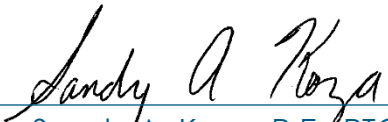


# Transportation Impact Study for Lawrenceville Chick-fil-A Lawrence Township, Mercer County, NJ



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Prepared for  
**Chick-fil-A**

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# TABLE OF CONTENTS

	<i>Page</i>
<b>EXECUTIVE SUMMARY</b>	1
<b>EXISTING TRANSPORTATION SETTINGS AND CONDITIONS</b>	3
<i>ROADWAY CHARACTERISTICS</i>	3
<i>LAND USE CONTEXT</i>	4
<i>AREA TRANSIT SERVICES</i>	4
<i>PEDESTRIAN-BICYCLE FACILITIES</i>	4
<i>TRAFFIC COUNT DATA</i>	4
<b>SITE CHARACTERISTICS</b>	5
<i>TRIP GENERATION</i>	5
<i>TRIP DISTRIBUTION AND ASSIGNMENT</i>	5
<i>SITE ACCESS CONFIGURATION AND TRAFFIC CONTROL</i>	6
<i>DRIVE-THROUGH OPERATIONS</i>	6
<b>FUTURE TRAFFIC CONDITIONS</b>	8
<i>REGIONAL TRAFFIC GROWTH</i>	8
<i>LOCAL TRAFFIC GROWTH</i>	8
<i>PLANNED ROADWAY IMPROVEMENTS</i>	8
<i>FUTURE TRAFFIC VOLUMES</i>	8
<b>CAPACITY/LEVEL-OF-SERVICE RESULTS</b>	9
<i>BAKERS BASIN ROAD OPERATIONS</i>	13
<b>CONCLUSION AND RECOMMENDATIONS</b>	14
<b>APPENDIX A</b>	- <i>Intersection Signal Permit Plans</i>
<b>APPENDIX B</b>	- <i>Traffic Count Data, Volume Balancing, and Bakers Basin Road Queues</i>
<b>APPENDIX C</b>	- <i>Store Operational Data</i>
<b>APPENDIX D</b>	- <i>Volume Development Spreadsheets</i>
<b>APPENDIX E</b>	- <i>Capacity/Level-of-Service Methodology</i>
<b>APPENDIX F</b>	- <i>2023 Existing Capacity/Level-of-Service Analysis Worksheets</i>
<b>APPENDIX G</b>	- <i>2025 Future Base Configuration Capacity/Level-of-Service Analysis Worksheets</i>
<b>APPENDIX H</b>	- <i>2025 Future Build Configuration Capacity/Level-of-Service Analysis Worksheets</i>

## Executive Summary

Chick-fil-A plans to renovate the exterior of existing Chick-fil-A restaurant, which has 5,314 square feet of building space, located to the east of Brunswick Avenue (U.S. 1) and to the south of Bakersville Road in Lawrence Township, Mercer County, New Jersey (see **Figures 1A and 1B**). Access to the site is currently provided via two full-movement driveways located along Bakersville Road (see **Figure 2A**).

With the planned renovations to the site, the existing western driveway will be converted to one-way egress movements serving the drive-through and patrons who utilize the parking lot to the east of the store. The existing eastern driveway will then be converted to one-way ingress movements to the parking lot only. The entry to the drive through will be reconfigured with its access provided via the internal loop road that links Bakersville Road to Greenberg Road.

The drive through will also be reconfigured to provide three lanes for orders before merging to two pick-up lanes. This will increase the on-site storage for the drive through since the existing store provides two lanes for placing orders before merging into a single lane for pick-up. The existing access to the drive through is provided within the parking field on the east side of the building. The final improvement to the exterior of the store will be the development of a new parking field located to the north of the store and the new drive through entrance. A schematic of the latest site plan prepared by Bowman is illustrated on an aerial in **Figure 2B**.

The scope of this *Transportation Impact Study* is based on a discussion with the Township's traffic consultant, Arora and Associates, P.C., as well as a review of the Township guidelines from *Section 814.B.2 of the Land Use Ordinance of the Township of Lawrence*. The Delaware and Raritan Canal Commission guidelines were also reviewed, since the site is located within proximity to the park and the canal within Review Zone A. The purpose of this transportation impact study is to evaluate the traffic impacts of the proposed modifications to the Chick-fil-A parking fields, drive-through, and accesses. The scope of this study includes an evaluation of the existing 2023 weekday midday, weekday afternoon, and Saturday midday peak hours that correspond to the peak operations of the Chick-fil-A, as well as the future 2025 build-out year, both without and with the reconfiguration of the Chick-fil-A driveways. The following study intersections were selected by the Township's traffic consultant for inclusion in the study:

- Brunswick Avenue (U.S. 1) and Bakersville Road
- Brunswick Avenue (U.S. 1) and Franklin Corner Road (C.R. 546)/Bakers Basin Road
- Franklin Corner Road (C.R. 546) and U.S. 1 Southbound Jughandle/Shell Driveway
- Greenberg Road and Bakersville Road (South)/Wawa Driveway
- Greenberg Road and Bakersville Road (North)
- Greenberg Road and Internal Loop Road
- Greenberg Road and Bakers Basin Road
- Bakersville Road and Internal Loop Road/Wawa Driveway
- Bakersville Road and Chick-Fil-A Western Access
- Bakersville Road and Chick-Fil-A Eastern Access
- Internal Loop Road and New Chick-fil-A Drive-Through Entrance

### Trip Generation

Because the size of the building is unchanged by the proposed renovations, **no additional trips to the site are expected to be generated** as a result of the relocation of the drive through entrance and the expansion of the on-site parking. A comparison of the local trip generation for the site based upon the turning movement counts to data compiled in the Institute of Transportation Engineers', *Trip Generation Manual, 11<sup>th</sup> Edition*, for similar fast-food restaurants with drive-through windows is provided. It is noted that the existing turning movement trip

generation data is more conservative than the data from the *Trip Generation Manual*. The site currently generates 500 and 305 total trips (entering and exiting) during the weekday midday and afternoon peak hours, respectively, and 397 total trips (entering and exiting) during a typical Saturday midday.

### **Site Accesses**

Direct access to the site is currently provided via Bakersville Road. With the planned renovations, the following is a summary of the access recommendation:

#### Western Access Along Bakersville Road

- Convert the full-movement driveway to an egress only driveway.
- Maintain the existing driveway geometry.
- Install Do Not Enter and One-Way signage on both sides of the driveway, along with Stop-signs on both sides of the driveway for traffic approaching Bakersville Road.

#### Eastern Access Along Bakersville Road

- Convert the full-movement driveway to an egress only driveway.
- Maintain existing driveway geometry.
- Remove the existing Stop sign for the access approach to Bakersville Road.
- Install One-Way signage on both sides of the driveway.

#### Proposed Drive-Thru Entrance Along Internal Loop Road

- Provide three ingress lanes that will be striped to provide minimum 9-foot wide lanes separated by 3-foot wide gored striping.

### **Off-Site Intersection Operations**

Because the size of the building is unchanged by the proposed renovations, no additional trips to the site are expected to be generated as a result of the relocation of the drive through entrance and the expansion of the on-site parking. As a result, all off-site study intersections will operate at the same levels of service and delays from without- to with-development conditions during the three peak periods. Therefore, mitigation measures are not warranted or recommended as a result of the exterior modifications to the site.

### **Drive-Through Operations**

The existing driveway is being converted in terms of the number of lanes and the location of the entrance. Under existing conditions, there are two lanes for placing orders that then merge into a single lane for pick-up. With the reconfiguration of the site, the drive through will provide three lanes for placing orders that will then merge into two lanes for pick-up. Based upon existing observations of the drive-through, the maximum number of vehicles observed was 31 vehicles from the pick-up window to the end of the queue, which was observed within the parking lot located on the east side of the restaurant. The corresponding distance from the front of the first vehicle to the back of the last vehicle in the queue within the parking lot totals 702 feet, which corresponds to an average vehicle spacing of 22.6 feet per vehicle.

The new configuration for the drive through will have 1,021 feet of available storage from the pick-up window to the entrance to the drive through lanes. Based upon the available distance within the reconfigured drive through and the existing average vehicle spacing, up to 45 vehicles could be accommodated within the reconfigured drive-through. This value exceeds the existing maximum observed queue.

The traffic analyses contained herein reveal that efficient access to and from the proposed development can be provided, and furthermore, site-generated traffic can be accommodated at the study area intersections without the need for mitigation or off-site improvements.

## Existing Transportation Settings and Conditions

The existing restaurant is located to the east of Brunswick Avenue (U.S. 1) and to the south of Bakersville Road in Lawrence Township, Mercer County, New Jersey (see **Figures 1A and 1B**). The existing roadways and intersections in the vicinity of the site, which comprise the study area roadway network, are described in this section.

### Roadway Characteristics

The study area roadway network and characteristics are summarized below in **Table 1**.

**Table 1. Existing Roadway Characteristics**

Roadway Name	Average Daily Traffic Volumes (vehicles per day) <sup>(1)</sup>	Roadway Classification Data	Travel Lanes (per direction)	Posted Speed Limit (mph)
		NJDOT Functional Classification <sup>(2)</sup>		
Brunswick Avenue (U.S. 1)	59,897	Urban Principal Arterial - Other	2 to 3	55
Franklin Corner Road (C.R. 546)	12,652	Urban Minor Arterial	1 to 2	40
Bakers Basin Road	6,955	Urban Minor Arterial	1	35
Greenberg Road	n/a	Local	1	Not Posted
Bakersville Road	n/a	Local	1	Not Posted

(1) Based on traffic data from NJDOT's Traffic Count Stations online map.

(2) Based on the roadway classifications provided in NJDOT 2010 Functional Classification Map for Mercer County.

The following study intersections were selected by the Township's traffic consultant for inclusion in the study:

- Brunswick Avenue (U.S. 1) and Bakersville Road
- Brunswick Avenue (U.S. 1) and Franklin Corner Road (C.R. 546)/Bakers Basin Road
- Franklin Corner Road (C.R. 546) and U.S. 1 Southbound Jughandle/Shell Driveway
- Greenberg Road and Bakersville Road (South)/Wawa Driveway
- Greenberg Road and Bakersville Road (North)
- Greenberg Road and Internal Loop Road
- Greenberg Road and Bakers Basin Road
- Bakersville Road and Internal Loop Road/Wawa Driveway
- Bakersville Road and Chick-Fil-A Western Access
- Bakersville Road and Chick-Fil-A Eastern Access
- Internal Loop Road and New Chick-fil-A Drive-Through Entrance

The signal permit plan for the signalized intersection of Brunswick Avenue (U.S. 1) and Franklin Corner Road (C.R. 546)/Bakers Basin Road is provided in **Appendix A**.

### Land Use Context

The proposed development is located within the Highway Commercial (HC) Zoning District of Lawrence Township as illustrated in **Exhibit 1**. Restaurants, including fast food restaurants, are permitted by-right in the zoning district.

### Area Transit Services

New Jersey Transit Bus Routes 600, 603, and 613 traverse the study area. Route 600 stops along U.S. 1 Southbound directly across from the Chick-Fil-A, as well as along U.S. 1 Northbound just north of the intersection with Franklin Corner Road and Bakers Basin Road, approximately 0.2 miles from the site. Routes 603 and 613 stop along Franklin Corner Road just west of the intersection with U.S. 1, approximately 0.3 miles from the site. There are sidewalks connecting the site to the adjacent sidewalks and crosswalks at the signalized intersection of U.S. 1 and Franklin Corner Road/Bakers Basin Road. All crossings at the adjacent signal are push-button activated.

### Pedestrian-Bicycle Facilities

Sidewalks are provided along the U.S. 1 frontage for the parcel, as well as along the Bakers Basin Road Frontage. There is an internal connection that links the sidewalks within the southeast quadrants of the signalized intersection of U.S. 1 and Franklin Corner Road/Bakers Basin Road to the Chick-fil-A parcel where sidewalk is provided to the east of the building. There are pedestrian pushbuttons, signal heads, curb ramps, and marked crosswalks at the adjacent signal. No bicycle facilities are provided within the study area.

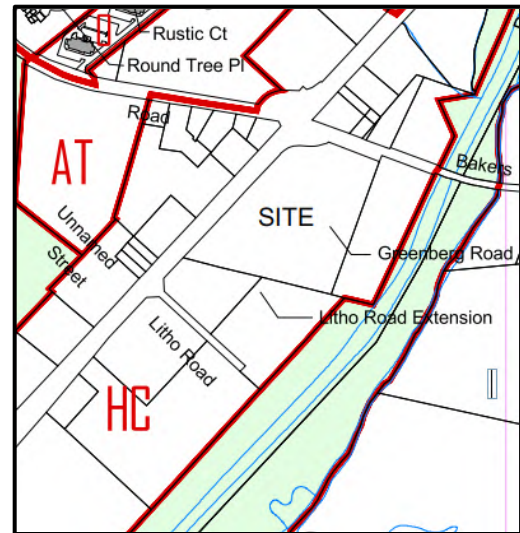
### Traffic Count Data

Daily traffic counts were obtained from NJDOT's Traffic Count Stations website. The traffic count data is provided in **Appendix B**, which is summarized in Table 1. Turning movement traffic counts were conducted in June 2023 during the weekday midday (11:00 AM to 1:00 PM), weekday afternoon (4:00 PM to 7:00 PM), and Saturday midday (11:00 AM to 2:00 PM) peak periods, which coincide with the peak operations of the Chick-fil-A. The results of these traffic counts are tabulated by 15-minute intervals in **Appendix B**. The four highest consecutive 15-minute peak intervals during these traffic count periods constitute the peak hours that are the basis of this traffic analysis.

The existing peak hour traffic volumes were then conservatively balanced (upwards) with one another as shown in **Appendix B**. The resultant peak hour traffic volumes are depicted in **Figure 3A** for the three peak periods. The traffic volumes in Figure 3A were then analyzed to determine the existing operating conditions, and the results of this analysis are shown in **Figure 3B**. Specific details regarding the analysis results and traffic operations are provided later in this report.

Additionally, as requested by the Township's traffic consultant, queue observations were conducted along the Bakers Basin Road approach lanes to Brunswick Avenue (U.S. 1). Copies of these observations are also provided in **Appendix B**, which have been summarized in tabular format and indicates the minimum, maximum, average, and 95<sup>th</sup> percentile queue observation during each peak period.

**Exhibit 1:** Lawrence Township Zoning Map



## Site Characteristics

This section presents the details regarding the existing trip generation associated with the site, an overview of the exterior renovations, and the redistribution of the access driveways during the three peak hours.

### Trip Generation

Because the size of the building is unchanged by the proposed renovations, no additional trips to the site are expected to be generated as a result of the relocation of the drive through entrance and the expansion of the on-site parking.

A summary of the existing combined peak hour traffic volumes associated with the Western and Eastern Accesses for the Chick-fil-A are provided in **Appendix C**. In addition to the turning movement counts at the Chick-fil-A Accesses, drive-thru queuing data was collected during the three peak periods, which included documentation of the number of vehicles from the pick-up window to the end of the queue in five-minute intervals and counts of the number of vehicles entering and exiting the drive-through in fifteen-minute intervals. A copy of this data is also included in **Appendix C**.

The local trip generation data was then compared to data compiled within the Institute of Transportation Engineers' (ITE), *Trip Generation Manual, 11<sup>th</sup> Edition*, for similar fast-food restaurants with drive-through windows. Specifically, the local trip generation characteristics were compared to the projected trips based upon ITE Land Use Code 934: Fast-Food Restaurant with Drive-Through Window. **Table 2** provides a comparison of the total daily and peak hour trip generation characteristics for the proposed site based upon the local data and the ITE-based data. As can be seen, the local data is higher than the ITE projected trips.

**Table 2 - Chick-fil-A Overall Vehicular Trip Generation Comparison**

Methodology	Size (s.f.)	Daily	Weekday Midday			Weekday Afternoon			Saturday Midday		
			In	Out	Total	In	Out	Total	In	Out	Total
Local Rates <sup>(1)</sup>	5,314	2,484	251	249	500	158	157	305	211	186	397
Land Use Code 934 <sup>(2)</sup>			138	133	271	91	84	176	150	144	294

(1) Based on count data for the two accesses as summarized in Appendix C, which was then divided by the store size. Daily trip generation estimate is based on applying a ratio of the total weekday afternoon trips from the local data to the ITE-based total to the ITE-based daily trips.

(2) Based on ITE *Trip Generation Manual, 11<sup>th</sup> Edition* and variable of store size. The weekday midday is based on the higher of the weekday morning or afternoon peak hour of generator for Land Use Code 934.

The trip generation in **Table 2** is based upon the combined total entering and exiting volumes of the Chick-fil-A only for each of the 15-minute count intervals. These volumes are not consistent with the volumes illustrated on Figure 3A that were utilized for the analysis since the selected peak hour for the driveways includes the other movements along Bakersville Road.

### Trip Distribution and Assignment

Traffic volumes generated by the existing site were analyzed to determine the percentage of trips that utilized the drive-thru and parking lot, respectively, in order to redistribute the existing site generated traffic based upon the revisions to the access configuration. The existing trips were re-distributed based on their existing arrival and departure directions, and the percentage of trips that utilize the drive-thru and main parking lot located on the east side of the restaurant, respectively. The resulting re-distribution affects only a small portion of the study area and

does not affect any of the major roadways. **Figure 4** illustrates the re-assignment of trips throughout the study area for the weekday midday, weekday afternoon, and Saturday midday peak hours.

### **Site Access Configuration and Traffic Control**

Access to the site is currently provided via two full-movement driveways located along Bakersville Road. With the planned renovations to the site, the existing western driveway will be converted to one-way egress movements serving the drive-through and patrons who utilize the parking lot to the east of the store. The existing eastern driveway will then be converted to one-way ingress movements to the parking lot only. The entry to the drive through will be reconfigured with its access provided via the internal loop road that links Bakersville Road to Greenberg Road.

The drive through will also be reconfigured to provide three lanes for orders before merging to two pick-up lanes. This will increase the on-site storage for the drive through, since the existing store provides two lanes for placing orders before merging into a single lane for pick-up. The existing access to the drive through is provided within the parking field on the east side of the building. The final improvement to the exterior of the store will be the development of a new parking field located to the north of the store and the new drive through entrance.

Based on the results of this evaluation, the following access configurations and traffic controls are recommended, subject to the detailed engineering of the site accesses:

#### Western Access Along Bakersville Road

- Convert the full-movement driveway to an egress only driveway.
- Maintain the existing driveway geometry.
- Install Do Not Enter and One-Way signage on both sides of the driveway, along with Stop-signs on both sides of the driveway for traffic approaching Bakersville Road.

#### Eastern Access Along Bakersville Road

- Convert the full-movement driveway to an egress only driveway.
- Maintain existing driveway geometry.
- Remove the existing Stop sign for the access approach to Bakersville Road.
- Install One-Way signage on both sides of the driveway.

#### Proposed Drive-Thru Entrance Along Internal Loop Road

- Provide three ingress lanes that will be striped to provide minimum 9-foot wide lanes separated by 3-foot wide gored striping.

### **Drive-Through Operations**

The existing driveway is being converted in terms of the number of lanes and the location of the entrance. Under existing conditions, there are two lanes for placing orders that then merge into a single lane for pick-up. With the reconfiguration of the site, the drive through will provide three lanes for placing orders that will then merge into two lanes for pick-up.

As noted in the Trip Generation section, observations of the existing drive through volumes and queues were performed during the weekday midday, weekday afternoon, and Saturday midday peak periods, which typically coincide with the Chick-fil-A peak operations. Based upon existing observations of the drive-through, the maximum number of vehicles observed was 31 vehicles from the pick-up window to the end of the queue, which was observed within the parking lot located on the east side of the restaurant. As seen in **Figure 5A**, the corresponding distance



from the front of the first vehicle to the back of the last vehicle in the queue within the parking lot totals 702 feet. This corresponds to an average vehicle spacing of 22.6 feet per vehicle.

As illustrated in **Figure 5B**, the new configuration for the drive through with three lanes for placing orders and two lanes for pick-up will have 1,021 feet of available storage from the pick-up window to the entrance to the drive through lanes. Based upon the available distance within the reconfigured drive through and the existing average vehicle spacing, up to 45 vehicles could be accommodated within the reconfigured drive-through. This value exceeds the existing maximum observed queue.

## Future Traffic Conditions

This section presents the 2025 future build-out year traffic conditions, both without and with the proposed renovations and access modifications for the restaurant, which are anticipated to be completed by 2025. The future 2025 build-out year without-development traffic volumes were estimated by increasing the existing 2023 traffic volumes to account for regional growth, as described below. The changes in traffic volumes due to the anticipated trip re-distribution for the site were then added, resulting in the future 2025 build-out year with-development traffic volumes.

### *Regional Traffic Growth*

To account for regional traffic growth, the existing traffic volumes were increased by an annual traffic growth rate of 1.00 percent per year compounded for 2 years to 2025, or 2.01 percent total. This growth rate is consistent with the traffic growth rate recommended in the NJDOT Access Permit Annual Background Growth Rate Table for urban roadways in Mercer County. The growth rate was only applied to the arterial roadways in the study area, as well as to the northbound through volumes along Greenberg Road since it acts as a jughandle for U.S. 1 Northbound.

