

TRAFFIC STUDY

For

**Delilah Road (CR 646) from
Black Horse Pike (US Route 322/40) in the Township of Hamilton to
Aviation Research Boulevard/Fourth Street in the Township of Egg Harbor,
Atlantic County, NJ**



**1904 Main Street
Lake Como, NJ 07719
(732) 681-0760**

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INTRODUCTION

Dynamic Traffic, LLC has been retained by the Atlantic County Division of Planning to prepare this Traffic Study to assess the existing and future traffic conditions along Delilah Road (CR 646) and recommend improvements to the corridor to improve operations. The “Study Area” includes Delilah Road from Black Horse Pike (US Route 322/40) in the Township of Hamilton to Aviation Research Boulevard/Fourth Street in the Township of Egg Harbor. The intersection of Delilah Road with the following cross streets are included within the study area:

- Black Horse Pike (US Route 322/40) - Signalized
- English Creek Avenue - Signalized
- Atlantic City Expressway Eastbound On/Off-Ramps - Signalized
- Atlantic City Expressway Westbound Off-Ramp - Signalized
- Aviation Research Boulevard/Fourth Street - Signalized

As part of this study, the following was performed:

- Performed a **Count Program** along the corridor for the weekday and weekend time periods including video turning movement counts during the month of April 2023 and automatic traffic recorders during the months of April and May 2023.
- Performed **Traffic Observations** during the count program to observe existing queues, and traffic and pedestrian operations to gain a better understanding of the existing traffic conditions not easily represented through counts and raw data collection.
- Performed a historical **Crash Analysis** for the corridor and at each study intersection.
- Through consultation with Atlantic County, significant future developments in the vicinity of the corridor were identified and considered in **Future Traffic Volumes**.
- Performed **Capacity Analyses** for the Existing and Future conditions for the study intersections.
- **Identified Potential Improvements** for the Study Area based on the capacity analysis and traffic observations.

EXISTING CONDITIONS

A review of the existing roadway conditions along The Corridor were conducted to provide the basis for assessing the traffic. This included field investigations of the surrounding roadways and intersections, collection of traffic volume data, and capacity analyses.

Delilah Road (CR 646) Corridor

Delilah Road is classified as a Collector roadway to the west of English Creek Avenue and as an Arterial roadway to the east of English Creek Avenue within the Atlantic County Master Plan (May 2018). Additionally, Delilah Road is classified as an Urban Minor Arterial roadway within the NJDOT Straight Line Diagrams. It possesses a general east/west orientation with a 50 MPH posted speed limit. It is noted that there is an approximate 90° bend in the roadway at its western end, and Delilah Road possesses a north/south orientation for approximately 700' prior to its intersection with Black Horse Pike.

Per the Atlantic County Master Plan, the Right of Way (“ROW”) standard width is 72 feet (Collector) to the west of English Creek Avenue and 90 feet (Arterial) to the east. The ROW varies from 66' to 96' to the west of English Creek Avenue and from 66' to 83' to the east based on the municipal tax maps. The land uses generally range from undeveloped land and residential/office uses along the west section of the study area, to undeveloped land and residential/commercial uses along the east section of the study area. The cross section of Delilah Road varies, ranging from a two-lane roadway to a four-lane cross section in certain areas, with additional turning lanes at major intersections.

The following describes the various sections of Delilah Road:

Black Horse Pike to English Creek Avenue

The posted speed limit is 50 MPH and the roadway generally provides a two-lane cross section, with the exception of additional left and/or right turn lanes at certain unsignalized intersections and additional turning lanes at signalized intersections. Additionally, there is an approximate 90° bend in the roadway approximately 700' north of Black Horse Pike which forms a T-intersection. The westbound approach and northbound right turn movements operate freely, with the westbound approach under flashing yellow control. The northbound through movement operates under stop control; however, there is no reason travel through the intersection in this direction. It is our understanding that a traffic signal was installed at this location to serve a development on the north side of the roadway. This development was never constructed and its approach to the intersection still remains, but only extends approximately 85' into undeveloped land. Per discussions with the County, it is our understanding that there are no future plans for this intersection and it will continue to operate under flash.

Shoulders vary from absent to being provided. Where shoulder is present, it is inconsistent, but is typically 6', while varying from 2' to 10'. Major developments are provided with a dedicated left turn lane and/or right turn lane. In addition to the 90° bend mentioned above, the roadway provides a slight curve just east of the T-intersection, otherwise the roadway provides a relatively straight horizontal alignment. Additionally, this section of Delilah Road provides a relatively flat vertical alignment. The land uses along the roadway are primarily residential and undeveloped land, with the CHOP Specialty Care Center located in the northeast corner of the intersection of Black Horse Pike and Delilah Road.

English Creek Avenue to Atlantic City Expressway Eastbound On/Off-Ramps

The posted speed limit is 50 MPH and the roadway generally provides a two-lane cross section, with the exception of dedicated left and/or right turn lanes at certain intersections and additional turning lanes at signalized intersections. Shoulders vary from absent to being provided. Where shoulder is present, it is inconsistent, but is typically 6' and varies from 2' to 10'. The roadway provides a generally straight horizontal alignment and a slightly rolling vertical alignment. The land uses along the roadway are primarily residential and undeveloped land, with the AtlantiCare Life Center located in the southeast corner of the intersection of Delilah Road and English Creek Avenue.

Atlantic City Expressway Eastbound On/Off-Ramps to Atlantic City Expressway Westbound Off-Ramp

The posted speed limit is 50 MPH and the roadway provides a two-lane cross section, with the exception of a dedicated left turn lane at Ridge Avenue and additional turning lanes at signalized intersections. The total roadway width on the Atlantic City Expressway overpass is approximately 46', with 10' shoulders. The roadway provides a straight horizontal alignment and an upgrade in the eastbound direction as the roadway travels over the Atlantic City Expressway. The land uses along the roadway are primarily residential and undeveloped land.

Atlantic City Expressway Westbound Off-Ramp to Aviation Research Boulevard/Fourth Street

The posted speed limit is 50 MPH and the roadway generally provides a two to four-lane cross section, with additional turning lanes at signalized intersections. It is noted that the intersection of Delilah Road, Tilton Avenue and the Atlantic City Airport access road form a traffic circle operating under signal control. This intersection was specifically excluded from the study area. To the east of the Atlantic City Expressway Westbound on-ramp, the roadway generally provides a four-lane cross section with additional turning lanes, and shoulders. The shoulders are typically 8', but vary from 8' to 14'. To the west of the on-ramp, the roadway provides a two-lane cross section and 10' typical shoulders, varying from 10' to 15'. The roadway provides a straight horizontal alignment as well as an upgrade in the westbound direction as the roadway travels over the Atlantic City Expressway and a slight upgrade in the eastbound direction to the east of the circle. The land uses along the roadway are primarily undeveloped land, with commercial uses along the circle and residential uses located along the south side of the roadway.

Corridor Crash History

Crashes occurring along Delilah Road corridor within the study area were reviewed utilizing the NJDOT Safety Voyager application. Crashes occurring at the traffic circle intersection of Delilah Road/Tilton Avenue/Atlantic City Airport access road were not considered. It should be noted that the Voyager application states that crash data through 2020 is complete, while crash data for 2021 and 2022 is not all-inclusive. As such, the crash history was examined for a five-year period, spanning from January, 2018 to December, 2022.

The crashes occurring along the corridor are tabulated below. The crashes occurring at each individual study intersection are detailed in the following section. It should be noted that the corridor crashes listed below overlap with the individual study intersection crashes.

Table 1
Crash History – Delilah Road (CR 646)
January 2018 – December 2022

Crash Type	2018	2019	2020	2021*	2022*	Total
Animal	0	0	0	1	0	1
Fixed Object	8	8	3	4	1	24
Left Turn/U Turn	3	2	3	0	5	13
Opposite Direction (Head On)	4	1	1	0	0	6
Opposite Direction (Sideswipe)	1	1	1	0	0	3
Other	1	0	0	0	0	1
Overturned	1	0	1	0	0	2
Non-fixed Object	1	0	0	2	0	3
Right Angle	6	6	3	7	8	30
Same Direction – Rear End	28	19	11	22	25	105
Same Direction – Sideswipe	6	8	2	2	2	20
Total	59	45	25	38	41	208

*Per NJDOT Voyager, Crash Data for 2021 and 2022 is not all-inclusive

As seen above, approximately 50% of the crashes occurring along the corridor involved a rear end crash. This is higher than the 2020 NJDOT Statewide average of 28% for rear end crashes occurring along County roadways.

Existing Intersection Descriptions & Observations

Black Horse Pike (US Route 322/40)

Black Horse Pike is under the jurisdiction of the New Jersey Department of Transportation (NJDOT) and is classified as an Urban Principal Arterial roadway within the NJDOT Straight Line Diagrams. It possesses a general east/west orientation. The posted speed limit is 50 MPH and the roadway provides two travel lanes in each direction separated by a grade median with additional turning lanes at its intersection with Delilah Road. In the vicinity of Delilah Road, Black Horse Pike provides a straight horizontal alignment and a slight downgrade from east to west. The land uses along Black Horse Pike in the vicinity of Delilah Road consist of the CHOP Specialty Care Center, undeveloped land, and other medical and commercial uses.

Delilah Road intersects Black Horse Pike to form a T-intersection controlled by a traffic signal. The signal timing directive obtained from the NJDOT indicates that three-phase 120-second background cycle and 81-120 second variable cycle lengths are utilized. The signal is coordinated with other signals along Black Horse Pike during peak operational periods. The signal includes an eastbound Black Horse Pike left turn phase, a Black Horse Pike ROW phase, and a Delilah Road ROW phase. Pedestrian accommodations are provided for crossing the west and north legs to the intersection.

The eastbound approach of Black Horse Pike provides a dedicated left turn lane and two dedicated through lanes, while the westbound approach provides a dedicated through lane and a shared through/right turn lane. The southbound approach of Delilah Road provides two dedicated left turn lanes and a dedicated right turn lane that operates freely through a lane addition to Black Horse Pike WB.

Table 2
Crash History – Delilah Road (CR 646) & Black Horse Pike (US Route 322/40)
January 2018 – December 2022

Crash Type	2018	2019	2020	2021*	2022*	Total
Animal	1	0	2	0	0	3
Backing	1	0	0	0	0	1
Fixed Object	3	0	1	0	0	4
Left Turn/U Turn	0	0	0	1	1	2
Non-fixed Object	0	0	1	0	0	1
Pedestrian	1	0	0	0	0	1
Right Angle	0	1	0	1	0	2
Same Direction – Rear End	18	14	2	14	11	59
Same Direction – Sideswipe	3	2	3	0	1	9
Total	27	17	9	16	13	82

*Per NJDOT Voyager, Crash Data for 2021 and 2022 is not all-inclusive

As seen above, approximately 72% of the crashes occurring along the corridor involved a rear end crash. This is significantly higher than the 2020 NJDOT Statewide average of 27% for rear end crashes occurring at signalized intersections under state jurisdiction.

Intersection Observations

During field observations, the eastbound left turn queue from Black Horse Pike to Delilah Road was observed to exceed the available storage length at times; however, the queue typically cleared in one cycle.

English Creek Avenue (CR 603)

English Creek Avenue is classified as a Minor Collector roadway to the north of Delilah Road and as an Arterial roadway to the south of Delilah Road within the Atlantic County Master Plan. Additionally, English Creek Avenue is classified as an Urban Local roadway to the north of Delilah Road and as an Urban Minor Arterial roadway to the south of Delilah Road within the NJDOT Straight Line Diagrams. The speed limit is not posted to the north of Delilah Road, while to the south the posted speed limit is 50 MPH. English Creek Avenue terminates approximately 790' to the north of Delilah Road where it is truncated by the Atlantic City Expressway. To the north of Delilah Road, the roadway provides one travel lane in each direction with additional turning lanes at its intersection with Delilah Road. To the south, the roadway provides a varying cross section, ranging from a three-lane section to a four-lane section with a two-way left turn lane. In the vicinity of Delilah Road, English Creek Avenue provides a relatively straight horizontal alignment and a slight downgrade from north to south. The land uses along English Creek Avenue in the vicinity of Delilah Road primarily consist of medical and commercial uses, with the Purple Crayon Early Learning Center located in the northwest corner of the intersection of Delilah Road and English Creek Avenue.

English Creek Avenue intersects Delilah Road to form a four-leg intersection controlled by a traffic signal. The signal timing directive obtained from Atlantic County indicates that a three-phase 70-90 second variable cycle is utilized. The signal includes a protected eastbound/westbound Delilah Road left turn/English Creek Avenue northbound right turn overlap phase, a Delilah Road ROW phase and an English Creek ROW phase. Pedestrian accommodations are provided for crossing all approaches to the intersection.

The eastbound and westbound approaches of Delilah Road each provide a dedicated left turn lane and a shared through/right turn lane. The northbound approach of English Creek Avenue provides a shared left turn/through lane and a dedicated right turn lane, while the southbound approach provides a dedicated left turn lane and a shared through/right turn lane.

Table 3
Crash History – Delilah Road (CR 646) & English Creek Avenue (CR 603)
January 2018 – December 2022

Crash Type	2018	2019	2020	2021*	2022*	Total
Fixed Object	1	3	0	1	0	5
Left Turn/U Turn	2	3	0	1	0	6
Right Angle	0	1	1	0	0	2
Same Direction - Rear End	10	5	2	2	4	23
Total	13	12	3	4	4	36

*Per NJDOT Voyager, Crash Data for 2021 and 2022 is not all-inclusive

As seen above, approximately 64% of the crashes occurring along the intersection involved a rear end crash. This is significantly higher than the 2020 NJDOT Statewide average of 23% for rear end crashes occurring at signalized intersections under County jurisdiction.

Intersection Observations

Operational concerns were not observed at the time of the counts. The volume of traffic along the southbound approach of English Creek Avenue was observed to be very low, while majority of the northbound English Creek Avenue volume was observed to turn right onto Delilah Road and travel in the eastbound direction.

Atlantic City Expressway Eastbound On/Off Ramp (Exit 9)

The Atlantic City Expressway is under the jurisdiction of the South Jersey Transportation Authority (SJTA) and is classified as an Urban Principal Arterial Freeway/Expressway within the New Jersey Straight Line Diagrams with a general east/west orientation. The advisory speed limit along the off-ramp is 25 MPH. Both the off-ramp and on-ramp provide one travel lane with additional turning lanes at its intersection with Delilah Road.

The Atlantic City Expressway Eastbound On/Off-Ramps intersect Delilah Road to form a T-intersection controlled by a traffic signal. The signal timing directive was obtained from Atlantic County which indicates that a three-phase 90-second background cycle length is utilized. The signal at this intersection as well as the intersection of Delilah Road with the Atlantic City Expressway Westbound Off-Ramp are coordinated. The signal provides an eastbound Delilah Road left turn/southbound off-ramp right turn overlap phase, a Delilah Road ROW phase, and an Atlantic City Expressway Eastbound Off-Ramp ROW phase. Pedestrian accommodations are not provided.

The eastbound approach of Delilah Road provides a dedicated left turn lane and a dedicated through lane, while the westbound approach provides a dedicated through lane and a dedicated right turn lane. The southbound approach of the Atlantic City Expressway Eastbound Off-Ramp provides dedicated left and right turn lanes.

Table 4
Crash History – Delilah Road (CR 646) & Atlantic City Expressway Eastbound On/Off-Ramp
January 2018 – December 2022

Crash Type	2018	2019	2020	2021*	2022*	Total
Left Turn/U Turn	0	1	0	0	2	3
Opposite Direction (Head On)	0	1	0	0	0	1
Opposite Direction (Sideswipe)	0	0	1	0	0	1
Right Angle	2	0	0	1	0	3
Same Direction – Rear End	8	6	3	8	9	34
Total	10	8	4	9	11	42

*Per NJDOT Voyager, Crash Data for 2021 and 2022 is not all-inclusive

As seen above, approximately 81% of the crashes occurring at the intersection involved a rear end crash. This is significantly higher than the NJDOT Statewide average of 23% for rear end crashes occurring at signalized County intersections.

Intersection Observations

During the weekday evening peak hour observations, excessive queuing was observed along the westbound approach of Delilah Road. At times this queue extended past the Atlantic City Expressway Westbound off-ramp to the traffic circle at the intersection of Delilah Road/Tilton Avenue/Atlantic City Airport access road. This can be attributed to the reduced green time that the westbound approach of Delilah Road experiences due to the eastbound approach receiving an advance left turn phase. The initial queue lengths were recorded prior to the beginning of each peak hour studied, while the unmet demand was recorded at the end of each peak hour. Both were accounted for in the analysis. This was especially apparent during the weekday evening peak hour. It is noted that without the consideration of the initial queue lengths, the intersection operates with acceptable levels of services, which do not accurately reflect the existing conditions.

The following image shows the westbound queue extending beyond the Atlantic City Expressway overpass.



Image 1. Standing at the Atlantic City Expressway EB On/Off-Ramps looking eastbound.

Atlantic City Expressway Westbound Off-Ramp (Exit 9)

The Atlantic City Expressway is under the jurisdiction of the South Jersey Transportation Authority (SJTA) and is classified as an Urban Principal Arterial Freeway/Expressway within the New Jersey Straight Line Diagrams with a general east/west orientation. The advisory speed limit along the off-ramp is 25 MPH and the ramp provides one travel lane with additional turning lanes at its intersection with Delilah Road.

The Atlantic City Expressway Westbound Off-Ramp intersects Delilah Road to form a T-intersection controlled by a traffic signal. The signal timing directive was obtained from Atlantic County which indicates that a two-phase 90-second background cycle length is utilized. The signal at this intersection as well as the intersection of Delilah Road with the Atlantic City Expressway Eastbound On/Off-Ramp are coordinated. The signal provides a Delilah Road ROW phase and an Atlantic City Expressway Westbound Off-Ramp ROW phase.

The eastbound and westbound approaches of Delilah Road each provide a dedicated through lane. The northbound approach of the Atlantic City Expressway Westbound Off-Ramp provides a shared left/right turn lane with a very short channelized right turn lane.

Table 5
Crash History – Delilah Road (CR 646) & Atlantic City Expressway Westbound Off-Ramp
January 2018 – December 2022

Crash Type	2018	2019	2020	2021*	2022*	Total
Fixed Object	0	1	0	0	0	1
Left Turn/U Turn	0	0	2	0	3	5
Right Angle	0	1	1	2	3	7
Same Direction – Rear End	10	2	5	7	5	29
Same Direction – Sideswipe	0	0	0	0	1	1
Total	10	4	8	9	12	43

*Per NJDOT Voyager, Crash Data for 2021 and 2022 is not all-inclusive

As seen above, approximately 67% of the crashes occurring at the intersection involved a rear end crash. This is significantly higher than the NJDOT Statewide average of 23% for rear end crashes occurring at signalized County intersections.

Intersection Observations

Consistent with our observations at the Atlantic City Expressway Eastbound off-ramp, the westbound approach experiences excessive queuing during the weekday evening peak hour, extending to the traffic circle at times. This can be attributed to the build up of vehicles at the Atlantic City Expressway Eastbound On/Off-Ramps. The initial queue lengths were recorded prior to the beginning of each peak hour studied, and the unmet demand was recorded at the end of each peak hour. Both were accounted for in the analysis. This was especially apparent during the weekday evening peak hour. It is noted that without the consideration of the initial queue lengths, the intersection operates with acceptable levels of services, which do not accurately reflect the existing conditions.

At times, the northbound left turn queue length was observed to block vehicles from accessing the channelized right turn lane and potentially making a right turn on red. Further, at times vehicles turning left from the ramp to Delilah Road were unable to complete the turn in one cycle due to the westbound queue length along Delilah Road.

The following image shows a vehicle waiting to make a northbound right turn stuck behind the northbound left turn queue length.



Image 2. Atlantic City Expressway Westbound Off-Ramp

Aviation Research Boulevard/Fourth Street

Aviation Research Boulevard and Fourth Street are both private roadways per the municipal tax maps, each with a general north/south orientation. The posted speed limit along Aviation Research Boulevard is 25 MPH, while the posted speed limit along Fourth Street is 10 MPH. Aviation Research Boulevard provides one travel lane in each direction with additional turning lanes constructed at future intersection locations. Fourth Street provides one travel lane in each direction.

Aviation Research Boulevard and Fourth Street intersect Delilah Road to form a four-leg intersection controlled by a traffic signal. The signal timing directive was obtained from Atlantic County which indicates that a three-phase cycle is utilized. The signal provides an eastbound/westbound Delilah Road left turn/Aviation Research Boulevard right turn overlap phase, a Delilah Road ROW phase, and an Aviation Research Boulevard/Fourth Street ROW phase.

The eastbound approach of Delilah Road provides a dedicated left turn lane, a dedicated through lane, and a shared through/right turn lane, while the westbound approach provides a dedicated left turn lane, two dedicated though lanes, and a dedicated right turn lane. The northbound approach of Fourth

Street provides a single lane for all movements, while the southbound approach of Aviation Research Boulevard provides a shared left turn/through lane and a dedicated right turn lane.

Table 6
Crash History – Delilah Road (CR 646) & Aviation Research Boulevard/Fourth Street
January 2018 – December 2022

Crash Type	2018	2019	2020	2021*	2022*	Total
Fixed Object	3	0	0	0	0	3
Same Direction – Rear End	2	1	0	0	1	4
Same Direction – Sideswipe	1	0	0	0	0	1
Total	6	1	0	0	1	8

*Per NJDOT Voyager, Crash Data for 2021 and 2022 is not all-inclusive

Observations

Operational concerns were not identified at the time of the counts through observation. The intersection has been fully built out in anticipation of the future construction of the National Aviation Research & Technology Park (NARTP) Expansion, which can be accessed through the subject intersection.

Existing Traffic Volumes

Video turning movement counts were conducted at the study intersections as follows. All traffic volumes were recorded using video data collection methodologies to record traffic volumes and pedestrians.

- Thursday, April 27, 2023 from 7:00 AM to 7:00 PM
- Saturday, April 29, 2023 from 9:00 AM to 7:00 PM

In addition, automatic traffic recorder (ATR) counts were conducted along Delilah Road at the following locations under the following schedule.

- West of English Creek Avenue
 - Tuesday, April 25, 2023 to Tuesday, May 9, 2023
- West of Atlantic City Expressway Eastbound On/Off-Ramps
 - Tuesday, April 25, 2023 to Tuesday, May 9, 2023
- East of Atlantic City Expressway Westbound Off-Ramp
 - Friday, May 5, 2023 to Saturday, May 13, 2023

The turning movement counts were generally found to be within 10% of the ATR counts. Review of the collected traffic data reveals that the weekday morning, weekday evening and Saturday peak hours occur at slightly different times for each intersection. As the intent of this study is to identify individual improvements at each study intersection, the individual intersection peak hours were used for utilized for each study period. The weekday morning, weekday evening and Saturday PSH at each intersection are detailed in Table 7 below. All traffic counts are contained in Appendix B.

Table 7
Intersection Peak Hours

Intersection	Peak Period		
	Weekday Morning Peak Hour	Weekday Evening Peak Hour	Saturday Peak Hour
Delilah Road & Black Horse Pike	7:45 - 8:45 AM	4:15 - 5:15 PM	1:30 - 2:30 PM
Delilah Road & English Creek Avenue	7:30 - 8:30 AM	4:30 - 5:30 PM	2:00 - 3:00 PM
Delilah Road & Atlantic City Expressway Eastbound On/Off-Ramps	7:45 - 8:45 AM	4:30 - 5:30 PM	3:45 - 4:45 PM
Delilah Road & Atlantic City Expressway Westbound Off-Ramp	7:45 - 8:45 AM	4:30 - 5:30 PM	3:45 - 4:45 PM
Delilah Road & Aviation Research Boulevard/Fourth Street	7:30 - 8:30 AM	4:15 - 5:15 PM	2:00 - 3:00 PM

Additionally, the initial queue lengths prior to the start of each peak hour as well as the unmet demand at the end of each peak hour were recorded at each intersection. It is noted that the intersections of Delilah Road with Black Horse Pike, English Creek Avenue and Aviation Research Boulevard/Fourth Street were generally not observed to experience oversaturation and did not have initial queues or unmet demand. The unmet demand was added to the existing as-counted traffic volumes, while the initial queues were input during the capacity analysis. The recorded initial queue lengths and unmet demand are included in Appendix B. Figure 2, located in Appendix A, shows the existing peak hour traffic volumes at the study intersections.

FUTURE TRAFFIC CONDITIONS

As discussed with the Atlantic County Division of Planning Staff, traffic volumes have been projected for the 10-year horizon year and are based on background growth and future developments as summarized below.

Future Developments

Through consultation with the Atlantic County Department of Regional Planning and Development, there are several developments in the vicinity of the corridor that will contribute to future traffic conditions if they are fully realized which are summarized below.

- **Airport Business Center – Phases I & II**

A development consisting of a 111 room hotel, two 2,080 SF fast food restaurants with a drive-thru, and a 5,625 SF restaurant known as Phases I and II of the Airport Business Center, is planned to be located in the northeast quadrant of the intersection of Delilah Road and Westcoat Road. Projections of the associated traffic volumes were obtained from the *Traffic Impact Analysis for Airport Business Center* prepared by Dolan and Dean Consulting Engineers, LLC and revised March 8, 2021. The Adjacent Development Traffic Volumes associated with Phases I and II of the Airport Business Center are shown on Figure 3.

- **Airport Business Center – Phases III & IV**

Phases III and IV of the Airport Business Center are planned to be located along the northbound side of Westcoat Road just north of Phases I and II. The preliminary plan includes two 100 room hotels, a 24,200 SF conference center, and 80,000 SF of light industrial/flex space. Projections of the associated traffic volumes were developed using Institute of Transportation Engineers (ITE) publication *Trip Generation, 11th Edition*. The site generated volumes were surcharged onto the study network considering the trip distribution utilized within the *Traffic Impact Analysis* for Phases I and II. The Adjacent Development Traffic Volumes associated with Phases III and IV of the Airport Business Center are shown on Figure 4.

- **The Villages at Farmington – Residential**

A residential development consisting of 140 townhomes, 259 single family homes and 261 age-restricted units (detached) known as The Villages at Farmington, bordered by Westcoat Road, the Garden State Parkway and Atlantic Avenue. Projections of the associated traffic volumes were developed using ITE publication *Trip Generation, 11th Edition*. The site generated volumes were surcharged onto the study network based on the surrounding roadway network. The Adjacent Development Traffic Volumes associated with The Villages at Farmington are shown on Figure 5.

- **ARX Ventures Storage Facility**

A 124,800 SF self-storage facility containing 47 passenger vehicle/van storage spaces and 54 RV storage spaces known as ARX Ventures, located in the southwest quadrant of the Airport Circle intersection of Delilah Road and Tilton Road. Projections of the associated traffic volumes were obtained from the *Traffic Impact Study* prepared by Horner & Canter Associates and dated August 9, 2022. The Adjacent Development Traffic Volumes associated with the ARX Self-Storage Facility are shown on Figure 6.

- **National Aviation Research & Technology Park (NARTP) Expansion**

It is understood that the NARTP plans to expand the campus to accommodate up to an additional 4,000 employees. Projections of the associated traffic volumes were developed using ITE publication *Trip Generation, 11th Edition* for LUC 760 – Research and Development Center. The Adjacent Development Traffic Volumes associated with the NARTP Expansion were surcharged onto the study network and are shown on Figure 7.

Due to the significant traffic volumes associated with the NARTP Expansion, and more specifically due to the lack of definitive information on the expansion at this time, future traffic conditions were evaluated both with and without the NARTP expansion. Intersection improvements were identified for both conditions in order to determine which improvements can be attributed to the increase in traffic associated with the NARTP expansion. When additional clarity is known for the NARTP Campus, the corridor improvements identified herein should be revisited to confirm they would still be applicable.

Background Growth

In addition to individual developments, traffic volumes on the surrounding roadways are expected to increase as a result of general growth throughout the region. A growth rate for roadways within the study area was determined utilizing data published by NJDOT as well as the South Jersey Transportation Planning Organization.

- The NJDOT Annual Background Growth Rate Table indicates a growth rate of 1.0% per year for Urban Minor Arterial roadways (Delilah Road) in Atlantic County. Note that NJDOT specifies that these rates are to be utilized for “short term” projections only (1-3 years).
- The South Jersey Transportation Planning Organization population projections indicate that from 2018 to 2050 Atlantic County’s population is anticipated to increase by 5.2%. This equates to a projected annualized growth rate of 0.16%.

Considering the information identified above, the NJDOT growth rate (1.0% per year) was applied for the first three years of growth, and a conservative annualized growth rate of 0.25% per year was applied for the remaining seven years of growth. This equates to an overall growth rate of 5.0% over the 10-year design horizon.

Future 2033 traffic volumes were developed by applying the overall 10-year growth factor of 5% to the study area roadways existing traffic volumes and adding the future development traffic volumes. Figure 8, in Appendix A, shows the 2033 Future traffic volumes without the NARTP Expansion, while Figure 9 shows the 2033 Future traffic volumes with the NARTP Expansion.

INTERSECTION ANALYSIS AND RECOMMENDATIONS

Operational conditions were analyzed for the existing and 2033 Future conditions, both with and without the traffic associated with the NARTP Expansion. Intersection improvements were then assessed based upon the findings of the analysis and observations.

Capacity Analysis

The methodology utilized in the capacity analyses is described in the *Highway Capacity Manual*, published by the Transportation Research Board. In general, the term Level of Service (LOS) is used to provide a “qualitative” evaluation of capacity based upon certain “quantitative” calculations related to empirical values, such as traffic volume and intersection control.

At signalized intersections, factors that affect the various approach capacities include width of approach, number of lanes, signal “green time”, turning percentages, truck volumes, etc. However, delays cannot be related to capacity in a simple one-to-one fashion. For example, it is possible to have delays in the Level of Service “F” range without exceeding roadway capacity. Substantial delays can exist without exceeding capacity if one or more of the following conditions exist: long signal cycle lengths; a particular traffic movement experiences a long red time; or progressive movement for a particular lane group is poor. Table 8 describes the level of service ranges for signalized intersections.

Table 8
Level of Service Criteria
for Signalized Intersections

Level of Service	Average Control Delay (seconds per vehicle)
A	0.0 to 10.0
B	10.1 to 20.0
C	20.1 to 35.0
D	35.1 to 55.0
E	55.1 to 80.0
F	greater than 80.0

It should be noted that the analyses within the *Highway Capacity Manual* assume a random arrival for all the movements, which may not be the case if an adjacent traffic signal is present that platoons vehicles.

All capacity analyses were performed utilizing Synchro 11 software in accordance with Highway Capacity Manual (HCM) 6th Edition methodologies. It should be noted that the existing percentage of trucks and peak hour factors were used in the existing analysis. All capacity analysis calculation worksheets are contained in Appendix C.

Black Horse Pike (US Route 322/40) & Delilah Road (CR 646)

Consistent with our observations, the capacity analyses demonstrate that the 95th percentile queue lengths associated with the eastbound left turn movement exceed the available storage length during the weekday morning and evening peak hours. The eastbound left turn movement was observed to spill out of the storage length at peak times. Under the future conditions, each intersection movement experiences a slight increase in delay during all studied peak hours, but continues to operate with existing levels of service “E” or better.

As more developments are constructed along Delilah Road to the east, Black Horse Pike will experience more volume from the west, further increasing the volume of eastbound left turns and the associated queue lengths. As such, it is recommended to extend the eastbound left turn storage length within the existing median to accommodate the existing and future anticipated queue lengths.

It is noted that depending on the level of traffic associated with the NARTP expansion, this development may result in the need to provide dual left turns from Black Horse Pike to Delilah Road. Based on the future analysis with the NARTP Expansion, it is anticipated that the eastbound left turn queue lengths will exceed the extended storage length during the weekday morning peak hour; however, once future plans become more definitive, it should be confirmed if dual left turn lanes would be necessary. This improvement would provide a significant benefit to the delay and queue length associated with the eastbound left turn movement; however, it would require extensive widening.

Additionally, it is recommended optimize the signal timing to provide a few additional seconds of green time to the eastbound Black Horse Pike left turn phase.

Improvements included in the *Future with Improvements (without NARTP)* analysis are:

- Optimized signal timing
- Lengthen eastbound left turn lane storage within existing median to provide 550' storage length (median widening required)

Improvements included in the *Future with Improvements (with NARTP)* analysis are:

- Dual eastbound left turn lanes (Widening Required)

Table 9 below summarizes the levels of service (LOS) and delays associated with the existing, future and future with improvements conditions (with and without NARTP Expansion), while Table 10 summarizes the 95th percentile queue lengths associated with each condition.

Table 9
Black Horse Pike & Delilah Road – Levels of Service

Direction/ Movement		Existing	Future (without NARTP)	Future w/ Imp. (without NARTP)	Future (with NARTP)	Future w/ Imp. (with NARTP)
Weekday Morning Peak Hour						
EB	L	E (58)	E (60)	E (58)	E (64)	D (49)
	T	A (2)	A (2)	A (2)	A (2)	A (2)
WB	TR	B (14)	B (15)	B (15)	B (20)	A (10)
	SB	L	E (60)	E (60)	E (60)	E (60)
Overall		B (16)	B (17)	B (17)	C (21)	B (15)
Weekday Evening Peak Hour						
EB	L	E (56)	E (59)	E (57)	E (60)	D (53)
	T	A (2)	A (2)	A (2)	A (2)	A (2)
WB	TR	B (18)	C (22)	C (22)	C (23)	B (13)
	SB	L	E (58)	E (58)	E (58)	E (58)
Overall		B (16)	B (18)	B (18)	B (19)	B (14)
Saturday Peak Hour						
EB	L	D (54)	D (52)	D (52)	D (52)	D (54)
	T	A (2)	A (2)	A (2)	A (2)	A (2)
WB	TR	B (13)	B (15)	B (15)	B (16)	A (10)
	SB	L	E (59)	E (59)	E (59)	E (59)
Overall		B (11)	B (13)	B (13)	B (13)	B (10)

A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Table 10
Black Horse Pike & Delilah Road – 95th Percentile Queue Lengths

Direction/ Movement		Storage Length	Existing	Future (without NARTP)	Future w/ Imp. (without NARTP)	Future (with NARTP)	Future w/ Imp. (with NARTP)
Weekday Morning Peak Hour							
EB	L	325'	478'	525'	518'	653'	313'
	T	-	20'	23'	23'	23'	23'
WB	TR	-	200'	223'	223'	253'	170'
	SB	L	200'	3'	3'	3'	3'
Weekday Evening Peak Hour							
EB	L	325'	375'	428'	420'	445'	230'
	T	-	38'	43'	43'	43'	43'
WB	TR	-	455'	530'	530'	543'	383'
	SB	L	200'	10'	10'	10'	10'
Saturday Peak Hour							
EB	L	325'	290'	325'	325'	338'	193'
	T	-	38'	40'	40'	40'	40'
WB	TR	-	373'	438'	438'	448'	325'
	SB	L	200'	5'	5'	5'	5'

The following image depicts the intersection geometry associated with the Future with Improvements condition (without the NARTP Expansion).

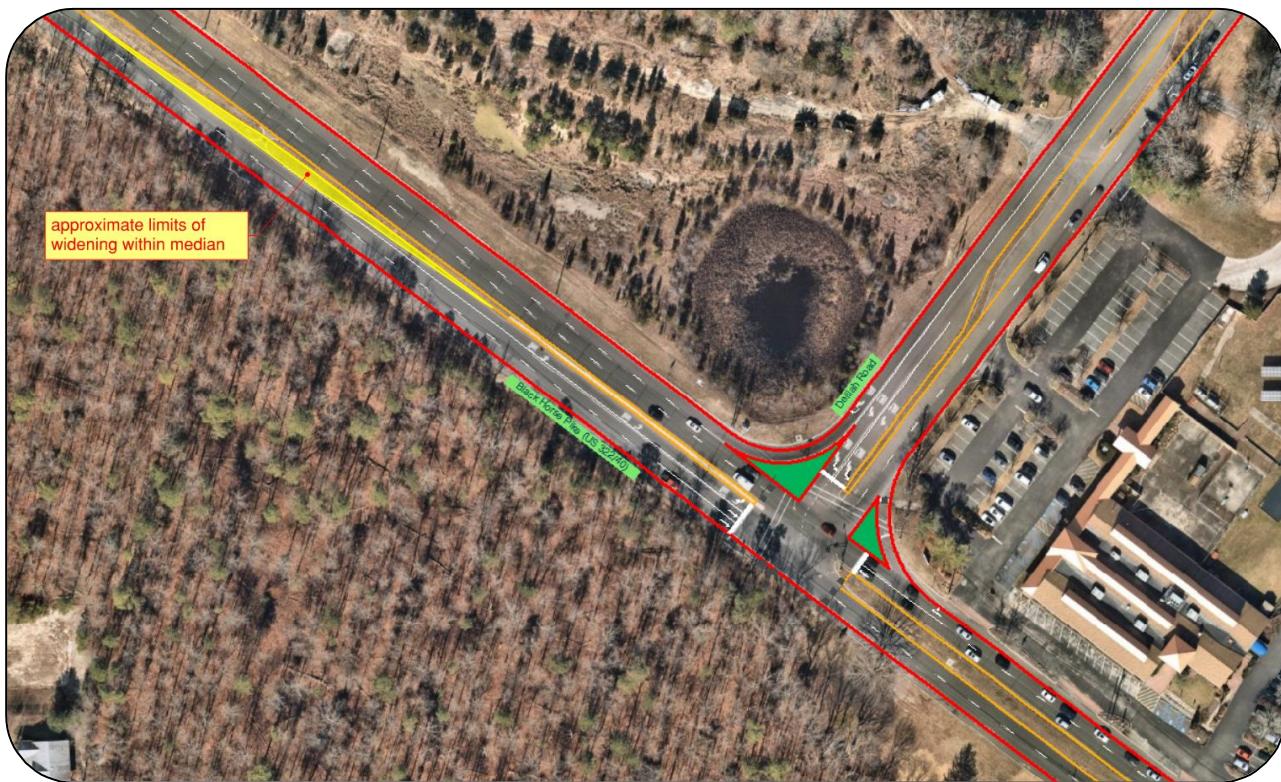


Figure 1 – Black Horse Pike (US Route 322/40) & Delilah Road (CR 646)

Delilah Road (CR 646) & English Creek Avenue (CR 603)

Consistent with our observations, the capacity analyses demonstrate that the intersection operates with acceptable levels of service and delays under the existing conditions. Under the future condition, some intersection movements experience an increase in delay during all studied peak hours, but all movements continue to operate with acceptable levels of service.

As more developments are constructed along Delilah Road to the east, English Creek Avenue will experience more volume from the south, increasing the volume of westbound left turns and northbound right turns. As such, it is recommended to optimize the signal timing to allocate a few additional seconds of green time to the English Creek Avenue ROW phase.

It is noted that depending on the level of traffic associated with the NARTP expansion, this development will likely result in the need to provide a second eastbound through lane along Delilah Road. Once future plans become more definitive, it should be confirmed if the second eastbound through lane along Delilah Road is necessary. This improvement is not anticipated to require extensive widening, as the second lane eastbound can likely be accommodated within the existing pavement width on the east side of the intersection. However, widening would be necessary on the west side of the intersection.

Improvements included in the *Future with Improvements (without NARTP)* analysis are:

- Optimized signal timing

Improvements included in the *Future with Improvements and (with NARTP)* analysis are:

- Optimized signal timing
- Widening of eastbound Delilah Road to provide a dedicated left turn lane, dedicated through lane, and a shared through/right turn lane (Widening Required)

Table 11 below summarizes the levels of service (LOS) and delays associated with the existing, future and future with improvements conditions (with and without NARTP Expansion), while Table 12 summarizes the 95th percentile queue lengths associated with each condition.

**Table 11
Delilah Road & English Creek Avenue – Levels of Service**

Direction/ Movement		Existing	Future (without NARTP)	Future w/ Imp. (without NARTP)	Future (with NARTP)	Future w/ Imp. (with NARTP)
Weekday Morning Peak Hour						
EB	L	A (10)	A (10)	B (11)	A (10)	B (12)
	TR	C (23)	C (25)	C (28)	C (32)	C (22)
WB	L	B (15)	B (20)	C (24)	D (39)	B (19)
	TR	B (14)	B (14)	B (16)	B (14)	B (17)
NB	LT	C (27)	C (27)	C (26)	C (27)	C (24)
	R	D (37)	D (45)	D (36)	F (101)	D (53)
SB	L	C (28)	C (28)	C (26)	C (28)	C (25)
	TR	C (26)	C (27)	C (25)	C (27)	C (24)
Overall		C (24)	C (28)	C (28)	D (52)	C (30)
Weekday Evening Peak Hour						
EB	L	A (0)	A (0)	A (0)	A (0)	A (0)
	TR	B (20)	C (21)	C (23)	C (22)	B (17)
WB	L	B (18)	C (30)	C (26)	F (82)	B (19)
	TR	A (7)	A (7)	A (7)	A (8)	A (6)
NB	LT	C (28)	C (28)	C (28)	C (28)	C (31)
	R	C (34)	D (44)	C (35)	D (48)	D (48)
SB	L	C (29)	C (29)	C (29)	C (29)	C (32)
	TR	C (27)	C (27)	C (27)	C (27)	C (29)
Overall		C (21)	C (27)	C (24)	D (43)	C (23)
Saturday Peak Hour						
EB	L	A (10)	A (10)	B (11)	A (10)	A (10)
	TR	B (18)	B (19)	C (22)	B (19)	B (16)
WB	L	B (11)	B (13)	B (15)	B (13)	B (11)
	TR	B (14)	B (15)	B (17)	B (15)	B (15)
NB	LT	C (27)	C (28)	C (25)	C (28)	C (28)
	R	C (32)	D (38)	C (29)	D (40)	D (40)
SB	L	C (28)	C (28)	C (26)	C (28)	C (28)
	TR	C (26)	C (27)	C (24)	C (27)	C (27)
Overall		C (20)	C (23)	C (22)	C (24)	C (22)

A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Table 12
Delilah Road & English Creek Avenue – 95th Percentile Queue Lengths

Direction/ Movement	Storage Length	Existing	Future (without NARTP)	Future w/ Imp. (without NARTP)	Future (with NARTP)	Future w/ Imp. (with NARTP)
Weekday Morning Peak Hour						
EB	L	185'	0'	0'	0'	0'
	TR	-	290'	330'	350'	430'
WB	L	245'	108'	143'	165'	215'
	TR	-	85'	95'	103'	100'
NB	LT	-	23'	23'	23'	20'
	R	-	318'	388'	345'	683'
SB	L	105'	3'	5'	5'	3'
	TR	-	5'	5'	5'	5'
Weekday Evening Peak Hour						
EB	L	185'	0'	0'	0'	0'
	TR	-	228'	253'	268'	263'
WB	L	245'	178'	240'	230'	515'
	TR	-	78'	88'	88'	105'
NB	LT	-	45'	48'	48'	48'
	R	-	318'	390'	350'	418'
SB	L	105'	3'	3'	3'	3'
	TR	-	3'	3'	3'	3'
Saturday Peak Hour						
EB	L	185'	0'	0'	0'	0'
	TR	-	178'	208'	225'	218'
WB	L	245'	100'	120'	138'	128'
	TR	-	105'	120'	133'	123'
NB	LT	-	33'	35'	33'	35'
	R	-	288'	345'	305'	365'
SB	L	105'	0'	0'	0'	0'
	TR	-	8'	8'	5'	8'

The following image depicts the intersection geometry associated with the Future with Improvements condition (with the NARTP Expansion).

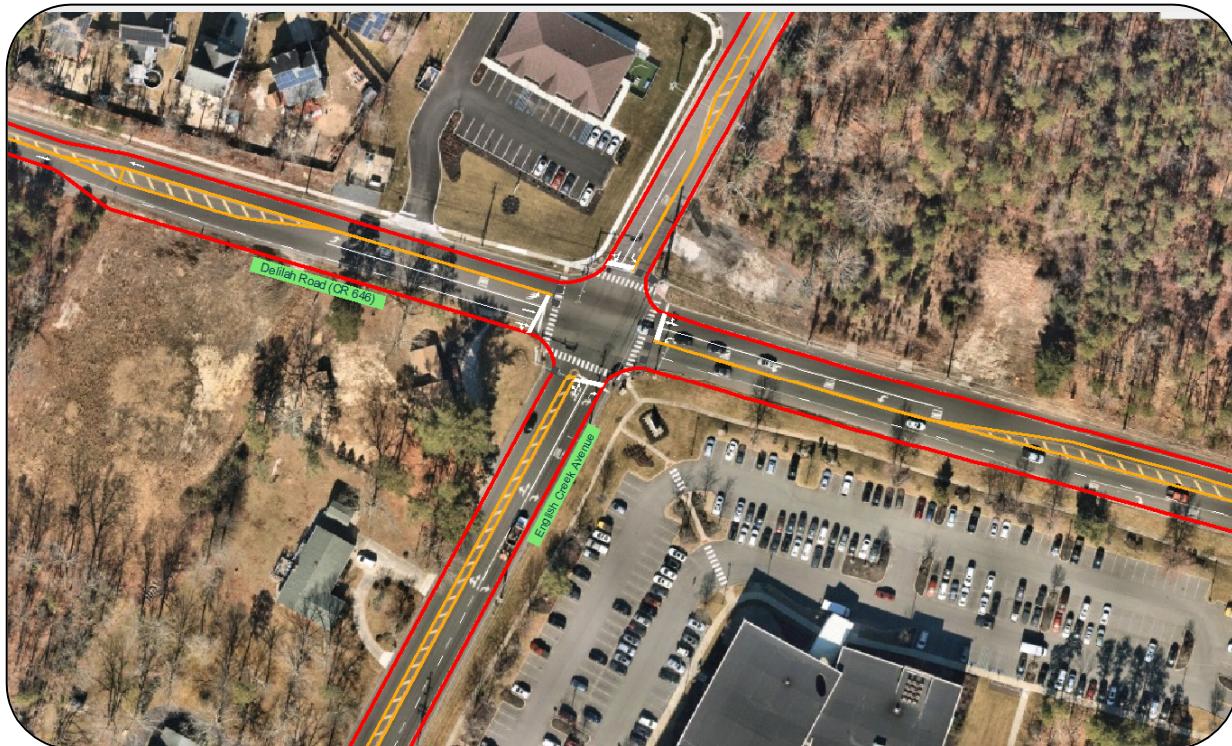


Figure 2 – Delilah Road (CR 646) & English Creek Avenue

Delilah Road (CR 646) & Atlantic City Expressway Eastbound On/Off Ramp

Consistent with our observations, the capacity analyses demonstrate that the westbound approach experiences significant delay and queues during the weekday evening peak hour. The westbound queue lengths extend beyond the Atlantic City Expressway Westbound off-ramp, consistent with observations. It is noted that without the consideration of initial queue lengths, the intersection would operate with acceptable levels of service.

In order to reduce the existing and future anticipated delays and queue lengths at the intersection, it is recommended to widen the westbound approach of Delilah Road to provide a dedicated through lane and a shared through/right turn lane, allowing more capacity to process through the intersection in each cycle. It is anticipated that this second through lane would begin just following the Atlantic City Expressway overpass in the vicinity of the Ridge Avenue left turn lane and extend through the intersection.

Additionally, it is recommended to monitor the storage length for the southbound approach as plans for the NARTP Expansion become more definitive. It is anticipated that the southbound left turn queue will extend beyond the toll booth, blocking vehicles from entering the right turn lane. It is recommended to consider extending the left and right turn storage lanes beyond the toll booth, which would require modification to the tolling operation.

Further, it is recommended to modernize the traffic signal and provide ADA compliant pedestrian facilities. Improvements included in both the *Future with Improvements (without NARTP)* and *(with NARTP)* analysis are:

- Optimized signal timing
- Westbound through and through/right turn lanes (Widening required)

Table 13 below summarizes the levels of service (LOS) and delays associated with the existing, future and future with improvements conditions (with and without NARTP Expansion), while Table 14 summarizes the 95th percentile queue lengths associated with each condition.

A Concept Plan illustrating the Future with Improvements condition (for both with and without the NARTP Expansion) for the intersections of Delilah Road with the Atlantic City Expressway Eastbound On/Off-Ramps and Westbound Off-Ramp is contained in Appendix D.

**Table 13
Delilah Road (CR 646) & Atlantic City Expressway Eastbound On/Off Ramp – Levels of Service**

Direction/ Movement	Existing	Future (without NARTP)	Future w/ Imp. (without NARTP)	Future (with NARTP)	Future w/ Imp. (with NARTP)
Weekday Morning Peak Hour					
EB	L	A (10)	B (13)	A (7)	B (19)
	T	A (8)	B (11)	B (11)	C (28)
WB	T/TR	B (16)	B (20)	B (12)	F (70)
SB	L	D (43)	D (43)	D (43)	E (62)
	R	C (31)	C (30)	C (30)	C (23)
Overall		B (14)	B (17)	B (14)	D (45)
Weekday Evening Peak Hour					
EB	L	B (13)	B (18)	A (7)	C (22)
	T	A (7)	A (8)	A (8)	A (9)
WB	T/TR	F (191)	F (264)	B (12)	F (329)
SB	L	D (42)	D (43)	D (43)	D (43)
	R	C (28)	C (28)	C (31)	C (27)
Overall		F (94)	F (129)	B (13)	F (167)
Saturday Peak Hour					
EB	L	A (7)	A (8)	A (5)	A (8)
	T	A (5)	A (6)	A (6)	A (6)
WB	T/TR	B (13)	B (14)	B (10)	B (15)
SB	L	D (40)	D (41)	D (41)	D (42)
	R	C (32)	C (32)	C (32)	C (32)
Overall		B (11)	B (12)	B (10)	B (13)
A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)					

Table 14
Delilah Road (CR 646) & Atlantic City Expressway Eastbound On/Off Ramp – 95th Percentile Queue Lengths

Direction/ Movement	Storage Length	Existing	Future (without NARTP)	Future w/ Imp. (without NARTP)	Future (with NARTP)	Future w/ Imp. (with NARTP)
Weekday Morning Peak Hour						
EB	L	225'	45'	68'	28'	73'
	T	-	168'	218'	218'	243'
WB	T/TR	-	1660'	2155'	208'	2743'
SB	L	-	95'	128'	125'	138'
	R	100'	38'	40'	43'	40'
Weekday Evening Peak Hour						
EB	L	225'	43'	60'	50'	85'
	T	-	218'	278'	278'	620'
WB	T/TR	-	320'	388'	153'	768'
SB	L	-	123'	153'	153'	300'
	R	100'	38'	38'	38'	35'
Saturday Peak Hour						
EB	L	225'	18'	20'	20'	20'
	T	-	110'	140'	140'	150'
WB	T/TR	-	253'	293'	125'	308'
SB	L	-	55'	85'	85'	98'
	R	100'	40'	40'	40'	40'

Delilah Road (CR 646) & Atlantic City Expressway Westbound Off-Ramp

Consistent with our observations, the capacity analyses demonstrate that the westbound approach experiences significant delay and queues during the weekday evening peak hour. The westbound queue lengths extend to the traffic circle, consistent with observations.

It is anticipated that the construction of the second westbound through lane at the Atlantic City Expressway Eastbound On/Off Ramps would also have a benefit to the westbound queue lengths at the subject intersection as there would no longer be spill back during peak times.

It is noted that the existing width of the Atlantic City Expressway overpass is anticipated to be able to accommodate one additional lane without the reconstruction of the bridge. Considering the anticipated improvement of the westbound approach due to improvements at the adjacent intersection as well as the future developments to the east, it is recommended to utilize this width to construct a second eastbound through lane at the intersection. This additional through lane could tie into the existing second eastbound lane at the traffic circle, and is anticipated to be able to be accommodated within the existing pavement width.

Based on observations and the analysis, at times access to the right turn lane is restricted due to stacking associated with the left turn movement. This was not observed to create backups onto the mainline, however correction of this operation would require widening of the westbound off-ramp to create defined storage for each turn movement. Impacts associated with this widening would be significant due to steep slopes and limited right-of-way. It is recommended that as the expansion plans associated with the NARTP become defined, impacts to this off-ramp are closely monitored.

Further, it is recommended to modernize the traffic signal and provide ADA compliant pedestrian facilities. Improvements included in both the *Future with Improvements (without NARTP)* and *(with NARTP)* analysis are:

- Optimized signal timing
- Second eastbound through lane (striping)

Table 15 below summarizes the levels of service (LOS) and delays associated with the existing, future and future with improvements conditions (with and without NARTP Expansion), while Table 16 summarizes the 95th percentile queue lengths associated with each condition.

A Concept Plan illustrating the Future with Improvements condition (for both with and without the NARTP Expansion) for the intersections of Delilah Road with the Atlantic City Expressway Eastbound On/Off-Ramps and Westbound Off-Ramp is contained in Appendix D.

**Table 15
Delilah Road (CR 646) & Atlantic City Expressway Westbound Off-Ramp – Levels of Service**

Direction/ Movement	Existing	Future (without NARTP)	Future w/ Imp. (without NARTP)	Future (with NARTP)	Future w/ Imp. (with NARTP)
Weekday Morning Peak Hour					
EB	T	B (13)	B (17)	A (8)	F (61)
WB	T	A (8)	A (9)	B (10)	A (10)
NB	LR	E (64)	F (84)	D (54)	F (145)
Overall	B (19)	C (24)	B (15)	E (58)	B (18)
Weekday Evening Peak Hour					
EB	T	B (11)	B (14)	A (8)	B (15)
WB	T	D (45)	E (56)	B (13)	F (108)
NB	L	E (59)	E (73)	D (53)	E (75)
Overall	C (32)	D (40)	B (16)	E (66)	B (20)
Saturday Peak Hour					
EB	T	A (8)	B (10)	A (6)	B (11)
WB	T	A (7)	A (9)	A (9)	A (9)
NB	LR	E (57)	E (61)	D (49)	E (62)
Overall	B (14)	B (16)	B (13)	B (17)	B (13)

Table 16
Delilah Road (CR 646) & Atlantic City Expressway Westbound Off-Ramp – 95th Percentile Queue Lengths

Direction/ Movement	Storage Length	Existing	Future (without NARTP)	Future w/ Imp. (without NARTP)	Future (with NARTP)	Future w/ Imp. (with NARTP)
Weekday Morning Peak Hour						
EB	T	-	350'	443'	160'	1105'
WB	T	-	185'	215'	233'	233'
NB	LR	-	300'	365'	295'	553'
Weekday Evening Peak Hour						
EB	T	-	290'	365'	138'	400'
WB	T	-	705'	838'	348'	1405'
NB	LR	-	305'	355'	295'	368'
Saturday Peak Hour						
EB	T	-	205'	275'	153'	305'
WB	T	-	160'	213'	215'	228'
NB	LR	-	245'	278'	248'	288'

Delilah Road (CR 646) & Aviation Research Boulevard/Fourth Street

Consistent with our observations, the capacity analyses demonstrate that the intersection operates with acceptable levels of service and delays under the existing conditions. Under the future condition, some intersection movements experience an increase in delay during all studied peak hours, but all movements continue to operate with acceptable levels of service.

The intersection is already fully built out in anticipation of the NARTP Expansion; however, the intersection geometry and signal timing should be monitored as the campus plans are confirmed. This intersection is anticipated to serve as the primary access point to the campus, but it is unknown what level of alternative access will be provided. As such, until future plans are definitive, it is unclear what level of traffic the subject expansion will add to the intersection.

Additionally, it is also our understanding that it is proposed to signalize the intersection of Delilah Road and Westcoat Road as more developments are constructed along the corridor. Due to close proximity, the signals at the intersections of Westcoat Road and Aviation Research Boulevard should be coordinated. Further, it is recommended to modernize the traffic signal and provide ADA compliant pedestrian facilities.

Table 17 summarizes the levels of service (LOS) and delays associated with the existing and future conditions (with and without NARTP Expansion), while Table 18 summarizes the 95th percentile queue lengths associated with each condition.

Table 17
Delilah Road (CR 646) & Aviation Research Boulevard/Fourth Street
Levels of Service

Direction/ Movement		Existing	Future (without NARTP)
Weekday Morning Peak Hour			
EB	L	A (2)	A (2)
	TR	A (3)	A (4)
WB	L	A (3)	A (3)
	T	A (4)	A (4)
	R	A (3)	A (3)
NB	LTR	D (44)	D (44)
SB	LT	D (44)	D (44)
	R	D (40)	D (40)
Overall		A (5)	A (5)
Weekday Evening Peak Hour			
EB	L	A (3)	A (4)
	TR	A (4)	A (5)
WB	L	A (3)	A (3)
	T	A (5)	A (5)
	R	A (3)	A (3)
NB	LTR	D (46)	D (46)
SB	LT	D (43)	D (43)
	R	D (40)	D (40)
Overall		A (7)	A (7)
Saturday Peak Hour			
EB	L	A (2)	A (2)
	TR	A (3)	A (3)
WB	L	A (2)	A (2)
	T	A (2)	A (3)
	R	A (2)	A (2)
NB	LTR	D (44)	D (44)
SB	LT	D (44)	D (44)
	R	D (44)	D (44)
Overall		A (4)	A (4)

A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)

Table 18
Delilah Road (CR 646) & Aviation Research Boulevard/Fourth Street
95th Percentile Queue Lengths

Direction/ Movement		Storage Length	Existing	Future (without NARTP)
Weekday Morning Peak Hour				
EB	L	200'	0'	3'
	TR	-	48'	63'
WB	L	100'	0'	0'
	T	-	43'	135'
	R	215'	13'	13'
NB	LTR	-	13'	15'
SB	LT	90'	30'	30'
	R	-	3'	3'
Weekday Evening Peak Hour				
EB	L	200'	0'	0'
	TR	-	68'	95'
WB	L	100'	0'	0'
	T	-	90'	125'
	R	215'	8'	8'
NB	LTR	-	5'	5'
SB	LT	90'	110'	118'
	R	-	33'	33'
Saturday Peak Hour				
EB	L	200'	0'	0'
	TR	-	33'	50'
WB	L	100'	0'	0'
	T	-	25'	35'
	R	215'	3'	3'
NB	LTR	-	10'	10'
SB	LT	90'	15'	18'
	R	-	8'	8'

CORRIDOR RECOMMENDATIONS

Outside of the influence of signalized intersections, it is recommended to widen Delilah Road to provide a two-way left turn lane for residential driveways located in close proximity. At major driveways, future and existing subdivisions, dedicated left turn lanes should be provided. Dedicated turn lanes improve safety by removing decelerating vehicles from the through lanes when performing left turn movements into various driveways and local streets. Based on the traffic volumes and speeds along Delilah Road, it is likely that most if not all driveways within the corridor would meet the volume based warrants for a left turn lane. Dedicated right turn lanes should be considered at high volume driveways, or a minimum of 10' shoulders provided along the corridor with low volume driveways. 5' minimum shoulders should be provided adjacent to turn lanes. It is noted that the Atlantic City Expressway overpass will constrain the ability to provide a consistent cross section on top of the overpass and the shoulder would need to be eliminated to accommodate intersection improvements as previously described.

SUMMARY OF RECOMMENDATIONS

Intersection improvements including widening and signal phasing and timing adjustments were considered based upon the findings of the Future analysis, both with and without the NARTP expansion. The following summarizes the recommendations for each study intersection.

Delilah Road (CR 646) & Black Horse Pike (US Route 322/40)

- *Without NARTP Expansion*
 - Extend the eastbound left turn lane along Black Horse Pike (median widening required)
 - Optimize signal timing
 - Modernize traffic signal and upgrade pedestrian facilities.
- *With NARTP Expansion*
 - Monitor the need for providing a second left turn lane along eastbound Black Horse Pike (widening of Black Horse Pike EB required)

Delilah Road (CR 646) & English Creek Avenue

- *Without NARTP Expansion*
 - Optimize signal timing
- *With NARTP Expansion*
 - Monitor the need for providing a second left turn lane along eastbound Black Horse Pike (widening required)

Delilah Road (CR 646) & Atlantic City Expressway Eastbound On/Off-Ramps

- *Without NARTP Expansion*
 - Widen the westbound approach to provide a dedicated though lane and a shared through/right turn lane
 - Optimize traffic signal timing.
 - Modernize traffic signal and upgrade pedestrian facilities.
- *With NARTP Expansion*
 - Monitor the southbound approach for potential need to lengthen the southbound left and right turn storage lengths as plans for the NARTP expansion become more definitive.

Delilah Road (CR 646) & Atlantic City Expressway Westbound Off-Ramp

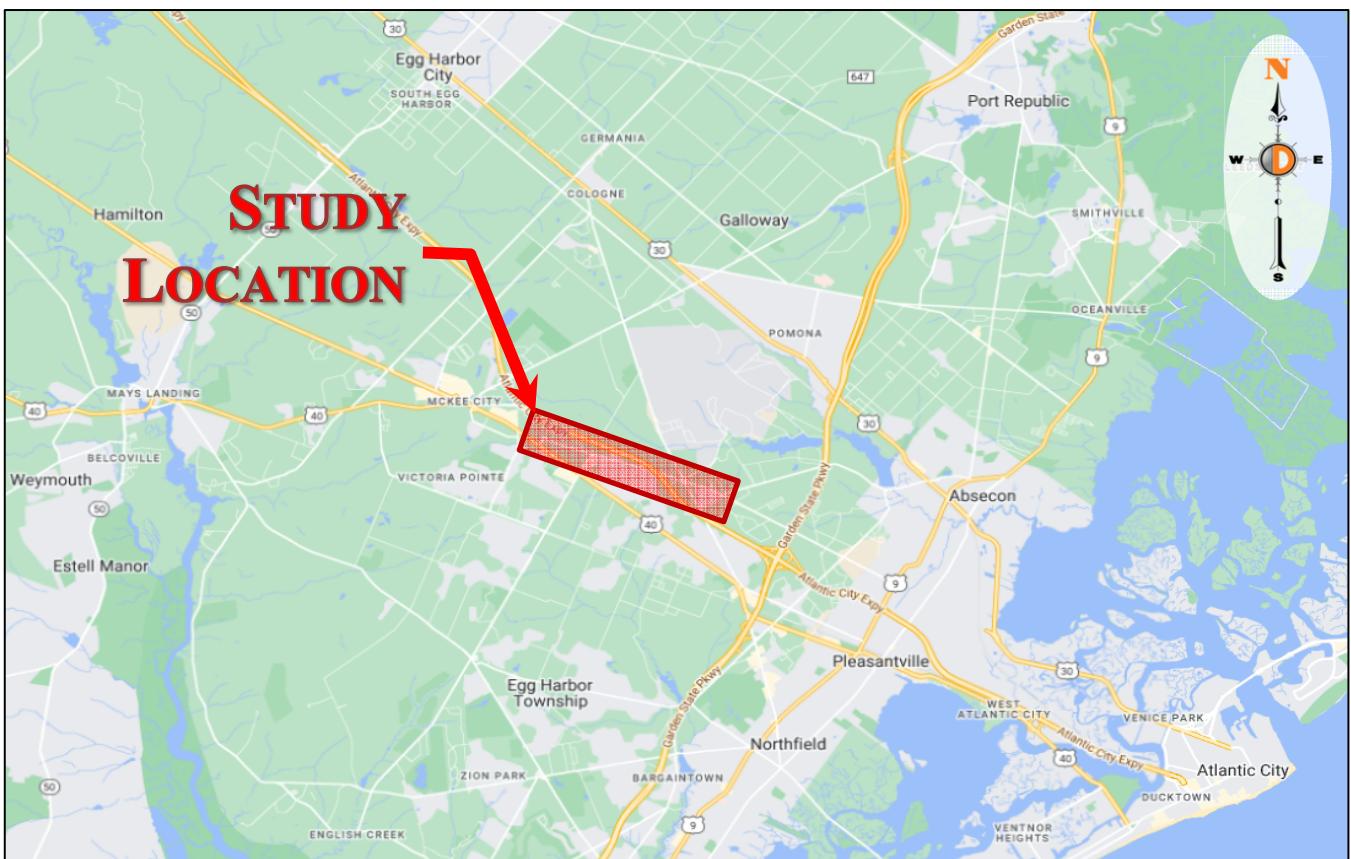
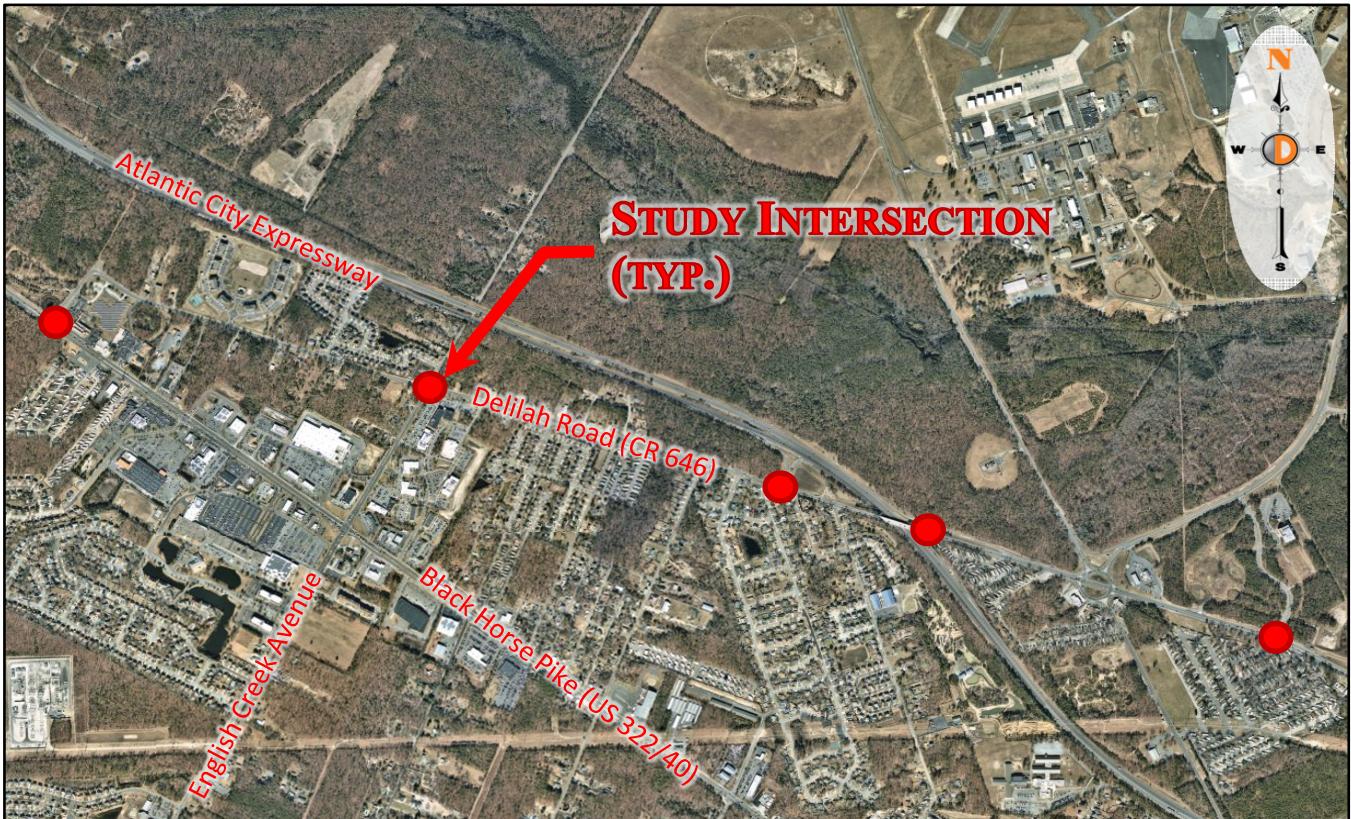
- *With & Without NARTP Expansion*
 - Optimize traffic signal timing.
 - Modernize traffic signal and upgrade pedestrian facilities.
 - Restripe eastbound approach to provide two through lanes.

Delilah Road (CR 646) & Aviation Research Boulevard

- *Without NARTP Expansion*
 - Modernize traffic signal and upgrade pedestrian facilities.

Appendix A

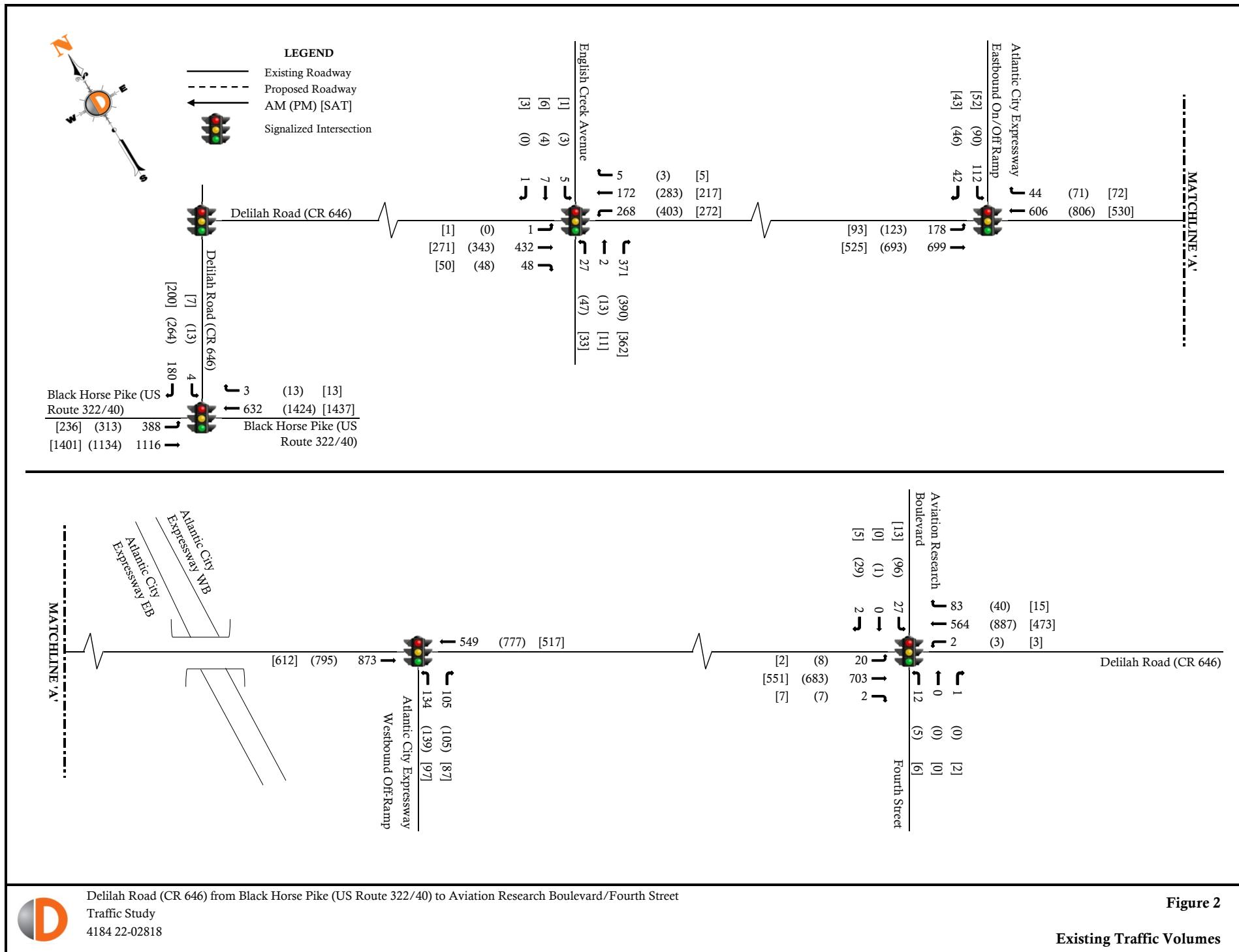
Traffic Volume Figures

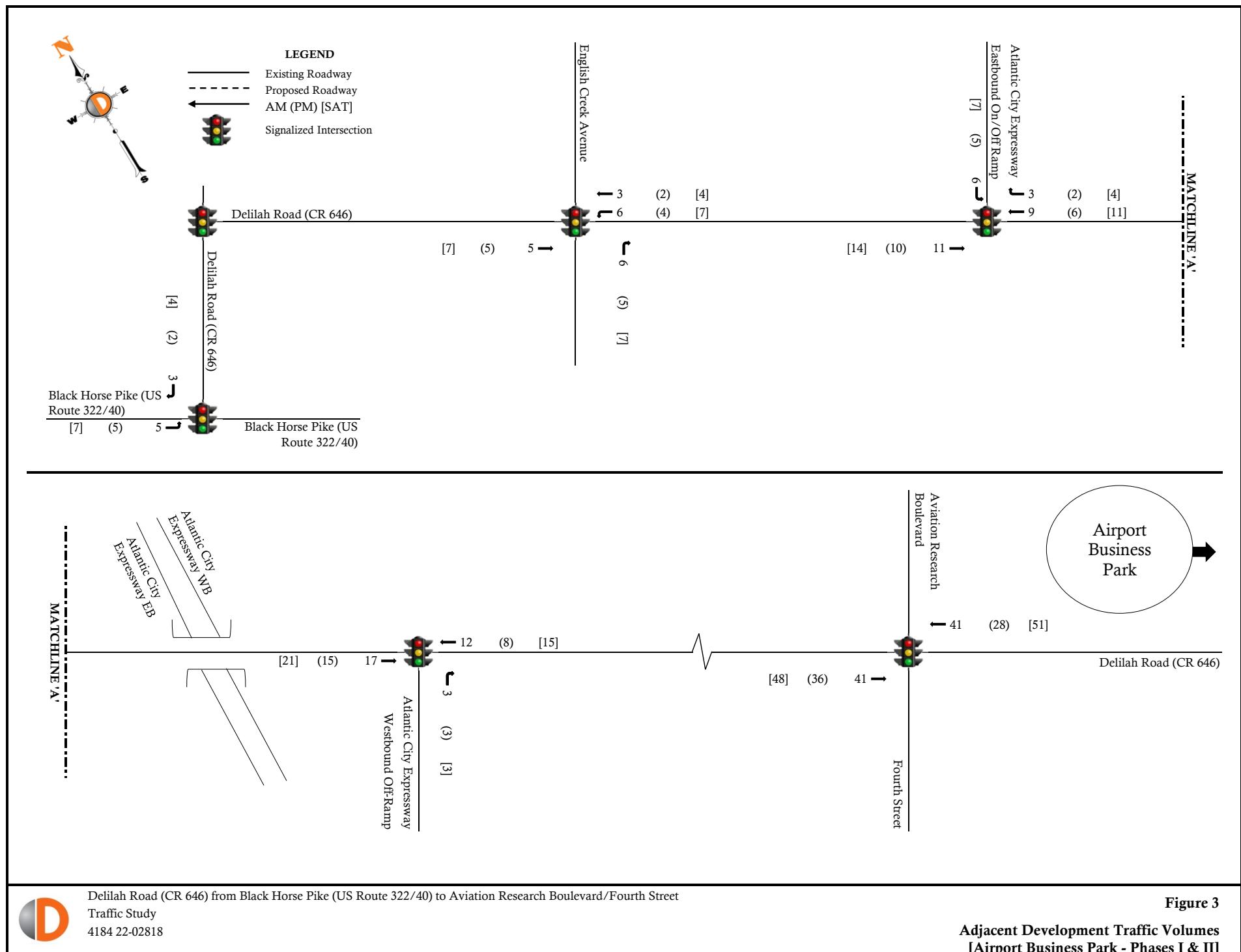


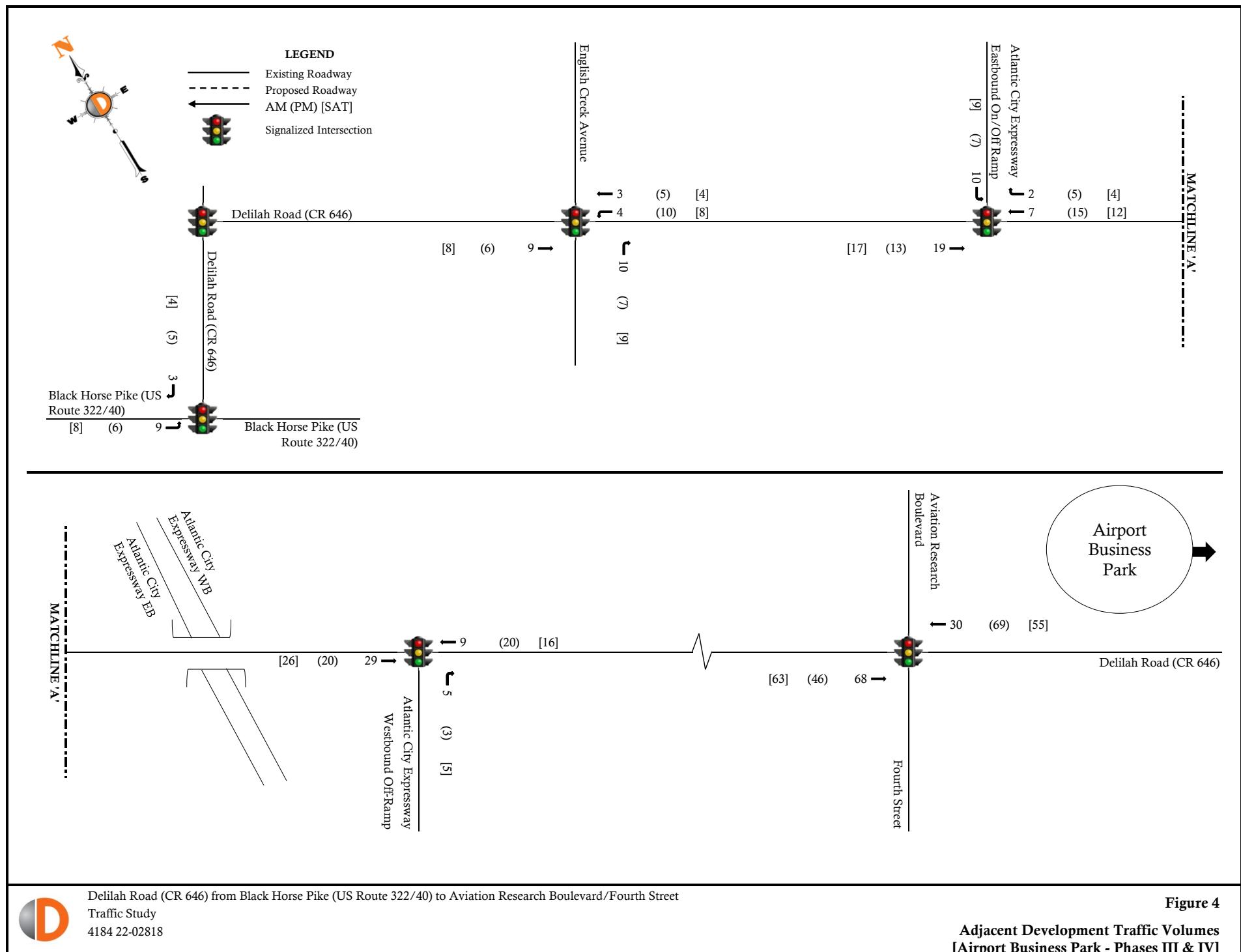
Delilah Road (CR 646) from Black Horse Pike (US Route 40/322)
to Aviation Research Boulevard/Fourth Street
Traffic Study
4184 22-02818

