A Street at Fairway General Plan Amendment and Rezone

Draft Transportation Impact Study

Prepared For: City of Santa Maria and RRM Design Group

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Central Coast Transportation Consulting
Traffic Engineering & Transportation Planning

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Executive Summary

This Transportation Impact Study (TIS) evaluates the potential transportation impacts of the rezoning of an approximately 6.9-acre site located west of A Street at Fairway Drive in the City of Santa Maria. The TIS analyzes the impacts of up to 100,000 square feet of industrial (M-I zoning) or manufacturing (C-M zoning) uses.

The proposed project is estimated to generate a maximum of 579 net new vehicle trips per weekday, including 71 AM peak hour trips and 70 PM peak hour trips if developed as manufacturing. General light industrial and an industrial park would generate fewer vehicle trips than the manufacturing land use.

Intersection Operations

All study intersections operate acceptably at level of service (LOS) D or better under Existing and Cumulative Conditions with or without the project.

We recommend the City update the following signal timing inputs for consistency with the California Manual on Uniform Traffic Control Devices (CAMUTCD) and the National Cooperative Highway Research Program (NCHRP) recommendations:

- Minimum Green Times
- Yellow Clearance Intervals
- Red Clearance Intervals
- Pedestrian Clearance Interval (Flashing Don't Walk)

The signal timing input recommendations are detailed in the report.

Site Access and Circulation

The preliminary site plan does not include the project access or frontage improvements. We recommend the project complete the following:

- Construct curb, gutter, and sidewalk on the project frontage extending to existing sidewalks on A Street and Fairway Drive.
- Stripe Class II bike lanes on Fairway Drive.
- Extend the existing bike lanes on A Street through the knuckle to the Fairway Avenue bike lanes.
- Restrict parking within the knuckle at the A Street/Fairway Drive intersection.
- Stripe crosswalks on Skyway Drive at Fairway Drive/Skyway Drive (#3).
- Locate primary project access on A Street approximately 300 feet north of Fairway Drive across from the existing driveway.
- Consider secondary project access restricted to right-in, right-out within the knuckle.
- Provide convenient pedestrian and bicycle access between the land uses on the project site and the frontage improvements.

Vehicle Miles Traveled (VMT)

The project is prescreened to have a less than significant impact on VMT since home-based-work VMT per employee is less than 85 percent of the Countywide average. Therefore, the project has a less than significant impact on VMT.

Contents

1.0 Introduction

This study evaluates the potential transportation impacts of the General Plan Amendment and Zone change proposed for the parcel located east of A Street at Fairway Drive on the western edge of the City of Santa Maria south of Betteravia Road and west of Skyway Drive. The project site is currently vacant except for the existing City water well pump facility and yard in the center of the site and a Santa Barbara County flood control channel. The approximately 6.9-acre project site is currently zoned for Open Space (OS), and Airport Service (AS-1). There is also an alternative project site on the same parcel at the southern end. The project proposes up to 100,000 square feet of industrial or manufacturing uses. The project vicinity map is shown in **Figure 1**.

The following study intersections were evaluated during the weekday AM and PM peak hours:

1. A Street/Betteravia Rd (Traffic Signal)
2. A Street/McCoy Lane (Stop Controlled)
3. Skyway Drive/Fairway Drive (Traffic Signal)

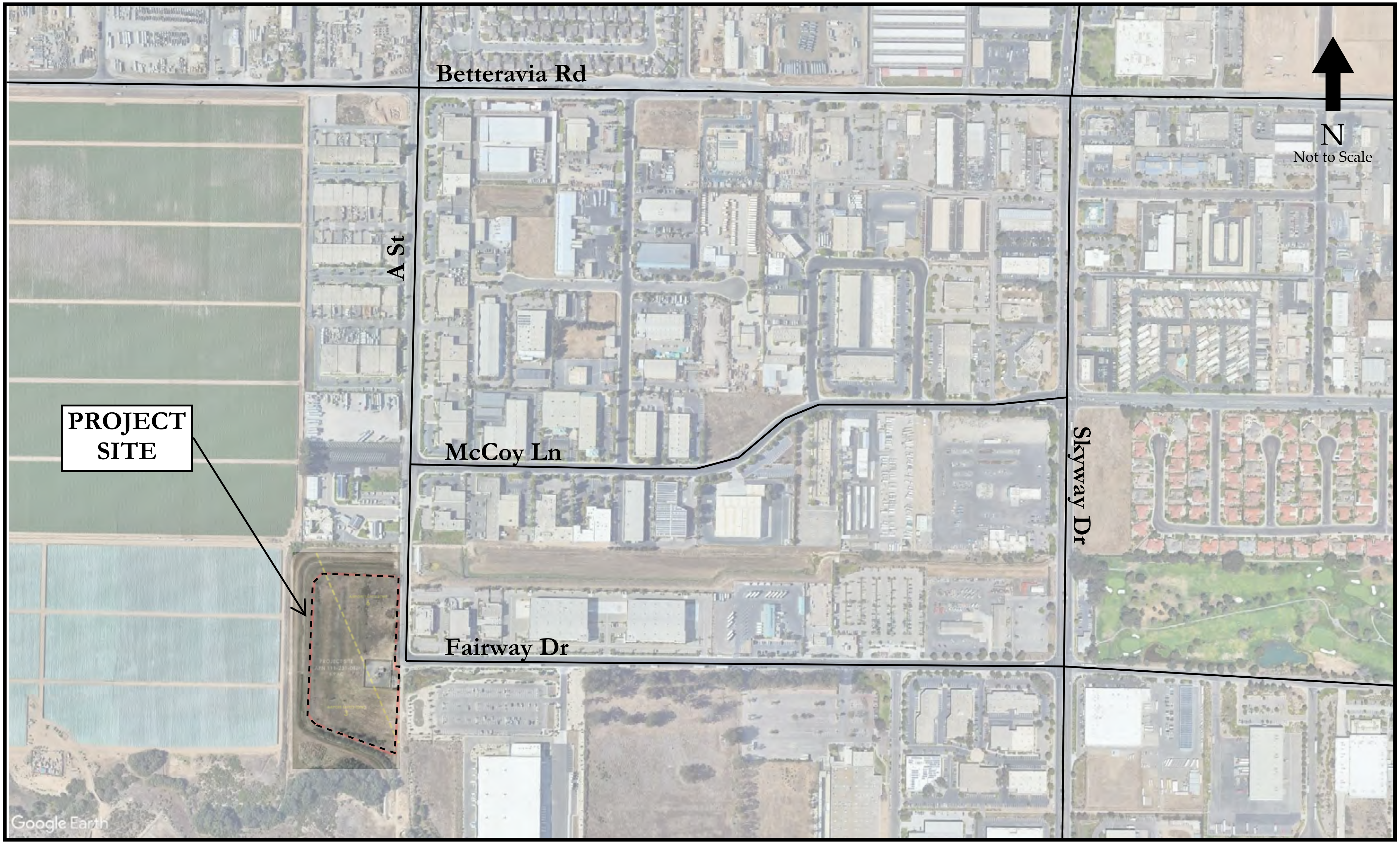
Vehicular level of service (LOS) and queuing is evaluated at each study intersection. The study locations were evaluated under these scenarios:

- **Existing Conditions** reflects existing traffic counts and the existing transportation network.
- **Existing Plus Project** adds Project-generated traffic to existing volumes.
- **Cumulative Conditions** reflects buildout of land uses in the region, not including the proposed Project.
- **Cumulative Plus Project** adds Project-generated traffic to cumulative volumes.

Each scenario is described in more detail in the appropriate chapter.

This study also evaluates vehicle miles traveled (VMT), safety, emergency access, and consistency with regional plans as required under the California Environmental Quality Act (CEQA).

Figure 1: Project Vicinity Map



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2.0 CEQA Transportation Analysis

This section presents analysis relevant to the California Environmental Quality Act (CEQA), notably analysis of the existing setting, vehicle miles traveled (VMT), emergency access, and safety.

2.1 EXISTING CIRCULATION NETWORK

The existing roadways in the project vicinity are described below with the roadway functional classifications obtained from the City's General Plan 2020 Transportation and Mobility Report Existing Conditions Report.

- *Betteravia Road* is an east-west primary arterial in the study area with an interchange at US 101 to the east. There are four lanes east of A Street and two lanes west of A Street. There are intermittent sidewalks east of A Street. The posted speed limit is 45 miles per hour (mph) in the City of Santa Maria.
- *A Street* is a north-south secondary arterial. There are four lanes from Betteravia Road to north of McCoy Lane and two lanes on the remainder of the roadway. There are existing Class II bike lanes and intermittent sidewalks south of Betteravia Road. The posted speed limit is 40 mph.
- *McCoy Lane* is an east-west, two-lane local road with sidewalks on both sides of the roadway, on-street parking, and a posted speed limit of 35 mph.
- *Fairway Drive* is an east-west, two-lane collector road with sidewalks on both sides of the roadway, on-street parking, and a posted speed limit of 40 mph.
- *Skyway Drive* is a north-south, four-lane primary arterial with intermittent sidewalks, existing Class II bike lanes, no on-street parking, and a posted speed limit of 55 mph.

The existing crosswalks at the study intersections are described below.

- A Street/Betteravia Road (#1): Marked crosswalks with pedestrian signals on all but the west leg.
- A Street/McCoy Lane (#2): No marked crosswalks with side street stop controlled.
- Skyway Drive/Fairway Drive (#3): Marked crosswalks on the west and east legs with pedestrian signals on all legs.

The 2009 Santa Maria Pedestrian and Bicycle Master Plan includes proposed Class II bike lanes on Betteravia Road, McCoy Lane, and the Fairway Drive Extension. A Class I bike path is also proposed on A Street and McCoy Lane.

2.2 TRANSIT

Santa Maria Regional Transit (SMRT) operates transit service in the City of Santa Maria and in Orcutt. *SMRT Route 4* travels between the northeastern area of the City and the Airport via the Santa Maria Transit Center with 45-minute headways. The closest stops to the project site are on A Street south of Betteravia Road. *SMRT*

The Breeze Bus operates commuter services between Santa Maria, Vandenberg Air Force Base, Lompoc, Los Alamos, Buellton, and Solvang. *Breeze Route 100* is a weekday bus service between the Santa Maria and Lompoc Transit Centers with the closest stops located on McCoy Lane east of Skyway Drive.

Santa Barbara County Association of Governments (SBCAG) manages the Clean Air Express bus service for commuters traveling between Northern Santa Barbara County and Goleta/Santa Barbara. The closest stop to the project is the Santa Maria Hagerman Softball Complex. Connections to other services are available at both the Santa Maria and Lompoc Transit Centers.

The City's Circulation Element supports the phased implementation of a light rail transportation system. The proposed corridor utilizes the Santa Maria Valley Railroad right-of-way both north and east of the project site.

2.3 VEHICLE MILES TRAVELED (VMT)

The City of Santa Maria's Environmental Procedures and Guidelines provides VMT and safety thresholds consistent with guidance from the State Office of Planning and Research (OPR). Non-residential projects may have a significant impact if the Average Home-Based-Work VMT per employee exceeds 85 percent of the regional average.

The Technical Memo for VMT Thresholds and Procedures in the City of Santa Maria divides the city into Traffic Analysis Zones (TAZs) and illustrates the mean VMT per employee for each TAZ. The project area is mapped showing that VMT per employee is less than or equal to 85 percent of the area-wide average. Therefore, the project has been prescreened and is not expected to have a significant impact on VMT.

2.4 COLLISIONS

Traffic collision data was obtained from the Statewide Integrated Traffic Records System (SWITRS). The following summarizes the collision history in the project vicinity between 2018 and 2022:

- A Street/Betteravia Road (#1): 15 collisions including three injury collisions were reported within 250' of the intersection. Six collisions occurred due to unsafe speeds, four due to traffic signals and signs, three due to improper turning or passing, and two due to other or not stated reasons. There is a pattern of eastbound rear end collisions. Modified signal timing inputs are recommended as detailed in the local transportation analysis.
- A Street/McCoy Lane (#2): No collisions were reported.
- Skyway Drive/Fairway Drive (#3): Eight collisions including two injury collisions were reported within 250' of the intersection. Three collisions occurred due to unsafe speeds, two collisions occurred due to improper turning, two due to driving under the influence, and one due to traffic signals and signs. No collision patterns were observed.
- A Street/Fairway Drive: Three non-injury collisions were reported within 250' of the intersection. All three collisions occurred due to unsafe speeds resulting in hitting an object. Additional delineation through the knuckle is recommended as detailed in the local transportation analysis.

No additional collisions were reported on A Street south of Betteravia Road. Four additional collisions were reported Fairway Drive between A Street and Skyway Drive due to right of way violations and improper passing; however, no collision patterns were observed. No fatal, severe injury, bicycle, or pedestrian collisions were reported in the project vicinity.

2.5 RTP CONSISTENCY

SBCAG's 2021 Regional Transportation Plan (RTP) serves as the blueprint for regional development patterns. It includes visions, goals, and policies relevant to the proposed project. The five goals include the following:

- Environment: Foster patterns of growth, development and transportation that protect natural resources and lead to a healthy environment.
- Mobility & System Reliability: Ensure the reliability of travel by all modes.
- Equity: Ensure that the transportation and housing needs of all socio-economic groups are adequately served.
- Health & Safety: Improve public health and ensure the safety of the regional transportation system.

- A Prosperous Economy: Achieve economically efficient transportation patterns and promote regional prosperity and economic growth.

The project is consistent with the plan by providing local jobs.

3.0 Local Transportation Analysis

The following sections summarize the deficiency thresholds, existing traffic volumes, existing plus project conditions, site access and circulation, and cumulative conditions relevant to City transportation policy.

3.1 DEFICIENCY THRESHOLDS

While level of service (LOS) is not an allowable CEQA metric it remains in planning documents. The level of service thresholds for intersections based on the 6th Edition Highway Capacity Manual (HCM) are presented in **Table 1**.

Table 1: Intersection LOS Thresholds

Intersection Level of Service Thresholds			
Signalized Intersections[1]		Stop Controlled Intersections[2]	
Control Delay (sec/vehicle)	Level of Service	Control Delay (sec/vehicle)	Level of Service
≤ 10	A	≤ 10	A
> 10 - 20	B	> 10 - 15	B
> 20 - 35	C	> 15 - 25	C
> 35 - 55	D	> 25 - 35	D
> 55 - 80	E	> 35 - 50	E
> 80	F	> 50 or v/c > 1	F

1. Source: Exhibit 19-8 of the Highway Capacity Manual 6th Edition.
2. Source: Exhibits 20-2 and 21-8 of the Highway Capacity Manual 6th Edition.

The City of Santa Maria considers LOS D acceptable for roadway and intersection operations. The intersection LOS was calculated using the PTV Vistro 2023 software package applying the Highway Capacity Manual (HCM) 6th Edition methodology.

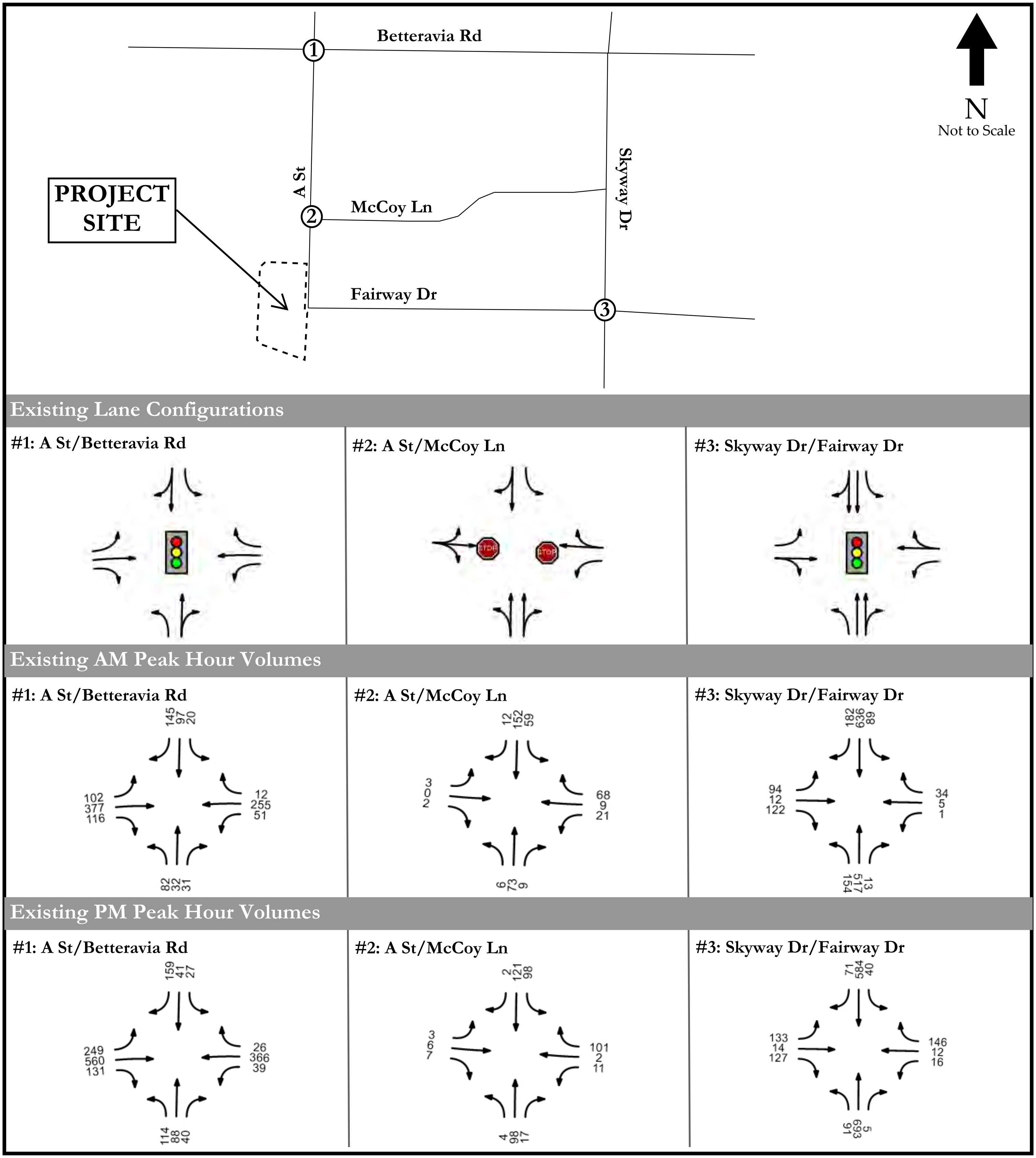
3.2 EXISTING TRAFFIC VOLUMES

Intersection turning movement counts were collected at the study intersections in May 2023 during the weekday AM and PM peak hours when local schools were in session. The existing intersection volumes and lane configurations are shown in **Figure 2**. The traffic count data sheets are included as **Appendix A**.

3.3 EXISTING PLUS PROJECT CONDITIONS

This section evaluates the effects of the proposed project on the surrounding transportation network. The amount of project traffic affecting the study locations is estimated in three steps: trip generation, trip distribution, and trip assignment. Trip generation refers to the total number of trips generated by the site. Trip distribution identifies the general origins and destination of these trips, and trip assignment specifies the routes taken to reach these origins and destinations.

Figure 2: Lane Configurations and Existing Volumes



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3.3.1 Project Trips

The Institute of Transportation Engineers (ITE) Trip Generation Manual 11th Edition was used to estimate the project trip generation for the potential on-site uses as shown in **Table 2**.

Table 2: Project Trip Generation

Trip Generation									
			Weekday	AM Peak Hour			PM Peak Hour		
Land Use	Size		Daily	In	Out	Total	In	Out	Total
Light Industrial[1]	100	KSF	426	63	9	72	6	34	40
Industrial Park[2]	100	KSF	337	28	6	34	7	27	34
Manufacturing[3]	100	KSF	579	54	17	71	22	48	70
Maximum Vehicle Trips			**579**	**54**	**17**	**71**	**22**	**48**	**70**

KSF = Thousand Square Feet; ITE = Institute of Transportation Engineers.
1. ITE Land Use Code #110, General Light Industrial. Fitted curve equations used.
2. ITE Land Use Code #130, Industrial Park. Average rates used.
3. ITE Land Use Code #140, Manufacturing. Fitted curve equations used.

The manufacturing land use produces the highest number of trips, and is therefore used in the analysis to present the most conservative scenario. The proposed project is estimated to generate a maximum of 579 net new vehicle trips per weekday, including 71 AM peak hour trips and 70 PM peak hour trips with manufacturing uses. **Figure 3** summarizes the project trip distribution and assignment.

3.3.2 Existing Plus Project Intersection Operations

Table 3 presents the LOS for the study intersections under Existing and Existing Plus Project Conditions and **Table 4** summarizes the key queues. The Existing Plus Project volumes are shown on **Figure 4** with detailed calculation sheets are included in **Appendix B**.

Table 3: Existing and Existing Plus Project Intersection Levels of Service

Existing and Existing Plus Project Intersection Levels of Service					
	Peak	Existing		Existing + Project	
Intersection	Hour	Delay[1]	LOS	Delay[1]	LOS
1. A St/Betteravia Rd	AM	26.1	C	26.7	C
	PM	30.3	C	31.2	C
2. A St/McCoy Ln	AM	3.7 (11.6)	B	3.5 (12.0)	B
	PM	4.4 (11.5)	B	4.1 (11.9)	B
3. Skyway Dr/Fairway Dr	AM	18.9	B	19.5	B
	PM	22.9	C	23.1	C

1. HCM 6th average control delay in seconds per vehicle. For side-street-stop controlled intersections the worst approach's delay is reported in parentheses next to the overall intersection delay.

All the study intersections operate at LOS C or above under existing conditions with or without the project.

Figure 3: Project Trip Distribution and Assignment

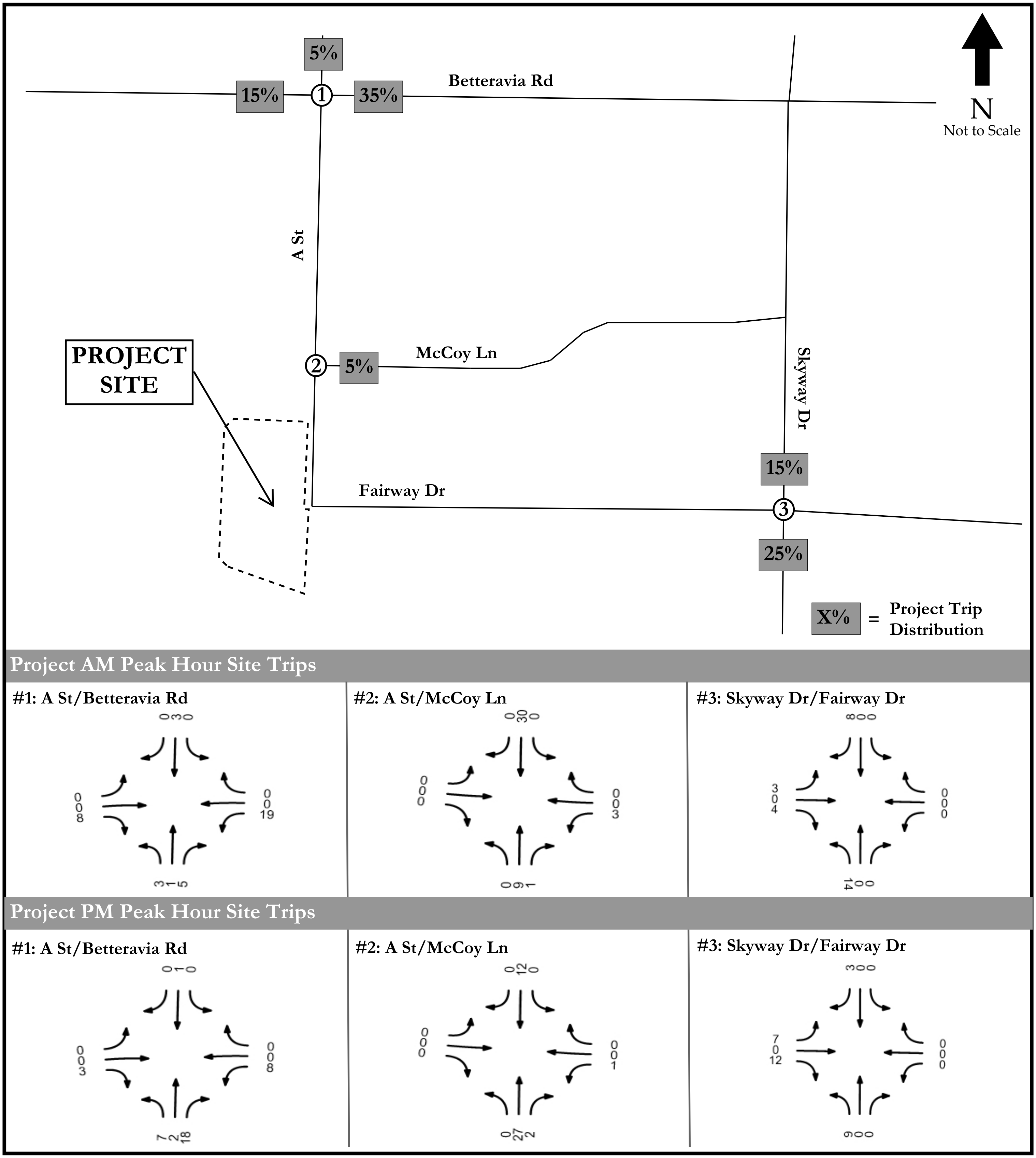

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Figure 4: Existing Plus Project Volumes

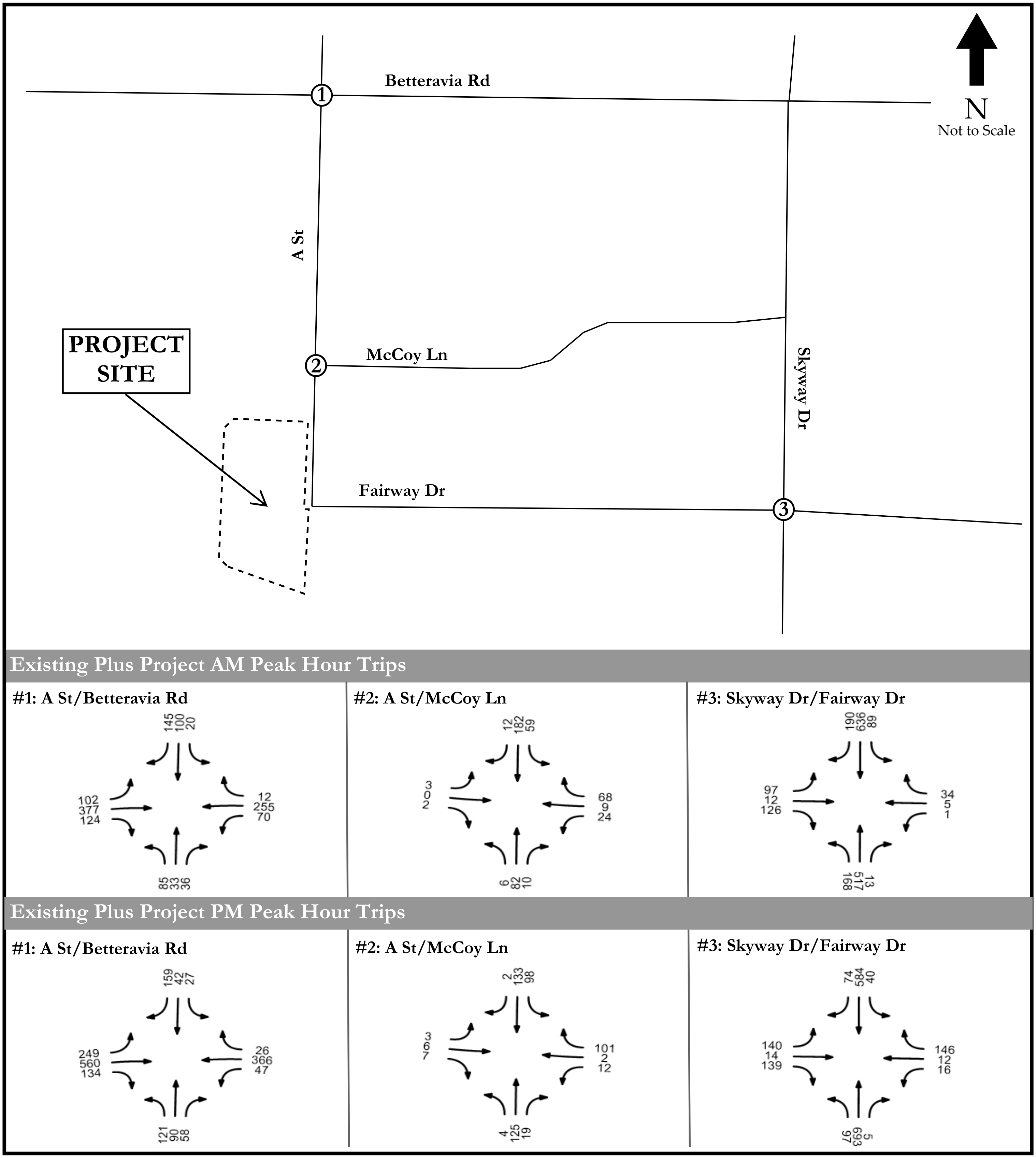

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Table 4: Existing and Existing Plus Project Intersection Queues

Existing and Existing Plus Project Intersection Queues					
Intersection	Movement	Storage Length (ft)	Peak Hour	95th percentile Queue (ft)[1] Existing (EX)	EX + Project
1. A St/Betteravia Rd	EBL	150	AM	75	78
			PM	**205**	**213**
	WBL	250	AM	37	53
			PM	33	42
	SBL	100	AM	15	16
			PM	24	25
3. Skyway Dr/Fairway Dr	EBL	100	AM	58	62
			PM	95	**102**
	WBL	100	AM	1	1
			PM	10	10
	NBL	140	AM	92	103
			PM	68	74
	SBL	150	AM	52	54
			PM	30	31

1. Queue length in feet that would not be exceeded 95 percent of the time. # indicates that the 95th percentile volume exceeds capacity and the queue may be longer. **Bold indicates queue length longer than storage length.**

The following queue lengths exceed storage:

- A Street/Betteravia Road (#1): The eastbound left turn lane exceeds the storage length in the PM peak hour with and without the addition of project volumes; however, the project increases the queue by less than one vehicle, an insignificant amount.
- Skyway Drive/Fairway Drive (#3): The eastbound left turn lane queue exceeds the storage length in the PM peak hour with the addition of project volumes; however, there is additional storage in the bay taper to accommodate the queue.

