Appendix I: Traffic Impact Analysis

Appendices

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LA PUERTA SCHOOL SITE RESIDENTIAL DEVELOPMENT

TRAFFIC IMPACT ANALYSIS

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1 EXECUTIVE SUMMARY

This Traffic Impact Analysis (TIA) evaluates the potential traffic impacts of the La Puerta School Site Residential Development project which is located on the southwest corner of Forbes Avenue and Miramar Avenue in the City of Claremont. As per the project site plan, a total of 56 single-family dwelling units (SFDU) are proposed. For the purpose of a conservative analysis, a total of 58 single-family dwelling units were analyzed given that is the stated maximum allowable density as per the *La Puerta School Site Specific Plan*. In addition to this, given the lot configurations on the project site, it is anticipated that up to 10 accessory dwelling units (ADUs) would be constructed throughout the plan area. Based on the Institute of Transportation Engineers, *Trip* Generation 11th Edition trip generation rates, the project would generate 612 daily trips including 45 AM peak hour and 60 PM peak hour trips.

The study area intersections listed in *Section 2.2 – Study Area and Analysis Scenarios* were evaluated during the AM and PM peak hours, which are defined as the hours with the highest traffic volumes during the 7 AM to 9 AM and 4 PM to 6 PM peak commute periods. AM and PM peak hour traffic operations were evaluated for the following scenarios:

- Existing Condition
- Opening Year 2023 Without Project
- Opening Year 2023 With Project
- Horizon Year 2040 Without Project
- Horizon Year 2040 With Project

The proposed development was evaluated to result in satisfactory LOS operations with the addition of the project to all baseline conditions. No improvements are recommended in this TIA as the study intersections would operate at satisfactory LOS with the project per the intersection operations evaluation.

Vehicle Miles Travelled (VMT) Analysis Results

The proposed development would have a less than significant impact on VMT in the baseline and cumulative conditions. The year 2022 project VMT per service population would be 24.8, which is 14.79 percent below the City's threshold of 29.1. The Cumulative project VMT per service population would be 25.6, which is 6.04 percent below the City's threshold of 27.2. Therefore, the project would have a less than significant impact on VMT. The project would also have a less than significant Cumulative impact when the project's effect on VMT is considered as the cumulative (2040) Citywide roadway VMT would be reduced from 1,227,535 without the project to 1,225,243 with the project. Citywide VMT per Service Population would be reduced from 19.74 to 19.65.

2 INTRODUCTION

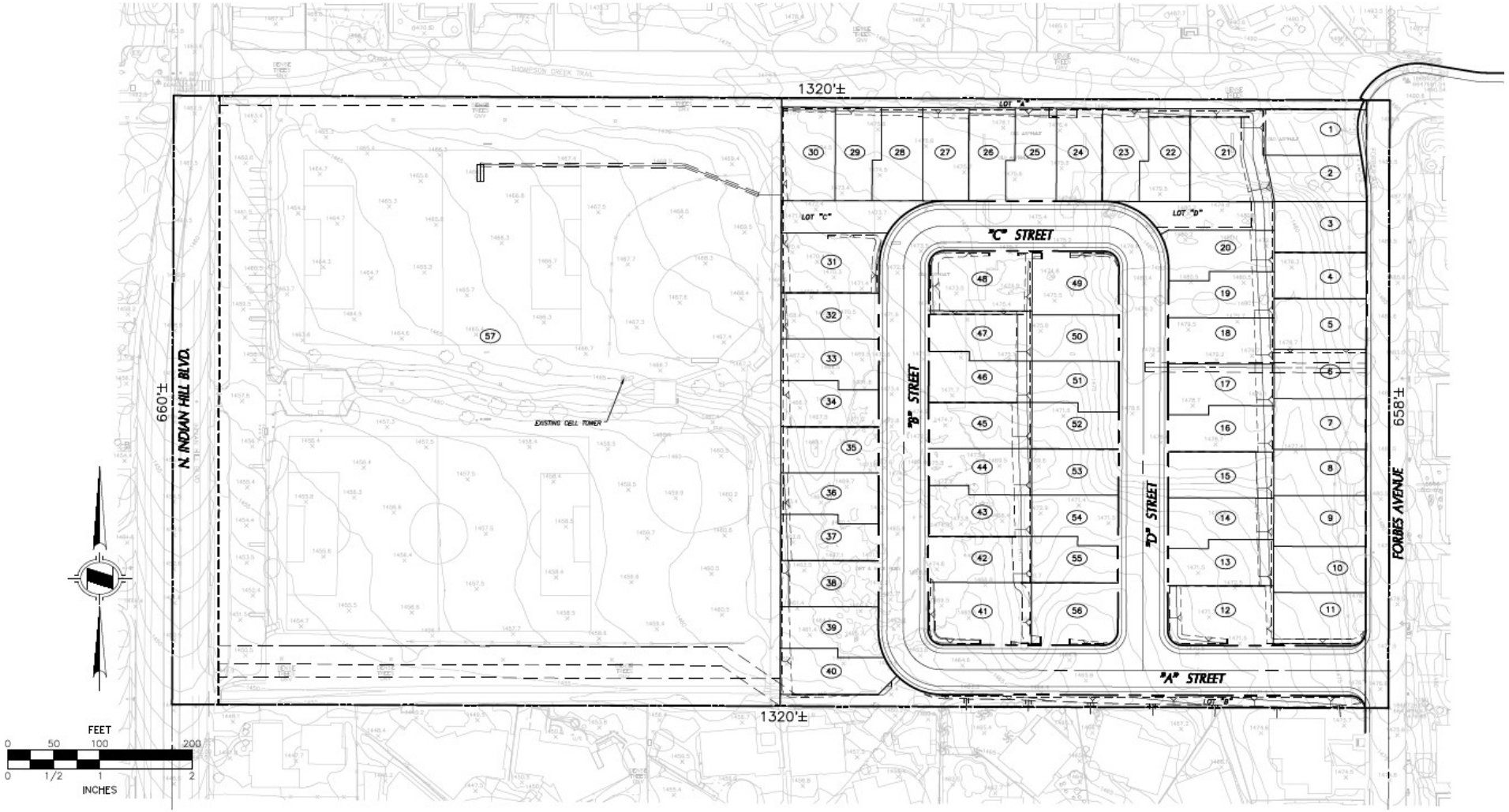
This Traffic Impact Analysis (TIA) has been prepared by EPD Solutions, Inc. (EPD) to analyze the potential transportation-related impacts of the proposed La Puerta School Site Residential Development project (proposed project). The scope of work for this TIA was reviewed and approved by the City of Claremont (City) and is provided in *Appendix A*. The TIA was prepared according to the approved scope of work using methodologies and significance criteria consistent with the requirements of the City of Claremont General Plan and the City's Transportation Impact Analysis Preparation Guide for Vehicle Miles Traveled and Level of Service Assessment.

2.1 Project Description

The proposed project is located on a vacant site on the southwest corner of Forbes Avenue and Miramar Avenue in the City of Claremont. The location of the project is shown in Figure 1 - Project Location, and the project site plan is shown in Figure 2 – Project Site Plan. As per the project site plan, a total of 56 single-family dwelling units (SFDU) are proposed. For the purpose of a conservative analysis, a total of 58 single-family dwelling units were analyzed given that is the stated maximum allowable density as per the *La Puerta School Site Specific Plan*. In addition to this, given the lot configurations on the project site, it is anticipated that up to 10 accessory dwelling units (ADUs) would be constructed throughout the plan area. Project site access will be provided by a full access driveway on Forbes Avenue.

Figure 1: Project Location

Figure 2: Project Site Plan



2.2 Study Area and Analysis Scenarios

The following study area signalized and unsignalized intersections were included in the analysis. The location of the study area intersections is shown on Figure 3 – Project Study Area. The lane geometry for the study area intersections is shown on Figure 4 – Project Study Area Lane Geometry.

1. Towne Avenue (NS) at Base Line Road (EW)
2. Mountain Avenue (NS) at Base Line Road (EW)
3. Indian Hill Boulevard (NS) at Base Line Road (EW)
4. Forbes Ave (NS) at Miramar Avenue (ES)
5. Forbes Avenue (NS) at Project Driveway (EW)
6. Forbes Avenue (NS) at Base Line Road (EW)
7. Bonnie Brae Avenue (NS) at Miramar Avenue (EW)
8. Bonnie Brae Avenue (NS) at Base Line Road (EW)
9. Mills Avenue (NS) at Miramar Avenue (EW) Mills
10. Mills Avenue (NS) at Base Line Road (EW)

Study area intersections were evaluated during the AM and PM peak hours, which are defined as the hour with the highest traffic volumes during the 7 AM to 9 AM and 4 PM to 6 PM peak commute periods. AM and PM peak hour traffic operations were evaluated for the following scenarios:

- Existing Condition
- Opening Year 2024 Without Project
- Opening Year 2024 With Project
- Horizon Year 2040 Without Project
- Horizon Year 2040 With Project

Traffic counts at the existing study area intersections and ADT at study roadway segments were collected on April 14, 2022. Due to an error during the original count collection, counts at the intersection of Bonnie Brae Avenue at Miramar Avenue and Bonnie Brae Avenue at Base Line Road were collected on June 30, 2022 for PM peak hour counts, and June 31, 2022 for AM peak hour counts. Counts at the intersections of Forbes Avenue at Base Line Avenue, Mills Avenue at Miramar Avenue and Mills Avenue at Baseline Avenue were also collected again during the same periods on June 30 and 31 for the purposes of comparison to the original counts collected on April 14, 2022. It was noted that the AM peak hour counts were higher during the April data collection than in June. A conversion factor of 24% for the AM peak hour and a factor of 2% for the PM peak hour was obtained for the intersections of Bonnie Brae Avenue at Miramar Avenue and Bonnie Brae Avenue at Base Line Road to escalate counts to be consistent with the original date of collection. The existing intersection turn movement count sheets are provided in *Appendix B*. The derivation of conversion factors for Bonnie Brae Avenue at Miramar Avenue and Bonnie Brae Avenue at Base Line Road is also attached in *Appendix B* for reference.

Forecast traffic volumes for the Opening Year 2024 conditions were developed by applying a growth rate of 0.43 percent to the 2022 traffic counts and adding traffic from nearby cumulative (approved and not yet built and those under review) development projects. The ambient growth rate was determined using observed growth in the project area from the SCAG model. The growth rate derivation using the SCAG model is provided in *Appendix C*. It is to be noted that the SCAG model does not provide accurate volume depiction on local streets north of Base Line Rd which are represented by centroid connectors in the model. Hence, only the daily volumes along intersections

on Base Line Rd that had all four legs of the intersection in the model were used to derive the observed growth rate. Cumulative development projects included in the Opening Year 2024 Without Project as well as Opening Year 2024 With Project analysis scenarios were provided by the City of Claremont Planning Department.

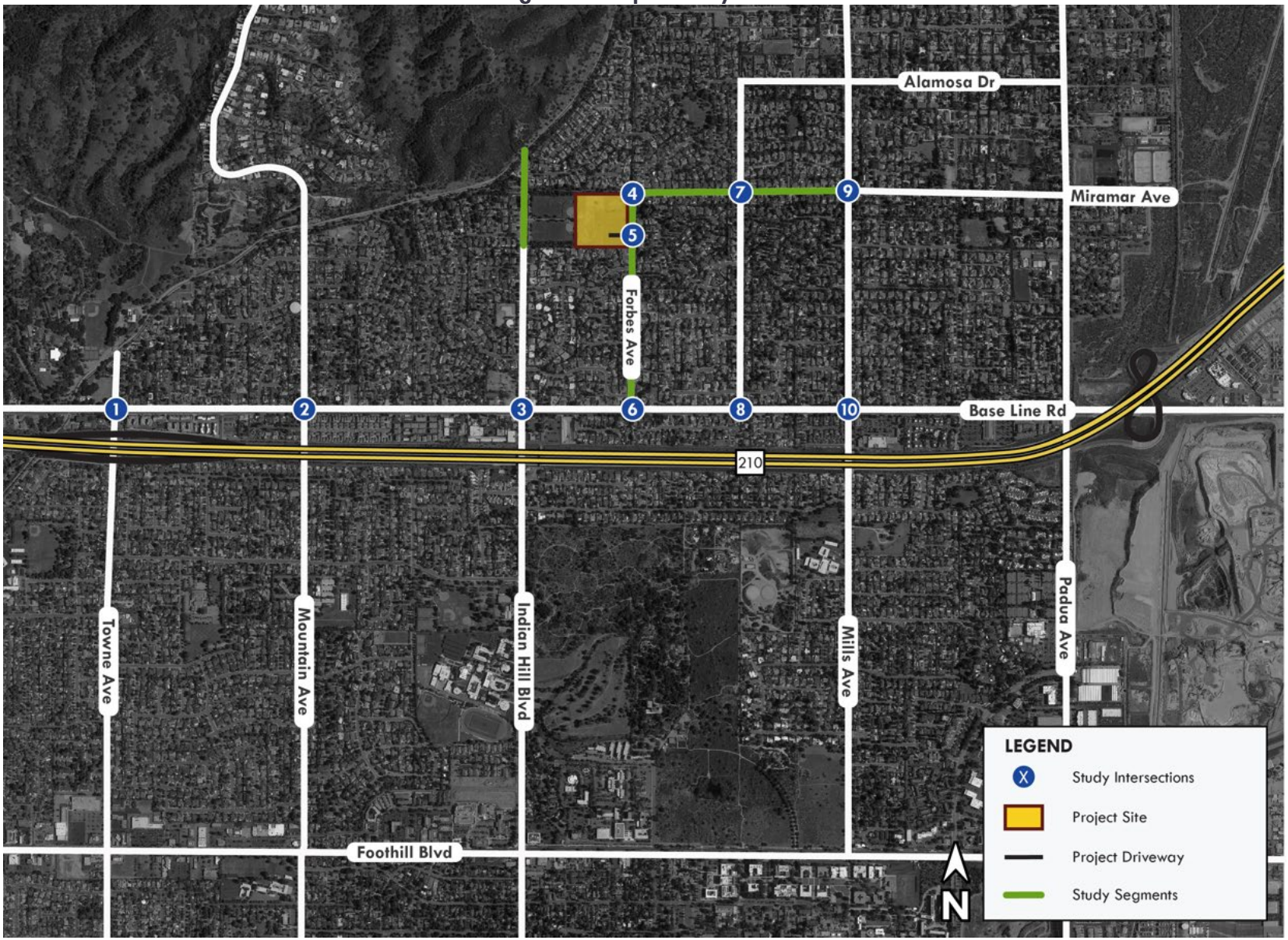
Horizon Year (2040) traffic volumes were developed by deriving growth rate per year using base year 2012 and forecast volumes for 2040 using the SCAG model. The link volumes obtain using the SCAG model were then post processed to obtain turning movement volumes using the Iterative Directional Volume Estimation Method from NCHRP Report 225. As noted above, the SCAG model does not provide accurate volume depiction on local streets north of Base Line Rd represented by centroid connectors. For this reason, the derived growth rate of 0.43 percent per year was applied to the existing intersection counts for the local street intersections (i.e., intersections #4, #5, #7, #9) during post processing to obtain Horizon Year intersection volumes. Please note that although individual turning movement volumes for the Horizon Year forecast may appear lower as compared to the existing volumes, the overall intersection volume is higher in the Horizon Year as compared to the Existing and Opening Year conditions. The Horizon Year volumes are provided in *Appendix D*.

The following roadway segments were evaluated for vehicle traffic, pedestrian volumes and bike volumes given the proximity to Thompson Creek Trail and are discussed in *Section 6 – Local Safety Assessment* of this TIA:

1. Forbes Avenue between Miramar Avenue and Base Line Road
2. Miramar Avenue between Forbes Avenue and Mills Avenue
3. Indian Hill Boulevard between Armstrong Drive and Mt Carmel Drive

The ADT volume counts for the roadway segments were collected on April 14, 2022 along with the intersection turn movements and are attached in *Appendix B* for reference.

Figure 3: Project Study Area



2.3 Methodology

Intersection operations are evaluated using Level of Service (LOS), which is a measure of the delay experienced by drivers on a roadway facility. LOS A indicates free-flow traffic conditions and is generally the best operating conditions. LOS F is an extremely congested condition and is the worst operating condition from the driver's perspective. In this report, LOS at signalized and unsignalized intersections is calculated using the Highway Capacity Manual (HCM), 6th Edition methodology.

LOS at signalized intersections is defined in terms of the weighted average control delay for the intersection as a whole. Control delay is a measure of the increase in travel time that is experienced due to traffic signal control and is expressed in terms of average control delay per vehicle (in seconds). Control delay is determined based on the intersection geometry and volume, signal cycle length, phasing and coordination along the arterial corridor. Table 1 shows the relationship between control delay and LOS.

Table 1. Relationship between Control Delay and LOS at a Signalized Intersection

LOS	Delay (Seconds per Vehicle)
A	≤ 10
B	>10 – 20
C	>20 – 35
D	>35 – 55
E	>55 – 80
F	>80

Unsignalized intersections are categorized as either all-way stop control (AWSC) or two-way stop control (TWSC). LOS at AWSC intersections is determined by the weighted average control delay of the overall intersection. The HCM TWSC intersection methodology calculates LOS based on the delay experienced by drivers on the minor (stop-controlled) approaches to the intersection. For TWSC intersections, LOS is determined for each minor-street movement, as well as the major-street left-turns. The relationship between delay and LOS at Unsignalized intersections is shown in Table 2.

Table 2. Relationship between Delay and LOS an Unsignalized Intersection

LOS	Delay (seconds)
A	0-10
B	>10 – 15
C	>15 – 25
D	>25 – 35
E	>35 – 50
F	>50

2.4 Significance Criteria

The City of Claremont has established the following circulation system performance criteria for intersections' LOS during peak hours:

Table 3. Circulation System Performance Criteria

Major Arterial	LOS E MINIMUM ACCEPTABLE OPERATIONS
Secondary Arterial	LOS D MINIMUM ACCEPTABLE OPERATIONS
Rural Secondary Arterial	LOS D MINIMUM ACCEPTABLE OPERATIONS
Collector	LOS C MINIMUM ACCEPTABLE OPERATIONS
Local Street	LOS B MINIMUM ACCEPTABLE OPERATIONS

The function roadway classification for streets in Claremont as obtained for the City of Claremont General Plan is provided in *Appendix E*. The following LOS thresholds for signalized and unsignalized intersections are per the City's Transportation Study Guidelines for determining and providing project traffic impacts.

Signalized intersections will require improvements if one of the following conditions is met:

Any study intersection that is operating at a minimum level of service as stated in Table 3 or better for any study scenario without project traffic in which the addition of project traffic causes the intersection to degrade operation, shall improve the deficiency so as to bring the intersection back to at least a minimum acceptable LOS as shown in Table 3.

Any study intersection that is operating at an existing deficient LOS for any study scenario without project traffic shall improve any deficiencies so as to bring the intersection back to the overall level of delay established prior to project traffic being added.

Unsignalized intersections will require improvements if both of the following conditions are met:

A deficient intersection requires improvements if the study determines that either section a) or both sections b) and c) occur.

a) The addition of project related traffic causes the intersection to move from the minimum acceptable LOS or better to an unacceptable operation LOS per Table 3

OR

b) The project contributes additional traffic to an intersection that is already projected to operate at an unacceptable LOS with background traffic

AND

c) One or both of the following conditions are met:

1) The project adds ten (10) or more trips to any approach
2) The intersection meets the peak hour traffic signal warrant after the addition of project traffic.

3 BASELINE CONDITIONS

This section discusses the baseline (without project) conditions. Baseline conditions are those conditions that exist within the study area in the existing condition and that are forecast to occur in the future, without the proposed project.

3.1 Existing Transportation System

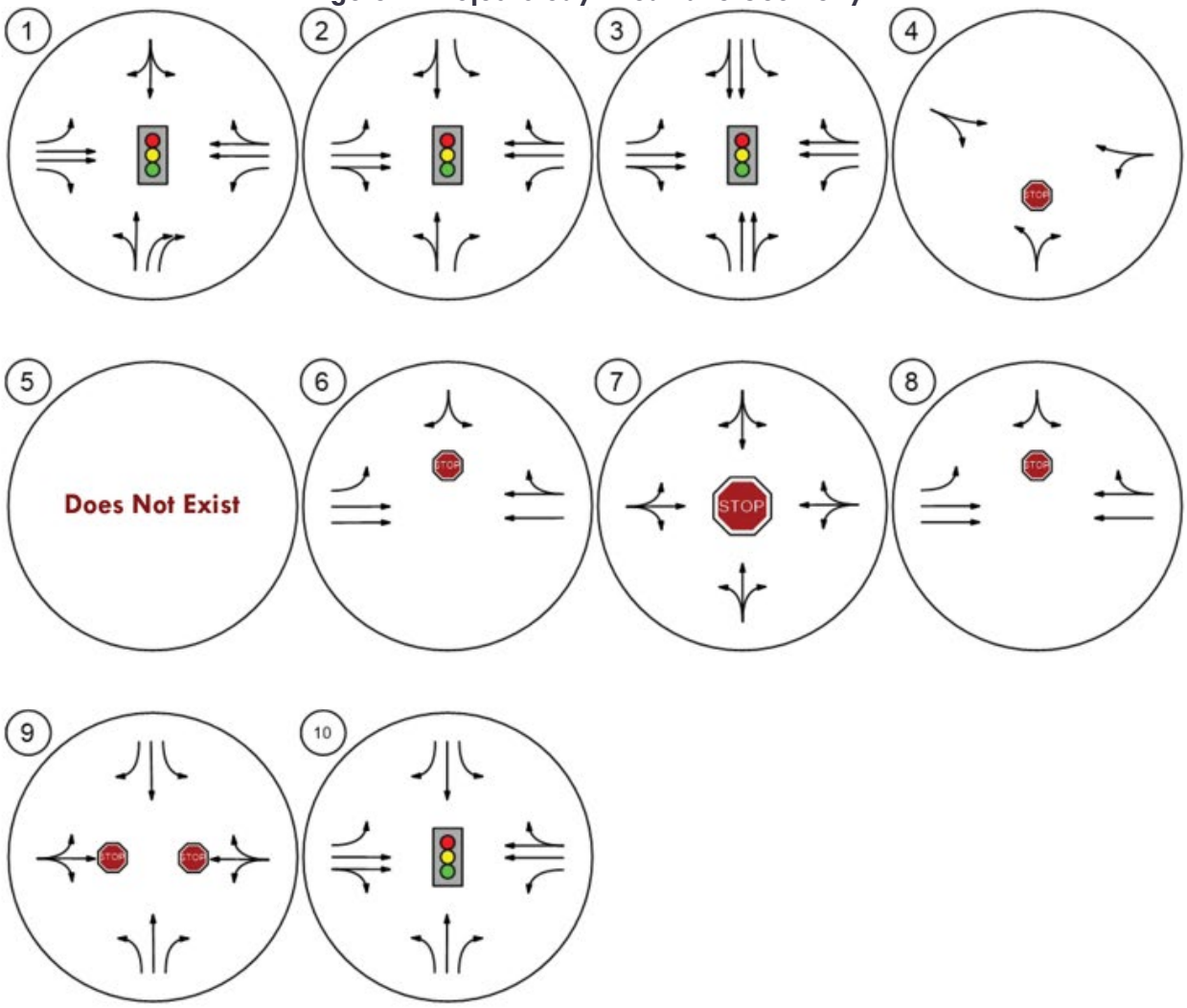
The proposed project is located on a vacant site on the southwest corner of Forbes Avenue and Miramar Avenue in the City of Claremont. Roadways providing access to the project site include Base Line Rd, Towne Ave, Mountain Ave, Indian Hill Blvd, Mills Ave, Forbes Ave, Bonnie Brae Ave, and Miramar Ave.

- Base Line Road is a four-lane east-west major arterial. The roadway is divided and portions of Base Line Road west of Mountain Avenue include a raised median. On-street parking is prohibited, it has a speed limit of 45 MPH.
- Towne Avenue is a four-lane major arterial with median. On-street parking is prohibited, it has a speed limit of 40 MPH.
- Mountain Avenue is a two-lane secondary arterial with on-street parking permitted, it has a speed limit of 35 MPH.
- Indian Hill Boulevard is a two-lane secondary arterial with on-street parking permitted, it has a speed limit of 40 MPH.
- Mills Avenue is a two-lane north-south secondary arterial with on-street parking permitted, it has a speed limit of 40 MPH.
- Forbes Avenue is a two-lane north-south residential local street with on-street parking permitted, it has a speed limit of 25 MPH.
- Bonnie Brae Avenue is a two-lane north-south residential local street with on-street parking permitted, it has a speed limit of 25 MPH.
- Miramar Avenue is a two-lane east-west residential local street with on-street parking permitted, it has a speed limit of 25 MPH.

The study area intersections as well as their lane geometry are shown on Figure 4 – Project Study Area Lane Geometry.

Although Forbes Avenue at Miramar Avenue is represented as an intersection in Figure 4, it should be noted that Forbes Avenue at Miramar Avenue is in fact a knuckle with no existing traffic control. This TIA analyzes Forbes Avenue at Miramar Avenue as an intersection at the request of the City to take into account the existing pedestrian and bike volumes that access the Thompson Creek Trail during peak hours. The EB leg has been assumed to be stop controlled at Forbes Avenue at Miramar and represents the trail connection at this knuckle. For the purpose of LOS analysis, the existing bike volumes have been included to represent the traffic volume on this leg to obtain conservative LOS results. Pedestrian volumes have been input into the analysis as consistent with LOS analysis methodology through this intersection and all intersections analyzed in this TIA.

Figure 4: Project Study Area Lane Geometry



3.2 Existing Traffic Volumes and Levels of Service

Traffic counts at the existing study area intersections shown in Figure 3 – Project Study Area, were collected on April 14, 2022. Due to an error during the original count collection, counts at the intersection of Bonnie Brae Avenue at Miramar Avenue and Bonnie Brae Avenue at Base Line Road were collected on June 30, 2022 for PM peak hour counts, and June 31, 2022 for AM peak hour counts as previously described in *Section 2.2 Study Area and Analysis Scenarios*. It was noted that the April counts were higher than the June counts, therefore, a conversion factor of 24% for the AM peak hour and a factor of 2% for the PM peak hour was applied to the intersections of Bonnie Brae Avenue at Miramar Avenue and Bonnie Brae Avenue at Base Line Road to escalate counts to the original date of collection. Intersection turn movement count sheets are provided in *Appendix B*. Existing AM and PM peak hour traffic volumes are shown on Figure 5 – Existing AM Peak Hour Traffic Volumes and on Figure 6 – Existing PM Peak Hour Traffic Volumes. The existing Levels of Service at the existing study area intersections were determined using the HCM methodology, described previously in *Section 2.3 Methodology*. Table 4 shows the existing AM and PM peak hour levels of service at study area intersections. All LOS calculations are provided in *Appendix F*. As shown in Table 4, all study area intersections operate at satisfactory LOS or better during the AM and PM peak hours in the existing (2022) condition.

Table 4. Existing AM and PM Peak Hour Levels of Service

Intersection		Traffic Control	Threshold of Significance	AM Peak		PM Peak	
				Delay[1]	LOS[2]	Delay[1]	LOS[2]
1.	Towne Ave/Base Line Rd	Signal	E	36.2	D	43.4	D
2.	Mountain Ave/Base Line Rd	Signal	E	20.6	C	20.2	C
3.	Indian Hill Blvd/Base Line Rd	Signal	E	25.9	C	24.1	C
4.	Forbes Ave/Miramar Ave	TWSC	B	9.7	A	9.6	A
5.	Forbes Ave/Proj Dwy	TWSC	B	-	-	-	-
6.	Forbes/Base Line Rd	TWSC	E	22.5	C	17.5	C
7.	Bonnie Brae Ave/Miramar Ave	AWSC	B	7.3	A	7.2	A
8.	Bonnie Brae Ave/Base Line Rd	TWSC	E	22.6	C	16.9	C
9.	Mills Ave/Miramar Ave	TWSC	D	16.0	C	12.4	B
10.	Mills Ave/Base Line Rd	Signal	E	22.2	C	20.5	C

=Unsatisfactory Level of Service

TWSC = Two-Way Stop Control

AWSC = All-Way Stop Control

[1] Delay in Seconds

[2] Level of Service

Figure 5: Existing AM Peak Hour Traffic Volumes

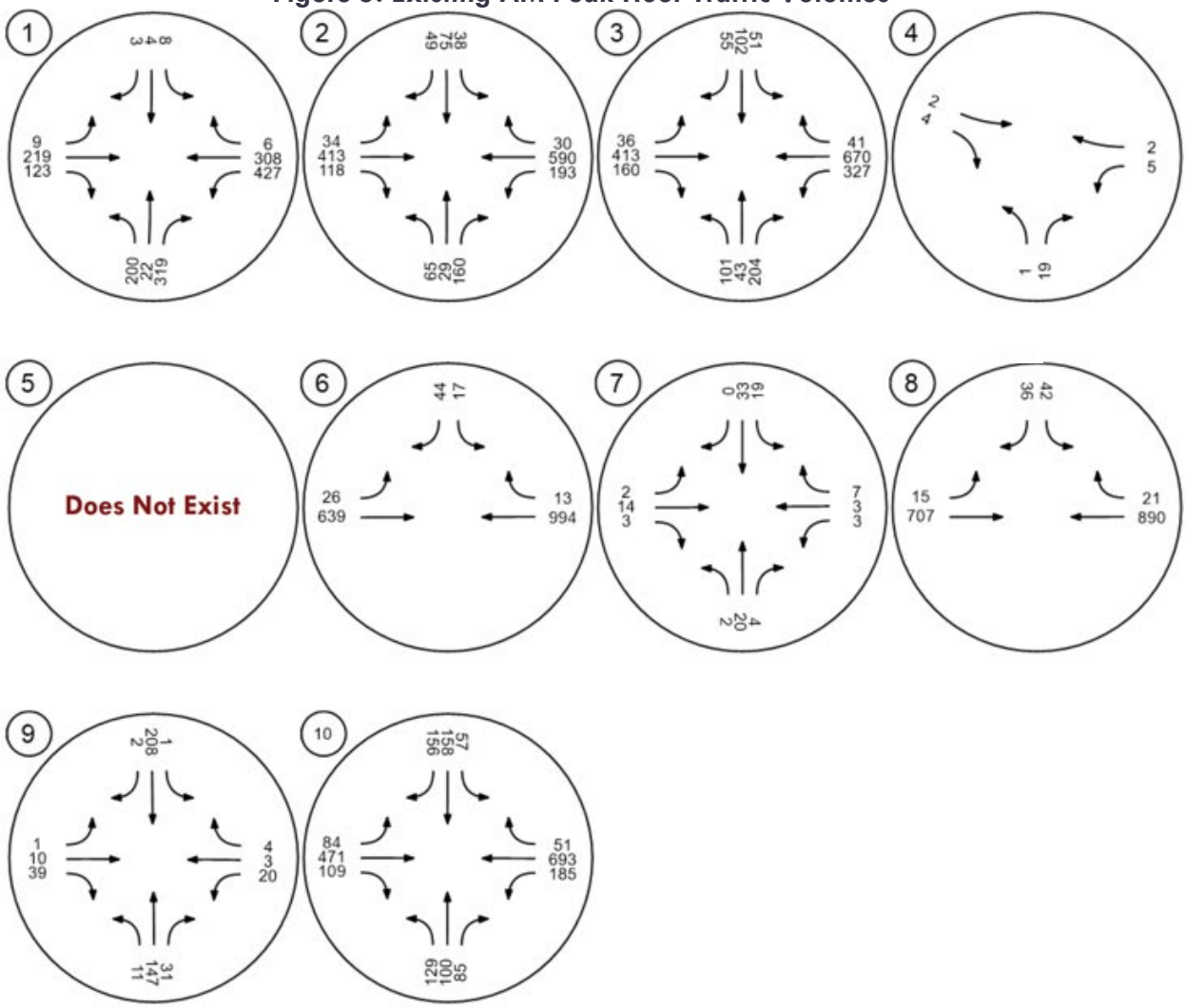
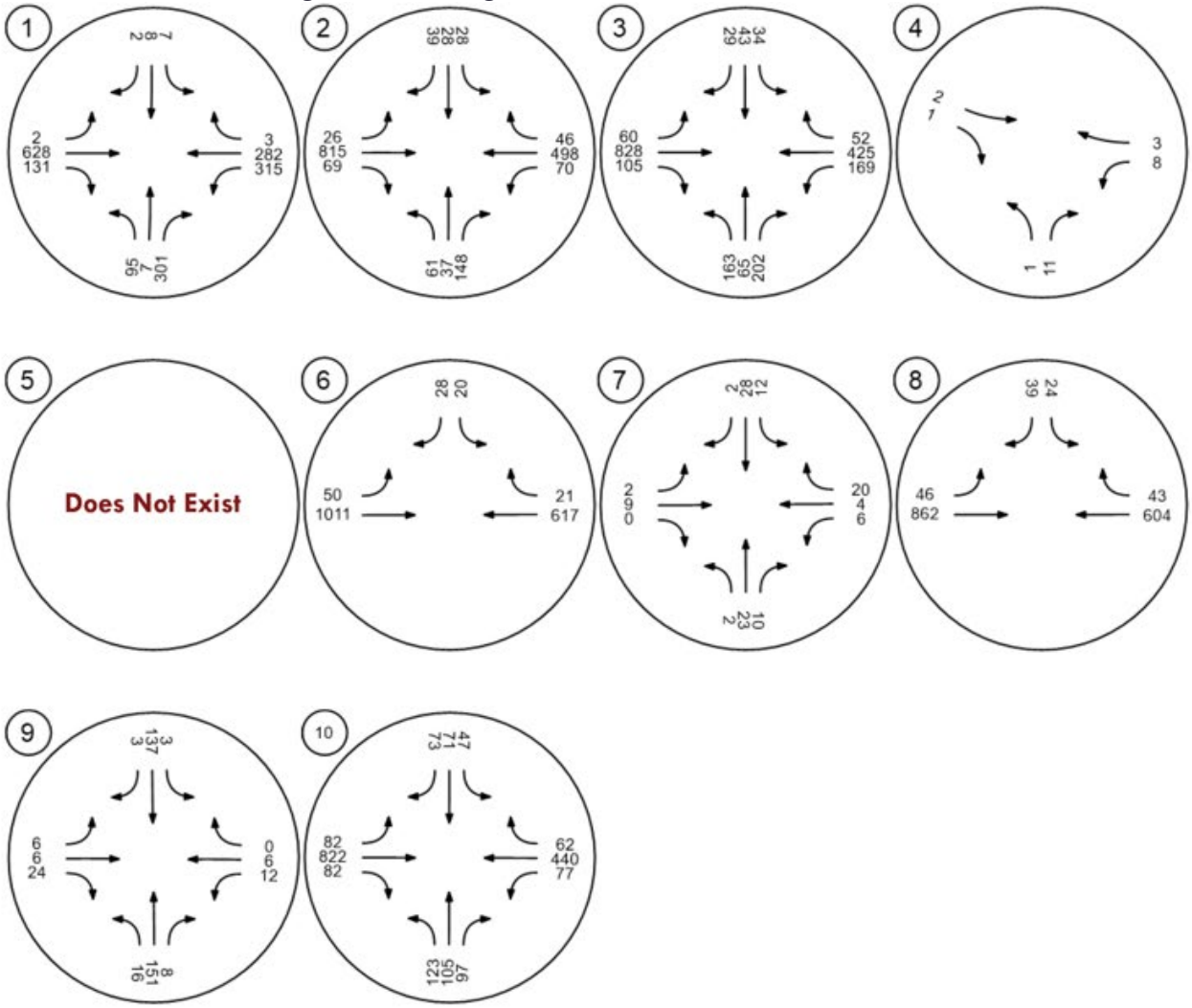


Figure 6: Existing PM Peak Hour Traffic Volumes



3.3 Project Opening Year 2024 Baseline Traffic Volumes and Levels of Service

Project Opening Year 2024 Baseline traffic volumes were developed by applying a growth rate of 0.43 percent per year to the existing (2022) traffic volumes and adding traffic generated by other approved and pending development projects. A total of 11 projects in the City of Claremont were included in the Project Completion (Year 2024) Baseline. The location of the cumulative projects is shown in Figure 7 – Location of Cumulative Projects. The project trip generation for each cumulative project was calculated using trip rates from the Institute of Transportation Engineers, *Trip* Generation, 11th Edition. Table 5 shows the trip generation for each of the cumulative projects.

The traffic volumes generated by the cumulative projects were distributed to the study area intersections based on logical routes of travel and are illustrated in Figure 8 – Cumulative Projects AM Peak Hour Trip Assignment and Figure 9 – Cumulative Projects PM Peak Hour Trip Assignment. As noted in *Section 2.2 – Study Area and Analysis Scenarios*, forecast traffic volumes for the Project Completion (Year 2024) Baseline condition were developed by applying a growth rate of 0.43 percent per year to the 2022 traffic counts and adding traffic from cumulative projects. The Project Completion (Year 2024) Baseline traffic volumes are illustrated in Figure 10 – Project Completion AM Peak Hour Traffic Volumes and Figure 11 – Project Completion PM Peak Hour Traffic Volumes.

The Project Completion (Year 2024) Baseline levels of service (LOS) at the ten existing study area intersections were determined using the HCM methodology, described previously in *Section 2.3 - Methodology*. All LOS calculations are provided *in Appendix F*. Table 5 shows the Project Completion (Year 2024) Baseline AM and PM peak hour levels of service at study area intersections. As shown in Table 6, all study area intersections operate at satisfactory LOS or better during the AM and PM peak hours in the Project Completion (Year 2024) Baseline condition.

Figure 7: Location of Cumulative Projects

Table 5. Cumulative Projects Trip Generation

Land Use	Units	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Trip Rates								
Musuem[1]	TSF	N/A[12]	0.24	0.04	0.28	0.03	0.15	0.18
Single-Family Detached Housing[2]	DU	9.43	0.18	0.52	0.70	0.59	0.35	0.94
Single-Family Attached Housing[3]	DU	7.20	0.15	0.33	0.48	0.32	0.25	0.57
Multifamily Housing (Low-Rise)[4]	DU	6.74	0.10	0.30	0.40	0.32	0.19	0.51
Hotel[5]	Rooms	7.99	0.26	0.20	0.46	0.30	0.29	0.59
University/College[6]	Students	1.56	0.12	0.03	0.15	0.05	0.10	0.15
Senior Adult Housing - Single-Family[7]	DU	4.31	0.08	0.16	0.24	0.18	0.12	0.30
Automobile Sales (New)[8]	TSF	27.84	1.36	0.50	1.86	0.97	1.45	2.42
High-Turnover (Sit-Down) Restaurant[9]	TSF	107.20	5.26	4.31	9.57	5.52	3.53	9.05
Shopping Plaza (40-150k)[10]	TSF	94.49	2.19	1.34	3.53	4.33	4.70	9.03
General Office Building[11]	TSF	10.84	1.34	0.18	1.52	0.24	1.20	1.44
City of Claremont								
1. Pomona College 2015 Master Plan								
Museum[1]	30 TSF	N/A[12]	7	1	8	1	5	6
2. Mt San Antonio Gardens Master Plan								
Single-Family Detached Housing[2]	17 DU	160	3	9	12	10	6	16
Multifamily Housing (Low-Rise)[4]	38 DU	256	4	12	16	12	7	19
3. Old School House Specific Plan								
Single-Family Attached Housing[3]	126 DU	907	19	42	61	41	31	72
4. Knight's Inn Redevelopment								
Hotel[5]	121 Rooms	967	31	24	55	36	35	71
5. Claremont McKenna College Master Plan								
University/College[6]	250 Students	390	29	8	37	12	26	38
6. Clara Oaks Residential Development								
Single-Family Detached Housing[2]	40 DU	377	7	21	28	24	14	38
7. Senior Low Income Housing								
Senior Adult Housing - Single-Family[7]	15 DU	65	1	2	3	3	2	5
8. Residential Development								
Single-Family Detached Housing[2]	13 DU	123	2	7	9	8	5	12
9. Claremont McKenna College Master Plan								
University/College[6]	68 Students	641	12	35	48	40	24	64
10. Claremont Mazda								
Automobile Sales (New)[8]	30 TSF	835	41	15	56	29	44	73

11. South Village Development								
Single-Family Detached Housing[2]	610 DU	5752	111	316	427	361	212	573
Single-Family Detached Housing[2]	103 DU	971	19	53	72	61	36	97
Single-Family Attached Housing[3]	21 DU	151	3	7	10	7	5	12
High-Turnover Restaurant[9]	34 TSF	3645	179	146	325	188	120	308
Shopping Plaza (40-150k)[10]	52 TSF	4913	114	70	184	225	244	469
General Office Building[11]	26 TSF	282	35	5	40	6	31	37

TSF = Thousand Square Feet

DU = Dwelling Units

[1] Trip rates from the Institute of Transporation Engineers, *Trip Generation, 11th Edition,* 2021, Land Use Code 580-Museum.

[2] Trip rates from the Institute of Transporation Engineers, *Trip Generation, 11th Edition* , 2021, Land Use Code 210-Single-Family Detached Housing.

[3] Trip rates from the Institute of Transporation Engineers, *Trip Generation, 11th Edition* , 2021, Land Use Code 215-Single-Family Attached Housing.

[4] Trip rates from the Institute of Transporation Engineers, *Trip Generation* , 11th Edition, 2021, Land Use Code 220-Multifamily Housing (Low-Rise).

[5] Trip rates from the Institute of Transporation Engineers, Trip Generation, 11th Edition, 2021, Land Use Code 310-Hotel.

[6] Trip rates from the Institute of Transporation Engineers, *Trip Generation, 11th Edition* , 2021, Land Use Code 550-University/College.

[7] Trip rates from the Institute of Transporation Engineers, *Trip Generation, 11th Edition* , 2021, Land Use Code 251-Senior Adult Housing - Single-Family.

[8] Trip rates from the Institute of Transporation Engineers, *Trip Generation, 11th Edition* , 2021, Land Use Code 840-Automobile Sales (New).

[9] Trip rates from the Institute of Transporation Engineers, *Trip Generation, 11th Edition* , 2021, Land Use Code 932-High-Turnover (Sit-Down) Restaurant.

[10] Trip rates from the Institute of Transporation Engineers, *Trip Generation, 11th Edition* , 2021, Land Use Code 821-Shopping Plaza (40-150k).

[11] Trip rates from the Institute of Transporation Engineers, *Trip Generation, 11th Edition* , 2021, Land Use Code 710-General Office Building.

[12] The Institute of Transporation Engineers, *Trip Generation, 11th Edition, 2021,* does not provide a daily trip rate for this land use.

Figure 8: Cumulative Projects AM Peak Hour Trip Assignment

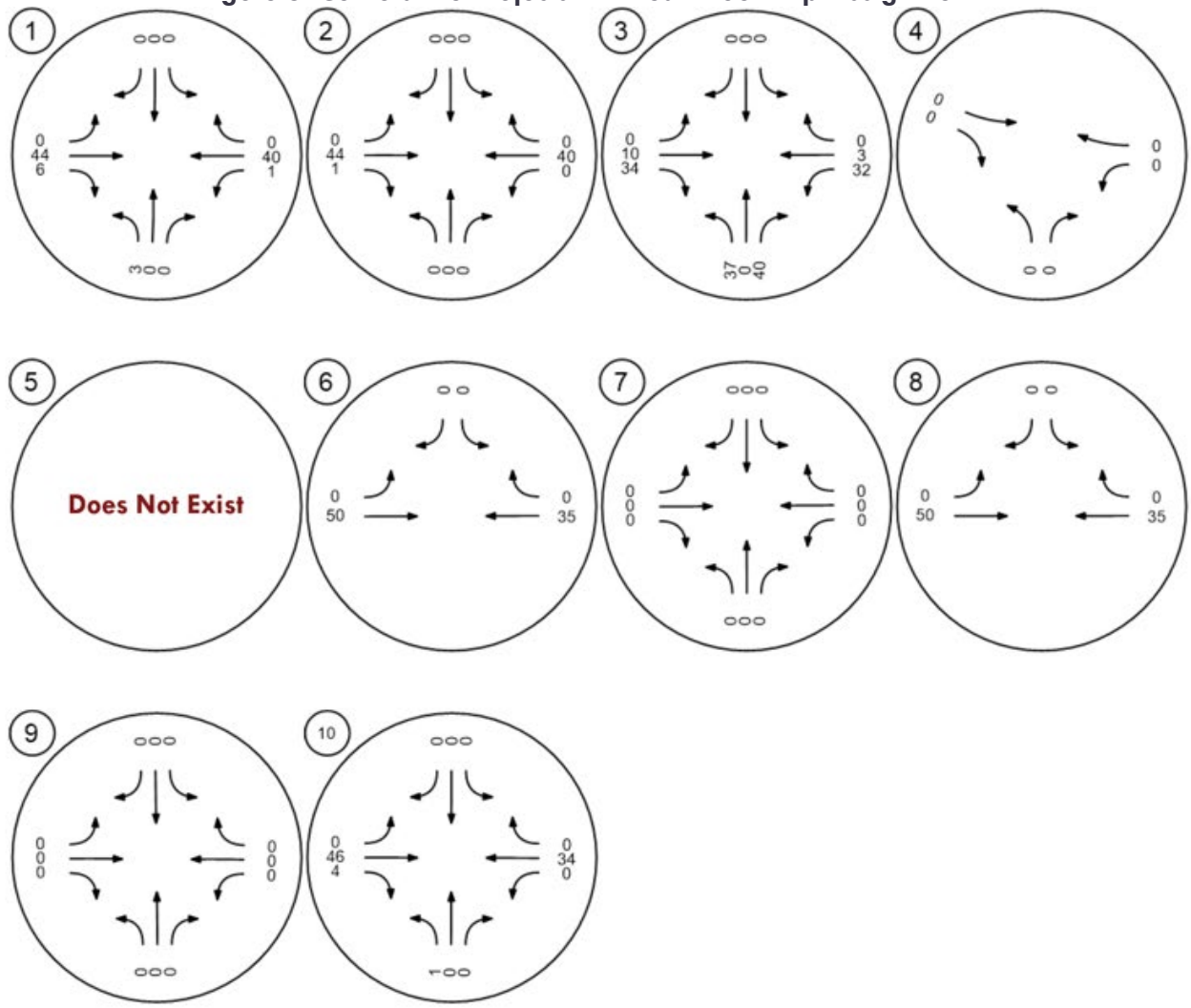


Figure 9: Cumulative Projects PM Peak Hour Trip Assignment

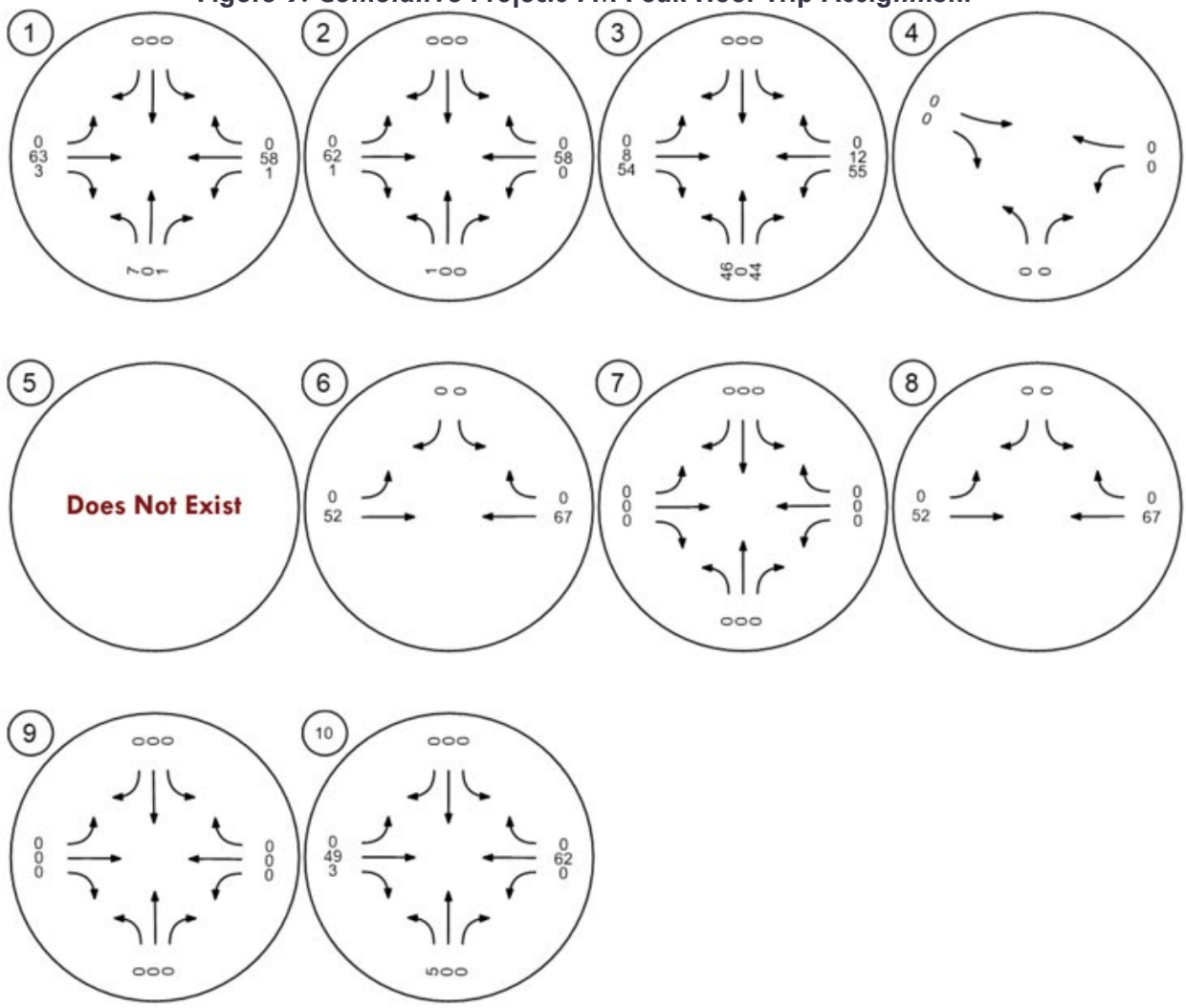


Table 6. Project Completion (Year 2024) Baseline AM and PM Peak Hour Levels of Service

	Intersection	Traffic Control	Threshold of Significance	AM Peak		PM Peak	
				Delay[1]	LOS[2]	Delay[1]	LOS[2]
1.	Towne Ave/Base Line Rd	Signal	E	36.5	D	43.6	D
2.	Mountain Ave/Base Line Rd	Signal	E	20.7	C	20.3	C
3.	Indian Hill Blvd/Base Line Rd	Signal	E	26.8	C	30.2	C
4.	Forbes Ave/Miramar Ave	TWSC	B	9.7	A	9.6	A
5.	Forbes Ave/Proj Dwy	TWSC	B	-	-	-	-
6.	Forbes/Base Line Rd	TWSC	E	23.8	C	18.8	C
7.	Bonnie Brae Ave/Miramar Ave	AWSC	B	7.3	A	7.2	A
8.	Bonnie Brae Ave/Base Line Rd	TWSC	E	24.0	C	18.1	C
9.	Mills Ave/Miramar Ave	TWSC	D	16.1	C	12.4	B
10.	Mills Ave/Base Line Rd	Signal	E	22.5	C	20.7	C

=Unsatisfactory Level of Service

TWSC = Two-Way Stop Control

AWSC = All-Way Stop Control

[1] Delay in Seconds

[2] Level of Service

Figure 10: Project Completion AM Peak Hour Traffic Volumes

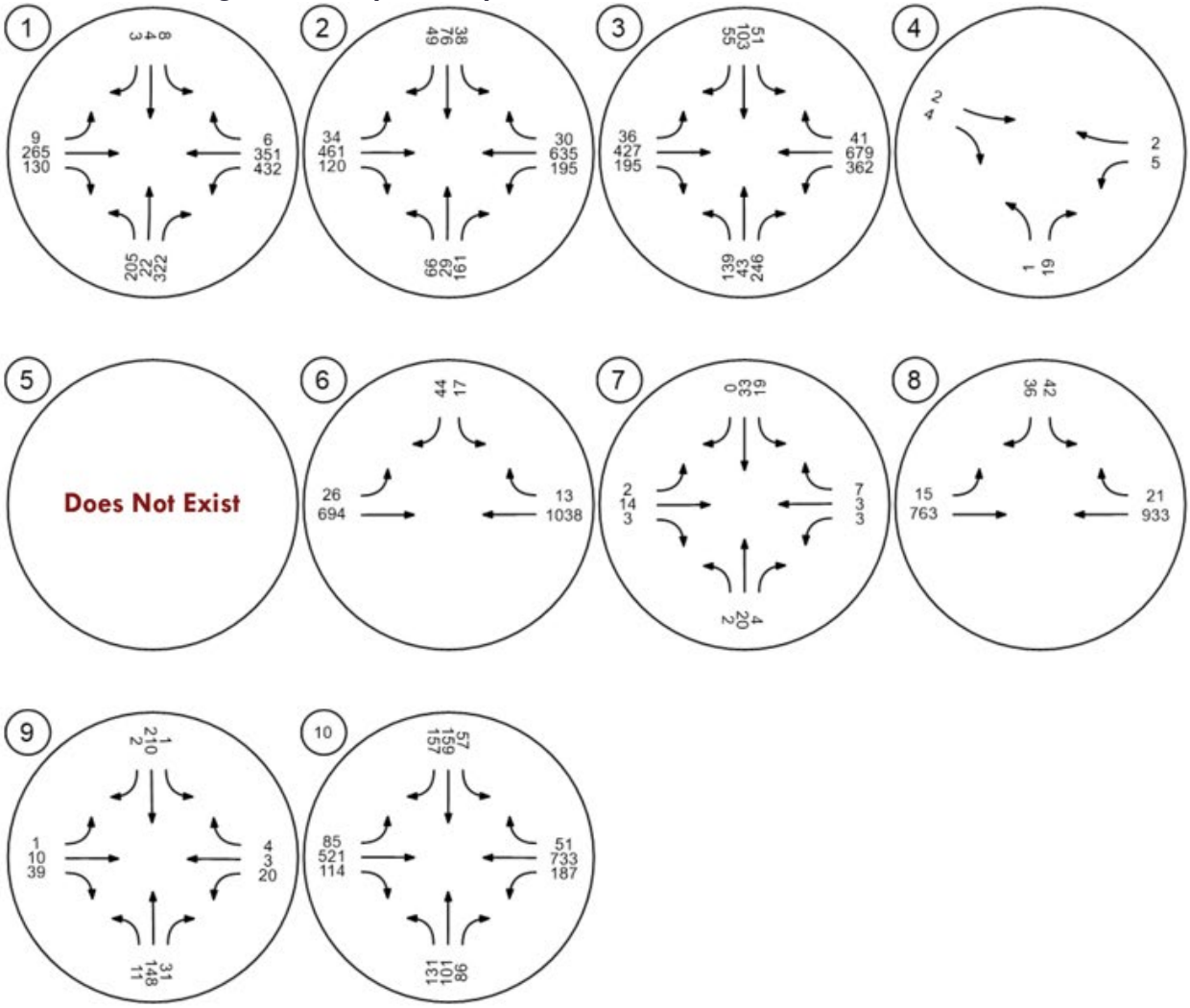
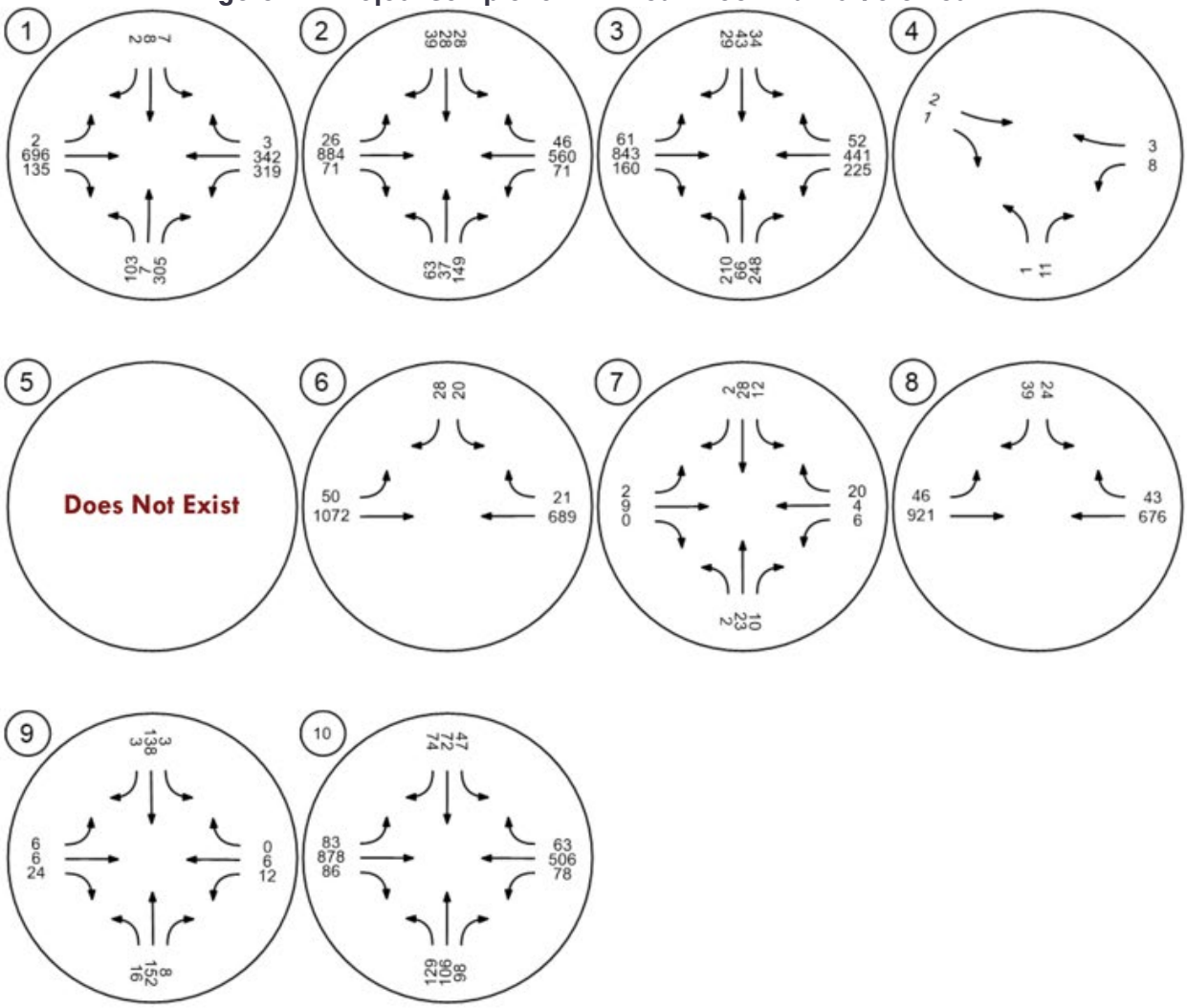


Figure 11: Project Completion PM Peak Hour Traffic Volumes



3.4 Horizon Year 2040 Baseline Traffic Volumes and Levels of Service

Horizon Year (2040) traffic volumes were developed by deriving a growth rate per year using base year 2012 and forecast volumes for 2040 using the SCAG model. The link volumes obtained using the SCAG model were then post processed to obtain turning movement volumes using the Iterative Directional Volume Estimation Method from NCHRP Report 225. As previously discussed in *Section 2.2 – Study Area and Analysis Scenarios,* the derived growth rate of 0.43 percent per year was applied to the existing intersection counts for the local street intersections (i.e., intersections #4, #5, #7, #9) during post processing to obtain Horizon Year intersection volumes. The Horizon Year volumes are provided in *Appendix D*.

The Horizon Year AM and PM peak hour traffic volumes are shown on Figure 12 – Horizon Year AM Peak Hour Traffic Volumes and on Figure 13 – Horizon Year PM Peak Hour Traffic Volumes. The existing Levels of Service at the existing study area intersections were determined using the HCM methodology, described previously in *Section 2.3 Methodology*. Table 4 shows the Horizon Year AM and PM peak hour levels of service at study area intersections. All LOS calculations are provided *in Appendix F*. As shown in Table 7, all study area intersections operate at satisfactory LOS or better during the AM and PM peak hours in the Horizon Year condition.

Table 7. Horizon Year Baseline AM and PM Peak Hour Levels of Service

	Intersection	Traffic Control	Threshold of Significance	AM Peak		PM Peak	
				Delay[1]	LOS[2]	Delay[1]	LOS[2]
1.	Towne Ave/Base Line Rd	Signal	E	38.7	D	76.4	E
2.	Mountain Ave/Base Line Rd	Signal	E	21.8	C	20.4	C
3.	Indian Hill Blvd/Base Line Rd	Signal	E	35.6	C	25.5	C
4.	Forbes Ave/Miramar Ave	TWSC	B	9.7	A	9.6	A
5.	Forbes Ave/Proj Dwy	TWSC	B	-	-	-	-
6.	Forbes/Base Line Rd	TWSC	E	20.3	C	16.5	C
7.	Bonnie Brae Ave/Miramar Ave	AWSC	B	7.2	A	7.1	A
8.	Bonnie Brae Ave/Base Line Rd	TWSC	E	19.8	C	16.0	C
9.	Mills Ave/Miramar Ave	TWSC	D	13.1	B	12.0	B
10.	Mills Ave/Base Line Rd	Signal	E	22.9	C	20.3	C

=Unsatisfactory Level of Service

TWSC = Two-Way Stop Control

AWSC = All-Way Stop Control

[1] Delay in Seconds

[2] Level of Service

Figure 12: Horizon Year AM Peak Hour Traffic Volumes

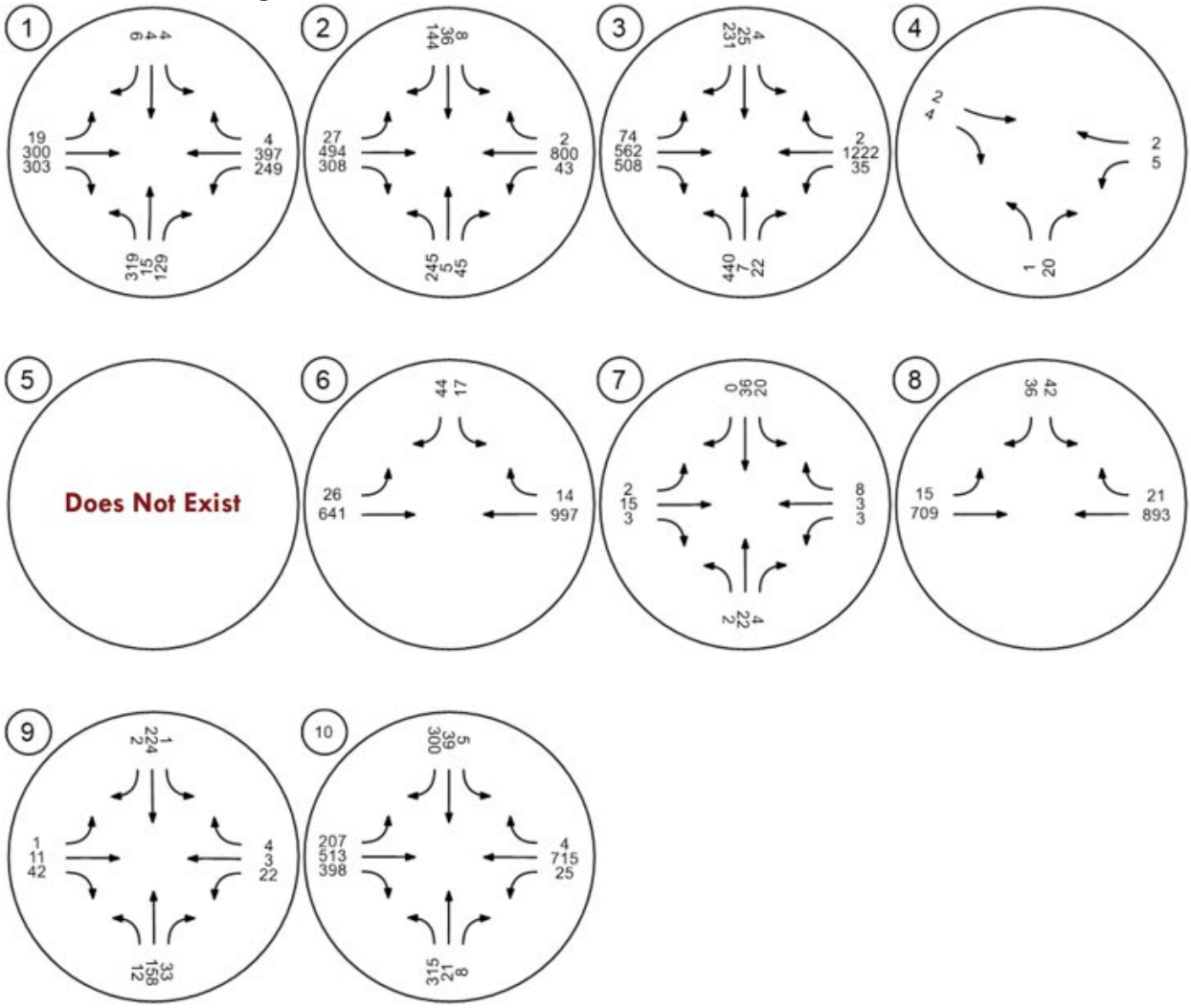
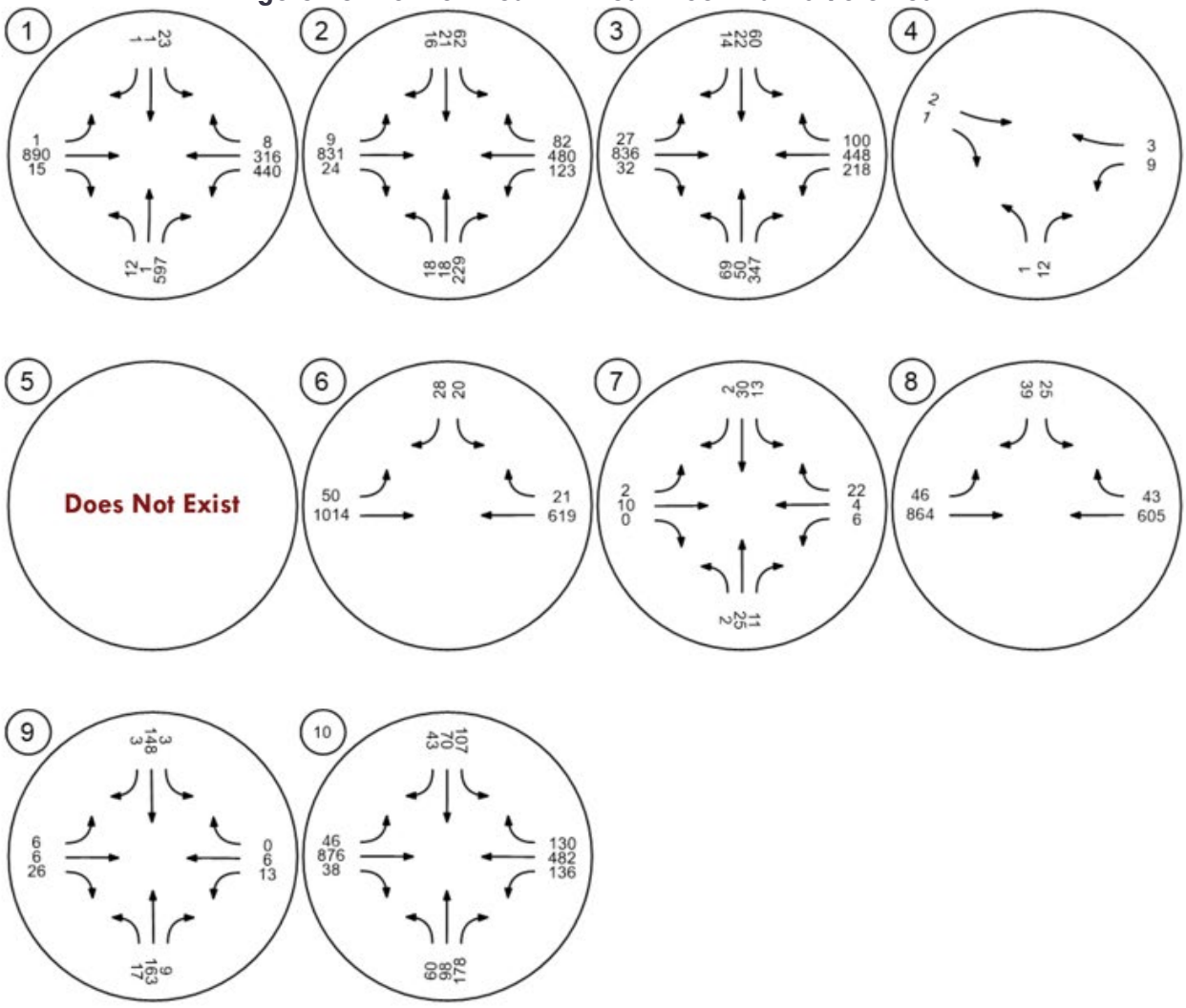


Figure 13: Horizon Year PM Peak Hour Traffic Volumes



4 PROPOSED PROJECT

4.1 Project Description and Site Access

As discussed previously in *Section 2.1 – Project Description*, the proposed project is located a vacant site on the southwest corner of Forbes Avenue and Miramar Avenue in the City of Claremont. The project comprises a total of 56 single-family dwelling units (SFDU. For the purpose of a conservative analysis, a total of 58 single-family dwelling units were analyzed given that is the stated maximum allowable density as per the *La Puerta School Site Specific Plan*. In addition to this, given the lot configurations on the project site, it is anticipated that up to 10 accessory dwelling units (ADUs) would be constructed throughout the plan area. Project site access will be provided by a full access driveway on Forbes Avenue. Sidewalks are provided on both sides of Forbes Avenue and Miramar Avenue in the vicinity of the project. The sidewalks also provide pedestrian connection to Thompson Creek Trail immediately north of the project site.

4.2 Project Trip Generation

Vehicle trips were generated for the project using trip rates from the Institute of Transportation Engineers (ITE) *Trip Generation*. The trip generation for the project is shown in Table 8. The project would generate 612 daily trips, including 45 AM peak hour and 60 PM peak hour trips.

Table 8. Project Trip Generation

				AM Peak Hour			PM Peak Hour		
Land Use	**Units**		**Daily**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Trip Rates									
Single-Family Detached Housing		DU	9.43	0.18	0.52	0.70	0.59	0.35	0.94
Multifamily Housing (Low-Rise)		DU	6.47	0.10	0.30	0.40	0.32	0.19	0.51
Project Trip Generation									
Trumark Homes	58	DU	547	11	30	41	34	21	55
Auxillary Dwelling Units	10	DU	65	1	3	4	3	2	5
Total Trip Generation			612	12	33	45	37	23	60

DU = Dwelling Units

[1] Trip rates from the Institute of Transportation Engineers, *Trip Generation, 11th Edition,* 2021. Land Use Code 210 - Single-Family Detached Housing.

[2] Trip rates from the Institute of Transportation Engineers, *Trip Generation, 11th Edition,* 2021. Land Use Code 220 - Multifamily Housing (Low-Rise) Not Close to Rail Transit

4.3 Project Trips

Project trips were distributed to the ten study area intersections based on logical routes of travel. The project trip distribution is shown in Figure 14 – Project Trip Distribution. The project AM and PM trip assignment is shown in Figure 15 – Project AM Peak Hour Trip Assignment and Figure 16 – Project PM Peak Hour Trip Assignment. Project trips were assigned to the study area intersections by multiplying the project trip generation by the trip distribution percent at each location.