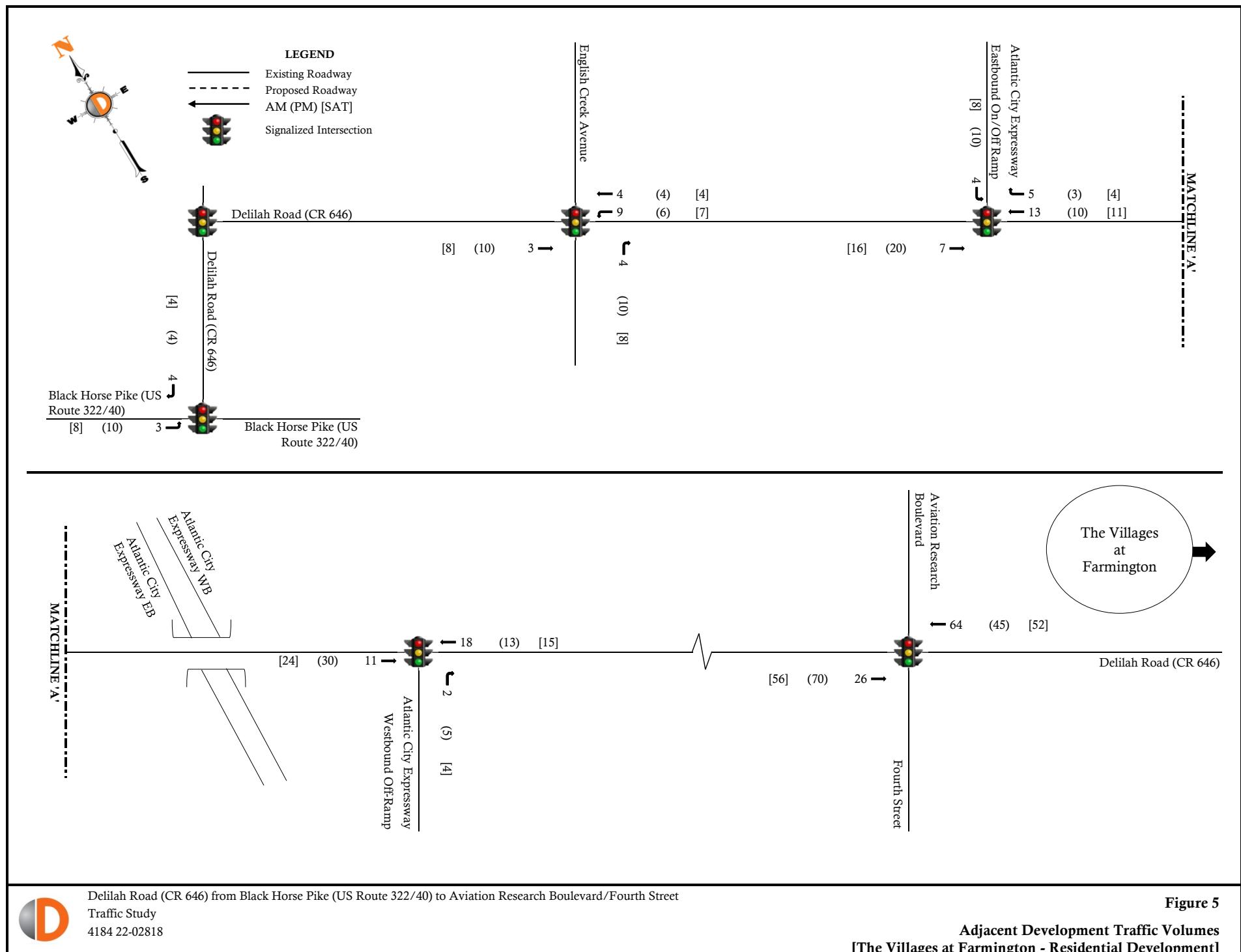
Figure 1

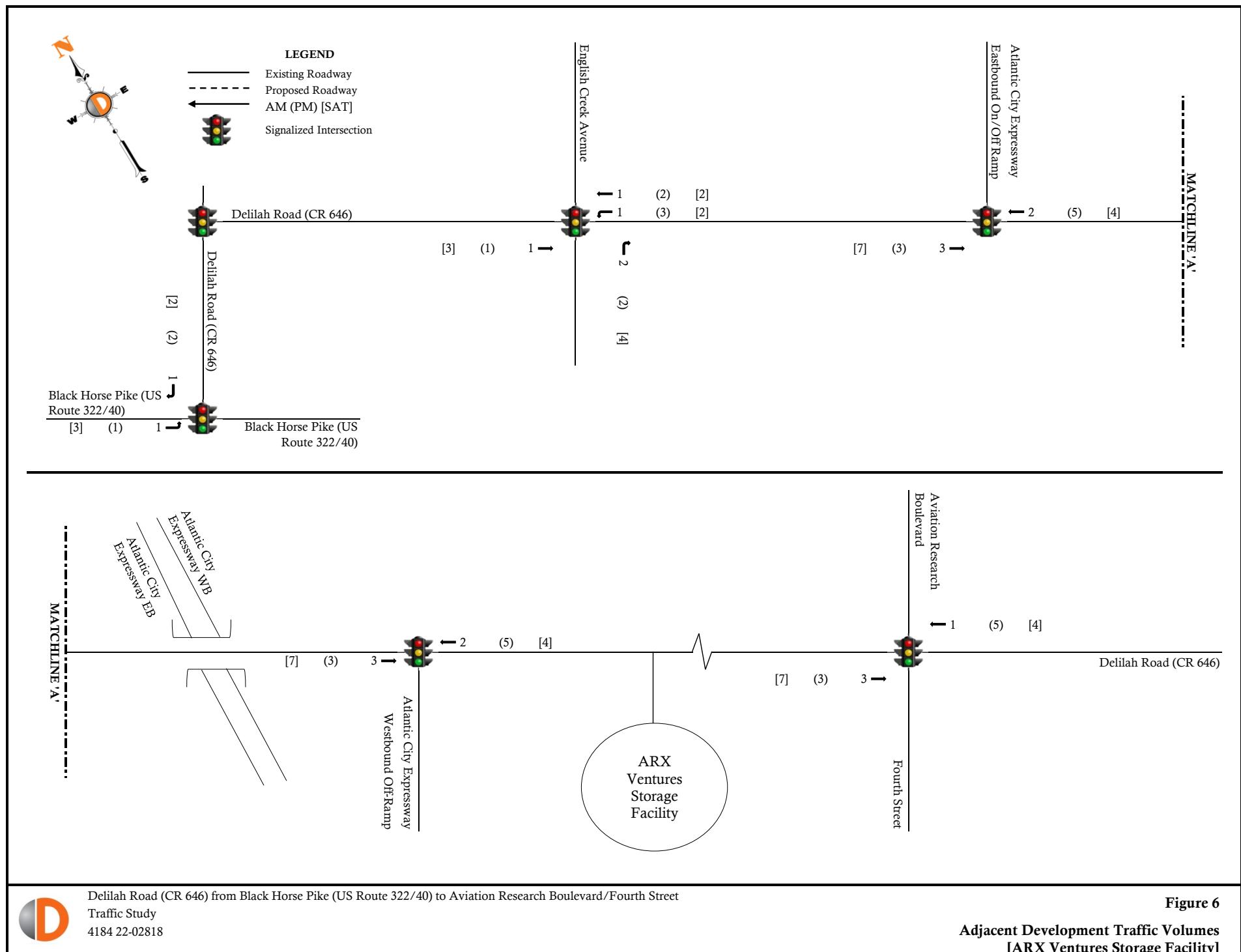
Site Location Map

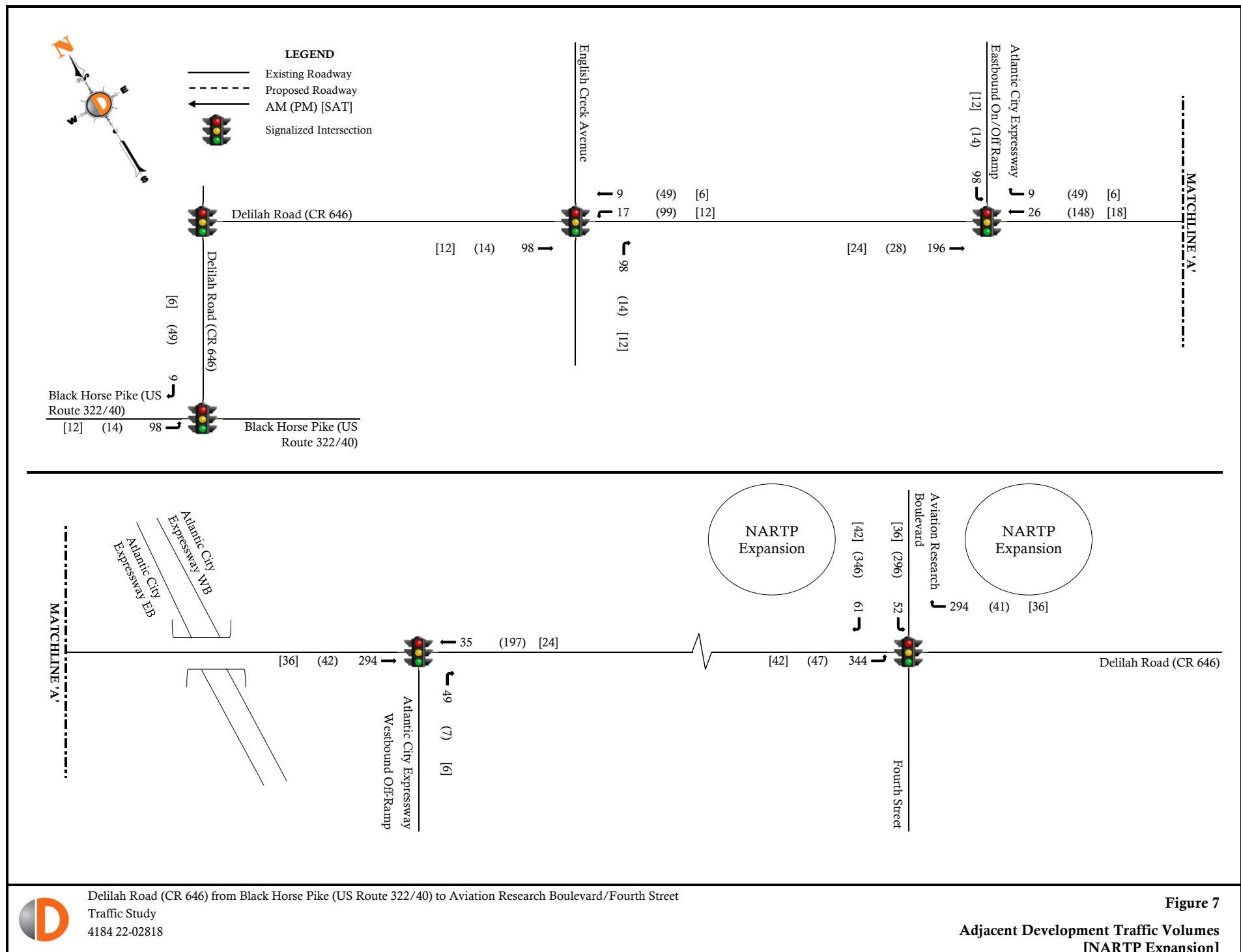


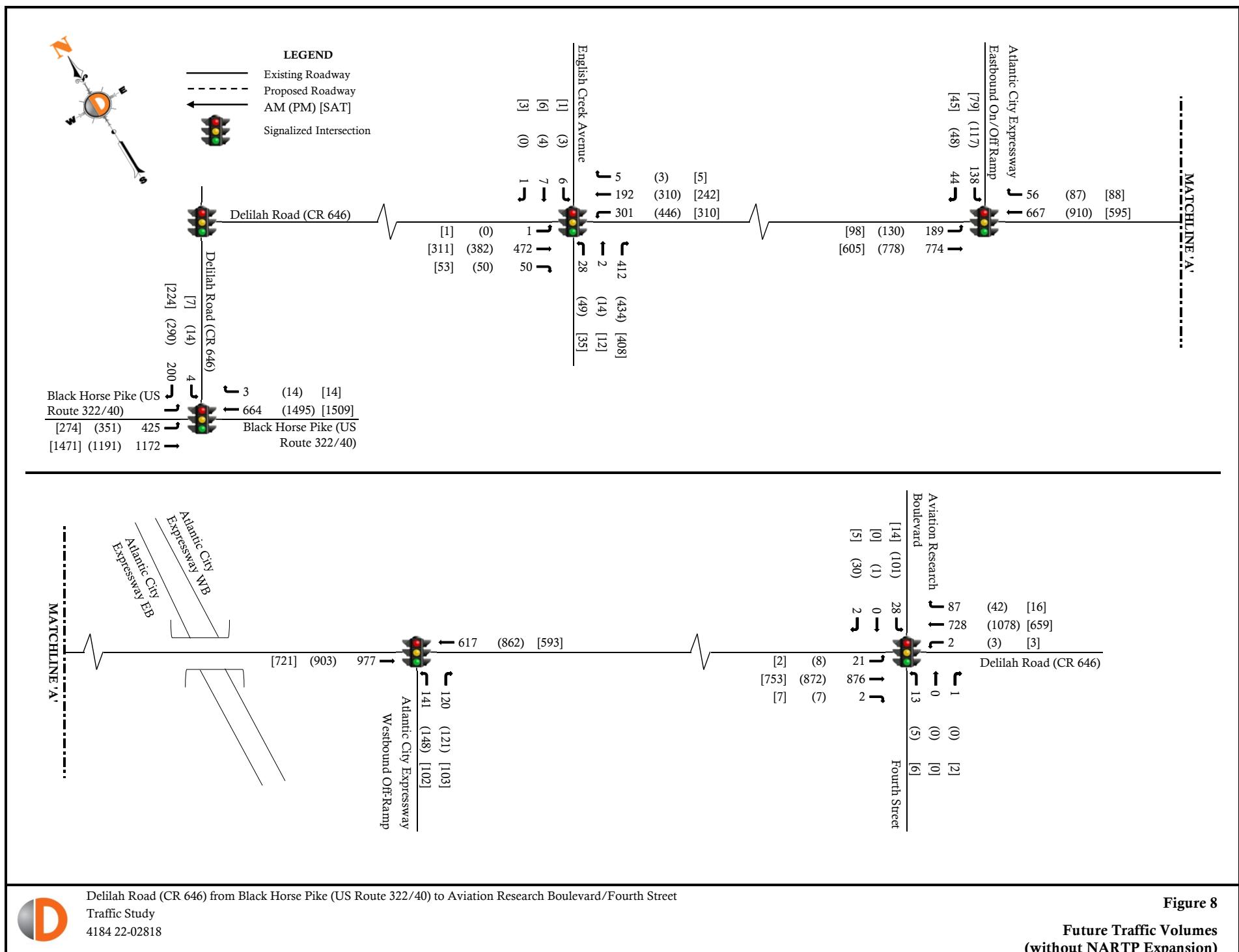


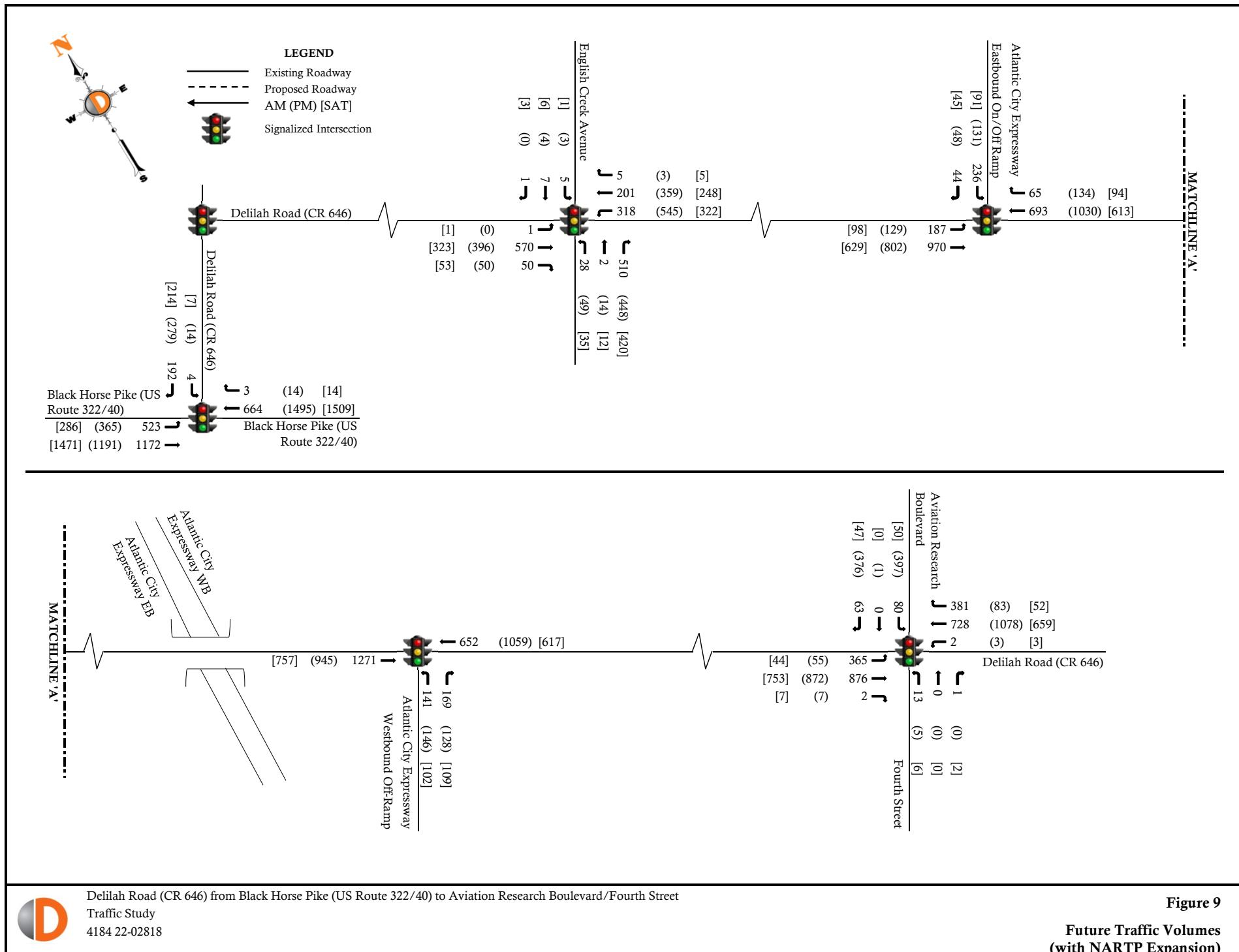












Appendix B

Project Information

1: Delilah Road/Zaberers Ave & Black Horse P... - TMC

Thu Apr 27, 2023

Full Length (7 AM-7 PM, 9 AM-7 PM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1062834, Location: 39.440356, -74.620108, Site Code: 1

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Zaberers Avenue/Delilah Road Southbound					Black Horse Pike Eastbound					Black Horse Pike Westbound					
Time	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	Int
2023-04-27 7:00AM	1	47	0	48	0	73	212	0	285	0	120	0	0	120	0	453
7:15AM	0	39	0	39	0	111	242	0	353	0	143	1	0	144	0	536
7:30AM	0	47	0	47	0	90	256	0	346	0	176	0	0	176	0	569
7:45AM	0	43	0	43	0	131	321	0	452	0	124	1	0	125	0	620
Hourly Total	1	176	0	177	0	405	1031	0	1436	0	563	2	0	565	0	2178
8:00AM	0	40	0	40	0	95	277	0	372	0	149	0	0	149	0	561
8:15AM	1	40	0	41	0	92	261	0	353	0	156	0	0	156	0	550
8:30AM	3	57	0	60	0	70	257	0	327	0	203	2	0	205	0	592
8:45AM	2	47	0	49	0	79	288	1	368	0	167	2	0	169	0	586
Hourly Total	6	184	0	190	0	336	1083	1	1420	0	675	4	0	679	0	2289
9:00AM	5	58	0	63	0	59	255	1	315	0	206	1	0	207	0	585
9:15AM	1	50	0	51	0	60	206	0	266	0	212	1	0	213	0	530
9:30AM	2	43	0	45	0	59	255	0	314	0	209	3	0	212	0	571
9:45AM	5	37	0	42	0	67	249	0	316	0	204	1	0	205	0	563
Hourly Total	13	188	0	201	0	245	965	1	1211	0	831	6	0	837	0	2249
10:00AM	0	44	0	44	0	37	204	0	241	0	235	3	0	238	0	523
10:15AM	0	43	0	43	0	61	238	1	300	0	199	2	0	201	0	544
10:30AM	1	40	0	41	0	54	236	0	290	0	277	4	0	281	0	612
10:45AM	3	51	0	54	0	68	246	0	314	0	258	6	0	264	0	632
Hourly Total	4	178	0	182	0	220	924	1	1145	0	969	15	0	984	0	2311
11:00AM	3	56	0	59	0	56	227	0	283	0	300	3	0	303	0	645
11:15AM	3	52	0	55	0	46	273	0	319	0	285	1	0	286	0	660
11:30AM	3	53	0	56	0	63	259	0	322	0	303	4	1	308	0	686
11:45AM	5	65	0	70	0	64	295	0	359	0	258	4	0	262	0	691
Hourly Total	14	226	0	240	0	229	1054	0	1283	0	1146	12	1	1159	0	2682
12:00PM	1	59	0	60	0	64	274	0	338	0	318	6	0	324	0	722
12:15PM	6	55	0	61	0	79	299	0	378	0	292	2	0	294	0	733
12:30PM	3	63	0	66	0	63	258	0	321	0	291	2	0	293	0	680
12:45PM	4	44	0	48	0	70	285	1	356	0	300	4	0	304	0	708
Hourly Total	14	221	0	235	0	276	1116	1	1393	0	1201	14	0	1215	0	2843
1:00PM	0	58	0	58	0	63	263	0	326	0	291	3	0	294	0	678
1:15PM	6	50	0	56	0	83	300	0	383	0	288	7	0	295	0	734
1:30PM	0	54	0	54	0	61	280	0	341	0	275	2	0	277	0	672
1:45PM	2	62	0	64	0	68	264	0	332	0	248	7	0	255	0	651
Hourly Total	8	224	0	232	0	275	1107	0	1382	0	1102	19	0	1121	0	2735
2:00PM	3	62	0	65	0	56	250	0	306	0	284	4	0	288	0	659
2:15PM	2	69	0	71	0	72	306	1	379	0	295	1	0	296	0	746

Leg Direction	Zaberers Avenue/Delilah Road Southbound					Black Horse Pike Eastbound					Black Horse Pike Westbound						
	Time	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	Int
2:30PM	0	66	0	66	0	0	59	292	0	351	0	327	3	0	330	0	747
2:45PM	5	52	0	57	0	0	103	286	0	389	0	262	2	0	264	0	710
Hourly Total	10	249	0	259	0	0	290	1134	1	1425	0	1168	10	0	1178	0	2862
3:00PM	3	50	0	53	0	0	76	273	0	349	0	351	3	0	354	0	756
3:15PM	5	60	0	65	0	0	69	295	2	366	0	317	2	0	319	0	750
3:30PM	2	57	1	60	0	0	56	286	0	342	0	337	2	0	339	0	741
3:45PM	0	53	0	53	0	0	73	335	1	409	0	326	3	0	329	0	791
Hourly Total	10	220	1	231	0	0	274	1189	3	1466	0	1331	10	0	1341	0	3038
4:00PM	2	66	0	68	0	0	68	277	0	345	0	352	5	0	357	0	770
4:15PM	8	65	0	73	0	0	74	295	0	369	0	363	4	0	367	0	809
4:30PM	2	75	0	77	1	0	68	246	0	314	0	368	1	0	369	0	760
4:45PM	2	62	0	64	0	0	89	311	1	401	0	312	3	0	315	0	780
Hourly Total	14	268	0	282	1	0	299	1129	1	1429	0	1395	13	0	1408	0	3119
5:00PM	1	62	0	63	1	0	82	282	2	366	0	381	5	0	386	0	815
5:15PM	3	86	0	89	0	0	77	252	0	329	0	378	3	0	381	0	799
5:30PM	3	50	0	53	0	0	52	254	0	306	0	369	3	0	372	0	731
5:45PM	2	81	0	83	0	0	42	262	0	304	0	331	2	0	333	0	720
Hourly Total	9	279	0	288	1	0	253	1050	2	1305	0	1459	13	0	1472	0	3065
6:00PM	0	46	0	46	1	0	55	224	0	279	0	300	3	0	303	0	628
6:15PM	1	50	0	51	0	0	68	279	0	347	0	271	1	0	272	0	670
6:30PM	2	72	0	74	0	0	45	256	0	301	0	260	1	0	261	0	636
6:45PM	2	51	0	53	0	0	62	270	0	332	0	236	2	0	238	0	623
Hourly Total	5	219	0	224	1	0	230	1029	0	1259	0	1067	7	0	1074	0	2557
2023-04-29 9:00AM	0	27	0	27	0	0	33	145	0	178	0	153	0	0	153	0	358
9:15AM	1	30	0	31	0	0	40	194	0	234	0	167	0	0	167	0	432
9:30AM	1	34	0	35	0	0	40	206	0	246	0	194	3	0	197	0	478
9:45AM	0	51	0	51	0	0	52	224	0	276	0	214	0	0	214	0	541
Hourly Total	2	142	0	144	0	0	165	769	0	934	0	728	3	0	731	0	1809
10:00AM	1	45	0	46	0	0	35	170	0	205	0	228	2	0	230	0	481
10:15AM	1	42	0	43	0	0	43	209	0	252	0	251	1	0	252	0	547
10:30AM	0	38	0	38	1	0	41	207	0	248	0	256	0	0	256	0	542
10:45AM	2	41	0	43	0	0	56	256	1	313	0	259	1	0	260	0	616
Hourly Total	4	166	0	170	1	0	175	842	1	1018	0	994	4	0	998	0	2186
11:00AM	2	37	0	39	0	0	42	243	2	287	0	286	2	0	288	0	614
11:15AM	0	55	0	55	0	0	67	263	0	330	0	303	1	0	304	0	689
11:30AM	2	51	0	53	0	0	29	252	0	281	0	314	3	0	317	0	651
11:45AM	3	52	0	55	0	0	64	314	0	378	0	311	1	0	312	0	745
Hourly Total	7	195	0	202	0	0	202	1072	2	1276	0	1214	7	0	1221	0	2699
12:00PM	2	57	0	59	0	0	59	292	0	351	0	373	1	0	374	0	784
12:15PM	4	73	0	77	0	0	60	333	0	393	0	322	5	0	327	0	797
12:30PM	2	63	0	65	0	0	54	313	0	367	0	375	0	0	375	0	807
12:45PM	4	72	0	76	0	0	57	346	2	405	0	358	11	0	369	0	850
Hourly Total	12	265	0	277	0	0	230	1284	2	1516	0	1428	17	0	1445	0	3238
1:00PM	0	44	0	44	0	0	62	309	0	371	0	326	4	0	330	0	745
1:15PM	2	68	0	70	0	0	62	340	0	402	0	357	3	0	360	0	832

Leg Direction	Zaberers Avenue/Delilah Road Southbound					Black Horse Pike Eastbound					Black Horse Pike Westbound						
	Time	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	Int
1:30PM	1	44	0	45	0		51	341	0	392	0	392	3	0	395	0	832
1:45PM	1	56	0	57	0		56	350	0	406	0	353	1	0	354	0	817
Hourly Total	4	212	0	216	0		231	1340	0	1571	0	1428	11	0	1439	0	3226
2:00PM	5	62	0	67	0		61	315	0	376	0	350	4	0	354	0	797
2:15PM	0	38	0	38	0		68	395	0	463	0	342	5	0	347	0	848
2:30PM	1	49	0	50	0		72	363	1	436	0	322	2	0	324	0	810
2:45PM	1	63	0	64	0		59	347	0	406	0	333	2	0	335	0	805
Hourly Total	7	212	0	219	0		260	1420	1	1681	0	1347	13	0	1360	0	3260
3:00PM	2	52	0	54	0		70	306	0	376	0	346	6	0	352	0	782
3:15PM	3	62	0	65	1		66	323	0	389	0	294	4	0	298	0	752
3:30PM	1	55	0	56	0		62	300	0	362	0	345	1	0	346	0	764
3:45PM	0	57	0	57	0		82	296	0	378	0	317	2	0	319	0	754
Hourly Total	6	226	0	232	1		280	1225	0	1505	0	1302	13	0	1315	0	3052
4:00PM	1	46	0	47	0		72	302	1	375	0	267	0	0	267	0	689
4:15PM	1	45	0	46	0		75	300	0	375	0	291	0	0	291	0	712
4:30PM	0	69	0	69	0		75	258	0	333	0	289	5	0	294	0	696
4:45PM	3	51	0	54	0		66	331	2	399	0	272	2	0	274	0	727
Hourly Total	5	211	0	216	0		288	1191	3	1482	0	1119	7	0	1126	0	2824
5:00PM	3	65	0	68	0		68	274	0	342	0	304	4	0	308	0	718
5:15PM	0	54	0	54	0		55	280	1	336	0	299	5	0	304	0	694
5:30PM	1	64	0	65	0		61	249	0	310	0	271	3	0	274	0	649
5:45PM	1	52	0	53	0		63	268	0	331	0	262	4	0	266	0	650
Hourly Total	5	235	0	240	0		247	1071	1	1319	0	1136	16	0	1152	0	2711
6:00PM	1	47	0	48	0		40	286	0	326	0	269	3	0	272	0	646
6:15PM	0	49	0	49	0		52	296	2	350	0	255	2	0	257	0	656
6:30PM	1	43	0	44	0		44	250	0	294	0	254	5	0	259	0	597
6:45PM	1	50	0	51	0		50	257	0	307	0	245	5	0	250	0	608
Hourly Total	3	189	0	192	0		186	1089	2	1277	0	1023	15	0	1038	0	2507
Total	163	4685	1	4849	5		5596	24114	23	29733	0	24626	231	1	24858	0	59440
% Approach	3.4%	96.6%	0%	-	-		18.8%	81.1%	0.1%	-	-	99.1%	0.9%	0%	-	-	-
% Total	0.3%	7.9%	0%	8.2%	-		9.4%	40.6%	0%	50.0%	-	41.4%	0.4%	0%	41.8%	-	-
Motorcycles	0	2	0	2	-		1	9	0	10	-	19	0	0	19	-	31
% Motorcycles	0%	0%	0%	0%	-		0%	0%	0%	0%	-	0.1%	0%	0%	0.1%	-	0.1%
Lights	156	4537	1	4694	-		5405	23743	22	29170	-	24197	222	1	24420	-	58284
% Lights	95.7%	96.8%	100%	96.8%	-		96.6%	98.5%	95.7%	98.1%	-	98.3%	96.1%	100%	98.2%	-	98.1%
Single-Unit Trucks	4	102	0	106	-		139	190	1	330	-	231	5	0	236	-	672
% Single-Unit Trucks	2.5%	2.2%	0%	2.2%	-		2.5%	0.8%	4.3%	1.1%	-	0.9%	2.2%	0%	0.9%	-	1.1%
Articulated Trucks	0	22	0	22	-		17	68	0	85	-	90	4	0	94	-	201
% Articulated Trucks	0%	0.5%	0%	0.5%	-		0.3%	0.3%	0%	0.3%	-	0.4%	1.7%	0%	0.4%	-	0.3%
Buses	3	22	0	25	-		34	101	0	135	-	88	0	0	88	-	248
% Buses	1.8%	0.5%	0%	0.5%	-		0.6%	0.4%	0%	0.5%	-	0.4%	0%	0%	0.4%	-	0.4%
Bicycles on Road	0	0	0	0	-		0	3	0	3	-	1	0	0	1	-	4
% Bicycles on Road	0%	0%	0%	0%	-		0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	5		-	-	-	-	0	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-

Leg Direction	Zaberers Avenue/Delilah Road Southbound					Black Horse Pike Eastbound					Black Horse Pike Westbound					
Time	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	Int
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

1: Delilah Road/Zaberers Ave & Black Horse P... - TMC

Thu Apr 27, 2023

AM Peak (Apr 27 2023 7:45AM - 8:45 AM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1062834, Location: 39.440356, -74.620108, Site Code: 1

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Zaberers Avenue/Delilah Road Southbound					Black Horse Pike Eastbound					Black Horse Pike Westbound					
Time	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	Int
2023-04-27 7:45AM	0	43	0	43	0	131	321	0	452	0	124	1	0	125	0	620
8:00AM	0	40	0	40	0	95	277	0	372	0	149	0	0	149	0	561
8:15AM	1	40	0	41	0	92	261	0	353	0	156	0	0	156	0	550
8:30AM	3	57	0	60	0	70	257	0	327	0	203	2	0	205	0	592
Total	4	180	0	184	0	388	1116	0	1504	0	632	3	0	635	0	2323
% Approach	2.2%	97.8%	0%	-	-	25.8%	74.2%	0%	-	-	99.5%	0.5%	0%	-	-	-
% Total	0.2%	7.7%	0%	7.9%	-	16.7%	48.0%	0%	64.7%	-	27.2%	0.1%	0%	27.3%	-	-
PHF	0.333	0.789	-	0.767	-	0.740	0.869	-	0.832	-	0.778	0.375	-	0.774	-	0.937
Motorcycles	0	0	0	0	-	0	0	0	0	-	3	0	0	3	-	3
% Motorcycles	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0.5%	0%	0%	0.5%	-	0.1%
Lights	4	161	0	165	-	373	1094	0	1467	-	610	3	0	613	-	2245
% Lights	100%	89.4%	0%	89.7%	-	96.1%	98.0%	0%	97.5%	-	96.5%	100%	0%	96.5%	-	96.6%
Single-Unit Trucks	0	11	0	11	-	13	13	0	26	-	9	0	0	9	-	46
% Single-Unit Trucks	0%	6.1%	0%	6.0%	-	3.4%	1.2%	0%	1.7%	-	1.4%	0%	0%	1.4%	-	2.0%
Articulated Trucks	0	5	0	5	-	2	5	0	7	-	2	0	0	2	-	14
% Articulated Trucks	0%	2.8%	0%	2.7%	-	0.5%	0.4%	0%	0.5%	-	0.3%	0%	0%	0.3%	-	0.6%
Buses	0	3	0	3	-	0	4	0	4	-	8	0	0	8	-	15
% Buses	0%	1.7%	0%	1.6%	-	0%	0.4%	0%	0.3%	-	1.3%	0%	0%	1.3%	-	0.6%
Bicycles on Road	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0
% Bicycles on Road	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

1: Delilah Road/Zaberers Ave & Black Horse P... - TMC

Thu Apr 27, 2023

PM Peak (Apr 27 2023 4:15PM - 5:15 PM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1062834, Location: 39.440356, -74.620108, Site Code: 1

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Zaberers Avenue/Delilah Road Southbound					Black Horse Pike Eastbound					Black Horse Pike Westbound					
Time	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	Int
2023-04-27 4:15PM	8	65	0	73	0	74	295	0	369	0	363	4	0	367	0	809
4:30PM	2	75	0	77	1	68	246	0	314	0	368	1	0	369	0	760
4:45PM	2	62	0	64	0	89	311	1	401	0	312	3	0	315	0	780
5:00PM	1	62	0	63	1	82	282	2	366	0	381	5	0	386	0	815
Total	13	264	0	277	2	313	1134	3	1450	0	1424	13	0	1437	0	3164
% Approach	4.7%	95.3%	0%	-	-	21.6%	78.2%	0.2%	-	-	99.1%	0.9%	0%	-	-	-
% Total	0.4%	8.3%	0%	8.8%	-	9.9%	35.8%	0.1%	45.8%	-	45.0%	0.4%	0%	45.4%	-	-
PHF	0.406	0.880	-	0.899	-	0.879	0.912	0.375	0.904	-	0.934	0.650	-	0.931	-	0.971
Motorcycles	0	0	0	0	-	0	0	0	0	-	1	0	0	1	-	1
% Motorcycles	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0.1%	0%	0%	0.1%	-	0%
Lights	12	262	0	274	-	296	1120	3	1419	-	1397	13	0	1410	-	3103
% Lights	92.3%	99.2%	0%	98.9%	-	94.6%	98.8%	100%	97.9%	-	98.1%	100%	0%	98.1%	-	98.1%
Single-Unit Trucks	0	1	0	1	-	13	7	0	20	-	16	0	0	16	-	37
% Single-Unit Trucks	0%	0.4%	0%	0.4%	-	4.2%	0.6%	0%	1.4%	-	1.1%	0%	0%	1.1%	-	1.2%
Articulated Trucks	0	1	0	1	-	1	3	0	4	-	3	0	0	3	-	8
% Articulated Trucks	0%	0.4%	0%	0.4%	-	0.3%	0.3%	0%	0.3%	-	0.2%	0%	0%	0.2%	-	0.3%
Buses	1	0	0	1	-	3	4	0	7	-	7	0	0	7	-	15
% Buses	7.7%	0%	0%	0.4%	-	1.0%	0.4%	0%	0.5%	-	0.5%	0%	0%	0.5%	-	0.5%
Bicycles on Road	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0
% Bicycles on Road	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	2	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

1: Delilah Road/Zaberers Ave & Black Horse P... - TMC

Sat Apr 29, 2023

PM Peak (WKND) (Apr 29 2023 1:30PM - 2:30 PM) - Overall Peak Hour

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1062834, Location: 39.440356, -74.620108, Site Code: 1

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Zaberers Avenue/Delilah Road Southbound					Black Horse Pike Eastbound					Black Horse Pike Westbound					
Time	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	Int
2023-04-29 1:30PM	1	44	0	45	0	51	341	0	392	0	392	3	0	395	0	832
1:45PM	1	56	0	57	0	56	350	0	406	0	353	1	0	354	0	817
2:00PM	5	62	0	67	0	61	315	0	376	0	350	4	0	354	0	797
2:15PM	0	38	0	38	0	68	395	0	463	0	342	5	0	347	0	848
Total	7	200	0	207	0	236	1401	0	1637	0	1437	13	0	1450	0	3294
% Approach	3.4%	96.6%	0%	-	-	14.4%	85.6%	0%	-	-	99.1%	0.9%	0%	-	-	-
% Total	0.2%	6.1%	0%	6.3%	-	7.2%	42.5%	0%	49.7%	-	43.6%	0.4%	0%	44.0%	-	-
PHF	0.350	0.806	-	0.772	-	0.868	0.887	-	0.884	-	0.916	0.650	-	0.918	-	0.971
Motorcycles	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0
% Motorcycles	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%
Lights	7	199	0	206	-	232	1394	0	1626	-	1424	13	0	1437	-	3269
% Lights	100%	99.5%	0%	99.5%	-	98.3%	99.5%	0%	99.3%	-	99.1%	100%	0%	99.1%	-	99.2%
Single-Unit Trucks	0	1	0	1	-	2	3	0	5	-	8	0	0	8	-	14
% Single-Unit Trucks	0%	0.5%	0%	0.5%	-	0.8%	0.2%	0%	0.3%	-	0.6%	0%	0%	0.6%	-	0.4%
Articulated Trucks	0	0	0	0	-	0	2	0	2	-	2	0	0	2	-	4
% Articulated Trucks	0%	0%	0%	0%	-	0%	0.1%	0%	0.1%	-	0.1%	0%	0%	0.1%	-	0.1%
Buses	0	0	0	0	-	2	2	0	4	-	3	0	0	3	-	7
% Buses	0%	0%	0%	0%	-	0.8%	0.1%	0%	0.2%	-	0.2%	0%	0%	0.2%	-	0.2%
Bicycles on Road	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0
% Bicycles on Road	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

2: Delilah Road & English Creek Avenue - TMC

Thu Apr 27, 2023

Full Length (7 AM-7 PM, 9 AM-7 PM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1062835, Location: 39.438211, -74.605333, Site Code: 2

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	English Creek Avenue Northbound						English Creek Avenue Southbound						Delilah Road Eastbound						Delilah Road Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2023-04-27 7:00AM	2	1	57	0	60	0	1	0	0	0	1	0	1	69	8	0	78	0	50	37	1	0	88	0	227
7:15AM	2	0	92	0	94	0	3	1	0	0	4	0	1	107	8	0	116	0	40	42	1	0	83	0	297
7:30AM	4	0	96	0	100	0	2	0	0	1	3	0	0	105	7	0	112	0	63	46	1	0	110	0	325
7:45AM	7	0	98	0	105	0	0	1	1	0	2	0	1	125	14	0	140	0	60	41	2	0	103	0	350
Hourly Total	15	1	343	0	359	0	6	2	1	1	10	0	3	406	37	0	446	0	213	166	5	0	384	0	1199
8:00AM	3	0	85	0	88	0	1	4	0	0	5	0	0	111	18	0	129	0	80	37	2	0	119	0	341
8:15AM	13	2	92	0	107	0	1	2	0	0	3	0	0	91	9	0	100	0	65	48	0	0	113	0	323
8:30AM	3	1	71	0	75	0	2	1	0	0	3	0	0	74	11	0	85	0	74	62	1	0	137	0	300
8:45AM	11	0	88	0	99	0	1	3	0	0	4	0	0	78	13	0	91	0	72	52	1	0	125	0	319
Hourly Total	30	3	336	0	369	0	5	10	0	0	15	0	0	354	51	0	405	0	291	199	4	0	494	0	1283
9:00AM	4	0	84	0	88	0	0	2	0	0	2	0	0	74	11	0	85	0	79	51	0	0	130	0	305
9:15AM	6	0	81	0	87	0	0	0	0	0	0	0	0	59	10	0	69	0	84	46	0	0	130	0	286
9:30AM	3	0	58	0	61	0	0	1	0	0	1	0	0	62	18	0	80	0	57	41	2	0	100	0	242
9:45AM	4	2	85	0	91	0	0	2	1	0	3	0	0	65	7	0	72	0	84	42	0	0	126	0	292
Hourly Total	17	2	308	0	327	0	0	5	1	0	6	0	0	260	46	0	306	0	304	180	2	0	486	0	1125
10:00AM	4	0	67	0	71	0	0	2	0	0	2	0	0	46	5	0	51	0	59	44	0	0	103	0	227
10:15AM	10	1	80	0	91	0	0	2	0	0	2	0	0	53	10	0	63	0	83	42	0	0	125	0	281
10:30AM	6	3	70	0	79	0	0	0	3	0	3	0	1	63	12	0	76	0	64	43	0	0	107	0	265
10:45AM	8	3	78	0	89	0	1	0	0	0	1	0	1	68	13	0	82	0	64	50	0	0	114	0	286
Hourly Total	28	7	295	0	330	0	1	4	3	0	8	0	2	230	40	0	272	0	270	179	0	0	449	0	1059
11:00AM	2	4	72	0	78	0	0	0	0	0	0	0	0	60	8	0	68	0	80	56	0	0	136	0	282
11:15AM	9	2	72	0	83	0	1	2	1	0	4	0	1	51	6	0	58	0	77	57	0	0	134	0	279
11:30AM	7	5	84	0	96	0	0	1	0	0	1	0	0	56	13	0	69	0	68	57	1	0	126	0	292
11:45AM	14	1	65	0	80	0	3	0	0	0	3	0	0	69	13	0	82	0	90	56	2	0	148	0	313
Hourly Total	32	12	293	0	337	0	4	3	1	0	8	0	1	236	40	0	277	0	315	226	3	0	544	0	1166
12:00PM	6	1	91	0	98	0	0	3	0	0	3	0	0	57	17	0	74	0	102	55	0	0	157	0	332
12:15PM	10	2	90	0	102	0	0	1	0	0	1	0	0	77	13	0	90	0	82	54	2	0	138	0	331
12:30PM	6	0	102	0	108	0	0	2	0	0	2	0	0	74	17	0	91	0	71	64	1	0	136	0	337
12:45PM	8	1	91	0	100	0	0	2	0	0	2	0	1	57	11	0	69	0	81	55	0	0	136	0	307
Hourly Total	30	4	374	0	408	0	0	8	0	0	8	0	1	265	58	0	324	0	336	228	3	0	567	0	1307
1:00PM	10	0	82	0	92	0	0	1	0	0	1	0	0	68	9	0	77	0	93	56	0	0	149	0	319
1:15PM	9	3	79	0	91	0	1	2	0	0	3	0	1	73	6	0	80	0	85	58	4	0	147	0	321
1:30PM	6	3	81	0	90	0	3	2	0	0	5	0	1	74	14	0	89	0	91	56	2	0	149	0	333
1:45PM	11	1	81	0	93	0	1	2	0	0	3	0	1	70	13	0	84	0	91	52	0	0	143	0	323
Hourly Total	36	7	323	0	366	0	5	7	0	0	12	0	3	285	42	0	330	0	360	222	6	0	588	0	1296
2:00PM	7	6	95	0	108	0	0	1	0	0	1	0	0	66	5	0	71	0	69	72	2	0	143	0	323
2:15PM	5	1	110	0	116	0	0	0	1	0	1	0	0	74	9	0	83	0	76	71	2	0	149	0	349

Leg Direction	English Creek Avenue Northbound						English Creek Avenue Southbound						Delilah Road Eastbound						Delilah Road Westbound						
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2:30PM	3	0	77	0	80	0	0	4	0	0	4	0	0	64	13	0	77	0	78	59	0	0	137	0	298
2:45PM	6	2	105	0	113	0	0	0	0	0	0	0	0	96	13	0	109	0	81	52	2	0	135	0	357
Hourly Total	21	9	387	0	417	0	0	5	1	0	6	0	0	300	40	0	340	0	304	254	6	0	564	0	1327
3:00PM	13	4	100	0	117	0	0	2	1	0	3	0	0	90	9	0	99	0	96	56	2	0	154	0	373
3:15PM	12	1	125	0	138	0	3	0	1	0	4	0	0	69	15	0	84	0	86	50	1	0	137	0	363
3:30PM	12	3	104	0	119	0	0	0	0	0	0	0	0	66	12	0	78	0	90	58	1	0	149	0	346
3:45PM	11	2	95	0	108	0	0	2	1	0	3	0	0	67	10	0	77	0	85	56	1	0	142	0	330
Hourly Total	48	10	424	0	482	0	3	4	3	0	10	0	0	292	46	0	338	0	357	220	5	0	582	0	1412
4:00PM	6	4	107	0	117	0	2	3	0	0	5	0	0	78	20	0	98	2	89	74	3	0	166	0	386
4:15PM	16	3	89	0	108	1	0	1	0	0	1	0	0	70	9	0	79	0	111	62	0	0	173	0	361
4:30PM	15	3	103	0	121	1	0	0	0	0	0	0	0	71	19	0	90	0	104	77	0	0	181	0	392
4:45PM	11	2	105	0	118	0	1	2	0	0	3	0	0	94	10	0	104	0	93	62	1	0	156	0	381
Hourly Total	48	12	404	0	464	2	3	6	0	0	9	0	0	313	58	0	371	2	397	275	4	0	676	0	1520
5:00PM	12	3	86	0	101	2	1	1	0	0	2	0	0	94	10	0	104	0	101	71	2	0	174	0	381
5:15PM	9	5	96	0	110	0	1	1	0	0	2	0	0	84	9	0	93	0	105	73	0	0	178	0	383
5:30PM	10	1	90	0	101	0	1	2	0	0	3	0	0	69	9	0	78	0	88	67	3	0	158	0	340
5:45PM	12	0	82	0	94	0	1	1	0	0	2	0	0	44	10	0	54	0	104	69	1	0	174	0	324
Hourly Total	43	9	354	0	406	2	4	5	0	0	9	0	0	291	38	0	329	0	398	280	6	0	684	0	1428
6:00PM	11	0	72	0	83	0	0	0	2	0	2	1	0	73	10	0	83	0	80	45	2	0	127	0	295
6:15PM	5	3	70	0	78	0	0	2	0	0	2	0	2	58	14	0	74	0	56	47	0	0	103	0	257
6:30PM	11	4	83	0	98	0	2	1	2	0	5	0	0	54	7	0	61	0	79	81	2	0	162	0	326
6:45PM	7	1	66	0	74	0	0	0	0	0	0	0	0	54	10	0	64	0	57	47	2	0	106	0	244
Hourly Total	34	8	291	0	333	0	2	3	4	0	9	1	2	239	41	0	282	0	272	220	6	0	498	0	1122
2023-04-29 9:00AM	7	0	42	0	49	0	0	0	0	0	0	0	0	36	8	0	44	0	50	31	1	0	82	0	175
9:15AM	2	2	33	0	37	0	0	2	0	0	2	0	0	36	5	0	41	0	38	30	0	0	68	0	148
9:30AM	5	0	47	0	52	0	0	2	0	0	2	0	0	46	10	0	56	0	40	34	1	0	75	0	185
9:45AM	5	1	53	0	59	0	0	0	0	0	0	0	0	41	16	0	57	0	45	49	0	0	94	0	210
Hourly Total	19	3	175	0	197	0	0	4	0	0	4	0	0	159	39	0	198	0	173	144	2	0	319	0	718
10:00AM	4	2	53	0	59	0	0	1	1	0	2	0	0	39	11	0	50	0	52	44	1	0	97	0	208
10:15AM	2	0	59	0	61	0	1	0	0	0	1	0	0	43	4	0	47	0	59	36	0	0	95	0	204
10:30AM	10	1	48	0	59	0	1	1	0	0	2	0	0	41	10	0	51	0	65	40	1	0	106	0	218
10:45AM	1	4	72	0	77	0	1	0	1	0	2	0	0	48	14	0	62	0	62	43	0	0	105	0	246
Hourly Total	17	7	232	0	256	0	3	2	2	0	7	0	0	171	39	0	210	0	238	163	2	0	403	0	876
11:00AM	6	1	73	0	80	0	1	0	0	0	1	0	0	47	10	0	57	0	76	41	0	0	117	0	255
11:15AM	7	2	69	0	78	0	2	1	0	0	3	0	0	62	8	0	70	0	67	55	1	0	123	0	274
11:30AM	6	0	69	0	75	0	1	2	0	0	3	0	1	37	10	0	48	0	77	53	0	0	130	0	256
11:45AM	5	4	67	0	76	2	4	1	0	0	5	0	0	54	10	0	64	0	67	52	0	0	119	0	264
Hourly Total	24	7	278	0	309	2	8	4	0	0	12	0	1	200	38	0	239	0	287	201	1	0	489	0	1049
12:00PM	1	4	78	0	83	0	0	1	0	0	1	0	1	72	8	0	81	0	83	52	2	0	137	0	302
12:15PM	4	1	79	0	84	0	0	0	0	0	0	0	0	53	7	0	60	0	76	80	0	0	156	0	300
12:30PM	6	1	72	0	79	0	0	2	0	0	2	0	0	59	16	0	75	0	74	66	0	0	140	0	296
12:45PM	4	4	72	0	80	0	0	0	1	0	1	0	0	56	9	0	65	0	57	71	0	0	128	0	274
Hourly Total	15	10	301	0	326	0	0	3	1	0	4	0	1	240	40	0	281	0	290	269	2	0	561	0	1172
1:00PM	7	2	85	0	94	0	2	1	0	0	3	0	0	68	14	0	82	0	67	44	2	0	113	0	292
1:15PM	10	4	77	0	91	2	1	0	0	0	1	0	0	60	12	0	72	0	73	62	0	0	135	0	299

Leg Direction	English Creek Avenue Northbound							English Creek Avenue Southbound							Delilah Road Eastbound							Delilah Road Westbound							
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int				
1:30PM	8	0	72	0	80	0	1	1	0	0	2	0	0	72	8	0	80	0	66	53	3	0	122	0	284				
1:45PM	8	2	91	0	101	0	1	2	0	0	3	0	0	52	11	0	63	0	73	54	1	0	128	0	295				
Hourly Total	33	8	325	0	366	2	5	4	0	0	9	0	0	252	45	0	297	0	279	213	6	0	498	0	1170				
2:00PM	8	1	93	0	102	0	0	2	1	0	3	0	0	64	9	0	73	0	78	59	1	1	139	0	317				
2:15PM	6	3	94	0	103	0	1	1	1	1	4	0	1	69	17	0	87	0	75	43	1	0	119	0	313				
2:30PM	7	2	91	0	100	0	0	2	0	2	4	0	0	72	9	0	81	0	59	50	2	0	111	0	296				
2:45PM	12	5	84	0	101	0	0	1	1	1	3	0	0	66	15	0	81	0	60	65	1	0	126	1	311				
Hourly Total	33	11	362	0	406	0	1	6	3	4	14	0	1	271	50	0	322	0	272	217	5	1	495	1	1237				
3:00PM	3	2	82	0	87	0	1	0	1	0	2	0	1	78	12	0	91	0	58	55	0	0	113	0	293				
3:15PM	5	3	77	0	85	0	0	0	0	0	0	0	1	64	12	0	77	0	76	55	0	0	131	0	293				
3:30PM	5	1	83	0	89	0	0	3	0	0	3	0	0	67	8	0	75	0	64	51	0	0	115	0	282				
3:45PM	7	3	88	0	98	0	0	0	0	0	0	0	0	80	10	0	90	0	75	69	0	0	144	0	332				
Hourly Total	20	9	330	0	359	0	1	3	1	0	5	0	2	289	42	0	333	0	273	230	0	0	503	0	1200				
4:00PM	8	5	59	0	72	0	0	1	0	0	1	0	0	87	12	0	99	0	67	44	1	0	112	0	284				
4:15PM	5	2	72	0	79	0	1	0	0	0	1	0	0	68	7	0	75	0	67	50	0	0	117	0	272				
4:30PM	4	3	58	0	65	0	2	0	0	0	2	0	0	76	13	0	89	0	68	69	2	0	139	1	295				
4:45PM	11	4	75	0	90	0	2	0	1	0	3	0	1	58	13	0	72	0	64	55	1	0	120	0	285				
Hourly Total	28	14	264	0	306	0	5	1	1	0	7	0	1	289	45	0	335	0	266	218	4	0	488	1	1136				
5:00PM	11	1	53	0	65	0	1	0	0	0	1	0	0	71	13	0	84	0	58	57	0	0	115	0	265				
5:15PM	5	0	68	0	73	0	0	2	0	0	2	0	0	63	13	0	76	0	61	60	1	0	122	0	273				
5:30PM	1	2	72	0	75	0	0	1	0	0	1	0	0	65	8	0	73	0	68	62	2	0	132	0	281				
5:45PM	9	2	63	0	74	0	1	1	0	0	2	0	0	53	11	0	64	0	58	49	1	0	108	0	248				
Hourly Total	26	5	256	0	287	0	2	4	0	0	6	0	0	252	45	0	297	0	245	228	4	0	477	0	1067				
6:00PM	7	3	80	0	90	0	1	2	0	0	3	0	1	60	13	0	74	0	52	47	1	0	100	0	267				
6:15PM	10	2	87	0	99	0	1	0	0	0	1	0	0	43	6	0	49	0	81	45	0	0	126	0	275				
6:30PM	7	3	75	0	85	0	0	0	0	0	0	0	0	55	8	0	63	0	55	50	3	0	108	0	256				
6:45PM	5	1	78	0	84	0	1	0	0	0	1	0	0	47	7	0	54	0	62	47	1	0	110	0	249				
Hourly Total	29	9	320	0	358	0	3	2	0	0	5	0	1	205	34	0	240	0	250	189	5	0	444	0	1047				
Total	626	167	6975	0	7768	8	61	95	22	5	183	1	19	5799	954	0	6772	2	6390	4721	81	1	11193	2	25916				
% Approach	8.1%	2.1%	89.8%	0%	-	-	33.3%	51.9%	12.0%	2.7%	-	-	0.3%	85.6%	14.1%	0%	-	-	57.1%	42.2%	0.7%	0%	-	-	-				
% Total	2.4%	0.6%	26.9%	0%	30.0%	-	0.2%	0.4%	0.1%	0%	0.7%	-	0.1%	22.4%	3.7%	0%	26.1%	-	24.7%	18.2%	0.3%	0%	43.2%	-	-				
Motorcycles	0	0	3	0	3	-	0	0	0	0	0	-	0	1	0	0	1	-	4	2	0	0	6	-	10				
% Motorcycles	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0.1%	0%	0%	0%	0.1%	-	0%				
Lights	612	151	6786	0	7549	-	59	89	22	5	175	-	18	5576	925	0	6519	-	6184	4561	75	1	10821	-	25064				
% Lights	97.8%	90.4%	97.3%	0%	97.2%	-	96.7%	93.7%	100%	100%	95.6%	-	94.7%	96.2%	97.0%	0%	96.3%	-	96.8%	96.6%	92.6%	100%	96.7%	-	96.7%				
Single-Unit Trucks	6	1	123	0	130	-	1	4	0	0	5	-	0	153	14	0	167	-	127	110	1	0	238	-	540				
% Single-Unit Trucks	1.0%	0.6%	1.8%	0%	1.7%	-	1.6%	4.2%	0%	0%	2.7%	-	0%	2.6%	1.5%	0%	2.5%	-	2.0%	2.3%	1.2%	0%	2.1%	-	2.1%				
Articulated Trucks	3	3	21	0	27	-	1	0	0	0	1	-	0	21	6	0	27	-	38	24	0	0	62	-	117				
% Articulated Trucks	0.5%	1.8%	0.3%	0%	0.3%	-	1.6%	0%	0%	0%	0.5%	-	0%	0.4%	0.6%	0%	0.4%	-	0.6%	0.5%	0%	0%	0.6%	-	0.5%				
Buses	4	10	40	0	54	-	0	0	0	0	0	-	1	48	8	0	57	-	37	23	5	0	65	-	176				
% Buses	0.6%	6.0%	0.6%	0%	0.7%	-	0%	0%	0%	0%	0%	-	5.3%	0.8%	0.8%	0%	0.8%	-	0.6%	0.5%	6.2%	0%	0.6%	-	0.7%				
Bicycles on Road	1	2	2	0	5	-	0	2	0	0	2	-	0	0	1	0	1	-	0	1	0	0	1	-	9				
% Bicycles on Road	0.2%	1.2%	0%	0%	0.1%	-	0%	2.1%	0%	0%	1.1%	-	0%	0%	0.1%	0%	0%	-	0%	0%	0%	0%	0%	-	0%				
Pedestrians	-	-	-	-	-	8	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	1					
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	50.0%				

Leg Direction	English Creek Avenue Northbound						English Creek Avenue Southbound						Delilah Road Eastbound						Delilah Road Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	50.0%	-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

2: Delilah Road & English Creek Avenue - TMC

Thu Apr 27, 2023

AM Peak (Apr 27 2023 7:30AM - 8:30 AM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1062835, Location: 39.438211, -74.605333, Site Code: 2

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	English Creek Avenue Northbound						English Creek Avenue Southbound						Delilah Road Eastbound						Delilah Road Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2023-04-27 7:30AM	4	0	96	0	100	0	2	0	0	1	3	0	0	105	7	0	112	0	63	46	1	0	110	0	325
7:45AM	7	0	98	0	105	0	0	1	1	0	2	0	1	125	14	0	140	0	60	41	2	0	103	0	350
8:00AM	3	0	85	0	88	0	1	4	0	0	5	0	0	111	18	0	129	0	80	37	2	0	119	0	341
8:15AM	13	2	92	0	107	0	1	2	0	0	3	0	0	91	9	0	100	0	65	48	0	0	113	0	323
Total	27	2	371	0	400	0	4	7	1	1	13	0	1	432	48	0	481	0	268	172	5	0	445	0	1339
% Approach	6.8%	0.5%	92.8%	0%	-	-	30.8%	53.8%	7.7%	7.7%	-	-	0.2%	89.8%	10.0%	0%	-	-	60.2%	38.7%	1.1%	0%	-	-	-
% Total	2.0%	0.1%	27.7%	0%	29.9%	-	0.3%	0.5%	0.1%	0.1%	1.0%	-	0.1%	32.3%	3.6%	0%	35.9%	-	20.0%	12.8%	0.4%	0%	33.2%	-	-
PHF	0.519	0.250	0.946	-	0.935	-	0.500	0.438	0.250	0.250	0.650	-	0.250	0.864	0.667	-	0.859	-	0.838	0.896	0.625	-	0.935	-	0.956
Motorcycles	0	0	1	0	1	-	0	0	0	0	0	-	0	0	0	0	0	-	1	0	0	0	1	-	2
% Motorcycles	0%	0%	0.3%	0%	0.3%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0.4%	0%	0%	0%	0.2%	-	0.1%
Lights	26	2	348	0	376	-	4	7	1	1	13	-	0	409	43	0	452	-	248	156	4	0	408	-	1249
% Lights	96.3%	100%	93.8%	0%	94.0%	-	100%	100%	100%	100%	100%	-	0%	94.7%	89.6%	0%	94.0%	-	92.5%	90.7%	80.0%	0%	91.7%	-	93.3%
Single-Unit Trucks	0	0	14	0	14	-	0	0	0	0	0	-	0	13	2	0	15	-	15	11	0	0	26	-	55
% Single-Unit Trucks	0%	0%	3.8%	0%	3.5%	-	0%	0%	0%	0%	0%	-	0%	3.0%	4.2%	0%	3.1%	-	5.6%	6.4%	0%	0%	5.8%	-	4.1%
Articulated Trucks	0	0	2	0	2	-	0	0	0	0	0	-	0	5	2	0	7	-	1	3	0	0	4	-	13
% Articulated Trucks	0%	0%	0.5%	0%	0.5%	-	0%	0%	0%	0%	0%	-	0%	1.2%	4.2%	0%	1.5%	-	0.4%	1.7%	0%	0%	0.9%	-	1.0%
Buses	1	0	6	0	7	-	0	0	0	0	0	-	1	5	1	0	7	-	3	2	1	0	6	-	20
% Buses	3.7%	0%	1.6%	0%	1.8%	-	0%	0%	0%	0%	0%	-	100%	1.2%	2.1%	0%	1.5%	-	1.1%	1.2%	20.0%	0%	1.3%	-	1.5%
Bicycles on Road	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Bicycles on Road	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

2: Delilah Road & English Creek Avenue - TMC

Thu Apr 27, 2023

PM Peak (Apr 27 2023 4:30PM - 5:30 PM) - Overall Peak Hour

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1062835, Location: 39.438211, -74.605333, Site Code: 2

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	English Creek Avenue Northbound						English Creek Avenue Southbound						Delilah Road Eastbound						Delilah Road Westbound							
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int	
2023-04-27 4:30PM	15	3	103	0	121	1	0	0	0	0	0	0	0	71	19	0	90	0	104	77	0	0	181	0	392	
4:45PM	11	2	105	0	118	0	1	2	0	0	3	0	0	94	10	0	104	0	93	62	1	0	156	0	381	
5:00PM	12	3	86	0	101	2	1	1	0	0	2	0	0	94	10	0	104	0	101	71	2	0	174	0	381	
5:15PM	9	5	96	0	110	0	1	1	0	0	2	0	0	84	9	0	93	0	105	73	0	0	178	0	383	
Total	47	13	390	0	450	3	3	4	0	0	7	0	0	343	48	0	391	0	403	283	3	0	689	0	1537	
% Approach	10.4%	2.9%	86.7%	0%	-	-	42.9%	57.1%	0%	0%	-	-	-	87.7%	12.3%	0%	-	-	58.5%	41.1%	0.4%	0%	-	-	-	
% Total	3.1%	0.8%	25.4%	0%	29.3%	-	0.2%	0.3%	0%	0%	0.5%	-	-	0%	22.3%	3.1%	0%	25.4%	-	26.2%	18.4%	0.2%	0%	44.8%	-	-
PHF	0.783	0.650	0.926	-	0.928	-	0.750	0.500	-	-	0.583	-	-	0.912	0.632	-	0.940	-	0.960	0.919	0.375	-	0.952	-	0.980	
Motorcycles	0	0	0	0	0	-	0	0	0	0	0	-	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Motorcycles	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%
Lights	47	13	384	0	444	-	3	4	0	0	7	-	-	0	327	45	0	372	-	395	281	3	0	679	-	1502
% Lights	100%	100%	98.5%	0%	98.7%	-	100%	100%	0%	0%	100%	-	-	0%	95.3%	93.8%	0%	95.1%	-	98.0%	99.3%	100%	0%	98.5%	-	97.7%
Single-Unit Trucks	0	0	4	0	4	-	0	0	0	0	0	-	-	0	14	1	0	15	-	4	1	0	0	5	-	24
% Single-Unit Trucks	0%	0%	1.0%	0%	0.9%	-	0%	0%	0%	0%	0%	-	-	0%	4.1%	2.1%	0%	3.8%	-	1.0%	0.4%	0%	0%	0.7%	-	1.6%
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	-	-	0	0	0	0	0	-	1	0	0	0	1	-	1
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	-	0%	0%	0%	0%	0%	-	0.2%	0%	0%	0%	0.1%	-	0.1%
Buses	0	0	1	0	1	-	0	0	0	0	0	-	-	0	2	2	0	4	-	3	1	0	0	4	-	9
% Buses	0%	0%	0.3%	0%	0.2%	-	0%	0%	0%	0%	0%	-	-	0%	0.6%	4.2%	0%	1.0%	-	0.7%	0.4%	0%	0%	0.6%	-	0.6%
Bicycles on Road	0	0	1	0	1	-	0	0	0	0	0	-	-	0	0	0	0	0	-	0	0	0	0	0	-	1
% Bicycles on Road	0%	0%	0.3%	0%	0.2%	-	0%	0%	0%	0%	0%	-	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0.1%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

2: Delilah Road & English Creek Avenue - TMC

Sat Apr 29, 2023

PM Peak (WKND) (Apr 29 2023 2PM - 3 PM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1062835, Location: 39.438211, -74.605333, Site Code: 2

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	English Creek Avenue Northbound						English Creek Avenue Southbound						Delilah Road Eastbound						Delilah Road Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2023-04-29 2:00PM	8	1	93	0	102	0	0	2	1	0	3	0	0	64	9	0	73	0	78	59	1	1	139	0	317
2:15PM	6	3	94	0	103	0	1	1	1	1	4	0	1	69	17	0	87	0	75	43	1	0	119	0	313
2:30PM	7	2	91	0	100	0	0	2	0	2	4	0	0	72	9	0	81	0	59	50	2	0	111	0	296
2:45PM	12	5	84	0	101	0	0	1	1	1	3	0	0	66	15	0	81	0	60	65	1	0	126	1	311
Total	33	11	362	0	406	0	1	6	3	4	14	0	1	271	50	0	322	0	272	217	5	1	495	1	1237
% Approach	8.1%	2.7%	89.2%	0%	-	-	7.1%	42.9%	21.4%	28.6%	-	-	0.3%	84.2%	15.5%	0%	-	-	54.9%	43.8%	1.0%	0.2%	-	-	-
% Total	2.7%	0.9%	29.3%	0%	32.8%	-	0.1%	0.5%	0.2%	0.3%	1.1%	-	0.1%	21.9%	4.0%	0%	26.0%	-	22.0%	17.5%	0.4%	0.1%	40.0%	-	-
PHF	0.688	0.550	0.963	-	0.985	-	0.250	0.750	0.750	0.500	0.875	-	0.250	0.941	0.735	-	0.925	-	0.872	0.835	0.625	0.250	0.890	-	0.976
Motorcycles	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Motorcycles	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%
Lights	33	10	359	0	402	-	1	6	3	4	14	-	1	267	49	0	317	-	268	216	5	1	490	-	1223
% Lights	100%	90.9%	99.2%	0%	99.0%	-	100%	100%	100%	100%	100%	-	100%	98.5%	98.0%	0%	98.4%	-	98.5%	99.5%	100%	100%	99.0%	-	98.9%
Single-Unit Trucks	0	0	3	0	3	-	0	0	0	0	0	-	0	1	1	0	2	-	1	1	0	0	2	-	7
% Single-Unit Trucks	0%	0%	0.8%	0%	0.7%	-	0%	0%	0%	0%	0%	-	0%	0.4%	2.0%	0%	0.6%	-	0.4%	0.5%	0%	0%	0.4%	-	0.6%
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	-	0	1	0	0	1	-	2	0	0	0	2	-	3
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0.4%	0%	0%	0.3%	-	0.7%	0%	0%	0%	0.4%	-	0.2%
Buses	0	1	0	0	1	-	0	0	0	0	0	-	0	2	0	0	2	-	1	0	0	0	1	-	4
% Buses	0%	9.1%	0%	0%	0.2%	-	0%	0%	0%	0%	0%	-	0%	0.7%	0%	0%	0.6%	-	0.4%	0%	0%	0%	0.2%	-	0.3%
Bicycles on Road	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Bicycles on Road	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

3: Delilah Road & AC Expressway On/Off Ramps - TMC

Thu Apr 27, 2023

Full Length (7 AM-7 PM, 9 AM-7 PM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1062836, Location: 39.434956, -74.59137, Site Code: 3

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	AC Expressway On/Off Ramps Southbound					Delilah Road Eastbound					Delilah Road Westbound					
Time	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	Int
2023-04-27 7:00AM	17	10	0	27	0	26	117	0	143	0	111	3	0	114	0	284
7:15AM	18	9	0	27	0	38	177	0	215	0	99	11	0	110	0	352
7:30AM	28	9	0	37	0	44	185	0	229	0	138	8	0	146	0	412
7:45AM	27	19	0	46	0	46	199	0	245	0	157	5	0	162	0	453
Hourly Total	90	47	0	137	0	154	678	0	832	0	505	27	0	532	0	1501
8:00AM	25	5	0	30	0	42	181	0	223	0	150	8	0	158	0	411
8:15AM	30	11	0	41	0	46	150	0	196	0	131	17	0	148	0	385
8:30AM	30	7	0	37	0	42	169	0	211	0	168	14	0	182	0	430
8:45AM	28	10	0	38	0	42	143	0	185	0	152	13	0	165	0	388
Hourly Total	113	33	0	146	0	172	643	0	815	0	601	52	0	653	0	1614
9:00AM	28	12	0	40	0	48	148	0	196	0	161	6	0	167	0	403
9:15AM	22	9	0	31	0	32	124	0	156	0	137	7	0	144	0	331
9:30AM	13	13	1	27	0	28	135	0	163	0	134	15	0	149	0	339
9:45AM	21	10	1	32	0	38	136	0	174	0	160	13	0	173	0	379
Hourly Total	84	44	2	130	0	146	543	0	689	0	592	41	0	633	0	1452
10:00AM	16	2	0	18	0	28	124	0	152	0	133	17	0	150	0	320
10:15AM	18	10	0	28	0	25	115	0	140	0	154	10	0	164	0	332
10:30AM	11	6	0	17	0	36	127	0	163	0	148	12	0	160	0	340
10:45AM	11	6	0	17	0	33	142	0	175	0	147	10	0	157	0	349
Hourly Total	56	24	0	80	0	122	508	0	630	0	582	49	0	631	0	1341
11:00AM	14	4	0	18	0	28	135	0	163	0	144	8	0	152	0	333
11:15AM	9	19	0	28	0	30	114	0	144	0	150	11	0	161	0	333
11:30AM	16	3	0	19	0	39	141	0	180	0	143	13	0	156	0	355
11:45AM	11	8	0	19	0	24	140	0	164	0	158	15	0	173	0	356
Hourly Total	50	34	0	84	0	121	530	0	651	0	595	47	0	642	0	1377
12:00PM	11	4	0	15	0	34	154	0	188	0	177	10	0	187	0	390
12:15PM	9	8	0	17	0	25	158	0	183	0	169	5	0	174	0	374
12:30PM	12	8	0	20	0	20	174	0	194	0	149	5	0	154	0	368
12:45PM	10	10	0	20	0	22	149	0	171	0	159	8	0	167	0	358
Hourly Total	42	30	0	72	0	101	635	0	736	0	654	28	0	682	0	1490
1:00PM	15	9	0	24	0	30	154	0	184	0	168	9	0	177	0	385
1:15PM	15	7	0	22	0	28	145	0	173	0	156	16	0	172	0	367
1:30PM	16	10	0	26	0	22	154	0	176	0	170	9	0	179	0	381
1:45PM	22	13	0	35	0	30	161	0	191	0	176	10	0	186	0	412
Hourly Total	68	39	0	107	0	110	614	0	724	0	670	44	0	714	0	1545
2:00PM	11	10	0	21	0	26	169	0	195	0	153	7	0	160	0	376
2:15PM	17	10	1	28	0	43	154	0	197	0	166	9	0	175	0	400

Leg Direction	AC Expressway On/Off Ramps					Delilah Road Eastbound					Delilah Road Westbound					
	Southbound					Eastbound					Westbound					
Time	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	Int
2:30PM	21	6	0	27	0	25	136	0	161	0	153	12	0	165	0	353
2:45PM	22	10	0	32	0	36	185	0	221	0	154	15	0	169	0	422
Hourly Total	71	36	1	108	0	130	644	0	774	0	626	43	0	669	0	1551
3:00PM	5	7	0	12	0	44	174	0	218	0	168	8	0	176	0	406
3:15PM	18	8	1	27	0	41	163	0	204	0	152	9	0	161	0	392
3:30PM	18	13	0	31	0	43	165	0	208	0	159	16	0	175	0	414
3:45PM	19	12	0	31	0	38	130	0	168	0	168	18	0	186	0	385
Hourly Total	60	40	1	101	0	166	632	0	798	0	647	51	0	698	0	1597
4:00PM	19	12	0	31	0	36	182	0	218	0	182	18	0	200	0	449
4:15PM	23	9	0	32	0	39	149	0	188	0	179	30	0	209	0	429
4:30PM	21	13	0	34	0	32	164	0	196	0	209	13	0	222	0	452
4:45PM	29	13	0	42	0	36	181	0	217	0	161	12	0	173	0	432
Hourly Total	92	47	0	139	0	143	676	0	819	0	731	73	0	804	0	1762
5:00PM	22	11	0	33	0	24	177	0	201	0	206	27	0	233	0	467
5:15PM	18	9	0	27	0	30	167	0	197	0	202	17	0	219	0	443
5:30PM	18	13	0	31	0	31	138	0	169	0	187	27	0	214	0	414
5:45PM	16	7	0	23	0	29	120	0	149	0	208	19	0	227	0	399
Hourly Total	74	40	0	114	0	114	602	0	716	0	803	90	0	893	0	1723
6:00PM	6	5	0	11	0	29	124	0	153	0	138	9	0	147	0	311
6:15PM	17	10	0	27	0	17	129	0	146	0	129	16	0	145	0	318
6:30PM	12	11	0	23	0	21	129	0	150	0	165	9	0	174	0	347
6:45PM	13	12	0	25	0	20	117	0	137	0	116	5	0	121	0	283
Hourly Total	48	38	0	86	0	87	499	0	586	0	548	39	0	587	0	1259
2023-04-29 9:00AM	5	2	0	7	0	20	71	0	91	0	79	8	0	87	0	185
9:15AM	2	2	0	4	0	11	58	0	69	0	86	13	0	99	0	172
9:30AM	8	4	0	12	0	20	89	0	109	0	90	17	0	107	0	228
9:45AM	5	6	0	11	0	15	80	0	95	0	107	12	0	119	0	225
Hourly Total	20	14	0	34	0	66	298	0	364	0	362	50	0	412	0	810
10:00AM	5	3	0	8	0	13	93	0	106	0	107	5	0	112	0	226
10:15AM	7	4	0	11	0	19	73	0	92	0	99	6	0	105	0	208
10:30AM	6	5	0	11	0	22	99	0	121	0	118	10	0	128	0	260
10:45AM	9	10	0	19	0	18	115	0	133	0	104	9	0	113	0	265
Hourly Total	27	22	0	49	0	72	380	0	452	0	428	30	0	458	0	959
11:00AM	8	6	0	14	0	21	126	0	147	0	121	7	0	128	3	289
11:15AM	13	9	0	22	0	34	113	0	147	0	134	13	0	147	0	316
11:30AM	17	10	1	28	0	34	90	0	124	0	124	13	0	137	3	289
11:45AM	12	10	0	22	0	27	110	0	137	0	138	8	0	146	0	305
Hourly Total	50	35	1	86	0	116	439	0	555	0	517	41	0	558	6	1199
12:00PM	21	10	0	31	0	28	106	0	134	0	140	7	0	147	0	312
12:15PM	8	9	0	17	0	34	120	0	154	0	160	11	0	171	0	342
12:30PM	3	5	0	8	0	40	103	0	143	0	145	5	0	150	0	301
12:45PM	7	4	0	11	0	24	117	0	141	0	129	4	0	133	0	285
Hourly Total	39	28	0	67	0	126	446	0	572	0	574	27	0	601	0	1240
1:00PM	6	13	0	19	0	27	130	0	157	0	128	1	0	129	0	305
1:15PM	15	5	0	20	0	29	122	0	151	0	140	14	0	154	0	325

Leg Direction	AC Expressway On/Off Ramps					Delilah Road Eastbound					Delilah Road Westbound					
	Southbound					Eastbound					Westbound					
Time	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	Int
1:30PM	6	14	1	21	0	29	115	0	144	0	116	12	0	128	0	293
1:45PM	13	8	1	22	0	23	116	0	139	0	134	9	0	143	0	304
Hourly Total	40	40	2	82	0	108	483	0	591	0	518	36	0	554	0	1227
2:00PM	11	9	0	20	0	31	126	0	157	0	139	6	0	145	0	322
2:15PM	11	13	0	24	0	40	128	0	168	0	133	8	0	141	0	333
2:30PM	6	10	0	16	0	38	129	0	167	0	125	11	0	136	0	319
2:45PM	16	6	0	22	0	25	135	0	160	0	138	9	0	147	0	329
Hourly Total	44	38	0	82	0	134	518	0	652	0	535	34	0	569	0	1303
3:00PM	15	11	0	26	0	39	138	0	177	0	105	9	0	114	0	317
3:15PM	10	6	0	16	0	27	119	0	146	0	149	10	0	159	0	321
3:30PM	14	10	0	24	0	28	115	0	143	0	109	8	0	117	0	284
3:45PM	13	9	0	22	0	32	151	0	183	0	145	8	0	153	0	358
Hourly Total	52	36	0	88	0	126	523	0	649	0	508	35	0	543	0	1280
4:00PM	12	9	0	21	0	18	126	0	144	0	125	20	0	145	0	310
4:15PM	10	13	0	23	0	18	136	0	154	0	116	14	0	130	0	307
4:30PM	17	12	0	29	0	25	112	0	137	0	144	30	0	174	0	340
4:45PM	19	6	0	25	0	28	130	0	158	0	126	19	0	145	0	328
Hourly Total	58	40	0	98	0	89	504	0	593	0	511	83	0	594	0	1285
5:00PM	17	6	0	23	0	23	112	0	135	0	115	15	0	130	0	288
5:15PM	10	19	2	31	0	25	113	0	138	0	133	20	0	153	0	322
5:30PM	8	5	0	13	0	26	116	0	142	0	138	13	0	151	0	306
5:45PM	8	9	0	17	0	29	86	0	115	0	117	13	0	130	0	262
Hourly Total	43	39	2	84	0	103	427	0	530	0	503	61	0	564	0	1178
6:00PM	12	8	0	20	0	26	111	0	137	0	104	7	0	111	0	268
6:15PM	8	9	0	17	0	25	93	0	118	0	132	4	0	136	0	271
6:30PM	7	7	0	14	0	19	121	0	140	0	110	9	0	119	0	273
6:45PM	7	12	0	19	0	27	106	0	133	0	112	14	0	126	0	278
Hourly Total	34	36	0	70	0	97	431	0	528	0	458	34	0	492	0	1090
Total	1255	780	9	2044	0	2603	11653	0	14256	0	12468	1015	0	13483	6	29783
% Approach	61.4%	38.2%	0.4%	-	-	18.3%	81.7%	0%	-	-	92.5%	7.5%	0%	-	-	-
% Total	4.2%	2.6%	0%	6.9%	-	8.7%	39.1%	0%	47.9%	-	41.9%	3.4%	0%	45.3%	-	-
Motorcycles	0	0	0	0	-	0	6	0	6	-	6	0	0	6	-	12
% Motorcycles	0%	0%	0%	0%	-	0%	0.1%	0%	0%	-	0%	0%	0%	0%	-	0%
Lights	1113	738	9	1860	-	2533	11242	0	13775	-	12075	957	0	13032	-	28667
% Lights	88.7%	94.6%	100%	91.0%	-	97.3%	96.5%	0%	96.6%	-	96.8%	94.3%	0%	96.7%	-	96.3%
Single-Unit Trucks	88	23	0	111	-	41	250	0	291	-	247	34	0	281	-	683
% Single-Unit Trucks	7.0%	2.9%	0%	5.4%	-	1.6%	2.1%	0%	2.0%	-	2.0%	3.3%	0%	2.1%	-	2.3%
Articulated Trucks	41	17	0	58	-	10	35	0	45	-	53	12	0	65	-	168
% Articulated Trucks	3.3%	2.2%	0%	2.8%	-	0.4%	0.3%	0%	0.3%	-	0.4%	1.2%	0%	0.5%	-	0.6%
Buses	13	2	0	15	-	19	117	0	136	-	86	12	0	98	-	249
% Buses	1.0%	0.3%	0%	0.7%	-	0.7%	1.0%	0%	1.0%	-	0.7%	1.2%	0%	0.7%	-	0.8%
Bicycles on Road	0	0	0	0	-	0	3	0	3	-	1	0	0	1	-	4
% Bicycles on Road	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	6	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-

Leg Direction	AC Expressway On/Off Ramps Southbound					Delilah Road Eastbound					Delilah Road Westbound					
Time	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	Int
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

3: Delilah Road & AC Expressway On/Off Ramps - TMC

Thu Apr 27, 2023

AM Peak (Apr 27 2023 7:45AM - 8:45 AM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1062836, Location: 39.434956, -74.59137, Site Code: 3

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	AC Expressway On/Off Ramps Southbound					Delilah Road Eastbound					Delilah Road Westbound					
Time	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	Int
2023-04-27 7:45AM	27	19	0	46	0	46	199	0	245	0	157	5	0	162	0	453
8:00AM	25	5	0	30	0	42	181	0	223	0	150	8	0	158	0	411
8:15AM	30	11	0	41	0	46	150	0	196	0	131	17	0	148	0	385
8:30AM	30	7	0	37	0	42	169	0	211	0	168	14	0	182	0	430
Total	112	42	0	154	0	176	699	0	875	0	606	44	0	650	0	1679
% Approach	72.7%	27.3%	0%	-	-	20.1%	79.9%	0%	-	-	93.2%	6.8%	0%	-	-	-
% Total	6.7%	2.5%	0%	9.2%	-	10.5%	41.6%	0%	52.1%	-	36.1%	2.6%	0%	38.7%	-	-
PHF	0.933	0.553	-	0.837	-	0.957	0.878	-	0.893	-	0.906	0.647	-	0.896	-	0.926
Motorcycles	0	0	0	0	-	0	1	0	1	-	1	0	0	1	-	2
% Motorcycles	0%	0%	0%	0%	-	0%	0.1%	0%	0.1%	-	0.2%	0%	0%	0.2%	-	0.1%
Lights	100	40	0	140	-	168	668	0	836	-	559	40	0	599	-	1575
% Lights	89.3%	95.2%	0%	90.9%	-	95.5%	95.6%	0%	95.5%	-	92.2%	90.9%	0%	92.2%	-	93.8%
Single-Unit Trucks	6	2	0	8	-	5	20	0	25	-	26	3	0	29	-	62
% Single-Unit Trucks	5.4%	4.8%	0%	5.2%	-	2.8%	2.9%	0%	2.9%	-	4.3%	6.8%	0%	4.5%	-	3.7%
Articulated Trucks	4	0	0	4	-	1	2	0	3	-	9	1	0	10	-	17
% Articulated Trucks	3.6%	0%	0%	2.6%	-	0.6%	0.3%	0%	0.3%	-	1.5%	2.3%	0%	1.5%	-	1.0%
Buses	2	0	0	2	-	2	8	0	10	-	10	0	0	10	-	22
% Buses	1.8%	0%	0%	1.3%	-	1.1%	1.1%	0%	1.1%	-	1.7%	0%	0%	1.5%	-	1.3%
Bicycles on Road	0	0	0	0	-	0	0	0	0	-	1	0	0	1	-	1
% Bicycles on Road	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0.2%	0%	0%	0.2%	-	0.1%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

3: Delilah Road & AC Expressway On/Off Ramps - TMC

Thu Apr 27, 2023

PM Peak (Apr 27 2023 4:30PM - 5:30 PM) - Overall Peak Hour

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1062836, Location: 39.434956, -74.59137, Site Code: 3