Queuing was also observed on Betteravia Road eastbound west of A Street during the PM peak hour; however, the project would increase the queue by less than one vehicle, an insignificant amount.

We recommend the City update the following traffic signal timing inputs for consistency with the California Manual on Uniform Traffic Control Devices (CAMUTCD) and the National Cooperative Highway Research Program (NCHRP) recommendations:

- Minimum Green Time:
  - Left turn phases: 7.0 seconds.
  - Fairway Drive and A Street through phases: 8.0 seconds.
  - Skyway Drive through phases: 10.0 seconds. Note that Betteravia Road currently has 10.0 seconds of minimum green time.
- Yellow Clearance Interval:
  - Fairway Drive and A Street approaches: 4.1 seconds for left turn and 4.4 seconds for through phases.
  - Betteravia Road approaches: 4.4 seconds for left turn and 4.8 seconds for through phases.
  - Skyway Drive approaches: 4.1 seconds for left turn and 4.4 seconds for through phases.
- Red Clearance Interval:

  - Left turn phases: 2.0 seconds.
  - A Street through phases: 1.5 seconds.
  - All other phases: Existing 1.0 seconds recommended.
- Pedestrian Clearance Interval (Flashing Don't Walk):
  - Betteravia Road/A Street (#1) northbound A Street approach: Increase to 29.0 seconds.
  - Fairway Drive/Skyway Drive (#3) eastbound and westbound Fairway Drive approaches: Increases to 26.0 seconds.
  - Fairway Drive/Skyway Drive (#3) northbound Skyway Drive approach: Increase to 19.0 seconds.

We also recommend that crosswalks be striped on Skyway Drive at the Fairway Drive/Skyway Drive (#3) intersection. Additional signal timing modifications including max limits or coordination could also be considered but were not included in the analysis.

3.4 SITE ACCESS AND ON-SITE CIRCULATION

The site plan is preliminary at this time and no access or frontage improvements are shown. We recommend that the project construct curb, gutter, and sidewalk on project frontage extending to existing sidewalks on A Street and Fairway Drive. There are currently utilities conflicting with the frontage improvements; however, they will be undergrounded as part of the project as required by the City.

We also recommend a Class II bike lane be striped on Fairway Drive connecting to the existing bike lanes on A Street and Skyway Drive. We recommend the bike lane be striped through the A Street/Fairway Drive knuckle and parking be restricted within the knuckle. We also recommend that the project provide convenient pedestrian and bicycle access between the land uses on the project site and the frontage improvements.

We concur with the City that the primary project access should be located on A Street approximately 300 feet north of Fairway Drive across from the existing driveway. We also recommend that a secondary project access restricted to right-in, right-out be considered on A Street within the knuckle. The additional driveway would provide secondary access for emergency services. If the alternative site on the southern end of the parcel is developed, the access would be located at the south leg of A Street/Fairway Drive.

The Mahoney Ranch North Specific Plan located west of this project site is proposed to include both residential and commercial uses. The project proposes extending Fairway Drive and McCoy Lane west of A Street. The development timeline is currently unknown. We recommend the project dedicate right of way and construct improvements consistent with future development.

3.5 CUMULATIVE CONDITIONS

This Cumulative Conditions represents future traffic conditions including buildout of regional and local land uses. Cumulative traffic volume forecasts were developed using outputs from SBCAG's Travel Demand Model (TDM). No improvements were assumed at the study intersections under Cumulative Conditions. Under Cumulative Conditions a PHF of 0.92 was used for the analysis. However, if the existing PHF exceeded this value the higher PHF was used. Cumulative volumes are shown on **Figure 5** and Cumulative Plus Project volumes are shown on **Figure 6**.

Figure 5: Cumulative Volumes

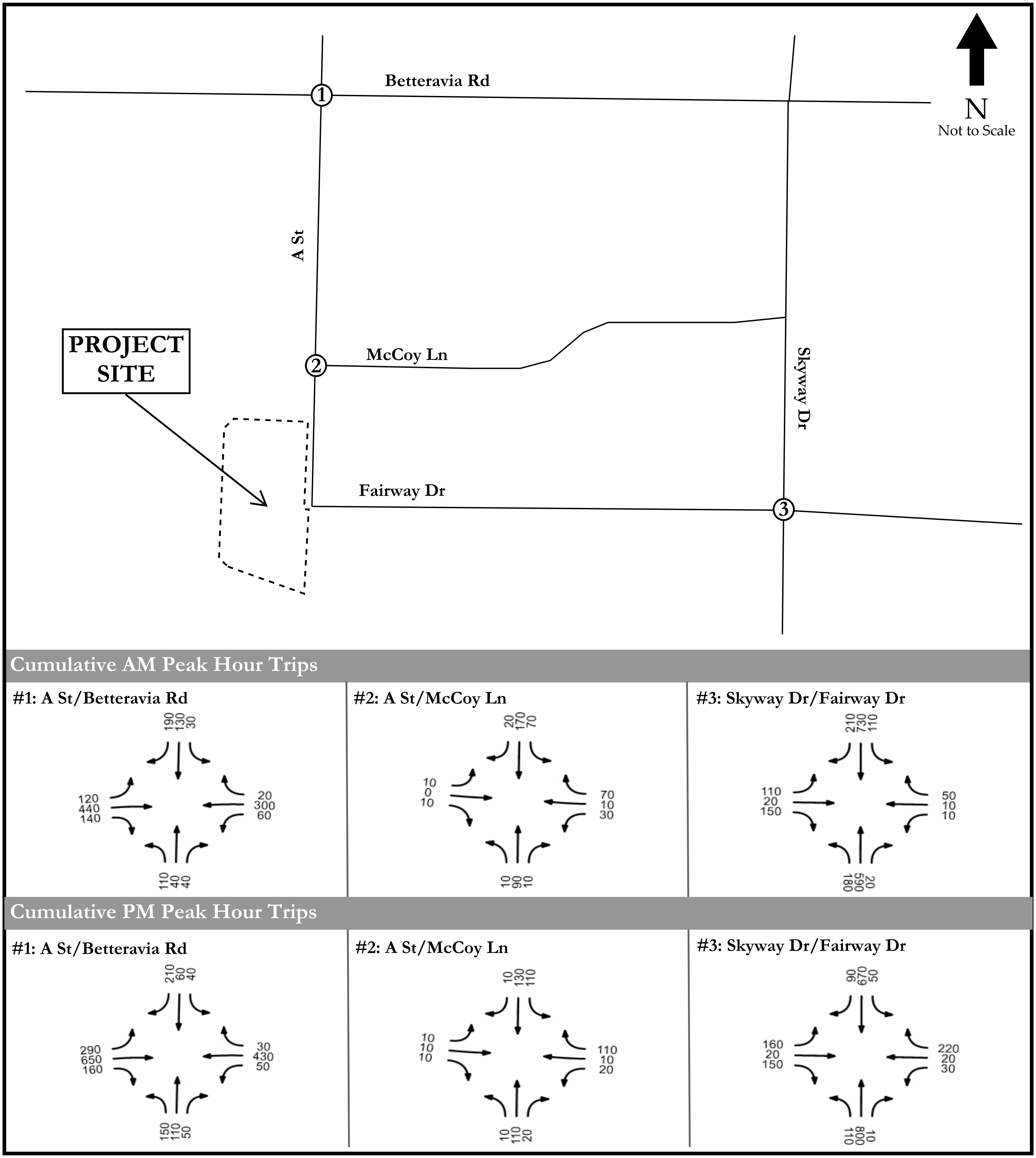

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Figure 6: Cumulative Plus Project Volumes

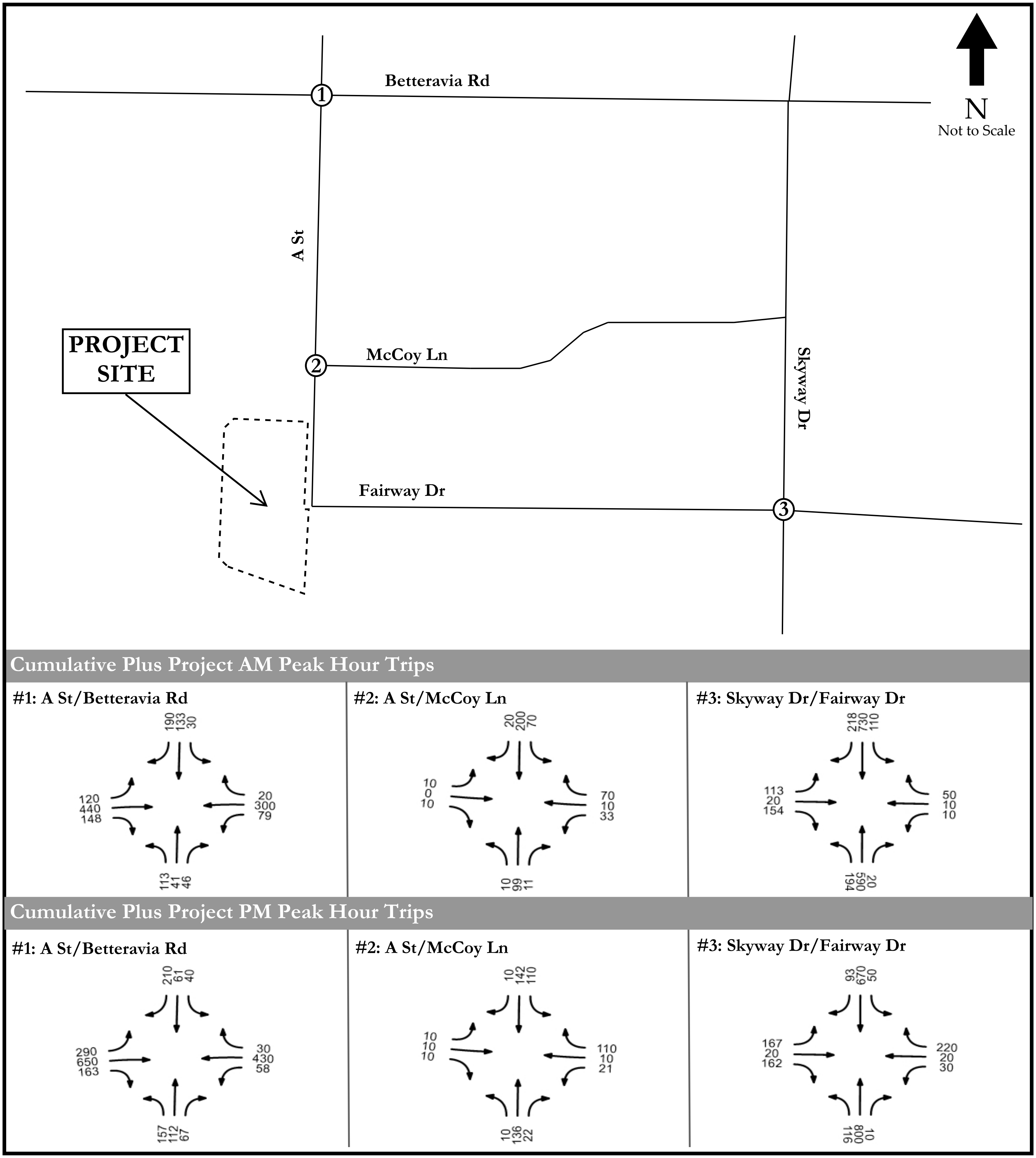

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Table 5 summarizes the vehicular LOS for the study intersections under Cumulative and Cumulative Plus Project Conditions, **Table 6** summarizes the key queues. Detailed calculation sheets are included in **Appendix B**.

Table 5: Cumulative and Cumulative Plus Project Intersection LOS

Cumulative and Cumulative Plus Project Intersection Levels of Service					
Intersection	Peak Hour	Cumulative Delay[1]	Cumulative LOS	Cumulative + Project Delay[1]	Cumulative + Project LOS
1. A St/Betteravia Rd	AM	32.2	C	33.3	C
	PM	50.4	D	52.0	D
2. A St/McCoy Ln	AM	4.0 (11.4)	B	3.8 (11.7)	B
	PM	5.0 (13.2)	B	4.8 (13.7)	B
3. Skyway Dr/Fairway Dr	AM	21.2	C	21.9	C
	PM	25.2	C	25.8	C

1. HCM 6th average control delay in seconds per vehicle. For side-street-stop controlled intersections the worst approach's delay is reported in parentheses next to the overall intersection delay.

All study intersections operate acceptably at LOS D or better under Cumulative Conditions with and without the project.

Table 6: Cumulative and Cumulative Plus Project Intersection Queues

Cumulative and Cumulative Plus Project Intersection Queues					
Intersection	Movement	Storage Length (ft)	Peak Hour	95th percentile Queue (ft)[1] Cumulative (CM)	CM + Project
1. A St/Betteravia Rd	EBL	150	AM	115	119
			PM	**431**	**446**
	WBL	250	AM	57	79
			PM	65	78
	SBL	100	AM	30	31
			PM	53	54
3. Skyway Dr/Fairway Dr	EBL	100	AM	78	83
			PM	**125**	**135**
	WBL	100	AM	7	8
			PM	19	19
	NBL	140	AM	122	136
			PM	88	95
	SBL	150	AM	76	80
			PM	38	40

1. Queue length in feet that would not be exceeded 95 percent of the time. # indicates that the 95th percentile volume exceeds capacity and the queue may be longer. **Bold indicates queue length longer than storage length.**

The eastbound left turn queue lengths at A Street/Betteravia Road (#1) and Skyway Drive/Fairway Drive (#3) would continue to exceed storage with and without the addition of project volumes; however, the project increases the queue by less than one vehicle, an insignificant amount.

4.0 References

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Appendix A: Traffic Counts

Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

Turning Movement Report

Prepared For:
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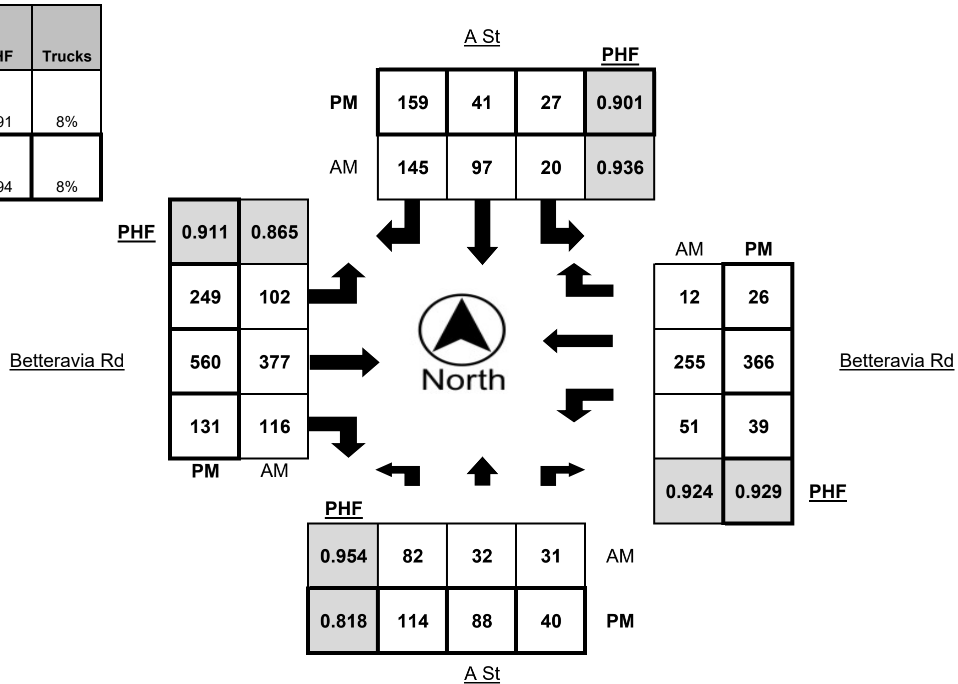
LOCATION	Betteravia Rd @ A St	**LATITUDE**	34.9208
COUNTY	Santa Barbara	**LONGITUDE**	-120.4641
COLLECTION DATE	Tuesday, May 30, 2023	**WEATHER**	Clear

	Northbound				Southbound				Eastbound				Westbound			
Time	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
7:00 AM - 7:15 AM	20	7	4	7	2	14	29	3	10	50	24	13	14	62	3	5
7:15 AM - 7:30 AM	24	4	4	10	6	21	27	2	20	73	13	9	6	61	3	14
7:30 AM - 7:45 AM	11	5	3	2	3	21	30	1	21	88	37	13	10	48	2	7
7:45 AM - 8:00 AM	23	6	7	4	11	36	23	1	25	112	35	12	19	65	2	7
8:00 AM - 8:15 AM	19	11	8	1	3	27	40	4	27	100	37	14	14	51	2	6
8:15 AM - 8:30 AM	22	7	5	6	4	21	37	5	22	69	23	10	14	67	2	9
8:30 AM - 8:45 AM	18	8	11	6	2	13	45	2	28	96	21	14	4	72	6	9
8:45 AM - 9:00 AM	16	6	4	5	2	20	16	2	25	109	15	20	7	64	6	11
TOTAL	**153**	**54**	**46**	**41**	**33**	**173**	**247**	**20**	**178**	**697**	**205**	**105**	**88**	**490**	**26**	**68**

	Northbound				Southbound				Eastbound				Westbound			
Time	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
2:00 PM - 2:15 PM	16	11	4	2	5	8	21	4	36	99	17	16	4	71	3	9
2:15 PM - 2:30 PM	15	7	8	6	8	18	37	7	46	116	33	9	9	85	6	12
2:30 PM - 2:45 PM	21	27	12	6	4	10	25	7	55	114	23	10	9	83	6	13
2:45 PM - 3:00 PM	31	19	11	6	10	13	34	6	48	128	17	9	13	70	7	4
3:00 PM - 3:15 PM	25	25	14	4	7	11	36	4	59	154	18	10	6	90	5	10
3:15 PM - 3:30 PM	17	23	8	4	8	7	48	13	53	138	34	12	13	92	5	12
3:30 PM - 3:45 PM	31	25	10	5	9	9	32	3	77	145	36	14	8	104	4	14
3:45 PM - 4:00 PM	27	19	8	4	4	10	40	5	61	140	31	10	10	80	6	15
4:00 PM - 4:15 PM	39	21	14	5	6	15	39	6	58	137	30	11	8	90	11	12
4:15 PM - 4:30 PM	33	22	10	2	5	13	27	6	54	130	36	12	11	95	3	16
4:30 PM - 4:45 PM	32	29	10	2	4	15	29	6	34	104	28	12	8	97	3	10
4:45 PM - 5:00 PM	32	7	4	3	7	8	37	6	35	100	25	13	1	100	6	8
5:00 PM - 5:15 PM	35	31	8	1	6	7	32	3	52	84	18	7	6	93	7	7
5:15 PM - 5:30 PM	20	13	7	0	4	5	25	3	38	105	14	6	5	84	10	6
5:30 PM - 5:45 PM	11	18	4	1	7	7	32	3	33	73	15	7	5	78	5	8
5:45 PM - 6:00 PM	20	8	5	3	5	10	29	1	34	70	10	8	3	78	7	2
TOTAL	**405**	**305**	**137**	**54**	**99**	**166**	**523**	**83**	**773**	**1837**	**385**	**166**	**119**	**1390**	**94**	**158**

	Northbound				Southbound				Eastbound				Westbound			
PEAK HOUR	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
7:45 AM - 8:45 AM	82	32	31	17	20	97	145	12	102	377	116	50	51	255	12	31
3:15 PM - 4:15 PM	114	88	40	18	27	41	159	27	249	560	131	47	39	366	26	53

	PHF	Trucks
AM	0.91	8%
PM	0.94	8%



Metro Traffic Data Inc.
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Turning Movement Report

Prepared For:
Central Coast Transportation Consulting
895 Napa Avenue, Suite A-6
Morro Bay, CA 93442

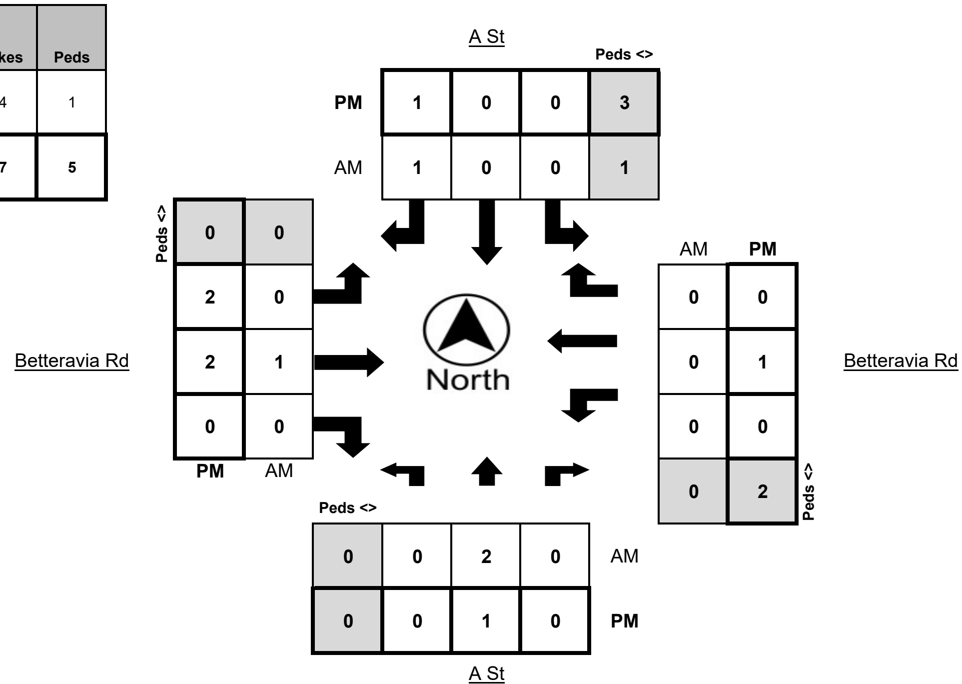
LOCATION Betteravia Rd @ A St
LATITUDE 34.9208
COUNTY Santa Barbara
LONGITUDE -120.4641
COLLECTION DATE Tuesday, May 30, 2023
WEATHER Clear

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM - 7:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	1	0	0	0	0	0	0	0	1	1	0	1	0	0
TOTAL	**0**	**2**	**1**	**2**	**0**	**3**	**1**	**0**	**0**	**1**	**1**	**2**	**0**	**1**	**0**	**0**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
2:00 PM - 2:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
2:15 PM - 2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
2:30 PM - 2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
2:45 PM - 3:00 PM	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
3:00 PM - 3:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
3:15 PM - 3:30 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
3:30 PM - 3:45 PM	0	0	0	3	0	0	1	0	0	0	0	1	0	0	0	0
3:45 PM - 4:00 PM	0	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**0**	**1**	**0**	**3**	**0**	**0**	**3**	**2**	**4**	**4**	**1**	**3**	**0**	**4**	**2**	**0**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
PEAK HOUR	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:45 AM - 8:45 AM	0	2	0	1	0	0	1	0	0	1	0	0	0	0	0	0
3:15 PM - 4:15 PM	0	1	0	3	0	0	1	0	2	2	0	2	0	1	0	0

	Bikes	Peds
AM Peak Total	4	1
PM Peak Total	**7**	**5**



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Turning Movement Report

Prepared For:
Central Coast Transportation Consulting
895 Napa Avenue, Suite A-6
Morro Bay, CA 93442

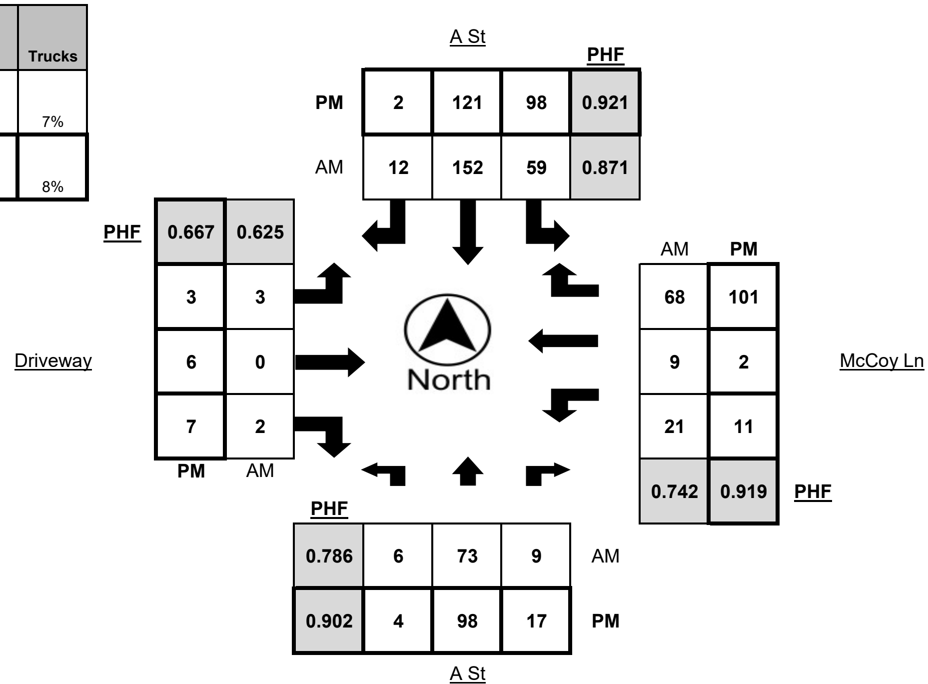
LOCATION	A St @ McCoy Ln	**LATITUDE**	34.9160
COUNTY	Santa Barbara	**LONGITUDE**	-120.4642
COLLECTION DATE	Tuesday, May 30, 2023	**WEATHER**	Clear

