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# MAVERIK TRAFFIC IMPACT STUDY MONUMENT, CO

NOVEMBER 18, 2020

PROJECT# CO-2608-2008



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# Introduction and Executive Summary

## PURPOSE OF REPORT AND STUDY OBJECTIVES

The purpose of this Traffic Impact Study (TIS) is to identify the traffic impacts for the proposed development, located in Monument, CO. The study objectives are to define the study intersections, estimate trip generation and distribution for the site before and after development construction, analyze AM and PM peak traffic conditions with and without the project traffic in 2040, and recommend improvements to mitigate traffic impacts if necessary.

## EXISTING LAND USE & STUDY BOUNDARIES

**Site Location and Study Area** – The land use for the existing site is an open plot of land located southwest of I-25 and SR-404 (County Line Road) junction (see Figure 1). The boundaries for this TIS study are along SR-404 from Beacon Lite Road to Doewood Drive. Major nearby streets surrounding the project area include the on and off-ramps of I-25, County Line Road (SR-404), and Beacon Lite Rd. This study will address the following intersections near the study area.

- SR-404 & I-25 Southbound On/Off Ramps
- SR-404 & I-25 Northbound On/Off Ramps
- SR-404 & Beacon Lite Road
- SR-404 & Monument Hill Road
- SR-404 & Doewood Drive

**Proposed Development Use** – The development will be a gas station with approximately 19 fuel pump stations. It will consist of 12 automobile pumps and seven large truck fuel pumps with a 5,951 square foot convenience store. The Parking lot will consist of 48 parking stalls.

**Surrounding Land Use** – The existing and proposed land uses in the vicinity of the development is residential and church.



## CONCLUSIONS AND RECOMMENDATIONS

1. Existing Conditions – All study intersections operate at an acceptable LOS, no recommended mitigations at this time. Due to insufficient historical data on the CDOT OTIS website, no COVID adjustments were included in this study.
2. The proposed development is estimated to generate approximately 3,902 new external daily trips with 237 during the AM peak and 266 during the PM peak. The pass-by trip reduction for the AM & PM peak hour is 62% & 56%, respectively.
3. Existing plus Project Conditions - All intersection function at an acceptable LOS. No mitigations are recommended at this time.
4. 2040 Background Conditions - Using the CDOT OTIS site, a growth factor of 2.12 was used to project 2020 traffic volumes to 2040.
  - The southbound left-turn lane of intersection SR-404 & I-25 southbound on/off fails with a delay of 38.98 sec/veh during the PM.
  - All other study intersections function at acceptable LOS.

### Recommended Mitigations

- Add traffic signal to intersection SR-404 & I-25 southbound on/off ramp (see **Figure 15**)
5. 2040 Background plus Project Condition - All study intersections function at acceptable LOS. No mitigations are recommended at this time.



# Proposed Development

## SITE LOCATION

The site for the Maverik Gas Station project is located on the west side of the I-25 interchange (exit 163), it is southeast side of the County Line Road (SR-404) & Beacon Lite Road intersection in Monument Colorado (see **Figure 1**).

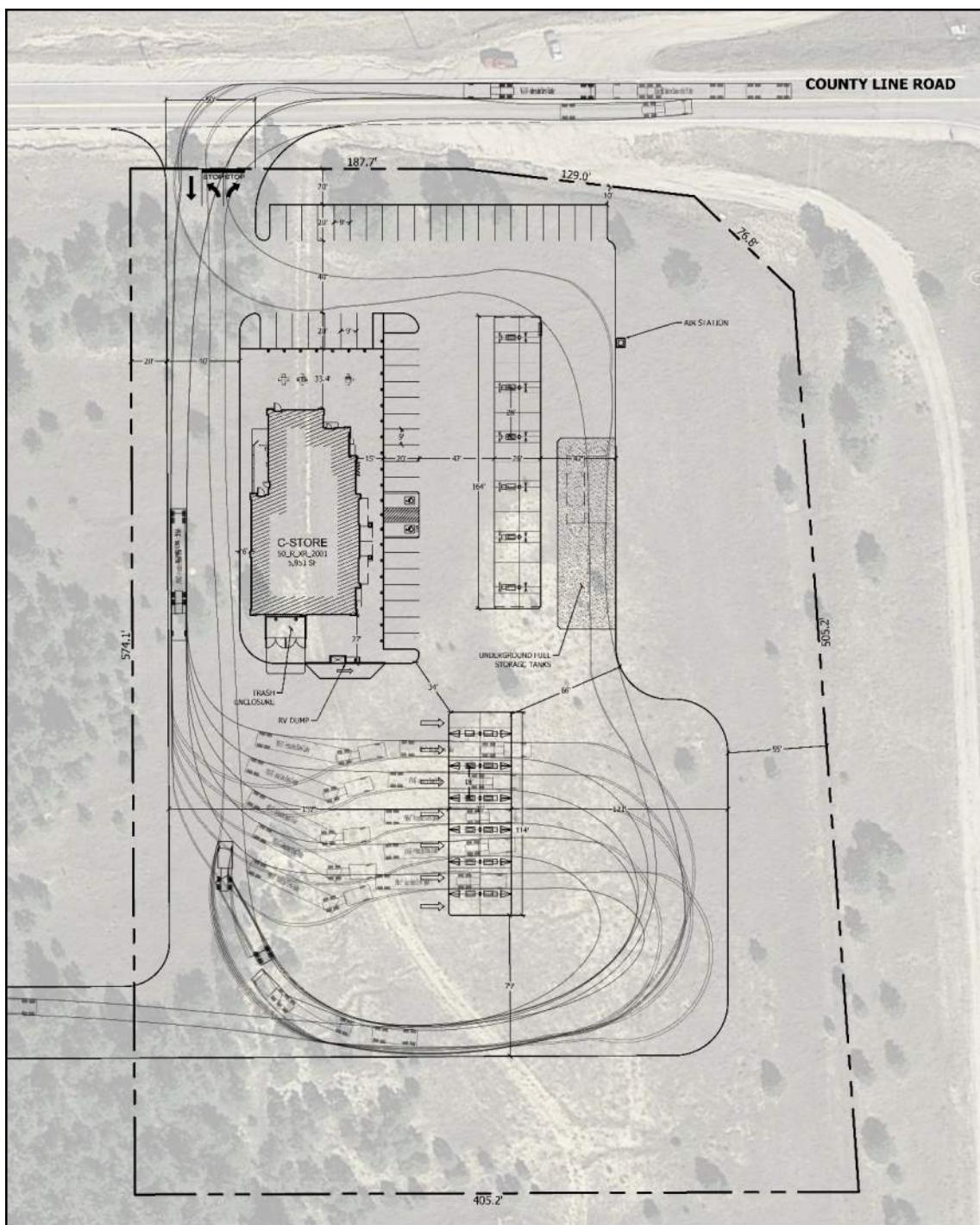
Figure 1: Project Location



## SITE PLAN AND PREFERRED ACCESS

The site will have two full accesses, one on the north side of the project on County Line Road. The Other access will be on west side of the development on Beacon Lite Road. The site plan is shown in **Figure 2**.

Figure 2: Site Plan





## Study Area Conditions

### STUDY AREA

The major streets potentially impacted by the Maverik gas station development are SR-404 (County Line Road) and Beacon Lite Road. The functional classification map, seen in **Figure 3**, shows the functional classification of roadways and stop-control devices of the intersections surrounding the project area. The speed limits listed in the description are the currently posted speed limits.

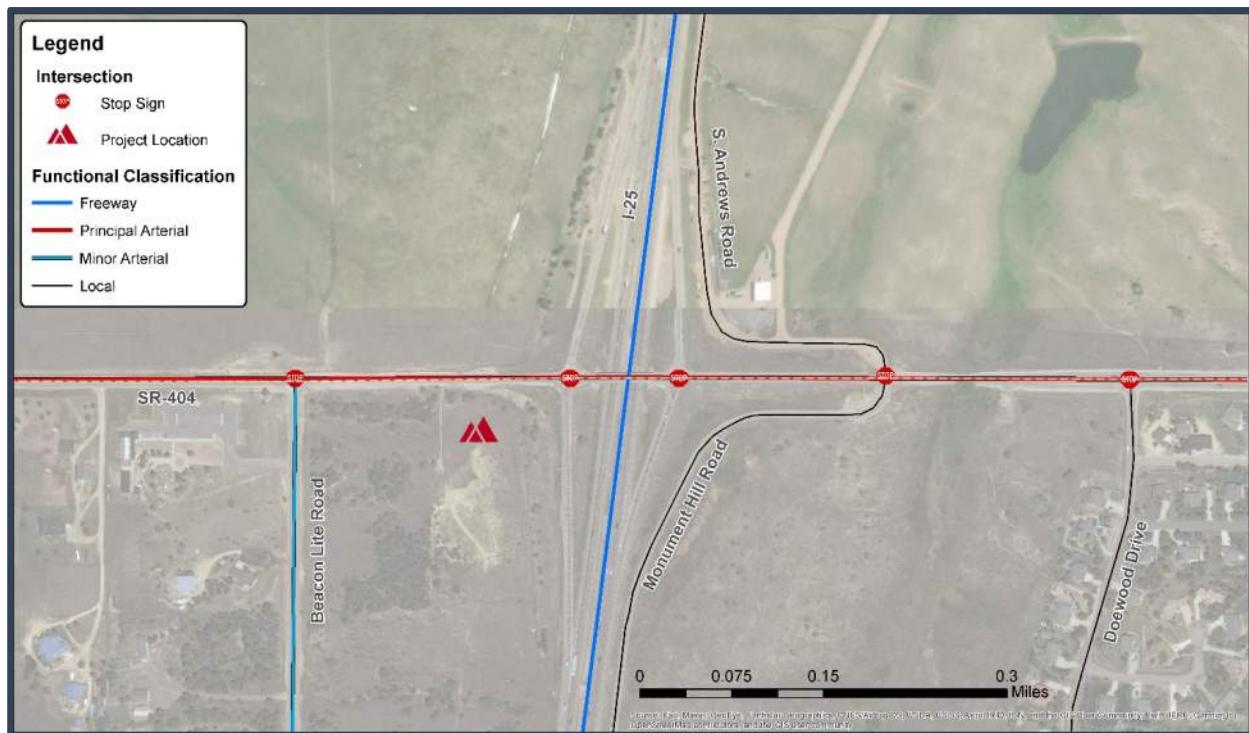
**County Line Road:** An east/west running road, it classifies as a principal arterial on the segment coming both on and off I-25, with a speed limit of 45 mph. This principal arterial is a two-lane roadway that overpasses I-25 with little to no shoulder and no median lane.

**Beacon Lite Road:** A north/south running grated road, it classifies as a minor arterial with a speed limit of 35 mph.

**Monument Hill Road:** A north/south running grated road, it classifies as a local road with a speed limit of 25 mph.

**Doewood Drive:** A north/south running grated road, it classifies as a local road with a speed limit of 25 mph.

Figure 3: Roadway Classification Map





## Project Traffic Volumes

Project traffic volumes were estimated and distributed using the industry-standard trip generation literature and using existing traffic counts and engineering judgment to distribute project traffic to the existing road network.

### TRIP GENERATION

The trip generation was estimated using the *ITE Trip Generation Manual 10<sup>th</sup> Edition*. The following land use was used:

- *Gasoline/Service Station with Convenience Market (ITE 945)* – This land use includes gasoline/service stations with markets where the primary business is the fueling of motor vehicles. These service stations may also have ancillary facilities for servicing and repairing motor vehicles and may have a car wash. Some commonly sold convenience items are newspapers, coffee, or other beverages, and snack items that are usually consumed in the car. The sites included in this land use category have the following specific characteristic:

The number of vehicles fueling positions is at least 10.

Convenience market (Land Use 851), convenience market with gasoline pumps (Land Use 853), gasoline/service station (Land Use 944), truck stop (Land Use 950), and super convenience market/gas station (Land Use 960) are related uses.

Based on the ITE methodology, the development within the study area is estimated to generate approximately 3,902 new external trips, with 237 trips and 266 trips occurring during the AM peak and PM peak hours, respectively. Pass-by trips only apply to commercial/retail developments. In the ITE manual, a gasoline/service station has a pass-by trip reduction of 62% and 56% during the AM & PM peak hours, respectively. Pass-by trips are not generated by the development but are existing trips on the roadway that will use the development. After applying the pass-by trip reduction, the new AM & PM trips are 90 & 117 trips, respectively. Copies of the ITE Trip Generation 10<sup>th</sup> Edition land use descriptions and rates used in this project are in the [APPENDIX](#). **Table 1** contains a summary of the calculated trip generation for the project.

**Table 1: ITE Trip Generation**

Monument Maverik Traffic Impact Study										
Variable	Quantity	Daily			AM Peak Hour			PM Peak Hour		
		Total	In	Out	Total	In	Out	Total	In	Out
Gasoline/Service Station (ITE 945)	205.36	50%	50%		12.47	51%	49%	13.99	51%	49%
Vehicle Fueling Positions	19	3,902	1,951	1,951	237	121	116	266	136	130
AM Pass-by trip Reduction	62%				147	75	72			
PM Pass-By Trip Reduction	56%							149	76	73
<b>Total New Trips</b>	<b>3,902</b>	<b>1,951</b>	<b>1,951</b>		<b>90</b>	<b>43</b>	<b>44</b>	<b>117</b>	<b>60</b>	<b>57</b>

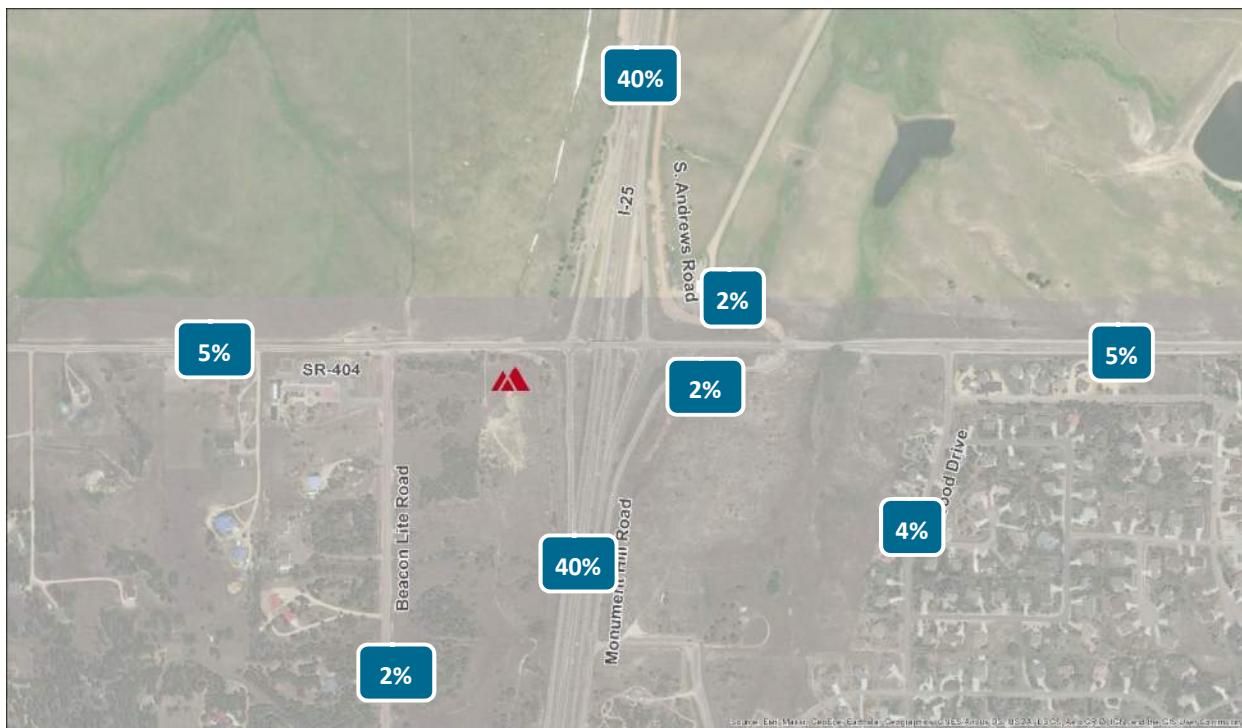
ITE Trip Generation 10<sup>th</sup> Edition



## TRIP DISTRIBUTION

The estimated new trips from the proposed development were distributed onto the roadway network based on the proposed site access locations, existing turning movements, traffic patterns, and proximity to major roadways, as shown in **Figure 4**.

Figure 4: Trip Distribution



## TRIP ASSIGNMENT

The development has two access, one on Beacon Lite Road, the other on County Line Road. Trip assignment involves assigning traffic to a selection of routes in a transportation network, it is how project trips travel through the transportation network to leave the study area. The Trip Assignment is in direct correlation to the trip distribution of project trips only. This development has one main route to the site. Therefore, the trip assignment percentage for this study area will be 100% as shown in **Figure 5**.

Figure 5: Trip Assignment





## Analysis of Existing Conditions

### STUDY INTERSECTION LEVEL OF SERVICE

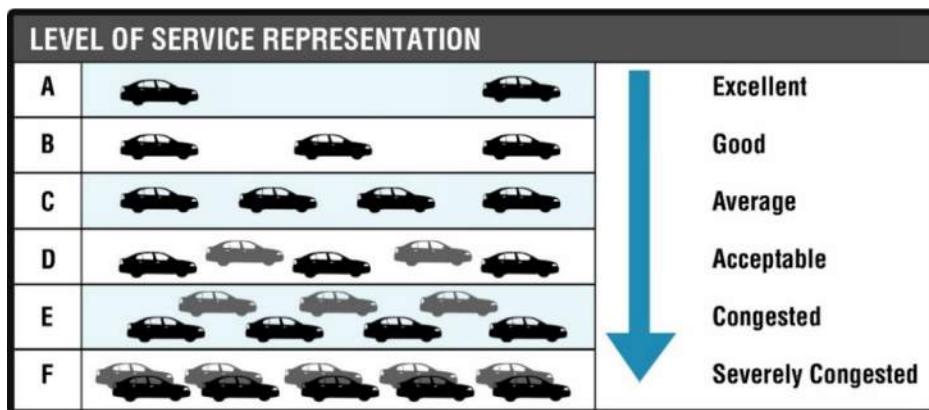
Level of Service (LOS) is a term used by the *Highway Capacity Manual* (HCM) to describe the traffic operations of an intersection, based on congestion and delay. It ranges from LOS A (almost no congestion or delay) to LOS F (traffic demand is above capacity and the intersection experiences long queues and delay). LOS C is generally considered acceptable for rural intersections, while LOS D is acceptable for urbanized intersections. LOS E is the threshold when the intersection reaches capacity. For two-way stop-controlled intersections, average intersection-wide delay and LOS are not defined by the HCM. **Table 2** summarizes LOS delay criteria for stop-controlled movements at unsignalized and signalized intersections. A visual representation of this is shown in **Figure 6**.

Table 2: Level of Service Criteria

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

Source: Highway Capacity Manual (HCM) 2010

Figure 6: LOS example



## EXISTING INTERSECTION OPERATIONS

### COVID-19 ADJUSTMENT

The AM and PM peak hour traffic counts for the study intersections were obtained by Horrocks Engineers in August 2020. Due to insufficient data on CDOT's Online Transportation Information System, no COVID-19 adjustments were made. The existing data collected in August 2020 does reflects the known traffic conditions.

Horrocks used turning movement counts completed on County Line Road at Beacon Lite Road, I-25 on/off ramps, Monument Hill Road, and Doewood Drive in August 2020, this ensures typical AM & PM peak hours are represented in the known traffic counts. **Figure 7** shows the AADT for the existing scenario. The balanced traffic turning movements are shown in **Figure 8**. All study intersections perform at an acceptable LOS, the SR-404 & I-25 southbound on/Off Ramps the southbound left being the worst movement, as shown in **Table 3**. **Table 4** shows the queue length for the existing intersections.

Figure 7: Existing AADT



**Table 3: Existing Peak Hour Traffic Analysis**

Intersection Number	Intersection	AM Peak Hour		PM Peak Hour	
		Average Control Delay (sec/veh)	Level of Service	Average Control Delay (sec/veh)	Level of Service
<b>Existing Peak Hour Conditions</b>					
1	SR-404 & Beacon Lite Road	10.08	B	9.25	A
2	SR-404 & I-25 Southbound On/Off Ramps	14.73	B	16.28	C
3	SR-404 & I-25 Northbound On/Off Ramps	13.77	B	15.41	C
4	SR-404 & Monument Hill Road	13.27	B	14.33	B
5	SR-404 & Doewood Drive	11.33	B	11.63	B

Source: HCM Methodologies using PTV Vistro Software

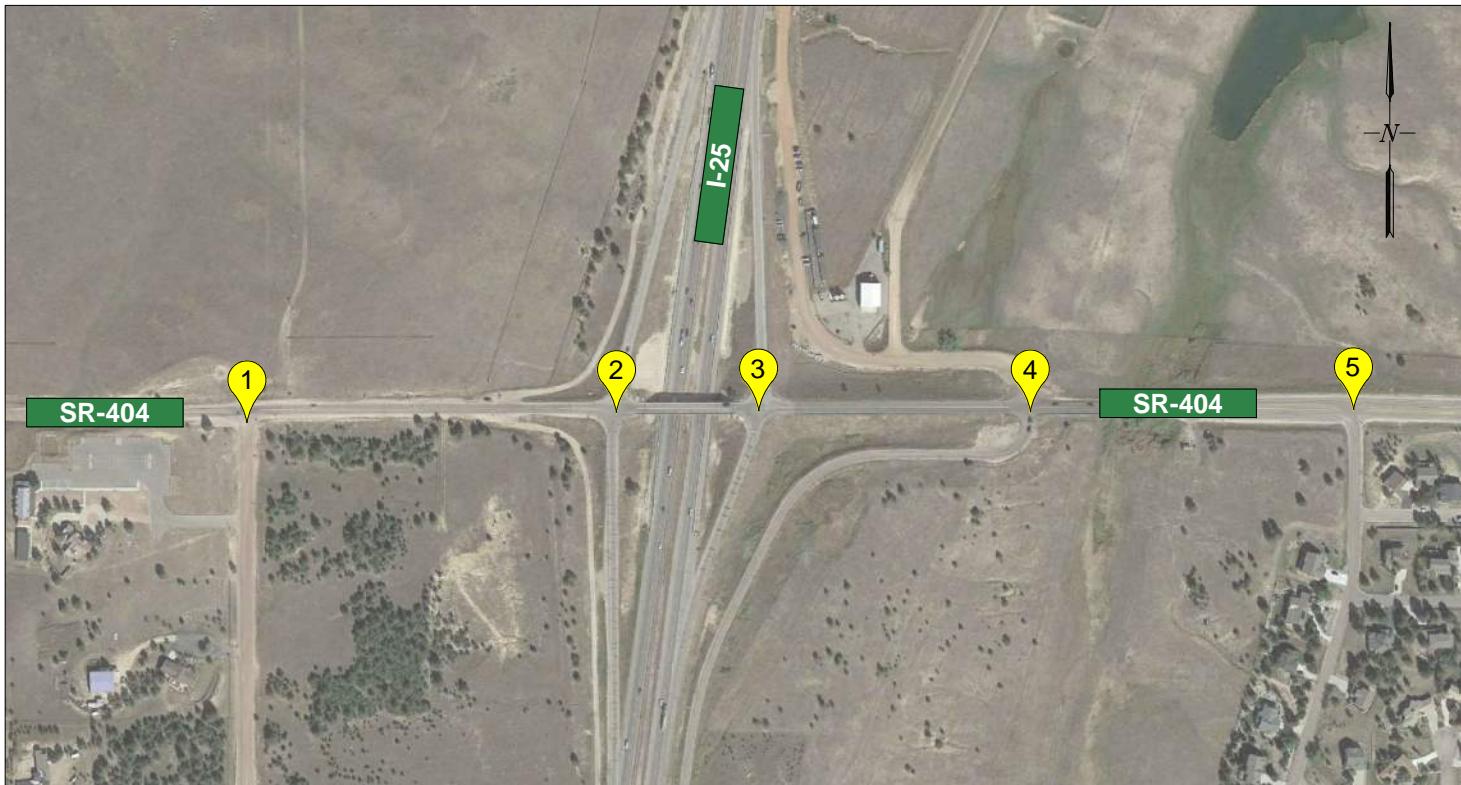
Control delay for unsignalized intersections shown for the worst approach only per the HCM.

**Table 4: Existing Queue Length**

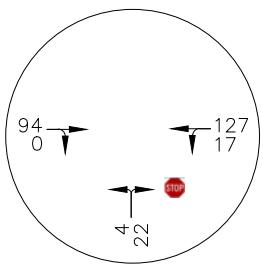
Intersection Number	Intersection	AM Queue Length (ft)	PM Queue Length (ft)
1	SR-404 & Beacon Lite Road	2	4
2	SR-404 & I-25 Southbound On/Off Ramps	10	30
3	SR-404 & I-25 Northbound On/Off Ramps	19	33
4	SR-404 & Monument Hill Road	8	10
5	SR-404 & Doewood Drive	14	12

## MITIGATIONS

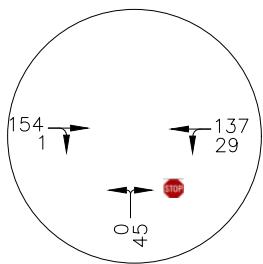
No mitigations are recommended at this time



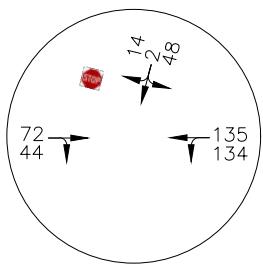
**1 AM PEAK HOUR**



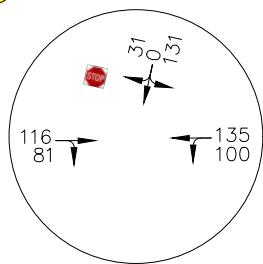
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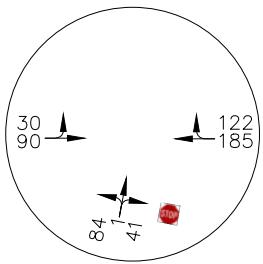
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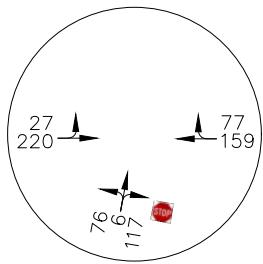
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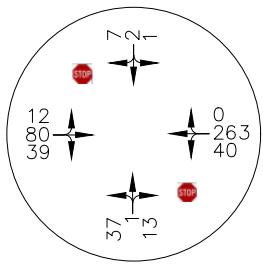
**3 AM PEAK HOUR**



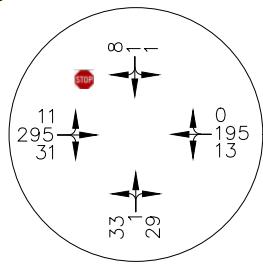
**3 PM PEAK HOUR**



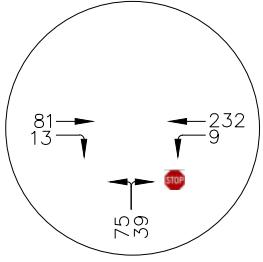
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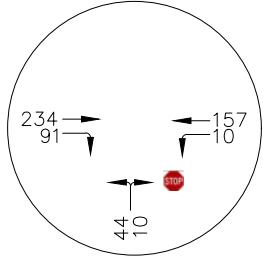
**4 PM PEAK HOUR**



**5 AM PEAK HOUR**



**5 PM PEAK HOUR**



## Analysis of Existing Plus Project Conditions

Project traffic was added to the existing background traffic to create an existing plus traffic scenario. After adding the project traffic to the existing conditions, all intersections operated at a LOS C or better. The intersection with the highest delay is the SR-404 & I-25 southbound on/off-ramp with the southbound left movement having the highest delay of 18.49 veh/sec, as shown in **Figure 10** and **Figure 11**. **Figure 12** and **Figure 13** shows traffic generated by the project site. Study intersections analyzed, and all function at an acceptable LOS, as shown in **Table 5**. **Figure 9** shows the AADT for the Existing plus Project scenario. **Table 6** shows the queue length for the existing plus project intersections

Figure 9: Existing plus Project AADT



**Table 5: Existing plus Project Conditions**

Intersection Number	Intersection	AM Peak Hour		PM Peak Hour	
		Average Control Delay (sec/veh)	Level of Service	Average Control Delay (sec/veh)	Level of Service
<b>Existing plus Project Peak Hour Conditions</b>					
1	SR-404 & Beacon Lite Road	10.3	B	11.2	B
2	SR-404 & I-25 Southbound On/Off Ramps	15.9	C	18.5	C
3	SR-404 & I-25 Northbound On/Off Ramps	15.1	C	16.9	C
4	SR-404 & Monument Hill Road	13.5	B	14.7	B
5	SR-404 & Doewood Drive	11.4	B	11.8	B
6	SR-404 & North Access	9.0	A	11.9	B
7	Beacon Lite Road & West Access	8.5	A	9.1	A

Source: HCM Methodologies using Vistro Software

Control delay for unsignalized intersections shown for the worst approach only per the HCM.

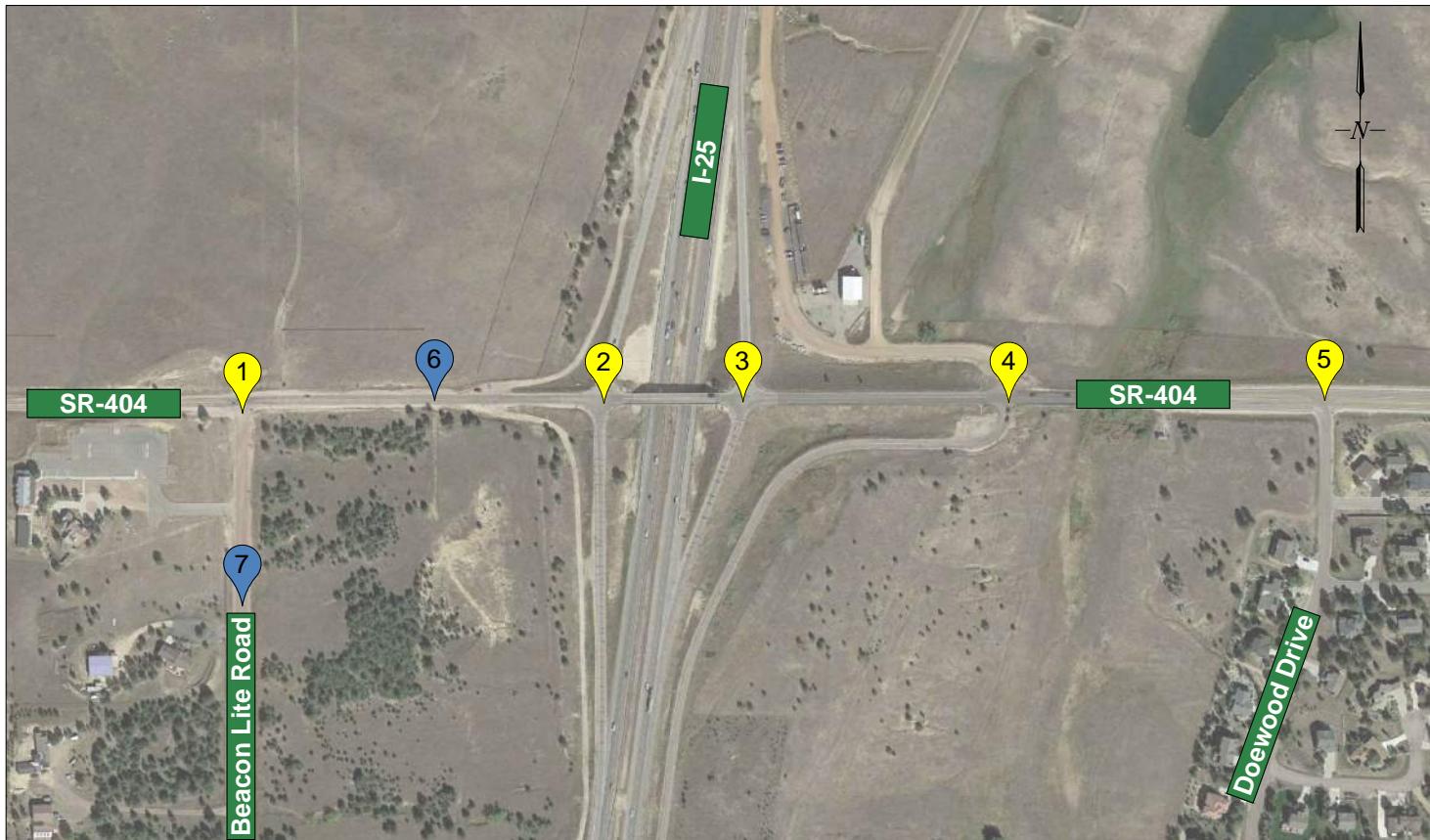
**Table 6: Existing plus Project Queue Length**

Intersection Number	Intersection	AM Queue Length (ft)	PM Queue Length (ft)
1	SR-404 & Beacon Lite Road	3	6
2	SR-404 & I-25 Southbound On/Off Ramps	11	36
3	SR-404 & I-25 Northbound On/Off Ramps	24	43
4	SR-404 & Monument Hill Road	8	11
5	SR-404 & Doewood Drive	14	8

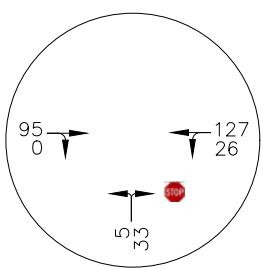
## RECOMMENDED MITIGATIONS FOR FULL ACCESS

The following recommended mitigations are for the full access scenario. Add a dedicated lane for the eastbound traffic and a dedicated two-way turn lane for westbound traffic. These mitigations will allow space for cars heading eastbound to have a dedicated lane to access the project. This eastbound lane would act as an acceleration and deceleration lane for the northbound right movement and the eastbound right-turn movement. This dedicated lane will help accelerate out of the project and merge into flowing traffic, and for trucks to accelerate with little disturbance to the flow of traffic heading to the I-25 on/off ramps. This lane would also help with the line of sight that could potentially be an issue for the hill that crests at Beacon Lite Road. The two-way turn lane for the dedicated westbound lane would allow the vehicles to access the project from County line road without causing delay to County line Road westbound traffic. The two-way turn lane would also allow cars turning northbound left to have a staging area that they could use to accelerate into flowing traffic heading westbound. All these recommended mitigations are to reduce the impact of project traffic on the overall traffic. These recommended mitigations are because the access spacing between Beacon Lite Road & I-25 is proximity and not recommended because of the level of service.

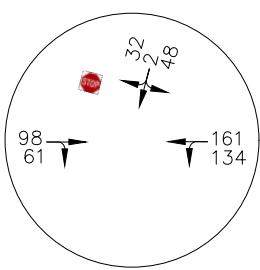
- Add dedicated acceleration and deceleration lane for eastbound traffic.
- Add two way turn lane for westbound traffic.



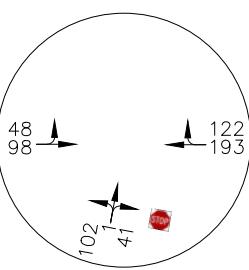
**1 AM PEAK HOUR**



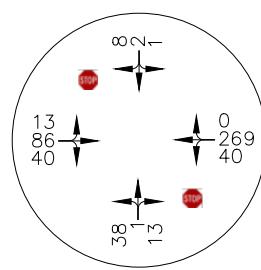
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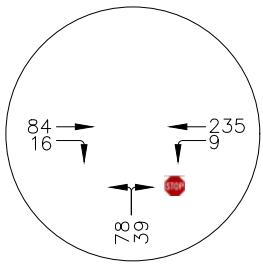
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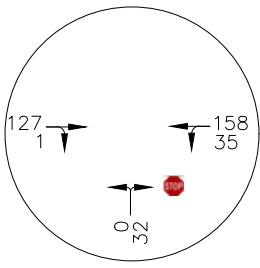
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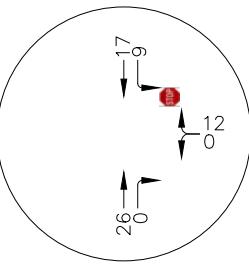
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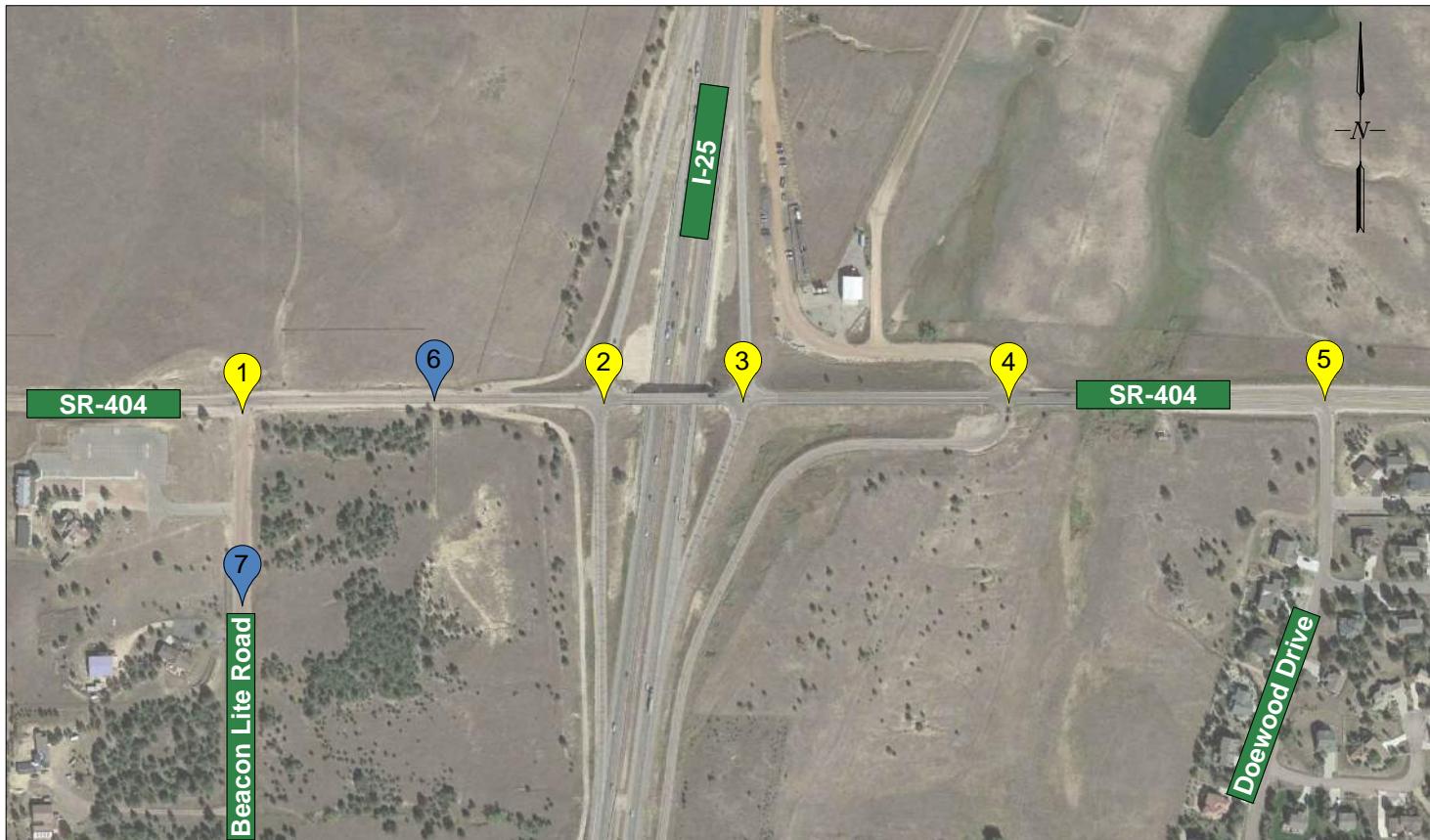


**6 AM PEAK HOUR**

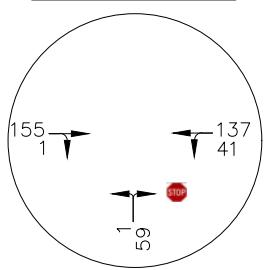


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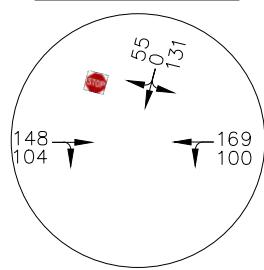




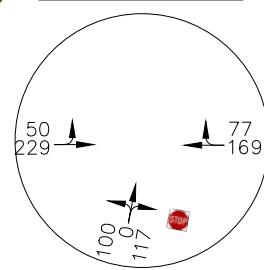
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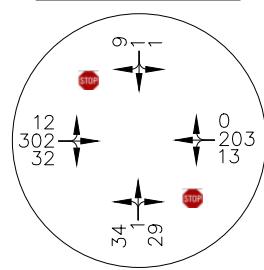
**2 PM PEAK HOUR**



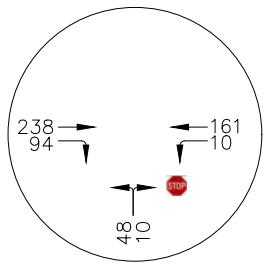
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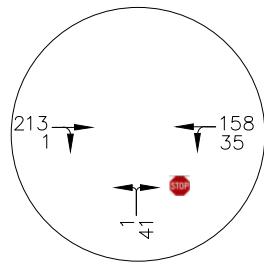
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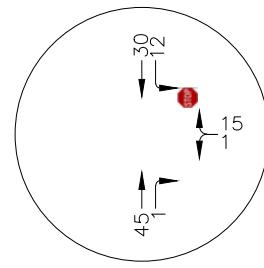
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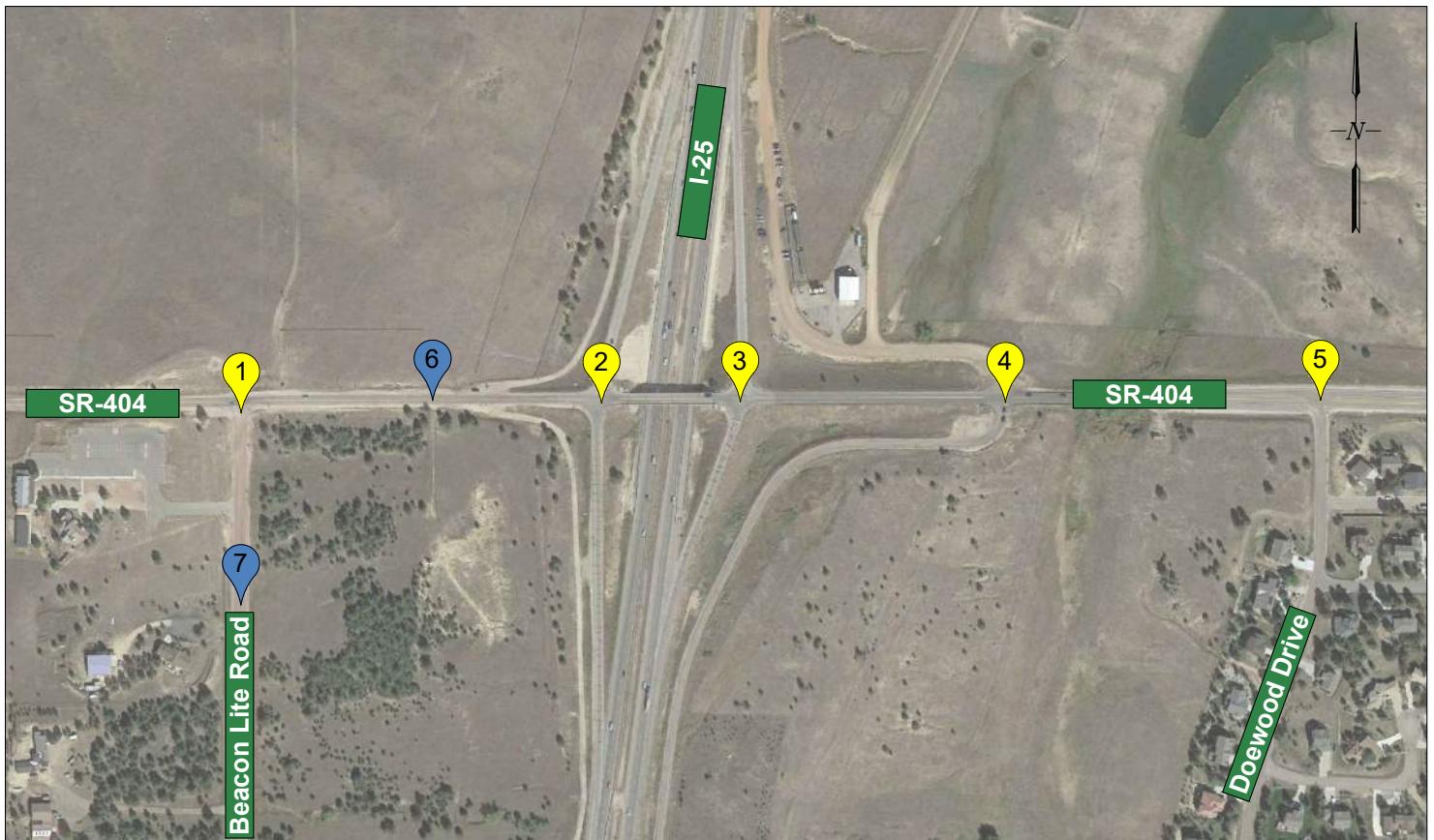


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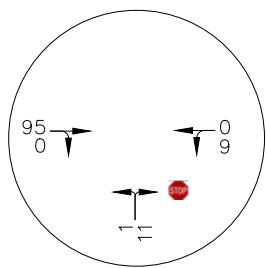


**7 PM PEAK HOUR**

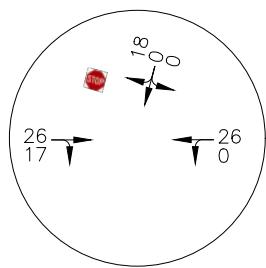




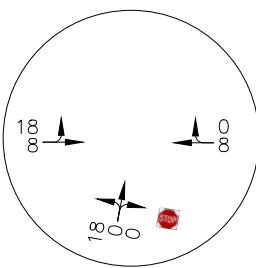
**1 AM PEAK HOUR**



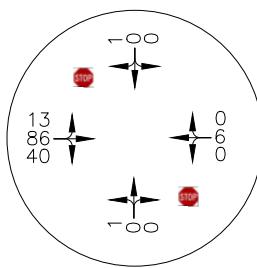
**2 AM PEAK HOUR**



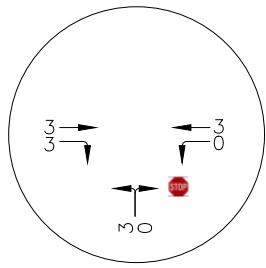
**3 AM PEAK HOUR**



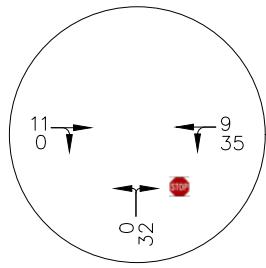
**4 AM PEAK HOUR**



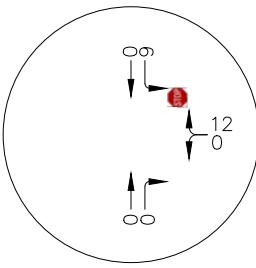
**5 AM PEAK HOUR**

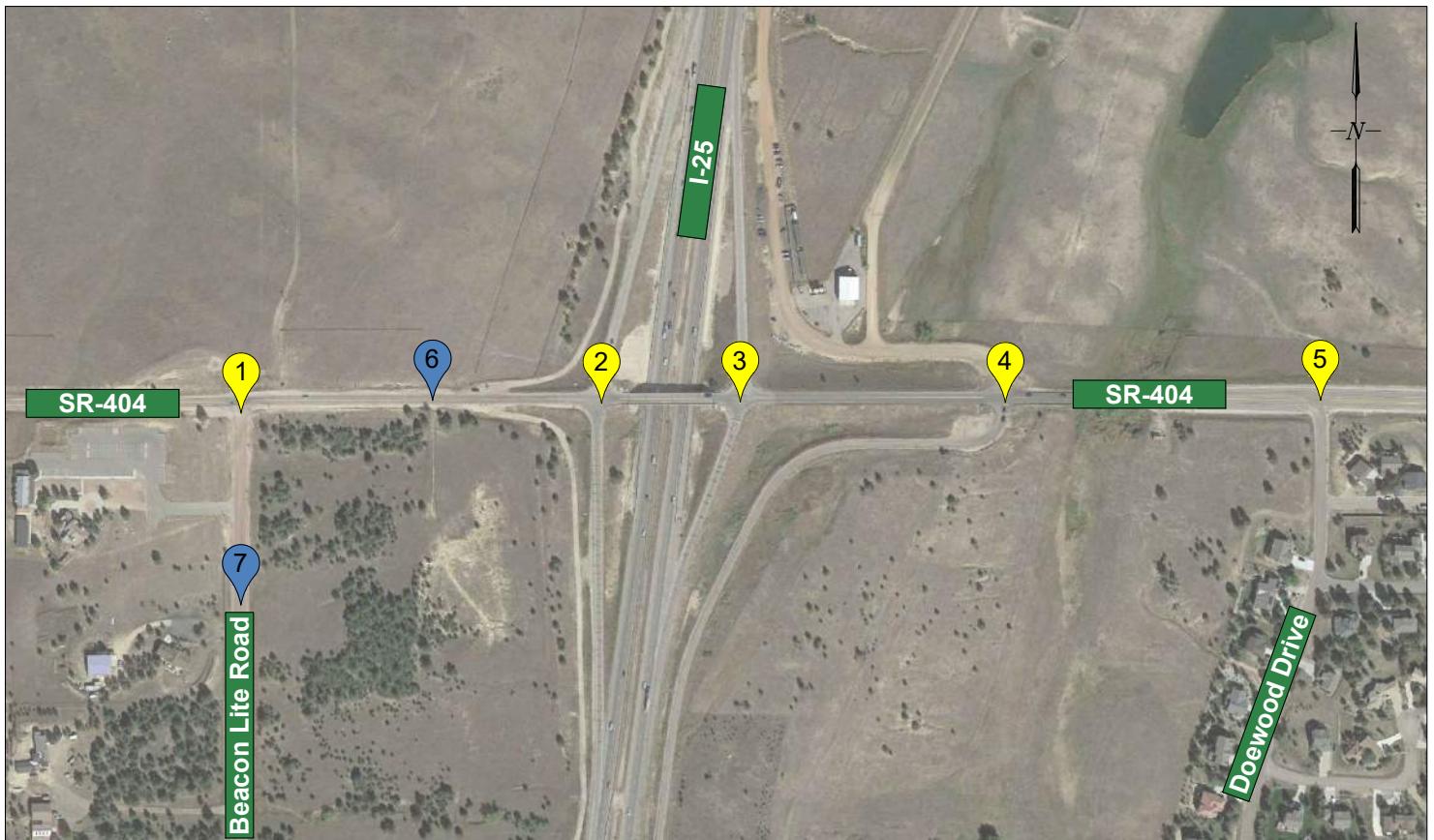


**6 AM PEAK HOUR**

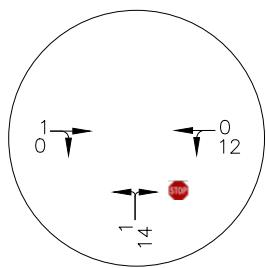


**7 AM PEAK HOUR**

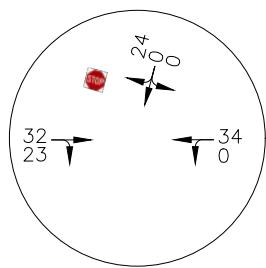




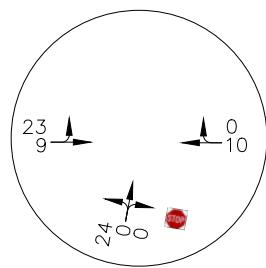
**1** PM PEAK HOUR



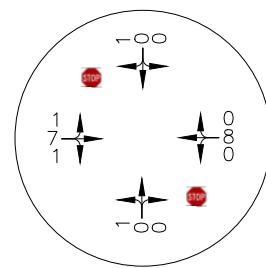
**2** PM PEAK HOUR



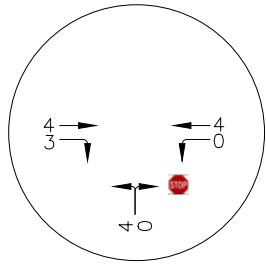
**3** PM PEAK HOUR



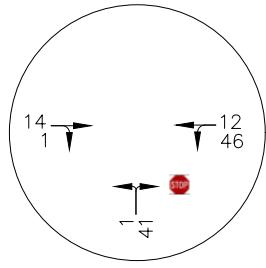
**4** PM PEAK HOUR



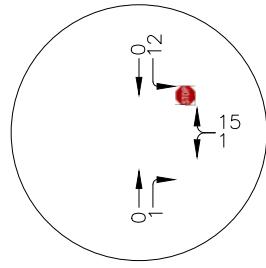
**5** PM PEAK HOUR



**6** PM PEAK HOUR



**7** PM PEAK HOUR



# Analysis of 2040 Background Conditions

## GROWTH RATES

For the 2040 condition, the future AADT data was obtained from the CDOT Online Transportation Information System (OTIS) at a location near the project. Using the OTIS AADT traffic data as well as input from City staff, a background growth factor of 1.49 will be used for the analysis, as shown in **Table 7**. Traffic data used to determine the growth is included in the APPENDIX. The AADT for the 2040 Background scenario is shown in **Figure 14**.

**Table 7: Growth Factor**

Station ID	Route	2018 AADT	20 Year Factor
100978	025A	75,000	1.49

**Figure 14: 2040 Background AADT**



## 2040 BACKGROUND CONDITIONS

Existing traffic was grown annually using the growth rate of 1.49 from **Table 7** to create the 2040 background traffic scenario, which is shown in **Figure 16**. All Intersections perform at an acceptable LOS except I-25 Southbound On/Off Ramp & SR-404, the southbound left-turn lane being the worst movement causing a LOS F and a delay of 38.98 seconds in the PM, as shown in **Table 8**. **Table 9** shows the queue length for the 2040 Background intersections.



Table 8: 2040 Background Hour Traffic Analysis

Intersection Number	Intersection	AM Peak Hour		PM Peak Hour	
		Average Control Delay (sec/veh)	Level of Service	Average Control Delay (sec/veh)	Level of Service
<b>2040 Background Peak Hour Conditions</b>					
1	SR-404 & Beacon Lite Road	11.10	B	9.85	A
2	SR-404 & I-25 Southbound On/Off Ramps	22.34	C	38.98	E
3	SR-404 & I-25 Northbound On/Off Ramps	19.59	C	26.87	D
4	SR-404 & Monument Hill Road	18.24	C	21.36	C
5	SR-404 & Doewood Drive	13.95	B	14.52	B

Source: HCM Methodologies using PTV Vistro Software

Control delay for unsignalized intersections shown for the worst approach only per the HCM.

Table 9: 2040 Background Queue Length

Intersection Number	Intersection	AM Queue Length (ft)	PM Queue Length (ft)
1	SR-404 & Beacon Lite Road	4	7
2	SR-404 & I-25 Southbound On/Off Ramps	25	111
3	SR-404 & I-25 Northbound On/Off Ramps	44	99
4	SR-404 & Monument Hill Road	18	25
5	SR-404 & Doewood Drive	28	15

The southbound left-turn lane of intersection SR-404 & I-25 southbound on/off ramps causes the increase of LOS to unacceptable standards. The intersection LOS improves to an acceptable LOS when the volume decreases by 12 vehicles. The maximum delay for an acceptable LOS for an unsignalized intersection is 35.0 sec/veh.

## MITIGATIONS

### SR-404 & I-25 southbound on/off ramps

- Upgrade intersection stop-control to a traffic signal. See **Figure 13** for roadway and signal improvements.

Delay and LOS after mitigation are shown in **Table 10**. See **Figure 17** for intersection configuration.