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	AC Expressway On/Off Ramps Southbound					Delilah Road Eastbound					Delilah Road Westbound					
Time	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	Int
2023-04-27 4:30PM	21	13	0	34	0	32	164	0	196	0	209	13	0	222	0	452
4:45PM	29	13	0	42	0	36	181	0	217	0	161	12	0	173	0	432
5:00PM	22	11	0	33	0	24	177	0	201	0	206	27	0	233	0	467
5:15PM	18	9	0	27	0	30	167	0	197	0	202	17	0	219	0	443
Total	90	46	0	136	0	122	689	0	811	0	778	69	0	847	0	1794
% Approach	66.2%	33.8%	0%	-	-	15.0%	85.0%	0%	-	-	91.9%	8.1%	0%	-	-	-
% Total	5.0%	2.6%	0%	7.6%	-	6.8%	38.4%	0%	45.2%	-	43.4%	3.8%	0%	47.2%	-	-
PHF	0.776	0.885	-	0.810	-	0.847	0.952	-	0.934	-	0.931	0.639	-	0.909	-	0.960
Motorcycles	0	0	0	0	-	0	1	0	1	-	0	0	0	0	-	1
% Motorcycles	0%	0%	0%	0%	-	0%	0.1%	0%	0.1%	-	0%	0%	0%	0%	-	0.1%
Lights	80	45	0	125	-	122	663	0	785	-	765	65	0	830	-	1740
% Lights	88.9%	97.8%	0%	91.9%	-	100%	96.2%	0%	96.8%	-	98.3%	94.2%	0%	98.0%	-	97.0%
Single-Unit Trucks	7	0	0	7	-	0	17	0	17	-	8	0	0	8	-	32
% Single-Unit Trucks	7.8%	0%	0%	5.1%	-	0%	2.5%	0%	2.1%	-	1.0%	0%	0%	0.9%	-	1.8%
Articulated Trucks	1	1	0	2	-	0	3	0	3	-	1	0	0	1	-	6
% Articulated Trucks	1.1%	2.2%	0%	1.5%	-	0%	0.4%	0%	0.4%	-	0.1%	0%	0%	0.1%	-	0.3%
Buses	2	0	0	2	-	0	5	0	5	-	4	4	0	8	-	15
% Buses	2.2%	0%	0%	1.5%	-	0%	0.7%	0%	0.6%	-	0.5%	5.8%	0%	0.9%	-	0.8%
Bicycles on Road	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0
% Bicycles on Road	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

3: Delilah Road & AC Expressway On/Off Ramps - TMC

Sat Apr 29, 2023

PM Peak (WKND) (Apr 29 2023 3:45PM - 4:45 PM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1062836, Location: 39.434956, -74.59137, Site Code: 3

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	AC Expressway On/Off Ramps Southbound					Delilah Road Eastbound					Delilah Road Westbound					
Time	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	Int
2023-04-29 3:45PM	13	9	0	22	0	32	151	0	183	0	145	8	0	153	0	358
4:00PM	12	9	0	21	0	18	126	0	144	0	125	20	0	145	0	310
4:15PM	10	13	0	23	0	18	136	0	154	0	116	14	0	130	0	307
4:30PM	17	12	0	29	0	25	112	0	137	0	144	30	0	174	0	340
Total	52	43	0	95	0	93	525	0	618	0	530	72	0	602	0	1315
% Approach	54.7%	45.3%	0%	-	-	15.0%	85.0%	0%	-	-	88.0%	12.0%	0%	-	-	-
% Total	4.0%	3.3%	0%	7.2%	-	7.1%	39.9%	0%	47.0%	-	40.3%	5.5%	0%	45.8%	-	-
PHF	0.765	0.827	-	0.819	-	0.727	0.869	-	0.844	-	0.914	0.600	-	0.865	-	0.918
Motorcycles	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0
% Motorcycles	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%
Lights	51	42	0	93	-	93	518	0	611	-	526	72	0	598	-	1302
% Lights	98.1%	97.7%	0%	97.9%	-	100%	98.7%	0%	98.9%	-	99.2%	100%	0%	99.3%	-	99.0%
Single-Unit Trucks	1	1	0	2	-	0	3	0	3	-	3	0	0	3	-	8
% Single-Unit Trucks	1.9%	2.3%	0%	2.1%	-	0%	0.6%	0%	0.5%	-	0.6%	0%	0%	0.5%	-	0.6%
Articulated Trucks	0	0	0	0	-	0	1	0	1	-	1	0	0	1	-	2
% Articulated Trucks	0%	0%	0%	0%	-	0%	0.2%	0%	0.2%	-	0.2%	0%	0%	0.2%	-	0.2%
Buses	0	0	0	0	-	0	3	0	3	-	0	0	0	0	-	3
% Buses	0%	0%	0%	0%	-	0%	0.6%	0%	0.5%	-	0%	0%	0%	0%	-	0.2%
Bicycles on Road	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0
% Bicycles on Road	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

4: Delilah Road & AC Expressway NB Off Ramp - TMC

Thu Apr 27, 2023

Full Length (7 AM-7 PM, 9 AM-7 PM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1062839, Location: 39.433434, -74.585665, Site Code: 4

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	AC Expressway Off Ramp Northbound					Delilah Road Eastbound					Delilah Road Westbound					
Time	L	R	U	App	Ped*	T	R	U	App	Ped*	L	T	U	App	Ped*	Int
2023-04-27 7:00AM	19	12	0	31	0	137	0	0	137	0	0	93	0	93	0	261
7:15AM	25	13	0	38	1	208	0	0	208	0	0	98	0	98	0	344
7:30AM	25	25	0	50	0	228	0	0	228	0	0	129	0	129	0	407
7:45AM	36	19	0	55	0	247	0	0	247	0	0	129	0	129	0	431
Hourly Total	105	69	0	174	1	820	0	0	820	0	0	449	0	449	0	1443
8:00AM	39	26	0	65	0	233	0	0	233	0	0	131	0	131	0	429
8:15AM	25	36	0	61	0	184	0	0	184	0	0	129	0	129	0	374
8:30AM	34	24	0	58	0	209	0	0	209	0	0	160	0	160	0	427
8:45AM	32	16	0	48	0	176	0	0	176	0	0	163	0	163	0	387
Hourly Total	130	102	0	232	0	802	0	0	802	0	0	583	0	583	0	1617
9:00AM	22	13	0	35	0	186	0	0	186	0	0	113	0	113	0	334
9:15AM	22	19	0	41	0	164	0	0	164	0	0	123	0	123	0	328
9:30AM	20	13	0	33	0	157	0	0	157	0	0	130	0	130	0	320
9:45AM	30	7	0	37	0	159	0	0	159	0	0	146	0	146	0	342
Hourly Total	94	52	0	146	0	666	0	0	666	0	0	512	0	512	0	1324
10:00AM	26	9	0	35	0	154	0	0	154	1	0	139	0	139	0	328
10:15AM	26	10	0	36	0	138	0	0	138	0	0	133	0	133	0	307
10:30AM	25	11	0	36	0	150	0	0	150	0	0	131	0	131	0	317
10:45AM	32	17	0	49	0	156	0	0	156	0	0	128	0	128	0	333
Hourly Total	109	47	0	156	0	598	0	0	598	1	0	531	0	531	0	1285
11:00AM	27	6	0	33	0	161	0	0	161	0	0	141	0	141	0	335
11:15AM	27	8	0	35	0	127	0	0	127	0	0	132	0	132	0	294
11:30AM	20	7	0	27	0	158	0	0	158	0	0	145	0	145	0	330
11:45AM	21	15	0	36	0	147	0	0	147	0	0	166	0	166	0	349
Hourly Total	95	36	0	131	0	593	0	0	593	0	0	584	0	584	0	1308
12:00PM	28	3	0	31	0	164	0	0	164	0	0	158	0	158	0	353
12:15PM	22	11	0	33	0	181	0	0	181	0	0	156	0	156	0	370
12:30PM	24	12	0	36	0	183	0	0	183	0	0	133	0	133	0	352
12:45PM	26	8	0	34	0	177	0	0	177	0	0	153	0	153	0	364
Hourly Total	100	34	0	134	0	705	0	0	705	0	0	600	0	600	0	1439
1:00PM	34	17	0	51	0	171	0	0	171	0	0	144	0	144	0	366
1:15PM	27	10	0	37	1	166	0	0	166	0	0	146	0	146	0	349
1:30PM	29	12	0	41	0	180	0	0	180	0	0	146	0	146	0	367
1:45PM	30	14	0	44	0	185	0	0	185	0	0	159	0	159	0	388
Hourly Total	120	53	0	173	1	702	0	0	702	0	0	595	0	595	0	1470
2:00PM	26	16	0	42	0	184	0	0	184	0	0	133	0	133	0	359
2:15PM	37	27	0	64	0	169	0	0	169	0	0	152	0	152	0	385

Leg Direction	AC Expressway Off Ramp					Delilah Road					Delilah Road					
	Northbound					Eastbound					Westbound					
Time	L	R	U	App	Ped*	T	R	U	App	Ped*	L	T	U	App	Ped*	Int
2:30PM	21	32	0	53	0	169	0	0	169	0	0	151	0	151	0	373
2:45PM	41	17	0	58	0	206	0	0	206	0	0	130	0	130	0	394
Hourly Total	125	92	0	217	0	728	0	0	728	0	0	566	0	566	0	1511
3:00PM	45	29	0	74	0	200	0	0	200	0	0	133	0	133	0	407
3:15PM	49	26	0	75	0	189	0	0	189	0	0	145	0	145	0	409
3:30PM	38	34	0	72	1	196	0	0	196	0	0	147	0	147	0	415
3:45PM	39	26	0	65	1	149	0	0	149	0	0	150	0	150	0	364
Hourly Total	171	115	0	286	2	734	0	0	734	0	0	575	0	575	0	1595
4:00PM	27	27	0	54	0	207	0	0	207	0	0	208	0	208	0	469
4:15PM	44	21	0	65	0	164	0	0	164	0	0	190	0	190	0	419
4:30PM	36	35	0	71	0	196	0	0	196	0	0	187	0	187	0	454
4:45PM	41	27	0	68	0	208	0	0	208	0	0	157	0	157	0	433
Hourly Total	148	110	0	258	0	775	0	0	775	0	0	742	0	742	0	1775
5:00PM	23	23	0	46	0	198	0	0	198	0	0	219	0	219	0	463
5:15PM	37	20	0	57	0	193	0	0	193	0	0	214	0	214	0	464
5:30PM	27	16	0	43	0	168	0	0	168	0	0	205	0	205	0	416
5:45PM	25	20	0	45	0	143	0	0	143	0	0	187	0	187	0	375
Hourly Total	112	79	0	191	0	702	0	0	702	0	0	825	0	825	0	1718
6:00PM	14	14	0	28	0	135	0	0	135	0	0	142	0	142	0	305
6:15PM	19	14	0	33	0	161	0	0	161	0	0	121	0	121	0	315
6:30PM	16	11	0	27	0	147	0	0	147	0	0	168	0	168	0	342
6:45PM	18	10	0	28	0	138	0	0	138	0	0	113	0	113	0	279
Hourly Total	67	49	0	116	0	581	0	0	581	0	0	544	0	544	0	1241
2023-04-29 9:00AM	10	18	0	28	0	83	0	0	83	0	0	76	0	76	0	187
9:15AM	9	20	0	29	0	64	0	0	64	0	0	89	0	89	0	182
9:30AM	13	4	0	17	0	102	0	0	102	0	0	104	0	104	0	223
9:45AM	15	16	0	31	0	89	0	0	89	0	0	104	0	104	0	224
Hourly Total	47	58	0	105	0	338	0	0	338	0	0	373	0	373	0	816
10:00AM	17	19	0	36	0	102	0	0	102	0	0	97	0	97	0	235
10:15AM	10	7	0	17	0	87	0	0	87	0	0	100	0	100	0	204
10:30AM	17	3	0	20	1	108	0	0	108	0	0	111	0	111	0	239
10:45AM	23	19	0	42	0	125	0	0	125	0	0	94	0	94	0	261
Hourly Total	67	48	0	115	1	422	0	0	422	0	0	402	0	402	0	939
11:00AM	25	9	0	34	0	140	0	0	140	0	0	98	0	98	0	272
11:15AM	25	11	0	36	0	138	0	0	138	0	0	129	0	129	0	303
11:30AM	21	10	0	31	0	114	0	0	114	0	0	127	0	127	0	272
11:45AM	32	7	0	39	0	128	0	0	128	0	0	110	0	110	0	277
Hourly Total	103	37	0	140	0	520	0	0	520	0	0	464	0	464	0	1124
12:00PM	29	5	0	34	0	136	0	0	136	0	0	142	0	142	0	312
12:15PM	30	21	0	51	0	134	0	0	134	0	0	150	0	150	0	335
12:30PM	19	7	0	26	0	103	0	0	103	0	0	127	0	127	0	256
12:45PM	25	12	0	37	0	121	0	0	121	0	0	112	0	112	0	270
Hourly Total	103	45	0	148	0	494	0	0	494	0	0	531	0	531	0	1173
1:00PM	16	4	0	20	1	145	0	0	145	0	0	112	0	112	0	277
1:15PM	22	13	0	35	0	145	0	0	145	0	0	133	0	133	0	313

Leg Direction	AC Expressway Off Ramp						Delilah Road						Delilah Road						
	Northbound						Eastbound						Westbound						
Time	L	R	U	App	Ped*		T	R	U	App	Ped*	L	T	U	App	Ped*	Int		
1:30PM	20	15	0	35	0		127	0	0	127	0	0	123	0	123	0	285		
1:45PM	25	16	0	41	0		131	0	0	131	0	0	118	0	118	0	290		
Hourly Total	83	48	0	131	1		548	0	0	548	0	0	486	0	486	0	1165		
2:00PM	32	12	0	44	0		137	0	0	137	0	0	130	0	130	0	311		
2:15PM	25	18	0	43	0		151	0	0	151	0	0	122	0	122	0	316		
2:30PM	22	14	0	36	0		146	0	0	146	0	0	118	0	118	0	300		
2:45PM	26	12	0	38	0		154	0	0	154	0	0	122	0	122	0	314		
Hourly Total	105	56	0	161	0		588	0	0	588	0	0	492	0	492	0	1241		
3:00PM	18	20	0	38	0		159	0	0	159	0	0	104	0	104	0	301		
3:15PM	27	17	0	44	0		142	0	0	142	0	0	131	0	131	0	317		
3:30PM	19	16	0	35	0		134	0	0	134	0	0	97	0	97	0	266		
3:45PM	38	35	0	73	0		178	0	0	178	0	0	127	0	127	0	378		
Hourly Total	102	88	0	190	0		613	0	0	613	0	0	459	0	459	0	1262		
4:00PM	18	15	0	33	0		141	0	0	141	0	0	124	0	124	0	298		
4:15PM	18	21	0	39	0		155	0	0	155	0	0	125	0	125	0	319		
4:30PM	23	16	0	39	0		138	0	0	138	0	0	141	0	141	0	318		
4:45PM	23	12	0	35	0		146	0	0	146	0	0	133	0	133	0	314		
Hourly Total	82	64	0	146	0		580	0	0	580	0	0	523	0	523	0	1249		
5:00PM	21	11	0	32	0		131	0	0	131	0	0	107	0	107	0	270		
5:15PM	26	4	0	30	0		138	0	0	138	0	0	145	0	145	0	313		
5:30PM	16	5	0	21	0		122	0	0	122	0	0	140	0	140	0	283		
5:45PM	24	6	0	30	0		100	0	0	100	0	0	103	0	103	0	233		
Hourly Total	87	26	0	113	0		491	0	0	491	0	0	495	0	495	0	1099		
6:00PM	28	6	0	34	0		113	0	0	113	0	0	96	0	96	0	243		
6:15PM	19	6	0	25	0		117	0	0	117	0	0	115	0	115	0	257		
6:30PM	14	3	0	17	0		124	0	0	124	0	0	107	0	107	0	248		
6:45PM	18	13	0	31	0		118	0	0	118	0	0	110	0	110	0	259		
Hourly Total	79	28	0	107	0		472	0	0	472	0	0	428	0	428	0	1007		
Total	2234	1336	0	3570	6		13472	0	0	13472	1	0	11759	0	11759	0	28801		
% Approach	62.6%	37.4%	0%	-	-		100%	0%	0%	-	-	0%	100%	0%	-	-	-		
% Total	7.8%	4.6%	0%	12.4%	-		46.8%	0%	0%	46.8%	-	0%	40.8%	0%	40.8%	-	-		
Motorcycles	1	0	0	1	-		9	0	0	9	-	0	10	0	10	-	20		
% Motorcycles	0%	0%	0%	0%	-		0.1%	0%	0%	0.1%	-	0%	0.1%	0%	0.1%	-	0.1%		
Lights	2160	1283	0	3443	-		12863	0	0	12863	-	0	11361	0	11361	-	27667		
% Lights	96.7%	96.0%	0%	96.4%	-		95.5%	0%	0%	95.5%	-	0%	96.6%	0%	96.6%	-	96.1%		
Single-Unit Trucks	47	32	0	79	-		389	0	0	389	-	0	248	0	248	-	716		
% Single-Unit Trucks	2.1%	2.4%	0%	2.2%	-		2.9%	0%	0%	2.9%	-	0%	2.1%	0%	2.1%	-	2.5%		
Articulated Trucks	9	5	0	14	-		78	0	0	78	-	0	49	0	49	-	141		
% Articulated Trucks	0.4%	0.4%	0%	0.4%	-		0.6%	0%	0%	0.6%	-	0%	0.4%	0%	0.4%	-	0.5%		
Buses	17	16	0	33	-		129	0	0	129	-	0	91	0	91	-	253		
% Buses	0.8%	1.2%	0%	0.9%	-		1.0%	0%	0%	1.0%	-	0%	0.8%	0%	0.8%	-	0.9%		
Bicycles on Road	0	0	0	0	-		4	0	0	4	-	0	0	0	0	-	4		
% Bicycles on Road	0%	0%	0%	0%	-		0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%		
Pedestrians	-	-	-	-	6		-	-	-	-	1	-	-	-	-	-	0		
% Pedestrians	-	-	-	-	-		100%	-	-	-	-	100%	-	-	-	-	-		

Leg Direction	AC Expressway Off Ramp Northbound					Delilah Road Eastbound					Delilah Road Westbound					
Time	L	R	U	App	Ped*	T	R	U	App	Ped*	L	T	U	App	Ped*	Int
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	-	-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

4: Delilah Road & AC Expressway NB Off Ramp - TMC

Thu Apr 27, 2023

AM Peak (Apr 27 2023 7:45AM - 8:45 AM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1062839, Location: 39.433434, -74.585665, Site Code: 4

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	AC Expressway Off Ramp Northbound					Delilah Road Eastbound					Delilah Road Westbound					
Time	L	R	U	App	Ped*	T	R	U	App	Ped*	L	T	U	App	Ped*	Int
2023-04-27 7:45AM	36	19	0	55	0	247	0	0	247	0	0	129	0	129	0	431
8:00AM	39	26	0	65	0	233	0	0	233	0	0	131	0	131	0	429
8:15AM	25	36	0	61	0	184	0	0	184	0	0	129	0	129	0	374
8:30AM	34	24	0	58	0	209	0	0	209	0	0	160	0	160	0	427
Total	134	105	0	239	0	873	0	0	873	0	0	549	0	549	0	1661
% Approach	56.1%	43.9%	0%	-	-	100%	0%	0%	-	-	0%	100%	0%	-	-	-
% Total	8.1%	6.3%	0%	14.4%	-	52.6%	0%	0%	52.6%	-	0%	33.1%	0%	33.1%	-	-
PHF	0.859	0.729	-	0.919	-	0.884	-	-	0.884	-	-	0.858	-	0.858	-	0.963
Motorcycles	0	0	0	0	-	1	0	0	1	-	0	2	0	2	-	3
% Motorcycles	0%	0%	0%	0%	-	0.1%	0%	0%	0.1%	-	0%	0.4%	0%	0.4%	-	0.2%
Lights	128	102	0	230	-	827	0	0	827	-	0	494	0	494	-	1551
% Lights	95.5%	97.1%	0%	96.2%	-	94.7%	0%	0%	94.7%	-	0%	90.0%	0%	90.0%	-	93.4%
Single-Unit Trucks	4	3	0	7	-	27	0	0	27	-	0	34	0	34	-	68
% Single-Unit Trucks	3.0%	2.9%	0%	2.9%	-	3.1%	0%	0%	3.1%	-	0%	6.2%	0%	6.2%	-	4.1%
Articulated Trucks	1	0	0	1	-	9	0	0	9	-	0	10	0	10	-	20
% Articulated Trucks	0.7%	0%	0%	0.4%	-	1.0%	0%	0%	1.0%	-	0%	1.8%	0%	1.8%	-	1.2%
Buses	1	0	0	1	-	9	0	0	9	-	0	9	0	9	-	19
% Buses	0.7%	0%	0%	0.4%	-	1.0%	0%	0%	1.0%	-	0%	1.6%	0%	1.6%	-	1.1%
Bicycles on Road	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0
% Bicycles on Road	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

4: Delilah Road & AC Expressway NB Off Ramp - TMC

Thu Apr 27, 2023

PM Peak (Apr 27 2023 4:30PM - 5:30 PM) - Overall Peak Hour

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1062839, Location: 39.433434, -74.585665, Site Code: 4

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	AC Expressway Off Ramp Northbound					Delilah Road Eastbound					Delilah Road Westbound					
Time	L	R	U	App	Ped*	T	R	U	App	Ped*	L	T	U	App	Ped*	Int
2023-04-27 4:30PM	36	35	0	71	0	196	0	0	196	0	0	187	0	187	0	454
4:45PM	41	27	0	68	0	208	0	0	208	0	0	157	0	157	0	433
5:00PM	23	23	0	46	0	198	0	0	198	0	0	219	0	219	0	463
5:15PM	37	20	0	57	0	193	0	0	193	0	0	214	0	214	0	464
Total	137	105	0	242	0	795	0	0	795	0	0	777	0	777	0	1814
% Approach	56.6%	43.4%	0%	-	-	100%	0%	0%	-	-	0%	100%	0%	-	-	-
% Total	7.6%	5.8%	0%	13.3%	-	43.8%	0%	0%	43.8%	-	0%	42.8%	0%	42.8%	-	-
PHF	0.835	0.750	-	0.852	-	0.954	-	-	0.954	-	-	0.887	-	0.887	-	0.979
Motorcycles	0	0	0	0	-	1	0	0	1	-	0	2	0	2	-	3
% Motorcycles	0%	0%	0%	0%	-	0.1%	0%	0%	0.1%	-	0%	0.3%	0%	0.3%	-	0.2%
Lights	136	103	0	239	-	736	0	0	736	-	0	758	0	758	-	1733
% Lights	99.3%	98.1%	0%	98.8%	-	92.6%	0%	0%	92.6%	-	0%	97.6%	0%	97.6%	-	95.5%
Single-Unit Trucks	1	1	0	2	-	43	0	0	43	-	0	9	0	9	-	54
% Single-Unit Trucks	0.7%	1.0%	0%	0.8%	-	5.4%	0%	0%	5.4%	-	0%	1.2%	0%	1.2%	-	3.0%
Articulated Trucks	0	0	0	0	-	3	0	0	3	-	0	0	0	0	-	3
% Articulated Trucks	0%	0%	0%	0%	-	0.4%	0%	0%	0.4%	-	0%	0%	0%	0%	-	0.2%
Buses	0	1	0	1	-	11	0	0	11	-	0	8	0	8	-	20
% Buses	0%	1.0%	0%	0.4%	-	1.4%	0%	0%	1.4%	-	0%	1.0%	0%	1.0%	-	1.1%
Bicycles on Road	0	0	0	0	-	1	0	0	1	-	0	0	0	0	-	1
% Bicycles on Road	0%	0%	0%	0%	-	0.1%	0%	0%	0.1%	-	0%	0%	0%	0%	-	0.1%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

4: Delilah Road & AC Expressway NB Off Ramp - TMC

Sat Apr 29, 2023

PM Peak (WKND) (Apr 29 2023 3:45PM - 4:45 PM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1062839, Location: 39.433434, -74.585665, Site Code: 4

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	AC Expressway Off Ramp Northbound					Delilah Road Eastbound					Delilah Road Westbound					
Time	L	R	U	App	Ped*	T	R	U	App	Ped*	L	T	U	App	Ped*	Int
2023-04-29 3:45PM	38	35	0	73	0	178	0	0	178	0	0	127	0	127	0	378
4:00PM	18	15	0	33	0	141	0	0	141	0	0	124	0	124	0	298
4:15PM	18	21	0	39	0	155	0	0	155	0	0	125	0	125	0	319
4:30PM	23	16	0	39	0	138	0	0	138	0	0	141	0	141	0	318
Total	97	87	0	184	0	612	0	0	612	0	0	517	0	517	0	1313
% Approach	52.7%	47.3%	0%	-	-	100%	0%	0%	-	-	0%	100%	0%	-	-	-
% Total	7.4%	6.6%	0%	14.0%	-	46.6%	0%	0%	46.6%	-	0%	39.4%	0%	39.4%	-	-
PHF	0.638	0.621	-	0.630	-	0.860	-	-	0.860	-	-	0.917	-	0.917	-	0.868
Motorcycles	0	0	0	0	-	1	0	0	1	-	0	0	0	0	-	1
% Motorcycles	0%	0%	0%	0%	-	0.2%	0%	0%	0.2%	-	0%	0%	0%	0%	-	0.1%
Lights	96	87	0	183	-	601	0	0	601	-	0	514	0	514	-	1298
% Lights	99.0%	100%	0%	99.5%	-	98.2%	0%	0%	98.2%	-	0%	99.4%	0%	99.4%	-	98.9%
Single-Unit Trucks	1	0	0	1	-	6	0	0	6	-	0	2	0	2	-	9
% Single-Unit Trucks	1.0%	0%	0%	0.5%	-	1.0%	0%	0%	1.0%	-	0%	0.4%	0%	0.4%	-	0.7%
Articulated Trucks	0	0	0	0	-	1	0	0	1	-	0	1	0	1	-	2
% Articulated Trucks	0%	0%	0%	0%	-	0.2%	0%	0%	0.2%	-	0%	0.2%	0%	0.2%	-	0.2%
Buses	0	0	0	0	-	3	0	0	3	-	0	0	0	0	-	3
% Buses	0%	0%	0%	0%	-	0.5%	0%	0%	0.5%	-	0%	0%	0%	0%	-	0.2%
Bicycles on Road	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0
% Bicycles on Road	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

5: Delilah Road & Aviation Research Boulevard - TMC

Thu Apr 27, 2023

Full Length (7 AM-7 PM, 9 AM-7 PM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1062843, Location: 39.429955, -74.57196, Site Code: 5

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	4th Street Northbound						Aviation Research Boulevard Southbound						Delilah Road Eastbound						Delilah Road Westbound							
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int	
2023-04-27 7:00AM	0	0	0	0	0	0	3	0	0	0	3	0	1	127	0	0	0	128	0	0	103	24	0	127	0	258
7:15AM	0	0	0	0	0	0	5	0	0	0	5	0	0	167	0	0	0	167	0	0	109	13	0	122	0	294
7:30AM	7	0	1	0	8	0	10	0	0	0	10	0	4	152	0	0	0	156	0	1	146	29	0	176	0	350
7:45AM	1	0	0	0	1	0	6	0	1	0	7	0	4	194	0	0	0	198	0	0	137	23	0	160	0	366
Hourly Total	8	0	1	0	9	0	24	0	1	0	25	0	9	640	0	0	0	649	0	1	495	89	0	585	0	1268
8:00AM	3	0	0	0	3	0	5	0	0	0	5	0	4	191	2	0	0	197	0	0	143	17	0	160	0	365
8:15AM	1	0	0	0	1	0	6	0	1	0	7	0	8	166	0	0	0	174	0	1	138	14	0	153	0	335
8:30AM	1	0	0	0	1	1	7	0	0	0	7	0	2	150	0	0	0	152	0	0	136	18	0	154	0	314
8:45AM	2	0	0	0	2	1	6	0	0	0	6	0	2	145	1	0	0	148	0	0	151	12	0	163	0	319
Hourly Total	7	0	0	0	7	2	24	0	1	0	25	0	16	652	3	0	0	671	0	1	568	61	0	630	0	1333
9:00AM	2	0	0	0	2	1	5	0	0	0	5	0	0	131	2	0	0	133	0	0	129	20	0	149	0	289
9:15AM	1	0	0	0	1	1	5	0	0	0	5	0	0	146	0	0	0	146	0	0	116	15	0	131	0	283
9:30AM	3	0	0	0	3	0	7	0	0	0	7	0	0	130	1	0	0	131	0	0	148	10	0	158	0	299
9:45AM	0	0	0	0	0	0	14	0	0	0	14	0	0	122	3	0	0	125	0	0	119	15	0	134	0	273
Hourly Total	6	0	0	0	6	2	31	0	0	0	31	0	0	529	6	0	0	535	0	0	512	60	0	572	0	1144
10:00AM	0	0	0	0	0	0	6	0	1	0	7	0	2	121	2	0	0	125	0	0	133	7	0	140	0	272
10:15AM	2	0	0	0	2	0	10	0	2	0	12	0	0	104	0	0	0	104	0	1	131	11	0	143	0	261
10:30AM	0	0	0	0	0	0	7	0	1	1	9	0	0	121	0	0	0	121	0	1	137	6	0	144	0	274
10:45AM	1	0	0	0	1	0	6	0	1	0	7	0	1	115	2	0	0	118	0	0	114	2	0	116	0	242
Hourly Total	3	0	0	0	3	0	29	0	5	1	35	0	3	461	4	0	0	468	0	2	515	26	0	543	0	1049
11:00AM	0	0	0	0	0	0	10	1	1	0	12	0	1	137	0	0	0	138	0	0	94	9	0	103	0	253
11:15AM	1	0	1	0	2	0	4	0	0	0	4	0	1	116	1	0	0	118	0	0	125	8	0	133	0	257
11:30AM	0	0	2	0	2	0	8	0	4	0	12	0	1	112	0	0	0	113	0	0	130	8	0	138	0	265
11:45AM	1	0	0	0	1	0	9	0	1	0	10	0	0	123	0	0	0	123	0	0	131	9	0	140	0	274
Hourly Total	2	0	3	0	5	0	31	1	6	0	38	0	3	488	1	0	0	492	0	0	480	34	0	514	0	1049
12:00PM	1	0	0	0	1	0	13	0	1	0	14	0	0	142	0	0	0	142	0	0	157	2	0	159	0	316
12:15PM	2	0	0	0	2	0	4	1	0	0	5	0	0	137	0	1	0	138	0	0	140	7	0	147	0	292
12:30PM	1	0	0	0	1	0	9	0	1	0	10	0	2	155	0	0	0	157	0	0	154	20	0	174	0	342
12:45PM	1	0	0	0	1	1	14	0	2	0	16	0	2	142	0	0	0	144	0	0	143	13	0	156	0	317
Hourly Total	5	0	0	0	5	1	40	1	4	0	45	0	4	576	0	1	0	581	0	0	594	42	0	636	0	1267
1:00PM	1	0	0	0	1	0	7	0	0	0	7	0	0	136	2	0	0	138	0	0	133	15	0	148	0	294
1:15PM	1	0	0	0	1	0	4	0	2	0	6	0	3	120	0	0	0	123	0	0	134	14	0	148	0	278
1:30PM	0	0	0	0	0	0	15	0	0	0	15	0	1	131	2	0	0	134	0	2	156	5	0	163	0	312
1:45PM	0	0	2	0	2	1	10	0	0	0	10	0	1	131	0	0	0	132	0	0	144	7	1	152	0	296
Hourly Total	2	0	2	0	4	1	36	0	2	0	38	0	5	518	4	0	0	527	0	2	567	41	1	611	0	1180
2:00PM	1	0	0	0	1	0	19	0	4	0	23	0	1	158	1	0	0	160	0	0	140	10	0	150	0	334
2:15PM	1	0	1	0	2	0	20	0	2	0	22	0	1	141	0	0	0	142	0	1	170	7	0	178	0	344

Leg Direction	4th Street Northbound						Aviation Research Boulevard Southbound					Delilah Road Eastbound					Delilah Road Westbound								
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2:30PM	1	0	0	0	1	0	22	0	1	0	23	0	3	152	2	0	157	0	1	155	6	0	162	0	343
2:45PM	3	0	0	0	3	0	13	0	3	0	16	0	1	181	1	0	183	0	0	130	6	0	136	0	338
Hourly Total	6	0	1	0	7	0	74	0	10	0	84	0	6	632	4	0	642	0	2	595	29	0	626	0	1359
3:00PM	1	0	0	0	1	0	24	0	2	0	26	0	1	165	1	0	167	0	0	144	6	0	150	0	344
3:15PM	5	0	0	0	5	0	23	0	1	0	24	0	1	178	2	0	181	0	0	150	14	0	164	0	374
3:30PM	1	0	1	0	2	0	21	0	1	0	22	0	1	159	3	0	163	0	0	175	2	0	177	0	364
3:45PM	1	1	0	0	2	2	20	0	3	0	23	0	2	139	2	0	143	0	0	142	6	0	148	0	316
Hourly Total	8	1	1	0	10	2	88	0	7	0	95	0	5	641	8	0	654	0	0	611	28	0	639	0	1398
4:00PM	4	0	0	0	4	1	40	0	4	0	44	0	3	154	2	0	159	0	3	240	11	0	254	0	461
4:15PM	1	0	0	0	1	0	19	0	8	0	27	0	0	159	2	0	161	0	1	232	16	0	249	0	438
4:30PM	0	0	0	0	0	4	29	1	9	0	39	0	1	164	1	1	167	0	1	223	6	0	230	0	436
4:45PM	3	0	0	0	3	3	24	0	6	0	30	0	4	164	1	0	169	0	1	195	8	0	204	0	406
Hourly Total	8	0	0	0	8	8	112	1	27	0	140	0	8	641	6	1	656	0	6	890	41	0	937	0	1741
5:00PM	1	0	0	0	1	0	24	0	6	0	30	0	3	196	3	0	202	0	0	237	10	0	247	0	480
5:15PM	3	0	0	0	3	0	22	0	4	0	26	0	1	181	3	0	185	0	0	201	6	0	207	0	421
5:30PM	4	0	0	0	4	0	9	0	4	0	13	0	0	142	1	0	143	0	0	188	6	0	194	0	354
5:45PM	3	0	0	0	3	0	10	0	3	0	13	0	3	106	1	0	110	0	0	153	6	0	159	0	285
Hourly Total	11	0	0	0	11	0	65	0	17	0	82	0	7	625	8	0	640	0	0	779	28	0	807	0	1540
6:00PM	0	0	0	0	0	0	16	0	0	0	16	0	1	128	1	0	130	0	1	151	6	0	158	0	304
6:15PM	0	0	1	0	1	1	9	0	2	0	11	0	2	124	4	0	130	0	1	116	5	0	122	0	264
6:30PM	0	0	0	0	0	2	12	0	0	0	12	0	0	122	2	0	124	0	0	148	6	0	154	0	290
6:45PM	3	0	0	0	3	2	7	0	0	0	7	0	1	110	0	0	111	0	0	107	7	0	114	0	235
Hourly Total	3	0	1	0	4	5	44	0	2	0	46	0	4	484	7	0	495	0	2	522	24	0	548	0	1093
2023-04-29 9:00AM	1	0	0	0	1	0	1	0	0	0	1	0	1	63	0	0	64	0	0	73	4	0	77	0	143
9:15AM	3	0	0	0	3	0	4	0	0	0	4	0	2	81	1	1	85	0	0	78	3	0	81	0	173
9:30AM	3	0	0	0	3	0	10	0	0	0	10	0	0	85	1	0	86	0	0	87	3	0	90	0	189
9:45AM	1	0	0	0	1	0	5	1	0	0	6	0	0	87	0	1	88	0	0	92	4	0	96	0	191
Hourly Total	8	0	0	0	8	0	20	1	0	0	21	0	3	316	2	2	323	0	0	330	14	0	344	0	696
10:00AM	0	0	0	0	0	0	3	0	0	0	3	0	1	93	0	0	94	0	0	90	4	0	94	0	191
10:15AM	1	0	1	0	2	0	3	0	1	0	4	0	1	86	1	0	88	0	0	101	6	0	107	0	201
10:30AM	1	0	0	0	1	0	2	0	0	0	2	0	0	95	0	0	95	0	1	90	4	0	95	0	193
10:45AM	1	0	0	0	1	0	2	0	0	0	2	0	2	114	1	0	117	0	0	102	2	0	104	0	224
Hourly Total	3	0	1	0	4	0	10	0	1	0	11	0	4	388	2	0	394	0	1	383	16	0	400	0	809
11:00AM	2	0	0	0	2	0	7	0	0	0	7	0	0	122	0	0	122	0	0	96	2	0	98	0	229
11:15AM	0	0	3	0	3	1	5	0	1	0	6	0	1	112	3	0	116	0	1	127	4	0	132	0	257
11:30AM	4	0	1	0	5	2	2	0	0	0	2	0	1	117	0	0	118	0	0	123	3	0	126	0	251
11:45AM	1	0	0	0	1	0	3	0	1	0	4	0	0	109	3	0	112	0	0	123	3	0	126	0	243
Hourly Total	7	0	4	0	11	3	17	0	2	0	19	0	2	460	6	0	468	0	1	469	12	0	482	0	980
12:00PM	2	0	0	0	2	1	3	0	0	0	3	0	0	116	1	0	117	0	1	120	0	0	121	0	243
12:15PM	2	0	0	0	2	1	4	0	0	0	4	0	0	115	0	0	115	0	1	133	5	0	139	0	260
12:30PM	2	0	1	0	3	0	1	0	1	0	2	0	0	95	2	0	97	0	1	136	5	0	142	0	244
12:45PM	3	0	0	0	3	0	1	0	0	0	1	0	1	115	1	0	117	0	0	123	1	0	124	0	245
Hourly Total	9	0	1	0	10	2	9	0	1	0	10	0	1	441	4	0	446	0	3	512	11	0	526	0	992
1:00PM	2	0	0	0	2	0	3	0	0	0	3	0	0	126	2	0	128	1	0	114	2	1	117	0	250
1:15PM	3	0	0	0	3	1	1	1	3	0	5	0	1	140	0	0	141	0	2	127	3	0	132	0	281

Leg Direction	4th Street Northbound						Aviation Research Boulevard Southbound						Delilah Road Eastbound						Delilah Road Westbound						
	Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*
1:30PM	2 0 1 0 3 0	4 0 0 0 4 0	0 113 0 0 113 0	0 149 4 0 153 0	273																				
1:45PM	1 0 0 0 1 0	1 1 0 0 2 0	0 116 1 0 117 0	0 104 5 0 109 0	229																				
Hourly Total	8 0 1 0 9 1	9 2 3 0 14 0	1 495 3 0 499 1	2 494 14 1 511 0	1033																				
2:00PM	1 0 2 0 3 0	3 0 3 0 6 0	0 127 0 0 127 0	0 113 3 0 116 0	252																				
2:15PM	1 0 0 0 1 3	3 0 0 0 3 0	1 163 1 0 165 0	3 125 4 0 132 0	301																				
2:30PM	1 0 0 0 1 0	3 0 1 0 4 0	0 119 5 0 124 0	0 120 4 0 124 0	253																				
2:45PM	3 0 0 0 3 0	4 0 1 0 5 0	1 142 1 0 144 0	0 115 4 0 119 0	271																				
Hourly Total	6 0 2 0 8 3	13 0 5 0 18 0	2 551 7 0 560 0	3 473 15 0 491 0	1077																				
3:00PM	1 0 1 0 2 0	3 0 1 0 4 0	0 131 1 0 132 0	1 102 5 1 109 0	247																				
3:15PM	1 0 0 0 1 0	4 0 0 0 4 1	1 114 0 0 115 0	0 128 4 0 132 0	252																				
3:30PM	1 0 1 0 2 3	9 0 0 0 9 0	1 119 1 0 121 0	1 124 2 0 127 0	259																				
3:45PM	3 0 2 0 5 0	7 0 0 0 7 0	1 144 2 0 147 0	0 115 6 0 121 0	280																				
Hourly Total	6 0 4 0 10 3	23 0 1 0 24 1	3 508 4 0 515 0	2 469 17 1 489 0	1038																				
4:00PM	1 0 0 0 1 1	10 0 0 0 10 0	0 105 0 0 105 0	0 115 7 0 122 0	238																				
4:15PM	0 0 1 0 1 1	10 0 0 0 10 0	2 137 1 0 140 0	0 98 6 0 104 0	255																				
4:30PM	2 0 1 0 3 0	6 0 0 0 6 0	2 104 0 0 106 0	0 111 5 0 116 0	231																				
4:45PM	1 0 1 0 2 0	5 0 0 0 5 0	0 122 1 0 123 0	0 118 1 0 119 0	249																				
Hourly Total	4 0 3 0 7 2	31 0 0 0 31 0	4 468 2 0 474 0	0 442 19 0 461 0	973																				
5:00PM	1 0 1 0 2 0	7 0 0 0 7 0	0 112 3 0 115 0	1 109 4 0 114 0	238																				
5:15PM	1 0 0 0 1 0	8 0 0 0 8 0	0 126 0 0 126 0	0 133 3 0 136 0	271																				
5:30PM	1 0 0 0 1 0	4 0 0 0 4 0	0 104 1 0 105 0	1 119 1 0 121 0	231																				
5:45PM	4 0 0 0 4 0	5 0 1 0 6 0	0 112 0 0 112 0	2 88 1 0 91 0	213																				
Hourly Total	7 0 1 0 8 0	24 0 1 0 25 0	0 454 4 0 458 0	4 449 9 0 462 0	953																				
6:00PM	0 0 0 0 0 0	2 0 1 0 3 0	0 93 0 0 93 0	0 105 2 0 107 0	203																				
6:15PM	1 0 0 0 1 0	2 0 0 0 2 0	0 84 3 0 87 0	0 115 5 0 120 0	210																				
6:30PM	3 0 0 0 3 0	0 0 0 0 0 0	0 102 3 1 106 0	1 102 6 0 109 0	218																				
6:45PM	2 0 1 0 3 0	2 0 0 0 2 0	0 110 1 0 111 0	1 102 1 0 104 0	220																				
Hourly Total	6 0 1 0 7 0	6 0 1 0 7 0	0 389 7 1 397 0	2 424 14 0 440 0	851																				
Total	133 1 27 0 161 35	760 6 97 1 864 1	90 11357 92 5 11544 1	34 11573 644 3 12254 0	24823																				
% Approach	82.6% 0.6% 16.8% 0%	- -	88.0% 0.7% 11.2% 0.1%	- -	0.8% 98.4% 0.8% 0%	- -	0.3% 94.4% 5.3% 0%	- -																	
% Total	0.5% 0% 0.1% 0%	0.6%	- 3.1% 0% 0.4% 0%	3.5%	- 0.4% 45.8% 0.4% 0%	46.5%	- 0.1% 46.6% 2.6% 0%	49.4%																	
Motorcycles	0 0 0 0 0 0	-	0 0 0 0 0 0	-	0 4 0 0 4	-	0 9 1 0 10	- 14																	
% Motorcycles	0% 0% 0% 0%	0%	- 0% 0% 0% 0%	- 0%	- 0% 0% 0% 0%	- 0%	- 0% 0.1% 0.2% 0%	0.1%																	
Lights	130 1 27 0 158	-	733 6 95 1 835	-	87 10805 84 5 10981	-	34 11013 621 3 11671	- 23645																	
% Lights	97.7% 100% 100% 0%	98.1%	- 96.4% 100% 97.9% 100%	96.6%	- 96.7% 95.1% 91.3% 100%	95.1%	- 100% 95.2% 96.4% 100%	95.2%																	
Single-Unit Trucks	2 0 0 0 2	-	17 0 2 0 19	-	2 350 2 0 354	-	0 393 16 0 409	- 784																	
% Single-Unit Trucks	1.5% 0% 0% 0%	1.2%	- 2.2% 0% 2.1% 0%	2.2%	- 2.2% 3.1% 2.2% 0%	3.1%	- 0% 3.4% 2.5% 0%	3.3%																	
Articulated Trucks	0 0 0 0 0	-	8 0 0 0 8	-	1 77 0 0 78	-	0 98 4 0 102	- 188																	
% Articulated Trucks	0% 0% 0% 0%	0%	- 1.1% 0% 0% 0%	0.9%	- 1.1% 0.7% 0% 0%	0.7%	- 0% 0.8% 0.6% 0%	0.8%																	
Buses	1 0 0 0 1	-	2 0 0 0 2	-	0 116 6 0 122	-	0 58 1 0 59	- 184																	
% Buses	0.8% 0% 0% 0%	0.6%	- 0.3% 0% 0% 0.2%	- 0.2%	- 0% 1.0% 6.5% 0%	1.1%	- 0% 0.5% 0.2% 0%	0.5%																	
Bicycles on Road	0 0 0 0 0	-	0 0 0 0 0	-	0 5 0 0 5	-	0 2 1 0 3	- 8																	
% Bicycles on Road	0% 0% 0% 0%	0%	- 0% 0% 0% 0%	- 0%	- 0% 0% 0% 0%	- 0%	- 0% 0% 0.2% 0%	0%																	
Pedestrians	- - - -	33	- - - -	1	- - - -	- 1	- - - -	- 0																	
% Pedestrians	- - - -	94.3%	- - - -	- 100%	- - - -	- 100%	- - - -	- - - -																	

Leg Direction	4th Street Northbound		Aviation Research Boulevard Southbound		Delilah Road Eastbound		Delilah Road Westbound												
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	5.7%	-	-	-	-	-	0%	-	-	-	-	-	-	

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

5: Delilah Road & Aviation Research Boulevard - TMC

Thu Apr 27, 2023

AM Peak (Apr 27 2023 7:30AM - 8:30 AM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1062843, Location: 39.429955, -74.57196, Site Code: 5

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	4th Street Northbound						Aviation Research Boulevard Southbound						Delilah Road Eastbound						Delilah Road Westbound							
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int	
2023-04-27 7:30AM	7	0	1	0	8	0	10	0	0	0	10	0	4	152	0	0	156	0	1	146	29	0	176	0	350	
7:45AM	1	0	0	0	1	0	6	0	1	0	7	0	4	194	0	0	198	0	0	137	23	0	160	0	366	
8:00AM	3	0	0	0	3	0	5	0	0	0	5	0	4	191	2	0	197	0	0	143	17	0	160	0	365	
8:15AM	1	0	0	0	1	0	6	0	1	0	7	0	8	166	0	0	174	0	1	138	14	0	153	0	335	
Total	12	0	1	0	13	0	27	0	2	0	29	0	20	703	2	0	725	0	2	564	83	0	649	0	1416	
% Approach	92.3%	0%	7.7%	0%	-	-	93.1%	0%	6.9%	0%	-	-	2.8%	97.0%	0.3%	0%	-	-	0.3%	86.9%	12.8%	0%	-	-	-	
% Total	0.8%	0%	0.1%	0%	0.9%	-	1.9%	0%	0.1%	0%	2.0%	-	1.4%	49.6%	0.1%	0%	51.2%	-	0.1%	39.8%	5.9%	0%	45.8%	-	-	
PHF	0.429	-	0.250	-	0.406	-	0.675	-	0.500	-	0.725	-	0.625	0.906	0.250	-	0.915	-	0.500	0.966	0.716	-	0.922	-	0.967	
Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	-	2
% Motorcycles	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0.4%	0%	0%	0.3%	-	0.1%	
Lights	11	0	1	0	12	-	23	0	2	0	25	-	20	650	2	0	672	-	2	486	81	0	569	-	1278	
% Lights	91.7%	0%	100%	0%	92.3%	-	85.2%	0%	100%	0%	86.2%	-	100%	92.5%	100%	0%	92.7%	-	100%	86.2%	97.6%	0%	87.7%	-	90.3%	
Single-Unit Trucks	0	0	0	0	0	0	3	0	0	0	3	-	0	33	0	0	33	-	0	47	2	0	49	-	85	
% Single-Unit Trucks	0%	0%	0%	0%	0%	-	11.1%	0%	0%	0%	10.3%	-	0%	4.7%	0%	0%	4.6%	-	0%	8.3%	2.4%	0%	7.6%	-	6.0%	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	-	0	8	0	0	8	-	0	21	0	0	21	-	29	
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	1.1%	0%	0%	1.1%	-	0%	3.7%	0%	0%	3.2%	-	2.0%	
Buses	1	0	0	0	1	-	1	0	0	0	1	-	0	12	0	0	12	-	0	8	0	0	8	-	22	
% Buses	8.3%	0%	0%	0%	7.7%	-	3.7%	0%	0%	0%	3.4%	-	0%	1.7%	0%	0%	1.7%	-	0%	1.4%	0%	0%	1.2%	-	1.6%	
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	
% Bicycles on Road	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

5: Delilah Road & Aviation Research Boulevard - TMC

Thu Apr 27, 2023

PM Peak (Apr 27 2023 4:15PM - 5:15 PM) - Overall Peak Hour

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1062843, Location: 39.429955, -74.57196, Site Code: 5

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	4th Street Northbound						Aviation Research Boulevard Southbound						Delilah Road Eastbound						Delilah Road Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2023-04-27 4:15PM	1	0	0	0	1	0	19	0	8	0	27	0	0	159	2	0	161	0	1	232	16	0	249	0	438
4:30PM	0	0	0	0	0	4	29	1	9	0	39	0	1	164	1	1	167	0	1	223	6	0	230	0	436
4:45PM	3	0	0	0	3	3	24	0	6	0	30	0	4	164	1	0	169	0	1	195	8	0	204	0	406
5:00PM	1	0	0	0	1	0	24	0	6	0	30	0	3	196	3	0	202	0	0	237	10	0	247	0	480
Total	5	0	0	0	5	7	96	1	29	0	126	0	8	683	7	1	699	0	3	887	40	0	930	0	1760
% Approach	100%	0%	0%	0%	-	-	76.2%	0.8%	23.0%	0%	-	-	1.1%	97.7%	1.0%	0.1%	-	-	0.3%	95.4%	4.3%	0%	-	-	-
% Total	0.3%	0%	0%	0%	0.3%	-	5.5%	0.1%	1.6%	0%	7.2%	-	0.5%	38.8%	0.4%	0.1%	39.7%	-	0.2%	50.4%	2.3%	0%	52.8%	-	-
PHF	0.417	-	-	-	0.417	-	0.828	0.250	0.806	-	0.808	-	0.500	0.870	0.583	0.250	0.864	-	0.750	0.936	0.625	-	0.934	-	0.916
Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	-	0	1	0	0	1	-	2
% Motorcycles	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0.1%	0%	0%	0.1%	-	0%	0.1%	0%	0%	0.1%	-	0.1%
Lights	5	0	0	0	5	-	96	1	29	0	126	-	8	633	7	1	649	-	3	862	40	0	905	-	1685
% Lights	100%	0%	0%	0%	100%	-	100%	100%	100%	0%	100%	-	100%	92.7%	100%	100%	92.8%	-	100%	97.2%	100%	0%	97.3%	-	95.7%
Single-Unit Trucks	0	0	0	0	0	-	0	0	0	0	0	-	0	33	0	0	33	-	0	12	0	0	12	-	45
% Single-Unit Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	4.8%	0%	0%	4.7%	-	0%	1.4%	0%	0%	1.3%	-	2.6%
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	-	0	6	0	0	6	-	0	4	0	0	4	-	10
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0.9%	0%	0%	0.9%	-	0%	0.5%	0%	0%	0.4%	-	0.6%
Buses	0	0	0	0	0	-	0	0	0	0	0	-	0	9	0	0	9	-	0	8	0	0	8	-	17
% Buses	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	1.3%	0%	0%	1.3%	-	0%	0.9%	0%	0%	0.9%	-	1.0%
Bicycles on Road	0	0	0	0	0	-	0	0	0	0	0	-	0	1	0	0	1	-	0	0	0	0	0	-	1
% Bicycles on Road	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0.1%	0%	0%	0.1%	-	0%	0%	0%	0%	0%	-	0.1%
Pedestrians	-	-	-	-	-	6	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	85.7%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	14.3%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

5: Delilah Road & Aviation Research Boulevard - TMC

Sat Apr 29, 2023

PM Peak (WKND) (Apr 29 2023 2PM - 3 PM)

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1062843, Location: 39.429955, -74.57196, Site Code: 5

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	4th Street Northbound						Aviation Research Boulevard Southbound						Delilah Road Eastbound						Delilah Road Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2023-04-29 2:00PM	1	0	2	0	3	0	3	0	3	0	6	0	0	127	0	0	127	0	0	113	3	0	116	0	252
2:15PM	1	0	0	0	1	3	3	0	0	0	3	0	1	163	1	0	165	0	3	125	4	0	132	0	301
2:30PM	1	0	0	0	1	0	3	0	1	0	4	0	0	119	5	0	124	0	0	120	4	0	124	0	253
2:45PM	3	0	0	0	3	0	4	0	1	0	5	0	1	142	1	0	144	0	0	115	4	0	119	0	271
Total	6	0	2	0	8	3	13	0	5	0	18	0	2	551	7	0	560	0	3	473	15	0	491	0	1077
% Approach	75.0%	0%	25.0%	0%	-	-	72.2%	0%	27.8%	0%	-	-	0.4%	98.4%	1.3%	0%	-	-	0.6%	96.3%	3.1%	0%	-	-	-
% Total	0.6%	0%	0.2%	0%	0.7%	-	1.2%	0%	0.5%	0%	1.7%	-	0.2%	51.2%	0.6%	0%	52.0%	-	0.3%	43.9%	1.4%	0%	45.6%	-	-
PHF	0.500	-	0.250	-	0.667	-	0.813	-	0.417	-	0.750	-	0.500	0.845	0.350	-	0.848	-	0.250	0.946	0.938	-	0.930	-	0.895
Motorcycles	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	0	0
% Motorcycles	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%
Lights	5	0	2	0	7	-	13	0	4	0	17	-	2	545	6	0	553	-	3	468	15	0	486	-	1063
% Lights	83.3%	0%	100%	0%	87.5%	-	100%	0%	80.0%	0%	94.4%	-	100%	98.9%	85.7%	0%	98.8%	-	100%	98.9%	100%	0%	99.0%	-	98.7%
Single-Unit Trucks	1	0	0	0	1	-	0	0	1	0	1	-	0	4	0	0	4	-	0	3	0	0	3	-	9
% Single-Unit Trucks	16.7%	0%	0%	0%	12.5%	-	0%	0%	20.0%	0%	5.6%	-	0%	0.7%	0%	0%	0.7%	-	0%	0.6%	0%	0%	0.6%	-	0.8%
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	2	0	0	2	-	2
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0.4%	0%	0%	0.4%	-	0.2%
Buses	0	0	0	0	0	0	0	0	0	0	0	-	0	2	1	0	3	-	0	0	0	0	0	0	3
% Buses	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0.4%	14.3%	0%	0.5%	-	0%	0%	0%	0%	0%	-	0.3%
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	0	0
% Bicycles on Road	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	-	3	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Delilah Road
west of English Creek Avenue
Egg Harbor, Atlantic County, NJ
Setup: DR/GP

Imperial >>

TRAFFIC & DATA COLLECTION

File Name: ATR1. Delilah Road, west of English Creek Avenue

Start Date: 4/25/2023
End Date: 5/9/2023
Date Printed: 5/12/2023

4/24/2023	Monday		Tuesday		Wednesday		Thursday		Friday		Weekday Average		Saturday		Sunday		
Time	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	
	Delilah	Road	Delilah	Road	Delilah	Road	Delilah	Road	Delilah	Road	Delilah	Road	Delilah	Road	Delilah	Road	
12:00 AM	*	*	*	*	*	54	23	61	32	67	31	61	29	80	41	90	42
1:00	*	*	*	*	28	16	30	14	34	24	31	18	44	17	52	20	
2:00	*	*	*	*	32	13	23	12	30	8	28	11	59	27	55	32	
3:00	*	*	*	*	20	34	38	38	39	40	32	37	36	45	51	51	
4:00	*	*	*	*	53	39	39	43	39	49	44	44	60	26	59	18	
5:00	*	*	*	*	55	145	58	128	39	126	51	133	37	47	49	50	
6:00	*	*	*	*	102	341	111	319	102	272	105	311	53	118	43	71	
7:00	*	*	*	*	186	469	182	448	197	439	188	452	85	151	68	110	
8:00	*	*	*	*	207	405	208	381	202	350	206	379	137	175	95	127	
9:00	*	*	*	*	224	306	197	300	199	278	207	295	162	197	99	170	
10:00	*	*	*	*	186	242	206	272	198	286	197	267	181	208	143	190	
11:00	*	*	*	*	214	289	257	272	232	312	234	291	229	242	194	207	
12:00 PM	*	*	195	235	236	278	251	315	249	282	233	278	280	283	244	222	
1:00	*	*	238	288	243	297	260	316	231	307	243	302	249	285	236	252	
2:00	*	*	283	330	255	337	267	343	267	315	268	331	255	319	183	255	
3:00	*	*	330	319	332	372	279	319	340	301	320	328	241	339	196	275	
4:00	*	*	397	373	348	344	309	365	328	346	346	357	251	319	202	202	
5:00	*	*	337	294	346	318	325	318	304	278	328	302	257	299	186	189	
6:00	*	*	271	277	274	284	261	272	249	293	264	282	211	241	147	177	
7:00	*	*	216	189	208	204	183	206	192	232	200	208	180	203	152	168	
8:00	*	*	172	171	146	164	176	178	141	175	159	172	159	192	138	121	
9:00	*	*	137	123	147	108	157	166	133	159	144	139	149	174	87	109	
10:00	*	*	112	88	101	89	105	92	122	118	110	97	139	123	93	68	
11:00	*	*	79	63	102	66	100	64	114	80	99	68	127	84	77	56	
Total Day	0	0	2767	2750	4099	5183	4083	5213	4048	5101	4098	5131	3661	4155	2939	3182	
AM Peak Volume					9:00	7:00	11:00	7:00	11:00	7:00	11:00	7:00	11:00	11:00	11:00	11:00	
PM Peak Volume			4:00	4:00	4:00	3:00	5:00	4:00	3:00	4:00	4:00	4:00	4:00	12:00 PM	3:00	3:00	

Delilah Road
west of English Creek Avenue
Egg Harbor, Atlantic County, NJ
Setup: DR/GP

Imperial >>

TRAFFIC & DATA COLLECTION

File Name: ATR1. Delilah Road, west of English Creek Avenue

Start Date: 4/25/2023
End Date: 5/9/2023
Date Printed: 5/12/2023

5/1/2023	Monday		Tuesday		Wednesday		Thursday		Friday		Weekday Average		Saturday		Sunday	
Time	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
	Delilah	Road	Delilah	Road	Delilah	Road	Delilah	Road	Delilah	Road	Delilah	Road	Delilah	Road	Delilah	Road
12:00 AM	60	24	81	0	0	0	53	30	70	36	53	18	77	50	86	55
1:00	41	7	55	0	0	0	37	9	31	20	33	7	44	24	57	19
2:00	26	17	41	2	0	0	26	12	24	15	23	9	51	24	65	24
3:00	34	35	52	0	0	0	20	38	44	43	30	23	54	53	47	37
4:00	51	41	85	0	0	0	50	38	44	31	46	22	48	29	57	31
5:00	72	125	222	0	0	0	61	137	48	129	81	78	37	78	39	54
6:00	126	346	488	0	0	0	118	322	120	277	170	189	50	140	47	97
7:00	155	437	654	1	0	0	177	459	185	420	234	263	109	154	76	107
8:00	210	388	603	3	6	6	208	366	194	363	244	225	168	216	109	147
9:00	178	261	464	0	210	317	207	289	211	266	254	227	204	216	133	189
10:00	208	244	458	0	209	246	196	264	214	262	257	203	185	245	181	211
11:00	232	305	454	0	249	321	216	297	237	258	278	236	208	288	231	270
12:00 PM	260	293	522	0	247	316	270	314	260	296	312	244	270	258	251	264
1:00	246	308	543	1	227	328	257	322	270	321	309	256	230	298	225	293
2:00	263	328	588	0	296	365	285	357	264	331	339	276	271	311	260	278
3:00	580	75	653	1	322	308	309	363	309	357	435	221	271	312	245	304
4:00	740	4	725	1	348	360	317	376	321	335	490	215	258	280	245	240
5:00	627	2	276	7	370	320	323	335	259	314	371	196	234	269	243	253
6:00	577	0	0	0	286	280	285	268	334	298	296	169	237	242	207	232
7:00	402	0	0	0	200	209	213	221	240	227	211	131	200	209	183	202
8:00	328	0	0	0	175	162	147	175	149	188	160	105	182	217	170	153
9:00	230	1	0	0	133	130	169	167	142	166	135	93	156	163	128	129
10:00	185	0	0	0	100	98	103	125	122	135	102	72	145	127	111	84
11:00	138	0	0	0	88	73	91	61	123	86	88	44	118	103	72	59
Total Day	5969	3241	6964	16	3466	3839	4138	5345	4215	5174	4951	3522	3807	4306	3468	3732
AM Peak Volume	11:00	7:00	7:00	8:00	11:00	11:00	11:00	7:00	11:00	7:00	11:00	7:00	11:00	11:00	11:00	11:00
PM Peak Volume	740	328	725	7	370	365	323	376	334	357	490	276	271	312	260	304

5/8/2023		Monday		Tuesday		Wednesday		Thursday		Friday		Weekday Average		Saturday		Sunday	
Time		WB Delilah Road	EB Delilah Road														
12:00 AM		75	35	67	29	*	*	*	*	*	*	71	32	*	*	*	*
1:00		36	17	24	12	*	*	*	*	*	*	30	14	*	*	*	*
2:00		29	20	20	17	*	*	*	*	*	*	24	18	*	*	*	*
3:00		30	31	24	33	*	*	*	*	*	*	27	32	*	*	*	*
4:00		48	33	62	44	*	*	*	*	*	*	55	38	*	*	*	*
5:00		60	127	59	152	*	*	*	*	*	*	60	140	*	*	*	*
6:00		125	341	116	362	*	*	*	*	*	*	120	352	*	*	*	*
7:00		175	471	155	434	*	*	*	*	*	*	165	452	*	*	*	*
8:00		215	368	*	*	*	*	*	*	*	*	215	368	*	*	*	*
9:00		202	276	*	*	*	*	*	*	*	*	202	276	*	*	*	*
10:00		209	246	*	*	*	*	*	*	*	*	209	246	*	*	*	*
11:00		222	279	*	*	*	*	*	*	*	*	222	279	*	*	*	*
12:00 PM		255	288	*	*	*	*	*	*	*	*	255	288	*	*	*	*
1:00		228	301	*	*	*	*	*	*	*	*	228	301	*	*	*	*
2:00		272	302	*	*	*	*	*	*	*	*	272	302	*	*	*	*
3:00		344	344	*	*	*	*	*	*	*	*	344	344	*	*	*	*
4:00		324	321	*	*	*	*	*	*	*	*	324	321	*	*	*	*
5:00		334	288	*	*	*	*	*	*	*	*	334	288	*	*	*	*
6:00		237	277	*	*	*	*	*	*	*	*	237	277	*	*	*	*
7:00		205	191	*	*	*	*	*	*	*	*	205	191	*	*	*	*
8:00		176	161	*	*	*	*	*	*	*	*	176	161	*	*	*	*
9:00		137	141	*	*	*	*	*	*	*	*	137	141	*	*	*	*
10:00		92	79	*	*	*	*	*	*	*	*	92	79	*	*	*	*
11:00		81	55	*	*	*	*	*	*	*	*	81	55	*	*	*	*
Total Day		4111	4992	527	1083	0	0	0	0	0	0	4085	4995	0	0	0	0
AM Peak Volume		11:00	7:00	7:00	7:00							11:00	7:00				
PM Peak Volume		3:00	3:00									3:00	3:00				
Comb Total ADT		18313	14107	16587	18779	18538	26782	15929	13321	ADT: 8,800	AADT: 8,800						

Delilah Road
west of the AC Expressway EB On/Off Ramps
Egg Harbor Township, Atlantic County, NJ
Setup: DR/GP

Imperial >>

TRAFFIC & DATA COLLECTION

File Name: ATR2. Delilah Road, wes of the
Atlantic City Expressway Ramps

Start Date: 4/25/2023
End Date: 5/9/2023
Date Printed: 5/12/2023

4/24/2023	Monday		Tuesday		Wednesday		Thursday		Friday		Weekday Average		Saturday		Sunday		
Time	WB Delilah Road	EB Delilah Road															
12:00 AM	*	*	*	*	*	81	41	100	54	101	47	94	47	139	54	160	81
1:00	*	*	*	*	46	25	56	36	63	30	55	30	77	24	85	35	
2:00	*	*	*	*	46	24	43	25	48	26	46	25	102	37	87	46	
3:00	*	*	*	*	39	62	56	75	53	76	49	71	65	87	99	83	
4:00	*	*	*	*	83	62	79	64	85	86	82	71	132	50	120	45	
5:00	*	*	*	*	116	215	123	184	116	176	118	192	78	84	84	85	
6:00	*	*	*	*	249	514	269	498	278	435	265	482	107	170	92	118	
7:00	*	*	*	*	460	791	491	756	491	704	481	750	178	247	147	182	
8:00	*	*	*	*	596	700	647	684	563	644	602	676	287	293	197	212	
9:00	*	*	*	*	619	642	578	623	517	574	571	613	340	339	247	296	
10:00	*	*	*	*	508	563	569	590	539	545	539	566	411	423	315	319	
11:00	*	*	292	316	574	639	587	594	578	653	508	550	512	494	333	423	
12:00 PM	*	*	619	651	566	673	600	695	564	604	587	656	535	564	415	452	
1:00	*	*	536	631	639	645	674	642	551	678	600	649	504	557	426	452	
2:00	*	*	605	732	581	715	612	726	513	651	578	706	519	610	329	471	
3:00	*	*	713	706	684	782	591	749	641	709	657	736	488	610	326	461	
4:00	*	*	723	758	717	793	693	761	629	691	690	751	498	551	341	377	
5:00	*	*	695	653	739	680	727	671	647	578	702	646	481	499	313	362	
6:00	*	*	533	584	564	593	508	559	497	538	526	568	466	503	289	324	
7:00	*	*	390	431	404	422	366	418	338	433	374	426	390	392	237	319	
8:00	*	*	324	344	322	364	332	374	301	336	320	354	365	320	244	231	
9:00	*	*	215	244	244	223	261	290	221	300	235	264	264	322	168	192	
10:00	*	*	186	158	167	170	197	185	226	206	194	180	259	237	155	131	
11:00	*	*	131	106	141	116	158	107	209	135	160	116	222	125	122	93	
Total Day	0	0	5962	6314	9185	10454	9317	10360	8769	9855	9033	10125	7419	7592	5331	5790	
AM Peak Volume			11:00	11:00	9:00	7:00	8:00	7:00	11:00	7:00	8:00	7:00	11:00	11:00	11:00	11:00	
PM Peak Volume			4:00	4:00	5:00	4:00	5:00	4:00	5:00	3:00	5:00	4:00	12:00 PM	2:00	1:00	2:00	

Delilah Road
west of the AC Expressway EB On/Off Ramps
Egg Harbor Township, Atlantic County, NJ
Setup: DR/GP

Imperial >>

TRAFFIC & DATA COLLECTION

File Name: ATR2. Delilah Road, wes of the
Atlantic City Expressway Ramps

Start Date: 4/25/2023
End Date: 5/9/2023
Date Printed: 5/12/2023

5/1/2023	Monday		Tuesday		Wednesday		Thursday		Friday		Weekday Average		Saturday		Sunday	
Time	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
	Delilah	Road	Delilah	Road	Delilah	Road	Delilah	Road	Delilah	Road	Delilah	Road	Delilah	Road	Delilah	Road
12:00 AM	108	45	85	49	76	51	93	52	108	64	94	52	129	71	148	86
1:00	70	16	66	37	47	23	71	18	57	26	62	24	85	46	102	39
2:00	44	24	51	28	35	29	39	22	48	26	43	26	87	40	114	41
3:00	60	68	45	68	47	62	34	69	62	77	50	69	98	81	83	66
4:00	101	66	79	69	76	75	88	74	88	69	86	71	102	50	117	47
5:00	132	175	144	209	129	209	130	192	114	186	130	194	85	124	77	89
6:00	237	490	248	541	272	564	278	533	276	452	262	516	113	242	94	170
7:00	379	724	443	783	461	761	478	774	494	675	451	743	220	276	175	199
8:00	462	649	542	708	637	692	593	696	564	626	560	674	397	357	244	225
9:00	412	591	532	642	581	644	554	641	549	569	526	617	442	421	333	351
10:00	451	573	523	573	556	610	552	569	555	579	527	581	483	486	417	427
11:00	485	653	538	642	573	718	606	629	562	655	553	659	576	617	489	504
12:00 PM	481	636	565	673	602	740	636	716	604	700	578	693	589	551	483	558
1:00	540	602	545	662	582	689	588	679	580	690	567	664	518	599	451	514
2:00	484	727	582	693	615	784	577	754	551	735	562	739	558	603	566	531
3:00	657	724	713	722	648	709	631	775	607	776	651	741	551	601	473	531
4:00	621	816	629	863	715	802	703	832	617	764	657	815	508	586	470	472
5:00	579	769	714	719	694	717	698	695	550	724	647	725	469	543	455	479
6:00	497	599	483	609	519	573	559	552	571	579	526	582	440	475	385	453
7:00	345	473	404	433	405	421	389	444	400	464	389	447	378	495	325	379
8:00	321	332	336	321	331	361	313	361	352	385	331	352	371	365	338	261
9:00	215	231	234	247	220	250	283	303	242	294	239	265	260	292	236	224
10:00	146	188	161	183	170	183	193	216	238	249	182	204	235	223	193	135
11:00	128	109	119	96	138	134	147	101	217	142	150	116	211	156	140	89
Total Day	7955	10280	8781	10570	9129	10801	9233	10697	9006	10506	8823	10569	7905	8300	6908	6870
AM Peak Volume	11:00	7:00	8:00	7:00	8:00	7:00	11:00	7:00	8:00	7:00	8:00	7:00	11:00	11:00	11:00	11:00
PM Peak Volume	3:00	4:00	5:00	4:00	4:00	4:00	4:00	4:00	4:00	3:00	4:00	4:00	12:00 PM	2:00	2:00	12:00 PM

Delilah Road
west of the AC Expressway EB On/Off Ramps
Egg Harbor Township, Atlantic County, NJ
Setup: DR/GP

Setup: DR/GP

Imperial



TRAFFIC & DATA COLLECTION

File Name: ATR2. Delilah Road, wes of the
Atlantic City Expressway Ramps

Start Date: 4/25/2023
End Date: 5/9/2023
Date Printed: 5/12/2023

Delilah Road
east of AC Expressway Ramps
Egg Harbor Township, Atlantic County, NJ
Setup: DR/GP

Imperial >>

TRAFFIC & DATA COLLECTION

File Name: ATR3. Delilah Road, east of the
Atlantic City Expressway Ramps

Start Date: 5/5/2023
End Date: 5/13/2023
Date Printed: 5/16/2023

5/1/2023	Monday		Tuesday		Wednesday		Thursday		Friday		Weekday Average		Saturday		Sunday		
	Time	WB	EB	WB	EB	WB	EB	WB	EB								
		Delilah Rd	Delilah Rd	Delilah Rd	Delilah Rd	Delilah Rd	Delilah Rd	Delilah Rd									
12:00 AM	*	*	*	*	*	*	*	*	*	*	*	*	*	134	94	158	119
1:00	*	*	*	*	*	*	*	*	*	*	*	*	*	88	60	104	68
2:00	*	*	*	*	*	*	*	*	*	*	*	*	*	83	45	136	48
3:00	*	*	*	*	*	*	*	*	*	*	*	*	*	96	97	82	85
4:00	*	*	*	*	*	*	*	*	*	*	*	*	*	121	101	138	117
5:00	*	*	*	*	*	*	*	*	*	*	*	*	*	88	153	88	126
6:00	*	*	*	*	*	*	*	*	*	*	*	*	*	109	290	95	230
7:00	*	*	*	*	*	*	*	*	*	*	*	*	*	239	330	155	246
8:00	*	*	*	*	*	*	*	71	240	71	240	403	420	271	291		
9:00	*	*	*	*	*	*	*	498	580	498	580	419	510	362	378		
10:00	*	*	*	*	*	*	*	501	598	501	598	454	538	389	545		
11:00	*	*	*	*	*	*	*	532	691	532	691	543	703	461	569		
12:00 PM	*	*	*	*	*	*	*	565	693	565	693	559	578	540	595		
1:00	*	*	*	*	*	*	*	552	712	552	712	489	619	441	550		
2:00	*	*	*	*	*	*	*	563	772	563	772	513	658	521	591		
3:00	*	*	*	*	*	*	*	591	743	591	743	537	646	482	617		
4:00	*	*	*	*	*	*	*	683	740	683	740	532	623	477	481		
5:00	*	*	*	*	*	*	*	577	751	577	751	505	561	419	496		
6:00	*	*	*	*	*	*	*	569	639	569	639	400	526	394	507		
7:00	*	*	*	*	*	*	*	420	521	420	521	387	517	332	410		
8:00	*	*	*	*	*	*	*	359	363	359	363	370	407	327	320		
9:00	*	*	*	*	*	*	*	250	355	250	355	270	318	228	244		
10:00	*	*	*	*	*	*	*	274	305	274	305	264	266	225	157		
11:00	*	*	*	*	*	*	*	227	173	227	173	200	176	141	125		
Total Day	0	0	0	0	0	0	0	7232	8876	7232	8876	7803	9236	6966	7915		
AM Peak Volume								11:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	
								532	691	532	691	543	703	461	569		
PM Peak Volume								4:00	2:00	4:00	2:00	12:00 PM	2:00	12:00 PM	3:00		
								683	772	683	772	559	658	540	617		

Delilah Road
east of AC Expressway Ramps
Egg Harbor Township, Atlantic County, NJ
Setup: DR/GP

Imperial

The logo consists of the word "Imperial" in a bold, black, sans-serif font. To the right of the text is a graphic element consisting of two thick, black, right-pointing chevrons. The entire logo is centered on a white background.

Start Date: 5/5/2023
End Date: 5/13/2023
Date Printed: 5/16/2023

NON-SUMMER TIMINGS (SEPTEMBER 4 THROUGH JUNE 14)

120 SECOND BACKGROUND CYCLE, 81 - 120 SECOND CYCLE

<u>Phase</u>	<u>Signal Heads</u>					<u>Time (Seconds)</u>				
	<u>1</u>	<u>2-4</u>	<u>5,6</u>	<u>7-10</u>	<u>11-14</u>	<u>Plan I</u> <u>(120)</u>	<u>Plan II</u> <u>(120)</u>	<u>Plan III</u> <u>(120)</u>	<u>Plan IV</u> <u>(120)</u>	<u>Plan V</u> <u>(81-120)</u>
A. Route 40/322 EBD Left ROW Change Clearance	R	G	<G-	R	R	7-43	7-40	7-40	7-40	7-40
	R	G	<Y-	R	R	3	3	3	3	3
	R	G	<R-	R	R	2	2	2	2	2
B. Route 40/322 ROW Change Clearance	G	G	<R-	G	R	87-43	87-48	87-48	87-48	48
	Y	Y**	<R-	Y	R	5*	5*	5*	5*	5
	R	R**	<R-	R	R	2	2	2	2	2
C. Delilah Road ROW Change Clearance	R	R	<R-	R	G	7-15	7-13	7-13	7-13	7-13
	R	R	<R-	R	Y	5	5	5	5	5
	R	R	<R-	R	R	2	2	2	2	2
Emergency Flash	Y	Y	<R-	Y	R	-	-	-	-	-
*Offsets						89	83	68	99	-

SUMMER TIMINGS (JUNE 15 THROUGH SEPTEMBER 3)

120 SECOND BACKGROUND CYCLE, 81 - 120 SECOND CYCLE

<u>Phase</u>	<u>Signal Heads</u>					<u>Time (Seconds)</u>			
	1	2-4	5,6	7-10	11-14	Plan I (120)	Plan II (120)	Plan III (120)	Plan IV (81-120)
A. Route 40/322 EBD Left ROW Change Clearance	R	G	<G-	R	R	7-43	7-40	7-40	7-40
	R	G	<Y-	R	R	3	3	3	3
	R	G	<R-	R	R	2	2	2	2
B. Route 40/322 ROW Change Clearance	G	G	<R-	G	R	87-45	87-48	87-48	48
	Y	Y**	<R-	Y	R	5*	5*	5*	5
	R	R**	<R-	R	R	2	2	2	2
C. Delilah Road ROW Change Clearance	R	R	<R-	R	G	7-13	7-13	7-13	7-13
	R	R	<R-	R	Y	5	5	5	5
	R	R	<R-	R	R	2	2	2	2
Emergency Flash	Y	Y	<R-	Y	R	-	-	-	-
*Offsets						66	106	77	-

Signal Notes:

1. Vehicle interval is to be 2 seconds.
2. The manual control is to be disconnected.
3. Memory circuit is to be off.
4. Signal is to rest in Phase B green.
5. This controller is to be capable of skipping any unactuated phase.
6. Actuation of pedestrian push button is to guarantee 22 seconds of green time to Phase C. The maximum green time will be exceeded using the pedestrian override feature in the controller.
7. *Offsets are measured from the beginning of yellow to Route 40/322 ROW at English Creek Road to the beginning of yellow to Route 40/322 at this intersection.
8. **Green if followed by Phase A.

Hours of Operation:

Non-Summer Timings (September 4 through June 14)

- Plan I: Monday to Friday, 6:30 AM to 10:00 AM
- Plan II: Monday to Friday, 10:00 AM to 3:00 PM
- Plan III: Monday to Friday, 3:00 PM to 10:00 PM
- Plan IV: Saturday, 8:30 AM to 11:00 PM
Sunday, 10:00 AM to 8:30 PM
- Plan V: All other times (Free Float)

Summer Timings (June 15 through September 3)

- Plan I: Monday to Friday, 6:30 AM to 10:00 AM
- Plan II: Monday to Thursday, 10:00 AM to 3:00 PM
Friday, 10:00 AM to 2:00 PM
Saturday, 8:30 AM to 3:00 PM
Sunday, 10:00 AM to 2:00 PM
- Plan III: Monday to Thursday, 3:00 PM to 10:00 PM
Friday, 2:00 PM to 10:00 PM
Saturday, 3:00 PM to 11:00 PM
Sunday, 2:00 PM to 10:00 PM
- Plan IV: All other times (Free Float)

English Creek Avenue & Delilah Road

Atlantic County, New Jersey

70-90 Second Variable Cycle

No Pedestrian Actuation

<u>Phase</u>	<u>Description</u>	<u>Signal Faces</u>										<u>Time (Sec)</u>
		<u>1.2</u>	<u>3</u>	<u>4.5</u>	<u>6</u>	<u>7.8</u>	<u>9</u>	<u>10.11</u>	<u>13.14</u>	<u>17.18</u>	<u>19.20</u>	
1	Delilah Rd. Lefts ROW	<=G/R	R	<=G/R	R	R	R/G=>	R	H	H		7-10 (3)
1	Delilah Rd. Lefts Change	<=Y/R	R	<=Y/R	R	R	R/Y=>	R	H	H		5
1	Delilah Rd. Lefts Clearance	<=Y/R	R	R	R	R	R	R	H	H		2
1a	Delilah Rd. EB ROW	<=G/G	G	R	R	R	R	R	H	H		7-10 (3)
1a	Delilah Rd. EB Change	<=Y/G	G	R	R	R	R	R	H	H		5
1a	Delilah Rd. EB Clearance	<=Y/G	G	R	R	R	R	R	H	H		2
1b	Delilah Rd. WB ROW	R	R	<=G/G	G	R	R/G=>	R	H	H		7-10 (3)
1b	Delilah Rd. WB Change	R	R	<=Y/G	G	R	R/Y=>	R	H	H		5
1b	Delilah Rd. WB Clearance	R	R	<=Y/G	G	R	R	R	H	H		2
2	Delilah Rd. ROW (2)	G	G	G	G	R	R	R	M	H		21
2	Delilah Rd. Ped Clearance	G	G	G	G	R	R	R	FH	H		14
2	Delilah Rd. Change	Y	Y	Y	Y	R	R	R	H	H		5
2	Delilah Rd. Clearance	R	R	R	R	R	R	R	H	H		2
3	English Creek Ave. ROW	R	R	R	R	G	G	G	H	H		7-16 (3)
3	English Creek Ave. Change	R	R	R	R	Y	Y	Y	H	H		5
3	English Creek Ave. Clearance	R	R	R	R	R	R	R	H	H		2

With Pedestrian Actuation												
	<u>1.2</u>	<u>3</u>	<u>4.5</u>	<u>6</u>	<u>7.8</u>	<u>9</u>	<u>10.11</u>	<u>13.14</u>	<u>17.18</u>	<u>19.20</u>		<u>Time (Sec)</u>
1	Delilah Rd. Lefts ROW	<=G/R	R	<=G/R	R	R	R/G=>	R	H	H		7
1	Delilah Rd. Lefts Change	<=Y/R	R	<=Y/R	R	R	R/Y=>	R	H	H		5
1	Delilah Rd. Lefts Clearance	<=Y/R	R	R	R	R	R	R	H	H		2
1a	Delilah Rd. EB ROW	<=G/G	G	R	R	R	R	R	H	H		7
1a	Delilah Rd. EB Change	<=Y/G	G	R	R	R	R	R	H	H		5
1a	Delilah Rd. EB Clearance	<=Y/G	G	R	R	R	R	R	H	H		2
1b	Delilah Rd. WB ROW	R	R	<=G/G	G	R	R/G=>	R	H	H		7
1b	Delilah Rd. WB Change	R	R	<=Y/G	G	R	R/Y=>	R	H	H		5
1b	Delilah Rd. WB Clearance	R	R	<=Y/G	G	R	R	R	H	H		2
2	Delilah Rd. ROW (2)	G	G	G	G	R	R	R	M	H		21
2	Delilah Rd. Ped Clearance	G	G	G	G	R	R	R	FH	H		14
2	Delilah Rd. Change	Y	Y	Y	Y	R	R	R	H	H		5
2	Delilah Rd. Clearance	R	R	R	R	R	R	R	H	H		2
3	English Creek Ave. ROW	R	R	R	R	G	G	G	H	M		12
3	English Creek Ped. Clearance	R	R	R	R	G	G	G	H	FH		15
3	English Creek Ave. Change	R	R	R	R	Y	Y	Y	H	H		5
3	English Creek Ave. Clearance	R	R	R	R	R	R	R	H	H		2
Flashing Operations		Y	Y	Y	Y	R	R	R	DARK	DARK	-	

1. MULTI-PHASE, SEMI-ACTUATED CONTROLLER
2. CONTROLLER TO REST IN PHASE 2 GREEN
3. VEHICLE EXTENSION INTERVAL TO BE THREE (3) SECONDS.
DETECTORS TO OPERATE IN THE NON-LOCK MODE. MEMORY OFF.
4. PHASES 1a AND 1b SHALL BE CAPABLE OF INITIATING AND TERMINATING INDEPENDENTLY, OR OF OVERLAPPING PHASE 1, USING THE TIMING VALUES ALLOTTED TO PHASE 1.
5. THE MANUAL CONTROL IS TO BE CONNECTED.