	Northbound				Southbound				Eastbound				Westbound			
Time	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
7:00 AM - 7:15 AM	1	22	3	4	15	22	1	1	0	1	0	1	1	1	21	2
7:15 AM - 7:30 AM	0	24	2	6	4	26	2	0	0	0	1	0	5	2	11	1
7:30 AM - 7:45 AM	1	17	0	1	15	36	2	3	0	0	0	0	3	0	9	1
7:45 AM - 8:00 AM	2	22	2	2	18	46	0	2	2	0	0	1	8	3	19	2
8:00 AM - 8:15 AM	3	21	4	1	14	41	4	1	0	0	2	1	6	1	16	2
8:15 AM - 8:30 AM	0	13	3	2	12	29	6	3	1	0	0	1	4	5	24	4
8:30 AM - 8:45 AM	4	16	3	3	8	19	3	2	0	0	1	0	2	0	11	2
8:45 AM - 9:00 AM	3	18	9	2	10	20	7	2	3	0	1	2	4	2	11	4
TOTAL	**14**	**153**	**26**	**21**	**96**	**239**	**25**	**14**	**6**	**1**	**5**	**6**	**33**	**14**	**122**	**18**

	Northbound				Southbound				Eastbound				Westbound			
Time	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
2:00 PM - 2:15 PM	1	11	1	0	9	16	3	4	0	1	1	1	1	1	16	1
2:15 PM - 2:30 PM	3	13	2	1	23	24	2	6	2	0	5	3	3	0	11	6
2:30 PM - 2:45 PM	1	19	4	4	13	17	0	3	12	4	4	6	3	0	30	3
2:45 PM - 3:00 PM	0	13	2	2	17	15	1	2	11	3	6	1	2	0	23	4
3:00 PM - 3:15 PM	0	22	3	4	16	13	0	1	5	1	1	0	3	0	19	1
3:15 PM - 3:30 PM	1	10	3	2	24	21	1	2	2	1	0	0	3	0	23	5
3:30 PM - 3:45 PM	1	21	5	2	23	21	0	2	1	0	1	0	2	0	28	3
3:45 PM - 4:00 PM	1	23	0	1	19	29	0	7	2	1	0	0	0	0	24	3
4:00 PM - 4:15 PM	0	31	2	5	25	27	2	3	1	0	2	1	2	0	26	2
4:15 PM - 4:30 PM	2	20	7	2	29	30	0	4	0	3	3	0	3	1	27	1
4:30 PM - 4:45 PM	1	24	8	2	25	35	0	4	0	2	2	0	6	1	24	2
4:45 PM - 5:00 PM	0	5	1	0	17	30	0	7	0	0	0	0	3	1	27	1
5:00 PM - 5:15 PM	0	34	1	0	9	25	0	3	1	1	0	0	2	0	28	2
5:15 PM - 5:30 PM	0	14	2	0	7	14	0	0	0	0	0	0	2	0	21	2
5:30 PM - 5:45 PM	0	4	1	0	13	16	0	1	0	0	1	0	1	0	18	2
5:45 PM - 6:00 PM	0	14	0	1	5	12	0	2	2	2	2	0	1	0	15	2
TOTAL	**11**	**278**	**42**	**26**	**274**	**345**	**9**	**51**	**39**	**19**	**28**	**12**	**37**	**4**	**360**	**40**

	Northbound				Southbound				Eastbound				Westbound			
PEAK HOUR	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
7:30 AM - 8:30 AM	6	73	9	6	59	152	12	9	3	0	2	3	21	9	68	9
3:45 PM - 4:45 PM	4	98	17	10	98	121	2	18	3	6	7	1	11	2	101	8

	PHF	Trucks
AM	0.85	7%
PM	0.92	8%



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Turning Movement Report

Prepared For:
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895 Napa Avenue, Suite A-6
Morro Bay, CA 93442

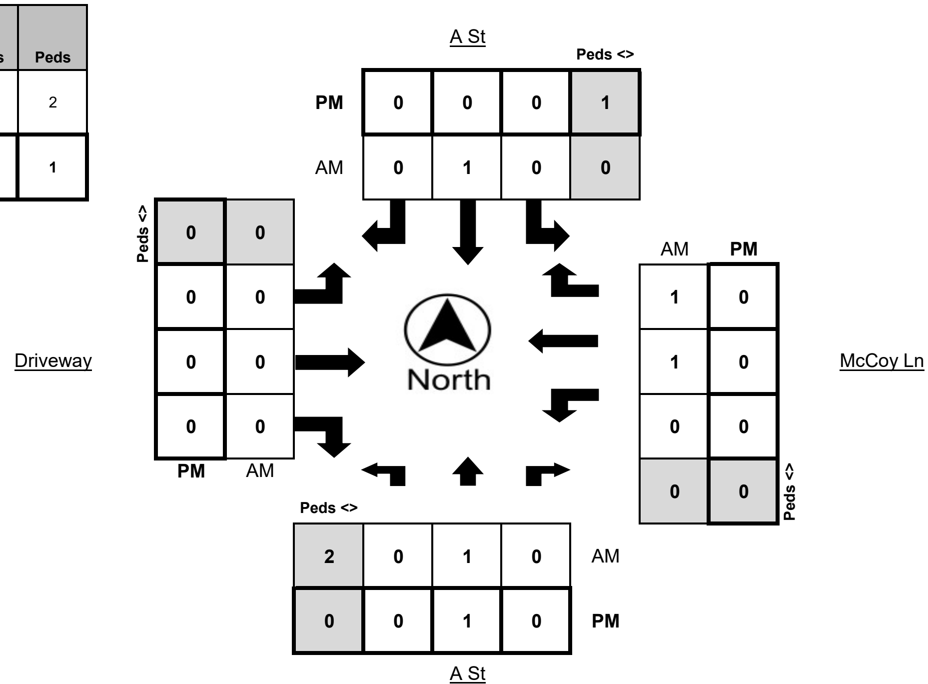
LOCATION	A St @ McCoy Ln	**LATITUDE**	34.9160
COUNTY	Santa Barbara	**LONGITUDE**	-120.4642
COLLECTION DATE	Tuesday, May 30, 2023	**WEATHER**	Clear

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
TOTAL	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**1**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
2:00 PM - 2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM - 2:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
2:30 PM - 2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:00 PM	0	0	0	0	0	1	0	1	0	1	0	1	0	0	0	0
3:00 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
3:15 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**3**	**0**	**1**	**0**	**5**	**2**	**0**	**0**	**1**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
PEAK HOUR	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:30 AM - 8:30 AM	0	1	0	0	0	1	0	2	0	0	0	0	0	1	1	0
3:45 PM - 4:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0

	Bikes	Peds
AM Peak Total	4	2
PM Peak Total	**1**	**1**



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Turning Movement Report

Prepared For:
Central Coast Transportation Consulting
895 Napa Avenue, Suite A-6
Morro Bay, CA 93442

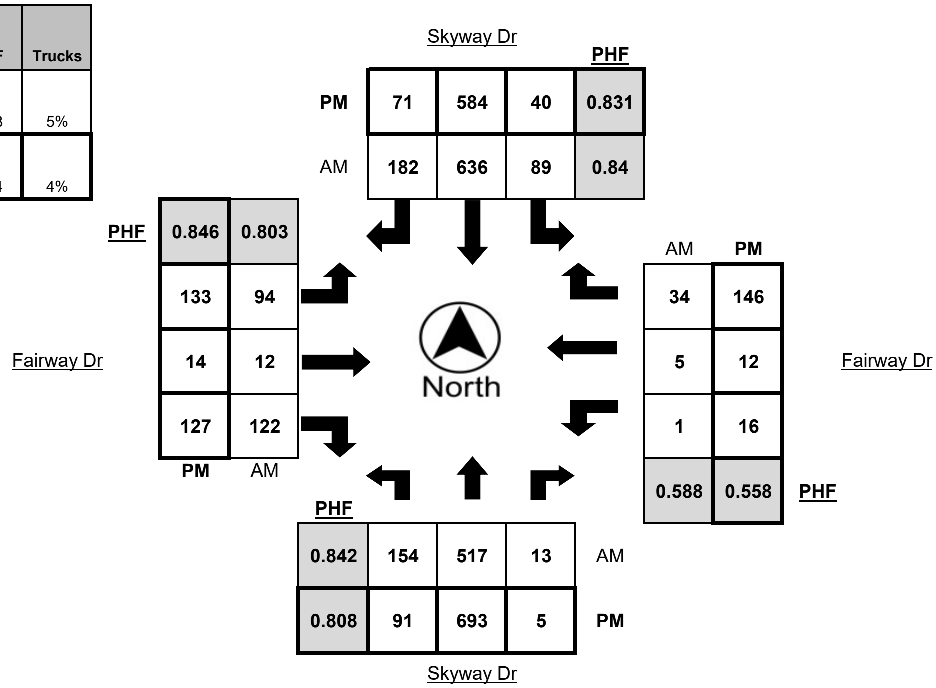
LOCATION	Fairway Dr @ Skyway Dr	**LATITUDE**	34.9135
COUNTY	Santa Barbara	**LONGITUDE**	-120.4541
COLLECTION DATE	Tuesday, May 30, 2023	**WEATHER**	Clear

	Northbound				Southbound				Eastbound				Westbound			
Time	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
7:00 AM - 7:15 AM	33	111	3	3	23	85	31	7	10	1	20	2	1	5	12	12
7:15 AM - 7:30 AM	27	106	3	5	13	118	28	2	6	1	20	1	0	5	16	13
7:30 AM - 7:45 AM	39	127	0	6	20	154	26	3	12	6	18	7	1	0	6	2
7:45 AM - 8:00 AM	53	144	6	5	29	172	69	4	12	3	35	5	0	3	3	3
8:00 AM - 8:15 AM	40	137	4	1	24	150	50	4	30	0	41	4	0	0	17	4
8:15 AM - 8:30 AM	22	109	3	6	16	160	37	19	40	3	28	17	0	2	8	1
8:30 AM - 8:45 AM	29	117	4	11	13	99	25	11	30	3	28	19	0	2	10	2
8:45 AM - 9:00 AM	34	104	7	12	11	98	21	7	20	3	16	14	1	0	14	3
TOTAL	**277**	**955**	**30**	**49**	**149**	**1036**	**287**	**57**	**160**	**20**	**206**	**69**	**3**	**17**	**86**	**40**

	Northbound				Southbound				Eastbound				Westbound			
Time	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
2:00 PM - 2:15 PM	18	95	2	4	10	97	11	7	20	2	21	7	3	2	22	8
2:15 PM - 2:30 PM	11	118	1	5	15	96	16	12	18	3	17	4	3	0	20	3
2:30 PM - 2:45 PM	22	123	1	7	16	103	17	9	53	2	21	3	3	0	20	5
2:45 PM - 3:00 PM	23	98	1	13	17	143	39	10	29	3	26	2	2	6	28	3
3:00 PM - 3:15 PM	19	159	1	8	10	138	12	3	49	3	16	8	2	3	24	3
3:15 PM - 3:30 PM	17	155	1	15	15	115	20	13	23	2	16	2	1	1	19	2
3:30 PM - 3:45 PM	25	186	2	13	12	183	14	11	47	3	27	0	3	3	72	2
3:45 PM - 4:00 PM	20	124	2	6	10	141	24	10	23	2	27	3	6	4	33	1
4:00 PM - 4:15 PM	24	220	0	9	7	146	14	6	38	3	40	3	4	2	20	1
4:15 PM - 4:30 PM	22	163	1	6	11	114	19	5	25	6	33	5	3	3	21	0
4:30 PM - 4:45 PM	13	146	0	3	13	155	20	10	81	4	37	5	1	4	29	1
4:45 PM - 5:00 PM	14	126	2	8	9	122	18	12	47	4	31	6	1	0	13	0
5:00 PM - 5:15 PM	13	132	1	4	9	175	13	8	80	2	47	5	14	5	41	0
5:15 PM - 5:30 PM	15	130	1	7	5	116	7	5	29	0	26	2	1	0	20	1
5:30 PM - 5:45 PM	6	96	1	3	6	88	12	6	23	1	20	2	4	2	11	0
5:45 PM - 6:00 PM	9	83	0	3	5	117	20	7	27	0	13	0	0	0	7	0
TOTAL	**271**	**2154**	**17**	**114**	**170**	**2049**	**276**	**134**	**612**	**40**	**418**	**57**	**51**	**35**	**400**	**30**

	Northbound				Southbound				Eastbound				Westbound			
PEAK HOUR	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**	**Left**	**Thru**	**Right**	**Trucks**
7:30 AM - 8:30 AM	154	517	13	18	89	636	182	30	94	12	122	33	1	5	34	10
3:30 PM - 4:30 PM	91	693	5	34	40	584	71	32	133	14	127	11	16	12	146	4

	PHF	Trucks
AM	0.88	5%
PM	0.84	4%



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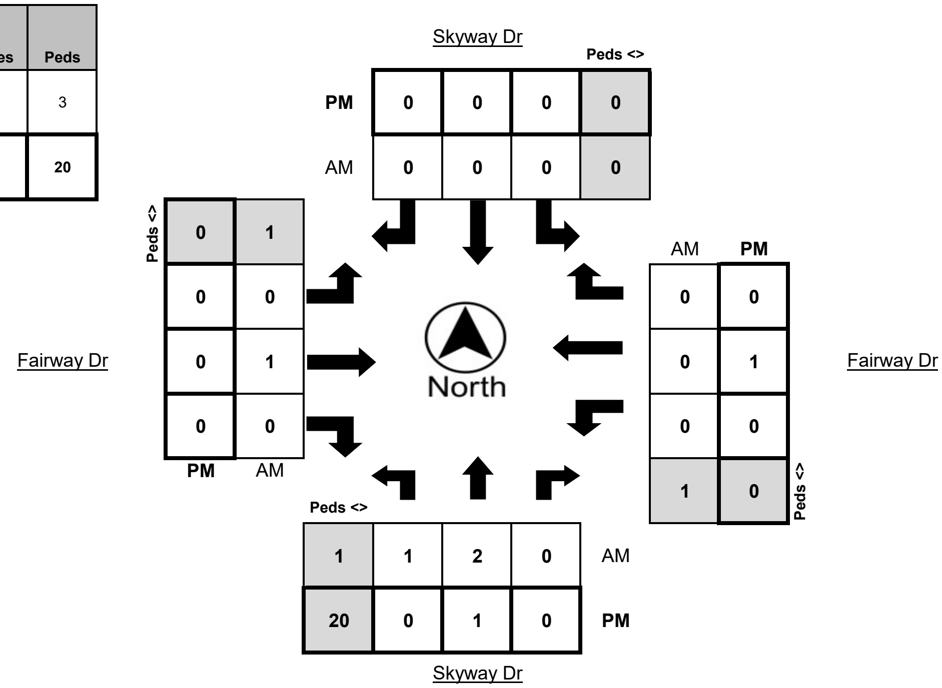
LOCATION	Fairway Dr @ Skyway Dr	**LATITUDE**	34.9135
COUNTY	Santa Barbara	**LONGITUDE**	-120.4541
COLLECTION DATE	Tuesday, May 30, 2023	**WEATHER**	Clear

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
7:15 AM - 7:30 AM	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
8:15 AM - 8:30 AM	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
TOTAL	**1**	**3**	**0**	**0**	**0**	**1**	**1**	**2**	**0**	**1**	**0**	**2**	**0**	**0**	**1**	**1**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
2:00 PM - 2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM - 2:30 PM	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
2:30 PM - 2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
3:00 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 3:45 PM	0	0	0	0	0	0	0	6	0	0	0	0	0	1	0	0
3:45 PM - 4:00 PM	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0
4:00 PM - 4:15 PM	0	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
TOTAL	**0**	**2**	**0**	**0**	**0**	**3**	**0**	**22**	**0**	**0**	**1**	**2**	**0**	**1**	**0**	**0**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
PEAK HOUR	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:30 AM - 8:30 AM	1	2	0	0	0	0	0	1	0	1	0	1	0	0	0	1
3:30 PM - 4:30 PM	0	1	0	0	0	0	0	20	0	0	0	0	0	1	0	0

	Bikes	Peds
AM Peak Total	4	3
PM Peak Total	**2**	**20**



Appendix B: Intersection Calculation Sheets

Santa Maria A Street Industrial

Vistro File: G:\...\2023_06_Base Scenario.vistro
Scenario 1 EX AM

Report File: G:\...\2023_08 EX AM (updated timings).pdf
8/10/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Betteravia Road/A Street	Signalized	HCM 6th Edition	SB Left	0.484	26.1	C
2	A St/McCoy Ln	Two-way stop	HCM 6th Edition	WB Thru	0.023	13.1	B
3	Skyway Dr/Fairway Dr	Signalized	HCM 6th Edition	NB Left	0.464	18.9	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Betteravia Road/A Street

Control Type:	Signalized	Delay (sec / veh):	26.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.484

Intersection Setup

Name	A St			A St			Betteravia Rd			Betteravia Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry Pocket Length [ft]	120.	100.	100.	105.	100.	100.	150.	100.	25.0	250.	100.	460.
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	A St			A St			Be Rd			Be Rd		
Base Volume Input [veh/h]	8	3	3	2	9	1	1	3	1	5	2	1
Base Volume Adjustment Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
Heavy Vehicles Percentage [%]	8.	8.	8.	8.	8.	8.	8.	8.	8.	8.	8.	8.
Growth Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	3	3	2	9	1	1	3	1	5	2	1
Peak Hour Factor	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Other Adjustment Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
Total 15-Minute Volume [veh/h]	2	9	9	5	2	4	2	1	3	1	7	3
Total Analysis Volume [veh/h]	9	3	3	2	1	1	1	4	1	5	2	1
Presence of On-Street Parking	N		N	N		N	N		N	N		N
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			1		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			1			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	2			0			1			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	145
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Prot	Per	Per	Prot	Per	Per	Prot	Per	Per	Prot	Per	Per
Signal Group	3	8	0	7	4	0	5	2	2	1	6	6
Auxiliary Signal Groups												
Lead / Lag	Lea	-	-	Lea	-	-	Lea	-	-	Lea	-	-
Minimum Green [s]	7	8	0	7	8	0	7	10	10	7	10	10
Maximum Green [s]	20	30	0	20	30	0	20	50	50	20	50	50
Amber [s]	4.1	4.4	0.0	4.1	4.4	0.0	4.4	4.8	4.8	4.4	4.8	4.8
All red [s]	2.0	1.5	0.0	2.0	1.5	0.0	2.0	1.0	1.0	2.0	1.0	1.0
Split [s]	27	36	0	27	36	0	27	56	56	27	56	56
Vehicle Extension [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	4.0	4.0	2.0	4.0	4.0
Walk [s]	0	4	0	0	0	0	0	4	4	0	4	4
Pedestrian Clearance [s]	0	29	0	0	0	0	0	20	20	0	15	15
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.1	3.9	0.0	4.1	3.9	0.0	4.4	3.8	3.8	4.4	3.8	3.8
Minimum Recall	No	No		No	No		No	Yes		No	Yes	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	20.0	20.0	0.0	20.0	20.0	0.0	20.0	100.	100.	20.0	100.	100.
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	R
C, Cycle Length [s]	66	66	66	66	66	66	66	66	66	66
L, Total Lost Time per Cycle [s]	6.10	5.90	6.10	5.90	6.40	5.80	5.80	6.40	5.80	5.80
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.10	3.90	4.10	3.90	4.40	3.80	3.80	4.40	3.80	3.80
g_i, Effective Green Time [s]	6	16	2	13	6	19	19	5	17	17
g / C, Green / Cycle	0.09	0.24	0.04	0.19	0.09	0.29	0.29	0.07	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.05	0.04	0.01	0.17	0.07	0.23	0.09	0.03	0.16	0.01
s, saturation flow rate [veh/h]	1695	1617	1695	1610	169	178	148	169	178	151
c, Capacity [veh/h]	146	396	60	313	157	509	423	116	466	395
d1, Uniform Delay [s]	29.22	19.74	31.21	25.76	29.1	22.0	18.4	29.7	21.4	18.2
k, delay calibration	0.04	0.04	0.04	0.04	0.04	0.15	0.15	0.04	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.58	0.08	1.36	2.53	2.24	4.51	0.56	1.15	1.77	0.05
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.62	0.17	0.36	0.85	0.71	0.81	0.30	0.48	0.60	0.03
d, Delay for Lane Group [s/veh]	30.80	19.82	32.57	28.29	31.4	26.5	19.0	30.8	23.1	18.2
Lane Group LOS	C	B	C	C	C	C	B	C	C	B
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.34	0.77	0.34	3.87	1.67	5.79	1.39	0.82	3.55	0.14
50th-Percentile Queue Length [ft/ln]	33.52	19.18	8.57	96.76	41.6	144.	34.7	20.5	88.7	3.41
95th-Percentile Queue Length [veh/ln]	2.41	1.38	0.62	6.97	3.00	9.73	2.50	1.48	6.39	0.25
95th-Percentile Queue Length [ft/ln]	60.34	34.53	15.43	174.16	75.0	243.	62.5	36.9	159.	6.13

Movement, Approach, & Intersection Results

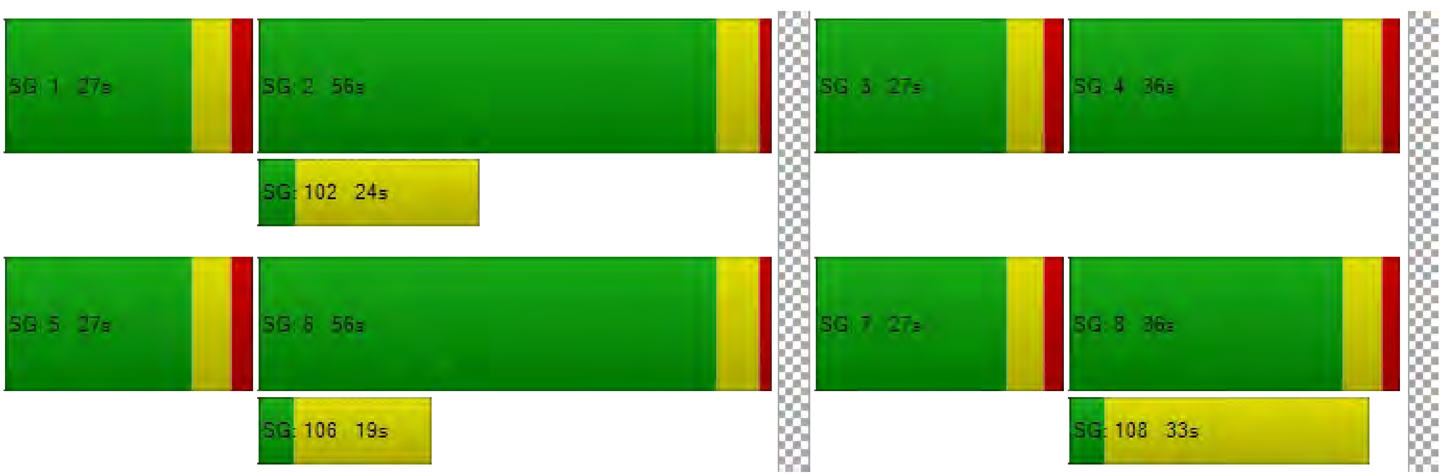
d_M, Delay for Movement [s/veh]	30.8	19.8	19.8	32.5	28.2	28.2	31.4	26.5	19.0	30.8	23.1	18.2
Movement LOS	C	B	B	C	C	C	C	C	B	C	C	B
d_A, Approach Delay [s/veh]	26.04			28.62			25.90			24.24		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	26.06											
Intersection LOS	C											
Intersection V/C	0.484											

Other Modes

g_Walk,mi, Effective Walk Time [s]	8.0	8.0	30.1	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	25.51	25.51	9.78	25.51
I_p,int, Pedestrian LOS Score for Intersection	2.122	2.122	2.512	2.418
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	911	911	1520	1520
d_b, Bicycle Delay [s]	9.79	9.78	1.90	1.90
I_b,int, Bicycle LOS Score for Intersection	1.822	2.035	2.637	2.135
Bicycle LOS	A	B	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 2: A St/McCoy Ln

Control Type:	Two-way stop	Delay (sec / veh):	13.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.023

Intersection Setup

Name	A St			A St			Driveway			McCoy Ln		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Entry Pocket	0	0	1	1	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.	100.	85.0	150.	100.	100.	100.	100.	100.	100.	100.	100.
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	50.0	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			30.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	A St			A St			Drivewa			Mc Ln		
Base Volume Input [veh/h]	6	7	9	5	1	1	3	0	2	2	9	6
Base Volume Adjustment Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
Heavy Vehicles Percentage [%]	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.
Growth Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	7	9	5	1	1	3	0	2	2	9	6
Peak Hour Factor	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Other Adjustment Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
Total 15-Minute Volume [veh/h]	2	2	3	1	4	4	1	0	1	6	3	2
Total Analysis Volume [veh/h]	7	8	1	6	1	1	4	0	2	2	1	8
Pedestrian Volume [ped/h]	2			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.05	0.00	0.00	0.01	0.00	0.00	0.04	0.02	0.08
d_M, Delay for Movement [s/veh]	7.70	0.00	0.00	7.59	0.00	0.00	12.8	12.6	8.98	11.7	13.0	9.10
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.02	0.01	0.00	0.15	0.00	0.00	0.03	0.03	0.03	0.14	0.35	0.35
95th-Percentile Queue Length [ft/ln]	0.39	0.20	0.00	3.72	0.00	0.00	0.82	0.82	0.82	3.53	8.64	8.64
d_A, Approach Delay [s/veh]	0.52			2.00			11.55			10.05		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	3.71											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 3: Skyway Dr/Fairway Dr

Control Type:	Signalized	Delay (sec / veh):	18.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.464

Intersection Setup

Name	Skyway Dr			Skyway Dr						Fairway Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	130.	100.	100.	145.	100.	100.	95.0	100.	100.	100.	100.	100.
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Sk Dr			Sk Dr						Fa Dr		
Base Volume Input [veh/h]	1	5	1	8	6	1	9	1	1	1	5	3
Base Volume Adjustment Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
Heavy Vehicles Percentage [%]	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.
Growth Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	5	1	8	6	1	9	1	1	1	5	3
Peak Hour Factor	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Other Adjustment Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
Total 15-Minute Volume [veh/h]	4	1	4	2	1	5	2	3	3	0	1	1
Total Analysis Volume [veh/h]	1	5	1	1	7	2	1	1	1	1	6	3
Presence of On-Street Parking	N		N	N		N	N		N	N		N
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	1			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			1			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			1			0			1		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	1			0			1			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	2			0			1			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	149
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Prot	Per	Per	Prot	Per	Per	Per	Per	Per	Per	Per	Per
Signal Group	5	2	0	1	6	0	4	4	0	8	8	0
Auxiliary Signal Groups												
Lead / Lag	Lea	-	-	Lea	-	-	Lea	-	-	Lea	-	-
Minimum Green [s]	7	10	0	7	10	0	8	8	0	8	8	0
Maximum Green [s]	30	50	0	30	50	0	50	50	0	50	50	0
Amber [s]	4.8	5.5	0.0	4.8	5.5	0.0	4.4	4.4	0.0	4.4	4.4	0.0
All red [s]	2.0	1.0	0.0	2.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	37	57	0	37	57	0	56	56	0	56	56	0
Vehicle Extension [s]	2.0	4.0	0.0	2.0	4.0	0.0	4.0	4.0	0.0	4.0	4.0	0.0
Walk [s]	0	7	0	0	7	0	7	7	0	7	7	0
Pedestrian Clearance [s]	0	19	0	0	17	0	26	26	0	26	26	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	4.8	4.5	0.0	4.8	4.5	0.0	3.4	3.4	0.0	3.4	3.4	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	100.	100.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.	100.	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C
C, Cycle Length [s]	57	57	57	57	57	57	57	57	57	57
L, Total Lost Time per Cycle [s]	6.80	6.50	6.50	6.80	6.50	6.50	5.40	5.40	5.40	5.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	4.80	4.50	4.50	4.80	4.50	4.50	3.40	3.40	3.40	3.40
g_i, Effective Green Time [s]	7	21	21	6	20	20	11	11	11	11
g / C, Green / Cycle	0.13	0.38	0.38	0.10	0.35	0.35	0.19	0.19	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.10	0.17	0.17	0.06	0.26	0.27	0.08	0.10	0.00	0.03
s, saturation flow rate [veh/h]	173	182	180	173	182	168	1328	1551	1203	1583
c, Capacity [veh/h]	222	692	685	172	640	591	300	297	205	303
d1, Uniform Delay [s]	23.9	13.0	13.0	24.4	16.2	16.2	23.30	20.53	24.82	19.05
k, delay calibration	0.04	0.15	0.15	0.04	0.15	0.15	0.15	0.15	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.36	0.62	0.63	1.19	2.61	2.84	1.02	1.96	0.01	0.32
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.79	0.44	0.44	0.59	0.76	0.76	0.36	0.51	0.00	0.15
d, Delay for Lane Group [s/veh]	26.3	13.7	13.7	25.6	18.8	19.1	24.32	22.49	24.83	19.37
Lane Group LOS	C	B	B	C	B	B	C	C	C	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.04	2.21	2.19	1.15	4.55	4.24	1.29	1.75	0.01	0.46
50th-Percentile Queue Length [ft/ln]	50.9	55.2	54.8	28.6	113.	106.	32.20	43.81	0.30	11.52
95th-Percentile Queue Length [veh/ln]	3.67	3.98	3.95	2.07	8.04	7.62	2.32	3.15	0.02	0.83
95th-Percentile Queue Length [ft/ln]	91.6	99.4	98.6	51.6	201.	190.	57.96	78.86	0.55	20.74