Figure 14: Project Trip Distribution

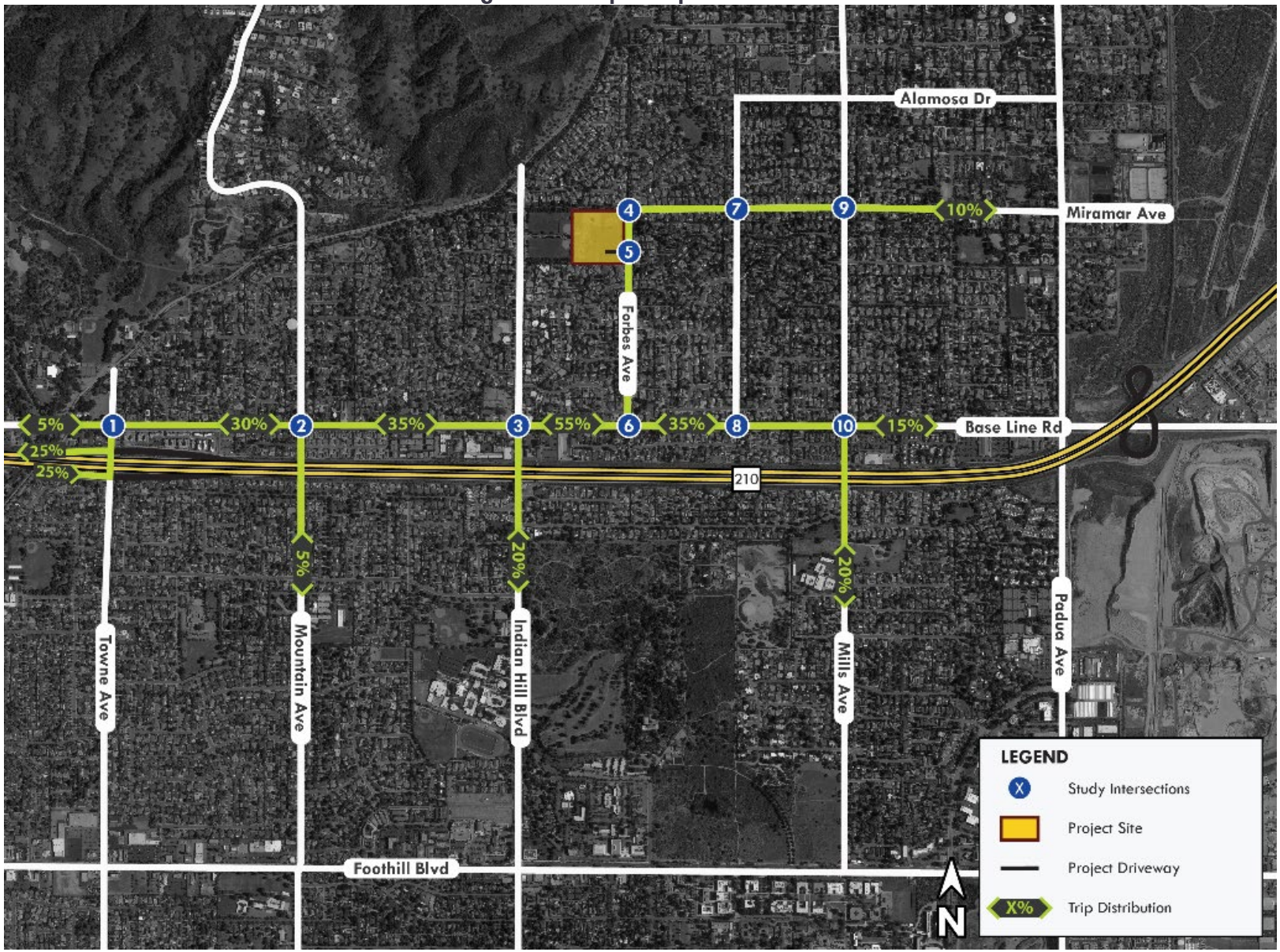


Figure 15: Project AM Peak Hour Trip Assignment

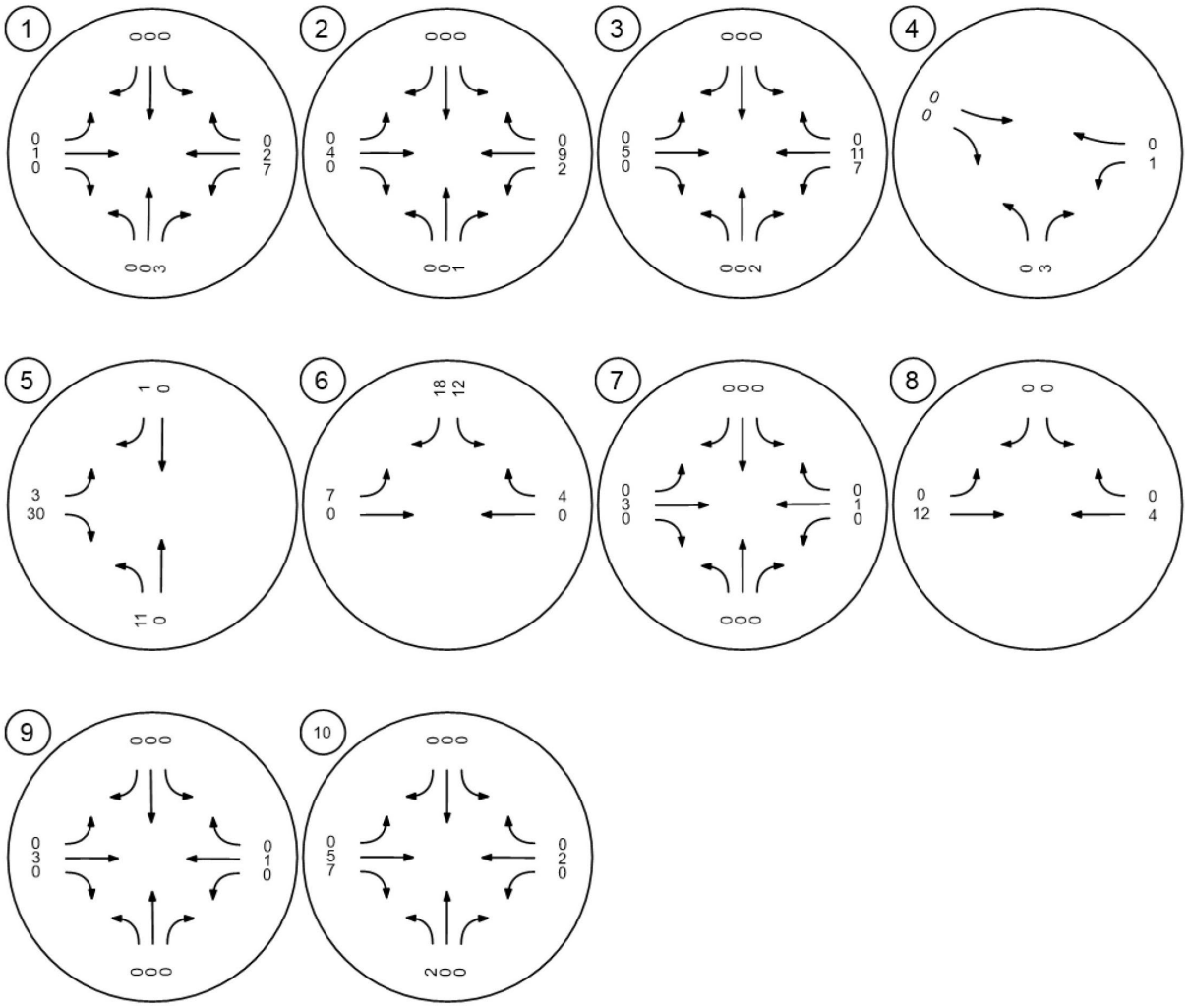
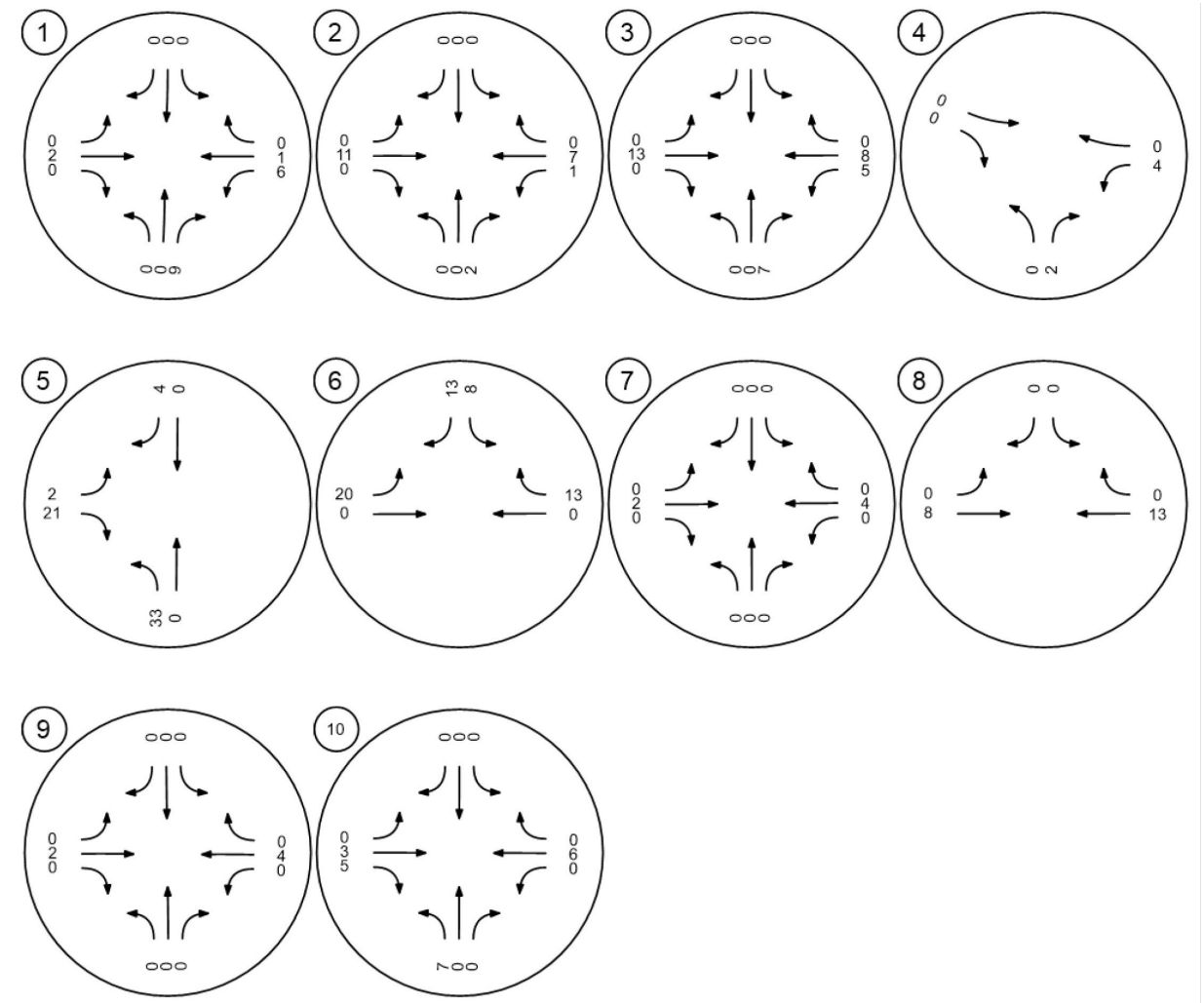


Figure 16: Project PM Peak Hour Trip Assignment



5 PROJECT IMPACTS

5.1 Project Completion (Year 2024) Plus Project Traffic Volumes and Intersection Operations

Project Completion (Year 2024) Plus Project traffic volumes were determined by adding the project trips to the Project Completion (Year 2024) Baseline traffic volumes. Figure 17 - Project Completion Plus Project AM Peak Hour Traffic Volumes and Figure 18 - Project Completion Plus Project PM Peak Hour Traffic Volumes, shows the Project Completion (Year 2024) Plus Project weekday AM and PM peak hour traffic volumes respectively at the study area intersections. An intersection operations analysis was conducted for the study area to evaluate the Project Completion (Year 2024) Plus Project weekday AM and PM peak hour conditions. Intersection operations were calculated using the LOS methodology described previously in *Section 2.3 - Methodology*. All LOS calculations are provided *in Appendix F*. Table 7 shows the Project Completion (Year 2024) Plus Project AM and PM peak hour levels of service at study area intersections. As shown in Table 9, all study area intersections operate at satisfactory LOS or better during the AM and PM peak hours in the Project Completion (Year 2024) Plus Project condition.

Table 9. Project Completion (Year 2024) Plus Project AM and PM Peak Hour Levels of Service

Intersection		Traffic Control	Threshold of Significance	AM Peak		PM Peak	
				Delay[1]	LOS[2]	Delay[1]	LOS[2]
1.	Towne Ave/Base Line Rd	Signal	E	36.5	D	43.7	D
2.	Mountain Ave/Base Line Rd	Signal	E	20.7	C	20.4	C
3.	Indian Hill Blvd/Base Line Rd	Signal	E	27.1	C	31.4	C
4.	Forbes Ave/Miramar Ave	TWSC	B	9.7	A	9.6	A
5.	Forbes Ave/Proj Dwy	TWSC	B	8.9	A	9.1	A
6.	Forbes/Base Line Rd	TWSC	E	26.8	D	20.5	C
7.	Bonnie Brae Ave/Miramar Ave	AWSC	B	7.3	A	7.3	A
8.	Bonnie Brae Ave/Base Line Rd	TWSC	E	24.2	C	18.3	C
9.	Mills Ave/Miramar Ave	TWSC	D	16.3	C	12.6	B
10.	Mills Ave/Base Line Rd	Signal	E	22.5	C	20.7	C

=Unsatisfactory Level of Service

TWSC = Two-Way Stop Control

AWSC = All-Way Stop Control

[1] Delay in Seconds

[2] Level of Service

Figure 17: Project Completion Plus Project (2024) AM Peak Hour Traffic Volumes

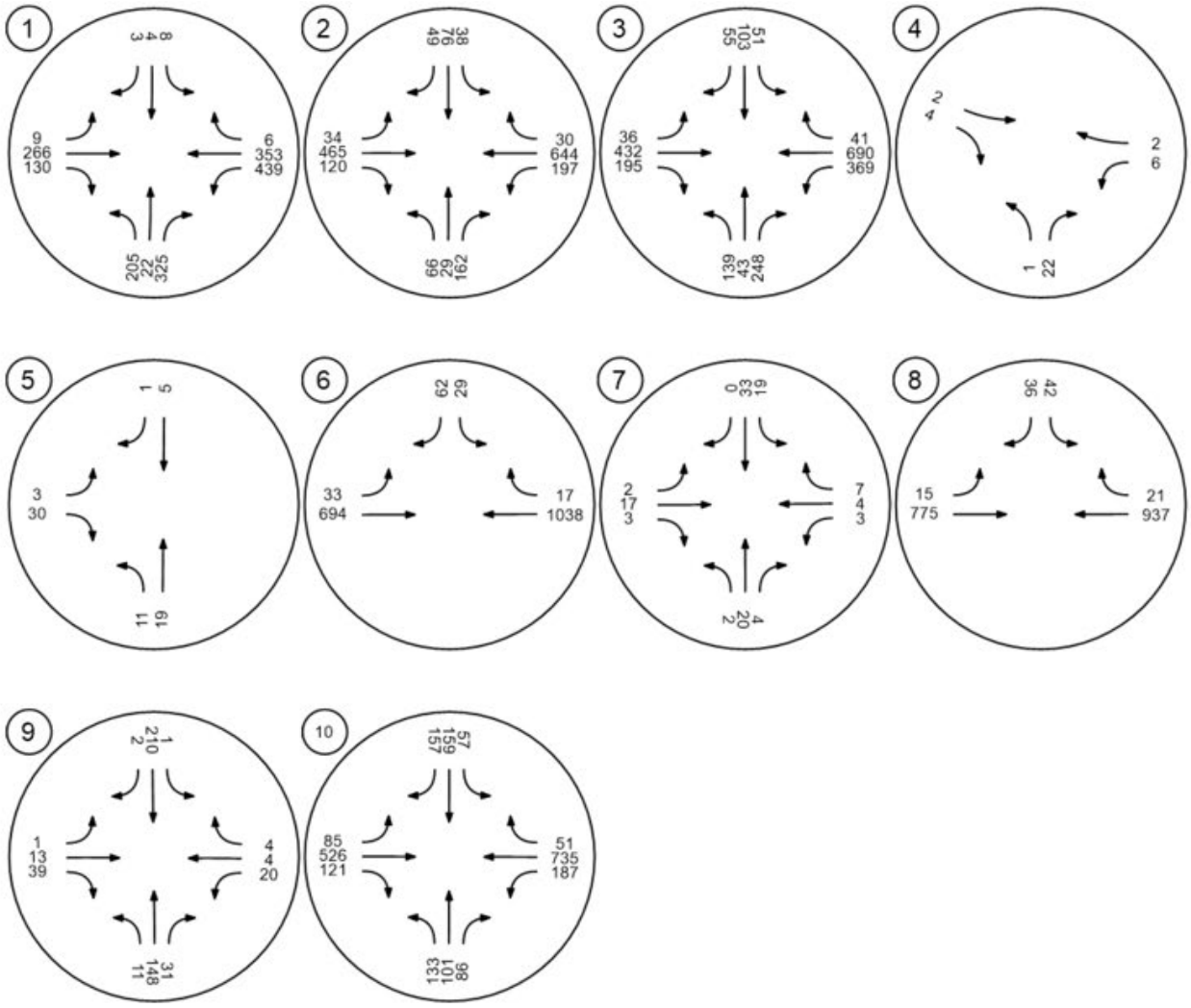
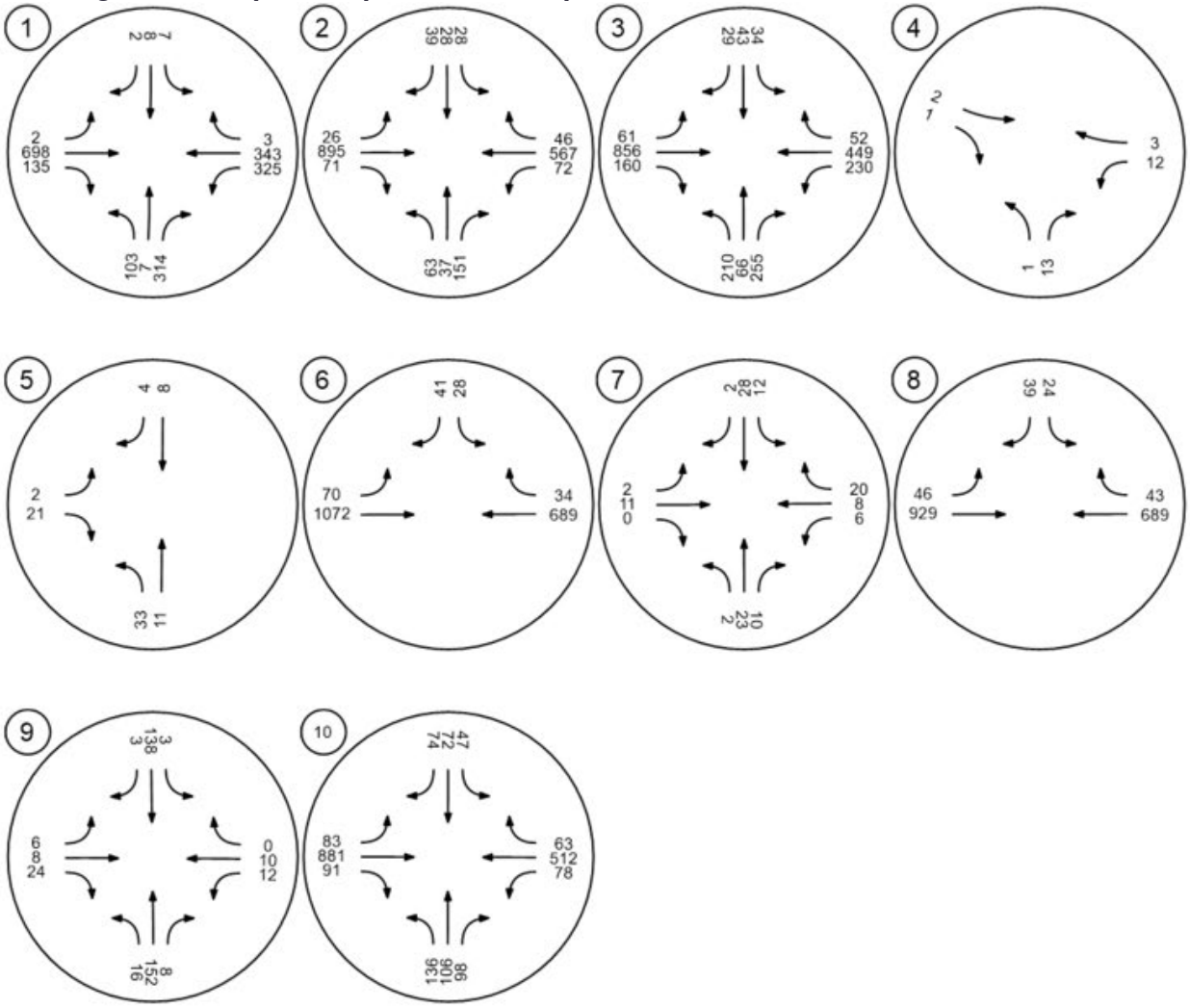


Figure 18: Project Completion Plus Project (2024) PM Peak Hour Traffic Volumes



5.2 Horizon Year 2040 Plus Project Traffic Volumes and Intersection Operations

Horizon Year (2040) Plus Project traffic volumes were determined by adding the project trips to the Horizon Year (2040) Baseline traffic volumes. Figure 19 – Horizon Year 2040 Plus Project AM Peak Hour Traffic Volumes and Figure 20 – Horizon Year 2040 Plus Project PM Peak Hour Traffic Volumes, shows the Horizon Year Plus Project weekday AM and PM peak hour traffic volumes respectively at the study area intersections. An intersection operations analysis was conducted for the study area to evaluate the Horizon Year 2040 Plus Project weekday AM and PM peak hour conditions. Intersection operations were calculated using the LOS methodology described previously in *Section 2.3 - Methodology*. All LOS calculations are provided *in Appendix F*. Table 10 shows the Horizon Year 2040 Plus Project AM and PM peak hour levels of service at study area intersections. As shown in Table 10, all study area intersections operate at satisfactory LOS or better during the AM and PM peak hours in the Horizon Year 2040 Plus Project condition.

Table 10. Horizon Year 2040 Plus Project AM and PM Peak Hour Levels of Service

Intersection		Traffic Control	Threshold of Significance	AM Peak		PM Peak	
				Delay[1]	LOS[2]	Delay[1]	LOS[2]
1.	Towne Ave/Base Line Rd	Signal	E	38.7	D	77.3	E
2.	Mountain Ave/Base Line Rd	Signal	E	21.8	C	20.4	C
3.	Indian Hill Blvd/Base Line Rd	Signal	E	36.0	D	26.5	C
4.	Forbes Ave/Miramar Ave	TWSC	B	9.7	A	9.6	A
5.	Forbes Ave/Proj Dwy	TWSC	B	8.9	A	9.1	A
6.	Forbes/Base Line Rd	TWSC	E	21.8	C	17.6	C
7.	Bonnie Brae Ave/Miramar Ave	AWSC	B	7.3	A	7.2	A
8.	Bonnie Brae Ave/Base Line Rd	TWSC	E	19.9	C	16.2	C
9.	Mills Ave/Miramar Ave	TWSC	D	13.2	B	12.0	B
10.	Mills Ave/Base Line Rd	Signal	E	23.0	C	20.3	C

=Unsatisfactory Level of Service

TWSC = Two-Way Stop Control

AWSC = All-Way Stop Control

[1] Delay in Seconds

[2] Level of Service

Figure 19: Horizon Year 2040 Plus Project AM Peak Hour Traffic Volumes

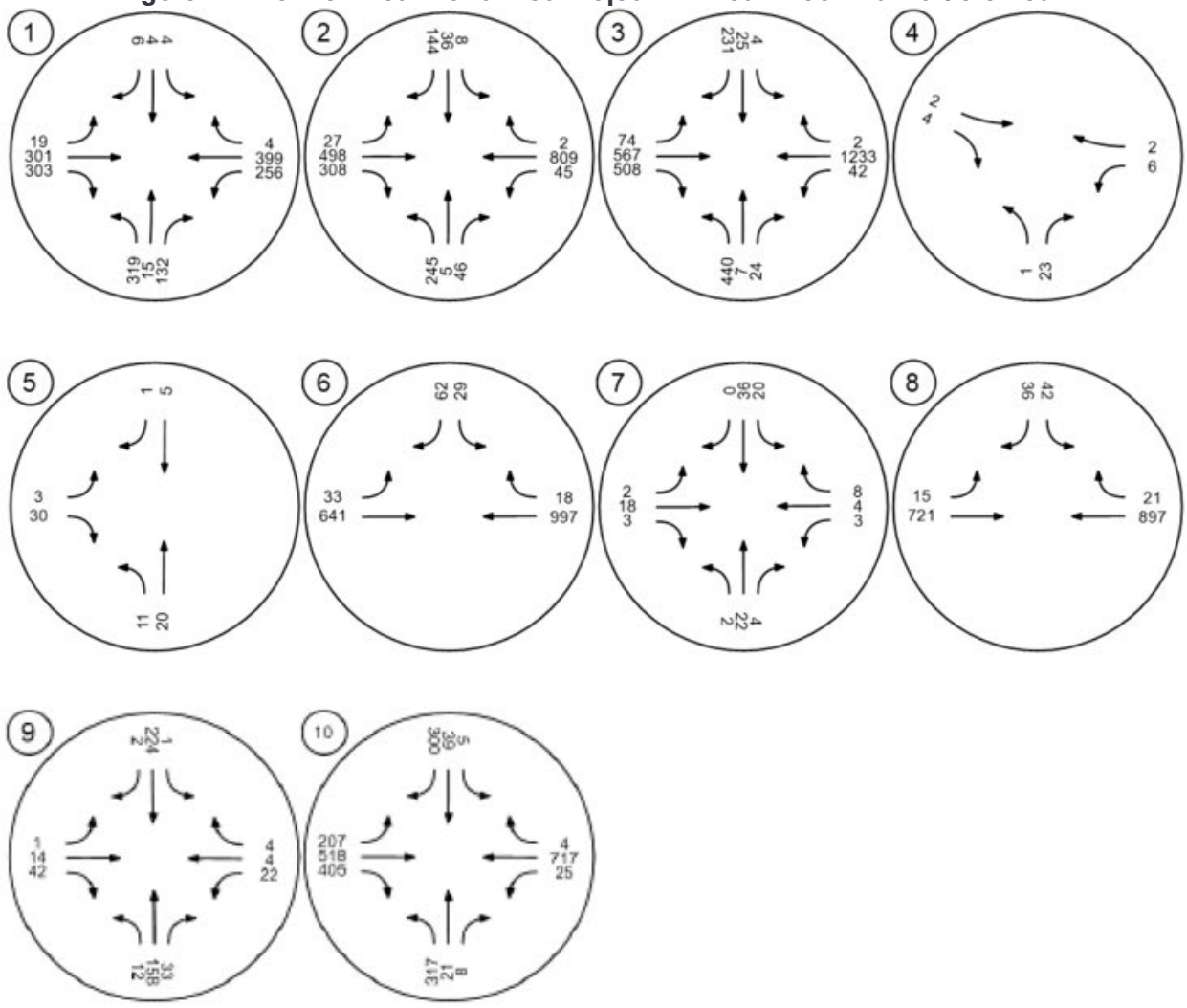
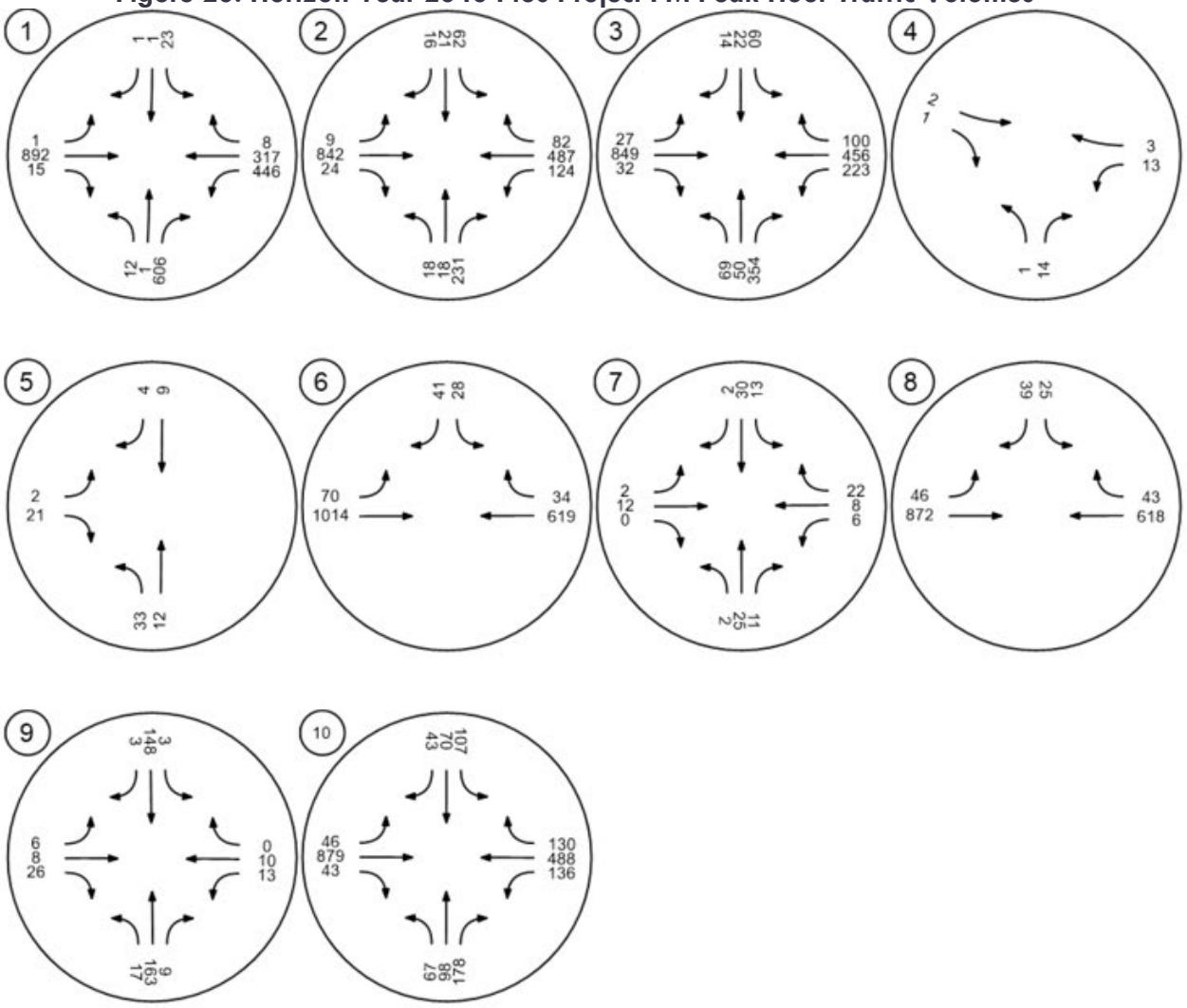


Figure 20: Horizon Year 2040 Plus Project PM Peak Hour Traffic Volumes



6 LOCAL SAFETY ASSESSMENT

6.1 Pedestrian and Bike Safety Assessment

The following roadway segments were evaluated for vehicle traffic, pedestrian volumes and bike volumes given the proximity to Thompson Creek Trail:

4. Forbes Avenue between Miramar Avenue and Base Line Road
5. Miramar Avenue between Forbes Avenue and Mills Avenue
6. Indian Hill Boulevard between Armstrong Drive and Mt Carmel Drive

Table 11 shows the existing Average Daily Traffic (ADT), AM peak hour volume and PM peak hour volume for vehicle, bike and pedestrian traffic. The ADT for the roadway segment were collected on April 14, 2022 along with the intersection turn movements and are attached in *Appendix B* for reference.

Table 11. Study Segments Vehicle, Bike and Pedestrian Traffic

Roadway Segment	ADT			Daily Bike Volume			Daily Pedestrian Volume		
	EB/NB	WB/SB	Total	EB/NB	WB/SB	Total	EB/NB	WB/SB	Total
Forbes Ave between Miramar Ave and Base Line Rd	165	158	323	8	9	17	64	71	135
Miramar Ave between Forbes Ave and Mills Ave	158	149	307	13	10	23	94	116	210
Indian Hill Blvd between Amrestrong Dr and Mt Carmel Dr	932	918	1850	9	4	13	93	108	201

Roadway Segment	AM Peak Hour Traffic			AM Peak Hour Bike Volume			AM Peak Hour Pedestrian Volume		
	EB/NB	WB/SB	Total	EB/NB	WB/SB	Total	EB/NB	WB/SB	Total
Forbes Ave between Miramar Ave and Base Line Rd	16	17	33	1	4	5	15	14	29
Miramar Ave between Forbes Ave and Mills Ave	16	16	32	2	2	4	17	21	38
Indian Hill Blvd between Amrestrong Dr and Mt Carmel Dr	61	79	140	2	1	3	17	24	41

Roadway Segment	PM Peak Hour Traffic			PM Peak Hour Bike Volume			PM Peak Hour Pedestrian Volume		
	EB/NB	WB/SB	Total	EB/NB	WB/SB	Total	EB/NB	WB/SB	Total
Forbes Ave between Miramar Ave and Base Line Rd	15	21	36	1	2	3	10	12	22
Miramar Ave between Forbes Ave and Mills Ave	15	20	35	2	3	5	14	16	30
Indian Hill Blvd between Amrestrong Dr and Mt Carmel Dr	107	97	204	2	2	4	13	13	26

According to the Transportation Injury Mapping System (TIMS), which provides access to California crash data based on the Statewide Integrated Traffic Records System (SWITRS), between January 1, 2015 and December 31, 2021, no pedestrian and vehicle crashes were

reported at the knuckle of Forbes Avenue/Miramar Avenue as well as on the mid-block intersection at Indian Hill Boulevard/Thompson Creek Trail.

6.2 Recommended Improvements

The proposed project would generate pedestrian and bike trips from the project site. Pedestrians and bicyclists would utilize Thompson Creek Trail to access either the westbound and southbound sidewalks along the knuckle of Forbes Avenue/Miramar Avenue (east of the project site) or the midblock crosswalk on Indian Hill Boulevard/Thompson Creek Trail (west of the project site). As a result of the project development the following safety enhancements are recommended to enhance pedestrian and bike safety.

Recommended Safety Improvements for the Knuckle of Forbes Avenue/Miramar Avenue:

The following warning and guiding signs are recommended at Forbes Avenue and Miramar Avenue given the significant pedestrian and bicycle traffic experienced at the knuckle as per Figure 2C-2 of the California Manual on Uniform Traffic Control Devices (CAMUTCD):

- W1-6L for westbound approach
- W1-6R for northbound approach
- W1-1aL (25 MPH) for westbound approach
- W1-1aR (25 MPH) for northbound approach
- W1-8L for westbound approach
- W1-8R for northbound approach
- W1-1L & W13-1P (25 MPH) advance warning signs for westbound approach
- W1-1R & W13-1P (25 MPH) advance warning signs for northbound approach

Figure 2C-2 of the CAMUTCD is attached in *Appendix G*.

Recommended Safety Improvements for the midblock crosswalk on Indian Hill Boulevard/Thompson Creek Trail

The following warning and guiding signs are recommended for the mid-block crossing at Indian Hill Boulevard as per Figure 3B-17 (CA) of the California Manual on Uniform Traffic Control Devices (CAMUTCD):

- W16-9P & W11-2 for northbound approach
- W16-9P & W11-2 for southbound approach
- R1-5 for northbound approach
- R1-5 for southbound approach
- W16-7P & W11-2 for northbound approach
- W16-7P & W11-2 for southbound approach

Figure 3B-17 (CA) of the CAMUTCD is attached in *Appendix G*.

7 VEHICLE MILES TRAVELLED (VMT) ANALYSIS

7.1 VMT Analysis Methodology

A VMT analysis was prepared using the City's guidelines for VMT analysis. The analysis was prepared by EPD using the SCAG Transportation Analysis Model, hereafter referred to as "Model".

The project is located within in the Model Tier 1 Traffic Analysis Zone 22450000 and Tier 2 Traffic Analysis Zone 22450200, referred to as "Zone" hereafter. The potential population generated by the project was calculated using a population of 2.9 persons per household, which is consistent with the existing residential uses in the SCAG model. Based on this data, the proposed project would have a population of 198 persons (68 dwelling units X 2.9 persons per household). The project population and households were entered into the project Zone in both the 2012 and 2040 models.

The model includes validated scenarios for 2012 and 2040. Data for years between 2012 and 2040 can be extrapolated using linear interpolation between the 2012 and 2040 model output. The model was run for the base year (2012) and future year (2040) without and with-project conditions. VMT was then evaluated using the Origin-Destination (OD) matrices as required by the City's guidelines. The OD matrices do not include trip purpose, but are broken down by vehicle type (i.e. passenger vehicles, light heavy-duty trucks, heavy heavy-duty trucks).

As noted under the discussion of thresholds, the City threshold is based on the OD data. To determine VMT, the OD trips were multiplied by the trip lengths to determine the VMT. The OD VMT is divided by the service population (employment plus population) to determine the OD VMT per service population.

7.2 VMT Thresholds

A project would result in a significant project generated VMT impact if either of the following conditions are satisfied:

- The baseline (2022) project generated VMT per service population exceeds 15% below the SGVCOG Northeast Subarea baseline VMT per service population, or
- The cumulative project generated VMT per service population exceeds 15% below the SGVCOG Northeast Subarea baseline VMT per service population.

The project's effect on VMT would be considered significant if it resulted in the following condition:

- The cumulative link-level Citywide VMT per service population increases under the plus project condition compared to the no project condition.

7.3 Project VMT Evaluation

The VMT analysis results are shown in Tables 12 and 13. As shown in Table 12, the project would have a less than significant impact on VMT in the baseline and cumulative conditions. The year 2022 project VMT per service population would be 24.8, which is 14.79 percent below the City's threshold of 29.1. The Cumulative project VMT per service population would be 25.6, which is 6.04

percent below the City's threshold of 27.2. Therefore, the project would have a less than significant impact on VMT.

Table 12. VMT Analysis of Project Impact

	2012	2040	2022
Project Zone VMT	141,527	152,043	145,283
TAZ 22450000 Population	5,600	5,721	5,643
TAZ 22450000 Employment	219	228	222
TAZ 22450000 Service Population	5,819	5,949	5,865
Project VMT/SP	24.3	25.6	24.8
SGVCOG Area VMT[1]	199,855,237	205,552,552	201,889,992
SGVCOG Service Population	5,633,375	6,431,395	5,918,382
City VMT/SP	35.5	32.0	34.2
Baseline Threshold[1]	**Baseline Proj VMT/SP**	**% Above/Below Threshold**	**Baseline VMT Impact?**
29.1	24.8	-14.79%	No
Cumulative Threshold[1]	**Cumulative Proj VMT/SP**	**% Above/Below Threshold**	**Cumulative VMT Impact?**
27.2	25.6	-6.04%	No

[1] SGVCOG VMT and Service Population obtained from the SCGCOG VMT Evaluation Tool dataset (https://555307c8-adff-4c43-a7f5-7d496a4ae77e.filesusr.com/ugd/f815d4_c5066beb93014a9795752ded3b4fb22d.xlsx?dn=SGVCOG%20VMT%20Screening%20Tool_Database_Update_07152021.xlsx).

As shown in Table 13, the cumulative (2040) Citywide roadway VMT would be reduced from 1,227,535 without the project to 1,225,243 with the project. Citywide VMT per Service Population would be reduced from 19.74 to 19.65. therefore, the project would have a less than significant Cumulative impact when the project's effect on VMT is considered.

Table 13. 2040 Project Effect on VMT

	Without Project	With Project	VMT Impact?
Citywide Roadway VMT	1,227,535	1,225,243	
Citywide Service Population	62,170	62,367	
Citywide Roadway VMT/SP	19.74	19.65	No

In summary, because the baseline and cumulative VMT per service population is below the City's threshold and the project would result in lower Citywide VMT and VMT per Service Population, the project would have a less than significant impact on VMT.

APPENDIX A – TRAFFIC STUDY SCOPING AGREEMENT

TRANSPORTATION STUDY SCOPING AGREEMENT

TO: CITY OF CLAREMONT PLANNING DEPARTMENT

FROM: Abby Pal | EPD SOLUTIONS, INC.

DATE: March 8, 2022

PROJECT: La Puerta School Site Specific Plan

EPD PROJECT #: 21-154

Introduction

The purpose of this scoping agreement is to outline the proposed transportation analysis parameters and assumptions for the La Puerta School Site Specific Plan ("Project") for review/concurrence by City of Claremont staff.

Project Description

The Project is located on the southwest corner of Forbes Avenue and Miramar Avenue in the City of Claremont. As per the project site plan, a total of 56 single-family dwelling units (SFDU) are proposed. For the purpose of a conservative analysis, a total of 58 single-family dwelling units were analyzed given that is the stated maximum allowable density as per the *La Puerta School Site Specific Plan*. In addition to this, given the lot configurations on the project site, it is anticipated that up to 10 accessory dwelling units (ADUs) would be constructed throughout the plan area. Please note that the number of ADUs have been confirmed by the City of Claremont Department of Community Development prior to analysis. The traffic analysis will therefore evaluate a total of 68 dwelling units taking into consideration 58 SFDUs and 10 anticipated ADUs. Project site access will be provided by a full access driveway on Forbes Avenue.

Study Area

The study area for the Transportation Study is shown on Figure 1. The following intersections have been identified for inclusion in the Transportation Study:

1. Towne Avenue (NS) at Base Line Road (EW)
2. Mountain Avenue (NS) at Base Line Road (EW)
3. Indian Hill Boulevard (NS) at Base Line Road (EW)
4. Forbes Ave (NS) at Miramar Avenue (ES)
5. Forbes Avenue (NS) at Project Driveway (EW)
6. Forbes Avenue (NS) at Base Line Road (EW)
7. Bonnie Brae Avenue (NS) at Miramar Avenue (EW)

8. Bonnie Brae Avenue (NS) at Base Line Road (EW)
9. Mills Avenue (NS) at Miramar Avenue (EW) Mills
10. Mills Avenue (NS) at Base Line Road (EW)

The following roadway segments have been identified for inclusion in the Transportation Study:

1. Forbes Avenue between Miramar Avenue and Base Line Road
2. Miramar Avenue between Forbes Avenue and Mills Avenue
3. Indian Hill Boulevard between Armstrong Drive and Mt Carmel Drive

Analysis Scenarios

The following scenarios will be analyzed in the Transportation Study:

- Existing Conditions
- Opening Year (2023) Without Project- Existing traffic conditions plus ambient growth and traffic from all the development within the study area
- Opening Year (2023) With Project- Existing traffic conditions plus ambient growth and traffic from all the development within the study area plus project.
- Horizon Year – Existing traffic volumes will be post-processed to SCAG build-out projections.
- Horizon Year with Project

Background growth for the Opening Year conditions will be based on an applicable ambient growth rate per year. The ambient growth rate will be determined using observed growth in the project area from the SCAG model. EPD will request the City of Claremont Planning Department for the most current list of cumulative projects. Cumulative projects which likely share travel routes with the project will be included in the TIA study regardless of distance from the project.

Project Trip Generation

The Project's trip generation has been calculated using trip rates for Single-Family Detached Housing (Land Use Code 210) and Multifamily Housing Low-Rise (Land Use 220) from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, 2021. The project trip generation for 58 SFDUs and 10 ADUs is provided in Table 1. As shown in Table 1, the project generates 612 daily trips, including 45 trips during the AM peak hour and 60 trips during the PM peak hour.

Project Trip Distribution

Project trips have been distributed to the study area intersections based on the location of the project and logical routes of travel to and from the Project site. The Project trip distribution is shown on Figure 2.

Level of Service (LOS) Analysis Methodology

Intersection operations will be evaluated using Level of Service (LOS). LOS at signalized and

unsignalized intersections will be calculated using the Highway Capacity Manual (HCM), 7th Edition methodology. Specific parameters listed in the "HCM Methodology" section of the City of Claremont Transportation Study Guidelines will be utilized.

Transportation Effect Thresholds

For intersections, the minimum acceptable LOS applicable to the largest intersecting street is applied. Minimum acceptable LOS by roadway classification as stated in *Table 4-2* of the City Transportation Study Guidelines is as follows:

Roadway Classification	Minimum Acceptable LOS
Major Arterial	LOS E
Secondary Arterial	LOS D
Rural Secondary Arterial	LOS D
Collector	LOS C
Local Street	LOS B

As per the City Transportation Study Guidelines *Transportation Effects* section, signalized intersections will require improvements if one of the following conditions is met:

- Any study intersection that is operating at an acceptable LOS for any study scenario without Project traffic in which the addition of Project traffic causes the intersection to degrade operation, shall improve the deficiency so as to bring the intersection back to at least a minimum acceptable LOS.
- Any study intersection that is operating at an unacceptable LOS for any study scenario without Project traffic shall improve any deficiencies so as to bring the intersection back to the overall level of delay established prior to Project traffic being added.

As per the City's Transportation Study Guidelines *Transportation Effects* section, unsignalized intersections will require improvements if either section a) or both sections b) and c) occur:

- The addition of Project related traffic causes the intersection to degrade from an acceptable LOS to an unacceptable LOS

OR

- The Project contributes additional traffic to an intersection that is already projected to operate at an unacceptable LOS with background traffic

AND

- One or both of the following conditions are met:

    1) The Project adds ten (10) or more trips to any approach
    2) The intersection meets the peak hour traffic signal warrant after the addition of Project traffic

Local Safety Assessment

Due to the proximity of the project to schools, a qualitative discussion on pedestrian safety near the project site (Forbes Avenue and Miramar Avenue) will be included. EPD will request the City for pedestrian/bike count data at Thompson Creek Trail at Forbes Ave/Miramar Ave, and also on Indian Hill Blvd to evaluate safety at mid-block crossing for the Trail at Indian Hill Blvd. A discussion on pedestrian and bike safety for trail access will be discussed in the TIA. The trail access will be evaluated for potential requirement of traffic control regulatory signs, and warning signs. Any required illumination measures will also be discussed.

Vehicle Miles Traveled (VMT) Screening

The San Gabriel Valley Council of Governments (SGVCOG) Vehicle Miles Traveled (VMT) Assessment Tool was utilized to determine if the Project is in a low VMT-generating area. As shown in the provided attachment, the Project is not within a low VMT-generating area. Additionally, the Project is not within a transit priority area (TPA) and generates more than 110 daily vehicle trips. As such, a VMT analysis is required to be included in the Transportation Study.

VMT Analysis Methodology

The Southern California Association of Governments (SCAG) model network and Project traffic analysis zone (TAZ) will be modified to accurately capture the Project and assign appropriate access to the Project site. The socio-economic data (SED) for each scenario will be input into the TAZ. Four full SCAG model runs will be prepared to evaluate two scenarios in the 2012 base year and 2040 cumulative year. The following model runs are required to evaluate the Project:

- 2012 Baseline Without Project
- 2012 Baseline With Project
- 2040 Baseline Without Project
- 2040 Baseline With Project

Existing 2022 VMT data will be extrapolated from the 2012 and 2040 model runs. The model output will be post-processed to calculate the VMT per service population.

VMT Impact Thresholds

The Project would result in a significant VMT impact if either of the following conditions are applied:

- The baseline Project generated VMT per service population exceeds the 15% below the SGVCOG Northeast Subarea baseline VMT per service population

OR

- The cumulative project generated VMT per service population exceeds 15% below the SGVCOG Northeast Subarea baseline VMT per service population

The Project's effect on VMT would be considered significant if it resulted in the following condition being satisfied:

- The cumulative link-level boundary Citywide VMT per service population increases under the With Project condition compared to the Without Project condition.

The cumulative without project scenario shall reflect the adopted Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS); as such, if the Project is consistent with the SCAG RTP/SCS, then the cumulative impacts (Project effect on VMT) shall be considered less than significant subject to consideration of other substantial evidence.

VMT mitigation measures, if necessary, will be based on those presented in the VMT Mitigation Measures section and Attachment D: VMT Reduction Strategies of the City of Claremont Transportation Study Guidelines.

Conclusion

We appreciate the opportunity to provide this scoping document for your review. Should you have any questions or comments regarding the proposed scope, please contact me at 412-636-2713 or abby@epdsolutions.com.

Figure 1: Project Site Plan

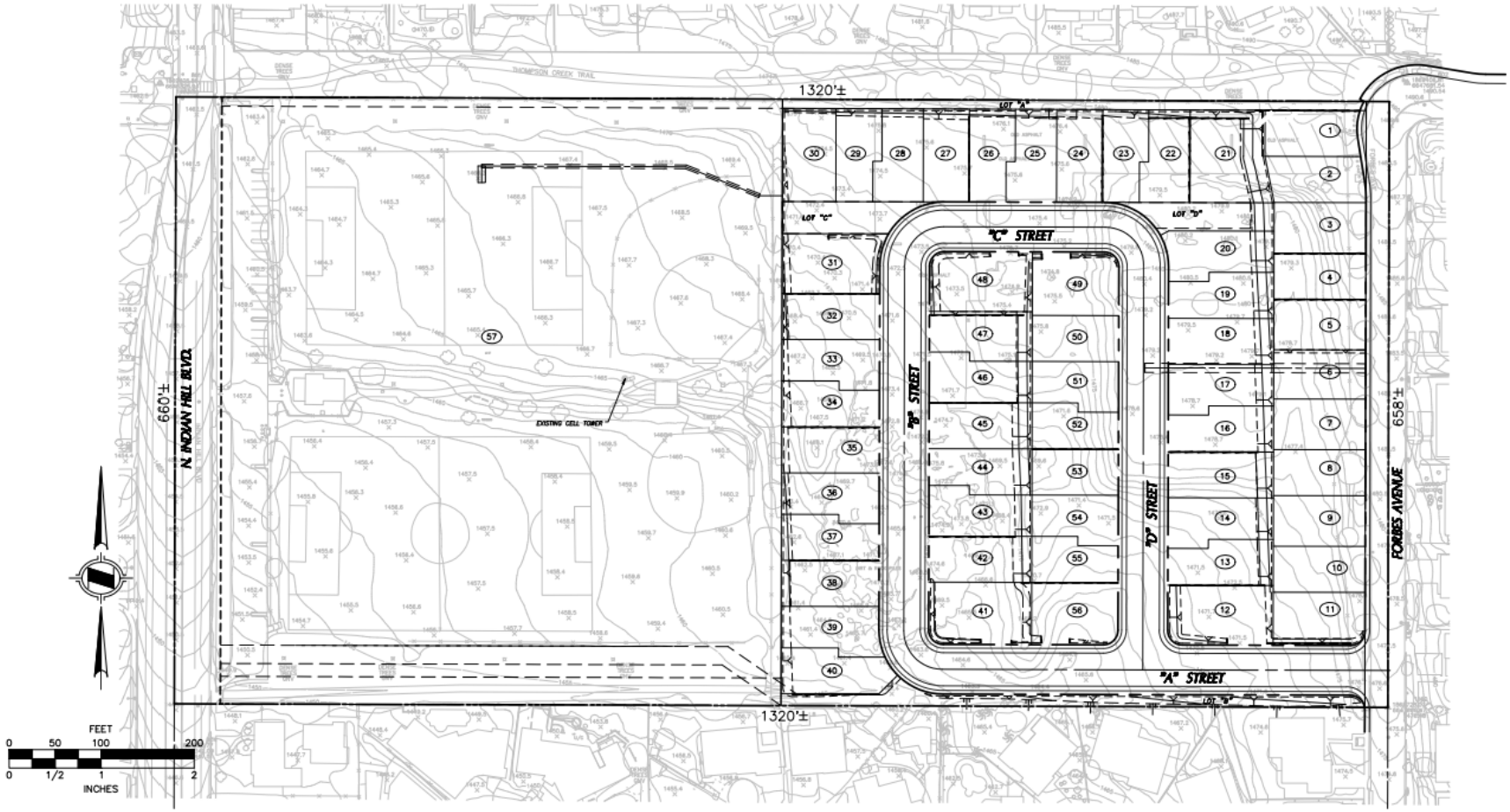


Figure 2: Project Study Area

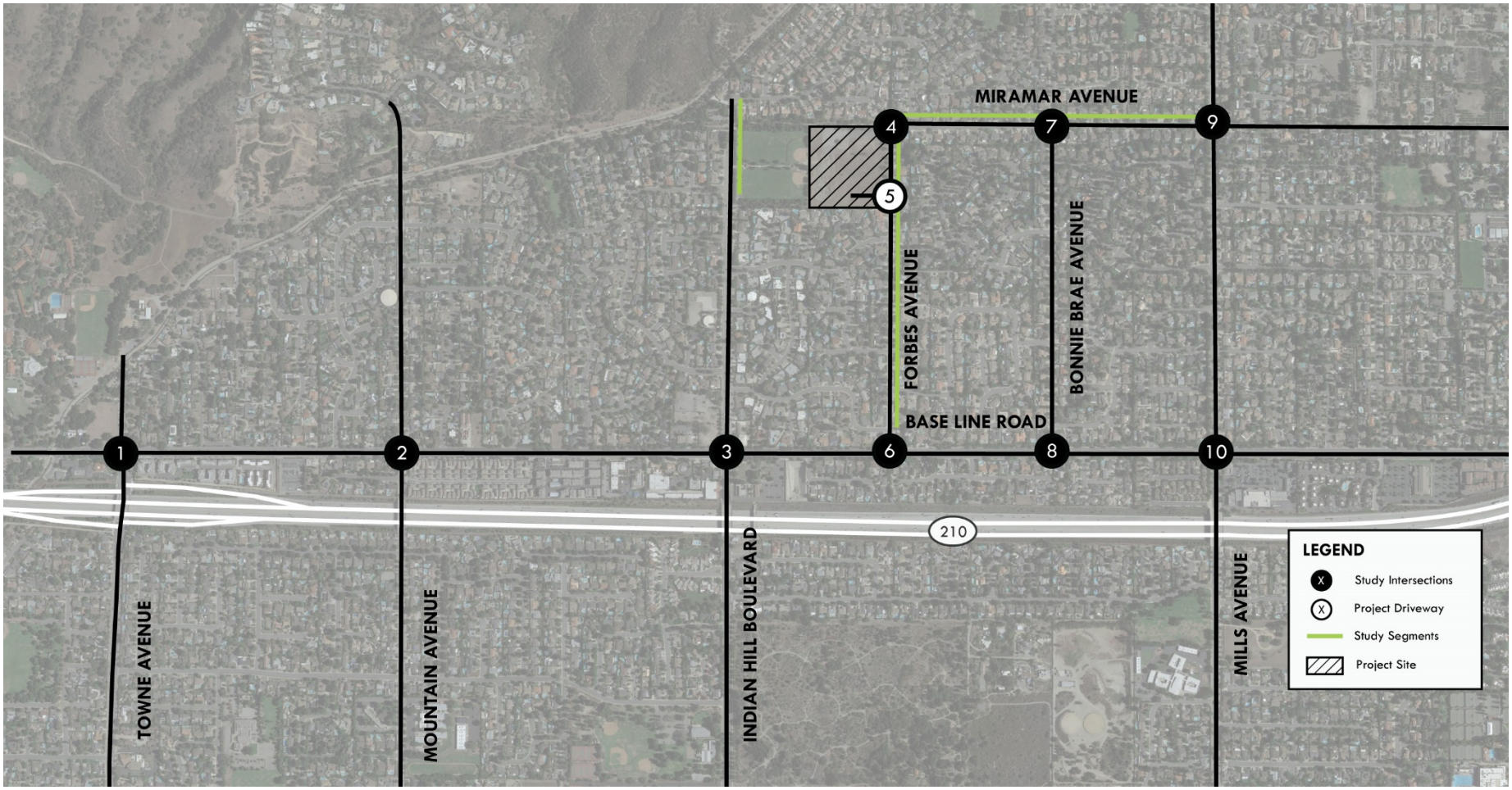


Figure 3: Project Trip Distribution

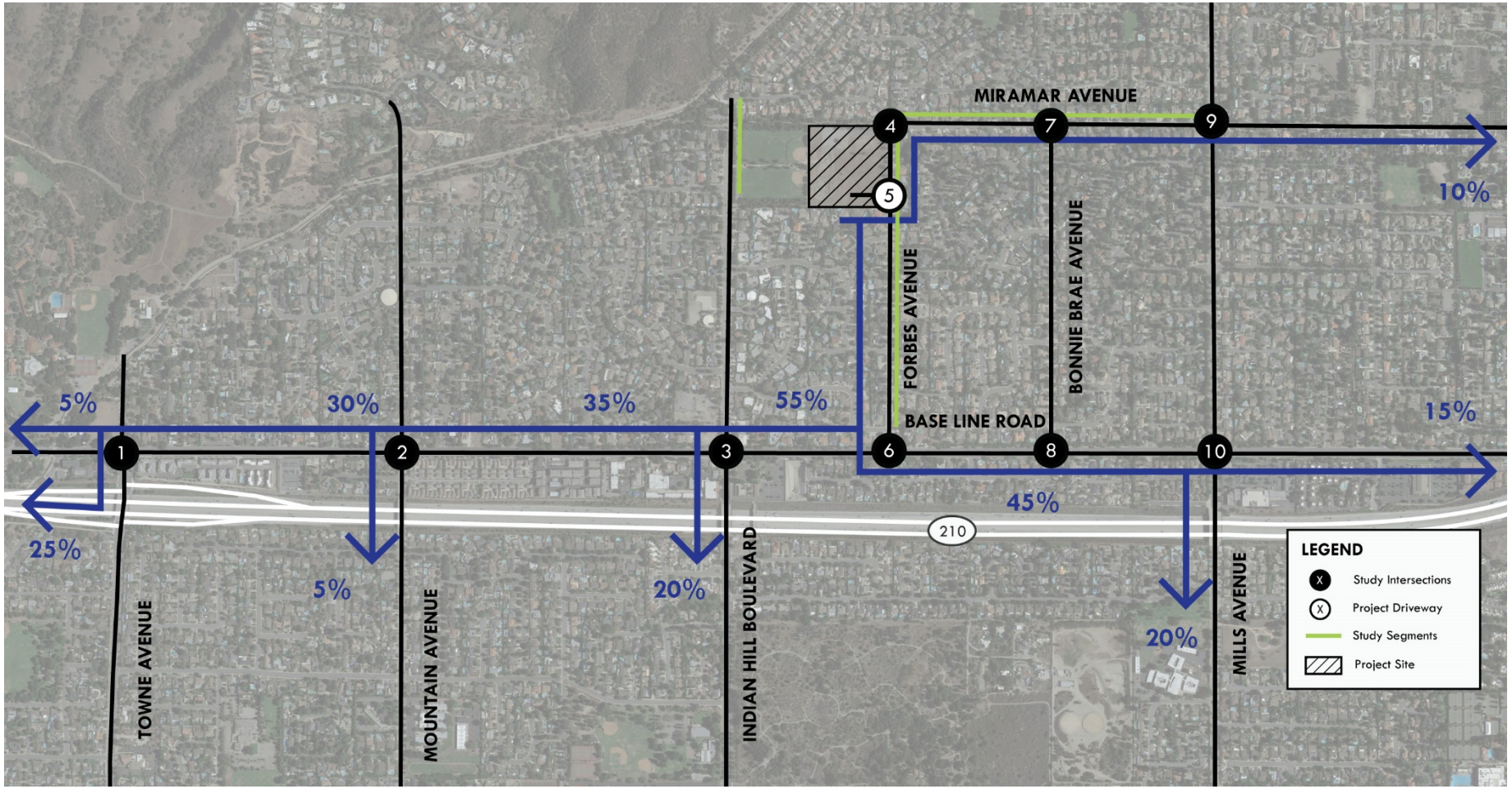


Table 1: Project Trip Generation

Land Use	Units		Daily	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Trip Rates									
Single-Family Detached Housing		DU	9.43	0.18	0.52	0.70	0.59	0.35	0.94
Multifamily Housing (Low-Rise)		DU	6.47	0.10	0.30	0.40	0.32	0.19	0.51
Project Trip Generation									
Trumark Homes	58	DU	547	11	30	41	34	21	55
Auxiliary Dwelling Units	10	DU	65	1	3	4	3	2	5
Total Trip Generation			612	12	33	45	37	23	60

DU = Dwelling Units

[1] Trip rates from the Institute of Transportation Engineers, *Trip Generation, 11th Edition,* 2021. Land Use Code 210 - Single-Family Detached Housing.

[2] Trip rates from the Institute of Transportation Engineers, *Trip Generation, 11th Edition,* 2021. Land Use Code 220 - Multifamily Housing (Low-Rise) Not Close to Rail Transit

APPENDIX B – TRAFFIC COUNTS

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, Apr 14, 22

LOCATION: Claremont
NORTH & SOUTH: Towne
EAST & WEST: Base Line

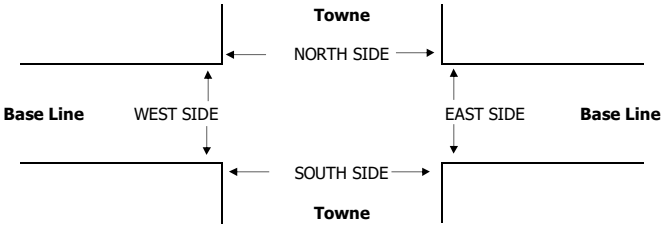
PROJECT #: SC3383
LOCATION #: 1
CONTROL: SIGNAL

NOTES:

AM PM MD OTHER OTHER — ▲ N ◄ W E ► S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND (Towne)			SOUTHBOUND (Towne)			EASTBOUND (Base Line)			WESTBOUND (Base Line)				U-TURNS				
	LANES:	NL 0.5	NT 0.5	NR 2	SL 0	ST 1	SR 0	EL 1	ET 2	ER 1	WL 1	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	6:00 AM	10	1	7	0	0	0	0	11	6	54	29	0	118	2	0	0	0	2
	6:15 AM	8	0	11	0	1	0	0	8	10	55	18	2	113	0	0	0	0	0
	6:30 AM	19	1	21	0	0	0	0	9	8	61	36	0	155	3	0	0	0	3
	6:45 AM	16	1	20	0	1	0	0	19	15	61	34	0	167	0	0	0	0	0
	7:00 AM	17	1	28	0	2	1	2	31	11	88	61	0	242	1	0	0	0	1
	7:15 AM	15	2	41	1	1	0	1	35	26	85	65	0	272	0	0	0	1	1
	7:30 AM	41	8	49	2	2	2	2	51	37	99	74	1	368	0	0	0	0	0
	7:45 AM	48	2	97	2	1	1	2	59	34	114	78	1	439	1	0	0	0	1
	8:00 AM	54	6	95	3	1	0	4	57	38	107	83	3	451	1	0	0	0	1
	8:15 AM	57	6	78	1	0	0	1	52	14	107	73	1	390	1	0	0	0	1
	8:30 AM	52	3	41	3	1	2	2	39	22	85	75	1	326	0	0	0	0	0
	8:45 AM	36	1	57	0	2	3	1	43	18	78	55	1	295	1	0	0	0	1
	VOLUMES	373	32	545	12	12	9	15	414	239	994	681	10	3,336	10	0	0	1	11
	APPROACH %	39%	3%	57%	36%	36%	27%	2%	62%	36%	59%	40%	1%						
	APP/DEPART	950	/	57	33	/	1,254	668	/	972	1,685	/	1,053	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	200	22	319	8	4	3	9	219	123	427	308	6	1,648					
	APPROACH %	37%	4%	59%	53%	27%	20%	3%	62%	35%	58%	42%	1%						
	PEAK HR FACTOR		0.873			0.625			0.886			0.960		0.914					
	APP/DEPART	541	/	37	15	/	557	351	/	546	741	/	508	0					
PM	3:00 PM	18	1	52	1	1	0	2	118	41	74	72	1	381	1	0	0	0	1
	3:15 PM	27	0	70	4	3	1	0	129	34	76	66	0	410	2	0	0	0	2
	3:30 PM	23	2	73	0	2	0	2	112	37	75	66	1	393	2	0	0	0	2
	3:45 PM	30	2	65	1	2	1	0	126	28	87	57	0	399	2	0	0	0	2
	4:00 PM	18	2	61	1	0	1	3	106	35	69	66	5	367	1	0	0	1	2
	4:15 PM	28	1	54	2	0	2	0	136	35	71	62	2	393	3	0	0	0	3
	4:30 PM	21	1	83	0	0	0	0	145	40	58	59	1	408	2	0	0	0	2
	4:45 PM	25	1	67	0	3	0	0	144	32	75	71	0	418	1	0	0	0	1
	5:00 PM	19	0	90	2	3	0	2	166	34	72	65	1	454	1	0	0	0	1
	5:15 PM	26	2	62	2	0	2	0	160	31	90	79	2	456	1	0	0	0	1
	5:30 PM	25	4	82	3	2	0	0	158	34	78	67	0	453	1	0	0	0	1
	5:45 PM	24	4	67	2	2	0	1	152	27	77	58	2	416	1	0	0	0	1
	VOLUMES	284	20	826	18	18	7	10	1,652	408	902	788	15	4,948	18	0	0	1	19
	APPROACH %	25%	2%	73%	42%	42%	16%	0%	80%	20%	53%	46%	1%						
	APP/DEPART	1,130	/	45	43	/	1,345	2,070	/	2,497	1,705	/	1,061	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	95	7	301	7	8	2	2	628	131	315	282	3	1,781					
	APPROACH %	24%	2%	75%	41%	47%	12%	0%	83%	17%	53%	47%	1%						
	PEAK HR FACTOR		0.908			0.850			0.942			0.877		0.976					
	APP/DEPART	403	/	12	17	/	458	761	/	936	600	/	375	0					



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 AM	0	0	0	2	2	0	0	0	1	1	0	0	0	1	1
	6:45 AM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0
	7:00 AM	1	3	0	4	8	0	0	0	1	1	1	3	0	3	7
	7:15 AM	1	3	0	1	5	0	0	0	1	1	1	3	0	0	4
	7:30 AM	0	2	1	3	6	0	1	1	0	2	0	1	0	3	4
	7:45 AM	3	2	1	1	7	0	0	1	0	1	3	2	0	1	6
	8:00 AM	2	1	3	1	7	0	1	3	1	5	2	0	0	0	2
	8:15 AM	3	2	4	1	10	0	1	4	0	5	3	1	0	1	5
	8:30 AM	0	3	0	1	4	0	0	0	0	0	0	3	0	1	4
	8:45 AM	2	1	0	2	5	0	0	0	0	0	2	1	0	2	5
	TOTAL	12	18	9	16	55	0	4	9	4	17	12	14	0	12	38
	AM BEGIN PEAK HR			7:30 AM			0	3	9	1	13					
PM	3:00 PM	1	0	1	1	3	1	0	1	1	3	0	0	0	0	0
	3:15 PM	2	0	1	1	4	1	0	1	0	2	1	0	0	1	2
	3:30 PM	2	0	1	1	4	0	0	0	0	0	2	0	1	1	4
	3:45 PM	1	0	0	1	2	0	0	0	0	0	1	0	0	1	2
	4:00 PM	0	1	3	6	10	0	0	3	6	9	0	1	0	0	1
	4:15 PM	5	1	2	2	10	2	0	1	1	4	3	1	1	1	6
	4:30 PM	3	0	0	2	5	1	0	0	2	3	2	0	0	0	2
	4:45 PM	1	4	2	1	8	0	4	0	1	5	1	0	2	0	3
	5:00 PM	1	4	2	1	8	0	0	1	1	2	1	4	1	0	6
	5:15 PM	2	0	0	3	5	0	0	0	1	1	2	0	0	2	4
	5:30 PM	5	2	0	2	9	0	0	0	2	2	5	2	0	0	7
	5:45 PM	4	0	0	0	4	0	0	0	0	0	4	0	0	0	4
	TOTAL	27	12	12	21	72	5	4	7	15	31	22	8	5	6	41
	PM BEGIN PEAK HR			4:45 PM			0	4	1	5	10					

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, Apr 14, 22

LOCATION: Claremont
NORTH & SOUTH: Mountain
EAST & WEST: Base Line

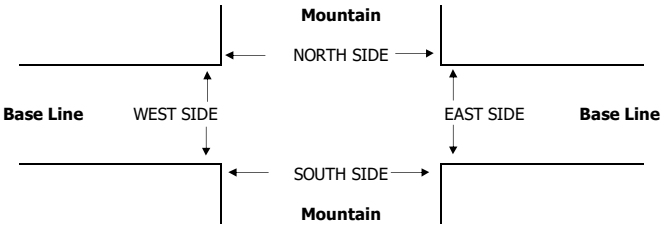
PROJECT #: SC3383
LOCATION #: 2
CONTROL: SIGNAL

NOTES:

AM PM MD OTHER OTHER — ▲ N ◄ W E ► S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Mountain			SOUTHBOUND Mountain			EASTBOUND Base Line			WESTBOUND Base Line				U-TURNS				
	LANES:	NL 0.5	NT 0.5	NR 1	SL 1	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	6:00 AM	5	0	2	0	3	2	1	16	2	6	70	0	107	0	0	0	0	0
	6:15 AM	6	2	3	3	0	3	0	19	2	2	56	3	99	0	0	0	0	0
	6:30 AM	9	2	2	3	0	5	2	21	6	3	81	1	135	0	0	0	0	0
	6:45 AM	4	2	9	2	3	12	0	41	3	3	77	4	160	0	0	0	0	0
	7:00 AM	9	1	8	7	6	16	8	36	13	6	106	4	220	0	0	0	0	0
	7:15 AM	18	5	15	9	9	10	5	51	32	26	118	6	304	0	0	0	0	0
	7:30 AM	9	6	16	7	11	14	6	78	27	42	142	10	368	0	0	0	0	0
	7:45 AM	14	3	27	12	28	18	10	108	47	83	142	4	496	0	0	0	0	0
	8:00 AM	24	11	64	13	27	6	8	121	28	48	154	6	510	0	0	0	0	0
	8:15 AM	18	9	53	6	9	11	10	106	16	20	152	10	420	0	0	0	0	0
	8:30 AM	13	7	18	11	7	15	5	66	11	17	125	6	301	0	0	0	0	0
	8:45 AM	10	4	17	9	8	12	10	74	11	13	94	7	269	0	0	1	0	1
	VOLUMES	139	52	234	82	111	124	65	737	198	269	1,317	61	3,389	0	0	1	0	1
	APPROACH %	33%	12%	55%	26%	35%	39%	7%	74%	20%	16%	80%	4%						
	APP/DEPART	425	/	177	317	/	578	1,000	/	1,053	1,647	/	1,581	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	65	29	160	38	75	49	34	413	118	193	590	30	1,794					
	APPROACH %	26%	11%	63%	23%	46%	30%	6%	73%	21%	24%	73%	4%						
	PEAK HR FACTOR		0.641			0.698			0.856			0.888		0.879					
	APP/DEPART	254	/	93	162	/	386	565	/	611	813	/	704	0					
PM	3:00 PM	18	3	29	8	5	10	10	141	15	34	124	7	404	1	0	0	0	1
	3:15 PM	14	7	36	15	7	9	13	176	21	27	103	12	440	0	0	0	0	0
	3:30 PM	18	12	66	6	11	10	9	157	15	29	124	8	465	0	0	0	0	0
	3:45 PM	24	10	43	9	11	11	10	162	19	28	110	10	447	0	0	0	0	0
	4:00 PM	21	7	24	8	6	7	10	145	8	28	111	10	385	0	0	1	0	1
	4:15 PM	11	9	29	16	7	9	13	171	9	20	114	10	418	0	0	0	0	0
	4:30 PM	14	5	29	7	8	11	6	196	16	25	99	8	424	0	0	2	0	2
	4:45 PM	15	11	44	9	8	13	7	188	12	15	120	14	456	0	0	0	0	0
	5:00 PM	8	11	38	11	8	9	9	210	18	16	109	11	458	0	0	1	0	1
	5:15 PM	22	7	27	3	7	9	5	201	14	21	141	11	468	0	0	0	0	0
	5:30 PM	16	8	39	5	5	8	5	216	25	18	128	10	483	0	0	1	2	3
	5:45 PM	11	4	30	6	6	6	13	178	10	23	116	10	413	0	0	0	0	0
	VOLUMES	192	94	434	103	89	112	110	2,141	182	284	1,399	121	5,261	1	0	5	2	8
	APPROACH %	27%	13%	60%	34%	29%	37%	5%	88%	7%	16%	78%	7%						
	APP/DEPART	720	/	320	304	/	554	2,433	/	2,680	1,804	/	1,707	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	61	37	148	28	28	39	26	815	69	70	498	46	1,865					
	APPROACH %	25%	15%	60%	29%	29%	41%	3%	90%	8%	11%	81%	7%						
	PEAK HR FACTOR		0.879			0.792			0.925			0.887		0.965					
	APP/DEPART	246	/	107	95	/	165	910	/	993	614	/	600	0					