**Table 11** shows the queue length for the 2040 Background with Mitigation intersections.



Table 10: 2040 Background with Mitigation Hour Traffic Analysis

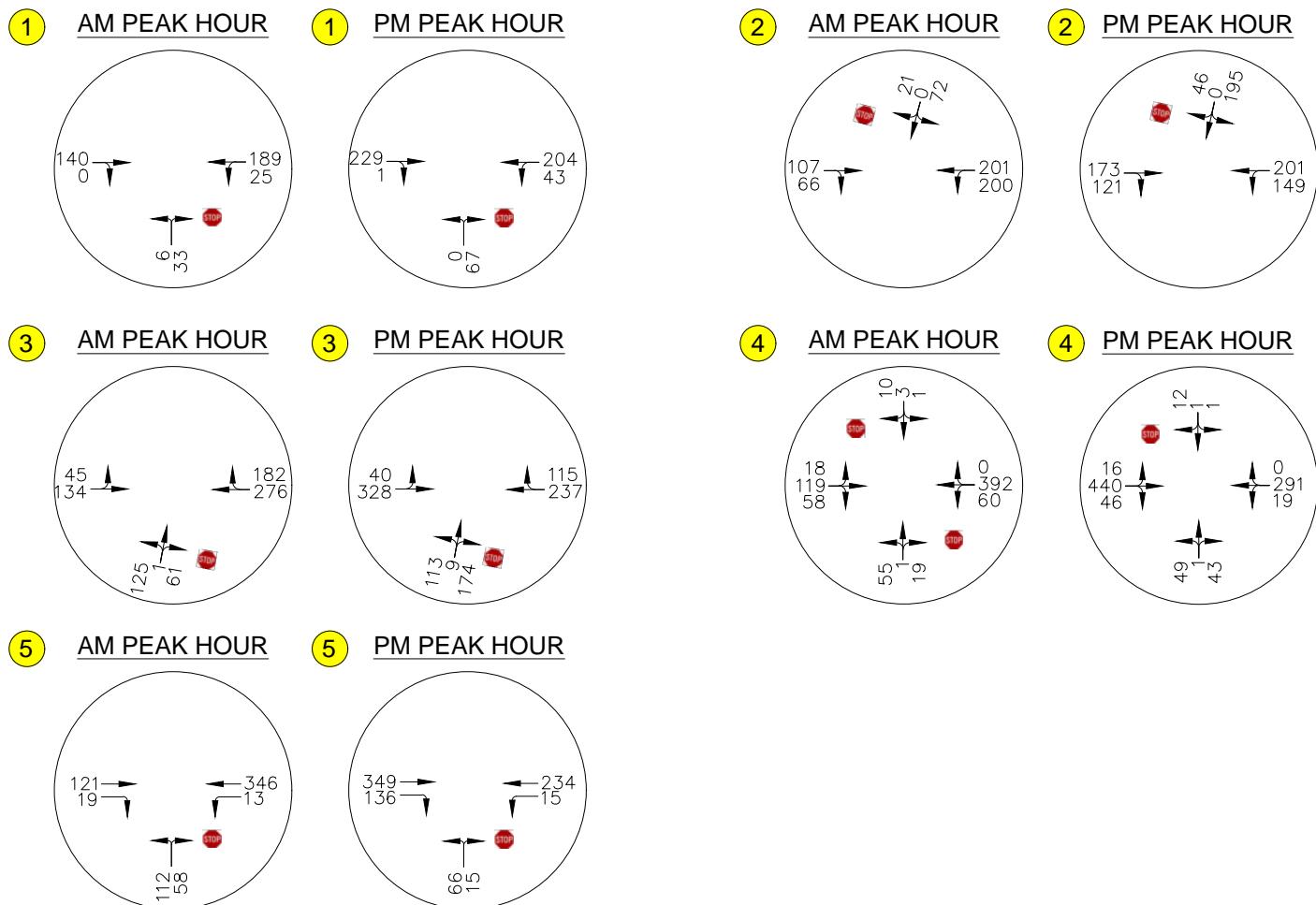
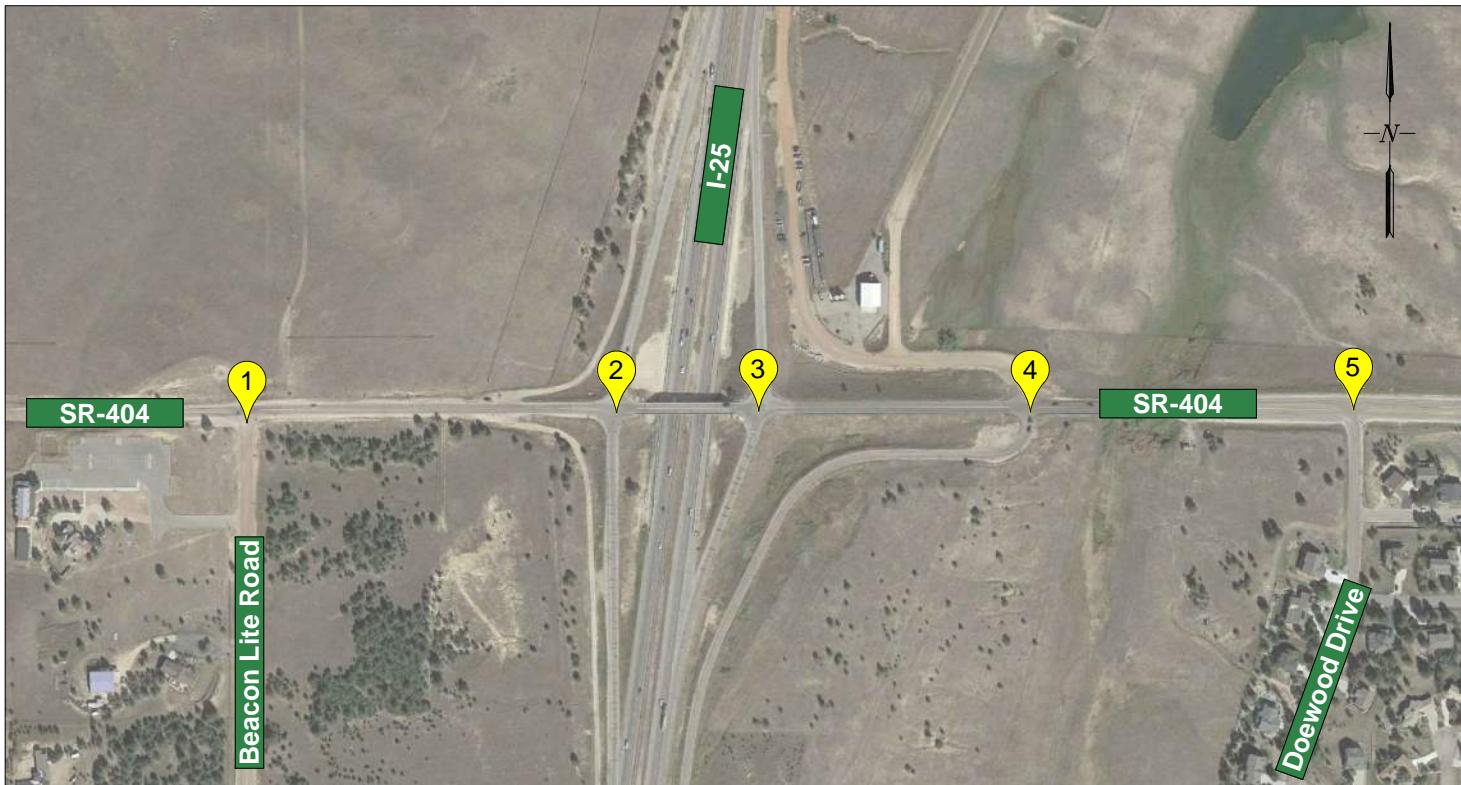
Intersection Number	Intersection	AM Peak Hour		PM Peak Hour	
		Average Control Delay (sec/veh)	Level of Service	Average Control Delay (sec/veh)	Level of Service
<b>2040 Background with Mitigations Peak Hour Conditions</b>					
1	SR-404 & Beacon Lite Road	11.10	B	9.85	A
2	SR-404 & I-25 Southbound On/Off Ramps	5.14	A	6.53	A
3	SR-404 & I-25 Northbound On/Off Ramps	19.59	C	25.10	D
4	SR-404 & Monument Hill Road	18.24	C	21.36	C
5	SR-404 & Doewood Drive	13.95	B	14.52	B

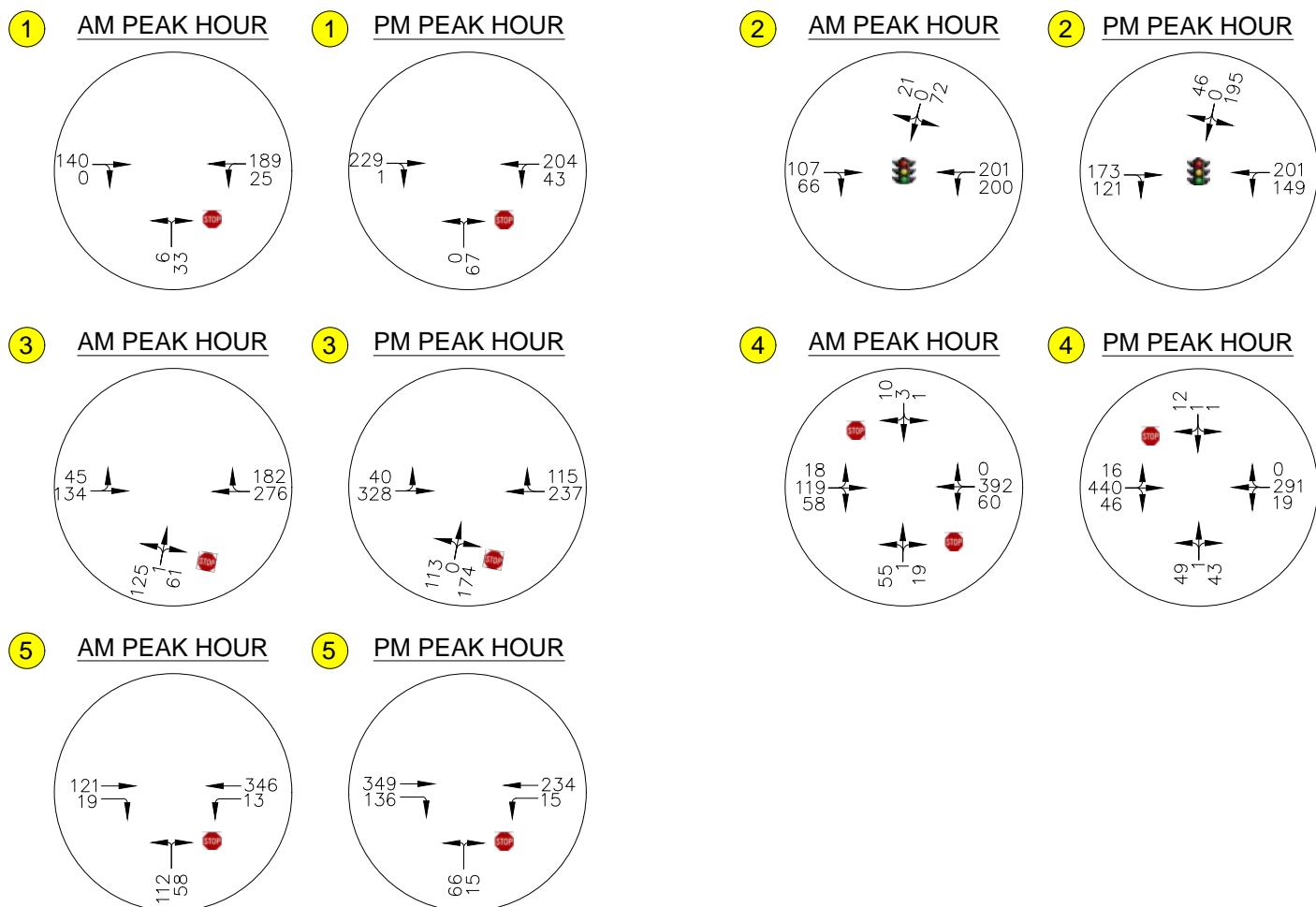
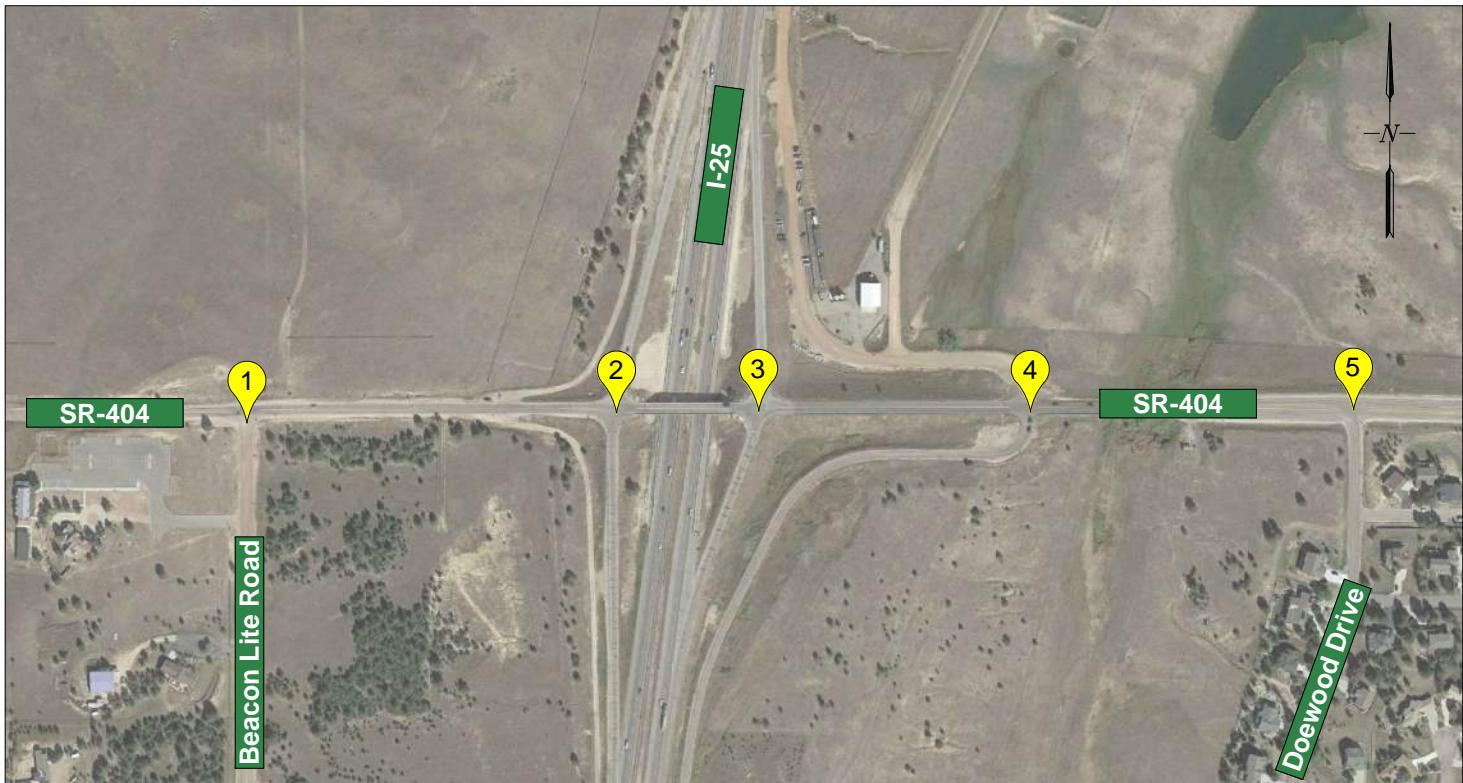
Table 11: 2040 Background with Mitigation Queue Length

Intersection Number	Intersection	AM Queue Length (ft)	PM Queue Length (ft)
1	SR-404 & Beacon Lite Road	4	7
2	SR-404 & I-25 Southbound On/Off Ramps	19	28
3	SR-404 & I-25 Northbound On/Off Ramps	44	91
4	SR-404 & Monument Hill Road	18	25
5	SR-404 & Doewood Drive	28	15

Figure 15: Roadway and Signal Improvements









## Analysis of 2040 Background with Project Conditions

### 2040 BACKGROUND PLUS PROJECT INTERSECTION OPERATIONS

Project traffic was added to the 2040 background traffic using the same distribution as the 2020 conditions, as shown in **Figure 19**. Study intersections were analyzed and all function at an acceptable LOS, as shown in **Table 12**/**Table 10**. Worst intersection is SR—404 & I-25 Northbound On/Off Ramps with the northbound left-turn land being the worst movement causing a LOS D and a delay of 34.5 seconds in the PM. The AADT for the 2040 Background plus Project scenario is shown in **Figure 18**. All mitigations that were performed in 2040 background scenarios are represented in these scenarios. **Figure 19** and **Figure 20** show turn movements for 2040 plus project scenarios. **Table 13** shows the queue length for the 2040 Background plus Project intersections.

Figure 18: 2040 Background plus Project





Table 12: 2040 Background plus Project Hour Traffic Analysis

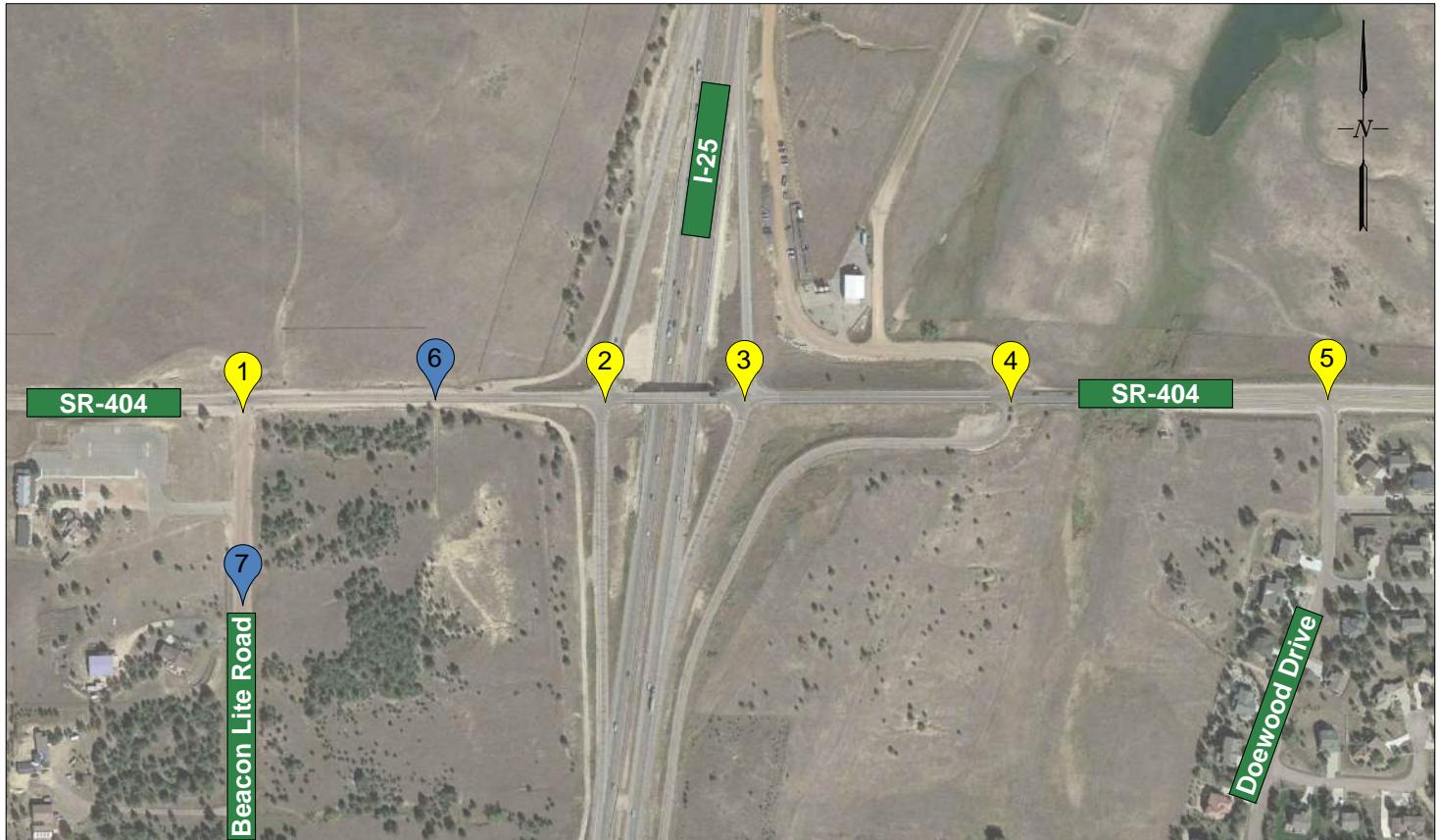
Intersection Number	Intersection	AM Peak Hour		PM Peak Hour	
		Average Control Delay (sec/veh)	Level of Service	Average Control Delay (sec/veh)	Level of Service
<b>2040 Background plus Project Peak Hour Conditions</b>					
1	SR-404 & Beacon Lite Road	11.4	B	13.1	B
2	SR-404 & I-25 Southbound On/Off Ramps	4.3	A	6.7	A
3	SR-404 & I-25 Northbound On/Off Ramps	21.8	C	34.5	D
4	SR-404 & Monument Hill Road	18.7	C	22.0	C
5	SR-404 & Doewood Drive	14.1	B	14.7	B
6	SR-404 & North Access	9.4	A	13.8	B
7	Beacon Lite Road & West Access	8.5	A	9.3	A

Source: HCM Methodologies using Vistro Software

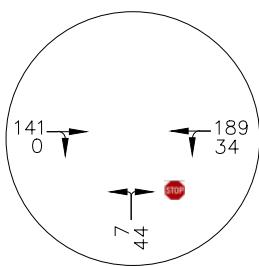
Control delay for unsignalized intersections shown for the worst approach only per the HCM.

Table 13: 2040 Background plus Project Queue Length

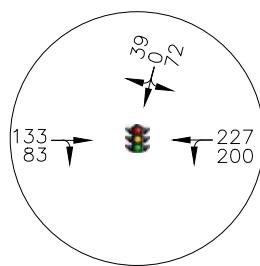
Intersection Number	Intersection	AM Queue Length (ft)	PM Queue Length (ft)
1	SR-404 & Beacon Lite Road	5	9
2	SR-404 & I-25 Southbound On/Off Ramps	9	51
3	SR-404 & I-25 Northbound On/Off Ramps	60	135
4	SR-404 & Monument Hill Road	19	26
5	SR-404 & Doewood Drive	29	16



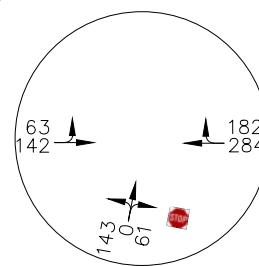
**1 AM PEAK HOUR**



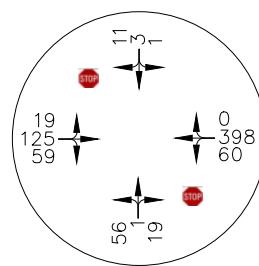
**2 AM PEAK HOUR**



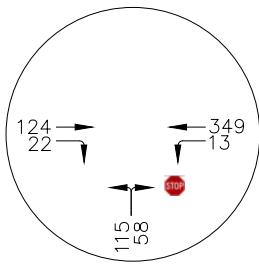
**3 AM PEAK HOUR**



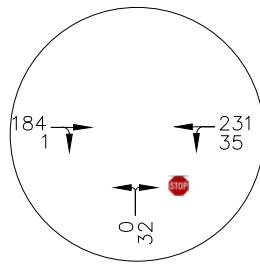
**4 AM PEAK HOUR**



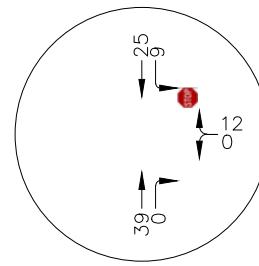
**5 AM PEAK HOUR**



**6 AM PEAK HOUR**

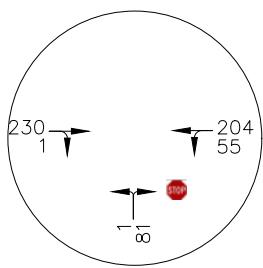


**7 AM PEAK HOUR**

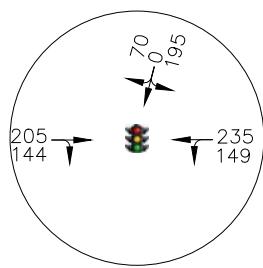




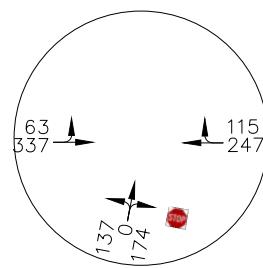
**1 PM PEAK HOUR**



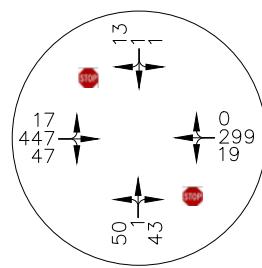
**2 PM PEAK HOUR**



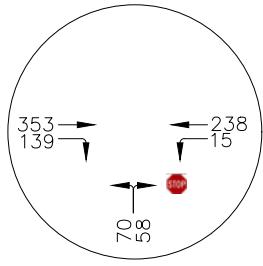
**3 PM PEAK HOUR**



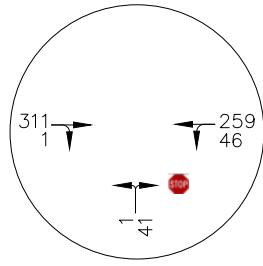
**4 PM PEAK HOUR**



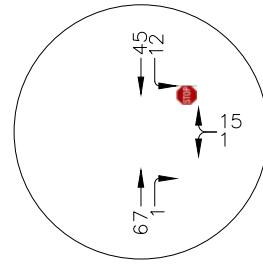
**5 PM PEAK HOUR**



**6 PM PEAK HOUR**



**7 PM PEAK HOUR**





## HIGHWAY IMPROVEMENTS

Highway improvements are not required for this traffic impact study.

## CAPACITY AND LOS ANALYSIS

The capacity and LOS analysis reports are supplied in the **APPENDIX** provided.

## TRAFFIC SIGNAL ANALYSIS

The SR-404 & I-25 southbound on/off ramp intersection performs at an unacceptable LOS opening day. The southbound left has a delay of 38.98 sec/veh. The signal warrant report is supplied in the **APPENDIX** provided.

## Conclusions and Recommendations

1. Existing Conditions – All study intersections operate at an acceptable LOS, no recommended mitigations at this time. Due to insufficient historical data on the CDOT OTIS website, no COVID adjustments were included in this study.
2. The proposed development is estimated to generate approximately 3,902 new external daily trips with 237 during the AM peak and 266 during the PM peak. The pass-by trip reduction for the AM & PM peak hour is 62% & 56%, respectively.
3. Existing plus Project Conditions - All intersection function at an acceptable LOS. No mitigations are recommended at this time.
4. 2040 Background Conditions - Using the CDOT OTIS site, a growth factor of 2.12 was used to project 2020 traffic volumes to 2040.
  - The southbound left-turn lane of intersection SR-404 & I-25 southbound on/off fails with a delay of 38.98 sec/veh during the PM.
  - All other study intersections function at acceptable LOS.

### Recommended Mitigations

- Add traffic signal to intersection SR-404 & I-25 southbound on/off ramp (see **Figure 13**)
5. 2040 Background plus Project Condition - All study intersections function at acceptable LOS. No mitigations are recommended at this time.



## APPENDIX



**TRAFFIC COUNTS**



**TRAFFIC COUNTS**

## TRAFFIC COUNT SUMMARY

City: Monument  
N-S Street: I-25 NB Ramps

E-W Street: SR-404

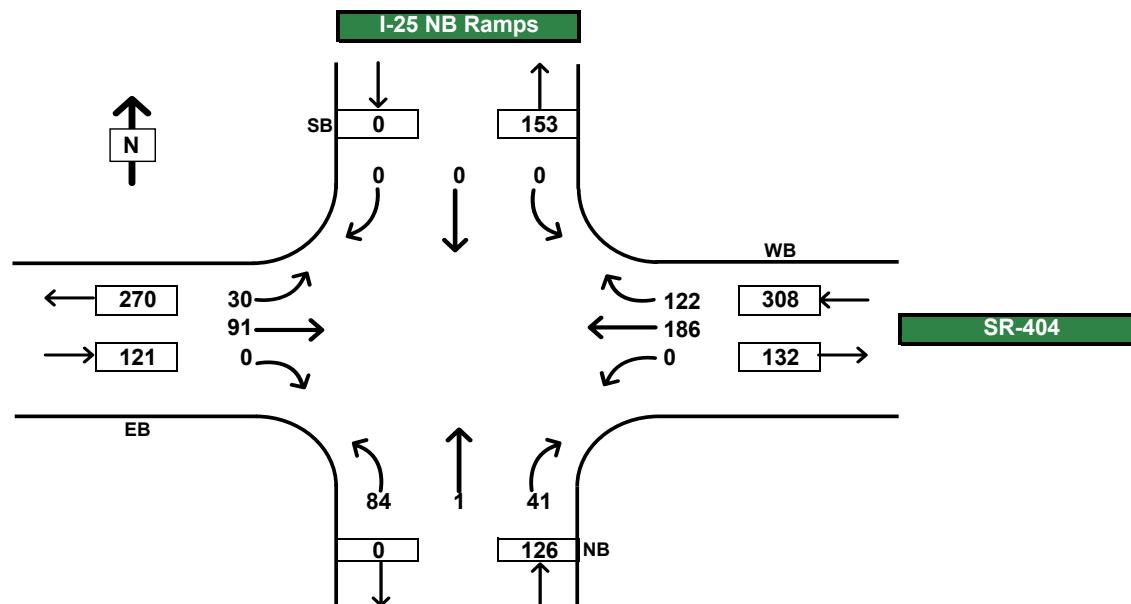
Date: Wednesday, August 19, 2020

Begin Time: 07:00 AM

Interval Length: 15 min

**HORROCKS**  
E N G I N E E R S

Time Interval		SB				WB				NB				EB				Hourly Totals
		Left	Thru	Right	PED													
07:00 AM	07:15 AM	0	0	0	0	0	43	31	0	22	0	8	0	6	16	0	0	126
07:15 AM	07:30 AM	0	0	0	0	0	43	39	0	11	1	9	0	12	23	0	0	138
07:30 AM	07:45 AM	0	0	0	0	0	60	29	0	14	0	2	0	7	24	0	0	136
07:45 AM	08:00 AM	0	0	0	1	0	40	23	0	37	0	22	0	5	28	0	0	155
08:00 AM	08:15 AM	0	0	0	0	0	42	33	0	17	2	7	0	6	17	0	0	124
08:15 AM	08:30 AM	0	0	0	0	0	31	25	0	11	1	10	0	8	18	0	0	104
08:30 AM	08:45 AM	0	0	0	0	0	48	17	0	35	2	16	0	2	22	0	0	142
08:45 AM	09:00 AM	0	0	0	0	0	42	31	0	20	0	18	1	6	29	0	0	146



ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	0	186	122	84	1	41	30	91	0
0	0	0	308	0	0	126	0	0	121	0	0
Trucks:	0%	Trucks:	0%	Trucks:	0%	Trucks:	0%	Trucks:	0%	Trucks:	0%
Peak Hour:	7:00:00 AM		8:00 AM			Peak Vol:	555	PHF:	0.90	Total:	1

OPTIONAL Adjustment Factor	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

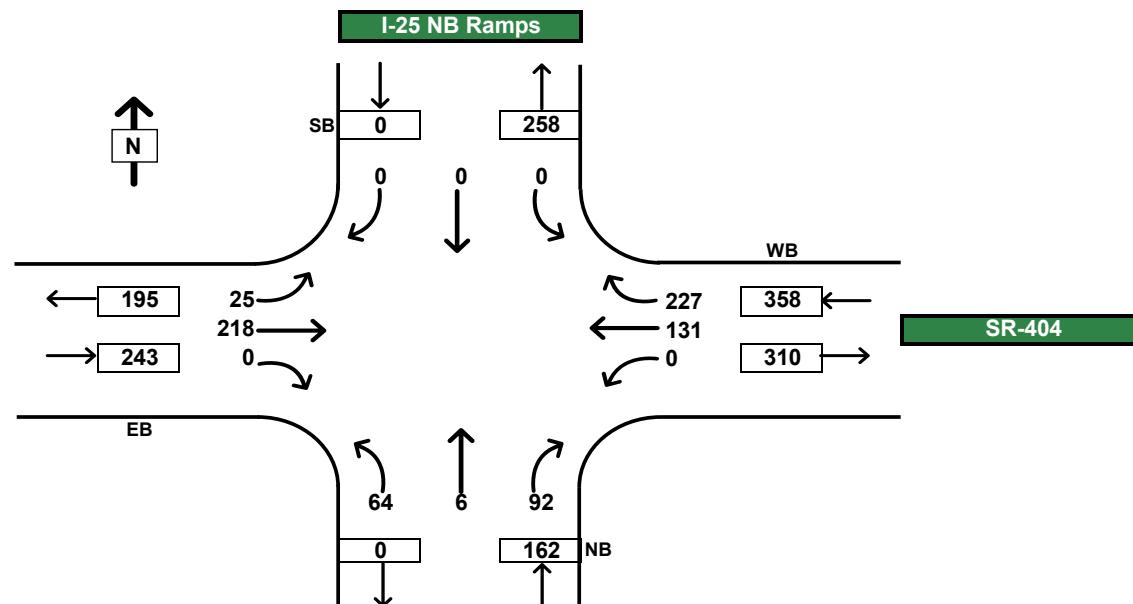
## TRAFFIC COUNT SUMMARY

City: Monument  
 N-S Street: I-25 NB Ramps  
 Date: Tuesday, August 18, 2020  
 Begin Time: 04:00 PM  
 Interval Length: 15 min

E-W Street: SR-404



Time Interval		SB				WB				NB				EB				Total All Moves	Hourly Totals
		Left	Thru	Right	PED														
04:00 PM	04:15 PM	0	0	0	0	0	37	117	0	8	1	14	0	8	59	0	0	244	
04:15 PM	04:30 PM	0	0	0	1	0	25	60	0	19	1	25	0	5	55	0	0	190	
04:30 PM	04:45 PM	0	0	0	0	0	31	27	0	18	2	23	0	5	55	0	0	161	
04:45 PM	05:00 PM	0	0	0	0	0	38	23	0	19	2	30	0	7	49	0	0	168	763
05:00 PM	05:15 PM	0	0	0	0	0	52	9	0	18	2	31	0	7	59	0	0	178	697
05:15 PM	05:30 PM	0	0	0	0	0	38	18	0	21	0	32	0	8	57	0	0	174	681
05:30 PM	05:45 PM	0	0	0	0	0	31	22	0	18	2	35	0	4	53	0	0	165	685
05:45 PM	06:00 PM	0	0	0	1	0	36	11	0	11	0	37	0	4	51	0	0	150	667



ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	0	131	227	64	6	92	25	218	0
0	0	0	358			162			243		
Trucks:	0%	Trucks:	0%	Trucks:	0%	Trucks:	0%	Trucks:	0%	Trucks:	0%
Peak Hour:	4:00:00 PM		5:00 PM			Peak Vol:	763		PHF:	0.78	

OPTIONAL Adjustment Factor	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

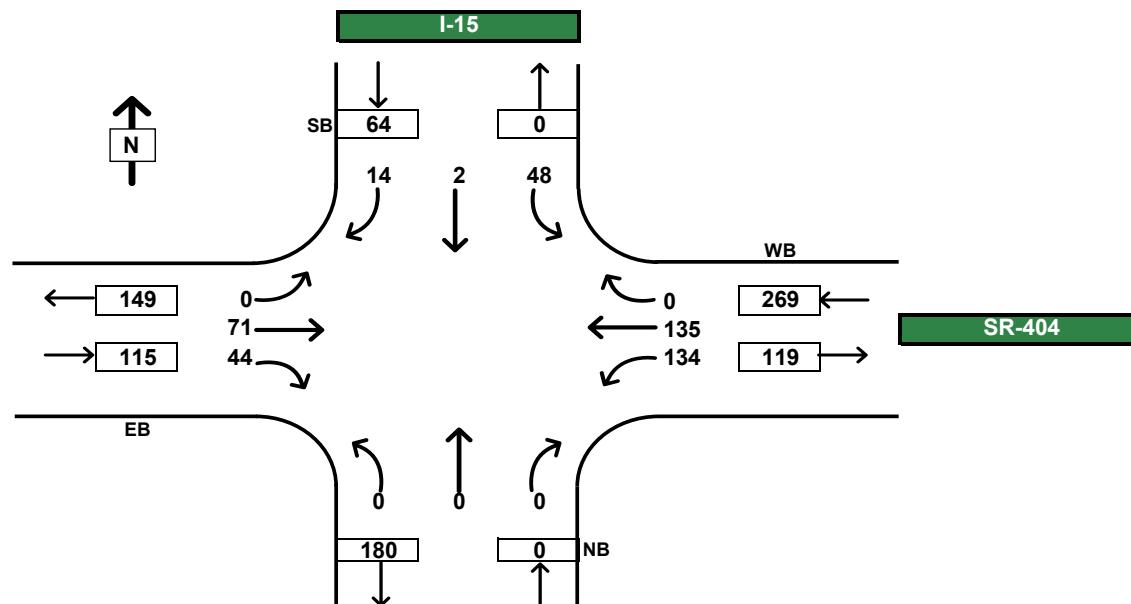
## TRAFFIC COUNT SUMMARY

City: Monument  
 N-S Street: I-15  
 Date: Wednesday, August 19, 2020  
 Begin Time: 07:00 AM  
 Interval Length: 15 min

E-W Street: SR-404



Time Interval		SB				WB				NB				EB				Total All Moves	Hourly Totals
		Left	Thru	Right	PED														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
07:00 AM	07:15 AM	3	0	2	0	39	27	0	0	0	0	0	0	0	17	9	0	97	
07:15 AM	07:30 AM	16	1	3	0	30	24	0	0	0	0	0	0	0	20	8	0	102	
07:30 AM	07:45 AM	15	1	4	0	35	38	0	0	0	0	0	0	0	16	17	0	126	
07:45 AM	08:00 AM	14	0	5	0	30	46	0	0	0	0	0	0	0	18	10	0	123	448
08:00 AM	08:15 AM	13	0	2	0	29	31	0	0	0	0	0	0	0	12	8	0	95	446
08:15 AM	08:30 AM	14	1	6	0	18	25	0	0	0	0	0	0	0	10	9	0	83	427
08:30 AM	08:45 AM	12	1	7	0	31	52	0	0	0	0	0	0	0	13	6	0	122	423
08:45 AM	09:00 AM	17	1	3	0	28	32	0	0	0	0	0	0	0	20	18	0	119	419



ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
48	2	14	134	135	0	0	0	0	0	71	44
64			269			0			115		
Trucks:	0%	Trucks:	0%	Trucks:	0%	Trucks:	0%	Trucks:	0%		
Peak Hour:	7:00:00 AM		8:00 AM			Peak Vol:	448	PHF:	0.89		

OPTIONAL Adjustment Factor	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

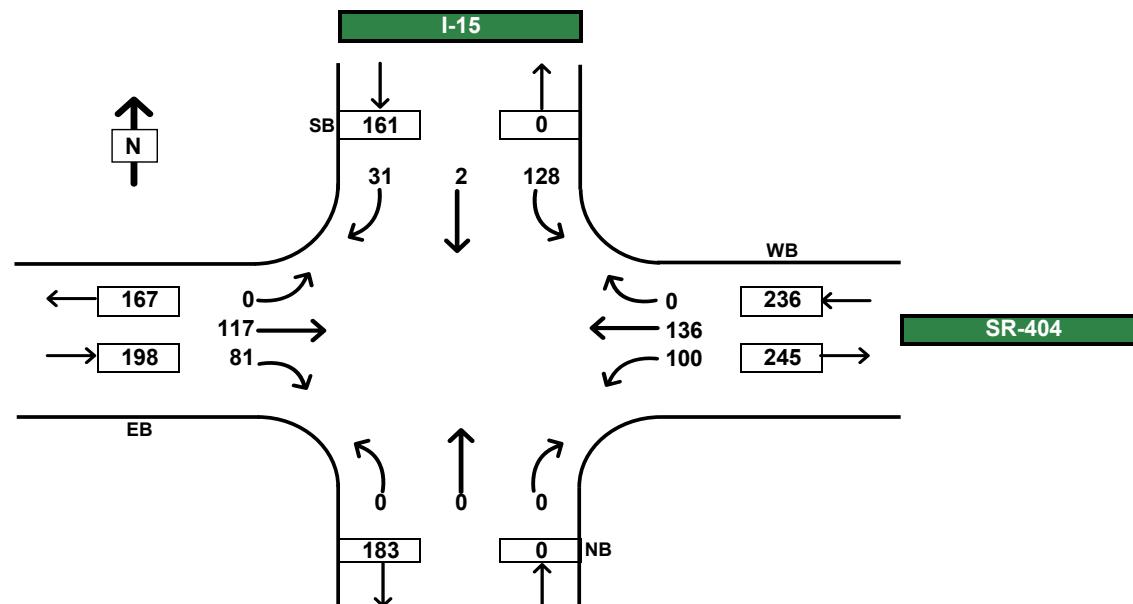
## TRAFFIC COUNT SUMMARY

City: Monument  
 N-S Street: I-15  
 Date: Tuesday, August 18, 2020  
 Begin Time: 04:00 PM  
 Interval Length: 15 min

E-W Street: SR-404

**HORROCKS**  
 ENGINEERS

Time Interval		SB				WB				NB				EB				Total All Moves	Hourly Totals
		Left	Thru	Right	PED														
04:00 PM	04:15 PM	36	0	6	0	15	28	0	0	0	0	0	0	0	31	18	0	134	
04:15 PM	04:30 PM	44	0	8	0	14	32	0	0	0	0	0	0	0	15	11	0	124	
04:30 PM	04:45 PM	33	0	13	0	20	29	0	0	0	0	0	0	0	26	28	0	149	
04:45 PM	05:00 PM	27	1	5	0	22	35	0	0	0	0	0	0	0	28	13	0	131	538
05:00 PM	05:15 PM	30	1	6	0	34	37	0	0	0	0	0	0	0	38	20	0	166	570
05:15 PM	05:30 PM	38	0	7	0	24	35	0	0	0	0	0	0	0	25	20	0	149	595
05:30 PM	05:45 PM	40	1	6	0	24	26	0	0	0	0	0	0	0	17	20	0	134	580
05:45 PM	06:00 PM	43	0	6	0	18	29	0	0	0	0	0	0	0	13	13	0	122	571



ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
128	2	31	100	136	0	0	0	0	0	117	81
161			236			0			198		
Trucks:	0%	Trucks:	0%	Trucks:	0%	Trucks:	0%	Trucks:	0%		
Peak Hour:	4:30:00 PM		5:30 PM			Peak Vol:	595	PHF:	0.90		

OPTIONAL Adjustment Factor	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

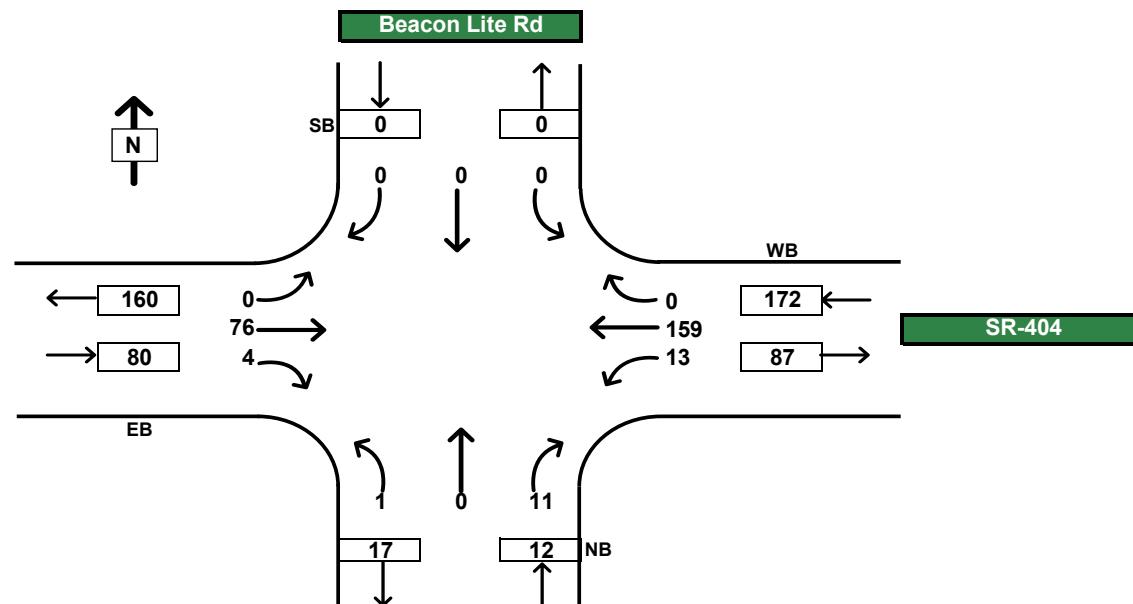
## TRAFFIC COUNT SUMMARY

City: Monument  
 N-S Street: Beacon Lite Rd  
 Date: Wednesday, August 19, 2020  
 Begin Time: 07:00 AM  
 Interval Length: 15 min

E-W Street: SR-404

**HORROCKS**  
 ENGINEERS

Time Interval		SB				WB				NB				EB				Total All Moves	Hourly Totals
		Left	Thru	Right	PED														
07:00 AM	07:15 AM	0	0	0	0	1	27	0	0	0	0	6	0	0	21	0	0	55	
07:15 AM	07:30 AM	0	0	0	0	5	23	0	0	1	0	6	0	0	21	0	0	56	
07:30 AM	07:45 AM	0	0	0	0	7	33	0	0	2	0	9	0	0	21	0	0	72	
07:45 AM	08:00 AM	0	0	0	0	4	44	0	0	1	0	1	0	0	26	0	0	76	259
08:00 AM	08:15 AM	0	0	0	0	1	32	0	0	0	0	0	0	0	19	1	0	53	257
08:15 AM	08:30 AM	0	0	0	0	3	29	0	0	0	0	3	0	0	16	1	0	52	253
08:30 AM	08:45 AM	0	0	0	0	5	54	0	0	0	0	7	0	0	15	2	0	83	264
08:45 AM	09:00 AM	0	0	0	0	5	31	0	0	2	0	6	0	0	28	2	0	74	262



ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	13	159	0	1	0	11	0	76	4
0				172				12		80	
Trucks:	0%	Trucks:	0%	Trucks:	0%	Trucks:	0%	Trucks:	0%		
Peak Hour:	7:45:00 AM		8:45 AM			Peak Vol:	264	PHF:	0.80		

OPTIONAL Adjustment Factor	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

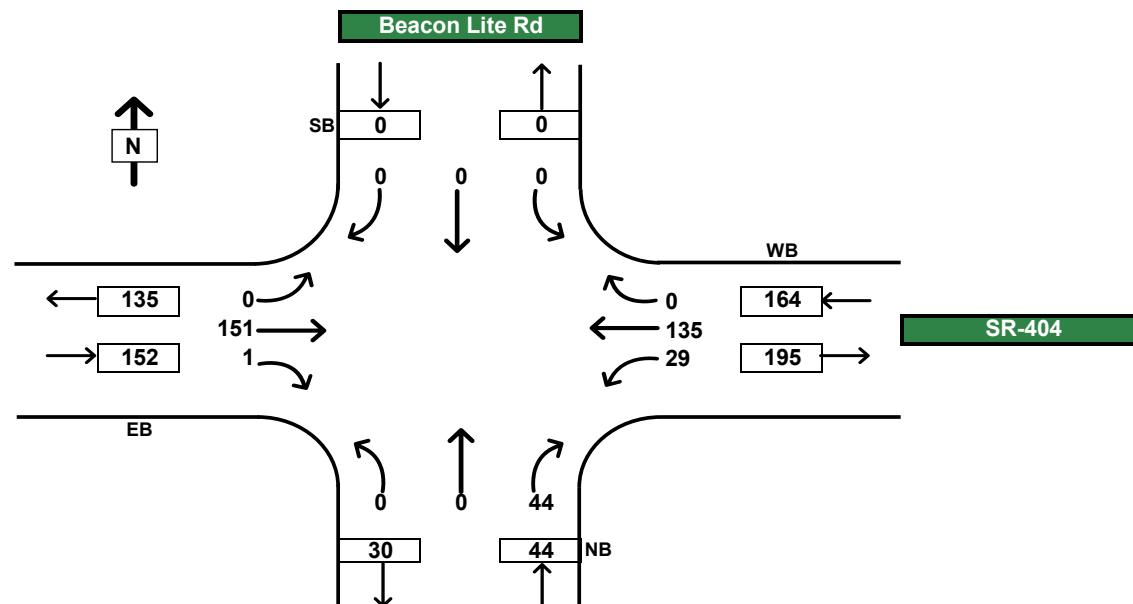
## TRAFFIC COUNT SUMMARY

City: Monument  
 N-S Street: Beacon Lite Rd  
 Date: Tuesday, August 18, 2020  
 Begin Time: 04:00 PM  
 Interval Length: 15 min

E-W Street: SR-404

**HORROCKS**  
 ENGINEERS

Time Interval		SB				WB				NB				EB				Hourly Totals
		Left	Thru	Right	PED	5	6	7	8	9	10	11	12	13	14	15	16	
04:00 PM	04:15 PM	0	0	0	0	6	28	0	0	1	0	12	0	0	38	2	0	87
04:15 PM	04:30 PM	0	0	0	0	8	31	0	0	0	0	9	0	0	17	1	0	66
04:30 PM	04:45 PM	0	0	0	0	9	28	0	0	0	0	10	0	0	43	0	0	90
04:45 PM	05:00 PM	0	0	0	0	8	35	0	0	0	0	9	0	0	34	1	0	87
05:00 PM	05:15 PM	0	0	0	0	4	37	0	0	0	0	12	0	0	42	0	0	95
05:15 PM	05:30 PM	0	0	0	0	8	35	0	0	0	0	13	0	0	32	0	0	88
05:30 PM	05:45 PM	0	0	0	0	4	26	0	0	0	0	6	0	0	30	0	0	66
05:45 PM	06:00 PM	0	0	0	0	5	29	0	0	0	0	9	0	0	18	0	0	61



ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	29	135	0	0	0	44	0	151	1
0	0	0	164	0	0	44	0	152	0	0	0
Trucks:	0%	Trucks:	0%	Trucks:	0%	Trucks:	0%	Trucks:	0%	Trucks:	0%
Peak Hour:	4:30:00 PM		5:30 PM			Peak Vol:	360	PHF:	0.95		

OPTIONAL Adjustment Factor	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

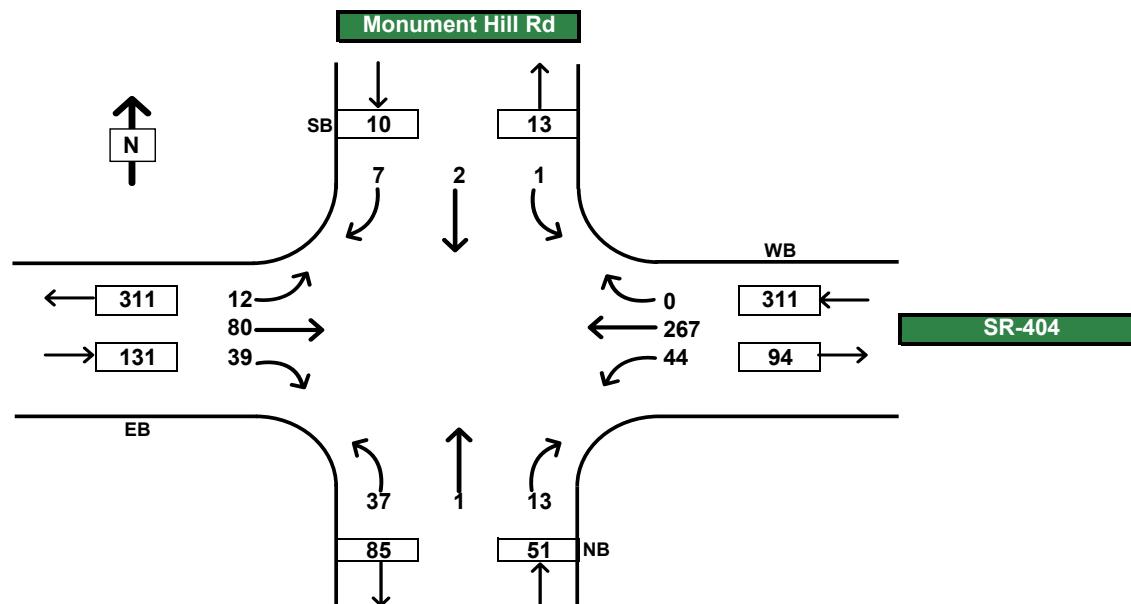
## TRAFFIC COUNT SUMMARY

City: **Monument**  
 N-S Street: **Monument Hill Rd**  
 Date: **Wednesday, August 19, 2020**  
 Begin Time: **07:00 AM**  
 Interval Length: **15 min**

E-W Street: **SR-404**

**HORROCKS**  
  
**E N G I N E E R S**

Time Interval		SB				WB				NB				EB				Hourly Totals
		Left	Thru	Right	PED													
07:00 AM	07:15 AM	0	0	2	0	9	68	0	0	6	0	1	0	3	10	10	0	109
07:15 AM	07:30 AM	0	1	3	0	30	73	0	0	8	0	5	0	3	20	10	0	153
07:30 AM	07:45 AM	1	0	1	0	2	69	0	0	18	0	7	0	3	16	8	0	125
07:45 AM	08:00 AM	0	1	1	0	3	57	0	0	5	1	0	0	3	34	11	0	116
08:00 AM	08:15 AM	0	0	1	0	5	63	0	0	10	0	1	0	1	19	5	0	105
08:15 AM	08:30 AM	0	0	4	0	5	50	0	0	3	1	3	0	1	19	8	0	94
08:30 AM	08:45 AM	0	0	2	0	3	59	0	0	5	0	2	0	0	33	6	0	110
08:45 AM	09:00 AM	0	1	0	0	4	60	2	0	13	0	4	0	5	34	8	0	131



ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	2	7	44	267	0	37	1	13	12	80	39
10			311			51			131		
Trucks:	0%	Trucks:	0%	Trucks:	0%	Trucks:	0%	Trucks:	0%	Trucks:	0%
Peak Hour:	7:00:00 AM		8:00 AM			Peak Vol:	503	PHF:	0.82		

OPTIONAL Adjustment Factor	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

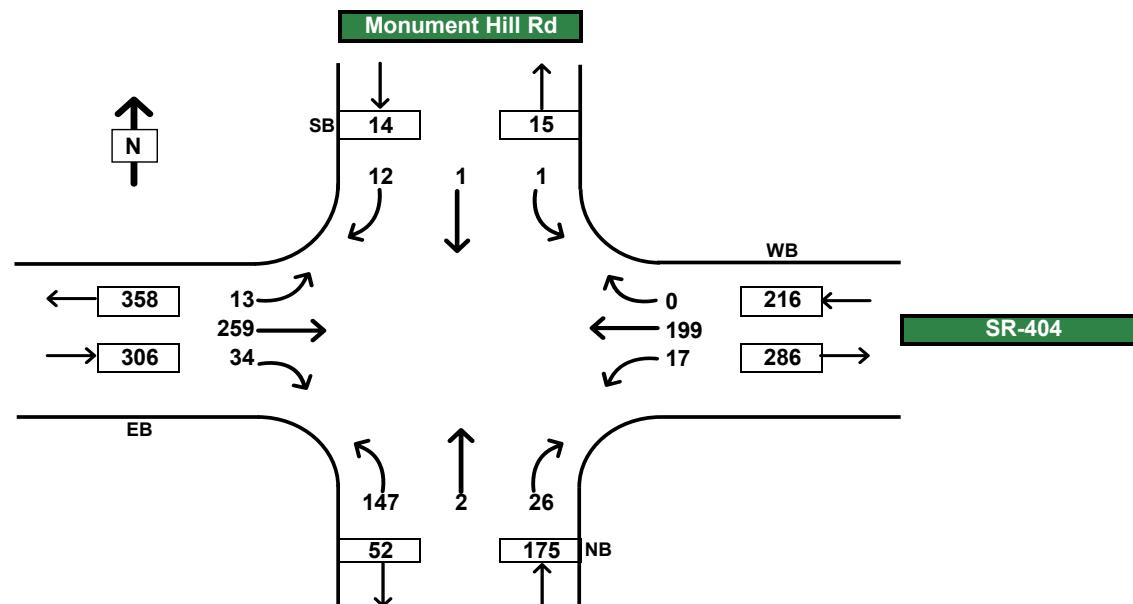
## TRAFFIC COUNT SUMMARY

City: **Monument**  
 N-S Street: **Monument Hill Rd**  
 Date: **Tuesday, August 18, 2020**  
 Begin Time: **04:00 PM**  
 Interval Length: **15 min**

E-W Street: **SR-404**

**HORROCKS**  
  
**E N G I N E E R S**

Time Interval		SB				WB				NB				EB				Total All Moves	Hourly Totals
		Left	Thru	Right	PED														
04:00 PM	04:15 PM	0	0	1	0	7	57	0	0	95	0	9	0	4	61	9	0	243	
04:15 PM	04:30 PM	1	0	6	0	4	46	0	0	32	2	7	0	4	62	11	0	175	
04:30 PM	04:45 PM	0	0	3	0	3	46	0	0	11	0	5	0	2	71	7	0	148	
04:45 PM	05:00 PM	0	1	2	0	3	50	0	0	9	0	5	0	3	65	7	0	145	711
05:00 PM	05:15 PM	1	0	1	0	6	50	0	0	7	0	10	0	3	79	11	0	168	636
05:15 PM	05:30 PM	0	0	2	0	1	49	0	0	6	1	3	0	3	80	6	0	151	612
05:30 PM	05:45 PM	0	2	2	0	1	46	2	0	2	2	8	0	1	83	7	0	156	620
05:45 PM	06:00 PM	0	0	3	0	2	43	0	0	2	0	2	0	5	77	7	0	141	616



ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	1	12	17	199	0	147	2	26	13	259	34
14			216			175			306		
Trucks: 0%	Trucks: 0%	Trucks: 0%	Peak Hour: 4:00:00 PM	Peak Hour: 5:00 PM	Peak Vol: 711	PHF: 0.73					

OPTIONAL Adjustment Factor	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

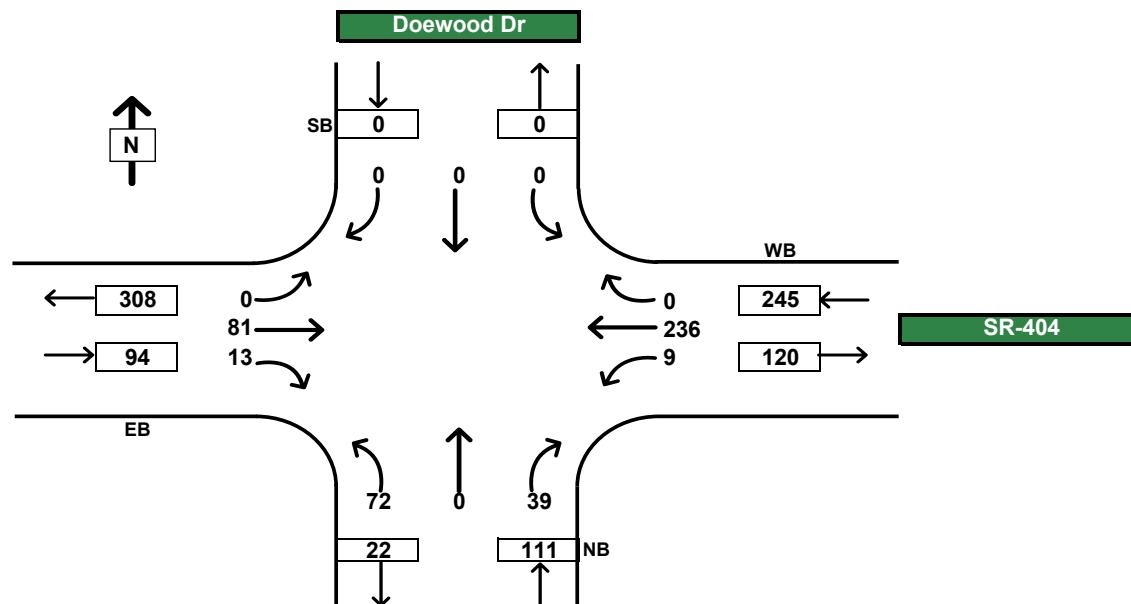
## TRAFFIC COUNT SUMMARY

City: Monument  
 N-S Street: Doewood Dr  
 Date: Wednesday, August 19, 2020  
 Begin Time: 07:00 AM  
 Interval Length: 15 min

E-W Street: SR-404

**HORROCKS**  
  
**E N G I N E E R S**

Time Interval		SB				WB				NB				EB				Total All Moves	Hourly Totals
		Left	Thru	Right	PED														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
07:00 AM	07:15 AM	0	0	0	0	3	61	0	0	19	0	6	0	0	9	3	0	101	
07:15 AM	07:30 AM	0	0	0	0	4	78	0	0	21	0	15	0	0	18	4	0	140	
07:30 AM	07:45 AM	0	0	0	0	1	48	0	0	20	0	10	0	0	24	2	0	105	
07:45 AM	08:00 AM	0	0	0	0	1	49	0	0	12	0	8	0	0	30	4	0	104	450
08:00 AM	08:15 AM	0	0	0	0	1	54	0	0	12	0	4	0	0	15	5	0	91	440
08:15 AM	08:30 AM	0	0	0	0	0	43	0	0	13	0	2	0	0	16	6	0	80	380
08:30 AM	08:45 AM	0	0	0	0	2	50	0	0	10	0	7	0	0	25	10	0	104	379
08:45 AM	09:00 AM	0	0	0	0	6	51	0	0	16	0	4	0	0	28	9	0	114	389



ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	9	236	0	72	0	39	0	81	13
0	245					111			94		
Trucks:	0%	Trucks:	0%	Trucks:	0%	Trucks:	0%	Trucks:	0%	Trucks:	0%
Peak Hour:	7:00:00 AM		8:00 AM			Peak Vol:	450	PHF:	0.80		

OPTIONAL Adjustment Factor	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

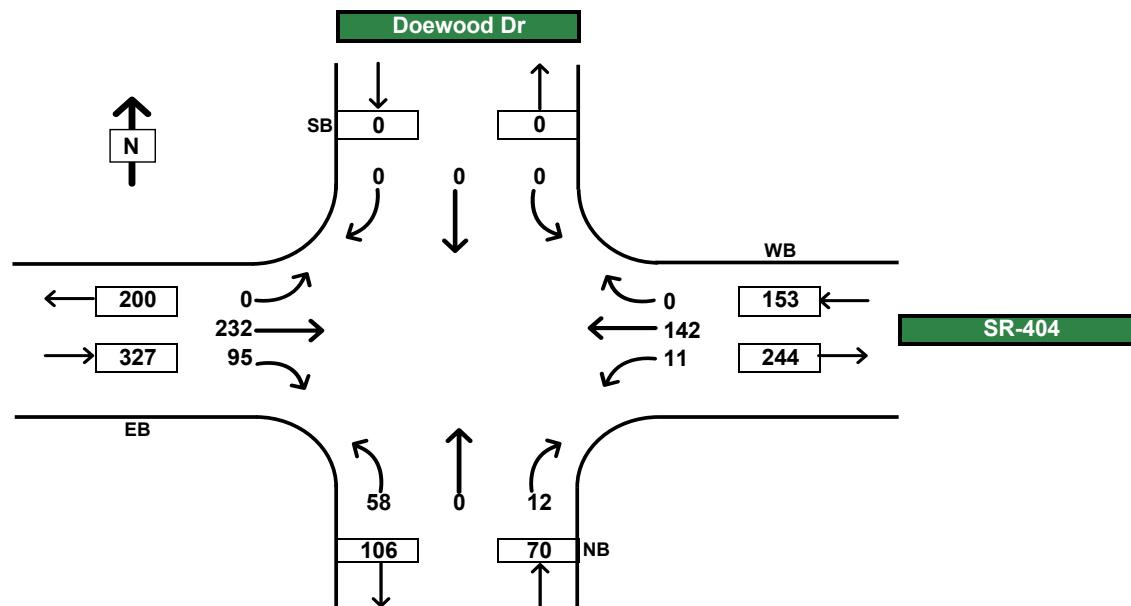
## TRAFFIC COUNT SUMMARY

City: Monument  
 N-S Street: Doewood Dr  
 Date: Wednesday, August 19, 2020  
 Begin Time: 04:00 PM  
 Interval Length: 15 min

E-W Street: SR-404

**HORROCKS**  
 ENGINEERS

Time Interval		SB				WB				NB				EB				Hourly Totals
		Left	Thru	Right	PED	5	6	7	8	9	10	11	12	13	14	15	16	
04:00 PM	04:15 PM	0	0	0	0	4	54	0	0	10	0	1	0	0	56	13	0	138
04:15 PM	04:30 PM	0	0	0	0	2	43	0	0	7	0	0	0	0	58	13	0	123
04:30 PM	04:45 PM	0	0	0	0	1	42	0	0	7	0	2	0	0	58	14	0	124
04:45 PM	05:00 PM	0	0	0	0	4	42	0	0	9	0	3	0	0	49	21	0	128
05:00 PM	05:15 PM	0	0	0	0	3	42	0	0	13	0	1	0	0	67	21	0	147
05:15 PM	05:30 PM	0	0	0	0	2	31	0	0	15	0	4	0	0	55	28	0	135
05:30 PM	05:45 PM	0	0	0	0	2	27	0	0	21	0	4	0	0	61	25	0	140
05:45 PM	06:00 PM	0	0	0	0	2	36	0	0	8	0	3	0	0	55	23	0	127
																		549



ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	11	142	0	58	0	12	0	232	95
0	0	0	153	0	0	70	0	0	327	0	0
Trucks:	0%	Trucks:	0%	Trucks:	0%	Trucks:	0%	Trucks:	0%	Trucks:	0%
Peak Hour:	4:45:00 PM		5:45 PM			Peak Vol:	550	PHF:	0.94		

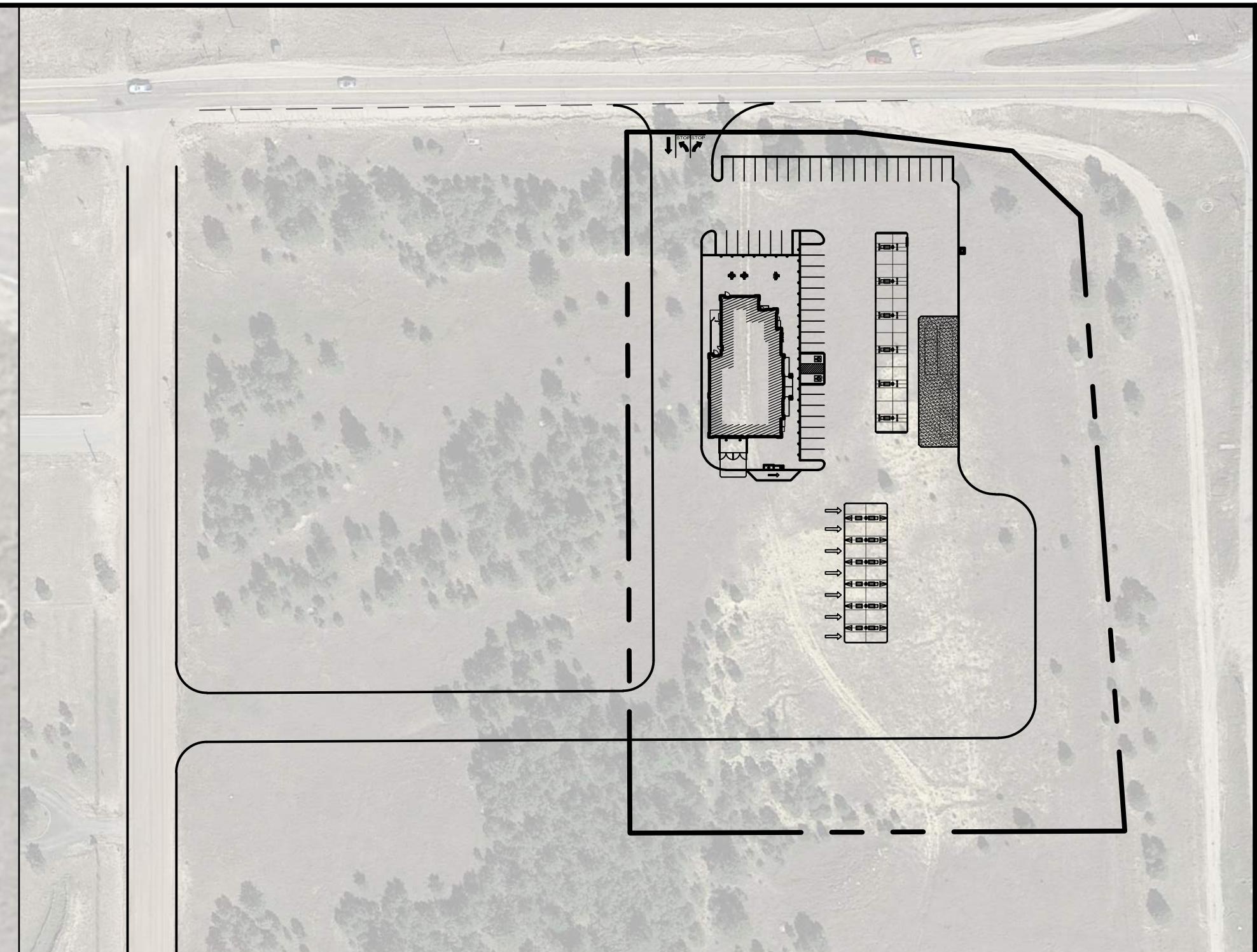
OPTIONAL Adjustment Factor	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1



SITE LAYOUT



**STORE #: TBD  
MAVERIK, INC.  
COUNTY LINE ROAD &  
INTERSTATE 25  
MONUMENT, COLORADO**

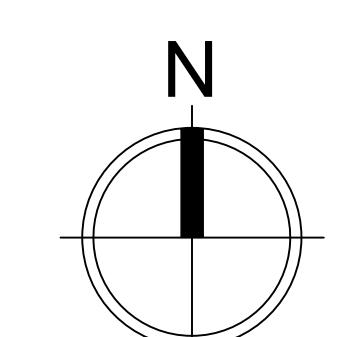


**NOTES:**

- AREAS AND DIMENSIONS PROVIDED ARE APPROXIMATE AND SHOULD BE VERIFIED BY A SURVEY
- THIS PLAN IS FOR ILLUSTRATIVE PURPOSES ONLY
- THE BOUNDARIES OF THE PROPERTY SHOWN ON THIS DRAWING WERE CREATED FROM SCALED INFORMATION AND SHOULD NOT BE CONSIDERED ACCURATE.