Movement, Approach, & Intersection Results

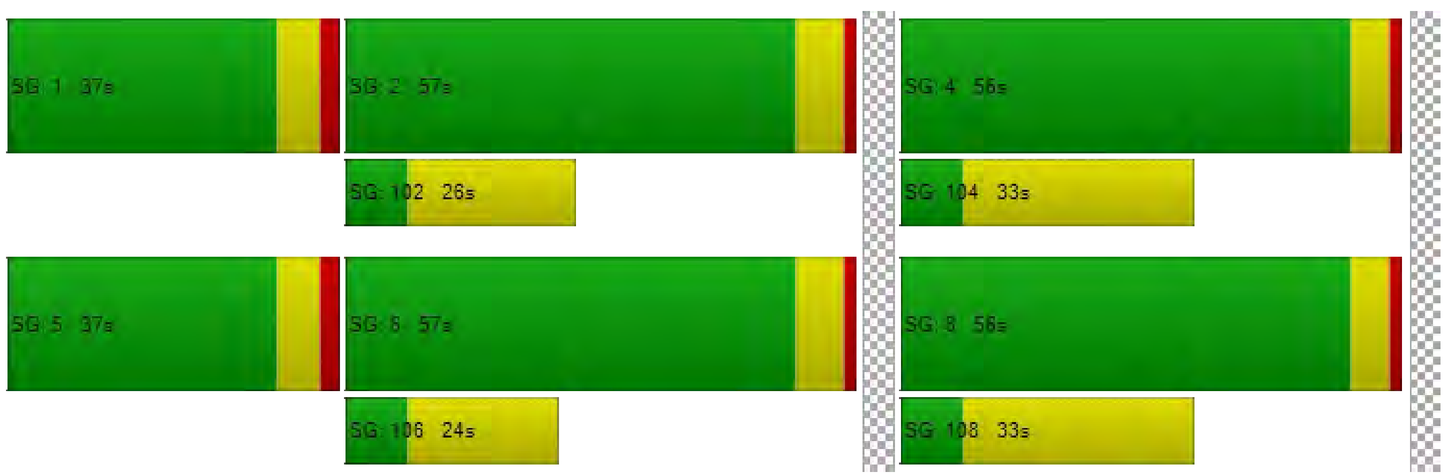
d_M, Delay for Movement [s/veh]	26.3	13.7	13.7	25.6	18.9	19.1	24.3	22.4	22.4	24.8	19.3	19.3
Movement LOS	C	B	B	C	B	B	C	C	C	C	B	B
d_A, Approach Delay [s/veh]	16.55			19.63			23.24			19.49		
Approach LOS	B			B			C			B		
d_I, Intersection Delay [s/veh]	18.94											
Intersection LOS	B											
Intersection V/C	0.464											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	18.40	18.40	18.40	18.40
I_p,int, Pedestrian LOS Score for Intersection	2.862	3.105	2.195	1.991
Crosswalk LOS	C	C	B	A
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1782	1782	1786	1786
d_b, Bicycle Delay [s]	0.34	0.34	0.33	0.32
I_b,int, Bicycle LOS Score for Intersection	2.201	2.410	1.989	1.636
Bicycle LOS	B	B	A	A

Sequence

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



Santa Maria A Street Industrial

Vistro File: G:\...\2023_06_Base Scenario.vistro
Report File: G:\...\2023_08 EX AM (updated timings).pdf

Scenario 1 EX AM
8/10/2023

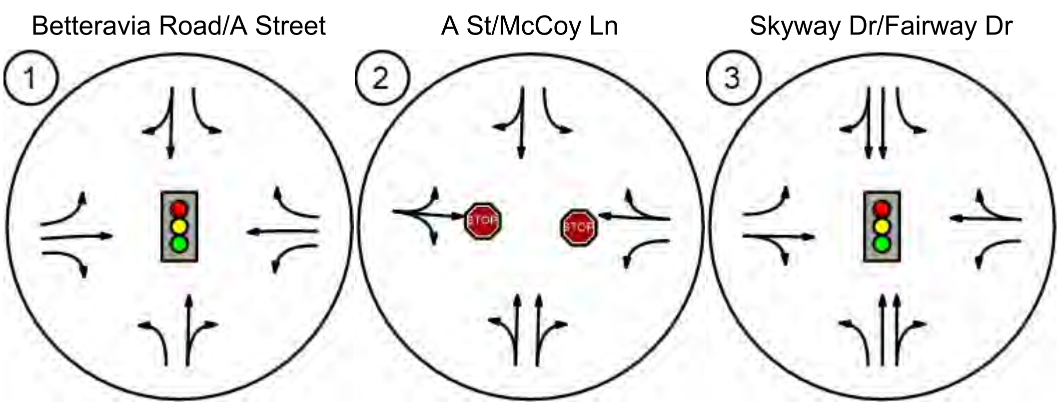
Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Betteravia Road/A Street	82	32	31	20	97	145	102	377	116	51	255	12	1320

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	A St/McCoy Ln	6	73	9	59	152	12	3	0	2	21	9	68	414

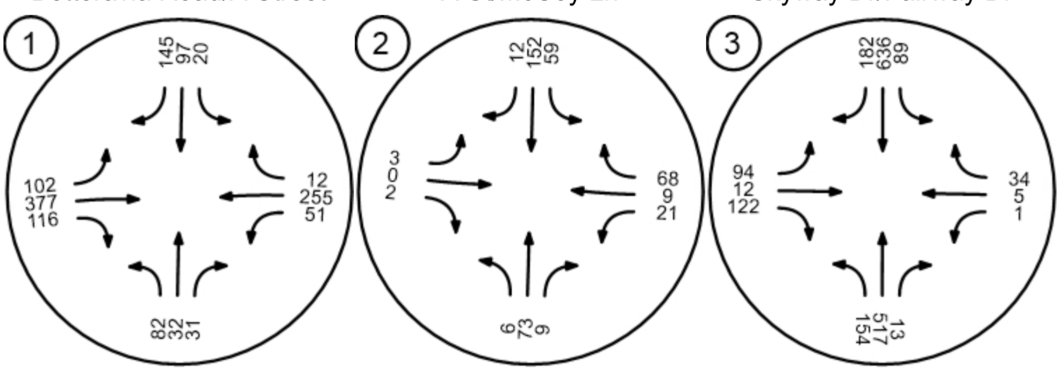
ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Skyway Dr/Fairway Dr	154	517	13	89	636	182	94	12	122	1	5	34	1859

Lane Configuration and Traffic Control



Traffic Volume - Base Volume

Betteravia Road/A Street A St/McCoy Ln Skyway Dr/Fairway Dr



Santa Maria A Street Industrial

Vistro File: G:\...\2023_06_Base Scenario.vistro | Scenario 2 EX PM

Report File: G:\...\2023_08 EX PM (updated timings).pdf | 8/9/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Betteravia Road/A Street	Signalized	HCM 6th Edition	NB Left	0.583	30.3	C
2	A St/McCoy Ln	Two-way stop	HCM 6th Edition	WB Thru	0.005	13.7	B
3	Skyway Dr/Fairway Dr	Signalized	HCM 6th Edition	SB Left	0.414	22.9	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Betteravia Road/A Street

Control Type:	Signalized	Delay (sec / veh):	30.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.583

Intersection Setup

Name	A St			A St			Betteravia Rd			Betteravia Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry Pocket Length [ft]	120.	100.	100.	105.	100.	100.	150.	100.	25.0	250.	100.	460.
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	A St			A St			Betteravia Rd			Betteravia Rd		
Base Volume Input [veh/h]	114	88	40	27	41	159	249	560	131	39	366	26
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	114	88	40	27	41	159	249	560	131	39	366	26
Peak Hour Factor	0.940	0.940	0.940	0.940	0.940	0.940	0.940	0.940	0.940	0.940	0.940	0.940
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	30	23	11	7	11	42	66	149	35	10	97	7
Total Analysis Volume [veh/h]	121	94	43	29	44	169	265	596	139	41	389	28
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			1			1		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	1			1			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			1			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	145
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Prot	Per	Per	Prot	Per	Per	Prot	Per	Per	Prot	Per	Per
Signal Group	3	8	0	7	4	0	5	2	2	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lea	-	-	Lea	-	-	Lea	-	-	Lea	-	-
Minimum Green [s]	7	8	0	7	8	0	7	10	10	7	10	0
Maximum Green [s]	20	30	0	20	30	0	20	50	50	20	50	0
Amber [s]	4.1	4.4	0.0	4.1	4.4	0.0	4.4	4.8	4.8	4.4	4.8	0.0
All red [s]	2.0	1.5	0.0	2.0	1.5	0.0	2.0	1.0	1.0	2.0	1.0	0.0
Split [s]	27	36	0	27	36	0	27	56	56	27	56	0
Vehicle Extension [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	4.0	4.0	2.0	4.0	0.0
Walk [s]	0	4	0	0	0	0	0	4	4	0	4	0
Pedestrian Clearance [s]	0	29	0	0	0	0	0	20	20	0	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	4.1	3.9	0.0	4.1	3.9	0.0	4.4	3.8	3.8	4.4	3.8	0.0
Minimum Recall	No	No		No	No		No	Yes		No	Yes	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	20.0	20.0	0.0	20.0	20.0	0.0	20.0	20.0	20.0	20.0	20.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	R
C, Cycle Length [s]	78	78	78	78	78	78	78	78	78	78
L, Total Lost Time per Cycle [s]	6.10	5.90	6.10	5.90	6.40	5.80	5.80	6.40	5.80	5.80
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.10	3.90	4.10	3.90	4.40	3.80	3.80	4.40	3.80	3.80
g_i, Effective Green Time [s]	7	16	3	12	14	30	30	4	20	20
g / C, Green / Cycle	0.09	0.21	0.04	0.16	0.18	0.38	0.38	0.05	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.07	0.08	0.02	0.14	0.16	0.33	0.09	0.02	0.22	0.02
s, saturation flow rate [veh/h]	1695	1687	1695	1561	169	178	147	169	178	151
c, Capacity [veh/h]	153	352	71	251	305	684	569	90	459	389
d1, Uniform Delay [s]	34.61	26.47	36.24	31.69	30.9	22.1	16.1	35.6	27.3	21.8
k, delay calibration	0.04	0.04	0.04	0.04	0.04	0.15	0.15	0.04	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.46	0.26	1.37	3.12	2.97	5.02	0.31	1.33	6.19	0.11
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.79	0.39	0.41	0.85	0.87	0.87	0.24	0.46	0.85	0.07
d, Delay for Lane Group [s/veh]	38.08	26.74	37.62	34.81	33.9	27.1	16.5	37.0	33.5	21.9
Lane Group LOS	D	C	D	C	C	C	B	D	C	C
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.26	2.07	0.54	3.85	4.68	9.64	1.53	0.74	6.97	0.37
50th-Percentile Queue Length [ft/ln]	56.62	51.74	13.43	96.33	116.	240.	38.3	18.5	174.	9.16
95th-Percentile Queue Length [veh/ln]	4.08	3.73	0.97	6.94	8.22	14.7	2.76	1.33	11.3	0.66
95th-Percentile Queue Length [ft/ln]	101.92	93.13	24.18	173.39	205.	368.	68.9	33.3	282.	16.4

Movement, Approach, & Intersection Results

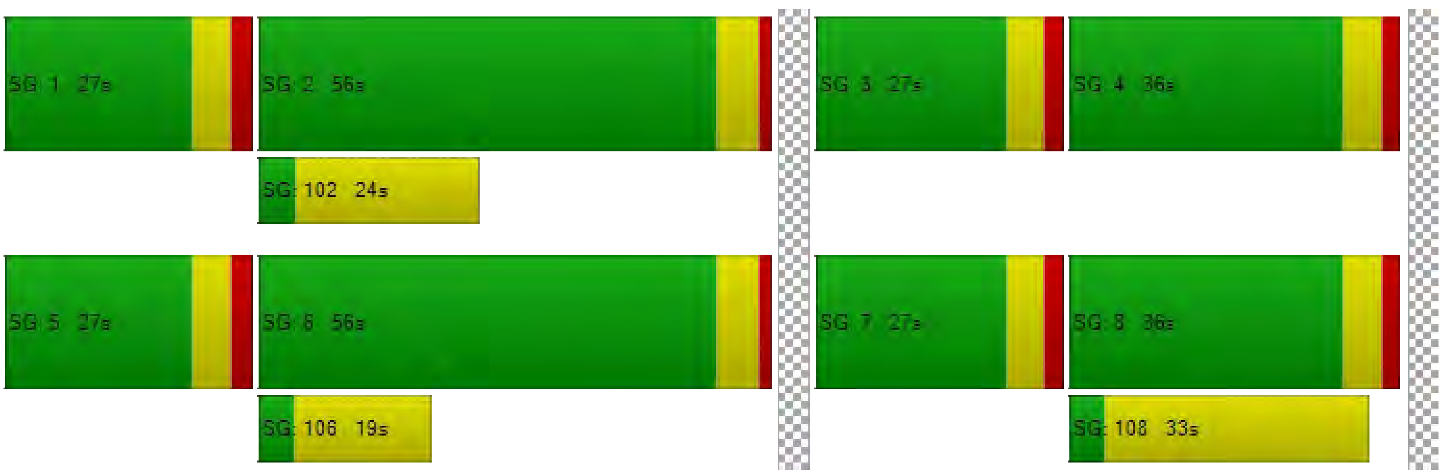
d_M, Delay for Movement [s/veh]	38.0	26.7	26.7	37.6	34.8	34.8	33.9	27.1	16.5	37.0	33.5	21.9
Movement LOS	D	C	C	D	C	C	C	C	B	D	C	C
d_A, Approach Delay [s/veh]	32.05			35.15			27.45			33.17		
Approach LOS	C			D			C			C		
d_I, Intersection Delay [s/veh]	30.35											
Intersection LOS	C											
Intersection V/C	0.583											

Other Modes

g_Walk,mi, Effective Walk Time [s]	8.0	8.0	30.1	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	4635.30	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	31.17	31.17	14.50	31.17
I_p,int, Pedestrian LOS Score for Intersection	2.144	2.208	2.710	2.538
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	777	777	1295	1295
d_b, Bicycle Delay [s]	14.50	14.50	4.81	4.81
I_b,int, Bicycle LOS Score for Intersection	1.985	1.959	3.210	2.315
Bicycle LOS	A	A	C	B

Sequence

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



Intersection Level Of Service Report

Intersection 2: A St/McCoy Ln

Control Type:	Two-way stop	Delay (sec / veh):	13.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name	A St			A St						McCoy Ln		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Entry Pocket	0	0	1	1	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.	100.	85.0	150.	100.	100.	100.	100.	100.	100.	100.	100.
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	50.0	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			30.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	A St			A St						McCoy Ln		
Base Volume Input [veh/h]	4	98	17	98	121	2	3	6	7	11	2	101
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	98	17	98	121	2	3	6	7	11	2	101
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	1	27	5	27	33	1	1	2	2	3	1	27
Total Analysis Volume [veh/h]	4	107	18	107	132	2	3	7	8	12	2	110
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.08	0.00	0.00	0.01	0.02	0.01	0.03	0.00	0.11
d_M, Delay for Movement [s/veh]	7.57	0.00	0.00	7.75	0.00	0.00	13.6	13.5	8.94	12.8	13.7	9.22
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.01	0.00	0.00	0.24	0.00	0.00	0.10	0.10	0.10	0.08	0.40	0.40
95th-Percentile Queue Length [ft/ln]	0.21	0.11	0.00	6.12	0.00	0.00	2.43	2.43	2.43	1.96	9.99	9.99
d_A, Approach Delay [s/veh]	0.23			3.44			11.50			9.64		
Approach LOS	A			A			B			A		
d_I, Intersection Delay [s/veh]	4.42											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 3: Skyway Dr/Fairway Dr

Control Type:	Signalized	Delay (sec / veh):	22.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.414

Intersection Setup

Name	Skyway Dr			Skyway Dr						Fairway Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	130.	100.	100.	145.	100.	100.	95.0	100.	100.	100.	100.	100.
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Skyway Dr			Skyway Dr						Fairway Dr		
Base Volume Input [veh/h]	91	693	5	40	584	71	133	14	127	16	12	146
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	91	693	5	40	584	71	133	14	127	16	12	146
Peak Hour Factor	0.840	0.840	0.840	0.840	0.840	0.840	0.840	0.840	0.840	0.840	0.840	0.840
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	27	206	1	12	174	21	40	4	38	5	4	43
Total Analysis Volume [veh/h]	108	825	6	48	695	85	158	17	151	19	14	174
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0			0			20			20		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	20			20			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	1			0			0			1		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	149
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Prot	Per	Per	Prot	Per	Per	Per	Per	Per	Per	Per	Per
Signal Group	5	2	0	1	6	0	4	4	0	8	8	0
Auxiliary Signal Groups												
Lead / Lag	Lea	-	-	Lea	-	-	Lea	-	-	Lea	-	-
Minimum Green [s]	7	10	0	7	10	0	8	8	0	8	8	0
Maximum Green [s]	30	50	0	30	50	0	50	50	0	50	50	0
Amber [s]	4.8	5.5	0.0	4.8	5.5	0.0	4.4	4.4	0.0	4.4	4.4	0.0
All red [s]	2.0	1.0	0.0	2.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	37	57	0	37	57	0	56	56	0	56	56	0
Vehicle Extension [s]	2.0	4.0	0.0	2.0	4.0	0.0	4.0	4.0	0.0	4.0	4.0	0.0
Walk [s]	0	7	0	0	7	0	7	7	0	7	7	0
Pedestrian Clearance [s]	0	19	0	0	17	0	26	26	0	26	26	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	4.8	4.5	0.0	4.8	4.5	0.0	3.4	3.4	0.0	3.4	3.4	0.0
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	100.	100.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.	100.	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C
C, Cycle Length [s]	65	65	65	65	65	65	65	65	65	65
L, Total Lost Time per Cycle [s]	6.80	6.50	6.50	6.80	6.50	6.50	5.40	5.40	5.40	5.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	4.80	4.50	4.50	4.80	4.50	4.50	3.40	3.40	3.40	3.40
g_i, Effective Green Time [s]	6	20	20	4	18	18	22	22	22	22
g / C, Green / Cycle	0.09	0.31	0.31	0.06	0.28	0.28	0.34	0.34	0.34	0.34
(v / s)_i Volume / Saturation Flow Rate	0.06	0.23	0.23	0.03	0.22	0.22	0.14	0.11	0.02	0.12
s, saturation flow rate [veh/h]	175	184	183	175	184	177	1163	1562	1183	1537
c, Capacity [veh/h]	163	578	577	111	524	504	358	524	378	515
d1, Uniform Delay [s]	28.5	19.7	19.8	29.4	21.2	21.2	23.35	16.13	19.85	16.40
k, delay calibration	0.04	0.15	0.15	0.04	0.15	0.15	0.15	0.15	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.72	2.41	2.42	0.99	3.23	3.36	1.21	0.50	0.08	0.62
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.66	0.72	0.72	0.43	0.76	0.76	0.44	0.32	0.05	0.36
d, Delay for Lane Group [s/veh]	30.2	22.2	22.2	30.3	24.4	24.6	24.57	16.63	19.92	17.02
Lane Group LOS	C	C	C	C	C	C	C	B	B	B
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	1.50	4.89	4.88	0.67	4.99	4.83	2.11	1.70	0.21	1.94
50th-Percentile Queue Length [ft/ln]	37.5	122.	122.	16.6	124.	120.	52.73	42.57	5.34	48.59
95th-Percentile Queue Length [veh/ln]	2.70	8.52	8.51	1.20	8.65	8.43	3.80	3.07	0.38	3.50
95th-Percentile Queue Length [ft/ln]	67.5	213.	212.	30.0	216.	210.	94.92	76.63	9.61	87.46

Movement, Approach, & Intersection Results

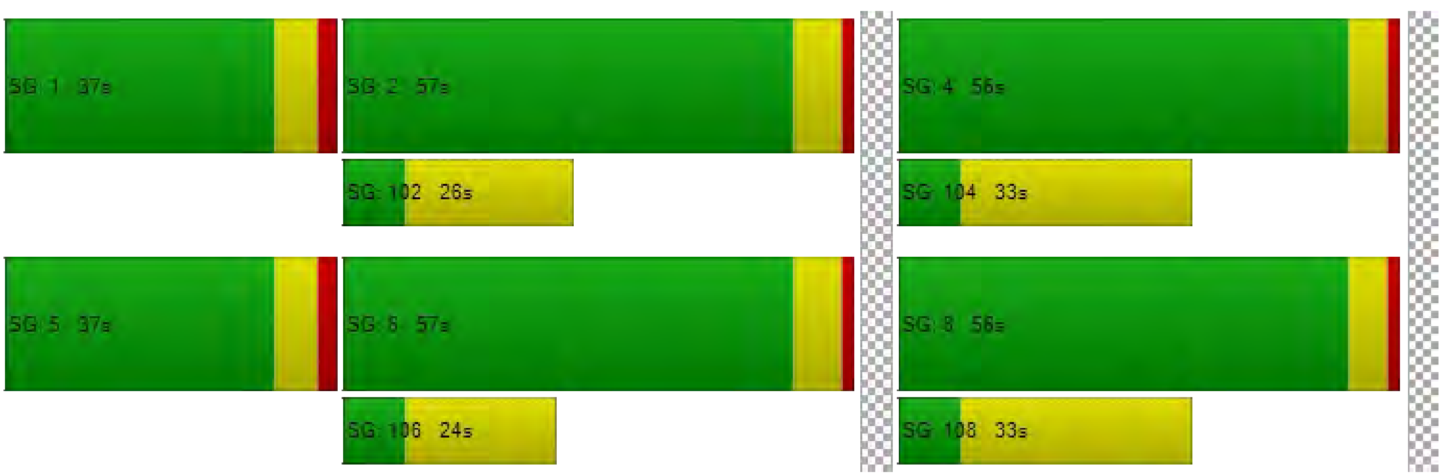
d_M, Delay for Movement [s/veh]	30.2	22.2	22.2	30.3	24.5	24.6	24.5	16.6	16.6	19.9	17.0	17.0
Movement LOS	C	C	C	C	C	C	C	B	B	B	B	B
d_A, Approach Delay [s/veh]	23.14			24.90			20.48			17.29		
Approach LOS	C			C			C			B		
d_I, Intersection Delay [s/veh]	22.87											
Intersection LOS	C											
Intersection V/C	0.414											

Other Modes

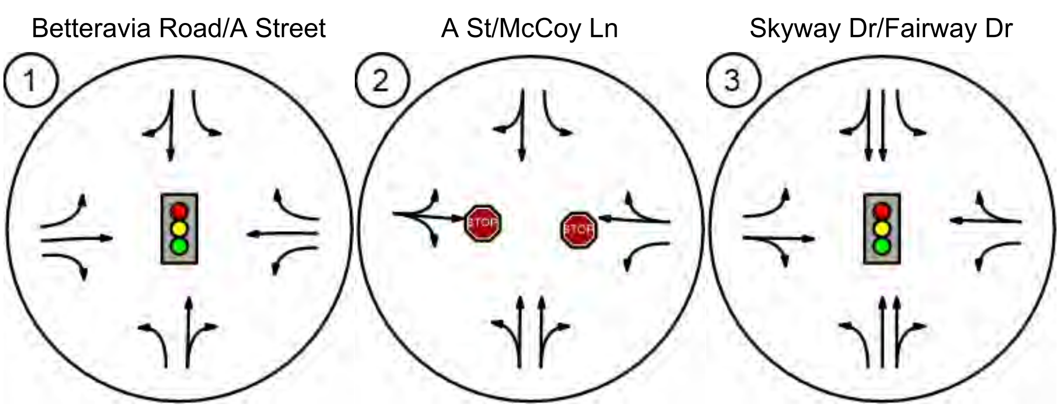
g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	22.45	22.45	22.45	22.45
I_p,int, Pedestrian LOS Score for Intersection	2.954	3.251	2.153	2.043
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1553	1553	1556	1556
d_b, Bicycle Delay [s]	1.63	1.63	1.60	1.61
I_b,int, Bicycle LOS Score for Intersection	2.334	2.243	2.098	1.901
Bicycle LOS	B	B	B	A

Sequence

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



Lane Configuration and Traffic Control



Santa Maria A Street Industrial

Vistro File: G:\...\2023_06_Base Scenario.vistro — Scenario 3 EX +P AM

Report File: G:\...\2023_08 EX +P AM (updated timings).pdf — 8/10/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Betteravia Road/A Street	Signalized	HCM 6th Edition	SB Left	0.500	26.7	C
2	A St/McCoy Ln	Two-way stop	HCM 6th Edition	WB Thru	0.025	13.6	B
3	Skyway Dr/Fairway Dr	Signalized	HCM 6th Edition	NB Left	0.479	19.5	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Betteravia Road/A Street

Control Type:	Signalized	Delay (sec / veh):	26.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.500