2/8/2005

15
CORRECTED

INT. 9 RAMP TO/FROM EASTBOUND A.C.E.

Traffic Signal Timing and Operation

Delilah Rd. (Rt. 646) & A. C. Exp'y Exit 9
 Egg Harbor Township
 Atlantic County

May 2, 1994

Revised July 19, 1994
 Revised November 2, 2001

Revised April 21, 2004

90 Second Background Cycle

Phase	Interval	Signal Face					Time (Sec.)
		1, 2	3	4, 5, 6	7, 8	9	
A ₁	Rt. 646 E.B. R.O.W. & Lt. Turn/ Exit 9 Rt. Turn	G / <G-	G	R	R / -G>	R	8 - 16
	Change	G / <Y-	G	R	R / -Y>	R	5
	Clearance	G	G	R	R	R	2
A	Rt. 646 R.O.W.	G	G	G	R	R	32 - 36
	Change	Y	Y	Y	R	R	6
	Clearance	R	R	R	R	R	2
B	Exit 9 R.O.W.	R	R	R	G	G	8 - 16
	Change	R	R	R	Y	Y	5
	Clearance	R	R	R	R	R	2

Notes:

1. Vehicle interval set at two seconds.
2. Memory circuits off.
3. Controller to rest in Phase "A" green.
4. Manual control disconnected.
5. Phase "A" must follow phase "A₁".
6. Vehicle detection at loops A, B, C, D, E, F, G, H, I, and J shall initiate phase "A₁" only.
7. Vehicle detection at loops K, L, M, N, and O shall initiate phase "B" only.
8. The offset is 0 seconds as measured from Phase "A" yellow at this intersection.

January 30, 2004
Revised August 16, 2004

TIMING SCHEDULE

ATLANTIC CITY EXPRESSWAY INTERCHANGE 9 WESTBOUND OFF-RAMP
AND
DELILAH ROAD (COUNTY ROUTE 646)
TOWNSHIP OF EGG HARBOR
ATLANTIC COUNTY, NEW JERSEY
(90 SECOND BACKGROUND CYCLE)

SIGNAL HEADS

<u>PHASE</u>	<u>1-6</u>	<u>7-13</u>	<u>TIME (sec)</u>
A- Rt. 646 R.O.W.	G	R	70-61
A-CHANGE	Y	R	6
A-CLEAR	R	R	2
B-ACEX WB OFF-RAMP R.O.W.	R	G	7-16
B-CHANGE	R	Y	3
B-CLEAR	R	R	2
EMERGENCY	FY	FR	-

PEDESTRIAN ACTUATION
SIGNAL HEADS

<u>PHASE</u>	<u>1-6</u>	<u>7-13</u>	<u>TIME (sec)</u>
A- Rt. 646 R.O.W.	G	R	61
A-CHANGE	Y	R	6
A-CLEAR	R	R	2
B-ACEX WB OFF-RAMP R.O.W.	R	G	16
B-CHANGE	R	Y	3
B-CLEAR	R	R	2

EMERGENCY

FY FR -

Phase A: Unactuated

Phase B: Actuated

Vehicle interval = 2 seconds

Loop delay - 2 seconds

Memory circuit - off

Recall - off

Manual control - disconnected

1. Controller shall skip any unactuated phases and shall rest in Phase "A" green.
2. Vehicle detection in area of presence detection shall initiate Phase "B" only.
3. The offset is 8 seconds as measured from Phase "A" yellow at the Atlantic City Expressway Eastbound ramp intersection, to the Phase "A" yellow at this intersection.

VEHICLE ACTUATION		INDICATIONS										OL A	122	111
Phase		1,2	3,4	5,6	7,8	9,10 11	12,13	14	15,16 17,18	19,20	PM Peak Time	All Other Times		
1.5	A.	Delilah Road Lead Lefts Change	<G/R <Y/R	R R	<G/R <Y/R	R R	R R	R R	R/-G> R/-Y>	DW DW	DW DW	7.12 3	10 3	
2.6	B.	Delilah Road ROW Change Clearance	G Y R	G Y R	G Y R	R R R	R R R	R R R	R R R	DW DW DW	DW DW DW	51-38 4 2	48-45 4 2	
4.8	C.	Site Drwy/ 4 th St. ROW Change Clearance	R R R	R R R	R R R	R R R	G Y R	G Y R	G Y R	DW DW DW	DW DW DW	17-30 4 2	17-20 4 2	
	EMERGENCY FLASH		Y	Y	Y	Y	R	R	R					

NOTES:

1. Signal to rest in Phase B.
2. The vehicle interval is to be set at 2 seconds.
3. Manual control to be connected.
4. Memory circuit is to be in off position.
5. PM Peak Timing to operate from 6:00PM – 8:00PM Monday through Friday.
6. If the detection fails, the signal shall operate with Phase C getting the maximum green time available (30 seconds in the PM Peak and 20 seconds at all other times) and Phase B getting the minimum green time available (38 seconds in the PM Peak and 45 seconds at all other times).
7. The left turn lanes on Delilah Road are to operate independently but concurrently if actuation occurs on both approaches. If only one left turn lane is actuated, the non-conflicting through movement shall be initiated prior to Phase C.

Directive #

Delilah Road (CR 646) and Site Driveway/ 4th Street
 Egg Harbor Township, Atlantic County
 080192001
 July 21, 2010

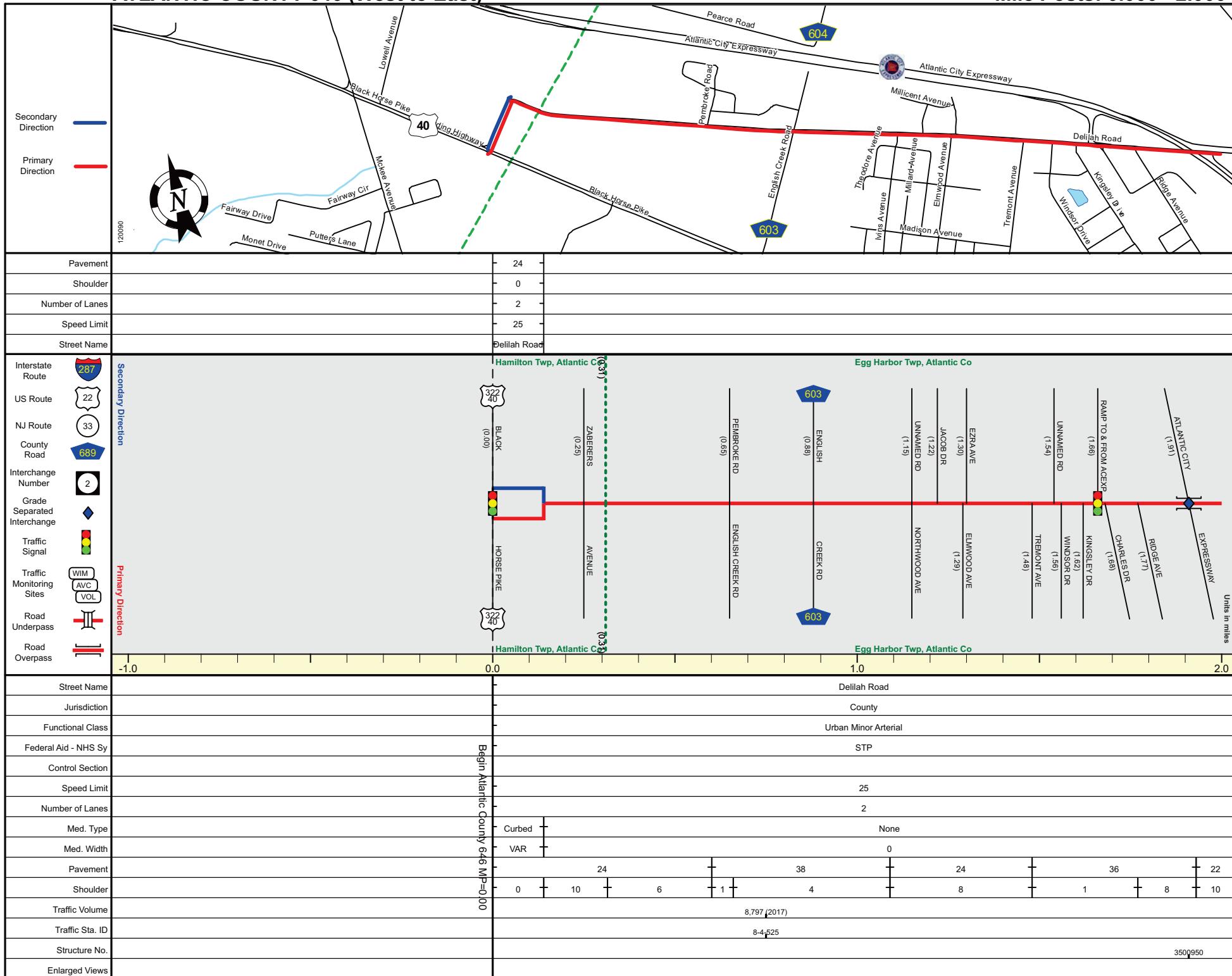
PEDESTRIAN ACTUATION

INDICATIONS

Phase		1,2	3,4	5,6	7,8	9,10 11	12,13	14	15,16 17,18	19,20	PM Peak Time	All Other Times
A.	Delilah Road Lead Lefts Change	<G-/R <Y-/R	R R	<G-/R <Y-/R	R R	R R	R R	R/-G> R/-Y>	DW DW	DW DW	7 3	10 3
B.	Delilah Road ROW Pedestrian Clearance Change Clearance	G G Y R	G G Y R	G G Y R	R R R R	R R R R	R R R R	W FDW DW DW	DW DW DW DW	11 26 4 2	8 26 4 2	
C.	Site Drwy/ 4 th St. ROW Pedestrian Clearance Change Clearance	R R R R	R R R R	R R R R	R G Y R	G G Y R	G G Y R	DW DW DW DW	W FDW DW DW	7 24 4 2	7 24 4 2	

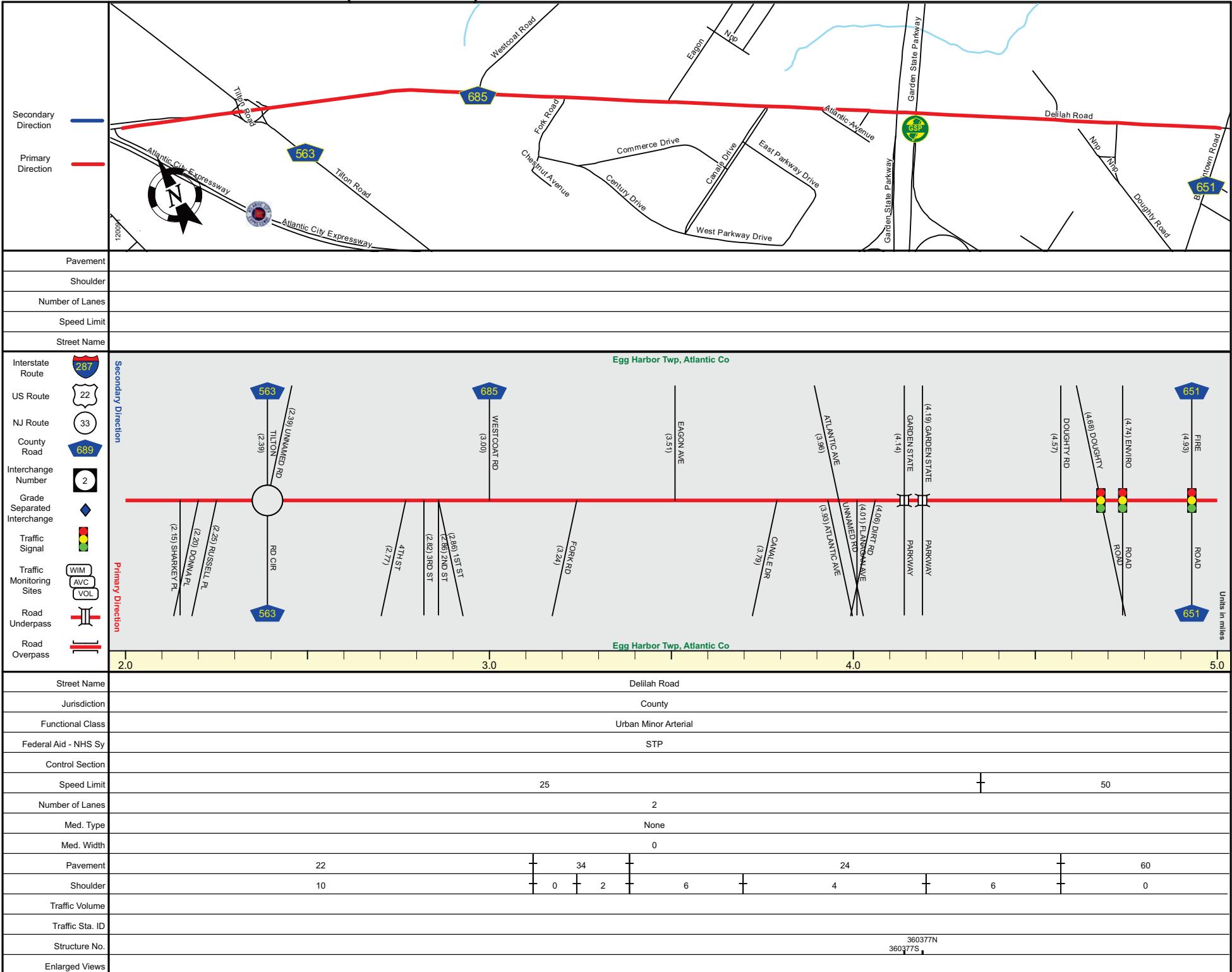
ATLANTIC COUNTY 646 (West to East)

Mile Posts: 0.000 - 2.000



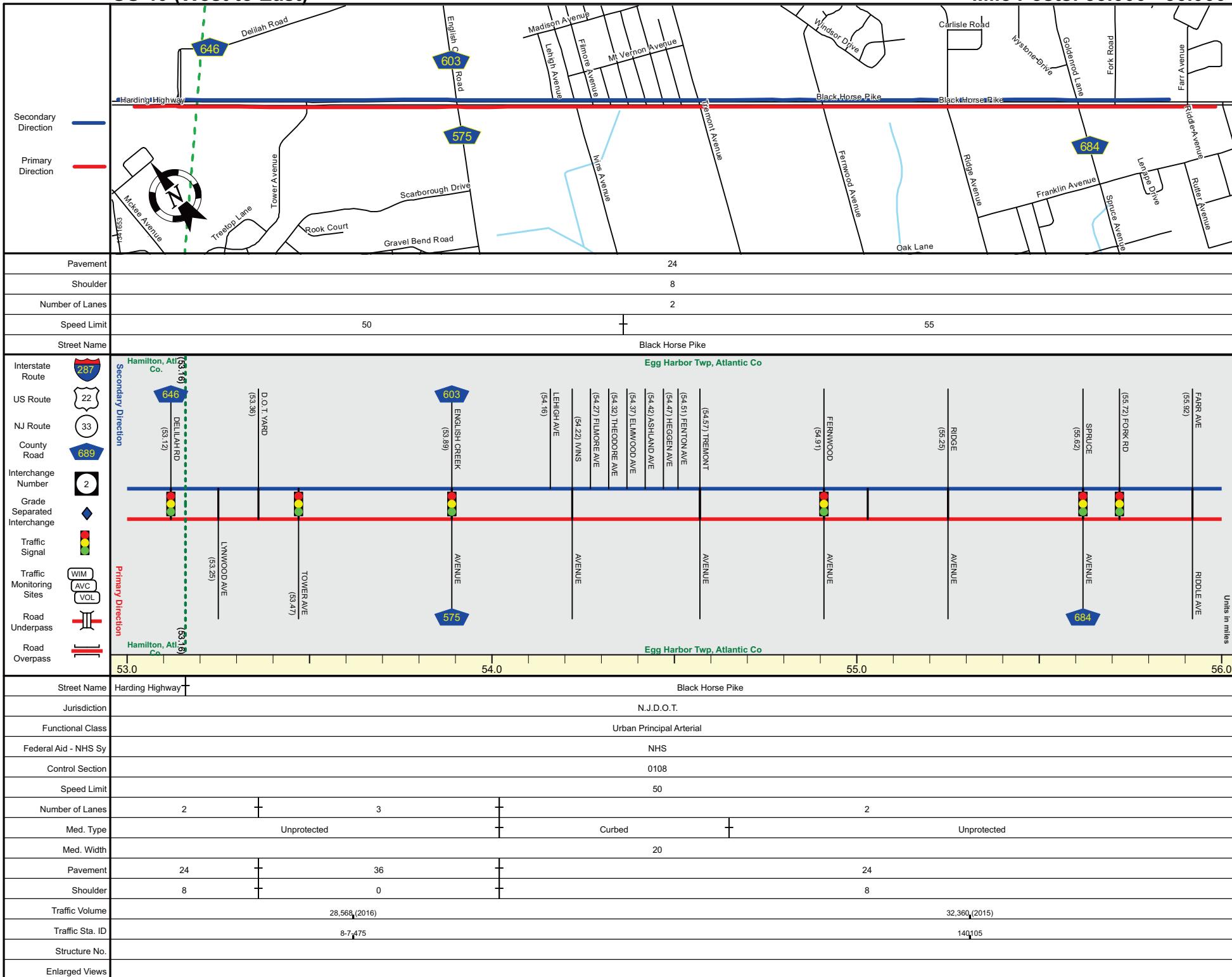
ATLANTIC COUNTY 646 (West to East)

Mile Posts: 2.000 - 5.000



US 40 (West to East)

Mile Posts: 53.000 - 56.000

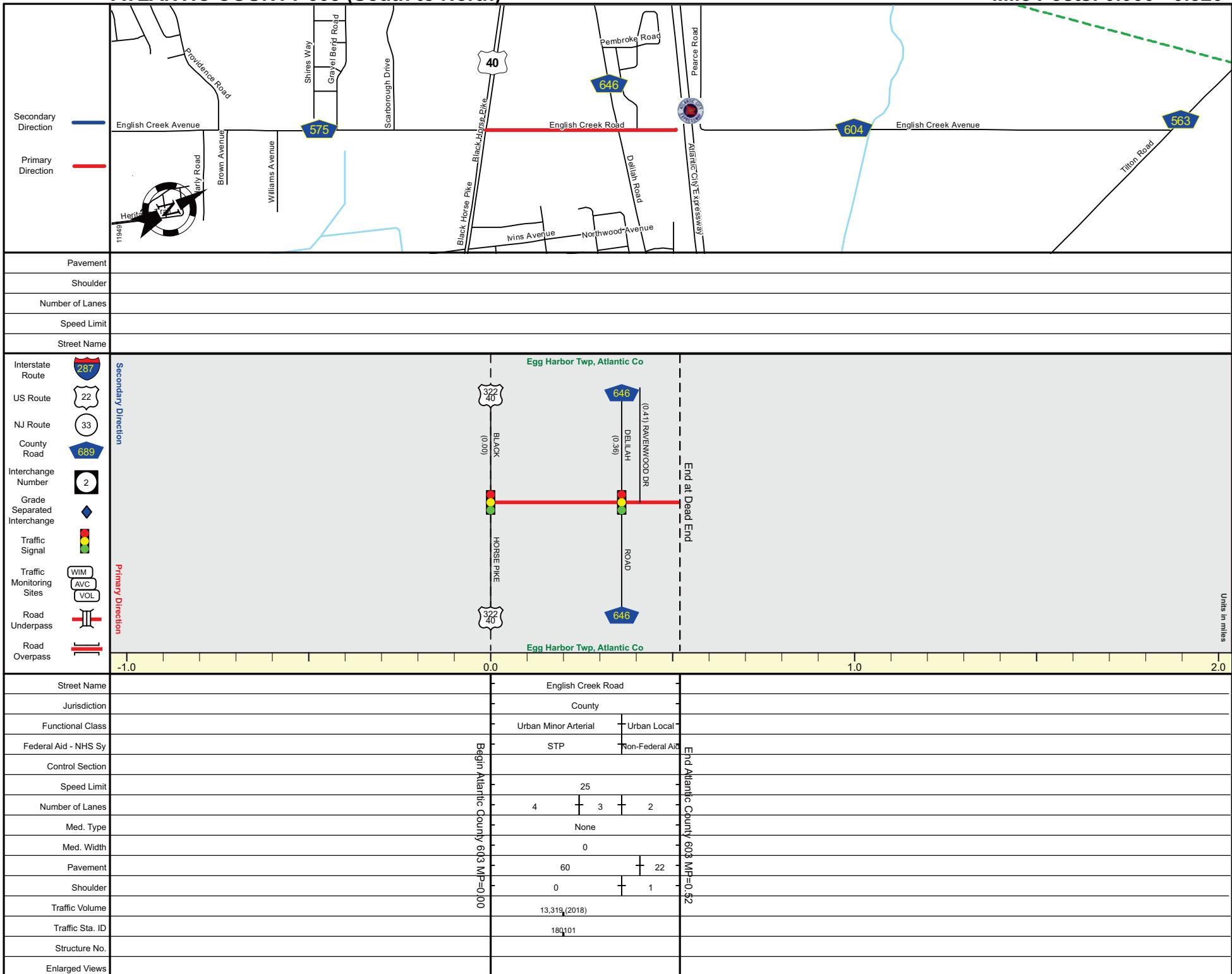


SRI = 00000040

Date last inventoried: June 2017

ATLANTIC COUNTY 603 (South to North)

Mile Posts: 0.000 - 0.520



SRI = 01000603

Date last inventoried: July 2011

INITIAL QUEUES AND UNMET DEMAND

Intersection		Peak Hour					
		7:45 - 8:45 AM		4:15 - 5:15 PM		1:30 - 2:30 PM	
		Initial Queue	Unmet Demand	Initial Queue	Unmet Demand	Initial Queue	Unmet Demand
Delilah Road (CR 646) and Black Horse Pike U.S. Route 322/40	EB APPROACH	0	0	0	0	0	0
	EB LEFT	0	0	0	0	0	0
	EB THRU	0	0	0	0	0	0
	WB APPROACH	0	0	0	0	0	0
	WB THRU	0	0	0	0	0	0
	WB RIGHT	0	0	0	0	0	0
	SB APPROACH	0	0	0	0	0	0
	SB LEFT	0	0	0	0	0	0
	SB RIGHT	0	0	0	0	0	0
Delilah Road (CR 646) and English Creek Avenue	7:30 - 8:30 AM		4:30 - 5:30 PM		2:00 - 3:00 PM		
	Initial Queue	Unmet Demand	Initial Queue	Unmet Demand	Initial Queue	Unmet Demand	
	EB APPROACH	0	0	0	0	0	0
	EB LEFT	0	0	0	0	0	0
	EB THRU	0	0	0	0	0	0
	EB RIGHT	0	0	0	0	0	0
	WB APPROACH	0	0	0	0	0	0
	WB LEFT	0	0	0	0	0	0
	WB THRU	0	0	0	0	0	0
	WB RIGHT	0	0	0	0	0	0
	NB APPROACH	0	0	0	0	0	0
	NB LEFT	0	0	0	0	0	0
	NB THRU	0	0	0	0	0	0
	NB RIGHT	0	0	0	0	0	0
	SB APPROACH	0	1	0	0	0	0
	SB LEFT	0	1	0	0	0	0
	SB THRU	0	0	0	0	0	0
	SB RIGHT	0	0	0	0	0	0
Delilah Road (646) and Atlantic City Expressway Eastbound On/Off Ramps	7:45 - 8:45 AM		4:30 - 5:30 PM		3:45 - 4:45 PM		
	Initial Queue	Unmet Demand	Initial Queue	Unmet Demand	Initial Queue	Unmet Demand	
	EB APPROACH	3	2	1	5	0	0
	EB LEFT	0	2	1	1	0	0
	EB THRU	1	0	0	4	0	0
	WB APPROACH	0	0	53	30	0	0
	WB THRU	0	0	49	28	0	0
	WB RIGHT	0	0	4	2	0	0
	SB APPROACH	0	0	0	0	0	0
	SB LEFT	0	0	0	0	0	0
Delilah Road (CR 646) and Atlantic City Expressway Westbound Off Ramp	SB RIGHT	0	0	0	0	0	0
	7:45 - 8:45 AM		4:30 - 5:30 PM		3:45 - 4:45 PM		
	Initial Queue	Unmet Demand	Initial Queue	Unmet Demand	Initial Queue	Unmet Demand	
	EB APPROACH	0	0	0	0	0	0
	EB THRU	0	0	0	0	0	0
	WB APPROACH	0	0	51	0	0	0
	WB THRU	0	0	51	0	0	0
Delilah Road (646) and Aviation Research Boulevard/Fourth Street	NB APPROACH	0	0	1	2	0	0
	NB LEFT	0	0	1	0	0	0
	NB RIGHT	0	0	0	0	0	0
	7:30 - 8:30 AM		4:15 - 5:15 PM		2:00 - 3:00 PM		
	Initial Queue	Unmet Demand	Initial Queue	Unmet Demand	Initial Queue	Unmet Demand	
	EB APPROACH	0	0	0	0	0	0
	EB LEFT	0	0	0	0	0	0
Delilah Road (646) and Aviation Research Boulevard/Fourth Street	EB THRU	0	0	0	0	0	0
	EB RIGHT	0	0	0	0	0	0
	WB APPROACH	0	0	0	0	0	0
	WB LEFT	0	0	0	0	0	0
	WB THRU	0	0	0	0	0	0
	WB RIGHT	0	0	0	0	0	0
	NB APPROACH	0	0	0	0	0	0
	NB LEFT	0	0	0	0	0	0
	NB THRU	0	0	0	0	0	0
	NB RIGHT	0	0	0	0	0	0
	SB APPROACH	0	0	0	0	0	0
	SB LEFT	0	0	0	0	0	0
	SB THRU	0	0	0	0	0	0
	SB RIGHT	0	0	0	0	0	0

Appendix C

Capacity Analysis



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	388	1116	632	3	4	180
Future Volume (vph)	388	1116	632	3	4	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12
Storage Length (ft)	325			30	200	550
Storage Lanes	1			0	1	1
Taper Length (ft)	200				60	
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	1.00
Fr _t			0.999			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1736	3539	3502	0	3735	1455
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1736	3539	3502	0	3735	1455
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						191
Link Speed (mph)		50	50		30	
Link Distance (ft)		1279	1789		807	
Travel Time (s)		17.4	24.4		18.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	4%	2%	3%	0%	0%	11%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	413	1187	675	0	4	191
Turn Type	Prot	NA	NA		Prot	Free
Protected Phases	1	6	2		4	
Permitted Phases					Free	
Detector Phase	1	6	2		4	
Switch Phase						
Minimum Initial (s)	7.0	43.0	43.0		7.0	
Minimum Split (s)	12.0	50.0	50.0		14.0	
Total Split (s)	48.0	98.0	50.0		22.0	
Total Split (%)	40.0%	81.7%	41.7%		18.3%	
Yellow Time (s)	3.0	5.0	5.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	7.0	7.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	
Act Effct Green (s)	33.4	115.8	71.8		7.0	120.0
Actuated g/C Ratio	0.28	0.96	0.60		0.06	1.00
v/c Ratio	0.86	0.35	0.32		0.02	0.13
Control Delay	57.7	1.0	14.5		53.5	0.2
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	57.7	1.0	14.5		53.5	0.2
LOS	E	A	B		D	A
Approach Delay		15.6	14.5		1.3	
Approach LOS		B	B		A	
Queue Length 50th (ft)	302	0	121		1	0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 95th (ft)	385	120	243		7	0
Internal Link Dist (ft)		1199	1709		727	
Turn Bay Length (ft)	325			200	550	
Base Capacity (vph)	622	3415	2094	466	1455	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.66	0.35	0.32		0.01	0.13

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 89 (74%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 14.2

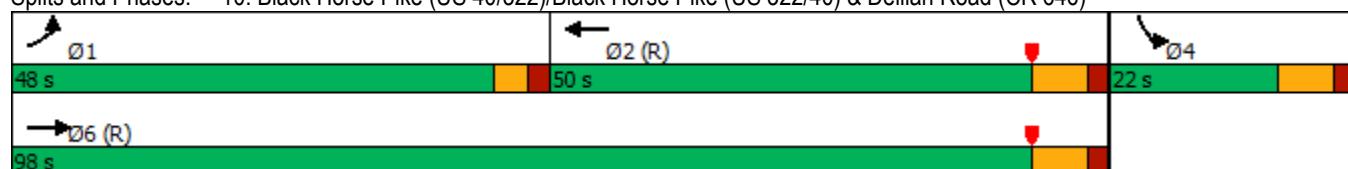
Intersection LOS: B

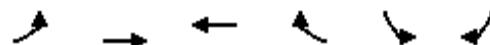
Intersection Capacity Utilization 79.0%

ICU Level of Service D

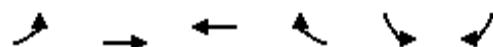
Analysis Period (min) 15

Splits and Phases: 10: Black Horse Pike (US 40/322)/Black Horse Pike (US 322/40) & Delilah Road (CR 646)

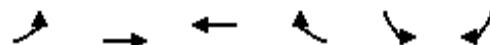




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑		↑↑	↑
Traffic Volume (veh/h)	388	1116	632	3	4	180
Future Volume (veh/h)	388	1116	632	3	4	180
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1841	1870	1856	1900	1976	1737
Adj Flow Rate, veh/h	413	1187	672	3	4	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	2	3	0	0	11
Cap, veh/h	443	3113	2095	9	27	
Arrive On Green	0.25	0.88	0.58	0.58	0.01	0.00
Sat Flow, veh/h	1753	3647	3692	16	3651	1472
Grp Volume(v), veh/h	413	1187	329	346	4	0
Grp Sat Flow(s), veh/h/ln	1753	1777	1763	1853	1825	1472
Q Serve(g_s), s	27.6	7.5	11.5	11.5	0.1	0.0
Cycle Q Clear(g_c), s	27.6	7.5	11.5	11.5	0.1	0.0
Prop In Lane	1.00			0.01	1.00	1.00
Lane Grp Cap(c), veh/h	443	3113	1026	1078	27	
V/C Ratio(X)	0.93	0.38	0.32	0.32	0.15	
Avail Cap(c_a), veh/h	628	3113	1026	1078	456	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	43.9	1.4	12.9	12.9	59.2	0.0
Incr Delay (d2), s/veh	14.3	0.4	0.8	0.8	1.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	19.1	0.8	7.8	8.0	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	58.1	1.7	13.7	13.7	60.2	0.0
LnGrp LOS	E	A	B	B	E	
Approach Vol, veh/h		1600	675		4	
Approach Delay, s/veh		16.3	13.7		60.2	
Approach LOS		B	B		E	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+R _c), s	35.3	76.8		7.9		112.1
Change Period (Y+R _c), s	5.0	7.0		7.0		7.0
Max Green Setting (Gmax), s	43.0	43.0		15.0		91.0
Max Q Clear Time (g_c+l1), s	29.6	0.0		2.1		0.0
Green Ext Time (p_c), s	0.6	0.0		0.0		0.0
Intersection Summary						
HCM 6th Ctrl Delay			15.6			
HCM 6th LOS			B			
Notes						
User approved pedestrian interval to be less than phase max green.						
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	313	1134	1424	13	13	264
Future Volume (vph)	313	1134	1424	13	13	264
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12
Storage Length (ft)	325			30	200	550
Storage Lanes	1			0	1	1
Taper Length (ft)	200				60	
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	1.00
Ped Bike Factor				1.00		
Fr _t			0.999			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1703	3574	3536	0	3458	1599
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1703	3574	3536	0	3458	1599
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			1			272
Link Speed (mph)		50	50		30	
Link Distance (ft)		1279	1789		807	
Travel Time (s)		17.4	24.4		18.3	
Confl. Peds. (#/hr)				2		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	6%	1%	2%	0%	8%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	323	1169	1481	0	13	272
Turn Type	Prot	NA	NA		Prot	Free
Protected Phases	1	6	2		4	
Permitted Phases					Free	
Detector Phase	1	6	2		4	
Switch Phase						
Minimum Initial (s)	7.0	48.0	48.0		7.0	
Minimum Split (s)	12.0	55.0	55.0		14.0	
Total Split (s)	45.0	100.0	55.0		20.0	
Total Split (%)	37.5%	83.3%	45.8%		16.7%	
Yellow Time (s)	3.0	5.0	5.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	7.0	7.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	
Act Effect Green (s)	27.6	111.6	74.8	7.0	120.0	
Actuated g/C Ratio	0.23	0.93	0.62	0.06	1.00	
v/c Ratio	0.82	0.35	0.67	0.06	0.17	
Control Delay	60.7	1.6	19.4	54.2	0.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	60.7	1.6	19.4	54.2	0.2	
LOS	E	A	B	D	A	
Approach Delay		14.4	19.4		2.7	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Approach LOS		B	B		A	
Queue Length 50th (ft)	239	0	314	5	0	
Queue Length 95th (ft)	317	116	633	15	0	
Internal Link Dist (ft)		1199	1709		727	
Turn Bay Length (ft)	325			200	550	
Base Capacity (vph)	567	3324	2203	374	1599	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.57	0.35	0.67	0.03	0.17	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 68 (57%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 15.7

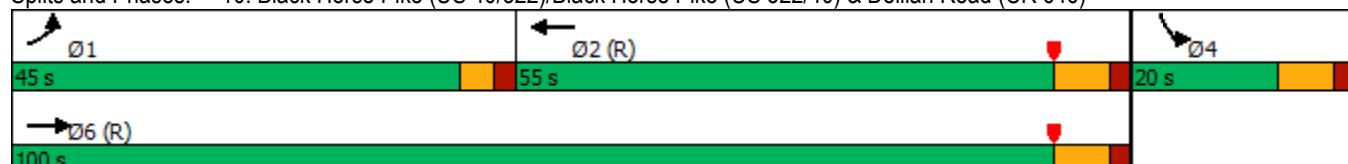
Intersection LOS: B

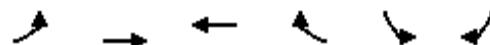
Intersection Capacity Utilization 79.0%

ICU Level of Service D

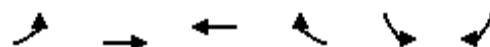
Analysis Period (min) 15

Splits and Phases: 10: Black Horse Pike (US 40/322)/Black Horse Pike (US 322/40) & Delilah Road (CR 646)

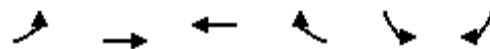




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑		↑↑	↑
Traffic Volume (veh/h)	313	1134	1424	13	13	264
Future Volume (veh/h)	313	1134	1424	13	13	264
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1811	1885	1870	1900	1853	1885
Adj Flow Rate, veh/h	323	1169	1468	13	13	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	6	1	2	0	8	1
Cap, veh/h	352	3090	2227	20	70	
Arrive On Green	0.20	0.86	0.62	0.62	0.02	0.00
Sat Flow, veh/h	1725	3676	3703	32	3423	1598
Grp Volume(v), veh/h	323	1169	722	759	13	0
Grp Sat Flow(s), veh/h/ln	1725	1791	1777	1865	1712	1598
Q Serve(g_s), s	22.0	8.0	31.5	31.5	0.4	0.0
Cycle Q Clear(g_c), s	22.0	8.0	31.5	31.5	0.4	0.0
Prop In Lane	1.00			0.02	1.00	1.00
Lane Grp Cap(c), veh/h	352	3090	1096	1150	70	
V/C Ratio(X)	0.92	0.38	0.66	0.66	0.19	
Avail Cap(c_a), veh/h	575	3090	1096	1150	371	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	46.8	1.7	14.8	14.8	57.8	0.0
Incr Delay (d2), s/veh	8.8	0.4	3.1	3.0	0.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	15.0	1.5	17.5	18.2	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	55.6	2.0	17.9	17.8	58.2	0.0
LnGrp LOS	E	A	B	B	E	
Approach Vol, veh/h	1492	1481		13		
Approach Delay, s/veh	13.6	17.9		58.2		
Approach LOS	B	B		E		
Timer - Assigned Phs	1	2	4		6	
Phs Duration (G+Y+R _c), s	29.5	81.0		9.5	110.5	
Change Period (Y+R _c), s	5.0	7.0		7.0	7.0	
Max Green Setting (Gmax), s	40.0	48.0		13.0	93.0	
Max Q Clear Time (g_c+l1), s	24.0	0.0		2.4	0.0	
Green Ext Time (p_c), s	0.5	0.0		0.0	0.0	
Intersection Summary						
HCM 6th Ctrl Delay			15.9			
HCM 6th LOS			B			
Notes						
User approved pedestrian interval to be less than phase max green.						
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	236	1401	1437	13	7	200
Future Volume (vph)	236	1401	1437	13	7	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12
Storage Length (ft)	325			30	200	550
Storage Lanes	1			0	1	1
Taper Length (ft)	200				60	
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	1.00
Ped Bike Factor				1.00		
Fr _t			0.999			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3574	3571	0	3735	1599
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	3574	3571	0	3735	1599
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			1			206
Link Speed (mph)		50	50		30	
Link Distance (ft)		1279	1789		807	
Travel Time (s)		17.4	24.4		18.3	
Confl. Peds. (#/hr)				2		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	1%	1%	0%	0%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	243	1444	1494	0	7	206
Turn Type	Prot	NA	NA		Prot	Free
Protected Phases	1	6	2		4	
Permitted Phases					Free	
Detector Phase	1	6	2		4	
Switch Phase						
Minimum Initial (s)	7.0	48.0	48.0		7.0	
Minimum Split (s)	12.0	55.0	55.0		14.0	
Total Split (s)	45.0	100.0	55.0		20.0	
Total Split (%)	37.5%	83.3%	45.8%		16.7%	
Yellow Time (s)	3.0	5.0	5.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	7.0	7.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	
Act Effect Green (s)	21.3	115.8	83.9	7.0	120.0	
Actuated g/C Ratio	0.18	0.96	0.70	0.06	1.00	
v/c Ratio	0.78	0.42	0.60	0.03	0.13	
Control Delay	63.2	1.2	12.5	53.7	0.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	63.2	1.2	12.5	53.7	0.2	
LOS	E	A	B	D	A	
Approach Delay		10.1	12.5		1.9	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Approach LOS		B	B		A	
Queue Length 50th (ft)	182	0	256	2	0	
Queue Length 95th (ft)	254	160	552	10	0	
Internal Link Dist (ft)		1199	1709		727	
Turn Bay Length (ft)	325			200	550	
Base Capacity (vph)	590	3449	2497	404	1599	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.41	0.42	0.60	0.02	0.13	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 99 (83%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 10.7

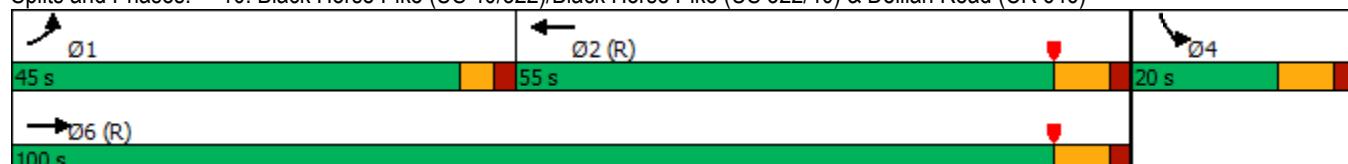
Intersection LOS: B

Intersection Capacity Utilization 74.9%

ICU Level of Service D

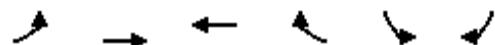
Analysis Period (min) 15

Splits and Phases: 10: Black Horse Pike (US 40/322)/Black Horse Pike (US 322/40) & Delilah Road (CR 646)

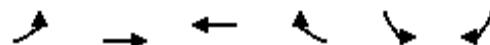




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑		↑↑	↑
Traffic Volume (veh/h)	236	1401	1437	13	7	200
Future Volume (veh/h)	236	1401	1437	13	7	200
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1885	1885	1900	1976	1885
Adj Flow Rate, veh/h	243	1444	1481	13	7	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	1	1	0	0	1
Cap, veh/h	273	3120	2460	22	44	
Arrive On Green	0.15	0.87	0.68	0.68	0.01	0.00
Sat Flow, veh/h	1781	3676	3733	32	3651	1598
Grp Volume(v), veh/h	243	1444	729	765	7	0
Grp Sat Flow(s), veh/h/ln	1781	1791	1791	1879	1825	1598
Q Serve(g_s), s	16.0	10.4	26.7	26.7	0.2	0.0
Cycle Q Clear(g_c), s	16.0	10.4	26.7	26.7	0.2	0.0
Prop In Lane	1.00			0.02	1.00	1.00
Lane Grp Cap(c), veh/h	273	3120	1211	1270	44	
V/C Ratio(X)	0.89	0.46	0.60	0.60	0.16	
Avail Cap(c_a), veh/h	594	3120	1211	1270	396	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.8	1.7	10.6	10.6	58.7	0.0
Incr Delay (d2), s/veh	3.9	0.5	2.2	2.1	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	11.6	1.5	14.4	14.9	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	53.7	2.2	12.8	12.7	59.3	0.0
LnGrp LOS	D	A	B	B	E	
Approach Vol, veh/h		1687	1494		7	
Approach Delay, s/veh		9.6	12.8		59.3	
Approach LOS		A	B		E	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	23.4	88.1		8.5		111.5
Change Period (Y+Rc), s	5.0	7.0		7.0		7.0
Max Green Setting (Gmax), s	40.0	48.0		13.0		93.0
Max Q Clear Time (g_c+l1), s	18.0	0.0		2.2		0.0
Green Ext Time (p_c), s	0.4	0.0		0.0		0.0
Intersection Summary						
HCM 6th Ctrl Delay			11.2			
HCM 6th LOS			B			
Notes						
User approved pedestrian interval to be less than phase max green.						
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	425	1172	664	3	4	200
Future Volume (vph)	425	1172	664	3	4	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12
Storage Length (ft)	325			30	200	550
Storage Lanes	1			0	1	1
Taper Length (ft)	200				60	
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	1.00
Fr _t			0.999			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1736	3539	3502	0	3735	1455
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1736	3539	3502	0	3735	1455
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)					213	
Link Speed (mph)		50	50		30	
Link Distance (ft)		1279	1789		807	
Travel Time (s)		17.4	24.4		18.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	4%	2%	3%	0%	0%	11%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	452	1247	709	0	4	213
Turn Type	Prot	NA	NA		Prot	Free
Protected Phases	1	6	2		4	
Permitted Phases					Free	
Detector Phase	1	6	2		4	
Switch Phase						
Minimum Initial (s)	7.0	43.0	43.0		7.0	
Minimum Split (s)	12.0	50.0	50.0		14.0	
Total Split (s)	48.0	98.0	50.0		22.0	
Total Split (%)	40.0%	81.7%	41.7%		18.3%	
Yellow Time (s)	3.0	5.0	5.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	7.0	7.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	
Act Effct Green (s)	35.5	115.8	69.7		7.0	120.0
Actuated g/C Ratio	0.30	0.96	0.58		0.06	1.00
v/c Ratio	0.88	0.37	0.35		0.02	0.15
Control Delay	58.7	1.1	15.7		53.5	0.2
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	58.7	1.1	15.7		53.5	0.2
LOS	E	A	B		D	A
Approach Delay		16.4	15.7		1.2	
Approach LOS		B	B		A	
Queue Length 50th (ft)	330	0	137		1	0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 95th (ft)	430	128	260		7	0
Internal Link Dist (ft)		1199	1709		727	
Turn Bay Length (ft)	325			200	550	
Base Capacity (vph)	622	3415	2033	466	1455	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.73	0.37	0.35		0.01	0.15

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 89 (74%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 14.9

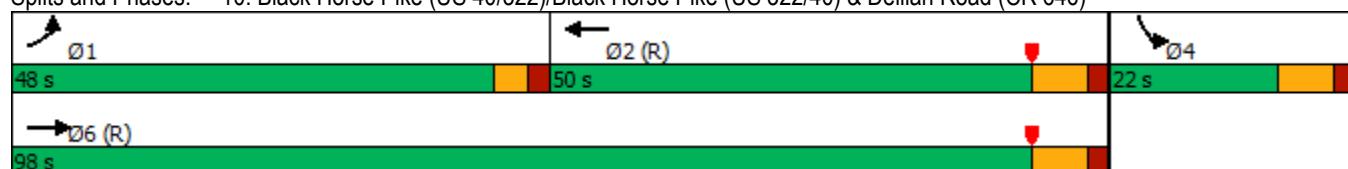
Intersection LOS: B

Intersection Capacity Utilization 81.0%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 10: Black Horse Pike (US 40/322)/Black Horse Pike (US 322/40) & Delilah Road (CR 646)

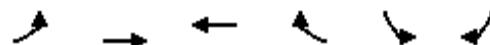




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑		↑↑	↑
Traffic Volume (veh/h)	425	1172	664	3	4	200
Future Volume (veh/h)	425	1172	664	3	4	200
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1841	1870	1856	1900	1976	1737
Adj Flow Rate, veh/h	452	1247	706	3	4	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	2	3	0	0	11
Cap, veh/h	481	3113	2016	9	27	
Arrive On Green	0.27	0.88	0.56	0.56	0.01	0.00
Sat Flow, veh/h	1753	3647	3693	15	3651	1472
Grp Volume(v), veh/h	452	1247	346	363	4	0
Grp Sat Flow(s), veh/h/ln	1753	1777	1763	1853	1825	1472
Q Serve(g_s), s	30.3	8.0	12.9	12.9	0.1	0.0
Cycle Q Clear(g_c), s	30.3	8.0	12.9	12.9	0.1	0.0
Prop In Lane	1.00			0.01	1.00	1.00
Lane Grp Cap(c), veh/h	481	3113	987	1038	27	
V/C Ratio(X)	0.94	0.40	0.35	0.35	0.15	
Avail Cap(c_a), veh/h	628	3113	987	1038	456	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.6	1.4	14.4	14.4	59.2	0.0
Incr Delay (d2), s/veh	17.3	0.4	1.0	0.9	1.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	21.0	0.9	8.6	8.9	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	59.8	1.8	15.4	15.4	60.2	0.0
LnGrp LOS	E	A	B	B	E	
Approach Vol, veh/h		1699	709		4	
Approach Delay, s/veh		17.2	15.4		60.2	
Approach LOS		B	B		E	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+R _c), s	37.9	74.2		7.9		112.1
Change Period (Y+R _c), s	5.0	7.0		7.0		7.0
Max Green Setting (Gmax), s	43.0	43.0		15.0		91.0
Max Q Clear Time (g_c+l1), s	32.3	0.0		2.1		0.0
Green Ext Time (p_c), s	0.7	0.0		0.0		0.0
Intersection Summary						
HCM 6th Ctrl Delay			16.8			
HCM 6th LOS			B			
Notes						
User approved pedestrian interval to be less than phase max green.						
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	351	1191	1495	14	14	290
Future Volume (vph)	351	1191	1495	14	14	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12
Storage Length (ft)	325			30	200	550
Storage Lanes	1			0	1	1
Taper Length (ft)	200				60	
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	1.00
Ped Bike Factor				1.00		
Fr _t			0.999			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1703	3574	3536	0	3458	1599
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1703	3574	3536	0	3458	1599
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			1			299
Link Speed (mph)		50	50		30	
Link Distance (ft)		1279	1789		807	
Travel Time (s)		17.4	24.4		18.3	
Confl. Peds. (#/hr)				2		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	6%	1%	2%	0%	8%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	362	1228	1555	0	14	299
Turn Type	Prot	NA	NA		Prot	Free
Protected Phases	1	6	2		4	
Permitted Phases					Free	
Detector Phase	1	6	2		4	
Switch Phase						
Minimum Initial (s)	7.0	48.0	48.0		7.0	
Minimum Split (s)	12.0	55.0	55.0		14.0	
Total Split (s)	45.0	100.0	55.0		20.0	
Total Split (%)	37.5%	83.3%	45.8%		16.7%	
Yellow Time (s)	3.0	5.0	5.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	7.0	7.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	
Act Effect Green (s)	30.3	111.6	72.1	7.0	120.0	
Actuated g/C Ratio	0.25	0.93	0.60	0.06	1.00	
v/c Ratio	0.84	0.37	0.73	0.07	0.19	
Control Delay	59.9	1.7	22.6	54.4	0.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	59.9	1.7	22.6	54.4	0.3	
LOS	E	A	C	D	A	
Approach Delay		15.0	22.6		2.7	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Approach LOS		B	C		A	
Queue Length 50th (ft)	267	0	370	5	0	
Queue Length 95th (ft)	348	124	#773	16	0	
Internal Link Dist (ft)		1199	1709		727	
Turn Bay Length (ft)	325			200	550	
Base Capacity (vph)	567	3324	2126	374	1599	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.64	0.37	0.73	0.04	0.19	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 68 (57%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 17.3

Intersection LOS: B

Intersection Capacity Utilization 82.9%

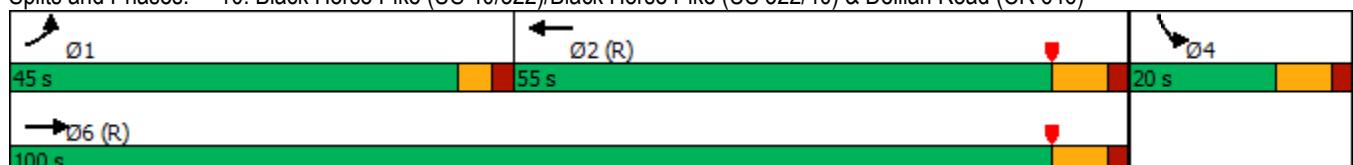
ICU Level of Service E

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

Splits and Phases: 10: Black Horse Pike (US 40/322)/Black Horse Pike (US 322/40) & Delilah Road (CR 646)

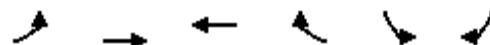




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑		↑↑	↑
Traffic Volume (veh/h)	351	1191	1495	14	14	290
Future Volume (veh/h)	351	1191	1495	14	14	290
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1811	1885	1870	1900	1853	1885
Adj Flow Rate, veh/h	362	1228	1541	14	14	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	6	1	2	0	8	1
Cap, veh/h	391	3086	2141	19	74	
Arrive On Green	0.23	0.86	0.59	0.59	0.02	0.00
Sat Flow, veh/h	1725	3676	3702	33	3423	1598
Grp Volume(v), veh/h	362	1228	758	797	14	0
Grp Sat Flow(s), veh/h/ln	1725	1791	1777	1864	1712	1598
Q Serve(g_s), s	24.6	8.7	36.3	36.4	0.5	0.0
Cycle Q Clear(g_c), s	24.6	8.7	36.3	36.4	0.5	0.0
Prop In Lane	1.00			0.02	1.00	1.00
Lane Grp Cap(c), veh/h	391	3086	1054	1106	74	
V/C Ratio(X)	0.93	0.40	0.72	0.72	0.19	
Avail Cap(c_a), veh/h	575	3086	1054	1106	371	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	45.4	1.7	17.3	17.3	57.7	0.0
Incr Delay (d2), s/veh	13.2	0.4	4.2	4.1	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	17.1	1.7	20.3	21.2	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	58.6	2.1	21.6	21.4	58.1	0.0
LnGrp LOS	E	A	C	C	E	
Approach Vol, veh/h		1590	1555		14	
Approach Delay, s/veh		15.0	21.5		58.1	
Approach LOS		B	C		E	
Timer - Assigned Phs	1	2	4		6	
Phs Duration (G+Y+R _c), s	32.2	78.2		9.6	110.4	
Change Period (Y+R _c), s	5.0	7.0		7.0	7.0	
Max Green Setting (Gmax), s	40.0	48.0		13.0	93.0	
Max Q Clear Time (g_c+l1), s	26.6	0.0		2.5	0.0	
Green Ext Time (p_c), s	0.6	0.0		0.0	0.0	
Intersection Summary						
HCM 6th Ctrl Delay			18.4			
HCM 6th LOS			B			
Notes						
User approved pedestrian interval to be less than phase max green.						
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	274	1471	1509	14	7	224
Future Volume (vph)	274	1471	1509	14	7	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12
Storage Length (ft)	325			30	200	550
Storage Lanes	1			0	1	1
Taper Length (ft)	200				60	
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	1.00
Ped Bike Factor				1.00		
Fr _t			0.999			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3574	3571	0	3735	1599
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	3574	3571	0	3735	1599
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			1			231
Link Speed (mph)		50	50		30	
Link Distance (ft)		1279	1789		807	
Travel Time (s)		17.4	24.4		18.3	
Confl. Peds. (#/hr)				2		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	1%	1%	0%	0%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	282	1516	1570	0	7	231
Turn Type	Prot	NA	NA		Prot	Free
Protected Phases	1	6	2		4	
Permitted Phases					Free	
Detector Phase	1	6	2		4	
Switch Phase						
Minimum Initial (s)	7.0	48.0	48.0		7.0	
Minimum Split (s)	12.0	55.0	55.0		14.0	
Total Split (s)	45.0	100.0	55.0		20.0	
Total Split (%)	37.5%	83.3%	45.8%		16.7%	
Yellow Time (s)	3.0	5.0	5.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	7.0	7.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	
Act Effect Green (s)	24.0	115.8	81.2	7.0	120.0	
Actuated g/C Ratio	0.20	0.96	0.68	0.06	1.00	
v/c Ratio	0.80	0.44	0.65	0.03	0.14	
Control Delay	61.9	1.3	15.0	53.7	0.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	61.9	1.3	15.0	53.7	0.2	
LOS	E	A	B	D	A	
Approach Delay		10.8	15.0		1.8	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Approach LOS		B	B		A	
Queue Length 50th (ft)	210	0	307	2	0	
Queue Length 95th (ft)	285	174	640	10	0	
Internal Link Dist (ft)		1199	1709		727	
Turn Bay Length (ft)	325			200	550	
Base Capacity (vph)	590	3449	2417	404	1599	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.48	0.44	0.65	0.02	0.14	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 99 (83%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 12.0

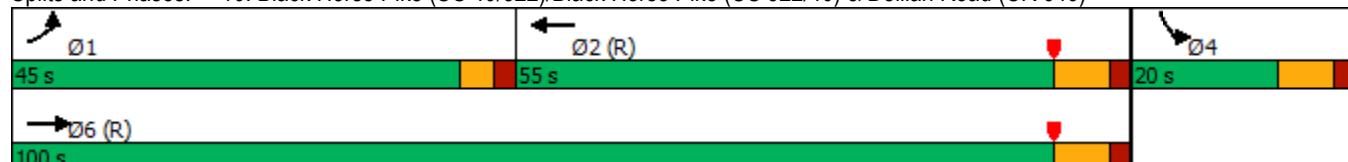
Intersection LOS: B

Intersection Capacity Utilization 79.0%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 10: Black Horse Pike (US 40/322)/Black Horse Pike (US 322/40) & Delilah Road (CR 646)





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑		↑↑	↑
Traffic Volume (veh/h)	274	1471	1509	14	7	224
Future Volume (veh/h)	274	1471	1509	14	7	224
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1885	1885	1900	1976	1885
Adj Flow Rate, veh/h	282	1516	1556	14	7	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	1	1	0	0	1
Cap, veh/h	312	3120	2379	21	44	
Arrive On Green	0.18	0.87	0.65	0.65	0.01	0.00
Sat Flow, veh/h	1781	3676	3732	33	3651	1598
Grp Volume(v), veh/h	282	1516	766	804	7	0
Grp Sat Flow(s), veh/h/ln	1781	1791	1791	1879	1825	1598
Q Serve(g_s), s	18.6	11.3	31.0	31.1	0.2	0.0
Cycle Q Clear(g_c), s	18.6	11.3	31.0	31.1	0.2	0.0
Prop In Lane	1.00			0.02	1.00	1.00
Lane Grp Cap(c), veh/h	312	3120	1171	1229	44	
V/C Ratio(X)	0.90	0.49	0.65	0.65	0.16	
Avail Cap(c_a), veh/h	594	3120	1171	1229	396	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.5	1.7	12.5	12.6	58.7	0.0
Incr Delay (d2), s/veh	3.9	0.5	2.8	2.7	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	13.0	1.6	16.8	17.5	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	52.4	2.3	15.4	15.3	59.3	0.0
LnGrp LOS	D	A	B	B	E	
Approach Vol, veh/h		1798	1570		7	
Approach Delay, s/veh		10.1	15.3		59.3	
Approach LOS		B	B		E	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+R _c), s	26.1	85.5		8.5		111.5
Change Period (Y+R _c), s	5.0	7.0		7.0		7.0
Max Green Setting (Gmax), s	40.0	48.0		13.0		93.0
Max Q Clear Time (g_c+l1), s	20.6	0.0		2.2		0.0
Green Ext Time (p_c), s	0.4	0.0		0.0		0.0
Intersection Summary						
HCM 6th Ctrl Delay			12.7			
HCM 6th LOS			B			
Notes						
User approved pedestrian interval to be less than phase max green.						
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.						

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	425	1172	664	3	4	200
Future Volume (vph)	425	1172	664	3	4	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12
Storage Length (ft)	550			30	200	550
Storage Lanes	1			0	1	1
Taper Length (ft)	200				60	
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	1.00
Fr _t			0.999			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1736	3539	3502	0	3735	1455
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1736	3539	3502	0	3735	1455
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)					213	
Link Speed (mph)		50	50		30	
Link Distance (ft)		1279	1789		807	
Travel Time (s)		17.4	24.4		18.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	4%	2%	3%	0%	0%	11%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	452	1247	709	0	4	213
Turn Type	Prot	NA	NA		Prot	Free
Protected Phases	1	6	2		4	
Permitted Phases					Free	
Detector Phase	1	6	2		4	
Switch Phase						
Minimum Initial (s)	7.0	43.0	43.0		7.0	
Minimum Split (s)	12.0	50.0	50.0		14.0	
Total Split (s)	50.0	100.0	50.0		20.0	
Total Split (%)	41.7%	83.3%	41.7%		16.7%	
Yellow Time (s)	3.0	5.0	5.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	7.0	7.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	
Act Effct Green (s)	36.1	115.8	69.1		7.0	120.0
Actuated g/C Ratio	0.30	0.96	0.58		0.06	1.00
v/c Ratio	0.87	0.37	0.35		0.02	0.15
Control Delay	56.4	1.1	16.2		53.5	0.2
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	56.4	1.1	16.2		53.5	0.2
LOS	E	A	B		D	A
Approach Delay		15.8	16.2		1.2	
Approach LOS		B	B		A	
Queue Length 50th (ft)	329	0	138		1	0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 95th (ft)	417	128	268		7	0
Internal Link Dist (ft)		1199	1709		727	
Turn Bay Length (ft)	550			200	550	
Base Capacity (vph)	651	3415	2017		404	1455
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.69	0.37	0.35		0.01	0.15

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 89 (74%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 14.7

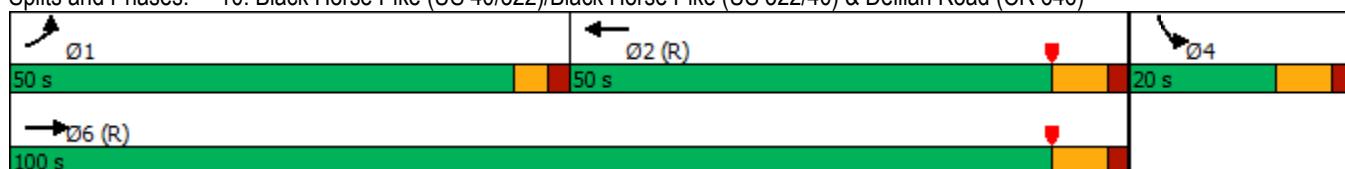
Intersection LOS: B

Intersection Capacity Utilization 81.0%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 10: Black Horse Pike (US 40/322)/Black Horse Pike (US 322/40) & Delilah Road (CR 646)

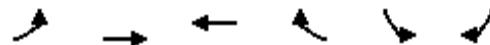




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑		↑↑	↑
Traffic Volume (veh/h)	425	1172	664	3	4	200
Future Volume (veh/h)	425	1172	664	3	4	200
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1841	1870	1856	1900	1976	1737
Adj Flow Rate, veh/h	452	1247	706	3	4	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	2	3	0	0	11
Cap, veh/h	481	3113	2015	9	27	
Arrive On Green	0.27	0.88	0.56	0.56	0.01	0.00
Sat Flow, veh/h	1753	3647	3693	15	3651	1472
Grp Volume(v), veh/h	452	1247	346	363	4	0
Grp Sat Flow(s), veh/h/ln	1753	1777	1763	1853	1825	1472
Q Serve(g_s), s	30.2	8.0	12.9	12.9	0.1	0.0
Cycle Q Clear(g_c), s	30.2	8.0	12.9	12.9	0.1	0.0
Prop In Lane	1.00			0.01	1.00	1.00
Lane Grp Cap(c), veh/h	481	3113	987	1037	27	
V/C Ratio(X)	0.94	0.40	0.35	0.35	0.15	
Avail Cap(c_a), veh/h	657	3113	987	1037	396	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.5	1.4	14.5	14.5	59.2	0.0
Incr Delay (d2), s/veh	15.6	0.4	1.0	0.9	1.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	20.7	0.9	8.6	8.9	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	58.1	1.8	15.4	15.4	60.2	0.0
LnGrp LOS	E	A	B	B	E	
Approach Vol, veh/h		1699	709		4	
Approach Delay, s/veh		16.8	15.4		60.2	
Approach LOS		B	B		E	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	38.0	74.2		7.9		112.1
Change Period (Y+Rc), s	5.0	7.0		7.0		7.0
Max Green Setting (Gmax), s	45.0	43.0		13.0		93.0
Max Q Clear Time (g_c+l1), s	32.2	0.0		2.1		0.0
Green Ext Time (p_c), s	0.7	0.0		0.0		0.0
Intersection Summary						
HCM 6th Ctrl Delay			16.5			
HCM 6th LOS			B			
Notes						
User approved pedestrian interval to be less than phase max green.						
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	351	1191	1495	14	14	290
Future Volume (vph)	351	1191	1495	14	14	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12
Storage Length (ft)	550			30	200	550
Storage Lanes	1			0	1	1
Taper Length (ft)	200				60	
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	1.00
Ped Bike Factor				1.00		
Fr _t			0.999			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1703	3574	3536	0	3458	1599
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1703	3574	3536	0	3458	1599
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			1			299
Link Speed (mph)		50	50		30	
Link Distance (ft)		1279	1789		807	
Travel Time (s)		17.4	24.4		18.3	
Confl. Peds. (#/hr)				2		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	6%	1%	2%	0%	8%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	362	1228	1555	0	14	299
Turn Type	Prot	NA	NA		Prot	Free
Protected Phases	1	6	2		4	
Permitted Phases					Free	
Detector Phase	1	6	2		4	
Switch Phase						
Minimum Initial (s)	7.0	46.0	46.0		7.0	
Minimum Split (s)	12.0	53.0	53.0		14.0	
Total Split (s)	47.0	100.0	53.0		20.0	
Total Split (%)	39.2%	83.3%	44.2%		16.7%	
Yellow Time (s)	3.0	5.0	5.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	7.0	7.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	
Act Effect Green (s)	30.4	111.6	72.0	7.0	120.0	
Actuated g/C Ratio	0.25	0.93	0.60	0.06	1.00	
v/c Ratio	0.84	0.37	0.73	0.07	0.19	
Control Delay	59.2	1.7	22.8	54.4	0.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	59.2	1.7	22.8	54.4	0.3	
LOS	E	A	C	D	A	
Approach Delay		14.8	22.8		2.7	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Approach LOS		B	C		A	
Queue Length 50th (ft)	266	0	371	5	0	
Queue Length 95th (ft)	346	124	#778	16	0	
Internal Link Dist (ft)		1199	1709		727	
Turn Bay Length (ft)	550			200	550	
Base Capacity (vph)	596	3324	2121	374	1599	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.61	0.37	0.73	0.04	0.19	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 68 (57%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 17.3

Intersection LOS: B

Intersection Capacity Utilization 82.9%

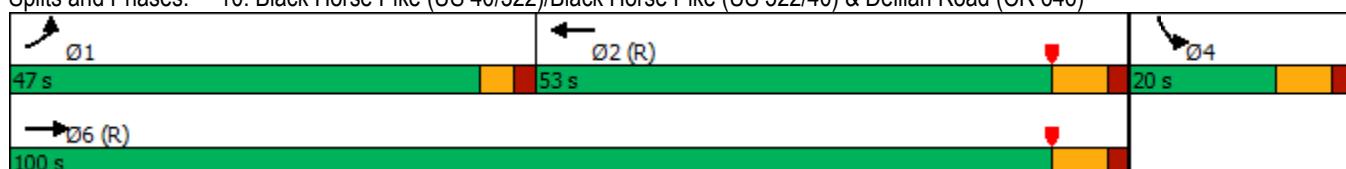
ICU Level of Service E

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

Splits and Phases: 10: Black Horse Pike (US 40/322)/Black Horse Pike (US 322/40) & Delilah Road (CR 646)





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑		↑↑	↑
Traffic Volume (veh/h)	351	1191	1495	14	14	290
Future Volume (veh/h)	351	1191	1495	14	14	290
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1811	1885	1870	1900	1853	1885
Adj Flow Rate, veh/h	362	1228	1541	14	14	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	6	1	2	0	8	1
Cap, veh/h	391	3086	2140	19	74	
Arrive On Green	0.23	0.86	0.59	0.59	0.02	0.00
Sat Flow, veh/h	1725	3676	3702	33	3423	1598
Grp Volume(v), veh/h	362	1228	758	797	14	0
Grp Sat Flow(s), veh/h/ln	1725	1791	1777	1864	1712	1598
Q Serve(g_s), s	24.6	8.7	36.4	36.4	0.5	0.0
Cycle Q Clear(g_c), s	24.6	8.7	36.4	36.4	0.5	0.0
Prop In Lane	1.00			0.02	1.00	1.00
Lane Grp Cap(c), veh/h	391	3086	1054	1106	74	
V/C Ratio(X)	0.93	0.40	0.72	0.72	0.19	
Avail Cap(c_a), veh/h	604	3086	1054	1106	371	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	45.4	1.7	17.3	17.3	57.7	0.0
Incr Delay (d2), s/veh	11.3	0.4	4.2	4.1	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	16.8	1.7	20.4	21.2	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	56.7	2.1	21.6	21.4	58.1	0.0
LnGrp LOS	E	A	C	C	E	
Approach Vol, veh/h		1590	1555		14	
Approach Delay, s/veh		14.5	21.5		58.1	
Approach LOS		B	C		E	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+R _c), s	32.2	78.2		9.6		110.4
Change Period (Y+R _c), s	5.0	7.0		7.0		7.0
Max Green Setting (Gmax), s	42.0	46.0		13.0		93.0
Max Q Clear Time (g_c+l1), s	26.6	0.0		2.5		0.0
Green Ext Time (p_c), s	0.6	0.0		0.0		0.0
Intersection Summary						
HCM 6th Ctrl Delay			18.2			
HCM 6th LOS			B			
Notes						
User approved pedestrian interval to be less than phase max green.						
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	274	1471	1509	14	7	224
Future Volume (vph)	274	1471	1509	14	7	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12
Storage Length (ft)	550			30	200	550
Storage Lanes	1			0	1	1
Taper Length (ft)	200				60	
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	1.00
Ped Bike Factor				1.00		
Fr _t			0.999			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3574	3571	0	3735	1599
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	3574	3571	0	3735	1599
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			1			231
Link Speed (mph)		50	50		30	
Link Distance (ft)		1279	1789		807	
Travel Time (s)		17.4	24.4		18.3	
Confl. Peds. (#/hr)				2		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	1%	1%	0%	0%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	282	1516	1570	0	7	231
Turn Type	Prot	NA	NA		Prot	Free
Protected Phases	1	6	2		4	
Permitted Phases					Free	
Detector Phase	1	6	2		4	
Switch Phase						
Minimum Initial (s)	7.0	46.0	46.0		7.0	
Minimum Split (s)	12.0	53.0	53.0		14.0	
Total Split (s)	47.0	100.0	53.0		20.0	
Total Split (%)	39.2%	83.3%	44.2%		16.7%	
Yellow Time (s)	3.0	5.0	5.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	7.0	7.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	
Act Effect Green (s)	24.0	115.8	81.2	7.0	120.0	
Actuated g/C Ratio	0.20	0.96	0.68	0.06	1.00	
v/c Ratio	0.80	0.44	0.65	0.03	0.14	
Control Delay	61.6	1.3	15.0	53.7	0.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	61.6	1.3	15.0	53.7	0.2	
LOS	E	A	B	D	A	
Approach Delay		10.7	15.0		1.8	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Approach LOS		B	B		A	
Queue Length 50th (ft)	209	0	308	2	0	
Queue Length 95th (ft)	284	174	642	10	0	
Internal Link Dist (ft)		1199	1709		727	
Turn Bay Length (ft)	550			200	550	
Base Capacity (vph)	619	3449	2415	404	1599	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.46	0.44	0.65	0.02	0.14	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 99 (83%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 12.0

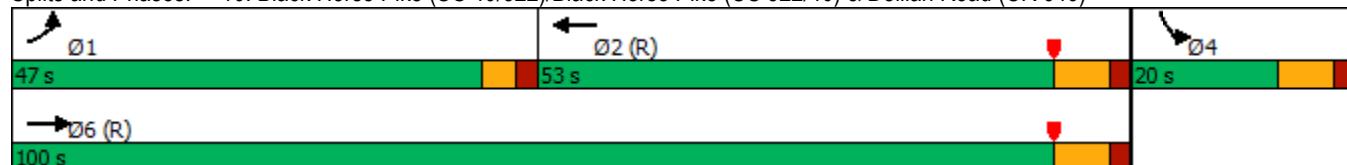
Intersection LOS: B

Intersection Capacity Utilization 79.0%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 10: Black Horse Pike (US 40/322)/Black Horse Pike (US 322/40) & Delilah Road (CR 646)





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑		↑↑	↑
Traffic Volume (veh/h)	274	1471	1509	14	7	224
Future Volume (veh/h)	274	1471	1509	14	7	224
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1885	1885	1900	1976	1885
Adj Flow Rate, veh/h	282	1516	1556	14	7	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	1	1	0	0	1
Cap, veh/h	313	3120	2379	21	44	
Arrive On Green	0.18	0.87	0.65	0.65	0.01	0.00
Sat Flow, veh/h	1781	3676	3732	33	3651	1598
Grp Volume(v), veh/h	282	1516	766	804	7	0
Grp Sat Flow(s), veh/h/ln	1781	1791	1791	1879	1825	1598
Q Serve(g_s), s	18.6	11.3	31.0	31.1	0.2	0.0
Cycle Q Clear(g_c), s	18.6	11.3	31.0	31.1	0.2	0.0
Prop In Lane	1.00			0.02	1.00	1.00
Lane Grp Cap(c), veh/h	313	3120	1171	1229	44	
V/C Ratio(X)	0.90	0.49	0.65	0.65	0.16	
Avail Cap(c_a), veh/h	623	3120	1171	1229	396	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.5	1.7	12.5	12.6	58.7	0.0
Incr Delay (d2), s/veh	3.9	0.5	2.8	2.7	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	13.0	1.6	16.8	17.5	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	52.4	2.3	15.4	15.3	59.3	0.0
LnGrp LOS	D	A	B	B	E	
Approach Vol, veh/h		1798	1570		7	
Approach Delay, s/veh		10.1	15.3		59.3	
Approach LOS		B	B		E	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	26.1	85.5		8.5		111.5
Change Period (Y+Rc), s	5.0	7.0		7.0		7.0
Max Green Setting (Gmax), s	42.0	46.0		13.0		93.0
Max Q Clear Time (g_c+l1), s	20.6	0.0		2.2		0.0
Green Ext Time (p_c), s	0.5	0.0		0.0		0.0
Intersection Summary						
HCM 6th Ctrl Delay			12.7			
HCM 6th LOS			B			
Notes						
User approved pedestrian interval to be less than phase max green.						
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	523	1172	664	3	4	192
Future Volume (vph)	523	1172	664	3	4	192
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12
Storage Length (ft)	325			30	200	550
Storage Lanes	1			0	1	1
Taper Length (ft)	200				60	
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	1.00
Fr _t			0.999			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1736	3539	3502	0	3735	1455
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1736	3539	3502	0	3735	1455
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)					204	
Link Speed (mph)		50	50		30	
Link Distance (ft)		1279	1789		807	
Travel Time (s)		17.4	24.4		18.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	4%	2%	3%	0%	0%	11%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	556	1247	709	0	4	204
Turn Type	Prot	NA	NA		Prot	Free
Protected Phases	1	6	2		4	
Permitted Phases					Free	
Detector Phase	1	6	2		4	
Switch Phase						
Minimum Initial (s)	7.0	43.0	43.0		7.0	
Minimum Split (s)	12.0	50.0	50.0		14.0	
Total Split (s)	48.0	98.0	50.0		22.0	
Total Split (%)	40.0%	81.7%	41.7%		18.3%	
Yellow Time (s)	3.0	5.0	5.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	7.0	7.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	
Act Effct Green (s)	40.8	115.8	64.4		7.0	120.0
Actuated g/C Ratio	0.34	0.96	0.54		0.06	1.00
v/c Ratio	0.94	0.37	0.38		0.02	0.14
Control Delay	64.0	1.1	18.1		53.5	0.2
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	64.0	1.1	18.1		53.5	0.2
LOS	E	A	B		D	A
Approach Delay		20.5	18.1		1.2	
Approach LOS		C	B		A	
Queue Length 50th (ft)	403	0	159		1	0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 95th (ft)	#612	128	260		7	0
Internal Link Dist (ft)		1199	1709		727	
Turn Bay Length (ft)	325			200	550	
Base Capacity (vph)	622	3415	1879	466	1455	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.89	0.37	0.38		0.01	0.14

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 89 (74%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay: 18.4

Intersection LOS: B

Intersection Capacity Utilization 86.5%

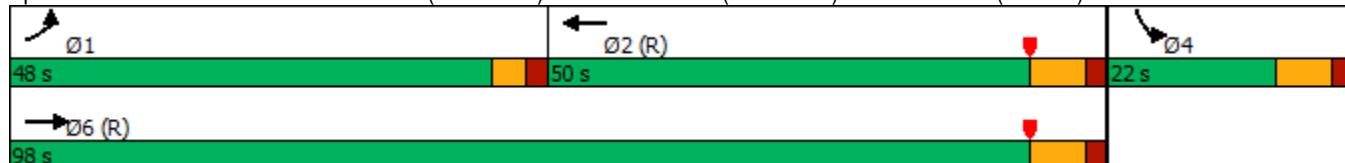
ICU Level of Service E

Analysis Period (min) 15

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

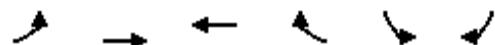
Queue shown is maximum after two cycles.