# SITE DATA

PARKING:	48 STALLS PROVIDED (2 A.D.A.) (Not incl. gas canopy locations)
PARCEL AREA:	217,991 SQ. FT.
BUILDING AREA:	5,951 SQ. FT.



DATE	DESCRIPTION	REVISED BY
03/03/03	FIT STUDY ANALYSIS 01	

# FIT STUDY ANALYSIS 01

# Option A



TRIP GENERATION

Monument Maverik Trip Gen										
Variable	Quantity	Daily			AM Peak Hour			PM Peak Hour		
		Total	In	Out	Total	In	Out	Total	In	Out
Gasoline/service Station (ITE 945)		205.36	50%	50%	12.47	51%	49%	13.99	51%	49%
Pumps	19	3,902	1,951	1,951	237	121	116	266	136	130
Total New Trips		3,902	1,951	1,951	237	121	116	266	136	130
Pass by Trips Percent					62%			56%		
Adjusted Pass by trips					147	75	72	149	76	73
Adjusted Total New Trips					90	46	44	117	60	57

ITE Trip Generation 10th Edition

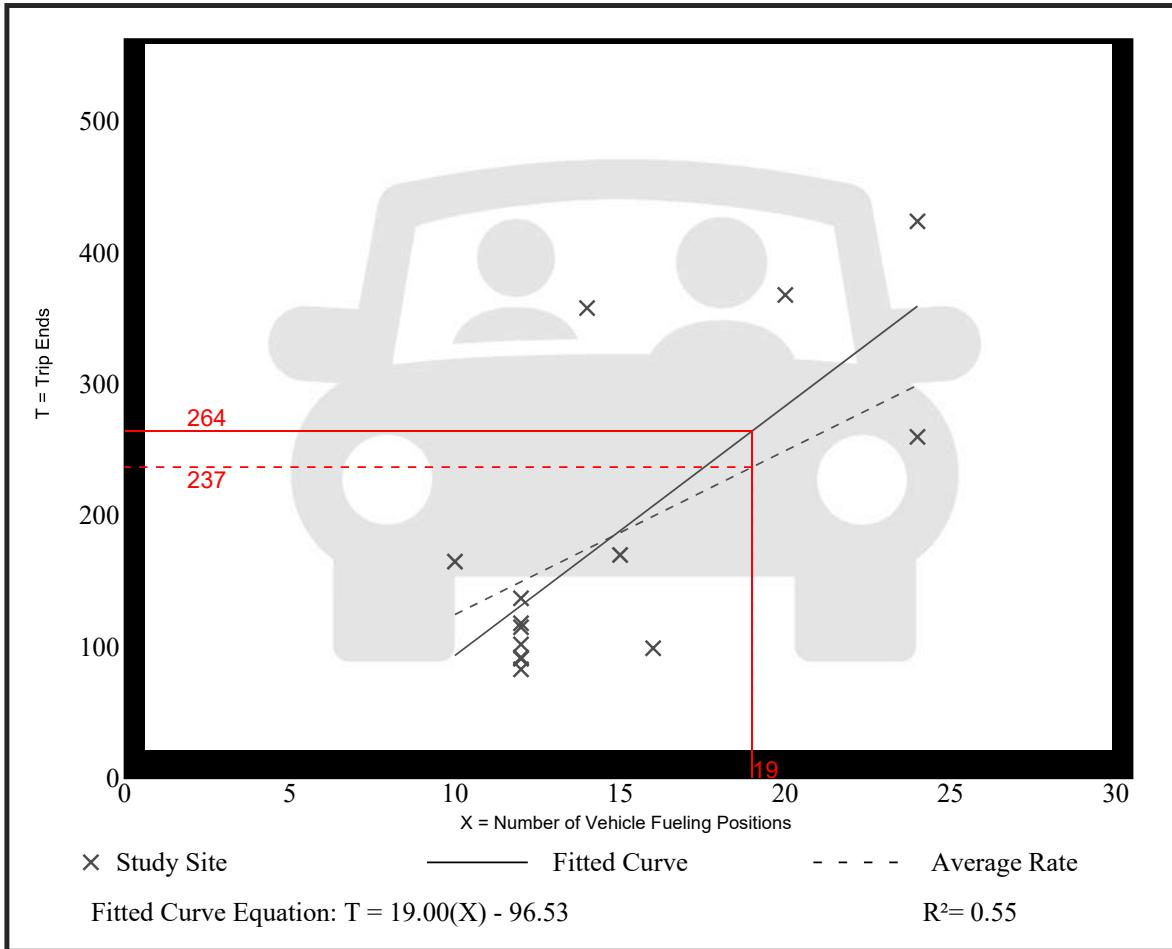
Gasoline/Service Station With Convenience Market  
(945)

**Vehicle Trip Ends vs: Vehicle Fueling Positions**  
**On a:** Weekday,  
**Peak Hour of Adjacent Street Traffic,**  
**One Hour Between 7 and 9 a.m.**  
**Setting/Location:** General Urban/Suburban  
 Number of Studies: 14  
 Avg. Num. of Vehicle Fueling Positions: 15  
 Directional Distribution: 51% entering, 49% exiting

### Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
12.47	6.19 - 25.57	5.56

### Data Plot and Equation



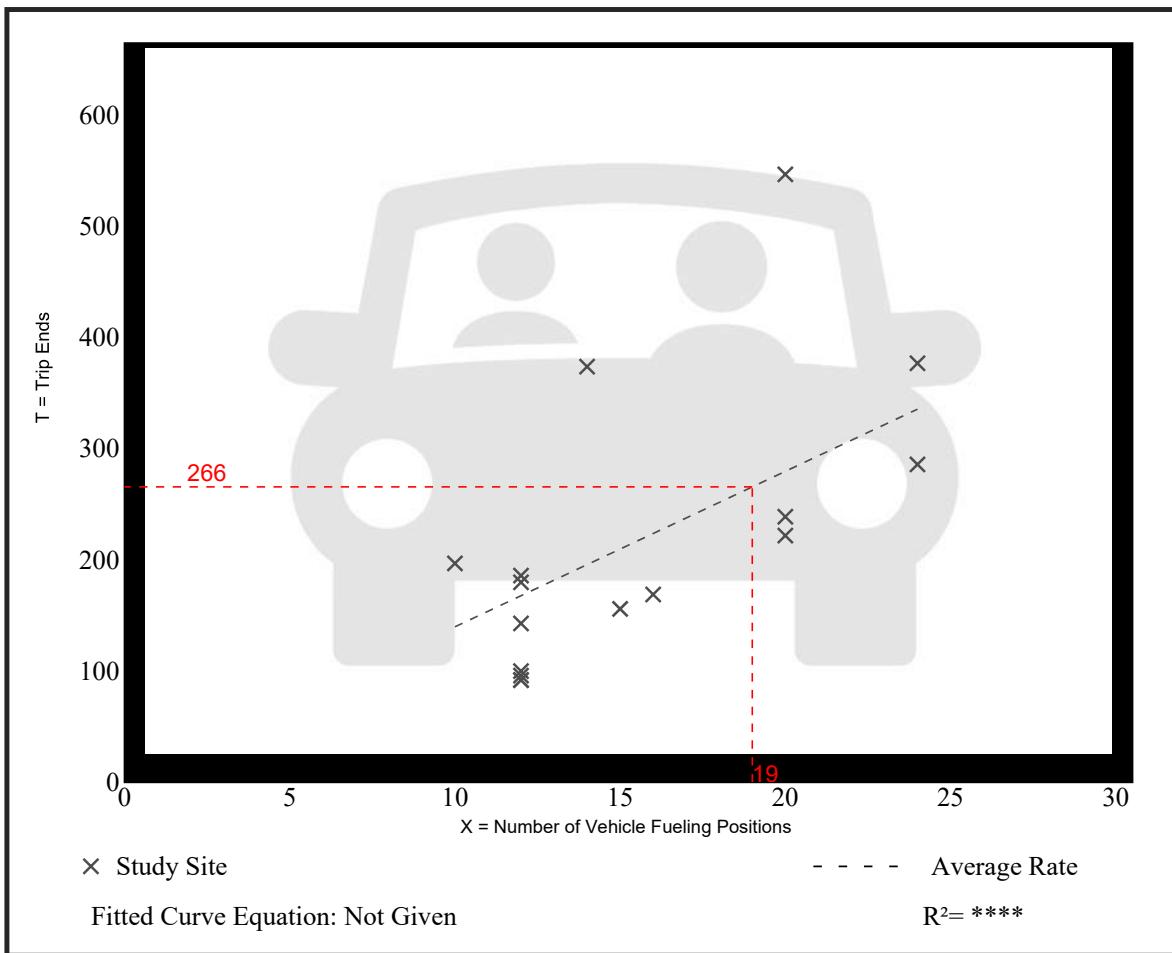
Gasoline/Service Station With Convenience Market  
(945)

**Vehicle Trip Ends vs: Vehicle Fueling Positions**  
**On a:** Weekday,  
**Peak Hour of Adjacent Street Traffic,**  
**One Hour Between 4 and 6 p.m.**  
**Setting/Location:** General Urban/Suburban  
 Number of Studies: 16  
 Avg. Num. of Vehicle Fueling Positions: 15  
 Directional Distribution: 51% entering, 49% exiting

### Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
13.99	7.67 - 27.35	6.18

### Data Plot and Equation



Gasoline/Service Station With Convenience Market  
(945)

**Vehicle Trip Ends vs: Vehicle Fueling Positions**  
On a: Weekday

**Setting/Location:** General Urban/Suburban

Number of Studies: 5

Avg. Num. of Vehicle Fueling Positions: 18

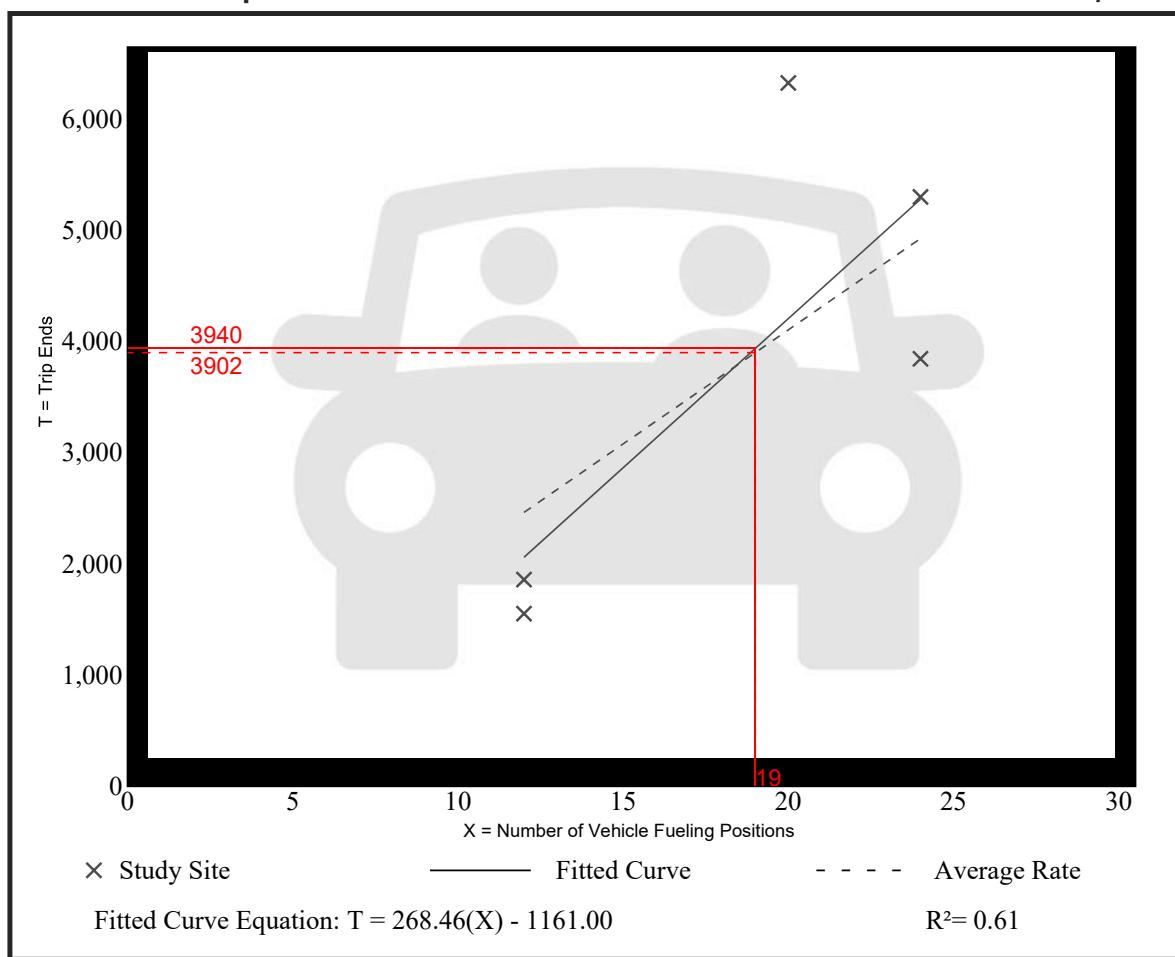
Directional Distribution: 50% entering, 50% exiting

**Vehicle Trip Generation per Vehicle Fueling Position**

Average Rate	Range of Rates	Standard Deviation
205.36	129.50 - 316.45	73.80

**Data Plot and Equation**

**Caution – Small Sample Size**





Existing TRAFFIC

Vistro File: D:\...\Vistro Base.vistro  
Report File: D:\...\1- Existing AM.pdf

Scenario 1 Existing AM  
9/16/2020

### Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Beacon Lite Rd & SR 404	Two-way stop	HCM 6. Auflage	NB Left	0.006	10.1	B
2	I-25 & SR-404 Southbound On/off Ramps	Two-way stop	HCM 6. Auflage	SB Thru	0.005	14.7	B
3	I-25 & SR-404 Northbound On/off Ramps	Two-way stop	HCM 6. Auflage	NB Thru	0.002	13.8	B
4	Monument Hill Rd & SR-404	Two-way stop	HCM 6. Auflage	NB Thru	0.002	13.3	B
5	Doewood Dr & SR-404	Two-way stop	HCM 6. Auflage	NB Left	0.114	11.3	B
6	SR-404 & North Access	Two-way stop	HCM 6. Auflage	WB Thru	0.001	0.0	A
7	Beacon Lite Rd & West Access	Two-way stop	HCM 6. Auflage	NB Thru	0.000	0.0	A

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: Beacon Lite Rd & SR 404**

Control Type:	Two-way stop	Delay (sec / veh):	10.1
Analysis Method:	HCM 6. Auflage	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.006

**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]	35.00		45.00		45.00		
Grade [%]	0.00			0.00		0.00	
Crosswalk	Ja			Ja		Ja	

**Volumes**

Name							
Base Volume Input [veh/h]	4	22	94	0	17	127	
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]	4	22	94	0	17	127	
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	1	6	24	0	4	32	
Total Analysis Volume [veh/h]	4	22	94	0	17	127	
Pedestrian Volume [ped/h]	0			0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	Nein		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.01	0.02	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	10.08	8.85	0.00	0.00	7.43	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.09	0.09	0.00	0.00	0.03	0.03
95th-Percentile Queue Length [ft/ln]	2.19	2.19	0.00	0.00	0.86	0.86
d_A, Approach Delay [s/veh]	9.04		0.00		0.88	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]			1.37			
Intersection LOS			B			

**Intersection Level Of Service Report**  
**Intersection 2: I-25 & SR-404 Southbound On/off Ramps**

Control Type:	Two-way stop	Delay (sec / veh):	14.7
Analysis Method:	HCM 6. Auflage	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

**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	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	0	0	0	48	2	14	0	72	44	134	135	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	0	0	0	48	2	14	0	72	44	134	135	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	12	1	4	0	18	11	34	34	0
Total Analysis Volume [veh/h]	0	0	0	48	2	14	0	72	44	134	135	0
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		Nein		
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.11	0.00	0.02	0.00	0.00	0.00	0.09	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	14.33	14.73	9.00	0.00	0.00	0.00	7.69	0.00	0.00
Movement LOS				B	B	A		A	A	A	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.39	0.39	0.05	0.00	0.00	0.00	0.30	0.30	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	9.66	9.66	1.17	0.00	0.00	0.00	7.49	7.49	0.00
d_A, Approach Delay [s/veh]		0.00			13.18			0.00			3.83	
Approach LOS		A		B			A			A		
d_I, Intersection Delay [s/veh]							4.17					
Intersection LOS							B					

**Intersection Level Of Service Report**  
**Intersection 3: I-25 & SR-404 Northbound On/off Ramps**

Control Type:	Two-way stop	Delay (sec / veh):	13.8
Analysis Method:	HCM 6. Auflage	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

**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]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	84	1	41	0	0	0	30	90	0	0	185	122
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	84	1	41	0	0	0	30	90	0	0	185	122
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	21	0	10	0	0	0	8	23	0	0	46	31
Total Analysis Volume [veh/h]	84	1	41	0	0	0	30	90	0	0	185	122
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	Nein			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Nein			
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.15	0.00	0.04	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.93	13.77	10.10	0.00	0.00	0.00	7.94	0.00	0.00	0.00	0.00	0.00
Movement LOS	B	B	B				A	A			A	A
95th-Percentile Queue Length [veh/ln]	0.73	0.73	0.73	0.00	0.00	0.00	0.07	0.07	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	18.22	18.22	18.22	0.00	0.00	0.00	1.84	1.84	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		12.01			0.00			1.99				0.00
Approach LOS		B			A			A			A	
d_I, Intersection Delay [s/veh]							3.17					
Intersection LOS							B					

**Intersection Level Of Service Report**  
**Intersection 4: Monument Hill Rd & SR-404**

Control Type:	Two-way stop	Delay (sec / veh):	13.3
Analysis Method:	HCM 6. Auflage	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

**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]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	37	1	13	1	2	7	12	80	39	40	263	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	37	1	13	1	2	7	12	80	39	40	263	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	0	3	0	1	2	3	20	10	10	66	0
Total Analysis Volume [veh/h]	37	1	13	1	2	7	12	80	39	40	263	0
Pedestrian Volume [ped/h]	0			0			0			0		

## Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	Nein	Nein		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Nein	Nein		
Number of Storage Spaces in Median	0	0	0	0

## Movement, Approach, & Intersection Results

**Intersection Level Of Service Report**  
**Intersection 5: Doewood Dr & SR-404**

Control Type:	Two-way stop	Delay (sec / veh):	11.3
Analysis Method:	HCM 6. Auflage	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.114

**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	1	1	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	280.00	450.00	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]	25.00		45.00		45.00		
Grade [%]	0.00			0.00		0.00	
Crosswalk	Ja		Ja		Ja		

**Volumes**

Name							
Base Volume Input [veh/h]	75	39	81	13	9	232	
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]	75	39	81	13	9	232	
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	19	10	20	3	2	58	
Total Analysis Volume [veh/h]	75	39	81	13	9	232	
Pedestrian Volume [ped/h]	0			0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	Nein		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.11	0.04	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	11.33	9.55	0.00	0.00	7.41	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.54	0.54	0.00	0.00	0.02	0.00
95th-Percentile Queue Length [ft/ln]	13.51	13.51	0.00	0.00	0.45	0.00
d_A, Approach Delay [s/veh]	10.73		0.00		0.28	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]			2.87			
Intersection LOS			B			

**Intersection Level Of Service Report**  
**Intersection 6: SR-404 & North Access**

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6. Auflage	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

**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	1	0	0	0	0	
Entry Pocket Length [ft]	100.00	50.00	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]	15.00		45.00		45.00		
Grade [%]	0.00		0.00		0.00		
Crosswalk	Ja		Ja		Ja		

**Volumes**

Name						
Base Volume Input [veh/h]	0	0	116	0	0	149
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	0	116	0	0	149
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	29	0	0	37
Total Analysis Volume [veh/h]	0	0	116	0	0	149
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
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]	9.97	8.85	0.00	0.00	7.44	0.00
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]		9.41		0.00		0.00
Approach LOS		A		A		A
d_I, Intersection Delay [s/veh]				0.00		
Intersection LOS				A		

**Intersection Level Of Service Report**  
**Intersection 7: Beacon Lite Rd & West Access**

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

**Intersection Setup**

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	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]	35.00		35.00		15.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Ja		Ja		Ja	

**Volumes**

Name						
Base Volume Input [veh/h]	26	0	0	17	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]	26	0	0	17	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	0	0	4	0	0
Total Analysis Volume [veh/h]	26	0	0	17	0	0
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Free	Free	Stop
Flared Lane			Nein
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Nein
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]	0.00	0.00	7.27	0.00	8.72	8.43
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		8.57	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]			0.00			
Intersection LOS			A			

Vistro File: D:\...\Vistro Base.vistro

Scenario 1 Existing AM

Report File: D:\...\1- Existing AM.pdf

9/16/2020

**Turning Movement Volume: Summary**

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
1	Beacon Lite Rd & SR 404	4	22	94	0	17	127	264

ID	Intersection Name	Southbound			Eastbound		Westbound		Total Volume
		Left	Thru	Right	Thru	Right	Left	Thru	
2	I-25 & SR-404 Southbound On/off Ramps	48	2	14	72	44	134	135	449

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Thru	Right	Left	Thru	Thru	Right	
3	I-25 & SR-404 Northbound On/off Ramps	84	1	41	30	90	185	122	553

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	Monument Hill Rd & SR-404	37	1	13	1	2	7	12	80	39	40	263	0	495

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru		
5	Doewood Dr & SR-404	75	39	81	13	9	232	449	

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru		
6	SR-404 & North Access	0	0	116	0	0	149	265	

ID	Intersection Name	Northbound			Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Right	Left	Right	
7	Beacon Lite Rd & West Access	26	0	0	17	0	0	43	

Vistro File: D:\...\Vistro Base.vistro

Report File: D:\...\1- Existing AM.pdf

Scenario 1 Existing AM

9/16/2020

**Turning Movement Volume: Detail**

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
1	Beacon Lite Rd & SR 404	Final Base	4	22	94	0	17	127	264
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>4</b>	<b>22</b>	<b>94</b>	<b>0</b>	<b>17</b>	<b>127</b>	<b>264</b>

ID	Intersection Name	Volume Type	Southbound			Eastbound		Westbound		Total Volume
			Left	Thru	Right	Thru	Right	Left	Thru	
2	I-25 & SR-404 Southbound On/off Ramps	Final Base	48	2	14	72	44	134	135	449
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>48</b>	<b>2</b>	<b>14</b>	<b>72</b>	<b>44</b>	<b>134</b>	<b>135</b>	<b>449</b>

ID	Intersection Name	Volume Type	Northbound			Eastbound		Westbound		Total Volume
			Left	Thru	Right	Left	Thru	Thru	Right	
3	I-25 & SR-404 Northbound On/off Ramps	Final Base	84	1	41	30	90	185	122	553
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>84</b>	<b>1</b>	<b>41</b>	<b>30</b>	<b>90</b>	<b>185</b>	<b>122</b>	<b>553</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	Monument Hill Rd & SR-404	Final Base	37	1	13	1	2	7	12	80	39	40	263	0	495
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>37</b>	<b>1</b>	<b>13</b>	<b>1</b>	<b>2</b>	<b>7</b>	<b>12</b>	<b>80</b>	<b>39</b>	<b>40</b>	<b>263</b>	<b>0</b>	<b>495</b>

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
5	Doewood Dr & SR-404	Final Base	75	39	81	13	9	232	449
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>75</b>	<b>39</b>	<b>81</b>	<b>13</b>	<b>9</b>	<b>232</b>	<b>449</b>

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
6	SR-404 & North Access	Final Base	0	0	116	0	0	149	265
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>0</b>	<b>0</b>	<b>116</b>	<b>0</b>	<b>0</b>	<b>149</b>	<b>265</b>

ID	Intersection Name	Volume Type	Northbound		Southbound		Westbound		Total Volume
			Thru	Right	Left	Thru	Left	Right	
7	Beacon Lite Rd & West Access	Final Base	26	0	0	17	0	0	43
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>26</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>43</b>

## Signal Warrants Report For Intersection 1: Beacon Lite Rd &amp; SR 404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	144	94	26
2	140	91	25
3	137	89	25
4	128	84	23
5	114	74	21
6	112	73	20
7	111	72	20
8	101	66	18
9	99	65	18
10	98	64	18
11	85	55	15
12	79	52	14
13	78	51	14
14	58	38	10
15	58	38	10
16	40	26	7
17	23	15	4
18	23	15	4
19	13	8	2
20	7	5	1
21	4	3	1
22	1	1	0
23	1	1	0
24	1	1	0

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	238	1	26	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	231	1	25	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	226	1	25	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	212	1	23	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	188	1	21	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	185	1	20	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	183	1	20	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	167	1	18	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	164	1	18	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	162	1	18	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	140	1	15	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	131	1	14	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	129	1	14	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	96	1	10	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	96	1	10	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	66	1	7	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	38	1	4	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	38	1	4	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	21	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	12	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	7	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	2	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	2	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	2	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	9
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:03
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	26
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	264
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 2: I-25 &amp; SR-404 Southbound On/off Ramps

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>N</b>
1	269	116	64
2	261	113	62
3	256	110	61
4	239	103	57
5	213	92	51
6	210	90	50
7	207	89	49
8	188	81	45
9	186	80	44
10	183	79	44
11	159	68	38
12	148	64	35
13	145	63	35
14	108	46	26
15	108	46	26
16	75	32	18
17	43	19	10
18	43	19	10
19	24	10	6
20	13	6	3
21	8	3	2
22	3	1	1
23	3	1	1
24	3	1	1

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	385	2	64	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	374	2	62	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	366	2	61	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	342	2	57	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	305	2	51	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	300	2	50	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	296	2	49	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	269	2	45	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	266	2	44	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	262	2	44	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	227	2	38	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	212	2	35	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	208	2	35	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	154	2	26	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	154	2	26	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	107	2	18	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	62	2	10	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	62	2	10	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	34	2	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	19	2	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	11	2	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	4	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	4	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	4	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	13.2
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:14
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	64
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	449
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 3: I-25 &amp; SR-404 Northbound On/off Ramps

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	307	120	126
2	298	116	122
3	292	114	120
4	273	107	112
5	243	95	100
6	239	94	98
7	236	92	97
8	215	84	88
9	212	83	87
10	209	82	86
11	181	71	74
12	169	66	69
13	166	65	68
14	123	48	50
15	123	48	50
16	86	34	35
17	49	19	20
18	49	19	20
19	28	11	11
20	15	6	6
21	9	4	4
22	3	1	1
23	3	1	1
24	3	1	1

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	427	1	126	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
2	2	414	1	122	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
3	2	406	1	120	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
4	2	380	1	112	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
5	2	338	1	100	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
6	2	333	1	98	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	328	1	97	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	299	1	88	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	295	1	87	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	291	1	86	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	252	1	74	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	235	1	69	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	231	1	68	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	171	1	50	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	171	1	50	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	120	1	35	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	68	1	20	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	68	1	20	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	39	1	11	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	21	1	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	13	1	4	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	4	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	4	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	4	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	1	5	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	12
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:25
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	126
High Minor Volume Condition Met	Ja
Total Entering Volume on All Approaches During Same Hour	553
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 4: Monument Hill Rd &amp; SR-404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N, S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>	
	<b>E</b>	<b>W</b>	<b>N</b>	<b>S</b>
1	303	131	10	51
2	294	127	10	49
3	288	124	10	48
4	270	117	9	45
5	239	103	8	40
6	236	102	8	40
7	233	101	8	39
8	212	92	7	36
9	209	90	7	35
10	206	89	7	35
11	179	77	6	30
12	167	72	6	28
13	164	71	5	28
14	121	52	4	20
15	121	52	4	20
16	85	37	3	14
17	48	21	2	8
18	48	21	2	8
19	27	12	1	5
20	15	7	1	3
21	9	4	0	2
22	3	1	0	1
23	3	1	0	1
24	3	1	0	1

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	434	2	61	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	421	2	59	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	412	2	58	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	387	2	54	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	342	2	48	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	338	2	48	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	334	2	47	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	304	2	43	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	299	2	42	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	295	2	42	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	256	2	36	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	239	2	34	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	235	2	33	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	173	2	24	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	173	2	24	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	122	2	17	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	69	2	10	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	69	2	10	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	39	2	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	22	2	4	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	13	2	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	4	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	4	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	4	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	N	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	10.7	12.2
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:01	0:10
Delay Condition Met	Nein	Nein
Volume on Minor Street Approach During Same Hour	10	51
High Minor Volume Condition Met	Nein	Nein
Total Entering Volume on All Approaches During Same Hour	495	495
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Nein	Nein
Warrant Met for Approach	Nein	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>	

## Signal Warrants Report For Intersection 5: Doewood Dr &amp; SR-404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	241	94	114
2	234	91	111
3	229	89	108
4	214	84	101
5	190	74	90
6	188	73	89
7	186	72	88
8	169	66	80
9	166	65	79
10	164	64	78
11	142	55	67
12	133	52	63
13	130	51	62
14	96	38	46
15	96	38	46
16	67	26	32
17	39	15	18
18	39	15	18
19	22	8	10
20	12	5	6
21	7	3	3
22	2	1	1
23	2	1	1
24	2	1	1

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	335	1	114	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	4	325	1	111	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	4	318	1	108	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	4	298	1	101	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	4	264	1	90	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	4	261	1	89	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	4	258	1	88	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	4	235	1	80	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	4	231	1	79	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	4	228	1	78	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	4	197	1	67	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	4	185	1	63	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	4	181	1	62	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	4	134	1	46	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	4	134	1	46	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	4	93	1	32	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	4	54	1	18	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	4	54	1	18	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	4	30	1	10	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	4	17	1	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	4	10	1	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	4	3	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	4	3	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	4	3	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	10.7
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:20
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	114
High Minor Volume Condition Met	Ja
Total Entering Volume on All Approaches During Same Hour	449
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 6: SR-404 &amp; North Access

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	149	116	0
2	145	113	0
3	142	110	0
4	133	103	0
5	118	92	0
6	116	90	0
7	115	89	0
8	104	81	0
9	103	80	0
10	101	79	0
11	88	68	0
12	82	64	0
13	80	63	0
14	60	46	0
15	60	46	0
16	42	32	0
17	24	19	0
18	24	19	0
19	13	10	0
20	7	6	0
21	4	3	0
22	1	1	0
23	1	1	0
24	1	1	0

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	265	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	258	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	252	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	236	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	210	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	206	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	204	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	185	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	183	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	180	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	156	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	146	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	143	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	106	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	106	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	74	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	43	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	43	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	23	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	13	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	7	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	2	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	2	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	2	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	9.4
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:00
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	0
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	265
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 7: Beacon Lite Rd &amp; West Access

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	N, S
Minor Approaches	E
Speed > 40mph	Nein
Population < 10,000	Nein
Warrant Factor	100%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>N</b>	<b>S</b>	
1	17	26	0
2	16	25	0
3	16	25	0
4	15	23	0
5	13	21	0
6	13	20	0
7	13	20	0
8	12	18	0
9	12	18	0
10	12	18	0
11	10	15	0
12	9	14	0
13	9	14	0
14	7	10	0
15	7	10	0
16	5	7	0
17	3	4	0
18	3	4	0
19	2	2	0
20	1	1	0
21	1	1	0
22	0	0	0
23	0	0	0
24	0	0	0

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	43	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	41	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	41	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	38	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	34	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	33	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	33	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	30	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	30	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	30	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	25	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	23	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	23	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	17	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	17	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	12	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	7	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	7	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	4	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	2	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	2	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	0	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	0	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	0	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.6
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:00
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	0
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	43
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

Vistro File: D:\...\Vistro Base.vistro

Scenario 1 Existing AM

Report File: D:\...\1- Existing AM.pdf

9/16/2020

**Trip Generation Summary****Added Trips**

Zone ID: Name	Land Use variables	Code	Ind. Var.	Rate	Quantity	% In	% Out	Trips In	Trips Out	Total Trips	% of Total Trips
1: Zone				1.000	0.000	50.00	50.00	0	0	0	0.00
<b>Added Trips Total</b>									<b>0</b>	<b>0</b>	<b>0.00</b>

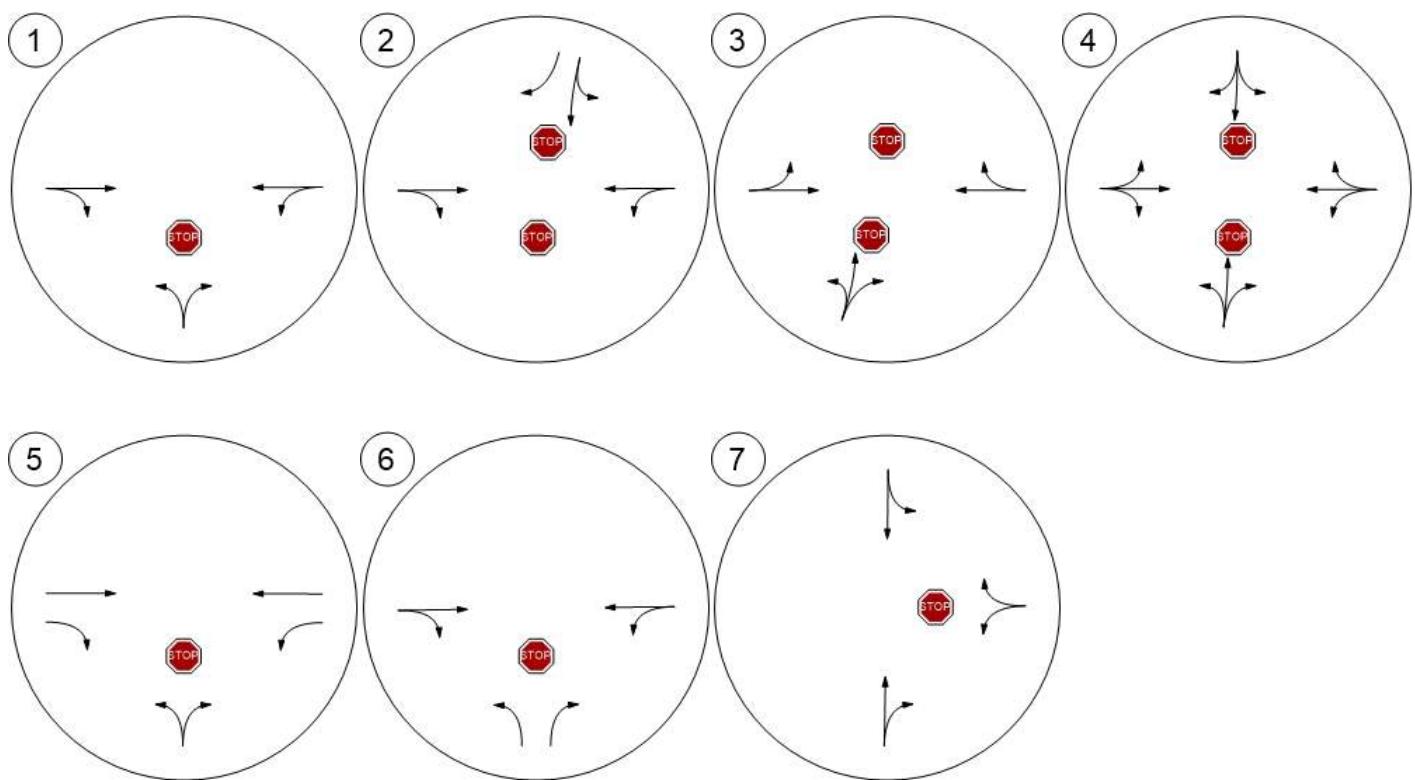
Vistro File: D:\...\Vistro Base.vistro  
Report File: D:\...\1- Existing AM.pdf

Scenario 1 Existing AM  
9/16/2020

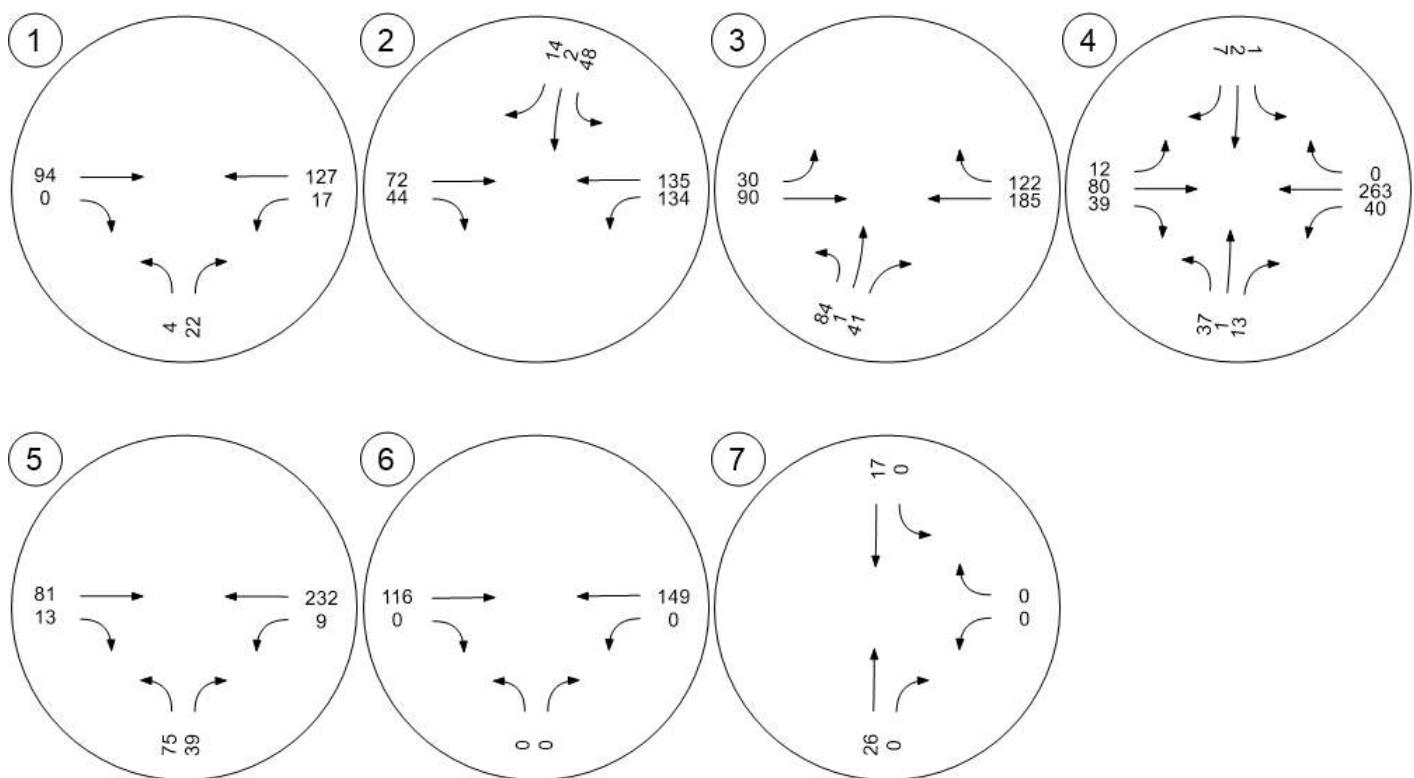
### Trip Distribution Summary

Zone / Gate	Zone 1: Zone			
	To Zone:		From Zone:	
	Share %	Trips	Share %	Trips
2: Gate	40.00	0	0.00	0
3: Gate	0.00	0	40.00	0
4: Gate	2.00	0	2.00	0
5: Gate	7.00	0	7.00	0
6: Gate	6.00	0	6.00	0
7: Gate	2.00	0	2.00	0
8: Gate	40.00	0	0.00	0
9: Gate	0.00	0	40.00	0
10: Gate	1.00	0	1.00	0
11: Gate	2.00	0	2.00	0
<b>Total</b>	<b>100.00</b>	<b>0</b>	<b>100.00</b>	<b>0</b>

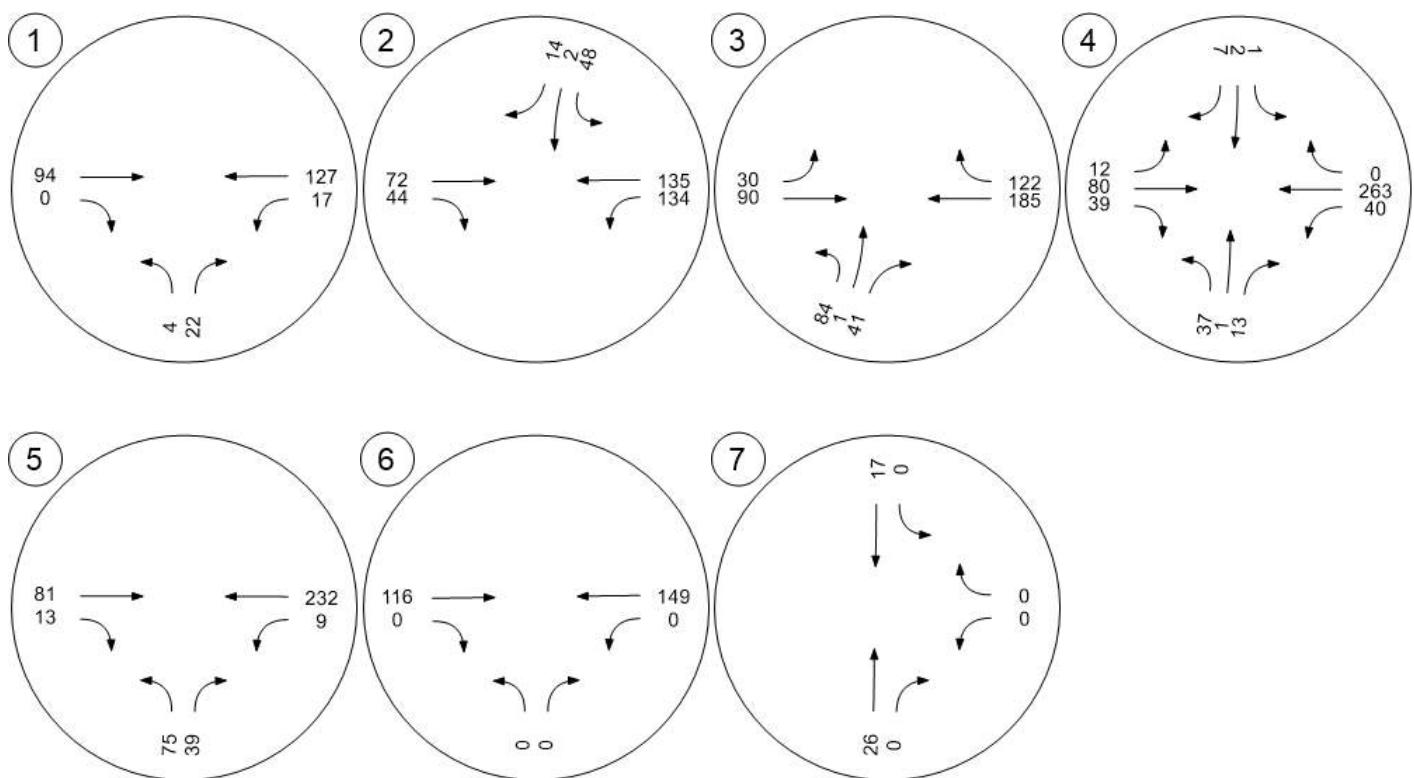
## Lane Configuration and Traffic Control



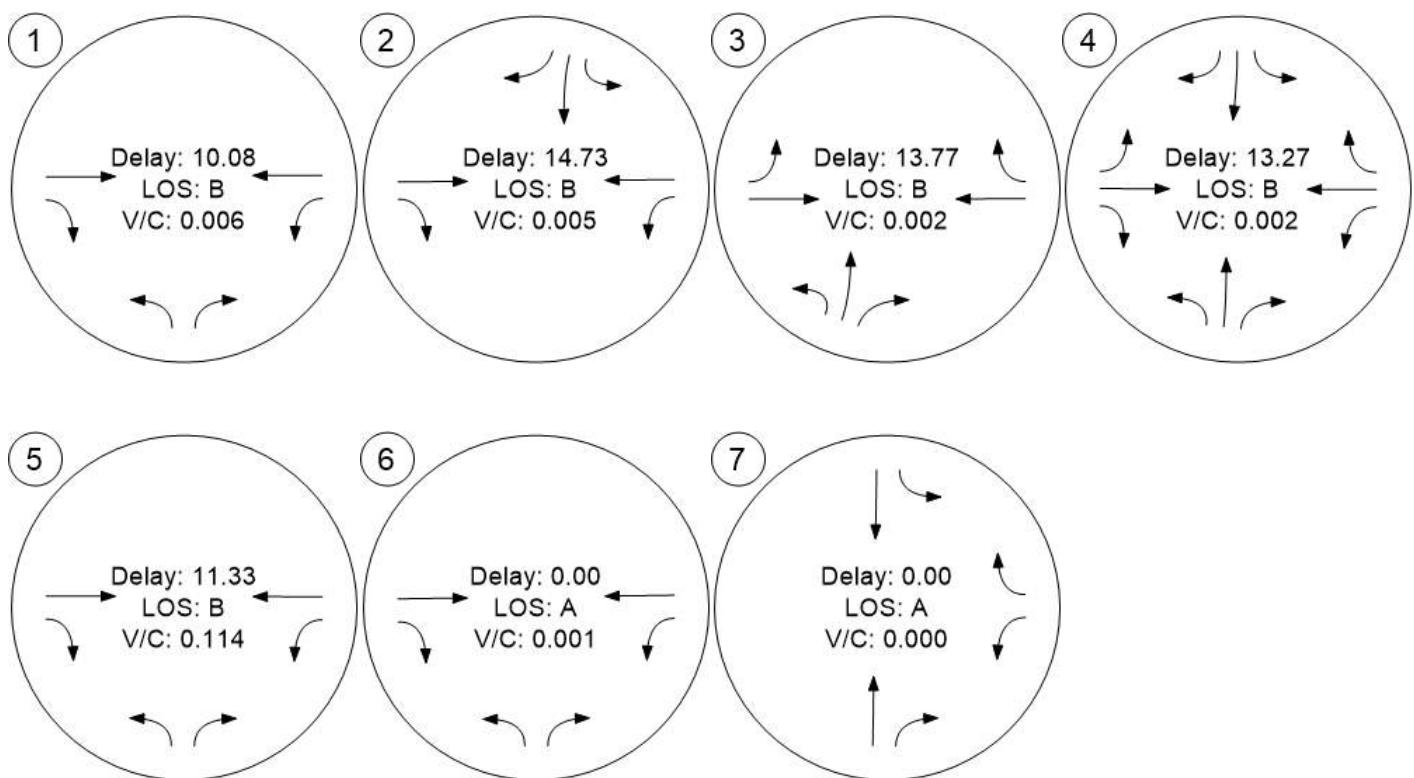
## Traffic Volume - Base Volume



## Traffic Volume - Future Total Volume



## Traffic Conditions



Vistro File: D:\...\Vistro Base.vistro  
Report File: D:\...\2- Existing PM.pdf

Scenario 2 Existing PM  
9/16/2020

### Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Beacon Lite Rd & SR 404	Two-way stop	HCM 6. Auflage	NB Right	0.050	9.3	A
2	I-25 & SR-404 Southbound On/off Ramps	Two-way stop	HCM 6. Auflage	SB Left	0.292	16.3	C
3	I-25 & SR-404 Northbound On/off Ramps	Two-way stop	HCM 6. Auflage	NB Thru	0.013	15.4	C
4	Monument Hill Rd & SR-404	Two-way stop	HCM 6. Auflage	NB Left	0.077	14.3	B
5	Doewood Dr & SR-404	Two-way stop	HCM 6. Auflage	NB Left	0.074	11.6	B
6	SR-404 & North Access	Two-way stop	HCM 6. Auflage	OB Thru	0.002	0.0	A
7	Beacon Lite Rd & West Access	Two-way stop	HCM 6. Auflage	NB Thru	0.000	0.0	A

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: Beacon Lite Rd & SR 404**

Control Type:	Two-way stop	Delay (sec / veh):	9.3
Analysis Method:	HCM 6. Auflage	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.050

**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]	35.00		45.00		45.00		
Grade [%]	0.00			0.00		0.00	
Crosswalk	Ja			Ja		Ja	

**Volumes**

Name							
Base Volume Input [veh/h]	0	45	154	1	29	137	
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	45	154	1	29	137	
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	0	11	39	0	7	34	
Total Analysis Volume [veh/h]	0	45	154	1	29	137	
Pedestrian Volume [ped/h]	0			0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	Nein		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.05	0.00	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	10.90	9.25	0.00	0.00	7.58	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.16	0.16	0.00	0.00	0.06	0.06
95th-Percentile Queue Length [ft/ln]	3.98	3.98	0.00	0.00	1.56	1.56
d_A, Approach Delay [s/veh]	9.25		0.00		1.32	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]			1.74			
Intersection LOS			A			

**Intersection Level Of Service Report**  
**Intersection 2: I-25 & SR-404 Southbound On/off Ramps**

Control Type:	Two-way stop	Delay (sec / veh):	16.3
Analysis Method:	HCM 6. Auflage	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.292

**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	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	0	0	0	131	0	31	0	116	81	100	135	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	0	0	0	131	0	31	0	116	81	100	135	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	33	0	8	0	29	20	25	34	0
Total Analysis Volume [veh/h]	0	0	0	131	0	31	0	116	81	100	135	0
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		Nein		
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.29	0.00	0.03	0.00	0.00	0.00	0.07	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	16.28	16.88	9.08	0.00	0.00	0.00	7.82	0.00	0.00
Movement LOS				C	C	A		A	A	A	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	1.20	1.20	0.11	0.00	0.00	0.00	0.23	0.23	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	29.97	29.97	2.63	0.00	0.00	0.00	5.87	5.87	0.00
d_A, Approach Delay [s/veh]		0.00			14.90			0.00			3.33	
Approach LOS		A		B			A		A		A	
d_I, Intersection Delay [s/veh]							5.38					
Intersection LOS							C					

**Intersection Level Of Service Report**  
**Intersection 3: I-25 & SR-404 Northbound On/off Ramps**

Control Type:	Two-way stop	Delay (sec / veh):	15.4
Analysis Method:	HCM 6. Auflage	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.013

**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]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	76	6	117	0	0	0	27	220	0	0	159	77
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	76	6	117	0	0	0	27	220	0	0	159	77
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	19	2	29	0	0	0	7	55	0	0	40	19
Total Analysis Volume [veh/h]	76	6	117	0	0	0	27	220	0	0	159	77
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	Nein			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Nein			
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.15	0.01	0.14	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	14.84	15.41	11.91	0.00	0.00	0.00	7.76	0.00	0.00	0.00	0.00	0.00
Movement LOS	B	C	B				A	A			A	A
95th-Percentile Queue Length [veh/ln]	1.32	1.32	1.32	0.00	0.00	0.00	0.06	0.06	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	33.01	33.01	33.01	0.00	0.00	0.00	1.55	1.55	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		13.13			0.00			0.85			0.00	
Approach LOS		B			A			A			A	
d_I, Intersection Delay [s/veh]							4.14					
Intersection LOS							C					

**Intersection Level Of Service Report**  
**Intersection 4: Monument Hill Rd & SR-404**

Control Type:	Two-way stop	Delay (sec / veh):	14.3
Analysis Method:	HCM 6. Auflage	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.077

**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]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	33	1	29	1	1	8	11	295	31	13	195	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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]	33	1	29	1	1	8	11	295	31	13	195	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	0	7	0	0	2	3	74	8	3	49	0
Total Analysis Volume [veh/h]	33	1	29	1	1	8	11	295	31	13	195	0
Pedestrian Volume [ped/h]	0			0			0			0		

## Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	Nein	Nein		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Nein	Nein		
Number of Storage Spaces in Median	0	0	0	0

## Movement, Approach, & Intersection Results

**Intersection Level Of Service Report**  
**Intersection 5: Doewood Dr & SR-404**

Control Type:	Two-way stop	Delay (sec / veh):	11.6
Analysis Method:	HCM 6. Auflage	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.074

**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	1	1	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	280.00	450.00	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]	25.00		45.00		45.00		
Grade [%]	0.00			0.00		0.00	
Crosswalk	Ja		Ja		Ja		

**Volumes**

Name							
Base Volume Input [veh/h]	44	10	234	91	10	157	
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]	44	10	234	91	10	157	
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	11	3	59	23	3	39	
Total Analysis Volume [veh/h]	44	10	234	91	10	157	
Pedestrian Volume [ped/h]	0			0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	Nein		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.07	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	11.63	10.02	0.00	0.00	7.94	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.28	0.28	0.00	0.00	0.02	0.00
95th-Percentile Queue Length [ft/ln]	7.09	7.09	0.00	0.00	0.61	0.00
d_A, Approach Delay [s/veh]	11.33		0.00		0.48	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]			1.27			
Intersection LOS			B			

**Intersection Level Of Service Report**  
**Intersection 6: SR-404 & North Access**

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6. Auflage	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

**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	1	0	0	0	0	
Entry Pocket Length [ft]	100.00	50.00	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]	15.00		45.00		45.00		
Grade [%]	0.00			0.00		0.00	
Crosswalk	Ja			Ja		Ja	

**Volumes**

Name							
Base Volume Input [veh/h]	0	0	199	0	0	166	
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	0	199	0	0	166	
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	0	0	50	0	0	42	
Total Analysis Volume [veh/h]	0	0	199	0	0	166	
Pedestrian Volume [ped/h]	0			0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
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]	10.67	9.28	0.00	0.00	7.62	0.00
Movement LOS	B	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]		9.97		0.00		0.00
Approach LOS		A		A		A
d_I, Intersection Delay [s/veh]				0.00		
Intersection LOS				A		

**Intersection Level Of Service Report**  
**Intersection 7: Beacon Lite Rd & West Access**

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

**Intersection Setup**

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	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]	35.00		35.00		15.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Ja		Ja		Ja	

**Volumes**

Name						
Base Volume Input [veh/h]	45	0	0	30	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]	45	0	0	30	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	0	0	8	0	0
Total Analysis Volume [veh/h]	45	0	0	30	0	0
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Free	Free	Stop
Flared Lane			Nein
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Nein
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]	0.00	0.00	7.30	0.00	8.88	8.51
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		8.70	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]			0.00			
Intersection LOS			A			

Vistro File: D:\...\Vistro Base.vistro

Scenario 2 Existing PM

Report File: D:\...\2- Existing PM.pdf

9/16/2020

**Turning Movement Volume: Summary**

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
1	Beacon Lite Rd & SR 404	0	45	154	1	29	137	366

ID	Intersection Name	Southbound			Eastbound		Westbound		Total Volume
		Left	Thru	Right	Thru	Right	Left	Thru	
2	I-25 & SR-404 Southbound On/off Ramps	131	0	31	116	81	100	135	594

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Thru	Right	Left	Thru	Thru	Right	
3	I-25 & SR-404 Northbound On/off Ramps	76	6	117	27	220	159	77	682

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	Monument Hill Rd & SR-404	33	1	29	1	1	8	11	295	31	13	195	0	618

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru		
5	Doewood Dr & SR-404	44	10	234	91	10	157	546	

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru		
6	SR-404 & North Access	0	0	199	0	0	166	365	

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
7	Beacon Lite Rd & West Access	45	0	0	30	0	0	75

Vistro File: D:\...\Vistro Base.vistro

Report File: D:\...\2- Existing PM.pdf

Scenario 2 Existing PM

9/16/2020

**Turning Movement Volume: Detail**

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
1	Beacon Lite Rd & SR 404	Final Base	0	45	154	1	29	137	366
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>0</b>	<b>45</b>	<b>154</b>	<b>1</b>	<b>29</b>	<b>137</b>	<b>366</b>

ID	Intersection Name	Volume Type	Southbound			Eastbound		Westbound		Total Volume
			Left	Thru	Right	Thru	Right	Left	Thru	
2	I-25 & SR-404 Southbound On/off Ramps	Final Base	131	0	31	116	81	100	135	594
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>131</b>	<b>0</b>	<b>31</b>	<b>116</b>	<b>81</b>	<b>100</b>	<b>135</b>	<b>594</b>

ID	Intersection Name	Volume Type	Northbound			Eastbound		Westbound		Total Volume
			Left	Thru	Right	Left	Thru	Thru	Right	
3	I-25 & SR-404 Northbound On/off Ramps	Final Base	76	6	117	27	220	159	77	682
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>76</b>	<b>6</b>	<b>117</b>	<b>27</b>	<b>220</b>	<b>159</b>	<b>77</b>	<b>682</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	Monument Hill Rd & SR-404	Final Base	33	1	29	1	1	8	11	295	31	13	195	0	618
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>33</b>	<b>1</b>	<b>29</b>	<b>1</b>	<b>1</b>	<b>8</b>	<b>11</b>	<b>295</b>	<b>31</b>	<b>13</b>	<b>195</b>	<b>0</b>	<b>618</b>

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
5	Doewood Dr & SR-404	Final Base	44	10	234	91	10	157	546
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>44</b>	<b>10</b>	<b>234</b>	<b>91</b>	<b>10</b>	<b>157</b>	<b>546</b>

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
6	SR-404 & North Access	Final Base	0	0	199	0	0	166	365
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>0</b>	<b>0</b>	<b>199</b>	<b>0</b>	<b>0</b>	<b>166</b>	<b>365</b>

ID	Intersection Name	Volume Type	Northbound		Southbound		Westbound		Total Volume
			Thru	Right	Left	Thru	Left	Right	
7	Beacon Lite Rd & West Access	Final Base	45	0	0	30	0	0	75
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>45</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>75</b>

## Signal Warrants Report For Intersection 1: Beacon Lite Rd &amp; SR 404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	166	155	45
2	161	150	44
3	158	147	43
4	148	138	40
5	131	122	36
6	129	121	35
7	128	119	35
8	116	109	31
9	115	107	31
10	113	105	31
11	98	91	27
12	91	85	25
13	90	84	24
14	66	62	18
15	66	62	18
16	46	43	13
17	27	25	7
18	27	25	7
19	15	14	4
20	8	8	2
21	5	5	1
22	2	2	0
23	2	2	0
24	2	2	0

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	321	1	45	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	311	1	44	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	305	1	43	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	286	1	40	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	253	1	36	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	250	1	35	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	247	1	35	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	225	1	31	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	222	1	31	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	218	1	31	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	189	1	27	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	176	1	25	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	174	1	24	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	128	1	18	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	128	1	18	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	89	1	13	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	52	1	7	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	52	1	7	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	29	1	4	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	16	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	10	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	4	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	4	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	4	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	9.3
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:06
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	45
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	366
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 2: I-25 &amp; SR-404 Southbound On/off Ramps

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>N</b>
1	235	197	162
2	228	191	157
3	223	187	154
4	209	175	144
5	186	156	128
6	183	154	126
7	181	152	125
8	165	138	113
9	162	136	112
10	160	134	110
11	139	116	96
12	129	108	89
13	127	106	87
14	94	79	65
15	94	79	65
16	66	55	45
17	38	32	26
18	38	32	26
19	21	18	15
20	12	10	8
21	7	6	5
22	2	2	2
23	2	2	2
24	2	2	2

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	432	2	162	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
2	2	419	2	157	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
3	2	410	2	154	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
4	2	384	2	144	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
5	2	342	2	128	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
6	2	337	2	126	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
7	2	333	2	125	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	303	2	113	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	298	2	112	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	294	2	110	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	255	2	96	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	237	2	89	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	233	2	87	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	173	2	65	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	173	2	65	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	121	2	45	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	70	2	26	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	70	2	26	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	39	2	15	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	22	2	8	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	13	2	5	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	4	2	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	4	2	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	4	2	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	1	6	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	14.9
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:40
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	162
High Minor Volume Condition Met	Ja
Total Entering Volume on All Approaches During Same Hour	594
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 3: I-25 &amp; SR-404 Northbound On/off Ramps

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	
1	236	247	199
2	229	240	193
3	224	235	189
4	210	220	177
5	186	195	157
6	184	193	155
7	182	190	153
8	165	173	139
9	163	170	137
10	160	168	135
11	139	146	117
12	130	136	109
13	127	133	107
14	94	99	80
15	94	99	80
16	66	69	56
17	38	40	32
18	38	40	32
19	21	22	18
20	12	12	10
21	7	7	6
22	2	2	2
23	2	2	2
24	2	2	2

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	483	1	199	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Nein	Ja	Nein
2	2	469	1	193	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Ja	Nein
3	2	459	1	189	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Ja	Nein
4	2	430	1	177	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
5	2	381	1	157	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
6	2	377	1	155	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
7	2	372	1	153	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
8	2	338	1	139	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
9	2	333	1	137	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	328	1	135	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	285	1	117	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	266	1	109	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	260	1	107	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	193	1	80	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	193	1	80	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	135	1	56	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	78	1	32	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	78	1	32	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	43	1	18	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	24	1	10	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	14	1	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	4	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	4	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	4	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	1	4	8	0	0	0	0	3	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	13.1
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:43
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	199
High Minor Volume Condition Met	Ja
Total Entering Volume on All Approaches During Same Hour	682
Number of Approaches on Intersection	3
Total Volume Condition Met	Ja
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 4: Monument Hill Rd &amp; SR-404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N, S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>	
	<b>E</b>	<b>W</b>	<b>N</b>	<b>S</b>
1	208	337	10	63
2	202	327	10	61
3	198	320	10	60
4	185	300	9	56
5	164	266	8	50
6	162	263	8	49
7	160	259	8	49
8	146	236	7	44
9	144	233	7	43
10	141	229	7	43
11	123	199	6	37
12	114	185	6	35
13	112	182	5	34
14	83	135	4	25
15	83	135	4	25
16	58	94	3	18
17	33	54	2	10
18	33	54	2	10
19	19	30	1	6
20	10	17	1	3
21	6	10	0	2
22	2	3	0	1
23	2	3	0	1
24	2	3	0	1

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	545	2	73	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein
2	2	529	2	71	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein
3	2	518	2	70	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein
4	2	485	2	65	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	430	2	58	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	425	2	57	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	419	2	57	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	382	2	51	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	377	2	50	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	370	2	50	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	322	2	43	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	299	2	41	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	294	2	39	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	218	2	29	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	218	2	29	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	152	2	21	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	87	2	12	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	87	2	12	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	49	2	7	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	27	2	4	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	16	2	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	5	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	5	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	5	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	3	0	0

## Warrant 3 Condition A

Orientation	N	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	10.2	12.7
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:01	0:13
Delay Condition Met	Nein	Nein
Volume on Minor Street Approach During Same Hour	10	63
High Minor Volume Condition Met	Nein	Nein
Total Entering Volume on All Approaches During Same Hour	618	618
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Nein	Nein
Warrant Met for Approach	Nein	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>	

## Signal Warrants Report For Intersection 5: Doewood Dr &amp; SR-404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	167	325	54
2	162	315	52
3	159	309	51
4	149	289	48
5	132	257	43
6	130	254	42
7	129	250	42
8	117	227	38
9	115	224	37
10	114	221	37
11	99	192	32
12	92	179	30
13	90	176	29
14	67	130	22
15	67	130	22
16	47	91	15
17	27	52	9
18	27	52	9
19	15	29	5
20	8	16	3
21	5	10	2
22	2	3	1
23	2	3	1
24	2	3	1