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 AM	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0
	6:30 AM	1	0	1	0	2	1	0	0	0	1	0	0	1	0	1
	6:45 AM	0	1	1	0	2	0	1	0	0	1	0	0	1	0	1
	7:00 AM	1	2	1	2	6	0	0	1	1	2	1	2	0	1	4
	7:15 AM	0	3	0	2	5	0	0	0	2	2	0	3	0	0	3
	7:30 AM	1	2	4	4	11	0	1	4	3	8	1	1	0	1	3
	7:45 AM	3	4	2	3	12	0	1	0	3	4	3	3	2	0	8
	8:00 AM	3	1	1	1	6	0	1	1	0	2	3	0	0	1	4
	8:15 AM	2	2	1	0	5	0	1	1	0	2	2	1	0	0	3
	8:30 AM	2	5	0	4	11	0	2	0	3	5	2	3	0	1	6
	8:45 AM	1	3	2	2	8	0	3	0	2	5	1	0	2	0	3
	TOTAL	14	23	13	19	69	1	10	7	15	33	13	13	6	4	36
	AM BEGIN PEAK HR			7:30 AM			0	4	6	6	16					
PM	3:00 PM	2	1	4	0	7	1	0	3	0	4	1	1	1	0	3
	3:15 PM	1	0	0	3	4	0	0	0	1	1	1	0	0	2	3
	3:30 PM	2	1	3	0	6	0	1	0	0	1	2	0	3	0	5
	3:45 PM	3	1	2	2	8	2	1	2	1	6	1	0	0	1	2
	4:00 PM	1	2	4	2	9	0	1	4	2	7	1	1	0	0	2
	4:15 PM	0	1	1	2	4	0	0	0	1	1	0	1	1	1	3
	4:30 PM	2	0	2	1	5	0	0	0	1	1	2	0	2	0	4
	4:45 PM	0	4	0	0	4	0	4	0	0	4	0	0	0	0	0
	5:00 PM	2	3	2	0	7	1	0	1	0	2	1	3	1	0	5
	5:15 PM	2	0	0	0	2	0	0	0	0	0	2	0	0	0	2
	5:30 PM	5	2	0	3	10	0	0	0	2	2	5	2	0	1	8
	5:45 PM	4	0	0	0	4	0	0	0	0	0	4	0	0	0	4
	TOTAL	24	15	18	13	70	4	7	10	8	29	20	8	8	5	41
	PM BEGIN PEAK HR			4:45 PM			1	4	1	2	8					

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, Apr 14, 22

LOCATION: Claremont
NORTH & SOUTH: Indian Hill
EAST & WEST: Base Line

PROJECT #: SC3383
LOCATION #: 3
CONTROL: SIGNAL

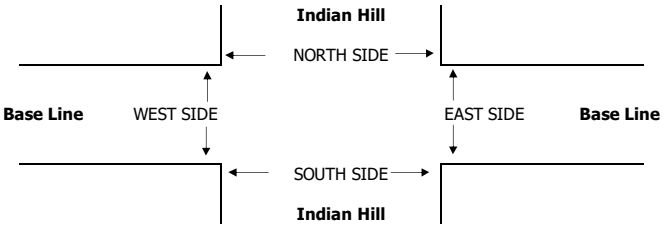
NOTES:

AM / PM / MD / OTHER / OTHER

N ▲ | ◄ W | E ► | S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Indian Hill			SOUTHBOUND Indian Hill			EASTBOUND Base Line			WESTBOUND Base Line				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	6:00 AM	9	2	6	2	2	8	1	15	1	9	53	2	110	0	0	0	0	0
	6:15 AM	11	2	7	3	1	4	1	22	4	14	39	1	109	0	0	0	0	0
	6:30 AM	6	1	7	2	3	1	2	17	11	24	80	1	155	0	0	0	0	0
	6:45 AM	10	2	9	5	4	3	5	37	11	34	73	7	200	0	0	0	0	0
	7:00 AM	10	1	15	4	10	8	3	31	16	71	103	7	279	0	0	0	0	0
	7:15 AM	19	14	52	3	38	10	3	56	28	95	125	14	457	0	0	0	0	0
	7:30 AM	23	12	28	13	15	14	6	73	17	53	166	6	426	0	0	0	0	0
	7:45 AM	24	12	40	19	26	19	7	102	46	82	193	17	587	0	0	0	0	0
	8:00 AM	17	8	55	14	24	9	12	125	47	93	172	10	586	0	0	0	0	0
	8:15 AM	37	11	81	5	37	13	11	113	50	99	139	8	604	0	0	0	0	0
	8:30 AM	14	14	33	12	12	11	9	74	18	50	120	16	383	0	0	0	0	0
	8:45 AM	13	9	19	8	12	11	8	75	20	49	103	9	336	0	0	0	0	0
	VOLUMES	193	88	352	90	184	111	68	740	269	673	1,366	98	4,232	0	0	0	0	0
	APPROACH %	30%	14%	56%	23%	48%	29%	6%	69%	25%	31%	64%	5%						
	APP/DEPART	633	/	254	385	/	1,126	1,077	/	1,182	2,137	/	1,670	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	101	43	204	51	102	55	36	413	160	327	670	41	2,203					
	APPROACH %	29%	12%	59%	25%	49%	26%	6%	68%	26%	32%	65%	4%						
	PEAK HR FACTOR		0.674			0.813			0.827			0.889		0.912					
	APP/DEPART	348	/	120	208	/	589	609	/	668	1,038	/	826	0					
PM	3:00 PM	35	17	46	12	7	6	8	162	25	31	126	15	490	0	0	0	0	0
	3:15 PM	18	6	35	7	10	6	10	173	31	62	117	7	482	0	0	0	0	0
	3:30 PM	37	12	93	6	15	7	12	177	25	69	129	12	594	0	0	0	0	0
	3:45 PM	29	11	66	11	6	9	10	198	20	56	101	6	523	0	0	0	0	0
	4:00 PM	37	15	55	5	9	6	5	155	18	41	116	9	471	0	0	0	0	0
	4:15 PM	29	20	44	6	13	15	7	177	18	31	100	6	466	0	0	0	0	0
	4:30 PM	30	19	42	7	14	8	10	204	21	45	103	12	515	0	0	0	0	0
	4:45 PM	30	19	40	9	14	6	14	208	29	39	119	16	543	1	0	0	0	1
	5:00 PM	40	17	60	5	9	4	15	215	31	35	89	15	535	0	0	0	0	0
	5:15 PM	52	16	51	11	9	7	15	195	20	48	120	10	554	0	0	0	0	0
	5:30 PM	41	13	51	9	11	12	16	210	25	47	97	11	543	0	0	0	0	0
	5:45 PM	30	15	40	6	17	9	14	182	28	30	103	16	490	0	0	0	0	0
	VOLUMES	408	180	623	94	134	95	136	2,256	291	534	1,320	135	6,206	1	0	0	0	1
	APPROACH %	34%	15%	51%	29%	41%	29%	5%	84%	11%	27%	66%	7%						
	APP/DEPART	1,211	/	451	323	/	960	2,683	/	2,973	1,989	/	1,822	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	163	65	202	34	43	29	60	828	105	169	425	52	2,175					
	APPROACH %	38%	15%	47%	32%	41%	27%	6%	83%	11%	26%	66%	8%						
	PEAK HR FACTOR		0.903			0.828			0.951			0.907		0.981					
	APP/DEPART	430	/	177	106	/	318	993	/	1,064	646	/	616	0					



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 AM	0	2	0	1	3	0	2	0	1	3	0	0	0	0	0
	6:30 AM	1	1	0	0	2	1	0	0	0	1	0	1	0	0	1
	6:45 AM	0	1	2	0	3	0	1	2	0	3	0	0	0	0	0
	7:00 AM	0	3	1	2	6	0	1	0	1	2	0	2	1	1	4
	7:15 AM	3	0	3	3	9	1	0	1	2	4	2	0	2	1	5
	7:30 AM	1	3	0	1	5	0	1	0	0	1	1	2	0	1	4
	7:45 AM	1	3	1	1	6	0	1	1	0	2	1	2	0	1	4
	8:00 AM	4	2	7	5	18	0	2	6	3	11	4	0	1	2	7
	8:15 AM	4	4	3	4	15	3	3	3	4	13	1	1	0	0	2
	8:30 AM	3	3	1	3	10	0	3	1	1	5	3	0	0	2	5
	8:45 AM	1	2	0	0	3	1	1	0	0	2	0	1	0	0	1
	TOTAL	18	24	18	20	80	6	15	14	12	47	12	9	4	8	33
	AM BEGIN PEAK HR			7:30 AM			3	7	10	7	27					
PM	3:00 PM	0	0	0	4	4	0	0	0	2	2	0	0	0	2	2
	3:15 PM	1	0	1	1	3	0	0	1	1	2	1	0	0	0	1
	3:30 PM	2	2	3	3	10	0	2	0	3	5	2	0	3	0	5
	3:45 PM	1	5	6	10	22	0	5	5	10	20	1	0	1	0	2
	4:00 PM	1	1	0	12	14	0	0	0	12	12	1	1	0	0	2
	4:15 PM	0	1	0	12	13	0	0	0	11	11	0	1	0	1	2
	4:30 PM	1	2	1	2	6	1	1	1	2	5	0	1	0	0	1
	4:45 PM	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0
	5:00 PM	3	4	3	2	12	1	1	3	2	7	2	3	0	0	5
	5:15 PM	0	1	0	1	2	0	1	0	1	2	0	0	0	0	0
	5:30 PM	5	0	1	3	9	0	0	0	2	2	5	0	1	1	7
	5:45 PM	4	4	1	1	10	0	0	1	1	2	4	4	0	0	8
	TOTAL	19	20	16	51	106	3	10	11	47	71	16	10	5	4	35
	PM BEGIN PEAK HR			4:45 PM			2	2	3	5	12					

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, Apr 14, 22

LOCATION: Claremont
NORTH & SOUTH: Forbes
EAST & WEST: Base Line

PROJECT #: SC3383
LOCATION #: 4
CONTROL: STOP S

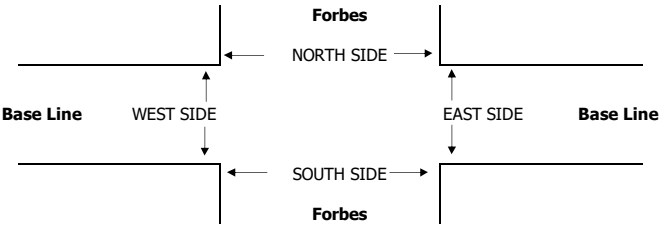
NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND (Forbes)			SOUTHBOUND (Forbes)			EASTBOUND (Base Line)			WESTBOUND (Base Line)				U-TURNS				
	LANES:	NL X	NT X	NR X	SL 0	ST X	SR 0	EL 1	ET 2	ER X	WL X	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	6:00 AM	0	0	0	0	0	3	1	22	0	0	61	0	87	0	0	0	0	0
	6:15 AM	0	0	0	1	0	3	1	33	0	0	52	0	90	0	0	0	0	0
	6:30 AM	0	0	0	4	0	5	1	22	0	0	96	2	130	0	0	0	0	0
	6:45 AM	0	0	0	1	0	4	1	49	0	0	111	1	167	0	0	0	0	0
	7:00 AM	0	0	0	3	0	13	6	41	0	0	166	2	231	0	0	0	0	0
	7:15 AM	0	0	0	5	0	9	5	103	0	0	224	4	350	0	0	0	0	0
	7:30 AM	0	0	0	7	0	14	4	106	0	0	221	1	353	0	0	0	0	0
	7:45 AM	0	0	0	7	0	14	2	158	0	0	265	2	448	0	0	0	0	0
	8:00 AM	0	0	0	1	0	7	11	187	0	0	277	5	488	0	0	0	0	0
	8:15 AM	0	0	0	2	0	9	9	188	0	0	231	5	444	0	0	0	0	0
	8:30 AM	0	0	0	1	0	8	4	117	0	0	172	2	304	0	0	0	0	0
	8:45 AM	0	0	0	2	0	7	7	95	0	0	157	4	272	0	0	0	0	0
	VOLUMES	0	0	0	34	0	96	52	1,121	0	0	2,033	28	3,364	0	0	0	0	0
	APPROACH %	0%	0%	0%	26%	0%	74%	4%	96%	0%	0%	99%	1%						
	APP/DEPART	0	/	80	130	/	0	1,173	/	1,155	2,061	/	2,129	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	0	0	0	17	0	44	26	639	0	0	994	13	1,733					
	APPROACH %	0%	0%	0%	28%	0%	72%	4%	96%	0%	0%	99%	1%						
	PEAK HR FACTOR		0.000			0.726			0.840			0.893		0.888					
	APP/DEPART	0	/	39	61	/	0	665	/	656	1,007	/	1,038	0					
PM	3:00 PM	0	0	0	4	0	10	8	197	0	0	186	2	407	0	0	0	0	0
	3:15 PM	0	0	0	3	0	10	8	200	0	0	174	3	398	0	0	0	0	0
	3:30 PM	0	0	0	3	0	14	14	268	0	0	197	5	501	0	0	0	0	0
	3:45 PM	0	0	0	4	0	9	12	254	0	0	139	4	422	0	0	1	0	1
	4:00 PM	0	0	0	2	0	6	4	212	0	0	166	8	398	0	0	0	0	0
	4:15 PM	0	0	0	3	0	5	13	226	0	0	132	0	379	0	0	0	0	0
	4:30 PM	0	0	0	2	0	6	6	239	0	0	150	3	406	0	0	0	0	0
	4:45 PM	0	0	0	3	0	7	9	247	0	0	166	3	435	0	0	0	0	0
	5:00 PM	0	0	0	2	0	5	11	271	0	0	135	5	429	0	0	0	0	0
	5:15 PM	0	0	0	7	0	7	13	253	0	0	177	6	463	0	0	0	0	0
	5:30 PM	0	0	0	8	0	9	17	240	0	0	139	7	420	0	0	0	0	0
	5:45 PM	0	0	0	2	0	5	8	234	0	0	154	9	412	0	0	1	0	1
	VOLUMES	0	0	0	43	0	93	123	2,841	0	0	1,915	55	5,070	0	0	2	0	2
	APPROACH %	0%	0%	0%	32%	0%	68%	4%	96%	0%	0%	97%	3%						
	APP/DEPART	0	/	176	136	/	0	2,964	/	2,884	1,970	/	2,010	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	0	0	0	20	0	28	50	1,011	0	0	617	21	1,747					
	APPROACH %	0%	0%	0%	42%	0%	58%	5%	95%	0%	0%	97%	3%						
	PEAK HR FACTOR		0.000			0.706			0.941			0.872		0.943					
	APP/DEPART	0	/	71	48	/	0	1,061	/	1,031	638	/	645	0					



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 AM	1	1	0	0	2	1	0	0	0	1	0	1	0	0	1
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:00 AM	3	0	0	0	3	2	0	0	0	2	1	0	0	0	1
	7:15 AM	2	0	0	0	2	0	0	0	0	0	2	0	0	0	2
	7:30 AM	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1
	7:45 AM	2	3	0	0	5	1	0	0	0	1	1	3	0	0	4
	8:00 AM	5	0	0	0	5	1	0	0	0	1	4	0	0	0	4
	8:15 AM	3	0	0	0	3	0	0	0	0	0	3	0	0	0	3
	8:30 AM	2	0	0	0	2	0	0	0	0	0	2	0	0	0	2
	8:45 AM	1	1	0	0	2	1	0	0	0	1	0	1	0	0	1
	TOTAL	20	5	0	0	25	6	0	0	0	6	14	5	0	0	19
	AM BEGIN PEAK HR			7:30 AM			2	0	0	0	2					
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1
	3:30 PM	2	1	0	0	3	0	0	0	0	0	2	1	0	0	3
	3:45 PM	4	0	0	0	4	2	0	0	0	2	2	0	0	0	2
	4:00 PM	1	1	0	0	2	0	0	0	0	0	1	1	0	0	2
	4:15 PM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2
	4:30 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1
	4:45 PM	1	1	0	0	2	1	0	0	0	1	0	1	0	0	1
	5:00 PM	4	1	0	0	5	2	0	0	0	2	2	1	0	0	3
	5:15 PM	4	2	0	0	6	0	0	0	0	0	4	2	0	0	6
	5:30 PM	1	1	0	0	2	0	0	0	0	0	1	1	0	0	2
	5:45 PM	4	6	0	0	10	0	0	0	0	0	4	6	0	0	10
	TOTAL	22	16	0	0	38	5	0	0	0	5	17	16	0	0	33
	PM BEGIN PEAK HR			4:45 PM			3	0	0	0	3					

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, Jun 30, 22

LOCATION: Claremont
NORTH & SOUTH: Forbes
EAST & WEST: Base Line

PROJECT #: SC3528
LOCATION #: 5
CONTROL: STOP S

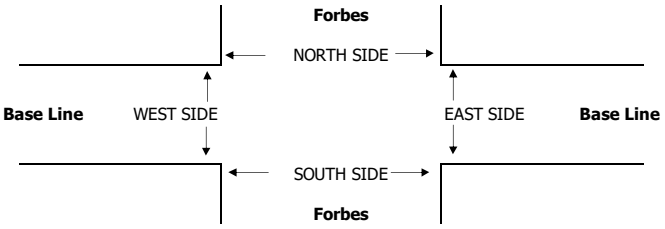
NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Forbes			SOUTHBOUND Forbes			EASTBOUND Base Line			WESTBOUND Base Line				U-TURNS				
	LANES:	NL X	NT X	NR X	SL 0	ST X	SR 0	EL 1	ET 2	ER X	WL X	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	6:00 AM	0	0	0	2	0	3	0	22	0	0	47	4	78	0	0	0	0	0
	6:15 AM	0	0	0	3	0	4	1	34	0	0	66	2	110	0	0	0	0	0
	6:30 AM	0	0	0	1	0	7	1	31	0	0	77	0	117	0	0	0	0	0
	6:45 AM	0	0	0	1	0	2	1	39	0	0	82	4	129	0	0	0	0	0
	7:00 AM	0	0	0	1	0	5	1	54	0	0	96	3	160	0	0	0	0	0
	7:15 AM	0	0	0	1	0	4	3	56	0	0	95	2	161	0	0	0	0	0
	7:30 AM	0	0	0	3	0	7	4	51	0	0	110	2	177	0	0	0	0	0
	7:45 AM	0	0	0	3	0	11	4	120	0	0	179	1	318	0	0	0	0	0
	8:00 AM	0	0	0	0	0	7	4	118	0	0	107	3	239	0	0	0	0	0
	8:15 AM	0	0	0	1	0	9	10	101	0	0	147	4	272	0	0	0	0	0
	8:30 AM	0	0	0	0	0	10	3	125	0	0	169	2	309	0	0	0	0	0
	8:45 AM	0	0	0	4	0	7	1	125	0	0	161	8	306	0	0	0	0	0
	VOLUMES	0	0	0	20	0	76	33	876	0	0	1,336	35	2,376	0	0	0	0	0
	APPROACH %	0%	0%	0%	21%	0%	79%	4%	96%	0%	0%	97%	3%						
	APP/DEPART	0	/	68	96	/	0	909	/	896	1,371	/	1,412	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	0	0	0	4	0	37	21	464	0	0	602	10	1,138					
	APPROACH %	0%	0%	0%	10%	0%	90%	4%	96%	0%	0%	98%	2%						
	PEAK HR FACTOR		0.000			0.732			0.947			0.850		0.895					
	APP/DEPART	0	/	31	41	/	0	485	/	468	612	/	639	0					
PM	3:00 PM	0	0	0	7	0	5	5	175	0	0	122	4	318	0	0	0	0	0
	3:15 PM	0	0	0	2	0	3	8	164	0	0	111	5	293	0	0	0	0	0
	3:30 PM	0	0	0	3	0	4	11	193	0	0	133	6	350	0	0	0	0	0
	3:45 PM	0	0	0	4	0	5	15	210	0	0	119	1	354	0	0	0	0	0
	4:00 PM	0	0	0	7	0	4	10	185	0	0	165	8	379	0	0	0	0	0
	4:15 PM	0	0	0	3	0	4	12	182	0	0	152	7	360	0	0	0	0	0
	4:30 PM	0	0	0	6	0	6	7	203	0	0	166	4	392	0	0	0	0	0
	4:45 PM	0	0	0	2	0	8	11	198	0	0	154	5	378	0	0	0	0	0
	5:00 PM	0	0	0	4	0	3	11	192	0	0	137	6	353	0	0	0	0	0
	5:15 PM	0	0	0	7	0	6	6	207	0	0	164	6	396	0	0	0	0	0
	5:30 PM	0	0	0	4	0	8	5	237	0	0	157	5	416	0	0	0	0	0
	5:45 PM	0	0	0	5	0	5	13	223	0	0	151	5	402	0	0	1	0	1
	VOLUMES	0	0	0	54	0	61	114	2,369	0	0	1,731	62	4,391	0	0	1	0	1
	APPROACH %	0%	0%	0%	47%	0%	53%	5%	95%	0%	0%	97%	3%						
	APP/DEPART	0	/	175	115	/	0	2,483	/	2,423	1,793	/	1,793	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	0	0	0	20	0	22	35	859	0	0	609	22	1,567					
	APPROACH %	0%	0%	0%	48%	0%	52%	4%	96%	0%	0%	97%	3%						
	PEAK HR FACTOR		0.000			0.808			0.924			0.928		0.942					
	APP/DEPART	0	/	56	42	/	0	894	/	879	631	/	632	0					



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	6:00 AM	3	0	0	0	3	1	0	0	0	1	2	0	0	0	2
	6:15 AM	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1
	6:30 AM	5	0	0	0	5	2	0	0	0	2	3	0	0	0	3
	6:45 AM	3	1	0	0	4	0	0	0	0	0	3	1	0	0	4
	7:00 AM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2
	7:15 AM	4	1	0	0	5	3	0	0	0	3	1	1	0	0	2
	7:30 AM	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1
	7:45 AM	5	0	0	0	5	0	0	0	0	0	5	0	0	0	5
	8:00 AM	9	0	0	0	9	0	0	0	0	0	9	0	0	0	9
	8:15 AM	3	3	0	0	6	1	0	0	0	1	2	3	0	0	5
	8:30 AM	1	5	2	0	8	0	2	2	0	4	1	3	0	0	4
	8:45 AM	6	0	0	0	6	0	0	0	0	0	6	0	0	0	6
	TOTAL	41	12	2	0	55	7	2	2	0	11	34	10	0	0	44
	AM BEGIN PEAK HR			7:45 AM			1	2	2	0	5					
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	2	1	0	0	3	0	0	0	0	0	2	1	0	0	3
	4:15 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1
	4:30 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1
	4:45 PM	1	1	0	0	2	0	1	0	0	1	1	0	0	0	1
	5:00 PM	2	1	0	0	3	0	0	0	0	0	2	1	0	0	3
	5:15 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1
	5:30 PM	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1
	5:45 PM	4	1	0	0	5	1	0	0	0	1	3	1	0	0	4
	TOTAL	10	8	0	0	18	1	1	0	0	2	9	7	0	0	16
	PM BEGIN PEAK HR			5:00 PM			1	0	0	0	1					

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, Apr 14, 22

LOCATION: Claremont
NORTH & SOUTH: Mills
EAST & WEST: Miramar

PROJECT #: SC3383
LOCATION #: 5
CONTROL: STOP E/W

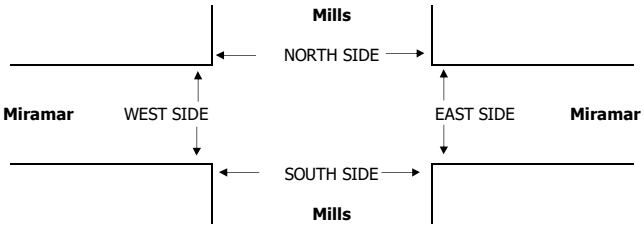
NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND (Mills)			SOUTHBOUND (Mills)			EASTBOUND (Miramar)			WESTBOUND (Miramar)				U-TURNS				
	LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	6:00 AM	1	4	0	0	6	0	0	0	1	0	0	0	12	0	0	0	0	0
	6:15 AM	0	5	0	0	10	0	0	0	3	1	0	0	19	0	0	0	0	0
	6:30 AM	1	6	0	0	16	0	0	1	3	1	1	0	29	0	0	0	0	0
	6:45 AM	2	11	0	1	13	1	0	2	1	2	0	0	33	0	0	0	0	0
	7:00 AM	0	15	0	1	29	1	1	1	6	0	0	0	54	0	0	0	0	0
	7:15 AM	3	27	0	0	33	0	0	0	7	6	1	0	77	0	0	0	0	0
	7:30 AM	2	19	6	0	48	1	0	0	5	6	0	0	87	0	0	0	0	0
	7:45 AM	1	28	8	0	72	1	1	3	16	11	0	0	141	0	0	0	0	0
	8:00 AM	5	56	14	0	55	0	0	4	7	1	2	1	145	0	0	0	0	0
	8:15 AM	3	44	3	1	33	0	0	3	11	2	1	3	104	0	0	0	0	0
	8:30 AM	0	35	1	1	37	1	0	0	2	2	0	0	79	0	0	0	0	0
	8:45 AM	3	21	3	0	29	1	1	2	3	1	1	0	65	0	0	0	0	0
	VOLUMES	21	271	35	4	381	6	3	16	65	33	6	4	845	0	0	0	0	0
	APPROACH %	6%	83%	11%	1%	97%	2%	4%	19%	77%	77%	14%	9%						
	APP/DEPART	327	/	278	391	/	479	84	/	55	43	/	33	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	11	147	31	1	208	2	1	10	39	20	3	4	477					
	APPROACH %	6%	78%	16%	0%	99%	1%	2%	20%	78%	74%	11%	15%						
	PEAK HR FACTOR		0.630			0.723			0.625			0.614		0.822					
	APP/DEPART	189	/	152	211	/	267	50	/	42	27	/	16	0					
PM	3:00 PM	4	31	3	0	34	1	2	1	6	2	1	0	85	0	0	0	0	0
	3:15 PM	2	35	2	1	40	0	0	1	9	1	1	0	92	0	0	0	0	0
	3:30 PM	5	43	1	2	41	2	3	2	2	6	4	0	111	0	0	0	0	0
	3:45 PM	5	42	2	0	22	0	1	2	7	3	0	0	84	0	0	0	0	0
	4:00 PM	8	32	0	0	29	0	1	2	4	1	0	0	77	0	0	0	0	0
	4:15 PM	4	33	0	0	27	1	2	2	3	4	4	0	80	0	0	0	0	0
	4:30 PM	3	28	5	0	18	0	2	2	7	0	1	1	67	0	0	0	0	0
	4:45 PM	7	38	3	0	27	0	0	3	7	3	2	0	90	0	0	0	0	0
	5:00 PM	8	33	3	1	20	0	0	3	4	2	0	0	74	0	0	0	0	0
	5:15 PM	7	52	2	0	29	0	0	3	3	3	1	0	100	0	0	0	0	0
	5:30 PM	11	45	2	0	26	0	1	3	3	1	3	0	95	0	0	0	0	0
	5:45 PM	6	36	2	2	34	1	0	1	8	4	1	1	96	0	1	0	0	1
	VOLUMES	70	448	25	6	347	5	12	25	63	30	18	2	1,051	0	1	0	0	1
	APPROACH %	13%	83%	5%	2%	97%	1%	12%	25%	63%	60%	36%	4%						
	APP/DEPART	543	/	463	358	/	440	100	/	55	50	/	93	0					
	BEGIN PEAK HR		3:00 PM																
	VOLUMES	16	151	8	3	137	3	6	6	24	12	6	0	372					
	APPROACH %	9%	86%	5%	2%	96%	2%	17%	17%	67%	67%	33%	0%						
	PEAK HR FACTOR		0.893			0.794			0.900			0.450		0.838					
	APP/DEPART	175	/	157	143	/	173	36	/	17	18	/	25	0					



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	6:00 AM	1	0	2	2	5	0	0	0	2	2	1	0	2	0	3
	6:15 AM	1	0	1	1	3	1	0	1	1	3	0	0	0	0	0
	6:30 AM	1	0	2	1	4	1	0	2	1	4	0	0	0	0	0
	6:45 AM	0	1	2	0	3	0	1	0	0	1	0	0	2	0	2
	7:00 AM	1	1	3	3	8	1	0	1	2	4	0	1	2	1	4
	7:15 AM	0	1	0	2	3	0	1	0	0	1	0	0	0	2	2
	7:30 AM	1	0	1	2	4	1	0	0	2	3	0	0	1	0	1
	7:45 AM	0	0	2	4	6	0	0	0	2	2	0	0	2	2	4
	8:00 AM	0	0	3	5	8	0	0	0	4	4	0	0	3	1	4
	8:15 AM	1	0	1	1	3	1	0	0	1	2	0	0	1	0	1
	8:30 AM	1	0	0	5	6	1	0	0	3	4	0	0	0	2	2
	8:45 AM	1	9	4	5	19	1	9	4	4	18	0	0	0	1	1
	TOTAL	8	12	21	31	72	7	11	8	22	48	1	1	13	9	24
	AM BEGIN PEAK HR			7:30 AM			2	0	0	9	11					
PM	3:00 PM	0	0	0	2	2	0	0	0	2	2	0	0	0	0	0
	3:15 PM	0	0	0	3	3	0	0	0	1	1	0	0	0	2	2
	3:30 PM	2	0	3	2	7	2	0	1	1	4	0	0	2	1	3
	3:45 PM	3	0	4	2	9	2	0	0	1	3	1	0	4	1	6
	4:00 PM	0	0	1	3	4	0	0	1	0	1	0	0	0	3	3
	4:15 PM	0	0	2	2	4	0	0	1	1	2	0	0	1	1	2
	4:30 PM	0	2	5	2	9	0	1	0	2	3	0	1	5	0	6
	4:45 PM	1	4	5	7	17	1	3	1	5	10	0	1	4	2	7
	5:00 PM	0	0	0	8	8	0	0	0	2	2	0	0	0	6	6
	5:15 PM	1	1	1	4	7	0	1	0	1	2	1	0	1	3	5
	5:30 PM	0	0	6	1	7	0	0	0	1	1	0	0	6	0	6
	5:45 PM	1	0	5	4	10	1	0	0	0	1	0	0	5	4	9
	TOTAL	8	7	32	40	87	7	5	4	17	32	2	2	28	23	55
	PM BEGIN PEAK HR			3:00 PM			4	0	1	5	10					

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, Apr 14, 22

LOCATION: Claremont
NORTH & SOUTH: Mills
EAST & WEST: Baseline

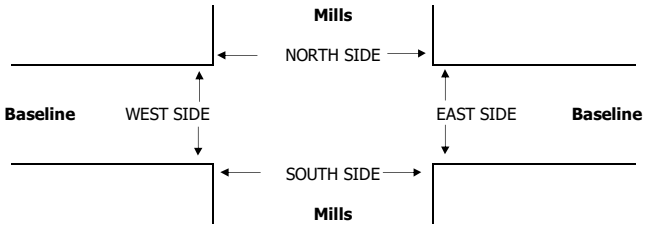
PROJECT #: SC3383
LOCATION #: 6
CONTROL: SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — N / W / E / S

☑ Add U-Turns to Left Turns

		NORTHBOUND (Mills)			SOUTHBOUND (Mills)			EASTBOUND (Baseline)			WESTBOUND (Baseline)				U-TURNS				
	LANES:	NL 1	NT 1	NR 1	SL 1	ST 1	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	6:00 AM	7	1	8	3	1	10	2	24	1	2	35	3	97	0	0	0	0	0
	6:15 AM	2	3	3	4	1	13	1	29	4	6	40	5	111	0	0	0	0	0
	6:30 AM	6	6	5	6	3	13	0	29	3	8	84	4	167	0	0	0	0	0
	6:45 AM	15	3	5	8	11	13	6	37	6	21	77	6	208	0	0	0	0	0
	7:00 AM	13	7	7	12	8	24	6	47	6	14	118	6	268	0	0	0	0	0
	7:15 AM	18	5	10	13	19	25	18	80	14	23	179	12	416	0	0	0	0	0
	7:30 AM	25	12	15	12	33	38	12	88	20	40	160	6	461	0	0	0	0	0
	7:45 AM	24	20	18	14	80	46	18	111	42	72	179	12	636	0	0	1	0	1
	8:00 AM	56	48	41	16	20	37	32	129	30	40	188	17	654	0	0	0	0	0
	8:15 AM	24	20	11	15	25	35	22	143	17	33	166	16	527	0	0	0	0	0
	8:30 AM	24	16	11	16	16	29	11	84	18	28	109	19	381	0	0	0	0	0
	8:45 AM	21	12	11	13	12	16	8	84	13	32	113	13	348	0	0	1	0	1
	VOLUMES	235	153	145	132	229	299	136	885	174	319	1,448	119	4,274	0	0	2	0	2
	APPROACH %	44%	29%	27%	20%	35%	45%	11%	74%	15%	17%	77%	6%						
	APP/DEPART	533	/	406	660	/	722	1,195	/	1,162	1,886	/	1,984	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	129	100	85	57	158	156	84	471	109	185	693	51	2,278					
	APPROACH %	41%	32%	27%	15%	43%	42%	13%	71%	16%	20%	75%	5%						
	PEAK HR FACTOR		0.541			0.663			0.869			0.883		0.871					
	APP/DEPART	314	/	234	371	/	452	664	/	613	929	/	979	0					
PM	3:00 PM	29	25	17	14	15	23	20	159	11	20	125	8	466	0	0	0	0	0
	3:15 PM	17	20	22	14	14	31	20	163	28	32	139	12	512	0	0	0	0	0
	3:30 PM	32	20	17	15	15	32	39	191	15	32	131	5	544	0	0	0	0	0
	3:45 PM	24	26	19	10	11	21	30	200	20	35	101	9	506	0	0	0	1	1
	4:00 PM	34	19	22	17	17	17	16	169	19	26	136	17	509	0	0	0	0	0
	4:15 PM	22	12	12	11	13	20	20	168	21	10	86	23	418	0	0	0	0	0
	4:30 PM	28	14	17	6	19	12	26	185	15	24	111	8	465	0	0	0	0	0
	4:45 PM	40	22	11	9	21	21	24	197	16	14	105	13	493	0	0	0	0	0
	5:00 PM	28	28	33	15	11	14	16	224	20	17	97	18	521	0	0	0	0	0
	5:15 PM	32	32	23	9	18	18	16	207	23	30	131	12	551	0	0	0	0	0
	5:30 PM	23	23	30	14	21	20	26	194	23	16	107	19	516	0	0	0	0	0
	5:45 PM	32	23	15	19	15	24	15	184	25	16	99	14	481	0	0	0	0	0
	VOLUMES	341	264	238	153	190	253	268	2,241	236	272	1,368	158	5,982	0	0	0	1	1
	APPROACH %	40%	31%	28%	26%	32%	42%	10%	82%	9%	15%	76%	9%						
	APP/DEPART	843	/	690	596	/	697	2,745	/	2,633	1,798	/	1,962	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	123	105	97	47	71	73	82	822	82	77	440	62	2,081					
	APPROACH %	38%	32%	30%	25%	37%	38%	8%	83%	8%	13%	76%	11%						
	PEAK HR FACTOR		0.913			0.868			0.948			0.837		0.944					
	APP/DEPART	325	/	249	191	/	230	986	/	966	579	/	636	0					



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	6:00 AM	0	0	1	2	3	0	0	0	2	2	0	0	1	0	1
	6:15 AM	0	0	0	2	2	0	0	0	1	1	0	0	0	1	1
	6:30 AM	0	1	2	0	3	0	0	2	0	2	0	1	0	0	1
	6:45 AM	0	1	3	2	6	0	1	1	2	4	0	0	2	0	2
	7:00 AM	1	1	0	1	3	0	0	0	0	0	1	1	0	1	3
	7:15 AM	2	2	0	2	6	1	2	0	1	4	1	0	0	1	2
	7:30 AM	1	4	5	4	14	1	2	4	2	9	0	2	1	2	5
	7:45 AM	2	8	5	8	23	1	2	1	6	10	1	6	4	2	13
	8:00 AM	3	3	1	5	12	0	3	0	4	7	3	0	1	1	5
	8:15 AM	2	1	1	3	7	0	1	0	0	1	2	0	1	3	6
	8:30 AM	3	1	1	2	7	1	0	1	1	3	2	1	0	1	4
	8:45 AM	1	1	4	2	8	1	1	4	1	7	0	0	0	1	1
	TOTAL	15	23	23	33	94	5	12	13	20	50	10	11	10	13	44
	AM BEGIN PEAK HR			7:30 AM			2	8	5	12	27					
PM	3:00 PM	1	2	0	2	5	1	0	0	2	3	0	2	0	0	2
	3:15 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1
	3:30 PM	2	2	6	0	10	0	0	2	0	2	2	2	4	0	8
	3:45 PM	2	0	5	1	8	0	0	1	1	2	2	0	4	0	6
	4:00 PM	0	2	1	3	6	0	1	1	0	2	0	1	0	3	4
	4:15 PM	2	4	6	0	12	1	0	1	0	2	1	4	5	0	10
	4:30 PM	0	0	3	1	4	0	0	0	0	0	0	0	3	1	4
	4:45 PM	0	1	4	5	10	0	1	1	4	6	0	0	3	1	4
	5:00 PM	2	1	1	1	5	1	0	0	1	2	1	1	1	0	3
	5:15 PM	5	5	11	4	25	0	1	0	0	1	5	4	11	4	24
	5:30 PM	1	0	6	2	9	0	0	2	0	2	1	0	4	2	7
	5:45 PM	6	3	11	4	24	1	1	0	0	2	5	2	11	4	22
	TOTAL	21	20	54	24	119	4	4	8	8	24	17	16	46	16	95
	PM BEGIN PEAK HR			4:45 PM			1	2	3	5	11					

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, Jun 30, 22

LOCATION: Claremont
NORTH & SOUTH: Bonnie Brae
EAST & WEST: Miramar

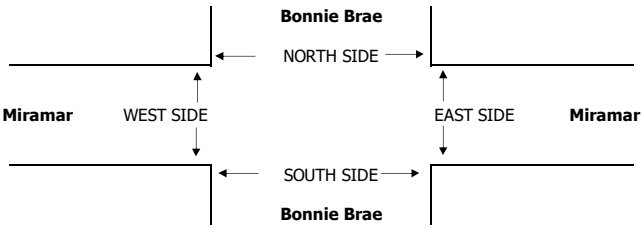
PROJECT #: SC3528
LOCATION #: 7
CONTROL: STOP ALL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Bonnie Brae			SOUTHBOUND Bonnie Brae			EASTBOUND Miramar			WESTBOUND Miramar				U-TURNS				
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	6:00 AM	0	1	0	1	1	0	0	0	0	0	1	2	6	0	0	0	0	0
	6:15 AM	0	2	0	2	2	0	0	0	0	0	0	2	8	0	0	0	0	0
	6:30 AM	0	1	0	1	0	0	0	0	0	1	1	0	4	0	0	0	0	0
	6:45 AM	0	4	0	2	1	0	0	2	0	0	0	1	10	0	0	0	0	0
	7:00 AM	0	2	1	2	5	0	0	1	0	0	0	1	12	0	0	0	0	0
	7:15 AM	0	0	2	2	8	0	0	2	0	1	0	0	15	0	0	0	0	0
	7:30 AM	0	5	0	2	4	0	1	0	0	1	1	2	16	0	0	0	0	0
	7:45 AM	1	3	1	7	6	0	0	0	0	1	1	1	21	0	0	0	0	0
	8:00 AM	1	8	3	2	6	0	1	1	1	1	0	0	24	0	0	0	0	0
	8:15 AM	0	2	0	5	6	0	0	1	1	0	1	1	17	0	0	0	0	0
	8:30 AM	0	1	0	2	8	0	0	5	0	0	0	2	18	0	0	0	0	0
	8:45 AM	0	5	0	6	6	0	0	4	0	1	1	2	25	0	0	0	0	0
	VOLUMES	2	34	7	34	53	0	2	16	2	6	6	14	176	0	0	0	0	0
	APPROACH %	5%	79%	16%	39%	61%	0%	10%	80%	10%	23%	23%	54%						
	APP/DEPART	43	/	50	87	/	61	20	/	57	26	/	8	0					
	BEGIN PEAK HR		8:00 AM																
	VOLUMES	1	16	3	15	26	0	1	11	2	2	2	5	84					
		2	20	4	19	33	0	2	14	3	3	3	7						
	APPROACH %	5%	80%	15%	37%	63%	0%	7%	79%	14%	22%	22%	56%						
	PEAK HR FACTOR		0.417			0.854			0.700			0.563		0.840					
	APP/DEPART	20	/	22	41	/	30	14	/	29	9	/	3	0					
PM	3:00 PM	0	3	1	3	6	0	0	1	0	1	1	3	19	0	0	0	0	0
	3:15 PM	0	4	2	2	8	0	0	0	0	0	1	1	18	0	0	0	0	0
	3:30 PM	0	3	1	5	10	0	0	0	0	1	0	2	22	0	1	0	0	1
	3:45 PM	0	5	2	4	3	0	1	0	0	0	1	3	19	0	0	0	0	0
	4:00 PM	0	11	1	6	4	0	0	1	1	0	1	4	29	0	0	0	0	0
	4:15 PM	0	9	2	2	5	0	1	1	0	0	3	1	24	0	0	0	0	0
	4:30 PM	0	3	2	2	7	0	0	2	1	1	3	1	22	0	1	0	0	1
	4:45 PM	0	4	1	4	6	0	0	1	0	0	2	8	26	0	0	0	0	0
	5:00 PM	1	2	1	4	7	0	0	1	0	0	0	3	19	0	0	0	0	0
	5:15 PM	0	4	1	2	6	1	0	3	0	1	0	8	26	0	0	0	0	0
	5:30 PM	0	8	3	1	8	0	1	4	0	1	1	4	31	0	0	0	0	0
	5:45 PM	0	8	4	4	6	0	0	0	0	3	2	4	31	0	0	0	0	0
	VOLUMES	1	64	21	39	76	1	3	14	2	8	15	42	286	0	2	0	0	2
	APPROACH %	1%	74%	24%	34%	66%	1%	16%	74%	11%	12%	23%	65%						
	APP/DEPART	86	/	111	116	/	86	19	/	72	65	/	17	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	1	22	9	11	27	1	1	8	0	5	3	19	107					
		2	23	10	12	28	2	2	9	0	6	4	20						
	APPROACH %	3%	69%	28%	28%	69%	3%	11%	89%	0%	19%	11%	70%						
	PEAK HR FACTOR		0.667			0.886			0.450			0.750		0.863					
	APP/DEPART	32	/	42	39	/	32	9	/	28	27	/	5	0					



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	6:00 AM	0	2	1	0	3	0	2	1	0	3	0	0	0	0	0
	6:15 AM	2	1	3	0	6	2	0	3	0	5	0	1	0	0	1
	6:30 AM	2	2	3	1	8	1	1	2	1	5	1	1	1	0	3
	6:45 AM	1	1	3	3	8	1	1	3	3	8	0	0	0	0	0
	7:00 AM	1	2	5	0	8	1	2	5	0	8	0	0	0	0	0
	7:15 AM	4	1	1	0	6	4	1	1	0	6	0	0	0	0	0
	7:30 AM	2	2	1	2	7	2	0	0	2	4	0	2	1	0	3
	7:45 AM	1	1	0	0	2	1	1	0	0	2	0	0	0	0	0
	8:00 AM	3	2	7	2	14	3	2	7	2	14	0	0	0	0	0
	8:15 AM	1	2	3	0	6	1	2	3	0	6	0	0	0	0	0
	8:30 AM	4	2	5	2	13	3	2	3	2	10	1	0	2	0	3
	8:45 AM	0	0	2	1	3	0	0	2	1	3	0	0	0	0	0
	TOTAL	21	18	34	11	84	19	14	30	11	74	2	4	4	0	10
	AM BEGIN PEAK HR			8:00 AM			7	6	15	5	33					
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0
	5:15 PM	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0
	5:30 PM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0
	5:45 PM	0	1	1	0	2	0	0	1	0	1	0	1	0	0	1
	TOTAL	2	2	2	1	7	1	1	2	1	5	1	1	0	0	2
	PM BEGIN PEAK HR			5:00 PM			0	1	2	1	4					

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, Apr 14, 22

LOCATION: Claremont
NORTH & SOUTH: Padua
EAST & WEST: Miramar

PROJECT #: SC3383
LOCATION #: 7
CONTROL: STOP E/W

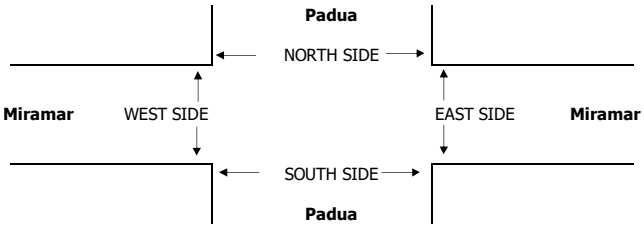
NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

☑ Add U-Turns to Left Turns

	NORTHBOUND Padua			SOUTHBOUND Padua			EASTBOUND Miramar			WESTBOUND Miramar				U-TURNS				
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM 6:00 AM	0	5	0	0	14	0	0	0	1	0	0	0	20	0	0	0	0	0
6:15 AM	2	13	0	0	23	0	0	0	1	1	0	0	40	0	0	0	0	0
6:30 AM	2	20	0	0	18	0	0	0	3	0	1	0	44	0	0	0	0	0
6:45 AM	1	23	5	0	25	0	0	1	4	0	0	0	59	0	0	0	0	0
7:00 AM	0	22	2	1	27	0	0	0	7	1	0	1	61	0	0	0	0	0
7:15 AM	2	21	1	1	52	2	0	0	4	0	1	1	85	0	0	0	0	0
7:30 AM	1	19	5	0	64	0	0	2	2	0	0	0	93	0	0	0	0	0
7:45 AM	5	36	0	1	61	1	1	0	16	0	2	0	123	0	0	0	0	0
8:00 AM	5	37	0	0	57	0	2	1	12	0	0	0	114	0	0	0	0	0
8:15 AM	3	35	2	0	35	0	0	0	8	0	0	0	83	0	0	0	0	0
8:30 AM	3	42	2	0	45	0	0	0	3	2	0	0	97	0	0	0	0	0
8:45 AM	4	35	0	1	52	0	0	0	10	5	0	1	108	0	0	0	0	0
VOLUMES	28	308	17	4	473	3	3	4	71	9	4	3	927	0	0	0	0	0
APPROACH %	8%	87%	5%	1%	99%	1%	4%	5%	91%	56%	25%	19%						
APP/DEPART	353	/	314	480	/	553	78	/	25	16	/	35	0					
BEGIN PEAK HR		7:45 AM																
VOLUMES	16	150	4	1	198	1	3	1	39	2	2	0	417					
APPROACH %	9%	88%	2%	1%	99%	1%	7%	2%	91%	50%	50%	0%						
PEAK HR FACTOR		0.904			0.794			0.632			0.500		0.848					
APP/DEPART	170	/	153	200	/	239	43	/	6	4	/	19	0					
PM 3:00 PM	6	32	0	2	42	0	0	0	8	0	0	1	91	0	1	0	0	1
3:15 PM	5	63	3	0	43	0	0	0	5	1	0	0	120	0	0	0	0	0
3:30 PM	3	39	0	1	44	1	1	0	7	1	0	0	97	0	0	0	0	0
3:45 PM	5	47	0	0	46	0	1	0	5	0	1	0	105	0	0	0	0	0
4:00 PM	1	40	0	0	34	2	0	0	6	8	0	0	91	0	0	0	0	0
4:15 PM	4	47	0	0	30	1	0	0	4	1	0	0	87	0	0	0	0	0
4:30 PM	4	41	0	0	37	1	2	2	2	4	0	0	93	0	0	0	0	0
4:45 PM	4	76	0	0	47	0	2	0	6	1	0	0	136	0	0	0	0	0
5:00 PM	5	57	0	0	37	0	0	0	8	0	0	0	107	0	0	0	0	0
5:15 PM	3	71	0	0	40	0	1	0	9	3	0	0	127	0	0	0	0	0
5:30 PM	8	73	0	0	32	1	2	0	2	0	0	0	118	0	0	0	0	0
5:45 PM	3	68	0	0	37	0	3	0	2	2	0	0	115	0	0	0	0	0
VOLUMES	51	654	3	3	469	6	12	2	64	21	1	1	1,287	0	1	0	0	1
APPROACH %	7%	92%	0%	1%	98%	1%	15%	3%	82%	91%	4%	4%						
APP/DEPART	708	/	668	478	/	554	78	/	7	23	/	58	0					
BEGIN PEAK HR		4:45 PM																
VOLUMES	20	277	0	0	156	1	5	0	25	4	0	0	488					
APPROACH %	7%	93%	0%	0%	99%	1%	17%	0%	83%	100%	0%	0%						
PEAK HR FACTOR		0.917			0.835			0.750			0.333		0.897					
APP/DEPART	297	/	282	157	/	185	30	/	0	4	/	21	0					



	PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM 6:00 AM	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0
6:15 AM	0	1	2	1	4	0	1	1	0	2	0	0	1	1	2
6:30 AM	2	1	0	0	3	2	1	0	0	3	0	0	0	0	0
6:45 AM	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0
7:30 AM	1	0	0	3	4	1	0	0	1	2	0	0	0	2	2
7:45 AM	1	0	1	1	3	1	0	0	1	2	0	0	1	0	1
8:00 AM	0	0	0	3	3	0	0	0	2	2	0	0	0	1	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	5	2	5	8	20	5	2	2	4	13	0	0	3	4	7
AM BEGIN PEAK HR			7:45 AM			1	0	0	3	4					
PM 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	2	2	0	0	0	0	0	0	0	0	2	2
3:30 PM	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	2	0	0	0	2	2	0	0	0	2	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	2	1	0	3	0	1	1	0	2	0	1	0	0	1
5:00 PM	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1
5:15 PM	0	2	3	1	6	0	0	0	1	1	0	2	3	0	5
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1
TOTAL	2	5	6	3	16	2	1	1	1	5	0	4	5	2	11
PM BEGIN PEAK HR			4:45 PM			0	1	1	1	3					

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

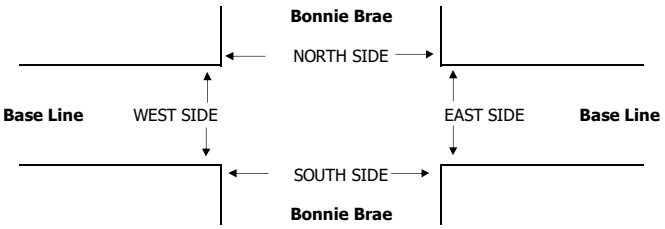
DATE:	LOCATION:	Claremont	PROJECT #:	SC3528
Thu, Jun 30, 22	NORTH & SOUTH:	Bonnie Brae	LOCATION #:	8
	EAST & WEST:	Base Line	CONTROL:	STOP S

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND Bonnie Brae			SOUTHBOUND Bonnie Brae			EASTBOUND Base Line			WESTBOUND Base Line				U-TURNS				
	LANES:	NL X	NT X	NR X	SL 0	ST X	SR 0	EL 1	ET 2	ER 0	WL X	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	6:00 AM	0	0	0	1	0	1	1	28	0	0	44	2	77	0	0	0	0	0
	6:15 AM	0	0	0	3	0	3	0	35	0	0	61	5	107	0	0	0	0	0
	6:30 AM	0	0	0	3	0	4	1	26	0	0	73	3	110	0	0	0	0	0
	6:45 AM	0	0	0	9	0	4	3	42	0	0	85	2	145	0	0	0	0	0
	7:00 AM	0	0	0	3	0	7	4	44	0	0	78	1	137	0	0	0	0	0
	7:15 AM	0	0	0	7	0	10	0	57	0	0	93	1	168	0	0	0	0	0
	7:30 AM	0	0	0	5	0	8	4	53	0	0	101	4	175	0	0	0	0	0
	7:45 AM	0	0	0	3	0	7	4	108	0	0	167	5	294	0	0	0	0	0
	8:00 AM	0	0	0	9	0	7	9	103	0	0	104	6	238	0	0	0	0	0
	8:15 AM	0	0	0	5	0	10	0	102	0	0	141	2	260	0	0	0	0	0
	8:30 AM	0	0	0	7	0	4	0	125	0	0	167	3	306	0	0	0	0	0
	8:45 AM	0	0	0	6	0	2	0	129	0	0	167	2	306	0	0	0	0	0
	VOLUMES	0	0	0	61	0	67	26	852	0	0	1,281	36	2,323	0	0	0	0	0
	APPROACH %	0%	0%	0%	48%	0%	52%	3%	97%	0%	0%	97%	3%						
	APP/DEPART	0	/	62	128	/	0	878	/	913	1,317	/	1,348	0					
	BEGIN PEAK HR		8:00 AM																
	VOLUMES	0	0	0	27	0	23	9	459	0	0	579	13	1,110					
		0	0	0	34	0	29	12	570	0	0	718	17						
	APPROACH %	0%	0%	0%	54%	0%	46%	2%	98%	0%	0%	98%	2%						
	PEAK HR FACTOR		0.000			0.781			0.907			0.871		0.907					
	APP/DEPART	0	/	22	50	/	0	468	/	486	592	/	602	0					
PM	3:00 PM	0	0	0	3	0	4	9	173	0	0	122	8	319	0	0	0	0	0
	3:15 PM	0	0	0	2	0	7	10	140	0	0	101	10	270	0	0	0	0	0
	3:30 PM	0	0	0	6	0	6	7	185	0	0	119	1	324	0	0	1	0	1
	3:45 PM	0	0	0	6	0	6	7	204	0	0	117	8	348	0	0	0	0	0
	4:00 PM	0	0	0	6	0	8	13	177	0	0	145	13	362	0	0	0	0	0
	4:15 PM	0	0	0	8	0	8	13	161	0	0	170	8	368	0	0	0	0	0
	4:30 PM	0	0	0	7	0	9	14	210	0	0	157	2	399	0	0	0	0	0
	4:45 PM	0	0	0	5	0	12	7	189	0	0	148	9	370	0	0	0	0	0
	5:00 PM	0	0	0	4	0	9	11	194	0	0	133	10	361	0	0	0	0	0
	5:15 PM	0	0	0	5	0	7	10	200	0	0	163	13	398	0	0	0	0	0
	5:30 PM	0	0	0	9	0	11	13	216	0	0	138	11	398	0	0	0	0	0
	5:45 PM	0	0	0	5	0	10	10	218	0	0	146	7	396	0	0	0	0	0
	VOLUMES	0	0	0	66	0	97	124	2,267	0	0	1,659	100	4,313	0	0	1	0	1
	APPROACH %	0%	0%	0%	40%	0%	60%	5%	95%	0%	0%	94%	6%						
	APP/DEPART	0	/	223	163	/	0	2,391	/	2,333	1,759	/	1,757	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	0	0	0	23	0	37	44	828	0	0	580	41	1,553					
		0	0	0	24	0	38	45	845	0	0	592	42						
	APPROACH %	0%	0%	0%	38%	0%	62%	5%	95%	0%	0%	93%	7%						
	PEAK HR FACTOR		0.000			0.750			0.952			0.882		0.976					
	APP/DEPART	0	/	85	60	/	0	872	/	851	621	/	617	0					



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	6:00 AM	3	0	0	0	3	1	0	0	0	1	2	0	0	0	2
	6:15 AM	2	0	0	0	2	1	0	0	0	1	1	0	0	0	1
	6:30 AM	3	0	0	0	3	1	0	0	0	1	2	0	0	0	2
	6:45 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1
	7:00 AM	6	0	0	0	6	0	0	0	0	0	6	0	0	0	6
	7:15 AM	3	4	2	0	9	2	0	0	0	2	1	4	2	0	7
	7:30 AM	1	1	0	1	3	0	0	0	0	0	1	1	0	1	3
	7:45 AM	4	0	0	0	4	0	0	0	0	0	4	0	0	0	4
	8:00 AM	9	0	0	0	9	0	0	0	0	0	9	0	0	0	9
	8:15 AM	2	0	0	0	2	1	0	0	0	1	1	0	0	0	1
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0
	TOTAL	34	6	2	1	43	7	0	0	0	7	27	6	2	1	36
	AM BEGIN PEAK HR			8:00 AM			2	0	0	0	2					
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	2	1	0	0	3	1	0	0	0	1	1	1	0	0	2
	4:15 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	1	2	0	0	3	0	1	0	0	1	1	1	0	0	2
	5:00 PM	2	1	0	0	3	0	0	0	0	0	2	1	0	0	3
	5:15 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1
	5:30 PM	1	1	0	0	2	0	1	0	0	1	1	0	0	0	1
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	6	8	0	0	14	1	2	0	0	3	5	6	0	0	11
	PM BEGIN PEAK HR			5:00 PM			0	1	0	0	1					

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, Jun 30, 22

LOCATION: Claremont
NORTH & SOUTH: Mills
EAST & WEST: Miramar

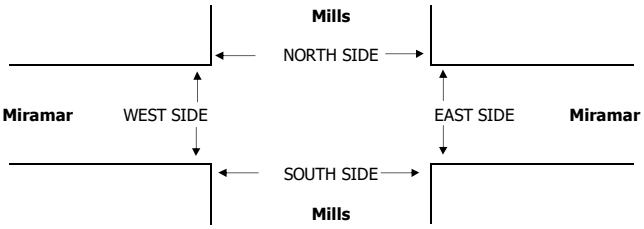
PROJECT #: SC3528
LOCATION #: 9
CONTROL: STOP E/W

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND (Mills)			SOUTHBOUND (Mills)			EASTBOUND (Miramar)			WESTBOUND (Miramar)				U-TURNS				
	LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	6:00 AM	3	17	0	0	8	0	0	1	0	1	0	0	30	1	0	0	0	1
	6:15 AM	1	9	1	0	5	0	0	0	2	1	0	0	19	0	0	0	0	0
	6:30 AM	1	13	2	1	12	0	0	0	2	3	0	1	35	0	0	0	0	0
	6:45 AM	1	21	1	0	16	0	0	1	3	1	0	0	44	0	0	0	0	0
	7:00 AM	0	28	2	1	29	1	0	2	2	1	1	0	67	0	0	0	0	0
	7:15 AM	1	20	1	2	17	0	1	0	6	3	0	0	51	0	0	0	0	0
	7:30 AM	1	17	2	0	23	0	0	2	1	0	1	0	47	0	0	0	0	0
	7:45 AM	2	27	0	2	31	1	0	1	6	6	1	1	78	0	0	0	0	0
	8:00 AM	1	36	3	0	28	0	0	1	7	3	0	0	79	0	0	0	0	0
	8:15 AM	0	46	5	0	35	0	0	1	5	4	1	0	97	0	0	0	0	0
	8:30 AM	5	46	2	0	69	1	0	3	6	5	1	0	138	0	0	0	0	0
	8:45 AM	1	50	3	1	70	0	1	4	6	7	1	0	144	0	0	0	0	0
	VOLUMES	17	330	22	7	343	3	2	16	46	35	6	2	829	1	0	0	0	1
	APPROACH %	5%	89%	6%	2%	97%	1%	3%	25%	72%	81%	14%	5%						
	APP/DEPART	369	/	334	353	/	425	64	/	45	43	/	25	0					
	BEGIN PEAK HR		8:00 AM																
	VOLUMES	7	178	13	1	202	1	1	9	24	19	3	0	458					
	APPROACH %	4%	90%	7%	0%	99%	0%	3%	26%	71%	86%	14%	0%						
	PEAK HR FACTOR		0.917			0.718			0.773			0.688		0.795					
	APP/DEPART	198	/	179	204	/	245	34	/	23	22	/	11	0					
PM	3:00 PM	5	36	2	1	44	0	1	0	4	1	0	0	94	0	0	0	0	0
	3:15 PM	3	40	4	1	37	0	0	2	7	3	1	0	98	0	0	0	0	0
	3:30 PM	4	31	2	0	30	0	1	0	5	1	0	0	74	0	0	0	0	0
	3:45 PM	2	61	5	2	26	1	0	2	4	5	2	0	110	0	0	0	0	0
	4:00 PM	6	45	4	1	67	0	1	2	6	0	0	0	132	0	0	0	0	0
	4:15 PM	2	36	2	1	55	0	0	0	3	1	1	1	102	0	0	0	0	0
	4:30 PM	4	24	2	0	31	2	0	2	3	4	2	0	74	0	0	0	0	0
	4:45 PM	5	34	7	0	37	0	0	3	4	1	3	0	94	0	0	0	0	0
	5:00 PM	6	24	6	0	33	0	1	2	3	4	0	0	79	0	0	0	0	0
	5:15 PM	7	44	7	1	31	0	1	0	7	2	2	1	103	0	0	0	0	0
	5:30 PM	7	24	2	0	24	0	1	3	1	5	2	0	69	0	0	0	0	0
	5:45 PM	5	33	5	0	18	2	2	1	5	1	0	1	73	0	0	0	0	0
	VOLUMES	56	432	48	7	433	5	8	17	52	28	13	3	1,102	0	0	0	0	0
	APPROACH %	10%	81%	9%	2%	97%	1%	10%	22%	68%	64%	30%	7%						
	APP/DEPART	536	/	443	445	/	513	77	/	72	44	/	74	0					
	BEGIN PEAK HR		3:45 PM																
	VOLUMES	14	166	13	4	179	3	1	6	16	10	5	1	418					
	APPROACH %	7%	86%	7%	2%	96%	2%	4%	26%	70%	63%	31%	6%						
	PEAK HR FACTOR		0.710			0.684			0.639			0.571		0.792					
	APP/DEPART	193	/	168	186	/	205	23	/	23	16	/	22	0					



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	6:00 AM	2	0	1	2	5	1	0	1	2	4	1	0	0	0	1
	6:15 AM	0	2	1	1	4	0	1	1	1	3	0	1	0	0	1
	6:30 AM	1	0	2	2	5	0	0	0	1	1	1	0	2	1	4
	6:45 AM	1	1	1	2	5	1	1	0	1	3	0	0	1	1	2
	7:00 AM	1	1	3	2	7	1	1	1	1	4	0	0	2	1	3
	7:15 AM	1	2	5	5	13	1	1	3	5	10	0	1	2	0	3
	7:30 AM	2	0	2	5	9	2	0	1	5	8	0	0	1	0	1
	7:45 AM	2	0	2	5	9	2	0	0	4	6	0	0	2	1	3
	8:00 AM	0	3	2	5	10	0	3	2	2	7	0	0	0	3	3
	8:15 AM	2	0	2	4	8	2	0	1	3	6	0	0	1	1	2
	8:30 AM	0	0	1	2	3	0	0	0	2	2	0	0	1	0	1
	8:45 AM	0	0	9	9	18	0	0	2	5	7	0	0	7	4	11
	TOTAL	12	9	31	44	96	10	7	12	32	61	2	2	19	12	35
	AM BEGIN PEAK HR			8:00 AM			2	3	5	12	22					
PM	3:00 PM	1	0	1	0	2	1	0	0	0	1	0	0	1	0	1
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1
	4:15 PM	0	0	1	1	2	0	0	0	0	0	0	0	1	1	2
	4:30 PM	1	0	2	1	4	1	0	0	0	1	0	0	2	1	3
	4:45 PM	1	0	0	1	2	1	0	0	0	1	0	0	0	1	1
	5:00 PM	1	0	1	1	3	1	0	0	1	2	0	0	1	0	1
	5:15 PM	0	0	0	2	2	0	0	0	1	1	0	0	0	1	1
	5:30 PM	0	0	1	1	2	0	0	0	0	0	0	0	1	1	2
	5:45 PM	0	0	1	1	2	0	0	0	1	1	0	0	1	0	1
	TOTAL	4	0	8	9	21	4	0	0	4	8	0	0	8	5	13
	PM BEGIN PEAK HR			3:45 PM			1	0	0	0	1					

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, Jun 30, 22

LOCATION: Claremont
NORTH & SOUTH: Mills
EAST & WEST: Base Line

PROJECT #: SC3528
LOCATION #: 10
CONTROL: SIGNAL

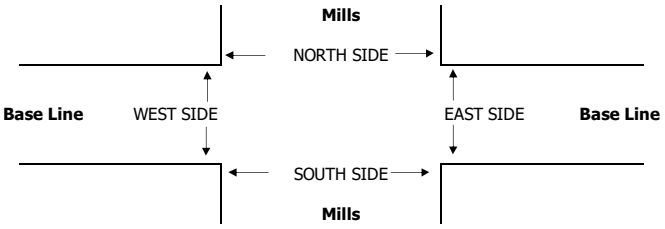
NOTES:

AM / PM / MD / OTHER / OTHER

N ▲ | ◄ W | E ► | S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND (Mills)			SOUTHBOUND (Mills)			EASTBOUND (Base Line)			WESTBOUND (Base Line)				U-TURNS				
	LANES:	NL 1	NT 1	NR 1	SL 1	ST 1	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	6:00 AM	5	9	4	6	1	7	6	21	1	7	41	8	116	0	0	0	0	0
	6:15 AM	3	3	3	7	1	4	5	27	7	0	61	6	127	0	0	0	0	0
	6:30 AM	10	7	4	3	7	12	6	22	5	12	58	6	152	0	0	0	0	0
	6:45 AM	6	8	4	7	7	6	7	35	6	10	63	10	169	0	0	0	0	0
	7:00 AM	17	15	2	9	15	11	9	39	7	8	58	11	201	0	0	0	0	0
	7:15 AM	15	11	4	16	5	11	12	50	6	16	68	11	225	0	0	0	0	0
	7:30 AM	8	4	5	19	10	11	7	46	7	14	100	10	241	0	0	0	0	0
	7:45 AM	13	11	11	10	10	34	12	91	13	20	125	9	359	0	0	0	0	0
	8:00 AM	21	18	11	14	7	21	19	91	11	13	64	12	302	0	0	0	0	0
	8:15 AM	23	9	18	15	15	24	24	79	8	18	97	19	349	0	0	0	0	0
	8:30 AM	15	18	7	27	37	35	26	106	15	25	110	13	434	0	0	0	0	0
	8:45 AM	21	24	5	40	26	30	30	106	12	23	123	12	452	0	0	0	0	0
	VOLUMES	157	137	78	173	141	206	163	713	98	166	968	127	3,127	0	0	0	0	0
	APPROACH %	42%	37%	21%	33%	27%	40%	17%	73%	10%	13%	77%	10%						
	APP/DEPART	372	/	427	520	/	405	974	/	964	1,261	/	1,331	0					
	BEGIN PEAK HR		8:00 AM																
	VOLUMES	80	69	41	96	85	110	99	382	46	79	394	56	1,537					
	APPROACH %	42%	36%	22%	33%	29%	38%	19%	72%	9%	15%	74%	11%						
	PEAK HR FACTOR		0.950			0.735			0.890			0.837		0.850					
	APP/DEPART	190	/	224	291	/	210	527	/	519	529	/	584	0					
PM	3:00 PM	22	18	14	10	12	17	12	126	9	14	59	7	320	0	0	0	0	0
	3:15 PM	26	15	12	13	13	13	17	144	10	16	67	8	354	0	0	0	0	0
	3:30 PM	16	21	18	9	17	19	23	139	21	22	99	11	415	0	0	0	0	0
	3:45 PM	20	31	19	16	14	12	23	195	12	17	85	22	466	0	0	0	0	0
	4:00 PM	25	24	18	21	25	42	15	146	15	16	107	21	475	0	0	0	0	0
	4:15 PM	32	22	17	27	18	12	15	161	16	25	116	15	476	0	0	0	0	0
	4:30 PM	28	15	21	11	15	23	13	194	22	17	109	11	479	0	0	0	0	0
	4:45 PM	28	22	25	14	16	19	19	163	18	18	113	14	469	0	0	0	0	0
	5:00 PM	37	14	24	9	14	18	19	165	20	19	99	17	455	0	0	0	0	0
	5:15 PM	19	29	16	14	15	17	21	178	11	24	134	14	492	0	0	0	0	0
	5:30 PM	39	20	9	14	20	13	23	201	13	21	105	14	492	0	0	0	0	0
	5:45 PM	26	18	15	11	10	13	23	199	19	14	124	8	480	0	0	0	0	0
	VOLUMES	318	249	208	169	189	218	223	2,011	186	223	1,217	162	5,373	0	0	0	0	0
	APPROACH %	41%	32%	27%	29%	33%	38%	9%	83%	8%	14%	76%	10%						
	APP/DEPART	775	/	634	576	/	598	2,420	/	2,388	1,602	/	1,753	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	121	81	64	48	59	61	86	743	63	78	462	53	1,919					
	APPROACH %	45%	30%	24%	29%	35%	36%	10%	83%	7%	13%	78%	9%						
	PEAK HR FACTOR		0.887			0.894			0.925			0.862		0.975					
	APP/DEPART	266	/	220	168	/	200	892	/	855	593	/	644	0					



		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	6:00 AM	2	0	1	0	3	1	0	1	0	2	1	0	0	0	1
	6:15 AM	3	3	3	1	10	2	3	3	1	9	1	0	0	0	1
	6:30 AM	2	2	0	0	4	0	2	0	0	2	2	0	0	0	2
	6:45 AM	5	2	2	1	10	1	2	1	0	4	4	0	1	1	6
	7:00 AM	0	2	1	2	5	0	2	0	2	4	0	0	1	0	1
	7:15 AM	1	4	0	2	7	0	1	0	2	3	1	3	0	0	4
	7:30 AM	1	2	0	3	6	0	2	0	3	5	1	0	0	0	1
	7:45 AM	7	1	1	2	11	0	1	1	1	3	7	0	0	1	8
	8:00 AM	3	6	5	3	17	1	6	2	2	11	2	0	3	1	6
	8:15 AM	1	7	2	2	12	0	7	2	2	11	1	0	0	0	1
	8:30 AM	0	3	2	1	6	0	1	2	1	4	0	2	0	0	2
	8:45 AM	2	1	0	1	4	0	1	0	1	2	2	0	0	0	2
	TOTAL	27	33	17	18	95	5	28	12	15	60	22	5	5	3	35
	AM BEGIN PEAK HR			8:00 AM			1	15	6	6	28					
PM	3:00 PM	0	1	1	0	2	0	1	0	0	1	0	0	1	0	1
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	1	0	1	2	0	1	0	1	2	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	2	1	1	1	5	1	0	0	1	2	1	1	1	0	3
	4:15 PM	0	2	2	1	5	0	1	1	0	2	0	1	1	1	3
	4:30 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1
	4:45 PM	1	1	1	0	3	0	1	1	0	2	1	0	0	0	1
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	2	1	2	1	6	2	1	2	1	6	0	0	0	0	0
	5:30 PM	0	1	0	1	2	0	1	0	1	2	0	0	0	0	0
	5:45 PM	0	0	1	1	2	0	0	1	1	2	0	0	0	0	0
	TOTAL	5	8	8	7	28	3	6	5	5	19	2	2	3	2	9
	PM BEGIN PEAK HR			5:00 PM			2	2	3	3	10					

Forbes and Baseline

April Counts AM

NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
0	0	0	17	0	44	26	639	0	0	994	13	1733

June Counts AM

NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
0	0	0	4	0	37	21	464	0	0	602	10	1138

Percentage Decrease

NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
0%	0%	0%	76%	0%	16%	19%	27%	0%	0%	39%	23%	34%

April Counts PM

NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
0	0	0	20	0	28	50	1011	0	0	617	21	1747

June Counts PM

NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
0	0	0	20	0	22	35	859	0	0	609	22	1567

Percentage Decrease

NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
0%	0%	0%	0%	0%	21%	30%	15%	0%	0%	1%	-5%	10%

Mills and Miramar

Percentage increase in NBL, WBT, and EBR

April Counts AM

NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
11	147	31	1	208	2	1	10	39	20	3	4	477

April Counts Total of NBL, SBR, and WBT AM: 16

June Counts AM

NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
7	178	13	1	202	1	1	9	24	19	3	0	458

June Counts Total of NBL, SBR, and WBT AM: 11

Percentage Decrease

NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
36%	-21%	58%	0%	3%	50%	0%	10%	38%	5%	0%	100%

Percentage Decrease: 31%

4%

April Counts PM

NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
16	151	8	3	137	3	6	6	24	12	6	0	372

April Counts Total of NBL, SBR, and WBT PM: 25

June Counts PM

NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
14	166	13	4	179	3	1	6	16	10	5	1	418

June Counts Total of NBL, SBR, and WBT PM: 22

Percentage Decrease

NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
13%	-10%	-63%	-33%	-31%	0%	83%	0%	33%	17%	17%	#DIV/0!