Splits and Phases: 10: Black Horse Pike (US 40/322)/Black Horse Pike (US 322/40) & Delilah Road (CR 646)

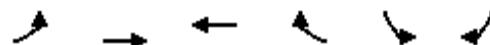




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑		↑↑	↑
Traffic Volume (veh/h)	523	1172	664	3	4	192
Future Volume (veh/h)	523	1172	664	3	4	192
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1841	1870	1856	1900	1976	1737
Adj Flow Rate, veh/h	556	1247	706	3	4	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	2	3	0	0	11
Cap, veh/h	581	3113	1811	8	27	
Arrive On Green	0.33	0.88	0.50	0.50	0.01	0.00
Sat Flow, veh/h	1753	3647	3693	15	3651	1472
Grp Volume(v), veh/h	556	1247	346	363	4	0
Grp Sat Flow(s), veh/h/ln	1753	1777	1763	1853	1825	1472
Q Serve(g_s), s	37.3	8.0	14.5	14.5	0.1	0.0
Cycle Q Clear(g_c), s	37.3	8.0	14.5	14.5	0.1	0.0
Prop In Lane	1.00			0.01	1.00	1.00
Lane Grp Cap(c), veh/h	581	3113	887	932	27	
V/C Ratio(X)	0.96	0.40	0.39	0.39	0.15	
Avail Cap(c_a), veh/h	628	3113	887	932	456	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.3	1.4	18.4	18.4	59.2	0.0
Incr Delay (d2), s/veh	24.2	0.4	1.3	1.2	1.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	26.1	0.9	9.8	10.1	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	63.5	1.8	19.7	19.7	60.2	0.0
LnGrp LOS	E	A	B	B	E	
Approach Vol, veh/h		1803	709		4	
Approach Delay, s/veh		20.8	19.7		60.2	
Approach LOS		C	B		E	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+R _c), s	44.8	67.4		7.9		112.1
Change Period (Y+R _c), s	5.0	7.0		7.0		7.0
Max Green Setting (Gmax), s	43.0	43.0		15.0		91.0
Max Q Clear Time (g_c+l1), s	39.3	0.0		2.1		0.0
Green Ext Time (p_c), s	0.5	0.0		0.0		0.0
Intersection Summary						
HCM 6th Ctrl Delay			20.6			
HCM 6th LOS			C			
Notes						
User approved pedestrian interval to be less than phase max green.						
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	365	1191	1495	14	14	279
Future Volume (vph)	365	1191	1495	14	14	279
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12
Storage Length (ft)	325			30	200	550
Storage Lanes	1			0	1	1
Taper Length (ft)	200				60	
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	1.00
Ped Bike Factor				1.00		
Fr _t			0.999			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1703	3574	3536	0	3458	1599
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1703	3574	3536	0	3458	1599
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			1			288
Link Speed (mph)		50	50		30	
Link Distance (ft)		1279	1789		807	
Travel Time (s)		17.4	24.4		18.3	
Confl. Peds. (#/hr)				2		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	6%	1%	2%	0%	8%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	376	1228	1555	0	14	288
Turn Type	Prot	NA	NA		Prot	Free
Protected Phases	1	6	2		4	
Permitted Phases					Free	
Detector Phase	1	6	2		4	
Switch Phase						
Minimum Initial (s)	7.0	48.0	48.0		7.0	
Minimum Split (s)	12.0	55.0	55.0		14.0	
Total Split (s)	45.0	100.0	55.0		20.0	
Total Split (%)	37.5%	83.3%	45.8%		16.7%	
Yellow Time (s)	3.0	5.0	5.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	7.0	7.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	
Act Effect Green (s)	31.2	111.6	71.2	7.0	120.0	
Actuated g/C Ratio	0.26	0.93	0.59	0.06	1.00	
v/c Ratio	0.85	0.37	0.74	0.07	0.18	
Control Delay	59.7	1.7	23.4	54.4	0.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	59.7	1.7	23.4	54.4	0.2	
LOS	E	A	C	D	A	
Approach Delay		15.3	23.4		2.8	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Approach LOS		B	C		A	
Queue Length 50th (ft)	277	0	380	5	0	
Queue Length 95th (ft)	360	124	#784	16	0	
Internal Link Dist (ft)		1199	1709		727	
Turn Bay Length (ft)	325			200	550	
Base Capacity (vph)	567	3324	2099	374	1599	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.66	0.37	0.74	0.04	0.18	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 68 (57%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 17.8

Intersection LOS: B

Intersection Capacity Utilization 83.7%

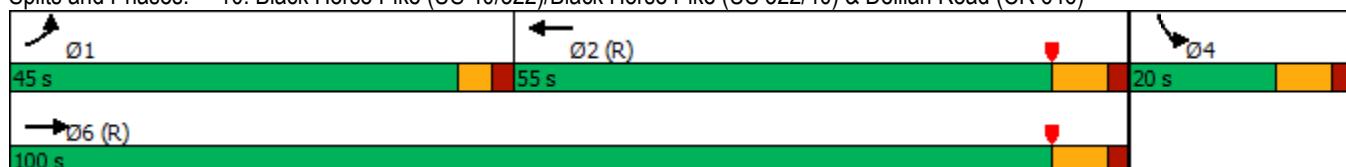
ICU Level of Service E

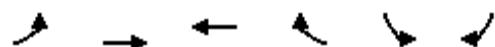
Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

Splits and Phases: 10: Black Horse Pike (US 40/322)/Black Horse Pike (US 322/40) & Delilah Road (CR 646)

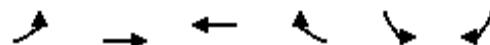




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑		↑↑	↑
Traffic Volume (veh/h)	365	1191	1495	14	14	279
Future Volume (veh/h)	365	1191	1495	14	14	279
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1811	1885	1870	1900	1853	1885
Adj Flow Rate, veh/h	376	1228	1541	14	14	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	6	1	2	0	8	1
Cap, veh/h	405	3086	2112	19	74	
Arrive On Green	0.23	0.86	0.59	0.59	0.02	0.00
Sat Flow, veh/h	1725	3676	3702	33	3423	1598
Grp Volume(v), veh/h	376	1228	758	797	14	0
Grp Sat Flow(s), veh/h/ln	1725	1791	1777	1864	1712	1598
Q Serve(g_s), s	25.6	8.7	37.1	37.1	0.5	0.0
Cycle Q Clear(g_c), s	25.6	8.7	37.1	37.1	0.5	0.0
Prop In Lane	1.00			0.02	1.00	1.00
Lane Grp Cap(c), veh/h	405	3086	1040	1091	74	
V/C Ratio(X)	0.93	0.40	0.73	0.73	0.19	
Avail Cap(c_a), veh/h	575	3086	1040	1091	371	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	44.9	1.7	18.0	18.0	57.7	0.0
Incr Delay (d2), s/veh	14.5	0.4	4.5	4.3	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	17.8	1.7	20.8	21.7	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	59.5	2.1	22.5	22.3	58.1	0.0
LnGrp LOS	E	A	C	C	E	
Approach Vol, veh/h		1604	1555		14	
Approach Delay, s/veh		15.6	22.4		58.1	
Approach LOS		B	C		E	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+R _c), s	33.2	77.2		9.6		110.4
Change Period (Y+R _c), s	5.0	7.0		7.0		7.0
Max Green Setting (Gmax), s	40.0	48.0		13.0		93.0
Max Q Clear Time (g_c+l1), s	27.6	0.0		2.5		0.0
Green Ext Time (p_c), s	0.6	0.0		0.0		0.0
Intersection Summary						
HCM 6th Ctrl Delay			19.1			
HCM 6th LOS			B			
Notes						
User approved pedestrian interval to be less than phase max green.						
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	286	1471	1509	14	7	214
Future Volume (vph)	286	1471	1509	14	7	214
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12
Storage Length (ft)	325			30	200	550
Storage Lanes	1			0	1	1
Taper Length (ft)	200				60	
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	1.00
Ped Bike Factor				1.00		
Fr _t			0.999			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3574	3571	0	3735	1599
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	3574	3571	0	3735	1599
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			1			221
Link Speed (mph)		50	50		30	
Link Distance (ft)		1279	1789		807	
Travel Time (s)		17.4	24.4		18.3	
Confl. Peds. (#/hr)				2		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	1%	1%	0%	0%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	295	1516	1570	0	7	221
Turn Type	Prot	NA	NA		Prot	Free
Protected Phases	1	6	2		4	
Permitted Phases					Free	
Detector Phase	1	6	2		4	
Switch Phase						
Minimum Initial (s)	7.0	48.0	48.0		7.0	
Minimum Split (s)	12.0	55.0	55.0		14.0	
Total Split (s)	45.0	100.0	55.0		20.0	
Total Split (%)	37.5%	83.3%	45.8%		16.7%	
Yellow Time (s)	3.0	5.0	5.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	7.0	7.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	
Act Effect Green (s)	24.9	115.8	80.3	7.0	120.0	
Actuated g/C Ratio	0.21	0.96	0.67	0.06	1.00	
v/c Ratio	0.81	0.44	0.66	0.03	0.14	
Control Delay	61.4	1.3	15.6	53.7	0.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	61.4	1.3	15.6	53.7	0.2	
LOS	E	A	B	D	A	
Approach Delay		11.1	15.6		1.8	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Approach LOS		B	B		A	
Queue Length 50th (ft)	219	0	316	2	0	
Queue Length 95th (ft)	295	174	653	10	0	
Internal Link Dist (ft)		1199	1709		727	
Turn Bay Length (ft)	325			200	550	
Base Capacity (vph)	590	3449	2391	404	1599	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.50	0.44	0.66	0.02	0.14	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 99 (83%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 12.5

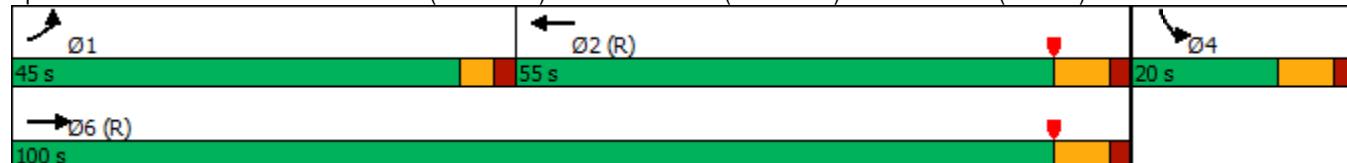
Intersection LOS: B

Intersection Capacity Utilization 79.7%

ICU Level of Service D

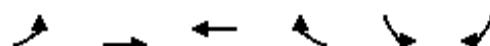
Analysis Period (min) 15

Splits and Phases: 10: Black Horse Pike (US 40/322)/Black Horse Pike (US 322/40) & Delilah Road (CR 646)

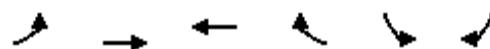




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑		↑↑	↑
Traffic Volume (veh/h)	286	1471	1509	14	7	214
Future Volume (veh/h)	286	1471	1509	14	7	214
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1885	1885	1900	1976	1885
Adj Flow Rate, veh/h	295	1516	1556	14	7	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	1	1	0	0	1
Cap, veh/h	325	3120	2353	21	44	
Arrive On Green	0.18	0.87	0.65	0.65	0.01	0.00
Sat Flow, veh/h	1781	3676	3732	33	3651	1598
Grp Volume(v), veh/h	295	1516	766	804	7	0
Grp Sat Flow(s), veh/h/ln	1781	1791	1791	1879	1825	1598
Q Serve(g_s), s	19.5	11.3	31.7	31.7	0.2	0.0
Cycle Q Clear(g_c), s	19.5	11.3	31.7	31.7	0.2	0.0
Prop In Lane	1.00			0.02	1.00	1.00
Lane Grp Cap(c), veh/h	325	3120	1158	1215	44	
V/C Ratio(X)	0.91	0.49	0.66	0.66	0.16	
Avail Cap(c_a), veh/h	594	3120	1158	1215	396	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.0	1.7	13.1	13.1	58.7	0.0
Incr Delay (d2), s/veh	3.9	0.5	3.0	2.8	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	13.5	1.6	17.3	17.9	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	52.0	2.3	16.0	15.9	59.3	0.0
LnGrp LOS	D	A	B	B	E	
Approach Vol, veh/h		1811	1570		7	
Approach Delay, s/veh		10.4	16.0		59.3	
Approach LOS		B	B		E	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+R _c), s	26.9	84.6		8.5		111.5
Change Period (Y+R _c), s	5.0	7.0		7.0		7.0
Max Green Setting (Gmax), s	40.0	48.0		13.0		93.0
Max Q Clear Time (g_c+l1), s	21.5	0.0		2.2		0.0
Green Ext Time (p_c), s	0.5	0.0		0.0		0.0
Intersection Summary						
HCM 6th Ctrl Delay			13.1			
HCM 6th LOS			B			
Notes						
User approved pedestrian interval to be less than phase max green.						
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑↑	↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	523	1172	664	3	4	192
Future Volume (vph)	523	1172	664	3	4	192
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12
Storage Length (ft)	325			30	200	550
Storage Lanes	2			0	1	1
Taper Length (ft)	200				60	
Lane Util. Factor	0.97	0.95	0.95	0.95	0.97	1.00
Fr _t			0.999			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3367	3539	3502	0	3735	1455
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3367	3539	3502	0	3735	1455
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)					204	
Link Speed (mph)		50	50		30	
Link Distance (ft)		1277	1789		807	
Travel Time (s)		17.4	24.4		18.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	4%	2%	3%	0%	0%	11%
Adj. Flow (vph)	556	1247	706	3	4	204
Shared Lane Traffic (%)						
Lane Group Flow (vph)	556	1247	709	0	4	204
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	18		34	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		32	22		34	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	0.92	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	0	0		1	0
Detector Template						
Leading Detector (ft)	40	0	0		40	0
Trailing Detector (ft)	-10	0	0		-10	0
Detector 1 Position(ft)	-10	0	0		-10	0
Detector 1 Size(ft)	50	6	6		50	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Turn Type	Prot	NA	NA		Prot	Free
Protected Phases	1	6	2		4	
Permitted Phases					Free	
Detector Phase	1	6	2		4	
Switch Phase						
Minimum Initial (s)	7.0	43.0	43.0		7.0	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Split (s)	12.0	50.0	50.0		14.0	
Total Split (s)	48.0	98.0	50.0		22.0	
Total Split (%)	40.0%	81.7%	41.7%		18.3%	
Maximum Green (s)	43.0	91.0	43.0		15.0	
Yellow Time (s)	3.0	5.0	5.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	7.0	7.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	2.0	2.0	2.0		2.0	
Recall Mode	None	C-Max	C-Max		None	
Walk Time (s)					7.0	
Flash Dont Walk (s)					22.0	
Pedestrian Calls (#/hr)					0	
Act Effect Green (s)	24.8	115.8	80.4		7.0	120.0
Actuated g/C Ratio	0.21	0.96	0.67		0.06	1.00
v/c Ratio	0.80	0.37	0.30		0.02	0.14
Control Delay	54.1	1.1	9.9		53.5	0.2
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	54.1	1.1	9.9		53.5	0.2
LOS	D	A	A		D	A
Approach Delay		17.4	9.9		1.2	
Approach LOS		B	A		A	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 89 (74%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 14.2

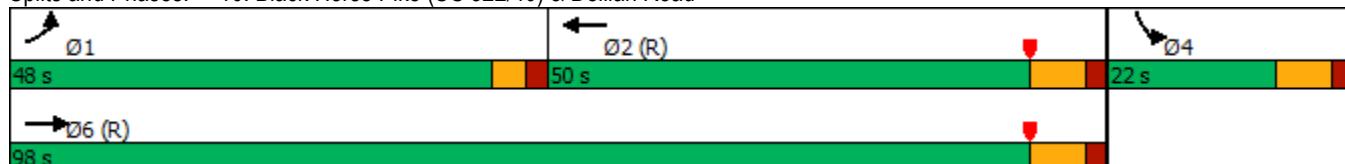
Intersection LOS: B

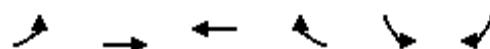
Intersection Capacity Utilization 72.4%

ICU Level of Service C

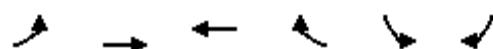
Analysis Period (min) 15

Splits and Phases: 10: Black Horse Pike (US 322/40) & Delilah Road

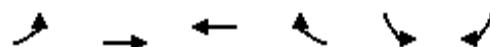




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑↑	↑↑	↑↑		↑↑	↑
Traffic Volume (veh/h)	523	1172	664	3	4	192
Future Volume (veh/h)	523	1172	664	3	4	192
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1841	1870	1856	1900	1976	1737
Adj Flow Rate, veh/h	556	1247	706	3	4	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	2	3	0	0	11
Cap, veh/h	633	3113	2334	10	27	
Arrive On Green	0.19	0.88	0.65	0.65	0.01	0.00
Sat Flow, veh/h	3401	3647	3693	15	3651	1472
Grp Volume(v), veh/h	556	1247	346	363	4	0
Grp Sat Flow(s), veh/h/ln	1700	1777	1763	1853	1825	1472
Q Serve(g_s), s	19.1	8.0	10.3	10.3	0.1	0.0
Cycle Q Clear(g_c), s	19.1	8.0	10.3	10.3	0.1	0.0
Prop In Lane	1.00			0.01	1.00	1.00
Lane Grp Cap(c), veh/h	633	3113	1143	1201	27	
V/C Ratio(X)	0.88	0.40	0.30	0.30	0.15	
Avail Cap(c_a), veh/h	1219	3113	1143	1201	456	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.5	1.4	9.2	9.2	59.2	0.0
Incr Delay (d2), s/veh	1.6	0.4	0.7	0.6	1.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	12.5	0.9	6.5	6.8	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	49.1	1.8	9.9	9.9	60.2	0.0
LnGrp LOS	D	A	A	A	E	
Approach Vol, veh/h	1803	709		4		
Approach Delay, s/veh	16.4	9.9		60.2		
Approach LOS	B	A		E		
Timer - Assigned Phs	1	2	4		6	
Phs Duration (G+Y+R _c), s	27.3	84.8		7.9	112.1	
Change Period (Y+R _c), s	5.0	7.0		7.0	7.0	
Max Green Setting (Gmax), s	43.0	43.0		15.0	91.0	
Max Q Clear Time (g_c+l1), s	21.1	0.0		2.1	0.0	
Green Ext Time (p_c), s	1.2	0.0		0.0	0.0	
Intersection Summary						
HCM 6th Ctrl Delay			14.6			
HCM 6th LOS			B			
Notes						
User approved pedestrian interval to be less than phase max green.						
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑↑	↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	365	1191	1495	14	14	279
Future Volume (vph)	365	1191	1495	14	14	279
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12
Storage Length (ft)	325			30	200	550
Storage Lanes	2			0	1	1
Taper Length (ft)	200				60	
Lane Util. Factor	0.97	0.95	0.95	0.95	0.97	1.00
Ped Bike Factor				1.00		
Fr _t			0.999			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3303	3574	3536	0	3458	1599
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3303	3574	3536	0	3458	1599
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			1			288
Link Speed (mph)		50	50		30	
Link Distance (ft)		1277	1789		807	
Travel Time (s)		17.4	24.4		18.3	
Confl. Peds. (#/hr)			2			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	6%	1%	2%	0%	8%	1%
Adj. Flow (vph)	376	1228	1541	14	14	288
Shared Lane Traffic (%)						
Lane Group Flow (vph)	376	1228	1555	0	14	288
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	18		34	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		32	22		34	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	0.92	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	0	0		1	0
Detector Template						
Leading Detector (ft)	40	0	0		40	0
Trailing Detector (ft)	-10	0	0		-10	0
Detector 1 Position(ft)	-10	0	0		-10	0
Detector 1 Size(ft)	50	6	6		50	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Turn Type	Prot	NA	NA		Prot	Free
Protected Phases	1	6	2		4	
Permitted Phases					Free	
Detector Phase	1	6	2		4	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Switch Phase						
Minimum Initial (s)	7.0	48.0	48.0		7.0	
Minimum Split (s)	12.0	55.0	55.0		14.0	
Total Split (s)	45.0	100.0	55.0		20.0	
Total Split (%)	37.5%	83.3%	45.8%		16.7%	
Maximum Green (s)	40.0	93.0	48.0		13.0	
Yellow Time (s)	3.0	5.0	5.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	7.0	7.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	2.0	2.0	2.0		2.0	
Recall Mode	None	C-Max	C-Max		None	
Walk Time (s)					7.0	
Flash Dont Walk (s)					22.0	
Pedestrian Calls (#/hr)					0	
Act Effect Green (s)	18.4	111.6	84.0		7.0	120.0
Actuated g/C Ratio	0.15	0.93	0.70		0.06	1.00
v/c Ratio	0.74	0.37	0.63		0.07	0.18
Control Delay	57.5	1.7	13.0		54.4	0.2
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	57.5	1.7	13.0		54.4	0.2
LOS	E	A	B		D	A
Approach Delay		14.8	13.0		2.8	
Approach LOS		B	B		A	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 68 (57%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 12.9

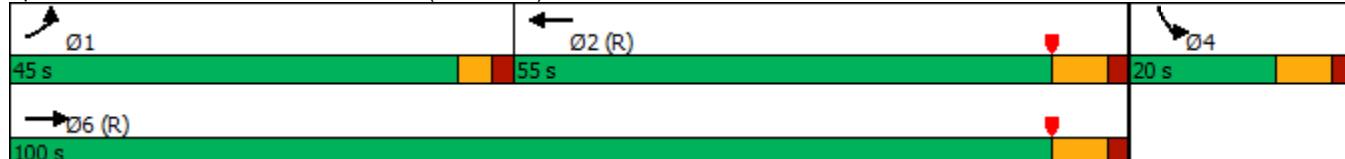
Intersection LOS: B

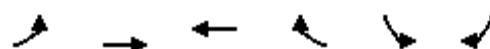
Intersection Capacity Utilization 73.9%

ICU Level of Service D

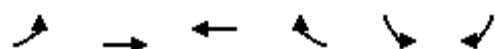
Analysis Period (min) 15

Splits and Phases: 10: Black Horse Pike (US 322/40) & Delilah Road

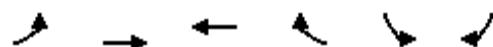




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑↑	↑↑	↑↑		↑↑	↑
Traffic Volume (veh/h)	365	1191	1495	14	14	279
Future Volume (veh/h)	365	1191	1495	14	14	279
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1811	1885	1870	1900	1853	1885
Adj Flow Rate, veh/h	376	1228	1541	14	14	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	6	1	2	0	8	1
Cap, veh/h	446	3086	2478	23	74	
Arrive On Green	0.13	0.86	0.69	0.69	0.02	0.00
Sat Flow, veh/h	3346	3676	3702	33	3423	1598
Grp Volume(v), veh/h	376	1228	758	797	14	0
Grp Sat Flow(s), veh/h/ln	1673	1791	1777	1864	1712	1598
Q Serve(g_s), s	13.2	8.7	28.0	28.0	0.5	0.0
Cycle Q Clear(g_c), s	13.2	8.7	28.0	28.0	0.5	0.0
Prop In Lane	1.00			0.02	1.00	1.00
Lane Grp Cap(c), veh/h	446	3086	1220	1280	74	
V/C Ratio(X)	0.84	0.40	0.62	0.62	0.19	
Avail Cap(c_a), veh/h	1115	3086	1220	1280	371	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.8	1.7	10.3	10.3	57.7	0.0
Incr Delay (d2), s/veh	1.7	0.4	2.4	2.3	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	9.2	1.7	14.7	15.3	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	52.5	2.1	12.7	12.6	58.1	0.0
LnGrp LOS	D	A	B	B	E	
Approach Vol, veh/h		1604	1555		14	
Approach Delay, s/veh		13.9	12.6		58.1	
Approach LOS		B	B		E	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+R _c), s	21.0	89.4		9.6		110.4
Change Period (Y+R _c), s	5.0	7.0		7.0		7.0
Max Green Setting (Gmax), s	40.0	48.0		13.0		93.0
Max Q Clear Time (g_c+l1), s	15.2	0.0		2.5		0.0
Green Ext Time (p_c), s	0.8	0.0		0.0		0.0
Intersection Summary						
HCM 6th Ctrl Delay			13.5			
HCM 6th LOS			B			
Notes						
User approved pedestrian interval to be less than phase max green.						
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑↑	↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	286	1471	1509	14	7	214
Future Volume (vph)	286	1471	1509	14	7	214
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12
Storage Length (ft)	325			30	200	550
Storage Lanes	2			0	1	1
Taper Length (ft)	200				60	
Lane Util. Factor	0.97	0.95	0.95	0.95	0.97	1.00
Ped Bike Factor				1.00		
Fr _t			0.999			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3433	3574	3571	0	3735	1599
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3433	3574	3571	0	3735	1599
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			1			221
Link Speed (mph)		50	50		30	
Link Distance (ft)		1277	1789		807	
Travel Time (s)		17.4	24.4		18.3	
Confl. Peds. (#/hr)			2			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	1%	1%	0%	0%	1%
Adj. Flow (vph)	295	1516	1556	14	7	221
Shared Lane Traffic (%)						
Lane Group Flow (vph)	295	1516	1570	0	7	221
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	18		34	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		32	22		34	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	0.92	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	0	0		1	0
Detector Template						
Leading Detector (ft)	40	0	0		40	0
Trailing Detector (ft)	-10	0	0		-10	0
Detector 1 Position(ft)	-10	0	0		-10	0
Detector 1 Size(ft)	50	6	6		50	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Turn Type	Prot	NA	NA		Prot	Free
Protected Phases	1	6	2		4	
Permitted Phases					Free	
Detector Phase	1	6	2		4	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Switch Phase						
Minimum Initial (s)	7.0	48.0	48.0		7.0	
Minimum Split (s)	12.0	55.0	55.0		14.0	
Total Split (s)	45.0	100.0	55.0		20.0	
Total Split (%)	37.5%	83.3%	45.8%		16.7%	
Maximum Green (s)	40.0	93.0	48.0		13.0	
Yellow Time (s)	3.0	5.0	5.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	7.0	7.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	2.0	2.0	2.0		2.0	
Recall Mode	None	C-Max	C-Max		None	
Walk Time (s)					7.0	
Flash Dont Walk (s)					22.0	
Pedestrian Calls (#/hr)					0	
Act Effect Green (s)	15.0	115.8	90.2		7.0	120.0
Actuated g/C Ratio	0.12	0.96	0.75		0.06	1.00
v/c Ratio	0.69	0.44	0.59		0.03	0.14
Control Delay	58.5	1.3	9.0		53.7	0.2
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	58.5	1.3	9.0		53.7	0.2
LOS	E	A	A		D	A
Approach Delay		10.6	9.0		1.8	
Approach LOS		B	A		A	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 99 (83%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 9.3

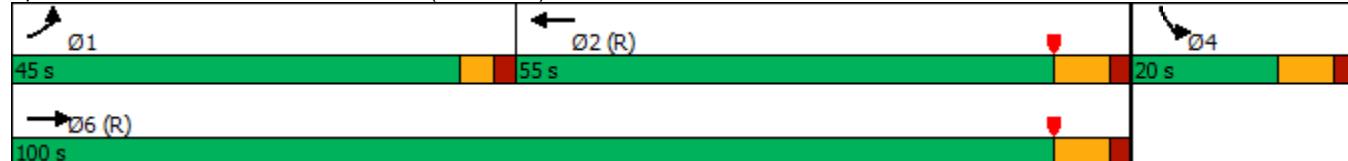
Intersection LOS: A

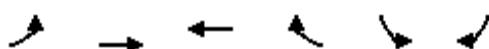
Intersection Capacity Utilization 72.0%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 10: Black Horse Pike (US 322/40) & Delilah Road





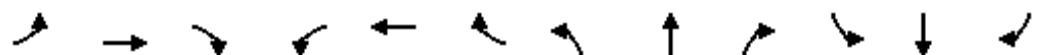
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑↑	↑↑	↑↑		↑↑	↑
Traffic Volume (veh/h)	286	1471	1509	14	7	214
Future Volume (veh/h)	286	1471	1509	14	7	214
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1885	1885	1900	1976	1885
Adj Flow Rate, veh/h	295	1516	1556	14	7	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	1	1	0	0	1
Cap, veh/h	364	3120	2634	24	44	
Arrive On Green	0.11	0.87	0.72	0.72	0.01	0.00
Sat Flow, veh/h	3456	3676	3732	33	3651	1598
Grp Volume(v), veh/h	295	1516	766	804	7	0
Grp Sat Flow(s), veh/h/ln	1728	1791	1791	1879	1825	1598
Q Serve(g_s), s	10.0	11.3	24.7	24.8	0.2	0.0
Cycle Q Clear(g_c), s	10.0	11.3	24.7	24.8	0.2	0.0
Prop In Lane	1.00			0.02	1.00	1.00
Lane Grp Cap(c), veh/h	364	3120	1297	1361	44	
V/C Ratio(X)	0.81	0.49	0.59	0.59	0.16	
Avail Cap(c_a), veh/h	1152	3120	1297	1361	396	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	52.5	1.7	8.0	8.0	58.7	0.0
Incr Delay (d2), s/veh	1.7	0.5	2.0	1.9	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	7.7	1.6	12.6	13.0	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	54.2	2.3	10.0	9.9	59.3	0.0
LnGrp LOS	D	A	A	A	E	
Approach Vol, veh/h		1811	1570		7	
Approach Delay, s/veh		10.7	9.9		59.3	
Approach LOS		B	A		E	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	17.6	93.9		8.5		111.5
Change Period (Y+Rc), s	5.0	7.0		7.0		7.0
Max Green Setting (Gmax), s	40.0	48.0		13.0		93.0
Max Q Clear Time (g_c+l1), s	12.0	0.0		2.2		0.0
Green Ext Time (p_c), s	0.6	0.0		0.0		0.0
Intersection Summary						
HCM 6th Ctrl Delay			10.4			
HCM 6th LOS			B			
Notes						
User approved pedestrian interval to be less than phase max green.						
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.						

	↗	→	↘	↙	←	↖	↑	↗	↘	↓	↙	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑		↑	↑		↑	↑	↑	↑	↑	
Traffic Volume (vph)	1	432	48	268	172	5	27	2	371	5	7	1
Future Volume (vph)	1	432	48	268	172	5	27	2	371	5	7	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Grade (%)		0%			2%			2%			4%	
Storage Length (ft)	185		0	245		0	0		0	105		0
Storage Lanes	1		0	1		0	0		1	1		0
Taper Length (ft)	75			120			25			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t		0.985			0.996				0.850		0.981	
Flt Protected	0.950			0.950				0.955		0.950		
Satd. Flow (prot)	902	1774	0	1670	1729	0	0	1732	1508	1710	1766	0
Flt Permitted	0.641			0.321				0.735		0.738		
Satd. Flow (perm)	609	1774	0	564	1729	0	0	1333	1508	1328	1766	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			2				277		1	
Link Speed (mph)	50			50			25			25		
Link Distance (ft)	442			881			789			832		
Travel Time (s)	6.0			12.0			21.5			22.7		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	100%	5%	10%	7%	8%	20%	4%	0%	6%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	500	0	279	184	0	0	30	386	5	8	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA	
Protected Phases	5	2		1	6			8	1		4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	35.0		7.0	35.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	14.0	42.0		14.0	42.0		14.0	14.0	14.0	14.0	14.0	
Total Split (s)	17.0	42.0		17.0	42.0		23.0	23.0	17.0	23.0	23.0	
Total Split (%)	20.7%	51.2%		20.7%	51.2%		28.0%	28.0%	20.7%	28.0%	28.0%	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Lead/Lag	Lead	Lag		Lead	Lag				Lead			
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			
Recall Mode	None	Max		None	Max		None	None	None	None	None	
Act Effect Green (s)	42.2	35.1		50.7	48.8			10.8	27.1	10.8	10.8	
Actuated g/C Ratio	0.55	0.46		0.66	0.64		0.14	0.36	0.14	0.14		
v/c Ratio	0.00	0.61		0.55	0.17		0.16	0.54	0.03	0.03		
Control Delay	6.0	20.0		9.9	8.0		30.2	8.6	27.6	26.1		
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0		
Total Delay	6.0	20.0		9.9	8.0		30.2	8.6	27.6	26.1		
LOS	A	C		A	A			C	A	C	C	
Approach Delay		20.0			9.2			10.1		26.7		
Approach LOS		B			A			B		C		

4184 22-02818

Existing - AM

20: English Creek Avenue (CR 603) & Delilah Road (CR 646)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	0	168		43	26			13	35	2	3	
Queue Length 95th (ft)	2	302		92	95			36	105	11	14	
Internal Link Dist (ft)		362			801			709			752	
Turn Bay Length (ft)	185			245						105		
Base Capacity (vph)	399	821		520	1106			280	694	279	372	
Starvation Cap Reductn	0	0		0	0			0	0	0	0	
Spillback Cap Reductn	0	0		0	0			0	0	0	0	
Storage Cap Reductn	0	0		0	0			0	0	0	0	
Reduced v/c Ratio	0.00	0.61		0.54	0.17			0.11	0.56	0.02	0.02	

Intersection Summary

Area Type: Other

Cycle Length: 82

Actuated Cycle Length: 76.3

Natural Cycle: 70

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 13.5

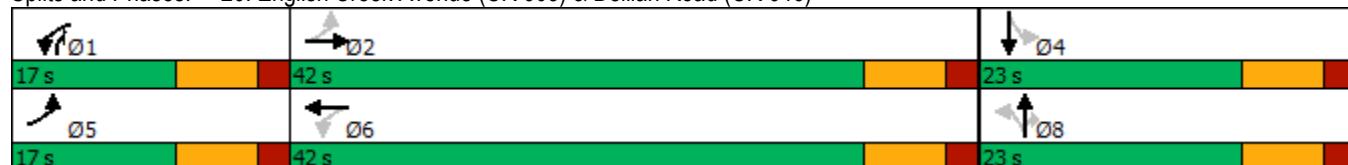
Intersection LOS: B

Intersection Capacity Utilization 75.5%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 20: English Creek Avenue (CR 603) & Delilah Road (CR 646)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↓		↑	↓				↑	↑	↓	↓
Traffic Volume (veh/h)	1	432	48	268	172	5	27	2	371	5	7	1
Future Volume (veh/h)	1	432	48	268	172	5	27	2	371	5	7	1
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	418	1826	1752	1773	1758	1580	1817	1876	1788	1806	1806	1806
Adj Flow Rate, veh/h	1	450	50	279	179	5	28	2	386	5	7	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	100	5	10	7	8	20	4	0	6	0	0	0
Cap, veh/h	229	694	77	462	782	22	344	22	473	260	304	43
Arrive On Green	0.09	0.43	0.43	0.12	0.46	0.46	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	398	1614	179	1688	1702	48	1315	111	1515	961	1545	221
Grp Volume(v), veh/h	1	0	500	279	0	184	30	0	386	5	0	8
Grp Sat Flow(s), veh/h/ln	398	0	1794	1688	0	1749	1426	0	1515	961	0	1766
Q Serve(g_s), s	0.1	0.0	17.9	7.3	0.0	5.2	1.2	0.0	16.0	0.3	0.0	0.3
Cycle Q Clear(g_c), s	0.1	0.0	17.9	7.3	0.0	5.2	1.5	0.0	16.0	1.9	0.0	0.3
Prop In Lane	1.00		0.10	1.00		0.03	0.93		1.00	1.00		0.13
Lane Grp Cap(c), veh/h	229	0	771	462	0	804	366	0	473	260	0	347
V/C Ratio(X)	0.00	0.00	0.65	0.60	0.00	0.23	0.08	0.00	0.82	0.02	0.00	0.02
Avail Cap(c_a), veh/h	244	0	771	474	0	804	366	0	473	260	0	347
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.6	0.0	18.3	13.0	0.0	13.3	26.9	0.0	25.9	27.6	0.0	26.4
Incr Delay (d2), s/veh	0.0	0.0	4.2	2.1	0.0	0.7	0.1	0.0	10.7	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	0.0	0.0	11.6	4.3	0.0	3.4	0.9	0.0	12.7	0.1	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	9.6	0.0	22.5	15.1	0.0	14.0	27.0	0.0	36.6	27.7	0.0	26.4
LnGrp LOS	A	A	C	B	A	B	C	A	D	C	A	C
Approach Vol, veh/h	501				463			416			13	
Approach Delay, s/veh	22.5				14.6			35.9			26.9	
Approach LOS	C				B			D			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.4	42.0		23.0	14.0	44.4		23.0				
Change Period (Y+Rc), s	7.0	7.0		7.0	7.0	7.0		7.0				
Max Green Setting (Gmax), s	10.0	35.0		16.0	10.0	35.0		16.0				
Max Q Clear Time (g_c+l1), s	9.3	0.0		3.9	2.1	0.0		18.0				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			23.9									
HCM 6th LOS			C									
Notes												
User approved pedestrian interval to be less than phase max green.												

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	2	1	1	2	1	1	2	1	1	2	1
Traffic Volume (vph)	0	343	48	403	283	3	47	13	390	3	4	0
Future Volume (vph)	0	343	48	403	283	3	47	13	390	3	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Grade (%)		0%			2%			2%			4%	
Storage Length (ft)	185		0	245		0	0		0	105		0
Storage Lanes	1		0	1		0	0		1	1		0
Taper Length (ft)	75			120			25			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00								
Fr _t		0.982			0.998				0.850			
Flt Protected				0.950				0.962		0.950		
Satd. Flow (prot)	1900	1770	0	1752	1859	0	0	1810	1583	1710	1800	0
Flt Permitted				0.382				0.769		0.717		
Satd. Flow (perm)	1900	1770	0	703	1859	0	0	1446	1583	1291	1800	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			1				371			
Link Speed (mph)		50			50			25			25	
Link Distance (ft)		442			881			789			832	
Travel Time (s)		6.0			12.0			21.5			22.7	
Confl. Peds. (#/hr)		3	3									
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	5%	6%	2%	1%	0%	0%	0%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	399	0	411	292	0	0	61	398	3	4	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA	
Protected Phases	5	2		1	6			8	1		4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	35.0		7.0	35.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	14.0	42.0		14.0	42.0		14.0	14.0	14.0	14.0	14.0	
Total Split (s)	17.0	42.0		17.0	42.0		23.0	23.0	17.0	23.0	23.0	
Total Split (%)	20.7%	51.2%		20.7%	51.2%		28.0%	28.0%	20.7%	28.0%	28.0%	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Lead/Lag	Lead	Lag		Lead	Lag				Lead			
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			
Recall Mode	None	Max		None	Max		None	None	None	None	None	
Act Effct Green (s)		35.1		52.0	52.0			9.8	26.7	9.8	9.8	
Actuated g/C Ratio		0.46		0.69	0.69			0.13	0.35	0.13	0.13	
v/c Ratio		0.48		0.66	0.23			0.33	0.50	0.02	0.02	
Control Delay		16.8		11.9	5.4			34.5	5.0	28.0	27.8	
Queue Delay		0.0		0.0	0.0			0.0	0.0	0.0	0.0	
Total Delay		16.8		11.9	5.4			34.5	5.0	28.0	27.8	
LOS		B		B	A			C	A	C	C	

4184 22-02818

Existing - PM

20: English Creek Avenue (CR 603) & Delilah Road (CR 646)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		16.8			9.2			9.0			27.9	
Approach LOS			B			A			A			C
Queue Length 50th (ft)		117		63	40			27	8	1	2	
Queue Length 95th (ft)		225		141	93			60	62	8	10	
Internal Link Dist (ft)		362			801			709			752	
Turn Bay Length (ft)				245							105	
Base Capacity (vph)		825		620	1275			306	793	273	380	
Starvation Cap Reductn		0		0	0			0	0	0	0	
Spillback Cap Reductn		0		0	0			0	0	0	0	
Storage Cap Reductn		0		0	0			0	0	0	0	
Reduced v/c Ratio		0.48		0.66	0.23			0.20	0.50	0.01	0.01	

Intersection Summary

Area Type: Other

Cycle Length: 82

Actuated Cycle Length: 75.8

Natural Cycle: 70

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 11.2

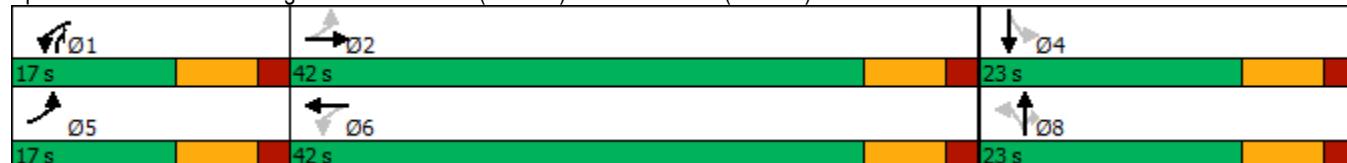
Intersection LOS: B

Intersection Capacity Utilization 78.9%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 20: English Creek Avenue (CR 603) & Delilah Road (CR 646)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↓		↑	↓			↑	↓	↑	↓	
Traffic Volume (veh/h)	0	343	48	403	283	3	47	13	390	3	4	0
Future Volume (veh/h)	0	343	48	403	283	3	47	13	390	3	4	0
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1826	1811	1847	1862	1876	1876	1876	1862	1806	1806	1806
Adj Flow Rate, veh/h	0	350	49	411	289	3	48	13	398	3	4	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	5	6	2	1	0	0	0	1	0	0	0
Cap, veh/h	561	669	94	557	1166	12	300	72	500	241	352	0
Arrive On Green	0.00	0.43	0.43	0.12	0.63	0.63	0.20	0.20	0.20	0.20	0.20	0.00
Sat Flow, veh/h	1810	1566	219	1759	1839	19	1137	371	1578	941	1806	0
Grp Volume(v), veh/h	0	0	399	411	0	292	61	0	398	3	4	0
Grp Sat Flow(s), veh/h/ln	1810	0	1786	1759	0	1858	1508	0	1578	941	1806	0
Q Serve(g_s), s	0.0	0.0	13.5	10.0	0.0	5.6	2.1	0.0	16.0	0.2	0.1	0.0
Cycle Q Clear(g_c), s	0.0	0.0	13.5	10.0	0.0	5.6	2.7	0.0	16.0	2.9	0.1	0.0
Prop In Lane	1.00		0.12	1.00		0.01	0.79		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	561	0	762	557	0	1178	373	0	500	241	352	0
V/C Ratio(X)	0.00	0.00	0.52	0.74	0.00	0.25	0.16	0.00	0.80	0.01	0.01	0.00
Avail Cap(c_a), veh/h	780	0	762	557	0	1178	373	0	500	241	352	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	17.3	13.0	0.0	6.5	27.6	0.0	25.6	28.8	26.6	0.0
Incr Delay (d2), s/veh	0.0	0.0	2.6	5.1	0.0	0.5	0.2	0.0	8.7	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	0.0	0.0	9.1	7.1	0.0	3.1	1.8	0.0	12.7	0.1	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	19.9	18.2	0.0	7.0	27.8	0.0	34.3	28.9	26.6	0.0
LnGrp LOS	A	A	B	B	A	A	C	A	C	C	C	A
Approach Vol, veh/h	399				703			459			7	
Approach Delay, s/veh	19.9				13.5			33.4			27.6	
Approach LOS		B			B			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.0	42.0		23.0	0.0	59.0		23.0				
Change Period (Y+Rc), s	7.0	7.0		7.0	7.0	7.0		7.0				
Max Green Setting (Gmax), s	10.0	35.0		16.0	10.0	35.0		16.0				
Max Q Clear Time (g_c+l1), s	12.0	0.0		4.9	0.0	0.0		18.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			21.0									
HCM 6th LOS			C									
Notes												
User approved pedestrian interval to be less than phase max green.												

	↗	→	↘	↙	←	↖	↑	↗	↘	↓	↙	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑		↑	↑		↑	↑	↑	↑	↑	
Traffic Volume (vph)	1	271	50	272	217	5	33	11	362	1	6	3
Future Volume (vph)	1	271	50	272	217	5	33	11	362	1	6	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Grade (%)		0%			2%			2%			4%	
Storage Length (ft)	185		0	245		0	0		0	105		0
Storage Lanes	1		0	1		0	0		1	1		0
Taper Length (ft)	75			120			25			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor										0.98	1.00	
Frt		0.977			0.997				0.850		0.950	
Flt Protected	0.950			0.950				0.964		0.950		
Satd. Flow (prot)	1805	1820	0	1752	1857	0	0	1774	1583	1710	1710	0
Flt Permitted	0.617			0.460				0.773		0.728		
Satd. Flow (perm)	1172	1820	0	848	1857	0	0	1423	1549	1308	1710	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			2				369		3	
Link Speed (mph)		50			50			25			25	
Link Distance (ft)		442			881			789			832	
Travel Time (s)		6.0			12.0			21.5			22.7	
Confl. Peds. (#/hr)									1	1		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	2%	2%	2%	1%	0%	0%	9%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	328	0	278	226	0	0	45	369	1	9	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA	
Protected Phases	5	2			1	6			8	1		4
Permitted Phases	2				6			8		8	4	
Detector Phase	5	2		1	6			8	8	8	4	4
Switch Phase												
Minimum Initial (s)	7.0	35.0		7.0	35.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	14.0	42.0		14.0	42.0		14.0	14.0	14.0	14.0	14.0	
Total Split (s)	17.0	42.0		17.0	42.0		23.0	23.0	17.0	23.0	23.0	
Total Split (%)	20.7%	51.2%		20.7%	51.2%		28.0%	28.0%	20.7%	28.0%	28.0%	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0			7.0	7.0	7.0	7.0	
Lead/Lag	Lead	Lag		Lead	Lag				Lead			
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			
Recall Mode	None	Max		None	Max		None	None	None	None	None	
Act Effct Green (s)	42.1	35.1		50.5	48.7			9.0	18.2	9.0	9.0	
Actuated g/C Ratio	0.57	0.47		0.68	0.66			0.12	0.24	0.12	0.12	
v/c Ratio	0.00	0.38		0.40	0.19			0.26	0.56	0.01	0.04	
Control Delay	5.0	14.3		6.6	7.3			33.4	5.6	28.0	24.7	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	
Total Delay	5.0	14.3		6.6	7.3			33.4	5.6	28.0	24.7	
LOS	A	B		A	A			C	A	C	C	

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Existing - SAT

20: English Creek Avenue (CR 603) & Delilah Road (CR 646)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		14.3			6.9			8.6			25.0	
Approach LOS			B			A			A			C
Queue Length 50th (ft)	0	87		37	28			19	0	0	3	
Queue Length 95th (ft)	2	170		85	110			48	51	5	15	
Internal Link Dist (ft)		362			801			709			752	
Turn Bay Length (ft)	185			245						105		
Base Capacity (vph)	796	866		698	1216			307	756	282	371	
Starvation Cap Reductn	0	0		0	0			0	0	0	0	
Spillback Cap Reductn	0	0		0	0			0	0	0	0	
Storage Cap Reductn	0	0		0	0			0	0	0	0	
Reduced v/c Ratio	0.00	0.38		0.40	0.19			0.15	0.49	0.00	0.02	

Intersection Summary

Area Type: Other

Cycle Length: 82

Actuated Cycle Length: 74.3

Natural Cycle: 70

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.56

Intersection Signal Delay: 9.6

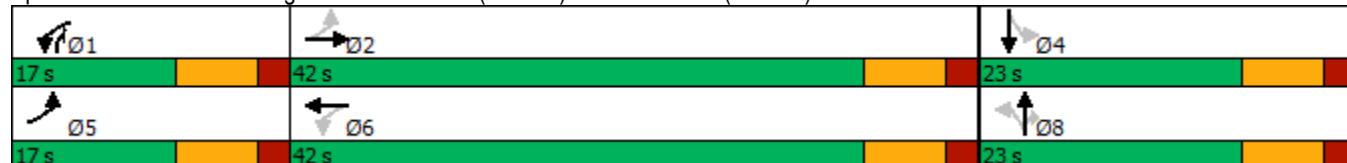
Intersection LOS: A

Intersection Capacity Utilization 75.0%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 20: English Creek Avenue (CR 603) & Delilah Road (CR 646)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↓		↑	↓			↑	↓	↑	↓	
Traffic Volume (veh/h)	1	271	50	272	217	5	33	11	362	1	6	3
Future Volume (veh/h)	1	271	50	272	217	5	33	11	362	1	6	3
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1870	1847	1862	1876	1876	1743	1862	1806	1806	1806
Adj Flow Rate, veh/h	1	277	51	278	221	5	34	11	369	1	6	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	2	1	0	0	9	1	0	0	0
Cap, veh/h	693	664	122	604	829	19	277	78	487	256	224	112
Arrive On Green	0.09	0.43	0.43	0.11	0.46	0.46	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1810	1537	283	1759	1813	41	1009	397	1574	967	1135	567
Grp Volume(v), veh/h	1	0	328	278	0	226	45	0	369	1	0	9
Grp Sat Flow(s), veh/h/ln	1810	0	1819	1759	0	1854	1406	0	1574	967	0	1702
Q Serve(g_s), s	0.0	0.0	10.1	6.9	0.0	6.1	1.4	0.0	16.0	0.1	0.0	0.3
Cycle Q Clear(g_c), s	0.0	0.0	10.1	6.9	0.0	6.1	2.0	0.0	16.0	2.1	0.0	0.3
Prop In Lane	1.00		0.16	1.00		0.02	0.76		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	693	0	786	604	0	848	356	0	487	256	0	336
V/C Ratio(X)	0.00	0.00	0.42	0.46	0.00	0.27	0.13	0.00	0.76	0.00	0.00	0.03
Avail Cap(c_a), veh/h	760	0	786	625	0	848	356	0	487	256	0	336
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.5	0.0	16.0	10.9	0.0	13.6	26.9	0.0	25.3	27.8	0.0	26.2
Incr Delay (d2), s/veh	0.0	0.0	1.6	0.5	0.0	0.8	0.2	0.0	6.8	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	0.0	0.0	7.1	4.0	0.0	4.2	1.3	0.0	11.5	0.0	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	9.5	0.0	17.6	11.4	0.0	14.4	27.0	0.0	32.0	27.8	0.0	26.3
LnGrp LOS	A	A	B	B	A	B	C	A	C	C	A	C
Approach Vol, veh/h	329				504			414			10	
Approach Delay, s/veh	17.6				12.8			31.5			26.4	
Approach LOS	B				B			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.1	42.0		23.0	14.0	44.1		23.0				
Change Period (Y+Rc), s	7.0	7.0		7.0	7.0	7.0		7.0				
Max Green Setting (Gmax), s	10.0	35.0		16.0	10.0	35.0		16.0				
Max Q Clear Time (g_c+l1), s	8.9	0.0		4.1	2.0	0.0		18.0				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			20.3									
HCM 6th LOS			C									
Notes												
User approved pedestrian interval to be less than phase max green.												

	↗	→	↘	↙	←	↖	↑	↗	↘	↓	↙	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑		↑	↑		↑	↑	↑	↑	↑	
Traffic Volume (vph)	1	472	50	301	192	5	28	2	412	6	7	1
Future Volume (vph)	1	472	50	301	192	5	28	2	412	6	7	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Grade (%)		0%			2%			2%			4%	
Storage Length (ft)	185		0	245		0	0		0	105		0
Storage Lanes	1		0	1		0	0		1	1		0
Taper Length (ft)	75			120			25			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t		0.986			0.996				0.850		0.981	
Flt Protected	0.950			0.950				0.955		0.950		
Satd. Flow (prot)	902	1776	0	1670	1730	0	0	1732	1508	1710	1766	0
Flt Permitted	0.629			0.280				0.734		0.737		
Satd. Flow (perm)	598	1776	0	492	1730	0	0	1331	1508	1327	1766	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			2				243		1	
Link Speed (mph)		50			50			25			25	
Link Distance (ft)		442			881			789			832	
Travel Time (s)		6.0			12.0			21.5			22.7	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	100%	5%	10%	7%	8%	20%	4%	0%	6%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	544	0	314	205	0	0	31	429	6	8	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA	
Protected Phases	5	2		1	6			8	1		4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	35.0		7.0	35.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	14.0	42.0		14.0	42.0		14.0	14.0	14.0	14.0	14.0	
Total Split (s)	17.0	42.0		17.0	42.0		23.0	23.0	17.0	23.0	23.0	
Total Split (%)	20.7%	51.2%		20.7%	51.2%		28.0%	28.0%	20.7%	28.0%	28.0%	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Lead/Lag	Lead	Lag		Lead	Lag				Lead			
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			
Recall Mode	None	Max		None	Max		None	None	None	None	None	
Act Effect Green (s)	42.1	35.1		51.1	49.2			12.6	29.4	12.6	12.6	
Actuated g/C Ratio	0.54	0.45		0.65	0.63		0.16	0.37	0.16	0.16		
v/c Ratio	0.00	0.68		0.68	0.19		0.15	0.60	0.03	0.03		
Control Delay	6.0	23.2		15.4	8.6		29.4	11.8	27.3	25.8		
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0		
Total Delay	6.0	23.2		15.4	8.6		29.4	11.8	27.3	25.8		
LOS	A	C		B	A			C	B	C	C	
Approach Delay		23.1			12.7			13.0			26.4	
Approach LOS		C			B			B			C	

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Future (without NARTP) - AM
20: English Creek Avenue (CR 603) & Delilah Road (CR 646)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	0	210		60	36			13	64	3	3	
Queue Length 95th (ft)	2	339		#120	105			37	154	13	14	
Internal Link Dist (ft)		362			801			709			752	
Turn Bay Length (ft)	185			245						105		
Base Capacity (vph)	382	798		470	1084			272	694	271	361	
Starvation Cap Reductn	0	0		0	0			0	0	0	0	
Spillback Cap Reductn	0	0		0	0			0	0	0	0	
Storage Cap Reductn	0	0		0	0			0	0	0	0	
Reduced v/c Ratio	0.00	0.68		0.67	0.19			0.11	0.62	0.02	0.02	

Intersection Summary

Area Type: Other

Cycle Length: 82

Actuated Cycle Length: 78.5

Natural Cycle: 70

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.68

Intersection Signal Delay: 16.6

Intersection LOS: B

Intersection Capacity Utilization 78.0%

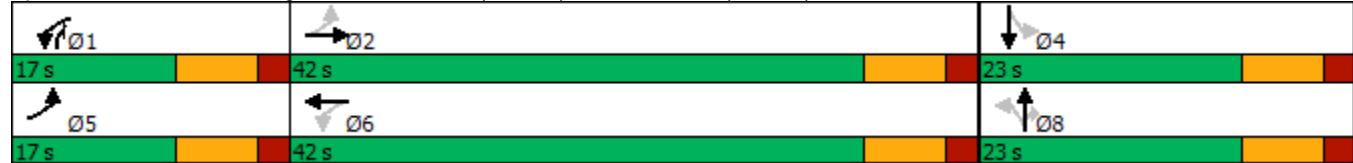
ICU Level of Service D

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

Splits and Phases: 20: English Creek Avenue (CR 603) & Delilah Road (CR 646)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↓		↑	↓			↑	↓	↑	↓	
Traffic Volume (veh/h)	1	472	50	301	192	5	28	2	412	6	7	1
Future Volume (veh/h)	1	472	50	301	192	5	28	2	412	6	7	1
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	418	1826	1752	1773	1758	1580	1817	1876	1788	1806	1806	1806
Adj Flow Rate, veh/h	1	492	52	314	200	5	29	2	429	6	7	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	100	5	10	7	8	20	4	0	6	0	0	0
Cap, veh/h	225	693	73	439	791	20	342	21	480	250	302	43
Arrive On Green	0.09	0.43	0.43	0.12	0.46	0.46	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	398	1623	172	1688	1708	43	1317	107	1515	924	1545	221
Grp Volume(v), veh/h	1	0	544	314	0	205	31	0	429	6	0	8
Grp Sat Flow(s), veh/h/ln	398	0	1795	1688	0	1750	1424	0	1515	924	0	1766
Q Serve(g_s), s	0.1	0.0	20.4	8.5	0.0	5.8	1.3	0.0	16.0	0.4	0.0	0.3
Cycle Q Clear(g_c), s	0.1	0.0	20.4	8.5	0.0	5.8	1.6	0.0	16.0	2.0	0.0	0.3
Prop In Lane	1.00		0.10	1.00		0.02	0.94		1.00	1.00		0.13
Lane Grp Cap(c), veh/h	225	0	766	439	0	811	363	0	480	250	0	345
V/C Ratio(X)	0.00	0.00	0.71	0.72	0.00	0.25	0.09	0.00	0.89	0.02	0.00	0.02
Avail Cap(c_a), veh/h	240	0	766	439	0	811	363	0	480	250	0	345
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.8	0.0	19.3	14.4	0.0	13.4	27.2	0.0	26.7	28.0	0.0	26.7
Incr Delay (d2), s/veh	0.0	0.0	5.5	5.5	0.0	0.7	0.1	0.0	18.8	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	0.0	0.0	13.2	5.7	0.0	3.8	0.9	0.0	15.5	0.2	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	9.8	0.0	24.8	19.9	0.0	14.1	27.3	0.0	45.4	28.1	0.0	26.7
LnGrp LOS	A	A	C	B	A	B	C	A	D	C	A	C
Approach Vol, veh/h	545				519			460			14	
Approach Delay, s/veh	24.8				17.6			44.2			27.3	
Approach LOS	C				B			D			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.0	42.0		23.0	14.0	45.0		23.0				
Change Period (Y+Rc), s	7.0	7.0		7.0	7.0	7.0		7.0				
Max Green Setting (Gmax), s	10.0	35.0		16.0	10.0	35.0		16.0				
Max Q Clear Time (g_c+l1), s	10.5	0.0		4.0	2.1	0.0		18.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			28.2									
HCM 6th LOS			C									
Notes												
User approved pedestrian interval to be less than phase max green.												

	↑	→	↓	↗	↖	↙	↖	↗	↑	↗	↖	↓	↗
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	↑	↑		↑	↑		↑	↑	↑	↑	↑		
Traffic Volume (vph)	0	382	50	446	310	3	49	14	434	3	4	0	
Future Volume (vph)	0	382	50	446	310	3	49	14	434	3	4	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11	
Grade (%)		0%			2%			2%			4%		
Storage Length (ft)	185		0	245		0	0		0	105		0	
Storage Lanes	1		0	1		0	0		1	1		0	
Taper Length (ft)	75			120			25			50			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Ped Bike Factor		1.00		1.00									
Fr _t		0.983			0.999				0.850				
Flt Protected				0.950				0.962		0.950			
Satd. Flow (prot)	1900	1772	0	1752	1861	0	0	1810	1583	1710	1800	0	
Flt Permitted				0.342				0.771		0.715			
Satd. Flow (perm)	1900	1772	0	630	1861	0	0	1450	1583	1287	1800	0	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)		10			1				328				
Link Speed (mph)		50			50			25			25		
Link Distance (ft)		442			881			789			832		
Travel Time (s)		6.0			12.0			21.5			22.7		
Confl. Peds. (#/hr)		3	3										
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	
Heavy Vehicles (%)	0%	5%	6%	2%	1%	0%	0%	0%	1%	0%	0%	0%	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	441	0	455	319	0	0	64	443	3	4	0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA		
Protected Phases	5	2		1	6			8	1		4		
Permitted Phases	2			6			8		8	4			
Detector Phase	5	2		1	6		8	8	8	4	4		
Switch Phase													
Minimum Initial (s)	7.0	35.0		7.0	35.0		7.0	7.0	7.0	7.0	7.0		
Minimum Split (s)	14.0	42.0		14.0	42.0		14.0	14.0	14.0	14.0	14.0		
Total Split (s)	17.0	42.0		17.0	42.0		23.0	23.0	17.0	23.0	23.0		
Total Split (%)	20.7%	51.2%		20.7%	51.2%		28.0%	28.0%	20.7%	28.0%	28.0%		
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0		
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0		
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0		
Lead/Lag	Lead	Lag		Lead	Lag				Lead				
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes				
Recall Mode	None	Max		None	Max		None	None	None	None	None		
Act Effct Green (s)		35.1		52.1	52.1			11.2	28.2	11.2	11.2		
Actuated g/C Ratio		0.45		0.67	0.67			0.14	0.36	0.14	0.14		
v/c Ratio		0.55		0.80	0.25			0.31	0.56	0.02	0.02		
Control Delay		18.9		20.3	6.1			33.0	8.1	27.3	27.2		
Queue Delay		0.0		0.0	0.0			0.0	0.0	0.0	0.0		
Total Delay		18.9		20.3	6.1			33.0	8.1	27.3	27.2		
LOS		B		C	A			C	A	C	C		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		18.9			14.5			11.3			27.3	
Approach LOS		B			B			B			C	
Queue Length 50th (ft)	142		80	50			28	37	1	2		
Queue Length 95th (ft)	256		#217	103			63	112	8	10		
Internal Link Dist (ft)	362			801			709			752		
Turn Bay Length (ft)				245						105		
Base Capacity (vph)	809		570	1254			300	760	267	373		
Starvation Cap Reductn	0		0	0			0	0	0	0		
Spillback Cap Reductn	0		0	0			0	0	0	0		
Storage Cap Reductn	0		0	0			0	0	0	0		
Reduced v/c Ratio	0.55		0.80	0.25			0.21	0.58	0.01	0.01		

Intersection Summary

Area Type: Other

Cycle Length: 82

Actuated Cycle Length: 77.3

Natural Cycle: 70

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 14.7

Intersection LOS: B

Intersection Capacity Utilization 81.5%

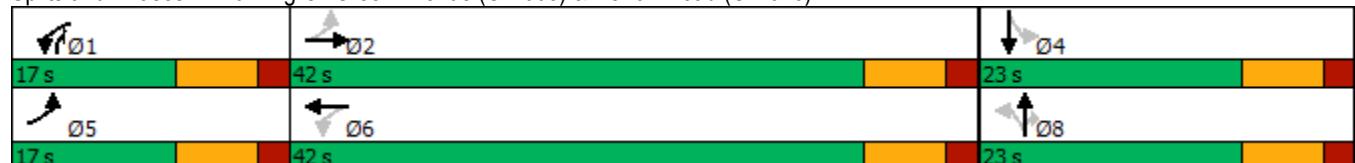
ICU Level of Service D

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

Splits and Phases: 20: English Creek Avenue (CR 603) & Delilah Road (CR 646)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↓		↑	↓			↑	↓	↑	↓	
Traffic Volume (veh/h)	0	382	50	446	310	3	49	14	434	3	4	0
Future Volume (veh/h)	0	382	50	446	310	3	49	14	434	3	4	0
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1826	1811	1847	1862	1876	1876	1876	1862	1806	1806	1806
Adj Flow Rate, veh/h	0	390	51	455	316	3	50	14	443	3	4	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	5	6	2	1	0	0	0	1	0	0	0
Cap, veh/h	550	675	88	526	1167	11	298	74	500	233	352	0
Arrive On Green	0.00	0.43	0.43	0.12	0.63	0.63	0.20	0.20	0.20	0.20	0.20	0.00
Sat Flow, veh/h	1810	1581	207	1759	1841	17	1129	382	1578	902	1806	0
Grp Volume(v), veh/h	0	0	441	455	0	319	64	0	443	3	4	0
Grp Sat Flow(s), veh/h/ln	1810	0	1788	1759	0	1858	1510	0	1578	902	1806	0
Q Serve(g_s), s	0.0	0.0	15.4	10.0	0.0	6.2	2.2	0.0	16.0	0.2	0.1	0.0
Cycle Q Clear(g_c), s	0.0	0.0	15.4	10.0	0.0	6.2	2.8	0.0	16.0	3.0	0.1	0.0
Prop In Lane	1.00		0.12	1.00		0.01	0.78		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	550	0	763	526	0	1179	373	0	500	233	352	0
V/C Ratio(X)	0.00	0.00	0.58	0.87	0.00	0.27	0.17	0.00	0.89	0.01	0.01	0.00
Avail Cap(c_a), veh/h	768	0	763	526	0	1179	373	0	500	233	352	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	17.9	16.4	0.0	6.6	27.6	0.0	26.6	29.0	26.6	0.0
Incr Delay (d2), s/veh	0.0	0.0	3.2	14.1	0.0	0.6	0.2	0.0	17.1	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	0.0	0.0	10.1	9.6	0.0	3.5	1.9	0.0	15.6	0.1	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	21.1	30.4	0.0	7.2	27.9	0.0	43.7	29.0	26.6	0.0
LnGrp LOS	A	A	C	C	A	A	C	A	D	C	C	A
Approach Vol, veh/h	441				774			507			7	
Approach Delay, s/veh	21.1				20.9			41.7			27.6	
Approach LOS		C			C			D		C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.0	42.0		23.0	0.0	59.0		23.0				
Change Period (Y+Rc), s	7.0	7.0		7.0	7.0	7.0		7.0				
Max Green Setting (Gmax), s	10.0	35.0		16.0	10.0	35.0		16.0				
Max Q Clear Time (g_c+l1), s	12.0	0.0		5.0	0.0	0.0		18.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			27.1									
HCM 6th LOS			C									
Notes												
User approved pedestrian interval to be less than phase max green.												

	↗	→	↘	↙	←	↖	↑	↗	↘	↓	↙	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	1	1	1	1	1	1	1	1	1	1	1
Traffic Volume (vph)	1	311	53	310	242	5	35	12	408	1	6	3
Future Volume (vph)	1	311	53	310	242	5	35	12	408	1	6	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Grade (%)		0%			2%			2%			4%	
Storage Length (ft)	185		0	245		0	0		0	105		0
Storage Lanes	1		0	1		0	0		1	1		0
Taper Length (ft)	75			120			25			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor									0.98	1.00		
Frt		0.978			0.997				0.850	0.950		
Flt Protected	0.950			0.950				0.964	0.950			
Satd. Flow (prot)	1805	1822	0	1752	1857	0	0	1773	1583	1710	1710	0
Flt Permitted	0.603			0.424				0.774	0.726			
Satd. Flow (perm)	1146	1822	0	782	1857	0	0	1424	1549	1305	1710	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)	13			2				416		3		
Link Speed (mph)	50			50			25			25		
Link Distance (ft)	442			881			789			832		
Travel Time (s)	6.0			12.0			21.5			22.7		
Confl. Peds. (#/hr)								1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	2%	2%	2%	1%	0%	0%	9%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	371	0	316	252	0	0	48	416	1	9	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm		NA
Protected Phases	5	2		1	6			8	1		4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	35.0		7.0	35.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	14.0	42.0		14.0	42.0		14.0	14.0	14.0	14.0	14.0	
Total Split (s)	17.0	42.0		17.0	42.0		23.0	23.0	17.0	23.0	23.0	
Total Split (%)	20.7%	51.2%		20.7%	51.2%		28.0%	28.0%	20.7%	28.0%	28.0%	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Lead/Lag	Lead	Lag		Lead	Lag				Lead			
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			
Recall Mode	None	Max		None	Max		None	None	None	None	None	
Act Effct Green (s)	42.1	35.1		50.7	48.9			9.3	18.7	9.3	9.3	
Actuated g/C Ratio	0.56	0.47		0.68	0.65		0.12	0.25	0.12	0.12		
v/c Ratio	0.00	0.43		0.48	0.21		0.27	0.59	0.01	0.04		
Control Delay	5.0	15.4		7.7	7.5		33.5	5.8	28.0	24.4		
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0		
Total Delay	5.0	15.4		7.7	7.5		33.5	5.8	28.0	24.4		
LOS	A	B		A	A			C	A	C	C	

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Future (without NARTP) - SAT
20: English Creek Avenue (CR 603) & Delilah Road (CR 646)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		15.4			7.7			8.6			24.8	
Approach LOS			B			A			A			C
Queue Length 50th (ft)	0	103		43	32			21	0	0	3	
Queue Length 95th (ft)	2	201		102	125			51	53	5	15	
Internal Link Dist (ft)		362			801			709			752	
Turn Bay Length (ft)	185			245						105		
Base Capacity (vph)	779	861		660	1214			305	790	279	368	
Starvation Cap Reductn	0	0		0	0			0	0	0	0	
Spillback Cap Reductn	0	0		0	0			0	0	0	0	
Storage Cap Reductn	0	0		0	0			0	0	0	0	
Reduced v/c Ratio	0.00	0.43		0.48	0.21			0.16	0.53	0.00	0.02	

Intersection Summary

Area Type: Other

Cycle Length: 82

Actuated Cycle Length: 74.8

Natural Cycle: 70

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.59

Intersection Signal Delay: 10.1

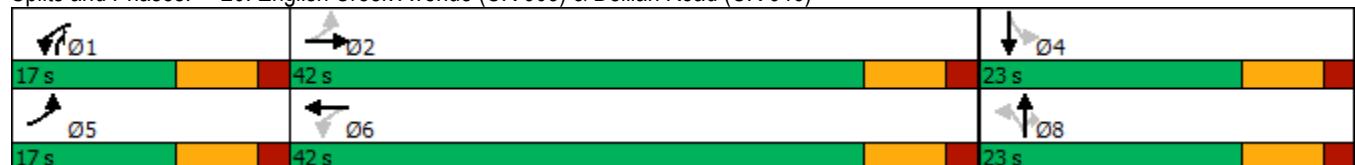
Intersection LOS: B

Intersection Capacity Utilization 77.9%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 20: English Creek Avenue (CR 603) & Delilah Road (CR 646)



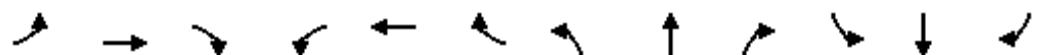
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↓		↑	↓			↑	↓	↑	↓	
Traffic Volume (veh/h)	1	311	53	310	242	5	35	12	408	1	6	3
Future Volume (veh/h)	1	311	53	310	242	5	35	12	408	1	6	3
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1870	1847	1862	1876	1876	1743	1862	1806	1806	1806
Adj Flow Rate, veh/h	1	317	54	316	247	5	36	12	416	1	6	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	2	1	0	0	9	1	0	0	0
Cap, veh/h	677	665	113	582	843	17	272	79	499	244	221	111
Arrive On Green	0.09	0.43	0.43	0.12	0.46	0.46	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1810	1557	265	1759	1818	37	1002	407	1574	925	1135	567
Grp Volume(v), veh/h	1	0	371	316	0	252	48	0	416	1	0	9
Grp Sat Flow(s), veh/h/ln	1810	0	1823	1759	0	1855	1409	0	1574	925	0	1702
Q Serve(g_s), s	0.0	0.0	12.0	8.1	0.0	6.9	1.5	0.0	16.0	0.1	0.0	0.4
Cycle Q Clear(g_c), s	0.0	0.0	12.0	8.1	0.0	6.9	2.2	0.0	16.0	2.3	0.0	0.4
Prop In Lane	1.00		0.15	1.00		0.02	0.75		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	677	0	778	582	0	860	352	0	499	244	0	332
V/C Ratio(X)	0.00	0.00	0.48	0.54	0.00	0.29	0.14	0.00	0.83	0.00	0.00	0.03
Avail Cap(c_a), veh/h	743	0	778	582	0	860	352	0	499	244	0	332
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.9	0.0	16.9	11.5	0.0	13.7	27.4	0.0	26.0	28.4	0.0	26.7
Incr Delay (d2), s/veh	0.0	0.0	2.1	1.0	0.0	0.9	0.2	0.0	11.5	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	0.0	0.0	8.3	4.8	0.0	4.8	1.4	0.0	13.8	0.0	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	9.9	0.0	19.0	12.5	0.0	14.5	27.6	0.0	37.5	28.4	0.0	26.7
LnGrp LOS	A	A	B	B	A	B	C	A	D	C	A	C
Approach Vol, veh/h	372				568			464			10	
Approach Delay, s/veh	19.0				13.4			36.5			26.9	
Approach LOS	B				B			D			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.0	42.0		23.0	14.0	45.0		23.0				
Change Period (Y+Rc), s	7.0	7.0		7.0	7.0	7.0		7.0				
Max Green Setting (Gmax), s	10.0	35.0		16.0	10.0	35.0		16.0				
Max Q Clear Time (g_c+l1), s	10.1	0.0		4.3	2.0	0.0		18.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			22.5									
HCM 6th LOS			C									
Notes												
User approved pedestrian interval to be less than phase max green.												

	↗	→	↘	↙	←	↖	↑	↗	↘	↓	↙	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑		↑	↑		↑	↑	↑	↑	↑	
Traffic Volume (vph)	1	472	50	301	192	5	28	2	412	6	7	1
Future Volume (vph)	1	472	50	301	192	5	28	2	412	6	7	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Grade (%)		0%			2%			2%			4%	
Storage Length (ft)	185		0	245		0	0		0	105		0
Storage Lanes	1		0	1		0	0		1	1		0
Taper Length (ft)	75			120			25			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t		0.986			0.996				0.850		0.981	
Flt Protected	0.950			0.950				0.955		0.950		
Satd. Flow (prot)	902	1776	0	1670	1730	0	0	1732	1508	1710	1766	0
Flt Permitted	0.629			0.275				0.734		0.737		
Satd. Flow (perm)	598	1776	0	483	1730	0	0	1331	1508	1327	1766	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			2				220		1	
Link Speed (mph)		50			50			25			25	
Link Distance (ft)		442			881			789			832	
Travel Time (s)		6.0			12.0			21.5			22.7	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	100%	5%	10%	7%	8%	20%	4%	0%	6%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	544	0	314	205	0	0	31	429	6	8	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA	
Protected Phases	5	2		1	6			8	1		4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	31.0		7.0	31.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	14.0	38.0		14.0	38.0		14.0	14.0	14.0	14.0	14.0	
Total Split (s)	17.0	40.0		17.0	40.0		25.0	25.0	17.0	25.0	25.0	
Total Split (%)	20.7%	48.8%		20.7%	48.8%		30.5%	30.5%	20.7%	30.5%	30.5%	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Lead/Lag	Lead	Lag		Lead	Lag				Lead			
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			
Recall Mode	None	Max		None	Max		None	None	None	None	None	
Act Effect Green (s)	42.2	35.1		51.2	49.3			13.8	30.6	13.8	13.8	
Actuated g/C Ratio	0.53	0.44		0.64	0.62		0.17	0.38	0.17	0.17		
v/c Ratio	0.00	0.69		0.69	0.19		0.14	0.60	0.03	0.03		
Control Delay	7.0	24.4		16.9	9.2		28.6	12.8	26.7	25.1		
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0		
Total Delay	7.0	24.4		16.9	9.2		28.6	12.8	26.7	25.1		
LOS	A	C		B	A			C	B	C	C	
Approach Delay		24.3			13.9			13.8			25.8	
Approach LOS		C			B			B			C	

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Future (without NARTP) with Improvements - AM

20: English Creek Avenue (CR 603) & Delilah Road (CR 646)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	0	215		62	37			13	75	3	3	
Queue Length 95th (ft)	2	354		#138	110			36	165	12	14	
Internal Link Dist (ft)		362			801			709			752	
Turn Bay Length (ft)	185			245						105		
Base Capacity (vph)	376	786		459	1069			301	698	300	400	
Starvation Cap Reductn	0	0		0	0			0	0	0	0	
Spillback Cap Reductn	0	0		0	0			0	0	0	0	
Storage Cap Reductn	0	0		0	0			0	0	0	0	
Reduced v/c Ratio	0.00	0.69		0.68	0.19			0.10	0.61	0.02	0.02	

Intersection Summary

Area Type: Other

Cycle Length: 82

Actuated Cycle Length: 79.8

Natural Cycle: 70

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 17.7

Intersection LOS: B

Intersection Capacity Utilization 76.7%

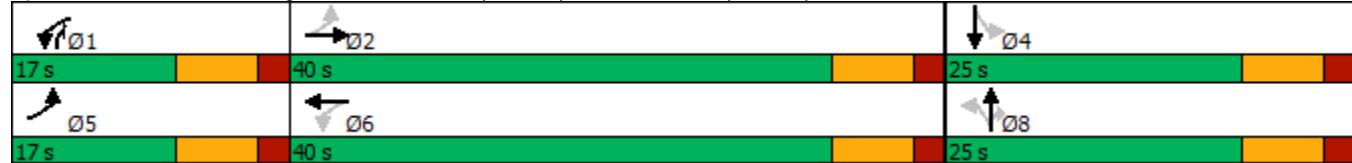
ICU Level of Service D

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

Splits and Phases: 20: English Creek Avenue (CR 603) & Delilah Road (CR 646)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↓		↑	↓			↑	↓	↑	↓	
Traffic Volume (veh/h)	1	472	50	301	192	5	28	2	412	6	7	1
Future Volume (veh/h)	1	472	50	301	192	5	28	2	412	6	7	1
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	418	1826	1752	1773	1758	1580	1817	1876	1788	1806	1806	1806
Adj Flow Rate, veh/h	1	492	52	314	200	5	29	2	429	6	7	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	100	5	10	7	8	20	4	0	6	0	0	0
Cap, veh/h	218	653	69	410	750	19	375	23	517	273	339	48
Arrive On Green	0.09	0.40	0.40	0.12	0.44	0.44	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	398	1623	172	1688	1708	43	1321	105	1515	924	1545	221
Grp Volume(v), veh/h	1	0	544	314	0	205	31	0	429	6	0	8
Grp Sat Flow(s), veh/h/ln	398	0	1795	1688	0	1750	1426	0	1515	924	0	1766
Q Serve(g_s), s	0.1	0.0	21.3	8.9	0.0	6.1	1.2	0.0	18.0	0.4	0.0	0.3
Cycle Q Clear(g_c), s	0.1	0.0	21.3	8.9	0.0	6.1	1.5	0.0	18.0	2.0	0.0	0.3
Prop In Lane	1.00		0.10	1.00		0.02	0.94		1.00	1.00		0.13
Lane Grp Cap(c), veh/h	218	0	722	410	0	768	398	0	517	273	0	388
V/C Ratio(X)	0.00	0.00	0.75	0.77	0.00	0.27	0.08	0.00	0.83	0.02	0.00	0.02
Avail Cap(c_a), veh/h	232	0	722	410	0	768	398	0	517	273	0	388
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.8	0.0	21.0	15.9	0.0	14.6	25.6	0.0	24.8	26.4	0.0	25.1
Incr Delay (d2), s/veh	0.0	0.0	7.1	8.4	0.0	0.9	0.1	0.0	10.9	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	0.0	0.0	14.0	6.6	0.0	4.1	0.9	0.0	13.8	0.2	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	10.9	0.0	28.1	24.2	0.0	15.5	25.7	0.0	35.7	26.4	0.0	25.1
LnGrp LOS	B	A	C	C	A	B	C	A	D	C	A	C
Approach Vol, veh/h		545			519			460			14	
Approach Delay, s/veh		28.1			20.8			35.0			25.7	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.0	40.0		25.0	14.0	43.0		25.0				
Change Period (Y+Rc), s	7.0	7.0		7.0	7.0	7.0		7.0				
Max Green Setting (Gmax), s	10.0	33.0		18.0	10.0	33.0		18.0				
Max Q Clear Time (g_c+l1), s	10.9	0.0		4.0	2.1	0.0		20.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			27.7									
HCM 6th LOS			C									
Notes												
User approved pedestrian interval to be less than phase max green.												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↓		↑	↓		↑	↓		↑	↓	
Traffic Volume (vph)	0	382	50	446	310	3	49	14	434	3	4	0
Future Volume (vph)	0	382	50	446	310	3	49	14	434	3	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Grade (%)		0%			2%			2%			4%	
Storage Length (ft)	185		0	245		0	0		0	105		0
Storage Lanes	1		0	1		0	0		1	1		0
Taper Length (ft)	75			120			25			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00								
Fr _t		0.983			0.999				0.850			
Flt Protected				0.950				0.962		0.950		
Satd. Flow (prot)	1900	1772	0	1752	1861	0	0	1810	1583	1710	1800	0
Flt Permitted				0.333				0.771		0.715		
Satd. Flow (perm)	1900	1772	0	613	1861	0	0	1450	1583	1287	1800	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			1				305			
Link Speed (mph)		50			50			25			25	
Link Distance (ft)		442			881			789			832	
Travel Time (s)		6.0			12.0			21.5			22.7	
Confl. Peds. (#/hr)		3	3									
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	5%	6%	2%	1%	0%	0%	0%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	441	0	455	319	0	0	64	443	3	4	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA	
Protected Phases	5	2		1	6			8	1		4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	33.0		7.0	33.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	14.0	40.0		14.0	40.0		14.0	14.0	14.0	14.0	14.0	
Total Split (s)	19.0	40.0		19.0	40.0		23.0	23.0	19.0	23.0	23.0	
Total Split (%)	23.2%	48.8%		23.2%	48.8%		28.0%	28.0%	23.2%	28.0%	28.0%	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Lead/Lag	Lead	Lag		Lead	Lag				Lead			
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			
Recall Mode	None	Max		None	Max		None	None	None	None	None	
Act Effct Green (s)	35.1	54.0		54.0			11.7	30.6	11.7	11.7		
Actuated g/C Ratio	0.44	0.68		0.68			0.15	0.38	0.15	0.15		
v/c Ratio	0.56	0.78		0.25			0.30	0.56	0.02	0.02		
Control Delay	20.4	18.1		6.1			33.7	8.7	28.0	28.0		
Queue Delay	0.0	0.0		0.0			0.0	0.0	0.0	0.0		
Total Delay	20.4	18.1		6.1			33.7	8.7	28.0	28.0		
LOS	C	B	A				C	A	C	C		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		20.4			13.2			11.8			28.0	
Approach LOS		C			B			B			C	
Queue Length 50th (ft)	154		84	52			29	45	1	2		
Queue Length 95th (ft)	266		#202	102			64	123	9	10		
Internal Link Dist (ft)	362			801			709			752		
Turn Bay Length (ft)				245						105		
Base Capacity (vph)	785		587	1261			291	786	259	361		
Starvation Cap Reductn	0		0	0			0	0	0	0		
Spillback Cap Reductn	0		0	0			0	0	0	0		
Storage Cap Reductn	0		0	0			0	0	0	0		
Reduced v/c Ratio	0.56		0.78	0.25			0.22	0.56	0.01	0.01		

Intersection Summary

Area Type: Other

Cycle Length: 82

Actuated Cycle Length: 79.7

Natural Cycle: 70

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 14.7

Intersection LOS: B

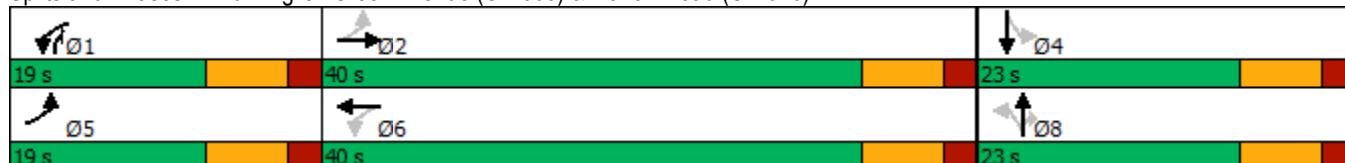
Intersection Capacity Utilization 81.5%

ICU Level of Service D

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

Splits and Phases: 20: English Creek Avenue (CR 603) & Delilah Road (CR 646)

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↓		↑	↓			↑	↓	↑	↓	
Traffic Volume (veh/h)	0	382	50	446	310	3	49	14	434	3	4	0
Future Volume (veh/h)	0	382	50	446	310	3	49	14	434	3	4	0
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00			1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1826	1811	1847	1862	1876	1876	1876	1862	1806	1806	1806
Adj Flow Rate, veh/h	0	390	51	455	316	3	50	14	443	3	4	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	5	6	2	1	0	0	0	1	0	0	0
Cap, veh/h	524	636	83	539	1167	11	298	74	539	233	352	0
Arrive On Green	0.00	0.40	0.40	0.15	0.63	0.63	0.20	0.20	0.20	0.20	0.20	0.00
Sat Flow, veh/h	1810	1581	207	1759	1841	17	1129	382	1578	902	1806	0
Grp Volume(v), veh/h	0	0	441	455	0	319	64	0	443	3	4	0
Grp Sat Flow(s), veh/h/ln	1810	0	1788	1759	0	1858	1510	0	1578	902	1806	0
Q Serve(g_s), s	0.0	0.0	16.0	12.0	0.0	6.2	2.2	0.0	16.0	0.2	0.1	0.0
Cycle Q Clear(g_c), s	0.0	0.0	16.0	12.0	0.0	6.2	2.8	0.0	16.0	3.0	0.1	0.0
Prop In Lane	1.00			0.12	1.00		0.01	0.78		1.00	1.00	0.00
Lane Grp Cap(c), veh/h	524	0	719	539	0	1179	373	0	539	233	352	0
V/C Ratio(X)	0.00	0.00	0.61	0.84	0.00	0.27	0.17	0.00	0.82	0.01	0.01	0.00
Avail Cap(c_a), veh/h	786	0	719	539	0	1179	373	0	539	233	352	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	19.4	14.2	0.0	6.6	27.6	0.0	24.7	29.0	26.6	0.0
Incr Delay (d2), s/veh	0.0	0.0	3.9	11.8	0.0	0.6	0.2	0.0	9.9	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	0.0	0.0	10.7	9.2	0.0	3.5	1.9	0.0	14.0	0.1	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	23.3	26.0	0.0	7.2	27.9	0.0	34.6	29.0	26.6	0.0
LnGrp LOS	A	A	C	C	A	A	C	A	C	C	C	A
Approach Vol, veh/h	441				774			507			7	
Approach Delay, s/veh	23.3				18.2			33.8			27.6	
Approach LOS		C			B			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.0	40.0		23.0	0.0	59.0		23.0				
Change Period (Y+Rc), s	7.0	7.0		7.0	7.0	7.0		7.0				
Max Green Setting (Gmax), s	12.0	33.0		16.0	12.0	33.0		16.0				
Max Q Clear Time (g_c+l1), s	14.0	0.0		5.0	0.0	0.0		18.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			24.1									
HCM 6th LOS			C									
Notes												
User approved pedestrian interval to be less than phase max green.												