### *Local Traffic Growth*

There are no known nearby development projects which would impact the operations of the study area intersections.

### *Planned Roadway Improvements*

There are no known roadway improvement projects by the state, county, or township which would affect operations within the study area.

### *Future Traffic Volumes*

The total background growth was added to the existing 2023 traffic volumes, resulting in the future 2025 without-development traffic volumes. Next, the re-distributed traffic volumes, as shown in Figure 4, were added to the future 2025 without-development traffic volumes, resulting in the future 2025 with-development traffic volumes. Volume development spreadsheets are provided in **Appendix D**.

The resultant future 2025 peak hour traffic volumes without development are illustrated in **Figure 6A**, and the future 2025 with-development peak hour traffic volumes are illustrated in **Figure 6B** for the weekday midday, weekday afternoon, and Saturday midday peak hours. These traffic volumes were then analyzed to determine the future 2025 without and with development traffic operating conditions, and the results of this analysis are shown in **Figures 6C and 6D**.

## Capacity/Level-of-Service Results

The peak hour traffic volumes were analyzed to determine the existing and future traffic operating conditions, both without and with the proposed development, in accordance with the standard techniques contained in the current *Highway Capacity Manual (HCM)*, 6<sup>th</sup> Edition, for both signalized and unsignalized intersections. The HCM 6<sup>th</sup> Edition Methodology within Synchro 11.1 (build 2, rev. 9) traffic analysis software was utilized in the traffic analyses. These standard capacity/level-of-service analysis techniques, which calculate total control delay, are described in **Appendix E** for both signalized and unsignalized intersections, as well as the correlation between average total control delay and the respective level-of-service (LOS) criteria for each intersection type.

The following is a summary of analysis assumptions utilized for specific intersections:

- Greenberg Road and Bakersville Road/Wawa Driveway: This is a three-way stop-controlled intersection with stop-control provided on the three of the four approaches, with the southbound approach of Greenberg Road operating at free-flow conditions. As this type of intersection control is not supported by the HCM methodology, SimTraffic was utilized to determine the delays and queues. SimTraffic was set-up with a five-minute seeding period along with four 15-minute periods, in which the volume in one period were adjusted by the peak hour factor (PHF) and the remaining three periods utilized the AntiPHF adjustment. Five runs were then utilized to determine the results within the program.
- Eastern Ingress Only Access and Drive Through Entrance: As these two intersections do not include approaches with stop-control, the HCM methodology will not provide capacity/level-of-service results unless a stop-controlled approach is provided. The Synchro model incorporated a stop-controlled approach at these two driveways for the future reconfiguration of the site to provide results.

The existing, future 2025 build-out year traffic conditions, both without and with the proposed development, are summarized in **Figures 3B, 6C, and 6D**, respectively while the detailed capacity/level-of-service analysis worksheets are provided in **Appendices F, G, and H**.

Based on the comparison of the overall levels-of-service from without- to with-development base conditions, no mitigation measures would be required for the study area intersections as there are no drops from without- to with-development conditions. **Table 3** summarizes the overall levels of service for the study, and the detailed results of the level-of-service analysis are contained in the matrices provided in **Table 4**, while the 95<sup>th</sup> percentile queues are summarized in matrices provided in **Table 5**.

Based upon a review of the levels of service from without- to with-development conditions, there are no drops in the study area intersections that would warrant mitigation measures. Again, it is also noted that the building size for the existing Chick-fil-A is not being modified as part of the project, so there are no anticipated increases in area traffic volumes.

**Table 3. Overall Intersection Levels-of-Service  
Weekday Morning Peak Hour**

Intersection	Overall Level-of-Service (Delay in Seconds)			Delay Increase <sup>(2)</sup>	Requires Mitigation
	Existing	Without Development	With Development <sup>(1)</sup>		
Brunswick Avenue (U.S. 1) and Bakersville Road	A	A	A	n/a	No
Brunswick Avenue (U.S. 1) and Franklin Corner Road/ Bakers Basin Road	E (59.9)	E (63.5)	E (63.5)	n/a	No
Quentin Road (SR 0072) and Summit Street	A	A	A	n/a	No
Franklin Corner Road (C.R. 546) and U.S. 1 SB Jughandle/Shell	A	A	A	n/a	No
Greenberg Road and Bakersville Road/Wawa	A	A	A	n/a	No
Greenberg Road and Bakersville Road (Roundabout)	A	A	A	n/a	No
Greenberg Road and Internal Loop Road	A	A	A	n/a	No
Greenberg Road and Bakers Basin Road (HCM-Based)	F (63.3)	F (68.8)	F (68.8)	n/a	No
Bakersville Road and Internal Loop Road/Wawa Driveway	A	A	A	n/a	No
Bakersville Road and CFA Western Access	A	A	A	n/a	No
Bakersville Road and CFA Eastern Access	A	A	A	n/a	No

(1) With-development base conditions without improvements.

(2) Based on the difference in delay from without-development to with-development conditions, in accordance with NJDOT's level of service requirements.

**Table 3. Overall Intersection Levels-of-Service (continued)  
Weekday Afternoon Peak Hour**

Intersection	Overall Level-of-Service (Delay in Seconds)			Delay Increase <sup>(2)</sup>	Requires Mitigation
	Existing	Without Development	With Development <sup>(1)</sup>		
Brunswick Avenue (U.S. 1) and Bakersville Road	A	A	A	n/a	No
Brunswick Avenue (U.S. 1) and Franklin Corner Road/ Bakers Basin Road	F (85.1)	F (90.8)	F (90.8)	n/a	No
Quentin Road (SR 0072) and Summit Street	A	A	A	n/a	No
Franklin Corner Road (C.R. 546) and U.S. 1 SB Jughandle/Shell	A	A	A	n/a	No
Greenberg Road and Bakersville Road/Wawa	A	A	A	n/a	No
Greenberg Road and Bakersville Road (Roundabout)	A	A	A	n/a	No
Greenberg Road and Internal Loop Road	A	A	A	n/a	No
Greenberg Road and Bakers Basin Road (HCM-Based)	F (55.3)	F (60.2)	F (60.2)	n/a	No
Bakersville Road and Internal Loop Road/Wawa Driveway	A	A	A	n/a	No
Bakersville Road and CFA Western Access	A	A	A	n/a	No
Bakersville Road and CFA Eastern Access	A	A	A	n/a	No

(3) With-development base conditions without improvements.

(4) Based on the difference in delay from without-development to with-development conditions, in accordance with NJDOT's level of service requirements.

**Table 3. Overall Intersection Levels-of-Service  
Saturday Midday Peak Hour**

Intersection	Overall Level-of-Service (Delay in Seconds)			Delay Increase <sup>(2)</sup>	Requires Mitigation
	Existing	Without Development	With Development <sup>(1)</sup>		
Brunswick Avenue (U.S. 1) and Bakersville Road	A	A	A	n/a	No
Brunswick Avenue (U.S. 1) and Franklin Corner Road/ Bakers Basin Road	E (66.3)	E (71.1)	E (71.1)	n/a	No
Quentin Road (SR 0072) and Summit Street	A	A	A	n/a	No
Franklin Corner Road (C.R. 546) and U.S. 1 SB Jughandle/Shell	A	A	A	n/a	No
Greenberg Road and Bakersville Road/Wawa	A	A	A	n/a	No
Greenberg Road and Bakersville Road (Roundabout)	A	A	A	n/a	No
Greenberg Road and Internal Loop Road	A	A	A	n/a	No
Greenberg Road and Bakers Basin Road (HCM-Based)	F (66.9)	F (73.3)	F (73.3)	n/a	No
Bakersville Road and Internal Loop Road/Wawa Driveway	A	A	A	n/a	No
Bakersville Road and CFA Western Access	A	A	A	n/a	No
Bakersville Road and CFA Eastern Access	A	A	A	n/a	No

(5) With-development base conditions without improvements.

(6) Based on the difference in delay from without-development to with-development conditions, in accordance with NJDOT's level of service requirements.

### Bakers Basin Road Operations

Queuing observations were conducted along the Bakers Basin Road approach to Brunswick Avenue (U.S. 1) during the three peak periods, which are provided in **Appendix B**. The field observed 95<sup>th</sup> percentile queues were then compared to the existing 95<sup>th</sup> percentile queues based upon the HCM methodology, which are summarized in **Table 6**. As can be seen from the comparison in Table 6, the HCM-based analysis of the intersection projects higher queues than observed in the field along these three lanes. These queues were then utilized to calibrate the existing SimTraffic to better represent actual operating conditions for the study area before completing the future projections of area traffic. Copies of the SimTraffic delays and queues, which are also reported in Table 6 are then provided in **Appendix F**.

The queue along this approach, along with the operations of the adjacent signal, impacts the operations and ability of vehicles to turn left from Greenberg Road onto Bakers Basin Road. The HCM-based results for the left-turn lane along Greenberg Road indicated delays in excess of 4-minutes, which did not coincide with field observations of this movement. Following calibration of the existing SimTraffic models for each peak hour, SimTraffic runs were also then utilized to better represent the actual conditions of this lane. Although the left-turn lane still operates with delays, the corresponding SimTraffic delays under existing conditions were then reduced by 75% to 82% when compared to the HCM-based delays. As no additional site-generated traffic is added to this intersection from without- to with-development conditions, no mitigation measures are offered.

**Table 6. Existing Queue Comparison for Bakers Basin Road Approach to Brunswick Avenue (U.S. 1)**

Condition	Weekday Midday			Weekday Afternoon			Saturday Midday		
	Left	Left /Thru	Thru/ Right	Left	Left/ Thru	Thru/ Right	Left	Left/ Thru	Thru /Right
Field Observations	225	275	250	275	375	325	250	275	300
HCM Based	373	440	430	513	643	618	415	500	483
Calibrated SimTraffic	281	324	305	339	370	354	289	329	311

## Conclusions and Recommendations

Access to the site is currently provided via two full-movement driveways located along Bakersville Road. With the planned renovations to the site, the existing western driveway will be converted to one-way egress movements serving the drive-through and patrons who utilize the parking lot to the east of the store. The existing eastern driveway will then be converted to one-way ingress movements to the parking lot only. The entry to the drive through will be reconfigured with its access provided via the internal loop road that links Bakersville Road to Greenberg Road.

The drive through will also be reconfigured to provide three lanes for orders before merging to two pick-up lanes. This will increase the on-site storage for the drive through, since the existing store provides two lanes for placing orders before merging into a single lane for pick-up. The existing access to the drive through is provided within the parking field on the east side of the building. The final improvement to the exterior of the store will be the development of a new parking field located to the north of the store and the new drive through entrance.

Because the size of the building is unchanged by the proposed renovations, no additional trips to the site are expected to be generated **as a result of the relocation of the drive through entrance and the expansion of the on-site parking**. As a result, there are no drops in the levels of service or delays from without- to with-development conditions that would warrant mitigation measures.

The existing driveway is being converted in terms of the number of lanes and the location of the entrance. Under existing conditions, there are two lanes for placing orders that then merge into a single lane for pick-up. With the reconfiguration of the site, the drive through will provide three lanes for placing orders that will then merge into two lanes for pick-up. Based upon existing observations of the drive-through, the maximum number of vehicles observed was 31 vehicles from the pick-up window to the end of the queue, which was observed within the parking lot located on the east side of the restaurant. The corresponding distance from the front of the first vehicle to the back of the last vehicle in the queue within the parking lot totals 702 feet, which corresponds to an average vehicle spacing of 22.6 feet per vehicle.

The new configuration for the drive through will have 1,021 feet of available storage from the pick-up window to the entrance to the drive through lanes. Based upon the available distance within the reconfigured drive through and the existing average vehicle spacing, up to 45 vehicles could be accommodated within the reconfigured drive-through. This value exceeds the existing maximum observed queue.

The traffic analyses contained herein reveal that efficient access to and from the proposed development can be provided, and furthermore, re-distributed traffic can be accommodated at the study area intersections without the need for any off-site mitigation measures.



**Table 4 - Level of Service Matrices**  
**1. Brunswick Avenue (U.S. 1) and Bakersville Road**

Time Period		Weekday Midday Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year	
Development Condition		Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base
Bakersville Road	WB Right	D 27.4	D 28.4	D 28.4	F 95.7	F 106.5	F 106.5	E 38.8	E 41.2	E 41.2
	Brunswick Avenue (U.S. 1)									
	NB 3 Thrus Right	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
	SB 3 Thrus	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Overall		A 1.5	A 1.5	A 1.5	A 3.5	A 3.8	A 3.8	A 2.2	A 2.3	A 2.3

(1) Movement operates at free-flow conditions.

**Table 4 - Level of Service Matrices**

**2. Brunswick Avenue (U.S. 1) and Franklin Corner Road (C.R. 546)/Bakers Basin Road**

Time Period		Weekday Midday Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year	
Development Condition		Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base
Franklin Corner Road (C.R. 546)	Left	D 47.6	D 48.3	D 48.3	E 63.2	E 63.3	E 63.3	D 48.6	D 49.0	D 49.0
	Thru	F 136.6	F 149.8	F 149.8	F 126.2	F 131.7	F 131.7	F 133.2	F 142.9	F 142.9
	Right	D 47.3	D 47.9	D 47.9	E 68.3	E 68.9	E 68.9	D 49.1	D 49.5	D 49.5
	Approach	F 100.4	F 108.6	F 108.6	F 96.9	F 99.9	F 99.9	F 99.0	F 104.8	F 104.8
Bakers Basin Road	Left	E 67.6	E 69.1	E 69.1	F 84.8	F 87.3	F 87.3	E 69.4	E 70.5	E 70.5
	Left/Thru	E 76.0	E 78.0	E 78.0	F 104.9	F 109.9	F 109.9	F 84.6	F 87.0	F 87.0
	Thru/Right	E 78.3	F 80.3	F 80.3	F 108.0	F 113.1	F 113.1	F 88.4	F 90.8	F 90.8
	Approach	E 74.2	E 76.0	E 76.0	F 99.8	F 104.0	F 104.0	F 81.1	F 83.0	F 83.0
Brunswick Avenue (U.S. 1)	2 Thrus	D 51.5	E 55.9	E 55.9	F 106.0	F 115.3	F 115.3	E 60.7	E 66.9	E 66.9
	Right	C 24.1	C 24.4	C 24.4	C 29.1	C 29.2	C 29.2	C 26.5	C 26.8	C 26.8
	Approach	D 49.0	D 52.9	D 52.9	F 95.8	F 103.8	F 103.8	E 56.5	E 61.9	E 61.9
	SB 2 Thrus	D 39.4	D 40.9	D 40.9	E 57.2	E 61.6	E 61.6	D 53.0	E 58.1	E 58.1
Overall		E 59.9	E 63.5	E 63.5	F 85.1	F 90.8	F 90.8	E 66.3	E 71.1	E 71.1

**Table 4 - Level of Service Matrices**

**3. Franklin Corner Road (C.R. 546) and U.S. 1 SB Jughandle/Shell Driveway**

Time Period		Weekday Midday Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year	
Development Condition		Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base
Franklin Corner Road (C.R. 546)	EB 3 Thrus Right	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
	WB 2 Thrus	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Shell Driveway	NB Left Right	B	B	B	B	B	B	B	B	B
		13.1	13.2	13.2	12.2	12.3	12.3	10.6	10.6	10.6
U.S. 1 SB Jughandle	Left	C	C	C	B	B	B	C	C	C
	Thru	16.1	16.3	16.3	14.0	14.1	14.1	16.1	16.5	16.5
	Right	A	A	A	A	A	A	A	A	A
	Approach	9.9	9.9	9.9	9.7	9.7	9.7	9.8	9.8	9.8
		B	B	B	B	B	B	B	B	B
		13.3	13.4	13.4	11.9	11.9	11.9	13.8	14.1	14.1
Overall		A	A	A	A	A	A	A	A	A
		3.1	3.1	3.1	2.3	2.3	2.3	3.7	3.8	3.8

(1) Movement operates at free-flow conditions.

**Table 4 - Level of Service Matrices**

**4. Greenberg Road and Bakersville Road/Wawa Driveway<sup>(2)</sup>**

Time Period		Weekday Midday Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year	
Development Condition		Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base
Wawa Driveway	EB Left	A	A	A	A	A	A	A	A	A
	EB Thru	5.3	4.7	4.3	6.1	5.7	7.7	4.3	4.6	4.6
Bakersville Road	WB Thru	A	A	A	A	B	B	A	A	A
	WB Right	5.2	4.6	4.6	4.3	12.9	11.0	4.6	4.6	4.8
Greenberg Road	Left	A	A	A	A	A	A	A	A	A
	NB Thru	4.2	4.2	4.1	3.9	4.0	4.0	4.0	4.1	4.1
	NB Right	B	A	A	A	B	A	A	A	A
	SB Left	10.3	6.0	6.1	8.2	11.2	9.5	6.1	6.5	6.1
	SB Right	A	A	A	A	A	A	A	A	A
	SB Right	0.7	0.4	0.8	1.3	0.4	0.8	0.4	0.5	0.4
		A	A	A	A	A	A	A	A	A
		0.3	0.3	0.7	0.1	0.2	0.4	0.2	0.2	0.4
Overall		A	A	A	A	A	A	A	A	A
		4.9	3.8	3.8	5.9	7.8	7.5	3.5	3.7	3.6

(1) Movement operates at free-flow conditions.

**Table 4 - Level of Service Matrices**  
**5. Greenberg Road and Bakersville Road**

Time Period		Weekday Midday Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year	
Development Condition		Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base
Bakersville Road	EB Left	A	A	A	A	A	A	A	A	A
	EB Right	5.5	5.5	5.5	4.2	4.2	4.2	4.9	4.9	4.9
Greenberg Road	NB Left	A	A	A	A	A	A	A	A	A
	NB Thru	6.4	6.4	6.4	5.0	5.1	5.1	5.4	5.5	5.5
	SB Thru Right	A	A	A	A	A	A	A	A	A
		5.7	5.7	4.8	4.3	4.3	3.9	5.0	5.0	4.3
Overall		A	A	A	A	A	A	A	A	A
		5.8	5.8	5.5	4.5	4.5	4.4	5.1	5.1	4.9

(1) Movement operates at free-flow conditions.

**Table 4 - Level of Service Matrices**  
**6. Greenberg Road and Internal Loop Road**

Time Period		Weekday Midday Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year	
Development Condition		Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base
Internal Loop Road	EB Left	C	C	C	B	B	B	C	C	B
	EB Right	16.9	17.0	16.1	12.9	12.9	12.6	15.4	15.4	14.8
Greenberg Road	NB Left	A	A	A	A	A	A	A	A	A
	NB Thru	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	SB Thru Right	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Overall		A	A	A	A	A	A	A	A	A
		0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3

(1) Movement operates at free-flow conditions.

**Table 4 - Level of Service Matrices**  
**7. Bakers Basin Road and Greenberg Road: HCM Results**

Time Period		Weekday Midday Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour			
Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year		
Development Condition		Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	
Bakers Basin Road	EB	Thru	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	
		Right	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	
	WB	Left	A 9.2	A 9.2	A 9.2	A 9.3	A 9.4	A 9.4	A 9.4	A 9.4	A 9.4
		Thru	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Greenberg Road	NB	Left	F 264.9	F 291.9	F 291.9	F 320.0	F 352.7	F 352.7	F 330.2	F 368.3	F 368.3
		Right	B 10.7	B 10.8	B 10.8	B 12.6	B 12.8	B 12.8	B 11.4	B 11.5	B 11.5
	Approach	Left	F 208.0	F 229.2	F 229.2	F 247.7	F 273.2	F 273.2	F 249.6	F 277.5	F 277.5
		Right	F	F	F	F	F	F	F	F	F
Overall		F 63.3	F 68.8	F 68.8	F 55.3	F 60.2	F 60.2	F 66.9	F 73.3	F 73.3	

(1) Movement operates at free-flow conditions.

**Table 4 - Level of Service Matrices**

**7. Bakers Basin Road and Greenberg Road: SimTraffic Results**

Time Period		Weekday Midday Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year	
Development Condition		Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base
Bakers Basin Road	EB	Thru	A	A	A	A	A	A	A	A
		5.4	5.1	5.3	3.0	3.0	3.0	4.0	4.3	4.0
	Right	A	A	A	A	A	A	A	A	A
		2.3	2.2	2.2	1.2	1.8	1.8	1.8	1.8	1.8
	WB	Left	A	A	A	A	A	A	A	A
7.7		7.9	6.8	7.0	8.4	8.4	6.9	7.0	7.0	
Greenberg Road	NB	Thru	A	A	A	A	A	A	A	A
		1.3	1.3	1.4	1.7	2.4	2.4	1.5	2.0	1.3
	Left	F	F	E	F	F	F	F	F	F
		53.0	54.8	49.7	83.1	95.8	95.8	59.0	74.3	62.6
	Right	A	A	A	A	A	A	A	A	A
4.2		4.2	4.2	6.6	6.1	6.1	4.9	5.7	5.1	
Overall		C	C	B	C	C	C	B	C	C
		15.9	15.9	14.7	16.6	19.3	19.3	14.4	18.1	15.7

(1) Movement operates at free-flow conditions.