Intersection Setup

Name	A St			A St			Betteravia Rd			Betteravia Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry Pocket Length [ft]	120.	100.	100.	105.	100.	100.	150.	100.	25.0	250.	100.	460.
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	A St			A St			Be Rd			Be Rd		
Base Volume Input [veh/h]	8	3	3	2	9	1	1	3	1	5	2	1
Base Volume Adjustment Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
Heavy Vehicles Percentage [%]	8.	8.	8.	8.	8.	8.	8.	8.	8.	8.	8.	8.
Growth Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	1	5	0	3	0	0	0	8	1	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	3	3	2	1	1	1	3	1	7	2	1
Peak Hour Factor	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Other Adjustment Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
Total 15-Minute Volume [veh/h]	2	9	1	5	2	4	2	1	3	1	7	3
Total Analysis Volume [veh/h]	9	3	4	2	1	1	1	4	1	7	2	1
Presence of On-Street Parking	N		N	N		N	N		N	N		N
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			1		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			1			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	2			0			1			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	145
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Prot	Per	Per	Prot	Per	Per	Prot	Per	Per	Prot	Per	Per
Signal Group	3	8	8	7	4	4	5	2	2	1	6	6
Auxiliary Signal Groups												
Lead / Lag	Lea	-	-	Lea	-	-	Lea	-	-	Lea	-	-
Minimum Green [s]	7	8	8	7	8	8	7	10	10	7	10	10
Maximum Green [s]	20	30	30	20	30	30	20	50	50	20	50	50
Amber [s]	4.1	4.4	4.4	4.1	4.4	4.4	4.4	4.8	4.8	4.4	4.8	4.8
All red [s]	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.0	1.0	2.0	1.0	1.0
Split [s]	27	36	36	27	36	36	27	56	56	27	56	56
Vehicle Extension [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	4.0	4.0	2.0	4.0	4.0
Walk [s]	0	4	4	0	0	0	0	4	4	0	4	4
Pedestrian Clearance [s]	0	29	29	0	0	0	0	20	20	0	15	15
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.1	3.9	3.9	4.1	3.9	3.9	4.4	3.8	3.8	4.4	3.8	3.8
Minimum Recall	No	No		No	No		No	Yes		No	Yes	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	R
C, Cycle Length [s]	68	68	68	68	68	68	68	68	68	68
L, Total Lost Time per Cycle [s]	6.10	5.90	6.10	5.90	6.40	5.80	5.80	6.40	5.80	5.80
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.10	3.90	4.10	3.90	4.40	3.80	3.80	4.40	3.80	3.80
g_i, Effective Green Time [s]	6	17	2	13	6	19	19	5	19	19
g / C, Green / Cycle	0.09	0.24	0.04	0.19	0.09	0.28	0.28	0.08	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.05	0.05	0.01	0.17	0.07	0.23	0.09	0.05	0.16	0.01
s, saturation flow rate [veh/h]	1695	1607	1695	1612	169	178	148	169	178	151
c, Capacity [veh/h]	145	394	60	315	154	507	422	134	486	413
d1, Uniform Delay [s]	30.14	20.37	32.11	26.49	30.1	22.7	19.1	30.2	21.3	18.1
k, delay calibration	0.04	0.04	0.04	0.04	0.04	0.15	0.15	0.04	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.76	0.09	1.39	2.61	2.46	4.61	0.62	1.43	1.53	0.04
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.64	0.19	0.37	0.86	0.73	0.82	0.32	0.57	0.58	0.03
d, Delay for Lane Group [s/veh]	31.91	20.45	33.50	29.09	32.6	27.3	19.7	31.6	22.8	18.1
Lane Group LOS	C	C	C	C	C	C	B	C	C	B
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.44	0.88	0.35	4.06	1.74	6.01	1.56	1.17	3.58	0.14
50th-Percentile Queue Length [ft/ln]	36.03	22.01	8.87	101.46	43.3	150.	38.9	29.2	89.5	3.46
95th-Percentile Queue Length [veh/ln]	2.59	1.58	0.64	7.30	3.12	10.0	2.81	2.10	6.45	0.25
95th-Percentile Queue Length [ft/ln]	64.86	39.62	15.96	182.62	78.1	250.	70.1	52.5	161.	6.22

Movement, Approach, & Intersection Results

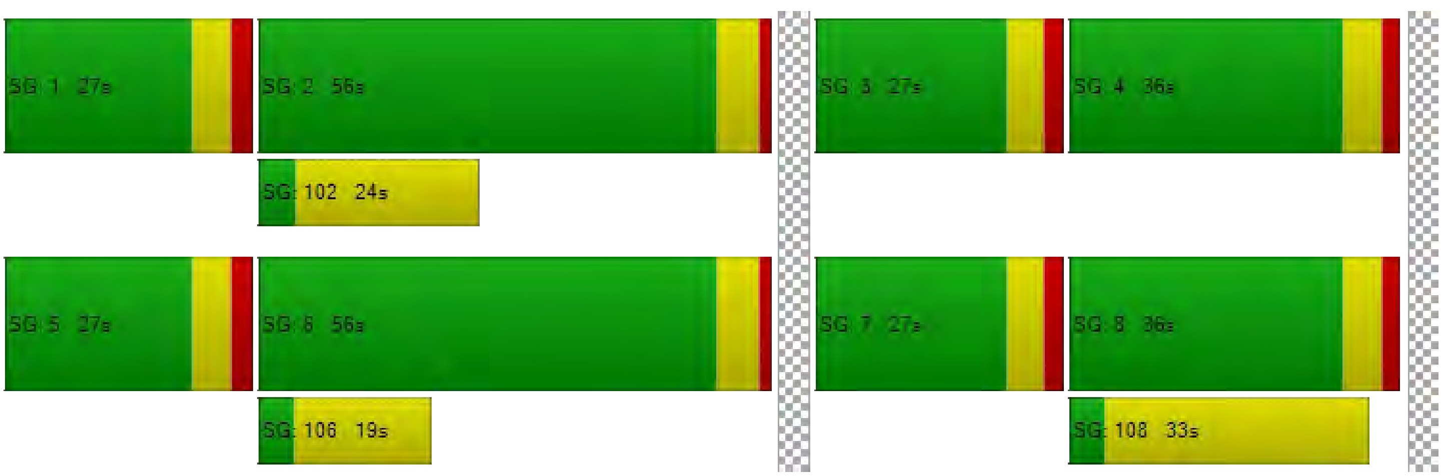
d_M, Delay for Movement [s/veh]	31.9	20.4	20.4	33.5	29.0	29.0	32.6	27.3	19.7	31.6	22.8	18.1
Movement LOS	C	C	C	C	C	C	C	C	B	C	C	B
d_A, Approach Delay [s/veh]	26.76			29.43			26.66			24.55		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	26.69											
Intersection LOS	C											
Intersection V/C	0.500											

Other Modes

g_Walk,mi, Effective Walk Time [s]	8.0	8.0	30.1	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	26.45	26.45	10.55	26.45
I_p,int, Pedestrian LOS Score for Intersection	2.142	2.125	2.519	2.429
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	886	886	1477	1477
d_b, Bicycle Delay [s]	10.56	10.55	2.32	2.32
I_b,int, Bicycle LOS Score for Intersection	1.838	2.040	2.652	2.170
Bicycle LOS	A	B	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 2: A St/McCoy Ln

Control Type:	Two-way stop	Delay (sec / veh):	13.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.025

Intersection Setup

Name	A St			A St						McCoy Ln		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Entry Pocket	0	0	1	1	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.	100.	85.0	150.	100.	100.	100.	100.	100.	100.	100.	100.
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	700.	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			30.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	A St			A St						Mc Ln		
Base Volume Input [veh/h]	6	7	9	5	1	1	3	0	2	2	9	6
Base Volume Adjustment Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
Heavy Vehicles Percentage [%]	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.
Growth Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	9	1	0	3	0	0	0	0	3	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	8	1	5	1	1	3	0	2	2	9	6
Peak Hour Factor	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Other Adjustment Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
Total 15-Minute Volume [veh/h]	2	2	3	1	5	4	1	0	1	7	3	2
Total Analysis Volume [veh/h]	7	9	1	6	2	1	4	0	2	2	1	8
Pedestrian Volume [ped/h]	2			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.05	0.00	0.00	0.01	0.00	0.00	0.05	0.02	0.08
d_M, Delay for Movement [s/veh]	7.78	0.00	0.00	7.62	0.00	0.00	13.4	13.1	9.09	12.1	13.5	9.15
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.02	0.01	0.00	0.15	0.00	0.00	0.03	0.03	0.03	0.17	0.35	0.35
95th-Percentile Queue Length [ft/ln]	0.41	0.20	0.00	3.76	0.00	0.00	0.87	0.87	0.87	4.17	8.84	8.84
d_A, Approach Delay [s/veh]	0.47			1.77			11.96			10.27		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	3.49											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 3: Skyway Dr/Fairway Dr

Control Type:	Signalized	Delay (sec / veh):	19.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.479

Intersection Setup

Name	Skyway Dr			Skyway Dr						Fairway Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	130.	100.	100.	145.	100.	100.	95.0	100.	100.	100.	100.	100.
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Sk Dr			Sk Dr						Fa Dr		
Base Volume Input [veh/h]	1	5	1	8	6	1	9	1	1	1	5	3
Base Volume Adjustment Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
Heavy Vehicles Percentage [%]	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.
Growth Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	0	0	0	8	3	0	4	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	5	1	8	6	1	9	1	1	1	5	3
Peak Hour Factor	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Other Adjustment Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
Total 15-Minute Volume [veh/h]	4	1	4	2	1	5	2	3	3	0	1	1
Total Analysis Volume [veh/h]	1	5	1	1	7	2	1	1	1	1	6	3
Presence of On-Street Parking	N		N	N		N	N		N	N		N
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	1			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			1			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			1			0			1		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	1			0			1			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	2			0			1			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	149
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Prot	Per	Per	Prot	Per	Per	Per	Per	Per	Per	Per	Per
Signal Group	5	2	2	1	6	6	4	4	4	8	8	8
Auxiliary Signal Groups												
Lead / Lag	Lea	-	-	Lea	-	-	Lea	-	-	Lea	-	-
Minimum Green [s]	7	10	10	7	10	10	8	8	8	8	8	8
Maximum Green [s]	30	50	50	30	50	50	50	50	50	50	50	50
Amber [s]	4.8	5.5	5.5	4.8	5.5	5.5	4.4	4.4	4.4	4.4	4.4	4.4
All red [s]	2.0	1.0	1.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	37	57	57	37	57	57	56	56	56	56	56	56
Vehicle Extension [s]	2.0	4.0	4.0	2.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Walk [s]	0	7	7	0	7	7	7	7	7	7	7	7
Pedestrian Clearance [s]	0	19	19	0	17	17	26	26	26	26	26	26
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.8	4.5	4.5	4.8	4.5	4.5	3.4	3.4	3.4	3.4	3.4	3.4
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	100.	100.	100.	0.0	0.0	0.0	0.0	0.0	0.0	100.	100.	100.
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C
C, Cycle Length [s]	59	59	59	59	59	59	59	59	59	59
L, Total Lost Time per Cycle [s]	6.80	6.50	6.50	6.80	6.50	6.50	5.40	5.40	5.40	5.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	4.80	4.50	4.50	4.80	4.50	4.50	3.40	3.40	3.40	3.40
g_i, Effective Green Time [s]	8	23	23	6	21	21	11	11	11	11
g / C, Green / Cycle	0.14	0.39	0.39	0.10	0.35	0.35	0.19	0.19	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.11	0.17	0.17	0.06	0.27	0.27	0.08	0.10	0.00	0.03
s, saturation flow rate [veh/h]	173	182	180	173	182	168	1328	1551	1199	1583
c, Capacity [veh/h]	240	715	708	168	641	590	298	298	199	304
d1, Uniform Delay [s]	24.4	12.9	12.9	25.3	16.8	16.8	24.07	21.28	25.72	19.69
k, delay calibration	0.04	0.15	0.15	0.04	0.15	0.15	0.15	0.15	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.31	0.57	0.57	1.28	2.71	2.95	1.08	2.05	0.01	0.32
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.80	0.42	0.42	0.60	0.76	0.76	0.37	0.53	0.01	0.15
d, Delay for Lane Group [s/veh]	26.7	13.5	13.5	26.6	19.5	19.8	25.15	23.34	25.73	20.00
Lane Group LOS	C	B	B	C	B	B	C	C	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.30	2.25	2.23	1.21	4.85	4.52	1.38	1.88	0.01	0.48
50th-Percentile Queue Length [ft/ln]	57.6	56.2	55.8	30.1	121.	112.	34.56	47.05	0.32	12.02
95th-Percentile Queue Length [veh/ln]	4.15	4.05	4.02	2.17	8.46	8.00	2.49	3.39	0.02	0.87
95th-Percentile Queue Length [ft/ln]	103.	101.	100.	54.2	211.	200.	62.21	84.69	0.57	21.63

Movement, Approach, & Intersection Results

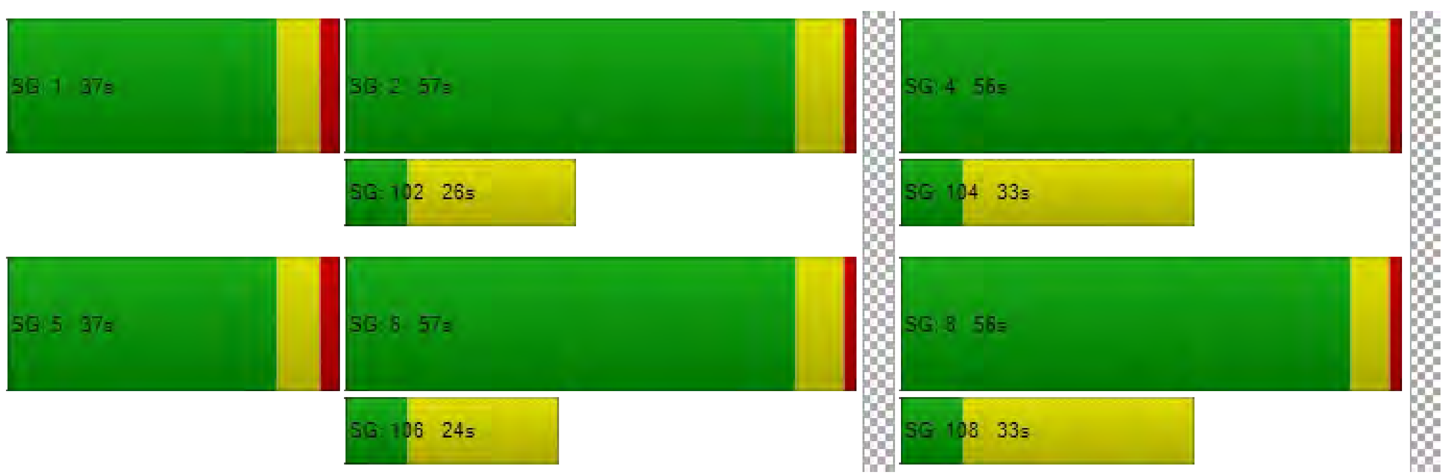
d_M, Delay for Movement [s/veh]	26.7	13.5	13.5	26.6	19.6	19.8	25.1	23.3	23.3	25.7	20.0	20.0
Movement LOS	C	B	B	C	B	B	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	16.74			20.36			24.08			20.13		
Approach LOS	B			C			C			C		
d_I, Intersection Delay [s/veh]	19.48											
Intersection LOS	B											
Intersection V/C	0.479											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	19.34	19.34	19.34	19.34
I_p,int, Pedestrian LOS Score for Intersection	2.871	3.115	2.211	1.993
Crosswalk LOS	C	C	B	A
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1723	1723	1727	1727
d_b, Bicycle Delay [s]	0.56	0.56	0.55	0.55
I_b,int, Bicycle LOS Score for Intersection	2.215	2.418	2.000	1.636
Bicycle LOS	B	B	B	A

Sequence

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



Santa Maria A Street Industrial

Vistro File: G:\...\2023_06_Base Scenario.vistro
Scenario 3 EX +P AM

Report File: G:\...\2023_08 EX +P AM (updated timings).pdf
8/10/2023

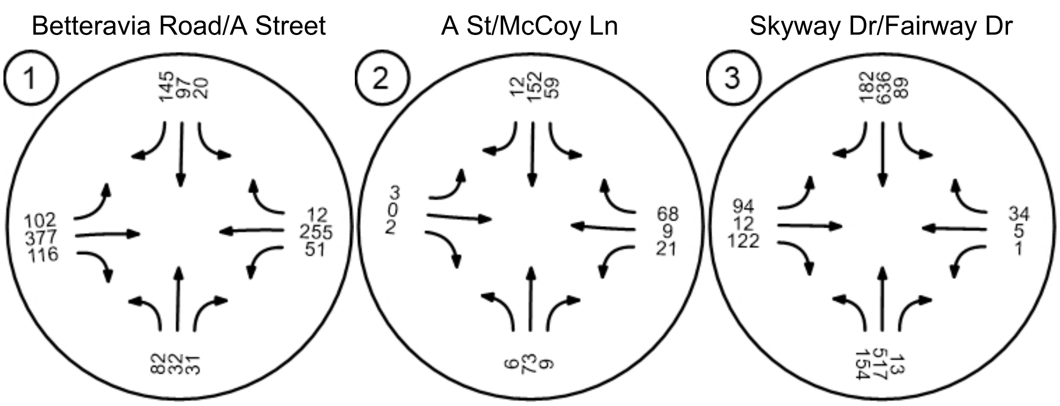
Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Betteravia Road/A Street	85	33	36	20	100	145	102	377	124	70	255	12	1359

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	A St/McCoy Ln	6	82	10	59	182	12	3	0	2	24	9	68	457

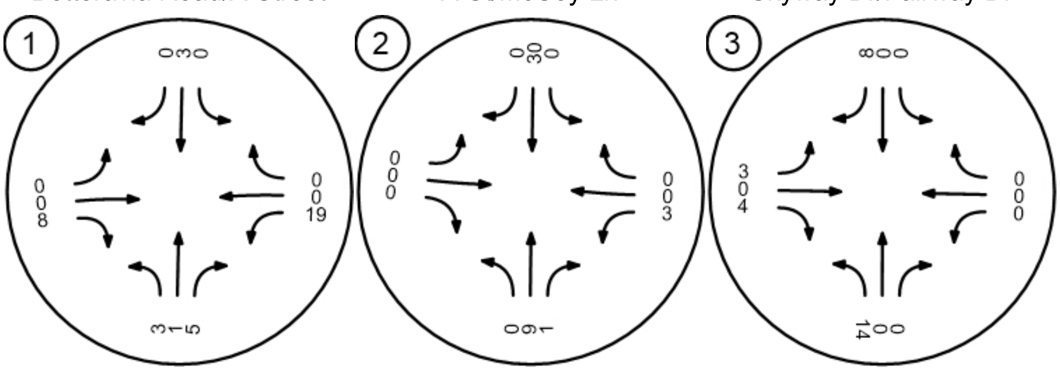
ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Skyway Dr/Fairway Dr	168	517	13	89	636	190	97	12	126	1	5	34	1888

Traffic Volume - Base Volume



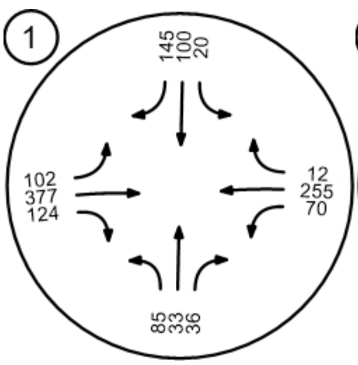
Traffic Volume - Net New Site Trips

Betteravia Road/A Street | A St/McCoy Ln | Skyway Dr/Fairway Dr

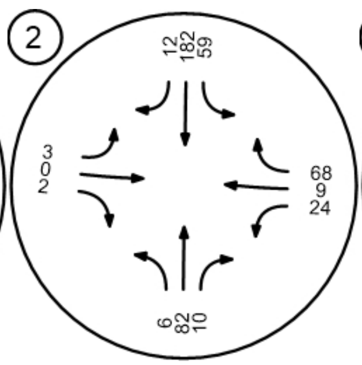


Traffic Volume - Future Total Volume

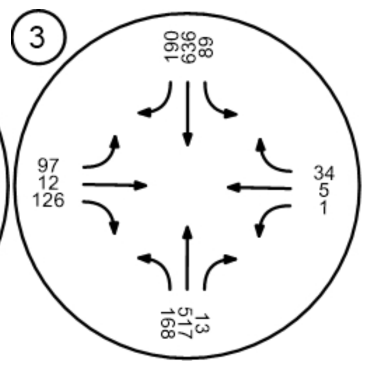
Betteravia Road/A Street



A St/McCoy Ln



Skyway Dr/Fairway Dr



Santa Maria A Street Industrial

Vistro File: G:\...\2023_06_Base Scenario.vistro
Report File: G:\...\2023_08 EX +P PM (updated timings).pdf

Scenario 4 EX +P PM
8/10/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Betteravia Road/A Street	Signalized	HCM 6th Edition	SB Left	0.588	31.2	C
2	A St/McCoy Ln	Two-way stop	HCM 6th Edition	WB Thru	0.005	14.3	B
3	Skyway Dr/Fairway Dr	Signalized	HCM 6th Edition	NB Left	0.425	23.1	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Betteravia Road/A Street

Control Type:	Signalized	Delay (sec / veh):	31.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.588

Intersection Setup

Name	A St			A St			Betteravia Rd			Betteravia Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry Pocket Length [ft]	120.	100.	100.	105.	100.	100.	150.	100.	25.0	250.	100.	460.
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	A St			A St			Be Rd			Be Rd		
Base Volume Input [veh/h]	1	8	4	2	4	1	2	5	1	3	3	2
Base Volume Adjustment Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
Heavy Vehicles Percentage [%]	8.	8.	8.	8.	8.	8.	8.	8.	8.	8.	8.	8.
Growth Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	2	1	0	1	0	0	0	3	8	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	9	5	2	4	1	2	5	1	4	3	2
Peak Hour Factor	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Other Adjustment Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
Total 15-Minute Volume [veh/h]	3	2	1	7	1	4	6	1	3	1	9	7
Total Analysis Volume [veh/h]	1	9	6	2	4	1	2	5	1	5	3	2
Presence of On-Street Parking	N		N	N		N	N		N	N		N
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0			0			0			2		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	2			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			3		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			3			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			1			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	145
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Prot	Per	Per	Prot	Per	Per	Prot	Per	Per	Prot	Per	Per
Signal Group	3	8	8	7	4	4	5	2	2	1	6	6
Auxiliary Signal Groups												
Lead / Lag	Lea	-	-	Lea	-	-	Lea	-	-	Lea	-	-
Minimum Green [s]	7	8	8	7	8	8	7	10	10	7	10	10
Maximum Green [s]	20	30	30	20	30	30	20	50	50	20	50	50
Amber [s]	4.1	4.4	4.4	4.1	4.4	4.4	4.4	4.8	4.8	4.4	4.8	4.8
All red [s]	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.0	1.0	2.0	1.0	1.0
Split [s]	27	36	36	27	36	36	27	56	56	27	56	56
Vehicle Extension [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	4.0	4.0	2.0	4.0	4.0
Walk [s]	0	4	4	0	0	0	0	4	4	0	4	4
Pedestrian Clearance [s]	0	29	29	0	0	0	0	20	20	0	15	15
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.1	3.9	3.9	4.1	3.9	3.9	4.4	3.8	3.8	4.4	3.8	3.8
Minimum Recall	No	No		No	No		No	Yes		No	Yes	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	R
C, Cycle Length [s]	80	80	80	80	80	80	80	80	80	80
L, Total Lost Time per Cycle [s]	6.10	5.90	6.10	5.90	6.40	5.80	5.80	6.40	5.80	5.80
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.10	3.90	4.10	3.90	4.40	3.80	3.80	4.40	3.80	3.80
g_i, Effective Green Time [s]	8	17	3	13	14	30	30	5	21	21
g / C, Green / Cycle	0.10	0.21	0.04	0.16	0.18	0.38	0.38	0.06	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.08	0.10	0.02	0.14	0.16	0.33	0.10	0.03	0.22	0.02
s, saturation flow rate [veh/h]	1695	1661	1695	1562	169	178	148	169	178	150
c, Capacity [veh/h]	162	357	71	251	305	680	565	100	465	393
d1, Uniform Delay [s]	35.39	27.25	37.33	32.62	31.8	22.9	16.8	36.4	27.9	22.2
k, delay calibration	0.04	0.04	0.04	0.04	0.05	0.15	0.15	0.04	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.35	0.32	1.40	3.15	3.81	5.31	0.33	1.43	5.69	0.11
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.80	0.44	0.41	0.85	0.87	0.88	0.25	0.50	0.84	0.07
d, Delay for Lane Group [s/veh]	38.73	27.57	38.73	35.77	35.6	28.2	17.2	37.9	33.6	22.3
Lane Group LOS	D	C	D	D	D	C	B	D	C	C
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.48	2.49	0.56	4.00	4.91	10.0	1.65	0.93	7.11	0.38
50th-Percentile Queue Length [ft/ln]	62.06	62.21	13.88	100.09	122.	252.	41.3	23.2	177.	9.43
95th-Percentile Queue Length [veh/ln]	4.47	4.48	1.00	7.21	8.55	15.2	2.98	1.67	11.4	0.68
95th-Percentile Queue Length [ft/ln]	111.71	111.98	24.99	180.16	213.	382.	74.3	41.8	287.	16.9

Movement, Approach, & Intersection Results

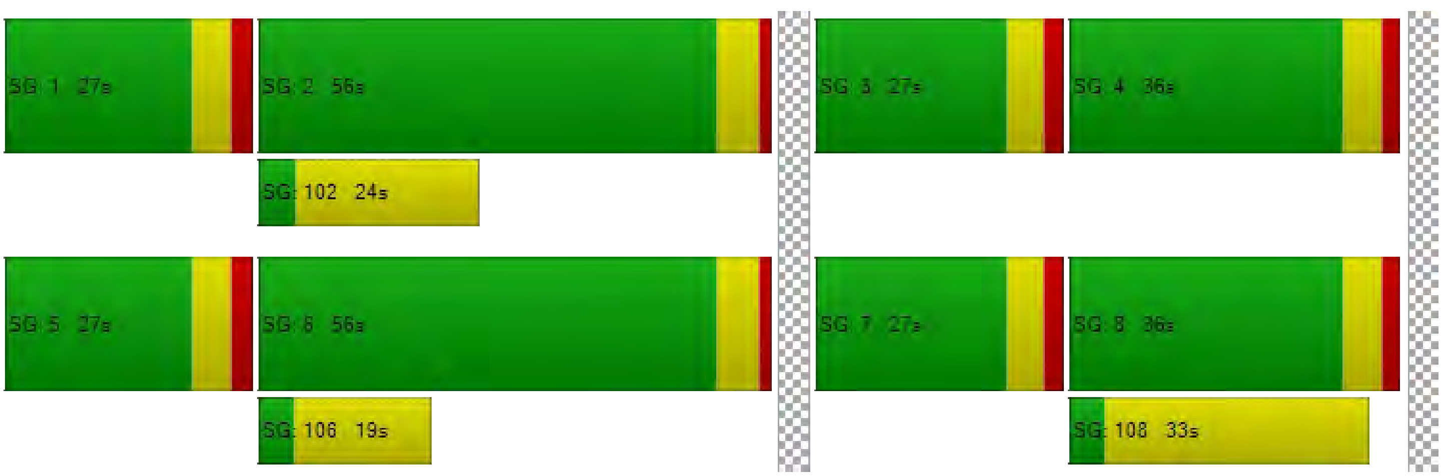
d_M, Delay for Movement [s/veh]	38.7	27.5	27.5	38.7	35.7	35.7	35.6	28.2	17.2	37.9	33.6	22.3
Movement LOS	D	C	C	D	D	D	D	C	B	D	C	C
d_A, Approach Delay [s/veh]	32.59			36.12			28.66			33.40		
Approach LOS	C			D			C			C		
d_I, Intersection Delay [s/veh]	31.23											
Intersection LOS	C											
Intersection V/C	0.588											

Other Modes

g_Walk,mi, Effective Walk Time [s]	8.0	8.0	30.1	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	3733.67
d_p, Pedestrian Delay [s]	32.28	32.28	15.46	32.28
I_p,int, Pedestrian LOS Score for Intersection	2.164	2.211	2.716	2.550
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	755	755	1259	1259
d_b, Bicycle Delay [s]	15.46	15.46	5.48	5.48
I_b,int, Bicycle LOS Score for Intersection	2.033	1.961	3.216	2.330
Bicycle LOS	B	A	C	B

Sequence

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



Intersection Level Of Service Report
Intersection 2: A St/McCoy Ln

Control Type:	Two-way stop	Delay (sec / veh):	14.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name	A St			A St						McCoy Ln		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Entry Pocket	0	0	1	1	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.	100.	85.0	150.	100.	100.	100.	100.	100.	100.	100.	100.
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	700.	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			30.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	A St			A St						Mc Ln		
Base Volume Input [veh/h]	4	9	1	9	1	2	3	6	7	1	2	1
Base Volume Adjustment Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
Heavy Vehicles Percentage [%]	8.	8.	8.	8.	8.	8.	8.	8.	8.	8.	8.	8.
Growth Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	2	0	1	0	0	0	0	1	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	1	1	9	1	2	3	6	7	1	2	1
Peak Hour Factor	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Other Adjustment Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
Total 15-Minute Volume [veh/h]	1	3	5	2	3	1	1	2	2	3	1	2
Total Analysis Volume [veh/h]	4	1	2	1	1	2	3	7	8	1	2	1
Pedestrian Volume [ped/h]	0			1			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.08	0.00	0.00	0.01	0.02	0.01	0.03	0.00	0.12
d_M, Delay for Movement [s/veh]	7.60	0.00	0.00	7.83	0.00	0.00	14.1	14.0	9.00	13.4	14.2	9.35
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.01	0.00	0.00	0.25	0.00	0.00	0.10	0.10	0.10	0.09	0.41	0.41
95th-Percentile Queue Length [ft/ln]	0.22	0.11	0.00	6.31	0.00	0.00	2.56	2.56	2.56	2.27	10.3	10.3
d_A, Approach Delay [s/veh]	0.19			3.30			11.82			9.85		
Approach LOS	A			A			B			A		
d_I, Intersection Delay [s/veh]	4.14											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 3: Skyway Dr/Fairway Dr