	↑	→	↓	↗	↖	↙	↖	↗	↑	↗	↖	↓	↗
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	1	1	1	1	1	1	1	1	1	1	1	1	
Traffic Volume (vph)	1	311	53	310	242	5	35	12	408	1	6	3	
Future Volume (vph)	1	311	53	310	242	5	35	12	408	1	6	3	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11	
Grade (%)		0%			2%			2%			4%		
Storage Length (ft)	185		0	245		0	0		0	105		0	
Storage Lanes	1		0	1		0	0		1	1		0	
Taper Length (ft)	75			120			25			50			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Ped Bike Factor										0.98	1.00		
Frt		0.978			0.997				0.850		0.950		
Flt Protected	0.950			0.950				0.964		0.950			
Satd. Flow (prot)	1805	1822	0	1752	1857	0	0	1773	1583	1710	1710	0	
Flt Permitted	0.603			0.423				0.774		0.726			
Satd. Flow (perm)	1146	1822	0	780	1857	0	0	1424	1549	1305	1710	0	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)		12			1				382		3		
Link Speed (mph)	50			50			25			25			
Link Distance (ft)	442			881			789			832			
Travel Time (s)	6.0			12.0			21.5			22.7			
Confl. Peds. (#/hr)									1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	
Heavy Vehicles (%)	0%	2%	2%	2%	1%	0%	0%	9%	1%	0%	0%	0%	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	1	371	0	316	252	0	0	48	416	1	9	0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA		
Protected Phases	5	2		1	6			8	1		4		
Permitted Phases	2			6			8		8	4			
Detector Phase	5	2		1	6		8	8	8	4	4		
Switch Phase													
Minimum Initial (s)	7.0	32.0		7.0	32.0		7.0	7.0	7.0	7.0	7.0		
Minimum Split (s)	14.0	39.0		14.0	39.0		14.0	14.0	14.0	14.0	14.0		
Total Split (s)	17.0	39.0		17.0	39.0		26.0	26.0	17.0	26.0	26.0		
Total Split (%)	20.7%	47.6%		20.7%	47.6%		31.7%	31.7%	20.7%	31.7%	31.7%		
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0		
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0		
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0		
Lead/Lag	Lead	Lag		Lead	Lag				Lead				
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes				
Recall Mode	None	Max		None	Max		None	None	None	None	None		
Act Effct Green (s)	42.1	35.1		50.8	49.0			9.8	19.2	9.8	9.8		
Actuated g/C Ratio	0.56	0.47		0.67	0.65		0.13	0.25	0.13	0.13			
v/c Ratio	0.00	0.43		0.49	0.21		0.26	0.61	0.01	0.04			
Control Delay	6.0	15.9		8.2	7.9		32.7	7.0	27.0	24.0			
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0			
Total Delay	6.0	15.9		8.2	7.9		32.7	7.0	27.0	24.0			
LOS	A	B		A	A			C	A	C	C		

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Future (without NARTP) with Improvements - SAT

20: English Creek Avenue (CR 603) & Delilah Road (CR 646)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		15.9			8.1			9.6			24.3	
Approach LOS			B			A			A			C
Queue Length 50th (ft)	0	103		43	33			21	10	0	3	
Queue Length 95th (ft)	2	209		109	131			50	65	5	15	
Internal Link Dist (ft)		362			801			709			752	
Turn Bay Length (ft)	185			245						105		
Base Capacity (vph)	773	854		654	1207			360	777	329	434	
Starvation Cap Reductn	0	0		0	0			0	0	0	0	
Spillback Cap Reductn	0	0		0	0			0	0	0	0	
Storage Cap Reductn	0	0		0	0			0	0	0	0	
Reduced v/c Ratio	0.00	0.43		0.48	0.21			0.13	0.54	0.00	0.02	

Intersection Summary

Area Type: Other

Cycle Length: 82

Actuated Cycle Length: 75.4

Natural Cycle: 70

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 10.8

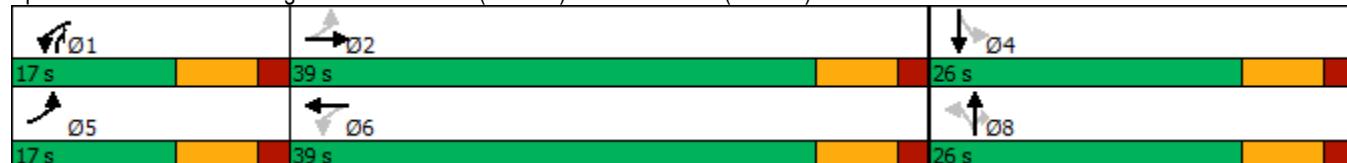
Intersection LOS: B

Intersection Capacity Utilization 75.4%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 20: English Creek Avenue (CR 603) & Delilah Road (CR 646)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↓		↑	↓			↑	↓	↑	↓	
Traffic Volume (veh/h)	1	311	53	310	242	5	35	12	408	1	6	3
Future Volume (veh/h)	1	311	53	310	242	5	35	12	408	1	6	3
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1870	1847	1862	1876	1876	1743	1862	1806	1806	1806
Adj Flow Rate, veh/h	1	317	54	316	247	5	36	12	416	1	6	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	2	1	0	0	9	1	0	0	0
Cap, veh/h	628	608	104	536	776	16	311	92	557	279	263	131
Arrive On Green	0.09	0.39	0.39	0.12	0.43	0.43	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1810	1557	265	1759	1818	37	1009	398	1574	925	1135	567
Grp Volume(v), veh/h	1	0	371	316	0	252	48	0	416	1	0	9
Grp Sat Flow(s), veh/h/ln	1810	0	1823	1759	0	1855	1407	0	1574	925	0	1702
Q Serve(g_s), s	0.0	0.0	12.8	8.8	0.0	7.4	1.4	0.0	19.0	0.1	0.0	0.3
Cycle Q Clear(g_c), s	0.0	0.0	12.8	8.8	0.0	7.4	2.1	0.0	19.0	2.1	0.0	0.3
Prop In Lane	1.00		0.15	1.00		0.02	0.75		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	628	0	711	536	0	792	403	0	557	279	0	394
V/C Ratio(X)	0.00	0.00	0.52	0.59	0.00	0.32	0.12	0.00	0.75	0.00	0.00	0.02
Avail Cap(c_a), veh/h	694	0	711	536	0	792	403	0	557	279	0	394
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.4	0.0	19.1	13.3	0.0	15.6	25.0	0.0	23.3	25.8	0.0	24.3
Incr Delay (d2), s/veh	0.0	0.0	2.7	1.7	0.0	1.1	0.1	0.0	5.5	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	0.0	0.0	9.0	5.5	0.0	5.3	1.3	0.0	12.2	0.0	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.4	0.0	21.9	15.0	0.0	16.6	25.1	0.0	28.8	25.9	0.0	24.4
LnGrp LOS	B	A	C	B	A	B	C	A	C	C	A	C
Approach Vol, veh/h		372			568			464			10	
Approach Delay, s/veh		21.8			15.8			28.4			24.5	
Approach LOS		C			B			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.0	39.0		26.0	14.0	42.0		26.0				
Change Period (Y+Rc), s	7.0	7.0		7.0	7.0	7.0		7.0				
Max Green Setting (Gmax), s	10.0	32.0		19.0	10.0	32.0		19.0				
Max Q Clear Time (g_c+l1), s	10.8	0.0		4.1	2.0	0.0		21.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			21.6									
HCM 6th LOS			C									
Notes												
User approved pedestrian interval to be less than phase max green.												

	↗	→	↘	↙	←	↖	↑	↗	↘	↓	↙	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑		↑	↑		↑	↑	↑	↑	↑	
Traffic Volume (vph)	1	570	50	318	201	5	28	2	510	5	7	1
Future Volume (vph)	1	570	50	318	201	5	28	2	510	5	7	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Grade (%)		0%			2%			2%			4%	
Storage Length (ft)	185		0	245		0	0		0	105		0
Storage Lanes	1		0	1		0	0		1	1		0
Taper Length (ft)	75			120			25			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t		0.988			0.996				0.850		0.981	
Flt Protected	0.950			0.950				0.955		0.950		
Satd. Flow (prot)	902	1781	0	1670	1730	0	0	1732	1508	1710	1766	0
Flt Permitted	0.624			0.191				0.746		0.737		
Satd. Flow (perm)	593	1781	0	336	1730	0	0	1353	1508	1327	1766	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			2				176		1	
Link Speed (mph)	50			50			25			25		
Link Distance (ft)	442			881			789			832		
Travel Time (s)	6.0			12.0			21.5			22.7		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	100%	5%	10%	7%	8%	20%	4%	0%	6%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	646	0	331	214	0	0	31	531	5	8	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA	
Protected Phases	5	2		1	6			8	1		4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	35.0		7.0	35.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	14.0	42.0		14.0	42.0		14.0	14.0	14.0	14.0	14.0	
Total Split (s)	17.0	42.0		17.0	42.0		23.0	23.0	17.0	23.0	23.0	
Total Split (%)	20.7%	51.2%		20.7%	51.2%		28.0%	28.0%	20.7%	28.0%	28.0%	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Lead/Lag	Lead	Lag		Lead	Lag				Lead			
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			
Recall Mode	None	Max		None	Max		None	None	None	None	None	
Act Effect Green (s)	42.0	35.0		51.2	49.2			15.3	32.3	15.3	15.3	
Actuated g/C Ratio	0.52	0.43		0.63	0.61		0.19	0.40	0.19	0.19		
v/c Ratio	0.00	0.84		0.88	0.20		0.12	0.75	0.02	0.02		
Control Delay	6.0	32.6		37.9	9.2		28.7	21.7	27.0	25.6		
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0		
Total Delay	6.0	32.6		37.9	9.2		28.7	21.7	27.0	25.6		
LOS	A	C		D	A			C	C	C	C	
Approach Delay		32.6			26.6			22.1		26.2		
Approach LOS		C			C			C		C		

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Future (with NARTP) - AM
20: English Creek Avenue (CR 603) & Delilah Road (CR 646)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	0	285		69	40			13	153	2	3	
Queue Length 95th (ft)	2	#486		#236	109			37	282	11	14	
Internal Link Dist (ft)		362			801			709			752	
Turn Bay Length (ft)	185			245						105		
Base Capacity (vph)	366	770		375	1047			266	693	260	348	
Starvation Cap Reductn	0	0		0	0			0	0	0	0	
Spillback Cap Reductn	0	0		0	0			0	0	0	0	
Storage Cap Reductn	0	0		0	0			0	0	0	0	
Reduced v/c Ratio	0.00	0.84		0.88	0.20			0.12	0.77	0.02	0.02	

Intersection Summary

Area Type: Other

Cycle Length: 82

Actuated Cycle Length: 81.3

Natural Cycle: 70

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 27.4

Intersection LOS: C

Intersection Capacity Utilization 87.9%

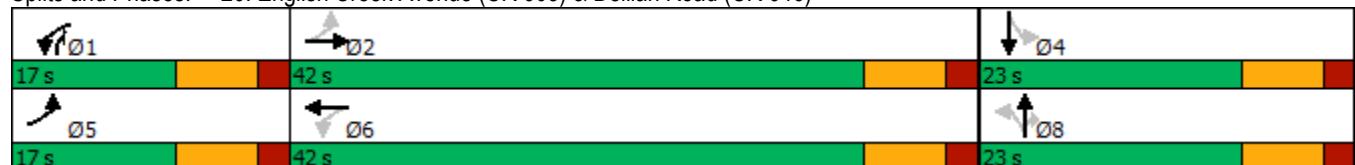
ICU Level of Service E

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

Splits and Phases: 20: English Creek Avenue (CR 603) & Delilah Road (CR 646)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↓		↑	↓			↑	↓	↑	↓	
Traffic Volume (veh/h)	1	570	50	318	201	5	28	2	510	5	7	1
Future Volume (veh/h)	1	570	50	318	201	5	28	2	510	5	7	1
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	418	1826	1752	1773	1758	1580	1817	1876	1788	1806	1806	1806
Adj Flow Rate, veh/h	1	594	52	331	209	5	29	2	531	5	7	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	100	5	10	7	8	20	4	0	6	0	0	0
Cap, veh/h	223	706	62	372	792	19	342	21	480	236	302	43
Arrive On Green	0.09	0.43	0.43	0.12	0.46	0.46	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	398	1655	145	1688	1710	41	1317	107	1515	841	1545	221
Grp Volume(v), veh/h	1	0	646	331	0	214	31	0	531	5	0	8
Grp Sat Flow(s), veh/h/ln	398	0	1800	1688	0	1751	1424	0	1515	841	0	1766
Q Serve(g_s), s	0.1	0.0	26.3	9.0	0.0	6.1	1.3	0.0	16.0	0.4	0.0	0.3
Cycle Q Clear(g_c), s	0.1	0.0	26.3	9.0	0.0	6.1	1.6	0.0	16.0	2.0	0.0	0.3
Prop In Lane	1.00		0.08	1.00		0.02	0.94		1.00	1.00		0.13
Lane Grp Cap(c), veh/h	223	0	768	372	0	811	363	0	480	236	0	345
V/C Ratio(X)	0.00	0.00	0.84	0.89	0.00	0.26	0.09	0.00	1.11	0.02	0.00	0.02
Avail Cap(c_a), veh/h	238	0	768	372	0	811	363	0	480	236	0	345
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.8	0.0	21.0	16.8	0.0	13.4	27.2	0.0	28.0	28.0	0.0	26.7
Incr Delay (d2), s/veh	0.0	0.0	10.8	22.1	0.0	0.8	0.1	0.0	73.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	0.0	0.0	17.2	8.6	0.0	4.0	0.9	0.0	27.3	0.1	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	9.8	0.0	31.8	38.9	0.0	14.2	27.3	0.0	101.0	28.1	0.0	26.7
LnGrp LOS	A	A	C	D	A	B	C	A	F	C	A	C
Approach Vol, veh/h		647			545			562			13	
Approach Delay, s/veh		31.7			29.2			97.0			27.2	
Approach LOS		C			C			F			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.0	42.0		23.0	14.0	45.0		23.0				
Change Period (Y+Rc), s	7.0	7.0		7.0	7.0	7.0		7.0				
Max Green Setting (Gmax), s	10.0	35.0		16.0	10.0	35.0		16.0				
Max Q Clear Time (g_c+l1), s	11.0	0.0		4.0	2.1	0.0		18.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			51.7									
HCM 6th LOS			D									
Notes												
User approved pedestrian interval to be less than phase max green.												

	↗	→	↘	↙	←	↖	↑	↗	↘	↓	↙	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑		↑	↑		↑	↑	↑	↑	↑	
Traffic Volume (vph)	0	396	50	545	359	3	49	14	448	3	4	0
Future Volume (vph)	0	396	50	545	359	3	49	14	448	3	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Grade (%)		0%			2%			2%			4%	
Storage Length (ft)	185		0	245		0	0		0	105		0
Storage Lanes	1		0	1		0	0		1	1		0
Taper Length (ft)	75			120			25			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00								
Fr _t		0.983			0.999				0.850			
Flt Protected				0.950				0.962		0.950		
Satd. Flow (prot)	1900	1772	0	1752	1861	0	0	1810	1583	1710	1800	0
Flt Permitted				0.328				0.771		0.715		
Satd. Flow (perm)	1900	1772	0	604	1861	0	0	1450	1583	1287	1800	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			1				314			
Link Speed (mph)		50			50			25		25		
Link Distance (ft)		442			881			789		832		
Travel Time (s)		6.0			12.0			21.5		22.7		
Confl. Peds. (#/hr)		3	3									
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	5%	6%	2%	1%	0%	0%	0%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	455	0	556	369	0	0	64	457	3	4	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA	
Protected Phases	5	2		1	6			8	1		4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	35.0		7.0	35.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	14.0	42.0		14.0	42.0		14.0	14.0	14.0	14.0	14.0	
Total Split (s)	17.0	42.0		17.0	42.0		23.0	23.0	17.0	23.0	23.0	
Total Split (%)	20.7%	51.2%		20.7%	51.2%		28.0%	28.0%	20.7%	28.0%	28.0%	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Lead/Lag	Lead	Lag		Lead	Lag				Lead			
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			
Recall Mode	None	Max		None	Max		None	None	None	None	None	
Act Effct Green (s)		35.1		52.1	52.1			11.8	28.8	11.8	11.8	
Actuated g/C Ratio		0.45		0.67	0.67			0.15	0.37	0.15	0.15	
v/c Ratio		0.57		1.01	0.30			0.29	0.58	0.02	0.01	
Control Delay		19.6		54.4	6.6			32.4	9.3	27.0	27.0	
Queue Delay		0.0		0.0	0.0			0.0	0.0	0.0	0.0	
Total Delay		19.6		54.4	6.6			32.4	9.3	27.0	27.0	
LOS		B		D	A			C	A	C	C	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		19.6			35.3			12.1			27.0	
Approach LOS		B			D			B			C	
Queue Length 50th (ft)	153		~117	64			28	47	1	2		
Queue Length 95th (ft)	265		#374	120			63	130	8	10		
Internal Link Dist (ft)	362			801			709			752		
Turn Bay Length (ft)				245						105		
Base Capacity (vph)	803		551	1245			298	773	265	370		
Starvation Cap Reductn	0		0	0			0	0	0	0		
Spillback Cap Reductn	0		0	0			0	0	0	0		
Storage Cap Reductn	0		0	0			0	0	0	0		
Reduced v/c Ratio	0.57		1.01	0.30			0.21	0.59	0.01	0.01		

Intersection Summary

Area Type: Other

Cycle Length: 82

Actuated Cycle Length: 77.9

Natural Cycle: 75

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 25.2

Intersection LOS: C

Intersection Capacity Utilization 87.0%

ICU Level of Service E

Analysis Period (min) 15

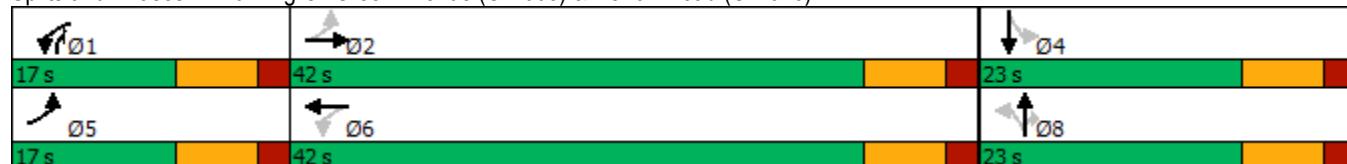
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

Splits and Phases: 20: English Creek Avenue (CR 603) & Delilah Road (CR 646)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↓		↑	↓			↑	↓	↑	↓	
Traffic Volume (veh/h)	0	396	50	545	359	3	49	14	448	3	4	0
Future Volume (veh/h)	0	396	50	545	359	3	49	14	448	3	4	0
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1826	1811	1847	1862	1876	1876	1876	1862	1806	1806	1806
Adj Flow Rate, veh/h	0	404	51	556	366	3	50	14	457	3	4	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	5	6	2	1	0	0	0	1	0	0	0
Cap, veh/h	529	678	86	516	1169	10	298	74	500	231	352	0
Arrive On Green	0.00	0.43	0.43	0.12	0.63	0.63	0.20	0.20	0.20	0.20	0.20	0.00
Sat Flow, veh/h	1810	1588	201	1759	1844	15	1129	382	1578	891	1806	0
Grp Volume(v), veh/h	0	0	455	556	0	369	64	0	457	3	4	0
Grp Sat Flow(s), veh/h/ln	1810	0	1789	1759	0	1859	1510	0	1578	891	1806	0
Q Serve(g_s), s	0.0	0.0	16.0	10.0	0.0	7.4	2.2	0.0	16.0	0.2	0.1	0.0
Cycle Q Clear(g_c), s	0.0	0.0	16.0	10.0	0.0	7.4	2.8	0.0	16.0	3.0	0.1	0.0
Prop In Lane	1.00		0.11	1.00		0.01	0.78		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	529	0	764	516	0	1179	373	0	500	231	352	0
V/C Ratio(X)	0.00	0.00	0.60	1.08	0.00	0.31	0.17	0.00	0.91	0.01	0.01	0.00
Avail Cap(c_a), veh/h	748	0	764	516	0	1179	373	0	500	231	352	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	18.1	19.6	0.0	6.8	27.6	0.0	26.9	29.0	26.6	0.0
Incr Delay (d2), s/veh	0.0	0.0	3.4	62.2	0.0	0.7	0.2	0.0	21.3	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	0.0	0.0	10.5	20.6	0.0	4.2	1.9	0.0	16.7	0.1	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	21.5	81.8	0.0	7.5	27.9	0.0	48.2	29.0	26.6	0.0
LnGrp LOS	A	A	C	F	A	A	C	A	D	C	C	A
Approach Vol, veh/h	455				925			521			7	
Approach Delay, s/veh	21.5				52.2			45.7			27.6	
Approach LOS	C				D			D			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.0	42.0		23.0	0.0	59.0		23.0				
Change Period (Y+Rc), s	7.0	7.0		7.0	7.0	7.0		7.0				
Max Green Setting (Gmax), s	10.0	35.0		16.0	10.0	35.0		16.0				
Max Q Clear Time (g_c+l1), s	12.0	0.0		5.0	0.0	0.0		18.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			43.0									
HCM 6th LOS			D									
Notes												
User approved pedestrian interval to be less than phase max green.												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	1	1	1	1	1	1	1	1	1	1	1
Traffic Volume (vph)	1	323	53	322	248	5	35	12	420	1	6	3
Future Volume (vph)	1	323	53	322	248	5	35	12	420	1	6	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Grade (%)		0%			2%			2%			4%	
Storage Length (ft)	185		0	245		0	0		0	105		0
Storage Lanes	1		0	1		0	0		1	1		0
Taper Length (ft)	75			120			25			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor										0.98	1.00	
Fr _t		0.979			0.997				0.850		0.950	
Flt Protected	0.950			0.950				0.964		0.950		
Satd. Flow (prot)	1805	1824	0	1752	1857	0	0	1773	1583	1710	1710	0
Flt Permitted	0.600			0.412				0.774		0.726		
Satd. Flow (perm)	1140	1824	0	760	1857	0	0	1424	1549	1305	1710	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)	13			2				402		3		
Link Speed (mph)	50			50			25			25		
Link Distance (ft)	442			881			789			832		
Travel Time (s)	6.0			12.0			21.5			22.7		
Confl. Peds. (#/hr)								1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	2%	2%	2%	1%	0%	0%	9%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	384	0	329	258	0	0	48	429	1	9	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm		NA
Protected Phases	5	2		1	6			8	1		4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	35.0		7.0	35.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	14.0	42.0		14.0	42.0		14.0	14.0	14.0	14.0	14.0	
Total Split (s)	17.0	42.0		17.0	42.0		23.0	23.0	17.0	23.0	23.0	
Total Split (%)	20.7%	51.2%		20.7%	51.2%		28.0%	28.0%	20.7%	28.0%	28.0%	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Lead/Lag	Lead	Lag		Lead	Lag				Lead			
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			
Recall Mode	None	Max		None	Max		None	None	None	None	None	
Act Effct Green (s)	42.1	35.1		50.9	49.0			9.8	19.2	9.8	9.8	
Actuated g/C Ratio	0.56	0.47		0.68	0.65		0.13	0.25	0.13	0.13		
v/c Ratio	0.00	0.45		0.52	0.21		0.26	0.61	0.01	0.04		
Control Delay	6.0	16.0		8.5	7.8		32.9	6.8	27.0	24.1		
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0		
Total Delay	6.0	16.0		8.5	7.8		32.9	6.8	27.0	24.1		
LOS	A	B		A	A			C	A	C	C	

4184 22-02818

Future (with NARTP) - SAT
20: English Creek Avenue (CR 603) & Delilah Road (CR 646)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		16.0			8.2			9.4			24.4	
Approach LOS		B			A			A			C	
Queue Length 50th (ft)	0	107		45	33			21	8	0	3	
Queue Length 95th (ft)	2	211		108	130			51	64	5	15	
Internal Link Dist (ft)		362			801			709			752	
Turn Bay Length (ft)	185			245						105		
Base Capacity (vph)	770	855		644	1208			302	779	277	366	
Starvation Cap Reductn	0	0		0	0			0	0	0	0	
Spillback Cap Reductn	0	0		0	0			0	0	0	0	
Storage Cap Reductn	0	0		0	0			0	0	0	0	
Reduced v/c Ratio	0.00	0.45		0.51	0.21			0.16	0.55	0.00	0.02	

Intersection Summary

Area Type: Other

Cycle Length: 82

Actuated Cycle Length: 75.4

Natural Cycle: 70

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 10.8

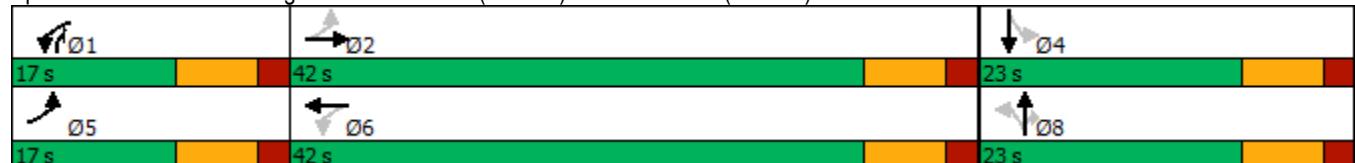
Intersection LOS: B

Intersection Capacity Utilization 78.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 20: English Creek Avenue (CR 603) & Delilah Road (CR 646)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↓		↑	↓			↑	↓	↑	↓	
Traffic Volume (veh/h)	1	323	53	322	248	5	35	12	420	1	6	3
Future Volume (veh/h)	1	323	53	322	248	5	35	12	420	1	6	3
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1870	1847	1862	1876	1876	1743	1862	1806	1806	1806
Adj Flow Rate, veh/h	1	330	54	329	253	5	36	12	429	1	6	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	2	1	0	0	9	1	0	0	0
Cap, veh/h	671	669	109	573	843	17	272	79	499	242	221	111
Arrive On Green	0.09	0.43	0.43	0.12	0.46	0.46	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1810	1568	257	1759	1819	36	1002	407	1574	914	1135	567
Grp Volume(v), veh/h	1	0	384	329	0	258	48	0	429	1	0	9
Grp Sat Flow(s), veh/h/ln	1810	0	1824	1759	0	1855	1409	0	1574	914	0	1702
Q Serve(g_s), s	0.0	0.0	12.5	8.5	0.0	7.1	1.5	0.0	16.0	0.1	0.0	0.4
Cycle Q Clear(g_c), s	0.0	0.0	12.5	8.5	0.0	7.1	2.2	0.0	16.0	2.3	0.0	0.4
Prop In Lane	1.00		0.14	1.00		0.02	0.75		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	671	0	779	573	0	860	352	0	499	242	0	332
V/C Ratio(X)	0.00	0.00	0.49	0.57	0.00	0.30	0.14	0.00	0.86	0.00	0.00	0.03
Avail Cap(c_a), veh/h	738	0	779	573	0	860	352	0	499	242	0	332
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.9	0.0	17.1	11.7	0.0	13.7	27.4	0.0	26.3	28.4	0.0	26.7
Incr Delay (d2), s/veh	0.0	0.0	2.2	1.4	0.0	0.9	0.2	0.0	14.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	0.0	0.0	8.7	5.1	0.0	4.9	1.4	0.0	14.6	0.0	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	9.9	0.0	19.3	13.1	0.0	14.6	27.6	0.0	40.3	28.4	0.0	26.7
LnGrp LOS	A	A	B	B	A	B	C	A	D	C	A	C
Approach Vol, veh/h	385				587			477			10	
Approach Delay, s/veh	19.3				13.8			39.0			26.9	
Approach LOS	B				B			D			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.0	42.0		23.0	14.0	45.0		23.0				
Change Period (Y+Rc), s	7.0	7.0		7.0	7.0	7.0		7.0				
Max Green Setting (Gmax), s	10.0	35.0		16.0	10.0	35.0		16.0				
Max Q Clear Time (g_c+l1), s	10.5	0.0		4.3	2.0	0.0		18.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			23.6									
HCM 6th LOS			C									
Notes												
User approved pedestrian interval to be less than phase max green.												

	↗	→	↘	↙	←	↖	↑	↗	↘	↓	↙	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑		↑	↑		↑	↑	↑	↑	↑	
Traffic Volume (vph)	1	570	50	318	201	5	28	2	510	5	7	1
Future Volume (vph)	1	570	50	318	201	5	28	2	510	5	7	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Grade (%)		0%			2%			2%			4%	
Storage Length (ft)	185		0	245		0	0		0	105		0
Storage Lanes	1		0	1		0	0		1	1		0
Taper Length (ft)	75			120			25			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t		0.988			0.996				0.850		0.981	
Flt Protected	0.950			0.950				0.955		0.950		
Satd. Flow (prot)	902	3384	0	1670	1730	0	0	1732	1508	1710	1766	0
Flt Permitted	0.624			0.308				0.766	0.737			
Satd. Flow (perm)	593	3384	0	541	1730	0	0	1389	1508	1327	1766	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			2				137		1	
Link Speed (mph)	50			50			25			25		
Link Distance (ft)	442			647			789			832		
Travel Time (s)	6.0			8.8			21.5			22.7		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	100%	5%	10%	7%	8%	20%	4%	0%	6%	0%	0%	0%
Adj. Flow (vph)	1	594	52	331	209	5	29	2	531	5	7	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	646	0	331	214	0	0	31	531	5	8	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	12			12			6			11		
Link Offset(ft)	0			0			3			0		
Crosswalk Width(ft)	28			24			22			24		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01	1.01	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0		1	0		1	1	1	1	1	1
Detector Template							Left					
Leading Detector (ft)	40	0		40	0		20	40	40	40	40	40
Trailing Detector (ft)	-10	0		-10	0		0	-10	-10	-10	-10	-10
Detector 1 Position(ft)	-10	-10		-10	-10		0	-10	-10	-10	-10	-10
Detector 1 Size(ft)	50	50		50	50		20	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA	
Protected Phases	5	2		1	6			8	1		4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		8	8	8	4	4	
Switch Phase												



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	7.0	31.0		7.0	31.0		7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	14.0	38.0		14.0	38.0		14.0	14.0	14.0	14.0	14.0	14.0
Total Split (s)	17.0	38.0		17.0	38.0		27.0	27.0	17.0	27.0	27.0	27.0
Total Split (%)	20.7%	46.3%		20.7%	46.3%		32.9%	32.9%	20.7%	32.9%	32.9%	32.9%
Maximum Green (s)	10.0	31.0		10.0	31.0		20.0	20.0	10.0	20.0	20.0	20.0
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag					Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes					Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Max		None	Max		None	None	None	None	None	None
Walk Time (s)		21.0			21.0		12.0	12.0		12.0	12.0	
Flash Dont Walk (s)		14.0			14.0		15.0	15.0		15.0	15.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	42.0	35.0		51.2	49.2		18.7	35.7	18.7	18.7		
Actuated g/C Ratio	0.50	0.41		0.60	0.58		0.22	0.42	0.22	0.22		
v/c Ratio	0.00	0.46		0.72	0.21		0.10	0.74	0.02	0.02		
Control Delay	7.0	19.2		19.9	10.7		27.0	22.5	25.8	24.4		
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0		
Total Delay	7.0	19.2		19.9	10.7		27.0	22.5	25.8	24.4		
LOS	A	B		B	B		C	C	C	C		
Approach Delay		19.2			16.3			22.7			24.9	
Approach LOS		B			B		C			C		

Intersection Summary

Area Type: Other

Cycle Length: 82

Actuated Cycle Length: 84.7

Natural Cycle: 70

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 19.4

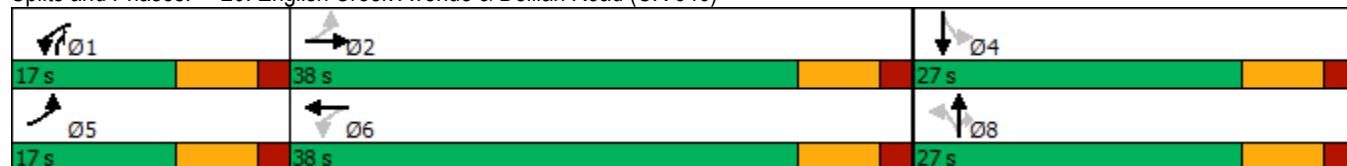
Intersection LOS: B

Intersection Capacity Utilization 80.7%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 20: English Creek Avenue & Delilah Road (CR 646)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	570	50	318	201	5	28	2	510	5	7	1
Future Volume (veh/h)	1	570	50	318	201	5	28	2	510	5	7	1
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	418	1826	1752	1773	1758	1580	1817	1876	1788	1806	1806	1806
Adj Flow Rate, veh/h	1	594	52	331	209	5	29	2	531	5	7	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	100	5	10	7	8	20	4	0	6	0	0	0
Cap, veh/h	209	1220	107	470	709	17	408	25	554	278	377	54
Arrive On Green	0.09	0.38	0.38	0.12	0.41	0.41	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	398	3228	282	1688	1710	41	1323	104	1515	841	1545	221
Grp Volume(v), veh/h	1	319	327	331	0	214	31	0	531	5	0	8
Grp Sat Flow(s), veh/h/ln	398	1735	1775	1688	0	1751	1428	0	1515	841	0	1766
Q Serve(g_s), s	0.1	11.5	11.5	10.0	0.0	6.7	1.2	0.0	20.0	0.4	0.0	0.3
Cycle Q Clear(g_c), s	0.1	11.5	11.5	10.0	0.0	6.7	1.5	0.0	20.0	1.9	0.0	0.3
Prop In Lane	1.00		0.16	1.00		0.02	0.94		1.00	1.00		0.13
Lane Grp Cap(c), veh/h	209	656	671	470	0	726	433	0	554	278	0	431
V/C Ratio(X)	0.00	0.49	0.49	0.70	0.00	0.29	0.07	0.00	0.96	0.02	0.00	0.02
Avail Cap(c_a), veh/h	223	656	671	470	0	726	433	0	554	278	0	431
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.9	19.4	19.4	14.2	0.0	16.0	24.0	0.0	25.4	24.7	0.0	23.5
Incr Delay (d2), s/veh	0.0	2.6	2.5	4.7	0.0	1.0	0.1	0.0	28.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	0.0	8.0	8.2	6.7	0.0	4.6	0.8	0.0	20.0	0.1	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.9	22.0	22.0	18.9	0.0	17.0	24.1	0.0	53.3	24.7	0.0	23.6
LnGrp LOS	B	C	C	B	A	B	C	A	D	C	A	C
Approach Vol, veh/h		647			545			562			13	
Approach Delay, s/veh		22.0			18.2			51.7			24.0	
Approach LOS		C			B			D			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.0	38.0		27.0	14.0	41.0		27.0				
Change Period (Y+Rc), s	7.0	7.0		7.0	7.0	7.0		7.0				
Max Green Setting (Gmax), s	10.0	31.0		20.0	10.0	31.0		20.0				
Max Q Clear Time (g_c+l1), s	12.0	0.0		3.9	2.1	0.0		22.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			30.3									
HCM 6th LOS			C									
Notes												
User approved pedestrian interval to be less than phase max green.												

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	1↑↓		1	1↑↓		1	1↑↓	1	1	1↑↓	
Traffic Volume (vph)	0	396	50	545	359	3	49	14	448	3	4	0
Future Volume (vph)	0	396	50	545	359	3	49	14	448	3	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Grade (%)		0%			2%			2%			4%	
Storage Length (ft)	185		0	245		0	0		0	105		0
Storage Lanes	1		0	1		0	0		1	1		0
Taper Length (ft)	75			120			25			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00								
Fr _t		0.983			0.999				0.850			
Flt Protected				0.950				0.962		0.950		
Satd. Flow (prot)	1900	3367	0	1752	1861	0	0	1810	1583	1710	1800	0
Flt Permitted				0.408				0.771		0.715		
Satd. Flow (perm)	1900	3367	0	751	1861	0	0	1450	1583	1287	1800	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21			1				314			
Link Speed (mph)		50			50			25			25	
Link Distance (ft)		442			647			789			832	
Travel Time (s)		6.0			8.8			21.5			22.7	
Confl. Peds. (#/hr)		3	3									
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	5%	6%	2%	1%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	0	404	51	556	366	3	50	14	457	3	4	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	455	0	556	369	0	0	64	457	3	4	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			6			11	
Link Offset(ft)		0			0			3			0	
Crosswalk Width(ft)		28			24			22			24	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01	1.01	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0		1	0		1	1	1	1	1	1
Detector Template							Left					
Leading Detector (ft)	40	0		40	0		20	40	40	40	40	40
Trailing Detector (ft)	-10	0		-10	0		0	-10	-10	-10	-10	-10
Detector 1 Position(ft)	-10	-10		-10	-10		0	-10	-10	-10	-10	-10
Detector 1 Size(ft)	50	50		50	50		20	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA	
Protected Phases	5	2		1	6			8		1		4
Permitted Phases	2			6			8		8		4	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		1	6		8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	35.0		7.0	35.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	14.0	42.0		14.0	42.0		14.0	14.0	14.0	14.0	14.0	
Total Split (s)	20.0	42.0		20.0	42.0		20.0	20.0	20.0	20.0	20.0	
Total Split (%)	24.4%	51.2%		24.4%	51.2%		24.4%	24.4%	24.4%	24.4%	24.4%	
Maximum Green (s)	13.0	35.0		13.0	35.0		13.0	13.0	13.0	13.0	13.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Lead/Lag	Lead	Lag		Lead	Lag					Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes					Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	Max		None	Max		None	None	None	None	None	
Walk Time (s)	21.0			21.0			12.0	12.0		12.0	12.0	
Flash Dont Walk (s)	14.0			14.0			15.0	15.0		15.0	15.0	
Pedestrian Calls (#/hr)	0			0			0	0		0	0	
Act Effect Green (s)	35.0			54.9	54.9		10.6	30.6	10.6	10.6		
Actuated g/C Ratio	0.44			0.69	0.69		0.13	0.38	0.13	0.13		
v/c Ratio	0.30			0.82	0.29		0.33	0.57	0.02	0.02		
Control Delay	14.8			18.8	5.8		35.9	9.0	29.7	29.5		
Queue Delay	0.0			0.0	0.0		0.0	0.0	0.0	0.0		
Total Delay	14.8			18.8	5.8		35.9	9.0	29.7	29.5		
LOS	B			B	A		D	A	C	C		
Approach Delay	14.8				13.6			12.3			29.6	
Approach LOS		B			B			B			C	

Intersection Summary

Area Type: Other

Cycle Length: 82

Actuated Cycle Length: 79.6

Natural Cycle: 70

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 13.6

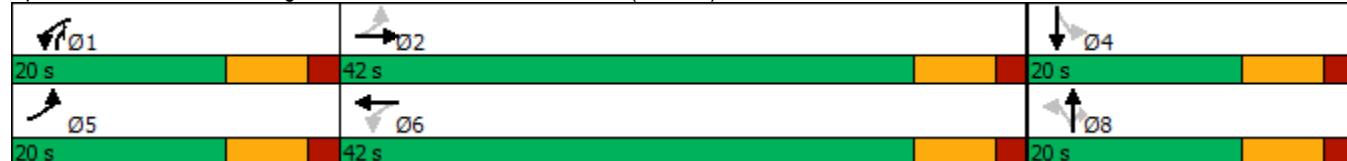
Intersection LOS: B

Intersection Capacity Utilization 87.0%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 20: English Creek Avenue & Delilah Road (CR 646)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↓		↑	↑↓			↑	↑	↑	↑↓	
Traffic Volume (veh/h)	0	396	50	545	359	3	49	14	448	3	4	0
Future Volume (veh/h)	0	396	50	545	359	3	49	14	448	3	4	0
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00			1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1826	1811	1847	1862	1876	1876	1876	1862	1806	1806	1806
Adj Flow Rate, veh/h	0	404	51	556	366	3	50	14	457	3	4	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	5	6	2	1	0	0	0	1	0	0	0
Cap, veh/h	529	1323	166	681	1237	10	256	63	500	197	286	0
Arrive On Green	0.00	0.43	0.43	0.16	0.67	0.67	0.16	0.16	0.16	0.16	0.16	0.00
Sat Flow, veh/h	1810	3100	389	1759	1844	15	1119	394	1578	891	1806	0
Grp Volume(v), veh/h	0	225	230	556	0	369	64	0	457	3	4	0
Grp Sat Flow(s), veh/h/ln	1810	1735	1754	1759	0	1859	1514	0	1578	891	1806	0
Q Serve(g_s), s	0.0	7.0	7.1	13.0	0.0	6.7	2.4	0.0	13.0	0.2	0.2	0.0
Cycle Q Clear(g_c), s	0.0	7.0	7.1	13.0	0.0	6.7	2.9	0.0	13.0	3.2	0.2	0.0
Prop In Lane	1.00		0.22	1.00		0.01	0.78		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	529	740	749	681	0	1247	318	0	500	197	286	0
V/C Ratio(X)	0.00	0.30	0.31	0.82	0.00	0.30	0.20	0.00	0.91	0.02	0.01	0.00
Avail Cap(c_a), veh/h	814	740	749	681	0	1247	318	0	500	197	286	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	15.5	15.5	11.6	0.0	5.5	30.2	0.0	26.9	31.7	29.1	0.0
Incr Delay (d2), s/veh	0.0	1.1	1.1	7.7	0.0	0.6	0.3	0.0	21.3	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	0.0	4.7	4.8	9.4	0.0	3.5	2.0	0.0	16.7	0.1	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	16.5	16.6	19.3	0.0	6.2	30.5	0.0	48.2	31.7	29.1	0.0
LnGrp LOS	A	B	B	B	A	A	C	A	D	C	C	A
Approach Vol, veh/h		455			925			521			7	
Approach Delay, s/veh		16.5			14.0			46.0			30.2	
Approach LOS		B			B			D			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.0	42.0		20.0	0.0	62.0		20.0				
Change Period (Y+Rc), s	7.0	7.0		7.0	7.0	7.0		7.0				
Max Green Setting (Gmax), s	13.0	35.0		13.0	13.0	35.0		13.0				
Max Q Clear Time (g_c+l1), s	15.0	0.0		5.2	0.0	0.0		15.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			23.4									
HCM 6th LOS			C									
Notes												
User approved pedestrian interval to be less than phase max green.												

	↗	→	↘	↙	←	↖	↑	↗	↘	↓	↙	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑		↑	↑		↑	↑	↑	↑	↑	
Traffic Volume (vph)	1	323	53	322	248	5	35	12	420	1	6	3
Future Volume (vph)	1	323	53	322	248	5	35	12	420	1	6	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	11	11
Grade (%)		0%			2%			2%			4%	
Storage Length (ft)	185		0	245		0	0		0	105		0
Storage Lanes	1		0	1		0	0		1	1		0
Taper Length (ft)	75			120			25			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor									0.99	1.00		
Frt		0.979			0.997				0.850	0.950		
Flt Protected	0.950			0.950				0.964	0.950			
Satd. Flow (prot)	1805	3465	0	1752	1857	0	0	1773	1583	1710	1710	0
Flt Permitted	0.600			0.448				0.774	0.726			
Satd. Flow (perm)	1140	3465	0	826	1857	0	0	1424	1563	1306	1710	0
Right Turn on Red		Yes			Yes				Yes		Yes	
Satd. Flow (RTOR)	28			2				402		3		
Link Speed (mph)	50			50			25			25		
Link Distance (ft)	442			647			789			832		
Travel Time (s)	6.0			8.8			21.5			22.7		
Confl. Peds. (#/hr)								1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	2%	2%	2%	1%	0%	0%	9%	1%	0%	0%	0%
Adj. Flow (vph)	1	330	54	329	253	5	36	12	429	1	6	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	384	0	329	258	0	0	48	429	1	9	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	12			12			6			11		
Link Offset(ft)	0			0			3			0		
Crosswalk Width(ft)	28			24			22			24		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01	1.01	1.07	1.07	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0		1	0		1	1	1	1	1	1
Detector Template							Left					
Leading Detector (ft)	40	0		40	0		20	40	40	40	40	
Trailing Detector (ft)	-10	0		-10	0		0	-10	-10	-10	-10	
Detector 1 Position(ft)	-10	-10		-10	-10		0	-10	-10	-10	-10	
Detector 1 Size(ft)	50	50		50	50		20	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA	
Protected Phases	5	2		1	6			8		8	4	
Permitted Phases	2			6			8		8	4		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		1	6		8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	35.0		7.0	35.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	14.0	42.0		14.0	42.0		14.0	14.0	14.0	14.0	14.0	
Total Split (s)	17.0	42.0		17.0	42.0		23.0	23.0	17.0	23.0	23.0	
Total Split (%)	20.7%	51.2%		20.7%	51.2%		28.0%	28.0%	20.7%	28.0%	28.0%	
Maximum Green (s)	10.0	35.0		10.0	35.0		16.0	16.0	10.0	16.0	16.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Lead/Lag	Lead	Lag		Lead	Lag					Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes					Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	Max		None	Max		None	None	None	None	None	
Walk Time (s)		21.0			21.0		12.0	12.0		12.0	12.0	
Flash Dont Walk (s)		14.0			14.0		15.0	15.0		15.0	15.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effect Green (s)	42.1	35.1		50.9	49.0		9.7	19.2	9.7	9.7	9.7	
Actuated g/C Ratio	0.56	0.47		0.68	0.65		0.13	0.25	0.13	0.13	0.13	
v/c Ratio	0.00	0.24		0.49	0.21		0.26	0.61	0.01	0.04		
Control Delay	6.0	12.2		8.0	7.8		32.9	6.7	27.0	24.1		
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	6.0	12.2		8.0	7.8		32.9	6.7	27.0	24.1		
LOS	A	B		A	A		C	A	C	C		
Approach Delay		12.2			7.9		9.4			24.4		
Approach LOS		B			A		A			C		

Intersection Summary

Area Type: Other

Cycle Length: 82

Actuated Cycle Length: 75.4

Natural Cycle: 70

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 9.6

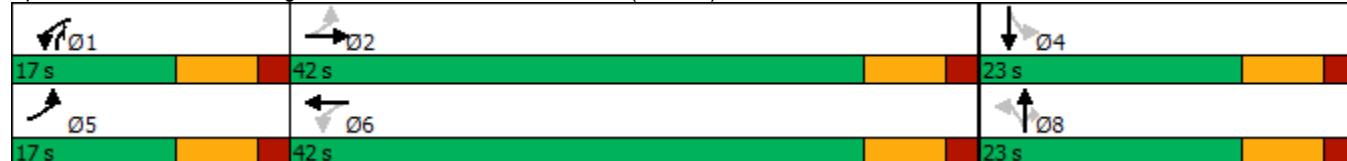
Intersection LOS: A

Intersection Capacity Utilization 78.6%

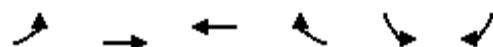
ICU Level of Service D

Analysis Period (min) 15

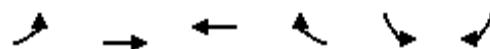
Splits and Phases: 20: English Creek Avenue & Delilah Road (CR 646)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	323	53	322	248	5	35	12	420	1	6	3
Future Volume (veh/h)	1	323	53	322	248	5	35	12	420	1	6	3
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1870	1870	1847	1862	1876	1876	1743	1862	1806	1806	1806
Adj Flow Rate, veh/h	1	330	54	329	253	5	36	12	429	1	6	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	2	1	0	0	9	1	0	0	0
Cap, veh/h	671	1307	212	654	843	17	272	79	500	242	221	111
Arrive On Green	0.09	0.43	0.43	0.12	0.46	0.46	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1810	3062	496	1759	1819	36	1002	407	1575	915	1135	567
Grp Volume(v), veh/h	1	190	194	329	0	258	48	0	429	1	0	9
Grp Sat Flow(s), veh/h/ln	1810	1777	1781	1759	0	1855	1409	0	1575	915	0	1702
Q Serve(g_s), s	0.0	5.6	5.7	8.5	0.0	7.1	1.5	0.0	16.0	0.1	0.0	0.4
Cycle Q Clear(g_c), s	0.0	5.6	5.7	8.5	0.0	7.1	2.2	0.0	16.0	2.3	0.0	0.4
Prop In Lane	1.00		0.28	1.00		0.02	0.75		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	671	758	760	654	0	860	352	0	500	242	0	332
V/C Ratio(X)	0.00	0.25	0.26	0.50	0.00	0.30	0.14	0.00	0.86	0.00	0.00	0.03
Avail Cap(c_a), veh/h	738	758	760	654	0	860	352	0	500	242	0	332
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.9	15.1	15.1	10.6	0.0	13.7	27.4	0.0	26.3	28.4	0.0	26.7
Incr Delay (d2), s/veh	0.0	0.8	0.8	0.6	0.0	0.9	0.2	0.0	13.9	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	0.0	3.9	3.9	4.9	0.0	4.9	1.4	0.0	14.6	0.0	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	9.9	15.9	15.9	11.2	0.0	14.6	27.6	0.0	40.2	28.4	0.0	26.7
LnGrp LOS	A	B	B	B	A	B	C	A	D	C	A	C
Approach Vol, veh/h		385			587			477			10	
Approach Delay, s/veh		15.9			12.7			38.9			26.9	
Approach LOS		B			B			D			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.0	42.0		23.0	14.0	45.0		23.0				
Change Period (Y+Rc), s	7.0	7.0		7.0	7.0	7.0		7.0				
Max Green Setting (Gmax), s	10.0	35.0		16.0	10.0	35.0		16.0				
Max Q Clear Time (g_c+l1), s	10.5	0.0		4.3	2.0	0.0		18.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			22.2									
HCM 6th LOS			C									
Notes												
User approved pedestrian interval to be less than phase max green.												



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	178	699	606	44	112	42
Future Volume (vph)	178	699	606	44	112	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	13	12	12
Grade (%)		4%	0%		2%	
Storage Length (ft)	225			150	0	100
Storage Lanes	1			1	1	1
Taper Length (ft)	100				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1685	1790	1759	1531	1610	1523
Flt Permitted	0.236				0.950	
Satd. Flow (perm)	419	1790	1759	1531	1610	1523
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				20		45
Link Speed (mph)		50	50		25	
Link Distance (ft)		586	889		281	
Travel Time (s)		8.0	12.1		7.7	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	4%	8%	9%	11%	5%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	191	752	652	47	120	45
Turn Type	pm+pt	NA	NA	Free	Prot	pt+ov
Protected Phases	5	2	6		8	5 8
Permitted Phases	2			Free		
Detector Phase	5	2	6		8	8
Switch Phase						
Minimum Initial (s)	8.0	57.0	36.0		8.0	
Minimum Split (s)	15.0	67.0	44.0		15.0	
Total Split (s)	23.0	67.0	44.0		23.0	
Total Split (%)	25.6%	74.4%	48.9%		25.6%	
Yellow Time (s)	5.0	6.0	6.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	7.0	8.0	8.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	
Act Effect Green (s)	64.4	63.4	47.0	90.0	11.6	28.0
Actuated g/C Ratio	0.72	0.70	0.52	1.00	0.13	0.31
v/c Ratio	0.44	0.60	0.71	0.03	0.58	0.09
Control Delay	7.9	9.8	18.8	0.0	47.7	6.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.9	9.8	18.8	0.0	47.7	6.0
LOS	A	A	B	A	D	A
Approach Delay		9.4	17.5		36.3	
Approach LOS		A	B		D	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 50th (ft)	29	183	192	0	65	0
Queue Length 95th (ft)	61	339	#549	m0	115	20
Internal Link Dist (ft)		506	809		201	
Turn Bay Length (ft)	225			150		100
Base Capacity (vph)	524	1261	918	1531	286	482
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.60	0.71	0.03	0.42	0.09

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 15.0

Intersection LOS: B

Intersection Capacity Utilization 66.8%

ICU Level of Service C

Analysis Period (min) 15

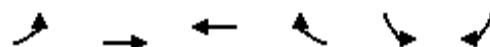
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

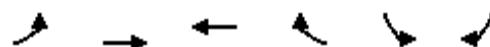
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 30: Delilah Road (CR 646) & Atlantic City Expressway EB On/Off Ramps

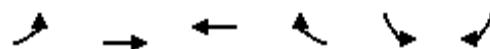




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑ ↗	↑ ↘	↑ ↗	↑ ↘	↑ ↗	↑ ↘
Traffic Volume (veh/h)	178	699	606	44	112	42
Future Volume (veh/h)	178	699	606	44	112	42
Initial Q (Q _b), veh	1	7	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1732	1746	1781	1837	1713	1802
Adj Flow Rate, veh/h	191	752	652	0	120	45
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	5	4	8	9	11	5
Cap, veh/h	462	1290	1014		154	285
Arrive On Green	0.09	0.74	0.57	0.00	0.09	0.09
Sat Flow, veh/h	1649	1746	1781	1557	1632	1527
Grp Volume(v), veh/h	191	752	652	0	120	45
Grp Sat Flow(s), veh/h/ln	1649	1746	1781	1557	1632	1527
Q Serve(g_s), s	3.7	17.8	22.2	0.0	6.5	2.2
Cycle Q Clear(g_c), s	3.7	17.8	22.2	0.0	6.5	2.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	462	1290	1014		154	285
V/C Ratio(X)	0.41	0.58	0.64		0.78	0.16
Avail Cap(c_a), veh/h	608	1290	1019		290	407
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	9.7	5.7	13.2	0.0	39.8	30.7
Incr Delay (d2), s/veh	0.2	1.9	3.1	0.0	3.2	0.1
Initial Q Delay(d3), s/veh	0.1	0.5	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	1.7	8.7	12.8	0.0	4.9	1.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	9.9	8.2	16.3	0.0	43.0	30.8
LnGrp LOS	A	A	B		D	C
Approach Vol, veh/h	943	652		165		
Approach Delay, s/veh	8.5	16.3		39.7		
Approach LOS	A	B		D		
Timer - Assigned Phs	2			5	6	8
Phs Duration (G+Y+R _c), s	74.5			15.0	59.5	15.5
Change Period (Y+R _c), s	8.0			7.0	8.0	7.0
Max Green Setting (Gmax), s	59.0			16.0	36.0	16.0
Max Q Clear Time (g_c+l1), s	0.0			5.7	0.0	8.5
Green Ext Time (p_c), s	0.0			0.2	0.0	0.2
Intersection Summary						
HCM 6th Ctrl Delay			14.3			
HCM 6th LOS			B			
Notes						
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	123	693	806	71	90	46
Future Volume (vph)	123	693	806	71	90	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	13	12	12
Grade (%)		4%	0%		2%	
Storage Length (ft)	225			150	0	100
Storage Lanes	1			1	1	1
Taper Length (ft)	100				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1769	1790	1863	1574	1610	1567
Flt Permitted	0.147				0.950	
Satd. Flow (perm)	274	1790	1863	1574	1610	1567
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				25		48
Link Speed (mph)		50	50		25	
Link Distance (ft)		586	889		281	
Travel Time (s)		8.0	12.1		7.7	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	4%	2%	6%	11%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	128	722	840	74	94	48
Turn Type	pm+pt	NA	NA	Free	Prot	pt+ov
Protected Phases	5	2	6		8	5 8
Permitted Phases	2			Free		
Detector Phase	5	2	6		8	8
Switch Phase						
Minimum Initial (s)	8.0	57.0	36.0		8.0	
Minimum Split (s)	15.0	67.0	44.0		15.0	
Total Split (s)	23.0	67.0	44.0		23.0	
Total Split (%)	25.6%	74.4%	48.9%		25.6%	
Yellow Time (s)	5.0	6.0	6.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	7.0	8.0	8.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	
Act Effect Green (s)	68.6	69.2	52.2	90.0	10.4	22.8
Actuated g/C Ratio	0.76	0.77	0.58	1.00	0.12	0.25
v/c Ratio	0.37	0.52	0.78	0.05	0.51	0.11
Control Delay	6.8	7.6	18.4	0.0	46.5	7.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.8	7.6	18.4	0.0	46.5	7.1
LOS	A	A	B	A	D	A
Approach Delay		7.5	16.9		33.2	
Approach LOS		A	B		C	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 50th (ft)	17	159	232	0	51	0
Queue Length 95th (ft)	39	294	#680	m0	96	23
Internal Link Dist (ft)		506	809		201	
Turn Bay Length (ft)	225			150		100
Base Capacity (vph)	474	1376	1079	1574	286	430
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.52	0.78	0.05	0.33	0.11

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 13.9 Intersection LOS: B

Intersection Capacity Utilization 74.2% ICU Level of Service D

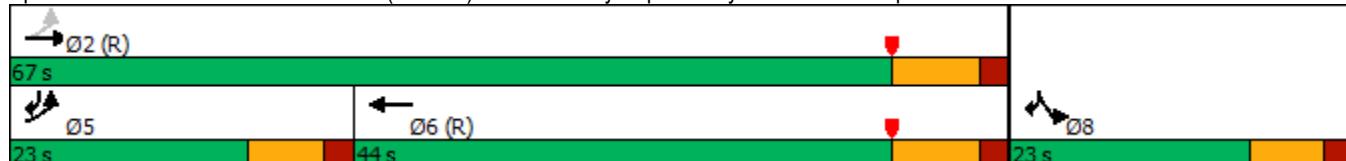
Analysis Period (min) 15

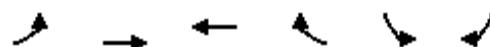
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

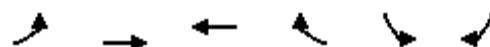
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 30: Delilah Road (CR 646) & Atlantic City Expressway EB On/Off Ramps

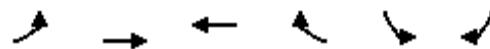




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	123	693	806	71	90	46
Future Volume (veh/h)	123	693	806	71	90	46
Initial Q (Q _b), veh	1	0	49	4	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1806	1746	1870	1884	1713	1847
Adj Flow Rate, veh/h	128	722	840	0	94	48
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	4	2	6	11	2
Cap, veh/h	383	1305	919		141	345
Arrive On Green	0.09	0.75	0.58	0.00	0.09	0.09
Sat Flow, veh/h	1720	1746	1870	1596	1632	1565
Grp Volume(v), veh/h	128	722	840	0	94	48
Grp Sat Flow(s), veh/h/ln	1720	1746	1870	1596	1632	1565
Q Serve(g_s), s	2.2	16.0	30.8	0.0	5.0	2.3
Cycle Q Clear(g_c), s	2.2	16.0	30.8	0.0	5.0	2.3
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	383	1305	919		141	345
V/C Ratio(X)	0.33	0.55	0.91		0.67	0.14
Avail Cap(c_a), veh/h	536	1305	1085		290	417
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	12.4	4.9	22.9	0.0	39.9	28.3
Incr Delay (d2), s/veh	0.2	1.7	15.0	0.0	2.0	0.1
Initial Q Delay(d3), s/veh	0.1	0.0	153.2	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	1.8	6.7	66.4	0.0	3.8	1.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	12.7	6.6	191.0	0.0	41.9	28.4
LnGrp LOS	B	A	F		D	C
Approach Vol, veh/h	850	840		142		
Approach Delay, s/veh	7.5	191.0		37.3		
Approach LOS	A	F		D		
Timer - Assigned Phs	2			5	6	8
Phs Duration (G+Y+R _c), s	75.2			15.0	60.2	14.8
Change Period (Y+R _c), s	8.0			7.0	8.0	7.0
Max Green Setting (Gmax), s	59.0			16.0	36.0	16.0
Max Q Clear Time (g_c+l1), s	0.0			4.2	0.0	7.0
Green Ext Time (p_c), s	0.0			0.1	0.0	0.2
Intersection Summary						
HCM 6th Ctrl Delay		94.0				
HCM 6th LOS		F				
Notes						
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑ ↗	↗ ↑	↑ ↗	↗ ↑	↑ ↗	↗ ↑
Traffic Volume (vph)	93	525	530	72	52	43
Future Volume (vph)	93	525	530	72	52	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	13	12	12
Grade (%)		4%	0%		2%	
Storage Length (ft)	225			150	0	100
Storage Lanes	1			1	1	1
Taper Length (ft)	100				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1769	1844	1881	1669	1752	1567
Flt Permitted	0.333				0.950	
Satd. Flow (perm)	620	1844	1881	1669	1752	1567
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				38		47
Link Speed (mph)		50	50		25	
Link Distance (ft)		586	889		281	
Travel Time (s)		8.0	12.1		7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	1%	0%	2%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	101	571	576	78	57	47
Turn Type	pm+pt	NA	NA	Free	Prot	pt+ov
Protected Phases	5	2	6		8	5 8
Permitted Phases	2			Free		
Detector Phase	5	2	6		8	8
Switch Phase						
Minimum Initial (s)	8.0	57.0	36.0		8.0	
Minimum Split (s)	15.0	67.0	44.0		15.0	
Total Split (s)	23.0	67.0	44.0		23.0	
Total Split (%)	25.6%	74.4%	48.9%		25.6%	
Yellow Time (s)	5.0	6.0	6.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	7.0	8.0	8.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	
Act Effect Green (s)	70.3	70.9	58.9	90.0	8.7	20.7
Actuated g/C Ratio	0.78	0.79	0.65	1.00	0.10	0.23
v/c Ratio	0.17	0.39	0.47	0.05	0.34	0.12
Control Delay	3.8	5.1	9.3	0.1	43.3	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.8	5.1	9.3	0.1	43.3	8.4
LOS	A	A	A	A	D	A
Approach Delay		4.9	8.2		27.5	
Approach LOS		A	A		C	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 50th (ft)	12	98	157	0	31	0
Queue Length 95th (ft)	27	168	204	0	67	25
Internal Link Dist (ft)		506	809		201	
Turn Bay Length (ft)	225			150		100
Base Capacity (vph)	688	1452	1230	1669	311	418
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.39	0.47	0.05	0.18	0.11

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.47

Intersection Signal Delay: 8.1

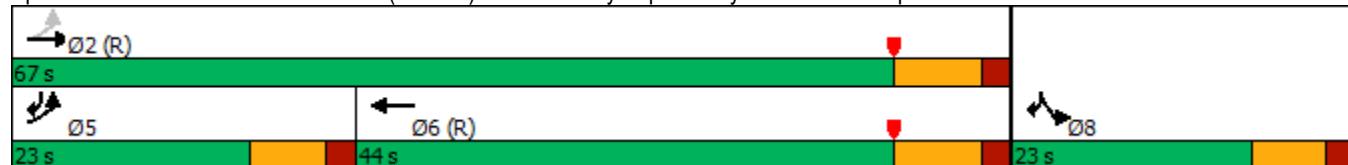
Intersection LOS: A

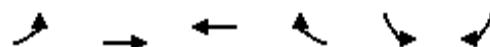
Intersection Capacity Utilization 66.7%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 30: Delilah Road (CR 646) & Atlantic City Expressway EB On/Off Ramps





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑ ↗	↑ ↘	↑ ↗	↑ ↘	↑ ↗	↑ ↘
Traffic Volume (veh/h)	93	525	530	72	52	43
Future Volume (veh/h)	93	525	530	72	52	43
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1806	1791	1885	1976	1847	1847
Adj Flow Rate, veh/h	101	571	576	0	57	47
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	0	2	2
Cap, veh/h	557	1345	1102		145	268
Arrive On Green	0.09	0.75	0.58	0.00	0.08	0.08
Sat Flow, veh/h	1720	1791	1885	1675	1759	1565
Grp Volume(v), veh/h	101	571	576	0	57	47
Grp Sat Flow(s), veh/h/ln	1720	1791	1885	1675	1759	1565
Q Serve(g_s), s	1.7	10.5	16.5	0.0	2.8	2.3
Cycle Q Clear(g_c), s	1.7	10.5	16.5	0.0	2.8	2.3
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	557	1345	1102		145	268
V/C Ratio(X)	0.18	0.42	0.52		0.39	0.18
Avail Cap(c_a), veh/h	710	1345	1102		313	417
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	6.6	4.1	11.2	0.0	39.2	31.9
Incr Delay (d2), s/veh	0.1	1.0	1.8	0.0	0.6	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	0.7	4.4	10.1	0.0	2.2	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.7	5.1	13.0	0.0	39.8	32.0
LnGrp LOS	A	A	B		D	C
Approach Vol, veh/h	672	576		104		
Approach Delay, s/veh	5.3	13.0		36.3		
Approach LOS	A	B		D		
Timer - Assigned Phs	2			5	6	8
Phs Duration (G+Y+R _c), s	75.6			15.0	60.6	14.4
Change Period (Y+R _c), s	8.0			7.0	8.0	7.0
Max Green Setting (Gmax), s	59.0			16.0	36.0	16.0
Max Q Clear Time (g_c+l1), s	0.0			3.7	0.0	4.8
Green Ext Time (p_c), s	0.0			0.1	0.0	0.1
Intersection Summary						
HCM 6th Ctrl Delay			11.0			
HCM 6th LOS			B			
Notes						
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	189	774	667	56	138	44
Future Volume (vph)	189	774	667	56	138	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	13	12	12
Grade (%)		4%	0%		2%	
Storage Length (ft)	225			150	0	100
Storage Lanes	1			1	1	1
Taper Length (ft)	100				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1685	1790	1759	1531	1610	1523
Flt Permitted	0.172				0.950	
Satd. Flow (perm)	305	1790	1759	1531	1610	1523
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				23		47
Link Speed (mph)		50	50		25	
Link Distance (ft)		586	889		281	
Travel Time (s)		8.0	12.1		7.7	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	4%	8%	9%	11%	5%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	203	832	717	60	148	47
Turn Type	pm+pt	NA	NA	Free	Prot	pt+ov
Protected Phases	5	2	6		8	5 8
Permitted Phases	2			Free		
Detector Phase	5	2	6		8	8
Switch Phase						
Minimum Initial (s)	8.0	57.0	36.0		8.0	
Minimum Split (s)	15.0	67.0	44.0		15.0	
Total Split (s)	23.0	67.0	44.0		23.0	
Total Split (%)	25.6%	74.4%	48.9%		25.6%	
Yellow Time (s)	5.0	6.0	6.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	7.0	8.0	8.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	
Act Effect Green (s)	63.5	62.5	44.6	90.0	12.5	30.4
Actuated g/C Ratio	0.71	0.69	0.50	1.00	0.14	0.34
v/c Ratio	0.53	0.67	0.82	0.04	0.66	0.09
Control Delay	10.6	11.9	25.8	0.0	50.8	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.6	11.9	25.8	0.0	50.8	5.4
LOS	B	B	C	A	D	A
Approach Delay		11.7	23.8		39.8	
Approach LOS		B	C		D	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 50th (ft)	33	236	208	0	81	0
Queue Length 95th (ft)	69	411	#650	m0	138	19
Internal Link Dist (ft)		506	809		201	
Turn Bay Length (ft)	225			150		100
Base Capacity (vph)	460	1243	871	1531	286	507
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.67	0.82	0.04	0.52	0.09

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 19.1

Intersection LOS: B

Intersection Capacity Utilization 71.6%

ICU Level of Service C

Analysis Period (min) 15

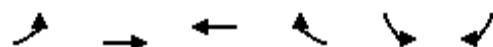
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

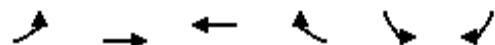
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 30: Delilah Road (CR 646) & Atlantic City Expressway EB On/Off Ramps





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	189	774	667	56	138	44
Future Volume (veh/h)	189	774	667	56	138	44
Initial Q (Q _b), veh	1	7	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1732	1746	1781	1837	1713	1802
Adj Flow Rate, veh/h	203	832	717	0	148	47
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	5	4	8	9	11	5
Cap, veh/h	400	1260	981		183	313
Arrive On Green	0.09	0.72	0.55	0.00	0.11	0.11
Sat Flow, veh/h	1649	1746	1781	1557	1632	1527
Grp Volume(v), veh/h	203	832	717	0	148	47
Grp Sat Flow(s), veh/h/ln	1649	1746	1781	1557	1632	1527
Q Serve(g_s), s	4.2	22.8	27.0	0.0	8.0	2.3
Cycle Q Clear(g_c), s	4.2	22.8	27.0	0.0	8.0	2.3
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	400	1260	981		183	313
V/C Ratio(X)	0.51	0.66	0.73		0.81	0.15
Avail Cap(c_a), veh/h	546	1260	988		290	407
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	12.6	7.1	15.2	0.0	39.0	29.4
Incr Delay (d2), s/veh	0.4	2.7	4.8	0.0	3.9	0.1
Initial Q Delay(d3), s/veh	0.1	0.7	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	2.4	11.1	15.5	0.0	6.1	1.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	13.0	10.5	20.0	0.0	42.9	29.5
LnGrp LOS	B	B	B		D	C
Approach Vol, veh/h	1035	717		195		
Approach Delay, s/veh	11.0	20.0		39.7		
Approach LOS	B	B		D		
Timer - Assigned Phs	2			5	6	8
Phs Duration (G+Y+Rc), s	72.9			15.0	57.9	17.1
Change Period (Y+Rc), s	8.0			7.0	8.0	7.0
Max Green Setting (Gmax), s	59.0			16.0	36.0	16.0
Max Q Clear Time (g_c+l1), s	0.0			6.2	0.0	10.0
Green Ext Time (p_c), s	0.0			0.2	0.0	0.2
Intersection Summary						
HCM 6th Ctrl Delay			17.2			
HCM 6th LOS			B			
Notes						
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	130	778	910	87	117	48
Future Volume (vph)	130	778	910	87	117	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	13	12	12
Grade (%)		4%	0%		2%	
Storage Length (ft)	225			150	0	100
Storage Lanes	1			1	1	1
Taper Length (ft)	100				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1769	1790	1863	1574	1610	1567
Flt Permitted	0.073				0.950	
Satd. Flow (perm)	136	1790	1863	1574	1610	1567
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				27		45
Link Speed (mph)		50	50		25	
Link Distance (ft)		586	889		281	
Travel Time (s)		8.0	12.1		7.7	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	4%	2%	6%	11%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	135	810	948	91	122	50
Turn Type	pm+pt	NA	NA	Free	Prot	pt+ov
Protected Phases	5	2	6		8	5 8
Permitted Phases	2			Free		
Detector Phase	5	2	6		8	8
Switch Phase						
Minimum Initial (s)	8.0	57.0	36.0		8.0	
Minimum Split (s)	15.0	67.0	44.0		15.0	
Total Split (s)	23.0	67.0	44.0		23.0	
Total Split (%)	25.6%	74.4%	48.9%		25.6%	
Yellow Time (s)	5.0	6.0	6.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	7.0	8.0	8.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	
Act Effect Green (s)	64.3	63.3	47.7	90.0	11.7	27.3
Actuated g/C Ratio	0.71	0.70	0.53	1.00	0.13	0.30
v/c Ratio	0.53	0.64	0.96	0.06	0.59	0.10
Control Delay	18.9	10.9	36.1	0.1	47.8	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.9	10.9	36.1	0.1	47.8	7.5
LOS	B	B	D	A	D	A
Approach Delay		12.0	32.9		36.1	
Approach LOS		B	C		D	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 50th (ft)	20	210	260	0	67	2
Queue Length 95th (ft)	81	389	#853	m0	116	24
Internal Link Dist (ft)		506	809		201	
Turn Bay Length (ft)	225			150		100
Base Capacity (vph)	387	1259	988	1574	286	480
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.64	0.96	0.06	0.43	0.10

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay: 24.0 Intersection LOS: C

Intersection Capacity Utilization 80.1% ICU Level of Service D

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

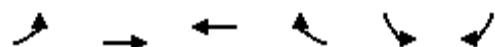
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 30: Delilah Road (CR 646) & Atlantic City Expressway EB On/Off Ramps

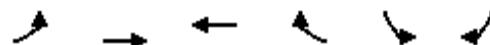




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	130	778	910	87	117	48
Future Volume (veh/h)	130	778	910	87	117	48
Initial Q (Q _b), veh	1	0	49	4	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1806	1746	1870	1884	1713	1847
Adj Flow Rate, veh/h	135	810	948	0	122	50
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	4	2	6	11	2
Cap, veh/h	308	1288	901		157	360
Arrive On Green	0.09	0.74	0.57	0.00	0.10	0.10
Sat Flow, veh/h	1720	1746	1870	1596	1632	1565
Grp Volume(v), veh/h	135	810	948	0	122	50
Grp Sat Flow(s), veh/h/ln	1720	1746	1870	1596	1632	1565
Q Serve(g_s), s	2.4	20.5	39.7	0.0	6.6	2.4
Cycle Q Clear(g_c), s	2.4	20.5	39.7	0.0	6.6	2.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	308	1288	901		157	360
V/C Ratio(X)	0.44	0.63	1.05		0.78	0.14
Avail Cap(c_a), veh/h	460	1288	1067		290	417
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	17.8	5.8	23.3	0.0	39.7	27.6
Incr Delay (d2), s/veh	0.4	2.3	44.7	0.0	3.1	0.1
Initial Q Delay(d3), s/veh	0.1	0.0	195.8	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	2.7	8.7	86.2	0.0	5.0	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	18.3	8.1	263.8	0.0	42.9	27.7
LnGrp LOS	B	A	F		D	C
Approach Vol, veh/h	945	948		172		
Approach Delay, s/veh	9.6	263.8		38.5		
Approach LOS	A	F		D		
Timer - Assigned Phs	2			5	6	8
Phs Duration (G+Y+R _c), s	74.4			15.0	59.4	15.6
Change Period (Y+R _c), s	8.0			7.0	8.0	7.0
Max Green Setting (Gmax), s	59.0			16.0	36.0	16.0
Max Q Clear Time (g_c+l1), s	0.0			4.4	0.0	8.6
Green Ext Time (p_c), s	0.0			0.1	0.0	0.2
Intersection Summary						
HCM 6th Ctrl Delay			128.7			
HCM 6th LOS			F			
Notes						
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	98	605	595	88	79	45
Future Volume (vph)	98	605	595	88	79	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	13	12	12
Grade (%)		4%	0%		2%	
Storage Length (ft)	225			150	0	100
Storage Lanes	1			1	1	1
Taper Length (ft)	100				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1769	1844	1881	1669	1752	1567
Flt Permitted	0.284				0.950	
Satd. Flow (perm)	529	1844	1881	1669	1752	1567
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				42		49
Link Speed (mph)		50	50		25	
Link Distance (ft)		586	889		281	
Travel Time (s)		8.0	12.1		7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	1%	0%	2%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	107	658	647	96	86	49
Turn Type	pm+pt	NA	NA	Free	Prot	pt+ov
Protected Phases	5	2	6		8	5 8
Permitted Phases	2			Free		
Detector Phase	5	2	6		8	8
Switch Phase						
Minimum Initial (s)	8.0	57.0	36.0		8.0	
Minimum Split (s)	15.0	67.0	44.0		15.0	
Total Split (s)	23.0	67.0	44.0		23.0	
Total Split (%)	25.6%	74.4%	48.9%		25.6%	
Yellow Time (s)	5.0	6.0	6.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	7.0	8.0	8.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	
Act Effect Green (s)	69.3	69.9	57.9	90.0	9.7	21.7
Actuated g/C Ratio	0.77	0.78	0.64	1.00	0.11	0.24
v/c Ratio	0.21	0.46	0.53	0.06	0.46	0.12
Control Delay	4.5	6.3	10.4	0.1	45.2	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.5	6.3	10.4	0.1	45.2	7.7
LOS	A	A	B	A	D	A
Approach Delay		6.1	9.1		31.6	
Approach LOS		A	A		C	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 50th (ft)	14	129	175	0	47	0
Queue Length 95th (ft)	32	231	224	0	89	25
Internal Link Dist (ft)		506	809		201	
Turn Bay Length (ft)	225			150		100
Base Capacity (vph)	627	1432	1210	1669	311	423
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.46	0.53	0.06	0.28	0.12

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.53

Intersection Signal Delay: 9.5

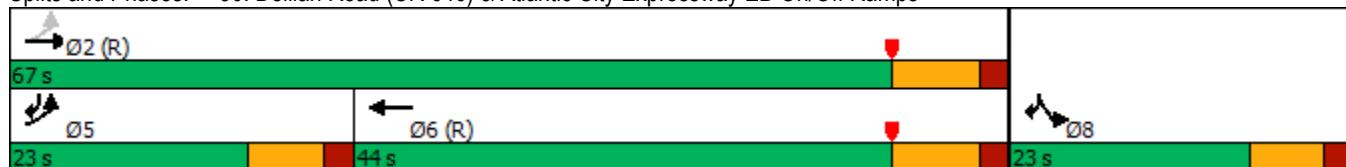
Intersection LOS: A

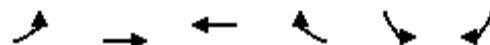
Intersection Capacity Utilization 66.7%

ICU Level of Service C

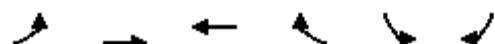
Analysis Period (min) 15

Splits and Phases: 30: Delilah Road (CR 646) & Atlantic City Expressway EB On/Off Ramps

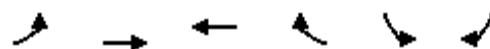




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	98	605	595	88	79	45
Future Volume (veh/h)	98	605	595	88	79	45
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1806	1791	1885	1976	1847	1847
Adj Flow Rate, veh/h	107	658	647	0	86	49
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	0	2	2
Cap, veh/h	507	1339	1095		151	273
Arrive On Green	0.09	0.75	0.58	0.00	0.09	0.09
Sat Flow, veh/h	1720	1791	1885	1675	1759	1565
Grp Volume(v), veh/h	107	658	647	0	86	49
Grp Sat Flow(s), veh/h/ln	1720	1791	1885	1675	1759	1565
Q Serve(g_s), s	1.8	13.2	19.7	0.0	4.2	2.4
Cycle Q Clear(g_c), s	1.8	13.2	19.7	0.0	4.2	2.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	507	1339	1095		151	273
V/C Ratio(X)	0.21	0.49	0.59		0.57	0.18
Avail Cap(c_a), veh/h	660	1339	1095		313	417
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	7.6	4.5	12.0	0.0	39.5	31.6
Incr Delay (d2), s/veh	0.1	1.3	2.3	0.0	1.3	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	0.8	5.6	11.7	0.0	3.4	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	7.7	5.8	14.4	0.0	40.8	31.8
LnGrp LOS	A	A	B		D	C
Approach Vol, veh/h	765	647		135		
Approach Delay, s/veh	6.1	14.4		37.5		
Approach LOS	A	B		D		
Timer - Assigned Phs	2			5	6	8
Phs Duration (G+Y+Rc), s	75.3			15.0	60.3	14.7
Change Period (Y+Rc), s	8.0			7.0	8.0	7.0
Max Green Setting (Gmax), s	59.0			16.0	36.0	16.0
Max Q Clear Time (g_c+l1), s	0.0			3.8	0.0	6.2
Green Ext Time (p_c), s	0.0			0.1	0.0	0.2
Intersection Summary						
HCM 6th Ctrl Delay			12.3			
HCM 6th LOS			B			
Notes						
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑↓		↑	↑
Traffic Volume (vph)	189	774	667	56	138	44
Future Volume (vph)	189	774	667	56	138	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	13	12	12
Grade (%)		4%	0%		2%	
Storage Length (ft)	225			750	0	100
Storage Lanes	1			1	1	1
Taper Length (ft)	100				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Fr _t			0.988			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1685	1790	3300	0	1610	1523
Flt Permitted	0.279				0.950	
Satd. Flow (perm)	495	1790	3300	0	1610	1523
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			12			47
Link Speed (mph)	50	50		25		
Link Distance (ft)	586	1000		1259		
Travel Time (s)	8.0	13.6		34.3		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	4%	8%	9%	11%	5%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	203	832	777	0	148	47
Turn Type	pm+pt	NA	NA		Prot	pt+ov
Protected Phases	5	2	6		8	5 8
Permitted Phases	2					
Detector Phase	5	2	6		8	8
Switch Phase						
Minimum Initial (s)	7.0	37.0	23.0		8.0	
Minimum Split (s)	14.0	45.0	31.0		15.0	
Total Split (s)	20.0	67.0	47.0		23.0	
Total Split (%)	22.2%	74.4%	52.2%		25.6%	
Yellow Time (s)	5.0	6.0	6.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	7.0	8.0	8.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	
Act Effect Green (s)	63.5	62.5	46.7		12.5	28.3
Actuated g/C Ratio	0.71	0.69	0.52		0.14	0.31
v/c Ratio	0.44	0.67	0.45		0.66	0.09
Control Delay	8.0	11.9	10.0		50.8	6.2
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	8.0	11.9	10.0		50.8	6.2
LOS	A	B	B		D	A
Approach Delay		11.1	10.0		40.0	
Approach LOS		B	B		D	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 50th (ft)	33	236	88		81	0
Queue Length 95th (ft)	65	411	113		138	21
Internal Link Dist (ft)		506	920		1179	
Turn Bay Length (ft)	225				100	
Base Capacity (vph)	521	1243	1718		286	473
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.39	0.67	0.45		0.52	0.10

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.67

Intersection Signal Delay: 13.5

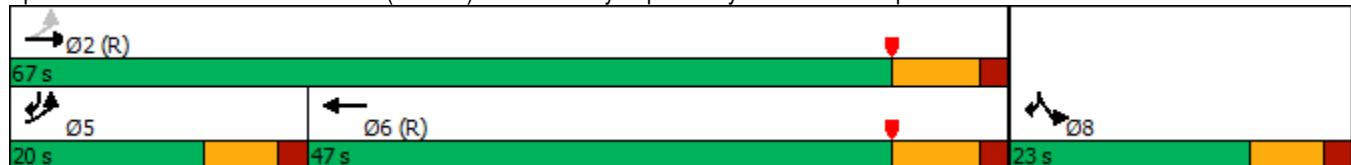
Intersection LOS: B

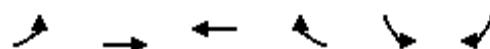
Intersection Capacity Utilization 60.9%

ICU Level of Service B

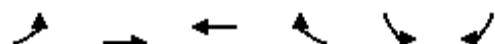
Analysis Period (min) 15

Splits and Phases: 30: Delilah Road (CR 646) & Atlantic City Expressway EB On/Off Ramps