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	492	1	54	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	4	477	1	52	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	4	468	1	51	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	4	438	1	48	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	4	389	1	43	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	4	384	1	42	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	4	379	1	42	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	4	344	1	38	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	4	339	1	37	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	4	335	1	37	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	4	291	1	32	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	4	271	1	30	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	4	266	1	29	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	4	197	1	22	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	4	197	1	22	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	4	138	1	15	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	4	79	1	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	4	79	1	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	4	44	1	5	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	4	24	1	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	4	15	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	4	5	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	4	5	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	4	5	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	11.3
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:10
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	54
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	546
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 6: SR-404 &amp; North Access

## Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	S
1	166	199	0
2	161	193	0
3	158	189	0
4	148	177	0
5	131	157	0
6	129	155	0
7	128	153	0
8	116	139	0
9	115	137	0
10	113	135	0
11	98	117	0
12	91	109	0
13	90	107	0
14	66	80	0
15	66	80	0
16	46	56	0
17	27	32	0
18	27	32	0
19	15	18	0
20	8	10	0
21	5	6	0
22	2	2	0
23	2	2	0
24	2	2	0

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	365	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	354	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	347	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	325	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	288	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	284	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	281	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	255	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	252	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	248	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	215	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	200	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	197	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	146	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	146	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	102	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	59	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	59	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	33	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	18	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	11	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	4	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	4	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	4	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	10
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:00
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	0
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	365
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 7: Beacon Lite Rd &amp; West Access

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	N, S
Minor Approaches	E
Speed > 40mph	Nein
Population < 10,000	Nein
Warrant Factor	100%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>N</b>	<b>S</b>	<b>E</b>
1	30	45	0
2	29	44	0
3	29	43	0
4	27	40	0
5	24	36	0
6	23	35	0
7	23	35	0
8	21	31	0
9	21	31	0
10	20	31	0
11	18	27	0
12	17	25	0
13	16	24	0
14	12	18	0
15	12	18	0
16	8	13	0
17	5	7	0
18	5	7	0
19	3	4	0
20	2	2	0
21	1	1	0
22	0	0	0
23	0	0	0
24	0	0	0

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	75	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	73	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	72	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	67	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	60	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	58	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	58	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	52	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	52	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	51	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	45	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	42	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	40	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	30	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	30	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	21	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	12	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	12	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	7	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	4	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	2	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	0	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	0	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	0	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.7
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:00
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	0
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	75
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

Vistro File: D:\...\Vistro Base.vistro

Scenario 2 Existing PM

Report File: D:\...\2- Existing PM.pdf

9/16/2020

**Trip Generation Summary****Added Trips**

Zone ID: Name	Land Use variables	Code	Ind. Var.	Rate	Quantity	% In	% Out	Trips In	Trips Out	Total Trips	% of Total Trips
1: Zone				1.000	0.000	50.00	50.00	0	0	0	0.00
<b>Added Trips Total</b>									<b>0</b>	<b>0</b>	<b>0.00</b>

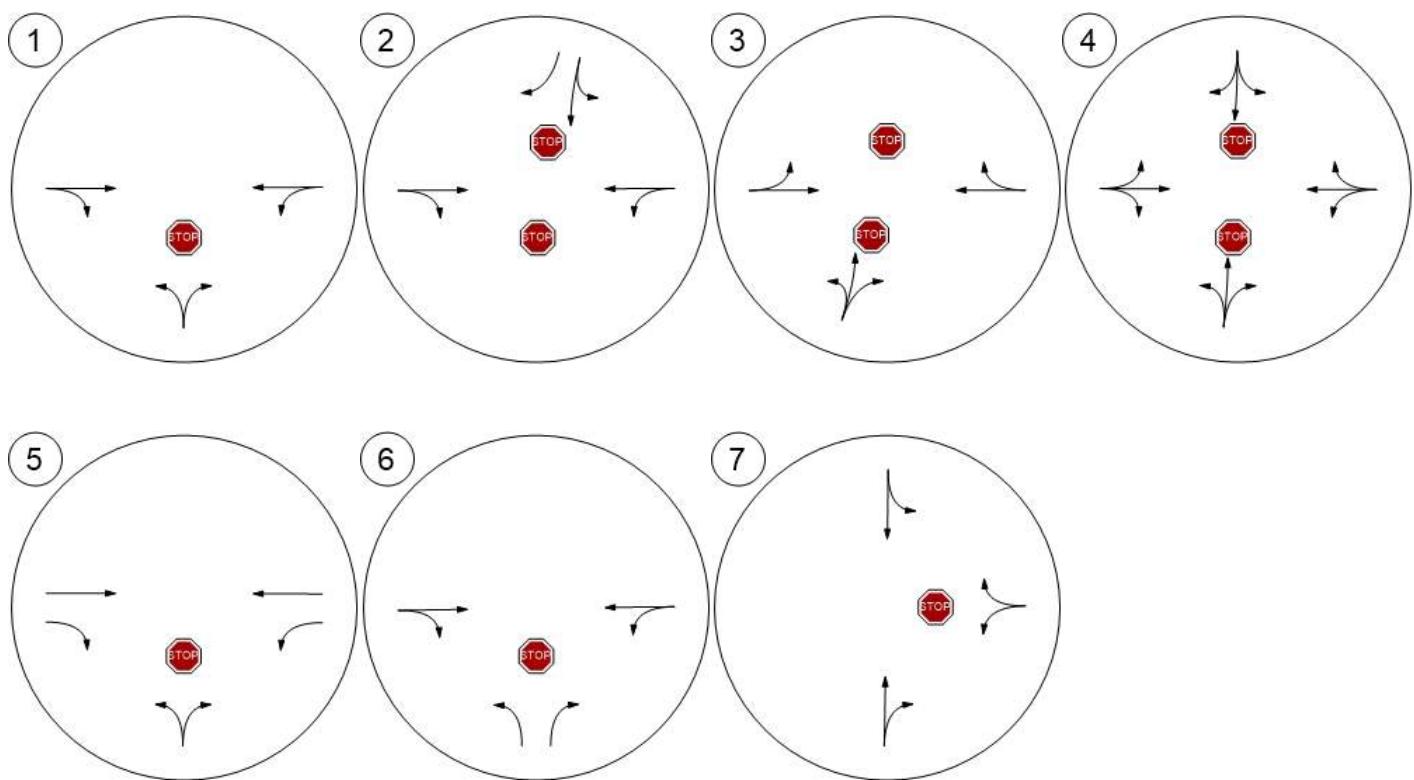
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Report File: D:\...\2- Existing PM.pdf

Scenario 2 Existing PM  
9/16/2020

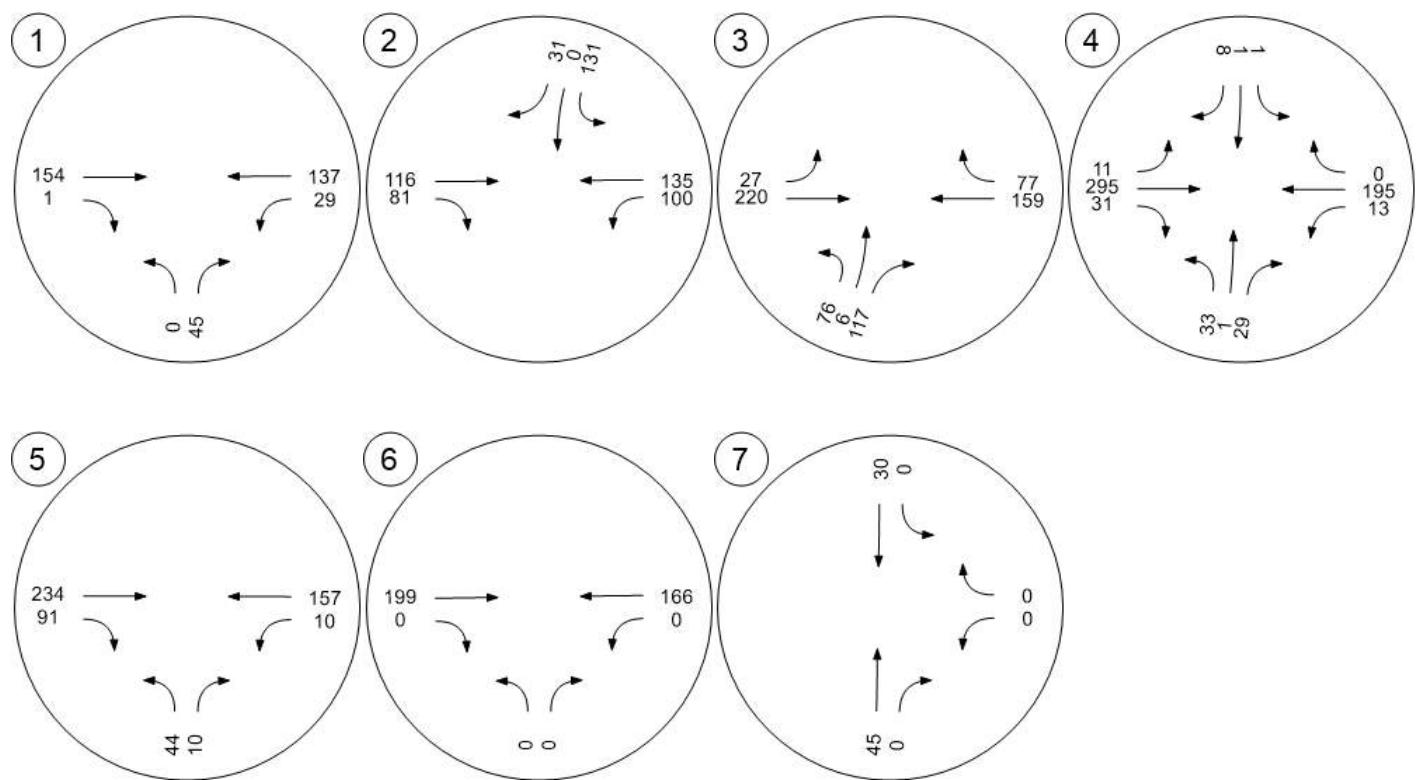
### Trip Distribution Summary

Zone / Gate	Zone 1: Zone			
	To Zone:		From Zone:	
	Share %	Trips	Share %	Trips
2: Gate	40.00	0	0.00	0
3: Gate	0.00	0	40.00	0
4: Gate	2.00	0	2.00	0
5: Gate	7.00	0	7.00	0
6: Gate	6.00	0	6.00	0
7: Gate	2.00	0	2.00	0
8: Gate	40.00	0	0.00	0
9: Gate	0.00	0	40.00	0
10: Gate	1.00	0	1.00	0
11: Gate	2.00	0	2.00	0
<b>Total</b>	<b>100.00</b>	<b>0</b>	<b>100.00</b>	<b>0</b>

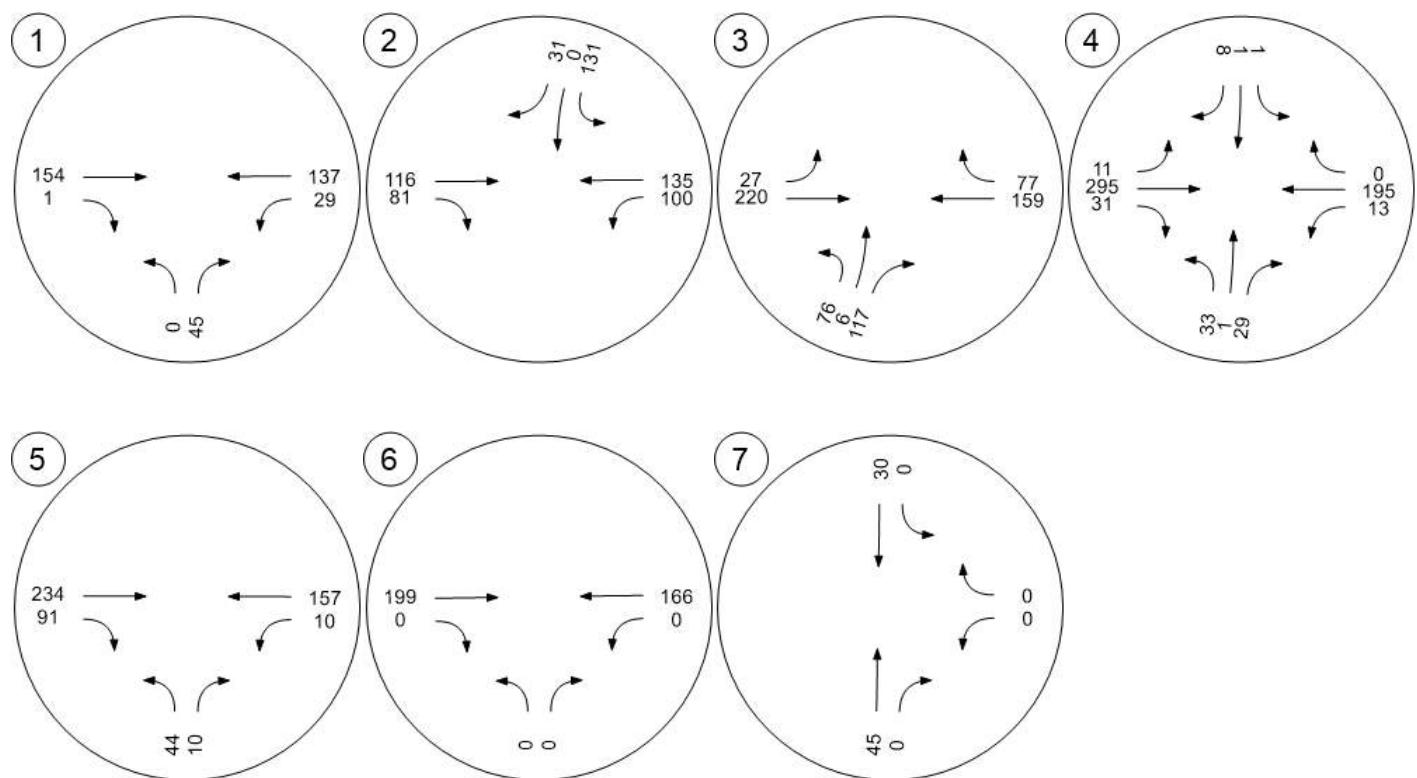
## Lane Configuration and Traffic Control



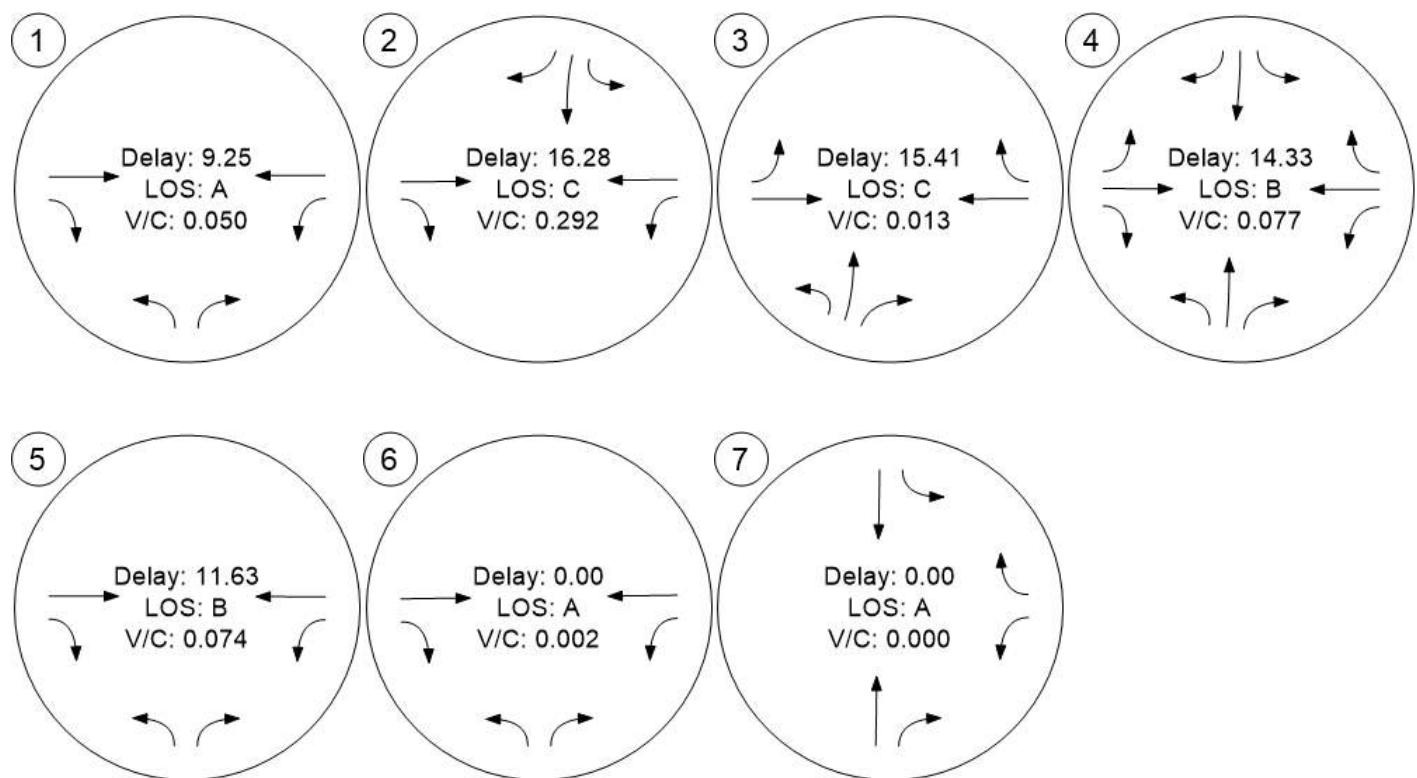
## Traffic Volume - Base Volume



## Traffic Volume - Future Total Volume



## Traffic Conditions



Existing Plus Project TRAFFIC

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Report File: D:\...\3- Existing + Project AM.pdf

Scenario 3 Existing + Project AM  
9/16/2020

### Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Beacon Lite Rd & SR 404	Two-way stop	HCM 6. Auflage	NB Left	0.007	10.3	B
2	I-25 & SR-404 Southbound On/off Ramps	Two-way stop	HCM 6. Auflage	SB Thru	0.005	15.9	C
3	I-25 & SR-404 Northbound On/off Ramps	Two-way stop	HCM 6. Auflage	NB Thru	0.002	15.1	C
4	Monument Hill Rd & SR-404	Two-way stop	HCM 6. Auflage	NB Thru	0.002	13.5	B
5	Doewood Dr & SR-404	Two-way stop	HCM 6. Auflage	NB Left	0.119	11.4	B
6	SR-404 & North Access	Two-way stop	HCM 6. Auflage	NB Right	0.035	9.0	A
7	Beacon Lite Rd & West Access	Two-way stop	HCM 6. Auflage	WB Right	0.011	8.5	A

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: Beacon Lite Rd & SR 404**

Control Type:	Two-way stop	Delay (sec / veh):	10.3
Analysis Method:	HCM 6. Auflage	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

**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]	35.00		45.00		45.00		
Grade [%]	0.00			0.00		0.00	
Crosswalk	Ja			Ja		Ja	

**Volumes**

Name							
Base Volume Input [veh/h]	4	22	94	0	17	127	
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]	1	11	1	0	9	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]	5	33	95	0	26	127	
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	1	8	24	0	7	32	
Total Analysis Volume [veh/h]	5	33	95	0	26	127	
Pedestrian Volume [ped/h]	0			0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	Nein		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.01	0.03	0.00	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	10.30	8.91	0.00	0.00	7.44	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.13	0.13	0.00	0.00	0.05	0.05
95th-Percentile Queue Length [ft/ln]	3.24	3.24	0.00	0.00	1.32	1.32
d_A, Approach Delay [s/veh]	9.10		0.00		1.27	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]			1.89			
Intersection LOS			B			

**Intersection Level Of Service Report**  
**Intersection 2: I-25 & SR-404 Southbound On/off Ramps**

Control Type:	Two-way stop	Delay (sec / veh):	15.9
Analysis Method:	HCM 6. Auflage	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

**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	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	0	0	0	48	2	14	0	72	44	134	135	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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	18	0	26	17	0	26	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]	0	0	0	48	2	32	0	98	61	134	161	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	12	1	8	0	25	15	34	40	0
Total Analysis Volume [veh/h]	0	0	0	48	2	32	0	98	61	134	161	0
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		Nein		
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.12	0.01	0.04	0.00	0.00	0.00	0.09	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	15.44	15.86	9.23	0.00	0.00	0.00	7.80	0.00	0.00
Movement LOS				C	C	A		A	A	A	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.43	0.43	0.11	0.00	0.00	0.00	0.31	0.31	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	10.78	10.78	2.81	0.00	0.00	0.00	7.80	7.80	0.00
d_A, Approach Delay [s/veh]		0.00			13.02			0.00			3.54	
Approach LOS		A		B			A			A		
d_I, Intersection Delay [s/veh]							3.94					
Intersection LOS							C					

**Intersection Level Of Service Report**  
**Intersection 3: I-25 & SR-404 Northbound On/off Ramps**

Control Type:	Two-way stop	Delay (sec / veh):	15.1
Analysis Method:	HCM 6. Auflage	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

**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]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	84	1	41	0	0	0	30	90	0	0	185	122
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	0	0	0	0	0	18	8	0	0	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
Total Hourly Volume [veh/h]	102	1	41	0	0	0	48	98	0	0	193	122
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	0	10	0	0	0	12	25	0	0	48	31
Total Analysis Volume [veh/h]	102	1	41	0	0	0	48	98	0	0	193	122
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	Nein			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Nein			
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.20	0.00	0.04	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	14.26	15.09	10.81	0.00	0.00	0.00	8.01	0.00	0.00	0.00	0.00	0.00
Movement LOS	B	C	B				A	A			A	A
95th-Percentile Queue Length [veh/ln]	0.98	0.98	0.98	0.00	0.00	0.00	0.12	0.12	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	24.45	24.45	24.45	0.00	0.00	0.00	3.00	3.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		13.28			0.00			2.63			0.00	
Approach LOS		B			A			A			A	
d_I, Intersection Delay [s/veh]							3.80					
Intersection LOS							C					

**Intersection Level Of Service Report**  
**Intersection 4: Monument Hill Rd & SR-404**

Control Type:	Two-way stop	Delay (sec / veh):	13.5
Analysis Method:	HCM 6. Auflage	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

**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]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	37	1	13	1	2	7	12	80	39	40	263	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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	1	1	6	1	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
Total Hourly Volume [veh/h]	38	1	13	1	2	8	13	86	40	40	269	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	0	3	0	1	2	3	22	10	10	67	0
Total Analysis Volume [veh/h]	38	1	13	1	2	8	13	86	40	40	269	0
Pedestrian Volume [ped/h]	0			0			0			0		

## Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	Nein	Nein		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Nein	Nein		
Number of Storage Spaces in Median	0	0	0	0

## Movement, Approach, & Intersection Results

**Intersection Level Of Service Report**  
**Intersection 5: Doewood Dr & SR-404**

Control Type:	Two-way stop	Delay (sec / veh):	11.4
Analysis Method:	HCM 6. Auflage	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.119

**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	1	1	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	280.00	450.00	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]	25.00		45.00		45.00		
Grade [%]	0.00			0.00		0.00	
Crosswalk	Ja		Ja		Ja		

**Volumes**

Name							
Base Volume Input [veh/h]	75	39	81	13	9	232	
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]	3	0	3	3	0	3	
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]	78	39	84	16	9	235	
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	20	10	21	4	2	59	
Total Analysis Volume [veh/h]	78	39	84	16	9	235	
Pedestrian Volume [ped/h]	0			0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	Nein		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.12	0.04	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	11.42	9.62	0.00	0.00	7.43	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.56	0.56	0.00	0.00	0.02	0.00
95th-Percentile Queue Length [ft/ln]	14.09	14.09	0.00	0.00	0.45	0.00
d_A, Approach Delay [s/veh]	10.82		0.00		0.27	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]			2.89			
Intersection LOS			B			

**Intersection Level Of Service Report**  
**Intersection 6: SR-404 & North Access**

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 6. Auflage	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.035

**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	1	0	0	0	0	
Entry Pocket Length [ft]	100.00	50.00	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]	15.00		45.00		45.00		
Grade [%]	0.00			0.00		0.00	
Crosswalk	Ja		Ja		Ja		

**Volumes**

Name						
Base Volume Input [veh/h]	0	0	116	0	0	149
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	32	11	1	35	9
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	32	127	1	35	158
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	8	32	0	9	40
Total Analysis Volume [veh/h]	0	32	127	1	35	158
Pedestrian Volume [ped/h]	0			0		0

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.03	0.00	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	10.75	9.04	0.00	0.00	7.53	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.11	0.00	0.00	0.07	0.07
95th-Percentile Queue Length [ft/ln]	0.00	2.69	0.00	0.00	1.84	1.84
d_A, Approach Delay [s/veh]		9.04		0.00		1.37
Approach LOS		A		A		A
d_I, Intersection Delay [s/veh]				1.57		
Intersection LOS				A		

**Intersection Level Of Service Report**  
**Intersection 7: Beacon Lite Rd & West Access**

Control Type:	Two-way stop	Delay (sec / veh):	8.5
Analysis Method:	HCM 6. Auflage	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.011

**Intersection Setup**

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	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]	35.00		35.00		15.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Ja		Ja		Ja	

**Volumes**

Name						
Base Volume Input [veh/h]	26	0	0	17	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	9	0	0	12
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]	26	0	9	17	0	12
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	0	2	4	0	3
Total Analysis Volume [veh/h]	26	0	9	17	0	12
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Free	Free	Stop
Flared Lane			Nein
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Nein
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	7.28	0.00	8.87	8.47
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.02	0.02	0.03	0.03
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.43	0.43	0.87	0.87
d_A, Approach Delay [s/veh]	0.00		2.52		8.47	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]			2.61			
Intersection LOS			A			

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Report File: D:\...\3- Existing + Project AM.pdf

Scenario 3 Existing + Project AM

9/16/2020

**Turning Movement Volume: Summary**

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
1	Beacon Lite Rd & SR 404	5	33	95	0	26	127	286

ID	Intersection Name	Southbound			Eastbound		Westbound		Total Volume
		Left	Thru	Right	Thru	Right	Left	Thru	
2	I-25 & SR-404 Southbound On/off Ramps	48	2	32	98	61	134	161	536

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Thru	Right	Left	Thru	Thru	Right	
3	I-25 & SR-404 Northbound On/off Ramps	102	1	41	48	98	193	122	605

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	Monument Hill Rd & SR-404	38	1	13	1	2	8	13	86	40	40	269	0	511

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru		
5	Doewood Dr & SR-404	78	39	84	16	9	235	461	

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru		
6	SR-404 & North Access	0	32	127	1	35	158	353	

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
7	Beacon Lite Rd & West Access	26	0	9	17	0	12	64

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Report File: D:\...\3- Existing + Project AM.pdf

Scenario 3 Existing + Project AM

9/16/2020

**Turning Movement Volume: Detail**

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
1	Beacon Lite Rd & SR 404	Final Base	4	22	94	0	17	127	264
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	1	11	1	0	9	0	22
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>5</b>	<b>33</b>	<b>95</b>	<b>0</b>	<b>26</b>	<b>127</b>	<b>286</b>

ID	Intersection Name	Volume Type	Southbound			Eastbound		Westbound		Total Volume
			Left	Thru	Right	Thru	Right	Left	Thru	
2	I-25 & SR-404 Southbound On/off Ramps	Final Base	48	2	14	72	44	134	135	449
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0
		Net New Trips	0	0	18	26	17	0	26	87
		Other	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>48</b>	<b>2</b>	<b>32</b>	<b>98</b>	<b>61</b>	<b>134</b>	<b>161</b>	<b>536</b>

ID	Intersection Name	Volume Type	Northbound			Eastbound		Westbound		Total Volume
			Left	Thru	Right	Left	Thru	Thru	Right	
3	I-25 & SR-404 Northbound On/off Ramps	Final Base	84	1	41	30	90	185	122	553
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0
		Net New Trips	18	0	0	18	8	8	0	52
		Other	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>102</b>	<b>1</b>	<b>41</b>	<b>48</b>	<b>98</b>	<b>193</b>	<b>122</b>	<b>605</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	Monument Hill Rd & SR-404	Final Base	37	1	13	1	2	7	12	80	39	40	263	0	495
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	1	0	0	0	0	1	1	6	1	0	6	0	16
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>38</b>	<b>1</b>	<b>13</b>	<b>1</b>	<b>2</b>	<b>8</b>	<b>13</b>	<b>86</b>	<b>40</b>	<b>40</b>	<b>269</b>	<b>0</b>	<b>511</b>

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
5	Doewood Dr & SR-404	Final Base	75	39	81	13	9	232	449
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	3	0	3	3	0	3	12
		Other	0	0	0	0	0	0	0
		Future Total	78	39	84	16	9	235	461

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
6	SR-404 & North Access	Final Base	0	0	116	0	0	149	265
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	32	11	1	35	9	88
		Other	0	0	0	0	0	0	0
		Future Total	0	32	127	1	35	158	353

ID	Intersection Name	Volume Type	Northbound		Southbound		Westbound		Total Volume
			Thru	Right	Left	Thru	Left	Right	
7	Beacon Lite Rd & West Access	Final Base	26	0	0	17	0	0	43
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	9	0	0	12	21
		Other	0	0	0	0	0	0	0
		Future Total	26	0	9	17	0	12	64

## Signal Warrants Report For Intersection 1: Beacon Lite Rd &amp; SR 404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	153	95	38
2	148	92	37
3	145	90	36
4	136	85	34
5	121	75	30
6	119	74	30
7	118	73	29
8	107	67	27
9	106	66	26
10	104	65	26
11	90	56	22
12	84	52	21
13	83	51	21
14	61	38	15
15	61	38	15
16	43	27	11
17	24	15	6
18	24	15	6
19	14	9	3
20	8	5	2
21	5	3	1
22	2	1	0
23	2	1	0
24	2	1	0

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	248	1	38	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	240	1	37	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	235	1	36	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	221	1	34	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	196	1	30	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	193	1	30	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	191	1	29	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	174	1	27	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	172	1	26	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	169	1	26	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	146	1	22	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	136	1	21	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	134	1	21	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	99	1	15	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	99	1	15	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	70	1	11	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	39	1	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	39	1	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	23	1	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	13	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	8	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	3	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	3	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	3	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	9.1
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:05
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	38
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	286
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 2: I-25 &amp; SR-404 Southbound On/off Ramps

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>N</b>
1	295	159	82
2	286	154	80
3	280	151	78
4	263	142	73
5	233	126	65
6	230	124	64
7	227	122	63
8	207	111	57
9	204	110	57
10	201	108	56
11	174	94	48
12	162	87	45
13	159	86	44
14	118	64	33
15	118	64	33
16	83	45	23
17	47	25	13
18	47	25	13
19	27	14	7
20	15	8	4
21	9	5	2
22	3	2	1
23	3	2	1
24	3	2	1

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	454	2	82	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	440	2	80	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	431	2	78	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	405	2	73	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	359	2	65	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	354	2	64	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	349	2	63	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	318	2	57	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	314	2	57	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	309	2	56	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	268	2	48	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	249	2	45	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	245	2	44	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	182	2	33	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	182	2	33	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	128	2	23	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	72	2	13	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	72	2	13	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	41	2	7	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	23	2	4	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	14	2	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	5	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	5	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	5	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	13
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:17
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	82
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	536
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 3: I-25 &amp; SR-404 Northbound On/off Ramps

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	315	146	144
2	306	142	140
3	299	139	137
4	280	130	128
5	249	115	114
6	246	114	112
7	243	112	111
8	221	102	101
9	217	101	99
10	214	99	98
11	186	86	85
12	173	80	79
13	170	79	78
14	126	58	58
15	126	58	58
16	88	41	40
17	50	23	23
18	50	23	23
19	28	13	13
20	16	7	7
21	9	4	4
22	3	1	1
23	3	1	1
24	3	1	1

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	461	1	144	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
2	2	448	1	140	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
3	2	438	1	137	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
4	2	410	1	128	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	364	1	114	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	360	1	112	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	355	1	111	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	323	1	101	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	318	1	99	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	313	1	98	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	272	1	85	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	253	1	79	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	249	1	78	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	184	1	58	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	184	1	58	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	129	1	40	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	73	1	23	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	73	1	23	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	41	1	13	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	23	1	7	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	13	1	4	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	4	1	1	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	4	1	1	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	4	1	1	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	3	7	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	13.3
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:31
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	144
High Minor Volume Condition Met	Ja
Total Entering Volume on All Approaches During Same Hour	605
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 4: Monument Hill Rd &amp; SR-404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N, S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>	
	<b>E</b>	<b>W</b>	<b>N</b>	<b>S</b>
1	309	139	11	52
2	300	135	11	50
3	294	132	10	49
4	275	124	10	46
5	244	110	9	41
6	241	108	9	41
7	238	107	8	40
8	216	97	8	36
9	213	96	8	36
10	210	95	7	35
11	182	82	6	31
12	170	76	6	29
13	167	75	6	28
14	124	56	4	21
15	124	56	4	21
16	87	39	3	15
17	49	22	2	8
18	49	22	2	8
19	28	13	1	5
20	15	7	1	3
21	9	4	0	2
22	3	1	0	1
23	3	1	0	1
24	3	1	0	1

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	448	2	63	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	435	2	61	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	426	2	59	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	399	2	56	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	354	2	50	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	349	2	50	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	345	2	48	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	313	2	44	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	309	2	44	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	305	2	42	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	264	2	37	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	246	2	35	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	242	2	34	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	180	2	25	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	180	2	25	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	126	2	18	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	71	2	10	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	71	2	10	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	41	2	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	22	2	4	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	13	2	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	4	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	4	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	4	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	N	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	10.6	12.4
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:01	0:10
Delay Condition Met	Nein	Nein
Volume on Minor Street Approach During Same Hour	11	52
High Minor Volume Condition Met	Nein	Nein
Total Entering Volume on All Approaches During Same Hour	511	511
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Nein	Nein
Warrant Met for Approach	Nein	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>	

## Signal Warrants Report For Intersection 5: Doewood Dr &amp; SR-404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	244	100	117
2	237	97	113
3	232	95	111
4	217	89	104
5	193	79	92
6	190	78	91
7	188	77	90
8	171	70	82
9	168	69	81
10	166	68	80
11	144	59	69
12	134	55	64
13	132	54	63
14	98	40	47
15	98	40	47
16	68	28	33
17	39	16	19
18	39	16	19
19	22	9	11
20	12	5	6
21	7	3	4
22	2	1	1
23	2	1	1
24	2	1	1

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	344	1	117	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	4	334	1	113	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	4	327	1	111	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	4	306	1	104	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	4	272	1	92	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	4	268	1	91	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	4	265	1	90	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	4	241	1	82	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	4	237	1	81	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	4	234	1	80	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	4	203	1	69	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	4	189	1	64	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	4	186	1	63	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	4	138	1	47	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	4	138	1	47	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	4	96	1	33	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	4	55	1	19	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	4	55	1	19	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	4	31	1	11	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	4	17	1	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	4	10	1	4	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	4	3	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	4	3	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	4	3	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	1	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	10.8
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:21
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	117
High Minor Volume Condition Met	Ja
Total Entering Volume on All Approaches During Same Hour	461
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 6: SR-404 &amp; North Access

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	193	128	32
2	187	124	31
3	183	122	30
4	172	114	28
5	152	101	25
6	151	100	25
7	149	99	25
8	135	90	22
9	133	88	22
10	131	87	22
11	114	76	19
12	106	70	18
13	104	69	17
14	77	51	13
15	77	51	13
16	54	36	9
17	31	20	5
18	31	20	5
19	17	12	3
20	10	6	2
21	6	4	1
22	2	1	0
23	2	1	0
24	2	1	0

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	321	2	32	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	311	2	31	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	305	2	30	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	286	2	28	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	253	2	25	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	251	2	25	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	248	2	25	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	225	2	22	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	221	2	22	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	218	2	22	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	190	2	19	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	176	2	18	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	173	2	17	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	128	2	13	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	128	2	13	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	90	2	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	51	2	5	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	51	2	5	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	29	2	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	16	2	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	10	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	3	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	3	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	3	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	9
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:04
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	32
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	353
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 7: Beacon Lite Rd &amp; West Access

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	N, S
Minor Approaches	E
Speed > 40mph	Nein
Population < 10,000	Nein
Warrant Factor	100%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>N</b>	<b>S</b>	
1	26	26	12
2	25	25	12
3	25	25	11
4	23	23	11
5	21	21	9
6	20	20	9
7	20	20	9
8	18	18	8
9	18	18	8
10	18	18	8
11	15	15	7
12	14	14	7
13	14	14	6
14	10	10	5
15	10	10	5
16	7	7	3
17	4	4	2
18	4	4	2
19	2	2	1
20	1	1	1
21	1	1	0
22	0	0	0
23	0	0	0
24	0	0	0

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	52	1	12	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	50	1	12	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	50	1	11	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	46	1	11	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	42	1	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	40	1	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	40	1	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	36	1	8	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	36	1	8	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	36	1	8	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	30	1	7	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	28	1	7	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	28	1	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	20	1	5	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	20	1	5	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	14	1	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	8	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	8	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	4	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	2	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	2	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	0	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	0	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	0	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.5
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:01
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	12
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	64
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

Vistro File: D:\...\Vistro Base.vistro  
Report File: D:\...\3- Existing + Project AM.pdf

Scenario 3 Existing + Project AM  
9/16/2020

### Trip Generation Summary

#### Added Trips

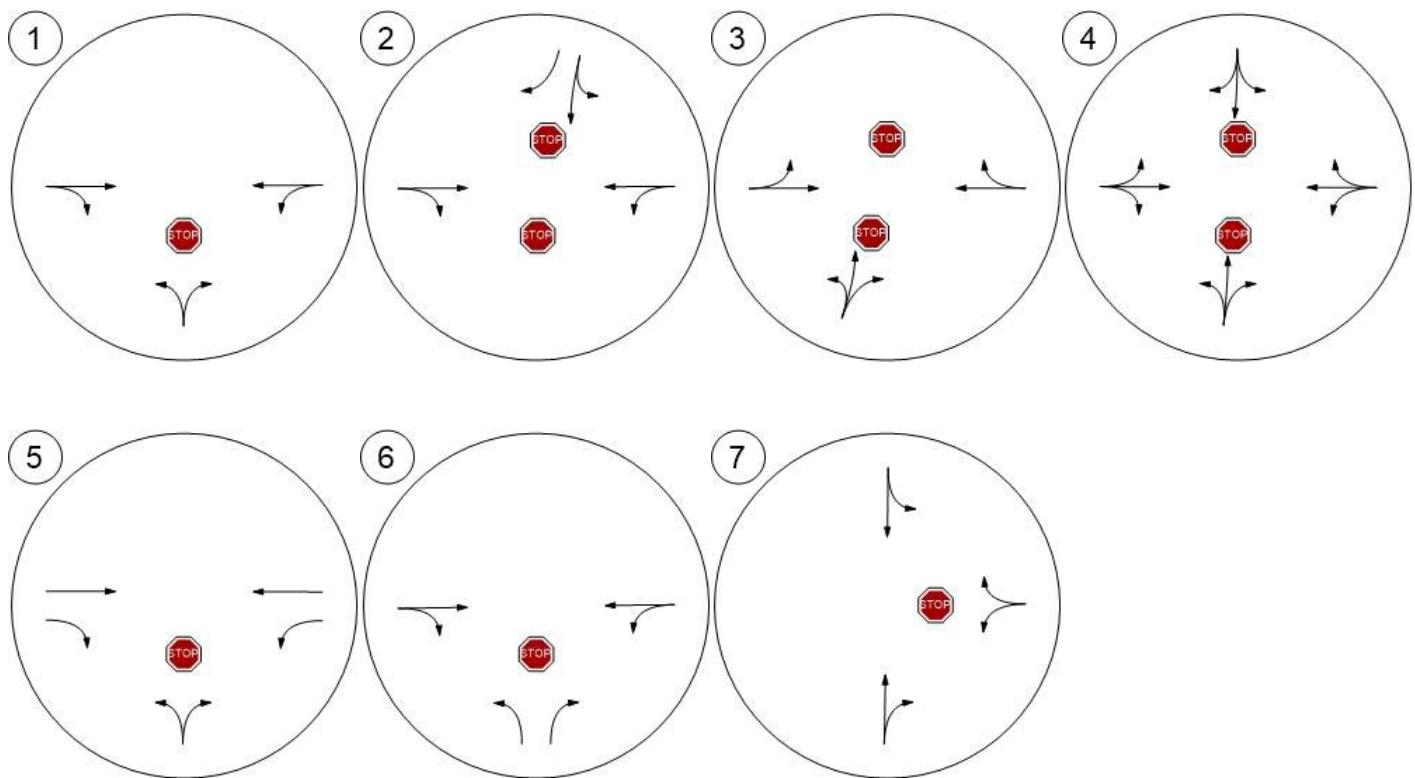
Zone ID: Name	Land Use variables	Code	Ind. Var.	Rate	Quantity	% In	% Out	Trips In	Trips Out	Total Trips	% of Total Trips	
1: Zone				1.000	0.000	50.00	50.00	46	44	90	100.00	
Added Trips Total									46	44	90	100.00

Vistro File: D:\...\Vistro Base.vistro  
Report File: D:\...\3- Existing + Project AM.pdf

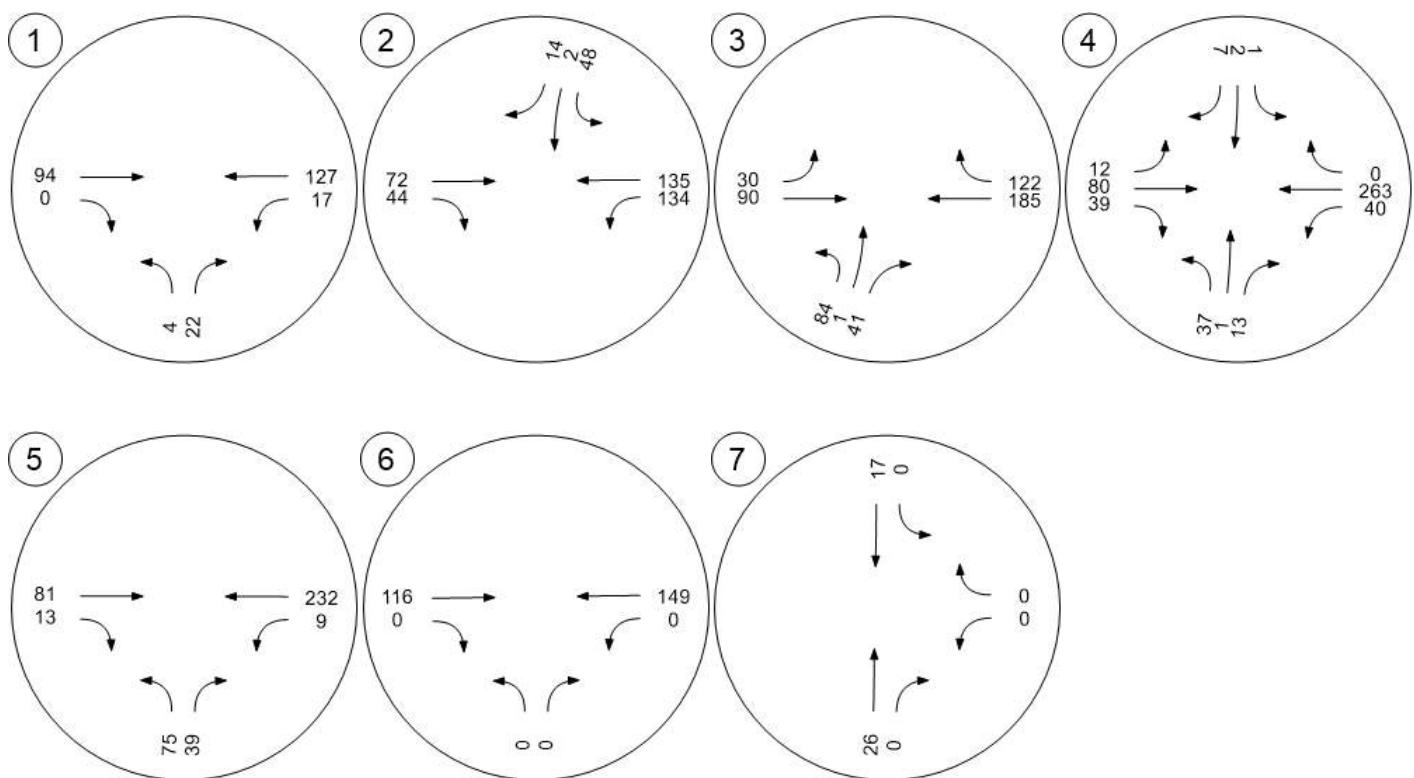
Scenario 3 Existing + Project AM  
9/16/2020

### Trip Distribution Summary

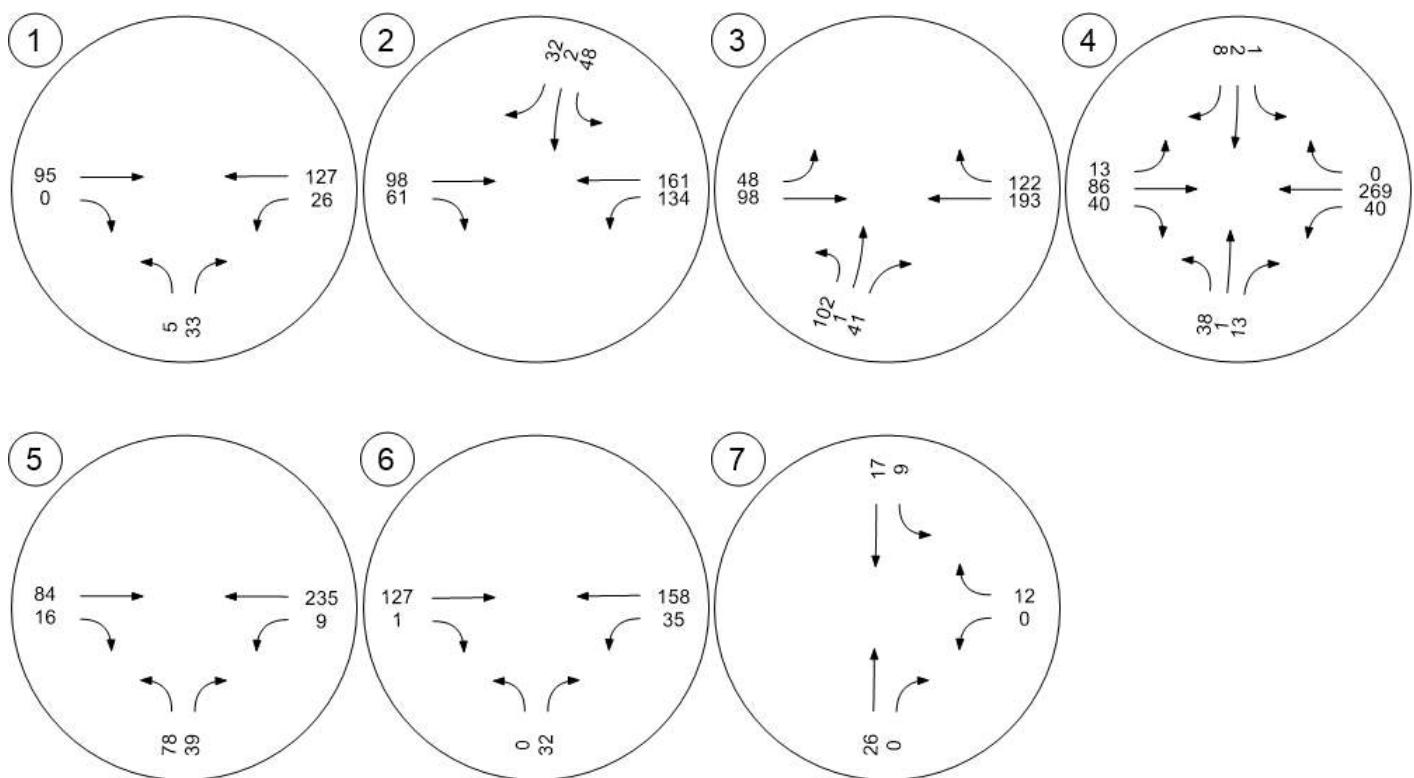
Zone / Gate	Zone 1: Zone			
	To Zone:		From Zone:	
	Share %	Trips	Share %	Trips
2: Gate	40.00	18	0.00	0
3: Gate	0.00	0	40.00	18
4: Gate	2.00	1	2.00	1
5: Gate	7.00	3	7.00	3
6: Gate	6.00	3	6.00	3
7: Gate	2.00	1	2.00	1
8: Gate	40.00	18	0.00	0
9: Gate	0.00	0	40.00	17
10: Gate	1.00	0	1.00	0
11: Gate	2.00	1	2.00	1
<b>Total</b>	<b>100.00</b>	<b>45</b>	<b>100.00</b>	<b>44</b>



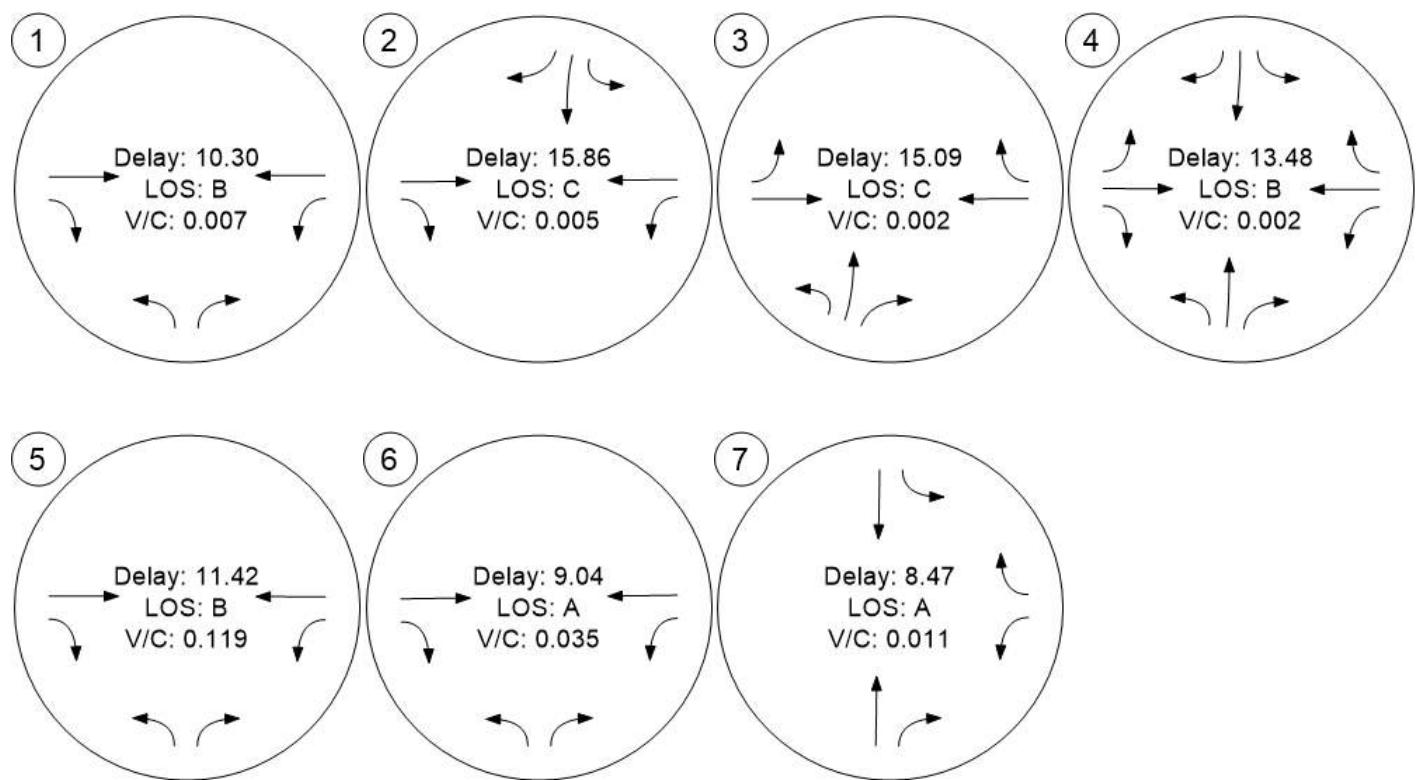
## Traffic Volume - Base Volume



## Traffic Volume - Future Total Volume



## Traffic Conditions



Vistro File: D:\...\Vistro Base.vistro  
Report File: D:\...\4- Existing + Project PM.pdf

Scenario 4 Existing + Project PM  
9/16/2020

### Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Beacon Lite Rd & SR 404	Two-way stop	HCM 6. Auflage	NB Left	0.002	11.2	B
2	I-25 & SR-404 Southbound On/off Ramps	Two-way stop	HCM 6. Auflage	SB Left	0.330	18.5	C
3	I-25 & SR-404 Northbound On/off Ramps	Two-way stop	HCM 6. Auflage	NB Left	0.230	16.9	C
4	Monument Hill Rd & SR-404	Two-way stop	HCM 6. Auflage	NB Left	0.082	14.7	B
5	Doewood Dr & SR-404	Two-way stop	HCM 6. Auflage	NB Left	0.082	11.8	B
6	SR-404 & North Access	Two-way stop	HCM 6. Auflage	NB Left	0.002	11.9	B
7	Beacon Lite Rd & West Access	Two-way stop	HCM 6. Auflage	WB Left	0.001	9.1	A

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: Beacon Lite Rd & SR 404**

Control Type:	Two-way stop	Delay (sec / veh):	11.2
Analysis Method:	HCM 6. Auflage	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

**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]	35.00		45.00		45.00		
Grade [%]	0.00			0.00		0.00	
Crosswalk	Ja			Ja		Ja	

**Volumes**

Name							
Base Volume Input [veh/h]	0	45	154	1	29	137	
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]	1	14	1	0	12	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	59	155	1	41	137	
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	0	15	39	0	10	34	
Total Analysis Volume [veh/h]	1	59	155	1	41	137	
Pedestrian Volume [ped/h]	0			0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	Nein		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.07	0.00	0.00	0.03	0.00
d_M, Delay for Movement [s/veh]	11.23	9.34	0.00	0.00	7.60	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.22	0.22	0.00	0.00	0.09	0.09
95th-Percentile Queue Length [ft/ln]	5.45	5.45	0.00	0.00	2.22	2.22
d_A, Approach Delay [s/veh]	9.37		0.00		1.75	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]			2.22			
Intersection LOS			B			

**Intersection Level Of Service Report**  
**Intersection 2: I-25 & SR-404 Southbound On/off Ramps**

Control Type:	Two-way stop	Delay (sec / veh):	18.5
Analysis Method:	HCM 6. Auflage	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.330

**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	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	0	0	0	131	0	31	0	116	81	100	135	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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	24	0	32	23	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
Total Hourly Volume [veh/h]	0	0	0	131	0	55	0	148	104	100	169	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	33	0	14	0	37	26	25	42	0
Total Analysis Volume [veh/h]	0	0	0	131	0	55	0	148	104	100	169	0
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		Nein		
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.33	0.00	0.06	0.00	0.00	0.00	0.08	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	18.49	19.16	9.39	0.00	0.00	0.00	7.97	0.00	0.00
Movement LOS				C	C	A		A	A	A	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	1.42	1.42	0.20	0.00	0.00	0.00	0.25	0.25	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	35.48	35.48	5.02	0.00	0.00	0.00	6.17	6.17	0.00
d_A, Approach Delay [s/veh]		0.00			15.80			0.00			2.96	
Approach LOS		A		C			A		A		A	
d_I, Intersection Delay [s/veh]							5.28					
Intersection LOS							C					

**Intersection Level Of Service Report**  
**Intersection 3: I-25 & SR-404 Northbound On/off Ramps**

Control Type:	Two-way stop	Delay (sec / veh):	16.9
Analysis Method:	HCM 6. Auflage	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.230

**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]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	76	0	117	0	0	0	27	220	0	0	159	77
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	24	0	0	0	0	0	23	9	0	0	10	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]	100	0	117	0	0	0	50	229	0	0	169	77
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	0	29	0	0	0	13	57	0	0	42	19
Total Analysis Volume [veh/h]	100	0	117	0	0	0	50	229	0	0	169	77
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	Nein			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Nein			
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.23	0.00	0.14	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	16.93	17.44	13.11	0.00	0.00	0.00	7.83	0.00	0.00	0.00	0.00	0.00
Movement LOS	C	C	B				A	A			A	A
95th-Percentile Queue Length [veh/ln]	1.73	1.73	1.73	0.00	0.00	0.00	0.12	0.12	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	43.19	43.19	43.19	0.00	0.00	0.00	2.95	2.95	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		14.87			0.00			1.40			0.00	
Approach LOS		B			A			A			A	
d_I, Intersection Delay [s/veh]							4.88					
Intersection LOS							C					

**Intersection Level Of Service Report**  
**Intersection 4: Monument Hill Rd & SR-404**

Control Type:	Two-way stop	Delay (sec / veh):	14.7
Analysis Method:	HCM 6. Auflage	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.082

**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]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	33	1	29	1	1	8	11	295	31	13	195	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
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	1	1	7	1	0	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
Total Hourly Volume [veh/h]	34	1	29	1	1	9	12	302	32	13	203	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	0	7	0	0	2	3	76	8	3	51	0
Total Analysis Volume [veh/h]	34	1	29	1	1	9	12	302	32	13	203	0
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	Nein	Nein		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Nein	Nein		
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.08	0.00	0.04	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	14.65	14.54	10.97	14.15	13.81	9.38	7.65	0.00	0.00	7.97	0.00	0.00
Movement LOS	B	B	B	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.42	0.42	0.42	0.05	0.05	0.05	0.03	0.03	0.03	0.03	0.03	0.03
95th-Percentile Queue Length [ft/ln]	10.57	10.57	10.57	1.19	1.19	1.19	0.66	0.66	0.66	0.80	0.80	0.80
d_A, Approach Delay [s/veh]		12.98			10.22			0.27			0.48	
Approach LOS		B		B			A			A		
d_I, Intersection Delay [s/veh]							1.79					
Intersection LOS							B					

**Intersection Level Of Service Report**  
**Intersection 5: Doewood Dr & SR-404**

Control Type:	Two-way stop	Delay (sec / veh):	11.8
Analysis Method:	HCM 6. Auflage	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.082

**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	1	1	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	280.00	450.00	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]	25.00		45.00		45.00		
Grade [%]	0.00			0.00		0.00	
Crosswalk	Ja		Ja		Ja		

**Volumes**

Name							
Base Volume Input [veh/h]	44	10	234	91	10	157	
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]	4	0	4	3	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]	48	10	238	94	10	161	
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	12	3	60	24	3	40	
Total Analysis Volume [veh/h]	48	10	238	94	10	161	
Pedestrian Volume [ped/h]	0			0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	Nein		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.08	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	11.75	10.10	0.00	0.00	7.96	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.31	0.31	0.00	0.00	0.02	0.00
95th-Percentile Queue Length [ft/ln]	7.78	7.78	0.00	0.00	0.62	0.00
d_A, Approach Delay [s/veh]	11.47		0.00		0.47	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]			1.33			
Intersection LOS			B			

**Intersection Level Of Service Report**  
**Intersection 6: SR-404 & North Access**

Control Type:	Two-way stop	Delay (sec / veh):	11.9
Analysis Method:	HCM 6. Auflage	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

**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	1	0	0	0	0	
Entry Pocket Length [ft]	100.00	50.00	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]	15.00		45.00		45.00		
Grade [%]	0.00		0.00		0.00		
Crosswalk	Ja		Ja		Ja		

**Volumes**

Name						
Base Volume Input [veh/h]	0	0	199	0	0	166
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]	1	41	14	1	46	12
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	41	213	1	46	178
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	10	53	0	12	45
Total Analysis Volume [veh/h]	1	41	213	1	46	178
Pedestrian Volume [ped/h]	0			0		0

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.05	0.00	0.00	0.03	0.00
d_M, Delay for Movement [s/veh]	11.91	9.58	0.00	0.00	7.75	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.16	0.00	0.00	0.11	0.11
95th-Percentile Queue Length [ft/ln]	0.14	3.91	0.00	0.00	2.63	2.63
d_A, Approach Delay [s/veh]	9.64		0.00		1.59	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]			1.59			
Intersection LOS			B			

**Intersection Level Of Service Report**  
**Intersection 7: Beacon Lite Rd & West Access**

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 6. Auflage	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

**Intersection Setup**

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	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]	35.00		35.00		15.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Ja		Ja		Ja	

**Volumes**

Name						
Base Volume Input [veh/h]	45	0	0	30	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	1	12	0	1	15
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]	45	1	12	30	1	15
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	0	3	8	0	4
Total Analysis Volume [veh/h]	45	1	12	30	1	15
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Free	Free	Stop
Flared Lane			Nein
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Nein
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	7.32	0.00	9.09	8.57
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.02	0.02	0.05	0.05
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.58	0.58	1.20	1.20
d_A, Approach Delay [s/veh]	0.00		2.09		8.60	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]			2.17			
Intersection LOS			A			

Vistro File: D:\...\Vistro Base.vistro

Scenario 4 Existing + Project PM

Report File: D:\...\4- Existing + Project PM.pdf

9/16/2020

**Turning Movement Volume: Summary**

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
1	Beacon Lite Rd & SR 404	1	59	155	1	41	137	394

ID	Intersection Name	Southbound			Eastbound		Westbound		Total Volume
		Left	Thru	Right	Thru	Right	Left	Thru	
2	I-25 & SR-404 Southbound On/off Ramps	131	0	55	148	104	100	169	707

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Thru	Right	Left	Thru	Thru	Right	
3	I-25 & SR-404 Northbound On/off Ramps	100	0	117	50	229	169	77	742

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	Monument Hill Rd & SR-404	34	1	29	1	1	9	12	302	32	13	203	0	637

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru		
5	Doewood Dr & SR-404	48	10	238	94	10	161	561	

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru		
6	SR-404 & North Access	1	41	213	1	46	178	480	

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
7	Beacon Lite Rd & West Access	45	1	12	30	1	15	104

Vistro File: D:\...\Vistro Base.vistro

Scenario 4 Existing + Project PM

Report File: D:\...\4- Existing + Project PM.pdf

9/16/2020

**Turning Movement Volume: Detail**

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
1	Beacon Lite Rd & SR 404	Final Base	0	45	154	1	29	137	366
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	1	14	1	0	12	0	28
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>1</b>	<b>59</b>	<b>155</b>	<b>1</b>	<b>41</b>	<b>137</b>	<b>394</b>

ID	Intersection Name	Volume Type	Southbound			Eastbound		Westbound		Total Volume
			Left	Thru	Right	Thru	Right	Left	Thru	
2	I-25 & SR-404 Southbound On/off Ramps	Final Base	131	0	31	116	81	100	135	594
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0
		Net New Trips	0	0	24	32	23	0	34	113
		Other	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>131</b>	<b>0</b>	<b>55</b>	<b>148</b>	<b>104</b>	<b>100</b>	<b>169</b>	<b>707</b>

ID	Intersection Name	Volume Type	Northbound			Eastbound		Westbound		Total Volume
			Left	Thru	Right	Left	Thru	Thru	Right	
3	I-25 & SR-404 Northbound On/off Ramps	Final Base	76	0	117	27	220	159	77	676
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0
		Net New Trips	24	0	0	23	9	10	0	66
		Other	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>100</b>	<b>0</b>	<b>117</b>	<b>50</b>	<b>229</b>	<b>169</b>	<b>77</b>	<b>742</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	Monument Hill Rd & SR-404	Final Base	33	1	29	1	1	8	11	295	31	13	195	0	618
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	1	0	0	0	0	1	1	7	1	0	8	0	19
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>34</b>	<b>1</b>	<b>29</b>	<b>1</b>	<b>1</b>	<b>9</b>	<b>12</b>	<b>302</b>	<b>32</b>	<b>13</b>	<b>203</b>	<b>0</b>	<b>637</b>