**Table 4 - Level of Service Matrices**

**8. Bakersville Road and Internal Loop Road/Wawa Driveway**

Time Period		Weekday Midday Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year	
Development Condition		Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base
Bakersville Road	Left	A	A	A	A	A	A	A	A	A
	EB Thru									
	Right	0.3	0.3	1.5	0.2	0.2	1.6	0.2	0.2	1.3
	WB Thru									
Right	Left	A	A	A	A	A	A	A	A	A
	Right	3.4	3.4	5.1	4.0	4.0	5.3	3.3	3.3	5.3
Wawa Driveway	Left	C	B	B	B	B	B	B	B	B
	NB Thru									
Right	Left	15.0	15.0	14.9	11.5	11.5	11.6	11.7	11.7	11.6
	Right									
Internal Loop Road	Left	B	B	B	A	A	A	A	A	A
	SB Thru									
Right	Left	11.1	11.1	10.5	9.6	9.6	9.4	9.9	9.9	9.5
	Right									
Overall		A	A	A	A	A	A	A	A	A
		5.9	5.9	6.8	5.1	5.1	5.8	5.1	5.1	6.0

(1) Movement operates at free-flow conditions.

**Table 4 - Level of Service Matrices**  
**9. Bakersville Road and CFA East Access**

Time Period		Weekday Midday Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year	
Development Condition		Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base
Bakersville Road	EB Left Thru	A 1.8	A 1.8	A 0.9	A 1.9	A 1.9	A 0.8	A 1.5	A 1.5	A 0.9
	WB Thru Right	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
CFA East Access	SB Left Right	B 11.4	B 11.4	(2) (2)	A 9.9	A 9.9	(2) (2)	B 10.2	B 10.2	(2) (2)
Overall		A 1.5	A 1.5	A 0.6	A 1.6	A 1.6	A 0.5	A 1.4	A 1.4	A 0.6

(1) Movement operates at free-flow conditions.

**Table 4 - Level of Service Matrices**  
**10. Bakersville Road and CFA West Access**

Time Period		Weekday Midday Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year	
Development Condition		Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base
Bakersville Road	EB Left Thru	A	A	(2)	A	A	(2)	A	A	(2)
		1.2	1.2	(1)	0.9	0.9	(1)	1.4	1.4	(1)
	WB Thru Right	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
				(2)			(2)			(2)
CFA West Access SB Left Right	B	B	B	A	A	A	B	B	B	
	11.5	11.5	11.3	9.9	9.9	9.7	11.1	11.1	10.7	
Overall		A	A	A	A	A	A	A	A	A
		5.9	5.9	6.3	4.2	4.2	4.6	5.6	5.6	6.2

(1) Movement operates at free-flow conditions.

**Table 4 - Level of Service Matrices**  
**11. Internal Loop Road and Proposed Drive-thru Access**

Time Period		Weekday Midday Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year	
Development Condition		Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base
Internal Loop Road	NB Left Thru	(2)	(2)	A	(2)	(2)	A	(2)	(2)	A
	SB Thru Right	(1)	(1)	5.3	(1)	(1)	5.0	(1)	(1)	5.6
		(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
		(2)	(2)		(2)	(2)		(2)		
Overall		N/A	N/A	A	N/A	N/A	A	N/A	N/A	A
				1.8			2.2			1.6

(1) Movement operates at free-flow conditions.

**Table 5 - 95th Percentile Queue Matrices (feet)**  
**1. Brunswick Avenue (U.S. 1) and Bakersville Road**

Time Period		Current Storage <sup>(1)</sup>	Future Storage <sup>(2)</sup>	Weekday Midday Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour			
Year				2023	2025 Build-Out Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year		
Development Condition				Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	
Bakersville Road	WB Right	<i>40'</i>			75	78	78	178	188	188	118	123	123
	NB 3 Thrus Right	<i>470'</i>			0	0	0	0	0	0	0	0	0
Brunswick Avenue (U.S. 1)	SB 3 Thrus	<i>340'</i>			0	0	0	0	0	0	0	0	0

(1) Distance to adjacent intersections shown in italics.

(2) Future storage/distance to adjacent intersections shown if different/improved from existing conditions.

**Table 5 - 95th Percentile Queue Matrices (feet)**

**2. Brunswick Avenue (U.S. 1) and Franklin Corner Road (C.R. 546)/Bakers Basin Road**

Time Period		Current Storage <sup>(1)</sup>	Future Storage <sup>(2)</sup>	Weekday Midday Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
Year				2023	2025 Build-Out Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year	
Development Condition				Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base
Franklin Corner Road (C.R. 546)	Left	<i>100'</i>		215	220	220	263	265	265	200	205	205
	EB Thru	<i>100'</i>		800	853	853	745	770	770	783	825	825
	Right	<i>100'</i>		180	185	185	323	330	330	198	203	203
Bakers Basin Road	Left	<i>265'</i>		373	388	388	513	528	528	415	428	428
	WB Left/Thru	<i>370'</i>		440	455	455	643	668	668	500	518	518
	Thru/Right	<i>370'</i>		430	445	445	618	643	643	483	498	498
Brunswick Avenue (U.S. 1)	NB 2 Thrus	<i>290'</i>		805	853	853	1668	1760	1760	950	1010	1010
	Right	<i>290'</i>		128	130	130	308	315	315	205	210	210
	SB 2 Thrus	<i>500'</i>		625	653	653	1140	1200	1200	868	923	923

(1) Distance to adjacent intersections shown in italics.

(2) Future storage/distance to adjacent intersections shown if different/improved from existing conditions.

**Table 5 - 95th Percentile Queue Matrices (feet)**

**3. Franklin Corner Road (C.R. 546) and U.S. 1 SB Jughandle/Shell Driveway**

Time Period		Current Storage <sup>(1)</sup>	Future Storage <sup>(2)</sup>	Weekday Midday Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
Year				2023	2025 Build-Out Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year	
Development Condition				Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base
Franklin Corner Road (C.R. 546)	EB 3 Thrus Right	200'			0	0	0	0	0	0	0	
	WB 2 Thrus	110'			0	0	0	0	0	0	0	
Shell Driveway	NB Left Right	50'			0	0	0	0	0	0	0	
U.S. 1 SB Jughandle	Left	350'			35	35	35	20	20	20	43	
	SB Thru Right	350'			13	13	13	10	10	10	10	

(1) Distance to adjacent intersections shown in italics.

(2) Future storage/distance to adjacent intersections shown if different/improved from existing conditions.

**Table 5 - 95th Percentile Queue Matrices (feet)**

**4. Greenberg Road and Bakersville Road/Wawa Driveway<sup>(3)</sup>**

Time Period		Current Storage <sup>(1)</sup>	Future Storage <sup>(2)</sup>	Weekday Midday Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
Year				2023	2025 Build-Out Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year	
Development Condition				Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base
Wawa Driveway	Left	50'		63	63	59	50	47	52	43	49	51
	EB Thru											
Bakersville Road	Thru	480'		64	54	63	65	84	90	56	57	61
	WB Right											
Greenberg Road	Left	160'		64	44	41	39	35	37	35	31	36
	NB Thru	450'		75	41	48	36	59	41	40	39	35
	Right											
	Left	240'		9	2	0	0	0	0	0	0	3
	SB Right	130'		15	19	23	3	5	8	9	9	8

(1) Distance to adjacent intersections shown in italics.

(2) Future storage/distance to adjacent intersections shown if different/improved from existing conditions.

(3) Three-way stop control. SimTraffic results. 95th Percentile queue shown unless it exceeds maximum observed.



**Table 5 - 95th Percentile Queue Matrices (feet)**  
**5. Greenberg Road and Bakersville Road**

Time Period		Current Storage <sup>(1)</sup>	Future Storage <sup>(2)</sup>	Weekday Midday Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
Year				2023	2025 Build-Out Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year	
Development Condition				Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base
Bakersville Road	EB Left	90'		25	25	25	25	25	25	25	25	
	Right											
Greenberg Road	NB Left	230'		25	25	25	25	25	25	25	25	
	Thru											
	SB Thru	230'		25	25	25	25	25	25	0	25	
	Right											

(1) Distance to adjacent intersections shown in italics.

(2) Future storage/distance to adjacent intersections shown if different/improved from existing conditions.

**Table 5 - 95th Percentile Queue Matrices (feet)**  
**6. Greenberg Road and Internal Loop Road**

Time Period		Current Storage <sup>(1)</sup>	Future Storage <sup>(2)</sup>	Weekday Midday Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
Year				2023	2025 Build-Out Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year	
Development Condition				Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base
Internal Loop Road	EB Left	<i>350'</i>		8	8	5	3	3	3	3	3	
	Right											
Greenberg Road	NB Left	<i>250'</i>		0	0	0	0	0	0	0	0	
	Thru											
	SB Thru Right											
		<i>235'</i>		0	0	0	0	0	0	0	0	

(1) Distance to adjacent intersections shown in italics.

(2) Future storage/distance to adjacent intersections shown if different/improved from existing conditions.

**Table 5 - 95th Percentile Queue Matrices (feet)**  
**7. Bakers Basin Road and Greenberg Road: HCM Results**

Time Period		Current Storage <sup>(1)</sup>	Future Storage <sup>(2)</sup>	Weekday Midday Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
Year				2023	2025 Build-Out Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year	
Development Condition				Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base
Bakers Basin Road	EB	Thru	<i>380'</i>		0	0	0	0	0	0	0	
		Right	<i>220'</i>		0	0	0	0	0	0	0	
	WB	Left	<i>110'</i>		10	10	10	5	8	8	10	
		Thru	<i>1,000'+</i>		0	0	0	0	0	0	0	
Greenberg Road	NB	Left	<i>235'</i>		540	568	568	463	485	485	543	570
		Right	<i>115'</i>		13	13	13	15	15	15	15	15

(1) Distance to adjacent intersections shown in italics.

(2) Future storage/distance to adjacent intersections shown if different/improved from existing conditions.

**Table 5 - 95th Percentile Queue Matrices (feet)**

**7. Bakers Basin Road and Greenberg Road: SimTraffic Results**

Time Period		Current Storage <sup>(1)</sup>	Future Storage <sup>(2)</sup>	Weekday Midday Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
Year				2023	2025		2023	2025		2023	2025	
Development Condition					Existing	Build-Out Year		Existing	Build-Out Year		Existing	Build-Out Year
Bakers Basin Road	EB	Thru	6	w/o Dev	w/Dev Base	6	w/o Dev	w/Dev Base	3	w/o Dev	w/Dev Base	
			Right	22	7	9	19	10	22	28	5	0
Greenberg Road	NB	Left	66	20	27	59	30	19	65	68	70	
		Thru	14	76	68	51	70	61	41	77	20	
		Right	308	0	33	283	102	98	298	307	315	
		Left	150	303	262	150	283	287	150	307	315	
		Right	150	150	150	150	150	150	150	150	150	

(1) Distance to adjacent intersections shown in italics.

(2) Future storage/distance to adjacent intersections shown if different/improved from existing conditions.

**Table 5 - 95th Percentile Queue Matrices (feet)**  
**8. Bakersville Road and Internal Loop Road/Wawa Driveway**

Time Period		Current Storage <sup>(1)</sup>	Future Storage <sup>(2)</sup>	Weekday Midday Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour			
Year				2023	2025 Build-Out Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year		
Development Condition				Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	
Bakersville Road	Left EB Thru Right	<i>190'</i>			0	0	3	0	0	3	0	0	3
	Left WB Thru Right	<i>90'</i>			8	8	8	8	8	8	5	5	5
Wawa Driveway	Left NB Thru Right	<i>230'</i>			38	38	38	18	18	20	20	20	20
Internal Loop Road	Left SB Thru Right	<i>350'</i>			10	10	8	3	3	3	5	5	5

(1) Distance to adjacent intersections shown in italics.

(2) Future storage/distance to adjacent intersections shown if different/improved from existing conditions.

**Table 5 - 95th Percentile Queue Matrices (feet)**

**9. Bakersville Road and CFA East Access**

Time Period		Current Storage <sup>(1)</sup>	Future Storage <sup>(2)</sup>	Weekday Midday Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour			
Year				2023	2025 Build-Out Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year		
Development Condition				Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	
Bakersville Road	EB Left Thru	140'			5	5	3	3	3	0	3	3	3
	WB Thru Right	25'			0	0	0	0	0	0	0	0	0
CFA East Access	SB Left Right	115'			5	5	(3)	3	3	(3)	3	3	(3)

(1) Distance to adjacent intersections shown in italics.

(2) Future storage/distance to adjacent intersections shown if different/improved from existing conditions.

(3) Driveway to be converted to ingress only.

**Table 5 - 95th Percentile Queue Matrices (feet)**

**10. Bakersville Road and CFA West Access**

Time Period		Current Storage <sup>(1)</sup>	Future Storage <sup>(2)</sup>	Weekday Midday Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
Year				2023	2025 Build-Out Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year	
Development Condition				Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base
Bakersville Road	EB Left Thru	80'	0	0	(3)	0	0	0	3	3	(3)	
	WB Thru Right				0						0	0
CFA West Access	SB Left Right	115'	33	33	35	13	13	13	25	25	30	

(1) Distance to adjacent intersections shown in italics.

(2) Future storage/distance to adjacent intersections shown if different/improved from existing conditions.

(3) Driveway to be converted to egress only.

**Table 5 - 95th Percentile Queue Matrices (feet)**  
**11. Internal Loop Road and Proposed Drive-thru Access**

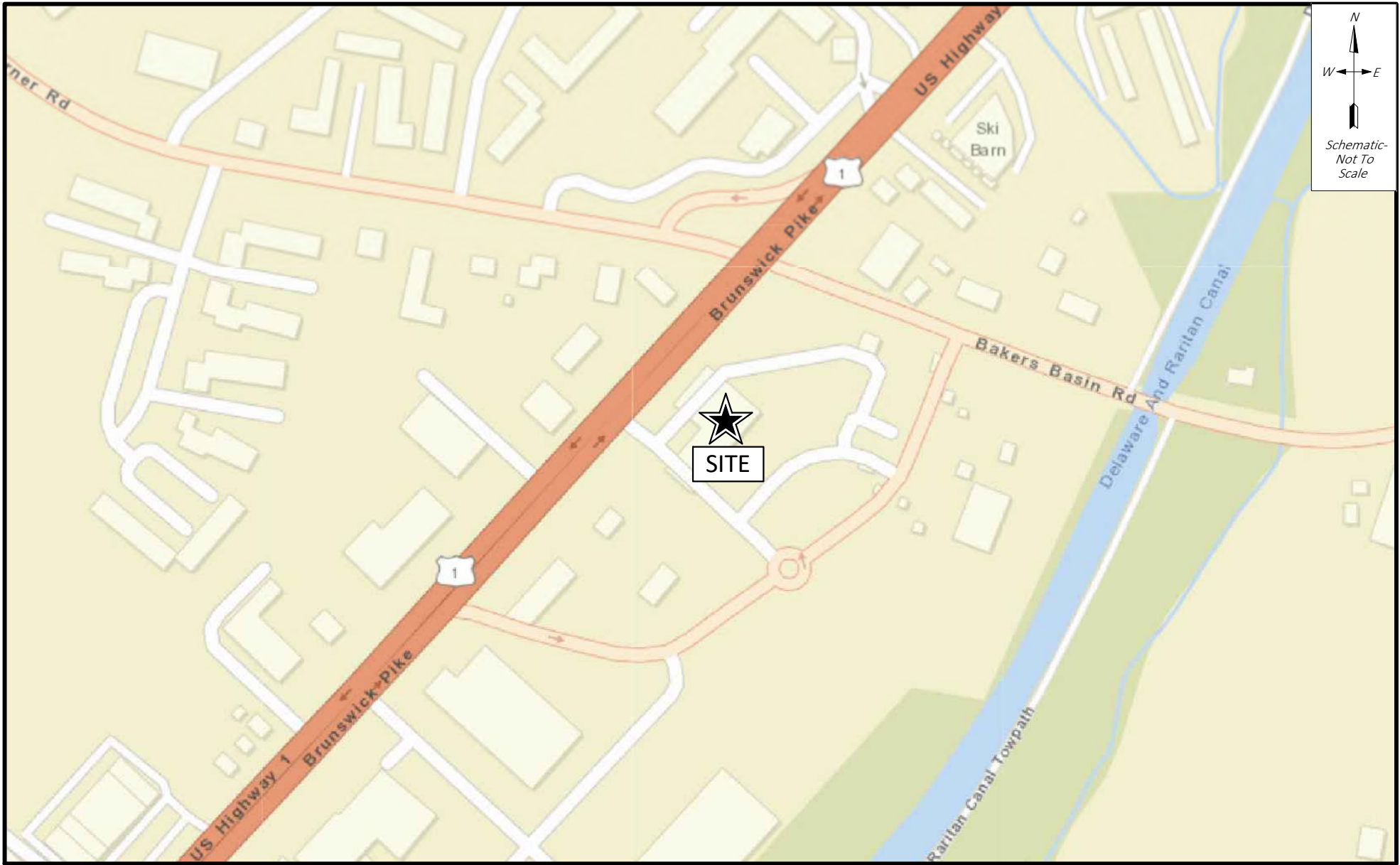
Time Period		Current Storage <sup>(1)</sup>	Future Storage <sup>(2)</sup>	Weekday Midday Peak Hour			Weekday Afternoon Peak Hour			Saturday Midday Peak Hour		
Year				2023	2025 Build-Out Year		2023	2025 Build-Out Year		2023	2025 Build-Out Year	
Development Condition				Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base	Existing	w/o Dev	w/Dev Base
Internal Loop Road	NB Left	<i>160'</i>		(3)	(3)	3	(3)	(3)	3	(3)	(3)	3
	Thru			0	0		0	0		0		
	SB Thru	<i>190'</i>		0	0	0	0	0	0	0	0	0
	Right			(3)	(3)		(3)	(3)		(3)		

(1) Distance to adjacent intersections shown in italics.

(2) Future storage/distance to adjacent intersections shown if different/improved from existing conditions.

(3) Movement does not exist.





**FIGURE 1A**  
 Site Location Map  
**LAWRENCEVILLE CHICK-FIL-A**  
 LAWRENCE TOWNSHIP, MERCER COUNTY, NJ

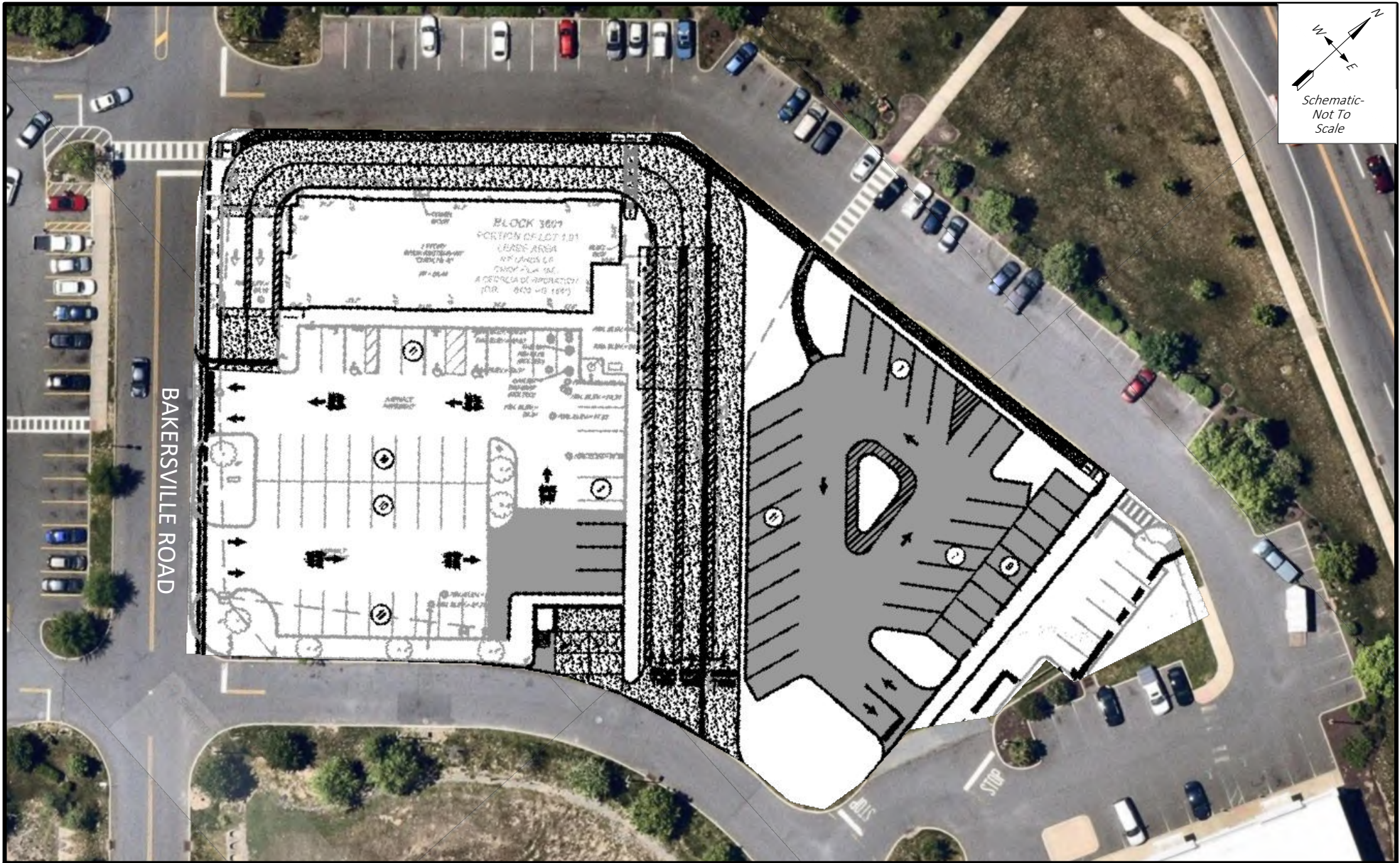




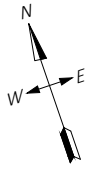
**FIGURE 1B**  
Site Aerial Location Map  
**LAWRENCEVILLE CHICK-FIL-A**  
LAWRENCE TOWNSHIP, MERCER COUNTY, NJ