Percentage Decrease: 12%

-12%

Mills and Baseline

Percentage increase in NBL, WBT, and EBR

April Counts AM

NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
129	100	85	57	158	156	84	471	109	185	693	51	2278

April Counts Total of NBL, SBR, and WBT AM: 978

June Counts AM

NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
80	69	41	96	85	110	99	382	46	79	394	56	1537

June Counts Total of NBL, SBR, and WBT AM: 584

Percentage Decrease

NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
38%	31%	52%	-68%	46%	29%	-18%	19%	58%	57%	43%	-10%

Percentage Decrease: 40%

33%

April Counts PM

NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
123	105	97	47	71	73	82	822	82	77	440	62	2081

April Counts Total of NBL, SBR, and WBT PM: 636

June Counts PM

NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
121	81	64	48	59	61	86	743	63	78	462	53	1919

June Counts Total of NBL, SBR, and WBT PM: 644

Percentage Decrease

NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
2%	23%	34%	-2%	17%	16%	-5%	10%	23%	-1%	-5%	15%

Percentage Decrease: -1%

8%

AM Percentage Increas
24

PM Percentage Increas
2

APPENDIX C – SCAG MODEL GROWTH RATE DERIVATION

2012 SCAG Volumes					
Intersection	**NB**	**SB**	**EB**	**WB**	**Total**
Mills Ave and Baseline Rd	4556	8865	16638	28739	58798
Indian Hill and Baseline Rd	4812	1812	16638	25225	48487
Towne Ave and Baseline Rd	0	14489	13868	25225	53582

2040 SCAG Volumes					
Intersection	**NB**	**SB**	**EB**	**WB**	**Total**
Mills Ave and Baseline Rd	4999	8872	19626	34106	67603
Indian Hill and Baseline Rd	4403	1652	22387	27508	55950
Towne Ave and Baseline Rd	0	10981	17982	27508	56471

Base Year	**Buildout Year**	**Increase in Vol.**	**# years**	**%Growth/year**
2012	**2040**		**28**	
Base Yr Vol.	**Buildout Yr Vol.**		**Growth/year**	
58798	67603	8805	314.46	0.53%
48487	55950	7463	266.54	0.55%
53582	56471	2889	103.18	0.19%
Average % Growth				**0.43%**

APPENDIX D – HORIZON YEAR VOLUME DEVELOPMENT

	Existing AM Traffic Volumes											
	Intersection	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**
Towne Ave/Base Line Rd	1	200	22	319	8	4	3	9	219	123	427	308	6
Mountain Ave/Base Line Rd	2	65	29	160	38	75	49	34	413	118	193	590	30
Indian Hill Blvd/Base Line Rd	3	101	43	204	51	102	55	36	413	160	327	670	41
Forbes Ave/Miramar Ave	4	0	0	19	0	0	0	0	0	0	5	0	0
Forbes Ave/Proj Dwy	5	0	19	0	0	5	0	0	0	0	0	0	0
Forbes/Base Line Rd	6	0	0	0	17	0	44	26	639	0	0	994	13
Bonnie Brae Ave/Miramar Ave	7	2	20	4	19	33	0	2	14	3	3	3	7
Bonnie Brae Ave/Base Line Rd	8	0	0	0	42.16	0	35.96	14.88	706.8	0	0	890.32	21.08
Mills Ave/Miramar Ave	9	11	147	31	1	208	2	1	10	39	20	3	4
Mills Ave/Base Line Rd	10	129	100	85	57	158	156	84	471	109	185	693	51

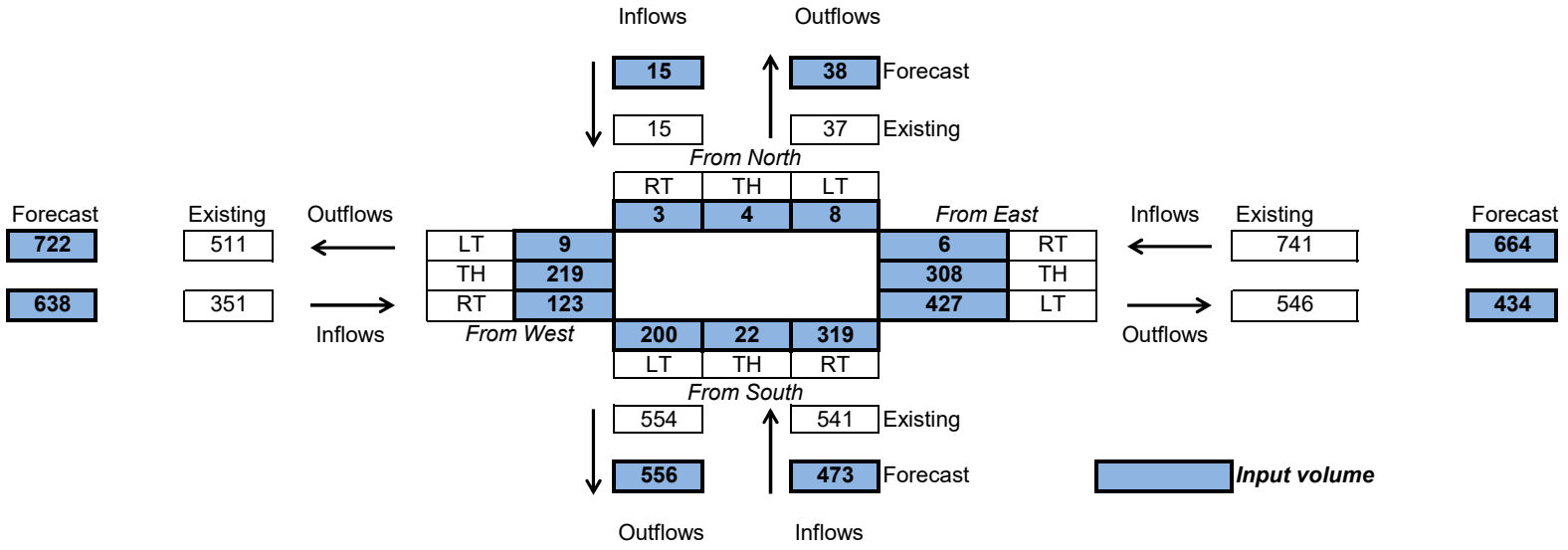
	Future AM Traffic Volumes											
	Intersection	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**
Towne Ave/Base Line Rd	1	319	15	129	4	4	6	19	300	303	249	397	4
Mountain Ave/Base Line Rd	2	245	5	45	8	36	144	27	494	308	43	800	2
Indian Hill Blvd/Base Line Rd	3	440	7	22	4	25	231	74	562	508	35	1222	2
Forbes Ave/Miramar Ave	4	0	0	10	0	0	0	0	0	0	5	0	0
Forbes Ave/Proj Dwy	5	0	19	0	0	5	0	0	0	0	0	0	0
Forbes/Base Line Rd	6	0	0	0	17	0	44	26	639	0	0	994	13
Bonnie Brae Ave/Miramar Ave	7	2	20	4	19	33	0	2	14	3	3	3	7
Bonnie Brae Ave/Base Line Rd	8	0	0	0	42	0	36	15	709	0	0	893	21
Mills Ave/Miramar Ave	9	11	147	31	1	209	2	1	10	39	20	3	4
Mills Ave/Base Line Rd	10	315	21	8	5	39	300	207	513	398	25	715	4

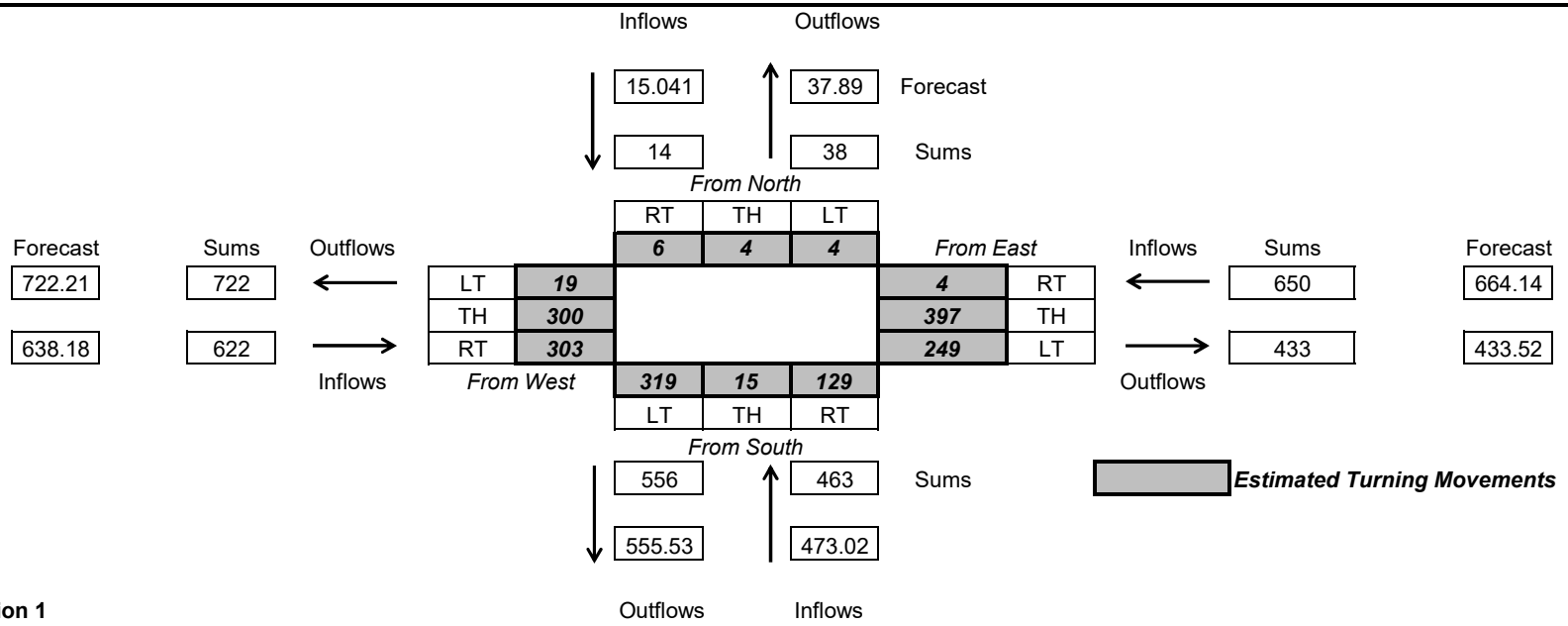
With 0.43% per year Growth Rate application for Intersections #4, #5, #7, #9

	Future AM Traffic Volumes											
	Intersection	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**
Towne Ave/Base Line Rd	1	319	15	129	4	4	6	19	300	303	249	397	4
Mountain Ave/Base Line Rd	2	245	5	45	8	36	144	27	494	308	43	800	2
Indian Hill Blvd/Base Line Rd	3	440	7	22	4	25	231	74	562	508	35	1222	2
Forbes Ave/Miramar Ave	4	0	0	20	0	0	0	0	0	0	5	0	0
Forbes Ave/Proj Dwy	5	0	20	0	0	5	0	0	0	0	0	0	0
Forbes/Base Line Rd	6	0	0	0	17	0	44	26	641	0	0	997	14
Bonnie Brae Ave/Miramar Ave	7	2	22	4	20	36	0	2	15	3	3	3	8
Bonnie Brae Ave/Base Line Rd	8	0	0	0	42	0	36	15	709	0	0	893	21
Mills Ave/Miramar Ave	9	12	158	33	1	224	2	1	11	42	22	3	4
Mills Ave/Base Line Rd	10	315	21	8	5	39	300	207	513	398	25	715	4

Iterative Method Estimated Turning Movements

Input Volumes

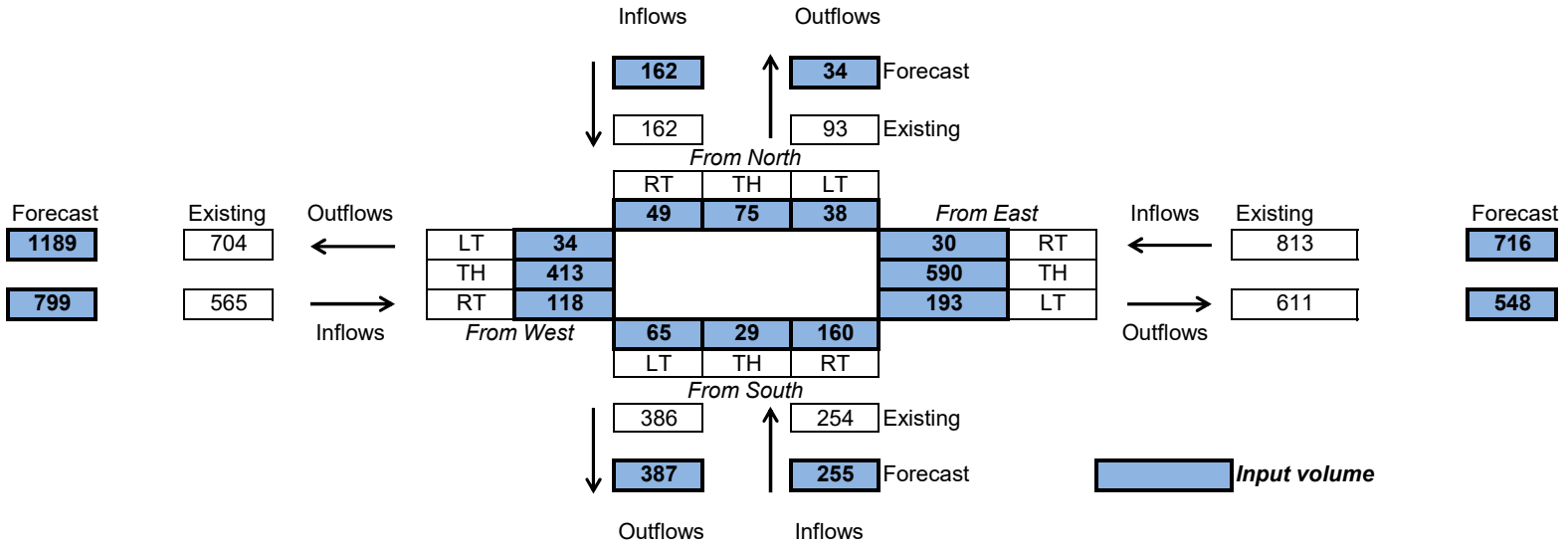


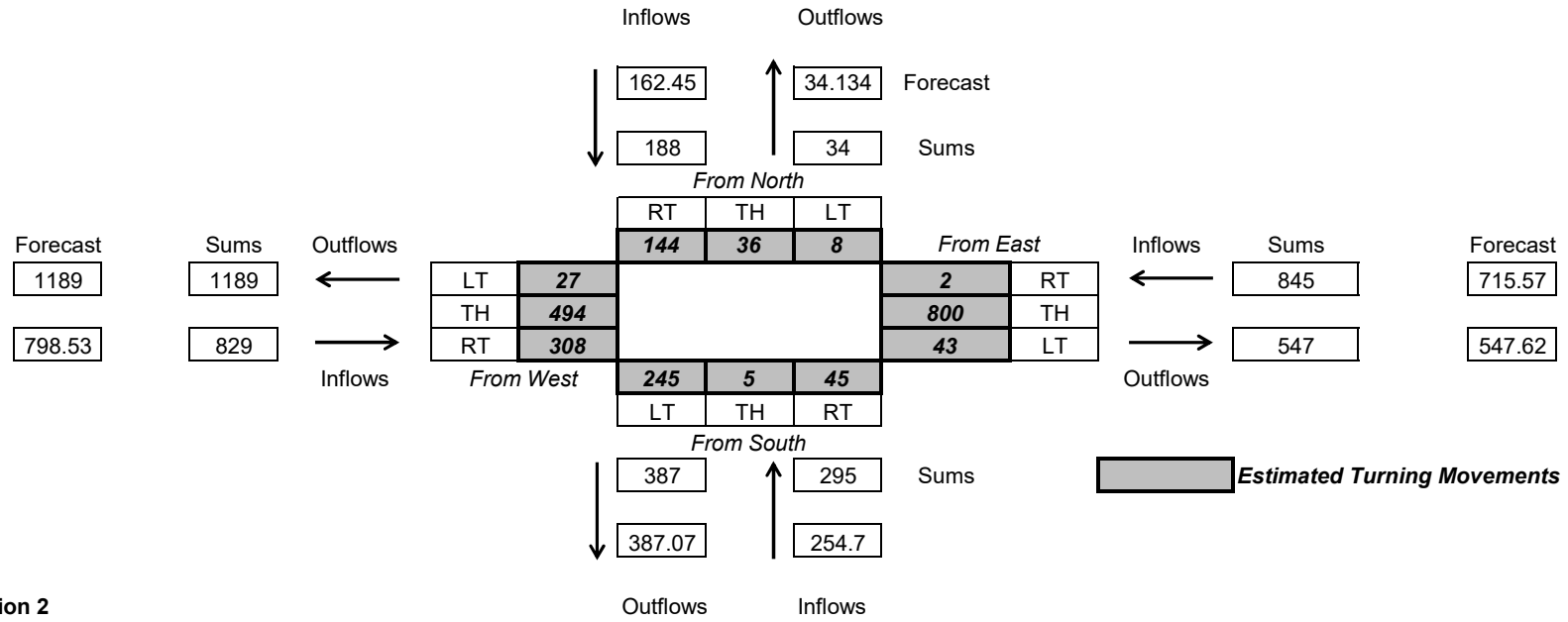


Intersection 1
AM

Iterative Method Estimated Turning Movements

Input Volumes

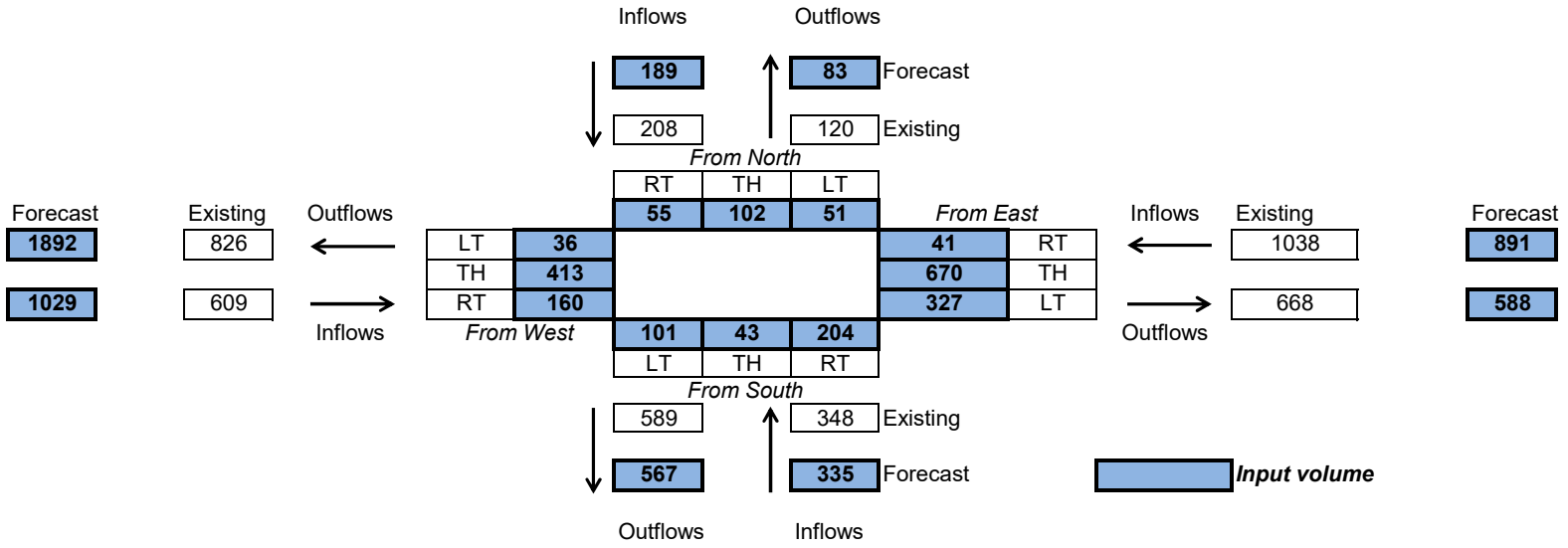


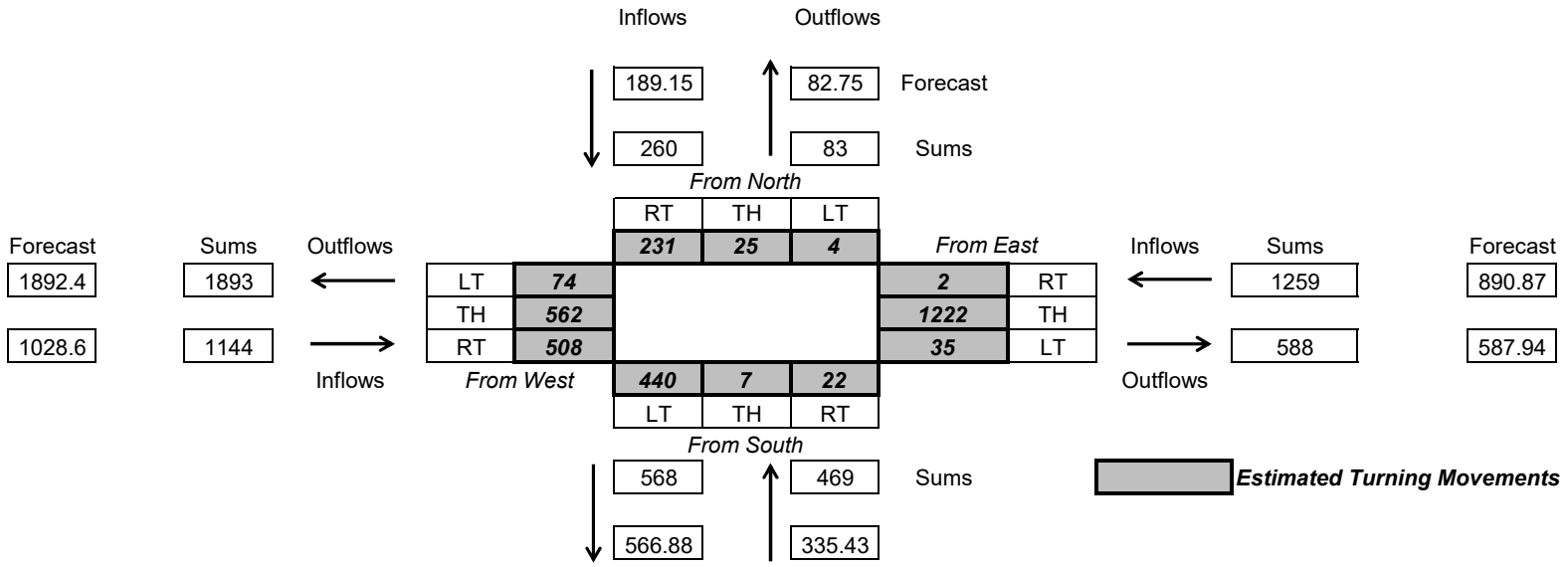


Intersection 2
AM

Iterative Method Estimated Turning Movements

Input Volumes

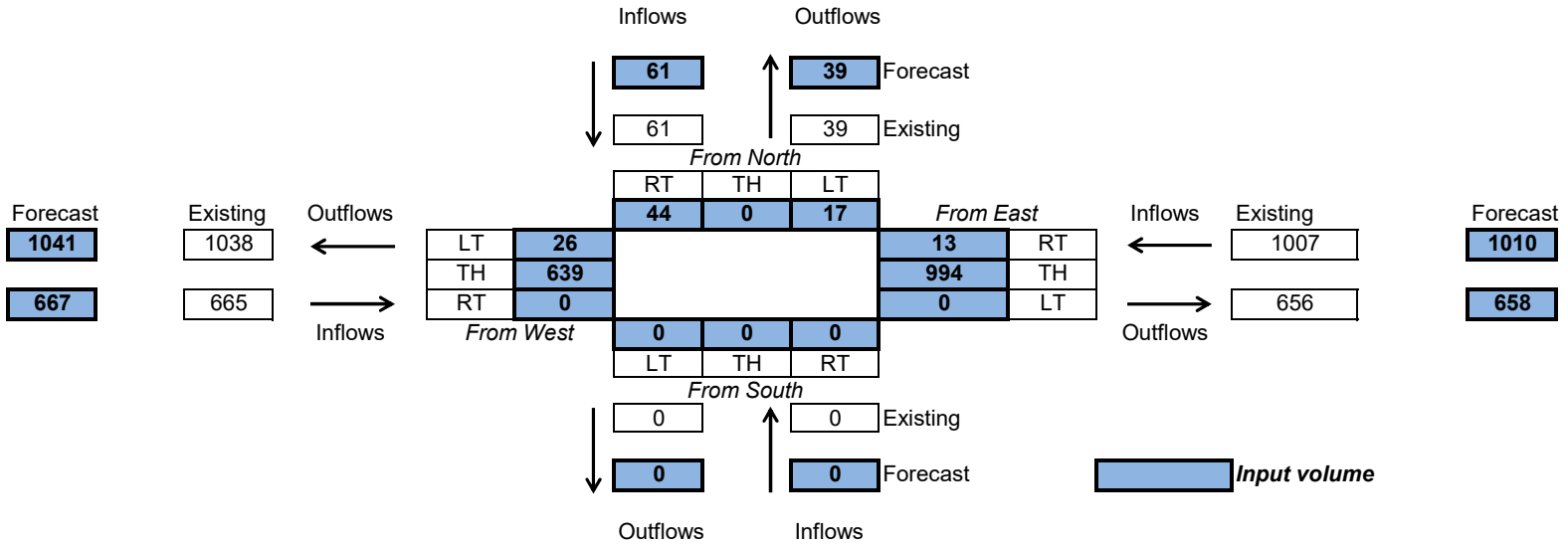


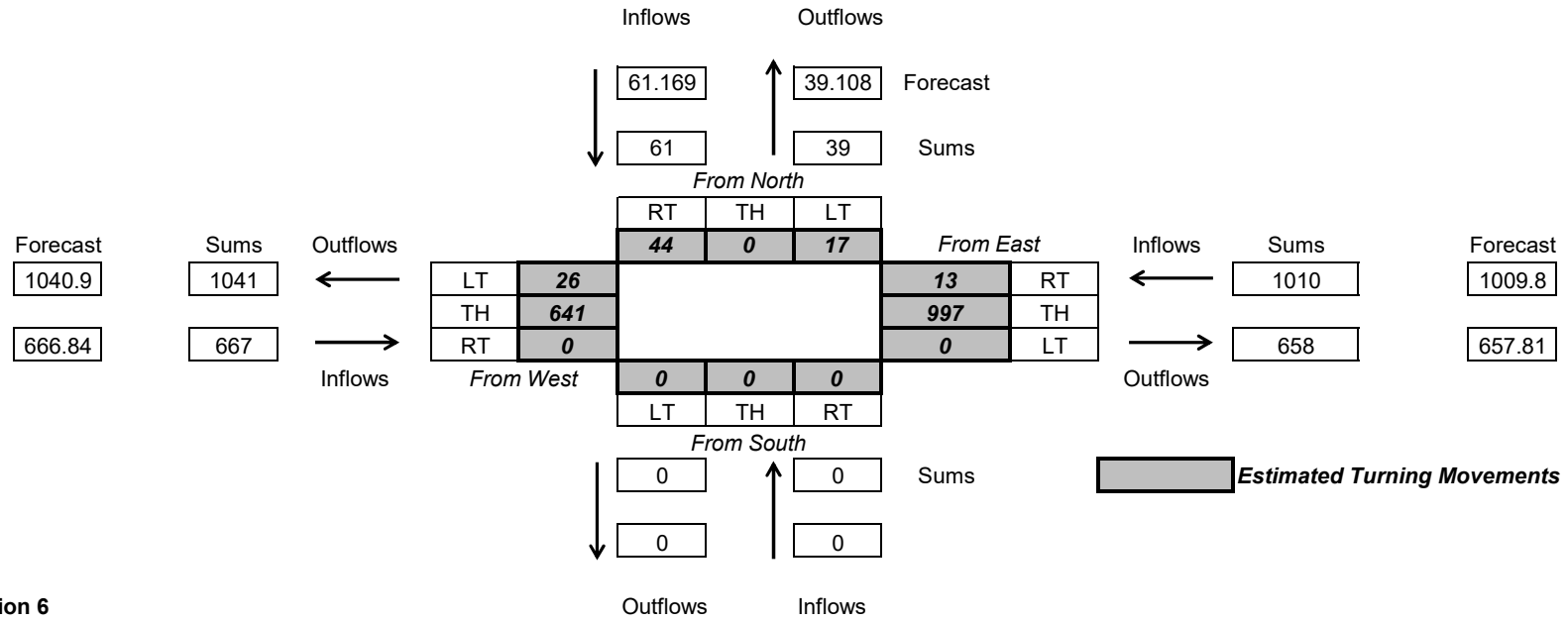


Intersection 3
AM

Iterative Method Estimated Turning Movements

Input Volumes

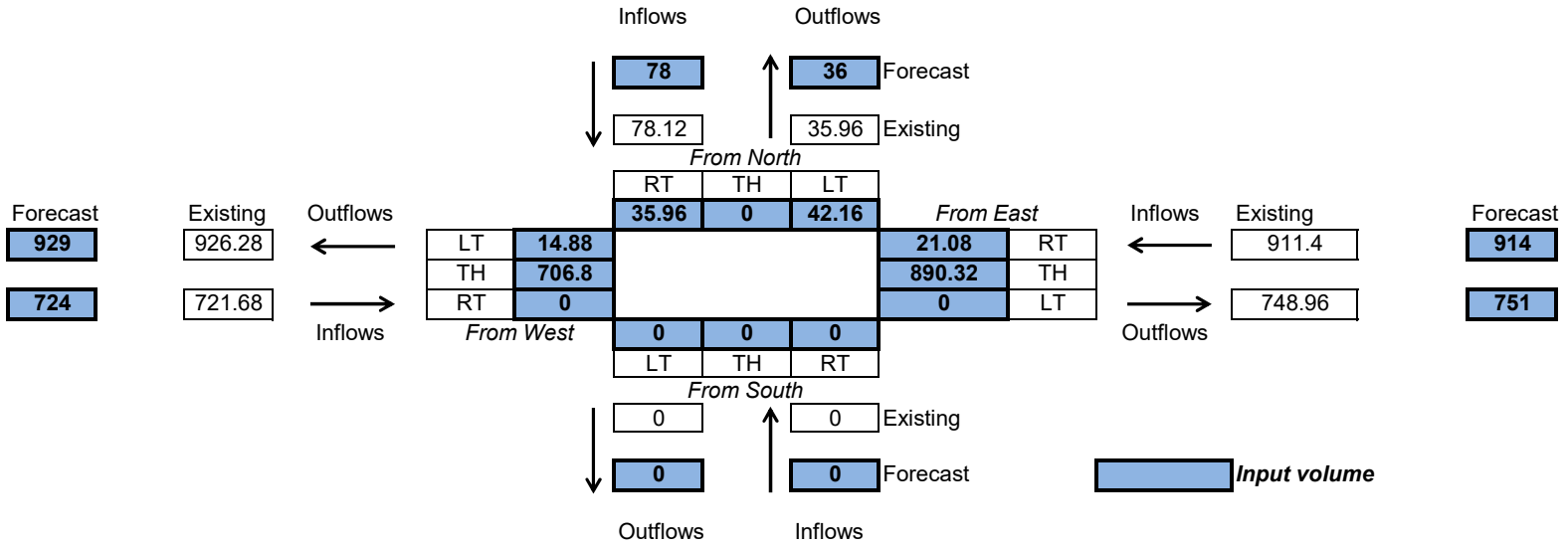


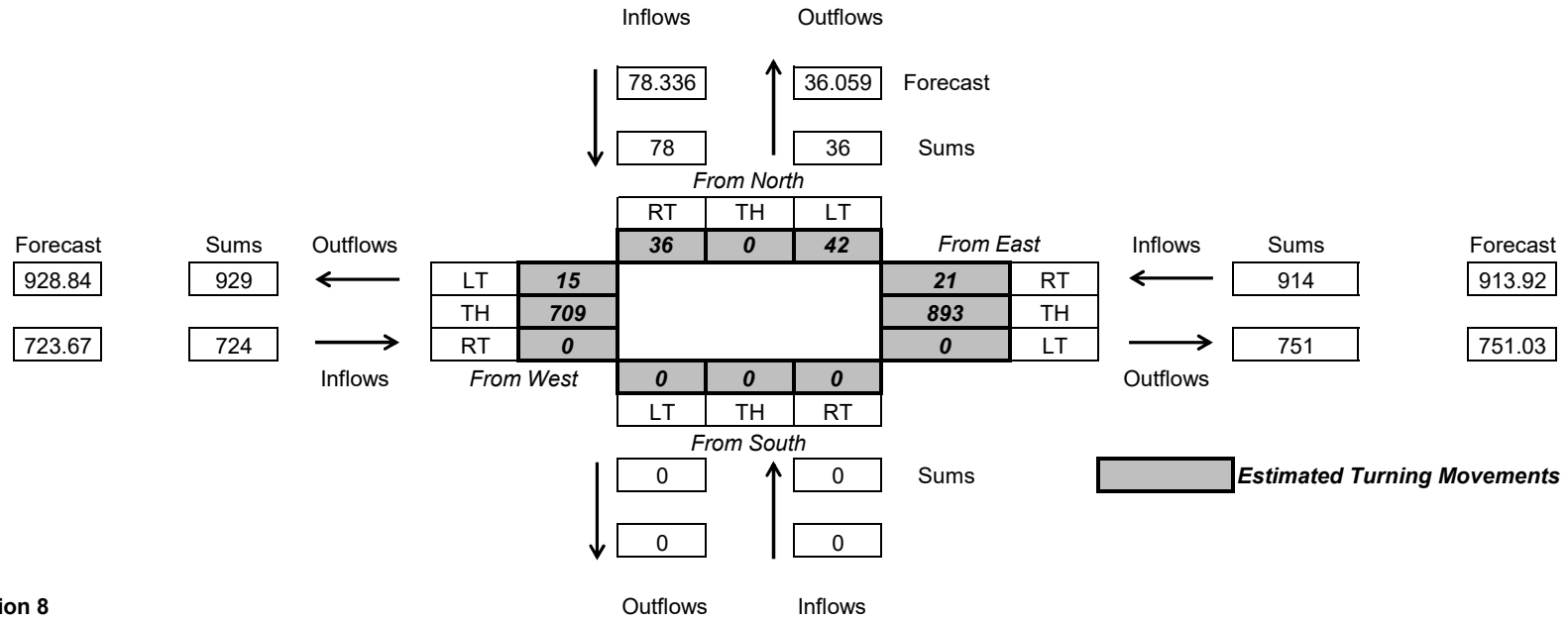


Intersection 6
AM

Iterative Method Estimated Turning Movements

Input Volumes

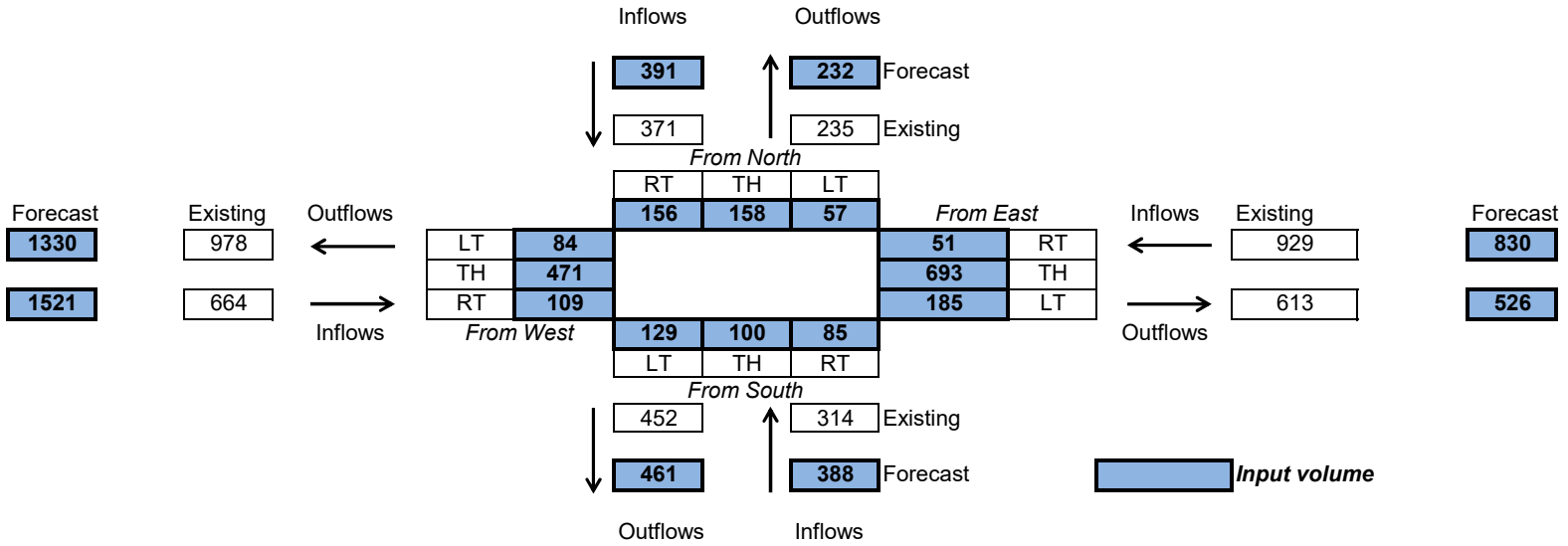


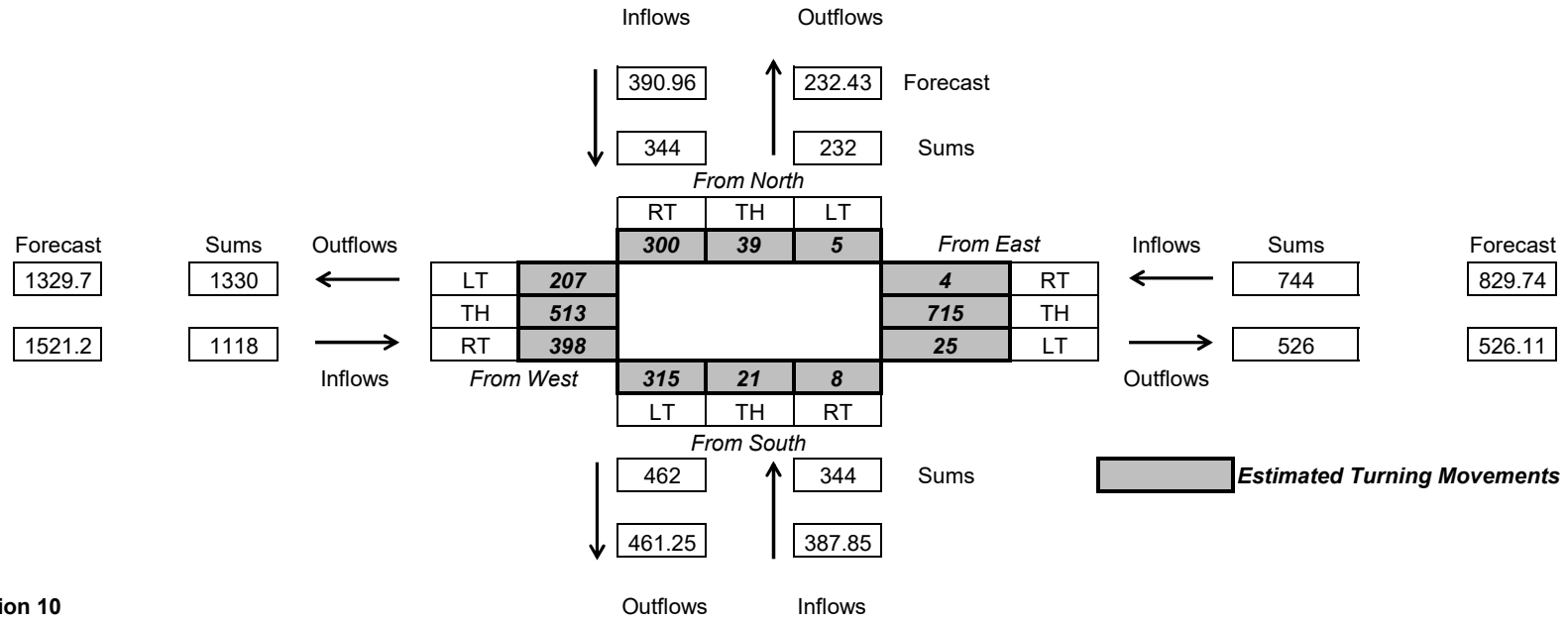


Intersection 8
AM

Iterative Method Estimated Turning Movements

Input Volumes





Intersection 10
AM

Existing PM Traffic Volumes												
Intersection	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**
1	95	7	301	7	8	2	2	628	131	315	282	3
2	61	37	148	28	28	39	26	815	69	70	498	46
3	163	65	202	34	43	29	60	828	105	169	425	52
4	0	0	11	0	0	0	0	0	0	8	0	0
5	0	11	0	0	8	0	0	0	0	0	0	0
6	0	0	0	20	0	28	50	1011	0	0	617	21
7	2	23	10	12	28	2	2	9	0	6	4	20
8	0	0	0	24	0	39	46	862	0	0	604	43
9	16	151	8	3	137	3	6	6	24	12	6	0
10	123	105	97	47	71	73	82	822	82	77	440	62

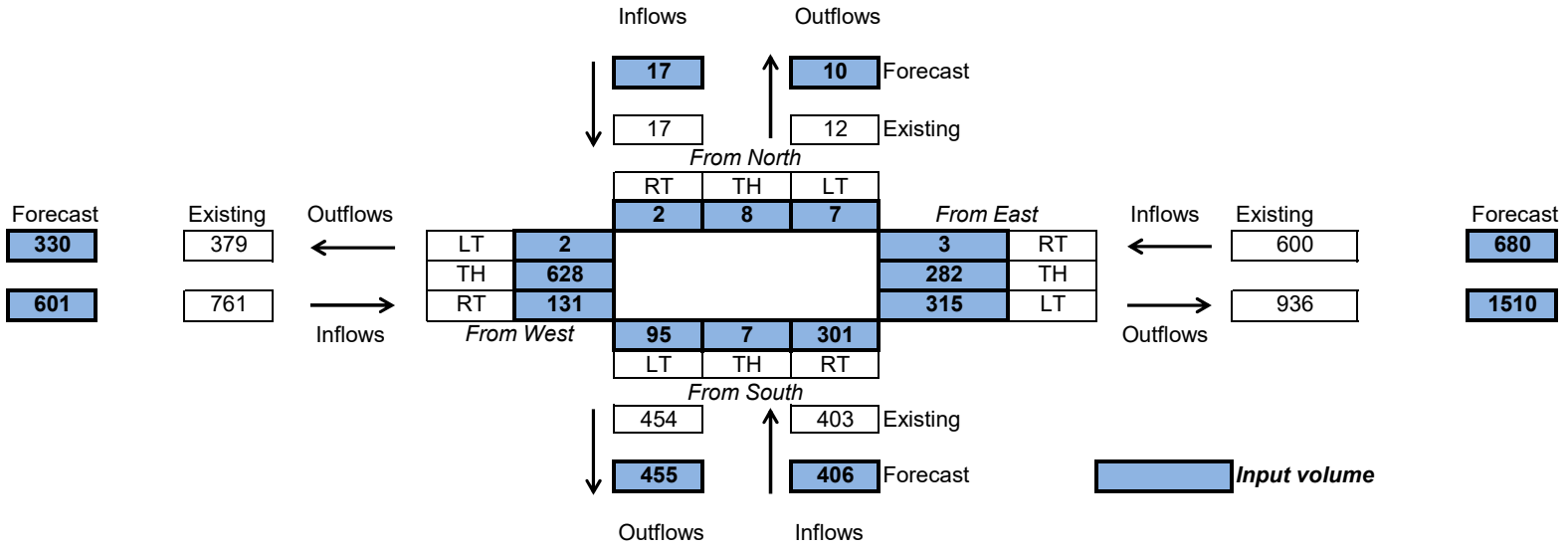
Future PM Traffic Volumes												
Intersection	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**
1	12	1	597	23	1	1	1	890	15	440	316	8
2	18	18	229	62	21	16	9	831	24	123	480	82
3	69	50	347	60	22	14	27	836	32	218	448	100
4	0	0	11	0	0	0	0	0	0	8	0	0
5	0	11	0	0	8	0	0	0	0	0	0	0
6	0	0	0	20	0	28	50	1014	0	0	619	21
7	2	23	10	12	28	2	2	9	0	6	4	20
8	0	0	0	25	0	39	46	864	0	0	605	43
9	16	151	8	3	137	3	6	6	24	12	6	0
10	60	98	178	107	70	43	46	876	38	136	482	130

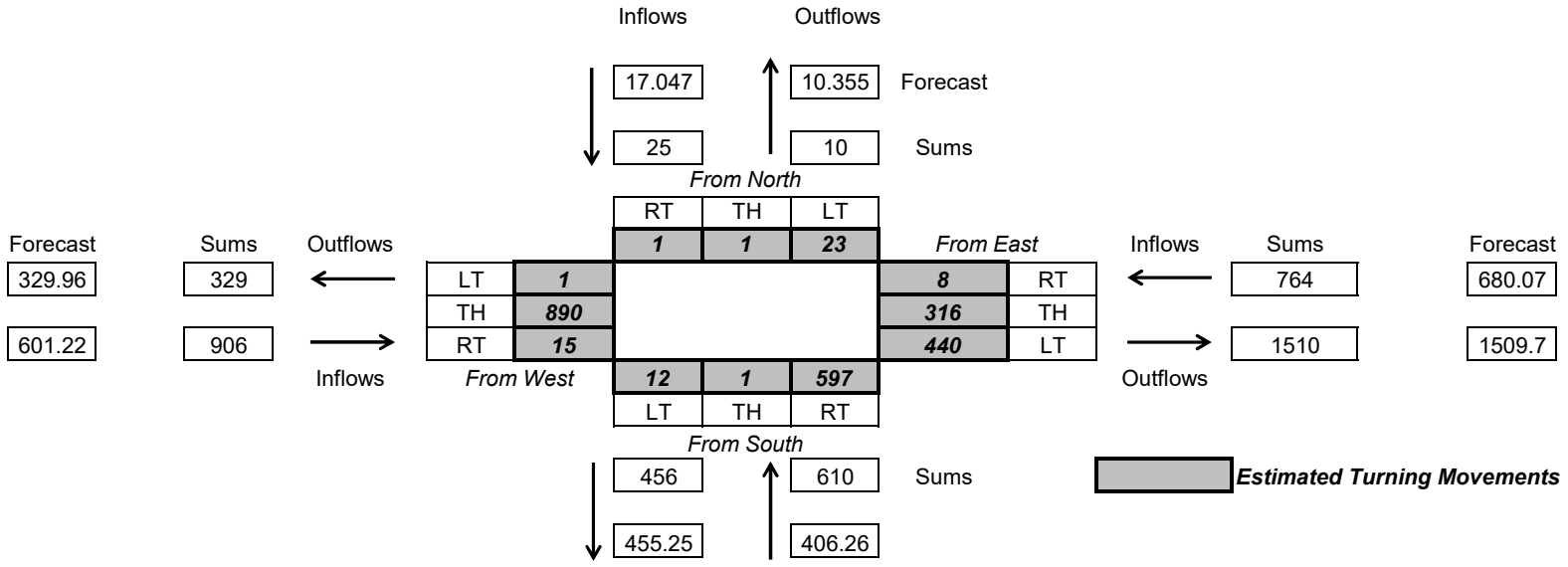
With 0.43% per year Growth Rate application for Intersections #4, #5, #6, #7

Future PM Traffic Volumes												
Intersection	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**
1	12	1	597	23	1	1	1	890	15	440	316	8
2	18	18	229	62	21	16	9	831	24	123	480	82
3	69	50	347	60	22	14	27	836	32	218	448	100
4	0	0	12	0	0	0	0	0	0	9	0	0
5	0	12	0	0	9	0	0	0	0	0	0	0
6	0	0	0	20	0	28	50	1014	0	0	619	21
7	2	25	11	13	30	2	2	10	0	6	4	22
8	0	0	0	25	0	39	46	864	0	0	605	43
9	17	163	9	3	148	3	6	6	26	13	6	0
10	60	98	178	107	70	43	46	876	38	136	482	130