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
5	Doewood Dr & SR-404	Final Base	44	10	234	91	10	157	546
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	4	0	4	3	0	4	15
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>48</b>	<b>10</b>	<b>238</b>	<b>94</b>	<b>10</b>	<b>161</b>	<b>561</b>

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
6	SR-404 & North Access	Final Base	0	0	199	0	0	166	365
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	1	41	14	1	46	12	115
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>1</b>	<b>41</b>	<b>213</b>	<b>1</b>	<b>46</b>	<b>178</b>	<b>480</b>

ID	Intersection Name	Volume Type	Northbound		Southbound		Westbound		Total Volume
			Thru	Right	Left	Thru	Left	Right	
7	Beacon Lite Rd & West Access	Final Base	45	0	0	30	0	0	75
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	1	12	0	1	15	29
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>45</b>	<b>1</b>	<b>12</b>	<b>30</b>	<b>1</b>	<b>15</b>	<b>104</b>

## Signal Warrants Report For Intersection 1: Beacon Lite Rd &amp; SR 404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	178	156	60
2	173	151	58
3	169	148	57
4	158	139	53
5	141	123	47
6	139	122	47
7	137	120	46
8	125	109	42
9	123	108	41
10	121	106	41
11	105	92	35
12	98	86	33
13	96	84	32
14	71	62	24
15	71	62	24
16	50	44	17
17	28	25	10
18	28	25	10
19	16	14	5
20	9	8	3
21	5	5	2
22	2	2	1
23	2	2	1
24	2	2	1

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	334	1	60	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	324	1	58	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	317	1	57	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	297	1	53	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	264	1	47	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	261	1	47	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	257	1	46	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	234	1	42	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	231	1	41	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	227	1	41	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	197	1	35	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	184	1	33	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	180	1	32	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	133	1	24	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	133	1	24	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	94	1	17	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	53	1	10	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	53	1	10	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	30	1	5	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	17	1	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	10	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	4	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	4	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	4	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	9.4
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:09
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	60
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	394
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 2: I-25 &amp; SR-404 Southbound On/off Ramps

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>N</b>
1	269	252	186
2	261	244	180
3	256	239	177
4	239	224	166
5	213	199	147
6	210	197	145
7	207	194	143
8	188	176	130
9	186	174	128
10	183	171	126
11	159	149	110
12	148	139	102
13	145	136	100
14	108	101	74
15	108	101	74
16	75	71	52
17	43	40	30
18	43	40	30
19	24	23	17
20	13	13	9
21	8	8	6
22	3	3	2
23	3	3	2
24	3	3	2

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%	Condition B	
1	2	521	2	186	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Nein	Nein
2	2	505	2	180	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Nein	Nein
3	2	495	2	177	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
4	2	463	2	166	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
5	2	412	2	147	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
6	2	407	2	145	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
7	2	401	2	143	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
8	2	364	2	130	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
9	2	360	2	128	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
10	2	354	2	126	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
11	2	308	2	110	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	287	2	102	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	281	2	100	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	209	2	74	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	209	2	74	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	146	2	52	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	83	2	30	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	83	2	30	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	47	2	17	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	26	2	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	16	2	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	6	2	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	6	2	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	6	2	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	3	4	10	0	0	0	2	0	0

## Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	15.8
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:48
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	186
High Minor Volume Condition Met	Ja
Total Entering Volume on All Approaches During Same Hour	707
Number of Approaches on Intersection	3
Total Volume Condition Met	Ja
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 3: I-25 &amp; SR-404 Northbound On/off Ramps

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Ja
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	246	279	217
2	239	271	210
3	234	265	206
4	219	248	193
5	194	220	171
6	192	218	169
7	189	215	167
8	172	195	152
9	170	193	150
10	167	190	148
11	145	165	128
12	135	153	119
13	133	151	117
14	98	112	87
15	98	112	87
16	69	78	61
17	39	45	35
18	39	45	35
19	22	25	20
20	12	14	11
21	7	8	7
22	2	3	2
23	2	3	2
24	2	3	2

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	525	1	217	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
2	2	510	1	210	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
3	2	499	1	206	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Nein	Ja	Nein
4	2	467	1	193	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Ja	Nein
5	2	414	1	171	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
6	2	410	1	169	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
7	2	404	1	167	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
8	2	367	1	152	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
9	2	363	1	150	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
10	2	357	1	148	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
11	2	310	1	128	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	288	1	119	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	284	1	117	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	210	1	87	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	210	1	87	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	147	1	61	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	84	1	35	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	84	1	35	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	47	1	20	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	26	1	11	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	15	1	7	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	5	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	5	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	5	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	3	4	10	0	0	0	2	4	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	14.9
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:53
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	217
High Minor Volume Condition Met	Ja
Total Entering Volume on All Approaches During Same Hour	742
Number of Approaches on Intersection	3
Total Volume Condition Met	Ja
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 4: Monument Hill Rd &amp; SR-404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N, S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>	
	<b>E</b>	<b>W</b>	<b>N</b>	<b>S</b>
1	216	346	11	64
2	210	336	11	62
3	205	329	10	61
4	192	308	10	57
5	171	273	9	51
6	168	270	9	50
7	166	266	8	49
8	151	242	8	45
9	149	239	8	44
10	147	235	7	44
11	127	204	6	38
12	119	190	6	35
13	117	187	6	35
14	86	138	4	26
15	86	138	4	26
16	60	97	3	18
17	35	55	2	10
18	35	55	2	10
19	19	31	1	6
20	11	17	1	3
21	6	10	0	2
22	2	3	0	1
23	2	3	0	1
24	2	3	0	1

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	562	2	75	Nein	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	Nein
2	2	546	2	73	Nein	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	Nein
3	2	534	2	71	Nein	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	Nein
4	2	500	2	67	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	444	2	60	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	438	2	59	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	432	2	57	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	393	2	53	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	388	2	52	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	382	2	51	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	331	2	44	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	309	2	41	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	304	2	41	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	224	2	30	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	224	2	30	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	157	2	21	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	90	2	12	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	90	2	12	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	50	2	7	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	28	2	4	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	16	2	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	5	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	5	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	5	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	3	0	0

## Warrant 3 Condition A

Orientation	N	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	10.2	13
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:01	0:13
Delay Condition Met	Nein	Nein
Volume on Minor Street Approach During Same Hour	11	64
High Minor Volume Condition Met	Nein	Nein
Total Entering Volume on All Approaches During Same Hour	637	637
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Nein	Nein
Warrant Met for Approach	Nein	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>	

## Signal Warrants Report For Intersection 5: Doewood Dr &amp; SR-404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	171	332	58
2	166	322	56
3	162	315	55
4	152	295	52
5	135	262	46
6	133	259	45
7	132	256	45
8	120	232	41
9	118	229	40
10	116	226	39
11	101	196	34
12	94	183	32
13	92	179	31
14	68	133	23
15	68	133	23
16	48	93	16
17	27	53	9
18	27	53	9
19	15	30	5
20	9	17	3
21	5	10	2
22	2	3	1
23	2	3	1
24	2	3	1

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	503	1	58	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	4	488	1	56	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	4	477	1	55	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	4	447	1	52	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	4	397	1	46	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	4	392	1	45	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	4	388	1	45	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	4	352	1	41	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	4	347	1	40	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	4	342	1	39	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	4	297	1	34	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	4	277	1	32	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	4	271	1	31	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	4	201	1	23	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	4	201	1	23	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	4	141	1	16	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	4	80	1	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	4	80	1	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	4	45	1	5	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	4	26	1	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	4	15	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	4	5	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	4	5	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	4	5	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	11.5
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:11
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	58
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	561
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 6: SR-404 &amp; North Access

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	224	214	42
2	217	208	41
3	213	203	40
4	199	190	37
5	177	169	33
6	175	167	33
7	172	165	32
8	157	150	29
9	155	148	29
10	152	146	29
11	132	126	25
12	123	118	23
13	121	116	23
14	90	86	17
15	90	86	17
16	63	60	12
17	36	34	7
18	36	34	7
19	20	19	4
20	11	11	2
21	7	6	1
22	2	2	0
23	2	2	0
24	2	2	0

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	438	2	42	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	425	2	41	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	416	2	40	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	389	2	37	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	346	2	33	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	342	2	33	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	337	2	32	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	307	2	29	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	303	2	29	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	298	2	29	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	258	2	25	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	241	2	23	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	237	2	23	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	176	2	17	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	176	2	17	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	123	2	12	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	70	2	7	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	70	2	7	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	39	2	4	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	22	2	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	13	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	4	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	4	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	4	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	9.6
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:06
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	42
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	480
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 7: Beacon Lite Rd &amp; West Access

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	N, S
Minor Approaches	E
Speed > 40mph	Nein
Population < 10,000	Nein
Warrant Factor	100%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>N</b>	<b>S</b>	<b>E</b>
1	42	46	16
2	41	45	16
3	40	44	15
4	37	41	14
5	33	36	13
6	33	36	12
7	32	35	12
8	29	32	11
9	29	32	11
10	29	31	11
11	25	27	9
12	23	25	9
13	23	25	9
14	17	18	6
15	17	18	6
16	12	13	4
17	7	7	3
18	7	7	3
19	4	4	1
20	2	2	1
21	1	1	0
22	0	0	0
23	0	0	0
24	0	0	0

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	88	1	16	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	86	1	16	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	84	1	15	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	78	1	14	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	69	1	13	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	69	1	12	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	67	1	12	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	61	1	11	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	61	1	11	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	60	1	11	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	52	1	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	48	1	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	48	1	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	35	1	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	35	1	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	25	1	4	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	14	1	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	14	1	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	8	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	4	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	2	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	0	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	0	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	0	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.6
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:02
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	16
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	104
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

Vistro File: D:\...\Vistro Base.vistro  
Report File: D:\...\4- Existing + Project PM.pdf

Scenario 4 Existing + Project PM  
9/16/2020

## Trip Generation Summary

## **Added Trips**

Zone ID: Name	Land Use variables	Code	Ind. Var.	Rate	Quantity	% In	% Out	Trips In	Trips Out	Total Trips	% of Total Trips
1: Zone				1.000	0.000	50.00	50.00	60	57	117	100.00
<b>Added Trips Total</b>								<b>60</b>	<b>57</b>	<b>117</b>	<b>100.00</b>

Vistro File: D:\...\Vistro Base.vistro

Report File: D:\...\4- Existing + Project PM.pdf

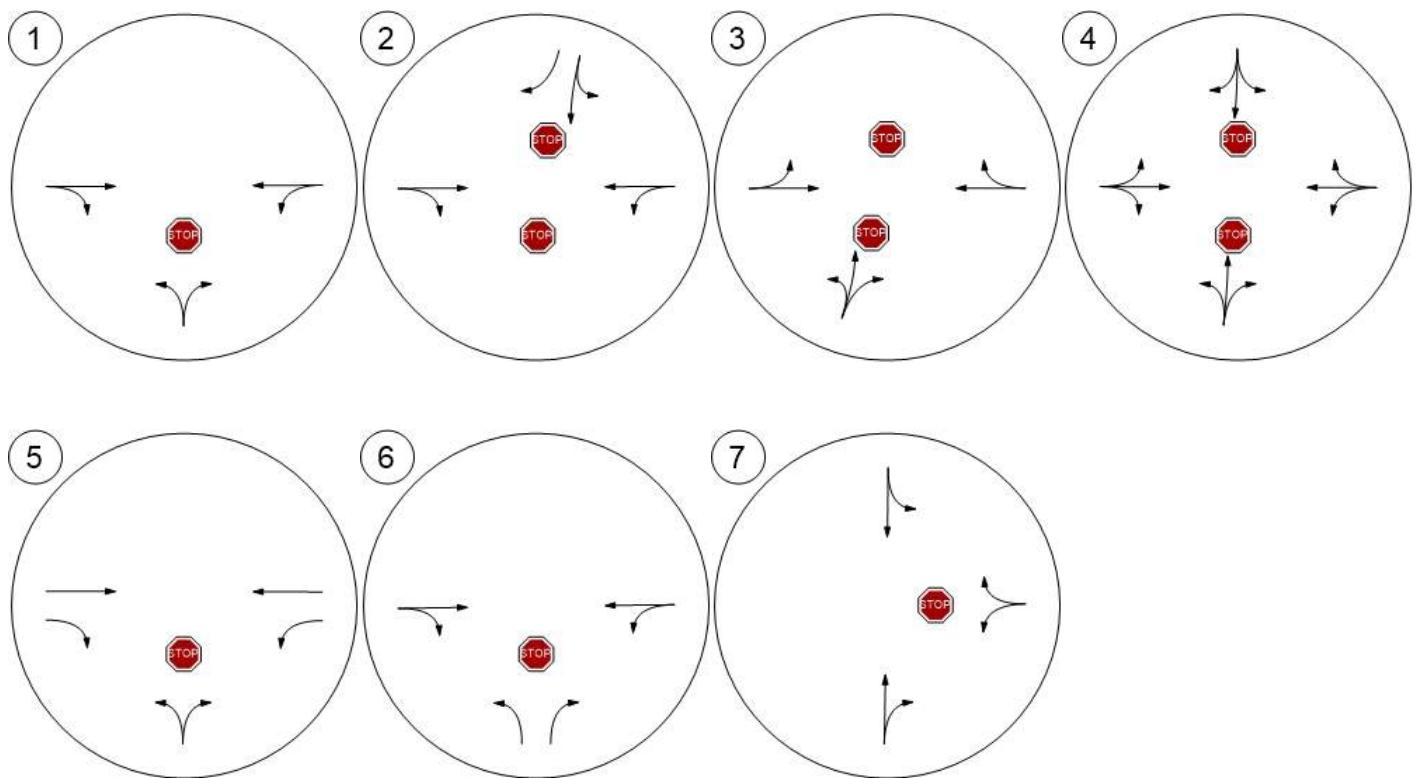
Scenario 4 Existing + Project PM

9/16/2020

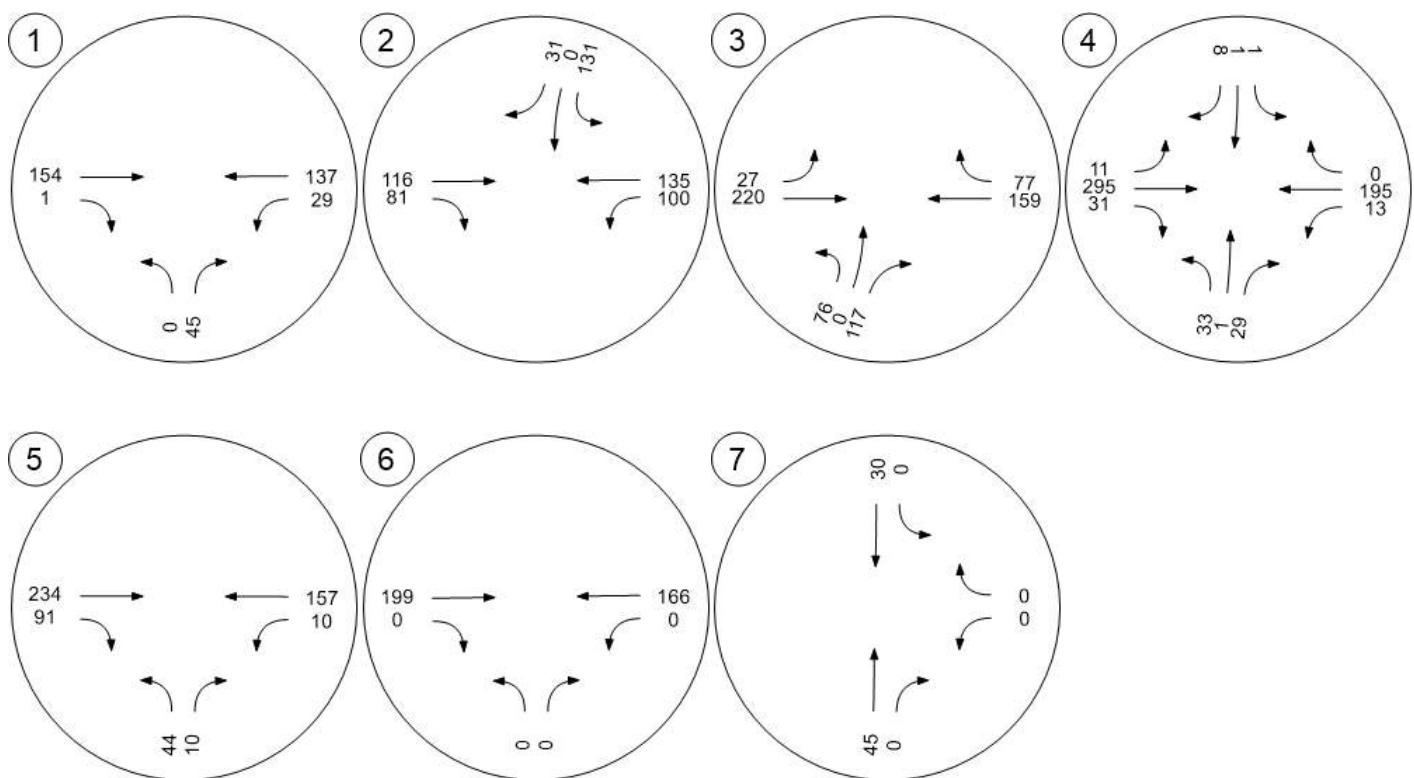
### Trip Distribution Summary

Zone / Gate	Zone 1: Zone			
	To Zone:		From Zone:	
	Share %	Trips	Share %	Trips
2: Gate	40.00	24	0.00	0
3: Gate	0.00	0	40.00	23
4: Gate	2.00	1	2.00	1
5: Gate	7.00	4	7.00	4
6: Gate	6.00	4	6.00	3
7: Gate	2.00	1	2.00	1
8: Gate	40.00	24	0.00	0
9: Gate	0.00	0	40.00	23
10: Gate	1.00	1	1.00	1
11: Gate	2.00	1	2.00	1
<b>Total</b>	<b>100.00</b>	<b>60</b>	<b>100.00</b>	<b>57</b>

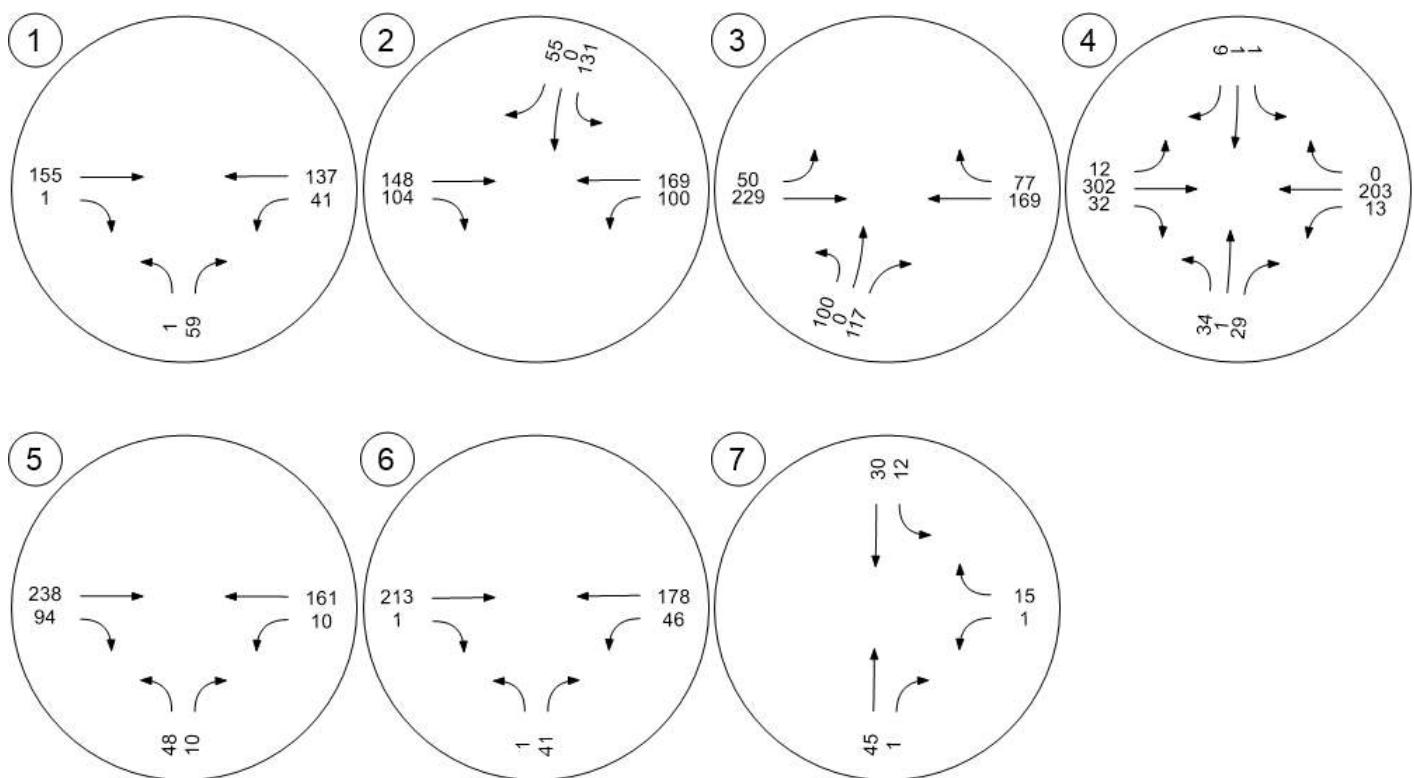
## Lane Configuration and Traffic Control



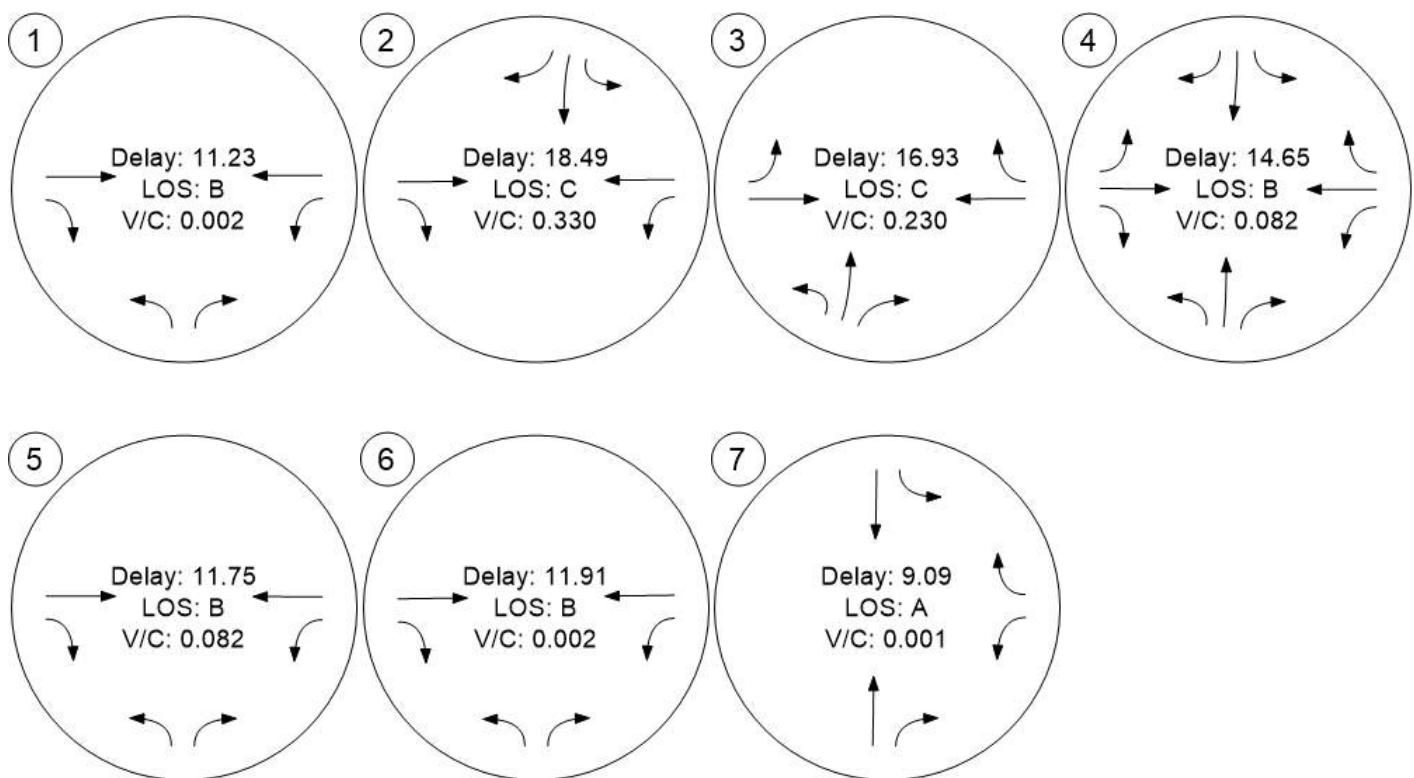
## Traffic Volume - Base Volume



## Traffic Volume - Future Total Volume



## Traffic Conditions





2040 BACKGROUND TRAFFIC

Vistro File: D:\...\Vistro Base.vistro  
Report File: D:\...\7- 2040 Background AM.pdf

Scenario 7 2040 Background AM  
9/16/2020

### Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Beacon Lite Rd & SR 404	Two-way stop	HCM 6. Auflage	NB Left	0.010	11.1	B
2	I-25 & SR-404 Southbound On/off Ramps	Two-way stop	HCM 6. Auflage	SB Left	0.258	22.3	C
3	I-25 & SR-404 Northbound On/off Ramps	Two-way stop	HCM 6. Auflage	NB Thru	0.003	19.6	C
4	Monument Hill Rd & SR-404	Two-way stop	HCM 6. Auflage	NB Left	0.169	18.2	C
5	Doewood Dr & SR-404	Two-way stop	HCM 6. Auflage	NB Left	0.211	14.0	B
6	SR-404 & North Access	Two-way stop	HCM 6. Auflage	WB Thru	0.002	0.0	A
7	Beacon Lite Rd & West Access	Two-way stop	HCM 6. Auflage	NB Thru	0.000	0.0	A

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: Beacon Lite Rd & SR 404**

Control Type:	Two-way stop	Delay (sec / veh):	11.1
Analysis Method:	HCM 6. Auflage	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.010

**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]	35.00		45.00		45.00		
Grade [%]	0.00			0.00		0.00	
Crosswalk	Ja			Ja		Ja	

**Volumes**

Name							
Base Volume Input [veh/h]	4	22	94	0	17	127	
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	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	
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]	6	33	140	0	25	189	
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	2	8	35	0	6	47	
Total Analysis Volume [veh/h]	6	33	140	0	25	189	
Pedestrian Volume [ped/h]	0			0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	Nein		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.01	0.04	0.00	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	11.10	9.17	0.00	0.00	7.54	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.14	0.14	0.00	0.00	0.05	0.05
95th-Percentile Queue Length [ft/ln]	3.62	3.62	0.00	0.00	1.32	1.32
d_A, Approach Delay [s/veh]	9.47		0.00		0.88	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]			1.42			
Intersection LOS			B			

**Intersection Level Of Service Report**  
**Intersection 2: I-25 & SR-404 Southbound On/off Ramps**

Control Type:	Two-way stop	Delay (sec / veh):	22.3
Analysis Method:	HCM 6. Auflage	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.258

**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	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	0	0	0	48	0	14	0	72	44	134	135	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.4900	1.4900	1.4900	1.0000	1.4900	1.4900	1.4900	1.4900	1.0000
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]	0	0	0	72	0	21	0	107	66	200	201	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	18	0	5	0	27	17	50	50	0
Total Analysis Volume [veh/h]	0	0	0	72	0	21	0	107	66	200	201	0
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		Nein		
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.26	0.00	0.03	0.00	0.00	0.00	0.14	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	22.34	22.45	9.40	0.00	0.00	0.00	7.99	0.00	0.00
Movement LOS				C	C	A		A	A	A	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	1.01	1.01	0.08	0.00	0.00	0.00	0.50	0.50	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	25.13	25.13	1.92	0.00	0.00	0.00	12.42	12.42	0.00
d_A, Approach Delay [s/veh]		0.00			19.42			0.00			3.99	
Approach LOS		A		C			A		A		A	
d_I, Intersection Delay [s/veh]						5.10						
Intersection LOS						C						

**Intersection Level Of Service Report**  
**Intersection 3: I-25 & SR-404 Northbound On/off Ramps**

Control Type:	Two-way stop	Delay (sec / veh):	19.6
Analysis Method:	HCM 6. Auflage	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

**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]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	84	1	41	0	0	0	30	90	0	0	185	122
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.0000	1.0000	1.0000	1.4900	1.4900	1.0000	1.0000	1.4900	1.4900
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]	125	1	61	0	0	0	45	134	0	0	276	182
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	0	15	0	0	0	11	34	0	0	69	46
Total Analysis Volume [veh/h]	125	1	61	0	0	0	45	134	0	0	276	182
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	Nein			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Nein			
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.31	0.00	0.07	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	18.47	19.59	13.40	0.00	0.00	0.00	8.40	0.00	0.00	0.00	0.00	0.00
Movement LOS	C	C	B				A	A			A	A
95th-Percentile Queue Length [veh/ln]	1.77	1.77	1.77	0.00	0.00	0.00	0.13	0.13	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	44.27	44.27	44.27	0.00	0.00	0.00	3.19	3.19	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		16.82			0.00			2.11			0.00	
Approach LOS		C			A			A			A	
d_I, Intersection Delay [s/veh]							4.28					
Intersection LOS							C					

**Intersection Level Of Service Report**  
**Intersection 4: Monument Hill Rd & SR-404**

Control Type:	Two-way stop	Delay (sec / veh):	18.2
Analysis Method:	HCM 6. Auflage	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.169

**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]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	37	1	13	1	2	7	12	80	39	40	263	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
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]	55	1	19	1	3	10	18	119	58	60	392	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	0	5	0	1	3	5	30	15	15	98	0
Total Analysis Volume [veh/h]	55	1	19	1	3	10	18	119	58	60	392	0
Pedestrian Volume [ped/h]	0			0			0			0		

## Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	Nein	Nein		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Nein	Nein		
Number of Storage Spaces in Median	0	0	0	0

## Movement, Approach, & Intersection Results

**Intersection Level Of Service Report**  
**Intersection 5: Doewood Dr & SR-404**

Control Type:	Two-way stop	Delay (sec / veh):	14.0
Analysis Method:	HCM 6. Auflage	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.211

**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	1	1	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	280.00	450.00	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]	25.00		45.00		45.00		
Grade [%]	0.00			0.00		0.00	
Crosswalk	Ja		Ja		Ja		

**Volumes**

Name							
Base Volume Input [veh/h]	75	39	81	13	9	232	
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	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	
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]	112	58	121	19	13	346	
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	28	15	30	5	3	87	
Total Analysis Volume [veh/h]	112	58	121	19	13	346	
Pedestrian Volume [ped/h]	0			0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	Nein		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.21	0.06	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	13.95	11.04	0.00	0.00	7.52	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.11	1.11	0.00	0.00	0.03	0.00
95th-Percentile Queue Length [ft/ln]	27.69	27.69	0.00	0.00	0.68	0.00
d_A, Approach Delay [s/veh]	12.96		0.00		0.27	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]			3.44			
Intersection LOS			B			

**Intersection Level Of Service Report**  
**Intersection 6: SR-404 & North Access**

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6. Auflage	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

**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	1	0	0	0	0	
Entry Pocket Length [ft]	100.00	50.00	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]	15.00		45.00		45.00		
Grade [%]	0.00			0.00		0.00	
Crosswalk	Ja		Ja		Ja		

**Volumes**

Name						
Base Volume Input [veh/h]	0	0	116	0	0	149
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	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
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	0	173	0	0	222
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	43	0	0	56
Total Analysis Volume [veh/h]	0	0	173	0	0	222
Pedestrian Volume [ped/h]	0			0		0

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
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]	10.90	9.14	0.00	0.00	7.56	0.00
Movement LOS	B	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]		10.02		0.00		0.00
Approach LOS		B		A		A
d_I, Intersection Delay [s/veh]				0.00		
Intersection LOS				A		

**Intersection Level Of Service Report**  
**Intersection 7: Beacon Lite Rd & West Access**

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

**Intersection Setup**

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	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]	35.00		35.00		15.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Ja		Ja		Ja	

**Volumes**

Name						
Base Volume Input [veh/h]	26	0	0	17	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	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
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]	39	0	0	25	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	0	0	6	0	0
Total Analysis Volume [veh/h]	39	0	0	25	0	0
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Free	Free	Stop
Flared Lane			Nein
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Nein
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]	0.00	0.00	7.29	0.00	8.82	8.49
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		8.65	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]			0.00			
Intersection LOS			A			

Vistro File: D:\...\Vistro Base.vistro

Scenario 7 2040 Background AM

Report File: D:\...\7- 2040 Background AM.pdf

9/16/2020

**Turning Movement Volume: Summary**

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
1	Beacon Lite Rd & SR 404	6	33	140	0	25	189	393

ID	Intersection Name	Southbound			Eastbound		Westbound		Total Volume
		Left	Thru	Right	Thru	Right	Left	Thru	
2	I-25 & SR-404 Southbound On/off Ramps	72	0	21	107	66	200	201	667

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Thru	Right	Left	Thru	Thru	Right	
3	I-25 & SR-404 Northbound On/off Ramps	125	1	61	45	134	276	182	824

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	Monument Hill Rd & SR-404	55	1	19	1	3	10	18	119	58	60	392	0	736

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	Right	
5	Doewood Dr & SR-404	112	58	121	19	13	346	669	

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	Right	
6	SR-404 & North Access	0	0	173	0	0	222	395	

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
7	Beacon Lite Rd & West Access	39	0	0	25	0	0	64

Vistro File: D:\...\Vistro Base.vistro

Scenario 7 2040 Background AM

Report File: D:\...\7- 2040 Background AM.pdf

9/16/2020

**Turning Movement Volume: Detail**

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
1	Beacon Lite Rd & SR 404	Final Base	4	22	94	0	17	127	264
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>6</b>	<b>33</b>	<b>140</b>	<b>0</b>	<b>25</b>	<b>189</b>	<b>393</b>

ID	Intersection Name	Volume Type	Southbound			Eastbound		Westbound		Total Volume
			Left	Thru	Right	Thru	Right	Left	Thru	
2	I-25 & SR-404 Southbound On/off Ramps	Final Base	48	0	14	72	44	134	135	447
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>72</b>	<b>0</b>	<b>21</b>	<b>107</b>	<b>66</b>	<b>200</b>	<b>201</b>	<b>667</b>

ID	Intersection Name	Volume Type	Northbound			Eastbound		Westbound		Total Volume
			Left	Thru	Right	Left	Thru	Thru	Right	
3	I-25 & SR-404 Northbound On/off Ramps	Final Base	84	1	41	30	90	185	122	553
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>125</b>	<b>1</b>	<b>61</b>	<b>45</b>	<b>134</b>	<b>276</b>	<b>182</b>	<b>824</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	Monument Hill Rd & SR-404	Final Base	37	1	13	1	2	7	12	80	39	40	263	0	495
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>55</b>	<b>1</b>	<b>19</b>	<b>1</b>	<b>3</b>	<b>10</b>	<b>18</b>	<b>119</b>	<b>58</b>	<b>60</b>	<b>392</b>	<b>0</b>	<b>736</b>

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
5	Doewood Dr & SR-404	Final Base	75	39	81	13	9	232	449
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>112</b>	<b>58</b>	<b>121</b>	<b>19</b>	<b>13</b>	<b>346</b>	<b>669</b>

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
6	SR-404 & North Access	Final Base	0	0	116	0	0	149	265
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>0</b>	<b>0</b>	<b>173</b>	<b>0</b>	<b>0</b>	<b>222</b>	<b>395</b>

ID	Intersection Name	Volume Type	Northbound		Southbound		Westbound		Total Volume
			Thru	Right	Left	Thru	Left	Right	
7	Beacon Lite Rd & West Access	Final Base	26	0	0	17	0	0	43
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>39</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>0</b>	<b>0</b>	<b>64</b>

## Signal Warrants Report For Intersection 1: Beacon Lite Rd &amp; SR 404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	214	140	39
2	208	136	38
3	203	133	37
4	190	125	35
5	169	111	31
6	167	109	30
7	165	108	30
8	150	98	27
9	148	97	27
10	146	95	27
11	126	83	23
12	118	77	21
13	116	76	21
14	86	56	16
15	86	56	16
16	60	39	11
17	34	22	6
18	34	22	6
19	19	13	4
20	11	7	2
21	6	4	1
22	2	1	0
23	2	1	0
24	2	1	0

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	354	1	39	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	344	1	38	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	336	1	37	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	315	1	35	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	280	1	31	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	276	1	30	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	273	1	30	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	248	1	27	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	245	1	27	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	241	1	27	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	209	1	23	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	195	1	21	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	192	1	21	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	142	1	16	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	142	1	16	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	99	1	11	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	56	1	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	56	1	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	32	1	4	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	18	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	10	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	3	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	3	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	3	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	9.5
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:06
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	39
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	393
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 2: I-25 &amp; SR-404 Southbound On/off Ramps

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>N</b>
1	401	173	93
2	389	168	90
3	381	164	88
4	357	154	83
5	317	137	73
6	313	135	73
7	309	133	72
8	281	121	65
9	277	119	64
10	273	118	63
11	237	102	55
12	221	95	51
13	217	93	50
14	160	69	37
15	160	69	37
16	112	48	26
17	64	28	15
18	64	28	15
19	36	16	8
20	20	9	5
21	12	5	3
22	4	2	1
23	4	2	1
24	4	2	1

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	574	2	93	Nein	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	Nein
2	2	557	2	90	Nein	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	Nein
3	2	545	2	88	Nein	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	Nein
4	2	511	2	83	Nein	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	Nein
5	2	454	2	73	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	448	2	73	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	442	2	72	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	402	2	65	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	396	2	64	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	391	2	63	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	339	2	55	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	316	2	51	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	310	2	50	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	229	2	37	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	229	2	37	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	160	2	26	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	92	2	15	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	92	2	15	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	52	2	8	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	29	2	5	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	17	2	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	6	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	6	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	6	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	4	0	0

## Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	19.4
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:30
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	93
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	667
Number of Approaches on Intersection	3
Total Volume Condition Met	Ja
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 3: I-25 &amp; SR-404 Northbound On/off Ramps

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Ja
#2	Four Hour Vehicular Volume	Ja
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	458	179	187
2	444	174	181
3	435	170	178
4	408	159	166
5	362	141	148
6	357	140	146
7	353	138	144
8	321	125	131
9	316	124	129
10	311	122	127
11	270	106	110
12	252	98	103
13	247	97	101
14	183	72	75
15	183	72	75
16	128	50	52
17	73	29	30
18	73	29	30
19	41	16	17
20	23	9	9
21	14	5	6
22	5	2	2
23	5	2	2
24	5	2	2

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	637	1	187	Ja	Ja	Ja	Ja	Nein	Nein	Ja	Ja	Ja	Nein
2	2	618	1	181	Ja	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
3	2	605	1	178	Ja	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
4	2	567	1	166	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
5	2	503	1	148	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
6	2	497	1	146	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
7	2	491	1	144	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
8	2	446	1	131	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
9	2	440	1	129	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
10	2	433	1	127	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
11	2	376	1	110	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
12	2	350	1	103	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
13	2	344	1	101	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
14	2	255	1	75	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	255	1	75	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	178	1	52	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	102	1	30	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	102	1	30	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	57	1	17	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	32	1	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	19	1	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	7	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	7	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	7	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					3	7	10	13	0	0	1	4	4	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	16.8
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:52
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	187
High Minor Volume Condition Met	Ja
Total Entering Volume on All Approaches During Same Hour	824
Number of Approaches on Intersection	3
Total Volume Condition Met	Ja
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 4: Monument Hill Rd &amp; SR-404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N, S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>	
	<b>E</b>	<b>W</b>	<b>N</b>	<b>S</b>
1	452	195	14	75
2	438	189	14	73
3	429	185	13	71
4	402	174	12	67
5	357	154	11	59
6	353	152	11	59
7	348	150	11	58
8	316	137	10	53
9	312	135	10	52
10	307	133	10	51
11	267	115	8	44
12	249	107	8	41
13	244	105	8	41
14	181	78	6	30
15	181	78	6	30
16	127	55	4	21
17	72	31	2	12
18	72	31	2	12
19	41	18	1	7
20	23	10	1	4
21	14	6	0	2
22	5	2	0	1
23	5	2	0	1
24	5	2	0	1

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%	Condition B	
1	2	647	2	89	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Nein	Nein	
2	2	627	2	87	Nein	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	
3	2	614	2	84	Nein	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	
4	2	576	2	79	Nein	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	
5	2	511	2	70	Nein	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	
6	2	505	2	70	Nein	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	
7	2	498	2	69	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
8	2	453	2	63	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
9	2	447	2	62	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
10	2	440	2	61	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
11	2	382	2	52	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
12	2	356	2	49	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
13	2	349	2	49	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
14	2	259	2	36	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
15	2	259	2	36	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
16	2	182	2	25	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
17	2	103	2	14	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
18	2	103	2	14	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
19	2	59	2	8	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
20	2	33	2	5	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
21	2	20	2	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
22	2	7	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
23	2	7	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
24	2	7	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
Hours Met					0	0	0	0	0	0	1	6	0	0

## Warrant 3 Condition A

Orientation	N	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	12.3	16.5
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:02	0:20
Delay Condition Met	Nein	Nein
Volume on Minor Street Approach During Same Hour	14	75
High Minor Volume Condition Met	Nein	Nein
Total Entering Volume on All Approaches During Same Hour	736	736
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Nein	Nein
Warrant Met for Approach	Nein	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>	

## Signal Warrants Report For Intersection 5: Doewood Dr &amp; SR-404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	359	140	170
2	348	136	165
3	341	133	162
4	320	125	151
5	284	111	134
6	280	109	133
7	276	108	131
8	251	98	119
9	248	97	117
10	244	95	116
11	212	83	100
12	197	77	94
13	194	76	92
14	144	56	68
15	144	56	68
16	101	39	48
17	57	22	27
18	57	22	27
19	32	13	15
20	18	7	9
21	11	4	5
22	4	1	2
23	4	1	2
24	4	1	2

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	499	1	170	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Nein	Ja	Nein
2	4	484	1	165	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
3	4	474	1	162	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
4	4	445	1	151	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
5	4	395	1	134	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
6	4	389	1	133	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
7	4	384	1	131	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
8	4	349	1	119	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
9	4	345	1	117	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
10	4	339	1	116	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
11	4	295	1	100	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	4	274	1	94	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	4	270	1	92	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	4	200	1	68	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	4	200	1	68	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	4	140	1	48	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	4	79	1	27	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	4	79	1	27	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	4	45	1	15	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	4	25	1	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	4	15	1	5	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	4	5	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	4	5	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	4	5	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	2	4	10	0	0	0	0	1	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	13
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:36
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	170
High Minor Volume Condition Met	Ja
Total Entering Volume on All Approaches During Same Hour	669
Number of Approaches on Intersection	3
Total Volume Condition Met	Ja
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 6: SR-404 &amp; North Access

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	222	173	0
2	215	168	0
3	211	164	0
4	198	154	0
5	175	137	0
6	173	135	0
7	171	133	0
8	155	121	0
9	153	119	0
10	151	118	0
11	131	102	0
12	122	95	0
13	120	93	0
14	89	69	0
15	89	69	0
16	62	48	0
17	36	28	0
18	36	28	0
19	20	16	0
20	11	9	0
21	7	5	0
22	2	2	0
23	2	2	0
24	2	2	0

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	395	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	383	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	375	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	352	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	312	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	308	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	304	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	276	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	272	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	269	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	233	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	217	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	213	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	158	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	158	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	110	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	64	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	64	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	36	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	20	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	12	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	4	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	4	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	4	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	10
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:00
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	0
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	395
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 7: Beacon Lite Rd &amp; West Access

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	N, S
Minor Approaches	E
Speed > 40mph	Nein
Population < 10,000	Nein
Warrant Factor	100%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>N</b>	<b>S</b>	<b>E</b>
1	25	39	0
2	24	38	0
3	24	37	0
4	22	35	0
5	20	31	0
6	20	30	0
7	19	30	0
8	18	27	0
9	17	27	0
10	17	27	0
11	15	23	0
12	14	21	0
13	14	21	0
14	10	16	0
15	10	16	0
16	7	11	0
17	4	6	0
18	4	6	0
19	2	4	0
20	1	2	0
21	1	1	0
22	0	0	0
23	0	0	0
24	0	0	0

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	64	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	62	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	61	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	57	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	51	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	50	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	49	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	45	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	44	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	44	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	38	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	35	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	35	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	26	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	26	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	18	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	10	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	10	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	6	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	3	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	2	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	0	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	0	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	0	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.7
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:00
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	0
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	64
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

Vistro File: D:\...\Vistro Base.vistro  
Report File: D:\...\7- 2040 Background AM.pdf

Scenario 7 2040 Background AM  
9/16/2020

### Trip Generation Summary

#### Added Trips

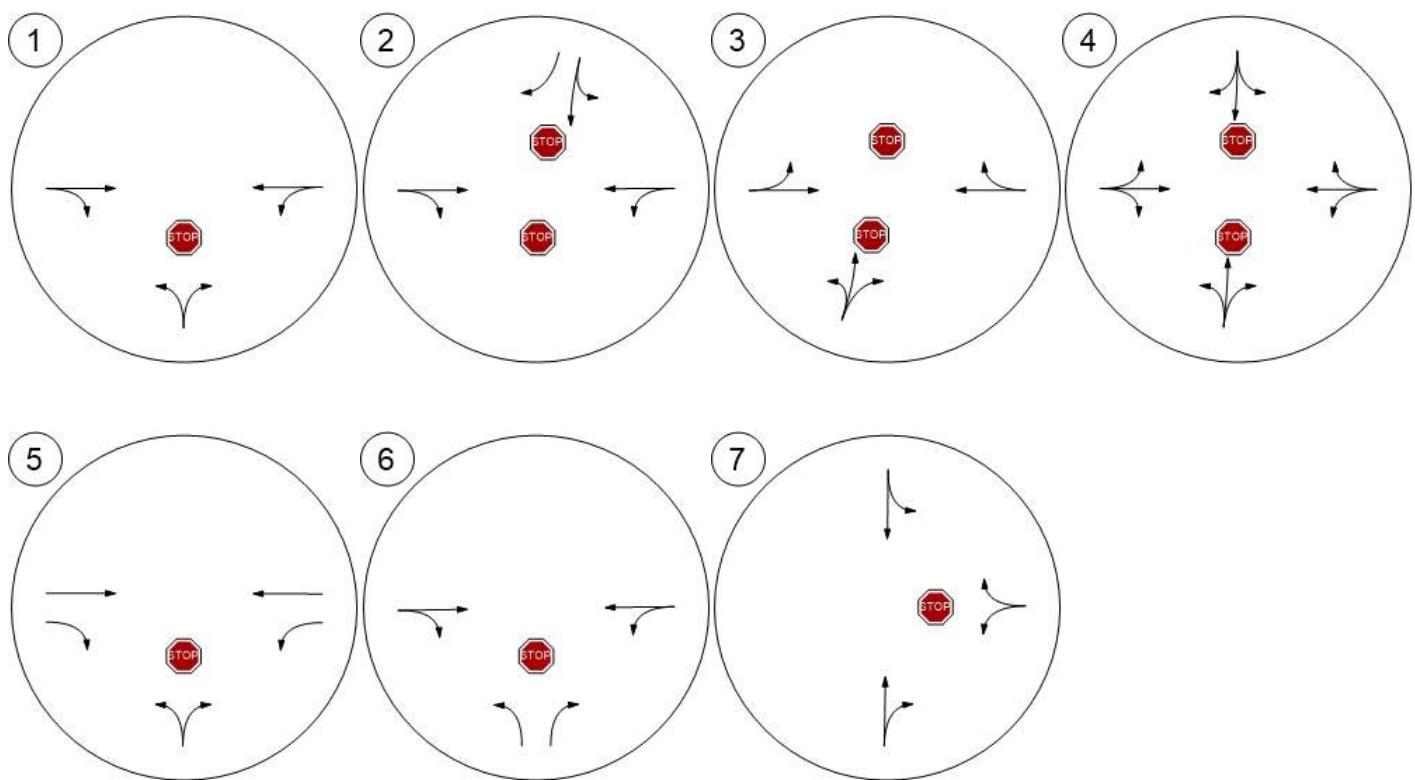
Zone ID: Name	Land Use variables	Code	Ind. Var.	Rate	Quantity	% In	% Out	Trips In	Trips Out	Total Trips	% of Total Trips
1: Zone				1.000	0.000	50.00	50.00	0	0	0	0.00
Added Trips Total									0	0	0.00

Vistro File: D:\...\Vistro Base.vistro  
Report File: D:\...\7- 2040 Background AM.pdf

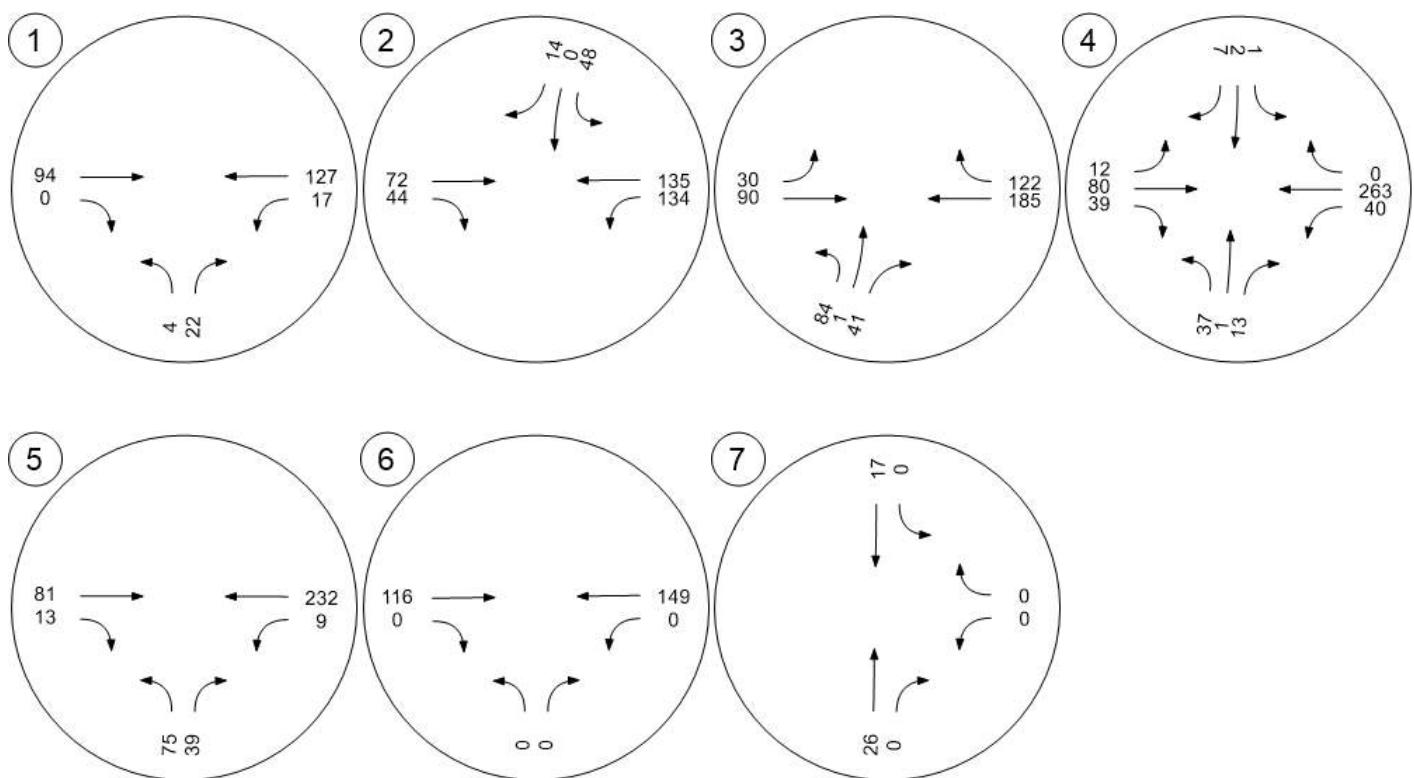
Scenario 7 2040 Background AM  
9/16/2020

### Trip Distribution Summary

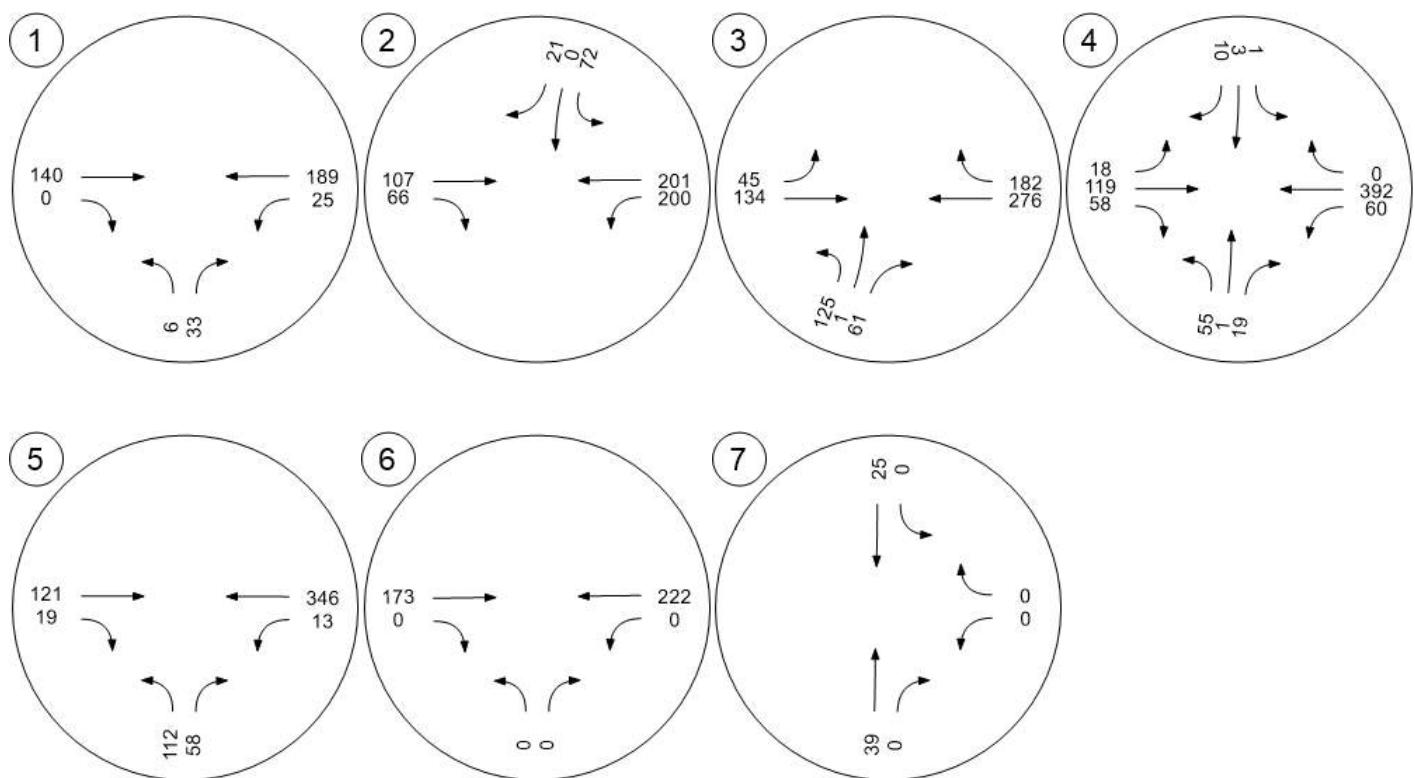
Zone / Gate	Zone 1: Zone			
	To Zone:		From Zone:	
	Share %	Trips	Share %	Trips
2: Gate	40.00	0	0.00	0
3: Gate	0.00	0	40.00	0
4: Gate	2.00	0	2.00	0
5: Gate	7.00	0	7.00	0
6: Gate	6.00	0	6.00	0
7: Gate	2.00	0	2.00	0
8: Gate	40.00	0	0.00	0
9: Gate	0.00	0	40.00	0
10: Gate	1.00	0	1.00	0
11: Gate	2.00	0	2.00	0
<b>Total</b>	<b>100.00</b>	<b>0</b>	<b>100.00</b>	<b>0</b>



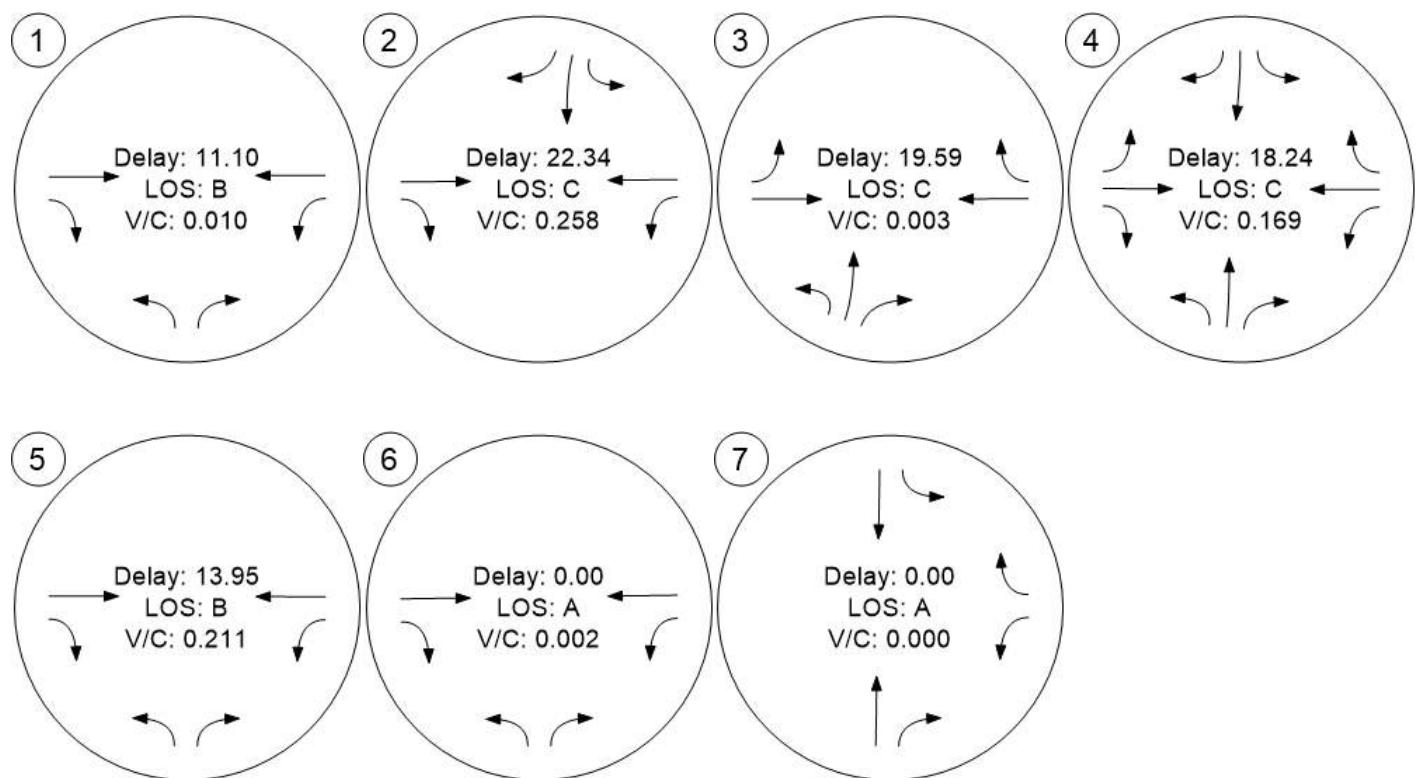
## Traffic Volume - Base Volume



## Traffic Volume - Future Total Volume



## Traffic Conditions



Vistro File: D:\...\Vistro Base.vistro  
Report File: D:\...\8- 2040 Background PM.pdf

Scenario 8 2040 Background PM  
9/16/2020

### Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Beacon Lite Rd & SR 404	Two-way stop	HCM 6. Auflage	NB Right	0.083	9.8	A
2	I-25 & SR-404 Southbound On/off Ramps	Two-way stop	HCM 6. Auflage	SB Left	0.668	39.0	E
3	I-25 & SR-404 Northbound On/off Ramps	Two-way stop	HCM 6. Auflage	NB Thru	0.028	26.9	D
4	Monument Hill Rd & SR-404	Two-way stop	HCM 6. Auflage	NB Left	0.178	21.4	C
5	Doewood Dr & SR-404	Two-way stop	HCM 6. Auflage	NB Left	0.147	14.5	B
6	SR-404 & North Access	Two-way stop	HCM 6. Auflage	OB Thru	0.003	0.0	A
7	Beacon Lite Rd & West Access	Two-way stop	HCM 6. Auflage	NB Thru	0.001	0.0	A

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: Beacon Lite Rd & SR 404**

Control Type:	Two-way stop	Delay (sec / veh):	9.8
Analysis Method:	HCM 6. Auflage	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.083

**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]	35.00		45.00		45.00		
Grade [%]	0.00			0.00		0.00	
Crosswalk	Ja			Ja		Ja	

**Volumes**

Name							
Base Volume Input [veh/h]	0	45	154	1	29	137	
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	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	
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	67	229	1	43	204	
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	0	17	57	0	11	51	
Total Analysis Volume [veh/h]	0	67	229	1	43	204	
Pedestrian Volume [ped/h]	0			0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	Nein		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.08	0.00	0.00	0.03	0.00
d_M, Delay for Movement [s/veh]	12.63	9.85	0.00	0.00	7.78	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.27	0.27	0.00	0.00	0.10	0.10
95th-Percentile Queue Length [ft/ln]	6.75	6.75	0.00	0.00	2.49	2.49
d_A, Approach Delay [s/veh]	9.85		0.00		1.35	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]			1.83			
Intersection LOS			A			

**Intersection Level Of Service Report**  
**Intersection 2: I-25 & SR-404 Southbound On/off Ramps**

Control Type:	Two-way stop	Delay (sec / veh):	39.0
Analysis Method:	HCM 6. Auflage	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.668

**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	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	0	0	0	131	0	31	0	116	81	100	135	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.4900	1.4900	1.4900	1.0000	1.4900	1.4900	1.4900	1.4900	1.0000
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]	0	0	0	195	0	46	0	173	121	149	201	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	49	0	12	0	43	30	37	50	0
Total Analysis Volume [veh/h]	0	0	0	195	0	46	0	173	121	149	201	0
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		Nein		
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.67	0.00	0.05	0.00	0.00	0.00	0.12	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	38.98	39.57	9.53	0.00	0.00	0.00	8.22	0.00	0.00
Movement LOS				E	E	A		A	A	A	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	4.42	4.42	0.17	0.00	0.00	0.00	0.40	0.40	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	110.49	110.49	4.34	0.00	0.00	0.00	9.96	9.96	0.00
d_A, Approach Delay [s/veh]		0.00			33.36			0.00			3.50	
Approach LOS		A		D			A			A		
d_I, Intersection Delay [s/veh]							10.47					
Intersection LOS							E					