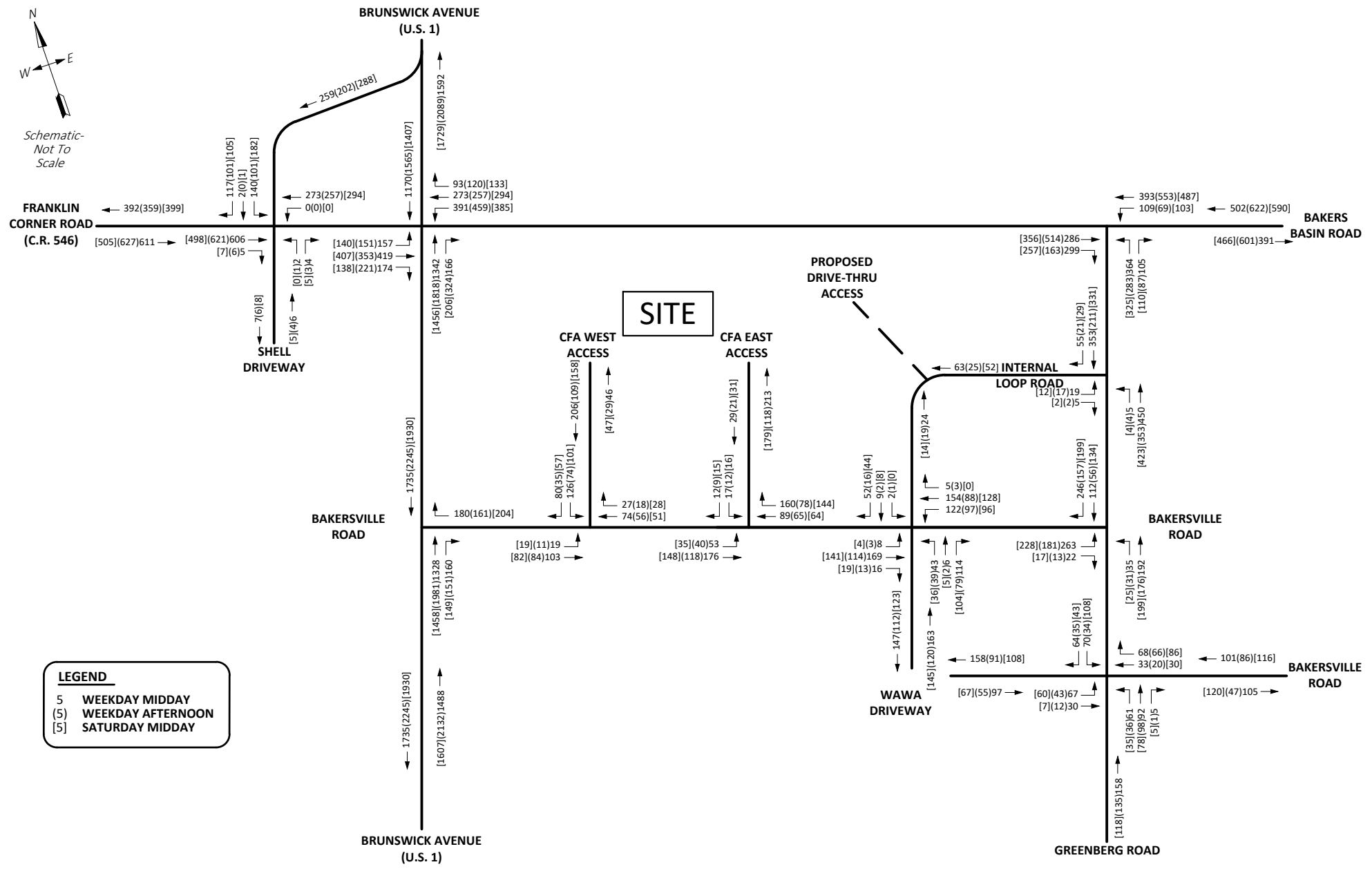
**FIGURE 2A**  
Existing Site Aerial  
**LAWRENCEVILLE CHICK-FIL-A**  
LAWRENCE TOWNSHIP, MERCER COUNTY, NJ



**FIGURE 2B**  
 Proposed Site Aerial (Site Plan prepared by Bowman Consulting)  
**LAWRENCEVILLE CHICK-FIL-A**  
 LAWRENCE TOWNSHIP, MERCER COUNTY, NJ

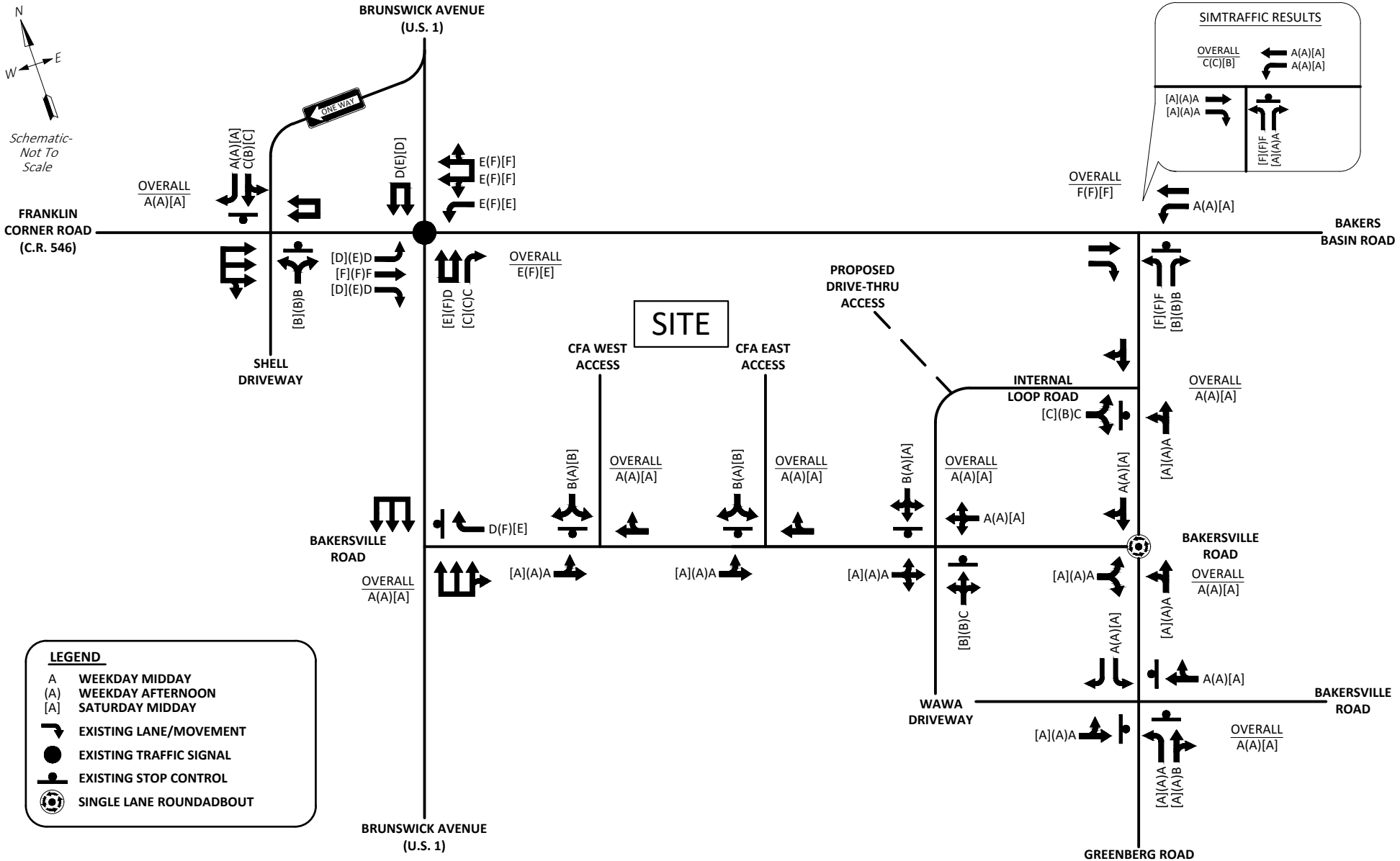


Schematic-  
Not To  
Scale



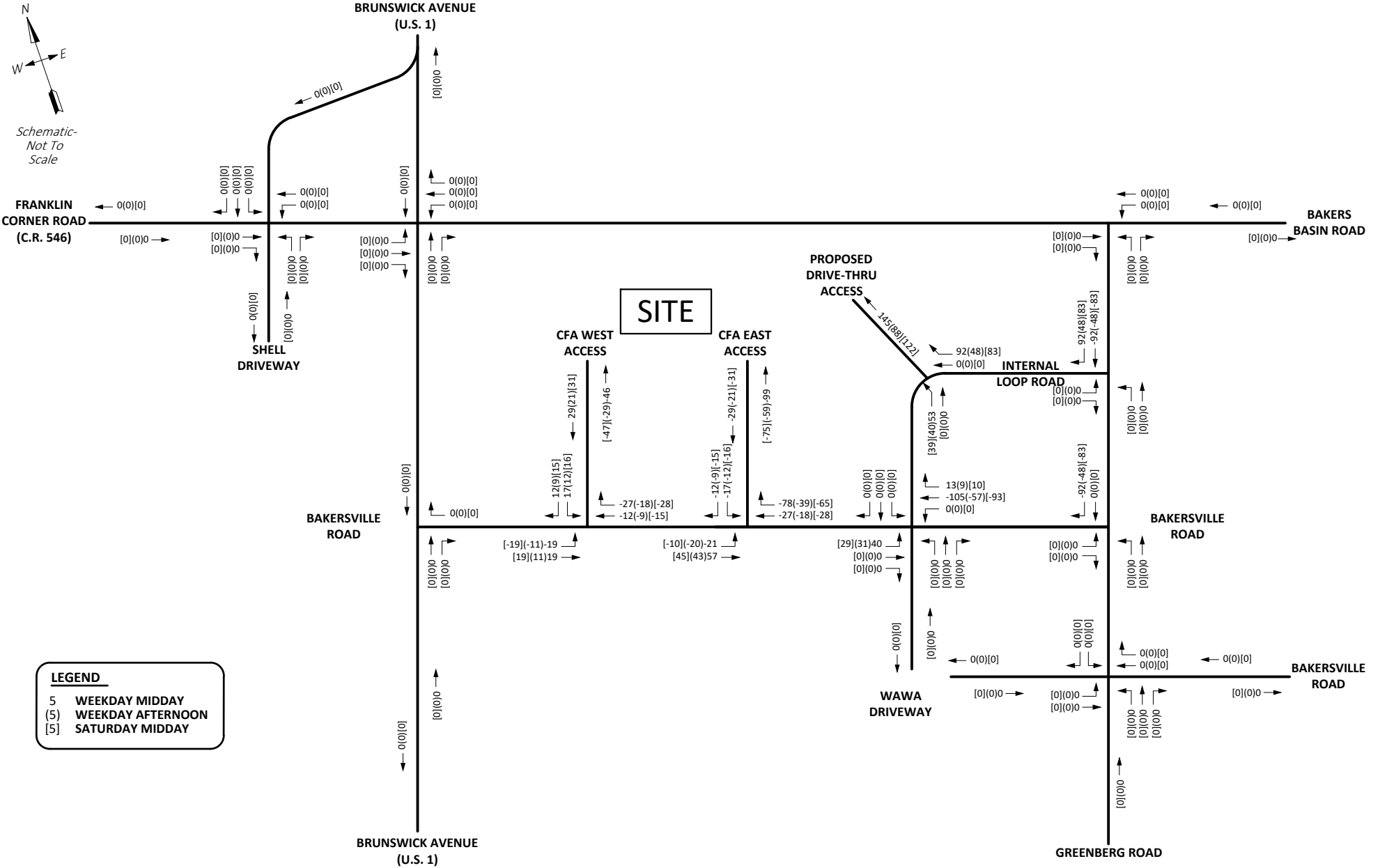
**FIGURE 3A**  
2023 Existing Peak Hour Traffic Volumes  
**LAWRENCEVILLE CHICK-FIL-A**  
LAWRENCE TOWNSHIP, MERCER COUNTY, NJ





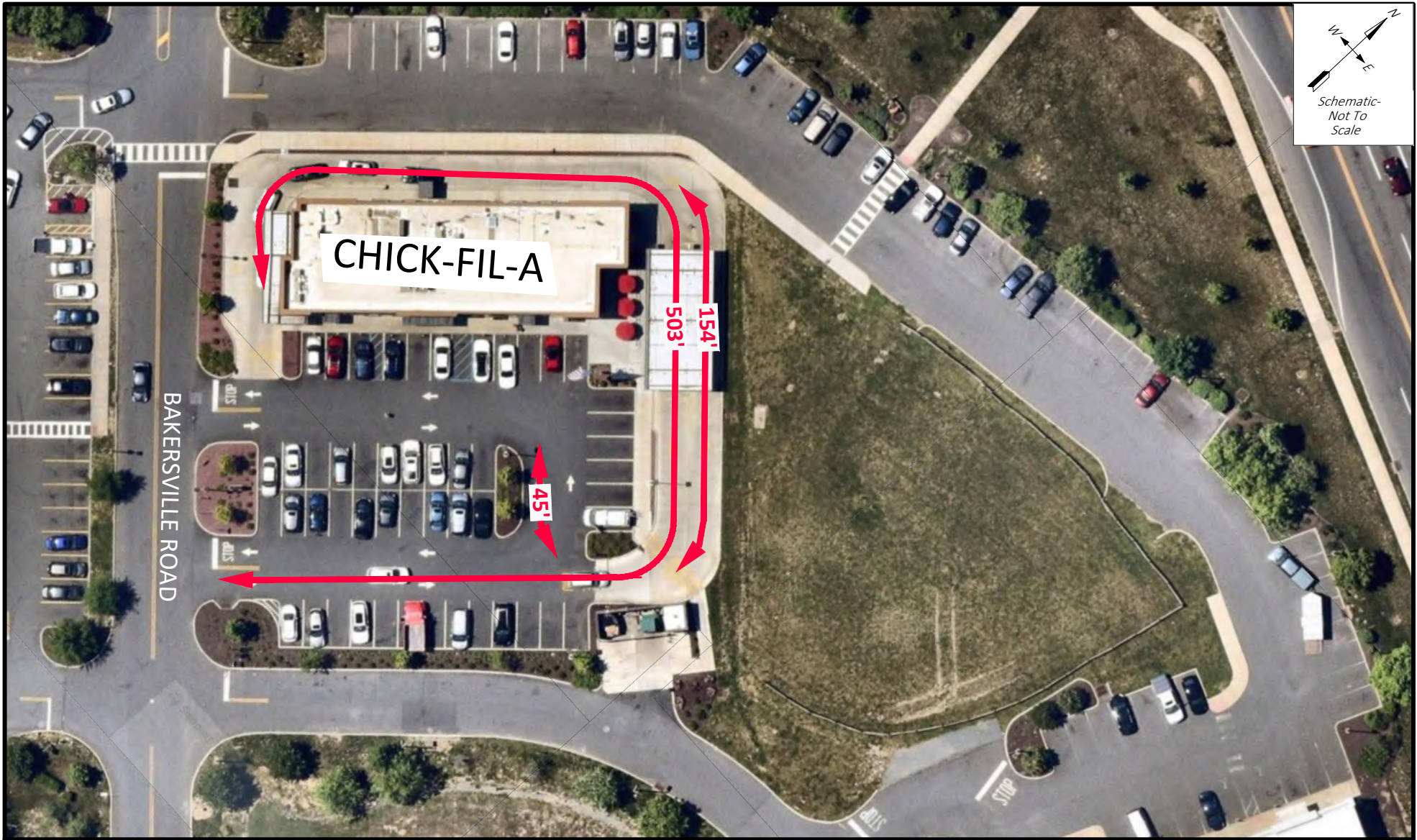
**FIGURE 3B**  
 2023 Existing Peak Hour Levels-of-Service  
**LAWRENCEVILLE CHICK-FIL-A**  
 LAWRENCE TOWNSHIP, MERCER COUNTY, NJ





**FIGURE 4**  
 Redistribution of Existing Site Trips  
**LAWRENCEVILLE CHICK-FIL-A**  
 LAWRENCE TOWNSHIP, MERCER COUNTY, NJ





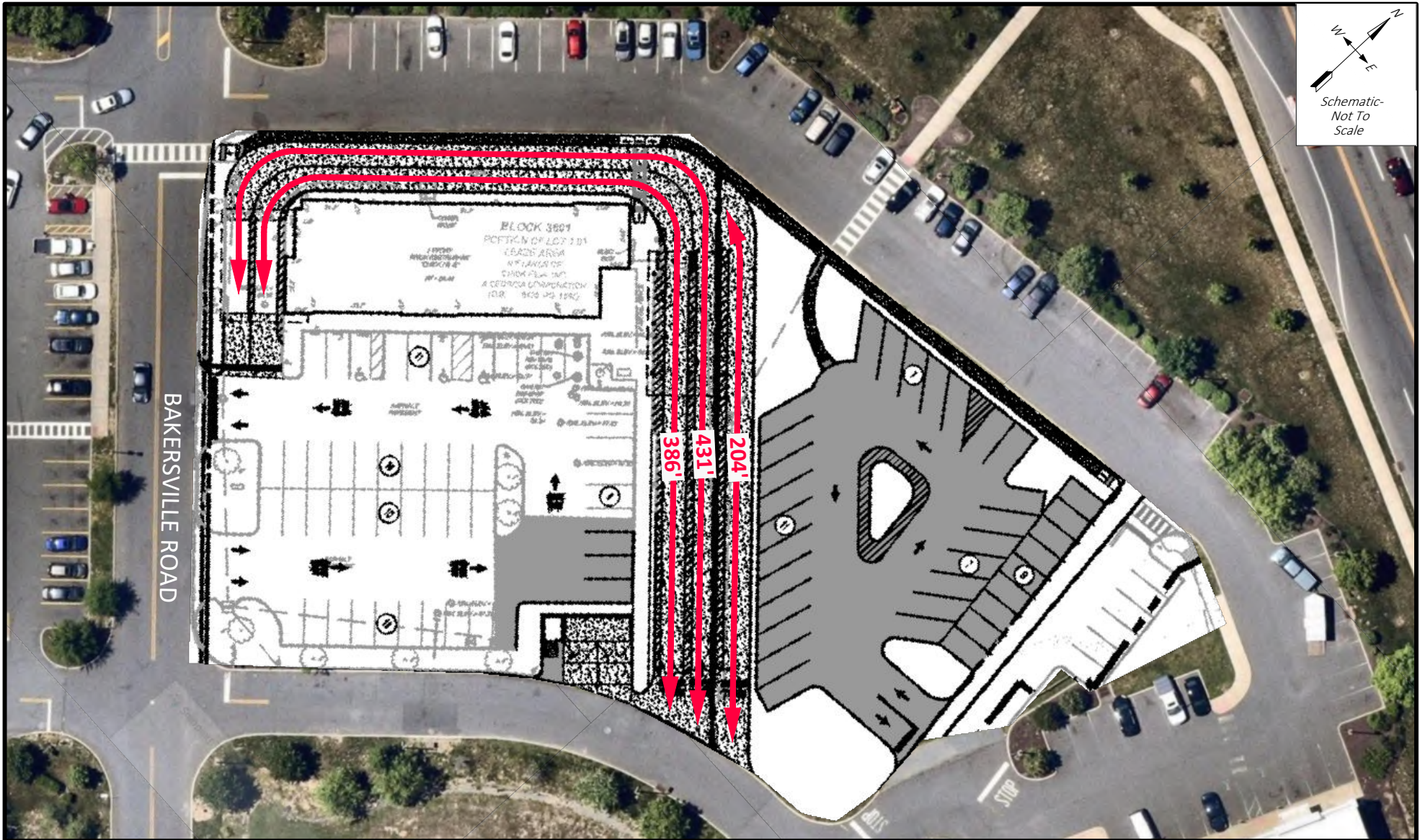
**FIGURE 5A**

Existing Maximum Observed Vehicle Queues  
 Weekday Midday 31 Vehicles in 702 feet: 22.6 feet per Vehicle