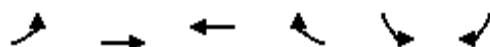




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑↑		↑	↑
Traffic Volume (veh/h)	189	774	667	56	138	44
Future Volume (veh/h)	189	774	667	56	138	44
Initial Q (Q _b), veh	1	7	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1732	1746	1781	1837	1713	1802
Adj Flow Rate, veh/h	203	832	717	0	148	47
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	5	4	8	9	11	5
Cap, veh/h	514	1260	1906		183	294
Arrive On Green	0.08	0.72	0.57	0.00	0.11	0.11
Sat Flow, veh/h	1649	1746	3563	0	1632	1527
Grp Volume(v), veh/h	203	832	717	0	148	47
Grp Sat Flow(s), veh/h/ln	1649	1746	1692	0	1632	1527
Q Serve(g_s), s	4.2	22.8	10.5	0.0	8.0	2.3
Cycle Q Clear(g_c), s	4.2	22.8	10.5	0.0	8.0	2.3
Prop In Lane	1.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	514	1260	1906		183	294
V/C Ratio(X)	0.39	0.66	0.38		0.81	0.16
Avail Cap(c_a), veh/h	623	1260	1915		290	390
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	7.1	7.1	10.9	0.0	39.0	30.3
Incr Delay (d2), s/veh	0.2	2.7	0.6	0.0	3.9	0.1
Initial Q Delay(d3), s/veh	0.0	0.7	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	2.0	11.1	6.1	0.0	6.1	1.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	7.3	10.5	11.5	0.0	42.9	30.4
LnGrp LOS	A	B	B		D	C
Approach Vol, veh/h	1035	717		195		
Approach Delay, s/veh	9.8	11.5		39.9		
Approach LOS	A	B		D		
Timer - Assigned Phs	2			5	6	8
Phs Duration (G+Y+R _c), s	72.9			14.0	58.9	17.1
Change Period (Y+R _c), s	8.0			7.0	8.0	7.0
Max Green Setting (Gmax), s	59.0			13.0	39.0	16.0
Max Q Clear Time (g_c+l1), s	0.0			6.2	0.0	10.0
Green Ext Time (p_c), s	0.0			0.2	0.0	0.2
Intersection Summary						
HCM 6th Ctrl Delay			13.5			
HCM 6th LOS			B			
Notes						
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑ ↗	↑ ↗	↑ ↗		↑ ↗	↑ ↗
Traffic Volume (vph)	130	778	910	87	117	48
Future Volume (vph)	130	778	910	87	117	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	13	12	12
Grade (%)		4%	0%		2%	
Storage Length (ft)	225			750	0	100
Storage Lanes	1			1	1	1
Taper Length (ft)	100				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Fr _t			0.987			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1769	1790	3481	0	1610	1567
Flt Permitted	0.189				0.950	
Satd. Flow (perm)	352	1790	3481	0	1610	1567
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			15			50
Link Speed (mph)		50	50		25	
Link Distance (ft)		586	1000		1259	
Travel Time (s)		8.0	13.6		34.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	4%	2%	6%	11%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	135	810	1039	0	122	50
Turn Type	pm+pt	NA	NA		Prot	pt+ov
Protected Phases	5	2	6		8	5 8
Permitted Phases	2					
Detector Phase	5	2	6		8	8
Switch Phase						
Minimum Initial (s)	8.0	35.0	17.0		8.0	
Minimum Split (s)	15.0	43.0	25.0		15.0	
Total Split (s)	17.0	67.0	50.0		23.0	
Total Split (%)	18.9%	74.4%	55.6%		25.6%	
Yellow Time (s)	5.0	6.0	6.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	7.0	8.0	8.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	
Act Effect Green (s)	64.3	63.3	48.1		11.7	26.9
Actuated g/C Ratio	0.71	0.70	0.53		0.13	0.30
v/c Ratio	0.36	0.64	0.56		0.59	0.10
Control Delay	7.1	10.9	11.2		47.8	6.6
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	7.1	10.9	11.2		47.8	6.6
LOS	A	B	B		D	A
Approach Delay		10.3	11.2		35.8	
Approach LOS		B	B		D	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 50th (ft)	20	210	110		67	0
Queue Length 95th (ft)	44	389	185		116	23
Internal Link Dist (ft)		506	920		1179	
Turn Bay Length (ft)	225				100	
Base Capacity (vph)	409	1259	1868		286	478
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.33	0.64	0.56		0.43	0.10

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 12.8

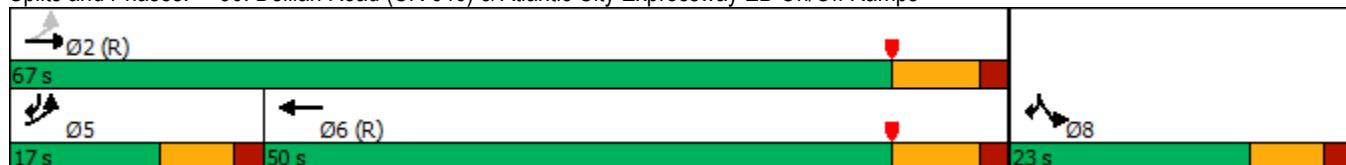
Intersection LOS: B

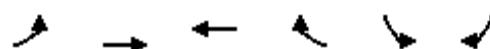
Intersection Capacity Utilization 60.1%

ICU Level of Service B

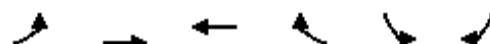
Analysis Period (min) 15

Splits and Phases: 30: Delilah Road (CR 646) & Atlantic City Expressway EB On/Off Ramps

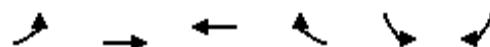




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑↑		↑	↑
Traffic Volume (veh/h)	130	778	910	87	117	48
Future Volume (veh/h)	130	778	910	87	117	48
Initial Q (Q _b), veh	1	0	0	4	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1806	1746	1870	1884	1713	1847
Adj Flow Rate, veh/h	135	810	948	0	122	50
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	4	2	6	11	2
Cap, veh/h	470	1288	2027		157	290
Arrive On Green	0.09	0.74	0.57	0.00	0.10	0.10
Sat Flow, veh/h	1720	1746	3741	0	1632	1565
Grp Volume(v), veh/h	135	810	948	0	122	50
Grp Sat Flow(s), veh/h/ln	1720	1746	1777	0	1632	1565
Q Serve(g_s), s	2.4	20.5	14.1	0.0	6.6	2.4
Cycle Q Clear(g_c), s	2.4	20.5	14.1	0.0	6.6	2.4
Prop In Lane	1.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	470	1288	2027		157	290
V/C Ratio(X)	0.29	0.63	0.47		0.78	0.17
Avail Cap(c_a), veh/h	508	1288	2028		290	417
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	6.9	5.8	11.3	0.0	39.7	30.9
Incr Delay (d2), s/veh	0.1	2.3	0.8	0.0	3.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	1.2	8.7	8.3	0.0	5.0	1.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	7.1	8.1	12.1	0.0	42.9	31.0
LnGrp LOS	A	A	B		D	C
Approach Vol, veh/h	945	948		172		
Approach Delay, s/veh	8.0	12.1		39.4		
Approach LOS	A	B		D		
Timer - Assigned Phs	2			5	6	8
Phs Duration (G+Y+R _c), s	74.4			15.0	59.4	15.6
Change Period (Y+R _c), s	8.0			7.0	8.0	7.0
Max Green Setting (Gmax), s	59.0			10.0	42.0	16.0
Max Q Clear Time (g_c+l1), s	0.0			4.4	0.0	8.6
Green Ext Time (p_c), s	0.0			0.1	0.0	0.2
Intersection Summary						
HCM 6th Ctrl Delay			12.5			
HCM 6th LOS			B			
Notes						
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑↓		↑	↑
Traffic Volume (vph)	98	605	595	88	79	45
Future Volume (vph)	98	605	595	88	79	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	13	12	12
Grade (%)		4%	0%		2%	
Storage Length (ft)	225			750	0	100
Storage Lanes	1			1	1	1
Taper Length (ft)	100				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Fr _t			0.981			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1769	1844	3511	0	1752	1567
Flt Permitted	0.314				0.950	
Satd. Flow (perm)	585	1844	3511	0	1752	1567
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			24			49
Link Speed (mph)		50	50		25	
Link Distance (ft)		586	1000		1259	
Travel Time (s)		8.0	13.6		34.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	1%	0%	2%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	107	658	743	0	86	49
Turn Type	pm+pt	NA	NA		Prot	pt+ov
Protected Phases	5	2	6		8	5 8
Permitted Phases	2					
Detector Phase	5	2	6		8	8
Switch Phase						
Minimum Initial (s)	8.0	57.0	36.0		8.0	
Minimum Split (s)	15.0	67.0	44.0		15.0	
Total Split (s)	17.0	67.0	50.0		23.0	
Total Split (%)	18.9%	74.4%	55.6%		25.6%	
Yellow Time (s)	5.0	6.0	6.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	7.0	8.0	8.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	
Act Effect Green (s)	69.3	69.9	57.9		9.7	21.7
Actuated g/C Ratio	0.77	0.78	0.64		0.11	0.24
v/c Ratio	0.19	0.46	0.33		0.46	0.12
Control Delay	4.3	6.3	6.8		45.2	7.7
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	4.3	6.3	6.8		45.2	7.7
LOS	A	A	A		D	A
Approach Delay		6.0	6.8		31.6	
Approach LOS		A	A		C	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 50th (ft)	14	129	74		47	0
Queue Length 95th (ft)	32	231	93		89	25
Internal Link Dist (ft)		506	920		1179	
Turn Bay Length (ft)	225				100	
Base Capacity (vph)	582	1432	2267		311	423
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.18	0.46	0.33		0.28	0.12

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.46

Intersection Signal Delay: 8.5

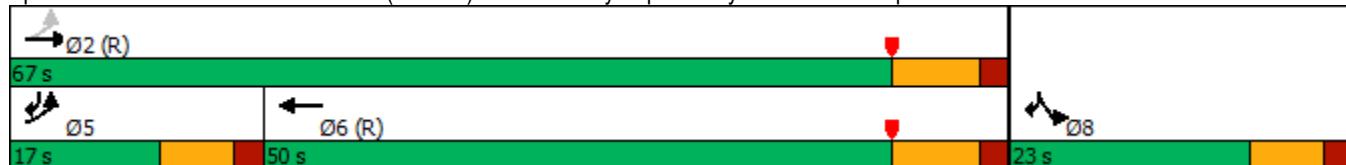
Intersection LOS: A

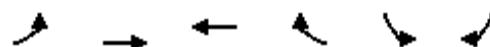
Intersection Capacity Utilization 66.7%

ICU Level of Service C

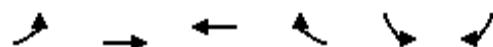
Analysis Period (min) 15

Splits and Phases: 30: Delilah Road (CR 646) & Atlantic City Expressway EB On/Off Ramps





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑↑		↑	↑
Traffic Volume (veh/h)	98	605	595	88	79	45
Future Volume (veh/h)	98	605	595	88	79	45
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1806	1791	1885	1976	1847	1847
Adj Flow Rate, veh/h	107	658	647	0	86	49
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	0	2	2
Cap, veh/h	602	1339	2080		151	273
Arrive On Green	0.09	0.75	0.58	0.00	0.09	0.09
Sat Flow, veh/h	1720	1791	3770	0	1759	1565
Grp Volume(v), veh/h	107	658	647	0	86	49
Grp Sat Flow(s), veh/h/ln	1720	1791	1791	0	1759	1565
Q Serve(g_s), s	1.8	13.2	8.3	0.0	4.2	2.4
Cycle Q Clear(g_c), s	1.8	13.2	8.3	0.0	4.2	2.4
Prop In Lane	1.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	602	1339	2080		151	273
V/C Ratio(X)	0.18	0.49	0.31		0.57	0.18
Avail Cap(c_a), veh/h	641	1339	2080		313	417
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	5.2	4.5	9.7	0.0	39.5	31.6
Incr Delay (d2), s/veh	0.1	1.3	0.4	0.0	1.3	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	0.8	5.6	5.0	0.0	3.4	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	5.3	5.8	10.0	0.0	40.8	31.8
LnGrp LOS	A	A	B		D	C
Approach Vol, veh/h	765	647		135		
Approach Delay, s/veh	5.8	10.0		37.5		
Approach LOS	A	B		D		
Timer - Assigned Phs	2			5	6	8
Phs Duration (G+Y+R _c), s	75.3			15.0	60.3	14.7
Change Period (Y+R _c), s	8.0			7.0	8.0	7.0
Max Green Setting (Gmax), s	59.0			10.0	42.0	16.0
Max Q Clear Time (g_c+l1), s	0.0			3.8	0.0	6.2
Green Ext Time (p_c), s	0.0			0.1	0.0	0.2
Intersection Summary						
HCM 6th Ctrl Delay			10.3			
HCM 6th LOS			B			
Notes						
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	187	970	693	65	236	44
Future Volume (vph)	187	970	693	65	236	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	13	12	12
Grade (%)		4%	0%		2%	
Storage Length (ft)	225			150	0	100
Storage Lanes	1			1	1	1
Taper Length (ft)	100				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1685	1790	1759	1531	1610	1523
Flt Permitted	0.120				0.950	
Satd. Flow (perm)	213	1790	1759	1531	1610	1523
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				26		47
Link Speed (mph)		50	50		25	
Link Distance (ft)		586	889		281	
Travel Time (s)		8.0	12.1		7.7	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	4%	8%	9%	11%	5%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	201	1043	745	70	254	47
Turn Type	pm+pt	NA	NA	Free	Prot	pt+ov
Protected Phases	5	2	6		8	5 8
Permitted Phases	2			Free		
Detector Phase	5	2	6		8	8
Switch Phase						
Minimum Initial (s)	8.0	57.0	36.0		8.0	
Minimum Split (s)	15.0	67.0	44.0		15.0	
Total Split (s)	23.0	67.0	44.0		23.0	
Total Split (%)	25.6%	74.4%	48.9%		25.6%	
Yellow Time (s)	5.0	6.0	6.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	7.0	8.0	8.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	
Act Effect Green (s)	60.4	59.4	41.5	90.0	15.6	33.5
Actuated g/C Ratio	0.67	0.66	0.46	1.00	0.17	0.37
v/c Ratio	0.63	0.88	0.92	0.05	0.91	0.08
Control Delay	18.8	23.8	36.4	0.0	73.5	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.8	23.8	36.4	0.0	73.5	5.3
LOS	B	C	D	A	E	A
Approach Delay		23.0	33.3		62.9	
Approach LOS		C	C		E	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 50th (ft)	38	434	402	0	142	0
Queue Length 95th (ft)	102	#782	#678	m0	#281	19
Internal Link Dist (ft)		506	809		201	
Turn Bay Length (ft)	225			150		100
Base Capacity (vph)	404	1181	810	1531	286	580
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.88	0.92	0.05	0.89	0.08

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay: 31.6

Intersection LOS: C

Intersection Capacity Utilization 78.2%

ICU Level of Service D

Analysis Period (min) 15

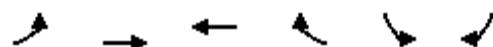
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

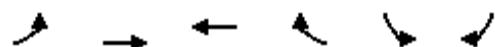
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 30: Delilah Road (CR 646) & Atlantic City Expressway EB On/Off Ramps

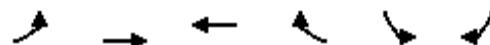




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	187	970	693	65	236	44
Future Volume (veh/h)	187	970	693	65	236	44
Initial Q (Q _b), veh	1	7	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1732	1746	1781	1837	1713	1802
Adj Flow Rate, veh/h	201	1043	745	0	254	47
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	5	4	8	9	11	5
Cap, veh/h	312	1150	718		285	461
Arrive On Green	0.09	0.66	0.49	0.00	0.17	0.17
Sat Flow, veh/h	1649	1746	1781	1557	1632	1527
Grp Volume(v), veh/h	201	1043	745	0	254	47
Grp Sat Flow(s), veh/h/ln	1649	1746	1781	1557	1632	1527
Q Serve(g_s), s	5.0	45.5	32.9	0.0	13.7	2.1
Cycle Q Clear(g_c), s	5.0	45.5	32.9	0.0	13.7	2.1
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	312	1150	718		285	461
V/C Ratio(X)	0.64	0.91	1.04		0.89	0.10
Avail Cap(c_a), veh/h	457	1150	877		290	407
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	17.8	13.6	26.9	0.0	36.3	22.7
Incr Delay (d2), s/veh	0.8	11.8	43.6	0.0	26.1	0.0
Initial Q Delay(d3), s/veh	0.2	2.9	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	3.4	24.8	30.7	0.0	12.0	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	18.9	28.3	70.4	0.0	62.4	22.8
LnGrp LOS	B	C	F		E	C
Approach Vol, veh/h	1244	745		301		
Approach Delay, s/veh	26.8	70.4		56.2		
Approach LOS	C	E		E		
Timer - Assigned Phs	2			5	6	8
Phs Duration (G+Y+R _c), s	67.3			15.0	52.3	22.7
Change Period (Y+R _c), s	8.0			7.0	8.0	7.0
Max Green Setting (Gmax), s	59.0			16.0	36.0	16.0
Max Q Clear Time (g_c+l1), s	0.0			7.0	0.0	15.7
Green Ext Time (p_c), s	0.0			0.2	0.0	0.0
Intersection Summary						
HCM 6th Ctrl Delay		44.9				
HCM 6th LOS		D				
Notes						
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	129	802	1030	134	131	48
Future Volume (vph)	129	802	1030	134	131	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	13	12	12
Grade (%)		4%	0%		2%	
Storage Length (ft)	225			150	0	100
Storage Lanes	1			1	1	1
Taper Length (ft)	100				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1769	1790	1863	1574	1610	1567
Flt Permitted	0.074				0.950	
Satd. Flow (perm)	138	1790	1863	1574	1610	1567
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				37		29
Link Speed (mph)		50	50		25	
Link Distance (ft)		586	889		281	
Travel Time (s)		8.0	12.1		7.7	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	4%	2%	6%	11%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	134	835	1073	140	136	50
Turn Type	pm+pt	NA	NA	Free	Prot	pt+ov
Protected Phases	5	2	6		8	5 8
Permitted Phases	2			Free		
Detector Phase	5	2	6		8	8
Switch Phase						
Minimum Initial (s)	8.0	57.0	36.0		8.0	
Minimum Split (s)	15.0	67.0	44.0		15.0	
Total Split (s)	23.0	67.0	44.0		23.0	
Total Split (%)	25.6%	74.4%	48.9%		25.6%	
Yellow Time (s)	5.0	6.0	6.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	7.0	8.0	8.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	
Act Effect Green (s)	63.9	62.9	47.3	90.0	12.1	27.7
Actuated g/C Ratio	0.71	0.70	0.53	1.00	0.13	0.31
v/c Ratio	0.53	0.67	1.10	0.09	0.63	0.10
Control Delay	18.6	11.7	75.1	0.1	49.3	11.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.6	11.7	75.1	0.1	49.3	11.4
LOS	B	B	E	A	D	B
Approach Delay		12.6	66.5		39.1	
Approach LOS		B	E		D	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 50th (ft)	20	230	~680	0	74	8
Queue Length 95th (ft)	80	414	#1016	m0	127	31
Internal Link Dist (ft)		506	809		201	
Turn Bay Length (ft)	225			150		100
Base Capacity (vph)	387	1250	978	1574	286	469
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.67	1.10	0.09	0.48	0.11

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.10

Intersection Signal Delay: 42.3

Intersection LOS: D

Intersection Capacity Utilization 86.9%

ICU Level of Service E

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

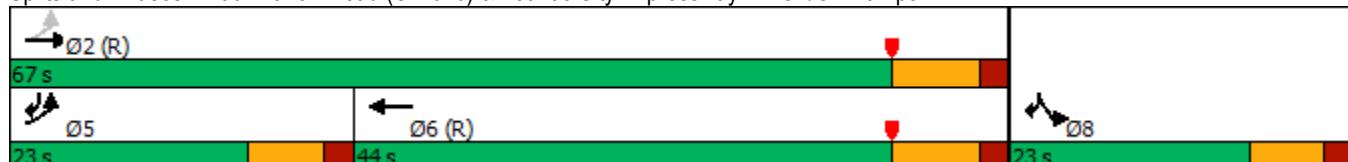
Queue shown is maximum after two cycles.

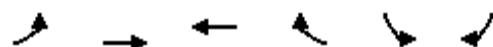
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

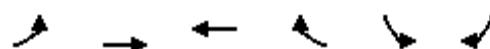
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 30: Delilah Road (CR 646) & Atlantic City Expressway EB On/Off Ramps





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	129	802	1030	134	131	48
Future Volume (veh/h)	129	802	1030	134	131	48
Initial Q (Q _b), veh	1	0	49	4	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1806	1746	1870	1884	1713	1847
Adj Flow Rate, veh/h	134	835	1073	0	136	50
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	4	2	6	11	2
Cap, veh/h	235	1272	885		171	374
Arrive On Green	0.09	0.73	0.56	0.00	0.10	0.10
Sat Flow, veh/h	1720	1746	1870	1596	1632	1565
Grp Volume(v), veh/h	134	835	1073	0	136	50
Grp Sat Flow(s), veh/h/ln	1720	1746	1870	1596	1632	1565
Q Serve(g_s), s	2.5	22.4	50.6	0.0	7.3	2.4
Cycle Q Clear(g_c), s	2.5	22.4	50.6	0.0	7.3	2.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	235	1272	885		171	374
V/C Ratio(X)	0.57	0.66	1.21		0.79	0.13
Avail Cap(c_a), veh/h	386	1272	1051		290	417
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	20.7	6.4	23.7	0.0	39.3	27.0
Incr Delay (d2), s/veh	0.8	2.7	106.3	0.0	3.2	0.1
Initial Q Delay(d3), s/veh	0.3	0.0	199.4	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	2.9	9.7	109.7	0.0	5.5	1.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	21.8	9.0	329.4	0.0	42.5	27.1
LnGrp LOS	C	A	F		D	C
Approach Vol, veh/h	969	1073		186		
Approach Delay, s/veh	10.8	329.4		38.4		
Approach LOS	B	F		D		
Timer - Assigned Phs	2			5	6	8
Phs Duration (G+Y+Rc), s	73.6			15.0	58.6	16.4
Change Period (Y+Rc), s	8.0			7.0	8.0	7.0
Max Green Setting (Gmax), s	59.0			16.0	36.0	16.0
Max Q Clear Time (g_c+l1), s	0.0			4.5	0.0	9.3
Green Ext Time (p_c), s	0.0			0.1	0.0	0.2
Intersection Summary						
HCM 6th Ctrl Delay			166.5			
HCM 6th LOS			F			
Notes						
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	98	629	613	94	91	45
Future Volume (vph)	98	629	613	94	91	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	13	12	12
Grade (%)		4%	0%		2%	
Storage Length (ft)	225			150	0	100
Storage Lanes	1			1	1	1
Taper Length (ft)	100				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1769	1844	1881	1669	1752	1567
Flt Permitted	0.269				0.950	
Satd. Flow (perm)	501	1844	1881	1669	1752	1567
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				43		49
Link Speed (mph)		50	50		25	
Link Distance (ft)		586	889		281	
Travel Time (s)		8.0	12.1		7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	1%	0%	2%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	107	684	666	102	99	49
Turn Type	pm+pt	NA	NA	Free	Prot	pt+ov
Protected Phases	5	2	6		8	5 8
Permitted Phases	2			Free		
Detector Phase	5	2	6		8	8
Switch Phase						
Minimum Initial (s)	8.0	57.0	36.0		8.0	
Minimum Split (s)	15.0	67.0	44.0		15.0	
Total Split (s)	23.0	67.0	44.0		23.0	
Total Split (%)	25.6%	74.4%	48.9%		25.6%	
Yellow Time (s)	5.0	6.0	6.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	7.0	8.0	8.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		None	
Act Effect Green (s)	68.8	69.4	57.4	90.0	10.2	22.2
Actuated g/C Ratio	0.76	0.77	0.64	1.00	0.11	0.25
v/c Ratio	0.22	0.48	0.56	0.06	0.50	0.12
Control Delay	4.8	6.9	11.0	0.1	45.9	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.8	6.9	11.0	0.1	45.9	7.5
LOS	A	A	B	A	D	A
Approach Delay		6.6	9.5		33.2	
Approach LOS		A	A		C	



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 50th (ft)	14	141	180	0	54	0
Queue Length 95th (ft)	33	255	228	0	100	24
Internal Link Dist (ft)		506	809		201	
Turn Bay Length (ft)	225			150		100
Base Capacity (vph)	608	1421	1199	1669	311	423
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.48	0.56	0.06	0.32	0.12

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.56

Intersection Signal Delay: 10.2

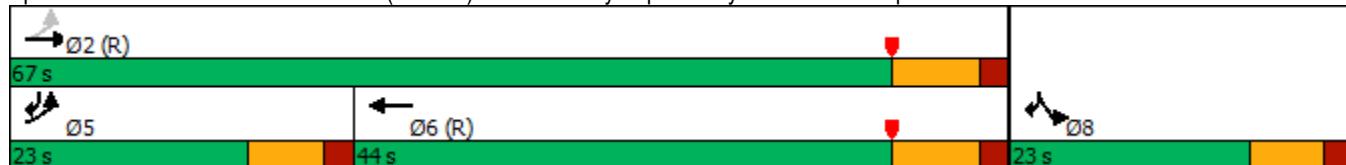
Intersection LOS: B

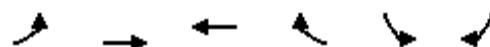
Intersection Capacity Utilization 66.7%

ICU Level of Service C

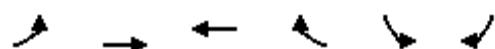
Analysis Period (min) 15

Splits and Phases: 30: Delilah Road (CR 646) & Atlantic City Expressway EB On/Off Ramps

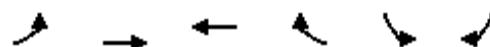




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	98	629	613	94	91	45
Future Volume (veh/h)	98	629	613	94	91	45
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1806	1791	1885	1976	1847	1847
Adj Flow Rate, veh/h	107	684	666	0	99	49
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	0	2	2
Cap, veh/h	493	1337	1093		152	275
Arrive On Green	0.09	0.75	0.58	0.00	0.09	0.09
Sat Flow, veh/h	1720	1791	1885	1675	1759	1565
Grp Volume(v), veh/h	107	684	666	0	99	49
Grp Sat Flow(s), veh/h/ln	1720	1791	1885	1675	1759	1565
Q Serve(g_s), s	1.8	14.1	20.7	0.0	4.9	2.4
Cycle Q Clear(g_c), s	1.8	14.1	20.7	0.0	4.9	2.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	493	1337	1093		152	275
V/C Ratio(X)	0.22	0.51	0.61		0.65	0.18
Avail Cap(c_a), veh/h	646	1337	1093		313	417
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	7.9	4.7	12.3	0.0	39.8	31.6
Incr Delay (d2), s/veh	0.1	1.4	2.5	0.0	1.7	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	0.8	6.0	12.3	0.0	3.9	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	8.0	6.1	14.8	0.0	41.5	31.7
LnGrp LOS	A	A	B		D	C
Approach Vol, veh/h		791	666		148	
Approach Delay, s/veh		6.3	14.8		38.3	
Approach LOS		A	B		D	
Timer - Assigned Phs		2		5	6	8
Phs Duration (G+Y+R _c), s		75.2		15.0	60.2	14.8
Change Period (Y+R _c), s		8.0		7.0	8.0	7.0
Max Green Setting (Gmax), s		59.0		16.0	36.0	16.0
Max Q Clear Time (g_c+l1), s		0.0		3.8	0.0	6.9
Green Ext Time (p_c), s		0.0		0.1	0.0	0.2
Intersection Summary						
HCM 6th Ctrl Delay			12.8			
HCM 6th LOS			B			
Notes						
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑↓		↑	↑
Traffic Volume (vph)	187	970	693	65	236	44
Future Volume (vph)	187	970	693	65	236	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	13	12	12
Grade (%)		4%	0%		2%	
Storage Length (ft)	225			750	0	100
Storage Lanes	1			1	1	1
Taper Length (ft)	100				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Fr _t			0.987			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1685	1790	3297	0	1610	1523
Flt Permitted	0.243				0.950	
Satd. Flow (perm)	431	1790	3297	0	1610	1523
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			13			47
Link Speed (mph)		50	50		25	
Link Distance (ft)		442	1017		303	
Travel Time (s)		6.0	13.9		8.3	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	4%	8%	9%	11%	5%
Adj. Flow (vph)	201	1043	745	70	254	47
Shared Lane Traffic (%)						
Lane Group Flow (vph)	201	1043	815	0	254	47
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		50	
Link Offset(ft)		0	0		-1	
Crosswalk Width(ft)		6	14		20	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.00	0.96	1.01	1.01
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	0	0		1	1
Detector Template						
Leading Detector (ft)	40	0	0		40	40
Trailing Detector (ft)	-10	0	0		-10	-10
Detector 1 Position(ft)	-10	0	0		-10	-10
Detector 1 Size(ft)	50	6	6		50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Turn Type	pm+pt	NA	NA		Prot	pt+ov
Protected Phases	5	2	6		8	85
Permitted Phases	2					
Detector Phase	5	2	6		8	8
Switch Phase						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Initial (s)	8.0	56.0	36.0		8.0	
Minimum Split (s)	15.0	64.0	44.0		15.0	
Total Split (s)	20.0	64.0	44.0		26.0	
Total Split (%)	22.2%	71.1%	48.9%		28.9%	
Maximum Green (s)	13.0	56.0	36.0		19.0	
Yellow Time (s)	5.0	6.0	6.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	7.0	8.0	8.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	2.0	2.0	2.0		2.0	
Recall Mode	None	C-Max	C-Max		None	
Act Effct Green (s)	58.9	57.9	41.3		17.1	33.7
Actuated g/C Ratio	0.65	0.64	0.46		0.19	0.37
v/c Ratio	0.49	0.91	0.54		0.83	0.08
Control Delay	10.7	27.9	16.1		58.0	5.3
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	10.7	27.9	16.1		58.0	5.3
LOS	B	C	B		E	A
Approach Delay		25.2	16.1		49.7	
Approach LOS		C	B		D	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 25.2

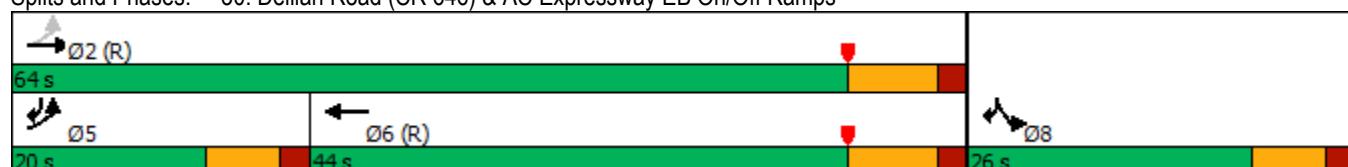
Intersection LOS: C

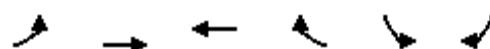
Intersection Capacity Utilization 76.6%

ICU Level of Service D

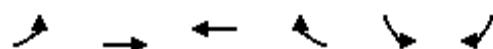
Analysis Period (min) 15

Splits and Phases: 30: Delilah Road (CR 646) & AC Expressway EB On/Off Ramps

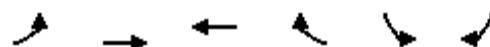




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑↑		↑	↑
Traffic Volume (veh/h)	187	970	693	65	236	44
Future Volume (veh/h)	187	970	693	65	236	44
Initial Q (Q _b), veh	1	7	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1732	1746	1781	1837	1713	1802
Adj Flow Rate, veh/h	201	1043	745	0	254	47
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	5	4	8	9	11	5
Cap, veh/h	457	1147	1632		288	417
Arrive On Green	0.09	0.66	0.49	0.00	0.18	0.18
Sat Flow, veh/h	1649	1746	3563	0	1632	1527
Grp Volume(v), veh/h	201	1043	745	0	254	47
Grp Sat Flow(s), veh/h/ln	1649	1746	1692	0	1632	1527
Q Serve(g_s), s	5.0	45.8	13.0	0.0	13.7	2.1
Cycle Q Clear(g_c), s	5.0	45.8	13.0	0.0	13.7	2.1
Prop In Lane	1.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	457	1147	1632		288	417
V/C Ratio(X)	0.44	0.91	0.46		0.88	0.11
Avail Cap(c_a), veh/h	548	1147	1659		344	458
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	10.0	13.8	15.5	0.0	36.1	24.5
Incr Delay (d2), s/veh	0.2	12.1	0.9	0.0	18.0	0.0
Initial Q Delay(d3), s/veh	0.1	3.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	2.7	25.0	8.1	0.0	11.1	1.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	10.3	28.9	16.4	0.0	54.1	24.6
LnGrp LOS	B	C	B		D	C
Approach Vol, veh/h	1244	745		301		
Approach Delay, s/veh	25.9	16.4		49.5		
Approach LOS	C	B		D		
Timer - Assigned Phs	2			5	6	8
Phs Duration (G+Y+R _c), s	67.1			15.0	52.1	22.9
Change Period (Y+R _c), s	8.0			7.0	8.0	7.0
Max Green Setting (Gmax), s	56.0			13.0	36.0	19.0
Max Q Clear Time (g_c+l1), s	0.0			7.0	0.0	15.7
Green Ext Time (p_c), s	0.0			0.2	0.0	0.2
Intersection Summary						
HCM 6th Ctrl Delay		25.9				
HCM 6th LOS			C			
Notes						
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑↓		↑	↑
Traffic Volume (vph)	129	802	1030	134	131	48
Future Volume (vph)	129	802	1030	134	131	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	13	12	12
Grade (%)		4%	0%		2%	
Storage Length (ft)	225			750	0	100
Storage Lanes	1			1	1	1
Taper Length (ft)	100				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Fr _t			0.983			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1769	1790	3463	0	1610	1567
Flt Permitted	0.135				0.950	
Satd. Flow (perm)	251	1790	3463	0	1610	1567
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			19			29
Link Speed (mph)		50	50		25	
Link Distance (ft)		442	1017		303	
Travel Time (s)		6.0	13.9		8.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	4%	2%	6%	11%	2%
Adj. Flow (vph)	134	835	1073	140	136	50
Shared Lane Traffic (%)						
Lane Group Flow (vph)	134	835	1213	0	136	50
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		50	
Link Offset(ft)		0	0		-1	
Crosswalk Width(ft)		6	14		20	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.00	0.96	1.01	1.01
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	0	0		1	1
Detector Template						
Leading Detector (ft)	40	0	0		40	40
Trailing Detector (ft)	-10	0	0		-10	-10
Detector 1 Position(ft)	-10	0	0		-10	-10
Detector 1 Size(ft)	50	6	6		50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Turn Type	pm+pt	NA	NA		Prot	pt+ov
Protected Phases	5	2	6		8	85
Permitted Phases	2					
Detector Phase	5	2	6		8	8
Switch Phase						

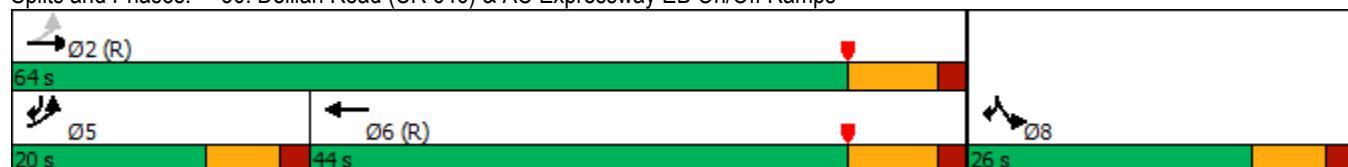


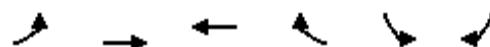
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Initial (s)	8.0	56.0	36.0		8.0	
Minimum Split (s)	15.0	64.0	44.0		15.0	
Total Split (s)	20.0	64.0	44.0		26.0	
Total Split (%)	22.2%	71.1%	48.9%		28.9%	
Maximum Green (s)	13.0	56.0	36.0		19.0	
Yellow Time (s)	5.0	6.0	6.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	7.0	8.0	8.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	2.0	2.0	2.0		2.0	
Recall Mode	None	C-Max	C-Max		None	
Act Effct Green (s)	63.6	62.6	47.0		12.4	28.0
Actuated g/C Ratio	0.71	0.70	0.52		0.14	0.31
v/c Ratio	0.42	0.67	0.67		0.61	0.10
Control Delay	8.8	12.1	18.6		47.8	11.1
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	8.8	12.1	18.6		47.8	11.1
LOS	A	B	B		D	B
Approach Delay		11.6	18.6		37.9	
Approach LOS		B	B		D	

Intersection Summary

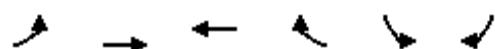
Area Type:	Other
Cycle Length:	90
Actuated Cycle Length:	90
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle:	80
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.67
Intersection Signal Delay: 17.2	Intersection LOS: B
Intersection Capacity Utilization 66.4%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 30: Delilah Road (CR 646) & AC Expressway EB On/Off Ramps

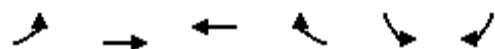




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑↑		↑	↑
Traffic Volume (veh/h)	129	802	1030	134	131	48
Future Volume (veh/h)	129	802	1030	134	131	48
Initial Q (Q _b), veh	1	0	0	4	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1806	1746	1870	1884	1713	1847
Adj Flow Rate, veh/h	134	835	1073	0	136	50
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	4	2	6	11	2
Cap, veh/h	422	1271	1992		172	305
Arrive On Green	0.09	0.73	0.56	0.00	0.11	0.11
Sat Flow, veh/h	1720	1746	3741	0	1632	1565
Grp Volume(v), veh/h	134	835	1073	0	136	50
Grp Sat Flow(s), veh/h/ln	1720	1746	1777	0	1632	1565
Q Serve(g_s), s	2.5	22.4	17.1	0.0	7.3	2.4
Cycle Q Clear(g_c), s	2.5	22.4	17.1	0.0	7.3	2.4
Prop In Lane	1.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	422	1271	1992		172	305
V/C Ratio(X)	0.32	0.66	0.54		0.79	0.16
Avail Cap(c_a), veh/h	517	1271	1995		344	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	8.1	6.4	12.4	0.0	39.3	30.1
Incr Delay (d2), s/veh	0.2	2.7	1.0	0.0	3.1	0.1
Initial Q Delay(d3), s/veh	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	1.3	9.7	9.8	0.0	5.5	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	8.3	9.0	13.5	0.0	42.4	30.2
LnGrp LOS	A	A	B		D	C
Approach Vol, veh/h	969	1073		186		
Approach Delay, s/veh	8.9	13.5		39.1		
Approach LOS	A	B		D		
Timer - Assigned Phs	2			5	6	8
Phs Duration (G+Y+R _c), s	73.5			15.0	58.5	16.5
Change Period (Y+R _c), s	8.0			7.0	8.0	7.0
Max Green Setting (Gmax), s	56.0			13.0	36.0	19.0
Max Q Clear Time (g_c+l1), s	0.0			4.5	0.0	9.3
Green Ext Time (p_c), s	0.0			0.1	0.0	0.3
Intersection Summary						
HCM 6th Ctrl Delay			13.7			
HCM 6th LOS			B			
Notes						
User approved volume balancing among the lanes for turning movement.						
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑↓		↑	↑
Traffic Volume (vph)	98	629	613	94	91	45
Future Volume (vph)	98	629	613	94	91	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	13	12	12
Grade (%)		4%	0%		2%	
Storage Length (ft)	225			750	0	100
Storage Lanes	1			1	1	1
Taper Length (ft)	100				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Fr _t			0.980			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1769	1844	3507	0	1752	1567
Flt Permitted	0.302				0.950	
Satd. Flow (perm)	562	1844	3507	0	1752	1567
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			20			49
Link Speed (mph)		50	50		25	
Link Distance (ft)		442	1017		303	
Travel Time (s)		6.0	13.9		8.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	1%	0%	2%	2%
Adj. Flow (vph)	107	684	666	102	99	49
Shared Lane Traffic (%)						
Lane Group Flow (vph)	107	684	768	0	99	49
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		50	
Link Offset(ft)		0	0		-1	
Crosswalk Width(ft)		6	14		20	
Two way Left Turn Lane						
Headway Factor	1.03	1.03	1.00	0.96	1.01	1.01
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	0	0		1	1
Detector Template						
Leading Detector (ft)	40	0	0		40	40
Trailing Detector (ft)	-10	0	0		-10	-10
Detector 1 Position(ft)	-10	0	0		-10	-10
Detector 1 Size(ft)	50	6	6		50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Turn Type	pm+pt	NA	NA		Prot	pt+ov
Protected Phases	5	2	6		8	85
Permitted Phases	2					
Detector Phase	5	2	6		8	8
Switch Phase						



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Initial (s)	8.0	49.0	29.0		8.0	
Minimum Split (s)	15.0	57.0	37.0		15.0	
Total Split (s)	20.0	57.0	37.0		33.0	
Total Split (%)	22.2%	63.3%	41.1%		36.7%	
Maximum Green (s)	13.0	49.0	29.0		26.0	
Yellow Time (s)	5.0	6.0	6.0		5.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	7.0	8.0	8.0		7.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	2.0	2.0	2.0		2.0	
Recall Mode	None	C-Max	C-Max		None	
Act Effct Green (s)	68.7	69.3	57.3	10.3	22.3	
Actuated g/C Ratio	0.76	0.77	0.64	0.11	0.25	
v/c Ratio	0.20	0.48	0.34	0.50	0.12	
Control Delay	4.7	6.9	8.7	45.6	7.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	4.7	6.9	8.7	45.6	7.5	
LOS	A	A	A	D	A	
Approach Delay		6.6	8.7	33.0		
Approach LOS		A	A	C		

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.50

Intersection Signal Delay: 9.8

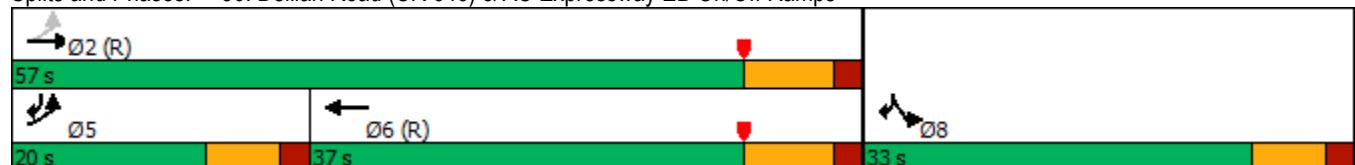
Intersection LOS: A

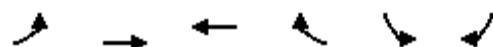
Intersection Capacity Utilization 60.0%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 30: Delilah Road (CR 646) & AC Expressway EB On/Off Ramps





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑ ↗	↑ ↘	↑ ↗ ↘		↑ ↗	↑ ↘
Traffic Volume (veh/h)	98	629	613	94	91	45
Future Volume (veh/h)	98	629	613	94	91	45
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1806	1791	1885	1976	1847	1847
Adj Flow Rate, veh/h	107	684	666	0	99	49
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	1	1	0	2	2
Cap, veh/h	593	1337	2077		152	275
Arrive On Green	0.09	0.75	0.58	0.00	0.09	0.09
Sat Flow, veh/h	1720	1791	3770	0	1759	1565
Grp Volume(v), veh/h	107	684	666	0	99	49
Grp Sat Flow(s), veh/h/ln	1720	1791	1791	0	1759	1565
Q Serve(g_s), s	1.8	14.1	8.6	0.0	4.9	2.4
Cycle Q Clear(g_c), s	1.8	14.1	8.6	0.0	4.9	2.4
Prop In Lane	1.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	593	1337	2077		152	275
V/C Ratio(X)	0.18	0.51	0.32		0.65	0.18
Avail Cap(c_a), veh/h	688	1337	2077		508	591
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	5.3	4.7	9.8	0.0	39.8	31.6
Incr Delay (d2), s/veh	0.1	1.4	0.4	0.0	1.7	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	0.8	6.0	5.2	0.0	3.9	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	5.4	6.1	10.2	0.0	41.5	31.7
LnGrp LOS	A	A	B		D	C
Approach Vol, veh/h		791	666		148	
Approach Delay, s/veh		6.0	10.2		38.3	
Approach LOS		A	B		D	
Timer - Assigned Phs		2		5	6	8
Phs Duration (G+Y+Rc), s		75.2		15.0	60.2	14.8
Change Period (Y+Rc), s		8.0		7.0	8.0	7.0
Max Green Setting (Gmax), s		49.0		13.0	29.0	26.0
Max Q Clear Time (g_c+l1), s		0.0		3.8	0.0	6.9
Green Ext Time (p_c), s		0.0		0.1	0.0	0.3
Intersection Summary						
HCM 6th Ctrl Delay			10.7			
HCM 6th LOS			B			

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↔	
Traffic Volume (vph)	873	0	0	549	134	105
Future Volume (vph)	873	0	0	549	134	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%			2%	4%	
Storage Length (ft)		0	0		0	40
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t					0.941	
Flt Protected					0.973	
Satd. Flow (prot)	1810	0	0	1710	1646	0
Flt Permitted					0.973	
Satd. Flow (perm)	1810	0	0	1710	1646	0
Right Turn on Red		No			Yes	
Satd. Flow (RTOR)					38	
Link Speed (mph)	50			50	25	
Link Distance (ft)	771			1053	657	
Travel Time (s)	10.5			14.4	17.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	5%	0%	0%	10%	4%	3%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	909	0	0	572	249	0
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	61.0			61.0	7.0	
Minimum Split (s)	69.0			69.0	12.0	
Total Split (s)	69.0			69.0	21.0	
Total Split (%)	76.7%			76.7%	23.3%	
Yellow Time (s)	6.0			6.0	3.0	
All-Red Time (s)	2.0			2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0	
Total Lost Time (s)	8.0			8.0	5.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max			C-Max	None	
Act Effct Green (s)	62.5			62.5	14.5	
Actuated g/C Ratio	0.69			0.69	0.16	
v/c Ratio	0.72			0.48	0.84	
Control Delay	8.2			8.3	55.9	
Queue Delay	0.0			0.0	0.0	
Total Delay	8.2			8.3	55.9	
LOS	A			A	E	
Approach Delay	8.2			8.3	55.9	
Approach LOS	A			A	E	
Queue Length 50th (ft)	161			137	115	



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Queue Length 95th (ft)	195			208	#233	
Internal Link Dist (ft)	691			973	577	
Turn Bay Length (ft)						
Base Capacity (vph)	1257			1188	323	
Starvation Cap Reductn	0			0	0	
Spillback Cap Reductn	0			0	0	
Storage Cap Reductn	0			0	0	
Reduced v/c Ratio	0.72			0.48	0.77	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 8 (9%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 15.1

Intersection LOS: B

Intersection Capacity Utilization 75.5%

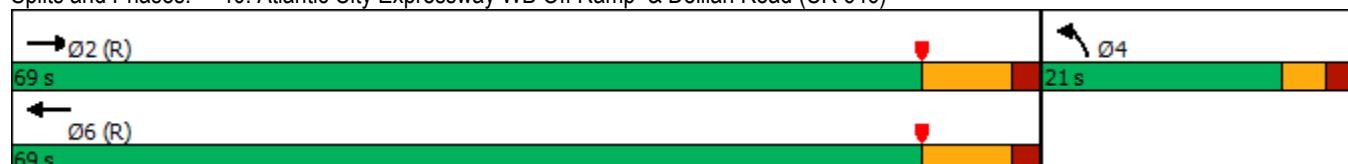
ICU Level of Service D

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

Splits and Phases: 40: Atlantic City Expressway WB Off Ramp & Delilah Road (CR 646)





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	873	0	0	549	134	105
Future Volume (veh/h)	873	0	0	549	134	105
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1826	0	0	1728	1746	1761
Adj Flow Rate, veh/h	909	0	0	572	140	109
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	0	0	10	4	3
Cap, veh/h	1239	0	0	1173	156	122
Arrive On Green	0.68	0.00	0.00	0.68	0.18	0.18
Sat Flow, veh/h	1826	0	0	1728	884	688
Grp Volume(v), veh/h	909	0	0	572	250	0
Grp Sat Flow(s), veh/h/ln	1826	0	0	1728	1578	0
Q Serve(g_s), s	28.7	0.0	0.0	14.3	13.9	0.0
Cycle Q Clear(g_c), s	28.7	0.0	0.0	14.3	13.9	0.0
Prop In Lane		0.00	0.00		0.56	0.44
Lane Grp Cap(c), veh/h	1239	0	0	1173	279	0
V/C Ratio(X)	0.73	0.00	0.00	0.49	0.90	0.00
Avail Cap(c_a), veh/h	1239	0	0	1173	281	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	9.3	0.0	0.0	6.9	36.2	0.0
Incr Delay (d2), s/veh	3.9	0.0	0.0	1.5	27.8	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	14.0	0.0	0.0	7.4	12.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	13.1	0.0	0.0	8.4	64.0	0.0
LnGrp LOS	B	A	A	A	E	A
Approach Vol, veh/h	909			572	250	
Approach Delay, s/veh	13.1			8.4	64.0	
Approach LOS	B			A	E	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s	69.1			20.9	69.1	
Change Period (Y+Rc), s	8.0			5.0	8.0	
Max Green Setting (Gmax), s	61.0			16.0	61.0	
Max Q Clear Time (g_c+l1), s	0.0			15.9	0.0	
Green Ext Time (p_c), s	0.0			0.0	0.0	
Intersection Summary						
HCM 6th Ctrl Delay			18.9			
HCM 6th LOS			B			
Notes						
User approved volume balancing among the lanes for turning movement.						



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↔	
Traffic Volume (vph)	795	0	0	777	139	105
Future Volume (vph)	795	0	0	777	139	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%			2%	4%	
Storage Length (ft)		0	0		0	40
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t					0.942	
Flt Protected					0.972	
Satd. Flow (prot)	1776	0	0	1844	1681	0
Flt Permitted					0.972	
Satd. Flow (perm)	1776	0	0	1844	1681	0
Right Turn on Red		No			Yes	
Satd. Flow (RTOR)					37	
Link Speed (mph)	50			50	25	
Link Distance (ft)	771			1053	657	
Travel Time (s)	10.5			14.4	17.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	7%	0%	0%	2%	1%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	811	0	0	793	249	0
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	61.0			61.0	7.0	
Minimum Split (s)	69.0			69.0	12.0	
Total Split (s)	69.0			69.0	21.0	
Total Split (%)	76.7%			76.7%	23.3%	
Yellow Time (s)	6.0			6.0	3.0	
All-Red Time (s)	2.0			2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0	
Total Lost Time (s)	8.0			8.0	5.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max			C-Max	None	
Act Effct Green (s)	62.6			62.6	14.4	
Actuated g/C Ratio	0.70			0.70	0.16	
v/c Ratio	0.66			0.62	0.83	
Control Delay	7.3			10.3	54.6	
Queue Delay	0.0			0.0	0.0	
Total Delay	7.3			10.3	54.6	
LOS	A			B	D	
Approach Delay	7.3			10.3	54.6	
Approach LOS	A			B	D	
Queue Length 50th (ft)	132			222	116	



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Queue Length 95th (ft)	161			332	#230	
Internal Link Dist (ft)	691			973	577	
Turn Bay Length (ft)						
Base Capacity (vph)	1235			1282	329	
Starvation Cap Reductn	0			0	0	
Spillback Cap Reductn	0			0	0	
Storage Cap Reductn	0			0	0	
Reduced v/c Ratio	0.66			0.62	0.76	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 8 (9%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 15.0

Intersection LOS: B

Intersection Capacity Utilization 75.8%

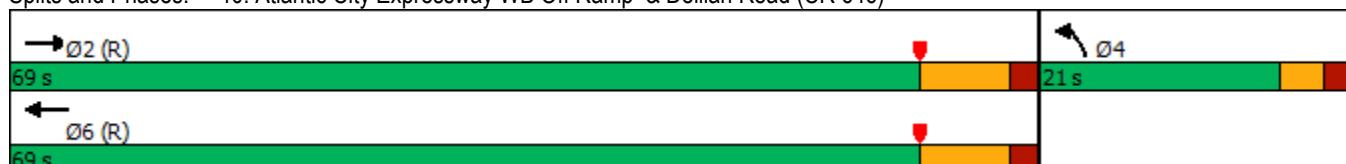
ICU Level of Service D

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

Splits and Phases: 40: Atlantic City Expressway WB Off Ramp & Delilah Road (CR 646)





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↖ ↗	
Traffic Volume (veh/h)	795	0	0	777	139	105
Future Volume (veh/h)	795	0	0	777	139	105
Initial Q (Q _b), veh	0	0	0	51	1	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	0	0	1847	1791	1776
Adj Flow Rate, veh/h	811	0	0	793	142	107
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	0	0	2	1	2
Cap, veh/h	1222	0	0	1257	209	79
Arrive On Green	0.68	0.00	0.00	0.68	0.17	0.17
Sat Flow, veh/h	1796	0	0	1847	920	693
Grp Volume(v), veh/h	811	0	0	793	250	0
Grp Sat Flow(s), veh/h/ln	1796	0	0	1847	1620	0
Q Serve(g_s), s	23.5	0.0	0.0	21.5	13.6	0.0
Cycle Q Clear(g_c), s	23.5	0.0	0.0	21.5	13.6	0.0
Prop In Lane		0.00	0.00		0.57	0.43
Lane Grp Cap(c), veh/h	1222	0	0	1257	289	0
V/C Ratio(X)	0.66	0.00	0.00	0.63	0.87	0.00
Avail Cap(c_a), veh/h	1226	0	0	1260	288	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.4	0.0	0.0	10.9	36.7	0.0
Incr Delay (d2), s/veh	2.9	0.0	0.0	2.4	22.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	32.2	0.0	0.0
%ile BackOfQ(95%), veh/ln	11.6	0.0	0.0	28.2	12.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	11.2	0.0	0.0	45.4	58.8	0.0
LnGrp LOS	B	A	A	D	E	A
Approach Vol, veh/h	811			793	250	
Approach Delay, s/veh	11.2			45.4	58.8	
Approach LOS	B			D	E	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+R _c), s	69.4			20.6	69.4	
Change Period (Y+R _c), s	8.0			5.0	8.0	
Max Green Setting (Gmax), s	61.0			16.0	61.0	
Max Q Clear Time (g_c+l1), s	0.0			15.6	0.0	
Green Ext Time (p_c), s	0.0			0.0	0.0	
Intersection Summary						
HCM 6th Ctrl Delay			32.3			
HCM 6th LOS			C			
Notes						
User approved volume balancing among the lanes for turning movement.						



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↔	
Traffic Volume (vph)	612	0	0	517	97	87
Future Volume (vph)	612	0	0	517	97	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%			2%	4%	
Storage Length (ft)		0	0		0	40
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t					0.936	
Flt Protected					0.974	
Satd. Flow (prot)	1863	0	0	1862	1689	0
Flt Permitted					0.974	
Satd. Flow (perm)	1863	0	0	1862	1689	0
Right Turn on Red		No			Yes	
Satd. Flow (RTOR)					44	
Link Speed (mph)	50			50	25	
Link Distance (ft)	771			1053	657	
Travel Time (s)	10.5			14.4	17.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	2%	0%	0%	1%	1%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	703	0	0	594	211	0
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	61.0			61.0	7.0	
Minimum Split (s)	69.0			69.0	12.0	
Total Split (s)	69.0			69.0	21.0	
Total Split (%)	76.7%			76.7%	23.3%	
Yellow Time (s)	6.0			6.0	3.0	
All-Red Time (s)	2.0			2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0	
Total Lost Time (s)	8.0			8.0	5.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max			C-Max	None	
Act Effct Green (s)	64.2			64.2	12.8	
Actuated g/C Ratio	0.71			0.71	0.14	
v/c Ratio	0.53			0.45	0.76	
Control Delay	5.9			7.2	46.3	
Queue Delay	0.0			0.0	0.0	
Total Delay	5.9			7.2	46.3	
LOS	A			A	D	
Approach Delay	5.9			7.2	46.3	
Approach LOS	A			A	D	
Queue Length 50th (ft)	109			126	91	



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Queue Length 95th (ft)	135			196	155	
Internal Link Dist (ft)	691			973	577	
Turn Bay Length (ft)						
Base Capacity (vph)	1328			1327	336	
Starvation Cap Reductn	0			0	0	
Spillback Cap Reductn	0			0	0	
Storage Cap Reductn	0			0	0	
Reduced v/c Ratio	0.53			0.45	0.63	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 8 (9%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 12.1

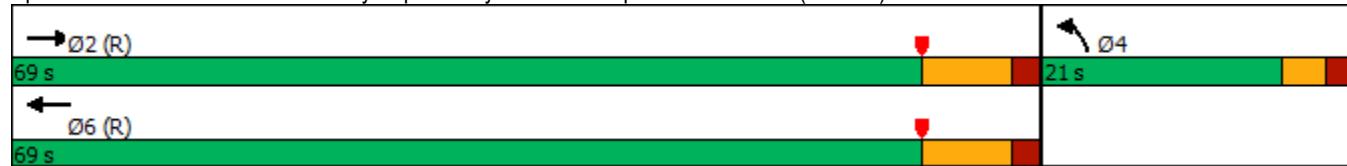
Intersection LOS: B

Intersection Capacity Utilization 72.4%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 40: Atlantic City Expressway WB Off Ramp & Delilah Road (CR 646)





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↗	
Traffic Volume (veh/h)	612	0	0	517	97	87
Future Volume (veh/h)	612	0	0	517	97	87
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	0	0	1862	1791	1806
Adj Flow Rate, veh/h	703	0	0	594	111	100
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	0	0	1	1	0
Cap, veh/h	1317	0	0	1311	128	115
Arrive On Green	0.70	0.00	0.00	0.70	0.15	0.15
Sat Flow, veh/h	1870	0	0	1862	844	760
Grp Volume(v), veh/h	703	0	0	594	212	0
Grp Sat Flow(s), veh/h/ln	1870	0	0	1862	1612	0
Q Serve(g_s), s	16.0	0.0	0.0	12.5	11.6	0.0
Cycle Q Clear(g_c), s	16.0	0.0	0.0	12.5	11.6	0.0
Prop In Lane		0.00	0.00		0.52	0.47
Lane Grp Cap(c), veh/h	1317	0	0	1311	244	0
V/C Ratio(X)	0.53	0.00	0.00	0.45	0.87	0.00
Avail Cap(c_a), veh/h	1317	0	0	1311	287	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	6.3	0.0	0.0	5.8	37.3	0.0
Incr Delay (d2), s/veh	1.6	0.0	0.0	1.1	19.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	8.2	0.0	0.0	6.4	9.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	7.9	0.0	0.0	6.9	56.6	0.0
LnGrp LOS	A	A	A	A	E	A
Approach Vol, veh/h	703			594	212	
Approach Delay, s/veh	7.9			6.9	56.6	
Approach LOS	A			A	E	
Timer - Assigned Phs	2			4	6	
Phs Duration (G+Y+Rc), s	71.4			18.6	71.4	
Change Period (Y+Rc), s	8.0			5.0	8.0	
Max Green Setting (Gmax), s	61.0			16.0	61.0	
Max Q Clear Time (g_c+l1), s	0.0			13.6	0.0	
Green Ext Time (p_c), s	0.0			0.1	0.0	
Intersection Summary						
HCM 6th Ctrl Delay			14.3			
HCM 6th LOS			B			
Notes						
User approved volume balancing among the lanes for turning movement.						



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↔	
Traffic Volume (vph)	977	0	0	617	141	120
Future Volume (vph)	977	0	0	617	141	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%			2%	4%	
Storage Length (ft)		0	0		0	40
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t					0.938	
Flt Protected					0.974	
Satd. Flow (prot)	1810	0	0	1710	1643	0
Flt Permitted					0.974	
Satd. Flow (perm)	1810	0	0	1710	1643	0
Right Turn on Red		No			Yes	
Satd. Flow (RTOR)					41	
Link Speed (mph)	50			50	25	
Link Distance (ft)	771			1053	657	
Travel Time (s)	10.5			14.4	17.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	5%	0%	0%	10%	4%	3%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1018	0	0	643	272	0
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	61.0			61.0	7.0	
Minimum Split (s)	69.0			69.0	12.0	
Total Split (s)	69.0			69.0	21.0	
Total Split (%)	76.7%			76.7%	23.3%	
Yellow Time (s)	6.0			6.0	3.0	
All-Red Time (s)	2.0			2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0	
Total Lost Time (s)	8.0			8.0	5.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max			C-Max	None	
Act Effct Green (s)	61.9			61.9	15.1	
Actuated g/C Ratio	0.69			0.69	0.17	
v/c Ratio	0.82			0.55	0.88	
Control Delay	11.5			9.4	60.1	
Queue Delay	0.0			0.0	0.0	
Total Delay	11.5			9.4	60.1	
LOS	B			A	E	
Approach Delay	11.5			9.4	60.1	
Approach LOS	B			A	E	
Queue Length 50th (ft)	187			165	129	



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Queue Length 95th (ft)	230			250	#264	
Internal Link Dist (ft)	691			973	577	
Turn Bay Length (ft)						
Base Capacity (vph)	1244			1176	325	
Starvation Cap Reductn	0			0	0	
Spillback Cap Reductn	0			0	0	
Storage Cap Reductn	0			0	0	
Reduced v/c Ratio	0.82			0.55	0.84	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 8 (9%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 17.6

Intersection LOS: B

Intersection Capacity Utilization 77.4%

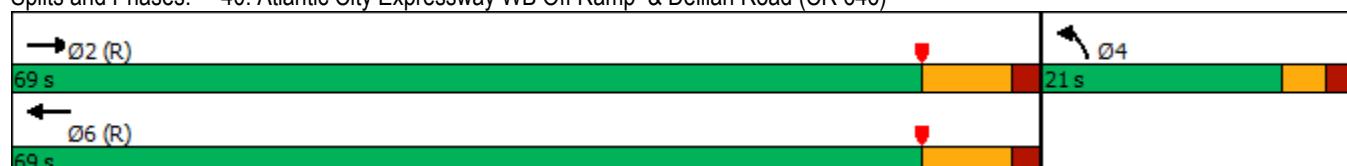
ICU Level of Service D

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

Splits and Phases: 40: Atlantic City Expressway WB Off Ramp & Delilah Road (CR 646)

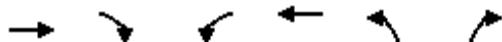




Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	977	0	0	617	141	120
Future Volume (veh/h)	977	0	0	617	141	120
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1826	0	0	1728	1746	1761
Adj Flow Rate, veh/h	1018	0	0	643	147	125
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	0	0	10	4	3
Cap, veh/h	1238	0	0	1171	151	128
Arrive On Green	0.68	0.00	0.00	0.68	0.18	0.18
Sat Flow, veh/h	1826	0	0	1728	848	721
Grp Volume(v), veh/h	1018	0	0	643	273	0
Grp Sat Flow(s), veh/h/ln	1826	0	0	1728	1574	0
Q Serve(g_s), s	36.5	0.0	0.0	17.2	15.5	0.0
Cycle Q Clear(g_c), s	36.5	0.0	0.0	17.2	15.5	0.0
Prop In Lane		0.00	0.00		0.54	0.46
Lane Grp Cap(c), veh/h	1238	0	0	1171	280	0
V/C Ratio(X)	0.82	0.00	0.00	0.55	0.98	0.00
Avail Cap(c_a), veh/h	1238	0	0	1171	280	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.6	0.0	0.0	7.4	36.8	0.0
Incr Delay (d2), s/veh	6.3	0.0	0.0	1.9	46.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	17.7	0.0	0.0	8.6	14.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	16.8	0.0	0.0	9.3	83.5	0.0
LnGrp LOS	B	A	A	A	F	A
Approach Vol, veh/h	1018			643	273	
Approach Delay, s/veh	16.8			9.3	83.5	
Approach LOS	B			A	F	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+R _c), s	69.0			21.0	69.0	
Change Period (Y+R _c), s	8.0			5.0	8.0	
Max Green Setting (Gmax), s	61.0			16.0	61.0	
Max Q Clear Time (g_c+l1), s	0.0			17.5	0.0	
Green Ext Time (p_c), s	0.0			0.0	0.0	
Intersection Summary						
HCM 6th Ctrl Delay			23.7			
HCM 6th LOS			C			
Notes						
User approved volume balancing among the lanes for turning movement.						



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↔	
Traffic Volume (vph)	903	0	0	862	148	121
Future Volume (vph)	903	0	0	862	148	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%			2%	4%	
Storage Length (ft)		0	0		0	40
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t					0.939	
Flt Protected					0.973	
Satd. Flow (prot)	1776	0	0	1844	1677	0
Flt Permitted					0.973	
Satd. Flow (perm)	1776	0	0	1844	1677	0
Right Turn on Red		No			Yes	
Satd. Flow (RTOR)					40	
Link Speed (mph)	50			50	25	
Link Distance (ft)	771			1053	657	
Travel Time (s)	10.5			14.4	17.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	7%	0%	0%	2%	1%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	921	0	0	880	274	0
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	61.0			61.0	7.0	
Minimum Split (s)	69.0			69.0	12.0	
Total Split (s)	69.0			69.0	21.0	
Total Split (%)	76.7%			76.7%	23.3%	
Yellow Time (s)	6.0			6.0	3.0	
All-Red Time (s)	2.0			2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0	
Total Lost Time (s)	8.0			8.0	5.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max			C-Max	None	
Act Effct Green (s)	62.0			62.0	15.0	
Actuated g/C Ratio	0.69			0.69	0.17	
v/c Ratio	0.75			0.69	0.88	
Control Delay	8.6			12.3	59.3	
Queue Delay	0.0			0.0	0.0	
Total Delay	8.6			12.3	59.3	
LOS	A			B	E	
Approach Delay	8.6			12.3	59.3	
Approach LOS	A			B	E	
Queue Length 50th (ft)	157			269	130	



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Queue Length 95th (ft)	189			408	#263	
Internal Link Dist (ft)	691			973	577	
Turn Bay Length (ft)						
Base Capacity (vph)	1222			1269	331	
Starvation Cap Reductn	0			0	0	
Spillback Cap Reductn	0			0	0	
Storage Cap Reductn	0			0	0	
Reduced v/c Ratio	0.75			0.69	0.83	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 8 (9%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 16.9

Intersection LOS: B

Intersection Capacity Utilization 77.3%

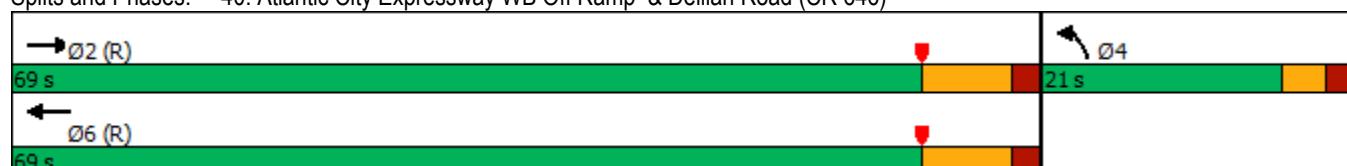
ICU Level of Service D

Analysis Period (min) 15

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

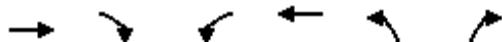
Queue shown is maximum after two cycles.

Splits and Phases: 40: Atlantic City Expressway WB Off Ramp & Delilah Road (CR 646)





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	903	0	0	862	148	121
Future Volume (veh/h)	903	0	0	862	148	121
Initial Q (Q _b), veh	0	0	0	51	1	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	0	0	1847	1791	1776
Adj Flow Rate, veh/h	921	0	0	880	151	123
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	0	0	2	1	2
Cap, veh/h	1217	0	0	1252	217	76
Arrive On Green	0.68	0.00	0.00	0.68	0.18	0.18
Sat Flow, veh/h	1796	0	0	1847	888	723
Grp Volume(v), veh/h	921	0	0	880	275	0
Grp Sat Flow(s), veh/h/ln	1796	0	0	1847	1616	0
Q Serve(g_s), s	30.5	0.0	0.0	26.4	15.2	0.0
Cycle Q Clear(g_c), s	30.5	0.0	0.0	26.4	15.2	0.0
Prop In Lane		0.00	0.00		0.55	0.45
Lane Grp Cap(c), veh/h	1217	0	0	1252	294	0
V/C Ratio(X)	0.76	0.00	0.00	0.70	0.94	0.00
Avail Cap(c_a), veh/h	1217	0	0	1252	287	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	9.6	0.0	0.0	12.0	36.8	0.0
Incr Delay (d2), s/veh	4.4	0.0	0.0	3.3	36.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	40.2	0.0	0.0
%ile BackOfQ(95%), veh/ln	14.6	0.0	0.0	33.5	14.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	14.0	0.0	0.0	55.6	73.3	0.0
LnGrp LOS	B	A	A	E	E	A
Approach Vol, veh/h	921			880	275	
Approach Delay, s/veh	14.0			55.6	73.3	
Approach LOS	B			E	E	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+R _c), s	69.0			21.0		69.0
Change Period (Y+R _c), s	8.0			5.0		8.0
Max Green Setting (Gmax), s	61.0			16.0		61.0
Max Q Clear Time (g_c+l1), s	0.0			17.2		0.0
Green Ext Time (p_c), s	0.0			0.0		0.0
Intersection Summary						
HCM 6th Ctrl Delay			39.5			
HCM 6th LOS			D			



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↗	
Traffic Volume (vph)	721	0	0	593	102	103
Future Volume (vph)	721	0	0	593	102	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%			2%	4%	
Storage Length (ft)		0	0		0	40
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t					0.932	
Flt Protected					0.976	
Satd. Flow (prot)	1881	0	0	1844	1685	0
Flt Permitted					0.976	
Satd. Flow (perm)	1881	0	0	1844	1685	0
Right Turn on Red		No			Yes	
Satd. Flow (RTOR)					49	
Link Speed (mph)	50			50	25	
Link Distance (ft)	771			1053	657	
Travel Time (s)	10.5			14.4	17.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	1%	0%	0%	2%	1%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	829	0	0	682	235	0
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	61.0			61.0	7.0	
Minimum Split (s)	69.0			69.0	12.0	
Total Split (s)	69.0			69.0	21.0	
Total Split (%)	76.7%			76.7%	23.3%	
Yellow Time (s)	6.0			6.0	3.0	
All-Red Time (s)	2.0			2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0	
Total Lost Time (s)	8.0			8.0	5.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max			C-Max	None	
Act Effct Green (s)	63.5			63.5	13.5	
Actuated g/C Ratio	0.71			0.71	0.15	
v/c Ratio	0.63			0.52	0.80	
Control Delay	7.3			8.5	49.0	
Queue Delay	0.0			0.0	0.0	
Total Delay	7.3			8.5	49.0	
LOS	A			A	D	
Approach Delay	7.3			8.5	49.0	
Approach LOS	A			A	D	
Queue Length 50th (ft)	140			166	101	



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Queue Length 95th (ft)	168			241	#174	
Internal Link Dist (ft)	691			973	577	
Turn Bay Length (ft)						
Base Capacity (vph)	1326			1300	339	
Starvation Cap Reductn	0			0	0	
Spillback Cap Reductn	0			0	0	
Storage Cap Reductn	0			0	0	
Reduced v/c Ratio	0.63			0.52	0.69	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 8 (9%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 13.3

Intersection LOS: B

Intersection Capacity Utilization 73.6%

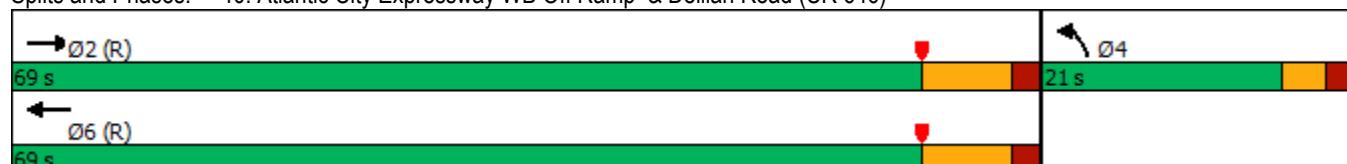
ICU Level of Service D

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

Splits and Phases: 40: Atlantic City Expressway WB Off Ramp & Delilah Road (CR 646)





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↔	
Traffic Volume (veh/h)	721	0	0	593	102	103
Future Volume (veh/h)	721	0	0	593	102	103
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	0	0	1847	1791	1806
Adj Flow Rate, veh/h	829	0	0	682	117	118
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	1	0	0	2	1	0
Cap, veh/h	1300	0	0	1273	132	133
Arrive On Green	0.69	0.00	0.00	0.69	0.17	0.17
Sat Flow, veh/h	1885	0	0	1847	796	803
Grp Volume(v), veh/h	829	0	0	682	236	0
Grp Sat Flow(s), veh/h/ln	1885	0	0	1847	1607	0
Q Serve(g_s), s	21.9	0.0	0.0	16.4	12.9	0.0
Cycle Q Clear(g_c), s	21.9	0.0	0.0	16.4	12.9	0.0
Prop In Lane		0.00	0.00		0.50	0.50
Lane Grp Cap(c), veh/h	1300	0	0	1273	267	0
V/C Ratio(X)	0.64	0.00	0.00	0.54	0.88	0.00
Avail Cap(c_a), veh/h	1300	0	0	1273	286	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	7.7	0.0	0.0	6.9	36.7	0.0
Incr Delay (d2), s/veh	2.4	0.0	0.0	1.6	24.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	11.0	0.0	0.0	8.5	11.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	10.1	0.0	0.0	8.5	60.7	0.0
LnGrp LOS	B	A	A	A	E	A
Approach Vol, veh/h	829			682	236	
Approach Delay, s/veh	10.1			8.5	60.7	
Approach LOS	B			A	E	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+R _c), s	70.1			19.9		70.1
Change Period (Y+R _c), s	8.0			5.0		8.0
Max Green Setting (Gmax), s	61.0			16.0		61.0
Max Q Clear Time (g_c+l1), s	0.0			14.9		0.0
Green Ext Time (p_c), s	0.0			0.1		0.0
Intersection Summary						
HCM 6th Ctrl Delay			16.3			
HCM 6th LOS			B			



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑	↔	
Traffic Volume (vph)	977	0	0	617	141	120
Future Volume (vph)	977	0	0	617	141	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%			2%	4%	
Storage Length (ft)		0	0		0	40
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00
Fr _t					0.938	
Flt Protected					0.974	
Satd. Flow (prot)	3438	0	0	1710	1643	0
Flt Permitted					0.974	
Satd. Flow (perm)	3438	0	0	1710	1643	0
Right Turn on Red		No			Yes	
Satd. Flow (RTOR)					44	
Link Speed (mph)	50			50	25	
Link Distance (ft)	658			1055	654	
Travel Time (s)	9.0			14.4	17.8	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	5%	0%	0%	10%	4%	3%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1018	0	0	643	272	0
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	56.0			56.0	7.0	
Minimum Split (s)	64.0			64.0	12.0	
Total Split (s)	64.0			64.0	26.0	
Total Split (%)	71.1%			71.1%	28.9%	
Yellow Time (s)	6.0			6.0	3.0	
All-Red Time (s)	2.0			2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0	
Total Lost Time (s)	8.0			8.0	5.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max			C-Max	None	
Act Effct Green (s)	60.4			60.4	16.6	
Actuated g/C Ratio	0.67			0.67	0.18	
v/c Ratio	0.44			0.56	0.80	
Control Delay	6.6			11.0	46.8	
Queue Delay	0.0			0.0	0.0	
Total Delay	6.6			11.0	46.8	
LOS	A			B	D	
Approach Delay	6.6			11.0	46.8	
Approach LOS	A			B	D	
Queue Length 50th (ft)	78			175	124	



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Queue Length 95th (ft)	156			304	204	
Internal Link Dist (ft)	578			975	574	
Turn Bay Length (ft)						
Base Capacity (vph)	2307			1147	417	
Starvation Cap Reductn	0			0	0	
Spillback Cap Reductn	0			0	0	
Storage Cap Reductn	0			0	0	
Reduced v/c Ratio	0.44			0.56	0.65	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 88 (98%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 13.7

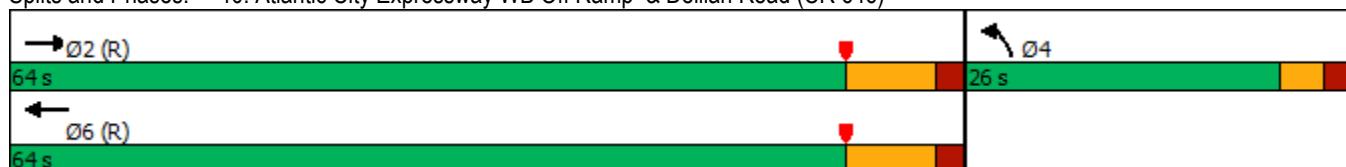
Intersection LOS: B

Intersection Capacity Utilization 72.7%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 40: Atlantic City Expressway WB Off Ramp & Delilah Road (CR 646)





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	977	0	0	617	141	120
Future Volume (veh/h)	977	0	0	617	141	120
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1826	0	0	1728	1746	1761
Adj Flow Rate, veh/h	1018	0	0	643	147	125
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	0	0	10	4	3
Cap, veh/h	2296	0	0	1144	164	140
Arrive On Green	0.66	0.00	0.00	0.66	0.19	0.19
Sat Flow, veh/h	3652	0	0	1728	848	721
Grp Volume(v), veh/h	1018	0	0	643	273	0
Grp Sat Flow(s), veh/h/ln	1735	0	0	1728	1574	0
Q Serve(g_s), s	12.6	0.0	0.0	18.0	15.2	0.0
Cycle Q Clear(g_c), s	12.6	0.0	0.0	18.0	15.2	0.0
Prop In Lane		0.00	0.00		0.54	0.46
Lane Grp Cap(c), veh/h	2296	0	0	1144	305	0
V/C Ratio(X)	0.44	0.00	0.00	0.56	0.89	0.00
Avail Cap(c_a), veh/h	2296	0	0	1144	367	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	7.3	0.0	0.0	8.2	35.4	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	2.0	18.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	6.4	0.0	0.0	9.3	11.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	7.9	0.0	0.0	10.2	54.3	0.0
LnGrp LOS	A	A	A	B	D	A
Approach Vol, veh/h	1018			643	273	
Approach Delay, s/veh	7.9			10.2	54.3	
Approach LOS	A			B	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+R _c), s	67.6			22.4		67.6
Change Period (Y+R _c), s	8.0			5.0		8.0
Max Green Setting (Gmax), s	56.0			21.0		56.0
Max Q Clear Time (g_c+l1), s	0.0			17.2		0.0
Green Ext Time (p_c), s	0.0			0.2		0.0
Intersection Summary						
HCM 6th Ctrl Delay			15.2			
HCM 6th LOS			B			
Notes						
User approved pedestrian interval to be less than phase max green.						
User approved volume balancing among the lanes for turning movement.						



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑	↘↗	
Traffic Volume (vph)	903	0	0	862	148	121
Future Volume (vph)	903	0	0	862	148	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%			2%	4%	
Storage Length (ft)		0	0		0	40
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00
Fr _t					0.939	
Flt Protected					0.973	
Satd. Flow (prot)	3374	0	0	1844	1677	0
Flt Permitted					0.973	
Satd. Flow (perm)	3374	0	0	1844	1677	0
Right Turn on Red		No			Yes	
Satd. Flow (RTOR)					42	
Link Speed (mph)	50			50	25	
Link Distance (ft)	658			1055	654	
Travel Time (s)	9.0			14.4	17.8	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	7%	0%	0%	2%	1%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	921	0	0	880	274	0
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	56.0			56.0	7.0	
Minimum Split (s)	64.0			64.0	12.0	
Total Split (s)	64.0			64.0	26.0	
Total Split (%)	71.1%			71.1%	28.9%	
Yellow Time (s)	6.0			6.0	3.0	
All-Red Time (s)	2.0			2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0	
Total Lost Time (s)	8.0			8.0	5.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max			C-Max	None	
Act Effct Green (s)	60.4			60.4	16.6	
Actuated g/C Ratio	0.67			0.67	0.18	
v/c Ratio	0.41			0.71	0.80	
Control Delay	6.4			14.5	46.5	
Queue Delay	0.0			0.0	0.0	
Total Delay	6.4			14.5	46.5	
LOS	A			B	D	
Approach Delay	6.4			14.5	46.5	
Approach LOS	A			B	D	
Queue Length 50th (ft)	72			285	126	



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Queue Length 95th (ft)	134			497	204	
Internal Link Dist (ft)	578			975	574	
Turn Bay Length (ft)						
Base Capacity (vph)	2264			1237	423	
Starvation Cap Reductn	0			0	0	
Spillback Cap Reductn	0			0	0	
Storage Cap Reductn	0			0	0	
Reduced v/c Ratio	0.41			0.71	0.65	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 88 (98%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 15.1

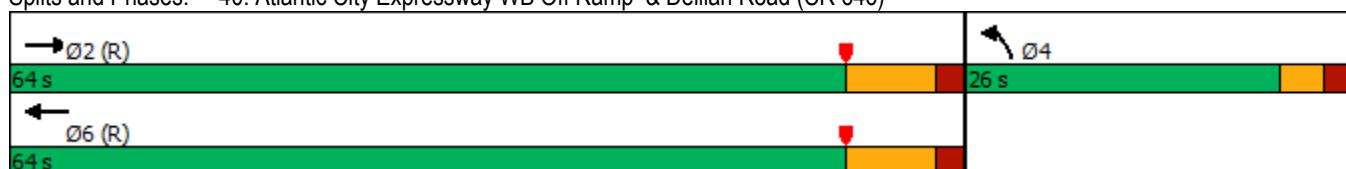
Intersection LOS: B

Intersection Capacity Utilization 73.1%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 40: Atlantic City Expressway WB Off Ramp & Delilah Road (CR 646)





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	903	0	0	862	148	121
Future Volume (veh/h)	903	0	0	862	148	121
Initial Q (Q _b), veh	0	0	0	0	1	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	0	0	1847	1791	1776
Adj Flow Rate, veh/h	921	0	0	880	151	123
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	0	0	2	1	2
Cap, veh/h	2269	0	0	1228	169	138
Arrive On Green	0.66	0.00	0.00	0.66	0.19	0.19
Sat Flow, veh/h	3593	0	0	1847	888	723
Grp Volume(v), veh/h	921	0	0	880	275	0
Grp Sat Flow(s), veh/h/ln	1706	0	0	1847	1616	0
Q Serve(g_s), s	11.1	0.0	0.0	27.5	14.9	0.0
Cycle Q Clear(g_c), s	11.1	0.0	0.0	27.5	14.9	0.0
Prop In Lane		0.00	0.00		0.55	0.45
Lane Grp Cap(c), veh/h	2269	0	0	1228	308	0
V/C Ratio(X)	0.41	0.00	0.00	0.72	0.89	0.00
Avail Cap(c_a), veh/h	2269	0	0	1228	377	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	6.9	0.0	0.0	9.7	35.5	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	3.6	17.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	5.5	0.0	0.0	13.9	11.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	7.5	0.0	0.0	13.3	53.3	0.0
LnGrp LOS	A	A	A	B	D	A
Approach Vol, veh/h	921			880	275	
Approach Delay, s/veh	7.5			13.3	53.3	
Approach LOS	A			B	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s	67.8			22.2		67.8
Change Period (Y+Rc), s	8.0			5.0		8.0
Max Green Setting (Gmax), s	56.0			21.0		56.0
Max Q Clear Time (g_c+l1), s	0.0			16.9		0.0
Green Ext Time (p_c), s	0.0			0.2		0.0
Intersection Summary						
HCM 6th Ctrl Delay			16.0			
HCM 6th LOS			B			
Notes						
User approved volume balancing among the lanes for turning movement.						