**Intersection Level Of Service Report**  
**Intersection 3: I-25 & SR-404 Northbound On/off Ramps**

Control Type:	Two-way stop	Delay (sec / veh):	26.9
Analysis Method:	HCM 6. Auflage	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.028

**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]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	76	6	117	0	0	0	27	220	0	0	159	77
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.0000	1.0000	1.0000	1.4900	1.4900	1.0000	1.0000	1.4900	1.4900
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]	113	9	174	0	0	0	40	328	0	0	237	115
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	28	2	44	0	0	0	10	82	0	0	59	29
Total Analysis Volume [veh/h]	113	9	174	0	0	0	40	328	0	0	237	115
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	Nein			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Nein			
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.33	0.03	0.24	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	26.33	26.87	20.74	0.00	0.00	0.00	8.09	0.00	0.00	0.00	0.00	0.00
Movement LOS	D	D	C				A	A			A	A
95th-Percentile Queue Length [veh/ln]	3.96	3.96	3.96	0.00	0.00	0.00	0.10	0.10	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	99.03	99.03	99.03	0.00	0.00	0.00	2.57	2.57	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		23.06			0.00			0.88			0.00	
Approach LOS		C			A			A			A	
d_I, Intersection Delay [s/veh]							7.04					
Intersection LOS							D					

**Intersection Level Of Service Report**  
**Intersection 4: Monument Hill Rd & SR-404**

Control Type:	Two-way stop	Delay (sec / veh):	21.4
Analysis Method:	HCM 6. Auflage	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.178

**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]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	33	1	29	1	1	8	11	295	31	13	195	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
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]	49	1	43	1	1	12	16	440	46	19	291	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	0	11	0	0	3	4	110	12	5	73	0
Total Analysis Volume [veh/h]	49	1	43	1	1	12	16	440	46	19	291	0
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	Nein	Nein		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Nein	Nein		
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.18	0.00	0.07	0.00	0.00	0.02	0.01	0.00	0.00	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	21.36	20.43	14.30	19.34	17.67	9.96	7.87	0.00	0.00	8.40	0.00	0.00
Movement LOS	C	C	B	C	C	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.99	0.99	0.99	0.07	0.07	0.07	0.04	0.04	0.04	0.05	0.05	0.05
95th-Percentile Queue Length [ft/ln]	24.70	24.70	24.70	1.80	1.80	1.80	0.96	0.96	0.96	1.35	1.35	1.35
d_A, Approach Delay [s/veh]		18.08			11.18			0.25			0.52	
Approach LOS		C			B			A			A	
d_I, Intersection Delay [s/veh]							2.31					
Intersection LOS								C				

**Intersection Level Of Service Report**  
**Intersection 5: Doewood Dr & SR-404**

Control Type:	Two-way stop	Delay (sec / veh):	14.5
Analysis Method:	HCM 6. Auflage	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.147

**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	1	1	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	280.00	450.00	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]	25.00		45.00		45.00		
Grade [%]	0.00			0.00		0.00	
Crosswalk	Ja		Ja		Ja		

**Volumes**

Name							
Base Volume Input [veh/h]	44	10	234	91	10	157	
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	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	
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]	66	15	349	136	15	234	
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	17	4	87	34	4	59	
Total Analysis Volume [veh/h]	66	15	349	136	15	234	
Pedestrian Volume [ped/h]	0			0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	Nein		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.15	0.02	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	14.52	11.70	0.00	0.00	8.39	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.60	0.60	0.00	0.00	0.04	0.00
95th-Percentile Queue Length [ft/ln]	15.01	15.01	0.00	0.00	1.06	0.00
d_A, Approach Delay [s/veh]	14.00		0.00		0.51	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]			1.55			
Intersection LOS			B			

**Intersection Level Of Service Report**  
**Intersection 6: SR-404 & North Access**

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6. Auflage	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	1	0	0	0	0	
Entry Pocket Length [ft]	100.00	50.00	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]	15.00		45.00		45.00		
Grade [%]	0.00		0.00		0.00		
Crosswalk	Ja		Ja		Ja		

**Volumes**

Name						
Base Volume Input [veh/h]	0	0	199	0	0	166
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	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
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	0	297	0	0	247
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	74	0	0	62
Total Analysis Volume [veh/h]	0	0	297	0	0	247
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
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]	12.20	9.85	0.00	0.00	7.85	0.00
Movement LOS	B	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]	11.02		0.00		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]			0.00			
Intersection LOS			A			

**Intersection Level Of Service Report**  
**Intersection 7: Beacon Lite Rd & West Access**

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6. Auflage	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

**Intersection Setup**

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	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]	35.00		35.00		15.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Ja		Ja		Ja	

**Volumes**

Name						
Base Volume Input [veh/h]	45	0	0	30	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	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
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]	67	0	0	45	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	0	0	11	0	0
Total Analysis Volume [veh/h]	67	0	0	45	0	0
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Free	Free	Stop
Flared Lane			Nein
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Nein
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]	0.00	0.00	7.35	0.00	9.07	8.61
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		8.84	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]			0.00			
Intersection LOS			A			

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Scenario 8 2040 Background PM

Report File: D:\...\8- 2040 Background PM.pdf

9/16/2020

**Turning Movement Volume: Summary**

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
1	Beacon Lite Rd & SR 404	0	67	229	1	43	204	544

ID	Intersection Name	Southbound			Eastbound		Westbound		Total Volume
		Left	Thru	Right	Thru	Right	Left	Thru	
2	I-25 & SR-404 Southbound On/off Ramps	195	0	46	173	121	149	201	885

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Thru	Right	Left	Thru	Thru	Right	
3	I-25 & SR-404 Northbound On/off Ramps	113	9	174	40	328	237	115	1016

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	Monument Hill Rd & SR-404	49	1	43	1	1	12	16	440	46	19	291	0	919

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru		
5	Doewood Dr & SR-404	66	15	349	136	15	234	815	

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru		
6	SR-404 & North Access	0	0	297	0	0	247	544	

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
7	Beacon Lite Rd & West Access	67	0	0	45	0	0	112

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Scenario 8 2040 Background PM

Report File: D:\...\8- 2040 Background PM.pdf

9/16/2020

**Turning Movement Volume: Detail**

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
1	Beacon Lite Rd & SR 404	Final Base	0	45	154	1	29	137	366
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>0</b>	<b>67</b>	<b>229</b>	<b>1</b>	<b>43</b>	<b>204</b>	<b>544</b>

ID	Intersection Name	Volume Type	Southbound			Eastbound		Westbound		Total Volume
			Left	Thru	Right	Thru	Right	Left	Thru	
2	I-25 & SR-404 Southbound On/off Ramps	Final Base	131	0	31	116	81	100	135	594
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>195</b>	<b>0</b>	<b>46</b>	<b>173</b>	<b>121</b>	<b>149</b>	<b>201</b>	<b>885</b>

ID	Intersection Name	Volume Type	Northbound			Eastbound		Westbound		Total Volume
			Left	Thru	Right	Left	Thru	Thru	Right	
3	I-25 & SR-404 Northbound On/off Ramps	Final Base	76	6	117	27	220	159	77	682
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>113</b>	<b>9</b>	<b>174</b>	<b>40</b>	<b>328</b>	<b>237</b>	<b>115</b>	<b>1016</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	Monument Hill Rd & SR-404	Final Base	33	1	29	1	1	8	11	295	31	13	195	0	618
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>49</b>	<b>1</b>	<b>43</b>	<b>1</b>	<b>1</b>	<b>12</b>	<b>16</b>	<b>440</b>	<b>46</b>	<b>19</b>	<b>291</b>	<b>0</b>	<b>919</b>

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
5	Doewood Dr & SR-404	Final Base	44	10	234	91	10	157	546
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		Future Total	66	15	349	136	15	234	815

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
6	SR-404 & North Access	Final Base	0	0	199	0	0	166	365
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		Future Total	0	0	297	0	0	247	544

ID	Intersection Name	Volume Type	Northbound		Southbound		Westbound		Total Volume
			Thru	Right	Left	Thru	Left	Right	
7	Beacon Lite Rd & West Access	Final Base	45	0	0	30	0	0	75
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		Future Total	67	0	0	45	0	0	112

## Signal Warrants Report For Intersection 1: Beacon Lite Rd &amp; SR 404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	
1	247	230	67
2	240	223	65
3	235	219	64
4	220	205	60
5	195	182	53
6	193	179	52
7	190	177	52
8	173	161	47
9	170	159	46
10	168	156	46
11	146	136	40
12	136	127	37
13	133	124	36
14	99	92	27
15	99	92	27
16	69	64	19
17	40	37	11
18	40	37	11
19	22	21	6
20	12	12	3
21	7	7	2
22	2	2	1
23	2	2	1
24	2	2	1

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	477	1	67	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	463	1	65	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	454	1	64	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	425	1	60	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	377	1	53	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	372	1	52	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	367	1	52	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	334	1	47	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	329	1	46	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	324	1	46	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	282	1	40	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	263	1	37	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	257	1	36	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	191	1	27	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	191	1	27	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	133	1	19	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	77	1	11	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	77	1	11	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	43	1	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	24	1	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	14	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	4	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	4	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	4	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	9.8
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:10
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	67
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	544
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 2: I-25 &amp; SR-404 Southbound On/off Ramps

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Ja
#2	Four Hour Vehicular Volume	Ja
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>N</b>
1	350	294	241
2	340	285	234
3	333	279	229
4	312	262	214
5	277	232	190
6	273	229	188
7	270	226	186
8	245	206	169
9	241	203	166
10	238	200	164
11	207	173	142
12	193	162	133
13	189	159	130
14	140	118	96
15	140	118	96
16	98	82	67
17	56	47	39
18	56	47	39
19	32	26	22
20	18	15	12
21	11	9	7
22	4	3	2
23	4	3	2
24	4	3	2

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	644	2	241	Ja	Ja	Ja	Ja	Nein	Nein	Ja	Ja	Ja	Nein
2	2	625	2	234	Ja	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
3	2	612	2	229	Ja	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
4	2	574	2	214	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
5	2	509	2	190	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Nein	Nein
6	2	502	2	188	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
7	2	496	2	186	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
8	2	451	2	169	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
9	2	444	2	166	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
10	2	438	2	164	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
11	2	380	2	142	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
12	2	355	2	133	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
13	2	348	2	130	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
14	2	258	2	96	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	258	2	96	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	180	2	67	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	103	2	39	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	103	2	39	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	58	2	22	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	33	2	12	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	20	2	7	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	7	2	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	7	2	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	7	2	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					3	7	10	13	0	0	1	5	4	0

## Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	33.4
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	2:13
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	241
High Minor Volume Condition Met	Ja
Total Entering Volume on All Approaches During Same Hour	885
Number of Approaches on Intersection	3
Total Volume Condition Met	Ja
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 3: I-25 &amp; SR-404 Northbound On/off Ramps

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Ja
#2	Four Hour Vehicular Volume	Ja
#3	Peak Hour	Ja

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	352	368	296
2	341	357	287
3	334	350	281
4	313	328	263
5	278	291	234
6	275	287	231
7	271	283	228
8	246	258	207
9	243	254	204
10	239	250	201
11	208	217	175
12	194	202	163
13	190	199	160
14	141	147	118
15	141	147	118
16	99	103	83
17	56	59	47
18	56	59	47
19	32	33	27
20	18	18	15
21	11	11	9
22	4	4	3
23	4	4	3
24	4	4	3

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%	Condition B	
1	2	720	1	296	Ja	Ja	Ja	Ja	Nein	Ja	Ja	Ja	Ja	Ja
2	2	698	1	287	Ja	Ja	Ja	Ja	Nein	Nein	Ja	Ja	Ja	Ja
3	2	684	1	281	Ja	Ja	Ja	Ja	Nein	Nein	Ja	Ja	Ja	Ja
4	2	641	1	263	Ja	Ja	Ja	Ja	Nein	Nein	Ja	Ja	Ja	Ja
5	2	569	1	234	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
6	2	562	1	231	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
7	2	554	1	228	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
8	2	504	1	207	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
9	2	497	1	204	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Nein	Ja	Nein
10	2	489	1	201	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Nein	Ja	Nein
11	2	425	1	175	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
12	2	396	1	163	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
13	2	389	1	160	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
14	2	288	1	118	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	288	1	118	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	202	1	83	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	115	1	47	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	115	1	47	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	65	1	27	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	36	1	15	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	22	1	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	8	1	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	8	1	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	8	1	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					4	10	11	13	0	1	4	8	10	4

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	23.1
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	1:53
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	296
High Minor Volume Condition Met	Ja
Total Entering Volume on All Approaches During Same Hour	1016
Number of Approaches on Intersection	3
Total Volume Condition Met	Ja
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 4: Monument Hill Rd &amp; SR-404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N, S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>	
	<b>E</b>	<b>W</b>	<b>N</b>	<b>S</b>
1	310	502	14	93
2	301	487	14	90
3	295	477	13	88
4	276	447	12	83
5	245	397	11	73
6	242	392	11	73
7	239	387	11	72
8	217	351	10	65
9	214	346	10	64
10	211	341	10	63
11	183	296	8	55
12	171	276	8	51
13	167	271	8	50
14	124	201	6	37
15	124	201	6	37
16	87	141	4	26
17	50	80	2	15
18	50	80	2	15
19	28	45	1	8
20	16	25	1	5
21	9	15	0	3
22	3	5	0	1
23	3	5	0	1
24	3	5	0	1

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	812	2	107	Nein	Nein	Ja	Nein	Ja	Ja	Ja	Ja	Ja	Nein
2	2	788	2	104	Nein	Nein	Ja	Nein	Ja	Ja	Ja	Ja	Ja	Nein
3	2	772	2	101	Nein	Nein	Ja	Nein	Ja	Ja	Ja	Ja	Ja	Nein
4	2	723	2	95	Nein	Nein	Nein	Nein	Ja	Ja	Ja	Ja	Nein	Nein
5	2	642	2	84	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Ja	Nein	Nein
6	2	634	2	84	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Ja	Nein	Nein
7	2	626	2	83	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Nein	Nein	Nein
8	2	568	2	75	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Nein	Nein	Nein
9	2	560	2	74	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Nein	Nein	Nein
10	2	552	2	73	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Nein	Nein	Nein
11	2	479	2	63	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	447	2	59	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	438	2	58	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	325	2	43	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	325	2	43	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	228	2	30	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	130	2	17	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	130	2	17	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	73	2	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	41	2	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	24	2	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	8	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	8	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	8	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	3	0	4	6	10	3	0

## Warrant 3 Condition A

Orientation	N	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	11.2	18.1
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:02	0:28
Delay Condition Met	Nein	Nein
Volume on Minor Street Approach During Same Hour	14	93
High Minor Volume Condition Met	Nein	Nein
Total Entering Volume on All Approaches During Same Hour	919	919
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Ja	Ja
Warrant Met for Approach	Nein	Nein
Warrant Met for Intersection	Nein	

## Signal Warrants Report For Intersection 5: Doewood Dr &amp; SR-404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	
1	249	485	81
2	242	470	79
3	237	461	77
4	222	432	72
5	197	383	64
6	194	378	63
7	192	373	62
8	174	340	57
9	172	335	56
10	169	330	55
11	147	286	48
12	137	267	45
13	134	262	44
14	100	194	32
15	100	194	32
16	70	136	23
17	40	78	13
18	40	78	13
19	22	44	7
20	12	24	4
21	7	15	2
22	2	5	1
23	2	5	1
24	2	5	1

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	734	1	81	Nein	Nein	Nein	Nein	Ja	Ja	Ja	Nein	Nein	Nein
2	4	712	1	79	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Nein	Nein	Nein
3	4	698	1	77	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Nein	Nein	Nein
4	4	654	1	72	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Nein	Nein	Nein
5	4	580	1	64	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein
6	4	572	1	63	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein
7	4	565	1	62	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein
8	4	514	1	57	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein
9	4	507	1	56	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein
10	4	499	1	55	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	4	433	1	48	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	4	404	1	45	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	4	396	1	44	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	4	294	1	32	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	4	294	1	32	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	4	206	1	23	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	4	118	1	13	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	4	118	1	13	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	4	66	1	7	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	4	36	1	4	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	4	22	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	4	7	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	4	7	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	4	7	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	1	4	9	0	0	

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	14
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:18
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	81
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	815
Number of Approaches on Intersection	3
Total Volume Condition Met	Ja
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 6: SR-404 &amp; North Access

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	
1	247	297	0
2	240	288	0
3	235	282	0
4	220	264	0
5	195	235	0
6	193	232	0
7	190	229	0
8	173	208	0
9	170	205	0
10	168	202	0
11	146	175	0
12	136	163	0
13	133	160	0
14	99	119	0
15	99	119	0
16	69	83	0
17	40	48	0
18	40	48	0
19	22	27	0
20	12	15	0
21	7	9	0
22	2	3	0
23	2	3	0
24	2	3	0

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	544	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	528	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	517	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	484	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	430	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	425	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	419	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	381	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	375	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	370	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	321	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	299	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	293	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	218	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	218	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	152	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	88	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	88	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	49	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	27	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	16	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	5	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	5	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	5	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	11
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:00
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	0
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	544
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 7: Beacon Lite Rd &amp; West Access

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	N, S
Minor Approaches	E
Speed > 40mph	Nein
Population < 10,000	Nein
Warrant Factor	100%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>N</b>	<b>S</b>	<b>E</b>
1	45	67	0
2	44	65	0
3	43	64	0
4	40	60	0
5	36	53	0
6	35	52	0
7	35	52	0
8	31	47	0
9	31	46	0
10	31	46	0
11	27	40	0
12	25	37	0
13	24	36	0
14	18	27	0
15	18	27	0
16	13	19	0
17	7	11	0
18	7	11	0
19	4	6	0
20	2	3	0
21	1	2	0
22	0	1	0
23	0	1	0
24	0	1	0

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	112	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	109	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	107	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	100	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	89	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	87	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	87	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	78	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	77	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	77	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	67	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	62	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	60	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	45	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	45	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	32	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	18	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	18	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	10	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	5	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	3	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	1	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	1	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	1	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.8
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:00
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	0
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	112
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

Vistro File: D:\...\Vistro Base.vistro  
Report File: D:\...\8- 2040 Background PM.pdf

Scenario 8 2040 Background PM  
9/16/2020

### Trip Generation Summary

#### Added Trips

Zone ID: Name	Land Use variables	Code	Ind. Var.	Rate	Quantity	% In	% Out	Trips In	Trips Out	Total Trips	% of Total Trips
1: Zone				1.000	0.000	50.00	50.00	0	0	0	0.00
Added Trips Total									0	0	0.00

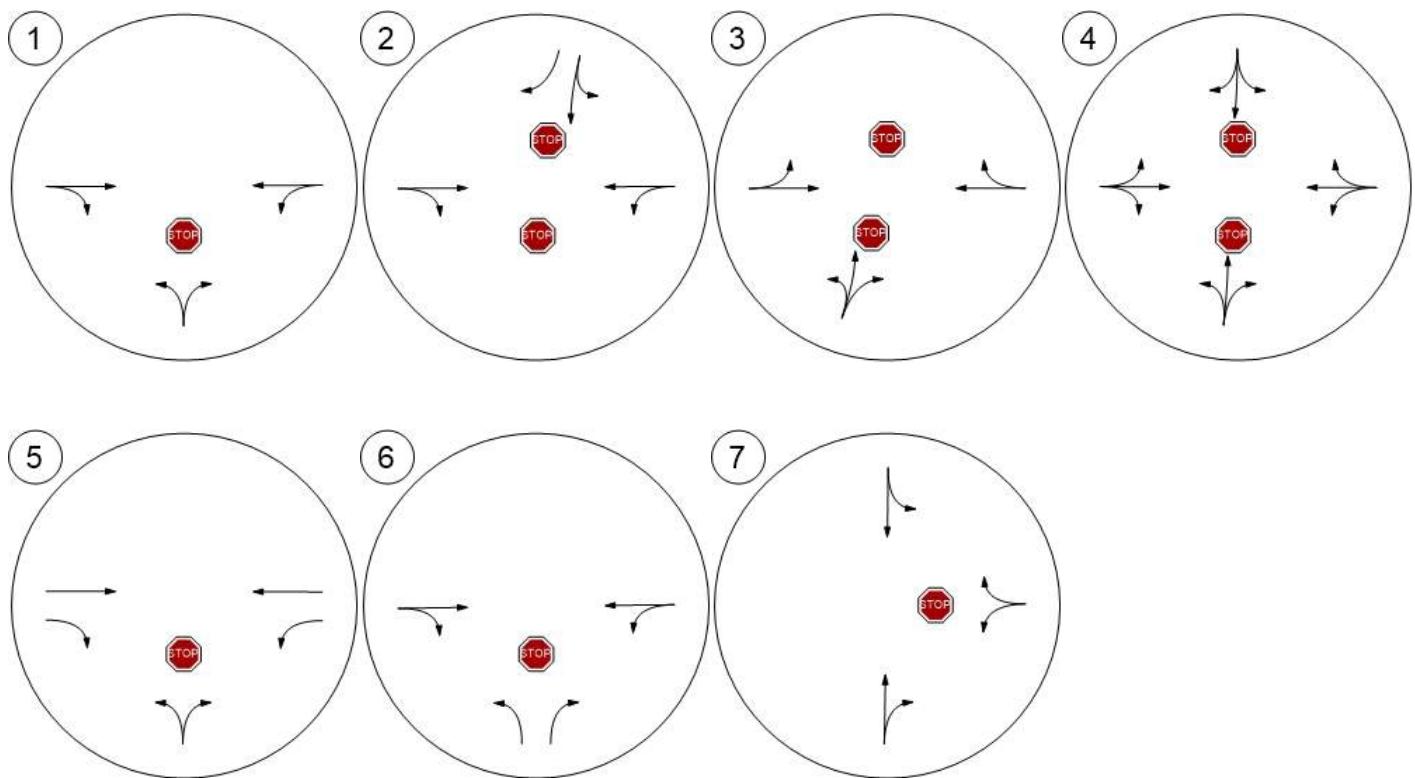
Vistro File: D:\...\Vistro Base.vistro  
Report File: D:\...\8- 2040 Background PM.pdf

Scenario 8 2040 Background PM  
9/16/2020

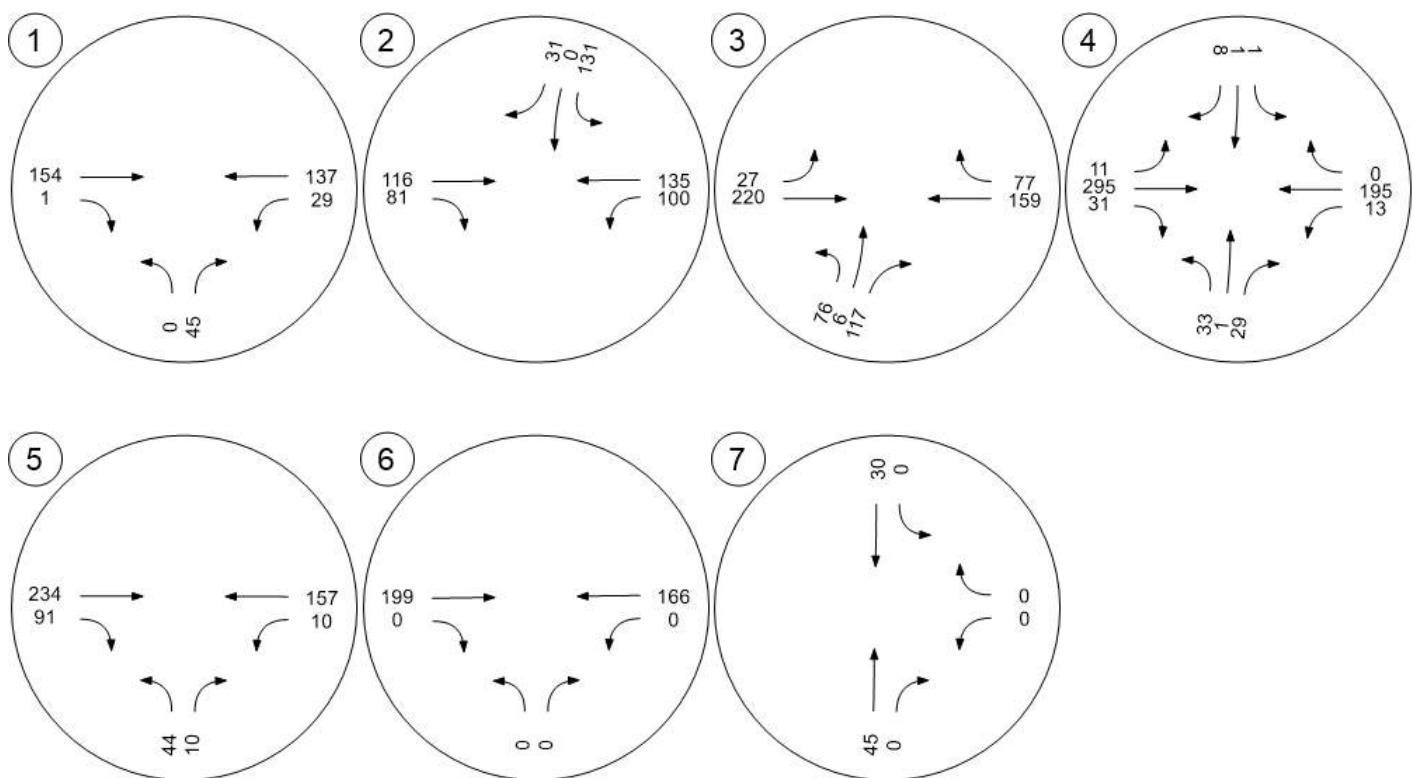
### Trip Distribution Summary

Zone / Gate	Zone 1: Zone			
	To Zone:		From Zone:	
	Share %	Trips	Share %	Trips
2: Gate	40.00	0	0.00	0
3: Gate	0.00	0	40.00	0
4: Gate	2.00	0	2.00	0
5: Gate	7.00	0	7.00	0
6: Gate	6.00	0	6.00	0
7: Gate	2.00	0	2.00	0
8: Gate	40.00	0	0.00	0
9: Gate	0.00	0	40.00	0
10: Gate	1.00	0	1.00	0
11: Gate	2.00	0	2.00	0
<b>Total</b>	<b>100.00</b>	<b>0</b>	<b>100.00</b>	<b>0</b>

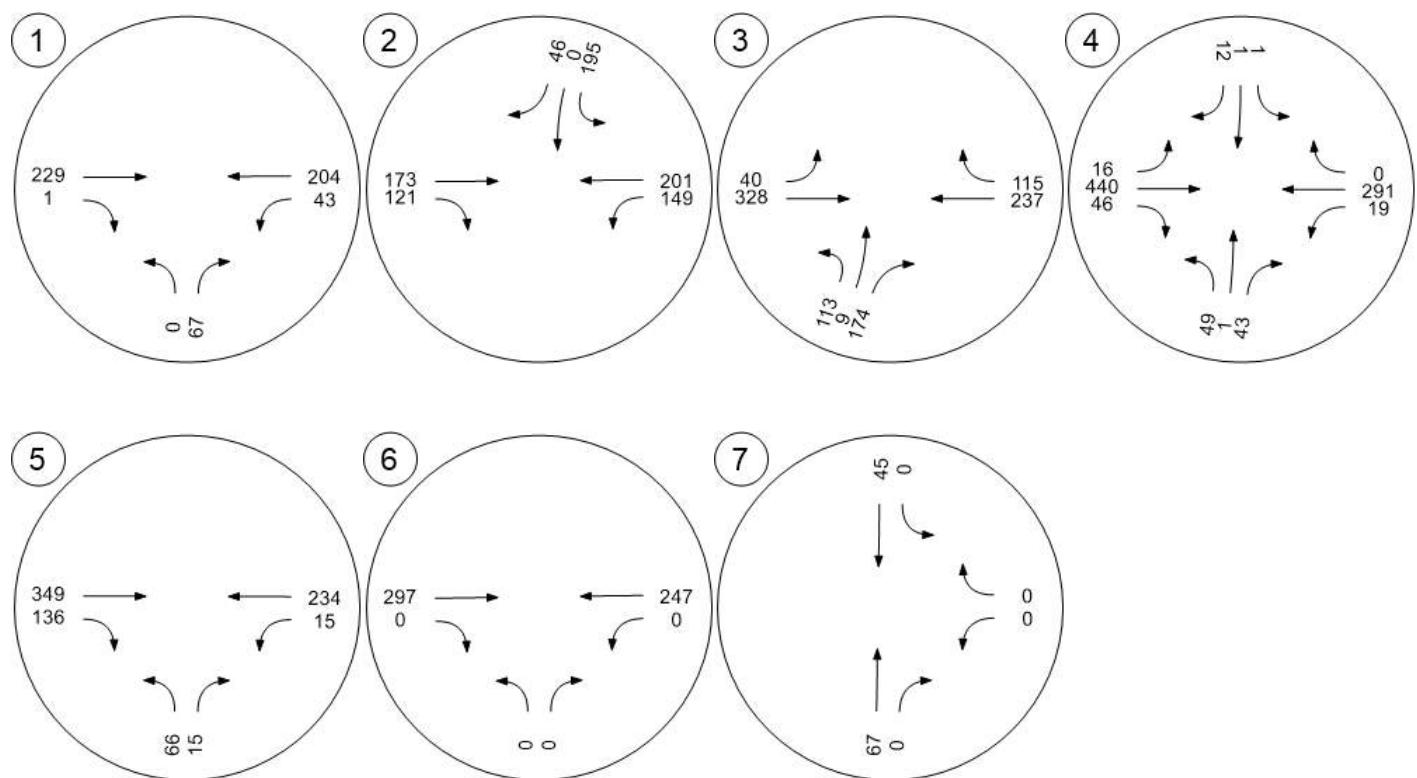
## Lane Configuration and Traffic Control



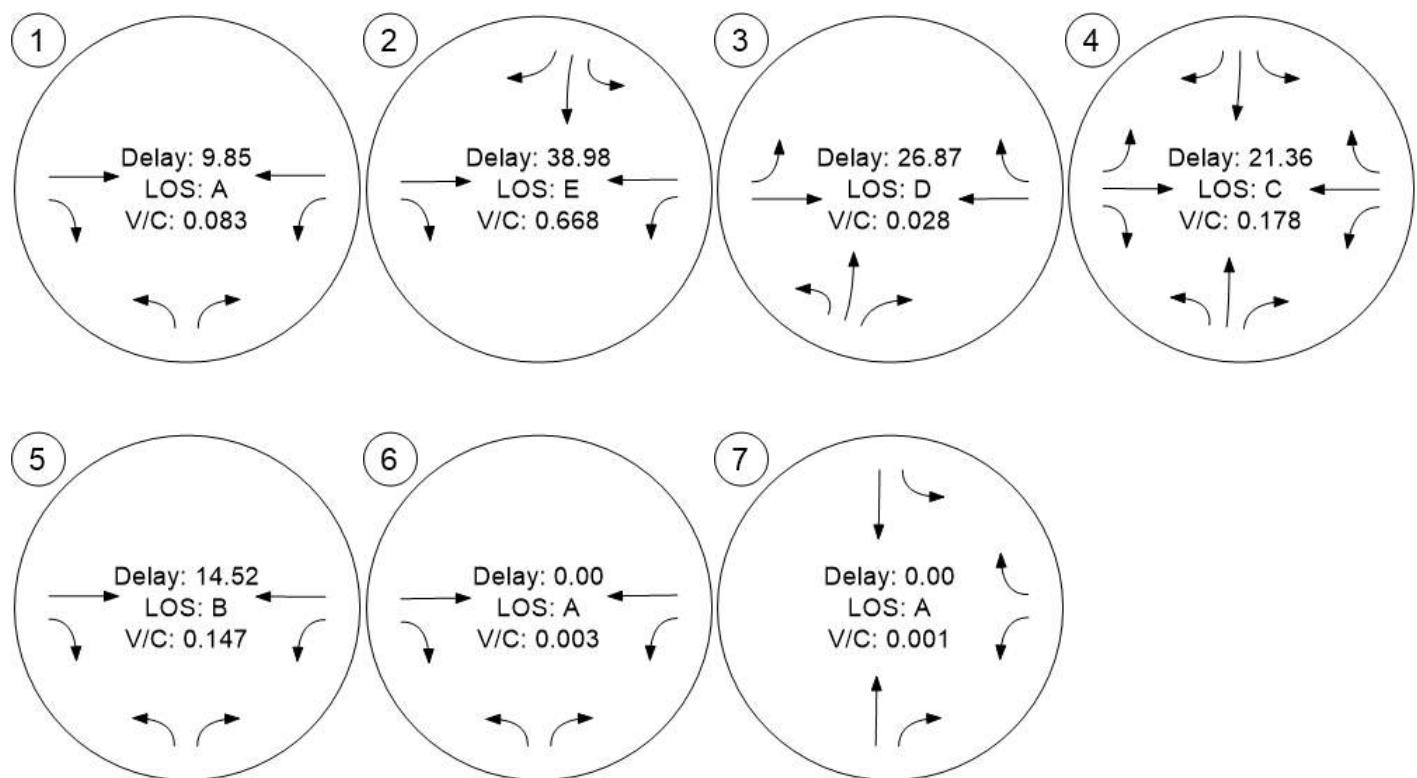
## Traffic Volume - Base Volume



## Traffic Volume - Future Total Volume



## Traffic Conditions



Vistro File: D:\...\Vistro Base.vistro  
Report File: D:\...\9- 2040 Background + Mitigations AM.pdf

Scenario 9 2040 Background + Mit AM  
9/16/2020

### Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Beacon Lite Rd & SR 404	Two-way stop	HCM 6. Auflage	NB Left	0.010	11.1	B
2	I-25 & SR-404 Southbound On/off Ramps	Signalized	HCM 6. Auflage	SB Left	0.417	5.1	A
3	I-25 & SR-404 Northbound On/off Ramps	Two-way stop	HCM 6. Auflage	NB Thru	0.003	19.6	C
4	Monument Hill Rd & SR-404	Two-way stop	HCM 6. Auflage	NB Left	0.169	18.2	C
5	Doewood Dr & SR-404	Two-way stop	HCM 6. Auflage	NB Left	0.211	14.0	B
6	SR-404 & North Access	Two-way stop	HCM 6. Auflage	WB Thru	0.002	0.0	A
7	Beacon Lite Rd & West Access	Two-way stop	HCM 6. Auflage	NB Thru	0.000	0.0	A

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: Beacon Lite Rd & SR 404**

Control Type:	Two-way stop	Delay (sec / veh):	11.1
Analysis Method:	HCM 6. Auflage	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.010

**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]	35.00		45.00		45.00		
Grade [%]	0.00			0.00		0.00	
Crosswalk	Ja		Ja		Ja		

**Volumes**

Name							
Base Volume Input [veh/h]	4	22	94	0	17	127	
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	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	
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]	6	33	140	0	25	189	
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	2	8	35	0	6	47	
Total Analysis Volume [veh/h]	6	33	140	0	25	189	
Pedestrian Volume [ped/h]	0			0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	Nein		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.01	0.04	0.00	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	11.10	9.17	0.00	0.00	7.54	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.14	0.14	0.00	0.00	0.05	0.05
95th-Percentile Queue Length [ft/ln]	3.62	3.62	0.00	0.00	1.32	1.32
d_A, Approach Delay [s/veh]	9.47		0.00		0.88	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]			1.42			
Intersection LOS			B			

**Intersection Level Of Service Report**  
**Intersection 2: I-25 & SR-404 Southbound On/off Ramps**

Control Type:	Signalized	Delay (sec / veh):	5.1
Analysis Method:	HCM 6. Auflage	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.417

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach												
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	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				Nein			Nein			Nein		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	0	0	0	48	0	14	0	72	44	134	135	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.4900	1.4900	1.4900	1.0000	1.4900	1.4900	1.4900	1.4900	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	72	0	21	0	107	66	200	201	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	18	0	5	0	27	17	50	50	0
Total Analysis Volume [veh/h]	0	0	0	72	0	21	0	107	66	200	201	0
Presence of On-Street Parking				Nein		Nein	Nein		Nein	Nein		Nein
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	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

## Intersection Settings

Located in CBD	Ja
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Verkehrsabhängig
Versatz [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost Time [s]	0.00

## Phasing & Timing

## Exclusive Pedestrian Phase

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

**Lane Group Calculations**

Lane Group		C	R	C	C
C, Cycle Length [s]		18	18	18	18
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00
I1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	2.00
I2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		2	2	8	8
g / C, Green / Cycle		0.10	0.10	0.46	0.46
(v / s)_i Volume / Saturation Flow Rate		0.04	0.01	0.11	0.37
s, Saturation Flow Rate [veh/h]		1603	1431	1577	1077
c, Capacity [veh/h]		166	148	716	787
d1, Uniform Delay [s]		7.60	7.37	3.03	4.57
k, Delay Calibration		0.11	0.11	0.11	0.11
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		1.78	0.43	0.17	0.51
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00
Rp, Platoon Ratio		1.00	1.00	1.00	1.00
PF, Progression Factor		1.00	1.00	1.00	1.00

**Lane Group Results**

X, Volume / Capacity		0.43	0.14	0.24	0.51
d, Delay for Lane Group [s/veh]		9.38	7.80	3.20	5.08
Lane Group LOS		A	A	A	A
Critical Lane Group		Ja	Nein	Nein	Ja
50th-Percentile Queue Length [veh/in]		0.21	0.05	0.03	0.42
50th-Percentile Queue Length [ft/in]		5.14	1.32	0.86	10.49
95th-Percentile Queue Length [veh/in]		0.37	0.09	0.06	0.76
95th-Percentile Queue Length [ft/in]		9.25	2.37	1.55	18.88

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	9.38	9.38	7.80	0.00	3.20	3.20	5.08	5.08	0.00
Movement LOS				A	A	A		A	A	A	A	
d_A, Approach Delay [s/veh]		0.00			9.03			3.20			5.08	
Approach LOS		A			A			A			A	
d_I, Intersection Delay [s/veh]						5.14						
Intersection LOS							A					
Intersection V/C							0.417					

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	1.982	1.775	2.019	2.154
Crosswalk LOS	A	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	267	1600	1600
d_b, Bicycle Delay [s]	60.00	45.07	2.40	2.40
I_b,int, Bicycle LOS Score for Intersection	4.132	1.713	1.845	2.221
Bicycle LOS	D	A	A	B

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 3: I-25 & SR-404 Northbound On/off Ramps**

Control Type:	Two-way stop	Delay (sec / veh):	19.6
Analysis Method:	HCM 6. Auflage	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

**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]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	84	1	41	0	0	0	30	90	0	0	185	122
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.0000	1.0000	1.0000	1.4900	1.4900	1.0000	1.0000	1.4900	1.4900
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]	125	1	61	0	0	0	45	134	0	0	276	182
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	0	15	0	0	0	11	34	0	0	69	46
Total Analysis Volume [veh/h]	125	1	61	0	0	0	45	134	0	0	276	182
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	Nein			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Nein			
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.31	0.00	0.07	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	18.47	19.59	13.40	0.00	0.00	0.00	8.40	0.00	0.00	0.00	0.00	0.00
Movement LOS	C	C	B				A	A			A	A
95th-Percentile Queue Length [veh/ln]	1.77	1.77	1.77	0.00	0.00	0.00	0.13	0.13	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	44.27	44.27	44.27	0.00	0.00	0.00	3.19	3.19	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		16.82			0.00			2.11			0.00	
Approach LOS		C			A			A			A	
d_I, Intersection Delay [s/veh]							4.28					
Intersection LOS							C					

**Intersection Level Of Service Report**  
**Intersection 4: Monument Hill Rd & SR-404**

Control Type:	Two-way stop	Delay (sec / veh):	18.2
Analysis Method:	HCM 6. Auflage	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.169

**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]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	37	1	13	1	2	7	12	80	39	40	263	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
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]	55	1	19	1	3	10	18	119	58	60	392	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	0	5	0	1	3	5	30	15	15	98	0
Total Analysis Volume [veh/h]	55	1	19	1	3	10	18	119	58	60	392	0
Pedestrian Volume [ped/h]	0			0			0			0		

## Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	Nein	Nein		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Nein	Nein		
Number of Storage Spaces in Median	0	0	0	0

## Movement, Approach, & Intersection Results

**Intersection Level Of Service Report**  
**Intersection 5: Doewood Dr & SR-404**

Control Type:	Two-way stop	Delay (sec / veh):	14.0
Analysis Method:	HCM 6. Auflage	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.211

**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	1	1	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	280.00	450.00	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]	25.00		45.00		45.00		
Grade [%]	0.00			0.00		0.00	
Crosswalk	Ja		Ja		Ja		

**Volumes**

Name							
Base Volume Input [veh/h]	75	39	81	13	9	232	
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	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	
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]	112	58	121	19	13	346	
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	28	15	30	5	3	87	
Total Analysis Volume [veh/h]	112	58	121	19	13	346	
Pedestrian Volume [ped/h]	0			0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	Nein		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.21	0.06	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	13.95	11.04	0.00	0.00	7.52	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.11	1.11	0.00	0.00	0.03	0.00
95th-Percentile Queue Length [ft/ln]	27.69	27.69	0.00	0.00	0.68	0.00
d_A, Approach Delay [s/veh]	12.96		0.00		0.27	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]			3.44			
Intersection LOS			B			

**Intersection Level Of Service Report**  
**Intersection 6: SR-404 & North Access**

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6. Auflage	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

**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	1	0	0	0	0	
Entry Pocket Length [ft]	100.00	50.00	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]	15.00		45.00		45.00		
Grade [%]	0.00			0.00		0.00	
Crosswalk	Ja		Ja		Ja		

**Volumes**

Name						
Base Volume Input [veh/h]	0	0	116	0	0	149
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	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
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	0	173	0	0	222
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	43	0	0	56
Total Analysis Volume [veh/h]	0	0	173	0	0	222
Pedestrian Volume [ped/h]	0			0		0

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
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]	10.90	9.14	0.00	0.00	7.56	0.00
Movement LOS	B	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]	10.02		0.00		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]			0.00			
Intersection LOS			A			

**Intersection Level Of Service Report**  
**Intersection 7: Beacon Lite Rd & West Access**

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

**Intersection Setup**

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	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]	35.00		35.00		15.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Ja		Ja		Ja	

**Volumes**

Name						
Base Volume Input [veh/h]	26	0	0	17	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	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
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]	39	0	0	25	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	0	0	6	0	0
Total Analysis Volume [veh/h]	39	0	0	25	0	0
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Free	Free	Stop
Flared Lane			Nein
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Nein
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]	0.00	0.00	7.29	0.00	8.82	8.49
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		8.65	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]			0.00			
Intersection LOS			A			

Vistro File: D:\...\Vistro Base.vistro

Scenario 9 2040 Background + Mit AM

Report File: D:\...\9- 2040 Background + Mitigations AM.pdf

9/16/2020

**Turning Movement Volume: Summary**

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
1	Beacon Lite Rd & SR 404	6	33	140	0	25	189	393

ID	Intersection Name	Southbound			Eastbound		Westbound		Total Volume
		Left	Thru	Right	Thru	Right	Left	Thru	
2	I-25 & SR-404 Southbound On/off Ramps	72	0	21	107	66	200	201	667

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Thru	Right	Left	Thru	Thru	Right	
3	I-25 & SR-404 Northbound On/off Ramps	125	1	61	45	134	276	182	824

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	Monument Hill Rd & SR-404	55	1	19	1	3	10	18	119	58	60	392	0	736

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	Thru	
5	Doewood Dr & SR-404	112	58	121	19	13	346	346	669

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	Thru	
6	SR-404 & North Access	0	0	173	0	0	222	222	395

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
7	Beacon Lite Rd & West Access	39	0	0	25	0	0	64

Vistro File: D:\...\Vistro Base.vistro

Scenario 9 2040 Background + Mit AM

Report File: D:\...\9- 2040 Background + Mitigations AM.pdf

9/16/2020

**Turning Movement Volume: Detail**

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
1	Beacon Lite Rd & SR 404	Final Base	4	22	94	0	17	127	264
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>6</b>	<b>33</b>	<b>140</b>	<b>0</b>	<b>25</b>	<b>189</b>	<b>393</b>

ID	Intersection Name	Volume Type	Southbound			Eastbound		Westbound		Total Volume
			Left	Thru	Right	Thru	Right	Left	Thru	
2	I-25 & SR-404 Southbound On/off Ramps	Final Base	48	0	14	72	44	134	135	447
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>72</b>	<b>0</b>	<b>21</b>	<b>107</b>	<b>66</b>	<b>200</b>	<b>201</b>	<b>667</b>

ID	Intersection Name	Volume Type	Northbound			Eastbound		Westbound		Total Volume
			Left	Thru	Right	Left	Thru	Thru	Right	
3	I-25 & SR-404 Northbound On/off Ramps	Final Base	84	1	41	30	90	185	122	553
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>125</b>	<b>1</b>	<b>61</b>	<b>45</b>	<b>134</b>	<b>276</b>	<b>182</b>	<b>824</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	Monument Hill Rd & SR-404	Final Base	37	1	13	1	2	7	12	80	39	40	263	0	495
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>55</b>	<b>1</b>	<b>19</b>	<b>1</b>	<b>3</b>	<b>10</b>	<b>18</b>	<b>119</b>	<b>58</b>	<b>60</b>	<b>392</b>	<b>0</b>	<b>736</b>

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
5	Doewood Dr & SR-404	Final Base	75	39	81	13	9	232	449
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>112</b>	<b>58</b>	<b>121</b>	<b>19</b>	<b>13</b>	<b>346</b>	<b>669</b>

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
6	SR-404 & North Access	Final Base	0	0	116	0	0	149	265
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>0</b>	<b>0</b>	<b>173</b>	<b>0</b>	<b>0</b>	<b>222</b>	<b>395</b>

ID	Intersection Name	Volume Type	Northbound		Southbound		Westbound		Total Volume
			Thru	Right	Left	Thru	Left	Right	
7	Beacon Lite Rd & West Access	Final Base	26	0	0	17	0	0	43
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>39</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>0</b>	<b>0</b>	<b>64</b>

## Signal Warrants Report For Intersection 1: Beacon Lite Rd &amp; SR 404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	214	140	39
2	208	136	38
3	203	133	37
4	190	125	35
5	169	111	31
6	167	109	30
7	165	108	30
8	150	98	27
9	148	97	27
10	146	95	27
11	126	83	23
12	118	77	21
13	116	76	21
14	86	56	16
15	86	56	16
16	60	39	11
17	34	22	6
18	34	22	6
19	19	13	4
20	11	7	2
21	6	4	1
22	2	1	0
23	2	1	0
24	2	1	0

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	354	1	39	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	344	1	38	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	336	1	37	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	315	1	35	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	280	1	31	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	276	1	30	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	273	1	30	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	248	1	27	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	245	1	27	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	241	1	27	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	209	1	23	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	195	1	21	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	192	1	21	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	142	1	16	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	142	1	16	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	99	1	11	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	56	1	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	56	1	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	32	1	4	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	18	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	10	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	3	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	3	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	3	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	9.5
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:06
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	39
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	393
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 3: I-25 &amp; SR-404 Northbound On/off Ramps

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Ja
#2	Four Hour Vehicular Volume	Ja
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	458	179	187
2	444	174	181
3	435	170	178
4	408	159	166
5	362	141	148
6	357	140	146
7	353	138	144
8	321	125	131
9	316	124	129
10	311	122	127
11	270	106	110
12	252	98	103
13	247	97	101
14	183	72	75
15	183	72	75
16	128	50	52
17	73	29	30
18	73	29	30
19	41	16	17
20	23	9	9
21	14	5	6
22	5	2	2
23	5	2	2
24	5	2	2

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	637	1	187	Ja	Ja	Ja	Ja	Nein	Nein	Ja	Ja	Ja	Nein
2	2	618	1	181	Ja	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
3	2	605	1	178	Ja	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
4	2	567	1	166	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
5	2	503	1	148	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
6	2	497	1	146	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
7	2	491	1	144	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
8	2	446	1	131	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
9	2	440	1	129	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
10	2	433	1	127	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
11	2	376	1	110	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
12	2	350	1	103	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
13	2	344	1	101	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
14	2	255	1	75	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	255	1	75	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	178	1	52	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	102	1	30	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	102	1	30	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	57	1	17	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	32	1	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	19	1	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	7	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	7	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	7	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					3	7	10	13	0	0	1	4	4	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	16.8
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:52
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	187
High Minor Volume Condition Met	Ja
Total Entering Volume on All Approaches During Same Hour	824
Number of Approaches on Intersection	3
Total Volume Condition Met	Ja
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 4: Monument Hill Rd &amp; SR-404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N, S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>	
	<b>E</b>	<b>W</b>	<b>N</b>	<b>S</b>
1	452	195	14	75
2	438	189	14	73
3	429	185	13	71
4	402	174	12	67
5	357	154	11	59
6	353	152	11	59
7	348	150	11	58
8	316	137	10	53
9	312	135	10	52
10	307	133	10	51
11	267	115	8	44
12	249	107	8	41
13	244	105	8	41
14	181	78	6	30
15	181	78	6	30
16	127	55	4	21
17	72	31	2	12
18	72	31	2	12
19	41	18	1	7
20	23	10	1	4
21	14	6	0	2
22	5	2	0	1
23	5	2	0	1
24	5	2	0	1

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%	Condition B	
1	2	647	2	89	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Nein	Nein	
2	2	627	2	87	Nein	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	
3	2	614	2	84	Nein	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	
4	2	576	2	79	Nein	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	
5	2	511	2	70	Nein	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	
6	2	505	2	70	Nein	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	
7	2	498	2	69	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
8	2	453	2	63	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
9	2	447	2	62	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
10	2	440	2	61	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
11	2	382	2	52	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
12	2	356	2	49	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
13	2	349	2	49	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
14	2	259	2	36	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
15	2	259	2	36	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
16	2	182	2	25	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
17	2	103	2	14	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
18	2	103	2	14	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
19	2	59	2	8	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
20	2	33	2	5	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
21	2	20	2	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
22	2	7	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
23	2	7	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
24	2	7	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
Hours Met					0	0	0	0	0	0	1	6	0	0

## Warrant 3 Condition A

Orientation	N	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	12.3	16.5
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:02	0:20
Delay Condition Met	Nein	Nein
Volume on Minor Street Approach During Same Hour	14	75
High Minor Volume Condition Met	Nein	Nein
Total Entering Volume on All Approaches During Same Hour	736	736
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Nein	Nein
Warrant Met for Approach	Nein	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>	

## Signal Warrants Report For Intersection 5: Doewood Dr &amp; SR-404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	359	140	170
2	348	136	165
3	341	133	162
4	320	125	151
5	284	111	134
6	280	109	133
7	276	108	131
8	251	98	119
9	248	97	117
10	244	95	116
11	212	83	100
12	197	77	94
13	194	76	92
14	144	56	68
15	144	56	68
16	101	39	48
17	57	22	27
18	57	22	27
19	32	13	15
20	18	7	9
21	11	4	5
22	4	1	2
23	4	1	2
24	4	1	2

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	499	1	170	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Nein	Ja	Nein
2	4	484	1	165	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
3	4	474	1	162	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
4	4	445	1	151	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
5	4	395	1	134	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
6	4	389	1	133	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
7	4	384	1	131	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
8	4	349	1	119	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
9	4	345	1	117	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
10	4	339	1	116	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
11	4	295	1	100	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	4	274	1	94	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	4	270	1	92	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	4	200	1	68	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	4	200	1	68	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	4	140	1	48	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	4	79	1	27	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	4	79	1	27	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	4	45	1	15	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	4	25	1	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	4	15	1	5	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	4	5	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	4	5	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	4	5	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	2	4	10	0	0	0	0	1	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	13
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:36
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	170
High Minor Volume Condition Met	Ja
Total Entering Volume on All Approaches During Same Hour	669
Number of Approaches on Intersection	3
Total Volume Condition Met	Ja
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 6: SR-404 &amp; North Access

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	
1	222	173	0
2	215	168	0
3	211	164	0
4	198	154	0
5	175	137	0
6	173	135	0
7	171	133	0
8	155	121	0
9	153	119	0
10	151	118	0
11	131	102	0
12	122	95	0
13	120	93	0
14	89	69	0
15	89	69	0
16	62	48	0
17	36	28	0
18	36	28	0
19	20	16	0
20	11	9	0
21	7	5	0
22	2	2	0
23	2	2	0
24	2	2	0

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	395	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	383	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	375	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	352	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	312	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	308	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	304	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	276	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	272	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	269	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	233	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	217	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	213	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	158	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	158	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	110	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	64	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	64	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	36	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	20	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	12	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	4	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	4	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	4	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	10
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:00
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	0
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	395
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 7: Beacon Lite Rd &amp; West Access

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	N, S
Minor Approaches	E
Speed > 40mph	Nein
Population < 10,000	Nein
Warrant Factor	100%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>N</b>	<b>S</b>	<b>E</b>
1	25	39	0
2	24	38	0
3	24	37	0
4	22	35	0
5	20	31	0
6	20	30	0
7	19	30	0
8	18	27	0
9	17	27	0
10	17	27	0
11	15	23	0
12	14	21	0
13	14	21	0
14	10	16	0
15	10	16	0
16	7	11	0
17	4	6	0
18	4	6	0
19	2	4	0
20	1	2	0
21	1	1	0
22	0	0	0
23	0	0	0
24	0	0	0

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	64	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	62	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	61	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	57	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	51	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	50	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	49	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	45	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	44	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	44	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	38	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	35	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	35	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	26	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	26	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	18	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	10	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	10	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	6	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	3	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	2	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	0	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	0	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	0	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.7
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:00
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	0
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	64
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

Vistro File: D:\...\Vistro Base.vistro  
Report File: D:\...\9- 2040 Background + Mitigations AM.pdf

Scenario 9 2040 Background + Mit AM  
9/16/2020

### Trip Generation Summary

#### Added Trips

Zone ID: Name	Land Use variables	Code	Ind. Var.	Rate	Quantity	% In	% Out	Trips In	Trips Out	Total Trips	% of Total Trips
1: Zone				1.000	0.000	50.00	50.00	0	0	0	0.00
Added Trips Total									0	0	0.00

Vistro File: D:\...\Vistro Base.vistro

Scenario 9 2040 Background + Mit AM

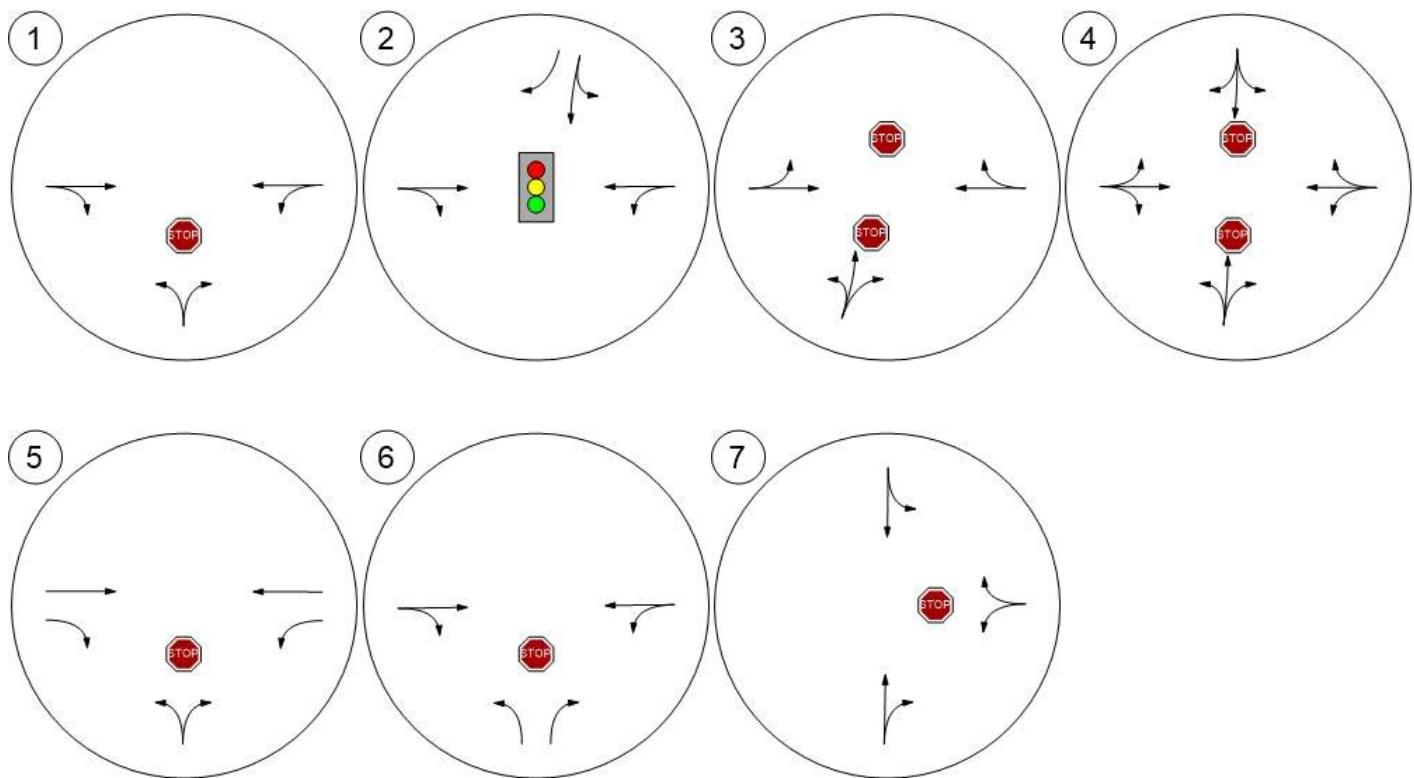
Report File: D:\...\9- 2040 Background + Mitigations AM.pdf

9/16/2020

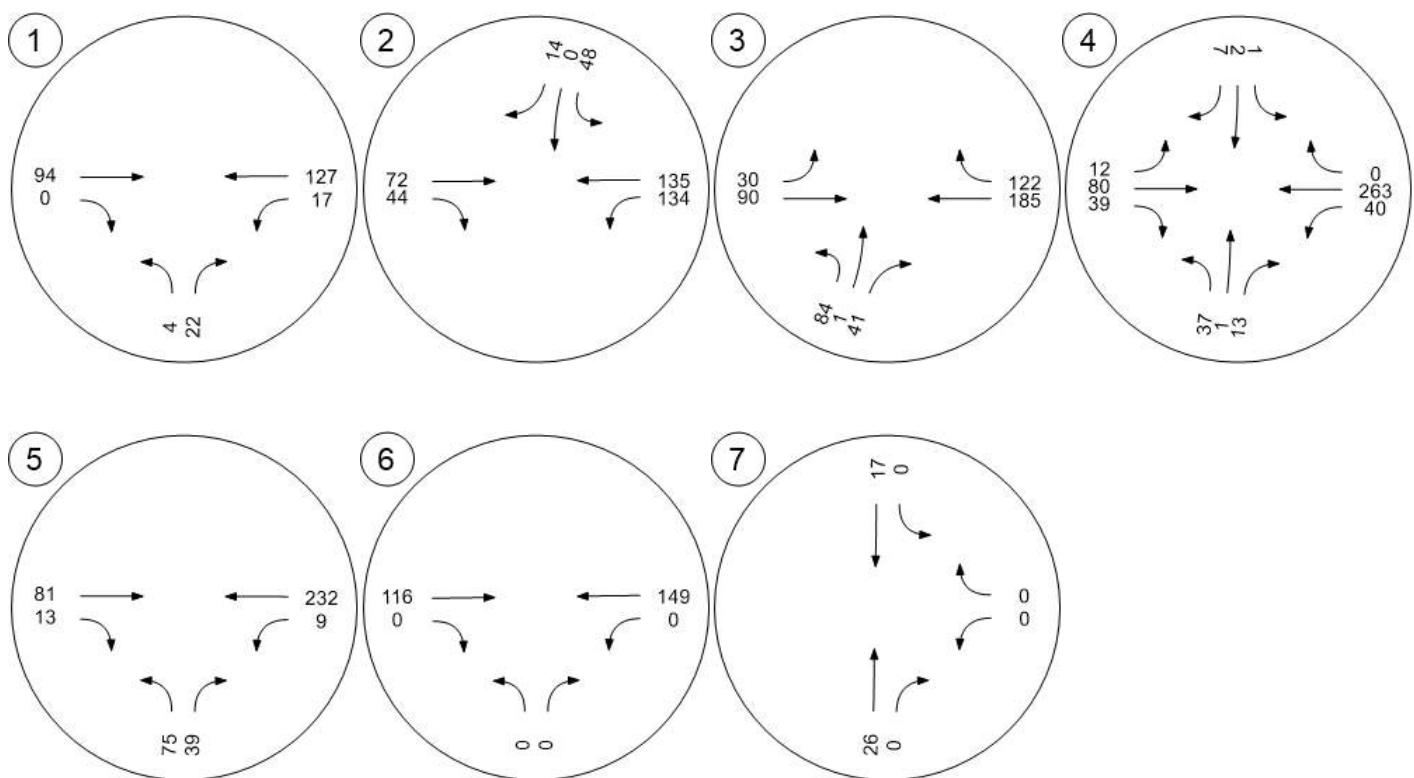
### Trip Distribution Summary

Zone / Gate	Zone 1: Zone			
	To Zone:		From Zone:	
	Share %	Trips	Share %	Trips
2: Gate	40.00	0	0.00	0
3: Gate	0.00	0	40.00	0
4: Gate	2.00	0	2.00	0
5: Gate	7.00	0	7.00	0
6: Gate	6.00	0	6.00	0
7: Gate	2.00	0	2.00	0
8: Gate	40.00	0	0.00	0
9: Gate	0.00	0	40.00	0
10: Gate	1.00	0	1.00	0
11: Gate	2.00	0	2.00	0
<b>Total</b>	<b>100.00</b>	<b>0</b>	<b>100.00</b>	<b>0</b>