**LAWRENCEVILLE CHICK-FIL-A**  
 LAWRENCE TOWNSHIP, MERCER COUNTY, NJ





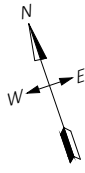


**FIGURE 5B**

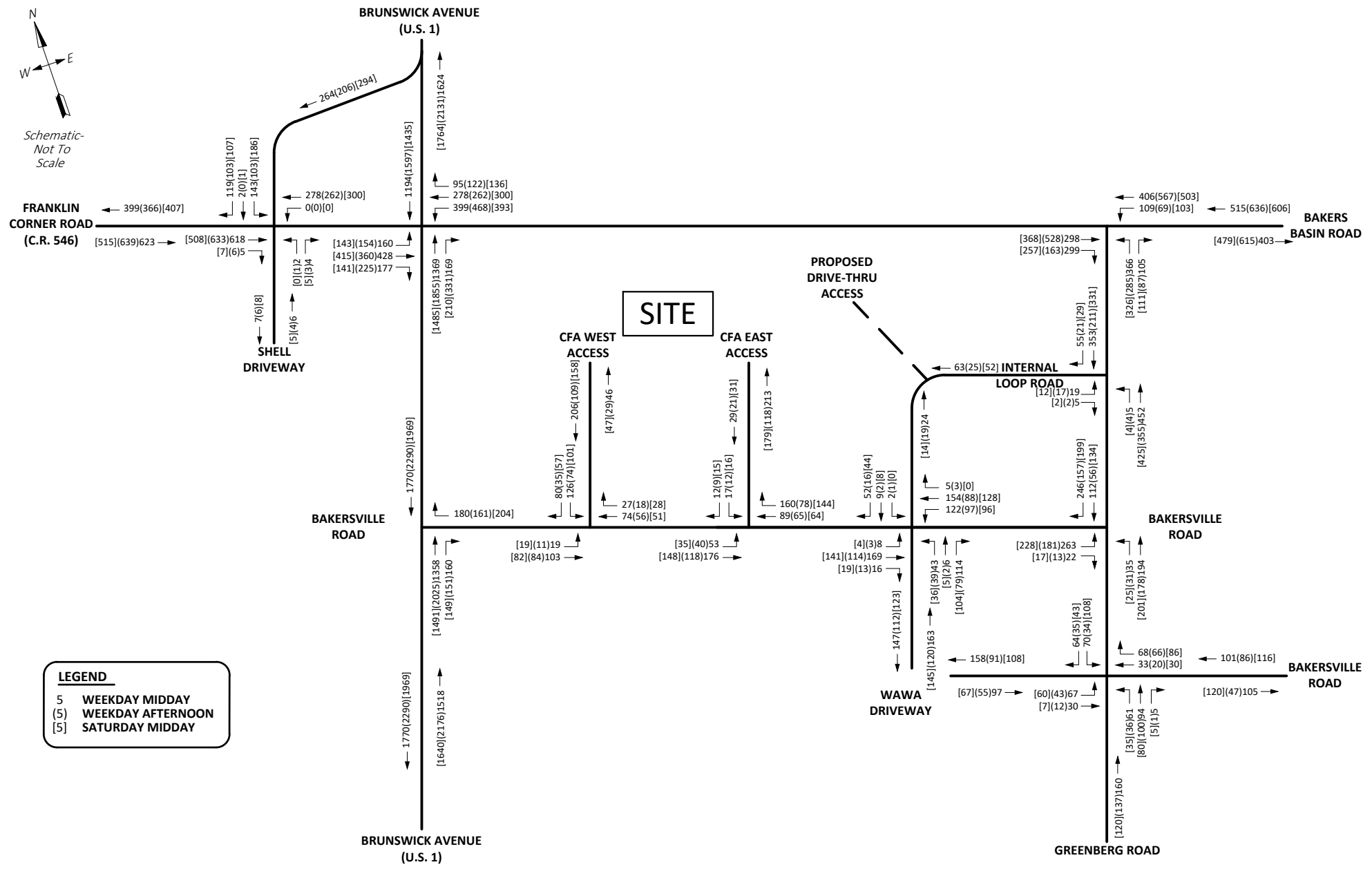
Proposed Drive Through Lane Storage for 3 to 2 Configuration  
 1,021 Feet: Up to 45 Vehicles Based on Spacing of 22.6 feet per Vehicle

**LAWRENCEVILLE CHICK-FIL-A**  
 LAWRENCE TOWNSHIP, MERCER COUNTY, NJ



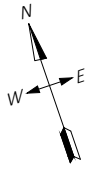


Schematic-  
Not To  
Scale

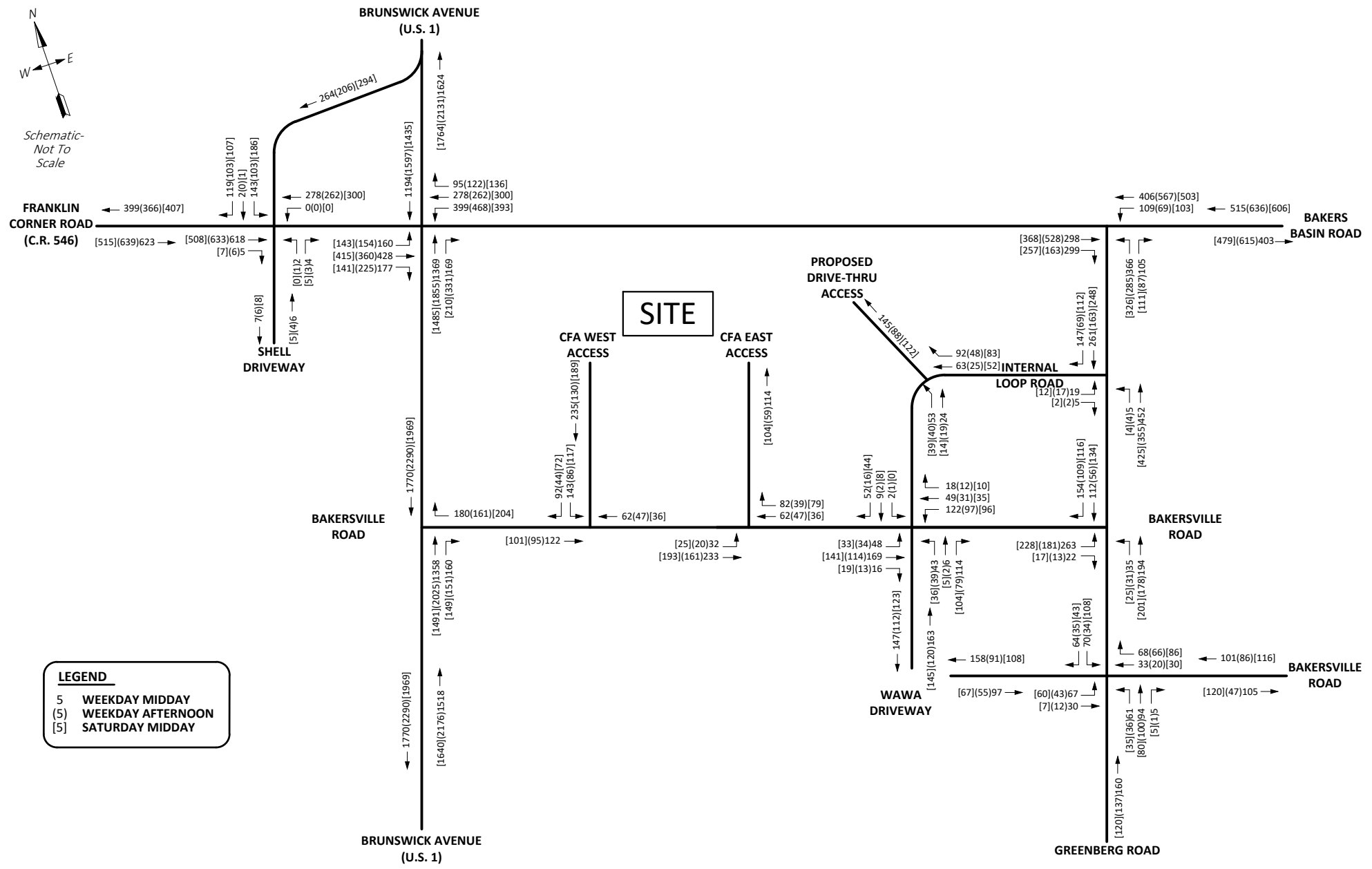


**FIGURE 6A**  
2025 Future Peak Hour Traffic Volumes Without Development  
**LAWRENCEVILLE CHICK-FIL-A**  
LAWRENCE TOWNSHIP, MERCER COUNTY, NJ





Schematic-  
Not To  
Scale

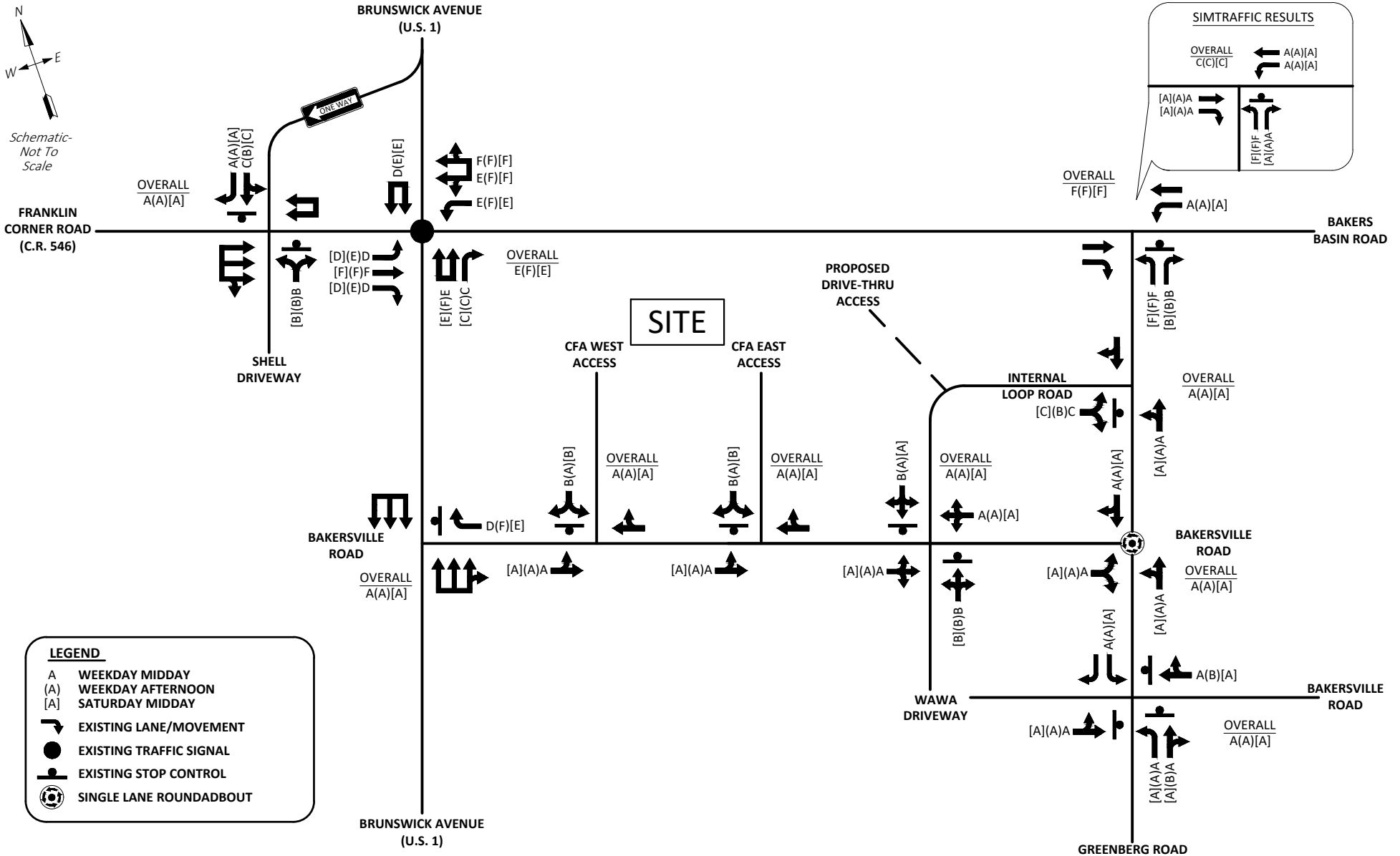


**LEGEND**

5 WEEKDAY MIDDAY  
 (5) WEEKDAY AFTERNOON  
 [5] SATURDAY MIDDAY

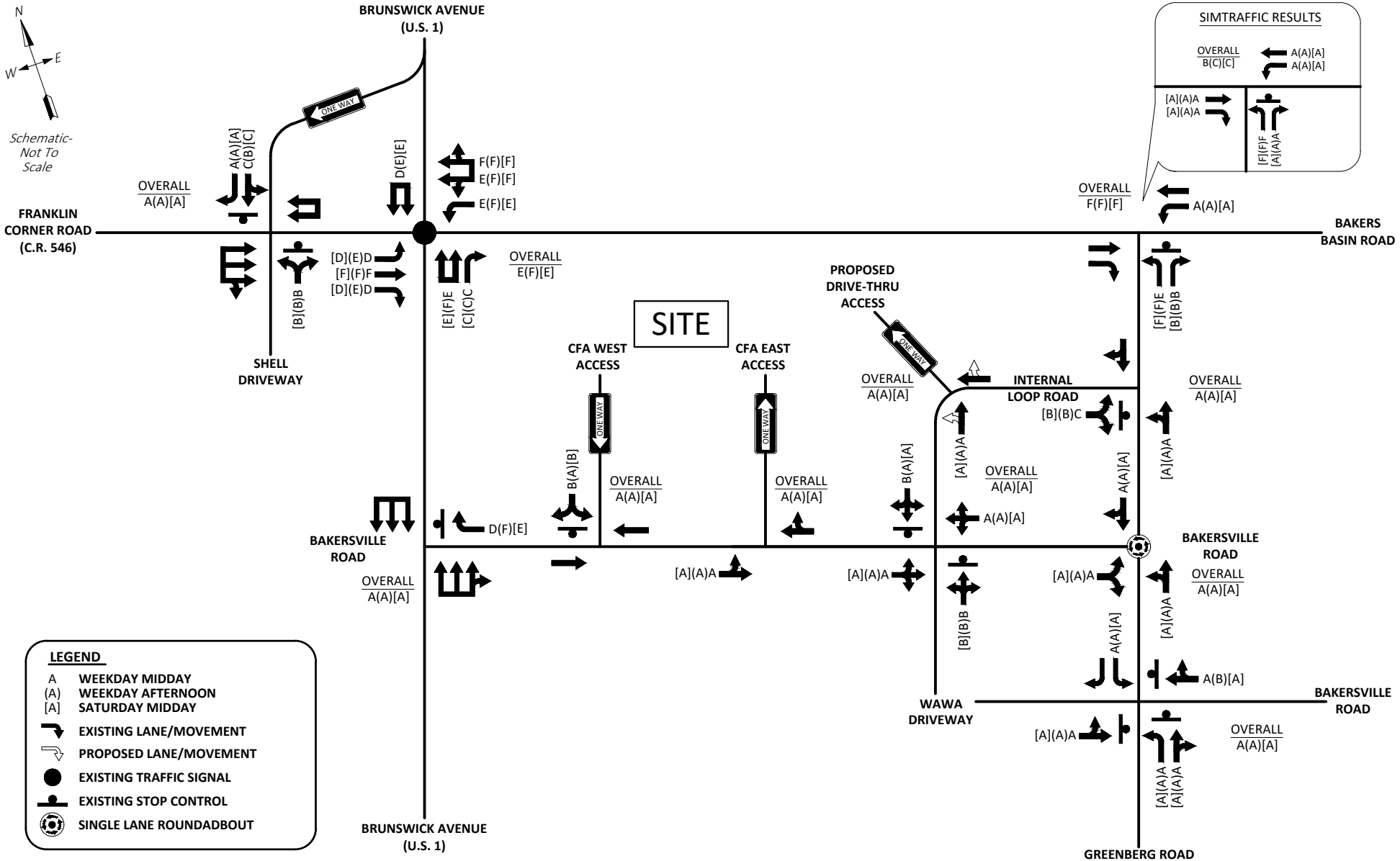
**FIGURE 6B**  
 2025 Future Peak Hour Traffic Volumes With Development  
**LAWRENCEVILLE CHICK-FIL-A**  
 LAWRENCE TOWNSHIP, MERCER COUNTY, NJ





**FIGURE 6C**  
 2025 Future Peak Hour Levels-of-Service Without Development  
**LAWRENCEVILLE CHICK-FIL-A**  
 LAWRENCE TOWNSHIP, MERCER COUNTY, NJ





**FIGURE 6D**  
 2025 Future Peak Hour Levels-of-Service With Development  
**LAWRENCEVILLE CHICK-FIL-A**  
 LAWRENCE TOWNSHIP, MERCER COUNTY, NJ












## Appendix A










# Intersection Signal Permit Plans



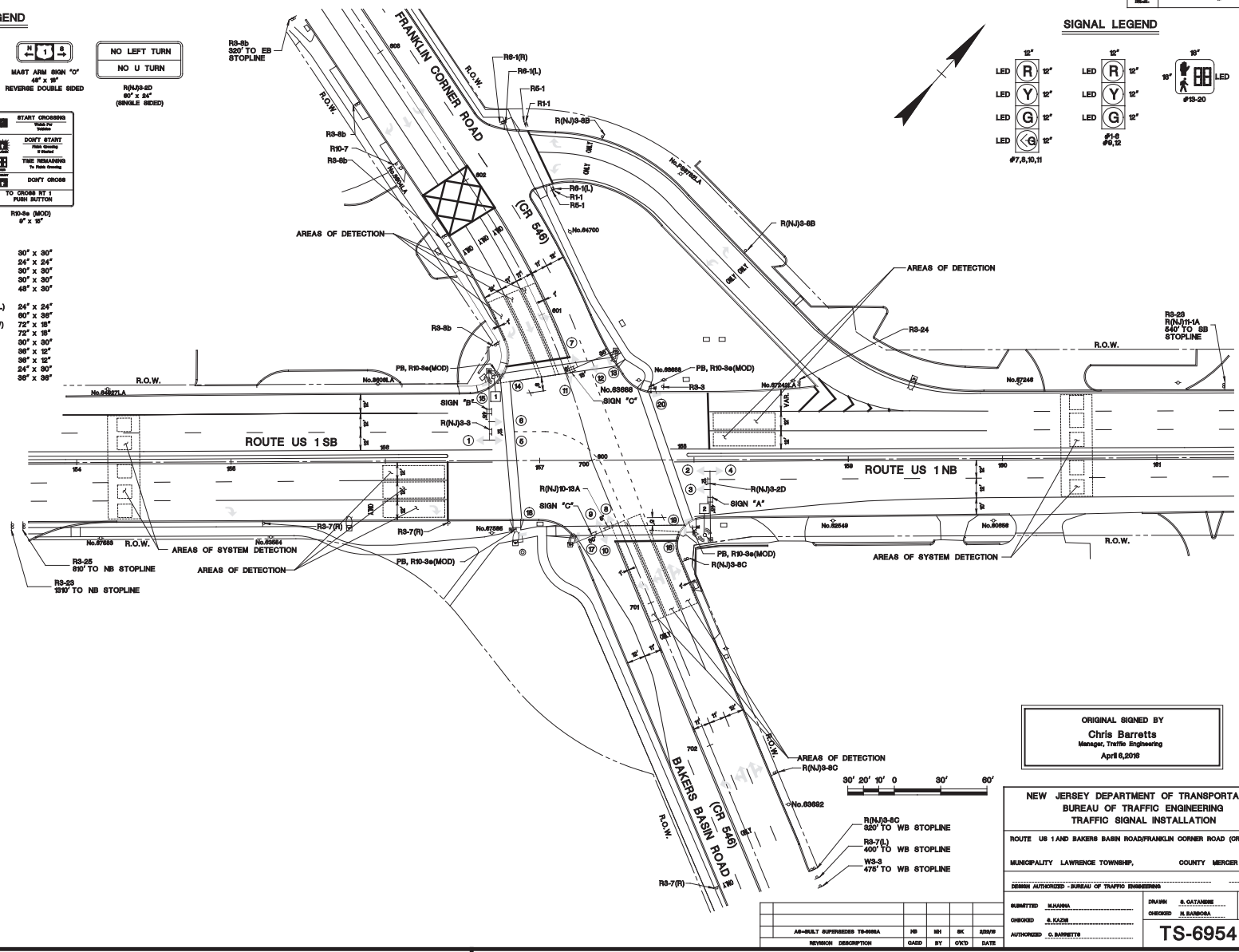
**SIGN LEGEND**

 Bakers Basin MAST ARM SIGN "A" 72" x 36" DOUBLE SIDED	 Franklin Corner MAST ARM SIGN "B" 60" x 36" REVERSE DOUBLE SIDED	 NO LEFT TURN NO U TURN R(N)J9-2D 60" x 36" (DOUBLE SIDED)
 NO TURNS R(N)J9-6 60" x 36"	 DELAYED GREEN R(N)J9-6A 60" x 36"	 START CROSSING DON'T START THE REMAINDER DON'T CROSS R(S)9-6 (MOD) 24" x 36"
 ONLY ONLY R(N)J9-8B 30" x 30"	 ONLY R(N)J9-8C 48" x 30"	 KEEP OFF SHOULDER R(N)J9-4A 24" x 30"
R1-1 STOP 30" x 30"	R8-3 NO TURNS 24" x 24"	R8-7(R) RIGHT LANE MUST TURN RIGHT 30" x 30"
R8-7(L) LEFT LANE MUST TURN LEFT 30" x 30"	R8-8b ADVANCE INTERSECTION LANE CONTROL (LEFTTHROUGH/RIGHT) 48" x 30"	R8-8 NO LEFT TURN NO U TURN (SYMBOL) 24" x 24"
R8-23 ALL TURNS FROM RIGHT LANE 60" x 36"	R8-24 ALL TURNS (WITH DIAGONAL ARROW) 72" x 36"	R8-25 ALL TURNS (WITH ARROW) 72" x 36"
R8-1 DO NOT ENTER 30" x 30"	R8-1(L) ONE WAY (LEFT) 36" x 36"	R8-1(R) ONE WAY (RIGHT) 36" x 36"
R10-7 DO NOT BLOCK INTERSECTION SIGNAL AHEAD (SYMBOL) 24" x 30"	WS-3 36" x 36"	

