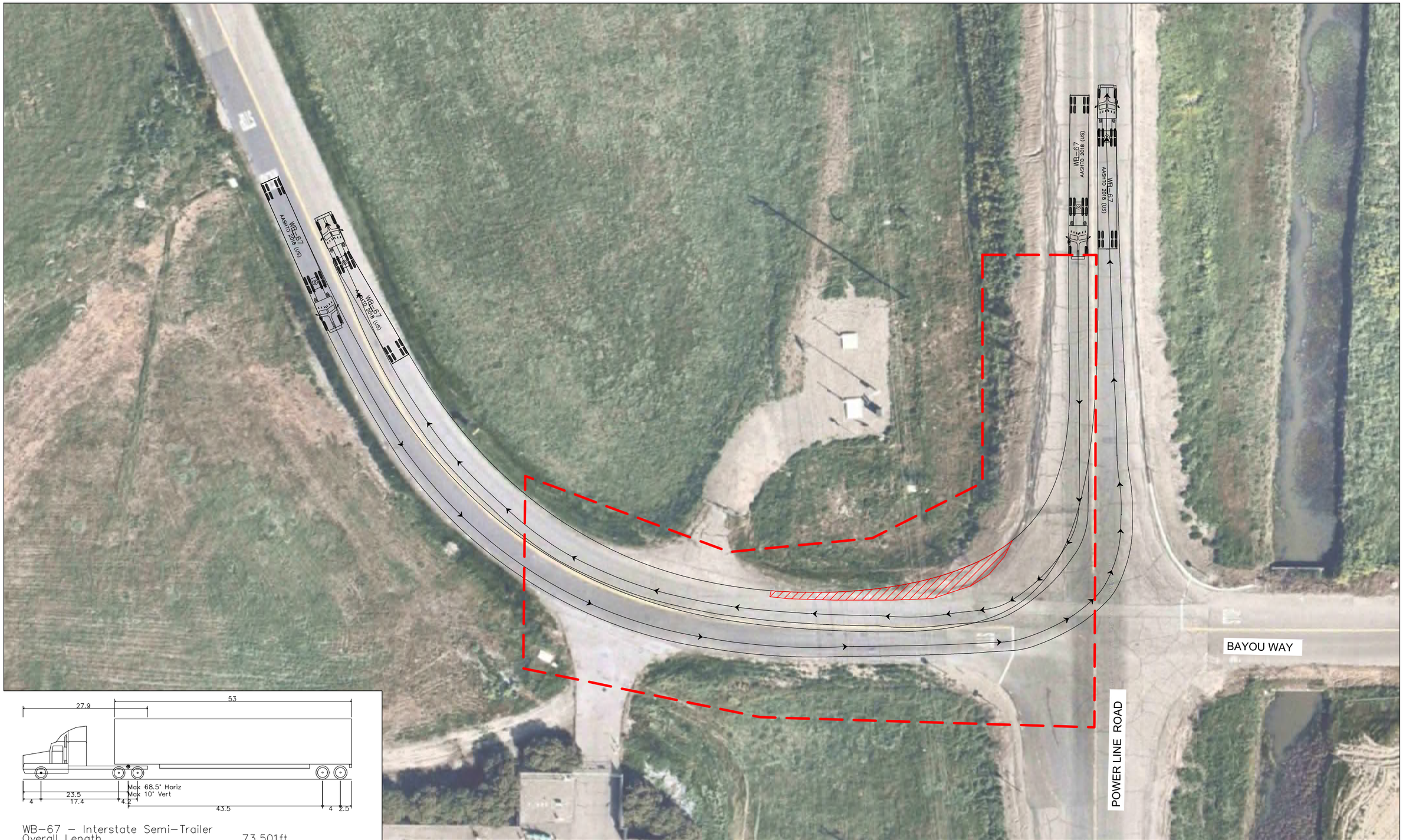

WB-67 – Interstate Semi-Trailer

Overall Length	73.501ft
Overall Width	8.500ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.334ft
Max Track Width	8.500ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	28.40°