Control Type:	Signalized	Delay (sec / veh):	23.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.425

Intersection Setup

Name	Skyway Dr			Skyway Dr						Fairway Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	130.	100.	100.	145.	100.	100.	95.0	100.	100.	100.	100.	100.
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Sk Dr			Sk Dr						Fa Dr		
Base Volume Input [veh/h]	9	6	5	4	5	7	1	1	1	1	1	1
Base Volume Adjustment Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
Heavy Vehicles Percentage [%]	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
Growth Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	0	0	0	0	3	7	0	1	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	6	5	4	5	7	1	1	1	1	1	1
Peak Hour Factor	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Other Adjustment Factor	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
Total 15-Minute Volume [veh/h]	2	2	1	1	1	2	4	4	4	5	4	4
Total Analysis Volume [veh/h]	1	8	6	4	6	8	1	1	1	1	1	1
Presence of On-Street Parking	N		N	N		N	N		N	N		N
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	10			0			10			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	10			0			10			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	1			0			0			1		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	149
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Prot	Per	Per	Prot	Per	Per	Per	Per	Per	Per	Per	Per
Signal Group	5	2	2	1	6	6	4	4	4	8	8	8
Auxiliary Signal Groups												
Lead / Lag	Lea	-	-	Lea	-	-	Lea	-	-	Lea	-	-
Minimum Green [s]	7	10	10	7	10	10	8	8	8	8	8	8
Maximum Green [s]	30	50	50	30	50	50	50	50	50	50	50	50
Amber [s]	4.8	5.5	5.5	4.8	5.5	5.5	4.4	4.4	4.4	4.4	4.4	4.4
All red [s]	2.0	1.0	1.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	37	57	57	37	57	57	56	56	56	56	56	56
Vehicle Extension [s]	2.0	4.0	4.0	2.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Walk [s]	0	7	7	0	7	7	7	7	7	7	7	7
Pedestrian Clearance [s]	0	19	19	0	17	17	26	26	26	26	26	26
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.8	4.5	4.5	4.8	4.5	4.5	3.4	3.4	3.4	3.4	3.4	3.4
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	100.	100.	100.	0.0	0.0	0.0	0.0	0.0	0.0	100.	100.	100.
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C
C, Cycle Length [s]	66	66	66	66	66	66	66	66	66	66
L, Total Lost Time per Cycle [s]	6.80	6.50	6.50	6.80	6.50	6.50	5.40	5.40	5.40	5.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	4.80	4.50	4.50	4.80	4.50	4.50	3.40	3.40	3.40	3.40
g_i, Effective Green Time [s]	6	21	21	4	19	19	22	22	22	22
g / C, Green / Cycle	0.09	0.31	0.31	0.06	0.28	0.28	0.34	0.34	0.34	0.34
(v / s)_i Volume / Saturation Flow Rate	0.07	0.23	0.23	0.03	0.22	0.22	0.14	0.12	0.02	0.12
s, saturation flow rate [veh/h]	175	184	183	175	184	176	1176	1560	1169	1563
c, Capacity [veh/h]	164	580	578	110	523	502	366	528	368	529
d1, Uniform Delay [s]	28.9	19.9	19.9	29.7	21.5	21.5	23.48	16.33	20.32	16.40
k, delay calibration	0.04	0.15	0.15	0.04	0.15	0.15	0.15	0.15	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.02	2.38	2.39	1.02	3.32	3.46	1.26	0.55	0.08	0.58
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.70	0.72	0.72	0.44	0.76	0.76	0.46	0.34	0.05	0.36
d, Delay for Lane Group [s/veh]	31.0	22.3	22.3	30.8	24.9	25.0	24.75	16.88	20.40	16.97
Lane Group LOS	C	C	C	C	C	C	C	B	C	B
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	1.64	4.97	4.95	0.68	5.12	4.94	2.26	1.89	0.22	1.96
50th-Percentile Queue Length [ft/ln]	40.9	124.	123.	16.9	127.	123.	56.55	47.13	5.47	48.90
95th-Percentile Queue Length [veh/ln]	2.95	8.62	8.61	1.22	8.83	8.59	4.07	3.39	0.39	3.52
95th-Percentile Queue Length [ft/ln]	73.7	215.	215.	30.5	220.	214.	101.79	84.83	9.85	88.03

Movement, Approach, & Intersection Results

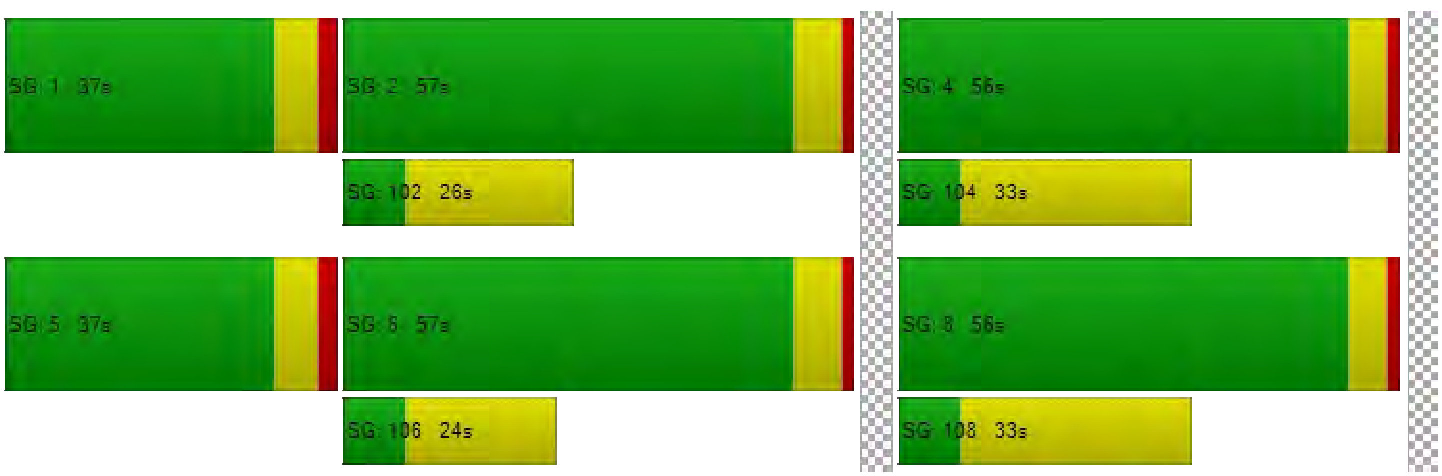
d_M, Delay for Movement [s/veh]	31.0	22.3	22.3	30.8	24.9	25.0	24.7	16.8	16.8	20.4	16.9	16.9
Movement LOS	C	C	C	C	C	C	C	B	B	C	B	B
d_A, Approach Delay [s/veh]	23.43			25.32			20.64			17.29		
Approach LOS	C			C			C			B		
d_I, Intersection Delay [s/veh]	23.14											
Intersection LOS	C											
Intersection V/C	0.425											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	22.86	22.86	22.86	22.86
I_p,int, Pedestrian LOS Score for Intersection	2.962	3.268	2.168	2.043
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1533	1533	1536	1536
d_b, Bicycle Delay [s]	1.80	1.80	1.77	1.77
I_b,int, Bicycle LOS Score for Intersection	2.340	2.245	2.135	1.901
Bicycle LOS	B	B	B	A

Sequence

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



Santa Maria A Street Industrial

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Scenario 4 EX +P PM

Report File: G:\...\2023_08 EX +P PM (updated timings).pdf

8/10/2023

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Betteravia Road/A Street	121	90	58	27	42	159	249	560	134	47	366	26	1879

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	A St/McCoy Ln	4	125	19	98	133	2	3	6	7	12	2	101	512

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Skyway Dr/Fairway Dr	97	693	5	40	584	74	140	14	139	16	12	146	1960

Santa Maria A Street Industrial

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Scenario 4 EX +P PM

8/10/2023

Turning Movement Volume: Detail

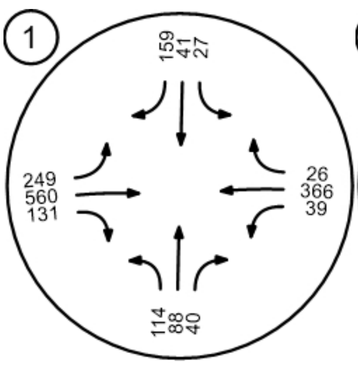
ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Betteravia Road/A Street	Final Base	114	88	40	27	41	159	249	560	131	39	366	26	1840
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	7	2	18	0	1	0	0	0	3	8	0	0	39
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		Future Total	**121**	**90**	**58**	**27**	**42**	**159**	**249**	**560**	**134**	**47**	**366**	**26**	**1879**

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	A St/McCoy Ln	Final Base	4	98	17	98	121	2	3	6	7	11	2	101	470
		Growth 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	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	27	2	0	12	0	0	0	0	1	0	0	42
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		Future Total	**4**	**125**	**19**	**98**	**133**	**2**	**3**	**6**	**7**	**12**	**2**	**101**	**512**

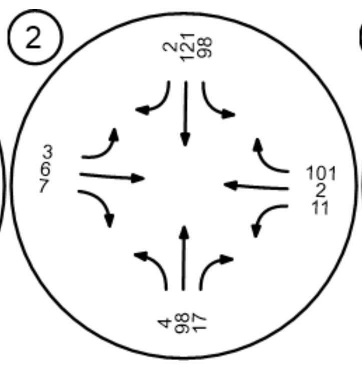
ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Skyway Dr/Fairway Dr	Final Base	91	693	5	40	584	71	133	14	127	16	12	146	1932
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	6	0	0	0	0	3	7	0	12	0	0	0	28
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		Future Total	**97**	**693**	**5**	**40**	**584**	**74**	**140**	**14**	**139**	**16**	**12**	**146**	**1960**

Traffic Volume - Base Volume

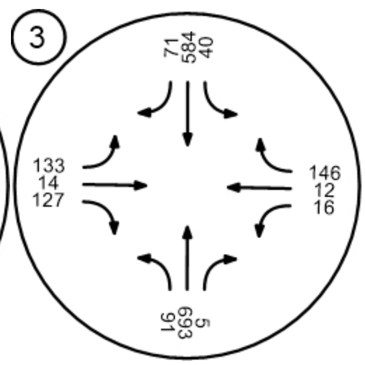
Betteravia Road/A Street



A St/McCoy Ln

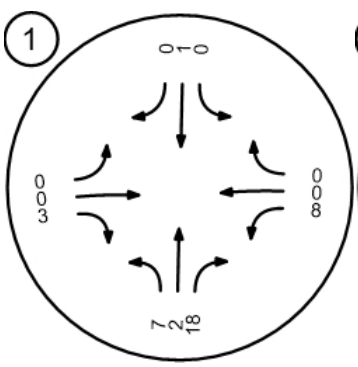


Skyway Dr/Fairway Dr

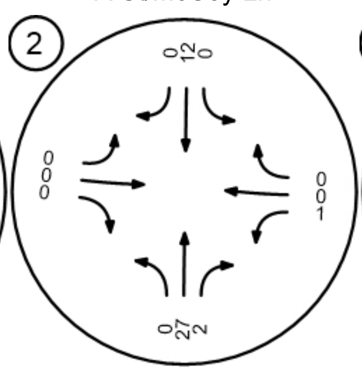


Traffic Volume - Net New Site Trips

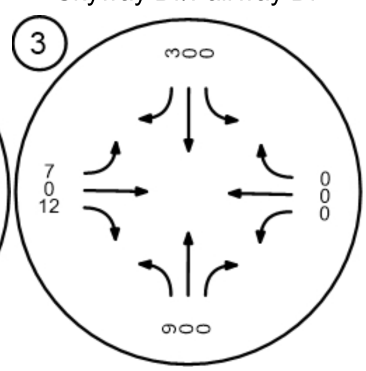
Betteravia Road/A Street



A St/McCoy Ln

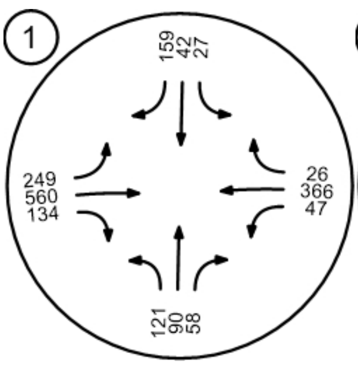


Skyway Dr/Fairway Dr

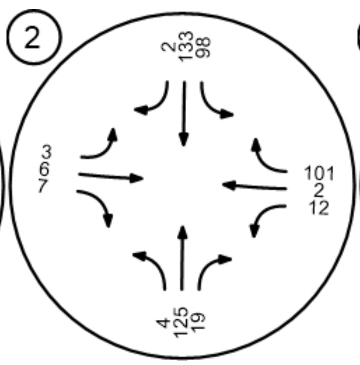


Traffic Volume - Future Total Volume

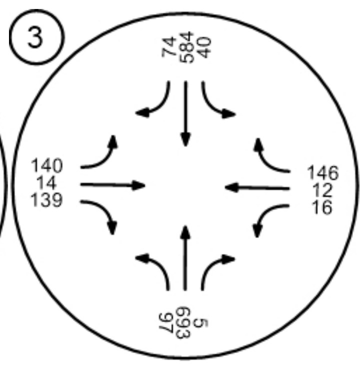
Betteravia Road/A Street



A St/McCoy Ln



Skyway Dr/Fairway Dr



Santa Maria A Street Industrial

Vistro File: G:\...\2023_06_Base Scenario.vistro Scenario 5 CM AM

Report File: G:\...\2023_08 CM AM (updated timings).pdf 8/14/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Betteravia Road/A Street	Signalized	HCM 6th Edition	NB Left	0.594	32.2	C
2	A St/McCoy Ln	Two-way stop	HCM 6th Edition	WB Thru	0.025	13.6	B
3	Skyway Dr/Fairway Dr	Signalized	HCM 6th Edition	SB Left	0.521	21.2	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report

Intersection 1: Betteravia Road/A Street

Control Type:	Signalized	Delay (sec / veh):	32.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.594

Intersection Setup

Name	A St			A St			Betteravia Rd			Betteravia Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry Pocket Length [ft]	120.	100.	100.	105.	100.	100.	150.	100.	25.0	250.	100.	460.
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	A St			A St			Betteravia Rd			Betteravia Rd		
Base Volume Input [veh/h]	110	40	40	30	130	190	120	440	140	60	300	20
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Growth 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
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	110	40	40	30	130	190	120	440	140	60	300	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Other Adjustment 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
Total 15-Minute Volume [veh/h]	30	11	11	8	35	52	33	120	38	16	82	5
Total Analysis Volume [veh/h]	120	43	43	33	141	207	130	478	152	65	326	22
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			1		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			1			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	2			0			1			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	145
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Prot	Per	Per	Prot	Per	Per	Prot	Per	Per	Prot	Per	Per
Signal Group	3	8	8	7	4	4	5	2	2	1	6	6
Auxiliary Signal Groups												
Lead / Lag	Lea	-	-	Lea	-	-	Lea	-	-	Lea	-	-
Minimum Green [s]	7	8	8	7	8	8	7	10	10	7	10	10
Maximum Green [s]	20	30	30	20	30	30	20	50	50	20	50	50
Amber [s]	4.1	4.4	4.4	4.1	4.4	4.4	4.4	4.8	4.8	4.4	4.8	4.8
All red [s]	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.0	1.0	2.0	1.0	1.0
Split [s]	27	36	36	27	36	36	27	56	56	27	56	56
Vehicle Extension [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	4.0	4.0	2.0	4.0	4.0
Walk [s]	0	4	4	0	0	0	0	4	4	0	4	4
Pedestrian Clearance [s]	0	29	29	0	0	0	0	20	20	0	15	15
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.1	3.9	3.9	4.1	3.9	3.9	4.4	3.8	3.8	4.4	3.8	3.8
Minimum Recall	No	No		No	No		No	Yes		No	Yes	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	R
C, Cycle Length [s]	83	83	83	83	83	83	83	83	83	83
L, Total Lost Time per Cycle [s]	6.10	5.90	6.10	5.90	6.40	5.80	5.80	6.40	5.80	5.80
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.10	3.90	4.10	3.90	4.40	3.80	3.80	4.40	3.80	3.80
g_i, Effective Green Time [s]	7	23	4	20	8	26	26	5	23	23
g / C, Green / Cycle	0.09	0.28	0.05	0.24	0.10	0.31	0.31	0.07	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.07	0.05	0.02	0.22	0.08	0.27	0.10	0.04	0.18	0.01
s, saturation flow rate [veh/h]	1695	1615	1695	1611	169	178	148	169	178	151
c, Capacity [veh/h]	151	457	77	385	163	557	464	112	504	427
d1, Uniform Delay [s]	36.92	22.44	38.44	30.53	36.6	26.6	21.7	37.5	26.0	21.5
k, delay calibration	0.04	0.04	0.04	0.06	0.04	0.15	0.15	0.04	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.54	0.07	1.41	5.06	3.40	5.53	0.58	1.78	1.99	0.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.79	0.19	0.43	0.90	0.80	0.86	0.33	0.58	0.65	0.05
d, Delay for Lane Group [s/veh]	40.45	22.51	39.85	35.59	40.0	32.2	22.2	39.3	28.0	21.6
Lane Group LOS	D	C	D	D	D	C	C	D	C	C
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.41	1.20	0.65	6.80	2.57	8.82	2.13	1.26	5.42	0.30
50th-Percentile Queue Length [ft/ln]	60.35	29.98	16.36	170.07	64.2	220.	53.3	31.5	135.	7.39
95th-Percentile Queue Length [veh/ln]	4.34	2.16	1.18	11.08	4.63	13.6	3.84	2.27	9.23	0.53
95th-Percentile Queue Length [ft/ln]	108.62	53.97	29.44	277.01	115.	342.	96.0	56.7	230.	13.3

Movement, Approach, & Intersection Results

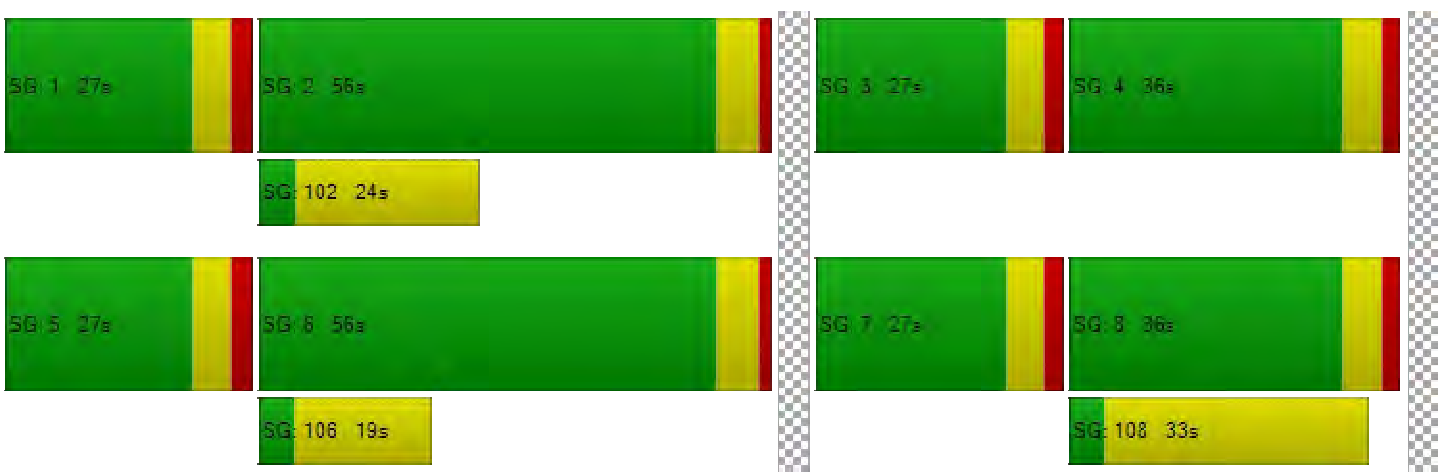
d_M, Delay for Movement [s/veh]	40.4	22.5	22.5	39.8	35.5	35.5	40.0	32.2	22.2	39.3	28.0	21.6
Movement LOS	D	C	C	D	D	D	D	C	C	D	C	C
d_A, Approach Delay [s/veh]	32.96			35.96			31.56			29.46		
Approach LOS	C			D			C			C		
d_I, Intersection Delay [s/veh]	32.18											
Intersection LOS	C											
Intersection V/C	0.594											

Other Modes

g_Walk,mi, Effective Walk Time [s]	8.0	8.0	30.1	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	33.64	33.64	16.65	33.64
I_p,int, Pedestrian LOS Score for Intersection	2.183	2.188	2.618	2.483
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	730	730	1217	1217
d_b, Bicycle Delay [s]	16.66	16.65	6.33	6.33
I_b,int, Bicycle LOS Score for Intersection	1.900	2.188	2.814	2.241
Bicycle LOS	A	B	C	B

Sequence

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



Intersection Level Of Service Report
Intersection 2: A St/McCoy Ln

Control Type:	Two-way stop	Delay (sec / veh):	13.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.025

Intersection Setup

Name	A St			A St						McCoy Ln		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Entry Pocket	0	0	1	1	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.	100.	85.0	150.	100.	100.	100.	100.	100.	100.	100.	100.
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	700.	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			30.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	A St			A St						McCoy Ln		
Base Volume Input [veh/h]	10	90	10	70	170	20	10	0	10	30	10	70
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Growth 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
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	90	10	70	170	20	10	0	10	30	10	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Other Adjustment 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
Total 15-Minute Volume [veh/h]	3	24	3	19	46	5	3	0	3	8	3	19
Total Analysis Volume [veh/h]	11	98	11	76	185	22	11	0	11	33	11	76
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.05	0.00	0.00	0.03	0.00	0.01	0.06	0.02	0.08
d_M, Delay for Movement [s/veh]	7.74	0.00	0.00	7.63	0.00	0.00	13.5	13.3	9.17	12.5	13.6	9.13
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.03	0.01	0.00	0.17	0.00	0.00	0.12	0.12	0.12	0.21	0.34	0.34
95th-Percentile Queue Length [ft/ln]	0.63	0.31	0.00	4.16	0.00	0.00	2.91	2.91	2.91	5.14	8.50	8.50
d_A, Approach Delay [s/veh]	0.71			2.05			11.36			10.47		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	3.99											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 3: Skyway Dr/Fairway Dr

Control Type:	Signalized	Delay (sec / veh):	21.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.521

Intersection Setup

Name	Skyway Dr			Skyway Dr						Fairway Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	130.	100.	100.	145.	100.	100.	95.0	100.	100.	100.	100.	100.
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Skyway Dr			Skyway Dr						Fairway Dr		
Base Volume Input [veh/h]	180	590	20	110	730	210	110	20	150	10	10	50
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Growth 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
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	180	590	20	110	730	210	110	20	150	10	10	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Other Adjustment 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
Total 15-Minute Volume [veh/h]	49	160	5	30	198	57	30	5	41	3	3	14
Total Analysis Volume [veh/h]	196	641	22	120	793	228	120	22	163	11	11	54
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	149
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Prot	Per	Per	Prot	Per	Per	Per	Per	Per	Per	Per	Per
Signal Group	5	2	2	1	6	6	4	4	4	8	8	8
Auxiliary Signal Groups												
Lead / Lag	Lea	-	-	Lea	-	-	Lea	-	-	Lea	-	-
Minimum Green [s]	7	10	10	7	10	10	8	8	8	8	8	8
Maximum Green [s]	30	50	50	30	50	50	50	50	50	50	50	50
Amber [s]	4.8	5.5	5.5	4.8	5.5	5.5	4.4	4.4	4.4	4.4	4.4	4.4
All red [s]	2.0	1.0	1.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	37	57	57	37	57	57	56	56	56	56	56	56
Vehicle Extension [s]	2.0	4.0	4.0	2.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Walk [s]	0	7	7	0	7	7	7	7	7	7	7	7
Pedestrian Clearance [s]	0	19	19	0	17	17	26	26	26	26	26	26
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.8	4.5	4.5	4.8	4.5	4.5	3.4	3.4	3.4	3.4	3.4	3.4
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	100.	100.	100.	0.0	0.0	0.0	0.0	0.0	0.0	100.	100.	100.
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C
C, Cycle Length [s]	65	65	65	65	65	65	65	65	65	65
L, Total Lost Time per Cycle [s]	6.80	6.50	6.50	6.80	6.50	6.50	5.40	5.40	5.40	5.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	4.80	4.50	4.50	4.80	4.50	4.50	3.40	3.40	3.40	3.40
g_i, Effective Green Time [s]	9	27	27	6	24	24	13	13	13	13
g / C, Green / Cycle	0.14	0.41	0.41	0.10	0.37	0.37	0.20	0.20	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.11	0.18	0.18	0.07	0.29	0.29	0.09	0.12	0.01	0.04
s, saturation flow rate [veh/h]	173	182	180	173	182	168	1304	1579	1170	1592
c, Capacity [veh/h]	244	755	746	167	674	623	288	321	183	323
d1, Uniform Delay [s]	27.1	13.7	13.7	28.5	18.2	18.2	26.77	23.42	28.91	21.56
k, delay calibration	0.04	0.15	0.15	0.04	0.15	0.15	0.15	0.15	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.38	0.58	0.59	2.17	2.93	3.19	1.37	2.32	0.19	0.43
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.80	0.44	0.44	0.72	0.79	0.79	0.42	0.58	0.06	0.20
d, Delay for Lane Group [s/veh]	29.5	14.2	14.2	30.7	21.1	21.4	28.14	25.74	29.10	21.99
Lane Group LOS	C	B	B	C	C	C	C	C	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.71	2.82	2.79	1.69	6.07	5.67	1.73	2.52	0.16	0.79
50th-Percentile Queue Length [ft/ln]	67.7	70.4	69.6	42.2	151.	141.	43.24	63.03	4.02	19.68
95th-Percentile Queue Length [veh/ln]	4.88	5.07	5.01	3.04	10.1	9.58	3.11	4.54	0.29	1.42
95th-Percentile Queue Length [ft/ln]	122.	126.	125.	76.0	252.	239.	77.83	113.45	7.23	35.42