**SIGNAL LEGEND**

#7,8,10,11



ORIGINAL SIGNED BY  
**Chris Barretta**  
Manager, Traffic Engineering  
April 6, 2016

NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF TRAFFIC ENGINEERING  
TRAFFIC SIGNAL INSTALLATION

ROUTE US 1 AND BAKERS BASIN ROAD/FRANKLIN CORNER ROAD (CR 549)

MUNICIPALITY LAWRENCE TOWNSHIP, COUNTY MERCER

DESIGN AUTHORIZED - BUREAU OF TRAFFIC ENGINEERING DATE

SUBMITTED: <b>SLAVINA</b>	DRAWN: <b>S. DATARANI</b>	SCALE: 1" = 30'
CHECKED: <b>S. KAZEM</b>	CHECKED: <b>A. BARBOZA</b>	
AUTHORIZED: <b>C. BARRETTA</b>		

**TS-6954**



PHASE	SIGNAL INDICATIONS									NORMAL OPERATION	TIME (SECONDS)					
	1-6	7-8	9	10-11	12	13,14	15,18	19,20	Adaptive Mode***		BACK UP TOD PLANS					
						16,17					PLAN I (127-179)	PLAN II (99-143)	PLAN III (122-176)	PLAN IV (105-145)	PLAN V (120-140)	PLAN X (140-180)
A) Route US 1 ROW	G	R	R	R	R	W	DW	DW	7 (min)	68	40	63	46	61	81	
Pedestrian Clearance	G	R	R	R	R	FDW	DW	DW	22	22	22	22	22	22	22	
Change	Y	R	R	R	R	DW	DW	DW	6	6	6	6	6	6	6	
Clearance	R	R	R	R	R	DW	DW	DW	2	2	2	2	2	2	2	
B) Bakers Basin Road WB ROW	R	R	R	G/<G-	G	DW	DW	DW	7 (min)	7-32	7-28	7-34	7-26	7-16	7-27	
Change	R	R	R	Y	Y	DW	DW	DW	4	4	4	4	4	4	4	
Clearance	R	R	R	R	R	DW	DW	DW	4	4	4	4	4	4	4	
C) Franklin Corner Road EB ROW	R	G/<G-	G	R	R	DW	DW	DW	7 (min)	7-34	7-30	7-34	7-28	7-18	7-27	
Change	R	Y	Y	R	R	DW	DW	DW	4	4	4	4	4	4	4	
Clearance	R	R	R	R	R	DW	DW	DW	3	3	3	3	3	3	3	
Emergency Flash	Y	R	R	R	R	DARK	DARK	DARK		-	-	-	-	-	-	

Route US 1 and Bakers Basin Road/  
Franklin Corner Road  
Lawrence Twp., Mercer Co.

PHASE	SIGNAL INDICATIONS									TIME (SECONDS)						
										WITH PEDESTRIAN ACTUATION						
	1-6	7-8	9	10-11	12	13,14 16,17	15,18	19,20	Adaptive Mode***	BACK UP TOD PLANS						
										PLAN I (127-179)	PLAN II (99-143)	PLAN III (122-176)	PLAN IV (105-145)	PLAN V (120-140)	PLAN X (140-180)	
A) Route US 1 ROW	G	R	R	R	R	W	DW	DW	7 (min)	66 (min)	36 (min)	56 (min)	41 (min)	36 (min)	76 (min)	
Pedestrian Clearance	G	R	R	R	R	FDW	DW	DW	22	22	22	22	22	22	22	
Change	Y	R	R	R	R	DW	DW	DW	6	6	6	6	6	6	6	
Clearance	R	R	R	R	R	DW	DW	DW	2	2	2	2	2	2	2	
B) Bakers Basin Road WB ROW	R	R	R	G/<G-	G	DW	DW	W	7	7	7	7	7	7		
Pedestrian Clearance	R	R	R	G/<G-	G	DW	DW	FDW(14)	22	22	22*	22	22*	22*		
Vehicle Extension	R	R	R	G/<G-	G	DW	DW	FDW(14)	0 (min)	0	0	0	0	0		
Change	R	R	R	Y	Y	DW	DW	FDW(14)	4	4	4	4	4	4		
Clearance	R	R	R	R	R	DW	DW	DW	4	4	4	4	4	4		
C) Franklin,Corner Road EB ROW	R	G/<G-	G	R	R	DW	W	DW	7	7	7	7	7	7		
Pedestrian Clearance	R	G/<G-	G	R	R	DW	FDW(14)	DW	23	23	23	23	23**	23**	23**	
Change	R	Y	Y	R	R	DW	FDW(14)	DW	4	4	4	4	4	4		
Clearance	R	R	R	R	R	DW	DW	DW	3	3	3	3	3	3		
Emergency Flash	Y	R	R	R	R	DARK	DARK	DARK	-	-	-	-	-	-		

Route US 1 and Bakers Basin Road/  
 Franklin Corner Road  
 Lawrence Twp., Mercer Co.

	<u>HOURS OF OPERATION</u>	<u>CYCLE LENGTH (SECONDS)</u>	<u>OFFSET (SECONDS)</u>
PLAN I:	6:00 AM - 9:00 AM EVERYDAY	127-179	-
PLAN II:	9:00 AM - 3:00 PM EVERYDAY	99-143	-
PLAN III:	3:00 PM - 7:00 PM EVERYDAY	122-176	-
PLAN IV:	7:00 PM - 12:00 AM EVERYDAY	105-145	-
PLAN V:	12:00 AM - 6:00 AM EVERYDAY	120-140	-
PLAN X:	Incident Management	140-180	-

NOTES:

1. \*Phase B maximum green times will be exceeded during pedestrian actuation under the backup TOD operation.
2. \*\*Phase C maximum green times will be exceeded during pedestrian actuation under the backup TOD operation.
3. \*\*\*The maximum cycle length for adaptive mode shall not exceed 240 seconds.
4. The memory circuit is to be off.
5. The manual control cord is to be removed.
6. For fully actuated adaptive signal, CNA (Call to Non-Actuated) will be deactivated.
7. The vehicle extension interval (passage time) is to be 2 seconds during TOD operation.
8. When there is no actuation on the side street, the signal shall rest on the mainline.
9. Rest in Walk shall remain enabled for Phase A.
10. A detector delay of 10 seconds is to be employed for Phases B and C.
11. If adaptive system fails or is turned off, controller will revert to indicated back up TOD operation
12. The vehicle extension interval (passage time) during Adaptive mode will be a minimum of 2 seconds.
13. Adaptive mode operation shall follow Time of Day phasing sequence.
14. During Adaptive Mode, the total FDW may be served prior to the yellow change interval due to increased split time.



## Appendix B

# Traffic Count Data, Volume Balancing, and Bakers Basin Road Queues



## **DAILY VOLUMES**





# New Jersey Department of Transportation

Short-term Hourly Traffic Volume for 04/24/2019 to 04/26/2019

Site names: 5-4-203,Herbert Highway-5.67,00000001\_\_  
 County: MERCER  
 Funct Class: Urban Principal Arterial - Other  
 Location: Bet US 1B and Rt 546

Seasonal Factor Grp: rg3\_3U  
 Daily Factor Grp: rg3\_3U  
 Axle Factor Grp: rg3\_3U  
 Growth Factor Grp: rg3\_3U

	Sun, Apr 21, 2019			Mon, Apr 22, 2019			Tue, Apr 23, 2019			Wed, Apr 24, 2019			Thu, Apr 25, 2019			Fri, Apr 26, 2019			Sat, Apr 27, 2019		
	Road	N	S	Road	N	S	Road	N	S	Road	N	S	Road	N	S	Road	N	S	Road	N	S
00:00													443	198	245	487	202	285			
01:00													286	155	131	300	152	148			
02:00													271	155	116	347	200	147			
03:00													395	258	137	406	298	108			
04:00													627	453	174	718	530	188			
05:00													1,367	1,039	328	1,512	1,174	338			
06:00													3,014	2,269	745	2,993	2,335	658			
07:00													5,034	3,633	1,401	4,843	3,293	1,550			
08:00													4,838	3,114	1,724	4,429	2,739	1,690			
09:00									3,317	1,805	1,512	3,642	2,178	1,464							
10:00									3,108	1,697	1,411	3,374	1,948	1,426							
11:00									3,230	1,706	1,524	3,517	2,118	1,399							
12:00									3,668	1,907	1,761	4,030	2,278	1,752							
13:00									3,701	1,725	1,976	4,071	2,206	1,865							
14:00									3,831	1,907	1,924	4,088	2,197	1,891							
15:00									4,104	1,930	2,174	4,526	2,345	2,181							
16:00									4,829	2,326	2,503	5,307	2,867	2,440							
17:00									4,819	2,296	2,523	5,137	2,695	2,442							
18:00									3,648	1,609	2,039	4,007	2,018	1,989							
19:00									2,576	1,114	1,462	3,068	1,642	1,426							
20:00									2,313	1,015	1,298	2,389	1,172	1,217							
21:00									1,852	729	1,123	1,875	946	929							
22:00									1,254	552	702	1,350	630	720							
23:00									795	303	492	872	385	487							
Total									47,045	22,621	24,424	67,528	38,899	28,629	16,035	10,923	5,112				
AM Peak Vol									3,317	1,805	1,524	5,325	3,775	1,749							
AM Peak Fct									.833	.85	.821	.945	.924	.955							
AM Peak Hr									9: 00	9: 00	11: 00	7: 15	7: 15	7: 45							
PM Peak Vol									4,951	2,426	2,525	5,417	2,867	2,561							
PM Peak Fct									.965	.927	.955	.971	.966	.946							
PM Peak Hr									16: 30	16: 30	16: 30	16: 30	16: 00	16: 30							
Seasonal Fct									.991	.991	.991	.991	.991	.991	.991	.991	.991				
Daily Fct									.961	.961	.961	.936	.936	.936	.908	.908	.908				
Axle Fct									.491	.491	.491	.491	.491	.491	.491	.491	.491				
Pulse Fct									2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000				

# New Jersey Department of Transportation

Short-term Hourly Traffic Volume for 05/20/2019 to 05/23/2019

Site names: c18489,FRANKLIN CORNER RD-9.52,00000546\_\_  
 County: MERCER  
 Funct Class: Urban Minor Arterial  
 Location: BET US 1 & PRINCESS RD

Seasonal Factor Grp: rg3\_4U  
 Daily Factor Grp: rg3\_4U  
 Axle Factor Grp: rg3\_4U  
 Growth Factor Grp: rg3\_4U

	Sun, May 19, 2019			Mon, May 20, 2019			Tue, May 21, 2019			Wed, May 22, 2019			Thu, May 23, 2019			Fri, May 24, 2019			Sat, May 25, 2019		
	Road	N	S	Road	N	S	Road	N	S	Road	N	S	Road	N	S	Road	N	S	Road	N	S
00:00							33	24	9	45	23	22	34	20	14						
01:00							18	9	9	18	12	6	21	8	13						
02:00							6	3	3	14	6	8	14	8	6						
03:00							12	10	2	14	12	2	15	12	3						
04:00							39	28	11	49	35	14	53	37	16						
05:00							132	79	53	124	69	55	128	74	54						
06:00							370	230	140	345	199	146									
07:00							1,007	575	432	997	561	436									
08:00							1,317	732	585	1,313	719	594									
09:00							1,018	555	463	991	537	454									
10:00							863	491	372	844	483	361									
11:00							911	548	363	898	557	341									
12:00							1,110	625	485	1,100	629	471									
13:00							937	496	441	980	547	433									
14:00							989	594	395	924	540	384									
15:00				1,061	652	409	1,075	662	413	1,078	660	418									
16:00				1,174	768	406	1,192	808	384	1,261	882	379									
17:00				1,244	885	359	1,290	870	420	1,380	980	400									
18:00				750	462	288	838	506	332	851	519	332									
19:00				485	289	196	474	276	198	573	338	235									
20:00				371	195	176	368	200	168	403	215	188									
21:00				258	132	126	276	152	124	285	167	118									
22:00				153	71	82	161	69	92	178	84	94									
23:00				103	54	49	104	54	50	99	47	52									
Total				5,599	3,508	2,091	14,540	8,596	5,944	14,764	8,821	5,943	265	159	106						
AM Peak Vol							1,338	741	597	1,333	740	596									
AM Peak Fct							.958	.94	.963	.969	.954	.955									
AM Peak Hr							7: 45	7: 45	7: 45	7: 45	7: 45	8: 15									
PM Peak Vol							1,319	918	513	1,422	1,023	471									
PM Peak Fct							.921	.964	.897	.936	.937	.859									
PM Peak Hr							16: 45	16: 45	12: 30	16: 30	16: 45	12: 00									
Seasonal Fct				.949	.949	.949	.949	.949	.949	.949	.949	.949	.949	.949	.949						
Daily Fct				1.024	1.024	1.024	.934	.934	.934	.914	.914	.914	.919	.919	.919						
Axle Fct				.489	.489	.489	.489	.489	.489	.489	.489	.489	.489	.489	.489						
Pulse Fct				2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000						

# New Jersey Department of Transportation

Short-term Hourly Traffic Volume for 08/20/2018 to 08/23/2018

Site names: c18041,YOUNGS ROAD 0.98,11072002\_\_  
 County: MERCER  
 Funct Class: Urban Minor Arterial  
 Location: BET LAWRENCE STATION RD & TENNIS CT

Seasonal Factor Grp: rg3\_4U  
 Daily Factor Grp: rg3\_4U  
 Axle Factor Grp: rg3\_4U  
 Growth Factor Grp: rg3\_4U

	Sun, Aug 19, 2018			Mon, Aug 20, 2018			Tue, Aug 21, 2018			Wed, Aug 22, 2018			Thu, Aug 23, 2018			Fri, Aug 24, 2018			Sat, Aug 25, 2018		
	Road	E	W	Road	E	W	Road	E	W	Road	E	W	Road	E	W	Road	E	W	Road	E	W
00:00							26	13	13	32	10	22	32	10	22						
01:00							14	7	7	13	6	7	15	11	4						
02:00							13	7	6	8	5	3	9	6	3						
03:00							16	10	6	8	5	3	10	4	6						
04:00							17	11	6	25	16	9	25	18	7						
05:00							64	25	39	68	38	30	75	42	33						
06:00							194	108	86	213	104	109	187	103	84						
07:00							541	250	291	553	278	275	540	274	266						
08:00							705	384	321	701	370	331	657	355	302						
09:00							509	249	260	471	252	219									
10:00							425	226	199	376	215	161									
11:00							420	207	213	431	244	187									
12:00				484	252	232	515	263	252	530	254	276									
13:00				464	231	233	523	275	248	522	283	239									
14:00				474	239	235	527	276	251	442	233	209									
15:00				486	274	212	528	290	238	481	260	221									
16:00				702	372	330	665	361	304	717	410	307									
17:00				790	497	293	711	446	265	789	453	336									
18:00				441	237	204	459	297	162	444	233	211									
19:00				303	127	176	290	135	155	309	154	155									
20:00				190	83	107	191	78	113	218	87	131									
21:00				107	55	52	121	48	73	134	63	71									
22:00				76	31	45	76	28	48	81	37	44									
23:00				46	23	23	44	23	21	45	21	24									
Total				4,563	2,421	2,142	7,594	4,017	3,577	7,611	4,031	3,580	1,550	823	727						
AM Peak Vol							719	384	352	740	378	362									
AM Peak Fct							.917	.932	.898	.939	.875	.862									
AM Peak Hr							7: 45	8: 00	7: 30	7: 45	7: 45	7: 45									
PM Peak Vol				828	512	338	781	471	319	838	495	343									
PM Peak Fct				.916	.895	.845	.9	.879	.876	.927	.93	.858									
PM Peak Hr				16: 30	16: 45	16: 30	16: 30	16: 45	16: 30	16: 45	16: 45	16: 45									
Seasonal Fct				1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001						
Daily Fct				1.001	1.001	1.001	.950	.950	.950	.922	.922	.922	.915	.915	.915						
Axle Fct				.486	.486	.486	.486	.486	.486	.486	.486	.486	.486	.486	.486						
Pulse Fct				2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000						

# New Jersey Department of Transportation

Short-term Hourly Traffic Volume for 08/20/2018 to 08/23/2018

Site names: c18041,YOUNGS ROAD 0.98,11072002\_\_  
 County: MERCER  
 Funct Class: Urban Minor Arterial  
 Location: BET LAWRENCE STATION RD & TENNIS CT

Seasonal Factor Grp: rg3\_4U  
 Daily Factor Grp: rg3\_4U  
 Axle Factor Grp: rg3\_4U  
 Growth Factor Grp: rg3\_4U

	Sun, Aug 19, 2018			Mon, Aug 20, 2018			Tue, Aug 21, 2018			Wed, Aug 22, 2018			Thu, Aug 23, 2018			Fri, Aug 24, 2018			Sat, Aug 25, 2018		
	Road	E	W	Road	E	W	Road	E	W	Road	E	W	Road	E	W	Road	E	W	Road	E	W
00:00							26	13	13	32	10	22	32	10	22						
01:00							14	7	7	13	6	7	15	11	4						
02:00							13	7	6	8	5	3	9	6	3						
03:00							16	10	6	8	5	3	10	4	6						
04:00							17	11	6	25	16	9	25	18	7						
05:00							64	25	39	68	38	30	75	42	33						
06:00							194	108	86	213	104	109	187	103	84						
07:00							541	250	291	553	278	275	540	274	266						
08:00							705	384	321	701	370	331	657	355	302						
09:00							509	249	260	471	252	219									
10:00							425	226	199	376	215	161									
11:00							420	207	213	431	244	187									
12:00				484	252	232	515	263	252	530	254	276									
13:00				464	231	233	523	275	248	522	283	239									
14:00				474	239	235	527	276	251	442	233	209									
15:00				486	274	212	528	290	238	481	260	221									
16:00				702	372	330	665	361	304	717	410	307									
17:00				790	497	293	711	446	265	789	453	336									
18:00				441	237	204	459	297	162	444	233	211									
19:00				303	127	176	290	135	155	309	154	155									
20:00				190	83	107	191	78	113	218	87	131									
21:00				107	55	52	121	48	73	134	63	71									
22:00				76	31	45	76	28	48	81	37	44									
23:00				46	23	23	44	23	21	45	21	24									
Total				4,563	2,421	2,142	7,594	4,017	3,577	7,611	4,031	3,580	1,550	823	727						
AM Peak Vol							719	384	352	740	378	362									
AM Peak Fct							.917	.932	.898	.939	.875	.862									
AM Peak Hr							7: 45	8: 00	7: 30	7: 45	7: 45	7: 45									
PM Peak Vol				828	512	338	781	471	319	838	495	343									
PM Peak Fct				.916	.895	.845	.9	.879	.876	.927	.93	.858									
PM Peak Hr				16: 30	16: 45	16: 30	16: 30	16: 45	16: 30	16: 45	16: 45	16: 45									
Seasonal Fct				1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001						
Daily Fct				1.001	1.001	1.001	.950	.950	.950	.922	.922	.922	.915	.915	.915						
Axle Fct				.486	.486	.486	.486	.486	.486	.486	.486	.486	.486	.486	.486						
Pulse Fct				2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000						