EXHIBIT 4 - BAYOU WAY/POWER LINE ROAD

– INTERSECTION WIDENING

– SURVEY LIMIT

GRAPHIC SCALE IN FEET
0 10 20 40

1/2 SIZE OF ORIGINAL SCALE

NORTH

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555 CAPITOL MALL, SUITE 300, SACRAMENTO, CA 95814
PHONE: 916-858-5800 FAX: 916-608-0885
WWW.KIMLEY-HORN.COM

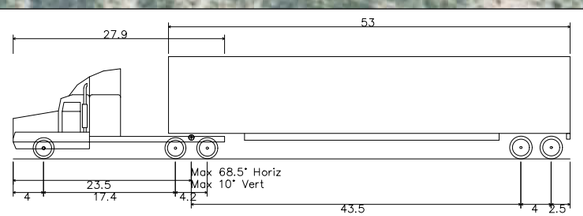
METRO AIR PARKWAY

BAYOU WAY

WB–67
AASHTO 2018 (US)

WB–67
AASHTO 2018 (US)

WB–67
AASHTO 2018 (US)



WB–67 – Interstate Semi–Trailer

Overall Length	73.501ft
Overall Width	8.500ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.334ft
Max Track Width	8.500ft
Lock–to–lock time	6.00s
Max Steering Angle (Virtual)	28.40°

EXHIBIT 5 - BAYOU WAY/METRO AIR PARKWAY

– INTERSECTION WIDENING

– SURVEY LIMIT

GRAPHIC SCALE IN FEET
0 10 20 40

1/2 SIZE OF ORIGINAL SCALE

NORTH

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555 CAPITOL MALL, SUITE 300, SACRAMENTO, CA 95814
PHONE: 916–858–5800 FAX: 916–608–0885
WWW.KIMLEY–HORN.COM

METRO AIR PARKWAY

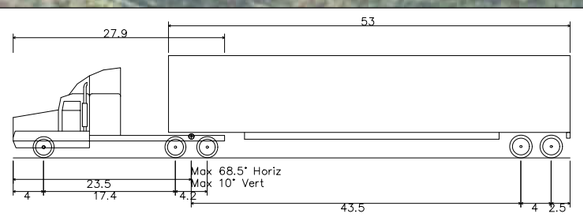
INTERSTATE 5 SB RAMPS

WB-67
AASHTO 2018 (US)

WB-67
AASHTO 2018 (US)

WB-67
AASHTO 2018 (US)

WB-67
AASHTO 2018 (US)



WB-67 - Interstate Semi-Trailer

Overall Length	73.501ft
Overall Width	8.500ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.334ft
Max Track Width	8.500ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	28.40°

EXHIBIT 6 - INTERSTATE 5 SB RAMPS/METRO AIR PARKWAY

– INTERSECTION WIDENING

– SURVEY LIMIT

GRAPHIC SCALE IN FEET
0 10 20 40

1/2 SIZE OF ORIGINAL SCALE

NORTH

Kimley»Horn

555 CAPITOL MALL, SUITE 300, SACRAMENTO, CA 95814
PHONE: 916-858-5800 FAX: 916-608-0885
WWW.KIMLEY-HORN.COM

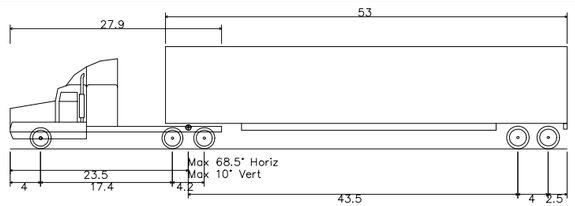
METRO AIR PARKWAY

INTERSTATE 5 NB RAMPS

WB-67
AASHTO 2018 (US)

WB-67
AASHTO 2018 (US)

WB-67
AASHTO 2018 (US)



WB-67 – Interstate Semi-Trailer

Overall Length	73.501ft
Overall Width	8.500ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.334ft
Max Track Width	8.500ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	28.40°

EXHIBIT 7 - INTERSTATE 5 NB RAMPS/METRO AIR PARKWAY

– INTERSECTION WIDENING

– SURVEY LIMIT

GRAPHIC SCALE IN FEET
0 10 20 40

1/2 SIZE OF ORIGINAL SCALE

NORTH

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