Movement, Approach, & Intersection Results

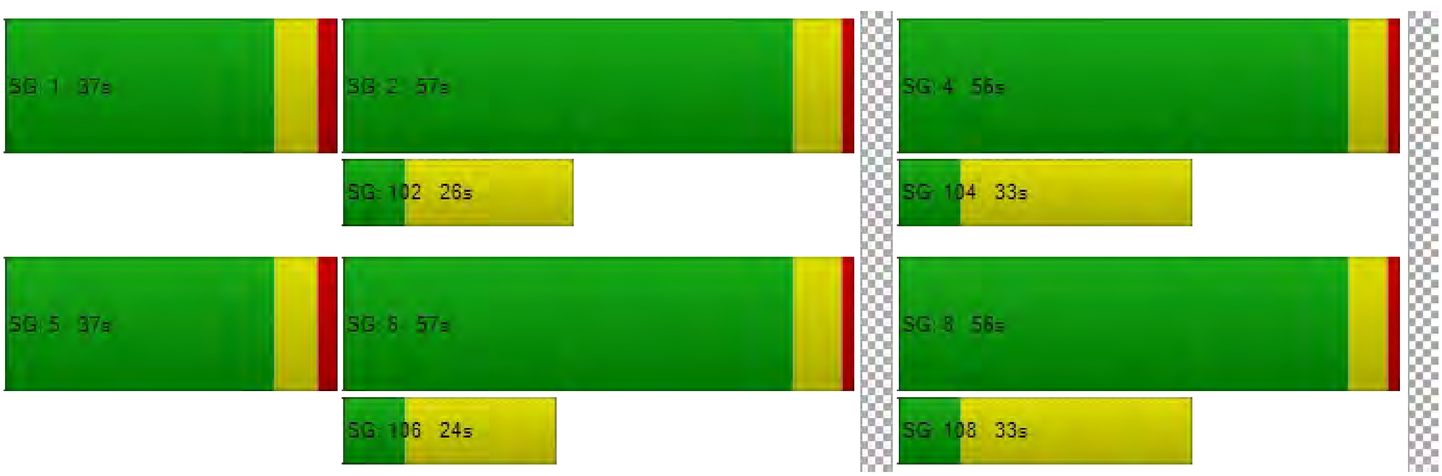
d_M, Delay for Movement [s/veh]	29.5	14.2	14.2	30.7	21.2	21.4	28.1	25.7	25.7	29.1	21.9	21.9
Movement LOS	C	B	B	C	C	C	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	17.76			22.30			26.68			23.02		
Approach LOS	B			C			C			C		
d_I, Intersection Delay [s/veh]	21.25											
Intersection LOS	C											
Intersection V/C	0.521											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	22.48	22.48	22.48	22.48
I_p,int, Pedestrian LOS Score for Intersection	2.950	3.188	2.243	2.026
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1551	1551	1554	1554
d_b, Bicycle Delay [s]	1.64	1.64	1.62	1.62
I_b,int, Bicycle LOS Score for Intersection	2.268	2.501	2.063	1.685
Bicycle LOS	B	B	B	A

Sequence

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



Santa Maria A Street Industrial

Vistro File: G:\...\2023_06_Base Scenario.vistro
Scenario 5 CM AM

Report File: G:\...\2023_08 CM AM (updated timings).pdf
8/14/2023

Turning Movement Volume: Summary

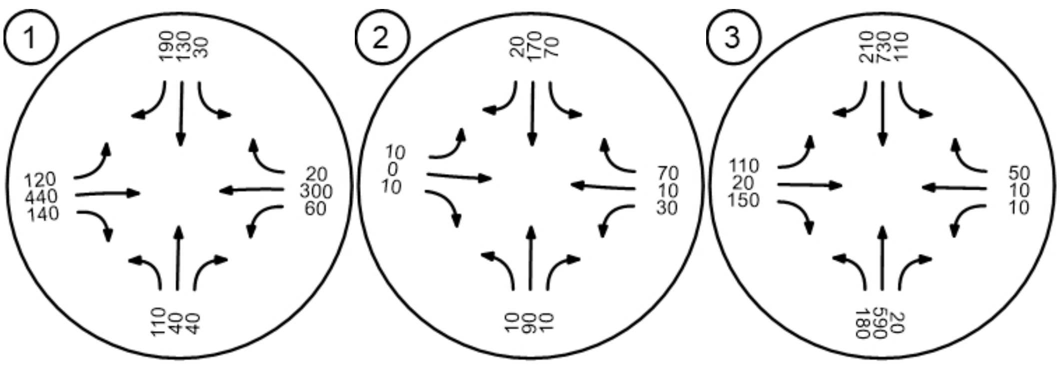
ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Betteravia Road/A Street	110	40	40	30	130	190	120	440	140	60	300	20	1620

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	A St/McCoy Ln	10	90	10	70	170	20	10	0	10	30	10	70	500

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Skyway Dr/Fairway Dr	180	590	20	110	730	210	110	20	150	10	10	50	2190

Traffic Volume - Base Volume

Betteravia Road/A Street A St/McCoy Ln Skyway Dr/Fairway Dr



Santa Maria A Street Industrial

Vistro File: G:\...\2023_06_Base Scenario.vistro
Scenario 6 CM PM

Report File: G:\...\2023_08 CM PM (updated timings).pdf
8/14/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Betteravia Road/A Street	Signalized	HCM 6th Edition	EB Left	0.717	50.4	D
2	A St/McCoy Ln	Two-way stop	HCM 6th Edition	EB Left	0.030	15.4	C
3	Skyway Dr/Fairway Dr	Signalized	HCM 6th Edition	NB Left	0.462	25.2	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Betteravia Road/A Street

Control Type:	Signalized	Delay (sec / veh):	50.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.717

Intersection Setup

Name	A St			A St			Betteravia Rd			Betteravia Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry Pocket Length [ft]	120.	100.	100.	105.	100.	100.	150.	100.	25.0	250.	100.	460.
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	A St			A St			Betteravia Rd			Betteravia Rd		
Base Volume Input [veh/h]	150	110	50	40	60	210	290	650	160	50	430	30
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Growth 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
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	150	110	50	40	60	210	290	650	160	50	430	30
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Other Adjustment 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
Total 15-Minute Volume [veh/h]	40	29	13	11	16	56	77	173	43	13	114	8
Total Analysis Volume [veh/h]	160	117	53	43	64	223	309	691	170	53	457	32
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing major street [ped/h]		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]		0			0			1			1	
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]		1			1			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			1			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	145
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Prot	Per	Per	Prot	Per	Per	Prot	Per	Per	Prot	Per	Per
Signal Group	3	8	8	7	4	4	5	2	2	1	6	6
Auxiliary Signal Groups												
Lead / Lag	Lea	-	-	Lea	-	-	Lea	-	-	Lea	-	-
Minimum Green [s]	7	8	8	7	8	8	7	10	10	7	10	10
Maximum Green [s]	20	30	30	20	30	30	20	50	50	20	50	50
Amber [s]	4.1	4.4	4.4	4.1	4.4	4.4	4.4	4.8	4.8	4.4	4.8	4.8
All red [s]	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.0	1.0	2.0	1.0	1.0
Split [s]	27	36	36	27	36	36	27	56	56	27	56	56
Vehicle Extension [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	4.0	4.0	2.0	4.0	4.0
Walk [s]	0	4	4	0	0	0	0	4	4	0	4	4
Pedestrian Clearance [s]	0	29	29	0	0	0	0	20	20	0	15	15
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.1	3.9	3.9	4.1	3.9	3.9	4.4	3.8	3.8	4.4	3.8	3.8
Minimum Recall	No	No		No	No		No	Yes		No	Yes	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	R
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	6.10	5.90	6.10	5.90	6.40	5.80	5.80	6.40	5.80	5.80
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.10	3.90	4.10	3.90	4.40	3.80	3.80	4.40	3.80	3.80
g_i, Effective Green Time [s]	12	29	5	22	20	46	46	6	31	31
g / C, Green / Cycle	0.11	0.27	0.05	0.20	0.18	0.42	0.42	0.05	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.09	0.10	0.03	0.18	0.18	0.39	0.11	0.03	0.26	0.02
s, saturation flow rate [veh/h]	1695	1687	1695	1565	169	178	148	169	178	151
c, Capacity [veh/h]	189	448	79	314	309	740	616	87	507	430
d1, Uniform Delay [s]	47.84	32.92	51.15	42.91	44.8	30.5	21.0	50.9	37.7	28.6
k, delay calibration	0.04	0.04	0.04	0.13	0.33	0.36	0.15	0.04	0.17	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.02	0.20	2.14	11.69	41.8	15.8	0.34	2.56	9.12	0.10
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.85	0.38	0.54	0.91	1.00	0.93	0.28	0.61	0.90	0.07
d, Delay for Lane Group [s/veh]	51.85	33.12	53.29	54.60	86.7	46.4	21.4	53.5	46.8	28.7
Lane Group LOS	D	C	D	D	F	D	C	D	D	C
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	4.40	3.62	1.18	8.40	11.6	19.3	2.78	1.45	12.4	0.61
50th-Percentile Queue Length [ft/ln]	110.00	90.55	29.50	209.95	291.	482.	69.4	36.1	311.	15.1
95th-Percentile Queue Length [veh/ln]	7.84	6.52	2.12	13.15	17.2	26.5	5.00	2.60	18.2	1.09
95th-Percentile Queue Length [ft/ln]	196.00	162.99	53.09	328.77	431.	662.	125.	65.0	456.	27.3

Movement, Approach, & Intersection Results

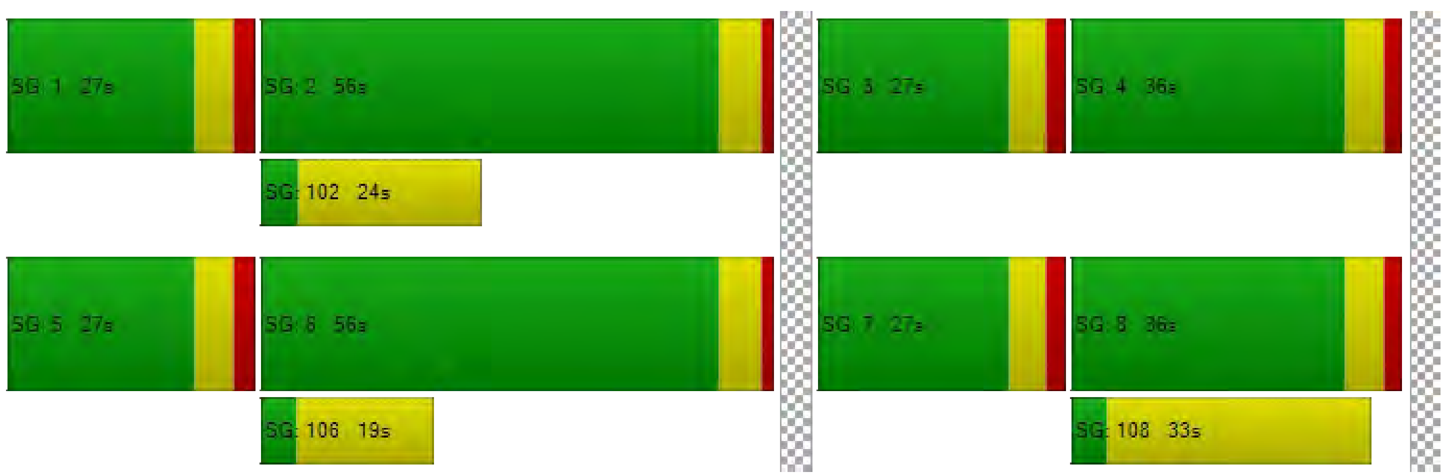
d_M, Delay for Movement [s/veh]	51.8	33.1	33.1	53.2	54.6	54.6	86.7	46.4	21.4	53.5	46.8	28.7
Movement LOS	D	C	C	D	D	D	F	D	C	D	D	C
d_A, Approach Delay [s/veh]	42.20			54.43			53.43			46.44		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	50.41											
Intersection LOS	D											
Intersection V/C	0.717											

Other Modes

g_Walk,mi, Effective Walk Time [s]	8.0	8.0	30.1	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	1578.72	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	47.08	47.08	28.82	47.08
I_p,int, Pedestrian LOS Score for Intersection	2.219	2.293	2.858	2.629
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	549	549	916	916
d_b, Bicycle Delay [s]	28.82	28.82	16.09	16.08
I_b,int, Bicycle LOS Score for Intersection	2.104	2.104	3.490	2.454
Bicycle LOS	B	B	C	B

Sequence

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



Intersection Level Of Service Report
Intersection 2: A St/McCoy Ln

Control Type:	Two-way stop	Delay (sec / veh):	15.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.030

Intersection Setup

Name	A St			A St						McCoy Ln		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Entry Pocket	0	0	1	1	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.	100.	85.0	150.	100.	100.	100.	100.	100.	100.	100.	100.
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	700.	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			30.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	A St			A St						McCoy Ln		
Base Volume Input [veh/h]	10	110	20	110	130	10	10	10	10	20	10	110
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Growth 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
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	110	20	110	130	10	10	10	10	20	10	110
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Other Adjustment 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
Total 15-Minute Volume [veh/h]	3	30	5	30	35	3	3	3	3	5	3	30
Total Analysis Volume [veh/h]	11	120	22	120	141	11	11	11	11	22	11	120
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.09	0.00	0.00	0.03	0.03	0.01	0.05	0.03	0.13
d_M, Delay for Movement [s/veh]	7.62	0.00	0.00	7.82	0.00	0.00	15.4	14.8	9.36	14.2	14.9	9.52
Movement LOS	A	A	A	A	A	A	C	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.02	0.01	0.00	0.28	0.00	0.00	0.22	0.22	0.22	0.17	0.54	0.54
95th-Percentile Queue Length [ft/ln]	0.60	0.30	0.00	7.04	0.00	0.00	5.62	5.62	5.62	4.21	13.5	13.5
d_A, Approach Delay [s/veh]	0.55			3.45			13.21			10.59		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	5.04											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 3: Skyway Dr/Fairway Dr

Control Type:	Signalized	Delay (sec / veh):	25.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.462

Intersection Setup

Name	Skyway Dr			Skyway Dr						Fairway Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	130.	100.	100.	145.	100.	100.	95.0	100.	100.	100.	100.	100.
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Skyway Dr			Skyway Dr						Fairway Dr		
Base Volume Input [veh/h]	110	800	10	50	670	90	160	20	150	30	20	220
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Growth 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
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	110	800	10	50	670	90	160	20	150	30	20	220
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Other Adjustment 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
Total 15-Minute Volume [veh/h]	30	217	3	14	182	24	43	5	41	8	5	60
Total Analysis Volume [veh/h]	120	870	11	54	728	98	174	22	163	33	22	239
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	149
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Prot	Per	Per	Prot	Per	Per	Per	Per	Per	Per	Per	Per
Signal Group	5	2	2	1	6	6	4	4	4	8	8	8
Auxiliary Signal Groups												
Lead / Lag	Lea	-	-	Lea	-	-	Lea	-	-	Lea	-	-
Minimum Green [s]	7	10	10	7	10	10	8	8	8	8	8	8
Maximum Green [s]	30	50	50	30	50	50	50	50	50	50	50	50
Amber [s]	4.8	5.5	5.5	4.8	5.5	5.5	4.4	4.4	4.4	4.4	4.4	4.4
All red [s]	2.0	1.0	1.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	37	57	57	37	57	57	56	56	56	56	56	56
Vehicle Extension [s]	2.0	4.0	4.0	2.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Walk [s]	0	7	7	0	7	7	7	7	7	7	7	7
Pedestrian Clearance [s]	0	19	19	0	17	17	26	26	26	26	26	26
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.8	4.5	4.5	4.8	4.5	4.5	3.4	3.4	3.4	3.4	3.4	3.4
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	100.	100.	100.	0.0	0.0	0.0	0.0	0.0	0.0	100.	100.	100.
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C
C, Cycle Length [s]	72	72	72	72	72	72	72	72	72	72
L, Total Lost Time per Cycle [s]	6.80	6.50	6.50	6.80	6.50	6.50	5.40	5.40	5.40	5.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	4.80	4.50	4.50	4.80	4.50	4.50	3.40	3.40	3.40	3.40
g_i, Effective Green Time [s]	6	23	23	5	21	21	26	26	26	26
g / C, Green / Cycle	0.09	0.32	0.32	0.06	0.29	0.29	0.36	0.36	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.07	0.24	0.24	0.03	0.23	0.23	0.16	0.12	0.03	0.16
s, saturation flow rate [veh/h]	175	184	183	175	184	176	1100	1592	1179	1584
c, Capacity [veh/h]	156	584	581	114	539	517	324	569	391	566
d1, Uniform Delay [s]	31.9	22.0	22.0	32.4	23.2	23.2	27.08	16.78	20.99	17.76
k, delay calibration	0.04	0.15	0.15	0.04	0.15	0.15	0.15	0.15	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.95	2.87	2.88	1.14	3.56	3.71	1.97	0.47	0.13	0.83
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.76	0.76	0.47	0.78	0.78	0.54	0.33	0.08	0.46
d, Delay for Lane Group [s/veh]	34.9	24.8	24.9	33.5	26.8	27.0	29.05	17.25	21.12	18.59
Lane Group LOS	C	C	C	C	C	C	C	B	C	B
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.95	6.03	6.01	0.85	6.04	5.82	2.77	2.05	0.41	3.08
50th-Percentile Queue Length [ft/ln]	48.6	150.	150.	21.2	150.	145.	69.16	51.31	10.26	77.12
95th-Percentile Queue Length [veh/ln]	3.50	10.0	10.0	1.53	10.0	9.77	4.98	3.69	0.74	5.55
95th-Percentile Queue Length [ft/ln]	87.5	251.	250.	38.2	251.	244.	124.49	92.36	18.47	138.81

Movement, Approach, & Intersection Results

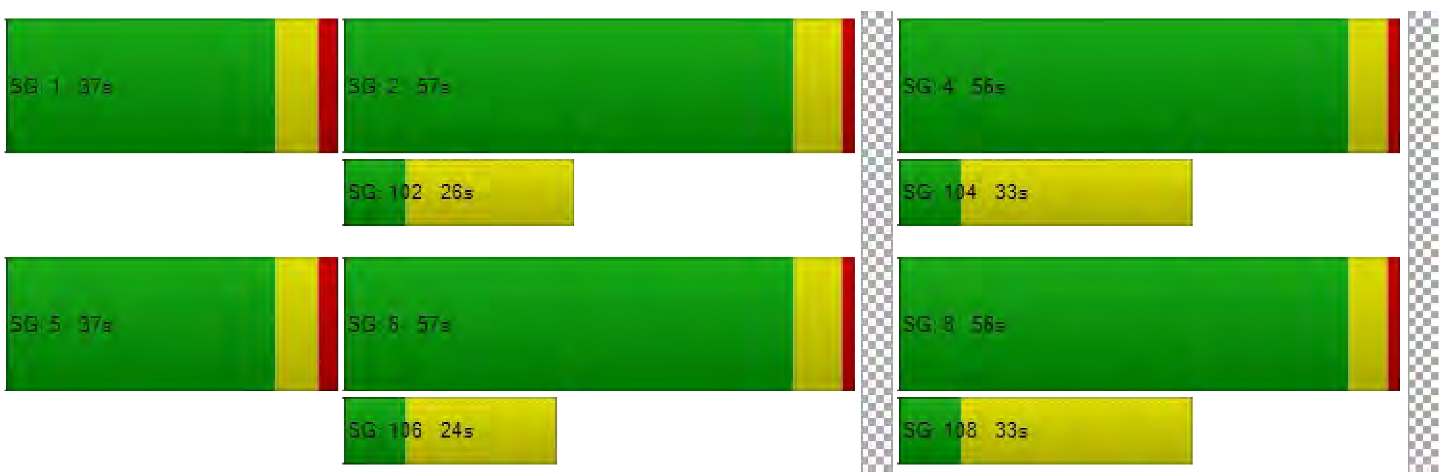
d_M, Delay for Movement [s/veh]	34.9	24.8	24.9	33.5	26.9	27.0	29.0	17.2	17.2	21.1	18.5	18.5
Movement LOS	C	C	C	C	C	C	C	B	B	C	B	B
d_A, Approach Delay [s/veh]	26.09			27.33			22.97			18.88		
Approach LOS	C			C			C			B		
d_I, Intersection Delay [s/veh]	25.24											
Intersection LOS	C											
Intersection V/C	0.462											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	25.68	25.68	25.68	25.68
I_p,int, Pedestrian LOS Score for Intersection	3.022	3.332	2.187	2.093
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1409	1409	1412	1412
d_b, Bicycle Delay [s]	3.13	3.13	3.10	3.10
I_b,int, Bicycle LOS Score for Intersection	2.385	2.286	2.152	2.045
Bicycle LOS	B	B	B	B

Sequence

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



Santa Maria A Street Industrial

Vistro File: G:\...\2023_06_Base Scenario.vistro

Scenario 6 CM PM

Report File: G:\...\2023_08 CM PM (updated timings).pdf

8/14/2023

Turning Movement Volume: Summary

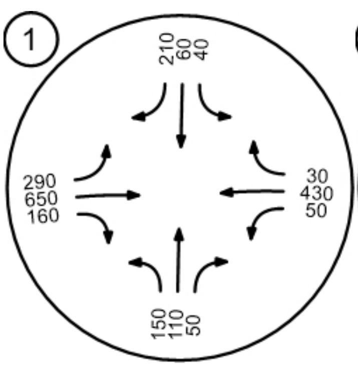
ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Betteravia Road/A Street	150	110	50	40	60	210	290	650	160	50	430	30	2230

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	A St/McCoy Ln	10	110	20	110	130	10	10	10	10	20	10	110	560

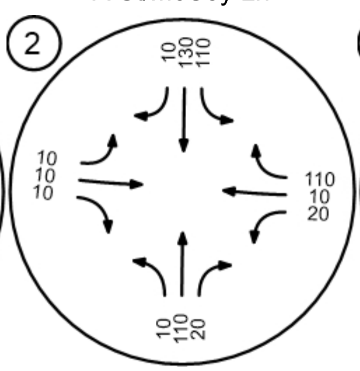
ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Skyway Dr/Fairway Dr	110	800	10	50	670	90	160	20	150	30	20	220	2330

Traffic Volume - Base Volume

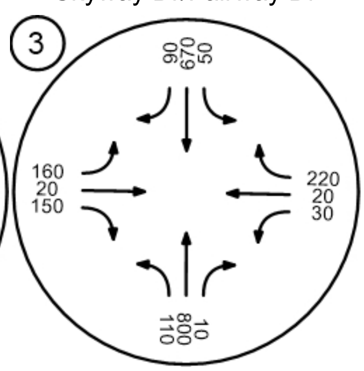
Betteravia Road/A Street



A St/McCoy Ln



Skyway Dr/Fairway Dr



Santa Maria A Street Industrial

Vistro File: G:\...\2023_06_Base Scenario.vistro
Scenario 7 CM +P AM

Report File: G:\...\2023_08 CM+P AM (updated timings).pdf
8/14/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Betteravia Road/A Street	Signalized	HCM 6th Edition	NB Left	0.610	33.3	C
2	A St/McCoy Ln	Two-way stop	HCM 6th Edition	WB Thru	0.026	14.1	B
3	Skyway Dr/Fairway Dr	Signalized	HCM 6th Edition	SB Left	0.535	21.9	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Betteravia Road/A Street

Control Type:	Signalized	Delay (sec / veh):	33.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.610

Intersection Setup

Name	A St			A St			Betteravia Rd			Betteravia Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry Pocket Length [ft]	120.	100.	100.	105.	100.	100.	150.	100.	25.0	250.	100.	460.
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	A St			A St			Betteravia Rd			Betteravia Rd		
Base Volume Input [veh/h]	113	41	46	30	133	190	120	440	148	79	300	20
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Growth 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
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	113	41	46	30	133	190	120	440	148	79	300	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Other Adjustment 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
Total 15-Minute Volume [veh/h]	31	11	13	8	36	52	33	120	40	21	82	5
Total Analysis Volume [veh/h]	123	45	50	33	145	207	130	478	161	86	326	22
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			1			1		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	1			1			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			1			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	145
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Prot	Per	Per	Prot	Per	Per	Prot	Per	Per	Prot	Per	Per
Signal Group	3	8	8	7	4	4	5	2	2	1	6	6
Auxiliary Signal Groups												
Lead / Lag	Lea	-	-	Lea	-	-	Lea	-	-	Lea	-	-
Minimum Green [s]	7	8	8	7	8	8	7	10	10	7	10	10
Maximum Green [s]	20	30	30	20	30	30	20	50	50	20	50	50
Amber [s]	4.1	4.4	4.4	4.1	4.4	4.4	4.4	4.8	4.8	4.4	4.8	4.8
All red [s]	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.0	1.0	2.0	1.0	1.0
Split [s]	27	36	36	27	36	36	27	56	56	27	56	56
Vehicle Extension [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	4.0	4.0	2.0	4.0	4.0
Walk [s]	0	4	4	0	0	0	0	4	4	0	4	4
Pedestrian Clearance [s]	0	29	29	0	0	0	0	20	20	0	15	15
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.1	3.9	3.9	4.1	3.9	3.9	4.4	3.8	3.8	4.4	3.8	3.8
Minimum Recall	No	No		No	No		No	Yes		No	Yes	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	R
C, Cycle Length [s]	85	85	85	85	85	85	85	85	85	85
L, Total Lost Time per Cycle [s]	6.10	5.90	6.10	5.90	6.40	5.80	5.80	6.40	5.80	5.80
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.10	3.90	4.10	3.90	4.40	3.80	3.80	4.40	3.80	3.80
g_i, Effective Green Time [s]	8	24	4	20	8	26	26	6	24	24
g / C, Green / Cycle	0.09	0.29	0.04	0.24	0.10	0.31	0.31	0.07	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.07	0.06	0.02	0.22	0.08	0.27	0.11	0.05	0.18	0.01
s, saturation flow rate [veh/h]	1695	1629	1695	1613	169	178	147	169	178	151
c, Capacity [veh/h]	154	467	76	388	162	556	461	122	513	435
d1, Uniform Delay [s]	37.91	22.97	39.59	31.37	37.6	27.5	22.5	38.6	26.4	21.8
k, delay calibration	0.04	0.04	0.04	0.08	0.04	0.15	0.15	0.04	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.54	0.08	1.45	6.55	3.46	5.64	0.64	2.82	1.86	0.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.80	0.20	0.43	0.91	0.80	0.86	0.35	0.71	0.64	0.05
d, Delay for Lane Group [s/veh]	41.45	23.05	41.04	37.93	41.1	33.1	23.1	41.4	28.2	21.9
Lane Group LOS	D	C	D	D	D	C	C	D	C	C
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.55	1.37	0.68	7.27	2.66	9.15	2.36	1.76	5.54	0.30
50th-Percentile Queue Length [ft/ln]	63.82	34.28	16.91	181.76	66.4	228.	59.1	43.8	138.	7.59
95th-Percentile Queue Length [veh/ln]	4.60	2.47	1.22	11.69	4.78	14.1	4.26	3.16	9.41	0.55
95th-Percentile Queue Length [ft/ln]	114.88	61.70	30.45	292.31	119.	352.	106.	79.0	235.	13.6

Movement, Approach, & Intersection Results

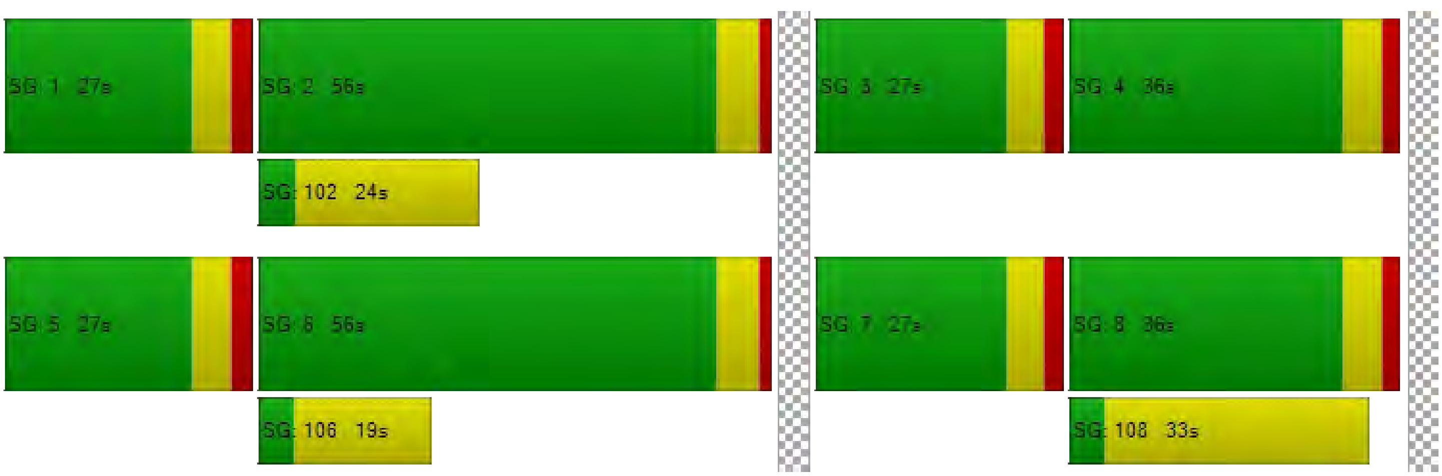
d_M, Delay for Movement [s/veh]	41.4	23.0	23.0	41.0	37.9	37.9	41.1	33.1	23.1	41.4	28.2	21.9
Movement LOS	D	C	C	D	D	D	D	C	C	D	C	C
d_A, Approach Delay [s/veh]	33.43			38.20			32.42			30.56		
Approach LOS	C			D			C			C		
d_I, Intersection Delay [s/veh]	33.33											
Intersection LOS	C											
Intersection V/C	0.610											