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑	↔	
Traffic Volume (vph)	721	0	0	593	102	103
Future Volume (vph)	721	0	0	593	102	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%			2%	4%	
Storage Length (ft)		0	0		0	40
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00
Fr _t					0.932	
Flt Protected					0.976	
Satd. Flow (prot)	3539	0	0	1862	1685	0
Flt Permitted					0.976	
Satd. Flow (perm)	3539	0	0	1862	1685	0
Right Turn on Red		No			Yes	
Satd. Flow (RTOR)					53	
Link Speed (mph)	50			50	25	
Link Distance (ft)	658			1055	654	
Travel Time (s)	9.0			14.4	17.8	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	2%	0%	0%	1%	1%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	829	0	0	682	235	0
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	56.0			56.0	7.0	
Minimum Split (s)	64.0			64.0	12.0	
Total Split (s)	64.0			64.0	26.0	
Total Split (%)	71.1%			71.1%	28.9%	
Yellow Time (s)	6.0			6.0	3.0	
All-Red Time (s)	2.0			2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0	
Total Lost Time (s)	8.0			8.0	5.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max			C-Max	None	
Act Effct Green (s)	62.4			62.4	14.6	
Actuated g/C Ratio	0.69			0.69	0.16	
v/c Ratio	0.34			0.53	0.74	
Control Delay	5.2			9.4	41.4	
Queue Delay	0.0			0.0	0.0	
Total Delay	5.2			9.4	41.4	
LOS	A			A	D	
Approach Delay	5.2			9.4	41.4	
Approach LOS	A			A	D	
Queue Length 50th (ft)	67			162	100	



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Queue Length 95th (ft)	94			292	157	
Internal Link Dist (ft)	578			975	574	
Turn Bay Length (ft)						
Base Capacity (vph)	2455			1291	433	
Starvation Cap Reductn	0			0	0	
Spillback Cap Reductn	0			0	0	
Storage Cap Reductn	0			0	0	
Reduced v/c Ratio	0.34			0.53	0.54	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 88 (98%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 11.7

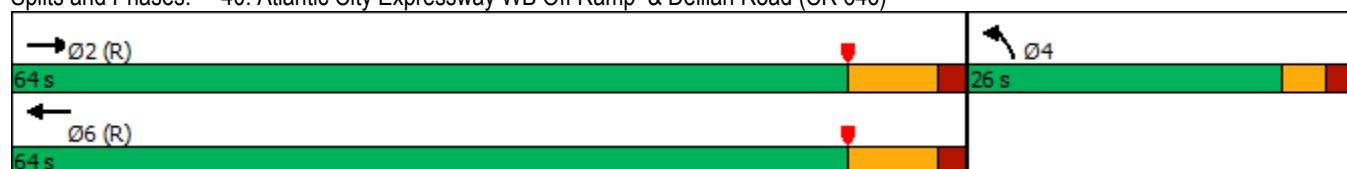
Intersection LOS: B

Intersection Capacity Utilization 69.5%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 40: Atlantic City Expressway WB Off Ramp & Delilah Road (CR 646)





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑	↔	
Traffic Volume (veh/h)	721	0	0	593	102	103
Future Volume (veh/h)	721	0	0	593	102	103
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	0	0	1862	1791	1806
Adj Flow Rate, veh/h	829	0	0	682	117	118
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	0	0	1	1	0
Cap, veh/h	2443	0	0	1280	134	135
Arrive On Green	0.69	0.00	0.00	0.69	0.17	0.17
Sat Flow, veh/h	3741	0	0	1862	796	803
Grp Volume(v), veh/h	829	0	0	682	236	0
Grp Sat Flow(s), veh/h/ln	1777	0	0	1862	1607	0
Q Serve(g_s), s	8.6	0.0	0.0	16.3	12.9	0.0
Cycle Q Clear(g_c), s	8.6	0.0	0.0	16.3	12.9	0.0
Prop In Lane		0.00	0.00		0.50	0.50
Lane Grp Cap(c), veh/h	2443	0	0	1280	270	0
V/C Ratio(X)	0.34	0.00	0.00	0.53	0.87	0.00
Avail Cap(c_a), veh/h	2443	0	0	1280	375	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	5.7	0.0	0.0	6.9	36.5	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	1.6	12.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	4.1	0.0	0.0	8.6	9.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.1	0.0	0.0	8.5	48.7	0.0
LnGrp LOS	A	A	A	A	D	A
Approach Vol, veh/h	829			682	236	
Approach Delay, s/veh	6.1			8.5	48.7	
Approach LOS	A			A	D	
Timer - Assigned Phs	2			4		6
Phs Duration (G+Y+Rc), s	69.9			20.1		69.9
Change Period (Y+Rc), s	8.0			5.0		8.0
Max Green Setting (Gmax), s	56.0			21.0		56.0
Max Q Clear Time (g_c+l1), s	0.0			14.9		0.0
Green Ext Time (p_c), s	0.0			0.3		0.0
Intersection Summary						
HCM 6th Ctrl Delay			12.8			
HCM 6th LOS			B			
Notes						
User approved volume balancing among the lanes for turning movement.						



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1271	0	0	652	141	169
Future Volume (vph)	1271	0	0	652	141	169
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%			2%	4%	
Storage Length (ft)		0	0		0	40
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t					0.926	
Flt Protected					0.978	
Satd. Flow (prot)	1810	0	0	1710	1630	0
Flt Permitted					0.978	
Satd. Flow (perm)	1810	0	0	1710	1630	0
Right Turn on Red		No			Yes	
Satd. Flow (RTOR)					58	
Link Speed (mph)	50			50	25	
Link Distance (ft)	771			1053	657	
Travel Time (s)	10.5			14.4	17.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	5%	0%	0%	10%	4%	3%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1324	0	0	679	323	0
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	61.0			61.0	7.0	
Minimum Split (s)	69.0			69.0	12.0	
Total Split (s)	69.0			69.0	21.0	
Total Split (%)	76.7%			76.7%	23.3%	
Yellow Time (s)	6.0			6.0	3.0	
All-Red Time (s)	2.0			2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0	
Total Lost Time (s)	8.0			8.0	5.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max			C-Max	None	
Act Effct Green (s)	61.0			61.0	16.0	
Actuated g/C Ratio	0.68			0.68	0.18	
v/c Ratio	1.08			0.59	0.96	
Control Delay	57.1			10.3	71.8	
Queue Delay	0.0			0.0	0.0	
Total Delay	57.1			10.3	71.8	
LOS	E			B	E	
Approach Delay	57.1			10.3	71.8	
Approach LOS	E			B	E	
Queue Length 50th (ft)	~845			180	153	



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Queue Length 95th (ft)	m#1058			273	#320	
Internal Link Dist (ft)	691			973	577	
Turn Bay Length (ft)						
Base Capacity (vph)	1226			1159	337	
Starvation Cap Reductn	0			0	0	
Spillback Cap Reductn	0			0	0	
Storage Cap Reductn	0			0	0	
Reduced v/c Ratio	1.08			0.59	0.96	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 8 (9%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow

Natural Cycle: 135

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.08

Intersection Signal Delay: 45.5

Intersection LOS: D

Intersection Capacity Utilization 95.9%

ICU Level of Service F

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

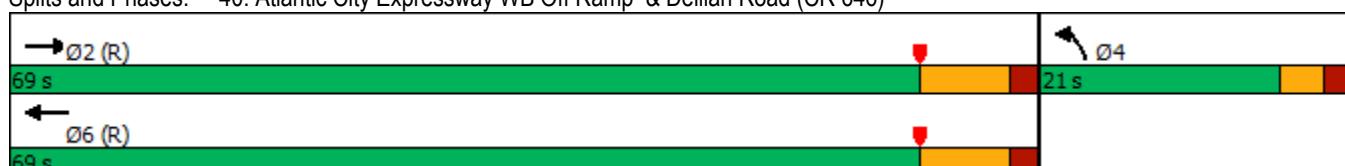
Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 40: Atlantic City Expressway WB Off Ramp & Delilah Road (CR 646)





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1271	0	0	652	141	169
Future Volume (veh/h)	1271	0	0	652	141	169
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1826	0	0	1728	1746	1761
Adj Flow Rate, veh/h	1324	0	0	679	147	176
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	0	0	10	4	3
Cap, veh/h	1238	0	0	1171	126	151
Arrive On Green	0.68	0.00	0.00	0.68	0.18	0.18
Sat Flow, veh/h	1826	0	0	1728	707	847
Grp Volume(v), veh/h	1324	0	0	679	324	0
Grp Sat Flow(s), veh/h/ln	1826	0	0	1728	1559	0
Q Serve(g_s), s	61.0	0.0	0.0	18.8	16.0	0.0
Cycle Q Clear(g_c), s	61.0	0.0	0.0	18.8	16.0	0.0
Prop In Lane		0.00	0.00		0.45	0.54
Lane Grp Cap(c), veh/h	1238	0	0	1171	277	0
V/C Ratio(X)	1.07	0.00	0.00	0.58	1.17	0.00
Avail Cap(c_a), veh/h	1238	0	0	1171	277	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	14.5	0.0	0.0	7.7	37.0	0.0
Incr Delay (d2), s/veh	46.5	0.0	0.0	2.1	107.8	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	44.2	0.0	0.0	9.3	22.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	61.0	0.0	0.0	9.8	144.8	0.0
LnGrp LOS	F	A	A	A	F	A
Approach Vol, veh/h	1324			679	324	
Approach Delay, s/veh	61.0			9.8	144.8	
Approach LOS	E			A	F	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+R _c), s	69.0			21.0	69.0	
Change Period (Y+R _c), s	8.0			5.0	8.0	
Max Green Setting (Gmax), s	61.0			16.0	61.0	
Max Q Clear Time (g_c+l1), s	0.0			18.0	0.0	
Green Ext Time (p_c), s	0.0			0.0	0.0	
Intersection Summary						
HCM 6th Ctrl Delay			57.7			
HCM 6th LOS			E			
Notes						
User approved volume balancing among the lanes for turning movement.						



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↔	
Traffic Volume (vph)	945	0	0	1059	146	128
Future Volume (vph)	945	0	0	1059	146	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%			2%	4%	
Storage Length (ft)		0	0		0	40
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t					0.937	
Flt Protected					0.974	
Satd. Flow (prot)	1776	0	0	1844	1675	0
Flt Permitted					0.974	
Satd. Flow (perm)	1776	0	0	1844	1675	0
Right Turn on Red		No			Yes	
Satd. Flow (RTOR)					43	
Link Speed (mph)	50			50	25	
Link Distance (ft)	771			1053	657	
Travel Time (s)	10.5			14.4	17.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	7%	0%	0%	2%	1%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	964	0	0	1081	280	0
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	61.0			61.0	7.0	
Minimum Split (s)	69.0			69.0	12.0	
Total Split (s)	69.0			69.0	21.0	
Total Split (%)	76.7%			76.7%	23.3%	
Yellow Time (s)	6.0			6.0	3.0	
All-Red Time (s)	2.0			2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0	
Total Lost Time (s)	8.0			8.0	5.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max			C-Max	None	
Act Effct Green (s)	61.8			61.8	15.2	
Actuated g/C Ratio	0.69			0.69	0.17	
v/c Ratio	0.79			0.85	0.88	
Control Delay	9.8			19.7	59.8	
Queue Delay	0.0			0.0	0.0	
Total Delay	9.8			19.7	59.8	
LOS	A			B	E	
Approach Delay	9.8			19.7	59.8	
Approach LOS	A			B	E	
Queue Length 50th (ft)	169			417	132	



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Queue Length 95th (ft)	210			#784	#270	
Internal Link Dist (ft)	691			973	577	
Turn Bay Length (ft)						
Base Capacity (vph)	1220			1266	333	
Starvation Cap Reductn	0			0	0	
Spillback Cap Reductn	0			0	0	
Storage Cap Reductn	0			0	0	
Reduced v/c Ratio	0.79			0.85	0.84	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 8 (9%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 20.5

Intersection LOS: C

Intersection Capacity Utilization 82.5%

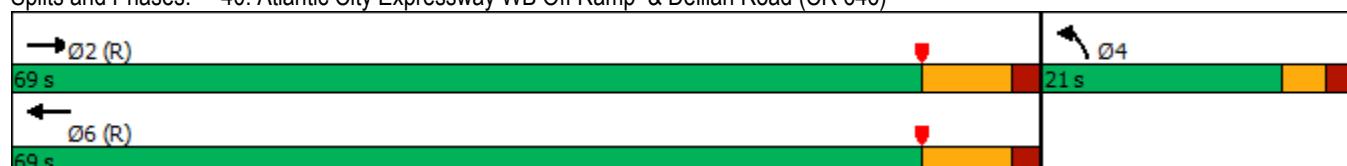
ICU Level of Service E

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

Splits and Phases: 40: Atlantic City Expressway WB Off Ramp & Delilah Road (CR 646)





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	945	0	0	1059	146	128
Future Volume (veh/h)	945	0	0	1059	146	128
Initial Q (Q _b), veh	0	0	0	51	1	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No	No		
Adj Sat Flow, veh/h/ln	1796	0	0	1847	1791	1776
Adj Flow Rate, veh/h	964	0	0	1081	149	131
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	0	0	2	1	2
Cap, veh/h	1217	0	0	1252	262	36
Arrive On Green	0.68	0.00	0.00	0.68	0.18	0.18
Sat Flow, veh/h	1796	0	0	1847	855	752
Grp Volume(v), veh/h	964	0	0	1081	281	0
Grp Sat Flow(s), veh/h/ln	1796	0	0	1847	1613	0
Q Serve(g_s), s	33.6	0.0	0.0	40.9	15.6	0.0
Cycle Q Clear(g_c), s	33.6	0.0	0.0	40.9	15.6	0.0
Prop In Lane		0.00	0.00		0.53	0.47
Lane Grp Cap(c), veh/h	1217	0	0	1252	299	0
V/C Ratio(X)	0.79	0.00	0.00	0.86	0.94	0.00
Avail Cap(c_a), veh/h	1217	0	0	1252	287	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.1	0.0	0.0	14.5	37.0	0.0
Incr Delay (d2), s/veh	5.3	0.0	0.0	8.0	37.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	85.3	0.0	0.0
%ile BackOfQ(95%), veh/ln	16.0	0.0	0.0	56.2	14.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	15.4	0.0	0.0	107.9	74.9	0.0
LnGrp LOS	B	A	A	F	E	A
Approach Vol, veh/h	964			1081	281	
Approach Delay, s/veh	15.4			107.9	74.9	
Approach LOS	B			F	E	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+R _c), s	69.0			21.0		69.0
Change Period (Y+R _c), s	8.0			5.0		8.0
Max Green Setting (Gmax), s	61.0			16.0		61.0
Max Q Clear Time (g_c+l1), s	0.0			17.6		0.0
Green Ext Time (p_c), s	0.0			0.0		0.0
Intersection Summary						
HCM 6th Ctrl Delay			65.6			
HCM 6th LOS			E			



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↔	
Traffic Volume (vph)	757	0	0	617	102	109
Future Volume (vph)	757	0	0	617	102	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%			2%	4%	
Storage Length (ft)		0	0		0	40
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t					0.930	
Flt Protected					0.976	
Satd. Flow (prot)	1863	0	0	1862	1682	0
Flt Permitted					0.976	
Satd. Flow (perm)	1863	0	0	1862	1682	0
Right Turn on Red		No			Yes	
Satd. Flow (RTOR)					52	
Link Speed (mph)	50			50	25	
Link Distance (ft)	771			1053	657	
Travel Time (s)	10.5			14.4	17.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	2%	0%	0%	1%	1%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	870	0	0	709	242	0
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	61.0			61.0	7.0	
Minimum Split (s)	69.0			69.0	12.0	
Total Split (s)	69.0			69.0	21.0	
Total Split (%)	76.7%			76.7%	23.3%	
Yellow Time (s)	6.0			6.0	3.0	
All-Red Time (s)	2.0			2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0	
Total Lost Time (s)	8.0			8.0	5.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max			C-Max	None	
Act Effct Green (s)	63.3			63.3	13.7	
Actuated g/C Ratio	0.70			0.70	0.15	
v/c Ratio	0.66			0.54	0.81	
Control Delay	8.0			8.8	49.3	
Queue Delay	0.0			0.0	0.0	
Total Delay	8.0			8.8	49.3	
LOS	A			A	D	
Approach Delay	8.0			8.8	49.3	
Approach LOS	A			A	D	
Queue Length 50th (ft)	153			178	103	



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Queue Length 95th (ft)	181			255	#189	
Internal Link Dist (ft)	691			973	577	
Turn Bay Length (ft)						
Base Capacity (vph)	1309			1309	341	
Starvation Cap Reductn	0			0	0	
Spillback Cap Reductn	0			0	0	
Storage Cap Reductn	0			0	0	
Reduced v/c Ratio	0.66			0.54	0.71	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 8 (9%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 13.8

Intersection LOS: B

Intersection Capacity Utilization 74.0%

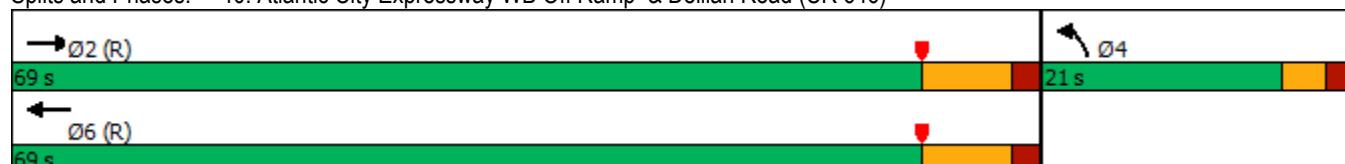
ICU Level of Service D

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

Splits and Phases: 40: Atlantic City Expressway WB Off Ramp & Delilah Road (CR 646)





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	757	0	0	617	102	109
Future Volume (veh/h)	757	0	0	617	102	109
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	0	0	1862	1791	1806
Adj Flow Rate, veh/h	870	0	0	709	117	125
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	0	0	1	1	0
Cap, veh/h	1281	0	0	1275	132	141
Arrive On Green	0.69	0.00	0.00	0.69	0.17	0.17
Sat Flow, veh/h	1870	0	0	1862	772	825
Grp Volume(v), veh/h	870	0	0	709	243	0
Grp Sat Flow(s), veh/h/ln	1870	0	0	1862	1604	0
Q Serve(g_s), s	24.6	0.0	0.0	17.4	13.3	0.0
Cycle Q Clear(g_c), s	24.6	0.0	0.0	17.4	13.3	0.0
Prop In Lane		0.00	0.00		0.48	0.51
Lane Grp Cap(c), veh/h	1281	0	0	1275	273	0
V/C Ratio(X)	0.68	0.00	0.00	0.56	0.89	0.00
Avail Cap(c_a), veh/h	1281	0	0	1275	285	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.3	0.0	0.0	7.2	36.5	0.0
Incr Delay (d2), s/veh	2.9	0.0	0.0	1.8	25.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	12.2	0.0	0.0	9.1	11.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	11.3	0.0	0.0	9.0	61.9	0.0
LnGrp LOS	B	A	A	A	E	A
Approach Vol, veh/h	870			709	243	
Approach Delay, s/veh	11.3			9.0	61.9	
Approach LOS	B			A	E	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+R _c), s	69.7			20.3	69.7	
Change Period (Y+R _c), s	8.0			5.0	8.0	
Max Green Setting (Gmax), s	61.0			16.0	61.0	
Max Q Clear Time (g_c+l1), s	0.0			15.3	0.0	
Green Ext Time (p_c), s	0.0			0.0	0.0	
Intersection Summary						
HCM 6th Ctrl Delay			17.1			
HCM 6th LOS			B			



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1271	0	0	652	141	169
Future Volume (vph)	1271	0	0	652	141	169
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%			2%	4%	
Storage Length (ft)		0	0		0	40
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00
Fr _t					0.926	
Flt Protected					0.978	
Satd. Flow (prot)	3438	0	0	1710	1630	0
Flt Permitted					0.978	
Satd. Flow (perm)	3438	0	0	1710	1630	0
Right Turn on Red		No			Yes	
Satd. Flow (RTOR)					54	
Link Speed (mph)	50			50	25	
Link Distance (ft)	644			1053	526	
Travel Time (s)	8.8			14.4	14.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	5%	0%	0%	10%	4%	3%
Adj. Flow (vph)	1324	0	0	679	147	176
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1324	0	0	679	323	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	R NA	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	30			72	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.01	1.01	1.03	1.03
Turning Speed (mph)		9	15		15	9
Number of Detectors	0			0	1	
Detector Template						
Leading Detector (ft)	0			0	40	
Trailing Detector (ft)	0			0	-10	
Detector 1 Position(ft)	0			0	-10	
Detector 1 Size(ft)	6			6	50	
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0			0.0	0.0	
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	53.0			53.0	7.0	



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	61.0			61.0	12.0	
Total Split (s)	61.0			61.0	29.0	
Total Split (%)	67.8%			67.8%	32.2%	
Maximum Green (s)	53.0			53.0	24.0	
Yellow Time (s)	6.0			6.0	3.0	
All-Red Time (s)	2.0			2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0	
Total Lost Time (s)	8.0			8.0	5.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	2.0			2.0	2.0	
Recall Mode	C-Max			C-Max	None	
Walk Time (s)					7.0	
Flash Dont Walk (s)					9.0	
Pedestrian Calls (#/hr)					0	
Act Effect Green (s)	57.9			57.9	19.1	
Actuated g/C Ratio	0.64			0.64	0.21	
v/c Ratio	0.60			0.62	0.83	
Control Delay	8.5			24.2	46.3	
Queue Delay	0.0			0.0	0.0	
Total Delay	8.5			24.2	46.3	
LOS	A			C	D	
Approach Delay	8.5			24.2	46.3	
Approach LOS	A			C	D	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 8 (9%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 18.4

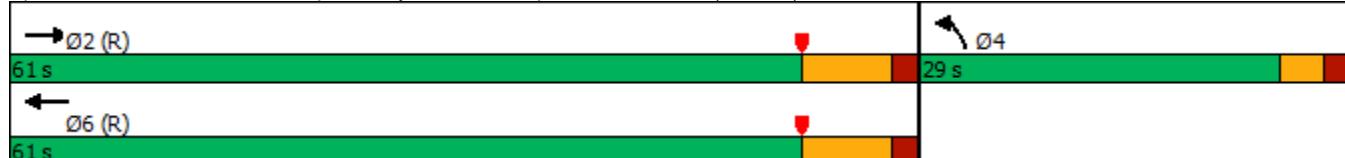
Intersection LOS: B

Intersection Capacity Utilization 73.2%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 40: AC Expressway WB Off Ramp & Delilah Road (CR 646)





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1271	0	0	652	141	169
Future Volume (veh/h)	1271	0	0	652	141	169
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1826	0	0	1728	1746	1761
Adj Flow Rate, veh/h	1324	0	0	679	147	176
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	0	0	10	4	3
Cap, veh/h	2177	0	0	1084	161	193
Arrive On Green	0.63	0.00	0.00	0.63	0.23	0.23
Sat Flow, veh/h	3652	0	0	1728	707	847
Grp Volume(v), veh/h	1324	0	0	679	324	0
Grp Sat Flow(s), veh/h/ln	1735	0	0	1728	1559	0
Q Serve(g_s), s	20.7	0.0	0.0	21.7	18.2	0.0
Cycle Q Clear(g_c), s	20.7	0.0	0.0	21.7	18.2	0.0
Prop In Lane	0.00	0.00		0.45	0.54	
Lane Grp Cap(c), veh/h	2177	0	0	1084	356	0
V/C Ratio(X)	0.61	0.00	0.00	0.63	0.91	0.00
Avail Cap(c_a), veh/h	2177	0	0	1084	416	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.1	0.0	0.0	10.3	33.8	0.0
Incr Delay (d2), s/veh	1.3	0.0	0.0	2.7	20.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	10.4	0.0	0.0	11.4	13.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	11.4	0.0	0.0	13.0	54.3	0.0
LnGrp LOS	B	A	A	B	D	A
Approach Vol, veh/h	1324			679	324	
Approach Delay, s/veh	11.4			13.0	54.3	
Approach LOS	B			B	D	
Timer - Assigned Phs	2			4	6	
Phs Duration (G+Y+Rc), s	64.5			25.5	64.5	
Change Period (Y+Rc), s	8.0			5.0	8.0	
Max Green Setting (Gmax), s	53.0			24.0	53.0	
Max Q Clear Time (g_c+l1), s	0.0			20.2	0.0	
Green Ext Time (p_c), s	0.0			0.3	0.0	
Intersection Summary						
HCM 6th Ctrl Delay			17.8			
HCM 6th LOS			B			
Notes						
User approved pedestrian interval to be less than phase max green.						
User approved volume balancing among the lanes for turning movement.						



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑	↘	
Traffic Volume (vph)	945	0	0	1059	146	128
Future Volume (vph)	945	0	0	1059	146	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%			2%	4%	
Storage Length (ft)		0	0		0	40
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00
Fr _t					0.937	
Flt Protected					0.974	
Satd. Flow (prot)	3374	0	0	1844	1675	0
Flt Permitted					0.974	
Satd. Flow (perm)	3374	0	0	1844	1675	0
Right Turn on Red		No				Yes
Satd. Flow (RTOR)					48	
Link Speed (mph)	50			50	25	
Link Distance (ft)	644			1053	526	
Travel Time (s)	8.8			14.4	14.3	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	7%	0%	0%	2%	1%	2%
Adj. Flow (vph)	964	0	0	1081	149	131
Shared Lane Traffic (%)						
Lane Group Flow (vph)	964	0	0	1081	280	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	R NA	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	30			72	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.01	1.01	1.03	1.03
Turning Speed (mph)		9	15		15	9
Number of Detectors	0			0	1	
Detector Template						
Leading Detector (ft)	0			0	40	
Trailing Detector (ft)	0			0	-10	
Detector 1 Position(ft)	0			0	-10	
Detector 1 Size(ft)	6			6	50	
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0			0.0	0.0	
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	53.0			53.0	7.0	



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	61.0			61.0	12.0	
Total Split (s)	61.0			61.0	29.0	
Total Split (%)	67.8%			67.8%	32.2%	
Maximum Green (s)	53.0			53.0	24.0	
Yellow Time (s)	6.0			6.0	3.0	
All-Red Time (s)	2.0			2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0	
Total Lost Time (s)	8.0			8.0	5.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	2.0			2.0	2.0	
Recall Mode	C-Max			C-Max	None	
Walk Time (s)					7.0	
Flash Dont Walk (s)					9.0	
Pedestrian Calls (#/hr)					0	
Act Effect Green (s)	59.7			59.7	17.3	
Actuated g/C Ratio	0.66			0.66	0.19	
v/c Ratio	0.43			0.88	0.78	
Control Delay	5.8			31.3	42.8	
Queue Delay	0.0			0.0	0.0	
Total Delay	5.8			31.3	42.8	
LOS	A			C	D	
Approach Delay	5.8			31.3	42.8	
Approach LOS	A			C	D	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 8 (9%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 22.1

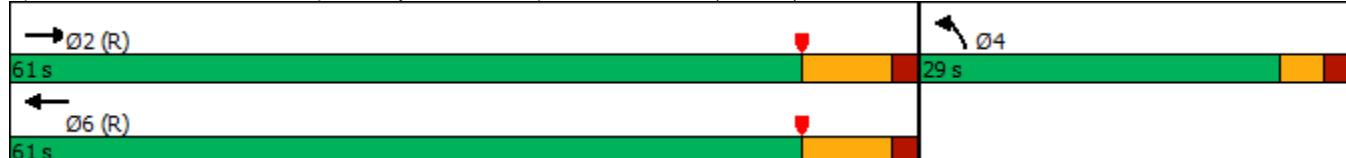
Intersection LOS: C

Intersection Capacity Utilization 82.5%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 40: AC Expressway WB Off Ramp & Delilah Road (CR 646)





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑	↔	
Traffic Volume (veh/h)	945	0	0	1059	146	128
Future Volume (veh/h)	945	0	0	1059	146	128
Initial Q (Q _b), veh	0	0	0	0	1	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	0	0	1847	1791	1776
Adj Flow Rate, veh/h	964	0	0	1081	149	131
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	0	0	2	1	2
Cap, veh/h	2252	0	0	1218	167	147
Arrive On Green	0.66	0.00	0.00	0.66	0.20	0.20
Sat Flow, veh/h	3593	0	0	1847	855	752
Grp Volume(v), veh/h	964	0	0	1081	281	0
Grp Sat Flow(s), veh/h/ln	1706	0	0	1847	1613	0
Q Serve(g_s), s	12.1	0.0	0.0	43.2	15.3	0.0
Cycle Q Clear(g_c), s	12.1	0.0	0.0	43.2	15.3	0.0
Prop In Lane		0.00	0.00		0.53	0.47
Lane Grp Cap(c), veh/h	2252	0	0	1218	316	0
V/C Ratio(X)	0.43	0.00	0.00	0.89	0.89	0.00
Avail Cap(c_a), veh/h	2252	0	0	1218	430	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	7.3	0.0	0.0	12.6	35.2	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	9.7	13.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	6.0	0.0	0.0	22.1	11.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	7.9	0.0	0.0	22.3	48.4	0.0
LnGrp LOS	A	A	A	C	D	A
Approach Vol, veh/h	964			1081	281	
Approach Delay, s/veh	7.9			22.3	48.4	
Approach LOS	A			C	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s	67.4			22.6		67.4
Change Period (Y+Rc), s	8.0			5.0		8.0
Max Green Setting (Gmax), s	53.0			24.0		53.0
Max Q Clear Time (g_c+l1), s	0.0			17.3		0.0
Green Ext Time (p_c), s	0.0			0.4		0.0
Intersection Summary						
HCM 6th Ctrl Delay			19.5			
HCM 6th LOS			B			
Notes						
User approved volume balancing among the lanes for turning movement.						



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	757	0	0	617	102	109
Future Volume (vph)	757	0	0	617	102	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%			2%	4%	
Storage Length (ft)		0	0		0	40
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00
Fr _t					0.930	
Flt Protected					0.976	
Satd. Flow (prot)	3539	0	0	1862	1682	0
Flt Permitted					0.976	
Satd. Flow (perm)	3539	0	0	1862	1682	0
Right Turn on Red		No				Yes
Satd. Flow (RTOR)					58	
Link Speed (mph)	50			50	25	
Link Distance (ft)	644			1053	526	
Travel Time (s)	8.8			14.4	14.3	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	2%	0%	0%	1%	1%	0%
Adj. Flow (vph)	870	0	0	709	117	125
Shared Lane Traffic (%)						
Lane Group Flow (vph)	870	0	0	709	242	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	R NA	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	30			72	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.01	1.01	1.03	1.03
Turning Speed (mph)		9	15		15	9
Number of Detectors	0			0	1	
Detector Template						
Leading Detector (ft)	0			0	40	
Trailing Detector (ft)	0			0	-10	
Detector 1 Position(ft)	0			0	-10	
Detector 1 Size(ft)	6			6	50	
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0			0.0	0.0	
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	53.0			53.0	7.0	



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	61.0			61.0	12.0	
Total Split (s)	61.0			61.0	29.0	
Total Split (%)	67.8%			67.8%	32.2%	
Maximum Green (s)	53.0			53.0	24.0	
Yellow Time (s)	6.0			6.0	3.0	
All-Red Time (s)	2.0			2.0	2.0	
Lost Time Adjust (s)	0.0			0.0	0.0	
Total Lost Time (s)	8.0			8.0	5.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	2.0			2.0	2.0	
Recall Mode	C-Max			C-Max	None	
Walk Time (s)					7.0	
Flash Dont Walk (s)					9.0	
Pedestrian Calls (#/hr)					0	
Act Effect Green (s)	62.2			62.2	14.8	
Actuated g/C Ratio	0.69			0.69	0.16	
v/c Ratio	0.36			0.55	0.74	
Control Delay	8.5			10.8	40.5	
Queue Delay	0.0			0.0	0.0	
Total Delay	8.5			10.8	40.5	
LOS	A			B	D	
Approach Delay	8.5			10.8	40.5	
Approach LOS	A			B	D	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 61 (68%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 13.7

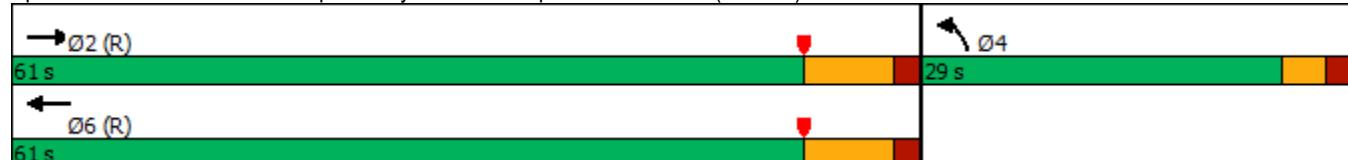
Intersection LOS: B

Intersection Capacity Utilization 67.3%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 40: AC Expressway WB Off Ramp & Delilah Road (CR 646)





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	757	0	0	617	102	109
Future Volume (veh/h)	757	0	0	617	102	109
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	0	0	1862	1791	1806
Adj Flow Rate, veh/h	870	0	0	709	117	125
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	0	0	1	1	0
Cap, veh/h	2424	0	0	1270	134	143
Arrive On Green	0.68	0.00	0.00	0.68	0.17	0.17
Sat Flow, veh/h	3741	0	0	1862	772	825
Grp Volume(v), veh/h	870	0	0	709	243	0
Grp Sat Flow(s), veh/h/ln	1777	0	0	1862	1604	0
Q Serve(g_s), s	9.3	0.0	0.0	17.6	13.3	0.0
Cycle Q Clear(g_c), s	9.3	0.0	0.0	17.6	13.3	0.0
Prop In Lane		0.00	0.00		0.48	0.51
Lane Grp Cap(c), veh/h	2424	0	0	1270	278	0
V/C Ratio(X)	0.36	0.00	0.00	0.56	0.87	0.00
Avail Cap(c_a), veh/h	2424	0	0	1270	428	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	6.0	0.0	0.0	7.3	36.2	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	1.8	8.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	4.6	0.0	0.0	9.2	9.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.4	0.0	0.0	9.1	44.3	0.0
LnGrp LOS	A	A	A	A	D	A
Approach Vol, veh/h	870			709	243	
Approach Delay, s/veh	6.4			9.1	44.3	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s	69.4			20.6	69.4	
Change Period (Y+Rc), s	8.0			5.0	8.0	
Max Green Setting (Gmax), s	53.0			24.0	53.0	
Max Q Clear Time (g_c+l1), s	0.0			15.3	0.0	
Green Ext Time (p_c), s	0.0			0.4	0.0	
Intersection Summary						
HCM 6th Ctrl Delay			12.5			
HCM 6th LOS			B			
Notes						
User approved volume balancing among the lanes for turning movement.						

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↓		↑	↑↑	↑	↔	↔		↑	↑↓	↑
Traffic Volume (vph)	20	703	2	2	564	83	12	0	1	27	0	2
Future Volume (vph)	20	703	2	2	564	83	12	0	1	27	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-2%			0%			2%	
Storage Length (ft)	200		0	100		215	0		0	90		0
Storage Lanes	1		0	1		1	0		0	1		1
Taper Length (ft)	60			60			25			30		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t					0.850			0.990				0.850
Flt Protected	0.950				0.950			0.956			0.950	
Satd. Flow (prot)	1805	3343	0	1823	3227	1599	0	1675	0	0	1554	1599
Flt Permitted	0.425				0.375			0.754			0.784	
Satd. Flow (perm)	808	3343	0	720	3227	1599	0	1321	0	0	1282	1599
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)						86			69			
Link Speed (mph)		50			50			25			25	
Link Distance (ft)		824			401			570			404	
Travel Time (s)		11.2			5.5			15.5			11.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	8%	0%	0%	13%	2%	8%	0%	0%	15%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	727	0	2	581	86	0	13	0	0	28	2
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	pm+ov
Protected Phases	5	2		1	6			8			4	5
Permitted Phases	2			6		6	8			4		4
Detector Phase	5	2		1	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	7.0	38.0		7.0	38.0	38.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	10.0	44.0		10.0	44.0	44.0	13.0	13.0		13.0	13.0	10.0
Total Split (s)	15.0	44.0		15.0	44.0	44.0	36.0	36.0		36.0	36.0	15.0
Total Split (%)	15.8%	46.3%		15.8%	46.3%	46.3%	37.9%	37.9%		37.9%	37.9%	15.8%
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	3.0
All-Red Time (s)	0.0	2.0		0.0	2.0	2.0	2.0	2.0		2.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	6.0		3.0	6.0	6.0	6.0	6.0		6.0	6.0	3.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	None
Act Effct Green (s)	82.7	80.7		82.1	78.7	78.7		7.9			7.9	14.9
Actuated g/C Ratio	0.87	0.85		0.86	0.83	0.83		0.08			0.08	0.16
v/c Ratio	0.03	0.26		0.00	0.22	0.06		0.08			0.26	0.01
Control Delay	1.8	3.3		2.0	3.9	1.4		0.8			46.8	29.0
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	1.8	3.3		2.0	3.9	1.4		0.8			46.8	29.0
LOS	A	A		A	A	A		A			D	C
Approach Delay		3.2			3.6			0.8			45.6	
Approach LOS		A			A			A			D	
Queue Length 50th (ft)	2	44		0	33	0		0			16	1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	6	117		1	92	14		0			43	6
Internal Link Dist (ft)		744			321			490			324	
Turn Bay Length (ft)	200			100		215						
Base Capacity (vph)	834	2841		770	2674	1340		464			404	555
Starvation Cap Reductn	0	0		0	0	0		0			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.03	0.26		0.00	0.22	0.06		0.03			0.07	0.00

Intersection Summary

Area Type: Other

Cycle Length: 95

Actuated Cycle Length: 95

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.26

Intersection Signal Delay: 4.2

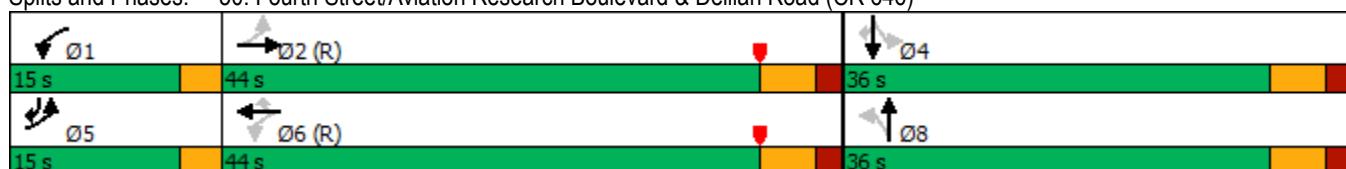
Intersection LOS: A

Intersection Capacity Utilization 56.7%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 50: Fourth Street/Aviation Research Boulevard & Delilah Road (CR 646)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑		↑	↑↑	↑		↔		↑	↑	↑
Traffic Volume (veh/h)	20	703	2	2	564	83	12	0	1	27	0	2
Future Volume (veh/h)	20	703	2	2	564	83	12	0	1	27	0	2
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1781	1900	1979	1784	1949	1781	1900	1900	1654	1876	1876
Adj Flow Rate, veh/h	21	725	2	2	581	86	12	0	1	28	0	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	8	0	0	13	2	8	0	0	15	0	0
Cap, veh/h	688	2730	8	647	2578	1256	120	3	4	155	0	129
Arrive On Green	0.03	0.79	0.79	0.00	0.76	0.76	0.05	0.00	0.05	0.05	0.00	0.05
Sat Flow, veh/h	1810	3463	10	1884	3389	1651	933	61	83	1579	0	1590
Grp Volume(v), veh/h	21	354	373	2	581	86	13	0	0	28	0	2
Grp Sat Flow(s), veh/h/ln	1810	1692	1780	1884	1694	1651	1077	0	0	1579	0	1590
Q Serve(g_s), s	0.2	5.3	5.3	0.0	4.7	1.2	0.6	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.2	5.3	5.3	0.0	4.7	1.2	2.0	0.0	0.0	1.4	0.0	0.1
Prop In Lane	1.00		0.01	1.00		1.00	0.92		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	688	1334	1403	647	2578	1256	127	0	0	155	0	129
V/C Ratio(X)	0.03	0.27	0.27	0.00	0.23	0.07	0.10	0.00	0.00	0.18	0.00	0.02
Avail Cap(c_a), veh/h	860	1334	1403	877	2578	1256	512	0	0	532	0	552
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	2.0	2.7	2.7	2.7	3.3	2.9	44.1	0.0	0.0	43.6	0.0	40.1
Incr Delay (d2), s/veh	0.0	0.5	0.5	0.0	0.2	0.1	0.1	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	0.0	1.8	1.9	0.0	1.7	0.5	0.5	0.0	0.0	1.2	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	2.0	3.2	3.2	2.7	3.5	3.0	44.3	0.0	0.0	43.8	0.0	40.2
LnGrp LOS	A	A	A	A	A	A	D	A	A	D	A	D
Approach Vol, veh/h	748				669			13			30	
Approach Delay, s/veh	3.1				3.4			44.3			43.5	
Approach LOS	A				A			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+R _c), s	3.4	80.9		10.7	6.0	78.3		10.7				
Change Period (Y+R _c), s	3.0	6.0		6.0	3.0	6.0		6.0				
Max Green Setting (Gmax), s	12.0	38.0		30.0	12.0	38.0		30.0				
Max Q Clear Time (g_c+l1), s	2.0	7.3		3.4	2.2	6.7		4.0				
Green Ext Time (p_c), s	0.0	1.2		0.0	0.0	1.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				4.5								
HCM 6th LOS				A								

	↗	→	↘	↙	←	↖	↑	↗	↘	↓	↙	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑		↑	↑↑	↑	↔	↔		↑	↑	↑
Traffic Volume (vph)	8	683	7	3	887	40	5	0	0	96	1	29
Future Volume (vph)	8	683	7	3	887	40	5	0	0	96	1	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-2%			0%			2%	
Storage Length (ft)	200		0	100		215	0		0	90		0
Storage Lanes	1		0	1		1	0		0	1		1
Taper Length (ft)	60			60			25			30		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00							
Fr _t		0.998				0.850					0.850	
Flt Protected	0.950			0.950			0.950			0.953		
Satd. Flow (prot)	1805	3368	0	1823	3540	1631	0	1805	0	0	1793	1599
Flt Permitted	0.277			0.358			0.689			0.725		
Satd. Flow (perm)	526	3368	0	685	3540	1631	0	1309	0	0	1364	1599
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)		1			69							
Link Speed (mph)	50			50			25			25		
Link Distance (ft)	824			401			570			404		
Travel Time (s)	11.2			5.5			15.5			11.0		
Confl. Peds. (#/hr)		7	7									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	7%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	9	750	0	3	964	43	0	5	0	0	105	32
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	pm+ov
Protected Phases	5	2		1	6			8			4	5
Permitted Phases	2			6		6	8			4		4
Detector Phase	5	2		1	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	7.0	38.0		7.0	38.0	38.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	10.0	44.0		10.0	44.0	44.0	13.0	13.0		13.0	13.0	10.0
Total Split (s)	15.0	44.0		15.0	44.0	44.0	36.0	36.0		36.0	36.0	15.0
Total Split (%)	15.8%	46.3%		15.8%	46.3%	46.3%	37.9%	37.9%		37.9%	37.9%	15.8%
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	3.0
All-Red Time (s)	0.0	2.0		0.0	2.0	2.0	2.0	2.0		2.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.0	6.0		3.0	6.0	6.0	6.0	6.0		6.0	6.0	3.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	None
Act Effct Green (s)	75.9	72.7		75.9	72.7	72.7		12.1			12.1	17.1
Actuated g/C Ratio	0.80	0.77		0.80	0.77	0.77		0.13			0.13	0.18
v/c Ratio	0.02	0.29		0.00	0.36	0.03		0.03			0.60	0.11
Control Delay	3.4	5.7		3.3	6.1	1.0		33.6			52.8	29.7
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	3.4	5.7		3.3	6.1	1.0		33.6			52.8	29.7
LOS	A	A		A	A	A		C		D	C	
Approach Delay		5.6			5.9			33.6			47.4	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		A			A			C			D	
Queue Length 50th (ft)	1	63		0	87	0		3			61	17
Queue Length 95th (ft)	5	156		3	210	7		13			108	34
Internal Link Dist (ft)		744			321			490			324	
Turn Bay Length (ft)	200			100		215						
Base Capacity (vph)	584	2576		695	2707	1263		413			430	555
Starvation Cap Reductn	0	0		0	0	0		0			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.02	0.29		0.00	0.36	0.03		0.01			0.24	0.06

Intersection Summary

Area Type: Other

Cycle Length: 95

Actuated Cycle Length: 95

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.60

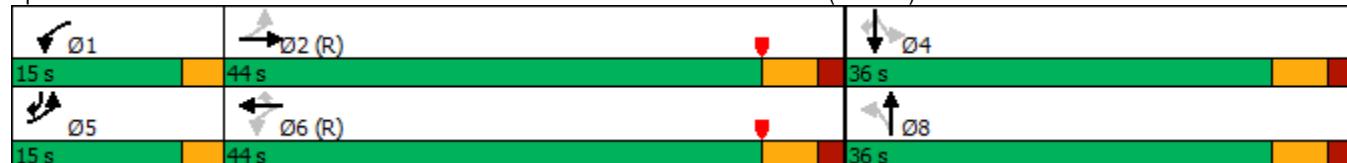
Intersection Signal Delay: 8.8

Intersection LOS: A

Intersection Capacity Utilization 56.7%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 50: Fourth Street/Aviation Research Boulevard & Delilah Road (CR 646)

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	683	7	3	887	40	5	0	0	96	1	29
Future Volume (veh/h)	8	683	7	3	887	40	5	0	0	96	1	29
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1796	1900	1979	1934	1979	1900	1900	1900	1876	1876	1876
Adj Flow Rate, veh/h	9	742	8	3	964	43	5	0	0	104	1	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	7	0	0	3	0	0	0	0	0	0	0
Cap, veh/h	477	2616	28	605	2743	1246	107	0	0	210	1	152
Arrive On Green	0.02	0.76	0.76	0.01	0.75	0.75	0.08	0.00	0.00	0.08	0.08	0.08
Sat Flow, veh/h	1810	3459	37	1884	3674	1669	395	0	0	1685	16	1590
Grp Volume(v), veh/h	9	366	384	3	964	43	5	0	0	105	0	32
Grp Sat Flow(s), veh/h/ln	1810	1706	1789	1884	1837	1669	395	0	0	1701	0	1590
Q Serve(g_s), s	0.1	6.3	6.3	0.0	8.6	0.6	0.3	0.0	0.0	0.0	0.0	1.8
Cycle Q Clear(g_c), s	0.1	6.3	6.3	0.0	8.6	0.6	5.8	0.0	0.0	5.5	0.0	1.8
Prop In Lane	1.00		0.02	1.00		1.00	1.00		0.00	0.99		1.00
Lane Grp Cap(c), veh/h	477	1291	1354	605	2743	1246	107	0	0	212	0	152
V/C Ratio(X)	0.02	0.28	0.28	0.00	0.35	0.03	0.05	0.00	0.00	0.50	0.00	0.21
Avail Cap(c_a), veh/h	677	1291	1354	833	2743	1246	437	0	0	548	0	527
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	3.1	3.6	3.6	3.1	4.1	3.1	45.5	0.0	0.0	42.7	0.0	39.6
Incr Delay (d2), s/veh	0.0	0.6	0.5	0.0	0.4	0.1	0.1	0.0	0.0	0.7	0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	0.0	2.6	2.7	0.0	3.6	0.3	0.2	0.0	0.0	4.4	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	3.1	4.1	4.1	3.1	4.5	3.2	45.6	0.0	0.0	43.4	0.0	39.9
LnGrp LOS	A	A	A	A	A	A	D	A	A	D	A	D
Approach Vol, veh/h	759			1010			5			137		
Approach Delay, s/veh	4.1			4.4			45.6			42.6		
Approach LOS	A			A			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+R _c), s	3.5	77.9		13.6	4.5	76.9		13.6				
Change Period (Y+R _c), s	3.0	6.0		6.0	3.0	6.0		6.0				
Max Green Setting (Gmax), s	12.0	38.0		30.0	12.0	38.0		30.0				
Max Q Clear Time (g_c+l1), s	2.0	8.3		7.5	2.1	10.6		7.8				
Green Ext Time (p_c), s	0.0	1.2		0.2	0.0	2.1		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			7.1									
HCM 6th LOS			A									

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	2	1	1	1	1	1	1	1	1	1	1
Traffic Volume (vph)	2	551	7	3	473	15	6	0	2	13	0	5
Future Volume (vph)	2	551	7	3	473	15	6	0	2	13	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-2%			0%			2%	
Storage Length (ft)	200		0	100		215	0		0	90		0
Storage Lanes	1		0	1		1	0		0	1		1
Taper Length (ft)	60			60			25			30		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00								
Fr _t		0.998				0.850		0.970				0.850
Flt Protected	0.950			0.950				0.963			0.950	
Satd. Flow (prot)	1805	3560	0	1823	3610	1631	0	1568	0	0	1787	1332
Flt Permitted	0.457			0.417								
Satd. Flow (perm)	868	3560	0	799	3610	1631	0	1628	0	0	1881	1332
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)	2				69		69					
Link Speed (mph)	50			50			25			25		
Link Distance (ft)	824			401			570			404		
Travel Time (s)	11.2			5.5			15.5			11.0		
Confl. Peds. (#/hr)		3	3									
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	1%	14%	0%	1%	0%	17%	0%	0%	0%	0%	20%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	620	0	3	526	17	0	9	0	0	14	6
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	pm+ov
Protected Phases	5	2		1	6			8			4	5
Permitted Phases	2			6		6	8			4		4
Detector Phase	5	2		1	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	7.0	38.0		7.0	38.0	38.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	10.0	44.0		10.0	44.0	44.0	13.0	13.0		13.0	13.0	10.0
Total Split (s)	15.0	44.0		15.0	44.0	44.0	36.0	36.0		36.0	36.0	15.0
Total Split (%)	15.8%	46.3%		15.8%	46.3%	46.3%	37.9%	37.9%		37.9%	37.9%	15.8%
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	3.0
All-Red Time (s)	0.0	2.0		0.0	2.0	2.0	2.0	2.0		2.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.0	6.0		3.0	6.0	6.0	6.0	6.0		6.0	6.0	3.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	None
Act Effct Green (s)	86.1	85.3		86.1	85.3	85.3		7.1			7.1	12.1
Actuated g/C Ratio	0.91	0.90		0.91	0.90	0.90		0.07			0.07	0.13
v/c Ratio	0.00	0.19		0.00	0.16	0.01		0.05			0.10	0.04
Control Delay	1.5	2.2		1.3	2.2	0.0		0.5			42.5	33.8
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	1.5	2.2		1.3	2.2	0.0		0.5			42.5	33.8
LOS	A	A		A	A	A		A		D	C	
Approach Delay		2.2			2.1			0.5			39.9	

4184 22-02818

Existing - SAT

50: Fourth Street/Aviation Research Boulevard & Delilah Road (CR 646)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		A			A			A			D	
Queue Length 50th (ft)	0	0		0	0	0		0			8	3
Queue Length 95th (ft)	1	86		1	73	0		0			27	14
Internal Link Dist (ft)		744			321			490			324	
Turn Bay Length (ft)	200			100		215						
Base Capacity (vph)	909	3195		858	3240	1471		561			594	462
Starvation Cap Reductn	0	0		0	0	0		0			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.00	0.19		0.00	0.16	0.01		0.02			0.02	0.01

Intersection Summary

Area Type: Other

Cycle Length: 95

Actuated Cycle Length: 95

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.19

Intersection Signal Delay: 2.8

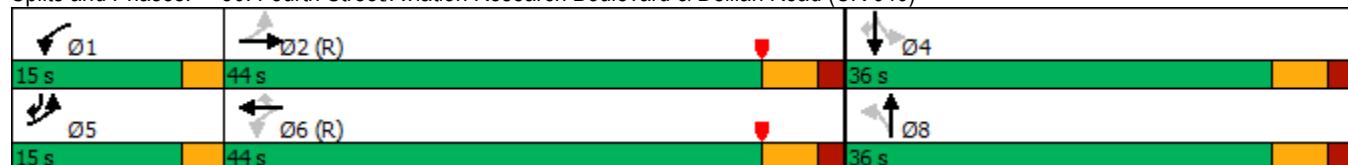
Intersection LOS: A

Intersection Capacity Utilization 56.7%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 50: Fourth Street/Aviation Research Boulevard & Delilah Road (CR 646)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↓		↑	↑↑	↑	↔	↔		↑	↑↓	↑
Traffic Volume (veh/h)	2	551	7	3	473	15	6	0	2	13	0	5
Future Volume (veh/h)	2	551	7	3	473	15	6	0	2	13	0	5
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1693	1979	1964	1979	1648	1900	1900	1876	1876	1580
Adj Flow Rate, veh/h	2	612	8	3	526	17	7	0	2	14	0	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	1	14	0	1	0	17	0	0	0	0	20
Cap, veh/h	754	2886	38	729	2981	1337	104	8	13	135	0	58
Arrive On Green	0.00	0.80	0.80	0.01	0.80	0.80	0.04	0.00	0.04	0.04	0.00	0.04
Sat Flow, veh/h	1810	3620	47	1884	3731	1674	922	204	322	1490	0	1339
Grp Volume(v), veh/h	2	303	317	3	526	17	9	0	0	14	0	6
Grp Sat Flow(s), veh/h/ln	1810	1791	1877	1884	1865	1674	1448	0	0	1490	0	1339
Q Serve(g_s), s	0.0	3.9	3.9	0.0	3.1	0.2	0.0	0.0	0.0	0.0	0.0	0.4
Cycle Q Clear(g_c), s	0.0	3.9	3.9	0.0	3.1	0.2	0.7	0.0	0.0	0.7	0.0	0.4
Prop In Lane	1.00		0.03	1.00		1.00	0.78		0.22	1.00		1.00
Lane Grp Cap(c), veh/h	754	1428	1496	729	2981	1337	124	0	0	135	0	58
V/C Ratio(X)	0.00	0.21	0.21	0.00	0.18	0.01	0.07	0.00	0.00	0.10	0.00	0.10
Avail Cap(c_a), veh/h	975	1428	1496	956	2981	1337	530	0	0	527	0	428
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	1.9	2.4	2.4	1.9	2.2	1.9	44.0	0.0	0.0	44.2	0.0	43.7
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	0.0	1.3	1.3	0.0	1.0	0.1	0.4	0.0	0.0	0.6	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	1.9	2.7	2.7	1.9	2.4	2.0	44.1	0.0	0.0	44.3	0.0	44.0
LnGrp LOS	A	A	A	A	A	A	D	A	A	D	A	D
Approach Vol, veh/h		622			546			9			20	
Approach Delay, s/veh		2.7			2.4			44.1			44.2	
Approach LOS		A			A			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+R _c), s	3.5	81.7		9.7	3.4	81.9		9.7				
Change Period (Y+R _c), s	3.0	6.0		6.0	3.0	6.0		6.0				
Max Green Setting (Gmax), s	12.0	38.0		30.0	12.0	38.0		30.0				
Max Q Clear Time (g_c+l1), s	2.0	5.9		2.7	2.0	5.1		2.7				
Green Ext Time (p_c), s	0.0	1.0		0.0	0.0	1.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			3.5									
HCM 6th LOS			A									

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group												
Lane Configurations	↑	↑↓		↑	↑↓	↑	↔	↔		↑	↑↓	↑
Traffic Volume (vph)	21	876	2	2	728	87	13	0	1	28	0	2
Future Volume (vph)	21	876	2	2	728	87	13	0	1	28	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-2%			0%			2%	
Storage Length (ft)	200		0	100		215	0		0	90		0
Storage Lanes	1		0	1		1	0		0	1		1
Taper Length (ft)	60			60			25			30		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t						0.850			0.990			0.850
Flt Protected	0.950				0.950				0.956			0.950
Satd. Flow (prot)	1805	3343	0	1823	3227	1599	0	1674	0	0	1554	1599
Flt Permitted	0.357				0.313				0.756			0.784
Satd. Flow (perm)	678	3343	0	601	3227	1599	0	1324	0	0	1282	1599
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)						90			69			
Link Speed (mph)		50			50			25			25	
Link Distance (ft)		824			401			570			404	
Travel Time (s)		11.2			5.5			15.5			11.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	8%	0%	0%	13%	2%	8%	0%	0%	15%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	22	905	0	2	751	90	0	14	0	0	29	2
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	pm+ov
Protected Phases	5	2		1	6			8			4	5
Permitted Phases	2			6		6	8			4		4
Detector Phase	5	2		1	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	7.0	38.0		7.0	38.0	38.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	10.0	44.0		10.0	44.0	44.0	13.0	13.0		13.0	13.0	10.0
Total Split (s)	15.0	44.0		15.0	44.0	44.0	36.0	36.0		36.0	36.0	15.0
Total Split (%)	15.8%	46.3%		15.8%	46.3%	46.3%	37.9%	37.9%		37.9%	37.9%	15.8%
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	3.0
All-Red Time (s)	0.0	2.0		0.0	2.0	2.0	2.0	2.0		2.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	6.0		3.0	6.0	6.0	6.0	6.0		6.0	6.0	3.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	None
Act Effct Green (s)	82.7	80.7		82.1	78.7	78.7		7.9			7.9	14.9
Actuated g/C Ratio	0.87	0.85		0.86	0.83	0.83		0.08			0.08	0.16
v/c Ratio	0.03	0.32		0.00	0.28	0.07		0.08			0.27	0.01
Control Delay	1.8	3.6		2.0	4.2	1.4		0.9			47.0	29.0
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	1.8	3.6		2.0	4.2	1.4		0.9			47.0	29.0
LOS	A	A		A	A	A		A			D	C
Approach Delay		3.5			3.9			0.9			45.8	
Approach LOS		A			A			A			D	
Queue Length 50th (ft)	2	58		0	46	0		0			17	1

4184 22-02818

Future (without NARTP) - AM
50: Fourth Street/Aviation Research Boulevard & Delilah Road (CR 646)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	6	154		1	124	15		0		44		6
Internal Link Dist (ft)		744			321			490			324	
Turn Bay Length (ft)	200			100		215						
Base Capacity (vph)	736	2839		681	2673	1340		465		404		555
Starvation Cap Reductn	0	0		0	0	0		0		0		0
Spillback Cap Reductn	0	0		0	0	0		0		0		0
Storage Cap Reductn	0	0		0	0	0		0		0		0
Reduced v/c Ratio	0.03	0.32		0.00	0.28	0.07		0.03		0.07		0.00

Intersection Summary

Area Type: Other

Cycle Length: 95

Actuated Cycle Length: 95

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.32

Intersection Signal Delay: 4.4

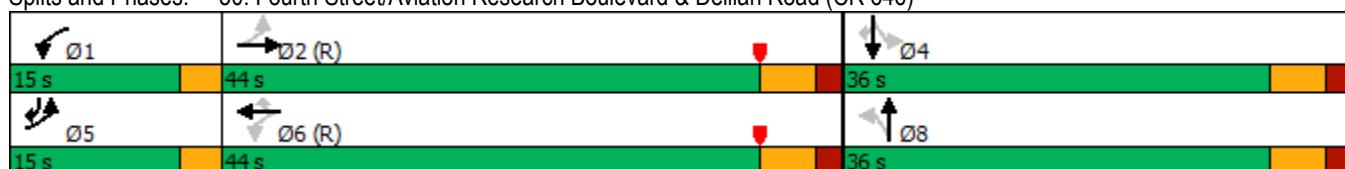
Intersection LOS: A

Intersection Capacity Utilization 56.7%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 50: Fourth Street/Aviation Research Boulevard & Delilah Road (CR 646)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑		↑	↑↑	↑		↔		↑	↑	↑
Traffic Volume (veh/h)	21	876	2	2	728	87	13	0	1	28	0	2
Future Volume (veh/h)	21	876	2	2	728	87	13	0	1	28	0	2
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1781	1900	1979	1784	1949	1781	1900	1900	1654	1876	1876
Adj Flow Rate, veh/h	22	903	2	2	751	90	13	0	1	29	0	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	8	0	0	13	2	8	0	0	15	0	0
Cap, veh/h	593	2727	6	547	2570	1252	121	3	4	157	0	133
Arrive On Green	0.03	0.79	0.79	0.00	0.76	0.76	0.05	0.00	0.05	0.05	0.00	0.05
Sat Flow, veh/h	1810	3465	8	1884	3389	1651	934	55	76	1585	0	1590
Grp Volume(v), veh/h	22	441	464	2	751	90	14	0	0	29	0	2
Grp Sat Flow(s), veh/h/ln	1810	1692	1780	1884	1694	1651	1065	0	0	1585	0	1590
Q Serve(g_s), s	0.2	7.1	7.1	0.0	6.5	1.3	0.7	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.2	7.1	7.1	0.0	6.5	1.3	2.2	0.0	0.0	1.5	0.0	0.1
Prop In Lane	1.00		0.00	1.00		1.00	0.93		0.07	1.00		1.00
Lane Grp Cap(c), veh/h	593	1332	1401	547	2570	1252	128	0	0	157	0	133
V/C Ratio(X)	0.04	0.33	0.33	0.00	0.29	0.07	0.11	0.00	0.00	0.18	0.00	0.02
Avail Cap(c_a), veh/h	763	1332	1401	778	2570	1252	511	0	0	533	0	554
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	2.1	2.9	2.9	2.8	3.6	2.9	44.1	0.0	0.0	43.5	0.0	39.9
Incr Delay (d2), s/veh	0.0	0.7	0.6	0.0	0.3	0.1	0.1	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	0.1	2.4	2.5	0.0	2.4	0.5	0.6	0.0	0.0	1.2	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	2.1	3.6	3.5	2.8	3.8	3.0	44.3	0.0	0.0	43.7	0.0	40.0
LnGrp LOS	A	A	A	A	A	A	D	A	A	D	A	D
Approach Vol, veh/h	927				843			14			31	
Approach Delay, s/veh	3.5				3.8			44.3			43.4	
Approach LOS	A				A			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+R _c), s	3.4	80.8		10.9	6.1	78.1		10.9				
Change Period (Y+R _c), s	3.0	6.0		6.0	3.0	6.0		6.0				
Max Green Setting (Gmax), s	12.0	38.0		30.0	12.0	38.0		30.0				
Max Q Clear Time (g_c+l1), s	2.0	9.1		3.5	2.2	8.5		4.2				
Green Ext Time (p_c), s	0.0	1.5		0.0	0.0	1.4		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				4.6								
HCM 6th LOS				A								

	←	→	↑	↓	←	→	↑	↓	↑	↓	←	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	2	3	1	2	3	1	2	3	1	2	3
Traffic Volume (vph)	8	872	7	3	1078	42	5	0	0	101	1	30
Future Volume (vph)	8	872	7	3	1078	42	5	0	0	101	1	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			-2%			0%			2%	
Storage Length (ft)	200		0	100		215	0		0	90		0
Storage Lanes	1		0	1		1	0		0	1		1
Taper Length (ft)	60			60			25			30		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00							
Fr _t		0.999				0.850					0.850	
Flt Protected	0.950			0.950			0.950			0.953		
Satd. Flow (prot)	1805	3371	0	1823	3540	1631	0	1805	0	0	1793	1599
Flt Permitted	0.208			0.276			0.685			0.725		
Satd. Flow (perm)	395	3371	0	529	3540	1631	0	1302	0	0	1364	1599
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)		1			69							
Link Speed (mph)	50			50			25			25		
Link Distance (ft)	824			401			570			404		
Travel Time (s)	11.2			5.5			15.5			11.0		
Confl. Peds. (#/hr)		7	7									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	7%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	9	956	0	3	1172	46	0	5	0	0	111	33
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	pm+ov
Protected Phases	5	2		1	6			8			4	5
Permitted Phases	2			6		6	8			4		4
Detector Phase	5	2		1	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	7.0	38.0		7.0	38.0	38.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	10.0	44.0		10.0	44.0	44.0	13.0	13.0		13.0	13.0	10.0
Total Split (s)	15.0	44.0		15.0	44.0	44.0	36.0	36.0		36.0	36.0	15.0
Total Split (%)	15.8%	46.3%		15.8%	46.3%	46.3%	37.9%	37.9%		37.9%	37.9%	15.8%
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	3.0
All-Red Time (s)	0.0	2.0		0.0	2.0	2.0	2.0	2.0		2.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.0	6.0		3.0	6.0	6.0	6.0	6.0		6.0	6.0	3.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	None
Act Effect Green (s)	72.9	68.5		72.9	68.5	68.5		12.5			12.5	17.5
Actuated g/C Ratio	0.77	0.72		0.77	0.72	0.72		0.13			0.13	0.18
v/c Ratio	0.02	0.39		0.01	0.46	0.04		0.03			0.62	0.11
Control Delay	3.6	6.9		3.7	7.4	1.2		33.2			53.0	29.3
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	3.6	6.9		3.7	7.4	1.2		33.2			53.0	29.3
LOS	A	A		A	A	A		C			D	C
Approach Delay		6.8			7.2			33.2			47.6	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		A			A			C			D	
Queue Length 50th (ft)	1	90		0	117	0		3			64	17
Queue Length 95th (ft)	5	216		3	279	9		13			112	35
Internal Link Dist (ft)		744			321			490			324	
Turn Bay Length (ft)	200			100		215						
Base Capacity (vph)	483	2430		572	2551	1194		411			430	555
Starvation Cap Reductn	0	0		0	0	0		0			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.02	0.39		0.01	0.46	0.04		0.01			0.26	0.06

Intersection Summary

Area Type: Other

Cycle Length: 95

Actuated Cycle Length: 95

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay: 9.6

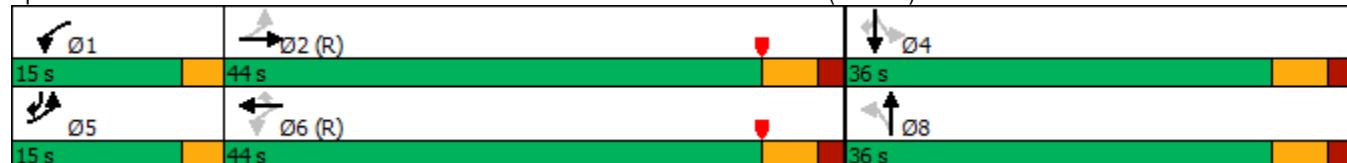
Intersection LOS: A

Intersection Capacity Utilization 56.7%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 50: Fourth Street/Aviation Research Boulevard & Delilah Road (CR 646)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↓		↑	↑↑	↑	↔	↔		↑	↑↓	↑
Traffic Volume (veh/h)	8	872	7	3	1078	42	5	0	0	101	1	30
Future Volume (veh/h)	8	872	7	3	1078	42	5	0	0	101	1	30
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1796	1900	1979	1934	1979	1900	1900	1900	1876	1876	1876
Adj Flow Rate, veh/h	9	948	8	3	1172	46	5	0	0	110	1	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	7	0	0	3	0	0	0	0	0	0	0
Cap, veh/h	394	2611	22	496	2730	1240	108	0	0	217	1	158
Arrive On Green	0.02	0.75	0.75	0.01	0.74	0.74	0.08	0.00	0.00	0.08	0.08	0.08
Sat Flow, veh/h	1810	3468	29	1884	3674	1669	383	0	0	1688	15	1590
Grp Volume(v), veh/h	9	466	490	3	1172	46	5	0	0	111	0	33
Grp Sat Flow(s), veh/h/ln	1810	1706	1791	1884	1837	1669	383	0	0	1704	0	1590
Q Serve(g_s), s	0.1	8.8	8.8	0.0	11.4	0.7	0.3	0.0	0.0	0.0	0.0	1.8
Cycle Q Clear(g_c), s	0.1	8.8	8.8	0.0	11.4	0.7	6.1	0.0	0.0	5.8	0.0	1.8
Prop In Lane	1.00		0.02	1.00		1.00	1.00		0.00	0.99		1.00
Lane Grp Cap(c), veh/h	394	1285	1348	496	2730	1240	108	0	0	218	0	158
V/C Ratio(X)	0.02	0.36	0.36	0.01	0.43	0.04	0.05	0.00	0.00	0.51	0.00	0.21
Avail Cap(c_a), veh/h	594	1285	1348	723	2730	1240	432	0	0	549	0	527
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	3.5	4.0	4.0	3.3	4.6	3.2	45.5	0.0	0.0	42.5	0.0	39.4
Incr Delay (d2), s/veh	0.0	0.8	0.8	0.0	0.5	0.1	0.1	0.0	0.0	0.7	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	0.0	3.7	3.8	0.0	5.0	0.3	0.2	0.0	0.0	4.7	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	3.5	4.8	4.7	3.3	5.1	3.3	45.6	0.0	0.0	43.2	0.0	39.6
LnGrp LOS	A	A	A	A	A	A	D	A	A	D	A	D
Approach Vol, veh/h	965				1221			5			144	
Approach Delay, s/veh	4.8				5.0			45.6			42.4	
Approach LOS		A				A			D			D
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+R _c), s	3.5	77.5		13.9	4.5	76.6		13.9				
Change Period (Y+R _c), s	3.0	6.0		6.0	3.0	6.0		6.0				
Max Green Setting (Gmax), s	12.0	38.0		30.0	12.0	38.0		30.0				
Max Q Clear Time (g_c+l1), s	2.0	10.8		7.8	2.1	13.4		8.1				
Green Ext Time (p_c), s	0.0	1.7		0.2	0.0	2.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			7.3									
HCM 6th LOS			A									

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	2	753	7	3	659	16	6	0	2	14	0	5
Traffic Volume (vph)	2	753	7	3	659	16	6	0	2	14	0	5
Future Volume (vph)	2	753	7	3	659	16	6	0	2	14	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)	0%			-2%			0%			2%		
Storage Length (ft)	200		0	100		215	0		0	90		0
Storage Lanes	1		0	1		1	0		0	1		1
Taper Length (ft)	60			60			25			30		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00			1.00								
Fr _t	0.999				0.850		0.970				0.850	
Flt Protected	0.950			0.950			0.963				0.950	
Satd. Flow (prot)	1805	3566	0	1823	3610	1631	0	1568	0	0	1787	1332
Flt Permitted	0.374			0.333								
Satd. Flow (perm)	711	3566	0	638	3610	1631	0	1628	0	0	1881	1332
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)	1				69		69					
Link Speed (mph)	50			50			25			25		
Link Distance (ft)	824			401			570			404		
Travel Time (s)	11.2			5.5			15.5			11.0		
Confl. Peds. (#/hr)		3	3									
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	1%	14%	0%	1%	0%	17%	0%	0%	0%	0%	20%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	845	0	3	732	18	0	9	0	0	16	6
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	pm+ov
Protected Phases	5	2		1	6			8			4	5
Permitted Phases	2			6		6	8			4		4
Detector Phase	5	2		1	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	7.0	38.0		7.0	38.0	38.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	10.0	44.0		10.0	44.0	44.0	13.0	13.0		13.0	13.0	10.0
Total Split (s)	15.0	44.0		15.0	44.0	44.0	36.0	36.0		36.0	36.0	15.0
Total Split (%)	15.8%	46.3%		15.8%	46.3%	46.3%	37.9%	37.9%		37.9%	37.9%	15.8%
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	3.0
All-Red Time (s)	0.0	2.0		0.0	2.0	2.0	2.0	2.0		2.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.0	6.0		3.0	6.0	6.0	6.0	6.0		6.0	6.0	3.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						Yes
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	None
Act Effect Green (s)	86.0	85.2		86.0	85.2	85.2		7.2			7.2	12.2
Actuated g/C Ratio	0.91	0.90		0.91	0.90	0.90		0.08			0.08	0.13
v/c Ratio	0.00	0.26		0.00	0.23	0.01		0.05			0.11	0.04
Control Delay	1.5	2.5		1.3	2.4	0.0		0.5			42.7	33.8
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	1.5	2.5		1.3	2.4	0.0		0.5			42.7	33.8
LOS	A	A		A	A	A		A			D	C
Approach Delay	2.5			2.3			0.5			40.3		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS			A		A			A			D	
Queue Length 50th (ft)	0	0		0	0	0		0			9	3
Queue Length 95th (ft)	1	125		1	105	0		0			30	14
Internal Link Dist (ft)		744			321			490			324	
Turn Bay Length (ft)	200			100		215						
Base Capacity (vph)	786	3199		731	3238	1470		561			594	462
Starvation Cap Reductn	0	0		0	0	0		0			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.00	0.26		0.00	0.23	0.01		0.02			0.03	0.01

Intersection Summary

Area Type: Other

Cycle Length: 95

Actuated Cycle Length: 95

Offset: 53 (56%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.26

Intersection Signal Delay: 2.9

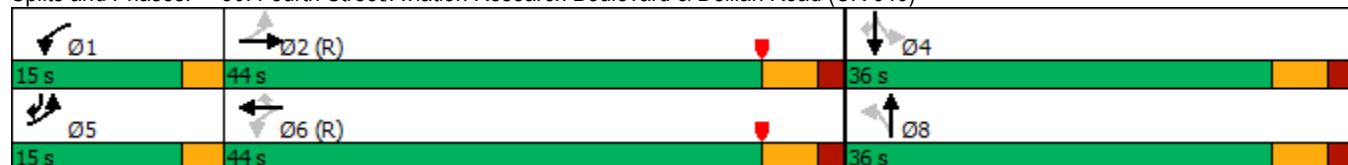
Intersection LOS: A

Intersection Capacity Utilization 56.7%

ICU Level of Service B

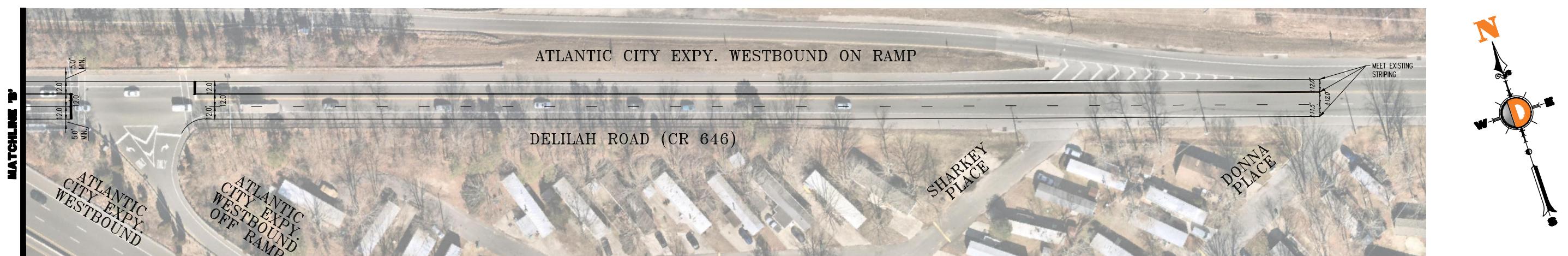
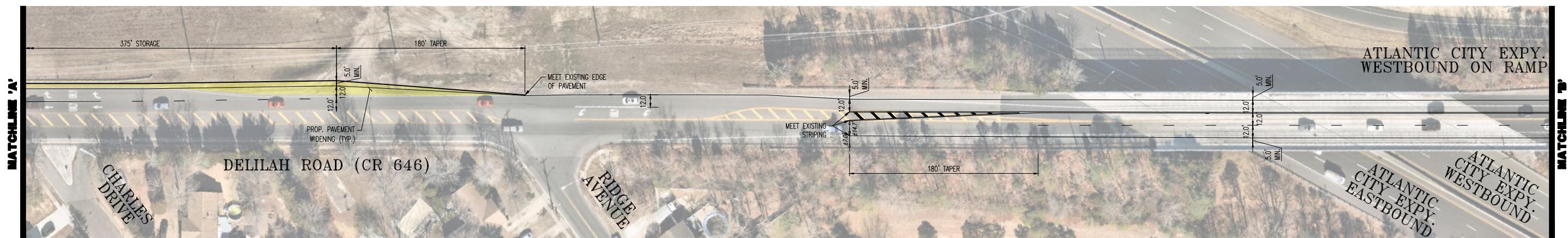
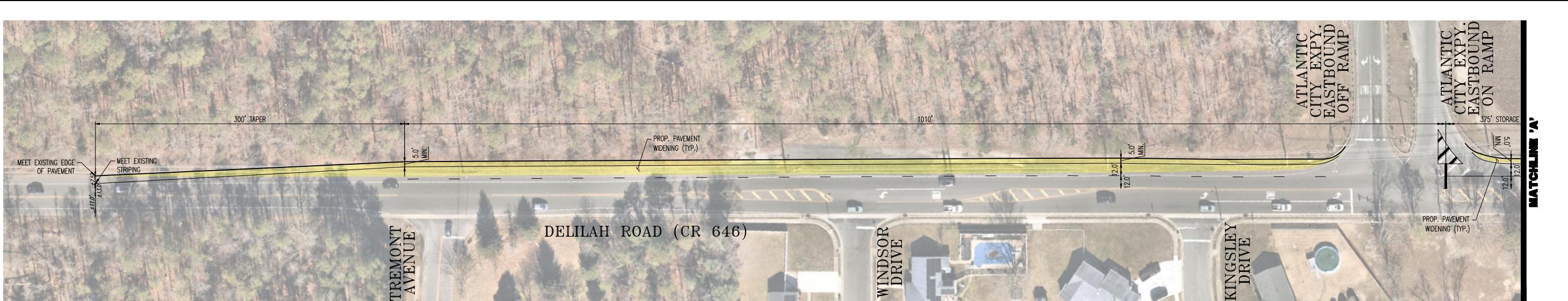
Analysis Period (min) 15

Splits and Phases: 50: Fourth Street/Aviation Research Boulevard & Delilah Road (CR 646)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↓		↑	↑↑	↑		↔			↑	↑
Traffic Volume (veh/h)	2	753	7	3	659	16	6	0	2	14	0	5
Future Volume (veh/h)	2	753	7	3	659	16	6	0	2	14	0	5
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1693	1979	1964	1979	1648	1900	1900	1876	1876	1580
Adj Flow Rate, veh/h	2	837	8	3	732	18	7	0	2	16	0	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	1	14	0	1	0	17	0	0	0	0	20
Cap, veh/h	623	2891	28	592	2974	1334	104	8	13	137	0	60
Arrive On Green	0.00	0.80	0.80	0.01	0.80	0.80	0.04	0.00	0.04	0.04	0.00	0.04
Sat Flow, veh/h	1810	3635	35	1884	3731	1674	902	197	314	1497	0	1339
Grp Volume(v), veh/h	2	412	433	3	732	18	9	0	0	16	0	6
Grp Sat Flow(s), veh/h/ln	1810	1791	1879	1884	1865	1674	1412	0	0	1497	0	1339
Q Serve(g_s), s	0.0	5.8	5.8	0.0	4.7	0.2	0.0	0.0	0.0	0.0	0.0	0.4
Cycle Q Clear(g_c), s	0.0	5.8	5.8	0.0	4.7	0.2	0.8	0.0	0.0	0.8	0.0	0.4
Prop In Lane	1.00		0.02	1.00		1.00	0.78		0.22	1.00		1.00
Lane Grp Cap(c), veh/h	623	1424	1494	592	2974	1334	126	0	0	137	0	60
V/C Ratio(X)	0.00	0.29	0.29	0.01	0.25	0.01	0.07	0.00	0.00	0.12	0.00	0.10
Avail Cap(c_a), veh/h	845	1424	1494	820	2974	1334	529	0	0	527	0	428
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	2.0	2.6	2.6	2.1	2.4	2.0	43.9	0.0	0.0	44.1	0.0	43.5
Incr Delay (d2), s/veh	0.0	0.5	0.5	0.0	0.2	0.0	0.1	0.0	0.0	0.1	0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%), veh/ln	0.0	1.9	2.0	0.0	1.4	0.1	0.4	0.0	0.0	0.7	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	2.0	3.1	3.1	2.1	2.6	2.0	44.0	0.0	0.0	44.2	0.0	43.8
LnGrp LOS	A	A	A	A	A	A	D	A	A	D	A	D
Approach Vol, veh/h		847			753			9			22	
Approach Delay, s/veh		3.1			2.6			44.0			44.1	
Approach LOS		A			A			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+R _c), s	3.5	81.6		9.9	3.4	81.7		9.9				
Change Period (Y+R _c), s	3.0	6.0		6.0	3.0	6.0		6.0				
Max Green Setting (Gmax), s	12.0	38.0		30.0	12.0	38.0		30.0				
Max Q Clear Time (g_c+l1), s	2.0	7.8		2.8	2.0	6.7		2.8				
Green Ext Time (p_c), s	0.0	1.4		0.0	0.0	1.5		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			3.6									
HCM 6th LOS			A									

Appendix D
Conceptual Improvement Plan



NEARMAP AERIAL IMAGE DATED: FEBRUARY 2023

GRAPHIC SCALE



(IN FEET)

ATLANTIC COUNTY

CONCEPTUAL IMPROVEMENT PLAN TRAFFIC STUDY

DELILAH ROAD (CR 646)
ATLANTIC CITY EXPRESSWAY EB ON/OFF RAMP TO ATLANTIC CITY EXPRESSWAY WB OFF RAMP
EGG HARBOR TOWNSHIP, ATLANTIC COUNTY

**DYNAMIC
TRAFFIC, LLC**

SCALE: 1"=100'	DRAWN BY: MNE	DESIGNED BY: NED	CHECKED BY: ADJ
PROJECT NUMBER: 4184-22-02818	DATE: 06/27/2023	REV. #: 0	
SHEET NUMBER: 1		OF 1	