## **TURNING MOVEMENT COUNTS**





McMahon a Bowman Company  
425 Commerce Drive, Suite 200

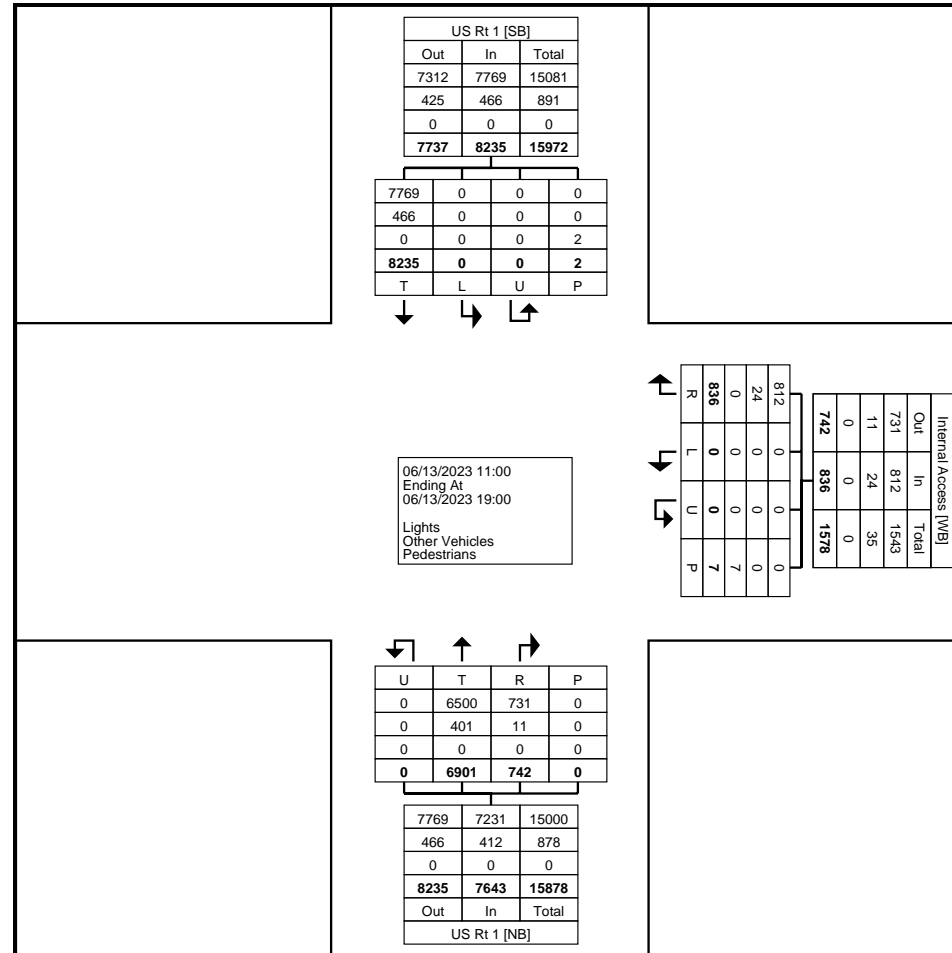
Fort Washington, Pennsylvania, United States 19034  
215-283-9444

Count Name: 010014-01-001 CFA Lawrenceville  
- Rt 1 & Access  
Site Code:  
Start Date: 06/13/2023  
Page No: 1

### Turning Movement Data

Start Time	US Rt 1 Southbound					Internal Access Westbound					US Rt 1 Northbound					Int. Total
	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	
11:00	0	311	0	0	311	0	32	0	0	32	240	46	0	0	286	629
11:15	0	366	0	0	366	0	41	0	1	41	286	39	0	0	325	732
11:30	0	359	0	0	359	0	38	0	0	38	306	40	0	0	346	743
11:45	0	378	0	0	378	0	51	0	1	51	283	34	0	0	317	746
Hourly Total	0	1414	0	0	1414	0	162	0	2	162	1115	159	0	0	1274	2850
12:00	0	344	0	0	344	0	40	0	2	40	303	45	0	0	348	732
12:15	0	337	0	1	337	0	51	0	0	51	315	41	0	0	356	744
12:30	0	312	0	0	312	0	65	0	0	65	283	39	0	0	322	699
12:45	0	291	0	1	291	0	84	0	2	84	354	52	0	0	406	781
Hourly Total	0	1284	0	2	1284	0	240	0	4	240	1255	177	0	0	1432	2956
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16:00	0	513	0	0	513	0	40	0	0	40	340	28	0	0	368	921
16:15	0	483	0	0	483	0	24	0	0	24	302	30	0	0	332	839
16:30	0	490	0	0	490	0	33	0	0	33	408	28	0	0	436	959
16:45	0	421	0	0	421	0	35	0	0	35	556	40	0	0	596	1052
Hourly Total	0	1907	0	0	1907	0	132	0	0	132	1606	126	0	0	1732	3771
17:00	0	536	0	0	536	0	41	0	0	41	514	30	0	0	544	1121
17:15	0	500	0	0	500	0	52	0	0	52	437	53	0	0	490	1042
17:30	0	492	0	0	492	0	35	0	0	35	391	25	0	0	416	943
17:45	0	458	0	0	458	0	34	0	0	34	390	41	0	0	431	923
Hourly Total	0	1986	0	0	1986	0	162	0	0	162	1732	149	0	0	1881	4029
18:00	0	453	0	0	453	0	34	0	1	34	314	38	0	0	352	839
18:15	0	426	0	0	426	0	44	0	0	44	330	33	0	0	363	833
18:30	0	385	0	0	385	0	32	0	0	32	265	27	0	0	292	709
18:45	0	380	0	0	380	0	30	0	0	30	284	33	0	0	317	727
Hourly Total	0	1644	0	0	1644	0	140	0	1	140	1193	131	0	0	1324	3108
Grand Total	0	8235	0	2	8235	0	836	0	7	836	6901	742	0	0	7643	16714
Approach %	0.0	100.0	0.0	-	-	0.0	100.0	0.0	-	-	90.3	9.7	0.0	-	-	-
Total %	0.0	49.3	0.0	-	49.3	0.0	5.0	0.0	-	5.0	41.3	4.4	0.0	-	45.7	-
Lights	0	7769	0	-	7769	0	812	0	-	812	6500	731	0	-	7231	15812
% Lights	-	94.3	-	-	94.3	-	97.1	-	-	97.1	94.2	98.5	-	-	94.6	94.6
Other Vehicles	0	466	0	-	466	0	24	0	-	24	401	11	0	-	412	902
% Other Vehicles	-	5.7	-	-	5.7	-	2.9	-	-	2.9	5.8	1.5	-	-	5.4	5.4
Pedestrians	-	-	-	2	-	-	-	-	7	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	-	-	-





Turning Movement Data Plot



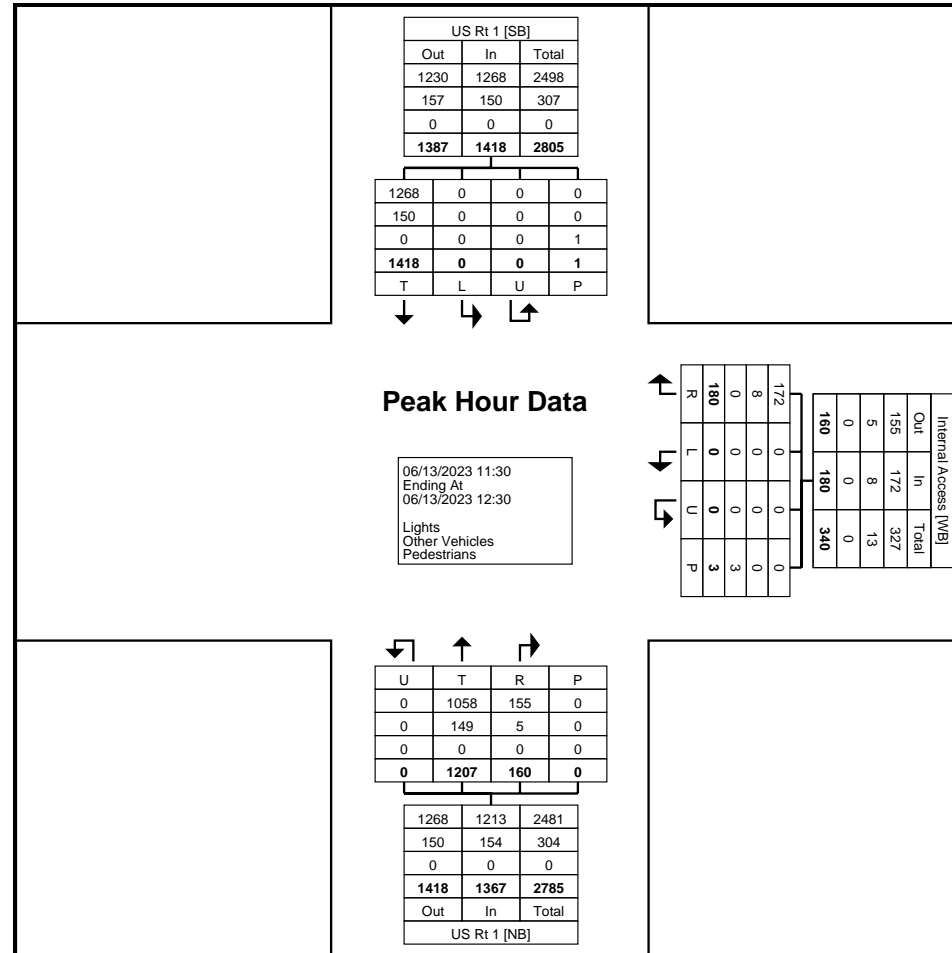
McMahon a Bowman Company  
425 Commerce Drive, Suite 200

Fort Washington, Pennsylvania, United States 19034  
215-283-9444

Count Name: 010014-01-001 CFA Lawrenceville  
- Rt 1 & Access  
Site Code:  
Start Date: 06/13/2023  
Page No: 3

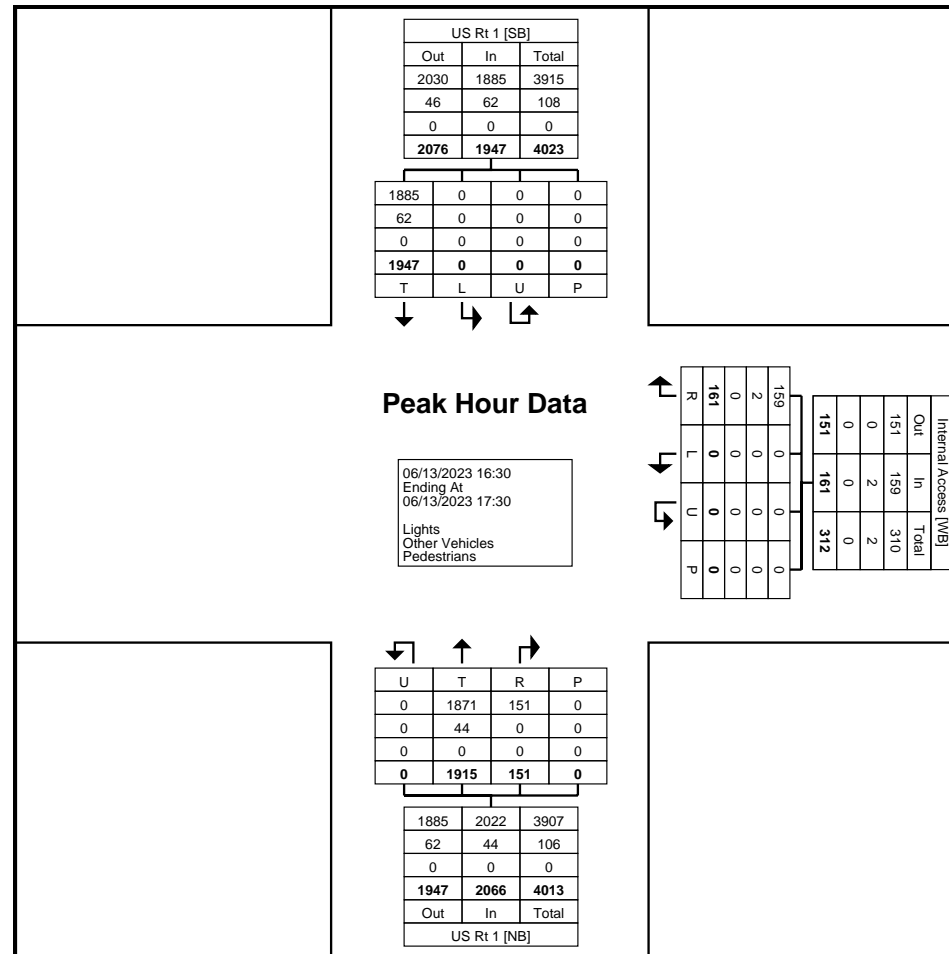
### Turning Movement Peak Hour Data (11:30)

Start Time	US Rt 1 Southbound					Internal Access Westbound					US Rt 1 Northbound					Int. Total
	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	
11:30	0	359	0	0	359	0	38	0	0	38	306	40	0	0	346	743
11:45	0	378	0	0	378	0	51	0	1	51	283	34	0	0	317	746
12:00	0	344	0	0	344	0	40	0	2	40	303	45	0	0	348	732
12:15	0	337	0	1	337	0	51	0	0	51	315	41	0	0	356	744
Total	0	1418	0	1	1418	0	180	0	3	180	1207	160	0	0	1367	2965
Approach %	0.0	100.0	0.0	-	-	0.0	100.0	0.0	-	-	88.3	11.7	0.0	-	-	-
Total %	0.0	47.8	0.0	-	47.8	0.0	6.1	0.0	-	6.1	40.7	5.4	0.0	-	46.1	-
PHF	0.000	0.938	0.000	-	0.938	0.000	0.882	0.000	-	0.882	0.958	0.889	0.000	-	0.960	0.994
Lights	0	1268	0	-	1268	0	172	0	-	172	1058	155	0	-	1213	2653
% Lights	-	89.4	-	-	89.4	-	95.6	-	-	95.6	87.7	96.9	-	-	88.7	89.5
Other Vehicles	0	150	0	-	150	0	8	0	-	8	149	5	0	-	154	312
% Other Vehicles	-	10.6	-	-	10.6	-	4.4	-	-	4.4	12.3	3.1	-	-	11.3	10.5
Pedestrians	-	-	-	1	-	-	-	-	3	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	-	-	-



Turning Movement Peak Hour Data Plot (11:30)





Turning Movement Peak Hour Data Plot (16:30)



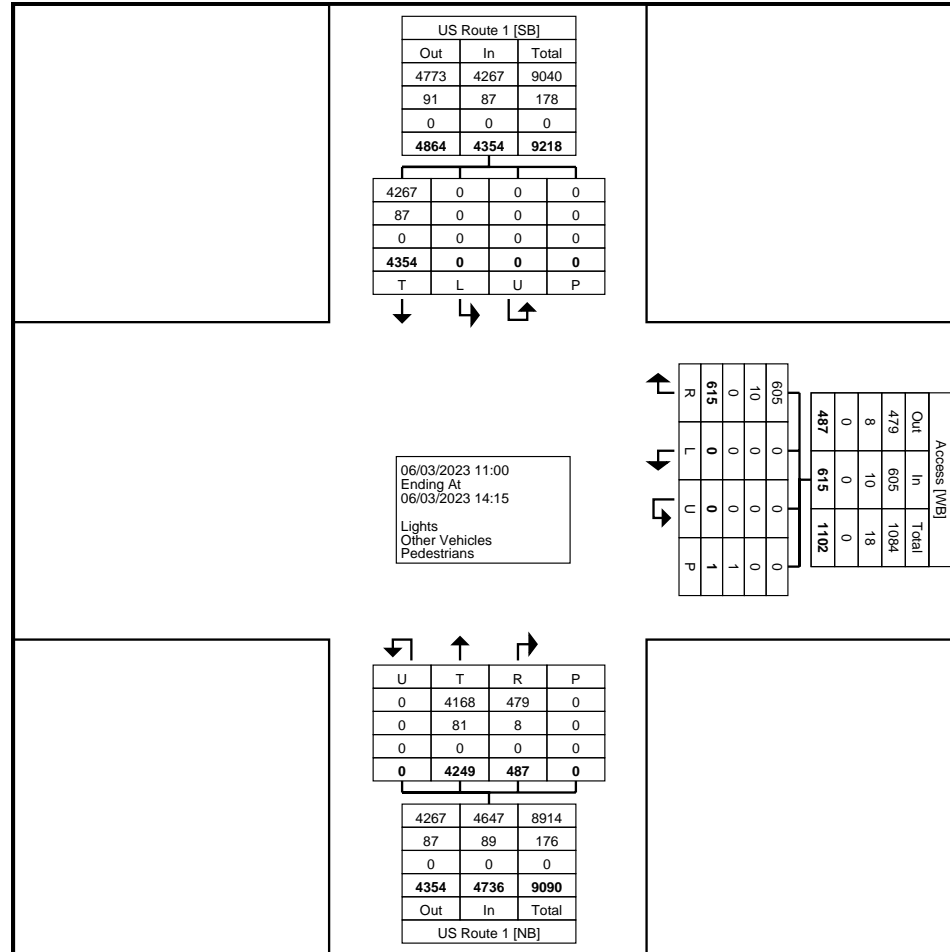
McMahon a Bowman Company  
425 Commerce Drive, Suite 200

Fort Washington, Pennsylvania, United States 19034  
215-283-9444

Count Name: 010014-01-001 Lawrenceville CFA  
- Rt 1 & Internal Access  
Site Code:  
Start Date: 06/03/2023  
Page No: 1

### Turning Movement Data

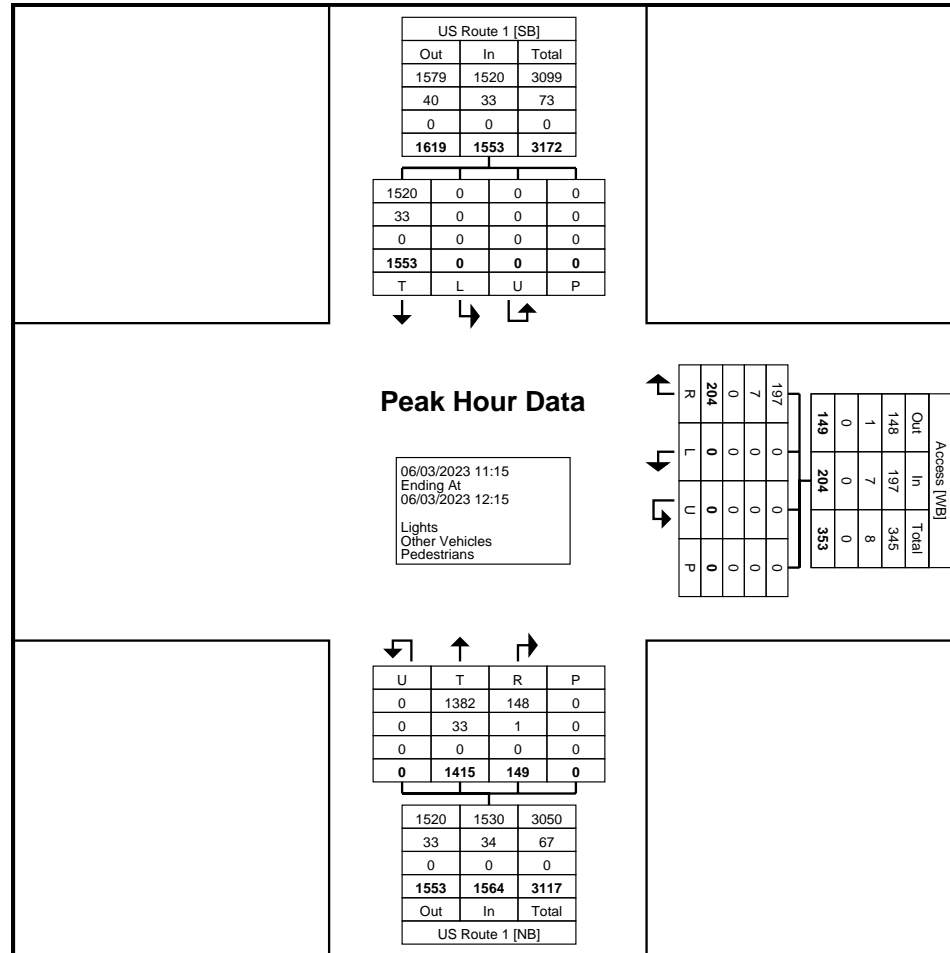
Start Time	US Route 1 Southbound					Access Westbound					US Route 1 Northbound					Int. Total
	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	
11:00	0	408	0	0	408	0	42	0	0	42	341	39	0	0	380	830
11:15	0	421	0	0	421	0	56	0	0	56	339	28	0	0	367	844
11:30	0	396	0	0	396	0	58	0	0	58	339	32	0	0	371	825
11:45	0	383	0	0	383	0	49	0	0	49	354	35	0	0	389	821
Hourly Total	0	1608	0	0	1608	0	205	0	0	205	1373	134	0	0	1507	3320
12:00	0	353	0	0	353	0	41	0	0	41	383	54	0	0	437	831
12:15	0	371	0	0	371	0	52	0	0	52	328	38	0	0	366	789
12:30	0	369	0	0	369	0	54	0	0	54	349	38	0	0	387	810
12:45	0	326	0	0	326	0	56	0	0	56	344	39	0	0	383	765
Hourly Total	0	1419	0	0	1419	0	203	0	0	203	1404	169	0	0	1573	3195
13:00	0	397	0	0	397	0	49	0	0	49	381	36	0	0	417	863
13:15	0	343	0	0	343	0	51	0	0	51	359	47	0	0	406	800
13:30	0	313	0	0	313	0	56	0	0	56	359	45	0	0	404	773
13:45	0	274	0	0	274	0	51	0	1	51	373	56	0	0	429	754
Hourly Total	0	1327	0	0	1327	0	207	0	1	207	1472	184	0	0	1656	3190
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	4354	0	0	4354	0	615	0	1	615	4249	487	0	0	4736	9705
Approach %	0.0	100.0	0.0	-	-	0.0	100.0	0.0	-	-	89.7	10.3	0.0	-	-	-
Total %	0.0	44.9	0.0	-	44.9	0.0	6.3	0.0	-	6.3	43.8	5.0	0.0	-	48.8	-
Lights	0	4267	0	-	4267	0	605	0	-	605	4168	479	0	-	4647	9519
% Lights	-	98.0	-	-	98.0	-	98.4	-	-	98.4	98.1	98.4	-	-	98.1	98.1
Other Vehicles	0	87	0	-	87	0	10	0	-	10	81	8	0	-	89	186
% Other Vehicles	-	2.0	-	-	2.0	-	1.6	-	-	1.6	1.9	1.6	-	-	1.9	1.9
Pedestrians	-	-	-	0	-	-	-	-	1	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-