Other Modes

g_Walk,mi, Effective Walk Time [s]	8.0	8.0	30.1	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	3421.52	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.83	34.83	17.69	34.83
I_p,int, Pedestrian LOS Score for Intersection	2.204	2.192	2.625	2.495
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	709	709	1182	1182
d_b, Bicycle Delay [s]	17.69	17.69	7.10	7.10
I_b,int, Bicycle LOS Score for Intersection	1.919	2.195	2.828	2.276
Bicycle LOS	A	B	C	B

Sequence

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



Intersection Level Of Service Report
Intersection 2: A St/McCoy Ln

Control Type:	Two-way stop	Delay (sec / veh):	14.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.026

Intersection Setup

Name	A St			A St						McCoy Ln		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Entry Pocket	0	0	1	1	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.	100.	85.0	150.	100.	100.	100.	100.	100.	100.	100.	100.
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	700.	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			30.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	A St			A St						McCoy Ln		
Base Volume Input [veh/h]	10	99	11	70	200	20	10	0	10	33	10	70
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Growth 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
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	99	11	70	200	20	10	0	10	33	10	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Other Adjustment 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
Total 15-Minute Volume [veh/h]	3	27	3	19	54	5	3	0	3	9	3	19
Total Analysis Volume [veh/h]	11	108	12	76	217	22	11	0	11	36	11	76
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.05	0.00	0.00	0.03	0.00	0.01	0.07	0.03	0.08
d_M, Delay for Movement [s/veh]	7.82	0.00	0.00	7.66	0.00	0.00	14.1	13.8	9.29	12.9	14.1	9.19
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.03	0.01	0.00	0.17	0.00	0.00	0.12	0.12	0.12	0.24	0.35	0.35
95th-Percentile Queue Length [ft/ln]	0.65	0.32	0.00	4.21	0.00	0.00	3.07	3.07	3.07	5.92	8.69	8.69
d_A, Approach Delay [s/veh]	0.66			1.85			11.71			10.72		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	3.80											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 3: Skyway Dr/Fairway Dr

Control Type:	Signalized	Delay (sec / veh):	21.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.535

Intersection Setup

Name	Skyway Dr			Skyway Dr						Fairway Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	130.	100.	100.	145.	100.	100.	95.0	100.	100.	100.	100.	100.
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Skyway Dr			Skyway Dr						Fairway Dr		
Base Volume Input [veh/h]	194	590	20	110	730	218	113	20	154	10	10	50
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Growth 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
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	194	590	20	110	730	218	113	20	154	10	10	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Other Adjustment 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
Total 15-Minute Volume [veh/h]	53	160	5	30	198	59	31	5	42	3	3	14
Total Analysis Volume [veh/h]	211	641	22	120	793	237	123	22	167	11	11	54
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	149
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Prot	Per	Per	Prot	Per	Per	Per	Per	Per	Per	Per	Per
Signal Group	5	2	2	1	6	6	4	4	4	8	8	8
Auxiliary Signal Groups												
Lead / Lag	Lea	-	-	Lea	-	-	Lea	-	-	Lea	-	-
Minimum Green [s]	7	10	10	7	10	10	8	8	8	8	8	8
Maximum Green [s]	30	50	50	30	50	50	50	50	50	50	50	50
Amber [s]	4.8	5.5	5.5	4.8	5.5	5.5	4.4	4.4	4.4	4.4	4.4	4.4
All red [s]	2.0	1.0	1.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	37	57	57	37	57	57	56	56	56	56	56	56
Vehicle Extension [s]	2.0	4.0	4.0	2.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Walk [s]	0	7	7	0	7	7	7	7	7	7	7	7
Pedestrian Clearance [s]	0	19	19	0	17	17	26	26	26	26	26	26
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.8	4.5	4.5	4.8	4.5	4.5	3.4	3.4	3.4	3.4	3.4	3.4
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	100.	100.	100.	0.0	0.0	0.0	0.0	0.0	0.0	100.	100.	100.
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C
C, Cycle Length [s]	67	67	67	67	67	67	67	67	67	67
L, Total Lost Time per Cycle [s]	6.80	6.50	6.50	6.80	6.50	6.50	5.40	5.40	5.40	5.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	4.80	4.50	4.50	4.80	4.50	4.50	3.40	3.40	3.40	3.40
g_i, Effective Green Time [s]	10	29	29	6	25	25	14	14	14	14
g / C, Green / Cycle	0.15	0.42	0.42	0.09	0.37	0.37	0.21	0.21	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.12	0.18	0.18	0.07	0.29	0.29	0.09	0.12	0.01	0.04
s, saturation flow rate [veh/h]	173	182	180	173	182	168	1304	1579	1165	1592
c, Capacity [veh/h]	257	774	765	162	674	622	289	324	182	326
d1, Uniform Delay [s]	27.8	13.6	13.6	29.7	18.9	18.9	27.53	24.18	29.78	22.19
k, delay calibration	0.04	0.15	0.15	0.04	0.15	0.15	0.15	0.15	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.48	0.54	0.55	2.47	3.07	3.36	1.42	2.38	0.20	0.42
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82	0.43	0.43	0.74	0.79	0.80	0.43	0.58	0.06	0.20
d, Delay for Lane Group [s/veh]	30.3	14.2	14.2	32.2	22.0	22.3	28.95	26.56	29.98	22.62
Lane Group LOS	C	B	B	C	C	C	C	C	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.04	2.87	2.84	1.78	6.46	6.03	1.84	2.69	0.17	0.82
50th-Percentile Queue Length [ft/ln]	75.9	71.8	71.0	44.4	161.	150.	46.11	67.17	4.18	20.47
95th-Percentile Queue Length [veh/ln]	5.47	5.17	5.11	3.20	10.6	10.0	3.32	4.84	0.30	1.47
95th-Percentile Queue Length [ft/ln]	136.	129.	127.	80.0	265.	251.	83.00	120.91	7.52	36.85

Movement, Approach, & Intersection Results

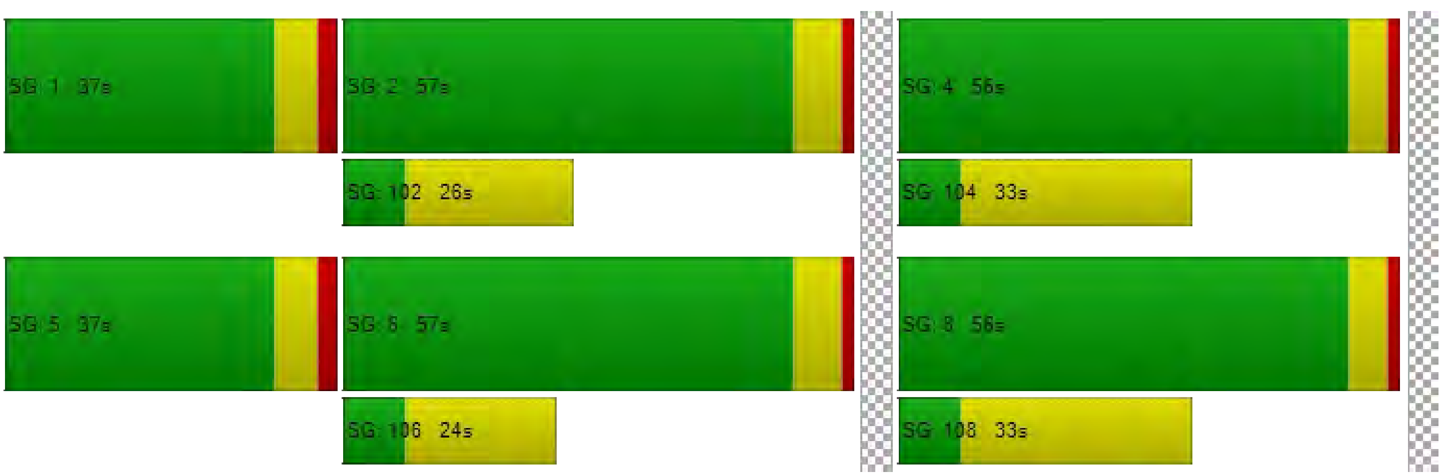
d_M, Delay for Movement [s/veh]	30.3	14.2	14.2	32.2	22.1	22.3	28.9	26.5	26.5	29.9	22.6	22.6
Movement LOS	C	B	B	C	C	C	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	18.10			23.21			27.50			23.68		
Approach LOS	B			C			C			C		
d_I, Intersection Delay [s/veh]	21.93											
Intersection LOS	C											
Intersection V/C	0.535											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	23.55	23.55	23.55	23.55
I_p,int, Pedestrian LOS Score for Intersection	2.959	3.198	2.258	2.028
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1500	1500	1503	1503
d_b, Bicycle Delay [s]	2.10	2.10	2.07	2.07
I_b,int, Bicycle LOS Score for Intersection	2.281	2.508	2.074	1.685
Bicycle LOS	B	B	B	A

Sequence

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



Santa Maria A Street Industrial

Vistro File: G:\...\2023_06_Base Scenario.vistro

Scenario 7 CM +P AM

Report File: G:\...\2023_08 CM+P AM (updated timings).pdf

8/14/2023

Turning Movement Volume: Summary

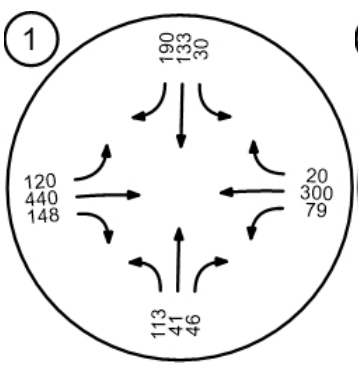
ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Betteravia Road/A Street	113	41	46	30	133	190	120	440	148	79	300	20	1660

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	A St/McCoy Ln	10	99	11	70	200	20	10	0	10	33	10	70	543

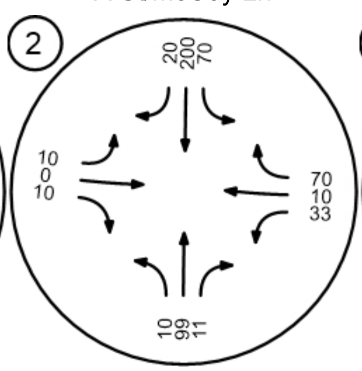
ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Skyway Dr/Fairway Dr	194	590	20	110	730	218	113	20	154	10	10	50	2219

Traffic Volume - Base Volume

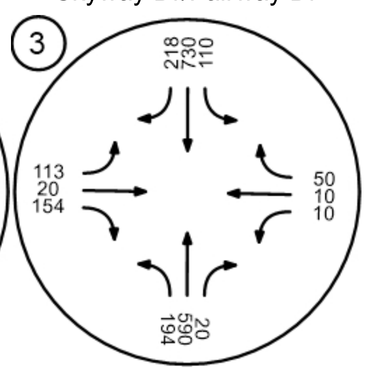
Betteravia Road/A Street



A St/McCoy Ln



Skyway Dr/Fairway Dr



Santa Maria A Street Industrial

Vistro File: G:\...\2023_06_Base Scenario.vistro — Scenario 8 CM +P PM

Report File: G:\...\2023_08 CM+P PM (updated timings).pdf — 8/14/2023

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Betteravia Road/A Street	Signalized	HCM 6th Edition	EB Left	0.721	52.0	D
2	A St/McCoy Ln	Two-way stop	HCM 6th Edition	EB Left	0.032	16.0	C
3	Skyway Dr/Fairway Dr	Signalized	HCM 6th Edition	NB Left	0.467	25.8	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Betteravia Road/A Street

Control Type:	Signalized	Delay (sec / veh):	52.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.721

Intersection Setup

Name	A St			A St			Betteravia Rd			Betteravia Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry Pocket Length [ft]	120.	100.	100.	105.	100.	100.	150.	100.	25.0	250.	100.	460.
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	Yes			Yes			Yes			Yes		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	A St			A St			Betteravia Rd			Betteravia Rd		
Base Volume Input [veh/h]	157	112	67	40	61	210	290	650	163	58	430	30
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Growth 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
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	157	112	67	40	61	210	290	650	163	58	430	30
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Other Adjustment 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
Total 15-Minute Volume [veh/h]	42	30	18	11	16	56	77	173	43	15	114	8
Total Analysis Volume [veh/h]	167	119	71	43	65	223	309	691	173	62	457	32
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			1			1		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	1			1			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			1			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	145
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Prot	Per	Per	Prot	Per	Per	Prot	Per	Per	Prot	Per	Per
Signal Group	3	8	8	7	4	4	5	2	2	1	6	6
Auxiliary Signal Groups												
Lead / Lag	Lea	-	-	Lea	-	-	Lea	-	-	Lea	-	-
Minimum Green [s]	7	8	8	7	8	8	7	10	10	7	10	10
Maximum Green [s]	20	30	30	20	30	30	20	50	50	20	50	50
Amber [s]	4.1	4.4	4.4	4.1	4.4	4.4	4.4	4.8	4.8	4.4	4.8	4.8
All red [s]	2.0	1.5	1.5	2.0	1.5	1.5	2.0	1.0	1.0	2.0	1.0	1.0
Split [s]	27	36	36	27	36	36	27	56	56	27	56	56
Vehicle Extension [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	4.0	4.0	2.0	4.0	4.0
Walk [s]	0	4	4	0	0	0	0	4	4	0	4	4
Pedestrian Clearance [s]	0	29	29	0	0	0	0	20	20	0	15	15
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.1	3.9	3.9	4.1	3.9	3.9	4.4	3.8	3.8	4.4	3.8	3.8
Minimum Recall	No	No		No	No		No	Yes		No	Yes	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	R
C, Cycle Length [s]	111	111	111	111	111	111	111	111	111	111
L, Total Lost Time per Cycle [s]	6.10	5.90	6.10	5.90	6.40	5.80	5.80	6.40	5.80	5.80
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.10	3.90	4.10	3.90	4.40	3.80	3.80	4.40	3.80	3.80
g_i, Effective Green Time [s]	13	30	5	22	20	46	46	6	32	32
g / C, Green / Cycle	0.12	0.27	0.05	0.20	0.18	0.41	0.41	0.05	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.10	0.11	0.03	0.18	0.18	0.39	0.12	0.04	0.26	0.02
s, saturation flow rate [veh/h]	1695	1670	1695	1566	169	178	148	169	178	151
c, Capacity [veh/h]	195	451	79	315	304	735	611	91	511	433
d1, Uniform Delay [s]	48.36	33.51	51.97	43.58	45.7	31.3	21.6	51.7	38.0	28.9
k, delay calibration	0.04	0.04	0.04	0.14	0.35	0.36	0.15	0.04	0.18	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.09	0.23	2.20	12.64	46.8	17.1	0.36	3.31	8.86	0.10
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.85	0.42	0.55	0.92	1.02	0.94	0.28	0.68	0.89	0.07
d, Delay for Lane Group [s/veh]	52.45	33.74	54.17	56.22	92.5	48.5	22.0	55.0	46.9	29.0
Lane Group LOS	D	C	D	E	F	D	C	E	D	C
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	4.67	4.15	1.20	8.64	12.0	19.9	2.91	1.74	12.6	0.62
50th-Percentile Queue Length [ft/ln]	116.72	103.81	30.02	216.07	300.	499.	72.7	43.4	315.	15.4
95th-Percentile Queue Length [veh/ln]	8.21	7.47	2.16	13.46	17.8	27.3	5.24	3.12	18.4	1.11
95th-Percentile Queue Length [ft/ln]	205.32	186.87	54.04	336.60	446.	682.	130.	78.1	461.	27.7

Movement, Approach, & Intersection Results

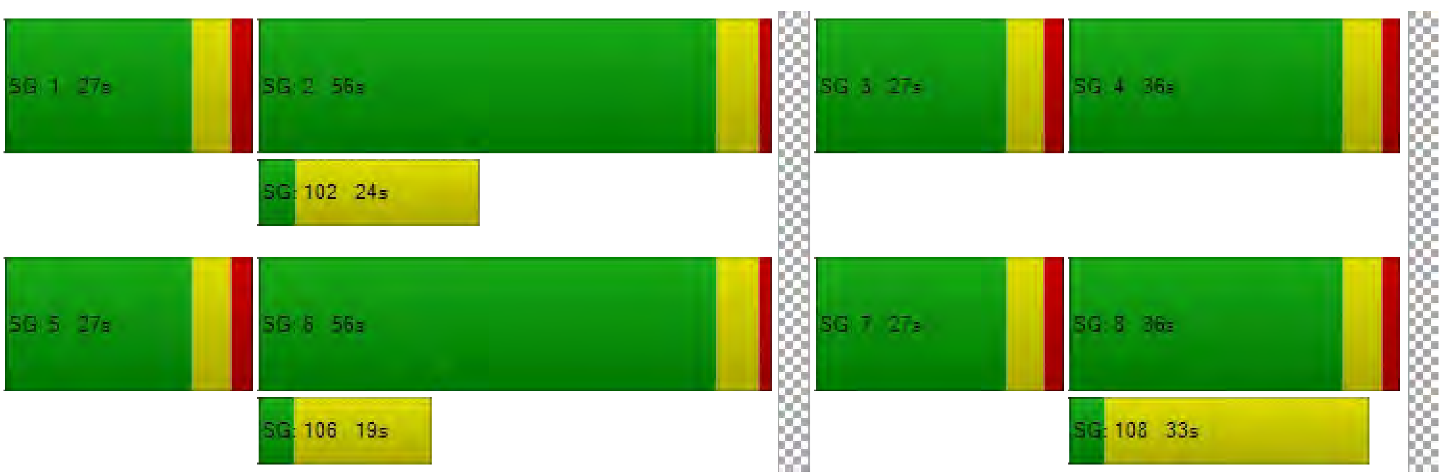
d_M, Delay for Movement [s/veh]	52.4	33.7	33.7	54.1	56.2	56.2	92.5	48.5	22.0	55.0	46.9	29.0
Movement LOS	D	C	C	D	E	E	F	D	C	E	D	C
d_A, Approach Delay [s/veh]	42.49			55.95			56.22			46.82		
Approach LOS	D			E			E			D		
d_I, Intersection Delay [s/veh]	52.00											
Intersection LOS	D											
Intersection V/C	0.721											

Other Modes

g_Walk,mi, Effective Walk Time [s]	8.0	8.0	30.1	8.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	1422.78	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	47.91	47.91	29.60	47.91
I_p,int, Pedestrian LOS Score for Intersection	2.237	2.295	2.863	2.639
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	541	541	902	902
d_b, Bicycle Delay [s]	29.60	29.60	16.76	16.75
I_b,int, Bicycle LOS Score for Intersection	2.149	2.106	3.495	2.469
Bicycle LOS	B	B	C	B

Sequence

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



Intersection Level Of Service Report
Intersection 2: A St/McCoy Ln

Control Type:	Two-way stop	Delay (sec / veh):	16.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.032

Intersection Setup

Name	A St			A St						McCoy Ln		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Entry Pocket	0	0	1	1	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.	100.	85.0	150.	100.	100.	100.	100.	100.	100.	100.	100.
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	700.	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			30.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name	A St			A St						McCoy Ln		
Base Volume Input [veh/h]	10	136	22	110	142	10	10	10	10	21	10	110
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Growth 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
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	136	22	110	142	10	10	10	10	21	10	110
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Other Adjustment 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
Total 15-Minute Volume [veh/h]	3	37	6	30	39	3	3	3	3	6	3	30
Total Analysis Volume [veh/h]	11	148	24	120	154	11	11	11	11	23	11	120
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.09	0.00	0.00	0.03	0.03	0.01	0.06	0.03	0.13
d_M, Delay for Movement [s/veh]	7.65	0.00	0.00	7.90	0.00	0.00	16.0	15.4	9.46	14.8	15.5	9.66
Movement LOS	A	A	A	A	A	A	C	C	A	B	C	A
95th-Percentile Queue Length [veh/ln]	0.02	0.01	0.00	0.29	0.00	0.00	0.24	0.24	0.24	0.19	0.56	0.56
95th-Percentile Queue Length [ft/ln]	0.61	0.30	0.00	7.25	0.00	0.00	5.92	5.92	5.92	4.71	13.9	13.9
d_A, Approach Delay [s/veh]	0.46			3.33			13.65			10.86		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	4.82											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 3: Skyway Dr/Fairway Dr

Control Type:	Signalized	Delay (sec / veh):	25.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.467

Intersection Setup

Name	Skyway Dr			Skyway Dr						Fairway Dr		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ	Left	Thru	Righ
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	130.	100.	100.	145.	100.	100.	95.0	100.	100.	100.	100.	100.
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	55.00			55.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Skyway Dr			Skyway Dr						Fairway Dr		
Base Volume Input [veh/h]	116	800	10	50	670	93	167	20	162	30	20	220
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Growth 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
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	116	800	10	50	670	93	167	20	162	30	20	220
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Other Adjustment 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
Total 15-Minute Volume [veh/h]	32	217	3	14	182	25	45	5	44	8	5	60
Total Analysis Volume [veh/h]	126	870	11	54	728	101	182	22	176	33	22	239
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	149
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Prot	Per	Per	Prot	Per	Per	Per	Per	Per	Per	Per	Per
Signal Group	5	2	2	1	6	6	4	4	4	8	8	8
Auxiliary Signal Groups												
Lead / Lag	Lea	-	-	Lea	-	-	Lea	-	-	Lea	-	-
Minimum Green [s]	7	10	10	7	10	10	8	8	8	8	8	8
Maximum Green [s]	30	50	50	30	50	50	50	50	50	50	50	50
Amber [s]	4.8	5.5	5.5	4.8	5.5	5.5	4.4	4.4	4.4	4.4	4.4	4.4
All red [s]	2.0	1.0	1.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	37	57	57	37	57	57	56	56	56	56	56	56
Vehicle Extension [s]	2.0	4.0	4.0	2.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Walk [s]	0	7	7	0	7	7	7	7	7	7	7	7
Pedestrian Clearance [s]	0	19	19	0	17	17	26	26	26	26	26	26
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.8	4.5	4.5	4.8	4.5	4.5	3.4	3.4	3.4	3.4	3.4	3.4
Minimum Recall	No	Yes		No	Yes			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	100.	100.	100.	0.0	0.0	0.0	0.0	0.0	0.0	100.	100.	100.
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C
C, Cycle Length [s]	74	74	74	74	74	74	74	74	74	74
L, Total Lost Time per Cycle [s]	6.80	6.50	6.50	6.80	6.50	6.50	5.40	5.40	5.40	5.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	4.80	4.50	4.50	4.80	4.50	4.50	3.40	3.40	3.40	3.40
g_i, Effective Green Time [s]	7	24	24	5	21	21	27	27	27	27
g / C, Green / Cycle	0.09	0.32	0.32	0.06	0.29	0.29	0.36	0.36	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.07	0.24	0.24	0.03	0.23	0.23	0.17	0.12	0.03	0.16
s, saturation flow rate [veh/h]	175	184	183	175	184	176	1100	1590	1165	1584
c, Capacity [veh/h]	162	589	586	112	537	514	329	577	384	575
d1, Uniform Delay [s]	32.7	22.4	22.4	33.3	24.0	24.0	27.59	17.12	21.62	17.94
k, delay calibration	0.04	0.15	0.15	0.04	0.15	0.15	0.15	0.15	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.08	2.75	2.77	1.20	3.71	3.87	2.07	0.50	0.14	0.80
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.78	0.75	0.75	0.48	0.79	0.79	0.55	0.34	0.09	0.45
d, Delay for Lane Group [s/veh]	35.8	25.2	25.2	34.5	27.7	27.9	29.66	17.62	21.75	18.74
Lane Group LOS	D	C	C	C	C	C	C	B	C	B
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	2.12	6.21	6.18	0.88	6.32	6.08	2.99	2.27	0.43	3.16
50th-Percentile Queue Length [ft/ln]	52.9	155.	154.	22.0	157.	151.	74.70	56.87	10.64	79.00
95th-Percentile Queue Length [veh/ln]	3.81	10.2	10.2	1.59	10.4	10.1	5.38	4.09	0.77	5.69
95th-Percentile Queue Length [ft/ln]	95.2	257.	256.	39.6	261.	253.	134.46	102.37	19.15	142.21

Movement, Approach, & Intersection Results

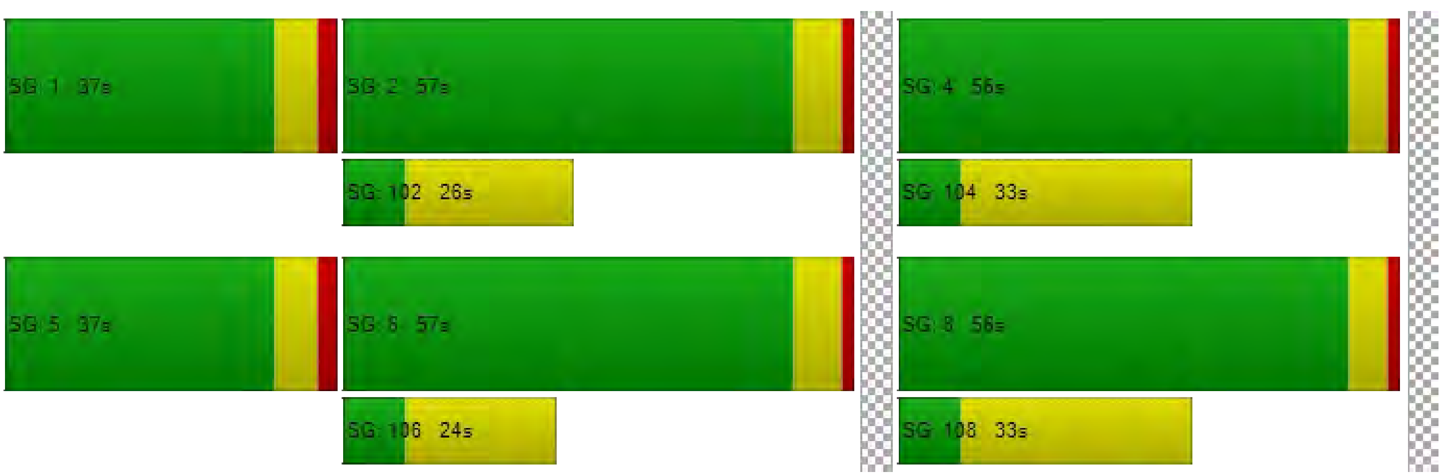
d_M, Delay for Movement [s/veh]	35.8	25.2	25.2	34.5	27.8	27.9	29.6	17.6	17.6	21.7	18.7	18.7
Movement LOS	D	C	C	C	C	C	C	B	B	C	B	B
d_A, Approach Delay [s/veh]	26.55			28.26			23.39			19.08		
Approach LOS	C			C			C			B		
d_I, Intersection Delay [s/veh]	25.82											
Intersection LOS	C											
Intersection V/C	0.467											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	26.67	26.67	26.67	26.67
I_p,int, Pedestrian LOS Score for Intersection	3.031	3.348	2.202	2.094
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1370	1370	1373	1373
d_b, Bicycle Delay [s]	3.65	3.65	3.62	3.62
I_b,int, Bicycle LOS Score for Intersection	2.390	2.288	2.187	2.045
Bicycle LOS	B	B	B	B

Sequence

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



Santa Maria A Street Industrial

Vistro File: G:\...\2023_06_Base Scenario.vistro
Scenario 8 CM +P PM

Report File: G:\...\2023_08 CM+P PM (updated timings).pdf
8/14/2023

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Betteravia Road/A Street	157	112	67	40	61	210	290	650	163	58	430	30	2268

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	A St/McCoy Ln	10	136	22	110	142	10	10	10	10	21	10	110	601

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Skyway Dr/Fairway Dr	116	800	10	50	670	93	167	20	162	30	20	220	2358

Traffic Volume - Base Volume