Iterative Method Estimated Turning Movements

Input Volumes



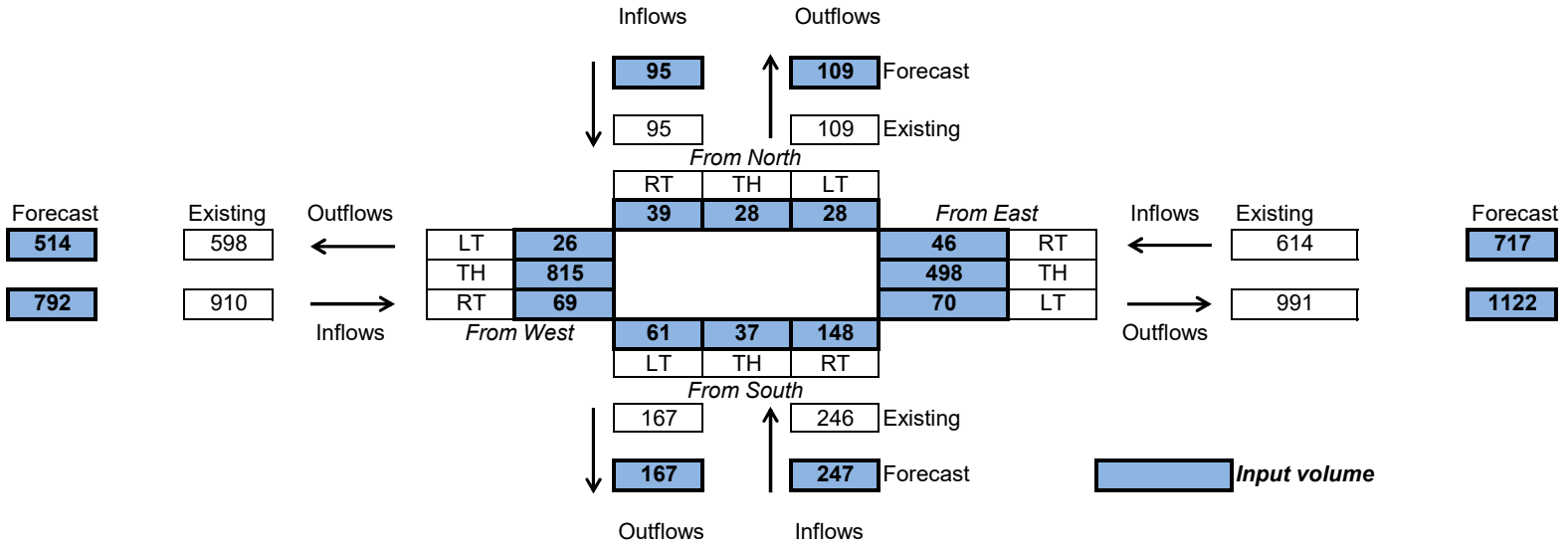


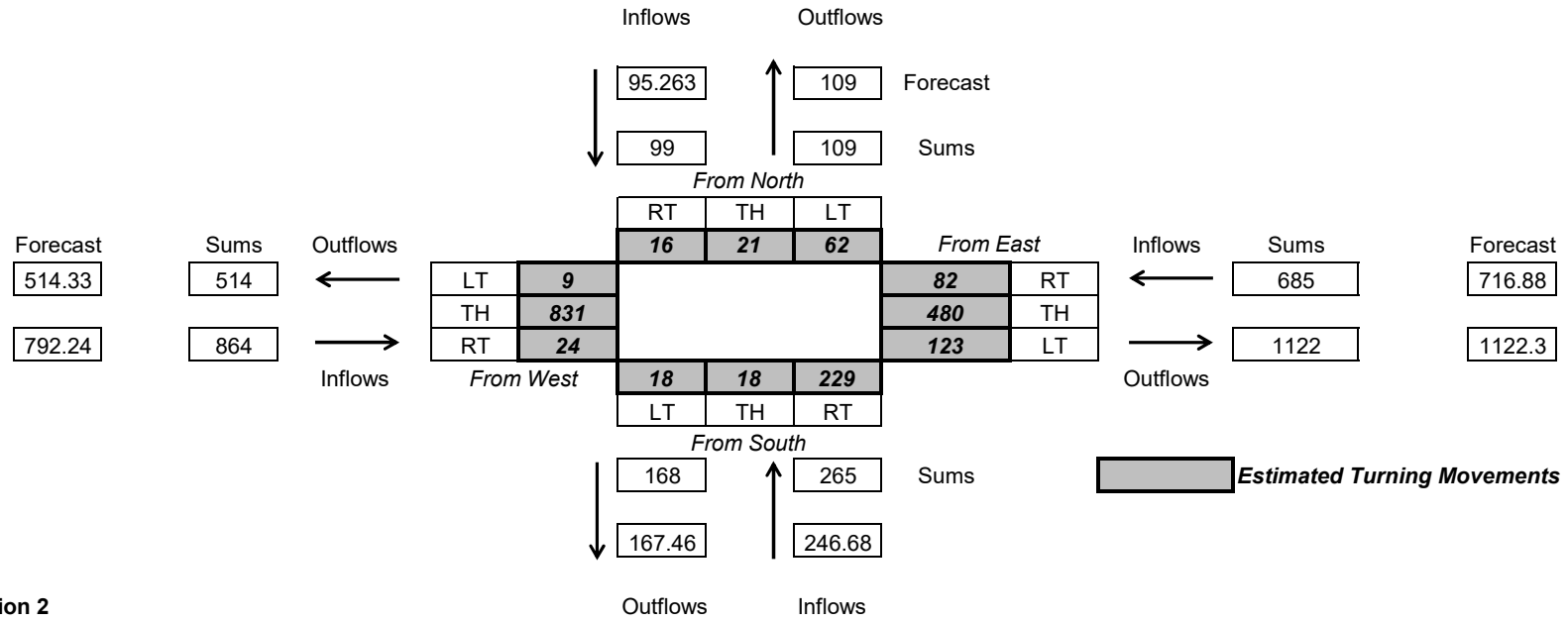
Intersection 1

PM

Iterative Method Estimated Turning Movements

Input Volumes

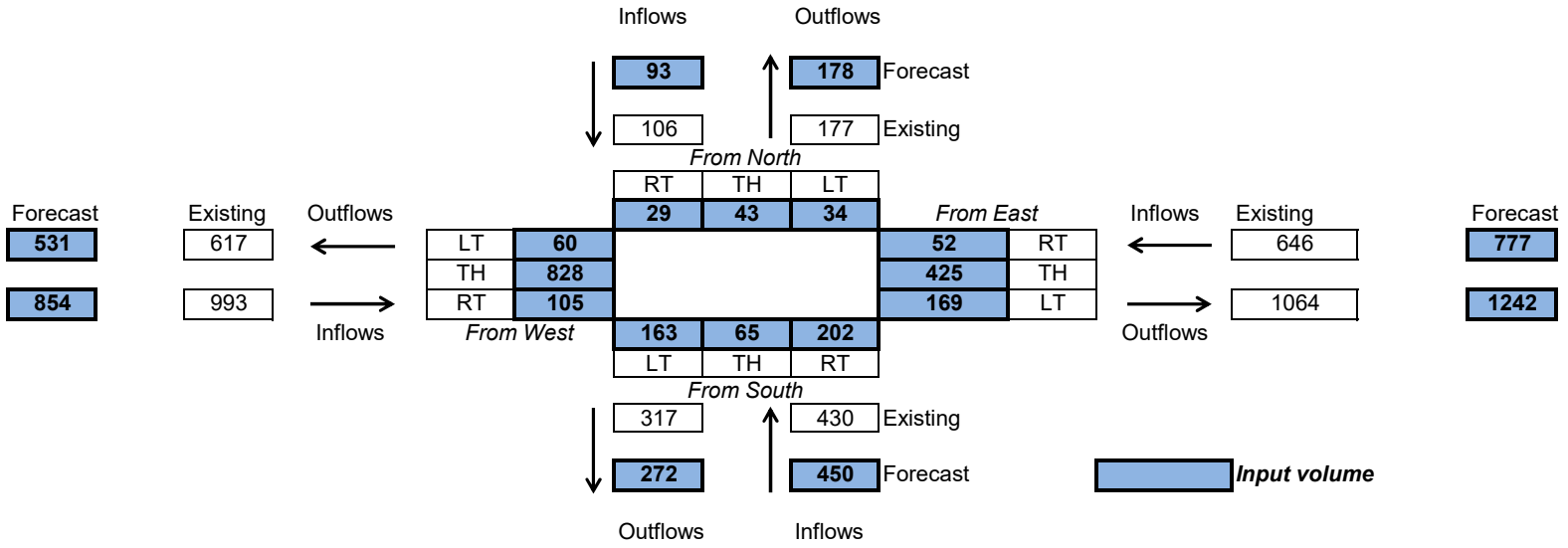


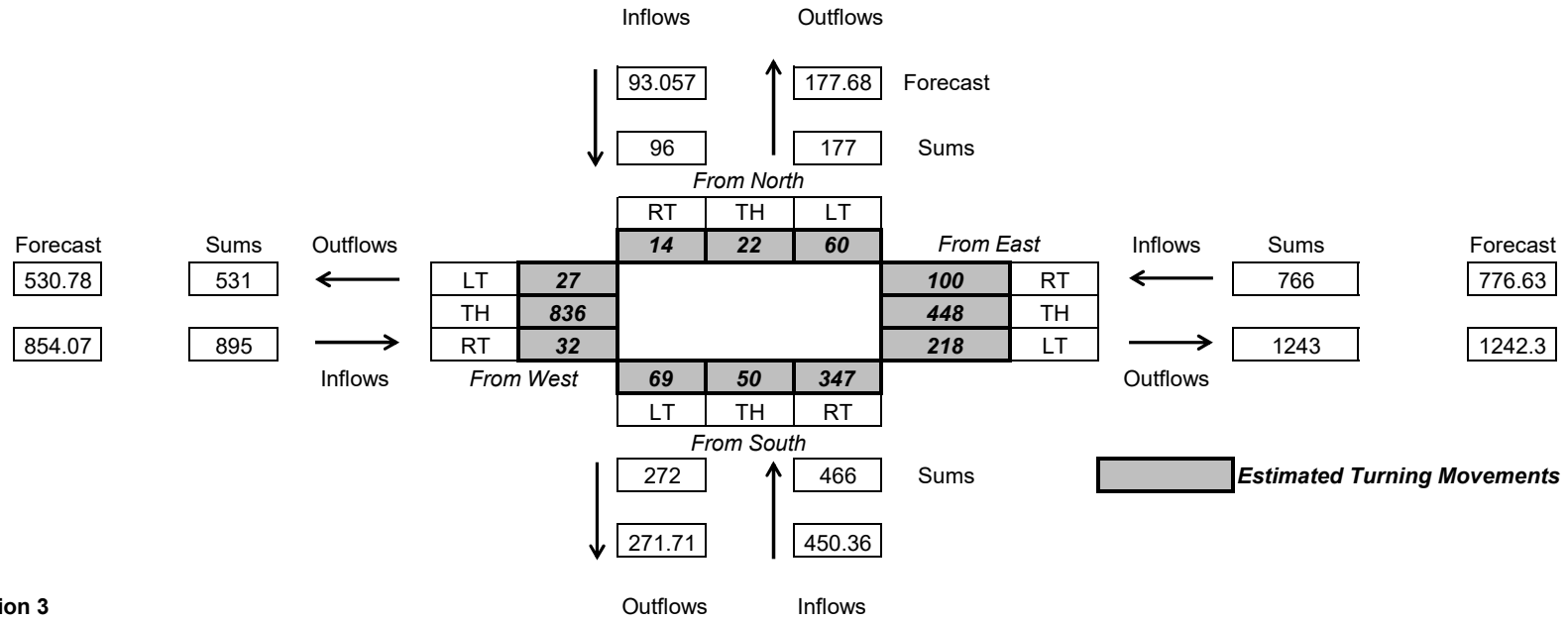


Intersection 2
PM

Iterative Method Estimated Turning Movements

Input Volumes



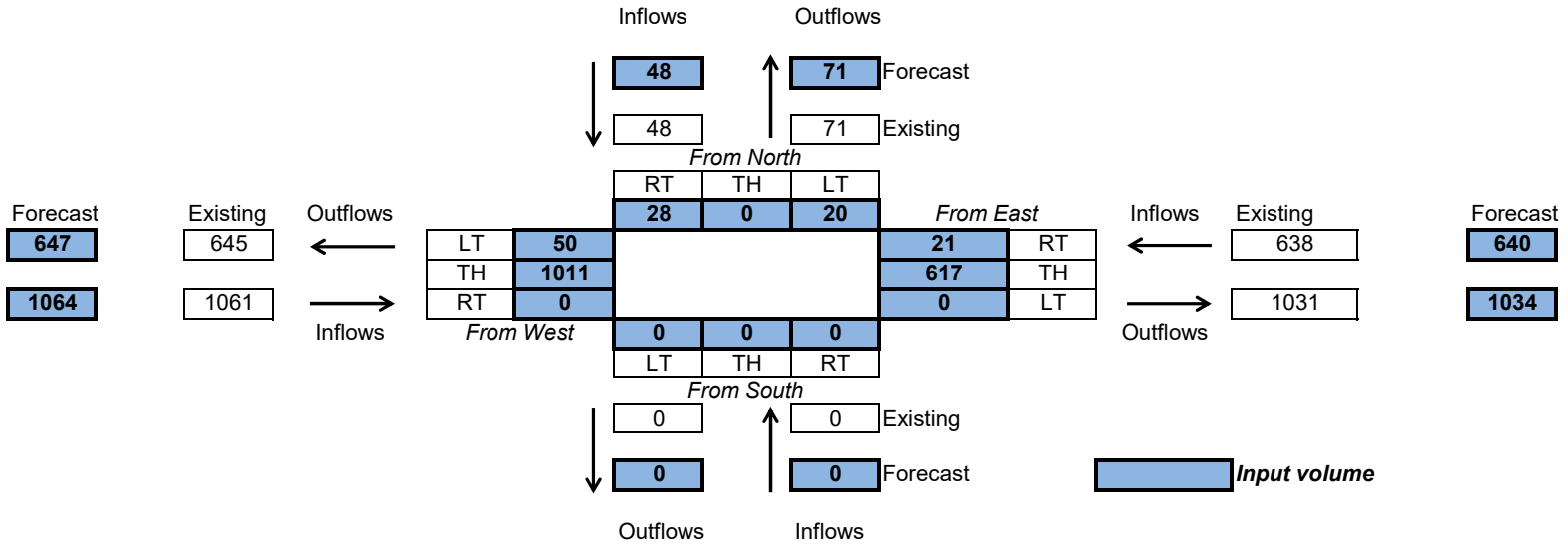


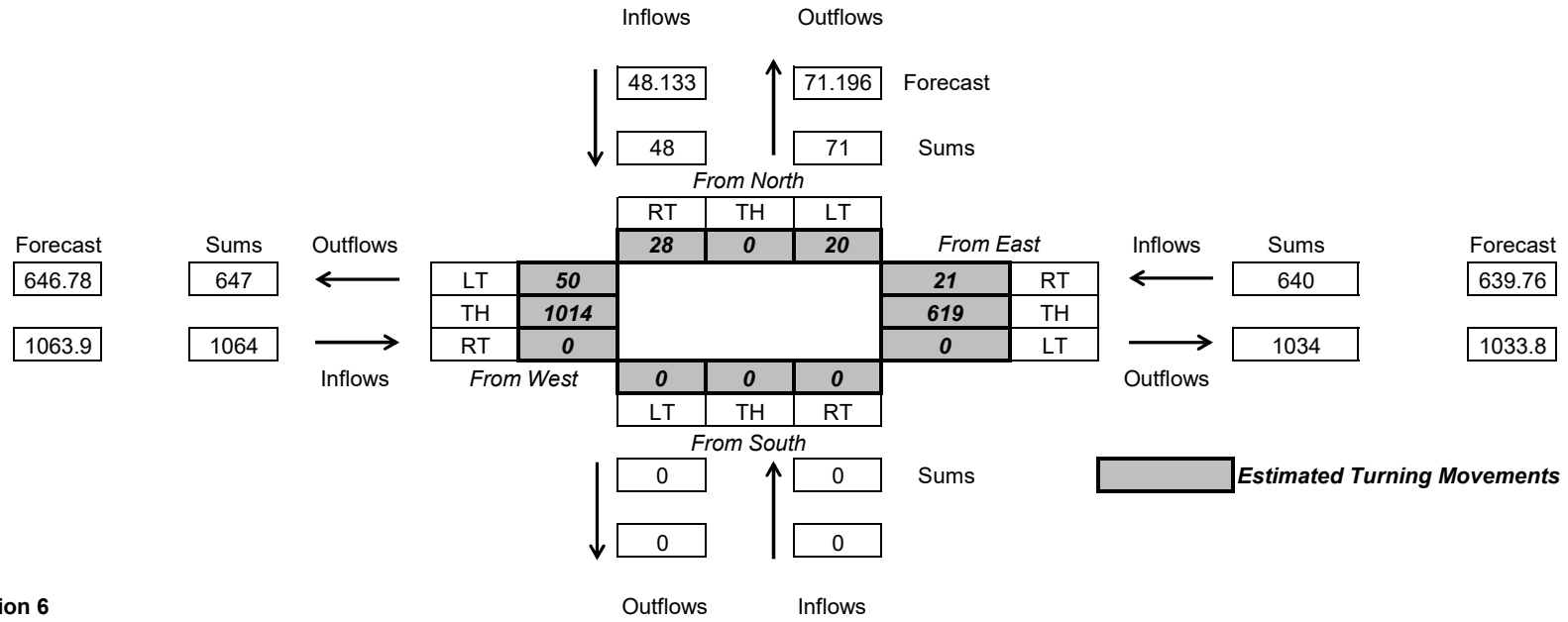
Intersection 3

PM

Iterative Method Estimated Turning Movements

Input Volumes

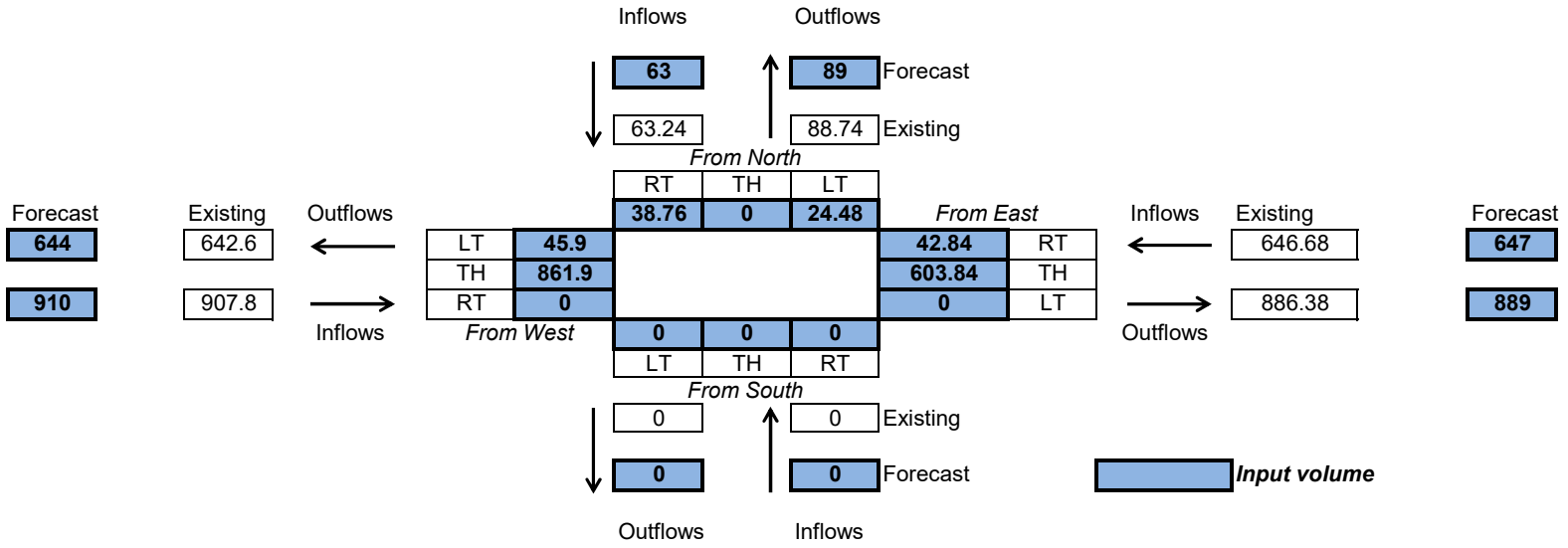


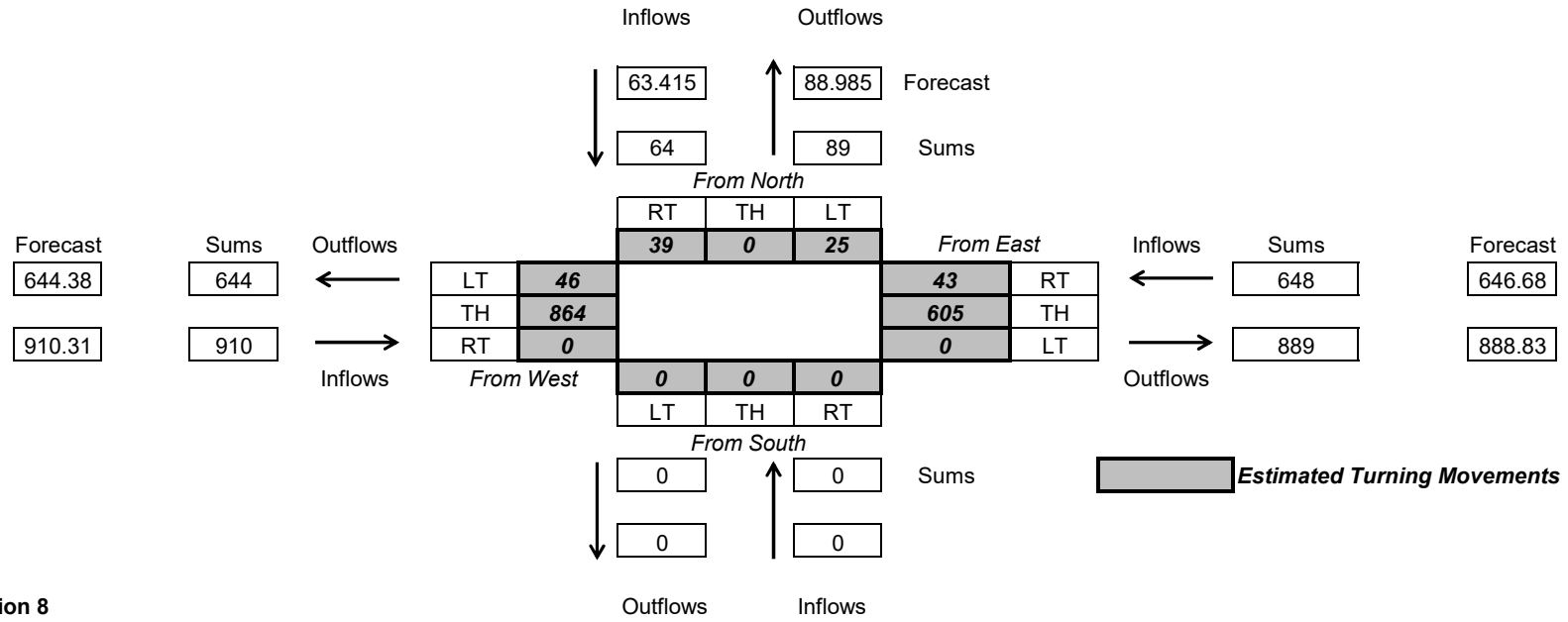


Intersection 6
PM

Iterative Method Estimated Turning Movements

Input Volumes

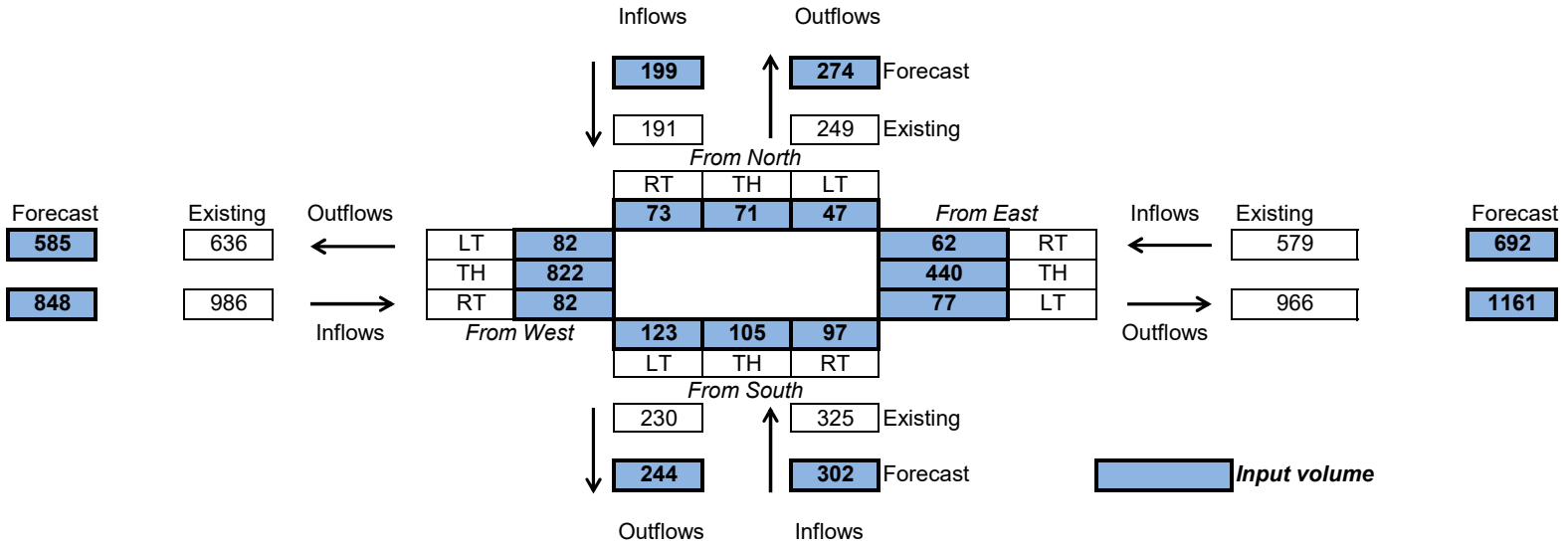


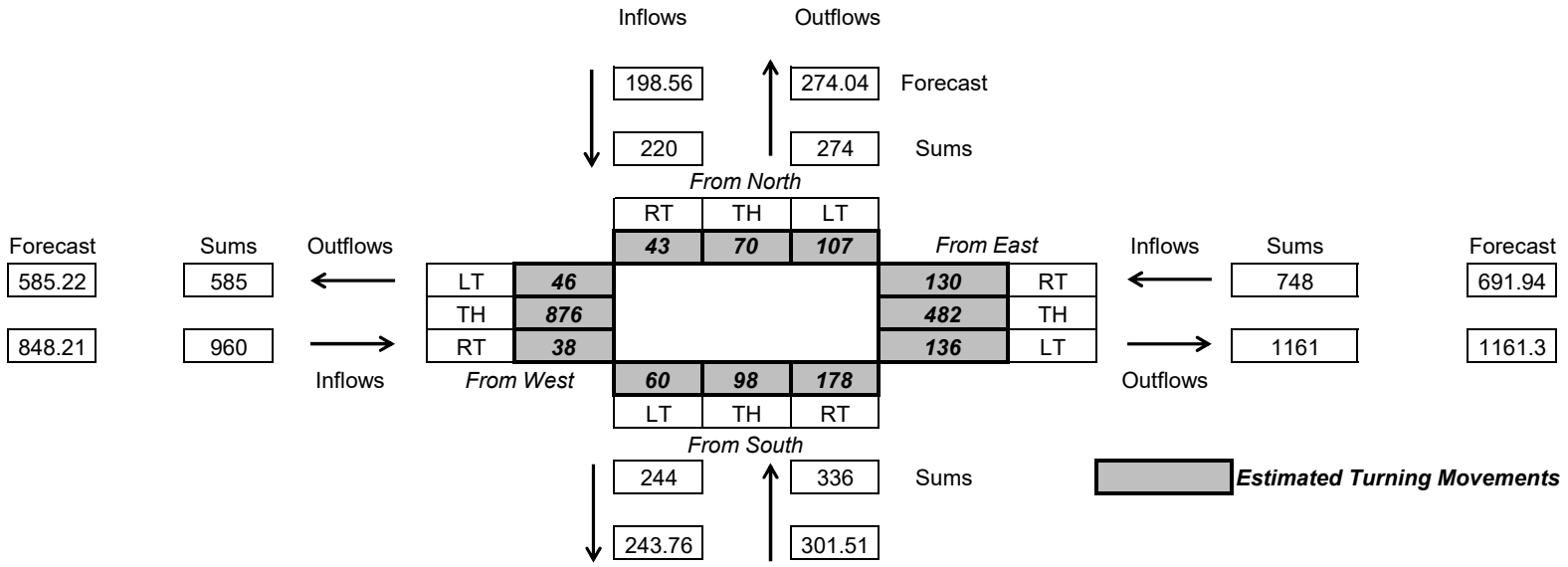


Intersection 8
PM

Iterative Method Estimated Turning Movements

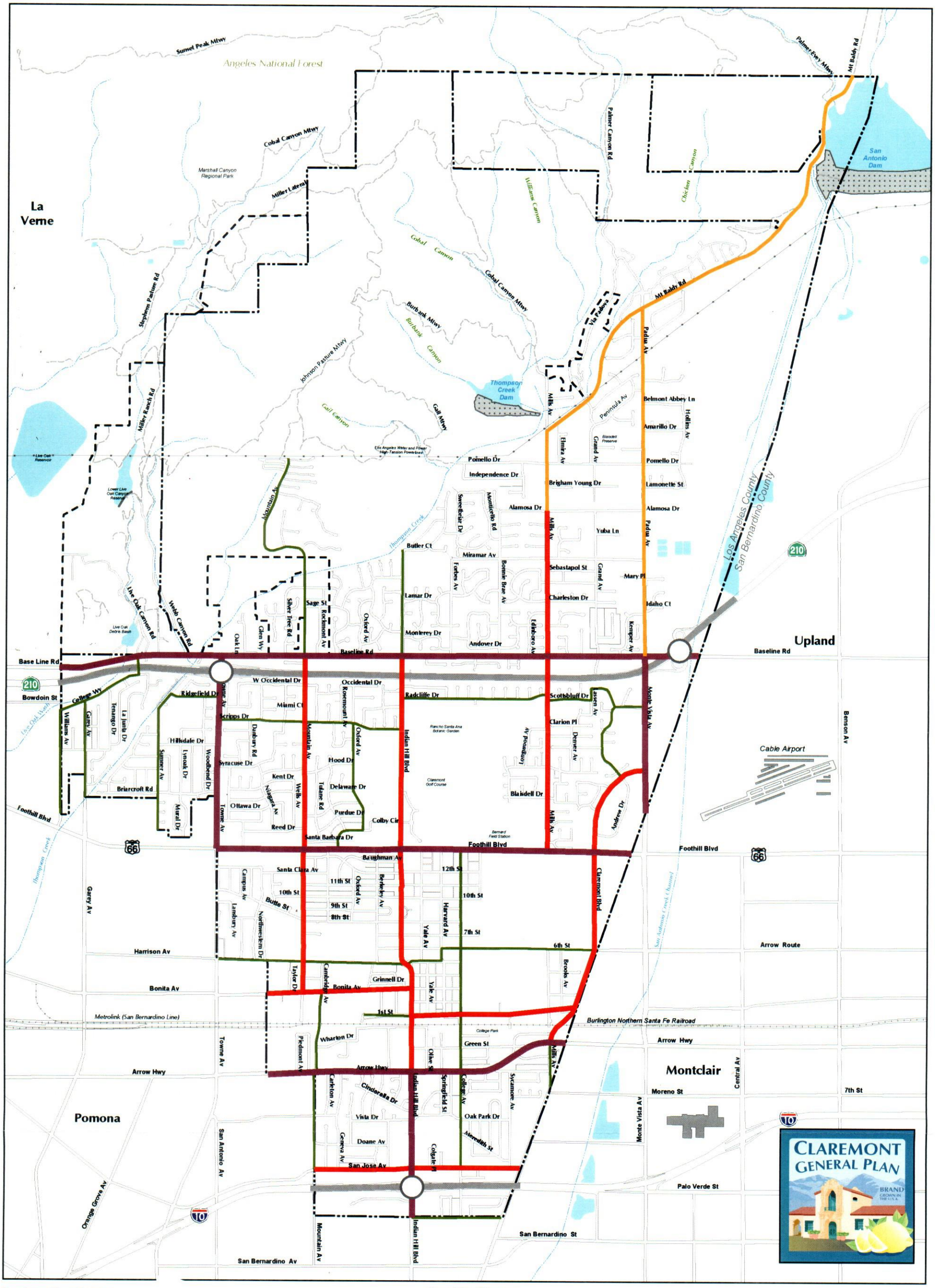
Input Volumes





Intersection 10
PM

APPENDIX E – CLAREMONT FUNCTIONAL ROADWAY CLASSIFICATION



Roadway Classification

- Major Arterial
- Secondary Arterial
- Rural Secondary Arterial
- Collector Roadway
- Local Streets
- Freeway
- Freeway Offramps

Base Map Features

- Claremont City Boundary
- Claremont Sphere of Influence
- Water
- Streams/Water Courses

Source: Meyer, Mohaddes Associates, 2005.

0 0.5 1 1.5 2 KILOMETERS

MILE

Figure 4-2

Master Plan of Roadways

CLAREMONT GENERAL PLAN

APPENDIX F – LOS CALCULATIONS

Vistro File: C:\...\Vistro.vistro
Report File: C:\...\Existing AM.pdf

Scenario 1 Existing AM
7/13/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Towne Ave/Base Line Rd	Signalized	HCM 6th Edition	EB Left	0.440	36.2	D
2	Mountain Ave/Base Line Rd	Signalized	HCM 6th Edition	EB Left	0.414	20.6	C
3	Indian Hill Blvd/Base Line Rd	Signalized	HCM 6th Edition	EB Left	0.536	25.9	C
4	Forbes Ave/Miramar Ave	Two-way stop	HCM 6th Edition	EB Thru	0.003	9.7	A
5	Forbes Ave/Proj Dwy	Two-way stop	HCM 6th Edition	NB Thru	0.000	0.0	A
6	Forbes/Base Line Rd	Two-way stop	HCM 6th Edition	SB Left	0.094	22.5	C
7	Bonnie Brae Ave/Miramar Ave	All-way stop	HCM 6th Edition	SB Thru	0.067	7.3	A
8	Bonnie Brae Ave/Base Line Rd	Two-way stop	HCM 6th Edition	SB Left	0.200	22.6	C
9	Mills Ave/Miramar Ave	Two-way stop	HCM 6th Edition	WB Left	0.091	16.0	C
10	Mills Ave/Base Line Rd	Signalized	HCM 6th Edition	EB Left	0.542	22.2	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: Towne Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	36.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.440

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	85.00	100.0	85.00	165.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	500.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	200	22	319	8	4	3	9	219	123	427	308	6
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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	80	0	0	1	0	0	31	0	0	2
Total Hourly Volume [veh/h]	200	22	239	8	4	2	9	219	92	427	308	4
Peak Hour Factor	0.873	0.873	0.873	0.625	0.625	0.625	0.886	0.886	0.886	0.960	0.960	0.960
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]	57	6	68	3	2	1	3	62	26	111	80	1
Total Analysis Volume [veh/h]	229	25	274	13	6	3	10	247	104	445	321	4
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			1			9		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	1			9			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	3			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			3		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	14			12			12			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Isolated
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	Split	Split	Split	Split	Split	Split	Permi	Permi	Permi	ProtP	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	30	0	9	54	0	0	45	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	21	0	0	21	0	0	7	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No			No		No	No	
Maximum Recall		No			No			No		No	No	
Pedestrian Recall		No			No			No		No	No	
Detector Location [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
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	C	R	C	L	C	R	L	C	C
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	28	28	28	13	13	13	42	38	38
g / C, Green / Cycle	0.25	0.25	0.25	0.12	0.12	0.12	0.38	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.14	0.10	0.01	0.01	0.07	0.07	0.29	0.09	0.09
s, saturation flow rate [veh/h]	1789	2684	1775	1055	3560	1530	1517	1870	1861
c, Capacity [veh/h]	455	682	451	102	414	178	610	647	644
d1, Uniform Delay [s]	35.66	33.90	30.98	51.75	46.16	45.96	28.38	25.75	25.75
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.11	0.24	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.89	1.76	0.20	0.41	1.38	3.03	3.77	0.20	0.20
d3, Initial Queue Delay [s]	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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.56	0.40	0.05	0.10	0.60	0.58	0.73	0.25	0.25
d, Delay for Lane Group [s/veh]	40.55	35.66	31.19	52.16	47.54	48.99	32.15	25.95	25.96
Lane Group LOS	D	D	C	D	D	D	C	C	C
Critical Lane Group	Yes	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	6.51	3.19	0.47	0.28	3.28	2.83	10.11	3.08	3.07
50th-Percentile Queue Length [ft/ln]	162.81	79.73	11.73	7.00	81.92	70.77	252.7	77.06	76.75
95th-Percentile Queue Length [veh/ln]	10.70	5.74	0.84	0.50	5.90	5.10	15.32	5.55	5.53
95th-Percentile Queue Length [ft/ln]	267.44	143.52	21.12	12.61	147.4	127.3	383.0	138.7	138.1

Movement, Approach, & Intersection Results

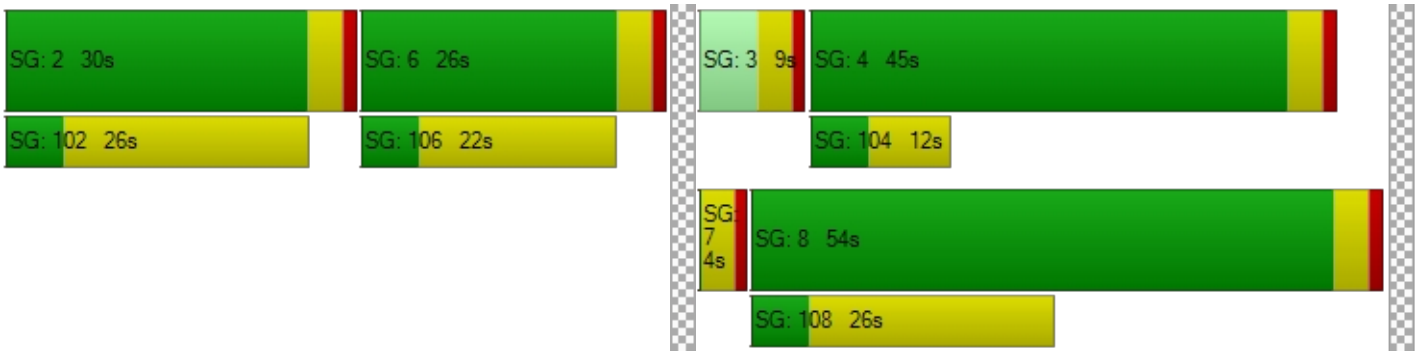
d_M, Delay for Movement [s/veh]	40.55	40.55	35.66	31.19	31.19	31.19	52.16	47.54	48.99	32.15	25.96	25.96
Movement LOS	D	D	D	C	C	C	D	D	D	C	C	C
d_A, Approach Delay [s/veh]	38.01			31.19			48.08			29.53		
Approach LOS	D			C			D			C		
d_I, Intersection Delay [s/veh]	36.20											
Intersection LOS	D											
Intersection V/C	0.440											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	11089.95	1307.47	0.00	2563.52
d_p, Pedestrian Delay [s]	46.37	46.37	46.37	46.37
l_p,int, Pedestrian LOS Score for Intersection	2.857	1.773	2.662	2.584
Crosswalk LOS	C	A	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]	400	473	909	745
d_b, Bicycle Delay [s]	35.45	32.27	16.46	21.64
l_b,int, Bicycle LOS Score for Intersection	2.563	1.598	1.883	2.197
Bicycle LOS	B	A	A	B

Sequence

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



Intersection Level Of Service Report
Intersection 2: Mountain Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	20.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.414

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	105.0	100.0	100.0	200.0	100.0	100.0	120.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	65	29	160	38	75	49	34	413	118	193	590	30
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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	40	0	0	12	0	0	30	0	0	8
Total Hourly Volume [veh/h]	65	29	120	38	75	37	34	413	88	193	590	22
Peak Hour Factor	0.641	0.641	0.641	0.698	0.698	0.698	0.856	0.856	0.856	0.888	0.888	0.888
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]	25	11	47	14	27	13	10	121	26	54	166	6
Total Analysis Volume [veh/h]	101	45	187	54	107	53	40	482	103	217	664	25
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			6			6		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	6			6			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			4			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			4			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	13			13			4			6		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	15	19	0	15	19	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	10	0	0	10	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	C	R	L	C	L	C	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	27	27	27	27	2	12	12	9	19	19
g / C, Green / Cycle	0.44	0.44	0.44	0.44	0.04	0.21	0.21	0.15	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.13	0.12	0.05	0.09	0.02	0.16	0.16	0.12	0.19	0.19
s, saturation flow rate [veh/h]	1148	1560	1148	1753	1781	1870	1728	1781	1870	1840
c, Capacity [veh/h]	612	694	414	779	76	386	356	266	584	575
d1, Uniform Delay [s]	12.36	10.49	17.44	10.18	28.12	22.52	22.63	24.73	17.40	17.42
k, delay calibration	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
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]	0.92	0.95	0.65	0.60	5.50	3.44	4.15	6.08	0.97	0.99
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	0.24	0.27	0.13	0.21	0.53	0.78	0.80	0.82	0.59	0.60
d, Delay for Lane Group [s/veh]	13.28	11.44	18.09	10.78	33.62	25.96	26.78	30.81	18.37	18.41
Lane Group LOS	B	B	B	B	C	C	C	C	B	B
Critical Lane Group	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.39	1.53	0.61	1.25	0.65	4.07	3.94	3.24	3.80	3.76
50th-Percentile Queue Length [ft/ln]	34.82	38.34	15.36	31.26	16.30	101.8	98.38	81.02	94.97	93.92
95th-Percentile Queue Length [veh/ln]	2.51	2.76	1.11	2.25	1.17	7.33	7.08	5.83	6.84	6.76
95th-Percentile Queue Length [ft/ln]	62.67	69.01	27.64	56.26	29.34	183.2	177.0	145.8	170.9	169.0

Movement, Approach, & Intersection Results

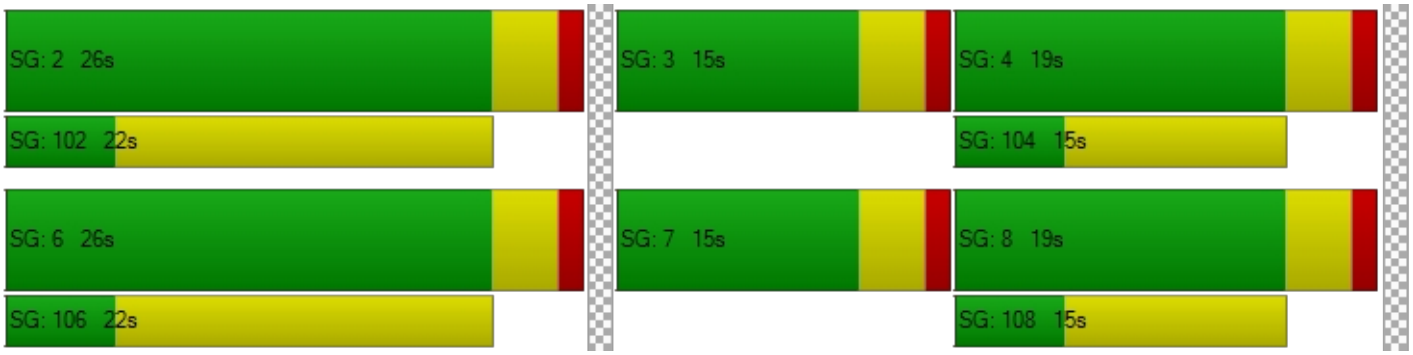
d_M, Delay for Movement [s/veh]	13.28	13.28	11.44	18.09	10.78	10.78	33.62	26.27	26.78	30.81	18.39	18.41
Movement LOS	B	B	B	B	B	B	C	C	C	C	B	B
d_A, Approach Delay [s/veh]	12.25			12.62			26.82			21.36		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	20.64											
Intersection LOS	C											
Intersection V/C	0.414											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	2742.17	2777.76	4199.66	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.248	2.050	2.756	2.696
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]	733	733	500	500
d_b, Bicycle Delay [s]	12.11	12.11	16.91	16.93
l_b,int, Bicycle LOS Score for Intersection	2.175	1.933	2.100	2.314
Bicycle LOS	B	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 3: Indian Hill Blvd/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	25.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.536

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	165.0	100.0	100.0	135.0	100.0	100.0	174.0	100.0	100.0	175.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
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	100.0
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	101	43	204	51	102	55	36	413	160	327	670	41
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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	51	0	0	14	0	0	40	0	0	10
Total Hourly Volume [veh/h]	101	43	153	51	102	41	36	413	120	327	670	31
Peak Hour Factor	0.674	0.674	0.674	0.813	0.813	0.813	0.827	0.827	0.827	0.889	0.889	0.889
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]	37	16	57	16	31	13	11	125	36	92	188	9
Total Analysis Volume [veh/h]	150	64	227	63	125	50	44	499	145	368	754	35
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			7			10		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	7			10			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	15			6			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			6			15		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	9			12			8			4		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	80
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	30	0	0	30	0	24	26	0	24	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	17	0	0	17	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	C	L	C	C
C, Cycle Length [s]	80	80	80	80	80	80	80	80	80	80	80	80
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	32	32	32	32	32	32	3	17	17	18	33	33
g / C, Green / Cycle	0.40	0.40	0.40	0.40	0.40	0.40	0.04	0.22	0.22	0.23	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.12	0.03	0.15	0.06	0.05	0.05	0.02	0.18	0.18	0.21	0.21	0.21
s, saturation flow rate [veh/h]	1206	1870	1545	1082	1870	1671	1781	1870	1701	1781	1870	1837
c, Capacity [veh/h]	505	754	623	386	754	674	72	408	371	407	760	746
d1, Uniform Delay [s]	19.63	14.75	16.70	22.41	14.96	15.02	37.75	29.75	29.89	30.01	17.91	17.92
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.12	0.11	0.11
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
d2, Incremental Delay [s]	1.50	0.22	1.65	0.91	0.32	0.39	7.97	4.06	4.98	8.45	0.56	0.57
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	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	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	1.00	1.00

Lane Group Results

X, volume / capacity	0.30	0.08	0.36	0.16	0.12	0.13	0.61	0.82	0.84	0.90	0.52	0.52
d, Delay for Lane Group [s/veh]	21.13	14.97	18.35	23.31	15.28	15.41	45.72	33.82	34.88	38.45	18.47	18.50
Lane Group LOS	C	B	B	C	B	B	D	C	C	D	B	B
Critical Lane Group	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.21	0.73	3.05	0.98	1.04	1.01	0.99	6.35	6.01	7.57	5.31	5.24
50th-Percentile Queue Length [ft/ln]	55.28	18.35	76.16	24.60	26.04	25.23	24.82	158.6	150.3	189.2	132.8	131.0
95th-Percentile Queue Length [veh/ln]	3.98	1.32	5.48	1.77	1.87	1.82	1.79	10.48	10.03	12.08	9.10	9.00
95th-Percentile Queue Length [ft/ln]	99.51	33.03	137.0	44.28	46.87	45.41	44.68	261.9	250.8	302.0	227.3	224.9

Movement, Approach, & Intersection Results

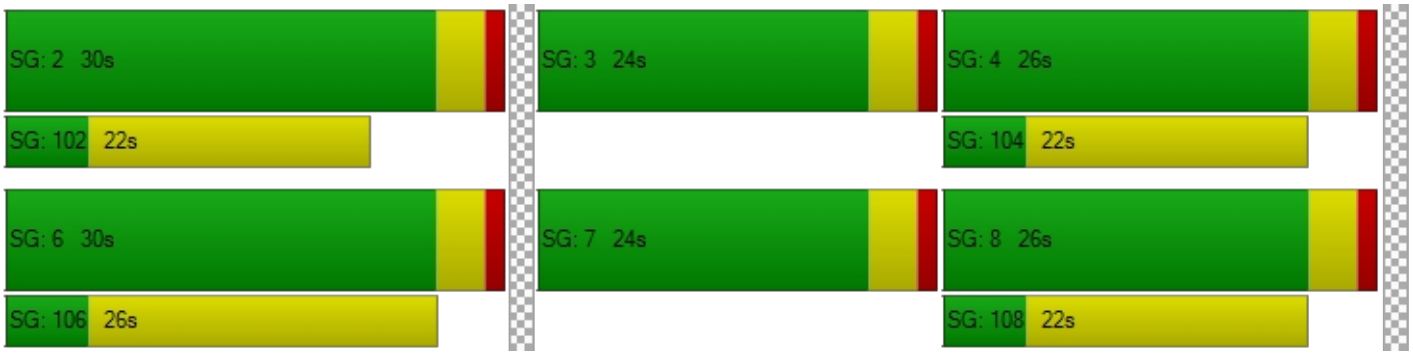
d_M, Delay for Movement [s/veh]	21.13	14.97	18.35	23.31	15.32	15.41	45.72	34.17	34.88	38.45	18.48	18.50
Movement LOS	C	B	B	C	B	B	D	C	C	D	B	B
d_A, Approach Delay [s/veh]	18.80			17.45			35.06			24.84		
Approach LOS	B			B			D			C		
d_I, Intersection Delay [s/veh]	25.87											
Intersection LOS	C											
Intersection V/C	0.536											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	1538.77	1218.79	1655.54	565.77
d_p, Pedestrian Delay [s]	31.51	31.51	31.51	31.51
l_p,int, Pedestrian LOS Score for Intersection	2.596	2.394	2.897	2.879
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	650	650	550	550
d_b, Bicycle Delay [s]	18.31	18.34	21.11	21.07
l_b,int, Bicycle LOS Score for Intersection	1.966	1.768	2.160	2.522
Bicycle LOS	A	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 4: Forbes Ave/Miramar Ave

Control Type:	Two-way stop	Delay (sec / veh):	9.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

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

Volumes

Name						
Base Volume Input [veh/h]	1	19	2	4	5	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	19	2	4	5	2
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	5	1	1	1	1
Total Analysis Volume [veh/h]	1	20	2	4	5	2
Pedestrian Volume [ped/h]	15		31		21	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.36	0.00	9.70	8.73	0.00	7.35
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.02	0.02	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.05	0.05	0.51	0.51	0.00	0.00
d_A, Approach Delay [s/veh]	0.35		9.06		2.10	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.25					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Forbes Ave/Proj Dwy

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

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

Volumes

Name						
Base Volume Input [veh/h]	0	19	5	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	19	5	0	0	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	5	1	0	0	0
Total Analysis Volume [veh/h]	0	20	5	0	0	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.23	0.00	0.00	0.00	8.63	8.34
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		8.49	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 6: Forbes/Base Line Rd

Control Type:	Two-way stop	Delay (sec / veh):	22.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.094

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	135.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	17	44	26	639	994	13
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	17	44	26	639	994	13
Peak Hour Factor	0.7262	0.7262	0.8396	0.8396	0.8927	0.8927
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	15	8	190	278	4
Total Analysis Volume [veh/h]	23	61	31	761	1113	15
Pedestrian Volume [ped/h]	2		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.13	0.05	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	22.55	15.50	11.19	0.00	0.00	0.00
Movement LOS	C	C	B	A	A	A
95th-Percentile Queue Length [veh/ln]	0.85	0.85	0.16	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	21.28	21.28	3.99	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	17.43		0.44		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.90					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 7: Bonnie Brae Ave/Miramar Ave

Control Type:	All-way stop	Delay (sec / veh):	7.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.067

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	2	20	4	19	33	0	2	14	3	3	3	7
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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]	2	20	4	19	33	0	2	14	3	3	3	7
Peak Hour Factor	0.666	0.666	0.666	0.886	0.886	0.886	0.450	0.450	0.450	0.750	0.750	0.750
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	7	1	5	9	0	1	8	2	1	1	2
Total Analysis Volume [veh/h]	3	30	6	21	37	0	4	31	7	4	4	9
Pedestrian Volume [ped/h]	7			9			6			19		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	891	864	882	919
Degree of Utilization, x	0.04	0.07	0.05	0.02

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.14	0.22	0.15	0.06
95th-Percentile Queue Length [ft]	3.43	5.39	3.74	1.41
Approach Delay [s/veh]	7.22	7.47	7.28	6.99
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.31			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 8: Bonnie Brae Ave/Base Line Rd

Control Type:	Two-way stop	Delay (sec / veh):	22.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.200

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	135.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	42	36	15	707	890	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	42	36	15	707	890	21
Peak Hour Factor	0.7813	0.7813	0.9070	0.9070	0.8706	0.8706
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	12	4	195	256	6
Total Analysis Volume [veh/h]	54	46	17	780	1022	24
Pedestrian Volume [ped/h]	2		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.20	0.09	0.03	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	22.59	16.54	10.61	0.00	0.00	0.00
Movement LOS	C	C	B	A	A	A
95th-Percentile Queue Length [veh/ln]	1.19	1.19	0.08	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	29.79	29.79	1.99	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	19.81		0.23		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	1.11					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 9: Mills Ave/Miramar Ave

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):	0.091

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	30.00	100.0	100.0	30.00	100.0	100.0	100.0	100.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	11	147	31	1	208	2	1	10	39	20	3	4
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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]	11	147	31	1	208	2	1	10	39	20	3	4
Peak Hour Factor	0.630	0.630	0.630	0.722	0.722	0.722	0.625	0.625	0.625	0.613	0.613	0.613
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]	4	58	12	0	72	1	0	4	16	8	1	2
Total Analysis Volume [veh/h]	17	233	49	1	288	3	2	16	62	33	5	7
Pedestrian Volume [ped/h]	0			2			9			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	0.00	0.00	0.00	0.01	0.04	0.08	0.09	0.01	0.01
d_M, Delay for Movement [s/veh]	7.92	0.00	0.00	7.81	0.00	0.00	14.92	14.93	10.76	16.01	14.64	10.60
Movement LOS	A	A	A	A	A	A	B	B	B	C	B	B
95th-Percentile Queue Length [veh/ln]	0.04	0.00	0.00	0.00	0.00	0.00	0.44	0.44	0.44	0.37	0.37	0.37
95th-Percentile Queue Length [ft/ln]	1.03	0.00	0.00	0.06	0.00	0.00	11.09	11.09	11.09	9.31	9.31	9.31
d_A, Approach Delay [s/veh]	0.45			0.03			11.69			15.01		
Approach LOS	A			A			B			C		
d_I, Intersection Delay [s/veh]	2.45											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 10: Mills Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	22.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.542

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	105.0	100.0	100.0	145.0	100.0	145.0	175.0	100.0	100.0	165.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	129	100	85	57	158	156	84	471	109	185	693	51
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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	21	0	0	39	0	0	27	0	0	13
Total Hourly Volume [veh/h]	129	100	64	57	158	117	84	471	82	185	693	38
Peak Hour Factor	0.541	0.541	0.541	0.662	0.662	0.662	0.869	0.869	0.869	0.883	0.883	0.883
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]	60	46	30	22	60	44	24	135	24	52	196	11
Total Analysis Volume [veh/h]	238	185	118	86	238	177	97	542	94	209	785	43
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			12			5		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	12			5			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	8			2			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			2			8		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	11			10			13			10		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	65
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	16	23	0	16	23	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	14	0	0	14	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	65	65	65	65	65	65	65	65	65	65	65	65
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	29	29	29	29	29	29	5	15	15	9	19	19
g / C, Green / Cycle	0.45	0.45	0.45	0.45	0.45	0.45	0.07	0.23	0.23	0.14	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.25	0.10	0.08	0.08	0.13	0.11	0.05	0.17	0.18	0.12	0.22	0.22
s, saturation flow rate [veh/h]	971	1870	1553	1073	1870	1560	1781	1870	1733	1781	1870	1827
c, Capacity [veh/h]	426	833	692	482	833	695	131	422	392	256	554	541
d1, Uniform Delay [s]	19.61	11.08	10.79	15.13	11.44	11.24	29.51	23.58	23.72	26.99	20.73	20.76
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
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
d2, Incremental Delay [s]	5.20	0.62	0.53	0.81	0.86	0.88	7.96	3.02	3.65	6.26	2.11	2.21
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	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	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	1.00	1.00

Lane Group Results

X, volume / capacity	0.56	0.22	0.17	0.18	0.29	0.25	0.74	0.77	0.79	0.82	0.75	0.76
d, Delay for Lane Group [s/veh]	24.81	11.70	11.32	15.94	12.31	12.12	37.47	26.60	27.37	33.25	22.84	22.97
Lane Group LOS	C	B	B	B	B	B	D	C	C	C	C	C
Critical Lane Group	Yes	No	No	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.54	1.60	1.01	0.94	2.14	1.59	1.71	4.73	4.59	3.42	5.60	5.52
50th-Percentile Queue Length [ft/ln]	88.61	40.07	25.23	23.55	53.47	39.67	42.81	118.3	114.7	85.60	140.0	138.0
95th-Percentile Queue Length [veh/ln]	6.38	2.88	1.82	1.70	3.85	2.86	3.08	8.30	8.10	6.16	9.48	9.37
95th-Percentile Queue Length [ft/ln]	159.5	72.12	45.41	42.40	96.25	71.41	77.06	207.5	202.5	154.0	237.0	234.3

Movement, Approach, & Intersection Results

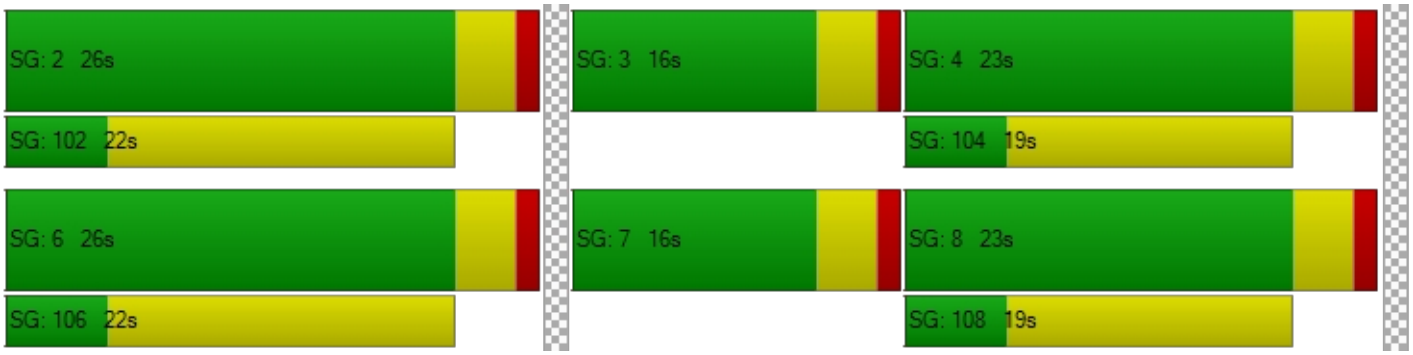
d_M, Delay for Movement [s/veh]	24.81	11.70	11.32	15.94	12.31	12.12	37.47	26.91	27.37	33.25	22.90	22.97
Movement LOS	C	B	B	B	B	B	D	C	C	C	C	C
d_A, Approach Delay [s/veh]	17.38			12.86			28.36			24.99		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	22.24											
Intersection LOS	C											
Intersection V/C	0.542											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	1389.66	3477.09	5885.76	1905.65
d_p, Pedestrian Delay [s]	24.12	24.12	24.12	24.12
l_p,int, Pedestrian LOS Score for Intersection	2.421	2.386	3.052	2.780
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	677	677	585	585
d_b, Bicycle Delay [s]	14.30	14.29	16.38	16.36
l_b,int, Bicycle LOS Score for Intersection	2.487	2.451	2.187	2.426
Bicycle LOS	B	B	B	B

Sequence

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



Vistro File: C:\...\Vistro.vistro
Report File: C:\...\Existing AM.pdf

Scenario 1 Existing AM
7/13/2022

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	Towne Ave/Base Line Rd	200	22	319	8	4	3	9	219	123	427	308	6	1648

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Mountain Ave/Base Line Rd	65	29	160	38	75	49	34	413	118	193	590	30	1794

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Indian Hill Blvd/Base Line Rd	101	43	204	51	102	55	36	413	160	327	670	41	2203

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
4	Forbes Ave/Miramar Ave	1	19	2	4	5	2	33

ID	Intersection Name	Northbound		Southbound		Eastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
5	Forbes Ave/Proj Dwy	0	19	5	0	0	0	24

ID	Intersection Name	Southbound		Eastbound		Westbound		Total Volume
		Left	Right	Left	Thru	Thru	Right	
6	Forbes/Base Line Rd	17	44	26	639	994	13	1733

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7	Bonnie Brae Ave/Miramar Ave	2	20	4	19	33	0	2	14	3	3	3	7	110

ID	Intersection Name	Southbound		Eastbound		Westbound		Total Volume
		Left	Right	Left	Thru	Thru	Right	
8	Bonnie Brae Ave/Base Line Rd	42	36	15	707	890	21	1711

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
9	Mills Ave/Miramar Ave	11	147	31	1	208	2	1	10	39	20	3	4	477

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
10	Mills Ave/Base Line Rd	129	100	85	57	158	156	84	471	109	185	693	51	2278

Vistro File: C:\...\Vistro.vistro
Report File: C:\...\Existing PM.pdf

Scenario 2 Existing PM
7/13/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Towne Ave/Base Line Rd	Signalized	HCM 6th Edition	EB Thru	0.446	43.4	D
2	Mountain Ave/Base Line Rd	Signalized	HCM 6th Edition	WB Left	0.379	20.2	C
3	Indian Hill Blvd/Base Line Rd	Signalized	HCM 6th Edition	EB Left	0.504	24.1	C
4	Forbes Ave/Miramar Ave	Two-way stop	HCM 6th Edition	EB Thru	0.003	9.6	A
5	Forbes Ave/Proj Dwy	Two-way stop	HCM 6th Edition	NB Thru	0.000	0.0	A
6	Forbes/Base Line Rd	Two-way stop	HCM 6th Edition	SB Left	0.086	17.5	C
7	Bonnie Brae Ave/Miramar Ave	All-way stop	HCM 6th Edition	SB Thru	0.057	7.2	A
8	Bonnie Brae Ave/Base Line Rd	Two-way stop	HCM 6th Edition	SB Left	0.092	16.9	C
9	Mills Ave/Miramar Ave	Two-way stop	HCM 6th Edition	WB Left	0.051	12.4	B
10	Mills Ave/Base Line Rd	Signalized	HCM 6th Edition	WB Left	0.414	20.5	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: Towne Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	43.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.446

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	85.00	100.0	85.00	165.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	500.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	95	7	301	7	8	2	2	628	131	315	282	3
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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	75	0	0	1	0	0	33	0	0	1
Total Hourly Volume [veh/h]	95	7	226	7	8	1	2	628	98	315	282	2
Peak Hour Factor	0.907	0.907	0.907	0.850	0.850	0.850	0.941	0.941	0.941	0.877	0.877	0.877
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]	26	2	62	2	2	0	1	167	26	90	80	1
Total Analysis Volume [veh/h]	105	8	249	8	9	1	2	667	104	359	321	2
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			1		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			1			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	4			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			4		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	8			22			6			5		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Isolated
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	Split	Split	Split	Split	Split	Split	Permi	Permi	Permi	ProtP	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	35	0	0	37	0	10	48	0	10	58	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	21	0	0	21	0	0	7	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No			No		No	No	
Maximum Recall		No			No			No		No	No	
Pedestrian Recall		No			No			No		No	No	
Detector Location [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
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	C	R	C	L	C	R	L	C	C
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	33	33	33	27	27	27	53	53	53
g / C, Green / Cycle	0.25	0.25	0.25	0.21	0.21	0.21	0.41	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.06	0.09	0.01	0.00	0.19	0.07	0.30	0.09	0.09
s, saturation flow rate [veh/h]	1787	2702	1812	1057	3560	1560	1192	1870	1865
c, Capacity [veh/h]	448	677	454	198	734	321	440	761	759
d1, Uniform Delay [s]	38.98	40.07	36.89	48.72	50.43	43.85	31.66	25.05	25.05
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.11	0.26	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.35	1.54	0.16	0.02	4.76	0.58	8.67	0.14	0.14
d3, Initial Queue Delay [s]	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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.25	0.37	0.04	0.01	0.91	0.32	0.82	0.21	0.21
d, Delay for Lane Group [s/veh]	40.34	41.60	37.05	48.74	55.19	44.43	40.33	25.19	25.19
Lane Group LOS	D	D	D	D	E	D	D	C	C
Critical Lane Group	No	Yes	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.09	3.45	0.46	0.06	11.07	2.92	9.40	3.31	3.30
50th-Percentile Queue Length [ft/ln]	77.13	86.19	11.51	1.45	276.7	73.04	234.9	82.77	82.61
95th-Percentile Queue Length [veh/ln]	5.55	6.21	0.83	0.10	16.53	5.26	14.43	5.96	5.95
95th-Percentile Queue Length [ft/ln]	138.84	155.15	20.71	2.61	413.1	131.4	360.6	148.9	148.7

Movement, Approach, & Intersection Results

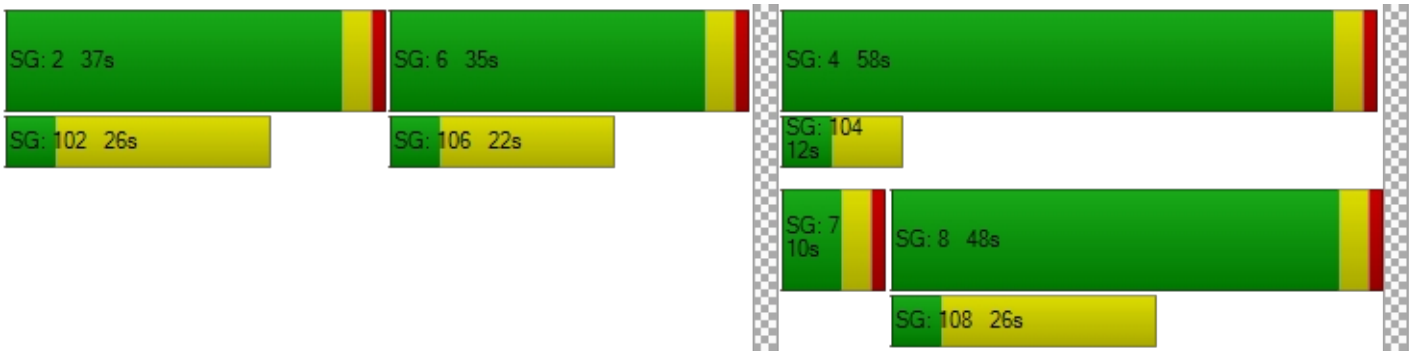
d_M, Delay for Movement [s/veh]	40.34	40.34	41.60	37.05	37.05	37.05	48.74	55.19	44.43	40.33	25.19	25.19
Movement LOS	D	D	D	D	D	D	D	E	D	D	C	C
d_A, Approach Delay [s/veh]	41.21			37.05			53.73			33.16		
Approach LOS	D			D			D			C		
d_I, Intersection Delay [s/veh]	43.45											
Intersection LOS	D											
Intersection V/C	0.446											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	10191.17	0.00	1545.17
d_p, Pedestrian Delay [s]	56.32	56.32	56.32	56.32
l_p,int, Pedestrian LOS Score for Intersection	2.845	1.754	2.719	2.648
Crosswalk LOS	C	A	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]	477	508	677	831
d_b, Bicycle Delay [s]	37.85	36.60	28.54	22.28
l_b,int, Bicycle LOS Score for Intersection	2.281	1.591	2.225	2.123
Bicycle LOS	B	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 2: Mountain Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	20.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.379

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	105.0	100.0	100.0	200.0	100.0	100.0	120.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	61	37	148	28	28	39	26	815	69	70	498	46
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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	37	0	0	10	0	0	17	0	0	12
Total Hourly Volume [veh/h]	61	37	111	28	28	29	26	815	52	70	498	34
Peak Hour Factor	0.878	0.878	0.878	0.791	0.791	0.791	0.924	0.924	0.924	0.887	0.887	0.887
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]	17	11	32	9	9	9	7	220	14	20	140	10
Total Analysis Volume [veh/h]	69	42	126	35	35	37	28	881	56	79	561	38
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			2			1		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	2			1			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			1			4		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	4			1			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	8			20			5			8		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	9	19	0	15	25	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	10	0	0	10	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	C	R	L	C	L	C	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	26	26	26	26	2	18	18	4	20	20
g / C, Green / Cycle	0.44	0.44	0.44	0.44	0.03	0.30	0.30	0.06	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.08	0.08	0.03	0.04	0.02	0.25	0.25	0.04	0.16	0.16
s, saturation flow rate [veh/h]	1374	1560	1215	1693	1781	1870	1823	1781	1870	1820
c, Capacity [veh/h]	703	688	507	746	57	554	540	112	612	596
d1, Uniform Delay [s]	10.67	10.19	14.35	9.80	28.57	19.89	19.92	27.57	16.20	16.22
k, delay calibration	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
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]	0.48	0.59	0.26	0.26	6.47	3.89	4.09	7.84	0.62	0.64
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	0.16	0.18	0.07	0.10	0.49	0.85	0.86	0.71	0.49	0.50
d, Delay for Lane Group [s/veh]	11.15	10.77	14.61	10.05	35.04	23.79	24.02	35.40	16.82	16.86
Lane Group LOS	B	B	B	B	D	C	C	D	B	B
Critical Lane Group	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.93	0.99	0.34	0.54	0.48	6.20	6.11	1.30	3.11	3.06
50th-Percentile Queue Length [ft/ln]	23.36	24.80	8.56	13.42	11.98	154.9	152.6	32.45	77.77	76.38
95th-Percentile Queue Length [veh/ln]	1.68	1.79	0.62	0.97	0.86	10.28	10.16	2.34	5.60	5.50
95th-Percentile Queue Length [ft/ln]	42.04	44.64	15.40	24.16	21.57	257.0	253.9	58.41	139.9	137.4

Movement, Approach, & Intersection Results

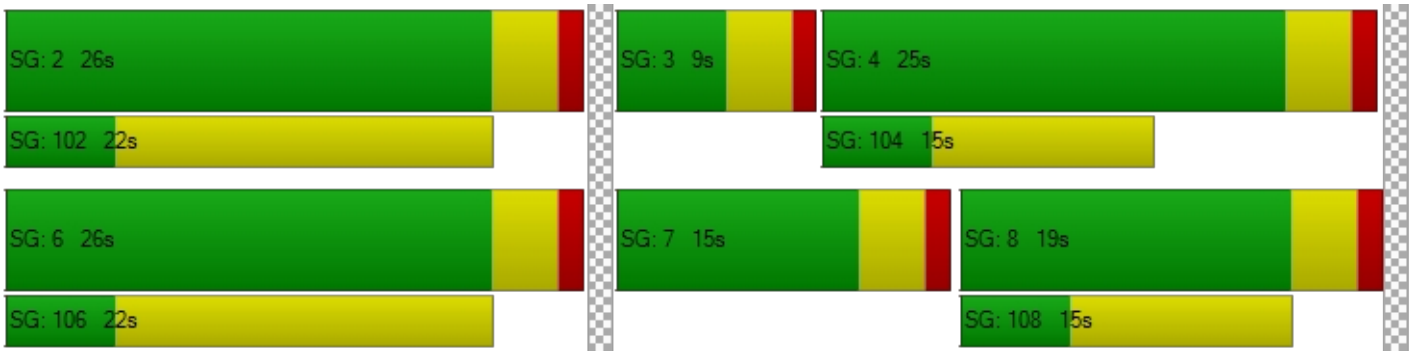
d_M, Delay for Movement [s/veh]	11.15	11.15	10.77	14.61	10.05	10.05	35.04	23.89	24.02	35.40	16.84	16.86
Movement LOS	B	B	B	B	B	B	D	C	C	D	B	B
d_A, Approach Delay [s/veh]	10.95			11.54			24.22			19.00		
Approach LOS	B			B			C			B		
d_I, Intersection Delay [s/veh]	20.18											
Intersection LOS	C											
Intersection V/C	0.379											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	8718.22	16311.48	17579.57	4196.23
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.123	2.012	2.726	2.692
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]	733	733	500	700
d_b, Bicycle Delay [s]	12.08	12.15	16.92	12.73
l_b,int, Bicycle LOS Score for Intersection	2.012	1.753	2.370	2.129
Bicycle LOS	B	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 3: Indian Hill Blvd/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	24.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.504

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	165.0	100.0	100.0	135.0	100.0	100.0	174.0	100.0	100.0	175.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
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	100.0
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	163	65	202	34	43	29	60	828	105	169	425	52
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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	51	0	0	7	0	0	26	0	0	13
Total Hourly Volume [veh/h]	163	65	151	34	43	22	60	828	79	169	425	39
Peak Hour Factor	0.903	0.903	0.903	0.828	0.828	0.828	0.951	0.951	0.951	0.907	0.907	0.907
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]	45	18	42	10	13	7	16	218	21	47	117	11
Total Analysis Volume [veh/h]	180	72	167	41	52	27	63	871	83	186	468	43
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			47			11		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	47			11			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	10			3			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			3			10		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	2			2			5			3		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	30	0	0	30	0	13	27	0	13	27	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	17	0	0	17	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	C	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	28	28	28	28	28	28	4	21	21	9	26	26
g / C, Green / Cycle	0.40	0.40	0.40	0.40	0.40	0.40	0.05	0.30	0.30	0.13	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.14	0.04	0.11	0.04	0.02	0.02	0.04	0.26	0.26	0.10	0.14	0.14
s, saturation flow rate [veh/h]	1317	1870	1557	1136	1870	1648	1781	1870	1790	1781	1870	1807
c, Capacity [veh/h]	571	749	623	441	749	660	94	563	539	226	702	678
d1, Uniform Delay [s]	16.84	13.09	14.10	17.91	12.86	12.89	32.55	23.06	23.17	29.79	15.85	15.87
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.16	0.17	0.11	0.11	0.11
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
d2, Incremental Delay [s]	1.44	0.26	1.05	0.42	0.14	0.17	7.92	5.75	6.71	7.32	0.32	0.34
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	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	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	1.00	1.00

Lane Group Results

X, volume / capacity	0.32	0.10	0.27	0.09	0.05	0.06	0.67	0.86	0.87	0.82	0.37	0.37
d, Delay for Lane Group [s/veh]	18.28	13.34	15.15	18.32	13.00	13.06	40.47	28.81	29.88	37.11	16.18	16.21
Lane Group LOS	B	B	B	B	B	B	D	C	C	D	B	B
Critical Lane Group	Yes	No	No	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.24	0.71	1.82	0.51	0.39	0.38	1.22	7.90	7.82	3.39	2.84	2.77
50th-Percentile Queue Length [ft/ln]	56.00	17.75	45.58	12.73	9.68	9.53	30.58	197.4	195.5	84.67	71.04	69.26
95th-Percentile Queue Length [veh/ln]	4.03	1.28	3.28	0.92	0.70	0.69	2.20	12.50	12.41	6.10	5.11	4.99
95th-Percentile Queue Length [ft/ln]	100.7	31.95	82.04	22.91	17.43	17.16	55.04	312.6	310.2	152.4	127.8	124.6

Movement, Approach, & Intersection Results

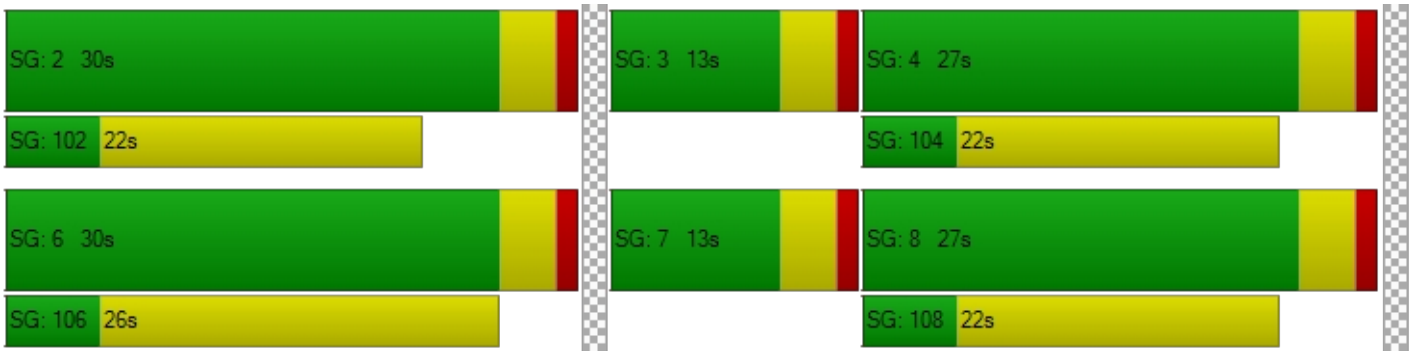
d_M, Delay for Movement [s/veh]	18.28	13.34	15.15	18.32	13.01	13.06	40.47	29.28	29.88	37.11	16.19	16.21
Movement LOS	B	B	B	B	B	B	D	C	C	D	B	B
d_A, Approach Delay [s/veh]	16.19			14.84			30.02			21.78		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	24.09											
Intersection LOS	C											
Intersection V/C	0.504											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	283.33	1262.80	3883.45	1144.10
d_p, Pedestrian Delay [s]	26.58	26.58	26.58	26.58
l_p,int, Pedestrian LOS Score for Intersection	2.521	2.361	2.918	2.818
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	743	743	657	657
d_b, Bicycle Delay [s]	13.84	13.84	15.82	15.80
l_b,int, Bicycle LOS Score for Intersection	1.947	1.664	2.420	2.145
Bicycle LOS	A	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 4: Forbes Ave/Miramar Ave

Control Type:	Two-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

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

Volumes

Name						
Base Volume Input [veh/h]	1	11	2	1	8	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	11	2	1	8	3
Peak Hour Factor	1.0000	0.9500	0.9500	0.9500	0.9500	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	3	1	0	2	1
Total Analysis Volume [veh/h]	1	12	2	1	8	3
Pedestrian Volume [ped/h]	10		26		16	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.34	0.00	9.56	8.65	0.00	7.33
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.05	0.05	0.27	0.27	0.00	0.00
d_A, Approach Delay [s/veh]	0.56		9.26		2.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.11					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Forbes Ave/Proj Dwy

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

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

Volumes

Name						
Base Volume Input [veh/h]	0	11	8	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	11	8	0	0	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	3	2	0	0	0
Total Analysis Volume [veh/h]	0	12	8	0	0	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.23	0.00	0.00	0.00	8.61	8.35
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		8.48	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 6: Forbes/Base Line Rd

Control Type:	Two-way stop	Delay (sec / veh):	17.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.086

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	135.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	20	28	50	1011	617	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	28	50	1011	617	21
Peak Hour Factor	0.7059	0.7059	0.9406	0.9406	0.8716	0.8716
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	10	13	269	177	6
Total Analysis Volume [veh/h]	28	40	53	1075	708	24
Pedestrian Volume [ped/h]	3		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.06	0.06	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	17.51	12.15	9.44	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.52	0.52	0.20	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	13.12	13.12	4.89	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	14.36		0.44		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.77					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 7: Bonnie Brae Ave/Miramar Ave

Control Type:	All-way stop	Delay (sec / veh):	7.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.057

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	2	23	10	12	28	2	2	9	0	6	4	20
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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]	2	23	10	12	28	2	2	9	0	6	4	20
Peak Hour Factor	0.666	0.666	0.666	0.886	0.886	0.886	0.450	0.450	0.450	0.750	0.750	0.750
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	9	4	3	8	1	1	5	0	2	1	7
Total Analysis Volume [veh/h]	3	34	15	14	32	2	4	20	0	8	5	27
Pedestrian Volume [ped/h]	1			0			1			2		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	910	867	854	946
Degree of Utilization, x	0.06	0.06	0.03	0.04

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.18	0.18	0.09	0.13
95th-Percentile Queue Length [ft]	4.53	4.39	2.17	3.31
Approach Delay [s/veh]	7.19	7.39	7.34	6.97
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.22			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 8: Bonnie Brae Ave/Base Line Rd

Control Type:	Two-way stop	Delay (sec / veh):	16.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.092

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	135.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	24	39	46	862	604	43
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	39	46	862	604	43
Peak Hour Factor	0.7500	0.7500	0.9520	0.9520	0.8821	0.8821
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	13	12	226	171	12
Total Analysis Volume [veh/h]	32	52	48	905	685	49
Pedestrian Volume [ped/h]	1		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.08	0.06	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	16.87	12.30	9.40	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.63	0.63	0.18	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	15.63	15.63	4.40	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	14.04		0.47		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.92					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 9: Mills Ave/Miramar Ave

Control Type:	Two-way stop	Delay (sec / veh):	12.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.051

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	30.00	100.0	100.0	30.00	100.0	100.0	100.0	100.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	16	151	8	3	137	3	6	6	24	12	6	0
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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]	16	151	8	3	137	3	6	6	24	12	6	0
Peak Hour Factor	0.892	0.892	0.892	0.794	0.794	0.794	0.900	0.900	0.900	0.450	0.450	0.450
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]	4	42	2	1	43	1	2	2	7	7	3	0
Total Analysis Volume [veh/h]	18	169	9	4	172	4	7	7	27	27	13	0
Pedestrian Volume [ped/h]	0			4			5			1		

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	0.00	0.00	0.00	0.01	0.01	0.03	0.05	0.02	0.00
d_M, Delay for Movement [s/veh]	7.63	0.00	0.00	7.59	0.00	0.00	12.04	12.14	9.49	12.40	12.35	9.72
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.04	0.00	0.00	0.01	0.00	0.00	0.18	0.18	0.18	0.25	0.25	0.25
95th-Percentile Queue Length [ft/ln]	0.99	0.00	0.00	0.22	0.00	0.00	4.58	4.58	4.58	6.13	6.13	6.13
d_A, Approach Delay [s/veh]	0.70			0.17			10.38			12.38		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	2.38											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 10: Mills Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	20.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.414

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	105.0	100.0	100.0	145.0	100.0	145.0	175.0	100.0	100.0	165.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	123	105	97	47	71	73	82	822	82	77	440	62
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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	24	0	0	18	0	0	21	0	0	16
Total Hourly Volume [veh/h]	123	105	73	47	71	55	82	822	61	77	440	46
Peak Hour Factor	0.912	0.912	0.912	0.868	0.868	0.868	0.948	0.948	0.948	0.836	0.836	0.836
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]	34	29	20	14	20	16	22	217	16	23	131	14
Total Analysis Volume [veh/h]	135	115	80	54	82	63	86	867	64	92	526	55
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			5			3		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	5			3			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	2			1			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			1			2		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	16			17			16			46		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	11	23	0	11	23	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	14	0	0	14	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	26	26	26	26	26	26	4	18	18	4	18	18
g / C, Green / Cycle	0.44	0.44	0.44	0.44	0.44	0.44	0.07	0.30	0.30	0.07	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.11	0.06	0.05	0.05	0.04	0.04	0.05	0.25	0.25	0.05	0.16	0.16
s, saturation flow rate [veh/h]	1242	1870	1555	1187	1870	1556	1781	1870	1811	1781	1870	1774
c, Capacity [veh/h]	576	813	676	542	813	676	119	554	536	123	558	530
d1, Uniform Delay [s]	13.48	10.22	10.10	13.05	10.03	9.98	27.45	19.86	19.91	27.42	17.52	17.60
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
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
d2, Incremental Delay [s]	0.95	0.36	0.36	0.37	0.25	0.27	8.02	3.78	4.09	8.71	0.78	0.86
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	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	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	1.00	1.00

Lane Group Results

X, volume / capacity	0.23	0.14	0.12	0.10	0.10	0.09	0.72	0.85	0.86	0.75	0.53	0.54
d, Delay for Lane Group [s/veh]	14.43	10.58	10.45	13.41	10.28	10.26	35.47	23.64	24.01	36.13	18.30	18.46
Lane Group LOS	B	B	B	B	B	B	D	C	C	D	B	B
Critical Lane Group	Yes	No	No	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.31	0.88	0.62	0.50	0.62	0.48	1.41	6.15	6.06	1.53	3.20	3.13
50th-Percentile Queue Length [ft/ln]	32.77	22.04	15.41	12.47	15.38	11.98	35.31	153.6	151.4	38.13	80.00	78.17
95th-Percentile Queue Length [veh/ln]	2.36	1.59	1.11	0.90	1.11	0.86	2.54	10.21	10.09	2.75	5.76	5.63
95th-Percentile Queue Length [ft/ln]	58.98	39.66	27.74	22.44	27.69	21.56	63.56	255.3	252.3	68.64	143.9	140.7

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	14.43	10.58	10.45	13.41	10.28	10.26	35.47	23.81	24.01	36.13	18.37	18.46
Movement LOS	B	B	B	B	B	B	D	C	C	D	B	B
d_A, Approach Delay [s/veh]	12.13			11.12			24.81			20.80		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	20.48											
Intersection LOS	C											
Intersection V/C	0.414											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	3753.73	6225.74	16909.65	8982.40
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.295	2.257	2.850	2.714
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]	733	733	633	633
d_b, Bicycle Delay [s]	12.13	12.14	14.12	14.34
l_b,int, Bicycle LOS Score for Intersection	2.144	1.918	2.416	2.128
Bicycle LOS	B	A	B	B

Sequence

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

Vistro File: C:\...\Vistro.vistro
Report File: C:\...\Existing PM.pdf

Scenario 2 Existing PM
7/13/2022

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	Towne Ave/Base Line Rd	95	7	301	7	8	2	2	628	131	315	282	3	1781

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Mountain Ave/Base Line Rd	61	37	148	28	28	39	26	815	69	70	498	46	1865

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Indian Hill Blvd/Base Line Rd	163	65	202	34	43	29	60	828	105	169	425	52	2175

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
4	Forbes Ave/Miramar Ave	1	11	2	1	8	3	26

ID	Intersection Name	Northbound		Southbound		Eastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
5	Forbes Ave/Proj Dwy	0	11	8	0	0	0	19

ID	Intersection Name	Southbound		Eastbound		Westbound		Total Volume
		Left	Right	Left	Thru	Thru	Right	
6	Forbes/Base Line Rd	20	28	50	1011	617	21	1747

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7	Bonnie Brae Ave/Miramar Ave	2	23	10	12	28	2	2	9	0	6	4	20	118

ID	Intersection Name	Southbound		Eastbound		Westbound		Total Volume
		Left	Right	Left	Thru	Thru	Right	
8	Bonnie Brae Ave/Base Line Rd	24	39	46	862	604	43	1618

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
9	Mills Ave/Miramar Ave	16	151	8	3	137	3	6	6	24	12	6	0	372

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
10	Mills Ave/Base Line Rd	123	105	97	47	71	73	82	822	82	77	440	62	2081

Vistro File: C:\...\Vistro.vistro
Report File: C:\...\Opening AM.pdf

Scenario 3 Opening AM
7/13/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Towne Ave/Base Line Rd	Signalized	HCM 6th Edition	EB Left	0.458	36.5	D
2	Mountain Ave/Base Line Rd	Signalized	HCM 6th Edition	EB Left	0.435	20.7	C
3	Indian Hill Blvd/Base Line Rd	Signalized	HCM 6th Edition	EB Left	0.603	26.8	C
4	Forbes Ave/Miramar Ave	Two-way stop	HCM 6th Edition	EB Thru	0.003	9.7	A
5	Forbes Ave/Proj Dwy	Two-way stop	HCM 6th Edition	NB Thru	0.000	0.0	A
6	Forbes/Base Line Rd	Two-way stop	HCM 6th Edition	SB Left	0.100	23.8	C
7	Bonnie Brae Ave/Miramar Ave	All-way stop	HCM 6th Edition	SB Thru	0.067	7.3	A
8	Bonnie Brae Ave/Base Line Rd	Two-way stop	HCM 6th Edition	SB Left	0.212	24.0	C
9	Mills Ave/Miramar Ave	Two-way stop	HCM 6th Edition	WB Left	0.091	16.1	C
10	Mills Ave/Base Line Rd	Signalized	HCM 6th Edition	EB Left	0.564	22.5	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: Towne Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	36.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.458

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	85.00	100.0	85.00	165.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	500.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	200	22	319	8	4	3	9	219	123	427	308	6
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	0	0	0	0	0	0	44	6	1	40	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	81	0	0	1	0	0	33	0	0	2
Total Hourly Volume [veh/h]	205	22	241	8	4	2	9	265	97	432	351	4
Peak Hour Factor	0.873	0.873	0.873	0.625	0.625	0.625	0.886	0.886	0.886	0.960	0.960	0.960
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]	59	6	69	3	2	1	3	75	27	113	91	1
Total Analysis Volume [veh/h]	235	25	276	13	6	3	10	299	109	450	366	4
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			1			9		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	1			9			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	3			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			3		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	14			12			12			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Isolated
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	Split	Split	Split	Split	Split	Split	Permi	Permi	Permi	ProtP	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	30	0	9	54	0	0	45	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	21	0	0	21	0	0	7	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No			No		No	No	
Maximum Recall		No			No			No		No	No	
Pedestrian Recall		No			No			No		No	No	
Detector Location [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
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	C	R	C	L	C	R	L	C	C
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	27	27	27	14	14	14	43	39	39
g / C, Green / Cycle	0.25	0.25	0.25	0.13	0.13	0.13	0.39	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.15	0.10	0.01	0.01	0.08	0.07	0.30	0.10	0.10
s, saturation flow rate [veh/h]	1789	2682	1775	1012	3560	1533	1486	1870	1862
c, Capacity [veh/h]	446	669	443	102	448	193	601	665	662
d1, Uniform Delay [s]	36.26	34.36	31.38	51.64	45.88	45.13	27.86	25.35	25.35
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.11	0.26	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.47	1.88	0.21	0.42	1.72	2.58	4.45	0.23	0.23
d3, Initial Queue Delay [s]	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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.58	0.41	0.05	0.10	0.67	0.56	0.75	0.28	0.28
d, Delay for Lane Group [s/veh]	41.73	36.24	31.59	52.05	47.61	47.71	32.31	25.57	25.57
Lane Group LOS	D	D	C	D	D	D	C	C	C
Critical Lane Group	Yes	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	6.78	3.24	0.47	0.28	3.99	2.92	10.18	3.49	3.48
50th-Percentile Queue Length [ft/ln]	169.52	81.10	11.83	7.00	99.79	73.10	254.5	87.37	87.06
95th-Percentile Queue Length [veh/ln]	11.05	5.84	0.85	0.50	7.18	5.26	15.41	6.29	6.27
95th-Percentile Queue Length [ft/ln]	276.29	145.97	21.29	12.60	179.6	131.5	385.3	157.2	156.7