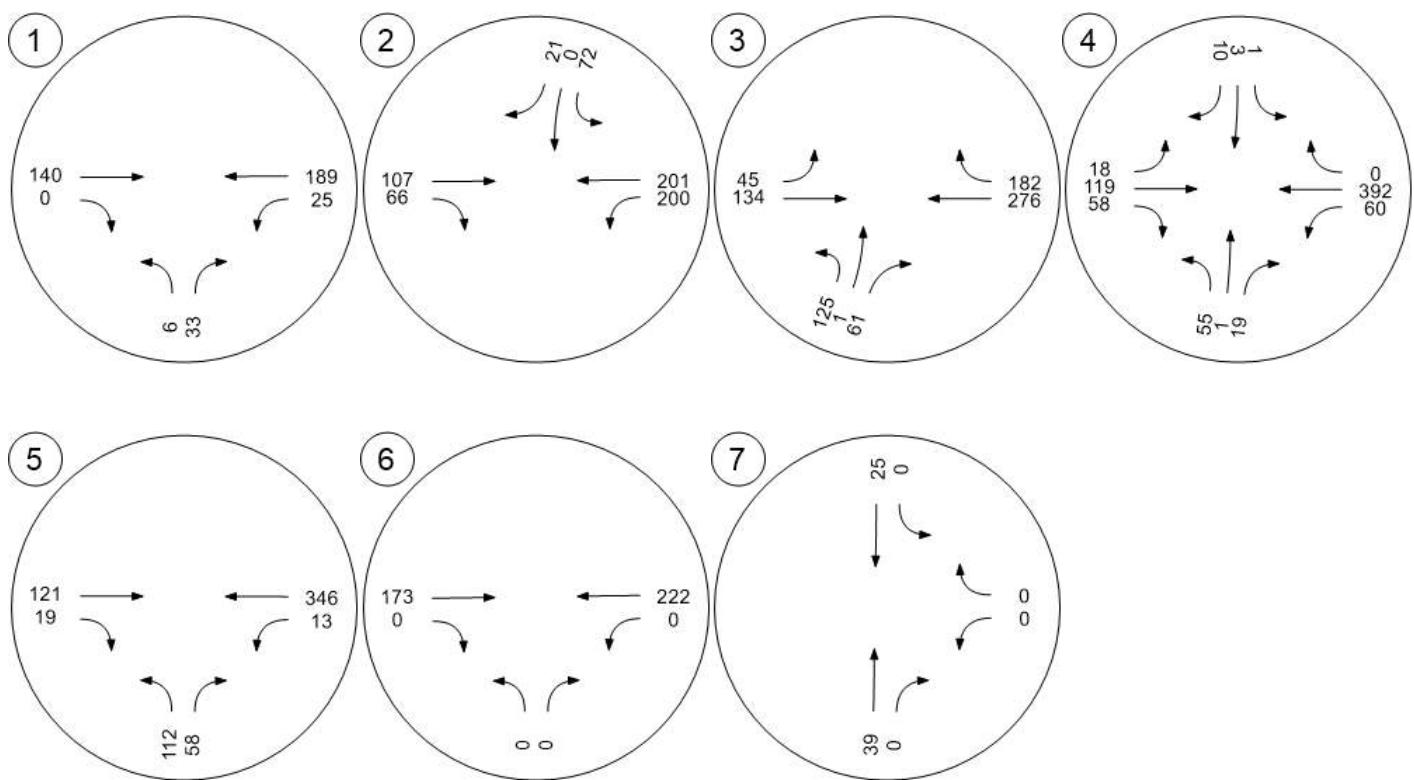
## Lane Configuration and Traffic Control



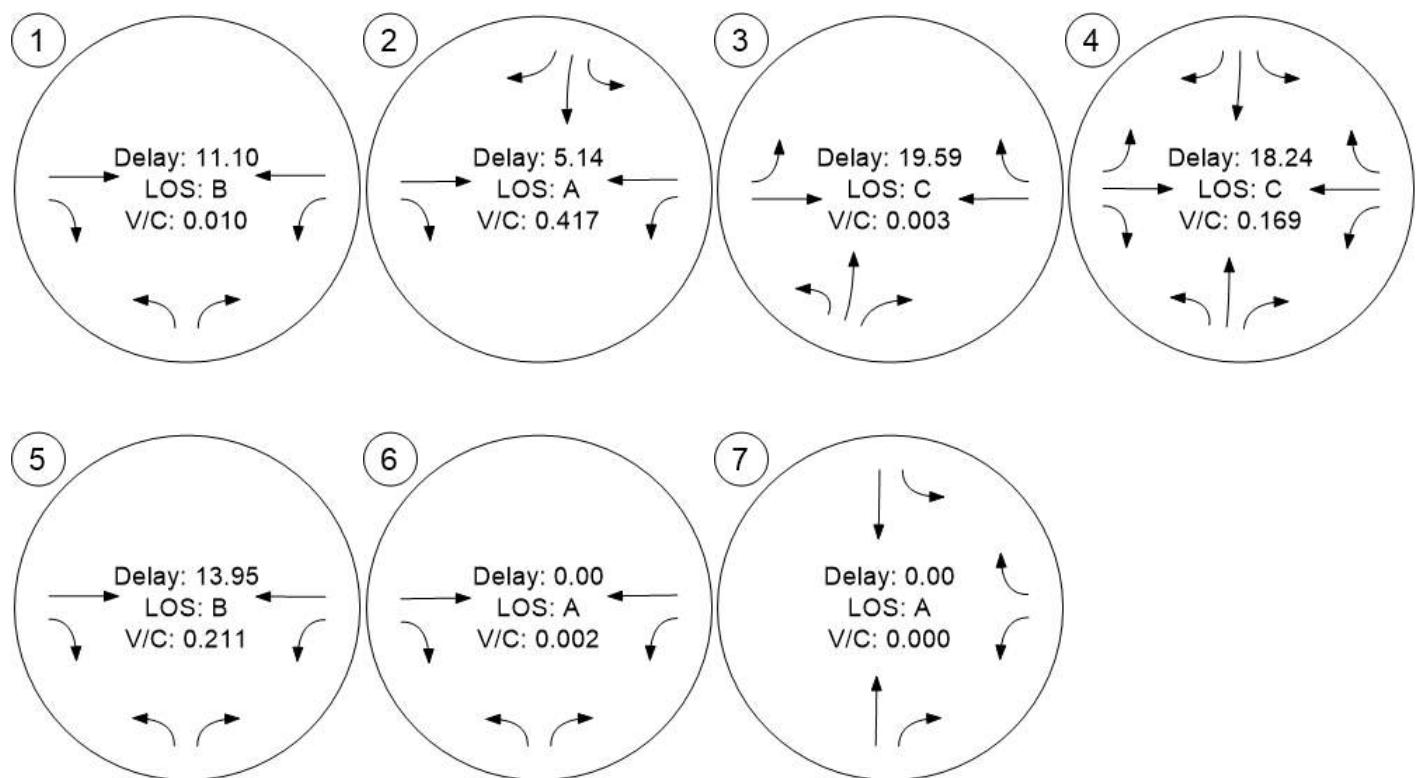
## Traffic Volume - Base Volume



## Traffic Volume - Future Total Volume



## Traffic Conditions



### Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Beacon Lite Rd & SR 404	Two-way stop	HCM 6. Auflage	NB Right	0.083	9.8	A
2	I-25 & SR-404 Southbound On/off Ramps	Signalized	HCM 6. Auflage	SB Left	0.479	6.5	A
3	I-25 & SR-404 Northbound On/off Ramps	Two-way stop	HCM 6. Auflage	NB Left	0.334	25.1	D
4	Monument Hill Rd & SR-404	Two-way stop	HCM 6. Auflage	NB Left	0.178	21.4	C
5	Doewood Dr & SR-404	Two-way stop	HCM 6. Auflage	NB Left	0.147	14.5	B
6	SR-404 & North Access	Two-way stop	HCM 6. Auflage	OB Thru	0.003	0.0	A
7	Beacon Lite Rd & West Access	Two-way stop	HCM 6. Auflage	NB Thru	0.001	0.0	A

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: Beacon Lite Rd & SR 404**

Control Type:	Two-way stop	Delay (sec / veh):	9.8
Analysis Method:	HCM 6. Auflage	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.083

**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]	35.00		45.00		45.00		
Grade [%]	0.00			0.00		0.00	
Crosswalk	Ja			Ja		Ja	

**Volumes**

Name							
Base Volume Input [veh/h]	0	45	154	1	29	137	
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	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	
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	67	229	1	43	204	
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	0	17	57	0	11	51	
Total Analysis Volume [veh/h]	0	67	229	1	43	204	
Pedestrian Volume [ped/h]	0			0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	Nein		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.08	0.00	0.00	0.03	0.00
d_M, Delay for Movement [s/veh]	12.63	9.85	0.00	0.00	7.78	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.27	0.27	0.00	0.00	0.10	0.10
95th-Percentile Queue Length [ft/ln]	6.75	6.75	0.00	0.00	2.49	2.49
d_A, Approach Delay [s/veh]	9.85		0.00		1.35	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]			1.83			
Intersection LOS			A			

**Intersection Level Of Service Report**  
**Intersection 2: I-25 & SR-404 Southbound On/off Ramps**

Control Type:	Signalized	Delay (sec / veh):	6.5
Analysis Method:	HCM 6. Auflage	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.479

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach												
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	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				Nein			Nein			Nein		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	0	0	0	131	0	31	0	116	81	100	135	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.4900	1.4900	1.4900	1.0000	1.4900	1.4900	1.4900	1.4900	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	195	0	46	0	173	121	149	201	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	49	0	12	0	43	30	37	50	0
Total Analysis Volume [veh/h]	0	0	0	195	0	46	0	173	121	149	201	0
Presence of On-Street Parking				Nein		Nein	Nein		Nein	Nein		Nein
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	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

## Intersection Settings

Located in CBD	Ja
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Verkehrsabhängig
Versatz [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost Time [s]	0.00

## Phasing & Timing

#### **Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

Lane Group		C	R	C	C
C, Cycle Length [s]		21	21	21	21
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00
I1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	2.00
I2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		4	4	9	9
g / C, Green / Cycle		0.18	0.18	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate		0.12	0.03	0.19	0.36
s, Saturation Flow Rate [veh/h]		1603	1431	1569	980
c, Capacity [veh/h]		296	264	676	669
d1, Uniform Delay [s]		7.87	7.15	4.14	5.25
k, Delay Calibration		0.11	0.11	0.11	0.11
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		2.51	0.31	0.44	0.64
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00
Rp, Platoon Ratio		1.00	1.00	1.00	1.00
PF, Progression Factor		1.00	1.00	1.00	1.00

**Lane Group Results**

X, Volume / Capacity		0.66	0.17	0.43	0.52
d, Delay for Lane Group [s/veh]		10.39	7.46	4.59	5.89
Lane Group LOS		B	A	A	A
Critical Lane Group		Ja	Nein	Nein	Ja
50th-Percentile Queue Length [veh/ln]		0.61	0.11	0.08	0.49
50th-Percentile Queue Length [ft/ln]		15.32	2.75	2.07	12.23
95th-Percentile Queue Length [veh/ln]		1.10	0.20	0.15	0.88
95th-Percentile Queue Length [ft/ln]		27.57	4.94	3.73	22.02

**Movement, Approach, & Intersection Results**

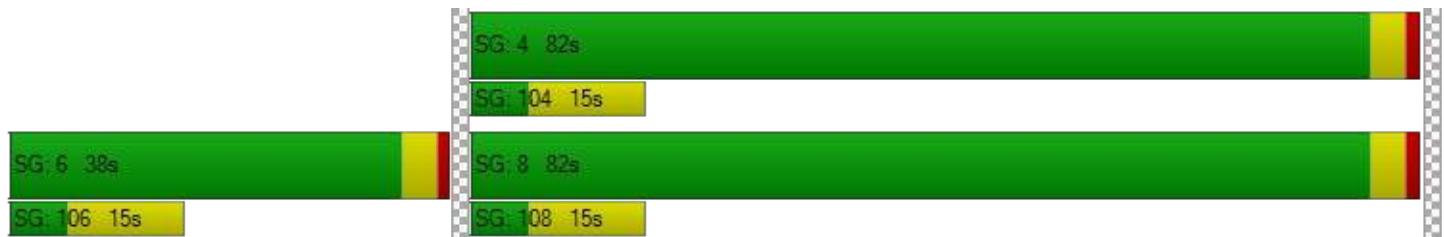
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	10.39	10.39	7.46	0.00	4.59	4.59	5.89	5.89	0.00
Movement LOS				B	B	A		A	A	A	A	
d_A, Approach Delay [s/veh]		0.00			9.83			4.59			5.89	
Approach LOS		A			A			A			A	
d_I, Intersection Delay [s/veh]						6.53						
Intersection LOS							A					
Intersection V/C							0.479					

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	1.914	1.848	2.126	2.255
Crosswalk LOS	A	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	567	1300	1300
d_b, Bicycle Delay [s]	60.00	30.82	7.35	7.35
I_b,int, Bicycle LOS Score for Intersection	4.132	1.957	2.045	2.137
Bicycle LOS	D	A	B	B

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 3: I-25 & SR-404 Northbound On/off Ramps**

Control Type:	Two-way stop	Delay (sec / veh):	25.1
Analysis Method:	HCM 6. Auflage	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.334

**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]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	76	0	117	0	0	0	27	220	0	0	159	77
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.0000	1.0000	1.0000	1.4900	1.4900	1.0000	1.0000	1.4900	1.4900
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]	113	0	174	0	0	0	40	328	0	0	237	115
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	28	0	44	0	0	0	10	82	0	0	59	29
Total Analysis Volume [veh/h]	113	0	174	0	0	0	40	328	0	0	237	115
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	Nein			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Nein			
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.33	0.00	0.24	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	25.10	25.64	19.51	0.00	0.00	0.00	8.09	0.00	0.00	0.00	0.00	0.00
Movement LOS	D	D	C				A	A			A	A
95th-Percentile Queue Length [veh/ln]	3.61	3.61	3.61	0.00	0.00	0.00	0.10	0.10	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	90.28	90.28	90.28	0.00	0.00	0.00	2.57	2.57	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		21.71			0.00			0.88			0.00	
Approach LOS		C			A			A			A	
d_I, Intersection Delay [s/veh]							6.51					
Intersection LOS							D					

**Intersection Level Of Service Report**  
**Intersection 4: Monument Hill Rd & SR-404**

Control Type:	Two-way stop	Delay (sec / veh):	21.4
Analysis Method:	HCM 6. Auflage	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.178

**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]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	33	1	29	1	1	8	11	295	31	13	195	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
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]	49	1	43	1	1	12	16	440	46	19	291	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	0	11	0	0	3	4	110	12	5	73	0
Total Analysis Volume [veh/h]	49	1	43	1	1	12	16	440	46	19	291	0
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	Nein	Nein		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Nein	Nein		
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.18	0.00	0.07	0.00	0.00	0.02	0.01	0.00	0.00	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	21.36	20.43	14.30	19.34	17.67	9.96	7.87	0.00	0.00	8.40	0.00	0.00
Movement LOS	C	C	B	C	C	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.99	0.99	0.99	0.07	0.07	0.07	0.04	0.04	0.04	0.05	0.05	0.05
95th-Percentile Queue Length [ft/ln]	24.70	24.70	24.70	1.80	1.80	1.80	0.96	0.96	0.96	1.35	1.35	1.35
d_A, Approach Delay [s/veh]		18.08			11.18			0.25			0.52	
Approach LOS		C			B			A			A	
d_I, Intersection Delay [s/veh]							2.31					
Intersection LOS								C				

**Intersection Level Of Service Report**  
**Intersection 5: Doewood Dr & SR-404**

Control Type:	Two-way stop	Delay (sec / veh):	14.5
Analysis Method:	HCM 6. Auflage	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.147

**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	1	1	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	280.00	450.00	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]	25.00		45.00		45.00		
Grade [%]	0.00			0.00		0.00	
Crosswalk	Ja		Ja		Ja		

**Volumes**

Name							
Base Volume Input [veh/h]	44	10	234	91	10	157	
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	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	
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]	66	15	349	136	15	234	
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	17	4	87	34	4	59	
Total Analysis Volume [veh/h]	66	15	349	136	15	234	
Pedestrian Volume [ped/h]	0			0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	Nein		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.15	0.02	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	14.52	11.70	0.00	0.00	8.39	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.60	0.60	0.00	0.00	0.04	0.00
95th-Percentile Queue Length [ft/ln]	15.01	15.01	0.00	0.00	1.06	0.00
d_A, Approach Delay [s/veh]	14.00		0.00		0.51	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]			1.55			
Intersection LOS			B			

**Intersection Level Of Service Report**  
**Intersection 6: SR-404 & North Access**

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6. Auflage	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	1	0	0	0	0	
Entry Pocket Length [ft]	100.00	50.00	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]	15.00		45.00		45.00		
Grade [%]	0.00		0.00		0.00		
Crosswalk	Ja		Ja		Ja		

**Volumes**

Name						
Base Volume Input [veh/h]	0	0	199	0	0	166
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	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
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	0	297	0	0	247
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	74	0	0	62
Total Analysis Volume [veh/h]	0	0	297	0	0	247
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
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]	12.20	9.85	0.00	0.00	7.85	0.00
Movement LOS	B	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]	11.02		0.00		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]			0.00			
Intersection LOS			A			

**Intersection Level Of Service Report**  
**Intersection 7: Beacon Lite Rd & West Access**

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6. Auflage	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

**Intersection Setup**

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	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]	35.00		35.00		15.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Ja		Ja		Ja	

**Volumes**

Name						
Base Volume Input [veh/h]	45	0	0	30	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	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
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]	67	0	0	45	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	0	0	11	0	0
Total Analysis Volume [veh/h]	67	0	0	45	0	0
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Free	Free	Stop
Flared Lane			Nein
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Nein
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]	0.00	0.00	7.35	0.00	9.07	8.61
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		8.84	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]			0.00			
Intersection LOS			A			

Vistro File: D:\...\Vistro Base.vistro

Scenario 10 2040 Background + Mit PM

Report File: D:\...\10- 2040 Background + Mitigation PM.pdf

9/16/2020

**Turning Movement Volume: Summary**

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
1	Beacon Lite Rd & SR 404	0	67	229	1	43	204	544

ID	Intersection Name	Southbound			Eastbound		Westbound		Total Volume
		Left	Thru	Right	Thru	Right	Left	Thru	
2	I-25 & SR-404 Southbound On/off Ramps	195	0	46	173	121	149	201	885

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Thru	Right	Left	Thru	Thru	Right	
3	I-25 & SR-404 Northbound On/off Ramps	113	0	174	40	328	237	115	1007

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	Monument Hill Rd & SR-404	49	1	43	1	1	12	16	440	46	19	291	0	919

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru		
5	Doewood Dr & SR-404	66	15	349	136	15	234	815	

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru		
6	SR-404 & North Access	0	0	297	0	0	247	544	

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
7	Beacon Lite Rd & West Access	67	0	0	45	0	0	112

Vistro File: D:\...\Vistro Base.vistro

Report File: D:\...\10- 2040 Background + Mitigation PM.pdf

Scenario 10 2040 Background + Mit PM

9/16/2020

**Turning Movement Volume: Detail**

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
1	Beacon Lite Rd & SR 404	Final Base	0	45	154	1	29	137	366
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>0</b>	<b>67</b>	<b>229</b>	<b>1</b>	<b>43</b>	<b>204</b>	<b>544</b>

ID	Intersection Name	Volume Type	Southbound			Eastbound		Westbound		Total Volume
			Left	Thru	Right	Thru	Right	Left	Thru	
2	I-25 & SR-404 Southbound On/off Ramps	Final Base	131	0	31	116	81	100	135	594
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>195</b>	<b>0</b>	<b>46</b>	<b>173</b>	<b>121</b>	<b>149</b>	<b>201</b>	<b>885</b>

ID	Intersection Name	Volume Type	Northbound			Eastbound		Westbound		Total Volume
			Left	Thru	Right	Left	Thru	Thru	Right	
3	I-25 & SR-404 Northbound On/off Ramps	Final Base	76	0	117	27	220	159	77	676
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>113</b>	<b>0</b>	<b>174</b>	<b>40</b>	<b>328</b>	<b>237</b>	<b>115</b>	<b>1007</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	Monument Hill Rd & SR-404	Final Base	33	1	29	1	1	8	11	295	31	13	195	0	618
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>49</b>	<b>1</b>	<b>43</b>	<b>1</b>	<b>1</b>	<b>12</b>	<b>16</b>	<b>440</b>	<b>46</b>	<b>19</b>	<b>291</b>	<b>0</b>	<b>919</b>

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
5	Doewood Dr & SR-404	Final Base	44	10	234	91	10	157	546
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		Future Total	66	15	349	136	15	234	815

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
6	SR-404 & North Access	Final Base	0	0	199	0	0	166	365
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		Future Total	0	0	297	0	0	247	544

ID	Intersection Name	Volume Type	Northbound		Southbound		Westbound		Total Volume
			Thru	Right	Left	Thru	Left	Right	
7	Beacon Lite Rd & West Access	Final Base	45	0	0	30	0	0	75
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		Future Total	67	0	0	45	0	0	112

## Signal Warrants Report For Intersection 1: Beacon Lite Rd &amp; SR 404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	247	230	67
2	240	223	65
3	235	219	64
4	220	205	60
5	195	182	53
6	193	179	52
7	190	177	52
8	173	161	47
9	170	159	46
10	168	156	46
11	146	136	40
12	136	127	37
13	133	124	36
14	99	92	27
15	99	92	27
16	69	64	19
17	40	37	11
18	40	37	11
19	22	21	6
20	12	12	3
21	7	7	2
22	2	2	1
23	2	2	1
24	2	2	1

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	477	1	67	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	463	1	65	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	454	1	64	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	425	1	60	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	377	1	53	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	372	1	52	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	367	1	52	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	334	1	47	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	329	1	46	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	324	1	46	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	282	1	40	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	263	1	37	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	257	1	36	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	191	1	27	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	191	1	27	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	133	1	19	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	77	1	11	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	77	1	11	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	43	1	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	24	1	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	14	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	4	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	4	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	4	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	9.8
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:10
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	67
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	544
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 3: I-25 &amp; SR-404 Northbound On/off Ramps

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Ja
#2	Four Hour Vehicular Volume	Ja
#3	Peak Hour	Ja

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	352	368	287
2	341	357	278
3	334	350	273
4	313	328	255
5	278	291	227
6	275	287	224
7	271	283	221
8	246	258	201
9	243	254	198
10	239	250	195
11	208	217	169
12	194	202	158
13	190	199	155
14	141	147	115
15	141	147	115
16	99	103	80
17	56	59	46
18	56	59	46
19	32	33	26
20	18	18	14
21	11	11	9
22	4	4	3
23	4	4	3
24	4	4	3

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	720	1	287	Ja	Ja	Ja	Ja	Nein	Ja	Ja	Ja	Ja	Ja
2	2	698	1	278	Ja	Ja	Ja	Ja	Nein	Nein	Ja	Ja	Ja	Ja
3	2	684	1	273	Ja	Ja	Ja	Ja	Nein	Nein	Ja	Ja	Ja	Ja
4	2	641	1	255	Ja	Ja	Ja	Ja	Nein	Nein	Ja	Ja	Ja	Ja
5	2	569	1	227	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
6	2	562	1	224	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
7	2	554	1	221	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
8	2	504	1	201	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
9	2	497	1	198	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Nein	Ja	Nein
10	2	489	1	195	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Nein	Ja	Nein
11	2	425	1	169	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
12	2	396	1	158	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
13	2	389	1	155	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
14	2	288	1	115	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	288	1	115	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	202	1	80	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	115	1	46	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	115	1	46	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	65	1	26	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	36	1	14	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	22	1	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	8	1	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	8	1	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	8	1	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					4	10	11	13	0	1	4	8	10	4

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	21.7
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	1:43
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	287
High Minor Volume Condition Met	Ja
Total Entering Volume on All Approaches During Same Hour	1007
Number of Approaches on Intersection	3
Total Volume Condition Met	Ja
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 4: Monument Hill Rd &amp; SR-404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N, S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>	
	<b>E</b>	<b>W</b>	<b>N</b>	<b>S</b>
1	310	502	14	93
2	301	487	14	90
3	295	477	13	88
4	276	447	12	83
5	245	397	11	73
6	242	392	11	73
7	239	387	11	72
8	217	351	10	65
9	214	346	10	64
10	211	341	10	63
11	183	296	8	55
12	171	276	8	51
13	167	271	8	50
14	124	201	6	37
15	124	201	6	37
16	87	141	4	26
17	50	80	2	15
18	50	80	2	15
19	28	45	1	8
20	16	25	1	5
21	9	15	0	3
22	3	5	0	1
23	3	5	0	1
24	3	5	0	1

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	812	2	107	Nein	Nein	Ja	Nein	Ja	Ja	Ja	Ja	Ja	Nein
2	2	788	2	104	Nein	Nein	Ja	Nein	Ja	Ja	Ja	Ja	Ja	Nein
3	2	772	2	101	Nein	Nein	Ja	Nein	Ja	Ja	Ja	Ja	Ja	Nein
4	2	723	2	95	Nein	Nein	Nein	Nein	Ja	Ja	Ja	Ja	Nein	Nein
5	2	642	2	84	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Ja	Nein	Nein
6	2	634	2	84	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Ja	Nein	Nein
7	2	626	2	83	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Nein	Nein	Nein
8	2	568	2	75	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Nein	Nein	Nein
9	2	560	2	74	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Nein	Nein	Nein
10	2	552	2	73	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Nein	Nein	Nein
11	2	479	2	63	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	447	2	59	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	438	2	58	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	325	2	43	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	325	2	43	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	228	2	30	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	130	2	17	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	130	2	17	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	73	2	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	41	2	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	24	2	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	8	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	8	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	8	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	3	0	4	6	10	3	0

## Warrant 3 Condition A

Orientation	N	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	11.2	18.1
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:02	0:28
Delay Condition Met	Nein	Nein
Volume on Minor Street Approach During Same Hour	14	93
High Minor Volume Condition Met	Nein	Nein
Total Entering Volume on All Approaches During Same Hour	919	919
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Ja	Ja
Warrant Met for Approach	Nein	Nein
Warrant Met for Intersection	Nein	

## Signal Warrants Report For Intersection 5: Doewood Dr &amp; SR-404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	
1	249	485	81
2	242	470	79
3	237	461	77
4	222	432	72
5	197	383	64
6	194	378	63
7	192	373	62
8	174	340	57
9	172	335	56
10	169	330	55
11	147	286	48
12	137	267	45
13	134	262	44
14	100	194	32
15	100	194	32
16	70	136	23
17	40	78	13
18	40	78	13
19	22	44	7
20	12	24	4
21	7	15	2
22	2	5	1
23	2	5	1
24	2	5	1

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	734	1	81	Nein	Nein	Nein	Nein	Ja	Ja	Ja	Nein	Nein	Nein
2	4	712	1	79	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Nein	Nein	Nein
3	4	698	1	77	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Nein	Nein	Nein
4	4	654	1	72	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Nein	Nein	Nein
5	4	580	1	64	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein
6	4	572	1	63	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein
7	4	565	1	62	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein
8	4	514	1	57	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein
9	4	507	1	56	Nein	Nein	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein
10	4	499	1	55	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	4	433	1	48	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	4	404	1	45	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	4	396	1	44	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	4	294	1	32	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	4	294	1	32	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	4	206	1	23	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	4	118	1	13	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	4	118	1	13	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	4	66	1	7	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	4	36	1	4	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	4	22	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	4	7	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	4	7	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	4	7	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	1	4	9	0	0	

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	14
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:18
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	81
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	815
Number of Approaches on Intersection	3
Total Volume Condition Met	Ja
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 6: SR-404 &amp; North Access

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	247	297	0
2	240	288	0
3	235	282	0
4	220	264	0
5	195	235	0
6	193	232	0
7	190	229	0
8	173	208	0
9	170	205	0
10	168	202	0
11	146	175	0
12	136	163	0
13	133	160	0
14	99	119	0
15	99	119	0
16	69	83	0
17	40	48	0
18	40	48	0
19	22	27	0
20	12	15	0
21	7	9	0
22	2	3	0
23	2	3	0
24	2	3	0

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	544	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	528	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	517	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	484	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	430	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	425	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	419	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	381	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	375	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	370	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	321	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	299	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	293	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	218	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	218	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	152	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	88	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	88	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	49	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	27	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	16	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	5	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	5	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	5	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	11
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:00
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	0
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	544
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 7: Beacon Lite Rd &amp; West Access

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	N, S
Minor Approaches	E
Speed > 40mph	Nein
Population < 10,000	Nein
Warrant Factor	100%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>N</b>	<b>S</b>	<b>E</b>
1	45	67	0
2	44	65	0
3	43	64	0
4	40	60	0
5	36	53	0
6	35	52	0
7	35	52	0
8	31	47	0
9	31	46	0
10	31	46	0
11	27	40	0
12	25	37	0
13	24	36	0
14	18	27	0
15	18	27	0
16	13	19	0
17	7	11	0
18	7	11	0
19	4	6	0
20	2	3	0
21	1	2	0
22	0	1	0
23	0	1	0
24	0	1	0

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	112	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	109	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	107	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	100	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	89	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	87	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	87	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	78	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	77	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	77	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	67	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	62	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	60	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	45	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	45	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	32	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	18	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	18	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	10	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	5	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	3	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	1	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	1	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	1	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.8
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	0:00
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	0
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	112
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

Vistro File: D:\...\Vistro Base.vistro  
Report File: D:\...\10- 2040 Background + Mitigation PM.pdf

Scenario 10 2040 Background + Mit PM  
9/16/2020

### Trip Generation Summary

#### Added Trips

Zone ID: Name	Land Use variables	Code	Ind. Var.	Rate	Quantity	% In	% Out	Trips In	Trips Out	Total Trips	% of Total Trips
1: Zone				1.000	0.000	50.00	50.00	0	0	0	0.00
Added Trips Total									0	0	0.00

Vistro File: D:\...\Vistro Base.vistro

Scenario 10 2040 Background + Mit PM

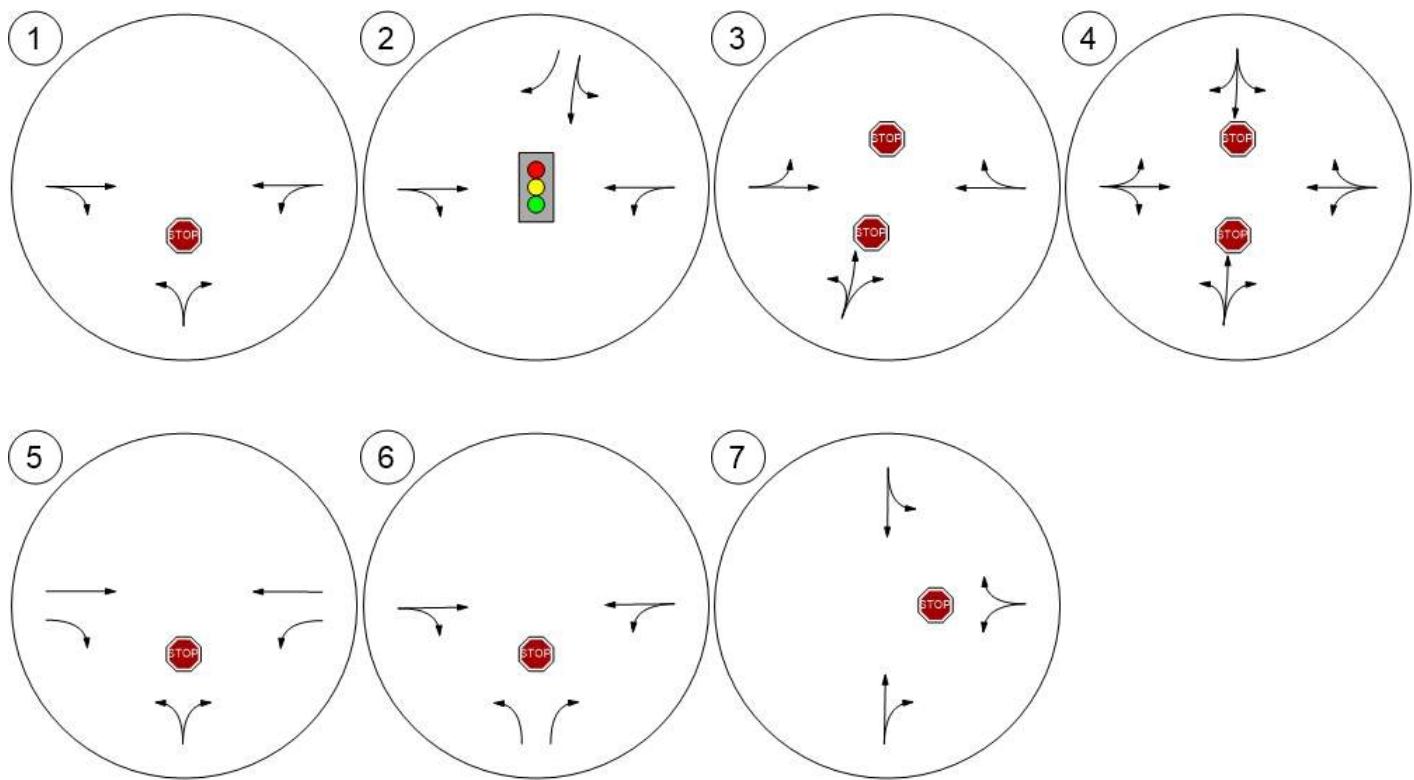
Report File: D:\...\10- 2040 Background + Mitigation PM.pdf

9/16/2020

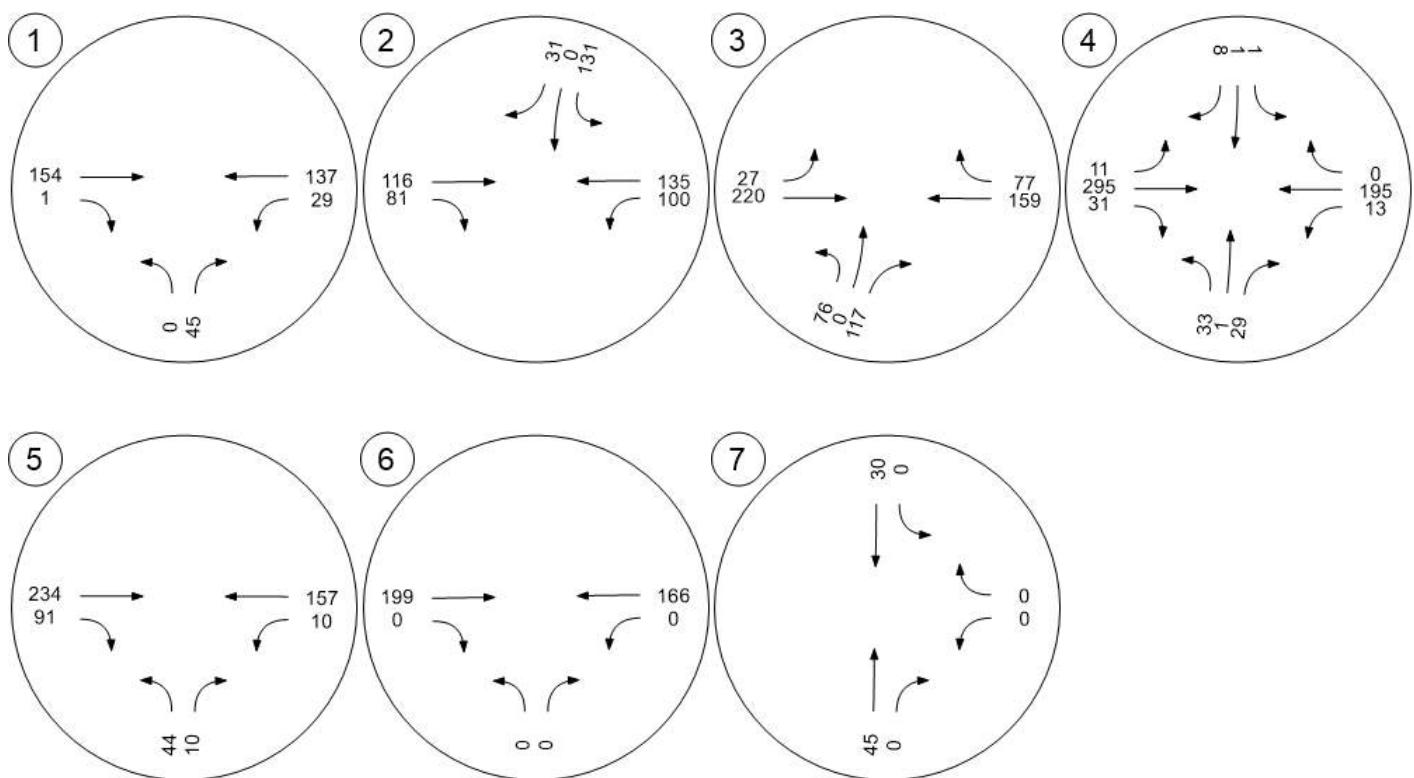
### Trip Distribution Summary

Zone / Gate	Zone 1: Zone			
	To Zone:		From Zone:	
	Share %	Trips	Share %	Trips
2: Gate	40.00	0	0.00	0
3: Gate	0.00	0	40.00	0
4: Gate	2.00	0	2.00	0
5: Gate	7.00	0	7.00	0
6: Gate	6.00	0	6.00	0
7: Gate	2.00	0	2.00	0
8: Gate	40.00	0	0.00	0
9: Gate	0.00	0	40.00	0
10: Gate	1.00	0	1.00	0
11: Gate	2.00	0	2.00	0
<b>Total</b>	<b>100.00</b>	<b>0</b>	<b>100.00</b>	<b>0</b>

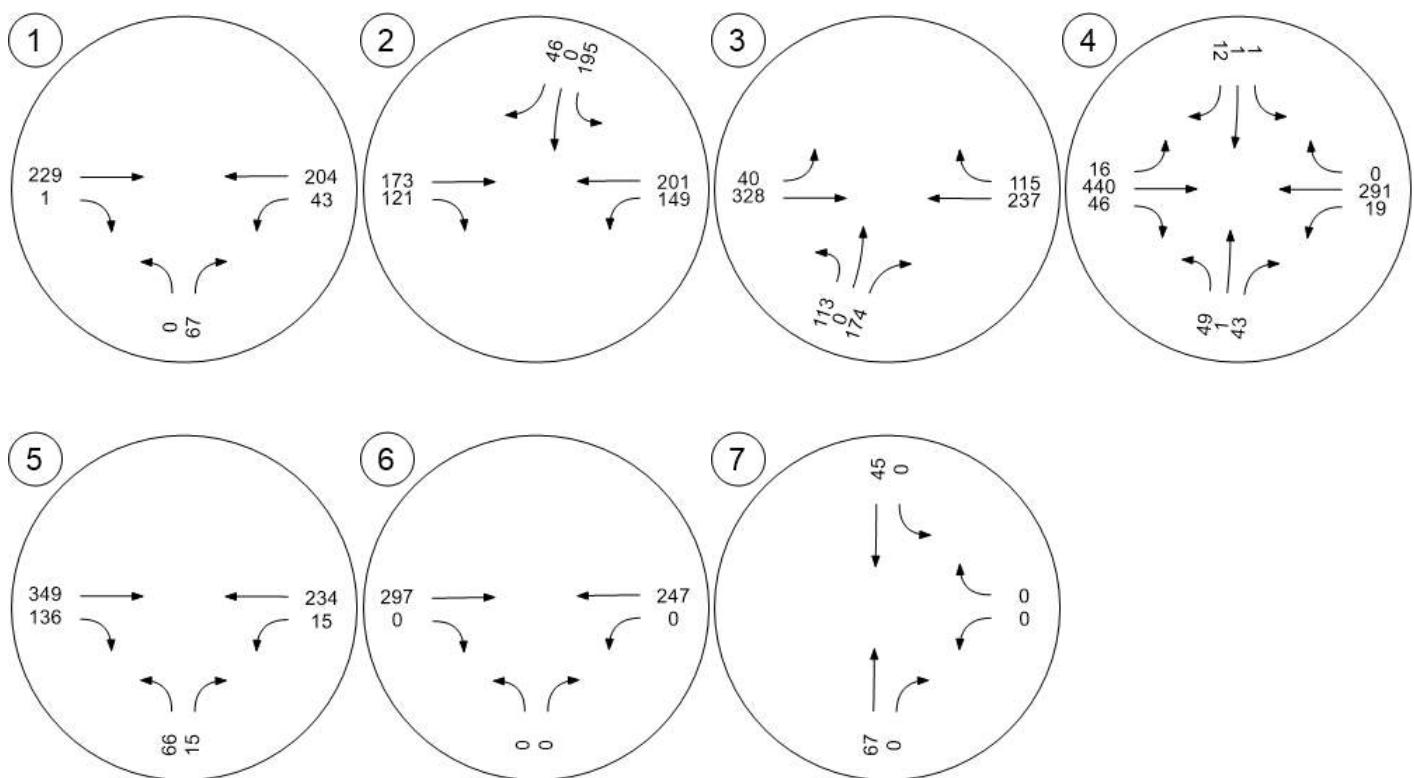
## Lane Configuration and Traffic Control



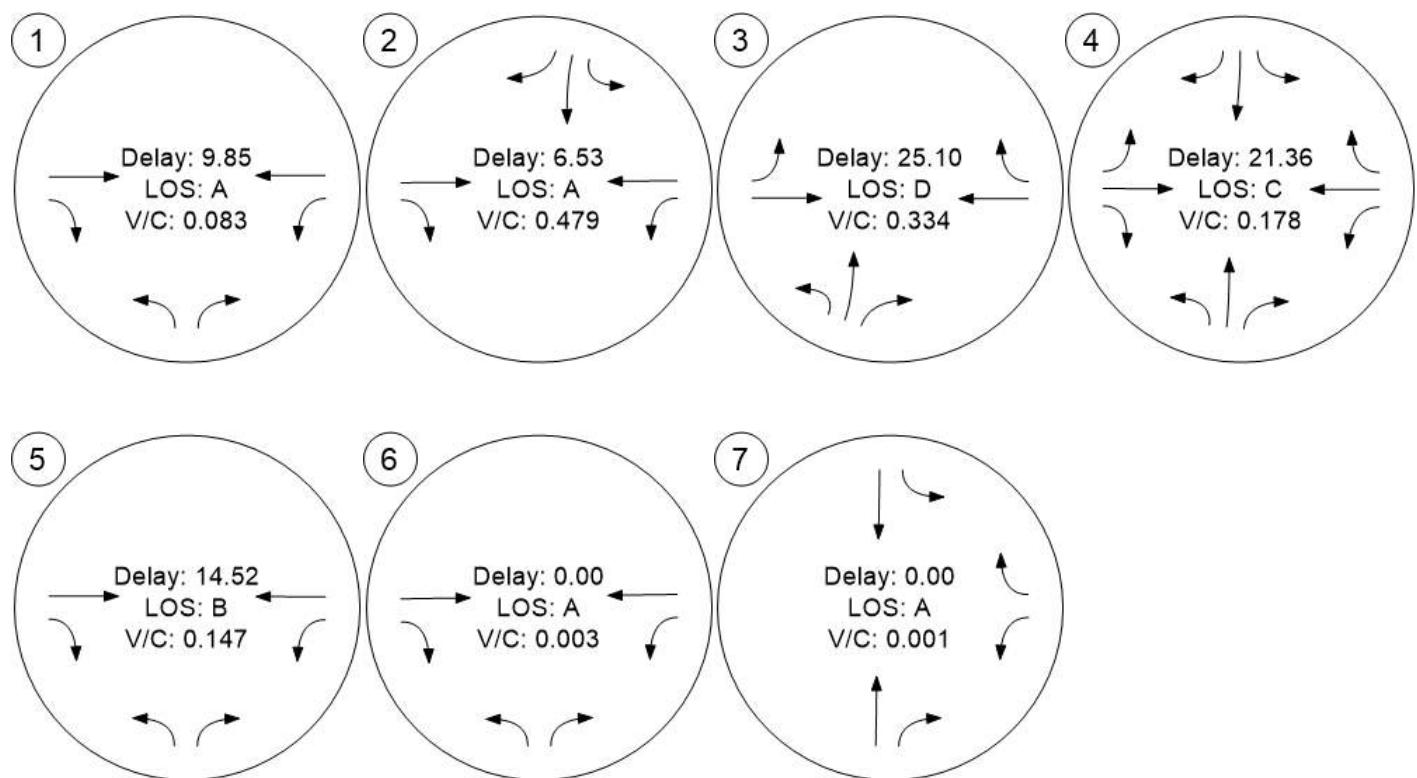
## Traffic Volume - Base Volume



## Traffic Volume - Future Total Volume



## Traffic Conditions



2040 BACKGROUND PLUS PROJECT Traffic

### Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Beacon Lite Rd & SR 404	Two-way stop	HCM 6. Auflage	NB Left	0.012	11.4	B
2	I-25 & SR-404 Southbound On/off Ramps	Signalized	HCM 6. Auflage	SB Left	0.580	4.3	A
3	I-25 & SR-404 Northbound On/off Ramps	Two-way stop	HCM 6. Auflage	NB Left	0.395	21.8	C
4	Monument Hill Rd & SR-404	Two-way stop	HCM 6. Auflage	NB Left	0.176	18.7	C
5	Doewood Dr & SR-404	Two-way stop	HCM 6. Auflage	NB Left	0.219	14.1	B
6	SR-404 & North Access	Two-way stop	HCM 6. Auflage	NB Right	0.037	9.4	A
7	Beacon Lite Rd & West Access	Two-way stop	HCM 6. Auflage	WB Right	0.012	8.5	A

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: Beacon Lite Rd & SR 404**

Control Type:	Two-way stop	Delay (sec / veh):	11.4
Analysis Method:	HCM 6. Auflage	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.012

**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]	35.00		45.00		45.00		
Grade [%]	0.00			0.00		0.00	
Crosswalk	Ja			Ja		Ja	

**Volumes**

Name							
Base Volume Input [veh/h]	4	22	94	0	17	127	
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	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	
In-Process Volume [veh/h]	0	0	0	0	0	0	
Site-Generated Trips [veh/h]	1	11	1	0	9	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]	7	44	141	0	34	189	
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	2	11	35	0	9	47	
Total Analysis Volume [veh/h]	7	44	141	0	34	189	
Pedestrian Volume [ped/h]	0			0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	Nein		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.01	0.05	0.00	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	11.36	9.24	0.00	0.00	7.56	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.19	0.19	0.00	0.00	0.07	0.07
95th-Percentile Queue Length [ft/ln]	4.81	4.81	0.00	0.00	1.81	1.81
d_A, Approach Delay [s/veh]	9.53		0.00		1.15	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]			1.79			
Intersection LOS			B			

**Intersection Level Of Service Report**  
**Intersection 2: I-25 & SR-404 Southbound On/off Ramps**

Control Type:	Signalized	Delay (sec / veh):	4.3
Analysis Method:	HCM 6. Auflage	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.580

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach												
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	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				Nein			Nein			Nein		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	0	0	0	48	0	14	0	72	44	134	135	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.4900	1.4900	1.4900	1.0000	1.4900	1.4900	1.4900	1.4900	1.0000
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	18	0	26	17	0	26	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	72	0	39	0	133	83	200	227	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	18	0	10	0	33	21	50	57	0
Total Analysis Volume [veh/h]	0	0	0	72	0	39	0	133	83	200	227	0
Presence of On-Street Parking				Nein		Nein	Nein		Nein	Nein		Nein
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	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

## Intersection Settings

Located in CBD	Ja
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Verkehrsabhängig
Versatz [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost Time [s]	0.00

## Phasing & Timing

#### **Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

Lane Group		C	R	C	C
C, Cycle Length [s]		18	18	18	18
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00
I1_p, Permitted Start-Up Lost Time [s]		2.00	0.00	0.00	2.00
I2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		3	3	14	7
g / C, Green / Cycle		0.15	0.15	0.78	0.41
(v / s)_i Volume / Saturation Flow Rate		0.25	0.03	0.14	0.33
s, Saturation Flow Rate [veh/h]		286	1431	1576	1300
c, Capacity [veh/h]		436	215	1232	826
d1, Uniform Delay [s]		8.93	6.80	0.51	4.68
k, Delay Calibration		0.11	0.11	0.11	0.11
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		0.18	0.40	0.07	0.50
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00
Rp, Platoon Ratio		1.00	1.00	1.00	1.00
PF, Progression Factor		1.00	1.00	1.00	1.00

**Lane Group Results**

X, Volume / Capacity		0.17	0.18	0.18	0.52
d, Delay for Lane Group [s/veh]		9.10	7.20	0.57	5.18
Lane Group LOS		A	A	A	A
Critical Lane Group		Ja	Nein	Nein	Ja
50th-Percentile Queue Length [veh/ln]		0.17	0.08	0.02	0.19
50th-Percentile Queue Length [ft/ln]		4.33	2.01	0.57	4.63
95th-Percentile Queue Length [veh/ln]		0.31	0.14	0.04	0.33
95th-Percentile Queue Length [ft/ln]		7.80	3.62	1.03	8.33

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	9.10	9.10	7.20	0.00	0.57	0.57	5.18	5.18	0.00
Movement LOS				A	A	A		A	A	A	A	
d_A, Approach Delay [s/veh]		0.00			8.43			0.57			5.18	
Approach LOS		A			A			A			A	
d_I, Intersection Delay [s/veh]						4.34						
Intersection LOS							A					
Intersection V/C							0.580					

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	46.37	46.37	46.37	46.37
I_p,int, Pedestrian LOS Score for Intersection	1.995	1.780	2.078	2.291
Crosswalk LOS	A	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	273	1927	1582
d_b, Bicycle Delay [s]	55.00	41.02	0.07	2.40
I_b,int, Bicycle LOS Score for Intersection	4.132	1.743	1.916	2.264
Bicycle LOS	D	A	A	B

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 3: I-25 & SR-404 Northbound On/off Ramps**

Control Type:	Two-way stop	Delay (sec / veh):	21.8
Analysis Method:	HCM 6. Auflage	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.395

**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]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	84	0	41	0	0	0	30	90	0	0	185	122
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.0000	1.0000	1.0000	1.4900	1.4900	1.0000	1.0000	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	0	0	0	0	0	18	8	0	0	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
Total Hourly Volume [veh/h]	143	0	61	0	0	0	63	142	0	0	284	182
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	36	0	15	0	0	0	16	36	0	0	71	46
Total Analysis Volume [veh/h]	143	0	61	0	0	0	63	142	0	0	284	182
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	Nein			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Nein			
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.39	0.00	0.07	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	21.75	22.87	15.79	0.00	0.00	0.00	8.49	0.00	0.00	0.00	0.00	0.00
Movement LOS	C	C	C				A	A			A	A
95th-Percentile Queue Length [veh/ln]	2.39	2.39	2.39	0.00	0.00	0.00	0.18	0.18	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	59.63	59.63	59.63	0.00	0.00	0.00	4.57	4.57	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		19.97			0.00			2.61			0.00	
Approach LOS		C			A			A			A	
d_I, Intersection Delay [s/veh]							5.27					
Intersection LOS							C					

**Intersection Level Of Service Report**  
**Intersection 4: Monument Hill Rd & SR-404**

Control Type:	Two-way stop	Delay (sec / veh):	18.7
Analysis Method:	HCM 6. Auflage	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.176

**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]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	37	1	13	1	2	7	12	80	39	40	263	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
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	1	1	6	1	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
Total Hourly Volume [veh/h]	56	1	19	1	3	11	19	125	59	60	398	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	0	5	0	1	3	5	31	15	15	100	0
Total Analysis Volume [veh/h]	56	1	19	1	3	11	19	125	59	60	398	0
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	Nein	Nein		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Nein	Nein		
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.18	0.00	0.02	0.00	0.01	0.02	0.02	0.00	0.00	0.04	0.00	0.00
d_M, Delay for Movement [s/veh]	18.71	18.20	11.41	16.60	16.48	10.74	8.15	0.00	0.00	7.71	0.00	0.00
Movement LOS	C	C	B	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.74	0.74	0.74	0.09	0.09	0.09	0.05	0.05	0.05	0.14	0.14	0.14
95th-Percentile Queue Length [ft/ln]	18.47	18.47	18.47	2.27	2.27	2.27	1.25	1.25	1.25	3.38	3.38	3.38
d_A, Approach Delay [s/veh]		16.88			12.28			0.76			1.01	
Approach LOS		C			B			A			A	
d_I, Intersection Delay [s/veh]							2.77					
Intersection LOS								C				

**Intersection Level Of Service Report**  
**Intersection 5: Doewood Dr & SR-404**

Control Type:	Two-way stop	Delay (sec / veh):	14.1
Analysis Method:	HCM 6. Auflage	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.219

**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	1	1	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	280.00	450.00	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]	25.00		45.00		45.00		
Grade [%]	0.00			0.00		0.00	
Crosswalk	Ja		Ja		Ja		

**Volumes**

Name							
Base Volume Input [veh/h]	75	39	81	13	9	232	
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	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	
In-Process Volume [veh/h]	0	0	0	0	0	0	
Site-Generated Trips [veh/h]	3	0	3	3	0	3	
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]	115	58	124	22	13	349	
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	29	15	31	6	3	87	
Total Analysis Volume [veh/h]	115	58	124	22	13	349	
Pedestrian Volume [ped/h]	0			0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	Nein		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.22	0.06	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	14.11	11.16	0.00	0.00	7.53	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.15	1.15	0.00	0.00	0.03	0.00
95th-Percentile Queue Length [ft/ln]	28.73	28.73	0.00	0.00	0.69	0.00
d_A, Approach Delay [s/veh]		13.12		0.00		0.27
Approach LOS		B		A		A
d_I, Intersection Delay [s/veh]				3.48		
Intersection LOS				B		

**Intersection Level Of Service Report**  
**Intersection 6: SR-404 & North Access**

Control Type:	Two-way stop	Delay (sec / veh):	9.4
Analysis Method:	HCM 6. Auflage	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.037

**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	1	0	0	0	0	
Entry Pocket Length [ft]	100.00	50.00	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]	15.00		45.00		45.00		
Grade [%]	0.00			0.00		0.00	
Crosswalk	Ja		Ja		Ja		

**Volumes**

Name							
Base Volume Input [veh/h]	0	0	116	0	0	149	
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	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	
In-Process Volume [veh/h]	0	0	0	0	0	0	
Site-Generated Trips [veh/h]	0	32	11	1	35	9	
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	32	184	1	35	231	
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	0	8	46	0	9	58	
Total Analysis Volume [veh/h]	0	32	184	1	35	231	
Pedestrian Volume [ped/h]	0			0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.04	0.00	0.00	0.03	0.00
d_M, Delay for Movement [s/veh]	11.86	9.36	0.00	0.00	7.66	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.12	0.00	0.00	0.08	0.08
95th-Percentile Queue Length [ft/ln]	0.00	2.90	0.00	0.00	1.94	1.94
d_A, Approach Delay [s/veh]	9.36		0.00		1.01	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]			1.17			
Intersection LOS			A			

**Intersection Level Of Service Report**  
**Intersection 7: Beacon Lite Rd & West Access**

Control Type:	Two-way stop	Delay (sec / veh):	8.5
Analysis Method:	HCM 6. Auflage	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.012

**Intersection Setup**

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	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]	35.00		35.00		15.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Ja		Ja		Ja	

**Volumes**

Name						
Base Volume Input [veh/h]	26	0	0	17	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	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	9	0	0	12
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]	39	0	9	25	0	12
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	0	2	6	0	3
Total Analysis Volume [veh/h]	39	0	9	25	0	12
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Free	Free	Stop
Flared Lane			Nein
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Nein
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	7.30	0.00	8.98	8.53
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.02	0.02	0.04	0.04
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.43	0.43	0.88	0.88
d_A, Approach Delay [s/veh]	0.00		1.93		8.53	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]			1.98			
Intersection LOS			A			

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Scenario 13 2040 Background + Project + Mit AM

Report File: D:\...\11- 2040 Background + Project AM.pdf

9/16/2020

**Turning Movement Volume: Summary**

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
1	Beacon Lite Rd & SR 404	7	44	141	0	34	189	415

ID	Intersection Name	Southbound			Eastbound		Westbound		Total Volume
		Left	Thru	Right	Thru	Right	Left	Thru	
2	I-25 & SR-404 Southbound On/off Ramps	72	0	39	133	83	200	227	754

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Thru	Right	Left	Thru	Thru	Right	
3	I-25 & SR-404 Northbound On/off Ramps	143	0	61	63	142	284	182	875

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	Monument Hill Rd & SR-404	56	1	19	1	3	11	19	125	59	60	398	0	752

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	Right	
5	Doewood Dr & SR-404	115	58	124	22	13	349	681	

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	Right	
6	SR-404 & North Access	0	32	184	1	35	231	483	

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
7	Beacon Lite Rd & West Access	39	0	9	25	0	12	85

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Scenario 13 2040 Background + Project + Mit AM

Report File: D:\...\11- 2040 Background + Project AM.pdf

9/16/2020

**Turning Movement Volume: Detail**

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
1	Beacon Lite Rd & SR 404	Final Base	4	22	94	0	17	127	264
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	1	11	1	0	9	0	22
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>7</b>	<b>44</b>	<b>141</b>	<b>0</b>	<b>34</b>	<b>189</b>	<b>415</b>

ID	Intersection Name	Volume Type	Southbound			Eastbound		Westbound		Total Volume
			Left	Thru	Right	Thru	Right	Left	Thru	
2	I-25 & SR-404 Southbound On/off Ramps	Final Base	48	0	14	72	44	134	135	447
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0	0
		Net New Trips	0	0	18	26	17	0	26	87
		Other	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>72</b>	<b>0</b>	<b>39</b>	<b>133</b>	<b>83</b>	<b>200</b>	<b>227</b>	<b>754</b>

ID	Intersection Name	Volume Type	Northbound			Eastbound		Westbound		Total Volume
			Left	Thru	Right	Left	Thru	Thru	Right	
3	I-25 & SR-404 Northbound On/off Ramps	Final Base	84	0	41	30	90	185	122	552
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0	0
		Net New Trips	18	0	0	18	8	8	0	52
		Other	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>143</b>	<b>0</b>	<b>61</b>	<b>63</b>	<b>142</b>	<b>284</b>	<b>182</b>	<b>875</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	Monument Hill Rd & SR-404	Final Base	37	1	13	1	2	7	12	80	39	40	263	0	495
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	1	0	0	0	0	1	1	6	1	0	6	0	16
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>56</b>	<b>1</b>	<b>19</b>	<b>1</b>	<b>3</b>	<b>11</b>	<b>19</b>	<b>125</b>	<b>59</b>	<b>60</b>	<b>398</b>	<b>0</b>	<b>752</b>

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
5	Doewood Dr & SR-404	Final Base	75	39	81	13	9	232	449
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	3	0	3	3	0	3	12
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>115</b>	<b>58</b>	<b>124</b>	<b>22</b>	<b>13</b>	<b>349</b>	<b>681</b>

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
6	SR-404 & North Access	Final Base	0	0	116	0	0	149	265
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	32	11	1	35	9	88
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>0</b>	<b>32</b>	<b>184</b>	<b>1</b>	<b>35</b>	<b>231</b>	<b>483</b>

ID	Intersection Name	Volume Type	Northbound		Southbound		Westbound		Total Volume
			Thru	Right	Left	Thru	Left	Right	
7	Beacon Lite Rd & West Access	Final Base	26	0	0	17	0	0	43
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	9	0	0	12	21
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>39</b>	<b>0</b>	<b>9</b>	<b>25</b>	<b>0</b>	<b>12</b>	<b>85</b>

## Signal Warrants Report For Intersection 1: Beacon Lite Rd &amp; SR 404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	223	141	51
2	216	137	49
3	212	134	48
4	198	125	45
5	176	111	40
6	174	110	40
7	172	109	39
8	156	99	36
9	154	97	35
10	152	96	35
11	132	83	30
12	123	78	28
13	120	76	28
14	89	56	20
15	89	56	20
16	62	39	14
17	36	23	8
18	36	23	8
19	20	13	5
20	11	7	3
21	7	4	2
22	2	1	1
23	2	1	1
24	2	1	1

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	364	1	51	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	353	1	49	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	346	1	48	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	323	1	45	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	287	1	40	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	284	1	40	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	281	1	39	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	255	1	36	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	251	1	35	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	248	1	35	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	215	1	30	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	201	1	28	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	196	1	28	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	145	1	20	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	145	1	20	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	101	1	14	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	59	1	8	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	59	1	8	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	33	1	5	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	18	1	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	11	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	3	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	3	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	3	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	9.5
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:08
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	51
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	415
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 3: I-25 &amp; SR-404 Northbound On/off Ramps

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Ja
#2	Four Hour Vehicular Volume	Ja
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	466	205	204
2	452	199	198
3	443	195	194
4	415	182	182
5	368	162	161
6	363	160	159
7	359	158	157
8	326	144	143
9	322	141	141
10	317	139	139
11	275	121	120
12	256	113	112
13	252	111	110
14	186	82	82
15	186	82	82
16	130	57	57
17	75	33	33
18	75	33	33
19	42	18	18
20	23	10	10
21	14	6	6
22	5	2	2
23	5	2	2
24	5	2	2

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	671	1	204	Ja	Ja	Ja	Ja	Nein	Nein	Ja	Ja	Ja	Nein
2	2	651	1	198	Ja	Ja	Ja	Ja	Nein	Nein	Ja	Ja	Ja	Nein
3	2	638	1	194	Ja	Ja	Ja	Ja	Nein	Nein	Ja	Ja	Ja	Nein
4	2	597	1	182	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
5	2	530	1	161	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
6	2	523	1	159	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
7	2	517	1	157	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Nein	Nein
8	2	470	1	143	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
9	2	463	1	141	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
10	2	456	1	139	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
11	2	396	1	120	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
12	2	369	1	112	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
13	2	363	1	110	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
14	2	268	1	82	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	268	1	82	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	187	1	57	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	108	1	33	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	108	1	33	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	60	1	18	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	33	1	10	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	20	1	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	7	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	7	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	7	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					3	7	10	13	0	0	3	7	6	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	20
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	1:07
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	204
High Minor Volume Condition Met	Ja
Total Entering Volume on All Approaches During Same Hour	875
Number of Approaches on Intersection	3
Total Volume Condition Met	Ja
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 4: Monument Hill Rd &amp; SR-404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N, S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>	
	<b>E</b>	<b>W</b>	<b>N</b>	<b>S</b>
1	458	203	15	76
2	444	197	15	74
3	435	193	14	72
4	408	181	13	68
5	362	160	12	60
6	357	158	12	59
7	353	156	12	59
8	321	142	11	53
9	316	140	10	52
10	311	138	10	52
11	270	120	9	45
12	252	112	8	42
13	247	110	8	41
14	183	81	6	30
15	183	81	6	30
16	128	57	4	21
17	73	32	2	12
18	73	32	2	12
19	41	18	1	7
20	23	10	1	4
21	14	6	0	2
22	5	2	0	1
23	5	2	0	1
24	5	2	0	1

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	661	2	91	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Nein	Nein	
2	2	641	2	89	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Nein	Nein	
3	2	628	2	86	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Nein	Nein	
4	2	589	2	81	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Nein	Nein	
5	2	522	2	72	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Nein	Nein	
6	2	515	2	71	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Nein	Nein	
7	2	509	2	71	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Nein	Nein	
8	2	463	2	64	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
9	2	456	2	62	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
10	2	449	2	62	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
11	2	390	2	54	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
12	2	364	2	50	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
13	2	357	2	49	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
14	2	264	2	36	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
15	2	264	2	36	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
16	2	185	2	25	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
17	2	105	2	14	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
18	2	105	2	14	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
19	2	59	2	8	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
20	2	33	2	5	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
21	2	20	2	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
22	2	7	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
23	2	7	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
24	2	7	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	
Hours Met					0	0	0	0	0	2	7	0	0	

## Warrant 3 Condition A

Orientation	N	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	12.3	16.9
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:03	0:21
Delay Condition Met	Nein	Nein
Volume on Minor Street Approach During Same Hour	15	76
High Minor Volume Condition Met	Nein	Nein
Total Entering Volume on All Approaches During Same Hour	752	752
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Nein	Nein
Warrant Met for Approach	Nein	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>	

## Signal Warrants Report For Intersection 5: Doewood Dr &amp; SR-404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	362	146	173
2	351	142	168
3	344	139	164
4	322	130	154
5	286	115	137
6	282	114	135
7	279	112	133
8	253	102	121
9	250	101	119
10	246	99	118
11	214	86	102
12	199	80	95
13	195	79	93
14	145	58	69
15	145	58	69
16	101	41	48
17	58	23	28
18	58	23	28
19	33	13	16
20	18	7	9
21	11	4	5
22	4	1	2
23	4	1	2
24	4	1	2