Movement, Approach, & Intersection Results

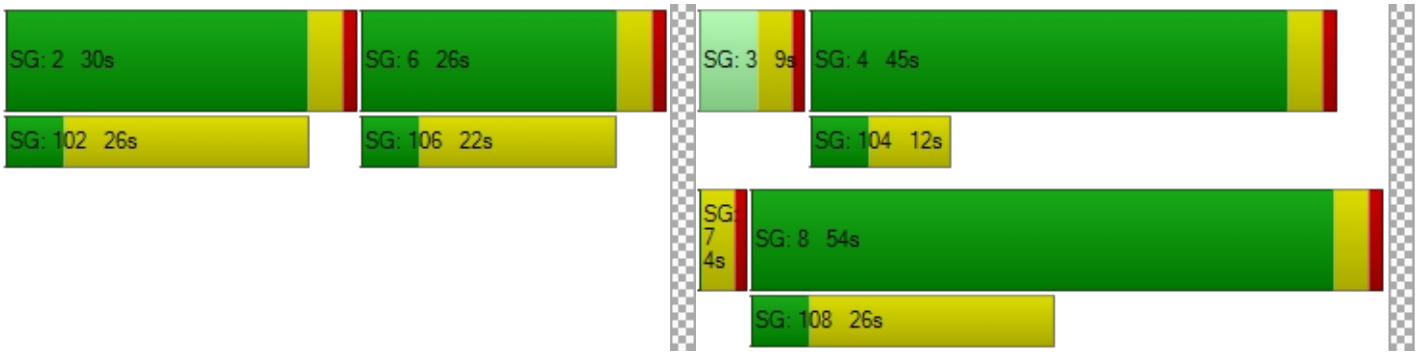
d_M, Delay for Movement [s/veh]	41.73	41.73	36.24	31.59	31.59	31.59	52.05	47.61	47.71	32.31	25.57	25.57
Movement LOS	D	D	D	C	C	C	D	D	D	C	C	C
d_A, Approach Delay [s/veh]	38.90			31.59			47.74			29.27		
Approach LOS	D			C			D			C		
d_I, Intersection Delay [s/veh]	36.47											
Intersection LOS	D											
Intersection V/C	0.458											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	10954.38	1307.47	0.00	2550.93
d_p, Pedestrian Delay [s]	46.37	46.37	46.37	46.37
l_p,int, Pedestrian LOS Score for Intersection	2.869	1.773	2.683	2.605
Crosswalk LOS	C	A	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]	400	473	909	745
d_b, Bicycle Delay [s]	35.45	32.27	16.46	21.64
l_b,int, Bicycle LOS Score for Intersection	2.578	1.598	1.932	2.238
Bicycle LOS	B	A	A	B

Sequence

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



Intersection Level Of Service Report
Intersection 2: Mountain Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	20.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.435

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	105.0	100.0	100.0	200.0	100.0	100.0	120.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	65	29	160	38	75	49	34	413	118	193	590	30
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008
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	44	1	0	40	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	40	0	0	12	0	0	30	0	0	8
Total Hourly Volume [veh/h]	66	29	121	38	76	37	34	461	90	195	635	22
Peak Hour Factor	0.641	0.641	0.641	0.698	0.698	0.698	0.856	0.856	0.856	0.888	0.888	0.888
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]	26	11	47	14	27	13	10	135	26	55	179	6
Total Analysis Volume [veh/h]	103	45	189	54	109	53	40	539	105	220	715	25
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			6			6		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	6			6			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			4			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			4			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	13			13			4			6		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	15	19	0	15	19	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	10	0	0	10	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	C	R	L	C	L	C	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	26	26	26	26	2	13	13	9	20	20
g / C, Green / Cycle	0.43	0.43	0.43	0.43	0.04	0.22	0.22	0.15	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.13	0.12	0.05	0.09	0.02	0.18	0.18	0.12	0.20	0.20
s, saturation flow rate [veh/h]	1131	1560	1146	1754	1781	1870	1739	1781	1870	1842
c, Capacity [veh/h]	587	669	392	752	76	412	383	269	614	605
d1, Uniform Delay [s]	13.15	11.10	18.33	10.78	28.12	22.16	22.26	24.68	16.90	16.91
k, delay calibration	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
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]	1.03	1.06	0.73	0.66	5.50	3.68	4.36	6.08	0.97	0.99
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	0.25	0.28	0.14	0.22	0.53	0.80	0.82	0.82	0.61	0.61
d, Delay for Lane Group [s/veh]	14.18	12.16	19.06	11.44	33.62	25.84	26.62	30.76	17.87	17.90
Lane Group LOS	B	B	B	B	C	C	C	C	B	B
Critical Lane Group	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.47	1.62	0.64	1.32	0.65	4.48	4.33	3.28	4.02	3.98
50th-Percentile Queue Length [ft/ln]	36.83	40.47	15.92	33.02	16.30	112.0	108.3	82.07	100.4	99.45
95th-Percentile Queue Length [veh/ln]	2.65	2.91	1.15	2.38	1.17	7.95	7.75	5.91	7.24	7.16
95th-Percentile Queue Length [ft/ln]	66.29	72.85	28.66	59.43	29.34	198.7	193.6	147.7	180.8	179.0

Movement, Approach, & Intersection Results

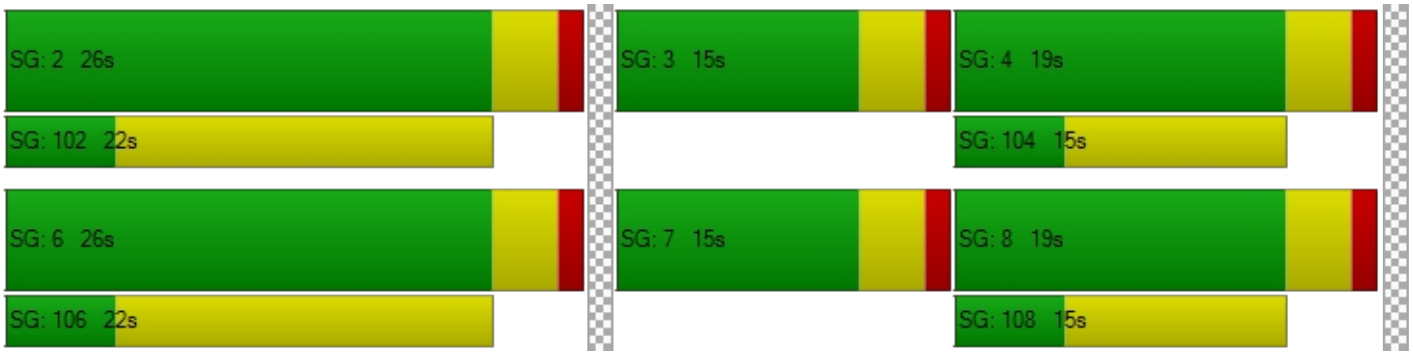
d_M, Delay for Movement [s/veh]	14.18	14.18	12.16	19.06	11.44	11.44	33.62	26.14	26.62	30.76	17.89	17.90
Movement LOS	B	B	B	B	B	B	C	C	C	C	B	B
d_A, Approach Delay [s/veh]	13.05			13.34			26.65			20.84		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	20.72											
Intersection LOS	C											
Intersection V/C	0.435											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	2735.27	2777.76	4191.59	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.251	2.050	2.781	2.718
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]	733	733	500	500
d_b, Bicycle Delay [s]	12.11	12.11	16.91	16.93
l_b,int, Bicycle LOS Score for Intersection	2.182	1.936	2.149	2.358
Bicycle LOS	B	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 3: Indian Hill Blvd/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	26.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.603

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	165.0	100.0	100.0	135.0	100.0	100.0	174.0	100.0	100.0	175.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
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	100.0
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	101	43	204	51	102	55	36	413	160	327	670	41
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	37	0	40	0	0	0	0	10	34	32	3	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	62	0	0	14	0	0	49	0	0	10
Total Hourly Volume [veh/h]	139	43	184	51	103	41	36	427	146	362	679	31
Peak Hour Factor	0.674	0.674	0.674	0.813	0.813	0.813	0.827	0.827	0.827	0.889	0.889	0.889
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]	52	16	68	16	32	13	11	129	44	102	191	9
Total Analysis Volume [veh/h]	206	64	273	63	127	50	44	516	177	407	764	35
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			7			10		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	7			10			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	15			6			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			6			15		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	9			12			8			4		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	80
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	30	0	0	30	0	24	26	0	24	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	17	0	0	17	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	C	L	C	C
C, Cycle Length [s]	80	80	80	80	80	80	80	80	80	80	80	80
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	30	30	30	30	30	30	3	18	18	20	35	35
g / C, Green / Cycle	0.37	0.37	0.37	0.37	0.37	0.37	0.04	0.23	0.23	0.25	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.17	0.03	0.18	0.06	0.05	0.05	0.02	0.19	0.20	0.23	0.22	0.22
s, saturation flow rate [veh/h]	1203	1870	1543	1038	1870	1672	1781	1870	1681	1781	1870	1837
c, Capacity [veh/h]	465	695	574	309	695	622	72	430	387	442	818	804
d1, Uniform Delay [s]	22.87	16.35	19.18	26.53	16.59	16.65	37.75	29.38	29.54	29.32	16.12	16.13
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.16	0.11	0.11
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
d2, Incremental Delay [s]	3.04	0.26	2.81	1.49	0.39	0.47	7.97	4.44	5.57	11.75	0.46	0.47
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	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	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	1.00	1.00

Lane Group Results

X, volume / capacity	0.44	0.09	0.48	0.20	0.13	0.14	0.61	0.84	0.86	0.92	0.49	0.49
d, Delay for Lane Group [s/veh]	25.92	16.61	21.99	28.02	16.98	17.12	45.72	33.82	35.11	41.07	16.58	16.60
Lane Group LOS	C	B	C	C	B	B	D	C	D	D	B	B
Critical Lane Group	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.48	0.78	4.12	1.11	1.13	1.09	0.99	6.90	6.48	8.74	5.02	4.96
50th-Percentile Queue Length [ft/ln]	86.96	19.62	103.0	27.77	28.17	27.31	24.82	172.4	161.9	218.3	125.6	123.9
95th-Percentile Queue Length [veh/ln]	6.26	1.41	7.42	2.00	2.03	1.97	1.79	11.21	10.65	13.58	8.70	8.61
95th-Percentile Queue Length [ft/ln]	156.5	35.31	185.4	49.98	50.71	49.15	44.68	280.1	266.3	339.5	217.5	215.2

Movement, Approach, & Intersection Results

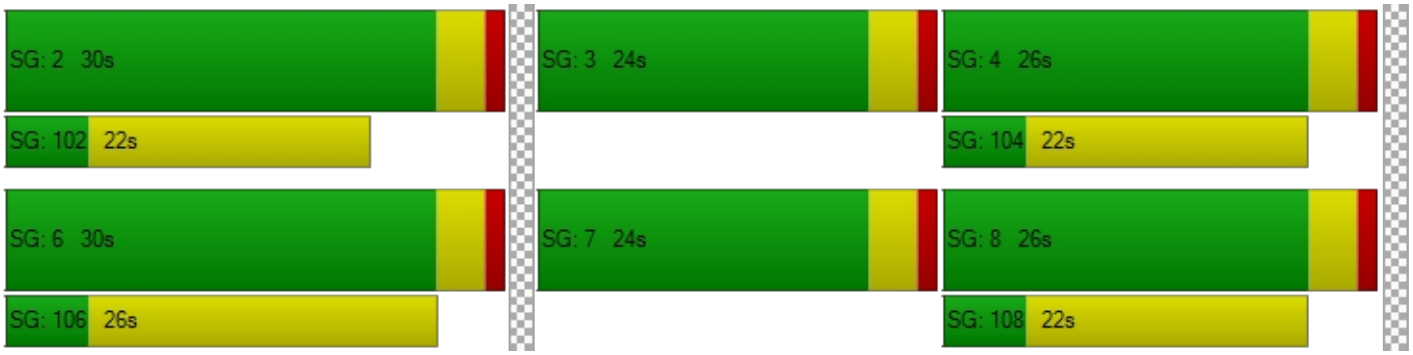
d_M, Delay for Movement [s/veh]	25.92	16.61	21.99	28.02	17.02	17.12	45.72	34.21	35.11	41.07	16.59	16.60
Movement LOS	C	B	C	C	B	B	D	C	D	D	B	B
d_A, Approach Delay [s/veh]	22.85			19.93			35.11			24.85		
Approach LOS	C			B			D			C		
d_I, Intersection Delay [s/veh]	26.79											
Intersection LOS	C											
Intersection V/C	0.603											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	1478.86	1218.79	1529.67	522.83
d_p, Pedestrian Delay [s]	31.51	31.51	31.51	31.51
l_p,int, Pedestrian LOS Score for Intersection	2.650	2.395	3.013	2.898
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	650	650	550	550
d_b, Bicycle Delay [s]	18.31	18.34	21.11	21.07
l_b,int, Bicycle LOS Score for Intersection	2.059	1.769	2.208	2.563
Bicycle LOS	B	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 4: Forbes Ave/Miramar Ave

Control Type:	Two-way stop	Delay (sec / veh):	9.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

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

Volumes

Name						
Base Volume Input [veh/h]	1	19	2	4	5	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0086	1.0086	1.0086	1.0086	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	19	2	4	5	2
Peak Hour Factor	1.0000	0.9500	0.9500	0.9500	0.9500	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	5	1	1	1	1
Total Analysis Volume [veh/h]	1	20	2	4	5	2
Pedestrian Volume [ped/h]	15		31		21	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.36	0.00	9.70	8.73	0.00	7.35
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.02	0.02	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.05	0.05	0.51	0.51	0.00	0.00
d_A, Approach Delay [s/veh]	0.35		9.06		2.10	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.25					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Forbes Ave/Proj Dwy

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

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

Volumes

Name						
Base Volume Input [veh/h]	0	19	5	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0086	1.0086	1.0086	1.0086	1.0086	1.0086
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	19	5	0	0	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	5	1	0	0	0
Total Analysis Volume [veh/h]	0	20	5	0	0	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.23	0.00	0.00	0.00	8.63	8.34
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		8.49	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 6: Forbes/Base Line Rd

Control Type:	Two-way stop	Delay (sec / veh):	23.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.100

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	135.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	17	44	26	639	994	13
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0086	1.0086	1.0086	1.0086	1.0086	1.0086
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	50	35	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	17	44	26	694	1038	13
Peak Hour Factor	0.7262	0.7262	0.8396	0.8396	0.8927	0.8927
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	15	8	207	291	4
Total Analysis Volume [veh/h]	23	61	31	827	1163	15
Pedestrian Volume [ped/h]	2		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.14	0.05	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	23.83	16.12	11.48	0.00	0.00	0.00
Movement LOS	C	C	B	A	A	A
95th-Percentile Queue Length [veh/ln]	0.90	0.90	0.17	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	22.60	22.60	4.18	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	18.23		0.41		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.89					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 7: Bonnie Brae Ave/Miramar Ave

Control Type:	All-way stop	Delay (sec / veh):	7.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.067

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	2	20	4	19	33	0	2	14	3	3	3	7
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008
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]	2	20	4	19	33	0	2	14	3	3	3	7
Peak Hour Factor	0.666	0.666	0.666	0.886	0.886	0.886	0.450	0.450	0.450	0.750	0.750	0.750
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	7	1	5	9	0	1	8	2	1	1	2
Total Analysis Volume [veh/h]	3	30	6	21	37	0	4	31	7	4	4	9
Pedestrian Volume [ped/h]	7			9			6			19		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	891	864	882	919
Degree of Utilization, x	0.04	0.07	0.05	0.02

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.14	0.22	0.15	0.06
95th-Percentile Queue Length [ft]	3.43	5.39	3.74	1.41
Approach Delay [s/veh]	7.22	7.47	7.28	6.99
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.31			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 8: Bonnie Brae Ave/Base Line Rd

Control Type:	Two-way stop	Delay (sec / veh):	24.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.212

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	135.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	42	36	15	707	890	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0086	1.0086	1.0086	1.0086	1.0086	1.0086
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	50	35	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	42	36	15	763	933	21
Peak Hour Factor	0.7813	0.7813	0.9070	0.9070	0.8706	0.8706
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	12	4	210	268	6
Total Analysis Volume [veh/h]	54	46	17	841	1072	24
Pedestrian Volume [ped/h]	2		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.21	0.10	0.03	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	24.05	17.42	10.87	0.00	0.00	0.00
Movement LOS	C	C	B	A	A	A
95th-Percentile Queue Length [veh/ln]	1.28	1.28	0.08	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	32.02	32.02	2.08	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	21.00		0.22		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	1.11					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 9: Mills Ave/Miramar Ave

Control Type:	Two-way stop	Delay (sec / veh):	16.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.091

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	30.00	100.0	100.0	30.00	100.0	100.0	100.0	100.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	11	147	31	1	208	2	1	10	39	20	3	4
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008
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]	11	148	31	1	210	2	1	10	39	20	3	4
Peak Hour Factor	0.630	0.630	0.630	0.722	0.722	0.722	0.625	0.625	0.625	0.613	0.613	0.613
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]	4	59	12	0	73	1	0	4	16	8	1	2
Total Analysis Volume [veh/h]	17	235	49	1	291	3	2	16	62	33	5	7
Pedestrian Volume [ped/h]	0			2			9			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	0.00	0.00	0.00	0.01	0.04	0.08	0.09	0.01	0.01
d_M, Delay for Movement [s/veh]	7.93	0.00	0.00	7.82	0.00	0.00	15.00	15.00	10.78	16.11	14.72	10.63
Movement LOS	A	A	A	A	A	A	B	B	B	C	B	B
95th-Percentile Queue Length [veh/ln]	0.04	0.00	0.00	0.00	0.00	0.00	0.45	0.45	0.45	0.38	0.38	0.38
95th-Percentile Queue Length [ft/ln]	1.04	0.00	0.00	0.06	0.00	0.00	11.15	11.15	11.15	9.39	9.39	9.39
d_A, Approach Delay [s/veh]	0.45			0.03			11.73			15.10		
Approach LOS	A			A			B			C		
d_I, Intersection Delay [s/veh]	2.44											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 10: Mills Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	22.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.564

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	105.0	100.0	100.0	145.0	100.0	145.0	175.0	100.0	100.0	165.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	129	100	85	57	158	156	84	471	109	185	693	51
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008
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	0	0	46	4	0	34	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	22	0	0	39	0	0	29	0	0	13
Total Hourly Volume [veh/h]	131	101	64	57	159	118	85	521	85	187	733	38
Peak Hour Factor	0.541	0.541	0.541	0.662	0.662	0.662	0.869	0.869	0.869	0.883	0.883	0.883
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]	60	47	30	22	60	45	24	150	24	53	208	11
Total Analysis Volume [veh/h]	242	187	118	86	240	178	98	599	98	212	830	43
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			12			5		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	12			5			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	8			2			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			2			8		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	11			10			13			10		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	65
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	16	23	0	16	23	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	14	0	0	14	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	65	65	65	65	65	65	65	65	65	65	65	65
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	28	28	28	28	28	28	5	16	16	9	20	20
g / C, Green / Cycle	0.43	0.43	0.43	0.43	0.43	0.43	0.07	0.24	0.24	0.15	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.25	0.10	0.08	0.08	0.13	0.11	0.06	0.19	0.20	0.12	0.24	0.24
s, saturation flow rate [veh/h]	968	1870	1553	1071	1870	1560	1781	1870	1741	1781	1870	1829
c, Capacity [veh/h]	408	803	667	463	803	670	132	449	418	259	583	570
d1, Uniform Delay [s]	20.79	11.75	11.42	15.94	12.13	11.91	29.48	23.18	23.31	26.93	20.14	20.17
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
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
d2, Incremental Delay [s]	6.21	0.68	0.58	0.89	0.95	0.97	7.91	3.23	3.86	6.26	2.02	2.11
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	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	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	1.00	1.00

Lane Group Results

X, volume / capacity	0.59	0.23	0.18	0.19	0.30	0.27	0.74	0.79	0.81	0.82	0.76	0.76
d, Delay for Lane Group [s/veh]	27.00	12.43	12.00	16.82	13.09	12.88	37.39	26.41	27.17	33.20	22.16	22.28
Lane Group LOS	C	B	B	B	B	B	D	C	C	C	C	C
Critical Lane Group	Yes	No	No	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.81	1.69	1.05	0.98	2.25	1.66	1.73	5.18	5.03	3.47	5.81	5.74
50th-Percentile Queue Length [ft/ln]	95.14	42.26	26.28	24.43	56.29	41.62	43.19	129.5	125.7	86.77	145.3	143.3
95th-Percentile Queue Length [veh/ln]	6.85	3.04	1.89	1.76	4.05	3.00	3.11	8.91	8.71	6.25	9.77	9.66
95th-Percentile Queue Length [ft/ln]	171.2	76.06	47.31	43.97	101.3	74.92	77.74	222.8	217.6	156.1	244.2	241.5

Movement, Approach, & Intersection Results

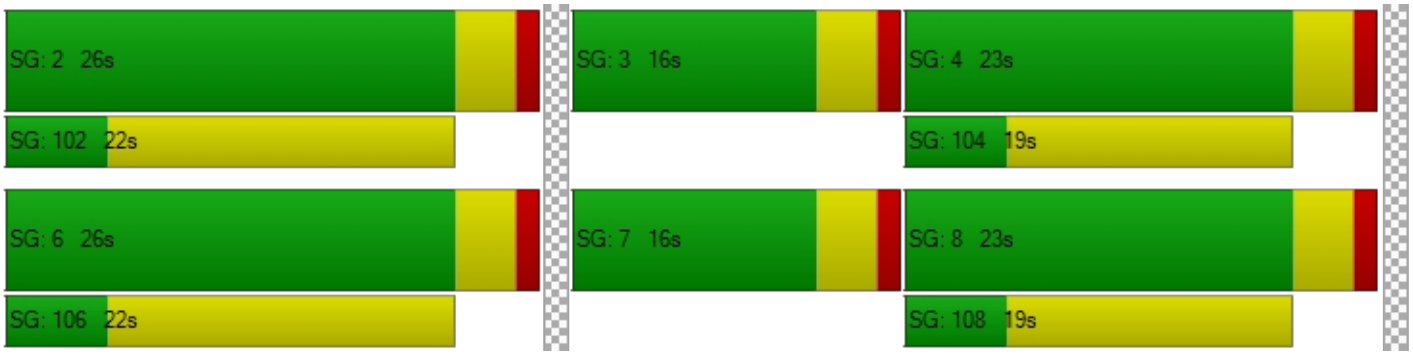
d_M, Delay for Movement [s/veh]	27.00	12.43	12.00	16.82	13.09	12.88	37.39	26.72	27.17	33.20	22.22	22.28
Movement LOS	C	B	B	B	B	B	D	C	C	C	C	C
d_A, Approach Delay [s/veh]	18.78			13.65			28.09			24.37		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	22.49											
Intersection LOS	C											
Intersection V/C	0.564											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	1383.63	3477.09	5844.47	1905.65
d_p, Pedestrian Delay [s]	24.12	24.12	24.12	24.12
l_p,int, Pedestrian LOS Score for Intersection	2.427	2.387	3.082	2.801
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	677	677	585	585
d_b, Bicycle Delay [s]	14.30	14.29	16.38	16.36
l_b,int, Bicycle LOS Score for Intersection	2.498	2.456	2.239	2.465
Bicycle LOS	B	B	B	B

Sequence

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



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Report File: C:\...\Opening AM.pdf

Scenario 3 Opening AM
7/13/2022

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	Towne Ave/Base Line Rd	205	22	322	8	4	3	9	265	130	432	351	6	1757

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Mountain Ave/Base Line Rd	66	29	161	38	76	49	34	461	120	195	635	30	1894

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Indian Hill Blvd/Base Line Rd	139	43	246	51	103	55	36	427	195	362	679	41	2377

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
4	Forbes Ave/Miramar Ave	1	19	2	4	5	2	33

ID	Intersection Name	Northbound		Southbound		Eastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
5	Forbes Ave/Proj Dwy	0	19	5	0	0	0	24

ID	Intersection Name	Southbound		Eastbound		Westbound		Total Volume
		Left	Right	Left	Thru	Thru	Right	
6	Forbes/Base Line Rd	17	44	26	694	1038	13	1832

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7	Bonnie Brae Ave/Miramar Ave	2	20	4	19	33	0	2	14	3	3	3	7	110

ID	Intersection Name	Southbound		Eastbound		Westbound		Total Volume
		Left	Right	Left	Thru	Thru	Right	
8	Bonnie Brae Ave/Base Line Rd	42	36	15	763	933	21	1810

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
9	Mills Ave/Miramar Ave	11	148	31	1	210	2	1	10	39	20	3	4	480

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
10	Mills Ave/Base Line Rd	131	101	86	57	159	157	85	521	114	187	733	51	2382

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Report File: C:\...\Opening PM.pdf

Scenario 4 Opening PM
7/13/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Towne Ave/Base Line Rd	Signalized	HCM 6th Edition	EB Thru	0.467	43.6	D
2	Mountain Ave/Base Line Rd	Signalized	HCM 6th Edition	WB Left	0.403	20.3	C
3	Indian Hill Blvd/Base Line Rd	Signalized	HCM 6th Edition	WB Left	0.597	30.2	C
4	Forbes Ave/Miramar Ave	Two-way stop	HCM 6th Edition	EB Thru	0.003	9.6	A
5	Forbes Ave/Proj Dwy	Two-way stop	HCM 6th Edition	NB Thru	0.000	0.0	A
6	Forbes/Base Line Rd	Two-way stop	HCM 6th Edition	SB Left	0.094	18.8	C
7	Bonnie Brae Ave/Miramar Ave	All-way stop	HCM 6th Edition	SB Thru	0.057	7.2	A
8	Bonnie Brae Ave/Base Line Rd	Two-way stop	HCM 6th Edition	SB Left	0.100	18.1	C
9	Mills Ave/Miramar Ave	Two-way stop	HCM 6th Edition	WB Left	0.052	12.4	B
10	Mills Ave/Base Line Rd	Signalized	HCM 6th Edition	WB Left	0.437	20.7	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: Towne Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	43.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.467

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	85.00	100.0	85.00	165.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	500.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	95	7	301	7	8	2	2	628	131	315	282	3
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	0	1	0	0	0	0	63	3	1	58	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	76	0	0	1	0	0	34	0	0	1
Total Hourly Volume [veh/h]	103	7	229	7	8	1	2	696	101	319	342	2
Peak Hour Factor	0.907	0.907	0.907	0.850	0.850	0.850	0.941	0.941	0.941	0.877	0.877	0.877
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]	28	2	63	2	2	0	1	185	27	91	97	1
Total Analysis Volume [veh/h]	113	8	252	8	9	1	2	739	107	364	390	2
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			1		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			1			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	4			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			4		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	8			22			6			5		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Isolated
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	Split	Split	Split	Split	Split	Split	Permi	Permi	Permi	ProtP	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	35	0	0	37	0	10	48	0	10	58	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	21	0	0	21	0	0	7	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No			No		No	No	
Maximum Recall		No			No			No		No	No	
Pedestrian Recall		No			No			No		No	No	
Detector Location [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
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	C	R	C	L	C	R	L	C	C
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	31	31	31	29	29	29	55	55	55
g / C, Green / Cycle	0.24	0.24	0.24	0.22	0.22	0.22	0.43	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.07	0.09	0.01	0.00	0.21	0.07	0.32	0.10	0.10
s, saturation flow rate [veh/h]	1787	2700	1812	992	3560	1561	1150	1870	1866
c, Capacity [veh/h]	430	650	436	195	793	348	441	797	796
d1, Uniform Delay [s]	40.21	41.17	37.86	48.13	49.55	42.10	32.62	23.90	23.90
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.11	0.29	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.63	1.74	0.18	0.02	5.64	0.50	10.04	0.16	0.16
d3, Initial Queue Delay [s]	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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.28	0.39	0.04	0.01	0.93	0.31	0.83	0.25	0.25
d, Delay for Lane Group [s/veh]	41.84	42.91	38.04	48.15	55.19	42.60	42.66	24.06	24.06
Lane Group LOS	D	D	D	D	E	D	D	C	C
Critical Lane Group	No	Yes	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.38	3.55	0.47	0.06	12.36	2.94	9.38	3.94	3.93
50th-Percentile Queue Length [ft/ln]	84.51	88.85	11.69	1.44	309.1	73.43	234.6	98.54	98.37
95th-Percentile Queue Length [veh/ln]	6.08	6.40	0.84	0.10	18.13	5.29	14.41	7.09	7.08
95th-Percentile Queue Length [ft/ln]	152.11	159.93	21.05	2.59	453.2	132.1	360.2	177.3	177.0

Movement, Approach, & Intersection Results

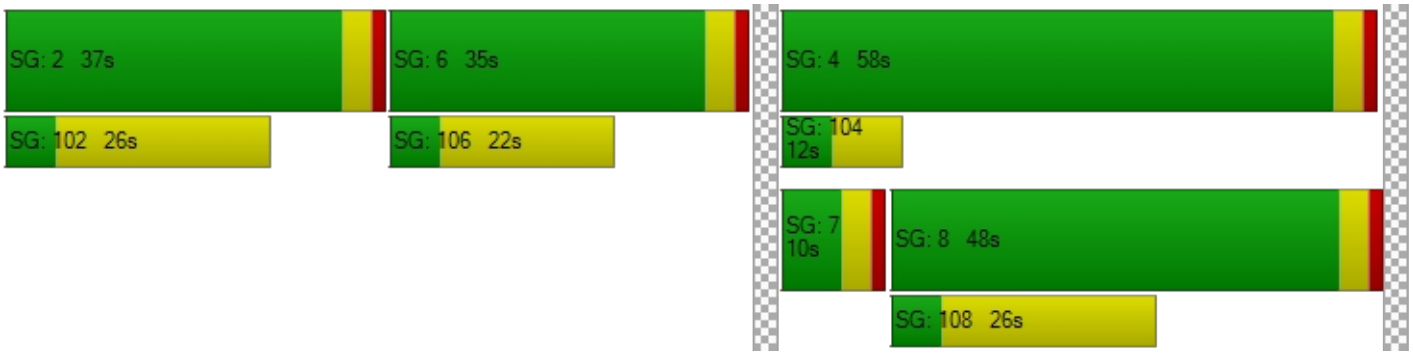
d_M, Delay for Movement [s/veh]	41.84	41.84	42.91	38.04	38.04	38.04	48.15	55.19	42.60	42.66	24.06	24.06
Movement LOS	D	D	D	D	D	D	D	E	D	D	C	C
d_A, Approach Delay [s/veh]	42.56			38.04			53.59			33.02		
Approach LOS	D			D			D			C		
d_I, Intersection Delay [s/veh]	43.59											
Intersection LOS	D											
Intersection V/C	0.467											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	10191.17	0.00	1531.00
d_p, Pedestrian Delay [s]	56.32	56.32	56.32	56.32
l_p,int, Pedestrian LOS Score for Intersection	2.860	1.754	2.746	2.677
Crosswalk LOS	C	A	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]	477	508	677	831
d_b, Bicycle Delay [s]	37.85	36.60	28.54	22.28
l_b,int, Bicycle LOS Score for Intersection	2.300	1.591	2.287	2.184
Bicycle LOS	B	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 2: Mountain Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	20.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.403

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	105.0	100.0	100.0	200.0	100.0	100.0	120.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	61	37	148	28	28	39	26	815	69	70	498	46
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008
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	0	0	62	1	0	58	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	37	0	0	10	0	0	18	0	0	12
Total Hourly Volume [veh/h]	63	37	112	28	28	29	26	884	53	71	560	34
Peak Hour Factor	0.878	0.878	0.878	0.791	0.791	0.791	0.924	0.924	0.924	0.887	0.887	0.887
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]	18	11	32	9	9	9	7	239	14	20	158	10
Total Analysis Volume [veh/h]	72	42	127	35	35	37	28	956	57	80	631	38
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			2			1		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	2			1			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			1			4		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	4			1			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	8			20			5			8		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	9	19	0	15	25	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	10	0	0	10	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	C	R	L	C	L	C	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	25	25	25	25	2	19	19	4	21	21
g / C, Green / Cycle	0.42	0.42	0.42	0.42	0.03	0.31	0.31	0.06	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.08	0.08	0.03	0.04	0.02	0.27	0.27	0.04	0.18	0.18
s, saturation flow rate [veh/h]	1366	1559	1214	1692	1781	1870	1826	1781	1870	1825
c, Capacity [veh/h]	675	659	487	715	57	587	573	113	646	631
d1, Uniform Delay [s]	11.45	10.87	15.03	10.44	28.57	19.43	19.46	27.56	15.69	15.70
k, delay calibration	0.50	0.50	0.50	0.50	0.11	0.12	0.12	0.11	0.11	0.11
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]	0.54	0.65	0.29	0.28	6.47	4.54	4.83	7.96	0.66	0.68
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	0.17	0.19	0.07	0.10	0.49	0.87	0.87	0.71	0.52	0.53
d, Delay for Lane Group [s/veh]	11.99	11.52	15.32	10.72	35.04	23.97	24.29	35.52	16.34	16.39
Lane Group LOS	B	B	B	B	D	C	C	D	B	B
Critical Lane Group	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.00	1.05	0.35	0.56	0.48	6.75	6.67	1.32	3.42	3.37
50th-Percentile Queue Length [ft/ln]	25.09	26.23	8.84	14.07	11.98	168.6	166.7	32.92	85.56	84.13
95th-Percentile Queue Length [veh/ln]	1.81	1.89	0.64	1.01	0.86	11.01	10.90	2.37	6.16	6.06
95th-Percentile Queue Length [ft/ln]	45.16	47.21	15.92	25.32	21.57	275.1	272.5	59.25	154.0	151.4

Movement, Approach, & Intersection Results

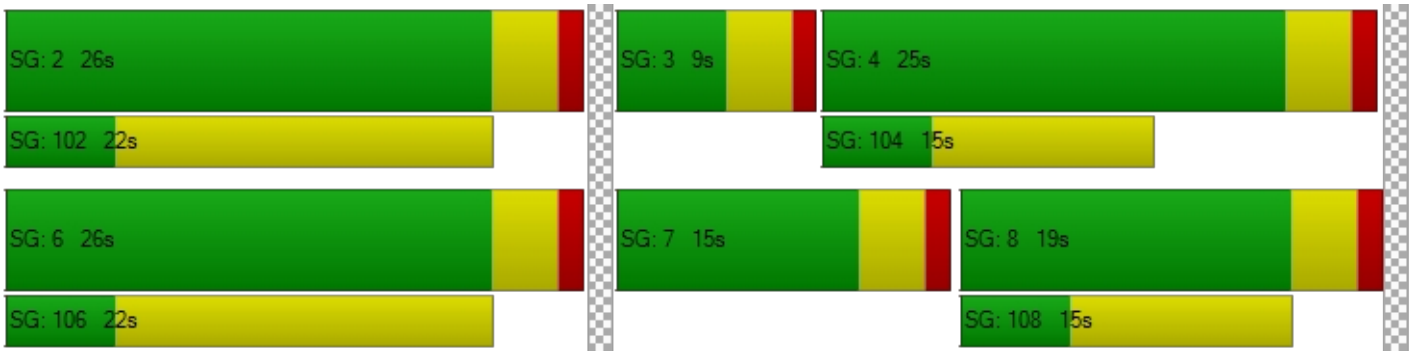
d_M, Delay for Movement [s/veh]	11.99	11.99	11.52	15.32	10.72	10.72	35.04	24.12	24.29	35.52	16.36	16.39
Movement LOS	B	B	B	B	B	B	D	C	C	D	B	B
d_A, Approach Delay [s/veh]	11.74			12.23			24.42			18.41		
Approach LOS	B			B			C			B		
d_I, Intersection Delay [s/veh]	20.27											
Intersection LOS	C											
Intersection V/C	0.403											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	8707.86	16311.48	17531.13	4192.27
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.126	2.012	2.761	2.721
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]	733	733	500	700
d_b, Bicycle Delay [s]	12.08	12.15	16.92	12.73
l_b,int, Bicycle LOS Score for Intersection	2.018	1.753	2.433	2.187
Bicycle LOS	B	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 3: Indian Hill Blvd/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	30.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.597

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	165.0	100.0	100.0	135.0	100.0	100.0	174.0	100.0	100.0	175.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
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	100.0
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	163	65	202	34	43	29	60	828	105	169	425	52
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	46	0	44	0	0	0	0	8	54	55	12	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	62	0	0	7	0	0	40	0	0	13
Total Hourly Volume [veh/h]	210	66	186	34	43	22	61	843	120	225	441	39
Peak Hour Factor	0.903	0.903	0.903	0.828	0.828	0.828	0.951	0.951	0.951	0.907	0.907	0.907
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]	58	18	51	10	13	7	16	222	32	62	122	11
Total Analysis Volume [veh/h]	232	73	206	41	52	27	64	886	126	248	486	43
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			47			11		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	47			11			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	10			3			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			3			10		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	2			2			5			3		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	30	0	0	30	0	13	27	0	13	27	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	17	0	0	17	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	C	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	27	27	27	27	27	27	4	22	22	9	27	27
g / C, Green / Cycle	0.39	0.39	0.39	0.39	0.39	0.39	0.05	0.31	0.31	0.13	0.39	0.39
(v / s)_i Volume / Saturation Flow Rate	0.18	0.04	0.13	0.04	0.02	0.02	0.04	0.28	0.28	0.14	0.14	0.14
s, saturation flow rate [veh/h]	1317	1870	1557	1095	1870	1647	1781	1870	1758	1781	1870	1809
c, Capacity [veh/h]	556	727	605	394	727	640	95	582	547	229	723	700
d1, Uniform Delay [s]	18.27	13.62	15.08	19.60	13.37	13.40	32.54	22.94	23.10	30.50	15.37	15.38
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.19	0.20	0.11	0.11	0.11
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
d2, Incremental Delay [s]	2.30	0.28	1.53	0.53	0.14	0.18	8.05	8.02	10.03	53.00	0.32	0.33
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	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	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	1.00	1.00

Lane Group Results

X, volume / capacity	0.42	0.10	0.34	0.10	0.06	0.06	0.67	0.89	0.90	1.08	0.37	0.37
d, Delay for Lane Group [s/veh]	20.57	13.89	16.61	20.13	13.52	13.58	40.59	30.96	33.13	83.50	15.68	15.71
Lane Group LOS	C	B	B	C	B	B	D	C	C	F	B	B
Critical Lane Group	Yes	No	No	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.13	0.74	2.39	0.54	0.40	0.39	1.24	8.81	8.77	7.07	2.89	2.81
50th-Percentile Queue Length [ft/ln]	78.32	18.49	59.86	13.58	9.94	9.79	31.11	220.1	219.1	176.6	72.17	70.33
95th-Percentile Queue Length [veh/ln]	5.64	1.33	4.31	0.98	0.72	0.70	2.24	13.67	13.62	11.80	5.20	5.06
95th-Percentile Queue Length [ft/ln]	140.9	33.29	107.7	24.45	17.89	17.62	56.00	341.7	340.5	294.9	129.9	126.5

Movement, Approach, & Intersection Results

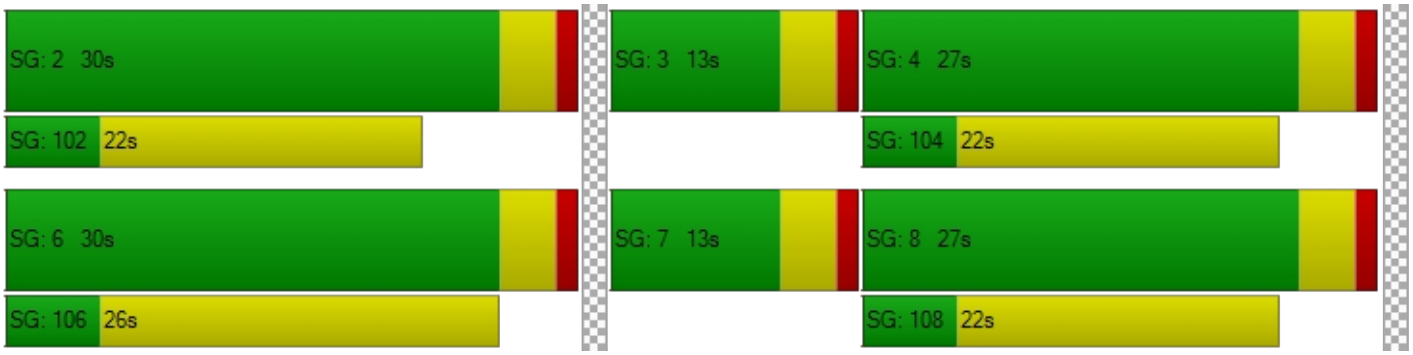
d_M, Delay for Movement [s/veh]	20.57	13.89	16.61	20.13	13.53	13.58	40.59	31.86	33.13	83.50	15.70	15.71
Movement LOS	C	B	B	C	B	B	D	C	C	F	B	B
d_A, Approach Delay [s/veh]	18.02			15.80			32.53			37.34		
Approach LOS	B			B			C			D		
d_I, Intersection Delay [s/veh]	30.24											
Intersection LOS	C											
Intersection V/C	0.597											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	271.41	1262.80	3649.55	1089.42
d_p, Pedestrian Delay [s]	26.58	26.58	26.58	26.58
l_p,int, Pedestrian LOS Score for Intersection	2.579	2.361	3.040	2.841
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	743	743	657	657
d_b, Bicycle Delay [s]	13.84	13.84	15.82	15.80
l_b,int, Bicycle LOS Score for Intersection	2.032	1.664	2.480	2.211
Bicycle LOS	B	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 4: Forbes Ave/Miramar Ave

Control Type:	Two-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

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

Volumes

Name						
Base Volume Input [veh/h]	1	11	2	1	8	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0086	1.0086	1.0086	1.0086	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	11	2	1	8	3
Peak Hour Factor	1.0000	0.9500	0.9500	0.9500	0.9500	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	3	1	0	2	1
Total Analysis Volume [veh/h]	1	12	2	1	8	3
Pedestrian Volume [ped/h]	10		26		16	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.34	0.00	9.56	8.65	0.00	7.33
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.05	0.05	0.27	0.27	0.00	0.00
d_A, Approach Delay [s/veh]	0.56		9.26		2.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.11					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Forbes Ave/Proj Dwy

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

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

Volumes

Name						
Base Volume Input [veh/h]	0	11	8	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0086	1.0086	1.0086	1.0086	1.0086	1.0086
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	11	8	0	0	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	3	2	0	0	0
Total Analysis Volume [veh/h]	0	12	8	0	0	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.23	0.00	0.00	0.00	8.61	8.35
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		8.48	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 6: Forbes/Base Line Rd

Control Type:	Two-way stop	Delay (sec / veh):	18.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.094

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	135.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	20	28	50	1011	617	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0086	1.0086	1.0086	1.0086	1.0086	1.0086
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	52	67	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	28	50	1072	689	21
Peak Hour Factor	0.7059	0.7059	0.9406	0.9406	0.8716	0.8716
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	10	13	285	198	6
Total Analysis Volume [veh/h]	28	40	53	1140	791	24
Pedestrian Volume [ped/h]	3		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.07	0.07	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	18.76	12.77	9.80	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.57	0.57	0.21	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	14.33	14.33	5.28	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	15.24		0.44		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.75					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 7: Bonnie Brae Ave/Miramar Ave

Control Type:	All-way stop	Delay (sec / veh):	7.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.057

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	2	23	10	12	28	2	2	9	0	6	4	20
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008
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]	2	23	10	12	28	2	2	9	0	6	4	20
Peak Hour Factor	0.666	0.666	0.666	0.886	0.886	0.886	0.450	0.450	0.450	0.750	0.750	0.750
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	9	4	3	8	1	1	5	0	2	1	7
Total Analysis Volume [veh/h]	3	34	15	14	32	2	4	20	0	8	5	27
Pedestrian Volume [ped/h]	1			0			1			2		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	910	867	854	946
Degree of Utilization, x	0.06	0.06	0.03	0.04

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.18	0.18	0.09	0.13
95th-Percentile Queue Length [ft]	4.53	4.39	2.17	3.31
Approach Delay [s/veh]	7.19	7.39	7.34	6.97
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.22			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 8: Bonnie Brae Ave/Base Line Rd

Control Type:	Two-way stop	Delay (sec / veh):	18.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.100

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	135.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	24	39	46	862	604	43
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0086	1.0086	1.0086	1.0086	1.0086	1.0086
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	52	67	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	39	46	921	676	43
Peak Hour Factor	0.7500	0.7500	0.9520	0.9520	0.8821	0.8821
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	13	12	242	192	12
Total Analysis Volume [veh/h]	32	52	48	967	766	49
Pedestrian Volume [ped/h]	1		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.09	0.06	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	18.09	12.94	9.75	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.68	0.68	0.19	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	17.09	17.09	4.74	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	14.90		0.46		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.90					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 9: Mills Ave/Miramar Ave

Control Type:	Two-way stop	Delay (sec / veh):	12.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.052

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	30.00	100.0	100.0	30.00	100.0	100.0	100.0	100.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	16	151	8	3	137	3	6	6	24	12	6	0
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008
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]	16	152	8	3	138	3	6	6	24	12	6	0
Peak Hour Factor	0.892	0.892	0.892	0.794	0.794	0.794	0.900	0.900	0.900	0.450	0.450	0.450
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]	4	43	2	1	43	1	2	2	7	7	3	0
Total Analysis Volume [veh/h]	18	170	9	4	174	4	7	7	27	27	13	0
Pedestrian Volume [ped/h]	0			4			5			1		

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	0.00	0.00	0.00	0.01	0.01	0.03	0.05	0.02	0.00
d_M, Delay for Movement [s/veh]	7.63	0.00	0.00	7.59	0.00	0.00	12.08	12.17	9.50	12.44	12.38	9.73
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.04	0.00	0.00	0.01	0.00	0.00	0.18	0.18	0.18	0.25	0.25	0.25
95th-Percentile Queue Length [ft/ln]	0.99	0.00	0.00	0.22	0.00	0.00	4.60	4.60	4.60	6.16	6.16	6.16
d_A, Approach Delay [s/veh]	0.70			0.17			10.40			12.42		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	2.37											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 10: Mills Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	20.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.437

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	105.0	100.0	100.0	145.0	100.0	145.0	175.0	100.0	100.0	165.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	123	105	97	47	71	73	82	822	82	77	440	62
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	0	0	0	0	0	0	49	3	0	62	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	25	0	0	19	0	0	22	0	0	16
Total Hourly Volume [veh/h]	129	106	73	47	72	55	83	878	64	78	506	47
Peak Hour Factor	0.912	0.912	0.912	0.868	0.868	0.868	0.948	0.948	0.948	0.836	0.836	0.836
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]	35	29	20	14	21	16	22	232	17	23	151	14
Total Analysis Volume [veh/h]	141	116	80	54	83	63	88	926	68	93	605	56
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			5			3		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	5			3			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	2			1			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			1			2		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	16			17			16			46		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	11	23	0	11	23	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	14	0	0	14	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	25	25	25	25	25	25	4	19	19	4	19	19
g / C, Green / Cycle	0.42	0.42	0.42	0.42	0.42	0.42	0.07	0.31	0.31	0.07	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.11	0.06	0.05	0.05	0.04	0.04	0.05	0.27	0.27	0.05	0.18	0.18
s, saturation flow rate [veh/h]	1241	1870	1555	1185	1870	1555	1781	1870	1811	1781	1870	1785
c, Capacity [veh/h]	558	785	653	525	785	653	120	581	562	124	585	558
d1, Uniform Delay [s]	14.15	10.77	10.63	13.62	10.57	10.52	27.45	19.51	19.57	27.39	17.26	17.33
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
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
d2, Incremental Delay [s]	1.09	0.40	0.38	0.39	0.27	0.29	8.33	4.18	4.67	8.68	0.89	0.97
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	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	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	1.00	1.00

Lane Group Results

X, volume / capacity	0.25	0.15	0.12	0.10	0.11	0.10	0.73	0.87	0.87	0.75	0.57	0.58
d, Delay for Lane Group [s/veh]	15.24	11.16	11.02	14.02	10.84	10.81	35.78	23.69	24.24	36.07	18.15	18.30
Lane Group LOS	B	B	B	B	B	B	D	C	C	D	B	B
Critical Lane Group	Yes	No	No	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.42	0.92	0.64	0.51	0.65	0.50	1.45	6.59	6.52	1.54	3.64	3.56
50th-Percentile Queue Length [ft/ln]	35.56	23.11	16.01	12.86	16.19	12.44	36.30	164.7	163.0	38.50	90.93	88.98
95th-Percentile Queue Length [veh/ln]	2.56	1.66	1.15	0.93	1.17	0.90	2.61	10.80	10.71	2.77	6.55	6.41
95th-Percentile Queue Length [ft/ln]	64.00	41.60	28.82	23.14	29.14	22.40	65.34	269.9	267.7	69.29	163.6	160.1

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	15.24	11.16	11.02	14.02	10.84	10.81	35.78	23.94	24.24	36.07	18.22	18.30
Movement LOS	B	B	B	B	B	B	D	C	C	D	B	B
d_A, Approach Delay [s/veh]	12.84			11.69			24.92			20.42		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	20.66											
Intersection LOS	C											
Intersection V/C	0.437											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	3739.24	6219.28	16810.55	8982.40
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.300	2.259	2.889	2.742
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]	733	733	633	633
d_b, Bicycle Delay [s]	12.13	12.14	14.12	14.34
l_b,int, Bicycle LOS Score for Intersection	2.157	1.921	2.470	2.195
Bicycle LOS	B	A	B	B

Sequence

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

Vistro File: C:\...\Vistro.vistro
Report File: C:\...\Opening PM.pdf

Scenario 4 Opening PM
7/13/2022

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	Towne Ave/Base Line Rd	103	7	305	7	8	2	2	696	135	319	342	3	1929

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Mountain Ave/Base Line Rd	63	37	149	28	28	39	26	884	71	71	560	46	2002

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Indian Hill Blvd/Base Line Rd	210	66	248	34	43	29	61	843	160	225	441	52	2412

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
4	Forbes Ave/Miramar Ave	1	11	2	1	8	3	26

ID	Intersection Name	Northbound		Southbound		Eastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
5	Forbes Ave/Proj Dwy	0	11	8	0	0	0	19

ID	Intersection Name	Southbound		Eastbound		Westbound		Total Volume
		Left	Right	Left	Thru	Thru	Right	
6	Forbes/Base Line Rd	20	28	50	1072	689	21	1880

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7	Bonnie Brae Ave/Miramar Ave	2	23	10	12	28	2	2	9	0	6	4	20	118

ID	Intersection Name	Southbound		Eastbound		Westbound		Total Volume
		Left	Right	Left	Thru	Thru	Right	
8	Bonnie Brae Ave/Base Line Rd	24	39	46	921	676	43	1749

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
9	Mills Ave/Miramar Ave	16	152	8	3	138	3	6	6	24	12	6	0	374

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
10	Mills Ave/Base Line Rd	129	106	98	47	72	74	83	878	86	78	506	63	2220

Vistro File: C:\...\Vistro.vistro
Report File: C:\...\Horizon AM.pdf

Scenario 7 Horizon Year AM
7/13/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Towne Ave/Base Line Rd	Signalized	HCM 6th Edition	EB Right	0.477	38.7	D
2	Mountain Ave/Base Line Rd	Signalized	HCM 6th Edition	EB Left	0.508	21.8	C
3	Indian Hill Blvd/Base Line Rd	Signalized	HCM 6th Edition	NB Left	0.783	35.6	D
4	Forbes Ave/Miramar Ave	Two-way stop	HCM 6th Edition	EB Thru	0.003	9.7	A
5	Forbes Ave/Proj Dwy	Two-way stop	HCM 6th Edition	NB Thru	0.000	0.0	A
6	Forbes/Base Line Rd	Two-way stop	HCM 6th Edition	SB Left	0.068	20.3	C
7	Bonnie Brae Ave/Miramar Ave	All-way stop	HCM 6th Edition	SB Thru	0.067	7.2	A
8	Bonnie Brae Ave/Base Line Rd	Two-way stop	HCM 6th Edition	SB Left	0.148	19.8	C
9	Mills Ave/Miramar Ave	Two-way stop	HCM 6th Edition	WB Left	0.049	13.1	B
10	Mills Ave/Base Line Rd	Signalized	HCM 6th Edition	WB Left	0.627	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: Towne Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	38.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.477

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	85.00	100.0	85.00	165.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	500.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	319	15	129	4	4	6	19	300	303	249	397	4
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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	32	0	0	2	0	0	76	0	0	1
Total Hourly Volume [veh/h]	319	15	97	4	4	4	19	300	227	249	397	3
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
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]	84	4	26	1	1	1	5	79	60	66	104	1
Total Analysis Volume [veh/h]	336	16	102	4	4	4	20	316	239	262	418	3
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			1			9		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	1			9			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	3			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			3		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	14			12			12			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Isolated
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	Split	Split	Split	Split	Split	Split	Permi	Permi	Permi	ProtP	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	30	0	9	54	0	0	45	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	21	0	0	21	0	0	7	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No			No		No	No	
Maximum Recall		No			No			No		No	No	
Pedestrian Recall		No			No			No		No	No	
Detector Location [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
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	C	R	C	L	C	R	L	C	C
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	30	30	30	19	19	19	38	34	34
g / C, Green / Cycle	0.27	0.27	0.27	0.18	0.18	0.18	0.35	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.20	0.04	0.01	0.02	0.09	0.15	0.21	0.11	0.11
s, saturation flow rate [veh/h]	1785	2688	1739	966	3560	1544	1262	1870	1865
c, Capacity [veh/h]	484	729	472	135	629	273	471	582	580
d1, Uniform Delay [s]	36.42	30.34	29.44	48.44	40.95	43.92	27.87	29.44	29.44
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.13	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.22	0.40	0.10	0.50	0.62	10.49	1.03	0.38	0.38
d3, Initial Queue Delay [s]	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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.73	0.14	0.03	0.15	0.50	0.88	0.56	0.36	0.36
d, Delay for Lane Group [s/veh]	45.64	30.74	29.54	48.94	41.57	54.40	28.90	29.82	29.82
Lane Group LOS	D	C	C	D	D	D	C	C	C
Critical Lane Group	Yes	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	9.74	1.07	0.25	0.54	3.92	7.07	5.37	4.38	4.37
50th-Percentile Queue Length [ft/ln]	243.54	26.67	6.18	13.49	97.99	176.6	134.2	109.4	109.1
95th-Percentile Queue Length [veh/ln]	14.86	1.92	0.45	0.97	7.06	11.42	9.17	7.81	7.79
95th-Percentile Queue Length [ft/ln]	371.51	48.00	11.13	24.29	176.3	285.6	229.2	195.1	194.8

Movement, Approach, & Intersection Results

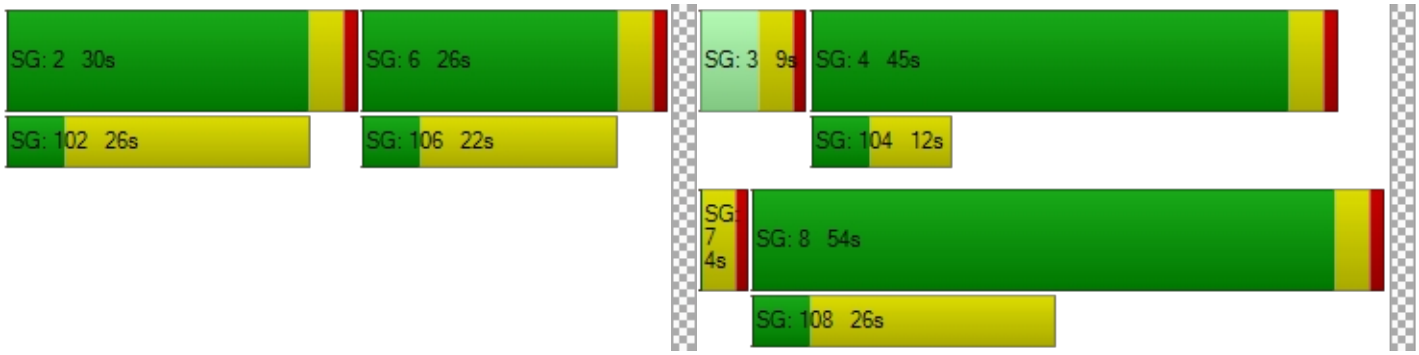
d_M, Delay for Movement [s/veh]	45.64	45.64	30.74	29.54	29.54	29.54	48.94	41.57	54.40	28.90	29.82	29.82
Movement LOS	D	D	C	C	C	C	D	D	D	C	C	C
d_A, Approach Delay [s/veh]	42.29			29.54			47.16			29.47		
Approach LOS	D			C			D			C		
d_I, Intersection Delay [s/veh]	38.75											
Intersection LOS	D											
Intersection V/C	0.477											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	9380.43	1279.61	0.00	3644.71
d_p, Pedestrian Delay [s]	46.39	46.39	46.39	46.39
l_p,int, Pedestrian LOS Score for Intersection	2.755	1.784	2.801	2.534
Crosswalk LOS	C	A	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]	400	473	909	745
d_b, Bicycle Delay [s]	35.47	32.29	16.48	21.66
l_b,int, Bicycle LOS Score for Intersection	2.362	1.583	2.097	2.124
Bicycle LOS	B	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 2: Mountain Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	21.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.508

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	105.0	100.0	100.0	200.0	100.0	100.0	120.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	245	5	45	8	36	144	27	494	308	43	800	2
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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	11	0	0	36	0	0	77	0	0	1
Total Hourly Volume [veh/h]	245	5	34	8	36	108	27	494	231	43	800	1
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
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]	64	1	9	2	9	28	7	130	61	11	211	0
Total Analysis Volume [veh/h]	258	5	36	8	38	114	28	520	243	45	842	1
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			6			6		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	6			6			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			4			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			4			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	13			13			4			6		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	15	19	0	15	19	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	10	0	0	10	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	C	R	L	C	L	C	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	29	29	29	29	2	16	16	3	17	17
g / C, Green / Cycle	0.49	0.49	0.49	0.49	0.03	0.27	0.27	0.05	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.26	0.02	0.01	0.09	0.02	0.22	0.22	0.03	0.23	0.23
s, saturation flow rate [veh/h]	1009	1561	1366	1625	1781	1870	1628	1781	1870	1869
c, Capacity [veh/h]	611	761	369	792	60	498	434	82	522	522
d1, Uniform Delay [s]	13.85	8.07	20.17	8.70	28.47	20.56	20.73	28.00	20.12	20.12
k, delay calibration	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
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]	2.21	0.12	0.11	0.54	5.65	3.14	4.19	5.57	3.02	3.02
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	0.43	0.05	0.02	0.19	0.47	0.81	0.83	0.55	0.81	0.81
d, Delay for Lane Group [s/veh]	16.06	8.19	20.27	9.24	34.13	23.70	24.93	33.58	23.14	23.14
Lane Group LOS	B	A	C	A	C	C	C	C	C	C
Critical Lane Group	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.77	0.23	0.10	1.07	0.47	5.22	4.83	0.73	5.40	5.40
50th-Percentile Queue Length [ft/ln]	69.16	5.82	2.43	26.64	11.76	130.4	120.8	18.22	135.0	135.0
95th-Percentile Queue Length [veh/ln]	4.98	0.42	0.18	1.92	0.85	8.96	8.44	1.31	9.21	9.21
95th-Percentile Queue Length [ft/ln]	124.48	10.48	4.38	47.96	21.17	224.1	210.9	32.80	230.3	230.2

Movement, Approach, & Intersection Results

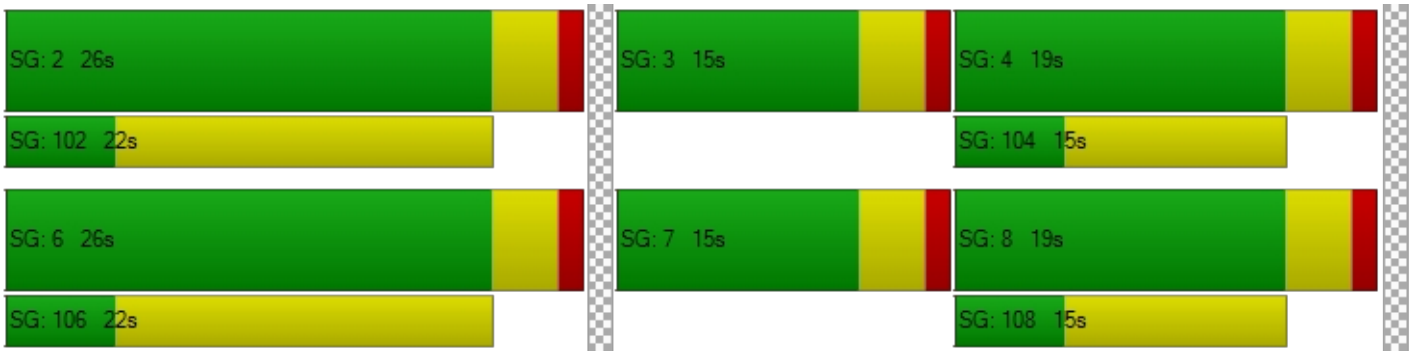
d_M, Delay for Movement [s/veh]	16.06	16.06	8.19	20.27	9.24	9.24	34.13	23.98	24.93	33.58	23.14	23.14
Movement LOS	B	B	A	C	A	A	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	15.11			9.79			24.63			23.67		
Approach LOS	B			A			C			C		
d_I, Intersection Delay [s/veh]	21.79											
Intersection LOS	C											
Intersection V/C	0.508											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	2259.12	2892.21	3319.98	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.168	2.047	3.170	2.579
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]	733	733	500	500
d_b, Bicycle Delay [s]	12.11	12.11	16.91	16.93
l_b,int, Bicycle LOS Score for Intersection	2.071	1.883	2.276	2.293
Bicycle LOS	B	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 3: Indian Hill Blvd/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	35.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.783

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	165.0	100.0	100.0	135.0	100.0	100.0	174.0	100.0	100.0	175.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
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	100.0
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	440	7	22	4	25	231	74	562	508	35	1222	2
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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	6	0	0	58	0	0	127	0	0	1
Total Hourly Volume [veh/h]	440	7	16	4	25	173	74	562	381	35	1222	1
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
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]	116	2	4	1	7	46	19	148	100	9	322	0
Total Analysis Volume [veh/h]	463	7	17	4	26	182	78	592	401	37	1286	1
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			7			10		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	7			10			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	15			6			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			6			15		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	9			12			8			4		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	80
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	30	0	0	30	0	24	26	0	24	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	17	0	0	17	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	C	L	C	C
C, Cycle Length [s]	80	80	80	80	80	80	80	80	80	80	80	80
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	33	33	33	33	33	33	5	32	32	3	31	31
g / C, Green / Cycle	0.41	0.41	0.41	0.41	0.41	0.41	0.06	0.40	0.40	0.04	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.40	0.00	0.01	0.00	0.01	0.12	0.04	0.28	0.29	0.02	0.34	0.34
s, saturation flow rate [veh/h]	1171	1870	1546	1373	1870	1553	1781	1870	1590	1781	1870	1869
c, Capacity [veh/h]	453	766	633	613	766	636	104	755	642	65	715	714
d1, Uniform Delay [s]	30.08	14.00	14.10	15.39	14.14	15.80	37.09	19.87	20.03	37.90	23.29	23.29
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.15	0.16	0.11	0.27	0.27
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
d2, Incremental Delay [s]	48.30	0.02	0.08	0.02	0.08	1.13	10.30	1.70	2.26	7.47	9.95	9.96
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	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	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	1.00	1.00

Lane Group Results

X, volume / capacity	1.02	0.01	0.03	0.01	0.03	0.29	0.75	0.70	0.72	0.57	0.90	0.90
d, Delay for Lane Group [s/veh]	78.37	14.02	14.18	15.40	14.23	16.93	47.40	21.57	22.29	45.37	33.24	33.25
Lane Group LOS	F	B	B	B	B	B	D	C	C	D	C	C
Critical Lane Group	Yes	No	No	No	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	14.82	0.08	0.19	0.05	0.29	2.31	1.77	8.04	7.13	0.84	12.61	12.61
50th-Percentile Queue Length [ft/ln]	370.5	1.91	4.74	1.17	7.19	57.75	44.26	201.0	178.2	20.91	315.1	315.1
95th-Percentile Queue Length [veh/ln]	21.47	0.14	0.34	0.08	0.52	4.16	3.19	12.69	11.51	1.51	18.43	18.43
95th-Percentile Queue Length [ft/ln]	536.8	3.44	8.54	2.11	12.94	103.9	79.66	317.2	287.7	37.63	460.7	460.7

Movement, Approach, & Intersection Results

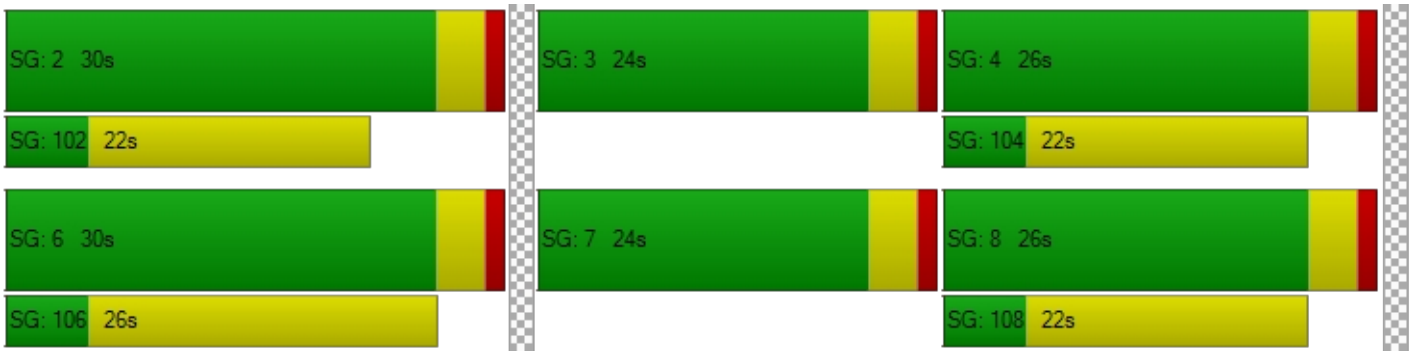
d_M, Delay for Movement [s/veh]	78.37	14.02	14.18	15.40	14.23	16.93	47.40	21.64	22.29	45.37	33.24	33.25
Movement LOS	F	B	B	B	B	B	D	C	C	D	C	C
d_A, Approach Delay [s/veh]	75.21			16.57			23.76			33.58		
Approach LOS	E			B			C			C		
d_I, Intersection Delay [s/veh]	35.57											
Intersection LOS	D											
Intersection V/C	0.783											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	1059.51	1263.75	655.33	816.89
d_p, Pedestrian Delay [s]	31.51	31.51	31.51	31.51
l_p,int, Pedestrian LOS Score for Intersection	2.515	2.448	3.756	2.772
Crosswalk LOS	B	B	D	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	650	650	550	550
d_b, Bicycle Delay [s]	18.31	18.34	21.11	21.07
l_b,int, Bicycle LOS Score for Intersection	1.966	1.782	2.548	2.653
Bicycle LOS	A	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 4: Forbes Ave/Miramar Ave

Control Type:	Two-way stop	Delay (sec / veh):	9.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

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

Volumes

Name						
Base Volume Input [veh/h]	1	20	2	4	5	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	20	2	4	5	2
Peak Hour Factor	1.0000	0.9500	0.9500	0.9500	0.9500	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	5	1	1	1	1
Total Analysis Volume [veh/h]	1	21	2	4	5	2
Pedestrian Volume [ped/h]	15		31		21	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.36	0.00	9.71	8.73	0.00	7.35
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.02	0.02	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.05	0.05	0.51	0.51	0.00	0.00
d_A, Approach Delay [s/veh]	0.33		9.06		2.10	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.18					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Forbes Ave/Proj Dwy

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

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

Volumes

Name						
Base Volume Input [veh/h]	0	20	5	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	20	5	0	0	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	5	1	0	0	0
Total Analysis Volume [veh/h]	0	21	5	0	0	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.23	0.00	0.00	0.00	8.64	8.34
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		8.49	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 6: Forbes/Base Line Rd

Control Type:	Two-way stop	Delay (sec / veh):	20.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.068

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	135.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	17	44	26	641	997	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	17	44	26	641	997	14
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	12	7	169	262	4
Total Analysis Volume [veh/h]	18	46	27	675	1049	15
Pedestrian Volume [ped/h]	2		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.09	0.04	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	20.32	14.10	10.80	0.00	0.00	0.00
Movement LOS	C	B	B	A	A	A
95th-Percentile Queue Length [veh/ln]	0.57	0.57	0.13	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	14.28	14.28	3.25	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	15.85		0.42		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.71					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 7: Bonnie Brae Ave/Miramar Ave

Control Type:	All-way stop	Delay (sec / veh):	7.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.067

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	2	22	4	20	36	0	2	15	3	3	3	8
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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]	2	22	4	20	36	0	2	15	3	3	3	8
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
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	6	1	5	9	0	1	4	1	1	1	2
Total Analysis Volume [veh/h]	2	23	4	21	38	0	2	16	3	3	3	8
Pedestrian Volume [ped/h]	7			9			6			19		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	901	877	885	936
Degree of Utilization, x	0.03	0.07	0.02	0.01

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.10	0.22	0.07	0.05
95th-Percentile Queue Length [ft]	2.49	5.40	1.82	1.14
Approach Delay [s/veh]	7.13	7.40	7.17	6.90
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.24			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 8: Bonnie Brae Ave/Base Line Rd

Control Type:	Two-way stop	Delay (sec / veh):	19.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.148

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	135.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	42	36	15	709	893	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	42	36	15	709	893	21
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	9	4	187	235	6
Total Analysis Volume [veh/h]	44	38	16	746	940	22
Pedestrian Volume [ped/h]	2		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.15	0.07	0.02	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	19.78	14.50	10.20	0.00	0.00	0.00
Movement LOS	C	B	B	A	A	A
95th-Percentile Queue Length [veh/ln]	0.83	0.83	0.07	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	20.64	20.64	1.73	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	17.33		0.21		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.88					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 9: Mills Ave/Miramar Ave

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):	0.049

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	30.00	100.0	100.0	30.00	100.0	100.0	100.0	100.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	12	158	33	1	224	2	1	11	42	22	3	4
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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]	12	158	33	1	224	2	1	11	42	22	3	4
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
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]	3	42	9	0	59	1	0	3	11	6	1	1
Total Analysis Volume [veh/h]	13	166	35	1	236	2	1	12	44	23	3	4
Pedestrian Volume [ped/h]	0			2			9			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	0.00	0.00	0.00	0.00	0.03	0.06	0.05	0.01	0.00
d_M, Delay for Movement [s/veh]	7.78	0.00	0.00	7.63	0.00	0.00	12.73	12.98	10.05	13.10	12.64	9.57
Movement LOS	A	A	A	A	A	A	B	B	B	B	B	A
95th-Percentile Queue Length [veh/ln]	0.03	0.00	0.00	0.00	0.00	0.00	0.27	0.27	0.27	0.19	0.19	0.19
95th-Percentile Queue Length [ft/ln]	0.75	0.00	0.00	0.05	0.00	0.00	6.76	6.76	6.76	4.72	4.72	4.72
d_A, Approach Delay [s/veh]	0.47			0.03			10.71			12.58		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	2.03											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 10: Mills Ave/Base Line Rd

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):	0.627

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	105.0	100.0	100.0	145.0	100.0	145.0	175.0	100.0	100.0	165.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	315	21	8	5	39	300	207	513	398	25	715	4
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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	2	0	0	75	0	0	100	0	0	1
Total Hourly Volume [veh/h]	315	21	6	5	39	225	207	513	298	25	715	3
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
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]	83	6	2	1	10	59	54	135	78	7	188	1
Total Analysis Volume [veh/h]	332	22	6	5	41	237	218	540	314	26	753	3
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			12			5		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	12			5			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	8			2			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			2			8		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	11			10			13			10		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	65
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	16	23	0	16	23	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	14	0	0	14	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	65	65	65	65	65	65	65	65	65	65	65	65
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	28	28	28	28	28	28	10	24	24	2	16	16
g / C, Green / Cycle	0.42	0.42	0.42	0.42	0.42	0.42	0.15	0.36	0.36	0.03	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.30	0.01	0.00	0.00	0.02	0.15	0.12	0.24	0.25	0.01	0.20	0.20
s, saturation flow rate [veh/h]	1100	1870	1552	1375	1870	1560	1781	1870	1576	1781	1870	1867
c, Capacity [veh/h]	525	791	657	637	791	660	265	675	569	56	456	455
d1, Uniform Delay [s]	18.11	10.95	10.86	12.44	11.06	12.72	26.84	17.52	17.77	30.95	23.30	23.30
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.12	0.11	0.11	0.11
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
d2, Incremental Delay [s]	5.71	0.07	0.03	0.02	0.12	1.52	6.36	1.18	1.76	5.98	3.95	3.97
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	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	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	1.00	1.00

Lane Group Results

X, volume / capacity	0.63	0.03	0.01	0.01	0.05	0.36	0.82	0.67	0.70	0.47	0.83	0.83
d, Delay for Lane Group [s/veh]	23.82	11.01	10.89	12.46	11.19	14.24	33.20	18.70	19.54	36.93	27.25	27.27
Lane Group LOS	C	B	B	B	B	B	C	B	B	D	C	C
Critical Lane Group	Yes	No	No	No	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.81	0.18	0.05	0.05	0.34	2.38	3.57	5.40	4.90	0.48	5.61	5.60
50th-Percentile Queue Length [ft/ln]	120.3	4.55	1.25	1.14	8.58	59.41	89.25	135.0	122.5	11.96	140.1	140.0
95th-Percentile Queue Length [veh/ln]	8.41	0.33	0.09	0.08	0.62	4.28	6.43	9.21	8.53	0.86	9.49	9.48
95th-Percentile Queue Length [ft/ln]	210.3	8.19	2.25	2.04	15.44	106.9	160.6	230.3	213.2	21.53	237.2	237.1

Movement, Approach, & Intersection Results

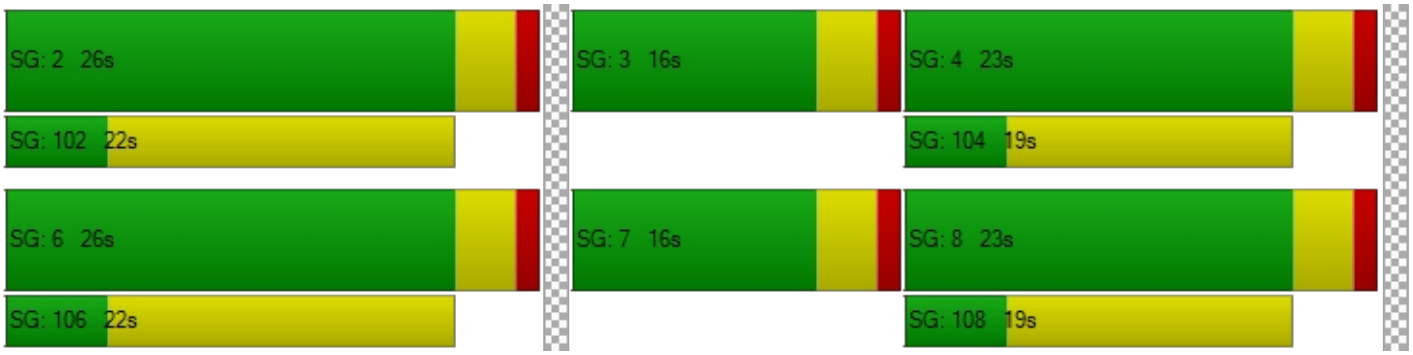
d_M, Delay for Movement [s/veh]	23.82	11.01	10.89	12.46	11.19	14.24	33.20	18.83	19.54	36.93	27.26	27.27
Movement LOS	C	B	B	B	B	B	C	B	B	D	C	C
d_A, Approach Delay [s/veh]	22.82			13.76			21.96			27.58		
Approach LOS	C			B			C			C		
d_I, Intersection Delay [s/veh]	22.92											
Intersection LOS	C											
Intersection V/C	0.627											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	1057.94	3631.99	4614.09	2303.79
d_p, Pedestrian Delay [s]	24.12	24.12	24.12	24.12
l_p,int, Pedestrian LOS Score for Intersection	2.324	2.369	3.400	2.554
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]	677	677	585	585
d_b, Bicycle Delay [s]	14.30	14.29	16.38	16.36
l_b,int, Bicycle LOS Score for Intersection	2.157	2.150	2.527	2.206
Bicycle LOS	B	B	B	B

Sequence

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



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Scenario 7 Horizon Year AM
7/13/2022

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	Towne Ave/Base Line Rd	319	15	129	4	4	6	19	300	303	249	397	4	1749

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Mountain Ave/Base Line Rd	245	5	45	8	36	144	27	494	308	43	800	2	2157

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Indian Hill Blvd/Base Line Rd	440	7	22	4	25	231	74	562	508	35	1222	2	3132

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
4	Forbes Ave/Miramar Ave	1	20	2	4	5	2	34

ID	Intersection Name	Northbound		Southbound		Eastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
5	Forbes Ave/Proj Dwy	0	20	5	0	0	0	25

ID	Intersection Name	Southbound		Eastbound		Westbound		Total Volume
		Left	Right	Left	Thru	Thru	Right	
6	Forbes/Base Line Rd	17	44	26	641	997	14	1739

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7	Bonnie Brae Ave/Miramar Ave	2	22	4	20	36	0	2	15	3	3	3	8	118

ID	Intersection Name	Southbound		Eastbound		Westbound		Total Volume
		Left	Right	Left	Thru	Thru	Right	
8	Bonnie Brae Ave/Base Line Rd	42	36	15	709	893	21	1716

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
9	Mills Ave/Miramar Ave	12	158	33	1	224	2	1	11	42	22	3	4	513

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
10	Mills Ave/Base Line Rd	315	21	8	5	39	300	207	513	398	25	715	4	2550

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Report File: C:\...\Horizon PM.pdf

Scenario 8 Horizon Year PM
7/13/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Towne Ave/Base Line Rd	Signalized	HCM 6th Edition	EB Thru	0.649	76.4	E
2	Mountain Ave/Base Line Rd	Signalized	HCM 6th Edition	EB Left	0.429	20.4	C
3	Indian Hill Blvd/Base Line Rd	Signalized	HCM 6th Edition	WB Left	0.549	25.5	C
4	Forbes Ave/Miramar Ave	Two-way stop	HCM 6th Edition	EB Thru	0.003	9.6	A
5	Forbes Ave/Proj Dwy	Two-way stop	HCM 6th Edition	NB Thru	0.000	0.0	A
6	Forbes/Base Line Rd	Two-way stop	HCM 6th Edition	SB Left	0.062	16.5	C
7	Bonnie Brae Ave/Miramar Ave	All-way stop	HCM 6th Edition	SB Thru	0.055	7.1	A
8	Bonnie Brae Ave/Base Line Rd	Two-way stop	HCM 6th Edition	SB Left	0.071	16.0	C
9	Mills Ave/Miramar Ave	Two-way stop	HCM 6th Edition	EB Thru	0.011	12.0	B
10	Mills Ave/Base Line Rd	Signalized	HCM 6th Edition	WB Left	0.436	20.3	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: Towne Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	76.4
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.649

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	85.00	100.0	85.00	165.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	500.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	12	1	597	23	1	1	1	890	15	440	316	8
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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	149	0	0	0	0	0	4	0	0	2
Total Hourly Volume [veh/h]	12	1	448	23	1	1	1	890	11	440	316	6
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
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]	3	0	118	6	0	0	0	234	3	116	83	2
Total Analysis Volume [veh/h]	13	1	472	24	1	1	1	937	12	463	333	6
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			1		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			1			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	4			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			4		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	8			22			6			5		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Isolated
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	Split	Split	Split	Split	Split	Split	Permi	Permi	Permi	ProtP	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	35	0	0	37	0	10	48	0	10	58	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	21	0	0	21	0	0	7	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No			No		No	No	
Maximum Recall		No			No			No		No	No	
Pedestrian Recall		No			No			No		No	No	
Detector Location [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
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	C	R	C	L	C	R	L	C	C
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	27	27	27	30	30	30	64	64	64
g / C, Green / Cycle	0.21	0.21	0.21	0.23	0.23	0.23	0.49	0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.01	0.18	0.01	0.00	0.26	0.01	0.39	0.09	0.09
s, saturation flow rate [veh/h]	1787	2691	1776	1041	3560	1561	1185	1870	1856
c, Capacity [veh/h]	372	560	370	226	822	360	529	919	913
d1, Uniform Delay [s]	41.09	48.99	41.38	45.46	50.01	38.76	36.41	18.48	18.49
k, delay calibration	0.50	0.50	0.50	0.11	0.14	0.11	0.43	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.19	14.35	0.37	0.01	67.72	0.04	15.87	0.10	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
Rp, platoon ratio	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

Lane Group Results

X, volume / capacity	0.04	0.84	0.07	0.00	1.14	0.03	0.88	0.18	0.19
d, Delay for Lane Group [s/veh]	41.28	63.34	41.74	45.47	117.7	38.80	52.28	18.58	18.58
Lane Group LOS	D	E	D	D	F	D	D	B	B
Critical Lane Group	No	Yes	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.38	8.41	0.72	0.03	21.02	0.30	12.01	2.92	2.90
50th-Percentile Queue Length [ft/ln]	9.56	210.25	17.91	0.70	525.5	7.62	300.1	72.91	72.48
95th-Percentile Queue Length [veh/ln]	0.69	13.17	1.29	0.05	30.68	0.55	17.69	5.25	5.22
95th-Percentile Queue Length [ft/ln]	17.21	329.15	32.24	1.25	767.1	13.71	442.2	131.2	130.4

Movement, Approach, & Intersection Results

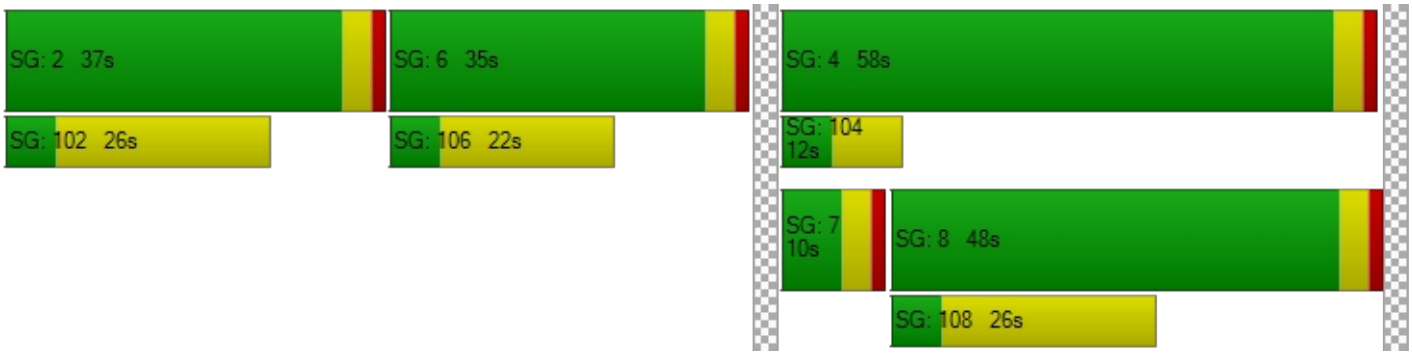
d_M, Delay for Movement [s/veh]	41.28	41.28	63.34	41.74	41.74	41.74	45.47	117.7	38.80	52.28	18.58	18.58
Movement LOS	D	D	E	D	D	D	D	F	D	D	B	B
d_A, Approach Delay [s/veh]	62.71			41.74			116.65			38.03		
Approach LOS	E			D			F			D		
d_I, Intersection Delay [s/veh]	76.36											
Intersection LOS	E											
Intersection V/C	0.649											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	10109.65	0.00	492.50
d_p, Pedestrian Delay [s]	56.31	56.31	56.31	56.31
l_p,int, Pedestrian LOS Score for Intersection	3.027	1.753	2.689	2.787
Crosswalk LOS	C	A	B	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	477	508	677	831
d_b, Bicycle Delay [s]	37.85	36.59	28.53	22.27
l_b,int, Bicycle LOS Score for Intersection	2.607	1.603	2.347	2.223
Bicycle LOS	B	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 2: Mountain Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	20.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.429

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	105.0	100.0	100.0	200.0	100.0	100.0	120.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	18	18	229	62	21	16	9	831	24	123	480	82
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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	57	0	0	4	0	0	6	0	0	21
Total Hourly Volume [veh/h]	18	18	172	62	21	12	9	831	18	123	480	61
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
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]	5	5	45	16	6	3	2	219	5	32	126	16
Total Analysis Volume [veh/h]	19	19	181	65	22	13	9	875	19	129	505	64
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			2			1		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	2			1			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			1			4		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	4			1			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	8			20			5			8		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	9	19	0	15	25	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	10	0	0	10	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	C	R	L	C	L	C	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	26	26	26	26	1	17	17	6	22	22
g / C, Green / Cycle	0.43	0.43	0.43	0.43	0.01	0.28	0.28	0.09	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.02	0.12	0.06	0.02	0.01	0.24	0.24	0.07	0.15	0.16
s, saturation flow rate [veh/h]	1552	1559	1180	1738	1781	1870	1853	1781	1870	1783
c, Capacity [veh/h]	750	664	518	740	25	522	517	170	674	643
d1, Uniform Delay [s]	10.11	11.17	13.96	10.10	29.32	20.51	20.52	26.47	14.51	14.54
k, delay calibration	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
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]	0.13	1.01	0.50	0.12	8.79	4.28	4.36	6.79	0.43	0.46
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	0.05	0.27	0.13	0.05	0.36	0.86	0.86	0.76	0.43	0.43
d, Delay for Lane Group [s/veh]	10.24	12.19	14.46	10.23	38.11	24.79	24.88	33.26	14.95	15.00
Lane Group LOS	B	B	B	B	D	C	C	C	B	B
Critical Lane Group	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.29	1.55	0.63	0.26	0.18	6.00	5.97	2.02	2.74	2.65
50th-Percentile Queue Length [ft/ln]	7.15	38.83	15.83	6.59	4.57	150.0	149.2	50.47	68.49	66.28
95th-Percentile Queue Length [veh/ln]	0.51	2.80	1.14	0.47	0.33	10.02	9.98	3.63	4.93	4.77
95th-Percentile Queue Length [ft/ln]	12.87	69.89	28.50	11.87	8.23	250.4	249.4	90.84	123.2	119.3

Movement, Approach, & Intersection Results

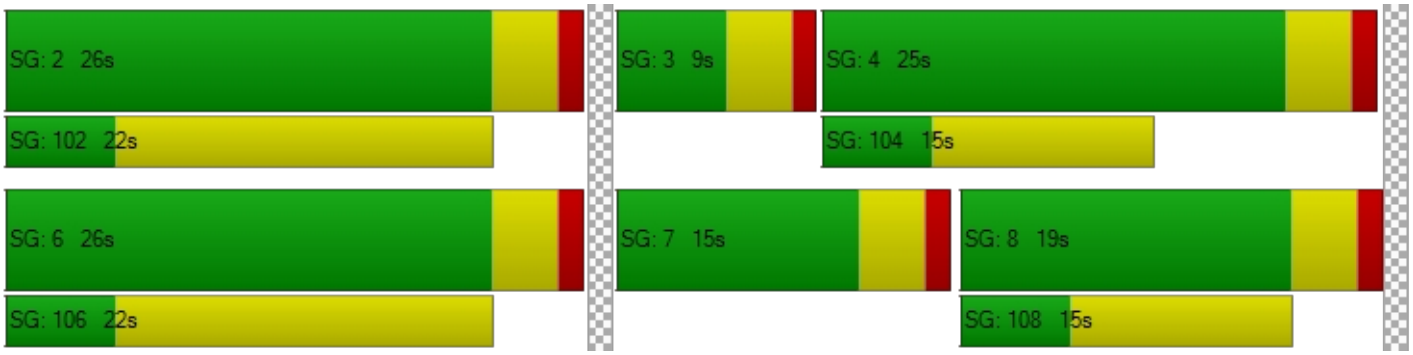
d_M, Delay for Movement [s/veh]	10.24	10.24	12.19	14.46	10.23	10.23	38.11	24.83	24.88	33.26	14.97	15.00
Movement LOS	B	B	B	B	B	B	D	C	C	C	B	B
d_A, Approach Delay [s/veh]	11.85			12.98			24.97			18.35		
Approach LOS	B			B			C			B		
d_I, Intersection Delay [s/veh]	20.44											
Intersection LOS	C											
Intersection V/C	0.429											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	9101.44	15566.79	18774.41	3859.98
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.149	1.997	2.599	2.773
Crosswalk LOS	B	A	B	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	733	733	500	700
d_b, Bicycle Delay [s]	12.08	12.15	16.92	12.73
l_b,int, Bicycle LOS Score for Intersection	2.015	1.731	2.310	2.153
Bicycle LOS	B	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 3: Indian Hill Blvd/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	25.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.549

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	165.0	100.0	100.0	135.0	100.0	100.0	174.0	100.0	100.0	175.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
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	100.0
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	69	50	347	60	22	14	27	836	32	218	448	100
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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	87	0	0	4	0	0	8	0	0	25
Total Hourly Volume [veh/h]	69	50	260	60	22	10	27	836	24	218	448	75
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
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]	18	13	68	16	6	3	7	220	6	57	118	20
Total Analysis Volume [veh/h]	73	53	274	63	23	11	28	880	25	229	472	79
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			47			11		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	47			11			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	10			3			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			3			10		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	2			2			5			3		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	30	0	0	30	0	13	27	0	13	27	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	17	0	0	17	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	C	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	29	29	29	29	29	29	2	20	20	9	27	27
g / C, Green / Cycle	0.41	0.41	0.41	0.41	0.41	0.41	0.03	0.29	0.29	0.13	0.39	0.39
(v / s)_i Volume / Saturation Flow Rate	0.05	0.03	0.18	0.06	0.01	0.01	0.02	0.24	0.24	0.13	0.15	0.15
s, saturation flow rate [veh/h]	1372	1870	1557	1049	1870	1659	1781	1870	1844	1781	1870	1765
c, Capacity [veh/h]	615	766	638	369	766	679	56	543	535	229	724	684
d1, Uniform Delay [s]	14.50	12.55	14.80	20.76	12.31	12.32	33.35	23.29	23.32	30.50	15.47	15.49
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.13	0.13	0.11	0.11	0.11
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
d2, Incremental Delay [s]	0.39	0.17	2.11	1.00	0.05	0.07	6.69	4.29	4.52	27.67	0.34	0.37
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	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	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	1.00	1.00

Lane Group Results

X, volume / capacity	0.12	0.07	0.43	0.17	0.02	0.02	0.50	0.84	0.84	1.00	0.39	0.39
d, Delay for Lane Group [s/veh]	14.90	12.73	16.91	21.77	12.37	12.39	40.04	27.58	27.84	58.17	15.81	15.86
Lane Group LOS	B	B	B	C	B	B	D	C	C	F	B	B
Critical Lane Group	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.78	0.51	3.23	0.88	0.16	0.16	0.56	7.21	7.18	5.45	3.06	2.93
50th-Percentile Queue Length [ft/ln]	19.59	12.65	80.76	22.06	4.01	3.97	13.96	180.1	179.3	136.3	76.62	73.21
95th-Percentile Queue Length [veh/ln]	1.41	0.91	5.81	1.59	0.29	0.29	1.01	11.61	11.57	9.28	5.52	5.27
95th-Percentile Queue Length [ft/ln]	35.27	22.76	145.3	39.71	7.22	7.14	25.13	290.2	289.2	232.1	137.9	131.7

Movement, Approach, & Intersection Results

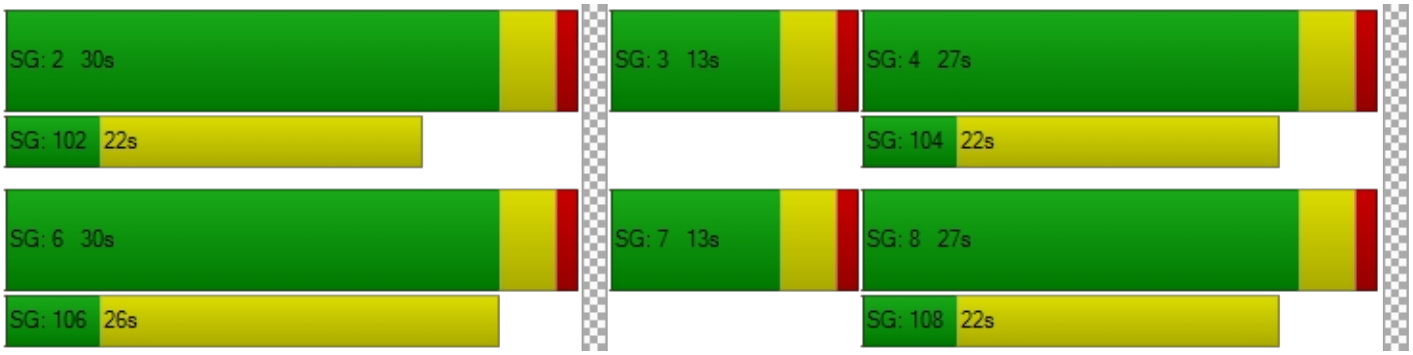
d_M, Delay for Movement [s/veh]	14.90	12.73	16.91	21.77	12.37	12.39	40.04	27.70	27.84	58.17	15.83	15.86
Movement LOS	B	B	B	C	B	B	D	C	C	F	B	B
d_A, Approach Delay [s/veh]	15.99			18.47			28.08			28.27		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	25.53											
Intersection LOS	C											
Intersection V/C	0.549											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	299.41	1219.52	4436.71	963.25
d_p, Pedestrian Delay [s]	26.58	26.58	26.58	26.58
l_p,int, Pedestrian LOS Score for Intersection	2.563	2.350	2.697	2.910
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	743	743	657	657
d_b, Bicycle Delay [s]	13.84	13.84	15.82	15.80
l_b,int, Bicycle LOS Score for Intersection	1.961	1.643	2.336	2.224
Bicycle LOS	A	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 4: Forbes Ave/Miramar Ave

Control Type:	Two-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

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

Volumes

Name						
Base Volume Input [veh/h]	1	12	2	1	9	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	12	2	1	9	3
Peak Hour Factor	1.0000	0.9500	0.9500	0.9500	0.9500	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	3	1	0	2	1
Total Analysis Volume [veh/h]	1	13	2	1	9	3
Pedestrian Volume [ped/h]	10		26		16	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.35	0.00	9.57	8.66	0.00	7.33
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.05	0.05	0.27	0.27	0.00	0.00
d_A, Approach Delay [s/veh]	0.52		9.27		1.83	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.97					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Forbes Ave/Proj Dwy

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

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

Volumes

Name						
Base Volume Input [veh/h]	0	12	9	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	12	9	0	0	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	3	2	0	0	0
Total Analysis Volume [veh/h]	0	13	9	0	0	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.23	0.00	0.00	0.00	8.62	8.36
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		8.49	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 6: Forbes/Base Line Rd

Control Type:	Two-way stop	Delay (sec / veh):	16.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.062

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	135.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	20	28	50	1014	619	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	28	50	1014	619	21
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	7	13	267	163	6
Total Analysis Volume [veh/h]	21	29	53	1067	652	22
Pedestrian Volume [ped/h]	3		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.04	0.06	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	16.52	11.41	9.21	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.35	0.35	0.19	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	8.86	8.86	4.64	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.56		0.44		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.63					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 7: Bonnie Brae Ave/Miramar Ave

Control Type:	All-way stop	Delay (sec / veh):	7.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.055

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	2	25	11	13	30	2	2	10	0	6	4	22
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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]	2	25	11	13	30	2	2	10	0	6	4	22
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
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	7	3	3	8	1	1	3	0	2	1	6
Total Analysis Volume [veh/h]	2	26	12	14	32	2	2	11	0	6	4	23
Pedestrian Volume [ped/h]	1			0			1			2		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	922	878	861	960
Degree of Utilization, x	0.04	0.05	0.02	0.03

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.14	0.17	0.05	0.11
95th-Percentile Queue Length [ft]	3.40	4.33	1.15	2.67
Approach Delay [s/veh]	7.08	7.34	7.25	6.89
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.14			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 8: Bonnie Brae Ave/Base Line Rd

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):	0.071

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	135.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	25	39	46	864	605	43
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	25	39	46	864	605	43
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	10	12	227	159	11
Total Analysis Volume [veh/h]	26	41	48	909	637	45
Pedestrian Volume [ped/h]	1		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.06	0.05	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	16.01	11.63	9.20	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.46	0.46	0.17	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	11.53	11.53	4.19	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.33		0.46		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.78					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 9: Mills Ave/Miramar Ave

Control Type:	Two-way stop	Delay (sec / veh):	12.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.011

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	30.00	100.0	100.0	30.00	100.0	100.0	100.0	100.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	17	163	9	3	148	3	6	6	26	13	6	0
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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]	17	163	9	3	148	3	6	6	26	13	6	0
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
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]	4	43	2	1	39	1	2	2	7	3	2	0
Total Analysis Volume [veh/h]	18	172	9	3	156	3	6	6	27	14	6	0
Pedestrian Volume [ped/h]	0			4			5			1		

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	0.00	0.00	0.00	0.01	0.01	0.03	0.03	0.01	0.00
d_M, Delay for Movement [s/veh]	7.59	0.00	0.00	7.59	0.00	0.00	11.74	11.97	9.36	11.91	11.90	9.43
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.04	0.00	0.00	0.01	0.00	0.00	0.17	0.17	0.17	0.11	0.11	0.11
95th-Percentile Queue Length [ft/ln]	0.97	0.00	0.00	0.16	0.00	0.00	4.16	4.16	4.16	2.87	2.87	2.87
d_A, Approach Delay [s/veh]	0.69			0.14			10.13			11.91		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	1.89											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 10: Mills Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	20.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.436

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	105.0	100.0	100.0	145.0	100.0	145.0	175.0	100.0	100.0	165.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	60	98	178	107	70	43	46	876	38	136	482	130
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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	45	0	0	11	0	0	10	0	0	33
Total Hourly Volume [veh/h]	60	98	133	107	70	32	46	876	28	136	482	97
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
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]	16	26	35	28	18	8	12	231	7	36	127	26
Total Analysis Volume [veh/h]	63	103	140	113	74	34	48	922	29	143	507	102
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			5			3		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	5			3			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	2			1			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			1			2		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	16			17			16			46		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	11	23	0	11	23	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	14	0	0	14	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	24	24	24	24	24	24	3	18	18	6	21	21
g / C, Green / Cycle	0.40	0.40	0.40	0.40	0.40	0.40	0.05	0.29	0.29	0.10	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.05	0.06	0.09	0.10	0.04	0.02	0.03	0.26	0.26	0.08	0.17	0.17
s, saturation flow rate [veh/h]	1285	1870	1554	1136	1870	1554	1781	1870	1843	1781	1870	1711
c, Capacity [veh/h]	561	755	628	498	755	628	86	550	543	181	651	596
d1, Uniform Delay [s]	13.60	11.29	11.69	14.81	11.10	10.90	27.94	20.07	20.09	26.31	15.31	15.41
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
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
d2, Incremental Delay [s]	0.41	0.38	0.82	1.06	0.26	0.16	5.63	4.35	4.52	7.39	0.55	0.64
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	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	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	1.00	1.00

Lane Group Results

X, volume / capacity	0.11	0.14	0.22	0.23	0.10	0.05	0.56	0.87	0.87	0.79	0.48	0.50
d, Delay for Lane Group [s/veh]	14.00	11.66	12.52	15.86	11.36	11.06	33.56	24.42	24.61	33.70	15.86	16.06
Lane Group LOS	B	B	B	B	B	B	C	C	C	C	B	B
Critical Lane Group	No	No	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.60	0.85	1.23	1.18	0.60	0.27	0.78	6.37	6.33	2.25	3.09	2.96
50th-Percentile Queue Length [ft/ln]	14.92	21.19	30.64	29.46	14.94	6.84	19.38	159.1	158.1	56.30	77.35	73.91
95th-Percentile Queue Length [veh/ln]	1.07	1.53	2.21	2.12	1.08	0.49	1.40	10.50	10.45	4.05	5.57	5.32
95th-Percentile Queue Length [ft/ln]	26.85	38.14	55.16	53.02	26.89	12.31	34.88	262.5	261.3	101.3	139.2	133.0

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	14.00	11.66	12.52	15.86	11.36	11.06	33.56	24.51	24.61	33.70	15.94	16.06
Movement LOS	B	B	B	B	B	B	C	C	C	C	B	B
d_A, Approach Delay [s/veh]	12.53			13.62			24.95			19.33		
Approach LOS	B			B			C			B		
d_I, Intersection Delay [s/veh]	20.33											
Intersection LOS	C											
Intersection V/C	0.436											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	3880.51	5922.28	18577.90	7999.72
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.324	2.254	2.701	2.879
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	733	733	633	633
d_b, Bicycle Delay [s]	12.13	12.14	14.12	14.34
l_b,int, Bicycle LOS Score for Intersection	2.139	1.942	2.392	2.207
Bicycle LOS	B	A	B	B

Sequence

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

Vistro File: C:\...\Vistro.vistro
Report File: C:\...\Horizon PM.pdf

Scenario 8 Horizon Year PM
7/13/2022

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	Towne Ave/Base Line Rd	12	1	597	23	1	1	1	890	15	440	316	8	2305

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Mountain Ave/Base Line Rd	18	18	229	62	21	16	9	831	24	123	480	82	1913

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Indian Hill Blvd/Base Line Rd	69	50	347	60	22	14	27	836	32	218	448	100	2223

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
4	Forbes Ave/Miramar Ave	1	12	2	1	9	3	28

ID	Intersection Name	Northbound		Southbound		Eastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
5	Forbes Ave/Proj Dwy	0	12	9	0	0	0	21

ID	Intersection Name	Southbound		Eastbound		Westbound		Total Volume
		Left	Right	Left	Thru	Thru	Right	
6	Forbes/Base Line Rd	20	28	50	1014	619	21	1752

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7	Bonnie Brae Ave/Miramar Ave	2	25	11	13	30	2	2	10	0	6	4	22	127

ID	Intersection Name	Southbound		Eastbound		Westbound		Total Volume
		Left	Right	Left	Thru	Thru	Right	
8	Bonnie Brae Ave/Base Line Rd	25	39	46	864	605	43	1622

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
9	Mills Ave/Miramar Ave	17	163	9	3	148	3	6	6	26	13	6	0	400

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
10	Mills Ave/Base Line Rd	60	98	178	107	70	43	46	876	38	136	482	130	2264

Vistro File: C:\...\Vistro.vistro
Report File: C:\...\Opening AM + Project.pdf

Scenario 5 Opening AM + Project
7/13/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Towne Ave/Base Line Rd	Signalized	HCM 6th Edition	EB Left	0.461	36.5	D
2	Mountain Ave/Base Line Rd	Signalized	HCM 6th Edition	EB Left	0.437	20.7	C
3	Indian Hill Blvd/Base Line Rd	Signalized	HCM 6th Edition	EB Left	0.611	27.1	C
4	Forbes Ave/Miramar Ave	Two-way stop	HCM 6th Edition	EB Thru	0.003	9.7	A
5	Forbes Ave/Proj Dwy	Two-way stop	HCM 6th Edition	EB Left	0.003	8.9	A
6	Forbes/Base Line Rd	Two-way stop	HCM 6th Edition	SB Left	0.176	26.8	D
7	Bonnie Brae Ave/Miramar Ave	All-way stop	HCM 6th Edition	SB Thru	0.067	7.3	A
8	Bonnie Brae Ave/Base Line Rd	Two-way stop	HCM 6th Edition	SB Left	0.214	24.2	C
9	Mills Ave/Miramar Ave	Two-way stop	HCM 6th Edition	WB Left	0.093	16.3	C
10	Mills Ave/Base Line Rd	Signalized	HCM 6th Edition	EB Left	0.573	22.5	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: Towne Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	36.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.461

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	85.00	100.0	85.00	165.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	500.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	200	22	319	8	4	3	9	219	123	427	308	6
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	0	3	0	0	0	0	45	6	8	42	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	81	0	0	1	0	0	33	0	0	2
Total Hourly Volume [veh/h]	205	22	244	8	4	2	9	266	97	439	353	4
Peak Hour Factor	0.873	0.873	0.873	0.625	0.625	0.625	0.886	0.886	0.886	0.960	0.960	0.960
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]	59	6	70	3	2	1	3	75	27	114	92	1
Total Analysis Volume [veh/h]	235	25	279	13	6	3	10	300	109	457	368	4
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			1			9		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	1			9			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	3			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			3		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	14			12			12			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Isolated
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	Split	Split	Split	Split	Split	Split	Permi	Permi	Permi	ProtP	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	30	0	9	54	0	0	45	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	21	0	0	21	0	0	7	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No			No		No	No	
Maximum Recall		No			No			No		No	No	
Pedestrian Recall		No			No			No		No	No	
Detector Location [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
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	C	R	C	L	C	R	L	C	C
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	27	27	27	14	14	14	44	40	40
g / C, Green / Cycle	0.25	0.25	0.25	0.13	0.13	0.13	0.40	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.15	0.10	0.01	0.01	0.08	0.07	0.31	0.10	0.10
s, saturation flow rate [veh/h]	1789	2682	1775	1010	3560	1533	1488	1870	1862
c, Capacity [veh/h]	443	665	440	102	448	193	607	671	668
d1, Uniform Delay [s]	36.41	34.55	31.51	51.64	45.89	45.12	27.73	25.11	25.11
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.11	0.27	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.59	1.94	0.22	0.42	1.73	2.58	4.66	0.22	0.22
d3, Initial Queue Delay [s]	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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.59	0.42	0.05	0.10	0.67	0.56	0.75	0.28	0.28
d, Delay for Lane Group [s/veh]	42.00	36.49	31.73	52.05	47.63	47.70	32.39	25.34	25.34
Lane Group LOS	D	D	C	D	D	D	C	C	C
Critical Lane Group	Yes	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	6.81	3.29	0.47	0.28	4.01	2.92	10.36	3.50	3.48
50th-Percentile Queue Length [ft/ln]	170.14	82.34	11.86	7.00	100.1	73.08	259.0	87.39	87.07
95th-Percentile Queue Length [veh/ln]	11.08	5.93	0.85	0.50	7.21	5.26	15.64	6.29	6.27
95th-Percentile Queue Length [ft/ln]	277.10	148.21	21.34	12.60	180.2	131.5	391.0	157.3	156.7

Movement, Approach, & Intersection Results

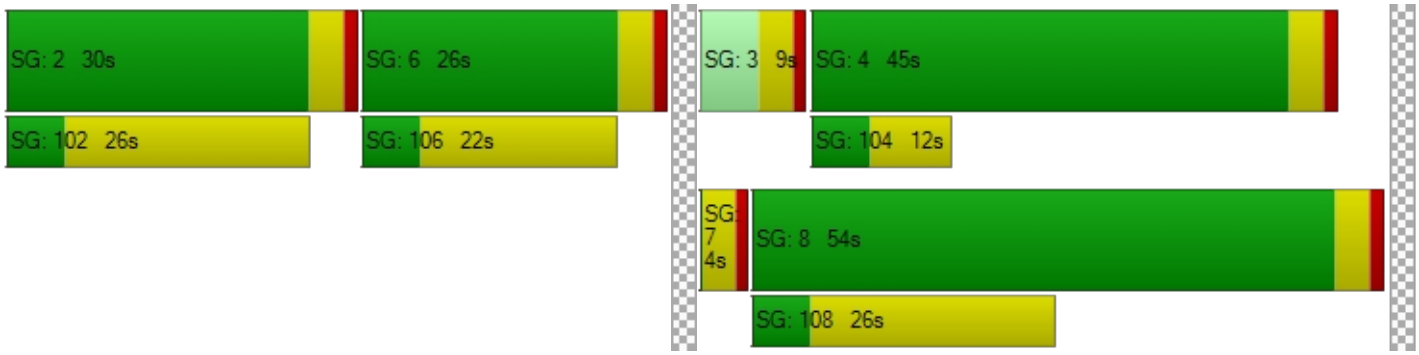
d_M, Delay for Movement [s/veh]	42.00	42.00	36.49	31.73	31.73	31.73	52.05	47.63	47.70	32.39	25.34	25.34
Movement LOS	D	D	D	C	C	C	D	D	D	C	C	C
d_A, Approach Delay [s/veh]	39.15			31.73			47.75			29.23		
Approach LOS	D			C			D			C		
d_I, Intersection Delay [s/veh]	36.50											
Intersection LOS	D											
Intersection V/C	0.461											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	10940.15	1307.47	0.00	2532.04
d_p, Pedestrian Delay [s]	46.37	46.37	46.37	46.37
l_p,int, Pedestrian LOS Score for Intersection	2.873	1.773	2.683	2.607
Crosswalk LOS	C	A	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]	400	473	909	745
d_b, Bicycle Delay [s]	35.45	32.27	16.46	21.64
l_b,int, Bicycle LOS Score for Intersection	2.583	1.598	1.933	2.245
Bicycle LOS	B	A	A	B

Sequence

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



Intersection Level Of Service Report
Intersection 2: Mountain Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	20.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.437

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	105.0	100.0	100.0	200.0	100.0	100.0	120.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	65	29	160	38	75	49	34	413	118	193	590	30
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	1	0	0	0	0	48	1	2	49	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	41	0	0	12	0	0	30	0	0	8
Total Hourly Volume [veh/h]	66	29	121	38	76	37	34	465	90	197	644	22
Peak Hour Factor	0.641	0.641	0.641	0.698	0.698	0.698	0.856	0.856	0.856	0.888	0.888	0.888
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]	26	11	47	14	27	13	10	136	26	55	181	6
Total Analysis Volume [veh/h]	103	45	189	54	109	53	40	543	105	222	725	25
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			6			6		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	6			6			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			4			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			4			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	13			13			4			6		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	15	19	0	15	19	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	10	0	0	10	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	C	R	L	C	L	C	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	26	26	26	26	2	13	13	9	20	20
g / C, Green / Cycle	0.43	0.43	0.43	0.43	0.04	0.22	0.22	0.15	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.13	0.12	0.05	0.09	0.02	0.18	0.18	0.12	0.20	0.20
s, saturation flow rate [veh/h]	1129	1560	1146	1754	1781	1870	1740	1781	1870	1843
c, Capacity [veh/h]	584	666	389	749	76	413	384	271	618	609
d1, Uniform Delay [s]	13.24	11.18	18.43	10.85	28.12	22.14	22.24	24.64	16.86	16.87
k, delay calibration	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
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]	1.04	1.07	0.74	0.66	5.50	3.71	4.39	6.08	0.98	1.00
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	0.25	0.28	0.14	0.22	0.53	0.80	0.82	0.82	0.61	0.61
d, Delay for Lane Group [s/veh]	14.28	12.25	19.17	11.52	33.62	25.85	26.63	30.73	17.84	17.87
Lane Group LOS	B	B	B	B	C	C	C	C	B	B
Critical Lane Group	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.48	1.63	0.64	1.33	0.65	4.51	4.36	3.31	4.07	4.03
50th-Percentile Queue Length [ft/ln]	37.00	40.68	15.99	33.18	16.30	112.7	109.0	82.77	101.8	100.7
95th-Percentile Queue Length [veh/ln]	2.66	2.93	1.15	2.39	1.17	7.99	7.79	5.96	7.33	7.25
95th-Percentile Queue Length [ft/ln]	66.60	73.22	28.77	59.73	29.34	199.8	194.6	148.9	183.2	181.3

Movement, Approach, & Intersection Results

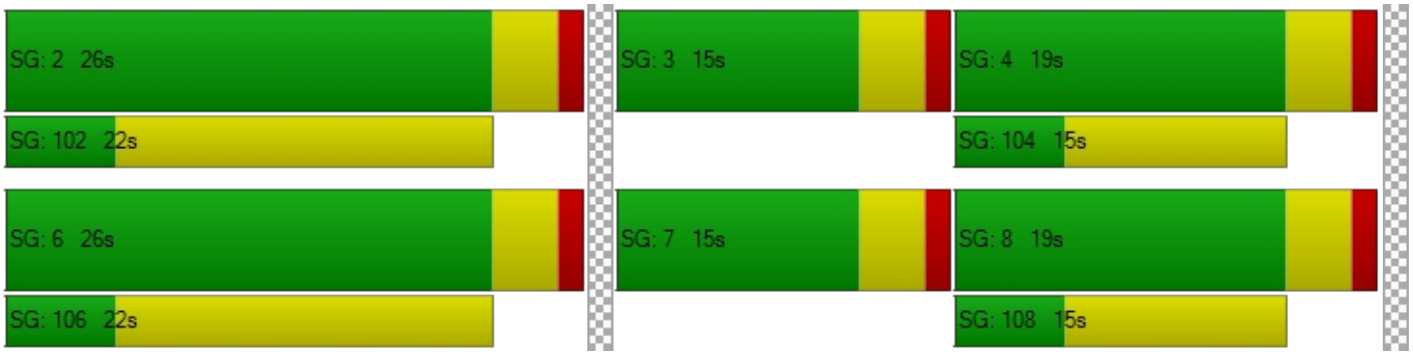
d_M, Delay for Movement [s/veh]	14.28	14.28	12.25	19.17	11.52	11.52	33.62	26.15	26.63	30.73	17.85	17.87
Movement LOS	B	B	B	B	B	B	C	C	C	C	B	B
d_A, Approach Delay [s/veh]	13.14			13.43			26.66			20.80		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	20.73											
Intersection LOS	C											
Intersection V/C	0.437											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	2735.27	2777.76	4191.59	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.253	2.050	2.784	2.721
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]	733	733	500	500
d_b, Bicycle Delay [s]	12.11	12.11	16.91	16.93
l_b,int, Bicycle LOS Score for Intersection	2.183	1.936	2.152	2.368
Bicycle LOS	B	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 3: Indian Hill Blvd/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	27.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.611

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	165.0	100.0	100.0	135.0	100.0	100.0	174.0	100.0	100.0	175.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
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	100.0
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	101	43	204	51	102	55	36	413	160	327	670	41
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	37	0	42	0	0	0	0	15	34	39	14	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	62	0	0	14	0	0	49	0	0	10
Total Hourly Volume [veh/h]	139	43	186	51	103	41	36	432	146	369	690	31
Peak Hour Factor	0.674	0.674	0.674	0.813	0.813	0.813	0.827	0.827	0.827	0.889	0.889	0.889
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]	52	16	69	16	32	13	11	131	44	104	194	9
Total Analysis Volume [veh/h]	206	64	276	63	127	50	44	522	177	415	776	35
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			7			10		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	7			10			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	15			6			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			6			15		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	9			12			8			4		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	80
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	30	0	0	30	0	24	26	0	24	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	17	0	0	17	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	C	L	C	C
C, Cycle Length [s]	80	80	80	80	80	80	80	80	80	80	80	80
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	29	29	29	29	29	29	3	19	19	20	35	35
g / C, Green / Cycle	0.37	0.37	0.37	0.37	0.37	0.37	0.04	0.23	0.23	0.25	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.17	0.03	0.18	0.06	0.05	0.05	0.02	0.19	0.20	0.23	0.22	0.22
s, saturation flow rate [veh/h]	1203	1870	1543	1035	1870	1672	1781	1870	1682	1781	1870	1838
c, Capacity [veh/h]	461	689	569	302	689	616	72	433	389	445	824	810
d1, Uniform Delay [s]	23.09	16.51	19.42	26.91	16.75	16.81	37.75	29.35	29.50	29.34	16.01	16.02
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.17	0.11	0.11
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
d2, Incremental Delay [s]	3.11	0.27	2.95	1.56	0.39	0.48	7.97	4.50	5.64	13.35	0.46	0.47
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	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	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	1.00	1.00

Lane Group Results

X, volume / capacity	0.45	0.09	0.49	0.21	0.13	0.14	0.61	0.84	0.86	0.93	0.50	0.50
d, Delay for Lane Group [s/veh]	26.20	16.78	22.36	28.47	17.15	17.29	45.72	33.86	35.14	42.68	16.47	16.50
Lane Group LOS	C	B	C	C	B	B	D	C	D	D	B	B
Critical Lane Group	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.50	0.79	4.21	1.12	1.13	1.10	0.99	6.96	6.54	9.11	5.08	5.02
50th-Percentile Queue Length [ft/ln]	87.55	19.74	105.2	28.06	28.35	27.48	24.82	174.1	163.5	227.7	127.0	125.4
95th-Percentile Queue Length [veh/ln]	6.30	1.42	7.58	2.02	2.04	1.98	1.79	11.29	10.74	14.06	8.78	8.69
95th-Percentile Queue Length [ft/ln]	157.5	35.54	189.4	50.51	51.04	49.47	44.68	282.2	268.4	351.4	219.5	217.3

Movement, Approach, & Intersection Results

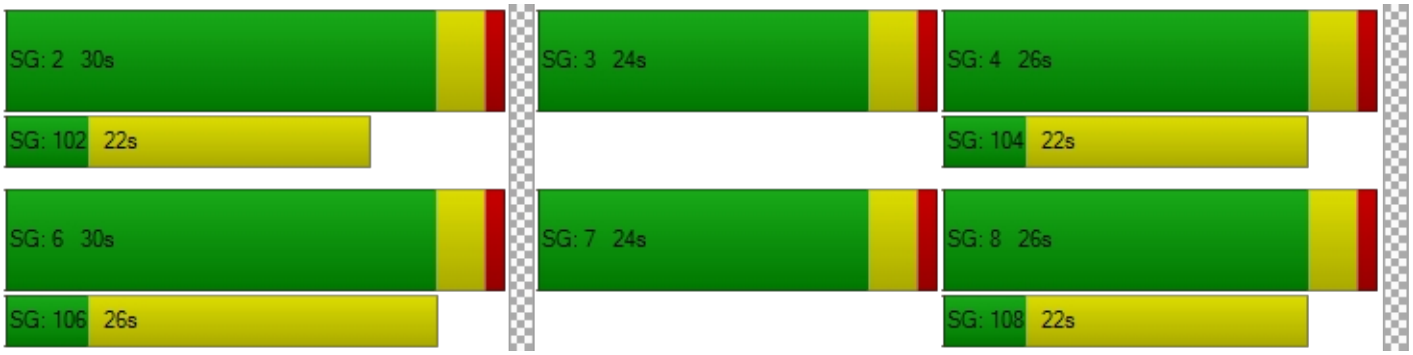
d_M, Delay for Movement [s/veh]	26.20	16.78	22.36	28.47	17.19	17.29	45.72	34.24	35.14	42.68	16.48	16.50
Movement LOS	C	B	C	C	B	B	D	C	D	D	B	B
d_A, Approach Delay [s/veh]	23.16			20.17			35.14			25.35		
Approach LOS	C			C			D			C		
d_I, Intersection Delay [s/veh]	27.10											
Intersection LOS	C											
Intersection V/C	0.611											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	1478.86	1218.79	1529.67	520.03
d_p, Pedestrian Delay [s]	31.51	31.51	31.51	31.51
l_p,int, Pedestrian LOS Score for Intersection	2.652	2.395	3.017	2.903
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	650	650	550	550
d_b, Bicycle Delay [s]	18.31	18.34	21.11	21.07
l_b,int, Bicycle LOS Score for Intersection	2.061	1.769	2.213	2.579
Bicycle LOS	B	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 4: Forbes Ave/Miramar Ave

Control Type:	Two-way stop	Delay (sec / veh):	9.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

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

Volumes

Name						
Base Volume Input [veh/h]	1	19	2	4	5	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0086	1.0086	1.0086	1.0086	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	0	0	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	22	2	4	6	2
Peak Hour Factor	1.0000	0.9500	0.9500	0.9500	0.9500	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	6	1	1	2	1
Total Analysis Volume [veh/h]	1	23	2	4	6	2
Pedestrian Volume [ped/h]	15		31		21	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.36	0.00	9.72	8.74	0.00	7.35
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.02	0.02	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.05	0.05	0.51	0.51	0.00	0.00
d_A, Approach Delay [s/veh]	0.31		9.07		1.84	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.01					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Forbes Ave/Proj Dwy

Control Type:	Two-way stop	Delay (sec / veh):	8.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

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

Volumes

Name						
Base Volume Input [veh/h]	0	19	5	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0086	1.0086	1.0086	1.0086	1.0086	1.0086
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	11	0	0	1	3	30
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	19	5	1	3	30
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	5	1	0	1	8
Total Analysis Volume [veh/h]	12	20	5	1	3	32
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.00	0.00	0.03
d_M, Delay for Movement [s/veh]	7.25	0.00	0.00	0.00	8.89	8.46
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.00	0.00	0.10	0.10
95th-Percentile Queue Length [ft/ln]	0.56	0.56	0.00	0.00	2.55	2.55
d_A, Approach Delay [s/veh]	2.72		0.00		8.49	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.26					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 6: Forbes/Base Line Rd

Control Type:	Two-way stop	Delay (sec / veh):	26.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.176

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	135.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	17	44	26	639	994	13
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0086	1.0086	1.0086	1.0086	1.0086	1.0086
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	12	18	7	50	35	4
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	29	62	33	694	1038	17
Peak Hour Factor	0.7262	0.7262	0.8396	0.8396	0.8927	0.8927
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	21	10	207	291	5
Total Analysis Volume [veh/h]	40	85	39	827	1163	19
Pedestrian Volume [ped/h]	2		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.18	0.19	0.07	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	26.83	19.00	11.60	0.00	0.00	0.00
Movement LOS	D	C	B	A	A	A
95th-Percentile Queue Length [veh/ln]	1.63	1.63	0.21	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	40.84	40.84	5.35	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	21.50		0.52		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	1.45					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 7: Bonnie Brae Ave/Miramar Ave

Control Type:	All-way stop	Delay (sec / veh):	7.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.067

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	2	20	4	19	33	0	2	14	3	3	3	7
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008
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	3	0	0	1	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]	2	20	4	19	33	0	2	17	3	3	4	7
Peak Hour Factor	0.666	0.666	0.666	0.886	0.886	0.886	0.450	0.450	0.450	0.750	0.750	0.750
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	7	1	5	9	0	1	9	2	1	1	2
Total Analysis Volume [veh/h]	3	30	6	21	37	0	4	38	7	4	5	9
Pedestrian Volume [ped/h]	7			9			6			19		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	887	860	879	914
Degree of Utilization, x	0.04	0.07	0.06	0.02

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.14	0.22	0.18	0.06
95th-Percentile Queue Length [ft]	3.44	5.41	4.42	1.51
Approach Delay [s/veh]	7.24	7.49	7.33	7.02
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.33			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 8: Bonnie Brae Ave/Base Line Rd

Control Type:	Two-way stop	Delay (sec / veh):	24.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.214

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	135.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	42	36	15	707	890	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0086	1.0086	1.0086	1.0086	1.0086	1.0086
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	62	39	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	42	36	15	775	937	21
Peak Hour Factor	0.7813	0.7813	0.9070	0.9070	0.8706	0.8706
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	12	4	214	269	6
Total Analysis Volume [veh/h]	54	46	17	854	1076	24
Pedestrian Volume [ped/h]	2		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.21	0.10	0.03	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	24.19	17.50	10.89	0.00	0.00	0.00
Movement LOS	C	C	B	A	A	A
95th-Percentile Queue Length [veh/ln]	1.29	1.29	0.08	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	32.24	32.24	2.08	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	21.11		0.21		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	1.11					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 9: Mills Ave/Miramar Ave

Control Type:	Two-way stop	Delay (sec / veh):	16.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.093

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	30.00	100.0	100.0	30.00	100.0	100.0	100.0	100.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	11	147	31	1	208	2	1	10	39	20	3	4
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008
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	3	0	0	1	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]	11	148	31	1	210	2	1	13	39	20	4	4
Peak Hour Factor	0.630	0.630	0.630	0.722	0.722	0.722	0.625	0.625	0.625	0.613	0.613	0.613
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]	4	59	12	0	73	1	0	5	16	8	2	2
Total Analysis Volume [veh/h]	17	235	49	1	291	3	2	21	62	33	7	7
Pedestrian Volume [ped/h]	0			2			9			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	0.00	0.00	0.00	0.01	0.05	0.08	0.09	0.02	0.01
d_M, Delay for Movement [s/veh]	7.93	0.00	0.00	7.82	0.00	0.00	15.17	15.13	10.92	16.33	14.80	10.71
Movement LOS	A	A	A	A	A	A	C	C	B	C	B	B
95th-Percentile Queue Length [veh/ln]	0.04	0.00	0.00	0.00	0.00	0.00	0.50	0.50	0.50	0.40	0.40	0.40
95th-Percentile Queue Length [ft/ln]	1.04	0.00	0.00	0.06	0.00	0.00	12.40	12.40	12.40	9.96	9.96	9.96
d_A, Approach Delay [s/veh]	0.45			0.03			12.06			15.26		
Approach LOS	A			A			B			C		
d_I, Intersection Delay [s/veh]	2.59											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 10: Mills Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	22.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.573

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	105.0	100.0	100.0	145.0	100.0	145.0	175.0	100.0	100.0	165.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	129	100	85	57	158	156	84	471	109	185	693	51
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	0	0	0	0	0	0	51	11	0	36	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	22	0	0	39	0	0	30	0	0	13
Total Hourly Volume [veh/h]	133	101	64	57	159	118	85	526	91	187	735	38
Peak Hour Factor	0.541	0.541	0.541	0.662	0.662	0.662	0.869	0.869	0.869	0.883	0.883	0.883
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]	61	47	30	22	60	45	24	151	26	53	208	11
Total Analysis Volume [veh/h]	246	187	118	86	240	178	98	605	105	212	832	43
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			12			5		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	12			5			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	8			2			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			2			8		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	11			10			13			10		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	65
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	16	23	0	16	23	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	14	0	0	14	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	65	65	65	65	65	65	65	65	65	65	65	65
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	28	28	28	28	28	28	5	16	16	9	21	21
g / C, Green / Cycle	0.43	0.43	0.43	0.43	0.43	0.43	0.07	0.24	0.24	0.15	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.25	0.10	0.08	0.08	0.13	0.11	0.06	0.19	0.20	0.12	0.24	0.24
s, saturation flow rate [veh/h]	968	1870	1553	1071	1870	1560	1781	1870	1735	1781	1870	1829
c, Capacity [veh/h]	405	797	661	459	797	665	132	456	423	259	589	577
d1, Uniform Delay [s]	21.13	11.90	11.57	16.11	12.28	12.06	29.48	23.07	23.21	26.93	19.95	19.98
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
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
d2, Incremental Delay [s]	6.65	0.69	0.59	0.90	0.97	0.99	7.91	3.26	3.94	6.26	1.93	2.01
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	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	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	1.00	1.00

Lane Group Results

X, volume / capacity	0.61	0.23	0.18	0.19	0.30	0.27	0.74	0.80	0.82	0.82	0.75	0.75
d, Delay for Lane Group [s/veh]	27.77	12.59	12.16	17.01	13.26	13.05	37.39	26.33	27.15	33.20	21.88	21.99
Lane Group LOS	C	B	B	B	B	B	D	C	C	C	C	C
Critical Lane Group	Yes	No	No	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.94	1.71	1.06	0.98	2.27	1.68	1.73	5.28	5.12	3.47	5.78	5.70
50th-Percentile Queue Length [ft/ln]	98.49	42.63	26.52	24.61	56.80	42.00	43.19	132.0	127.9	86.77	144.5	142.5
95th-Percentile Queue Length [veh/ln]	7.09	3.07	1.91	1.77	4.09	3.02	3.11	9.05	8.83	6.25	9.72	9.62
95th-Percentile Queue Length [ft/ln]	177.2	76.74	47.73	44.30	102.2	75.59	77.74	226.2	220.7	156.1	243.1	240.4

Movement, Approach, & Intersection Results

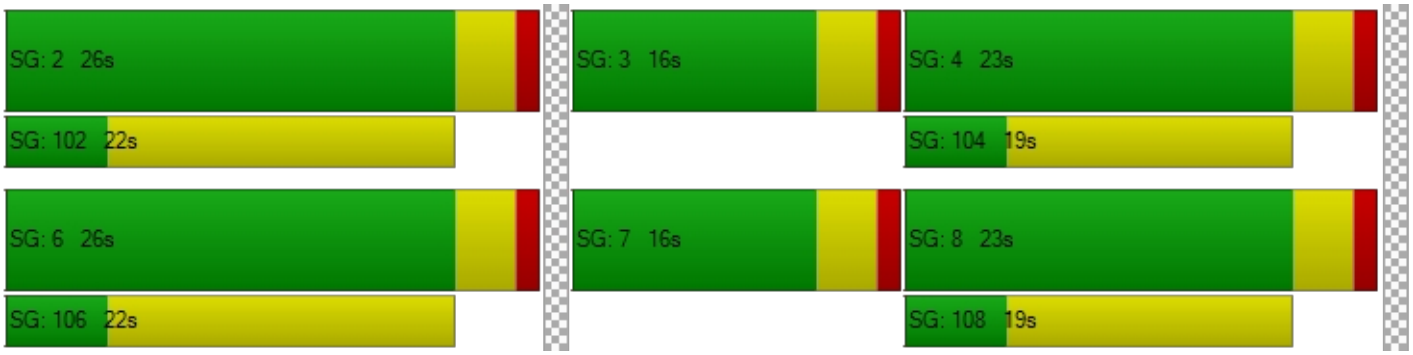
d_M, Delay for Movement [s/veh]	27.77	12.59	12.16	17.01	13.26	13.05	37.39	26.66	27.15	33.20	21.93	21.99
Movement LOS	C	B	B	B	B	B	D	C	C	C	C	C
d_A, Approach Delay [s/veh]	19.28			13.82			28.02			24.13		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	22.53											
Intersection LOS	C											
Intersection V/C	0.573											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	1373.08	3477.09	5811.44	1905.65
d_p, Pedestrian Delay [s]	24.12	24.12	24.12	24.12
l_p,int, Pedestrian LOS Score for Intersection	2.430	2.387	3.093	2.802
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	677	677	585	585
d_b, Bicycle Delay [s]	14.30	14.29	16.38	16.36
l_b,int, Bicycle LOS Score for Intersection	2.505	2.456	2.251	2.467
Bicycle LOS	B	B	B	B

Sequence

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



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Scenario 5 Opening AM + Project
7/13/2022

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	Towne Ave/Base Line Rd	205	22	325	8	4	3	9	266	130	439	353	6	1770

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Mountain Ave/Base Line Rd	66	29	162	38	76	49	34	465	120	197	644	30	1910

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Indian Hill Blvd/Base Line Rd	139	43	248	51	103	55	36	432	195	369	690	41	2402

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
4	Forbes Ave/Miramar Ave	1	22	2	4	6	2	37

ID	Intersection Name	Northbound		Southbound		Eastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
5	Forbes Ave/Proj Dwy	11	19	5	1	3	30	69

ID	Intersection Name	Southbound		Eastbound		Westbound		Total Volume
		Left	Right	Left	Thru	Thru	Right	
6	Forbes/Base Line Rd	29	62	33	694	1038	17	1873

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7	Bonnie Brae Ave/Miramar Ave	2	20	4	19	33	0	2	17	3	3	4	7	114

ID	Intersection Name	Southbound		Eastbound		Westbound		Total Volume
		Left	Right	Left	Thru	Thru	Right	
8	Bonnie Brae Ave/Base Line Rd	42	36	15	775	937	21	1826

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
9	Mills Ave/Miramar Ave	11	148	31	1	210	2	1	13	39	20	4	4	484

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
10	Mills Ave/Base Line Rd	133	101	86	57	159	157	85	526	121	187	735	51	2398

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Report File: C:\...\Opening PM + Project.pdf

Scenario 6 Opening PM + Project
7/13/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Towne Ave/Base Line Rd	Signalized	HCM 6th Edition	EB Thru	0.473	43.7	D
2	Mountain Ave/Base Line Rd	Signalized	HCM 6th Edition	WB Left	0.407	20.4	C
3	Indian Hill Blvd/Base Line Rd	Signalized	HCM 6th Edition	WB Left	0.604	31.4	C
4	Forbes Ave/Miramar Ave	Two-way stop	HCM 6th Edition	EB Thru	0.003	9.6	A
5	Forbes Ave/Proj Dwy	Two-way stop	HCM 6th Edition	EB Left	0.002	9.1	A
6	Forbes/Base Line Rd	Two-way stop	HCM 6th Edition	SB Left	0.141	20.5	C
7	Bonnie Brae Ave/Miramar Ave	All-way stop	HCM 6th Edition	SB Thru	0.057	7.3	A
8	Bonnie Brae Ave/Base Line Rd	Two-way stop	HCM 6th Edition	SB Left	0.101	18.3	C
9	Mills Ave/Miramar Ave	Two-way stop	HCM 6th Edition	WB Left	0.052	12.6	B
10	Mills Ave/Base Line Rd	Signalized	HCM 6th Edition	WB Left	0.446	20.7	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: Towne Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	43.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.473

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	85.00	100.0	85.00	165.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	500.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	95	7	301	7	8	2	2	628	131	315	282	3
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	0	10	0	0	0	0	65	3	7	59	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	79	0	0	1	0	0	34	0	0	1
Total Hourly Volume [veh/h]	103	7	235	7	8	1	2	698	101	325	343	2
Peak Hour Factor	0.907	0.907	0.907	0.850	0.850	0.850	0.941	0.941	0.941	0.877	0.877	0.877
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]	28	2	65	2	2	0	1	185	27	93	98	1
Total Analysis Volume [veh/h]	113	8	259	8	9	1	2	741	107	371	391	2
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			1		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			1			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	4			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			4		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	8			22			6			5		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Isolated
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	Split	Split	Split	Split	Split	Split	Permi	Permi	Permi	ProtP	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	35	0	0	37	0	10	48	0	10	58	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	21	0	0	21	0	0	7	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No			No		No	No	
Maximum Recall		No			No			No		No	No	
Pedestrian Recall		No			No			No		No	No	
Detector Location [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
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	C	R	C	L	C	R	L	C	C
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	31	31	31	29	29	29	56	56	56
g / C, Green / Cycle	0.24	0.24	0.24	0.22	0.22	0.22	0.43	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.07	0.10	0.01	0.00	0.21	0.07	0.32	0.11	0.11
s, saturation flow rate [veh/h]	1787	2699	1812	991	3560	1561	1154	1870	1866
c, Capacity [veh/h]	426	644	432	195	795	348	447	805	804
d1, Uniform Delay [s]	40.43	41.52	38.07	48.06	49.53	42.06	32.83	23.56	23.56
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.11	0.30	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.67	1.87	0.18	0.02	5.68	0.49	10.37	0.16	0.16
d3, Initial Queue Delay [s]	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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.28	0.40	0.04	0.01	0.93	0.31	0.83	0.24	0.24
d, Delay for Lane Group [s/veh]	42.10	43.38	38.25	48.08	55.21	42.55	43.20	23.71	23.71
Lane Group LOS	D	D	D	D	E	D	D	C	C
Critical Lane Group	No	Yes	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.39	3.68	0.47	0.06	12.40	2.94	9.57	3.92	3.91
50th-Percentile Queue Length [ft/ln]	84.82	91.96	11.73	1.44	310.0	73.38	239.2	97.96	97.80
95th-Percentile Queue Length [veh/ln]	6.11	6.62	0.84	0.10	18.18	5.28	14.64	7.05	7.04
95th-Percentile Queue Length [ft/ln]	152.67	165.54	21.12	2.59	454.4	132.0	366.0	176.3	176.0

Movement, Approach, & Intersection Results

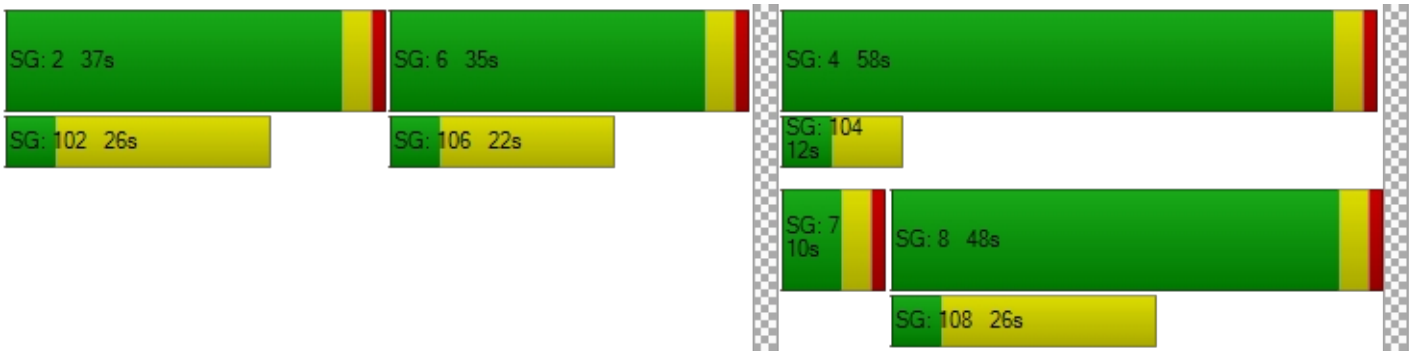
d_M, Delay for Movement [s/veh]	42.10	42.10	43.38	38.25	38.25	38.25	48.08	55.21	42.55	43.20	23.71	23.71
Movement LOS	D	D	D	D	D	D	D	E	D	D	C	C
d_A, Approach Delay [s/veh]	42.97			38.25			53.60			33.17		
Approach LOS	D			D			D			C		
d_I, Intersection Delay [s/veh]	43.70											
Intersection LOS	D											
Intersection V/C	0.473											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	10191.17	0.00	1497.96
d_p, Pedestrian Delay [s]	56.32	56.32	56.32	56.32
l_p,int, Pedestrian LOS Score for Intersection	2.869	1.754	2.746	2.681
Crosswalk LOS	C	A	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]	477	508	677	831
d_b, Bicycle Delay [s]	37.85	36.60	28.54	22.28
l_b,int, Bicycle LOS Score for Intersection	2.317	1.591	2.289	2.191
Bicycle LOS	B	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 2: Mountain Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	20.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.407

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	105.0	100.0	100.0	200.0	100.0	100.0	120.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	61	37	148	28	28	39	26	815	69	70	498	46
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	2	0	0	0	0	73	1	1	65	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	38	0	0	10	0	0	18	0	0	12
Total Hourly Volume [veh/h]	63	37	113	28	28	29	26	895	53	72	567	34
Peak Hour Factor	0.878	0.878	0.878	0.791	0.791	0.791	0.924	0.924	0.924	0.887	0.887	0.887
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]	18	11	32	9	9	9	7	242	14	20	160	10
Total Analysis Volume [veh/h]	72	42	129	35	35	37	28	968	57	81	639	38
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			2			1		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	2			1			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			1			4		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	4			1			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	8			20			5			8		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	9	19	0	15	25	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	10	0	0	10	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	C	R	L	C	L	C	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	25	25	25	25	2	19	19	4	21	21
g / C, Green / Cycle	0.42	0.42	0.42	0.42	0.03	0.32	0.32	0.06	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.08	0.08	0.03	0.04	0.02	0.28	0.28	0.05	0.18	0.18
s, saturation flow rate [veh/h]	1367	1559	1212	1692	1781	1870	1827	1781	1870	1826
c, Capacity [veh/h]	672	654	484	710	57	592	578	113	651	636
d1, Uniform Delay [s]	11.56	10.99	15.12	10.55	28.57	19.37	19.40	27.56	15.59	15.60
k, delay calibration	0.50	0.50	0.50	0.50	0.11	0.12	0.12	0.11	0.11	0.11
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]	0.55	0.67	0.29	0.29	6.47	4.78	5.08	8.09	0.66	0.68
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	0.17	0.20	0.07	0.10	0.49	0.87	0.88	0.71	0.52	0.53
d, Delay for Lane Group [s/veh]	12.10	11.67	15.41	10.84	35.04	24.15	24.48	35.65	16.24	16.28
Lane Group LOS	B	B	B	B	D	C	C	D	B	B
Critical Lane Group	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.01	1.08	0.36	0.57	0.48	6.86	6.78	1.34	3.45	3.39
50th-Percentile Queue Length [ft/ln]	25.24	26.89	8.88	14.17	11.98	171.4	169.5	33.39	86.25	84.82
95th-Percentile Queue Length [veh/ln]	1.82	1.94	0.64	1.02	0.86	11.15	11.05	2.40	6.21	6.11
95th-Percentile Queue Length [ft/ln]	45.43	48.40	15.99	25.51	21.57	278.8	276.2	60.10	155.2	152.6

Movement, Approach, & Intersection Results

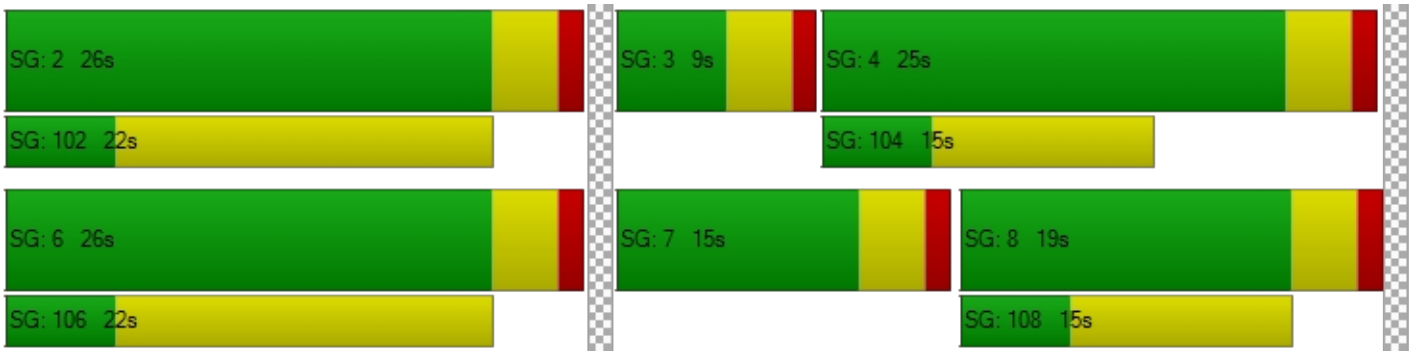
d_M, Delay for Movement [s/veh]	12.10	12.10	11.67	15.41	10.84	10.84	35.04	24.30	24.48	35.65	16.26	16.28
Movement LOS	B	B	B	B	B	B	D	C	C	D	B	B
d_A, Approach Delay [s/veh]	11.87			12.33			24.60			18.33		
Approach LOS	B			B			C			B		
d_I, Intersection Delay [s/veh]	20.36											
Intersection LOS	C											
Intersection V/C	0.407											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	8707.86	16311.48	17531.13	4184.36
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.128	2.012	2.765	2.726
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]	733	733	500	700
d_b, Bicycle Delay [s]	12.08	12.15	16.92	12.73
l_b,int, Bicycle LOS Score for Intersection	2.023	1.753	2.443	2.195
Bicycle LOS	B	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 3: Indian Hill Blvd/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	31.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.604

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	165.0	100.0	100.0	135.0	100.0	100.0	174.0	100.0	100.0	175.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
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	100.0
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	163	65	202	34	43	29	60	828	105	169	425	52
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	46	0	51	0	0	0	0	21	54	60	20	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	64	0	0	7	0	0	40	0	0	13
Total Hourly Volume [veh/h]	210	66	191	34	43	22	61	856	120	230	449	39
Peak Hour Factor	0.903	0.903	0.903	0.828	0.828	0.828	0.951	0.951	0.951	0.907	0.907	0.907
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]	58	18	53	10	13	7	16	225	32	63	124	11
Total Analysis Volume [veh/h]	232	73	211	41	52	27	64	900	126	253	495	43
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			47			11		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	47			11			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	10			3			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			3			10		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	2			2			5			3		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	30	0	0	30	0	13	27	0	13	27	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	17	0	0	17	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	C	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	27	27	27	27	27	27	4	22	22	9	27	27
g / C, Green / Cycle	0.39	0.39	0.39	0.39	0.39	0.39	0.05	0.31	0.31	0.13	0.39	0.39
(v / s)_i Volume / Saturation Flow Rate	0.18	0.04	0.14	0.04	0.02	0.02	0.04	0.28	0.29	0.14	0.15	0.15
s, saturation flow rate [veh/h]	1317	1870	1557	1090	1870	1647	1781	1870	1759	1781	1870	1810
c, Capacity [veh/h]	554	723	602	387	723	637	95	586	551	229	727	704
d1, Uniform Delay [s]	18.37	13.70	15.23	19.86	13.45	13.49	32.54	22.93	23.09	30.50	15.32	15.33
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.20	0.21	0.11	0.11	0.11
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
d2, Incremental Delay [s]	2.32	0.28	1.61	0.55	0.15	0.18	8.05	8.64	10.79	61.05	0.32	0.33
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	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	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	1.00	1.00