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	508	1	173	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
2	4	493	1	168	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
3	4	483	1	164	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
4	4	452	1	154	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
5	4	401	1	137	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
6	4	396	1	135	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
7	4	391	1	133	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
8	4	355	1	121	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
9	4	351	1	119	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
10	4	345	1	118	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
11	4	300	1	102	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	4	279	1	95	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	4	274	1	93	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	4	203	1	69	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	4	203	1	69	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	4	142	1	48	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	4	81	1	28	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	4	81	1	28	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	4	46	1	16	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	4	25	1	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	4	15	1	5	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	4	5	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	4	5	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	4	5	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	3	4	10	0	0	0	1	1	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	13.1
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:37
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	173
High Minor Volume Condition Met	Ja
Total Entering Volume on All Approaches During Same Hour	681
Number of Approaches on Intersection	3
Total Volume Condition Met	Ja
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 6: SR-404 &amp; North Access

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	266	185	32
2	258	179	31
3	253	176	30
4	237	165	28
5	210	146	25
6	207	144	25
7	205	142	25
8	186	130	22
9	184	128	22
10	181	126	22
11	157	109	19
12	146	102	18
13	144	100	17
14	106	74	13
15	106	74	13
16	74	52	9
17	43	30	5
18	43	30	5
19	24	17	3
20	13	9	2
21	8	6	1
22	3	2	0
23	3	2	0
24	3	2	0

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	451	2	32	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	437	2	31	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	429	2	30	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	402	2	28	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	356	2	25	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	351	2	25	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	347	2	25	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	316	2	22	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	312	2	22	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	307	2	22	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	266	2	19	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	248	2	18	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	244	2	17	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	180	2	13	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	180	2	13	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	126	2	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	73	2	5	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	73	2	5	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	41	2	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	22	2	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	14	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	5	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	5	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	5	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	9.4
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:04
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	32
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	483
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 7: Beacon Lite Rd &amp; West Access

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	N, S
Minor Approaches	E
Speed > 40mph	Nein
Population < 10,000	Nein
Warrant Factor	100%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>N</b>	<b>S</b>	<b>E</b>
1	34	39	12
2	33	38	12
3	32	37	11
4	30	35	11
5	27	31	9
6	27	30	9
7	26	30	9
8	24	27	8
9	23	27	8
10	23	27	8
11	20	23	7
12	19	21	7
13	18	21	6
14	14	16	5
15	14	16	5
16	10	11	3
17	5	6	2
18	5	6	2
19	3	4	1
20	2	2	1
21	1	1	0
22	0	0	0
23	0	0	0
24	0	0	0

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	73	1	12	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	71	1	12	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	69	1	11	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	65	1	11	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	58	1	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	57	1	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	56	1	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	51	1	8	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	50	1	8	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	50	1	8	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	43	1	7	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	40	1	7	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	39	1	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	30	1	5	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	30	1	5	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	21	1	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	11	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	11	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	7	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	4	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	2	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	0	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	0	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	0	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.5
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:01
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	12
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	85
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

Vistro File: D:\...\Vistro Base.vistro

Scenario 13 2040 Background + Project + Mit AM

Report File: D:\...\11- 2040 Background + Project AM.pdf

9/16/2020

### Trip Generation Summary

#### Added Trips

Zone ID: Name	Land Use variables	Code	Ind. Var.	Rate	Quantity	% In	% Out	Trips In	Trips Out	Total Trips	% of Total Trips	
1: Zone				1.000	0.000	50.00	50.00	46	44	90	100.00	
Added Trips Total									<b>46</b>	<b>44</b>	<b>90</b>	<b>100.00</b>

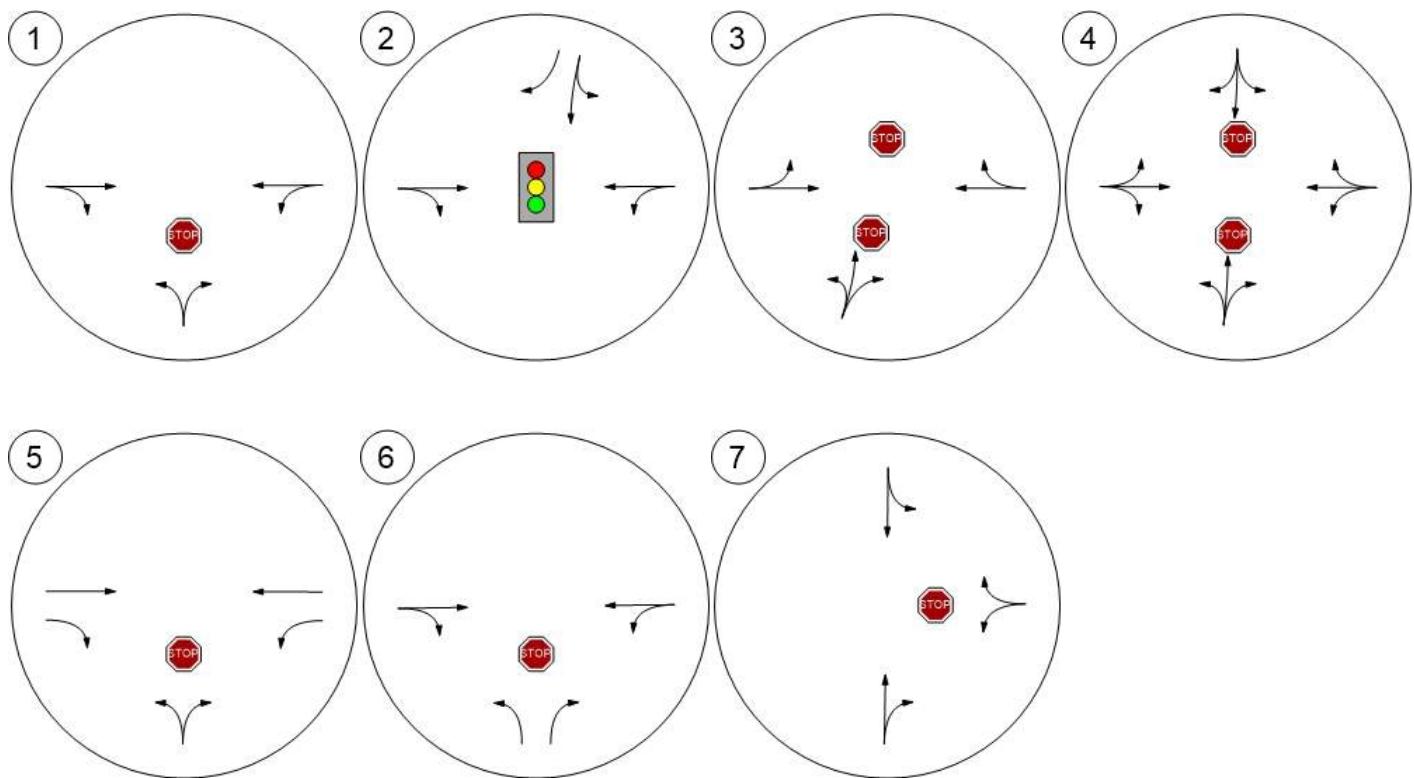
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Report File: D:\...\11- 2040 Background + Project AM.pdf

Scenario 13 2040 Background + Project + Mit AM  
9/16/2020

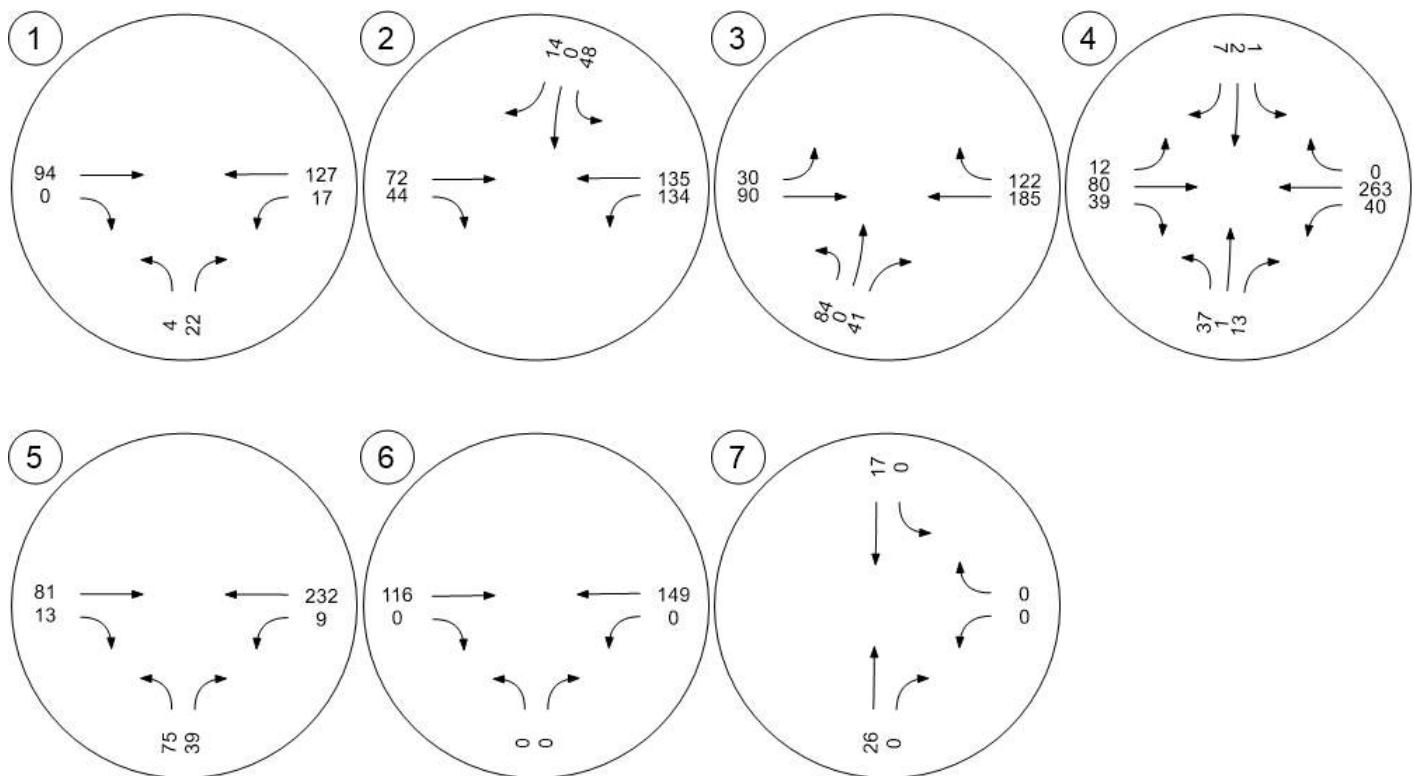
### Trip Distribution Summary

Zone / Gate	Zone 1: Zone			
	To Zone:		From Zone:	
	Share %	Trips	Share %	Trips
2: Gate	40.00	18	0.00	0
3: Gate	0.00	0	40.00	18
4: Gate	2.00	1	2.00	1
5: Gate	7.00	3	7.00	3
6: Gate	6.00	3	6.00	3
7: Gate	2.00	1	2.00	1
8: Gate	40.00	18	0.00	0
9: Gate	0.00	0	40.00	17
10: Gate	1.00	0	1.00	0
11: Gate	2.00	1	2.00	1
<b>Total</b>	<b>100.00</b>	<b>45</b>	<b>100.00</b>	<b>44</b>

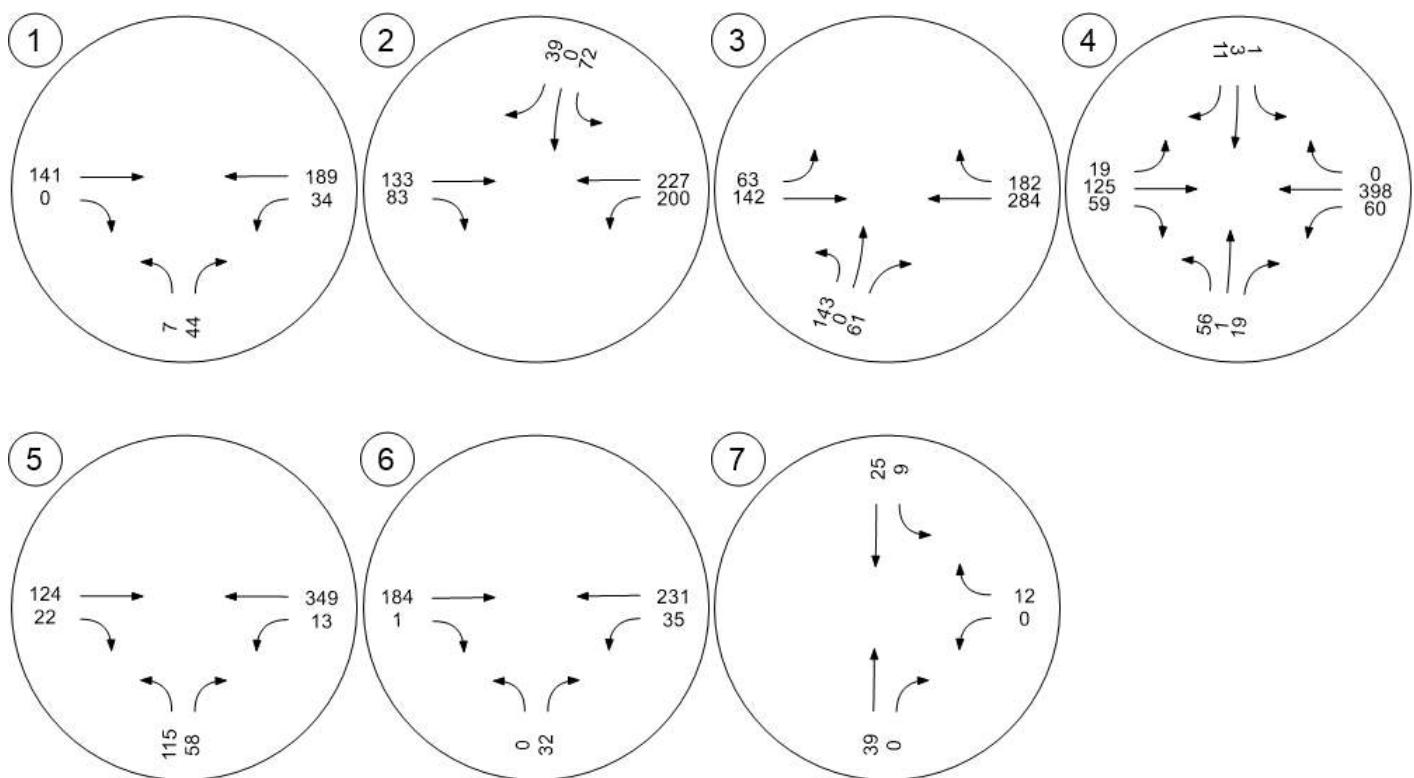
## Lane Configuration and Traffic Control



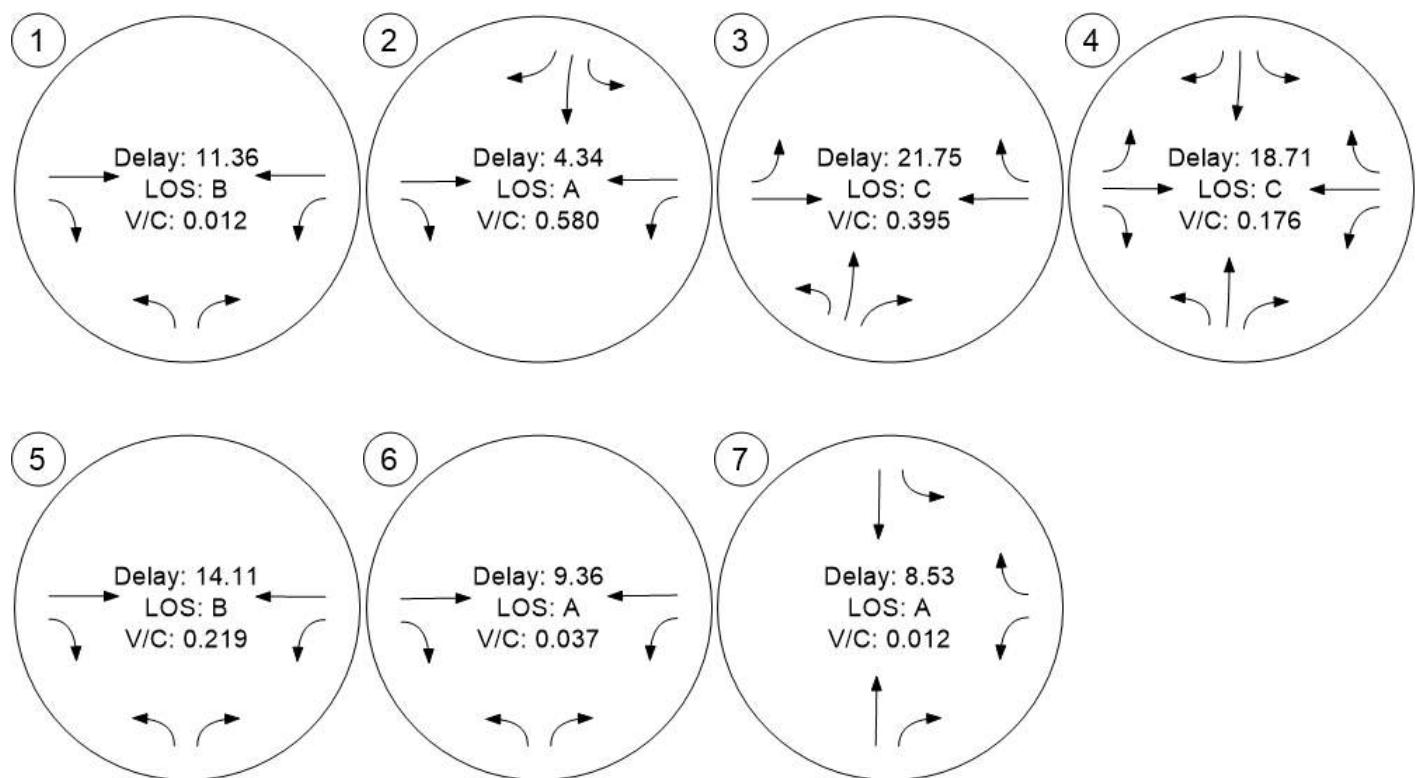
## Traffic Volume - Base Volume



## Traffic Volume - Future Total Volume



## Traffic Conditions



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Report File: D:\...\12- 2040 Background + Project PM.pdf

Scenario 14 2040 Background + Project + Mit PM  
9/16/2020

### Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Beacon Lite Rd & SR 404	Two-way stop	HCM 6. Auflage	NB Left	0.002	13.1	B
2	I-25 & SR-404 Southbound On/off Ramps	Signalized	HCM 6. Auflage	SB Left	0.610	6.7	A
3	I-25 & SR-404 Northbound On/off Ramps	Two-way stop	HCM 6. Auflage	NB Left	0.460	34.5	D
4	Monument Hill Rd & SR-404	Two-way stop	HCM 6. Auflage	NB Left	0.187	22.0	C
5	Doewood Dr & SR-404	Two-way stop	HCM 6. Auflage	NB Left	0.157	14.7	B
6	SR-404 & North Access	Two-way stop	HCM 6. Auflage	NB Left	0.002	13.8	B
7	Beacon Lite Rd & West Access	Two-way stop	HCM 6. Auflage	WB Left	0.001	9.3	A

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: Beacon Lite Rd & SR 404**

Control Type:	Two-way stop	Delay (sec / veh):	13.1
Analysis Method:	HCM 6. Auflage	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

**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]	35.00		45.00		45.00		
Grade [%]	0.00			0.00		0.00	
Crosswalk	Ja		Ja		Ja		

**Volumes**

Name							
Base Volume Input [veh/h]	0	45	154	1	29	137	
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	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	
In-Process Volume [veh/h]	0	0	0	0	0	0	
Site-Generated Trips [veh/h]	1	14	1	0	12	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	81	230	1	55	204	
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	0	20	58	0	14	51	
Total Analysis Volume [veh/h]	1	81	230	1	55	204	
Pedestrian Volume [ped/h]	0			0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	Nein		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.10	0.00	0.00	0.04	0.00
d_M, Delay for Movement [s/veh]	13.07	9.96	0.00	0.00	7.81	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.34	0.34	0.00	0.00	0.13	0.13
95th-Percentile Queue Length [ft/ln]	8.51	8.51	0.00	0.00	3.22	3.22
d_A, Approach Delay [s/veh]	10.00		0.00		1.66	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]			2.18			
Intersection LOS			B			

**Intersection Level Of Service Report**  
**Intersection 2: I-25 & SR-404 Southbound On/off Ramps**

Control Type:	Signalized	Delay (sec / veh):	6.7
Analysis Method:	HCM 6. Auflage	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.610

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach												
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	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	50.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				Nein			Nein			Nein		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	0	0	0	131	0	31	0	116	81	100	135	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.4900	1.4900	1.4900	1.0000	1.4900	1.4900	1.4900	1.4900	1.0000
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	24	0	32	23	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	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	195	0	70	0	205	144	149	235	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	49	0	18	0	51	36	37	59	0
Total Analysis Volume [veh/h]	0	0	0	195	0	70	0	205	144	149	235	0
Presence of On-Street Parking				Nein		Nein	Nein		Nein	Nein		Nein
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	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

## Intersection Settings

Located in CBD	Ja
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Verkehrsabhängig
Versatz [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost Time [s]	0.00

## Phasing & Timing

## Exclusive Pedestrian Phase

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

**Lane Group Calculations**

Lane Group		C	R	C	C
C, Cycle Length [s]		31	31	31	31
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00
I1_p, Permitted Start-Up Lost Time [s]		2.00	0.00	0.00	2.00
I2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		12	12	27	12
g / C, Green / Cycle		0.37	0.37	0.87	0.37
(v / s)_i Volume / Saturation Flow Rate		0.30	0.05	0.22	0.31
s, Saturation Flow Rate [veh/h]		657	1431	1569	1227
c, Capacity [veh/h]		476	535	1368	614
d1, Uniform Delay [s]		10.72	6.45	0.33	9.04
k, Delay Calibration		0.11	0.11	0.11	0.11
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		0.57	0.11	0.10	1.05
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00
Rp, Platoon Ratio		1.00	1.00	1.00	1.00
PF, Progression Factor		1.00	1.00	1.00	1.00

**Lane Group Results**

X, Volume / Capacity		0.41	0.13	0.26	0.63
d, Delay for Lane Group [s/veh]		11.28	6.56	0.43	10.09
Lane Group LOS		B	A	A	B
Critical Lane Group		Ja	Nein	Nein	Ja
50th-Percentile Queue Length [veh/ln]		0.94	0.20	0.04	1.13
50th-Percentile Queue Length [ft/ln]		23.54	5.12	0.92	28.37
95th-Percentile Queue Length [veh/ln]		1.70	0.37	0.07	2.04
95th-Percentile Queue Length [ft/ln]		42.38	9.21	1.66	51.07

**Movement, Approach, & Intersection Results**

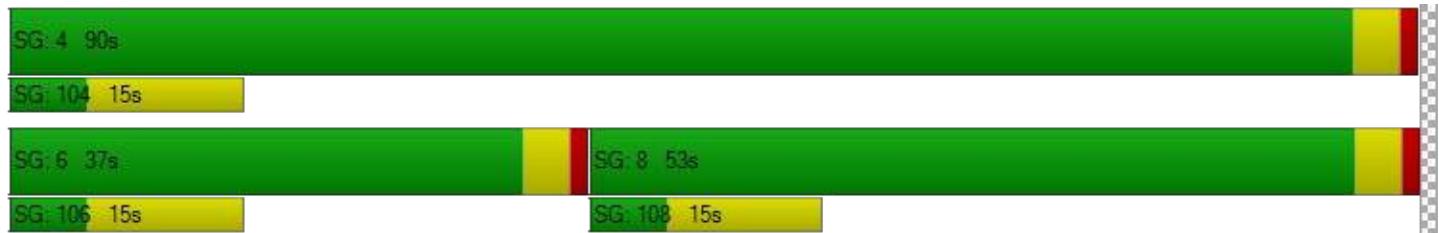
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	11.28	11.28	6.56	0.00	0.43	0.43	10.09	10.09	0.00
Movement LOS				B	B	A		A	A	B	B	
d_A, Approach Delay [s/veh]		0.00			10.04			0.43			10.09	
Approach LOS		A		B			A			B		
d_I, Intersection Delay [s/veh]					6.70							
Intersection LOS							A					
Intersection V/C						0.610						

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	1.923	1.846	2.195	2.567
Crosswalk LOS	A	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	733	1911	1089
d_b, Bicycle Delay [s]	45.00	18.05	0.09	9.34
I_b,int, Bicycle LOS Score for Intersection	4.132	1.997	2.135	2.193
Bicycle LOS	D	A	B	B

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 3: I-25 & SR-404 Northbound On/off Ramps**

Control Type:	Two-way stop	Delay (sec / veh):	34.5
Analysis Method:	HCM 6. Auflage	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.460

**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]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	76	0	117	0	0	0	27	220	0	0	159	77
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.0000	1.0000	1.0000	1.4900	1.4900	1.0000	1.0000	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	24	0	0	0	0	0	23	9	0	0	10	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]	137	0	174	0	0	0	63	337	0	0	247	115
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	34	0	44	0	0	0	16	84	0	0	62	29
Total Analysis Volume [veh/h]	137	0	174	0	0	0	63	337	0	0	247	115
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	Nein			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Nein			
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.46	0.00	0.25	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	34.45	34.89	27.48	0.00	0.00	0.00	8.18	0.00	0.00	0.00	0.00	0.00
Movement LOS	D	D	D				A	A			A	A
95th-Percentile Queue Length [veh/ln]	5.41	5.41	5.41	0.00	0.00	0.00	0.17	0.17	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	135.15	135.15	135.15	0.00	0.00	0.00	4.16	4.16	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		30.55			0.00			1.29			0.00	
Approach LOS		D			A			A			A	
d_I, Intersection Delay [s/veh]							9.34					
Intersection LOS							D					

**Intersection Level Of Service Report**  
**Intersection 4: Monument Hill Rd & SR-404**

Control Type:	Two-way stop	Delay (sec / veh):	22.0
Analysis Method:	HCM 6. Auflage	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.187

**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]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
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			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Ja			Ja			Ja			Ja		

**Volumes**

Name												
Base Volume Input [veh/h]	33	1	29	1	1	8	11	295	31	13	195	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	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	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
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	1	1	7	1	0	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
Total Hourly Volume [veh/h]	50	1	43	1	1	13	17	447	47	19	299	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	0	11	0	0	3	4	112	12	5	75	0
Total Analysis Volume [veh/h]	50	1	43	1	1	13	17	447	47	19	299	0
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	Nein	Nein		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Nein	Nein		
Number of Storage Spaces in Median	0	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.19	0.00	0.07	0.00	0.00	0.02	0.01	0.00	0.00	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	22.04	21.02	14.63	19.77	18.01	10.02	7.89	0.00	0.00	8.43	0.00	0.00
Movement LOS	C	C	B	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.04	1.04	1.04	0.08	0.08	0.08	0.04	0.04	0.04	0.05	0.05	0.05
95th-Percentile Queue Length [ft/ln]	25.97	25.97	25.97	1.94	1.94	1.94	1.02	1.02	1.02	1.36	1.36	1.36
d_A, Approach Delay [s/veh]		18.64			11.20			0.26			0.50	
Approach LOS		C		B			A			A		
d_I, Intersection Delay [s/veh]							2.36					
Intersection LOS							C					

**Intersection Level Of Service Report**  
**Intersection 5: Doewood Dr & SR-404**

Control Type:	Two-way stop	Delay (sec / veh):	14.7
Analysis Method:	HCM 6. Auflage	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.157

**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	1	1	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	280.00	450.00	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]	25.00		45.00		45.00		
Grade [%]	0.00			0.00		0.00	
Crosswalk	Ja		Ja		Ja		

**Volumes**

Name							
Base Volume Input [veh/h]	44	10	234	91	10	157	
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	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	
In-Process Volume [veh/h]	0	0	0	0	0	0	
Site-Generated Trips [veh/h]	4	0	4	3	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]	70	15	353	139	15	238	
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	18	4	88	35	4	60	
Total Analysis Volume [veh/h]	70	15	353	139	15	238	
Pedestrian Volume [ped/h]	0			0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	Nein		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.16	0.02	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	14.74	11.86	0.00	0.00	8.41	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.65	0.65	0.00	0.00	0.04	0.00
95th-Percentile Queue Length [ft/ln]	16.15	16.15	0.00	0.00	1.06	0.00
d_A, Approach Delay [s/veh]	14.23		0.00		0.50	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]			1.61			
Intersection LOS			B			

**Intersection Level Of Service Report**  
**Intersection 6: SR-404 & North Access**

Control Type:	Two-way stop	Delay (sec / veh):	13.8
Analysis Method:	HCM 6. Auflage	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

**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	1	0	0	0	0	
Entry Pocket Length [ft]	100.00	50.00	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]	15.00		45.00		45.00		
Grade [%]	0.00			0.00		0.00	
Crosswalk	Ja			Ja		Ja	

**Volumes**

Name							
Base Volume Input [veh/h]	0	0	199	0	0	166	
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	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	
In-Process Volume [veh/h]	0	0	0	0	0	0	
Site-Generated Trips [veh/h]	1	41	14	1	46	12	
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	41	311	1	46	259	
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	0	10	78	0	12	65	
Total Analysis Volume [veh/h]	1	41	311	1	46	259	
Pedestrian Volume [ped/h]	0			0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Nein		
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.06	0.00	0.00	0.04	0.00
d_M, Delay for Movement [s/veh]	13.84	10.23	0.00	0.00	7.99	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.18	0.00	0.00	0.11	0.11
95th-Percentile Queue Length [ft/ln]	0.18	4.46	0.00	0.00	2.87	2.87
d_A, Approach Delay [s/veh]		10.32		0.00		1.21
Approach LOS		B		A		A
d_I, Intersection Delay [s/veh]				1.22		
Intersection LOS				B		

**Intersection Level Of Service Report**  
**Intersection 7: Beacon Lite Rd & West Access**

Control Type:	Two-way stop	Delay (sec / veh):	9.3
Analysis Method:	HCM 6. Auflage	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

**Intersection Setup**

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	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]	35.00		35.00		15.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Ja		Ja		Ja	

**Volumes**

Name						
Base Volume Input [veh/h]	45	0	0	30	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	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	12	0	1	15
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]	67	1	12	45	1	15
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	0	3	11	0	4
Total Analysis Volume [veh/h]	67	1	12	45	1	15
Pedestrian Volume [ped/h]	0			0		0

**Intersection Settings**

Priority Scheme	Free	Free	Stop
Flared Lane			Nein
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Nein
Number of Storage Spaces in Median	0	0	0

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.00	0.02
d_M, Delay for Movement [s/veh]	0.00	0.00	7.37	0.00	9.30	8.68
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.02	0.02	0.05	0.05
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.59	0.59	1.24	1.24
d_A, Approach Delay [s/veh]	0.00		1.55		8.71	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]			1.62			
Intersection LOS			A			

Vistro File: D:\...\Vistro Base.vistro

Scenario 14 2040 Background + Project + Mit PM

Report File: D:\...\12- 2040 Background + Project PM.pdf

9/16/2020

**Turning Movement Volume: Summary**

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
1	Beacon Lite Rd & SR 404	1	81	230	1	55	204	572

ID	Intersection Name	Southbound			Eastbound		Westbound		Total Volume
		Left	Thru	Right	Thru	Right	Left	Thru	
2	I-25 & SR-404 Southbound On/off Ramps	195	0	70	205	144	149	235	998

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Thru	Right	Left	Thru	Thru	Right	
3	I-25 & SR-404 Northbound On/off Ramps	137	0	174	63	337	247	115	1073

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	Monument Hill Rd & SR-404	50	1	43	1	1	13	17	447	47	19	299	0	938

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	Right	
5	Doewood Dr & SR-404	70	15	353	139	15	238	830	

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	Right	
6	SR-404 & North Access	1	41	311	1	46	259	659	

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
7	Beacon Lite Rd & West Access	67	1	12	45	1	15	141

Vistro File: D:\...\Vistro Base.vistro

Scenario 14 2040 Background + Project + Mit PM

Report File: D:\...\12- 2040 Background + Project PM.pdf

9/16/2020

**Turning Movement Volume: Detail**

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
1	Beacon Lite Rd & SR 404	Final Base	0	45	154	1	29	137	366
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	1	14	1	0	12	0	28
		Other	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>1</b>	<b>81</b>	<b>230</b>	<b>1</b>	<b>55</b>	<b>204</b>	<b>572</b>

ID	Intersection Name	Volume Type	Southbound			Eastbound		Westbound		Total Volume
			Left	Thru	Right	Thru	Right	Left	Thru	
2	I-25 & SR-404 Southbound On/off Ramps	Final Base	131	0	31	116	81	100	135	594
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0	0
		Net New Trips	0	0	24	32	23	0	34	113
		Other	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>195</b>	<b>0</b>	<b>70</b>	<b>205</b>	<b>144</b>	<b>149</b>	<b>235</b>	<b>998</b>

ID	Intersection Name	Volume Type	Northbound			Eastbound		Westbound		Total Volume
			Left	Thru	Right	Left	Thru	Thru	Right	
3	I-25 & SR-404 Northbound On/off Ramps	Final Base	76	0	117	27	220	159	77	676
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0	0
		Net New Trips	24	0	0	23	9	10	0	66
		Other	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>137</b>	<b>0</b>	<b>174</b>	<b>63</b>	<b>337</b>	<b>247</b>	<b>115</b>	<b>1073</b>

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4	Monument Hill Rd & SR-404	Final Base	33	1	29	1	1	8	11	295	31	13	195	0	618
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	1	0	0	0	0	1	1	7	1	0	8	0	19
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		<b>Future Total</b>	<b>50</b>	<b>1</b>	<b>43</b>	<b>1</b>	<b>1</b>	<b>13</b>	<b>17</b>	<b>447</b>	<b>47</b>	<b>19</b>	<b>299</b>	<b>0</b>	<b>938</b>

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
5	Doewood Dr & SR-404	Final Base	44	10	234	91	10	157	546
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	4	0	4	3	0	4	15
		Other	0	0	0	0	0	0	0
		Future Total	70	15	353	139	15	238	830

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
6	SR-404 & North Access	Final Base	0	0	199	0	0	166	365
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	1	41	14	1	46	12	115
		Other	0	0	0	0	0	0	0
		Future Total	1	41	311	1	46	259	659

ID	Intersection Name	Volume Type	Northbound		Southbound		Westbound		Total Volume
			Thru	Right	Left	Thru	Left	Right	
7	Beacon Lite Rd & West Access	Final Base	45	0	0	30	0	0	75
		Growth Factor	1.49	1.49	1.49	1.49	1.49	1.49	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	1	12	0	1	15	29
		Other	0	0	0	0	0	0	0
		Future Total	67	1	12	45	1	15	141

## Signal Warrants Report For Intersection 1: Beacon Lite Rd &amp; SR 404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	259	231	82
2	251	224	80
3	246	219	78
4	231	206	73
5	205	182	65
6	202	180	64
7	199	178	63
8	181	162	57
9	179	159	57
10	176	157	56
11	153	136	48
12	142	127	45
13	140	125	44
14	104	92	33
15	104	92	33
16	73	65	23
17	41	37	13
18	41	37	13
19	23	21	7
20	13	12	4
21	8	7	2
22	3	2	1
23	3	2	1
24	3	2	1

**Warrant Analysis by Hour**

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	490	1	82	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	475	1	80	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	465	1	78	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	437	1	73	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	387	1	65	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	382	1	64	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	377	1	63	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	343	1	57	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	338	1	57	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	333	1	56	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	289	1	48	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	269	1	45	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	265	1	44	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	196	1	33	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	196	1	33	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	138	1	23	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	78	1	13	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	78	1	13	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	44	1	7	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	25	1	4	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	15	1	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	5	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	5	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	5	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

**Warrant 3 Condition A**

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	10
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:13
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	82
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	572
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 3: I-25 &amp; SR-404 Northbound On/off Ramps

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Ja
#2	Four Hour Vehicular Volume	Ja
#3	Peak Hour	Ja

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	362	400	311
2	351	388	302
3	344	380	295
4	322	356	277
5	286	316	246
6	282	312	243
7	279	308	239
8	253	280	218
9	250	276	215
10	246	272	211
11	214	236	183
12	199	220	171
13	195	216	168
14	145	160	124
15	145	160	124
16	101	112	87
17	58	64	50
18	58	64	50
19	33	36	28
20	18	20	16
21	11	12	9
22	4	4	3
23	4	4	3
24	4	4	3

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%	Condition B	
1	2	762	1	311	Ja	Ja	Ja	Ja	Nein	Ja	Ja	Ja	Ja	Ja
2	2	739	1	302	Ja	Ja	Ja	Ja	Nein	Ja	Ja	Ja	Ja	Ja
3	2	724	1	295	Ja	Ja	Ja	Ja	Nein	Ja	Ja	Ja	Ja	Ja
4	2	678	1	277	Ja	Ja	Ja	Ja	Nein	Nein	Ja	Ja	Ja	Ja
5	2	602	1	246	Ja	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Ja
6	2	594	1	243	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
7	2	587	1	239	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
8	2	533	1	218	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
9	2	526	1	215	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
10	2	518	1	211	Nein	Ja	Ja	Ja	Nein	Nein	Nein	Ja	Ja	Nein
11	2	450	1	183	Nein	Nein	Ja	Ja	Nein	Nein	Nein	Nein	Nein	Nein
12	2	419	1	171	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
13	2	411	1	168	Nein	Nein	Nein	Ja	Nein	Nein	Nein	Nein	Nein	Nein
14	2	305	1	124	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	305	1	124	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	213	1	87	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	122	1	50	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	122	1	50	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	69	1	28	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	38	1	16	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	23	1	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	8	1	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	8	1	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	8	1	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					5	10	11	13	0	3	4	10	10	5

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	30.6
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]:mm)	2:38
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	311
High Minor Volume Condition Met	Ja
Total Entering Volume on All Approaches During Same Hour	1073
Number of Approaches on Intersection	3
Total Volume Condition Met	Ja
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 4: Monument Hill Rd &amp; SR-404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N, S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>	
	<b>E</b>	<b>W</b>	<b>N</b>	<b>S</b>
1	318	511	15	94
2	308	496	15	91
3	302	485	14	89
4	283	455	13	84
5	251	404	12	74
6	248	399	12	73
7	245	393	12	72
8	223	358	11	66
9	219	353	10	65
10	216	347	10	64
11	188	301	9	55
12	175	281	8	52
13	172	276	8	51
14	127	204	6	38
15	127	204	6	38
16	89	143	4	26
17	51	82	2	15
18	51	82	2	15
19	29	46	1	8
20	16	26	1	5
21	10	15	0	3
22	3	5	0	1
23	3	5	0	1
24	3	5	0	1

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%	Condition B	
1	2	829	2	109	Nein	Nein	Ja	Nein	Ja	Ja	Ja	Ja	Ja	Nein
2	2	804	2	106	Nein	Nein	Ja	Nein	Ja	Ja	Ja	Ja	Ja	Nein
3	2	787	2	103	Nein	Nein	Ja	Nein	Ja	Ja	Ja	Ja	Ja	Nein
4	2	738	2	97	Nein	Nein	Ja	Nein	Ja	Ja	Ja	Ja	Ja	Nein
5	2	655	2	86	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Ja	Nein	Nein
6	2	647	2	85	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Ja	Nein	Nein
7	2	638	2	84	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Ja	Nein	Nein
8	2	581	2	77	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Ja	Nein	Nein
9	2	572	2	75	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Ja	Nein	Nein
10	2	563	2	74	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Ja	Nein	Nein
11	2	489	2	64	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	456	2	60	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	448	2	59	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	331	2	44	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	331	2	44	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	232	2	30	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	133	2	17	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	133	2	17	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	75	2	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	42	2	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	25	2	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	8	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	8	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	8	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	4	0	4	7	10	3	0

## Warrant 3 Condition A

Orientation	N	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	11.2	18.6
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:02	0:29
Delay Condition Met	Nein	Nein
Volume on Minor Street Approach During Same Hour	15	94
High Minor Volume Condition Met	Nein	Nein
Total Entering Volume on All Approaches During Same Hour	938	938
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Ja	Ja
Warrant Met for Approach	Nein	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>	

## Signal Warrants Report For Intersection 5: Doewood Dr &amp; SR-404

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	253	492	85
2	245	477	82
3	240	467	81
4	225	438	76
5	200	389	67
6	197	384	66
7	195	379	65
8	177	344	59
9	175	339	59
10	172	335	58
11	149	290	50
12	139	271	47
13	137	266	46
14	101	197	34
15	101	197	34
16	71	138	24
17	40	79	14
18	40	79	14
19	23	44	8
20	13	25	4
21	8	15	3
22	3	5	1
23	3	5	1
24	3	5	1

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	4	745	1	85	Nein	Nein	Ja	Nein	Ja	Ja	Ja	Ja	Nein	Nein
2	4	722	1	82	Nein	Nein	Nein	Nein	Ja	Ja	Ja	Ja	Nein	Nein
3	4	707	1	81	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Ja	Nein	Nein
4	4	663	1	76	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Ja	Nein	Nein
5	4	589	1	67	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Ja	Nein	Nein
6	4	581	1	66	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Ja	Nein	Nein
7	4	574	1	65	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Ja	Nein	Nein
8	4	521	1	59	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Ja	Nein	Nein
9	4	514	1	59	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Ja	Nein	Nein
10	4	507	1	58	Nein	Nein	Nein	Nein	Nein	Ja	Ja	Ja	Nein	Nein
11	4	439	1	50	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	4	410	1	47	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	4	403	1	46	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	4	298	1	34	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	4	298	1	34	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	4	209	1	24	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	4	119	1	14	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	4	119	1	14	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	4	67	1	8	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	4	38	1	4	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	4	23	1	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	4	8	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	4	8	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	4	8	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	1	0	2	4	10	0	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	14.2
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:20
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	85
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	830
Number of Approaches on Intersection	3
Total Volume Condition Met	Ja
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 6: SR-404 &amp; North Access

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	Ja
Population < 10,000	Nein
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>S</b>
1	305	312	42
2	296	303	41
3	290	296	40
4	271	278	37
5	241	246	33
6	238	243	33
7	235	240	32
8	214	218	29
9	210	215	29
10	207	212	29
11	180	184	25
12	168	172	23
13	165	168	23
14	122	125	17
15	122	125	17
16	85	87	12
17	49	50	7
18	49	50	7
19	27	28	4
20	15	16	2
21	9	9	1
22	3	3	0
23	3	3	0
24	3	3	0

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	617	2	42	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	599	2	41	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	586	2	40	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	549	2	37	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	487	2	33	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	481	2	33	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	475	2	32	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	432	2	29	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	425	2	29	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	419	2	29	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	364	2	25	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	340	2	23	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	333	2	23	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	247	2	17	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	247	2	17	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	172	2	12	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	99	2	7	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	99	2	7	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	55	2	4	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	31	2	2	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	18	2	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	6	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	6	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	6	2	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	10.3
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:07
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	42
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	659
Number of Approaches on Intersection	3
Total Volume Condition Met	Ja
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

## Signal Warrants Report For Intersection 7: Beacon Lite Rd &amp; West Access

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Nein
#2	Four Hour Vehicular Volume	Nein
#3	Peak Hour	Nein

## Intersection Warrants Parameters

Major Approaches	N, S
Minor Approaches	E
Speed > 40mph	Nein
Population < 10,000	Nein
Warrant Factor	100%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>N</b>	<b>S</b>	<b>E</b>
1	57	68	16
2	55	66	16
3	54	65	15
4	51	61	14
5	45	54	13
6	44	53	12
7	44	52	12
8	40	48	11
9	39	47	11
10	39	46	11
11	34	40	9
12	31	37	9
13	31	37	9
14	23	27	6
15	23	27	6
16	16	19	4
17	9	11	3
18	9	11	3
19	5	6	1
20	3	3	1
21	2	2	0
22	1	1	0
23	1	1	0
24	1	1	0

## Warrant Analysis by Hour

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3 Condition B
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		
1	2	125	1	16	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
2	2	121	1	16	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
3	2	119	1	15	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
4	2	112	1	14	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
5	2	99	1	13	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
6	2	97	1	12	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
7	2	96	1	12	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
8	2	88	1	11	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
9	2	86	1	11	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
10	2	85	1	11	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
11	2	74	1	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
12	2	68	1	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
13	2	68	1	9	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
14	2	50	1	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
15	2	50	1	6	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
16	2	35	1	4	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
17	2	20	1	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
18	2	20	1	3	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
19	2	11	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
20	2	6	1	1	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
21	2	4	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
22	2	2	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
23	2	2	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
24	2	2	1	0	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein	Nein
Hours Met					0	0	0	0	0	0	0	0	0	0

## Warrant 3 Condition A

Orientation	E
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.7
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:02
Delay Condition Met	Nein
Volume on Minor Street Approach During Same Hour	16
High Minor Volume Condition Met	Nein
Total Entering Volume on All Approaches During Same Hour	141
Number of Approaches on Intersection	3
Total Volume Condition Met	Nein
Warrant Met for Approach	Nein
<b>Warrant Met for Intersection</b>	<b>Nein</b>

Vistro File: D:\...\Vistro Base.vistro

Scenario 14 2040 Background + Project + Mit PM

Report File: D:\...\12- 2040 Background + Project PM.pdf

9/16/2020

## Trip Generation Summary

## **Added Trips**

Zone ID: Name	Land Use variables	Code	Ind. Var.	Rate	Quantity	% In	% Out	Trips In	Trips Out	Total Trips	% of Total Trips
1: Zone				1.000	0.000	50.00	50.00	60	57	117	100.00
<b>Added Trips Total</b>								<b>60</b>	<b>57</b>	<b>117</b>	<b>100.00</b>

Vistro File: D:\...\Vistro Base.vistro

Scenario 14 2040 Background + Project + Mit PM

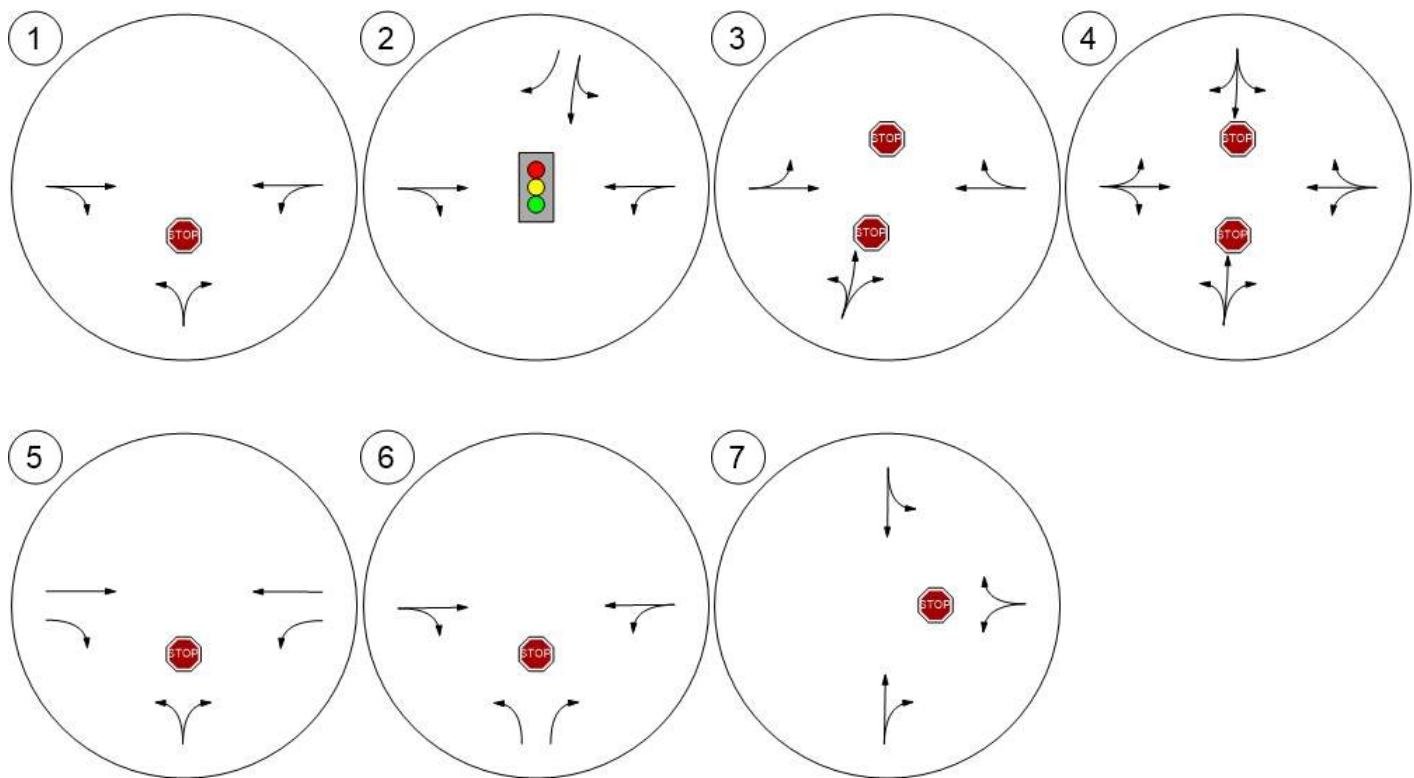
Report File: D:\...\12- 2040 Background + Project PM.pdf

9/16/2020

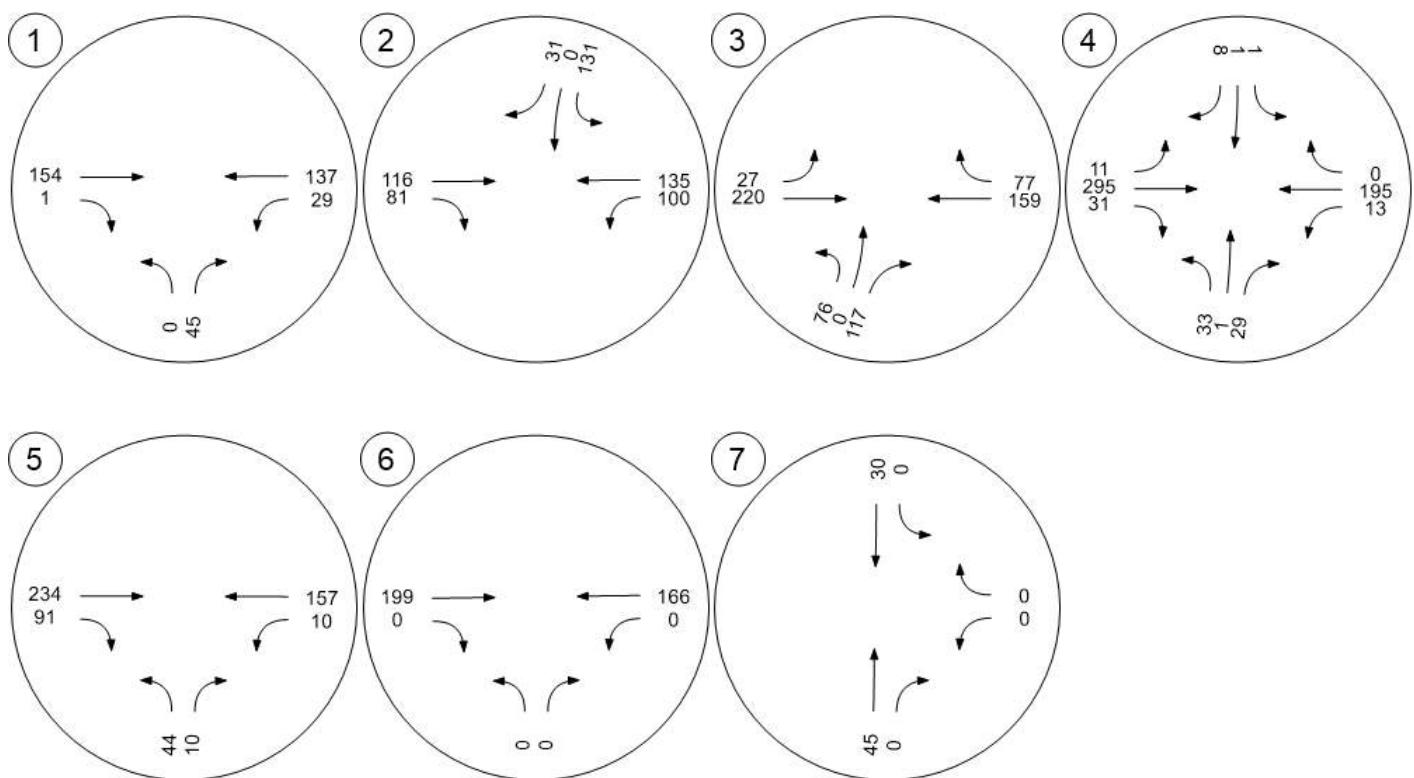
### Trip Distribution Summary

Zone / Gate	Zone 1: Zone			
	To Zone:		From Zone:	
	Share %	Trips	Share %	Trips
2: Gate	40.00	24	0.00	0
3: Gate	0.00	0	40.00	23
4: Gate	2.00	1	2.00	1
5: Gate	7.00	4	7.00	4
6: Gate	6.00	4	6.00	3
7: Gate	2.00	1	2.00	1
8: Gate	40.00	24	0.00	0
9: Gate	0.00	0	40.00	23
10: Gate	1.00	1	1.00	1
11: Gate	2.00	1	2.00	1
<b>Total</b>	<b>100.00</b>	<b>60</b>	<b>100.00</b>	<b>57</b>

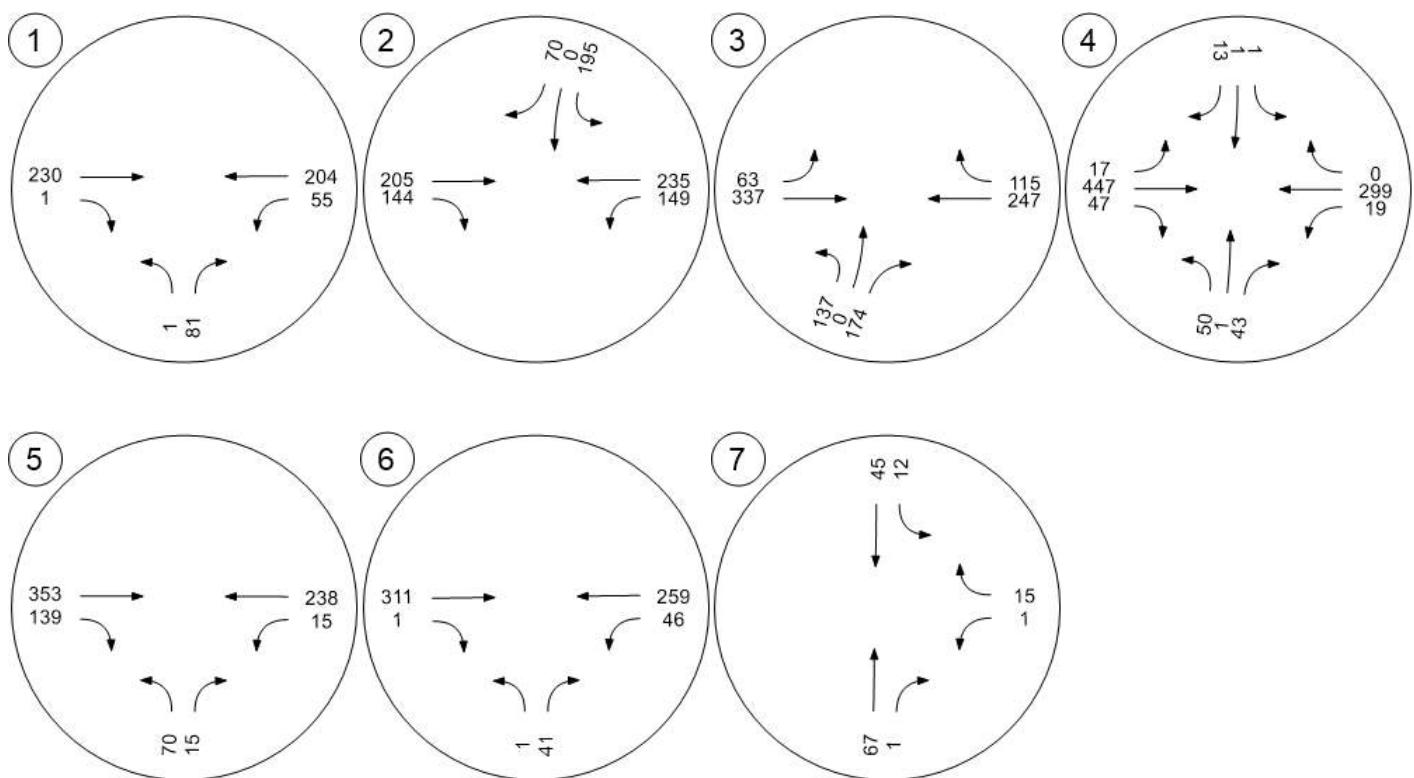
## Lane Configuration and Traffic Control



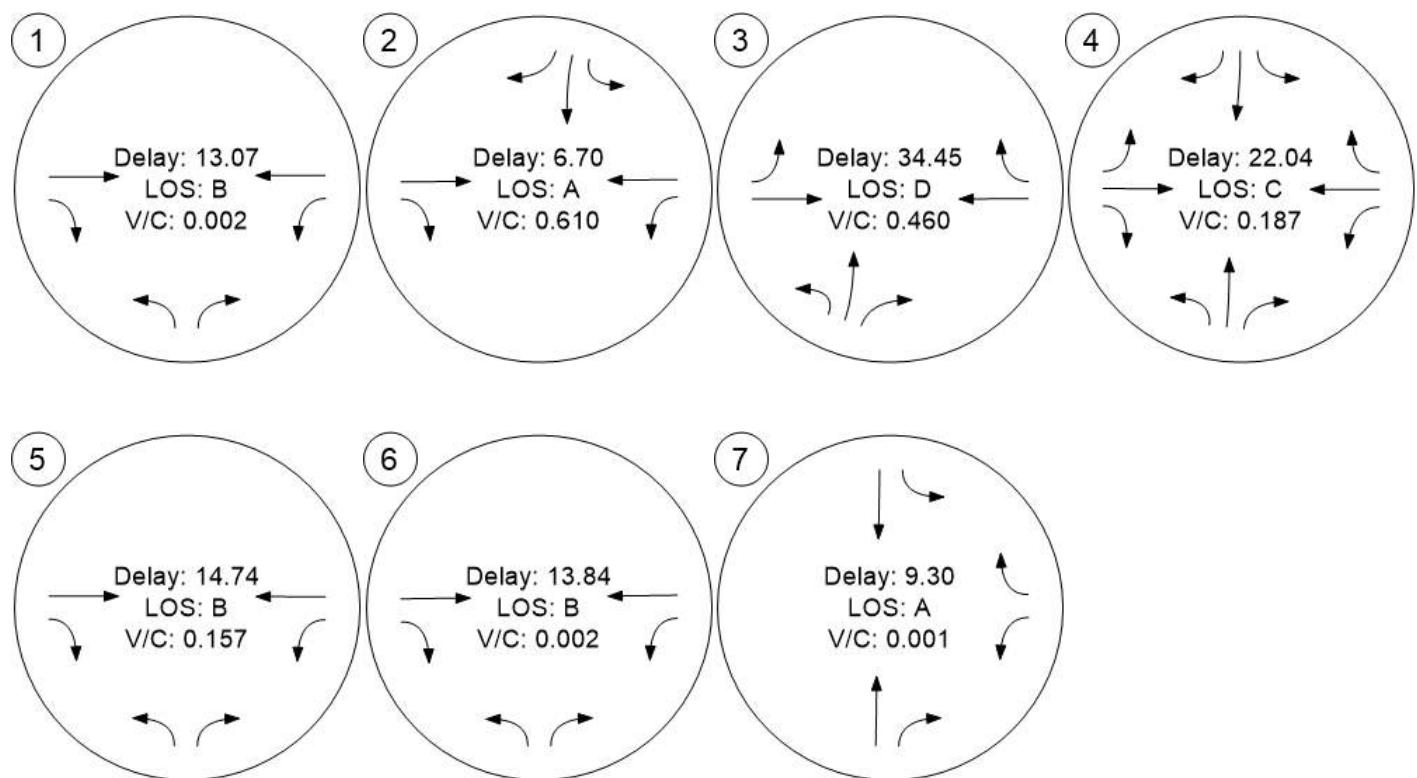
## Traffic Volume - Base Volume



## Traffic Volume - Future Total Volume



## Traffic Conditions





Traffic Signal Warrant

## Signal Warrants Report For Intersection 2: I-25 &amp; SR-404 Southbound On/off Ramps

## Warrants Summary

<b>Warrant</b>	<b>Name</b>	<b>Met?</b>
#1	Eight Hour Vehicular Volume	Yes
#2	Four Hour Vehicular Volume	Yes
#3	Peak Hour	No

## Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

## Warrant Analysis Traffic Volumes

<b>Hour</b>	<b>Major Streets</b>		<b>Minor Streets</b>
	<b>E</b>	<b>W</b>	<b>N</b>
1	350	294	241
2	340	285	234
3	333	279	229
4	312	262	214
5	277	232	190
6	273	229	188
7	270	226	186
8	245	206	169
9	241	203	166
10	238	200	164
11	207	173	142
12	193	162	133
13	189	159	130
14	140	118	96
15	140	118	96
16	98	82	67
17	56	47	39
18	56	47	39
19	32	26	22
20	18	15	12
21	11	9	7
22	4	3	2
23	4	3	2
24	4	3	2

**Warrant Analysis by Hour**

Hour	Major Lanes		Minor Lanes		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%	Condition B	
1	2	644	2	241	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No
2	2	625	2	234	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	No
3	2	612	2	229	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	No
4	2	574	2	214	No	Yes	Yes	Yes	No	No	No	Yes	Yes	No
5	2	509	2	190	No	Yes	Yes	Yes	No	No	No	Yes	No	No
6	2	502	2	188	No	Yes	Yes	Yes	No	No	No	No	No	No
7	2	496	2	186	No	Yes	Yes	Yes	No	No	No	No	No	No
8	2	451	2	169	No	No	Yes	Yes	No	No	No	No	No	No
9	2	444	2	166	No	No	Yes	Yes	No	No	No	No	No	No
10	2	438	2	164	No	No	Yes	Yes	No	No	No	No	No	No
11	2	380	2	142	No	No	No	Yes	No	No	No	No	No	No
12	2	355	2	133	No	No	No	Yes	No	No	No	No	No	No
13	2	348	2	130	No	No	No	Yes	No	No	No	No	No	No
14	2	258	2	96	No	No	No	No	No	No	No	No	No	No
15	2	258	2	96	No	No	No	No	No	No	No	No	No	No
16	2	180	2	67	No	No	No	No	No	No	No	No	No	No
17	2	103	2	39	No	No	No	No	No	No	No	No	No	No
18	2	103	2	39	No	No	No	No	No	No	No	No	No	No
19	2	58	2	22	No	No	No	No	No	No	No	No	No	No
20	2	33	2	12	No	No	No	No	No	No	No	No	No	No
21	2	20	2	7	No	No	No	No	No	No	No	No	No	No
22	2	7	2	2	No	No	No	No	No	No	No	No	No	No
23	2	7	2	2	No	No	No	No	No	No	No	No	No	No
24	2	7	2	2	No	No	No	No	No	No	No	No	No	No
Hours Met					3	7	10	13	0	0	1	5	4	0

**Warrant 3 Condition A**

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	33.4
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	2:13
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	241
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	885
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
<b>Warrant Met for Intersection</b>	<b>No</b>