Lane Group Results

X, volume / capacity	0.42	0.10	0.35	0.11	0.06	0.06	0.67	0.89	0.91	1.10	0.38	0.38
d, Delay for Lane Group [s/veh]	20.69	13.98	16.84	20.41	13.60	13.67	40.59	31.57	33.88	91.55	15.64	15.66
Lane Group LOS	C	B	B	C	B	B	D	C	C	F	B	B
Critical Lane Group	Yes	No	No	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.15	0.74	2.48	0.55	0.40	0.39	1.24	9.03	9.01	7.58	2.93	2.86
50th-Percentile Queue Length [ft/ln]	78.64	18.57	61.88	13.71	9.98	9.83	31.11	225.6	225.1	189.4	73.30	71.44
95th-Percentile Queue Length [veh/ln]	5.66	1.34	4.46	0.99	0.72	0.71	2.24	13.95	13.93	12.58	5.28	5.14
95th-Percentile Queue Length [ft/ln]	141.5	33.43	111.3	24.67	17.97	17.69	56.00	348.8	348.2	314.6	131.9	128.6

Movement, Approach, & Intersection Results

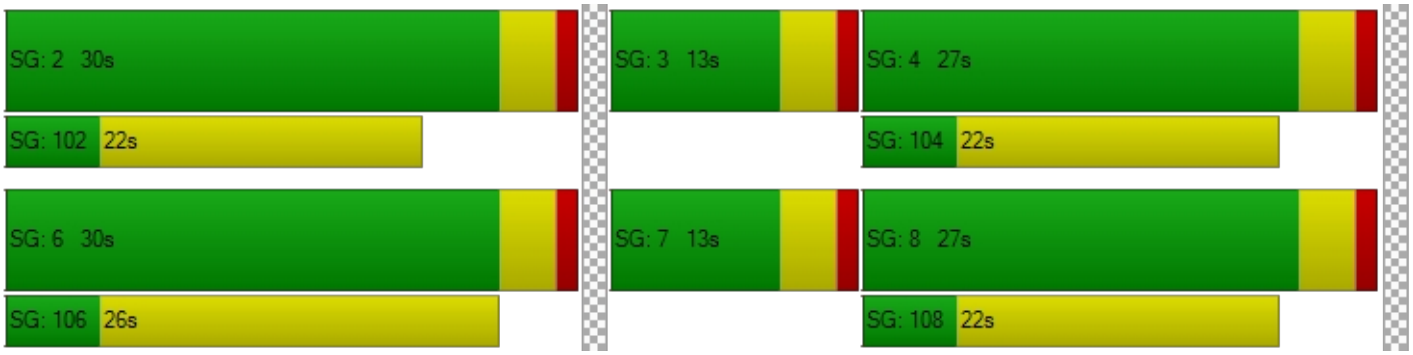
d_M, Delay for Movement [s/veh]	20.69	13.98	16.84	20.41	13.62	13.67	40.59	32.54	33.88	91.55	15.65	15.66
Movement LOS	C	B	B	C	B	B	D	C	C	F	B	B
d_A, Approach Delay [s/veh]	18.17			15.95			33.16			39.92		
Approach LOS	B			B			C			D		
d_I, Intersection Delay [s/veh]	31.39											
Intersection LOS	C											
Intersection V/C	0.604											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	271.41	1262.80	3649.55	1082.41
d_p, Pedestrian Delay [s]	26.58	26.58	26.58	26.58
l_p,int, Pedestrian LOS Score for Intersection	2.585	2.361	3.044	2.847
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	743	743	657	657
d_b, Bicycle Delay [s]	13.84	13.84	15.82	15.80
l_b,int, Bicycle LOS Score for Intersection	2.038	1.664	2.492	2.223
Bicycle LOS	B	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 4: Forbes Ave/Miramar Ave

Control Type:	Two-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

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

Volumes

Name						
Base Volume Input [veh/h]	1	11	2	1	8	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0086	1.0086	1.0086	1.0086	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	0	0	4	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	13	2	1	12	3
Peak Hour Factor	1.0000	0.9500	0.9500	0.9500	0.9500	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	3	1	0	3	1
Total Analysis Volume [veh/h]	1	14	2	1	13	3
Pedestrian Volume [ped/h]	10		26		16	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.35	0.00	9.60	8.68	0.00	7.33
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.05	0.05	0.27	0.27	0.00	0.00
d_A, Approach Delay [s/veh]	0.49		9.29		1.37	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.68					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Forbes Ave/Proj Dwy

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

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

Volumes

Name						
Base Volume Input [veh/h]	0	11	8	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0086	1.0086	1.0086	1.0086	1.0086	1.0086
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	33	0	0	4	2	21
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	11	8	4	2	21
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	3	2	1	1	6
Total Analysis Volume [veh/h]	35	12	8	4	2	22
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.00	0.02
d_M, Delay for Movement [s/veh]	7.29	0.00	0.00	0.00	9.13	8.44
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.00	0.00	0.07	0.07
95th-Percentile Queue Length [ft/ln]	1.67	1.67	0.00	0.00	1.75	1.75
d_A, Approach Delay [s/veh]	5.43		0.00		8.50	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.53					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 6: Forbes/Base Line Rd

Control Type:	Two-way stop	Delay (sec / veh):	20.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.141

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	135.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	20	28	50	1011	617	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0086	1.0086	1.0086	1.0086	1.0086	1.0086
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	8	13	20	52	67	13
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	41	70	1072	689	34
Peak Hour Factor	0.7059	0.7059	0.9406	0.9406	0.8716	0.8716
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	15	19	285	198	10
Total Analysis Volume [veh/h]	40	58	74	1140	791	39
Pedestrian Volume [ped/h]	3		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.14	0.10	0.09	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	20.50	13.97	10.00	0.00	0.00	0.00
Movement LOS	C	B	B	A	A	A
95th-Percentile Queue Length [veh/ln]	0.93	0.93	0.31	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	23.25	23.25	7.69	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	16.64		0.61		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	1.11					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 7: Bonnie Brae Ave/Miramar Ave

Control Type:	All-way stop	Delay (sec / veh):	7.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.057

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	2	23	10	12	28	2	2	9	0	6	4	20
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008
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	2	0	0	4	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]	2	23	10	12	28	2	2	11	0	6	8	20
Peak Hour Factor	0.666	0.666	0.666	0.886	0.886	0.886	0.450	0.450	0.450	0.750	0.750	0.750
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	9	4	3	8	1	1	6	0	2	3	7
Total Analysis Volume [veh/h]	3	34	15	14	32	2	4	24	0	8	11	27
Pedestrian Volume [ped/h]	1			0			1			2		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	906	863	853	933
Degree of Utilization, x	0.06	0.06	0.03	0.05

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.18	0.18	0.10	0.16
95th-Percentile Queue Length [ft]	4.56	4.41	2.54	3.88
Approach Delay [s/veh]	7.22	7.42	7.36	7.06
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.25			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 8: Bonnie Brae Ave/Base Line Rd

Control Type:	Two-way stop	Delay (sec / veh):	18.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.101

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	135.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	24	39	46	862	604	43
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0086	1.0086	1.0086	1.0086	1.0086	1.0086
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	60	80	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	39	46	929	689	43
Peak Hour Factor	0.7500	0.7500	0.9520	0.9520	0.8821	0.8821
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	13	12	244	195	12
Total Analysis Volume [veh/h]	32	52	48	976	781	49
Pedestrian Volume [ped/h]	1		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.09	0.06	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	18.33	13.06	9.81	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.69	0.69	0.19	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	17.37	17.37	4.80	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	15.07		0.46		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.90					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 9: Mills Ave/Miramar Ave

Control Type:	Two-way stop	Delay (sec / veh):	12.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.052

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	30.00	100.0	100.0	30.00	100.0	100.0	100.0	100.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	16	151	8	3	137	3	6	6	24	12	6	0
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008
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	2	0	0	4	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]	16	152	8	3	138	3	6	8	24	12	10	0
Peak Hour Factor	0.892	0.892	0.892	0.794	0.794	0.794	0.900	0.900	0.900	0.450	0.450	0.450
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]	4	43	2	1	43	1	2	2	7	7	6	0
Total Analysis Volume [veh/h]	18	170	9	4	174	4	7	9	27	27	22	0
Pedestrian Volume [ped/h]	0			4			5			1		

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	0.00	0.00	0.00	0.01	0.02	0.03	0.05	0.04	0.00
d_M, Delay for Movement [s/veh]	7.63	0.00	0.00	7.59	0.00	0.00	12.25	12.20	9.53	12.61	12.52	9.87
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.04	0.00	0.00	0.01	0.00	0.00	0.20	0.20	0.20	0.31	0.31	0.31
95th-Percentile Queue Length [ft/ln]	0.99	0.00	0.00	0.22	0.00	0.00	4.94	4.94	4.94	7.69	7.69	7.69
d_A, Approach Delay [s/veh]	0.70			0.17			10.53			12.57		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	2.63											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 10: Mills Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	20.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.446

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	105.0	100.0	100.0	145.0	100.0	145.0	175.0	100.0	100.0	165.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	123	105	97	47	71	73	82	822	82	77	440	62
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008	1.008
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	12	0	0	0	0	0	0	52	8	0	68	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	25	0	0	19	0	0	23	0	0	16
Total Hourly Volume [veh/h]	136	106	73	47	72	55	83	881	68	78	512	47
Peak Hour Factor	0.912	0.912	0.912	0.868	0.868	0.868	0.948	0.948	0.948	0.836	0.836	0.836
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]	37	29	20	14	21	16	22	232	18	23	153	14
Total Analysis Volume [veh/h]	149	116	80	54	83	63	88	929	72	93	612	56
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			5			3		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	5			3			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	2			1			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			1			2		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	16			17			16			46		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	11	23	0	11	23	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	14	0	0	14	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	25	25	25	25	25	25	4	19	19	4	19	19
g / C, Green / Cycle	0.42	0.42	0.42	0.42	0.42	0.42	0.07	0.31	0.31	0.07	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.12	0.06	0.05	0.05	0.04	0.04	0.05	0.27	0.27	0.05	0.18	0.18
s, saturation flow rate [veh/h]	1241	1870	1555	1185	1870	1555	1781	1870	1808	1781	1870	1786
c, Capacity [veh/h]	556	782	650	523	782	650	120	584	565	124	588	562
d1, Uniform Delay [s]	14.33	10.83	10.70	13.69	10.63	10.58	27.45	19.47	19.53	27.39	17.21	17.28
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.12	0.11	0.11	0.11
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
d2, Incremental Delay [s]	1.18	0.40	0.39	0.40	0.27	0.30	8.33	4.32	4.85	8.68	0.89	0.98
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	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	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	1.00	1.00

Lane Group Results

X, volume / capacity	0.27	0.15	0.12	0.10	0.11	0.10	0.73	0.87	0.88	0.75	0.58	0.59
d, Delay for Lane Group [s/veh]	15.51	11.23	11.09	14.09	10.91	10.88	35.78	23.79	24.38	36.07	18.11	18.26
Lane Group LOS	B	B	B	B	B	B	D	C	C	D	B	B
Critical Lane Group	Yes	No	No	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.52	0.93	0.64	0.52	0.65	0.50	1.45	6.66	6.59	1.54	3.67	3.59
50th-Percentile Queue Length [ft/ln]	38.04	23.21	16.08	12.90	16.26	12.50	36.30	166.3	164.6	38.50	91.78	89.83
95th-Percentile Queue Length [veh/ln]	2.74	1.67	1.16	0.93	1.17	0.90	2.61	10.89	10.80	2.77	6.61	6.47
95th-Percentile Queue Length [ft/ln]	68.47	41.79	28.95	23.22	29.27	22.50	65.34	272.1	269.9	69.29	165.2	161.6

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	15.51	11.23	11.09	14.09	10.91	10.88	35.78	24.06	24.38	36.07	18.17	18.26
Movement LOS	B	B	B	B	B	B	D	C	C	D	B	B
d_A, Approach Delay [s/veh]	13.05			11.76			25.03			20.37		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	20.71											
Intersection LOS	C											
Intersection V/C	0.446											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	3724.75	6219.28	16678.41	8982.40
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.304	2.259	2.906	2.744
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]	733	733	633	633
d_b, Bicycle Delay [s]	12.13	12.14	14.12	14.34
l_b,int, Bicycle LOS Score for Intersection	2.170	1.921	2.477	2.201
Bicycle LOS	B	A	B	B

Sequence

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

Vistro File: C:\...\Vistro.vistro
Report File: C:\...\Opening PM + Project.pdf
Scenario 6 Opening PM + Project
7/13/2022

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	Towne Ave/Base Line Rd	103	7	314	7	8	2	2	698	135	325	343	3	1947

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Mountain Ave/Base Line Rd	63	37	151	28	28	39	26	895	71	72	567	46	2023

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Indian Hill Blvd/Base Line Rd	210	66	255	34	43	29	61	856	160	230	449	52	2445

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
4	Forbes Ave/Miramar Ave	1	13	2	1	12	3	32

ID	Intersection Name	Northbound		Southbound		Eastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
5	Forbes Ave/Proj Dwy	33	11	8	4	2	21	79

ID	Intersection Name	Southbound		Eastbound		Westbound		Total Volume
		Left	Right	Left	Thru	Thru	Right	
6	Forbes/Base Line Rd	28	41	70	1072	689	34	1934

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7	Bonnie Brae Ave/Miramar Ave	2	23	10	12	28	2	2	11	0	6	8	20	124

ID	Intersection Name	Southbound		Eastbound		Westbound		Total Volume
		Left	Right	Left	Thru	Thru	Right	
8	Bonnie Brae Ave/Base Line Rd	24	39	46	929	689	43	1770

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
9	Mills Ave/Miramar Ave	16	152	8	3	138	3	6	8	24	12	10	0	380

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
10	Mills Ave/Base Line Rd	136	106	98	47	72	74	83	881	91	78	512	63	2241

Vistro File: C:\...\Vistro.vistro
Report File: C:\...\Horizon AM + Project.pdf

Scenario 9 Horizon Year AM + Project
7/13/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Towne Ave/Base Line Rd	Signalized	HCM 6th Edition	EB Right	0.481	38.7	D
2	Mountain Ave/Base Line Rd	Signalized	HCM 6th Edition	EB Left	0.510	21.8	C
3	Indian Hill Blvd/Base Line Rd	Signalized	HCM 6th Edition	NB Left	0.787	36.0	D
4	Forbes Ave/Miramar Ave	Two-way stop	HCM 6th Edition	EB Thru	0.003	9.7	A
5	Forbes Ave/Proj Dwy	Two-way stop	HCM 6th Edition	EB Left	0.003	8.9	A
6	Forbes/Base Line Rd	Two-way stop	HCM 6th Edition	SB Left	0.118	21.8	C
7	Bonnie Brae Ave/Miramar Ave	All-way stop	HCM 6th Edition	SB Thru	0.067	7.3	A
8	Bonnie Brae Ave/Base Line Rd	Two-way stop	HCM 6th Edition	SB Left	0.149	19.9	C
9	Mills Ave/Miramar Ave	Two-way stop	HCM 6th Edition	WB Left	0.049	13.2	B
10	Mills Ave/Base Line Rd	Signalized	HCM 6th Edition	WB Left	0.629	23.0	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: Towne Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	38.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.481

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	85.00	100.0	85.00	165.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	500.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	319	15	129	4	4	6	19	300	303	249	397	4
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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	3	0	0	0	0	1	0	7	2	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	33	0	0	2	0	0	76	0	0	1
Total Hourly Volume [veh/h]	319	15	99	4	4	4	19	301	227	256	399	3
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
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]	84	4	26	1	1	1	5	79	60	67	105	1
Total Analysis Volume [veh/h]	336	16	104	4	4	4	20	317	239	269	420	3
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			1			9		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	1			9			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	3			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			3		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	14			12			12			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Isolated
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	Split	Split	Split	Split	Split	Split	Permi	Permi	Permi	ProtP	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	30	0	9	54	0	0	45	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	21	0	0	21	0	0	7	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No			No		No	No	
Maximum Recall		No			No			No		No	No	
Pedestrian Recall		No			No			No		No	No	
Detector Location [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
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	C	R	C	L	C	R	L	C	C
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	30	30	30	19	19	19	39	35	35
g / C, Green / Cycle	0.27	0.27	0.27	0.18	0.18	0.18	0.35	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.20	0.04	0.01	0.02	0.09	0.15	0.21	0.11	0.11
s, saturation flow rate [veh/h]	1785	2688	1739	964	3560	1544	1266	1870	1865
c, Capacity [veh/h]	481	725	469	134	629	273	477	588	586
d1, Uniform Delay [s]	36.58	30.49	29.57	48.45	40.96	43.91	27.74	29.19	29.19
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.13	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.45	0.42	0.10	0.50	0.63	10.48	1.05	0.37	0.37
d3, Initial Queue Delay [s]	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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.73	0.14	0.03	0.15	0.50	0.88	0.56	0.36	0.36
d, Delay for Lane Group [s/veh]	46.02	30.91	29.67	48.95	41.58	54.39	28.80	29.56	29.56
Lane Group LOS	D	C	C	D	D	D	C	C	C
Critical Lane Group	Yes	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	9.79	1.09	0.25	0.54	3.93	7.06	5.51	4.38	4.37
50th-Percentile Queue Length [ft/ln]	244.64	27.28	6.20	13.49	98.33	176.6	137.7	109.4	109.1
95th-Percentile Queue Length [veh/ln]	14.92	1.96	0.45	0.97	7.08	11.42	9.36	7.81	7.79
95th-Percentile Queue Length [ft/ln]	372.90	49.11	11.16	24.29	177.0	285.6	233.9	195.1	194.8

Movement, Approach, & Intersection Results

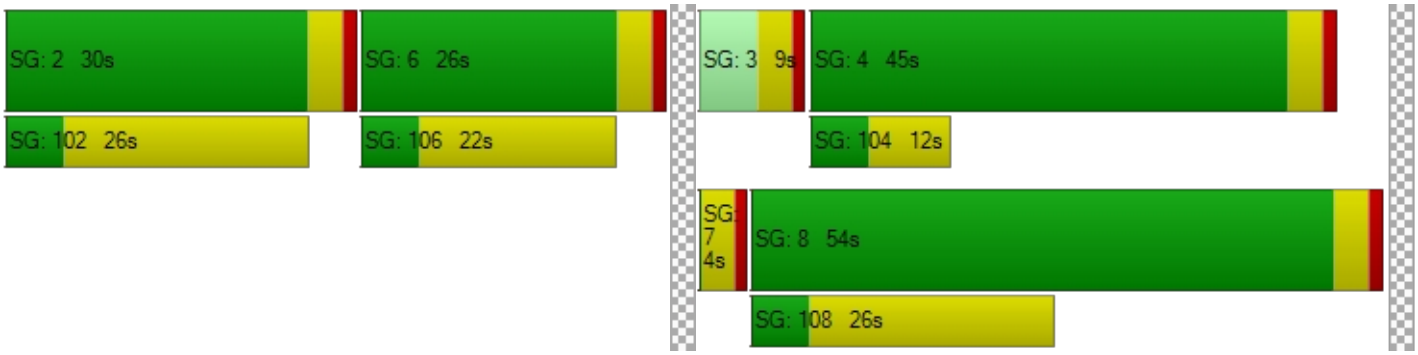
d_M, Delay for Movement [s/veh]	46.02	46.02	30.91	29.67	29.67	29.67	48.95	41.58	54.39	28.80	29.56	29.56
Movement LOS	D	D	C	C	C	C	D	D	D	C	C	C
d_A, Approach Delay [s/veh]	42.58			29.67			47.15			29.26		
Approach LOS	D			C			D			C		
d_I, Intersection Delay [s/veh]	38.70											
Intersection LOS	D											
Intersection V/C	0.481											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	9361.91	1279.61	0.00	3632.12
d_p, Pedestrian Delay [s]	46.39	46.39	46.39	46.39
l_p,int, Pedestrian LOS Score for Intersection	2.760	1.784	2.802	2.537
Crosswalk LOS	C	A	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]	400	473	909	745
d_b, Bicycle Delay [s]	35.47	32.29	16.48	21.66
l_b,int, Bicycle LOS Score for Intersection	2.366	1.583	2.098	2.131
Bicycle LOS	B	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 2: Mountain Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	21.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.510

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	105.0	100.0	100.0	200.0	100.0	100.0	120.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	245	5	45	8	36	144	27	494	308	43	800	2
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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	1	0	0	0	0	4	0	2	9	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	12	0	0	36	0	0	77	0	0	1
Total Hourly Volume [veh/h]	245	5	34	8	36	108	27	498	231	45	809	1
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
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]	64	1	9	2	9	28	7	131	61	12	213	0
Total Analysis Volume [veh/h]	258	5	36	8	38	114	28	524	243	47	852	1
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			6			6		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	6			6			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			4			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			4			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	13			13			4			6		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	15	19	0	15	19	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	10	0	0	10	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	C	R	L	C	L	C	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	29	29	29	29	2	16	16	3	17	17
g / C, Green / Cycle	0.49	0.49	0.49	0.49	0.03	0.27	0.27	0.05	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.26	0.02	0.01	0.09	0.02	0.22	0.22	0.03	0.23	0.23
s, saturation flow rate [veh/h]	1008	1561	1366	1625	1781	1870	1629	1781	1870	1869
c, Capacity [veh/h]	608	757	366	788	60	500	436	84	526	526
d1, Uniform Delay [s]	13.96	8.14	20.29	8.78	28.47	20.54	20.71	27.96	20.07	20.07
k, delay calibration	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
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]	2.24	0.12	0.11	0.54	5.65	3.16	4.20	5.62	3.05	3.05
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	0.43	0.05	0.02	0.19	0.47	0.81	0.83	0.56	0.81	0.81
d, Delay for Lane Group [s/veh]	16.20	8.26	20.40	9.32	34.13	23.69	24.91	33.58	23.12	23.12
Lane Group LOS	B	A	C	A	C	C	C	C	C	C
Critical Lane Group	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.78	0.23	0.10	1.07	0.47	5.24	4.86	0.76	5.47	5.46
50th-Percentile Queue Length [ft/ln]	69.56	5.86	2.45	26.82	11.76	131.1	121.4	19.00	136.6	136.6
95th-Percentile Queue Length [veh/ln]	5.01	0.42	0.18	1.93	0.85	9.00	8.47	1.37	9.30	9.30
95th-Percentile Queue Length [ft/ln]	125.20	10.55	4.40	48.27	21.17	224.9	211.8	34.20	232.5	232.4

Movement, Approach, & Intersection Results

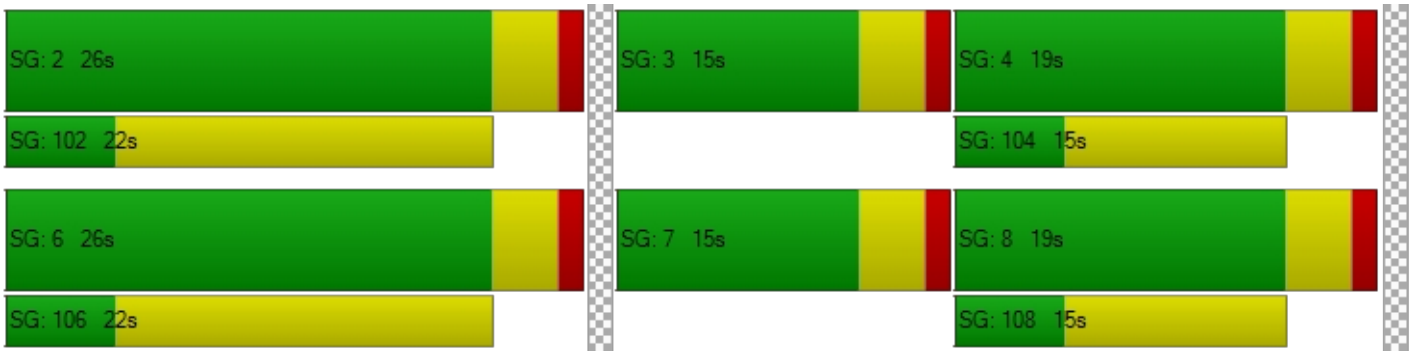
d_M, Delay for Movement [s/veh]	16.20	16.20	8.26	20.40	9.32	9.32	34.13	23.97	24.91	33.58	23.12	23.12
Movement LOS	B	B	A	C	A	A	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	15.24			9.87			24.62			23.66		
Approach LOS	B			A			C			C		
d_I, Intersection Delay [s/veh]	21.82											
Intersection LOS	C											
Intersection V/C	0.510											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	2259.12	2892.21	3319.98	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.171	2.047	3.173	2.582
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]	733	733	500	500
d_b, Bicycle Delay [s]	12.11	12.11	16.91	16.93
l_b,int, Bicycle LOS Score for Intersection	2.073	1.883	2.279	2.303
Bicycle LOS	B	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 3: Indian Hill Blvd/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	36.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.787

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	165.0	100.0	100.0	135.0	100.0	100.0	174.0	100.0	100.0	175.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
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	100.0
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	440	7	22	4	25	231	74	562	508	35	1222	2
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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	2	0	0	0	0	5	0	7	11	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	6	0	0	58	0	0	127	0	0	1
Total Hourly Volume [veh/h]	440	7	18	4	25	173	74	567	381	42	1233	1
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
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]	116	2	5	1	7	46	19	149	100	11	324	0
Total Analysis Volume [veh/h]	463	7	19	4	26	182	78	597	401	44	1298	1
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			7			10		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	7			10			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	15			6			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			6			15		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	9			12			8			4		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	80
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	30	0	0	30	0	24	26	0	24	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	17	0	0	17	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	C	L	C	C
C, Cycle Length [s]	80	80	80	80	80	80	80	80	80	80	80	80
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	33	33	33	33	33	33	5	32	32	3	31	31
g / C, Green / Cycle	0.41	0.41	0.41	0.41	0.41	0.41	0.06	0.40	0.40	0.04	0.39	0.39
(v / s)_i Volume / Saturation Flow Rate	0.40	0.00	0.01	0.00	0.01	0.12	0.04	0.29	0.29	0.02	0.35	0.35
s, saturation flow rate [veh/h]	1171	1870	1545	1370	1870	1553	1781	1870	1592	1781	1870	1869
c, Capacity [veh/h]	449	760	628	607	760	631	104	753	641	72	720	720
d1, Uniform Delay [s]	30.18	14.14	14.26	15.55	14.28	15.96	37.09	19.97	20.14	37.75	23.18	23.18
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.16	0.17	0.11	0.27	0.27
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
d2, Incremental Delay [s]	50.51	0.02	0.09	0.02	0.08	1.15	10.30	1.80	2.40	7.97	10.16	10.17
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	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	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	1.00	1.00

Lane Group Results

X, volume / capacity	1.03	0.01	0.03	0.01	0.03	0.29	0.75	0.71	0.72	0.61	0.90	0.90
d, Delay for Lane Group [s/veh]	80.69	14.16	14.35	15.57	14.37	17.11	47.40	21.77	22.54	45.72	33.34	33.35
Lane Group LOS	F	B	B	B	B	B	D	C	C	D	C	C
Critical Lane Group	Yes	No	No	No	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	14.99	0.08	0.21	0.05	0.29	2.33	1.77	8.13	7.22	0.99	12.75	12.75
50th-Percentile Queue Length [ft/ln]	374.8	1.93	5.34	1.18	7.23	58.14	44.26	203.1	180.4	24.82	318.7	318.7
95th-Percentile Queue Length [veh/ln]	21.79	0.14	0.38	0.09	0.52	4.19	3.19	12.80	11.62	1.79	18.61	18.61
95th-Percentile Queue Length [ft/ln]	544.6	3.47	9.62	2.13	13.02	104.6	79.66	320.0	290.6	44.68	465.1	465.1

Movement, Approach, & Intersection Results

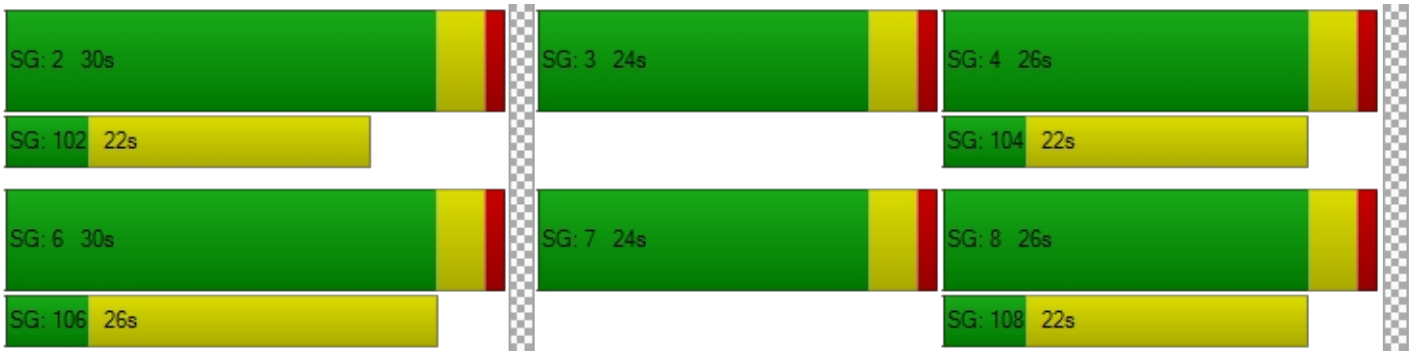
d_M, Delay for Movement [s/veh]	80.69	14.16	14.35	15.57	14.37	17.11	47.40	21.85	22.54	45.72	33.35	33.35
Movement LOS	F	B	B	B	B	B	D	C	C	D	C	C
d_A, Approach Delay [s/veh]	77.16			16.74			23.96			33.75		
Approach LOS	E			B			C			C		
d_I, Intersection Delay [s/veh]	36.02											
Intersection LOS	D											
Intersection V/C	0.787											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	1059.51	1263.75	655.33	815.02
d_p, Pedestrian Delay [s]	31.51	31.51	31.51	31.51
l_p,int, Pedestrian LOS Score for Intersection	2.517	2.448	3.760	2.776
Crosswalk LOS	B	B	D	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	650	650	550	550
d_b, Bicycle Delay [s]	18.31	18.34	21.11	21.07
l_b,int, Bicycle LOS Score for Intersection	1.968	1.782	2.552	2.668
Bicycle LOS	A	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 4: Forbes Ave/Miramar Ave

Control Type:	Two-way stop	Delay (sec / veh):	9.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

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

Volumes

Name						
Base Volume Input [veh/h]	1	20	2	4	5	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	0	0	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	23	2	4	6	2
Peak Hour Factor	1.0000	0.9500	0.9500	0.9500	0.9500	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	6	1	1	2	1
Total Analysis Volume [veh/h]	1	24	2	4	6	2
Pedestrian Volume [ped/h]	15		31		21	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.36	0.00	9.73	8.74	0.00	7.35
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.02	0.02	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.05	0.05	0.51	0.51	0.00	0.00
d_A, Approach Delay [s/veh]	0.29		9.07		1.84	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.96					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Forbes Ave/Proj Dwy

Control Type:	Two-way stop	Delay (sec / veh):	8.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

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

Volumes

Name						
Base Volume Input [veh/h]	0	20	5	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	11	0	0	1	3	30
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	20	5	1	3	30
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	5	1	0	1	8
Total Analysis Volume [veh/h]	12	21	5	1	3	32
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.00	0.00	0.03
d_M, Delay for Movement [s/veh]	7.25	0.00	0.00	0.00	8.90	8.46
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.00	0.00	0.10	0.10
95th-Percentile Queue Length [ft/ln]	0.56	0.56	0.00	0.00	2.55	2.55
d_A, Approach Delay [s/veh]	2.63		0.00		8.49	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.19					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 6: Forbes/Base Line Rd

Control Type:	Two-way stop	Delay (sec / veh):	21.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.118

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	135.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	17	44	26	641	997	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	12	18	7	0	0	4
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	29	62	33	641	997	18
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	16	9	169	262	5
Total Analysis Volume [veh/h]	31	65	35	675	1049	19
Pedestrian Volume [ped/h]	2		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.13	0.05	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	21.81	15.50	10.89	0.00	0.00	0.00
Movement LOS	C	C	B	A	A	A
95th-Percentile Queue Length [veh/ln]	0.98	0.98	0.17	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	24.47	24.47	4.29	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	17.54		0.54		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	1.10					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 7: Bonnie Brae Ave/Miramar Ave

Control Type:	All-way stop	Delay (sec / veh):	7.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.067

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	2	22	4	20	36	0	2	15	3	3	3	8
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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	3	0	0	1	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]	2	22	4	20	36	0	2	18	3	3	4	8
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
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	6	1	5	9	0	1	5	1	1	1	2
Total Analysis Volume [veh/h]	2	23	4	21	38	0	2	19	3	3	4	8
Pedestrian Volume [ped/h]	7			9			6			19		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	900	875	882	931
Degree of Utilization, x	0.03	0.07	0.03	0.02

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.10	0.22	0.08	0.05
95th-Percentile Queue Length [ft]	2.50	5.41	2.10	1.23
Approach Delay [s/veh]	7.14	7.41	7.19	6.93
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.25			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 8: Bonnie Brae Ave/Base Line Rd

Control Type:	Two-way stop	Delay (sec / veh):	19.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.149

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	135.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	42	36	15	709	893	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	12	4	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	42	36	15	721	897	21
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	9	4	190	236	6
Total Analysis Volume [veh/h]	44	38	16	759	944	22
Pedestrian Volume [ped/h]	2		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.15	0.07	0.02	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	19.88	14.55	10.22	0.00	0.00	0.00
Movement LOS	C	B	B	A	A	A
95th-Percentile Queue Length [veh/ln]	0.83	0.83	0.07	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	20.77	20.77	1.74	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	17.41		0.21		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.87					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 9: Mills Ave/Miramar Ave

Control Type:	Two-way stop	Delay (sec / veh):	13.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.049

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	30.00	100.0	100.0	30.00	100.0	100.0	100.0	100.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	12	158	33	1	224	2	1	11	42	22	3	4
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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	3	0	0	1	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]	12	158	33	1	224	2	1	14	42	22	4	4
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
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]	3	42	9	0	59	1	0	4	11	6	1	1
Total Analysis Volume [veh/h]	13	166	35	1	236	2	1	15	44	23	4	4
Pedestrian Volume [ped/h]	0			2			9			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	0.00	0.00	0.00	0.00	0.03	0.06	0.05	0.01	0.00
d_M, Delay for Movement [s/veh]	7.78	0.00	0.00	7.63	0.00	0.00	12.80	13.03	10.10	13.18	12.66	9.59
Movement LOS	A	A	A	A	A	A	B	B	B	B	B	A
95th-Percentile Queue Length [veh/ln]	0.03	0.00	0.00	0.00	0.00	0.00	0.29	0.29	0.29	0.20	0.20	0.20
95th-Percentile Queue Length [ft/ln]	0.75	0.00	0.00	0.05	0.00	0.00	7.32	7.32	7.32	4.92	4.92	4.92
d_A, Approach Delay [s/veh]	0.47			0.03			10.88			12.65		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	2.12											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 10: Mills Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	23.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.629

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	105.0	100.0	100.0	145.0	100.0	145.0	175.0	100.0	100.0	165.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	315	21	8	5	39	300	207	513	398	25	715	4
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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]	2	0	0	0	0	0	0	5	7	0	2	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	2	0	0	75	0	0	101	0	0	1
Total Hourly Volume [veh/h]	317	21	6	5	39	225	207	518	304	25	717	3
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
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]	83	6	2	1	10	59	54	136	80	7	189	1
Total Analysis Volume [veh/h]	334	22	6	5	41	237	218	545	320	26	755	3
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			12			5		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	12			5			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	8			2			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			2			8		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	11			10			13			10		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	65
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	16	23	0	16	23	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	14	0	0	14	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	65	65	65	65	65	65	65	65	65	65	65	65
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	27	27	27	27	27	27	10	24	24	2	16	16
g / C, Green / Cycle	0.42	0.42	0.42	0.42	0.42	0.42	0.15	0.36	0.36	0.03	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.30	0.01	0.00	0.00	0.02	0.15	0.12	0.25	0.26	0.01	0.20	0.20
s, saturation flow rate [veh/h]	1100	1870	1552	1375	1870	1560	1781	1870	1574	1781	1870	1867
c, Capacity [veh/h]	524	790	656	636	790	659	265	676	569	56	457	456
d1, Uniform Delay [s]	18.18	10.97	10.88	12.46	11.08	12.74	26.84	17.57	17.83	30.95	23.28	23.29
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.13	0.11	0.11	0.11
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
d2, Incremental Delay [s]	5.82	0.07	0.03	0.02	0.12	1.53	6.36	1.22	1.92	5.98	3.96	3.98
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	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	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	1.00	1.00

Lane Group Results

X, volume / capacity	0.64	0.03	0.01	0.01	0.05	0.36	0.82	0.68	0.71	0.47	0.83	0.83
d, Delay for Lane Group [s/veh]	24.00	11.03	10.91	12.48	11.21	14.26	33.20	18.79	19.75	36.93	27.24	27.26
Lane Group LOS	C	B	B	B	B	B	C	B	B	D	C	C
Critical Lane Group	Yes	No	No	No	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.87	0.18	0.05	0.05	0.34	2.38	3.57	5.49	5.00	0.48	5.62	5.62
50th-Percentile Queue Length [ft/ln]	121.7	4.55	1.25	1.14	8.59	59.48	89.25	137.3	124.9	11.96	140.5	140.4
95th-Percentile Queue Length [veh/ln]	8.49	0.33	0.09	0.08	0.62	4.28	6.43	9.34	8.67	0.86	9.51	9.50
95th-Percentile Queue Length [ft/ln]	212.1	8.20	2.25	2.05	15.45	107.0	160.6	233.4	216.6	21.53	237.7	237.5

Movement, Approach, & Intersection Results

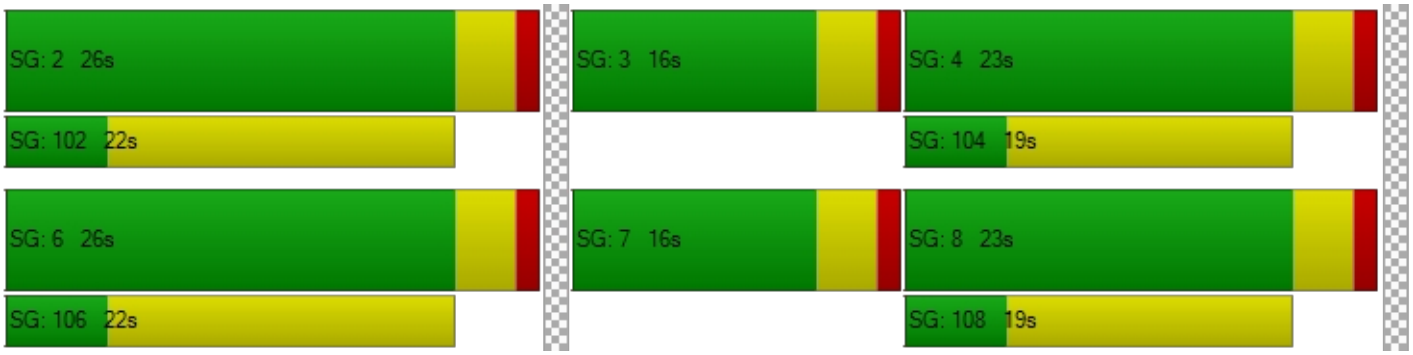
d_M, Delay for Movement [s/veh]	24.00	11.03	10.91	12.48	11.21	14.26	33.20	18.94	19.75	36.93	27.25	27.26
Movement LOS	C	B	B	B	B	B	C	B	B	D	C	C
d_A, Approach Delay [s/veh]	23.00			13.79			22.05			27.57		
Approach LOS	C			B			C			C		
d_I, Intersection Delay [s/veh]	22.98											
Intersection LOS	C											
Intersection V/C	0.629											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	1048.89	3631.99	4597.58	2303.79
d_p, Pedestrian Delay [s]	24.12	24.12	24.12	24.12
l_p,int, Pedestrian LOS Score for Intersection	2.327	2.369	3.408	2.555
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]	677	677	585	585
d_b, Bicycle Delay [s]	14.30	14.29	16.38	16.36
l_b,int, Bicycle LOS Score for Intersection	2.160	2.150	2.536	2.207
Bicycle LOS	B	B	B	B

Sequence

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



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Scenario 9 Horizon Year AM + Project
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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	Towne Ave/Base Line Rd	319	15	132	4	4	6	19	301	303	256	399	4	1762

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Mountain Ave/Base Line Rd	245	5	46	8	36	144	27	498	308	45	809	2	2173

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Indian Hill Blvd/Base Line Rd	440	7	24	4	25	231	74	567	508	42	1233	2	3157

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
4	Forbes Ave/Miramar Ave	1	23	2	4	6	2	38

ID	Intersection Name	Northbound		Southbound		Eastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
5	Forbes Ave/Proj Dwy	11	20	5	1	3	30	70

ID	Intersection Name	Southbound		Eastbound		Westbound		Total Volume
		Left	Right	Left	Thru	Thru	Right	
6	Forbes/Base Line Rd	29	62	33	641	997	18	1780

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7	Bonnie Brae Ave/Miramar Ave	2	22	4	20	36	0	2	18	3	3	4	8	122

ID	Intersection Name	Southbound		Eastbound		Westbound		Total Volume
		Left	Right	Left	Thru	Thru	Right	
8	Bonnie Brae Ave/Base Line Rd	42	36	15	721	897	21	1732

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
9	Mills Ave/Miramar Ave	12	158	33	1	224	2	1	14	42	22	4	4	517

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
10	Mills Ave/Base Line Rd	317	21	8	5	39	300	207	518	405	25	717	4	2566

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Scenario 10 Horizon Year PM + Project
7/13/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Towne Ave/Base Line Rd	Signalized	HCM 6th Edition	EB Thru	0.655	77.3	E
2	Mountain Ave/Base Line Rd	Signalized	HCM 6th Edition	EB Left	0.434	20.4	C
3	Indian Hill Blvd/Base Line Rd	Signalized	HCM 6th Edition	WB Left	0.559	26.5	C
4	Forbes Ave/Miramar Ave	Two-way stop	HCM 6th Edition	EB Thru	0.003	9.6	A
5	Forbes Ave/Proj Dwy	Two-way stop	HCM 6th Edition	EB Left	0.002	9.1	A
6	Forbes/Base Line Rd	Two-way stop	HCM 6th Edition	SB Left	0.090	17.6	C
7	Bonnie Brae Ave/Miramar Ave	All-way stop	HCM 6th Edition	SB Thru	0.055	7.2	A
8	Bonnie Brae Ave/Base Line Rd	Two-way stop	HCM 6th Edition	SB Left	0.072	16.2	C
9	Mills Ave/Miramar Ave	Two-way stop	HCM 6th Edition	WB Left	0.026	12.0	B
10	Mills Ave/Base Line Rd	Signalized	HCM 6th Edition	WB Left	0.439	20.3	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: Towne Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	77.3
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.655

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	85.00	100.0	85.00	165.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	2	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	500.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	12	1	597	23	1	1	1	890	15	440	316	8
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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	9	0	0	0	0	2	0	6	1	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	152	0	0	0	0	0	4	0	0	2
Total Hourly Volume [veh/h]	12	1	454	23	1	1	1	892	11	446	317	6
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
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]	3	0	119	6	0	0	0	235	3	117	83	2
Total Analysis Volume [veh/h]	13	1	478	24	1	1	1	939	12	469	334	6
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			1		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			1			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	4			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			4		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	8			22			6			5		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Isolated
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	Split	Split	Split	Split	Split	Split	Permi	Permi	Permi	ProtP	Permi	Permi
Signal Group	0	6	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	0	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	35	0	0	37	0	0	48	0	10	58	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	26	0	0	28	0	0	38	0	0	17	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]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No			No		No	No	
Maximum Recall		No			No			No		No	No	
Pedestrian Recall		No			No			No		No	No	
Detector Location [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
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	C	R	C	L	C	R	L	C	C
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	27	27	27	30	30	30	64	64	64
g / C, Green / Cycle	0.21	0.21	0.21	0.23	0.23	0.23	0.49	0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.01	0.18	0.01	0.00	0.26	0.01	0.40	0.09	0.09
s, saturation flow rate [veh/h]	1787	2691	1776	1040	3560	1561	1185	1870	1856
c, Capacity [veh/h]	372	560	369	226	822	360	529	919	913
d1, Uniform Delay [s]	41.09	49.11	41.38	45.48	50.01	38.76	36.73	18.49	18.49
k, delay calibration	0.50	0.50	0.50	0.11	0.14	0.11	0.44	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.19	15.24	0.37	0.01	68.78	0.04	17.32	0.10	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
Rp, platoon ratio	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

Lane Group Results

X, volume / capacity	0.04	0.85	0.07	0.00	1.14	0.03	0.89	0.19	0.19
d, Delay for Lane Group [s/veh]	41.28	64.36	41.74	45.48	118.7	38.80	54.05	18.59	18.59
Lane Group LOS	D	E	D	D	F	D	D	B	B
Critical Lane Group	No	Yes	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.38	8.59	0.72	0.03	21.14	0.30	12.39	2.93	2.91
50th-Percentile Queue Length [ft/ln]	9.56	214.77	17.91	0.70	528.5	7.62	309.7	73.14	72.72
95th-Percentile Queue Length [veh/ln]	0.69	13.40	1.29	0.05	30.87	0.55	18.16	5.27	5.24
95th-Percentile Queue Length [ft/ln]	17.21	334.95	32.24	1.25	771.8	13.71	454.0	131.6	130.8

Movement, Approach, & Intersection Results

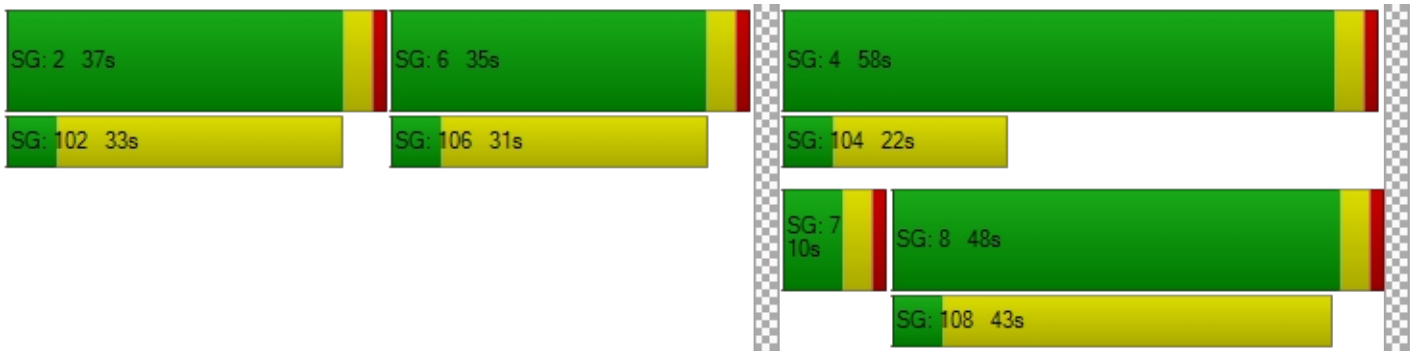
d_M, Delay for Movement [s/veh]	41.28	41.28	64.36	41.74	41.74	41.74	45.48	118.7	38.80	54.05	18.59	18.59
Movement LOS	D	D	E	D	D	D	D	F	D	D	B	B
d_A, Approach Delay [s/veh]	63.70			41.74			117.70			39.14		
Approach LOS	E			D			F			D		
d_I, Intersection Delay [s/veh]	77.29											
Intersection LOS	E											
Intersection V/C	0.655											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	10109.65	0.00	464.17
d_p, Pedestrian Delay [s]	56.31	56.31	56.31	56.31
l_p,int, Pedestrian LOS Score for Intersection	3.036	1.753	2.689	2.790
Crosswalk LOS	C	A	B	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	477	508	677	831
d_b, Bicycle Delay [s]	37.85	36.59	28.53	22.27
l_b,int, Bicycle LOS Score for Intersection	2.622	1.603	2.348	2.229
Bicycle LOS	B	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 2: Mountain Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	20.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.434

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	105.0	100.0	100.0	200.0	100.0	100.0	120.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	18	18	229	62	21	16	9	831	24	123	480	82
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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	2	0	0	0	0	11	0	1	7	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	58	0	0	4	0	0	6	0	0	21
Total Hourly Volume [veh/h]	18	18	173	62	21	12	9	842	18	124	487	61
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
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]	5	5	46	16	6	3	2	222	5	33	128	16
Total Analysis Volume [veh/h]	19	19	182	65	22	13	9	886	19	131	513	64
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			2			1		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	2			1			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			1			4		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	4			1			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	8			20			5			8		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	9	19	0	15	25	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	10	0	0	10	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	C	R	L	C	L	C	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	25	25	25	25	1	17	17	6	22	22
g / C, Green / Cycle	0.42	0.42	0.42	0.42	0.01	0.28	0.28	0.10	0.37	0.37
(v / s)_i Volume / Saturation Flow Rate	0.02	0.12	0.06	0.02	0.01	0.24	0.24	0.07	0.16	0.16
s, saturation flow rate [veh/h]	1553	1559	1179	1738	1781	1870	1853	1781	1870	1784
c, Capacity [veh/h]	745	658	514	733	25	526	522	172	681	650
d1, Uniform Delay [s]	10.24	11.33	14.07	10.23	29.32	20.46	20.47	26.42	14.38	14.41
k, delay calibration	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
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]	0.13	1.04	0.51	0.12	8.79	4.35	4.43	6.74	0.43	0.46
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	0.05	0.28	0.13	0.05	0.36	0.86	0.86	0.76	0.43	0.44
d, Delay for Lane Group [s/veh]	10.37	12.37	14.58	10.36	38.11	24.80	24.90	33.16	14.81	14.87
Lane Group LOS	B	B	B	B	D	C	C	C	B	B
Critical Lane Group	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.29	1.58	0.64	0.27	0.18	6.08	6.05	2.05	2.76	2.67
50th-Percentile Queue Length [ft/ln]	7.22	39.46	15.93	6.66	4.57	151.9	151.2	51.15	69.06	66.84
95th-Percentile Queue Length [veh/ln]	0.52	2.84	1.15	0.48	0.33	10.12	10.08	3.68	4.97	4.81
95th-Percentile Queue Length [ft/ln]	12.99	71.02	28.67	11.98	8.23	253.0	252.0	92.07	124.3	120.3

Movement, Approach, & Intersection Results

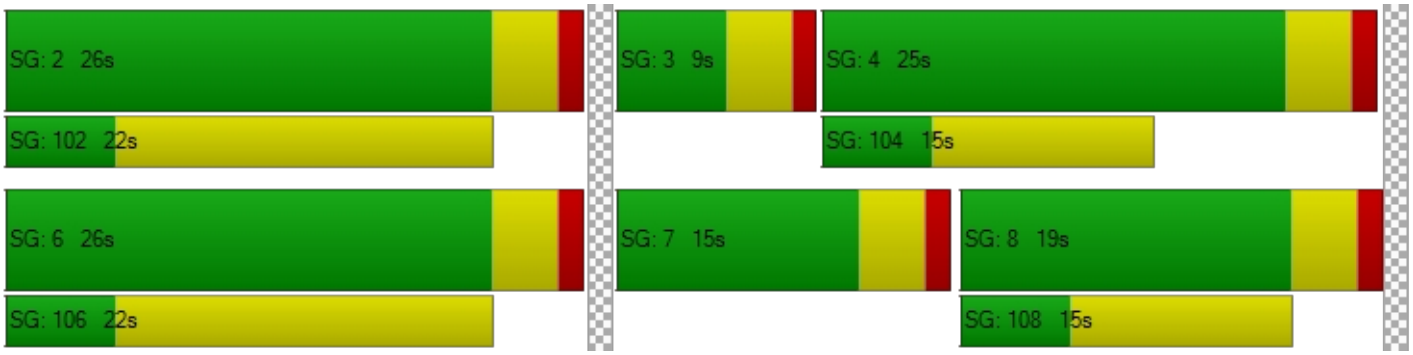
d_M, Delay for Movement [s/veh]	10.37	10.37	12.37	14.58	10.36	10.36	38.11	24.85	24.90	33.16	14.84	14.87
Movement LOS	B	B	B	B	B	B	D	C	C	C	B	B
d_A, Approach Delay [s/veh]	12.02			13.10			24.98			18.23		
Approach LOS	B			B			C			B		
d_I, Intersection Delay [s/veh]	20.44											
Intersection LOS	C											
Intersection V/C	0.434											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	9101.44	15566.79	18774.41	3856.02
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.152	1.997	2.603	2.777
Crosswalk LOS	B	A	B	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	733	733	500	700
d_b, Bicycle Delay [s]	12.08	12.15	16.92	12.73
l_b,int, Bicycle LOS Score for Intersection	2.018	1.731	2.319	2.161
Bicycle LOS	B	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 3: Indian Hill Blvd/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	26.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.559

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	165.0	100.0	100.0	135.0	100.0	100.0	174.0	100.0	100.0	175.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
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	100.0
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	69	50	347	60	22	14	27	836	32	218	448	100
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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	7	0	0	0	0	13	0	5	8	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	89	0	0	4	0	0	8	0	0	25
Total Hourly Volume [veh/h]	69	50	265	60	22	10	27	849	24	223	456	75
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
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]	18	13	70	16	6	3	7	223	6	59	120	20
Total Analysis Volume [veh/h]	73	53	279	63	23	11	28	894	25	235	480	79
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			47			11		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	47			11			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	10			3			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			3			10		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	2			2			5			3		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	70
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	30	0	0	30	0	13	27	0	13	27	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	17	0	0	17	0	0	17	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	C	L	C	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	29	29	29	29	29	29	2	20	20	9	27	27
g / C, Green / Cycle	0.41	0.41	0.41	0.41	0.41	0.41	0.03	0.29	0.29	0.13	0.39	0.39
(v / s)_i Volume / Saturation Flow Rate	0.05	0.03	0.18	0.06	0.01	0.01	0.02	0.25	0.25	0.13	0.15	0.15
s, saturation flow rate [veh/h]	1372	1870	1557	1044	1870	1659	1781	1870	1844	1781	1870	1766
c, Capacity [veh/h]	612	762	634	362	762	676	56	547	540	229	729	688
d1, Uniform Delay [s]	14.60	12.65	14.97	21.07	12.40	12.42	33.35	23.26	23.29	30.50	15.40	15.42
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.14	0.14	0.11	0.11	0.11
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
d2, Incremental Delay [s]	0.40	0.18	2.21	1.05	0.05	0.07	6.69	4.65	4.89	34.54	0.34	0.37
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	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	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	1.00	1.00

Lane Group Results

X, volume / capacity	0.12	0.07	0.44	0.17	0.02	0.02	0.50	0.84	0.85	1.03	0.39	0.40
d, Delay for Lane Group [s/veh]	15.00	12.83	17.18	22.12	12.46	12.48	40.04	27.91	28.18	65.04	15.74	15.79
Lane Group LOS	B	B	B	C	B	B	D	C	C	F	B	B
Critical Lane Group	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.79	0.51	3.32	0.89	0.16	0.16	0.56	7.37	7.34	5.89	3.10	2.96
50th-Percentile Queue Length [ft/ln]	19.68	12.71	83.11	22.30	4.03	3.99	13.96	184.3	183.6	147.2	77.54	74.12
95th-Percentile Queue Length [veh/ln]	1.42	0.92	5.98	1.61	0.29	0.29	1.01	11.83	11.79	9.98	5.58	5.34
95th-Percentile Queue Length [ft/ln]	35.43	22.88	149.6	40.15	7.26	7.18	25.13	295.6	294.7	249.4	139.5	133.4

Movement, Approach, & Intersection Results

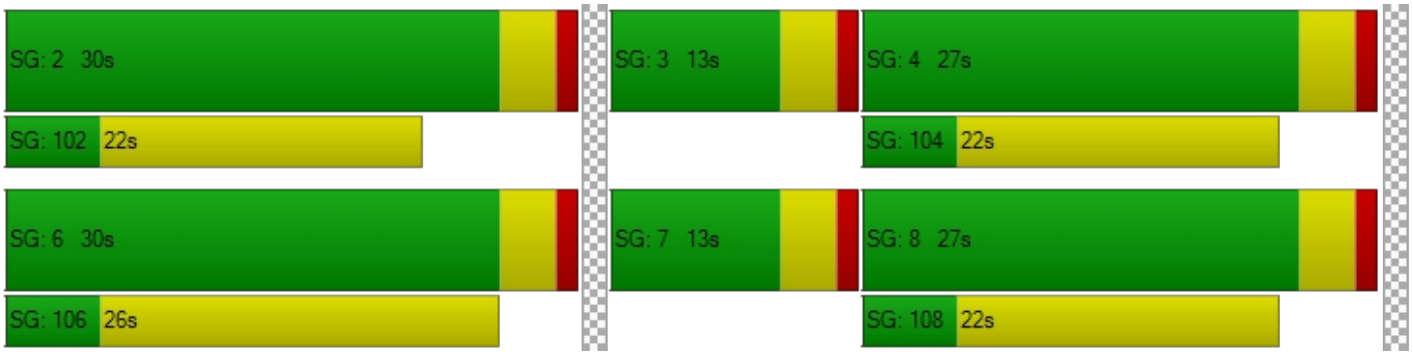
d_M, Delay for Movement [s/veh]	15.00	12.83	17.18	22.12	12.47	12.48	40.04	28.04	28.18	65.04	15.76	15.79
Movement LOS	B	B	B	C	B	B	D	C	C	F	B	B
d_A, Approach Delay [s/veh]	16.22			18.74			28.40			30.35		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	26.47											
Intersection LOS	C											
Intersection V/C	0.559											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	299.41	1219.52	4436.71	956.24
d_p, Pedestrian Delay [s]	26.58	26.58	26.58	26.58
l_p,int, Pedestrian LOS Score for Intersection	2.568	2.350	2.701	2.915
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	743	743	657	657
d_b, Bicycle Delay [s]	13.84	13.84	15.82	15.80
l_b,int, Bicycle LOS Score for Intersection	1.967	1.643	2.347	2.235
Bicycle LOS	A	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 4: Forbes Ave/Miramar Ave

Control Type:	Two-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

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

Volumes

Name						
Base Volume Input [veh/h]	1	12	2	1	9	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	0	0	4	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	14	2	1	13	3
Peak Hour Factor	1.0000	0.9500	0.9500	0.9500	0.9500	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	4	1	0	3	1
Total Analysis Volume [veh/h]	1	15	2	1	14	3
Pedestrian Volume [ped/h]	10		26		16	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.36	0.00	9.61	8.68	0.00	7.33
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.05	0.05	0.27	0.27	0.00	0.00
d_A, Approach Delay [s/veh]	0.46		9.30		1.29	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.59					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Forbes Ave/Proj Dwy

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

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

Volumes

Name						
Base Volume Input [veh/h]	0	12	9	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	33	0	0	4	2	21
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	12	9	4	2	21
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	3	2	1	1	6
Total Analysis Volume [veh/h]	35	13	9	4	2	22
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.00	0.02
d_M, Delay for Movement [s/veh]	7.29	0.00	0.00	0.00	9.14	8.44
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.00	0.00	0.07	0.07
95th-Percentile Queue Length [ft/ln]	1.67	1.67	0.00	0.00	1.75	1.75
d_A, Approach Delay [s/veh]	5.32		0.00		8.50	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.40					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 6: Forbes/Base Line Rd

Control Type:	Two-way stop	Delay (sec / veh):	17.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.090

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	135.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	20	28	50	1014	619	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	8	13	20	0	0	13
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	41	70	1014	619	34
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	11	18	267	163	9
Total Analysis Volume [veh/h]	29	43	74	1067	652	36
Pedestrian Volume [ped/h]	3		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.07	0.08	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	17.63	12.01	9.37	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.55	0.55	0.27	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	13.76	13.76	6.73	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	14.27		0.61		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.91					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 7: Bonnie Brae Ave/Miramar Ave

Control Type:	All-way stop	Delay (sec / veh):	7.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.055

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	2	25	11	13	30	2	2	10	0	6	4	22
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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	2	0	0	4	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]	2	25	11	13	30	2	2	12	0	6	8	22
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
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	7	3	3	8	1	1	3	0	2	2	6
Total Analysis Volume [veh/h]	2	26	12	14	32	2	2	13	0	6	8	23
Pedestrian Volume [ped/h]	1			0			1			2		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	919	875	861	949
Degree of Utilization, x	0.04	0.05	0.02	0.04

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.14	0.17	0.05	0.12
95th-Percentile Queue Length [ft]	3.41	4.34	1.33	3.04
Approach Delay [s/veh]	7.10	7.35	7.26	6.95
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.16			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 8: Bonnie Brae Ave/Base Line Rd

Control Type:	Two-way stop	Delay (sec / veh):	16.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.072

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	135.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	25	39	46	864	605	43
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	8	13	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	25	39	46	872	618	43
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	10	12	229	163	11
Total Analysis Volume [veh/h]	26	41	48	918	651	45
Pedestrian Volume [ped/h]	1		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.06	0.05	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	16.18	11.71	9.25	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.47	0.47	0.17	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	11.69	11.69	4.25	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.45		0.46		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.78					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 9: Mills Ave/Miramar Ave

Control Type:	Two-way stop	Delay (sec / veh):	12.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.026

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	30.00	100.0	100.0	30.00	100.0	100.0	100.0	100.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	17	163	9	3	148	3	6	6	26	13	6	0
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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	2	0	0	4	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]	17	163	9	3	148	3	6	8	26	13	10	0
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
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]	4	43	2	1	39	1	2	2	7	3	3	0
Total Analysis Volume [veh/h]	18	172	9	3	156	3	6	8	27	14	11	0
Pedestrian Volume [ped/h]	0			4			5			1		

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	0.00	0.00	0.00	0.01	0.01	0.03	0.03	0.02	0.00
d_M, Delay for Movement [s/veh]	7.59	0.00	0.00	7.59	0.00	0.00	11.84	11.99	9.39	12.01	11.97	9.50
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.04	0.00	0.00	0.01	0.00	0.00	0.18	0.18	0.18	0.15	0.15	0.15
95th-Percentile Queue Length [ft/ln]	0.97	0.00	0.00	0.16	0.00	0.00	4.48	4.48	4.48	3.63	3.63	3.63
d_A, Approach Delay [s/veh]	0.69			0.14			10.26			11.99		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	2.06											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 10: Mills Ave/Base Line Rd

Control Type:	Signalized	Delay (sec / veh):	20.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.439

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	105.0	100.0	100.0	145.0	100.0	145.0	175.0	100.0	100.0	165.0	100.0	100.0
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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	60	98	178	107	70	43	46	876	38	136	482	130
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 [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	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]	7	0	0	0	0	0	0	3	5	0	6	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	45	0	0	11	0	0	11	0	0	33
Total Hourly Volume [veh/h]	67	98	133	107	70	32	46	879	32	136	488	97
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
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]	18	26	35	28	18	8	12	231	8	36	128	26
Total Analysis Volume [veh/h]	71	103	140	113	74	34	48	925	34	143	514	102
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			5			3		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	5			3			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	2			1			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	0			0			1			2		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	16			17			16			46		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Semi-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	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	5	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	26	0	11	23	0	11	23	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	14	0	0	14	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]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [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
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	R	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	24	24	24	24	24	24	3	18	18	6	21	21
g / C, Green / Cycle	0.40	0.40	0.40	0.40	0.40	0.40	0.05	0.30	0.30	0.10	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.06	0.06	0.09	0.10	0.04	0.02	0.03	0.26	0.26	0.08	0.17	0.17
s, saturation flow rate [veh/h]	1285	1870	1554	1136	1870	1554	1781	1870	1839	1781	1870	1713
c, Capacity [veh/h]	559	751	624	496	751	624	86	554	545	181	655	600
d1, Uniform Delay [s]	13.77	11.36	11.77	14.90	11.18	10.97	27.94	20.02	20.05	26.31	15.25	15.35
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
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
d2, Incremental Delay [s]	0.47	0.38	0.83	1.07	0.26	0.17	5.63	4.39	4.59	7.39	0.55	0.64
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	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	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	1.00	1.00

Lane Group Results

X, volume / capacity	0.13	0.14	0.22	0.23	0.10	0.05	0.56	0.87	0.87	0.79	0.48	0.50
d, Delay for Lane Group [s/veh]	14.23	11.74	12.61	15.96	11.44	11.14	33.56	24.41	24.64	33.70	15.81	16.00
Lane Group LOS	B	B	B	B	B	B	C	C	C	C	B	B
Critical Lane Group	No	No	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.68	0.85	1.23	1.18	0.60	0.27	0.78	6.43	6.38	2.25	3.12	2.98
50th-Percentile Queue Length [ft/ln]	17.01	21.29	30.79	29.58	15.01	6.87	19.38	160.6	159.5	56.30	78.08	74.62
95th-Percentile Queue Length [veh/ln]	1.22	1.53	2.22	2.13	1.08	0.49	1.40	10.58	10.53	4.05	5.62	5.37
95th-Percentile Queue Length [ft/ln]	30.62	38.32	55.43	53.25	27.02	12.37	34.88	264.6	263.1	101.3	140.5	134.3

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	14.23	11.74	12.61	15.96	11.44	11.14	33.56	24.52	24.64	33.70	15.88	16.00
Movement LOS	B	B	B	B	B	B	C	C	C	C	B	B
d_A, Approach Delay [s/veh]	12.69			13.71			24.96			19.25		
Approach LOS	B			B			C			B		
d_I, Intersection Delay [s/veh]	20.32											
Intersection LOS	C											
Intersection V/C	0.439											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	3862.40	5922.28	18445.76	7999.72
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.327	2.254	2.719	2.881
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	733	733	633	633
d_b, Bicycle Delay [s]	12.13	12.14	14.12	14.34
l_b,int, Bicycle LOS Score for Intersection	2.152	1.942	2.399	2.213
Bicycle LOS	B	A	B	B

Sequence

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

Vistro File: C:\...\Vistro.vistro
Report File: C:\...\Horizon PM + Project.pdf
Scenario 10 Horizon Year PM + Project
7/13/2022

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	Towne Ave/Base Line Rd	12	1	606	23	1	1	1	892	15	446	317	8	2323

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Mountain Ave/Base Line Rd	18	18	231	62	21	16	9	842	24	124	487	82	1934

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Indian Hill Blvd/Base Line Rd	69	50	354	60	22	14	27	849	32	223	456	100	2256

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
4	Forbes Ave/Miramar Ave	1	14	2	1	13	3	34

ID	Intersection Name	Northbound		Southbound		Eastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
5	Forbes Ave/Proj Dwy	33	12	9	4	2	21	81

ID	Intersection Name	Southbound		Eastbound		Westbound		Total Volume
		Left	Right	Left	Thru	Thru	Right	
6	Forbes/Base Line Rd	28	41	70	1014	619	34	1806

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7	Bonnie Brae Ave/Miramar Ave	2	25	11	13	30	2	2	12	0	6	8	22	133

ID	Intersection Name	Southbound		Eastbound		Westbound		Total Volume
		Left	Right	Left	Thru	Thru	Right	
8	Bonnie Brae Ave/Base Line Rd	25	39	46	872	618	43	1643

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
9	Mills Ave/Miramar Ave	17	163	9	3	148	3	6	8	26	13	10	0	406

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
10	Mills Ave/Base Line Rd	67	98	178	107	70	43	46	879	43	136	488	130	2285

APPENDIX G – CA-MUTCD REFERENCE FIGURES

Figure 2C-2. Example of Warning Signs for a Turn

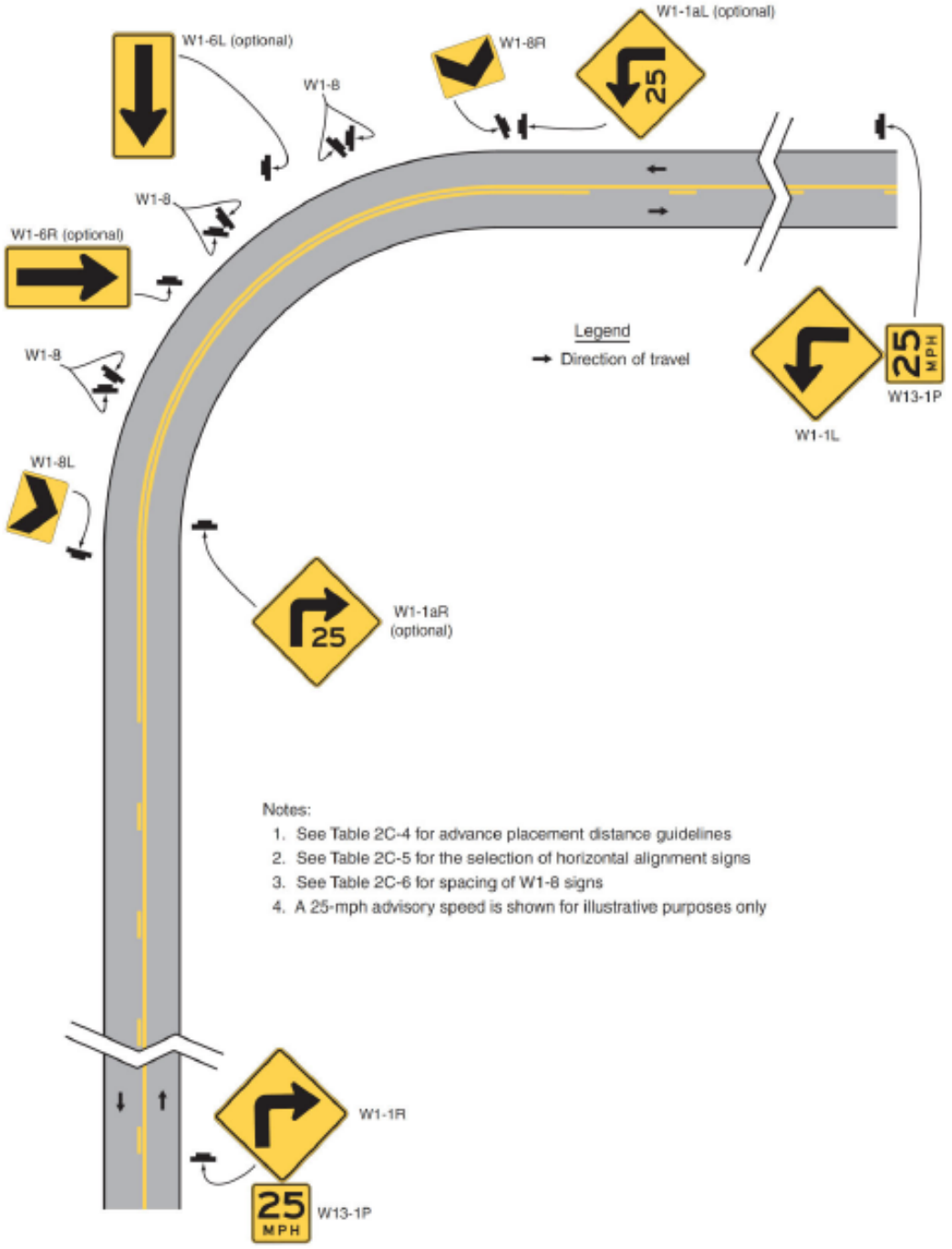


Figure 3B-17 (CA). Examples of Crosswalk Enhancements at Uncontrolled Multilane Approaches