Turning Movement Data Plot

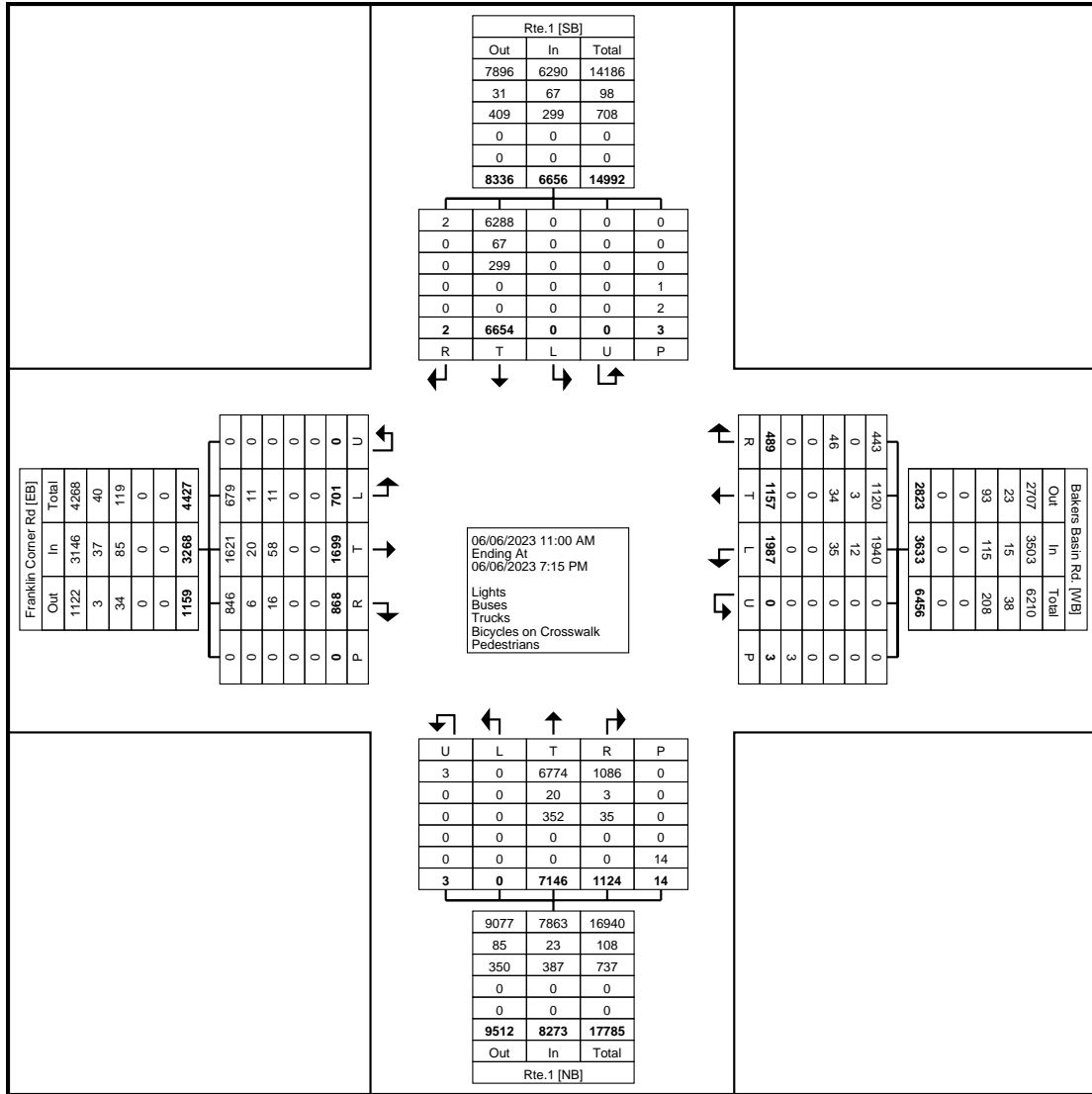






Turning Movement Peak Hour Data Plot (11:15)





Turning Movement Data Plot



www.TSTData.com  
184 Baker Rd

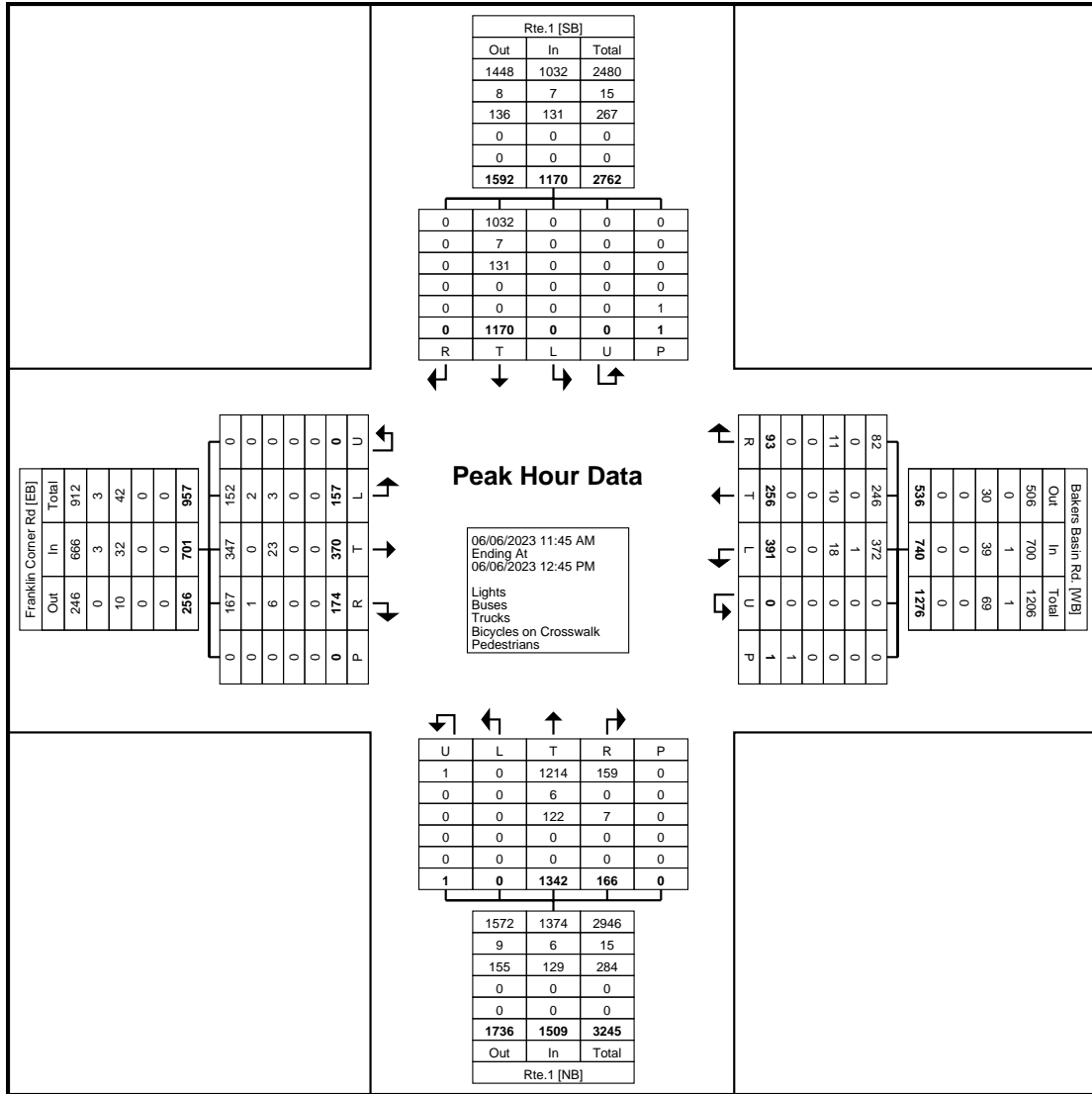
Lawrence, NJ  
Route 1 & Franklin Rd/Bakers  
Basin Rd  
Tuesday, June 6, 2023  
Location: 40.275107, -  
74.706197

Coatesville, Pennsylvania, United States 19320  
610-466-1469  
Serving Transportation Professionals Since 1995

Count Name: Rte.1 & Franklin  
Corner Rd. (6/6)  
Site Code:  
Start Date: 06/06/2023  
Page No: 3

### Turning Movement Peak Hour Data (11:45 AM)

Start Time	Franklin Corner Rd Eastbound							Bakers Basin Rd. Westbound							Rte.1 Northbound							Rte.1 Southbound							Int. Total
	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	
11:45 AM	31	79	36	10	0	0	156	86	74	25	2	0	0	187	0	357	52	0	0	0	409	0	281	0	0	0	1	281	1033
12:00 PM	44	106	24	14	0	0	188	107	60	25	5	0	0	197	0	301	21	12	0	0	334	0	267	0	0	0	0	267	986
12:15 PM	50	98	42	8	0	0	198	108	61	23	2	0	1	194	0	337	33	8	0	0	378	0	308	0	0	0	0	308	1078
12:30 PM	32	87	27	13	0	0	159	90	61	10	1	0	0	162	0	347	32	8	1	0	388	0	314	0	0	0	0	314	1023
<b>Total</b>	<b>157</b>	<b>370</b>	<b>129</b>	<b>45</b>	<b>0</b>	<b>0</b>	<b>701</b>	<b>391</b>	<b>256</b>	<b>83</b>	<b>10</b>	<b>0</b>	<b>1</b>	<b>740</b>	<b>0</b>	<b>1342</b>	<b>138</b>	<b>28</b>	<b>1</b>	<b>0</b>	<b>1509</b>	<b>0</b>	<b>1170</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1170</b>	<b>4120</b>
Approach %	22.4	52.8	18.4	6.4	0.0	-	-	52.8	34.6	11.2	1.4	0.0	-	-	0.0	88.9	9.1	1.9	0.1	-	-	0.0	100.0	0.0	0.0	0.0	-	-	-
Total %	3.8	9.0	3.1	1.1	0.0	-	17.0	9.5	6.2	2.0	0.2	0.0	-	18.0	0.0	32.6	3.3	0.7	0.0	-	36.6	0.0	28.4	0.0	0.0	0.0	-	28.4	-
PHF	0.785	0.873	0.768	0.804	0.000	-	0.885	0.905	0.865	0.830	0.500	0.000	-	0.939	0.000	0.940	0.663	0.583	0.250	-	0.922	0.000	0.932	0.000	0.000	0.000	-	0.932	0.955
Lights	152	347	123	44	0	-	666	372	246	73	9	0	-	700	0	1214	131	28	1	-	1374	0	1032	0	0	0	-	1032	3772
% Lights	96.8	93.8	95.3	97.8	-	-	95.0	95.1	96.1	88.0	90.0	-	94.6	-	90.5	94.9	100.0	100.0	-	91.1	-	88.2	-	-	-	-	88.2	91.6	
Buses	2	0	1	0	0	-	3	1	0	0	0	0	-	1	0	6	0	0	0	-	6	0	7	0	0	0	-	7	17
% Buses	1.3	0.0	0.8	0.0	-	-	0.4	0.3	0.0	0.0	0.0	-	0.1	-	0.4	0.0	0.0	0.0	-	0.4	-	0.6	-	-	-	-	0.6	0.4	
Trucks	3	23	5	1	0	-	32	18	10	10	1	0	-	39	0	122	7	0	0	-	129	0	131	0	0	0	-	131	331
% Trucks	1.9	6.2	3.9	2.2	-	-	4.6	4.6	3.9	12.0	10.0	-	5.3	-	9.1	5.1	0.0	0.0	-	8.5	-	11.2	-	-	-	-	11.2	8.0	
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	-	0	-	-	-	-	-	-	1	-	-	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	



Turning Movement Peak Hour Data Plot (11:45 AM)



Lawrence, NJ  
 Route 1 & Franklin Rd/Bakers  
 Basin Rd  
 Tuesday, June 6, 2023  
 Location: 40.275107, -  
 74.706197

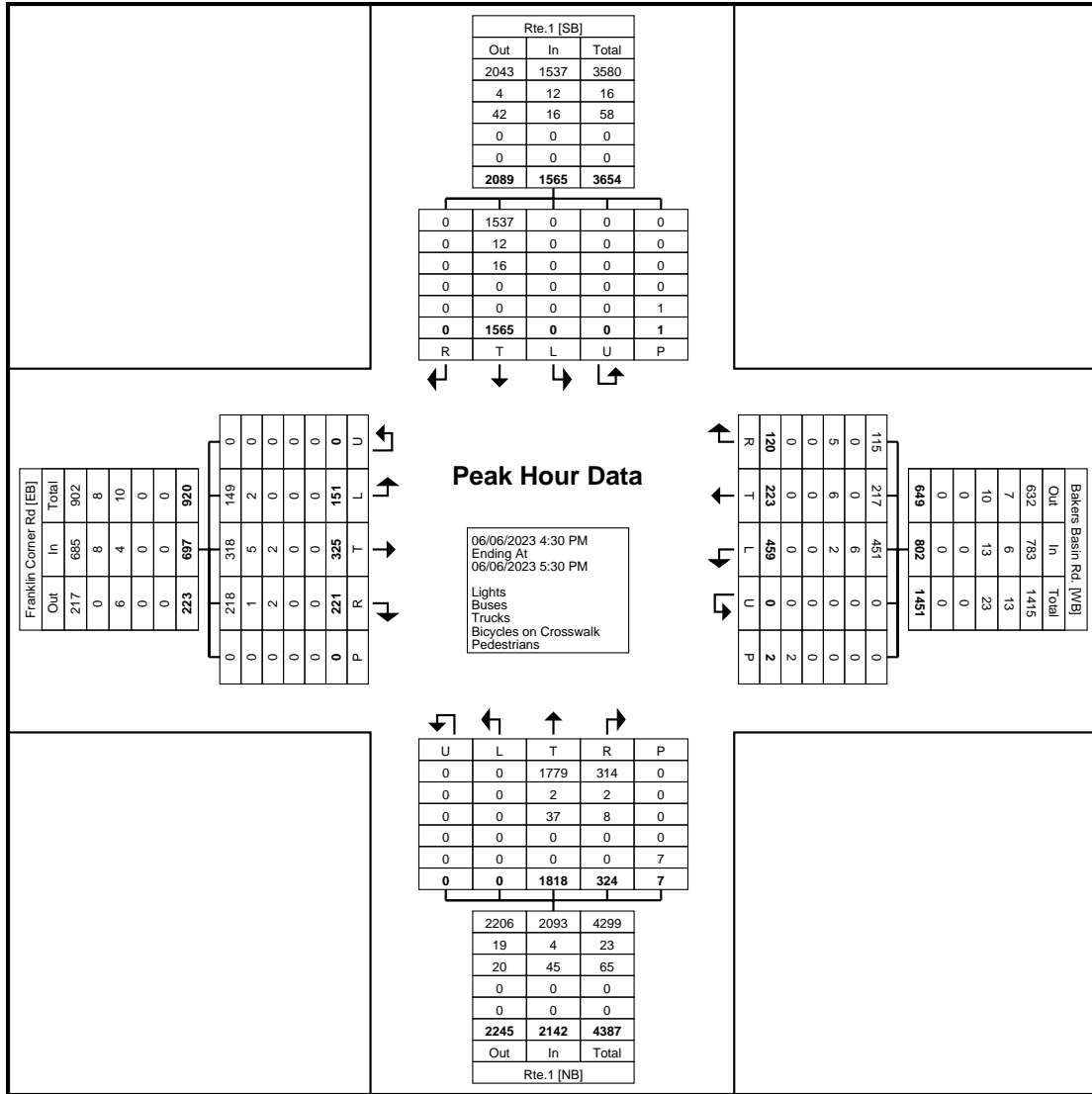
www.TSTData.com  
 184 Baker Rd

Coatesville, Pennsylvania, United States 19320  
 610-466-1469  
 Serving Transportation Professionals Since 1995

Count Name: Rte.1 & Franklin  
 Corner Rd. (6/6)  
 Site Code:  
 Start Date: 06/06/2023  
 Page No: 5

### Turning Movement Peak Hour Data (4:30 PM)

Start Time	Franklin Corner Rd Eastbound							Bakers Basin Rd. Westbound							Rte.1 Northbound							Rte.1 Southbound							Int. Total
	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	
4:30 PM	40	88	63	2	0	0	193	113	62	30	1	0	0	206	0	495	61	1	0	3	557	0	413	0	0	0	0	413	1369
4:45 PM	39	81	29	14	0	0	163	110	56	25	0	0	0	191	0	483	82	7	0	1	572	0	367	0	0	0	0	367	1293
5:00 PM	34	79	55	9	0	0	177	118	57	35	0	0	1	210	0	402	66	17	0	0	485	0	406	0	0	0	0	406	1278
5:15 PM	38	77	37	12	0	0	164	118	48	29	0	0	1	195	0	438	70	20	0	3	528	0	379	0	0	0	1	379	1266
<b>Total</b>	<b>151</b>	<b>325</b>	<b>184</b>	<b>37</b>	<b>0</b>	<b>0</b>	<b>697</b>	<b>459</b>	<b>223</b>	<b>119</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>802</b>	<b>0</b>	<b>1818</b>	<b>279</b>	<b>45</b>	<b>0</b>	<b>7</b>	<b>2142</b>	<b>0</b>	<b>1565</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1565</b>	<b>5206</b>
Approach %	21.7	46.6	26.4	5.3	0.0	-	-	57.2	27.8	14.8	0.1	0.0	-	-	0.0	84.9	13.0	2.1	0.0	-	-	0.0	100.0	0.0	0.0	0.0	-	-	-
Total %	2.9	6.2	3.5	0.7	0.0	-	13.4	8.8	4.3	2.3	0.0	0.0	-	15.4	0.0	34.9	5.4	0.9	0.0	-	41.1	0.0	30.1	0.0	0.0	0.0	-	30.1	-
PHF	0.94 4	0.923	0.730	0.661	0.000	-	0.903	0.972	0.899	0.850	0.250	0.000	-	0.955	0.000	0.918	0.851	0.563	0.000	-	0.936	0.000	0.947	0.000	0.000	0.000	-	0.947	0.951
Lights	149	318	182	36	0	-	685	451	217	114	1	0	-	783	0	1779	271	43	0	-	2093	0	1537	0	0	0	-	1537	5098
% Lights	98.7	97.8	98.9	97.3	-	-	98.3	98.3	97.3	95.8	100.0	-	97.6	-	97.9	97.1	95.6	-	-	97.7	-	98.2	-	-	-	-	98.2	97.9	
Buses	2	5	1	0	0	-	8	6	0	0	0	0	-	6	0	2	2	0	0	-	4	0	12	0	0	0	-	12	30
% Buses	1.3	1.5	0.5	0.0	-	-	1.1	1.3	0.0	0.0	0.0	-	0.7	-	0.1	0.7	0.0	-	-	0.2	-	0.8	-	-	-	-	0.8	0.6	
Trucks	0	2	1	1	0	-	4	2	6	5	0	0	-	13	0	37	6	2	0	-	45	0	16	0	0	0	-	16	78
% Trucks	0.0	0.6	0.5	2.7	-	-	0.6	0.4	2.7	4.2	0.0	-	1.6	-	2.0	2.2	4.4	-	-	2.1	-	1.0	-	-	-	-	1.0	1.5	
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	0.0	-	-	-	-	-	-	0.0	-	-	
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	-	7	-	-	-	-	-	-	1	-	-	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	100.0	-	-	-	-	-	-	100.0	-	-	



Turning Movement Peak Hour Data Plot (4:30 PM)



Lawrenceville, NJ  
 Route 1 & Franklin Rd/Bakers  
 Basin Rd  
 Saturday, June 3, 2023  
 Location: 40.275107, -  
 74.706197

www.TSTData.com  
 184 Baker Rd

Coatesville, Pennsylvania, United States 19320  
 610-466-1469  
 Serving Transportation Professionals Since 1995

Count Name: Rte.1 & Franklin  
 Corner Rd. (6/3)  
 Site Code:  
 Start Date: 06/03/2023  
 Page No: 1

### Turning Movement Data

Start Time	Franklin Corner Rd Eastbound						Bakers Basin Rd. Westbound						Rte.1 Northbound						Rte.1 Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
11:00 AM	32	90	39	0	0	161	82	60	37	0	0	179	0	377	52	0	0	429	0	362	0	0	0	362	1131
11:15 AM	25	81	35	0	0	141	117	56	26	0	0	199	0	341	44	0	0	385	0	342	0	1	1	343	1068
11:30 AM	45	99	36	0	0	180	98	58	42	0	0	198	0	335	57	0	0	392	0	317	0	0	0	317	1087
11:45 AM	38	102	28	0	0	168	88	50	28	0	0	166	0	403	53	0	0	456	0	386	0	0	0	386	1176
Hourly Total	140	372	138	0	0	650	385	224	133	0	0	742	0	1456	206	0	0	1662	0	1407	0	1	1	1408	4462
12:00 PM	36	100	26	0	0	162	104	66	42	0	0	212	0	346	47	0	0	393	0	298	0	0	0	298	1065
12:15 PM	38	116	28	0	0	182	117	40	28	0	0	185	0	341	41	0	0	382	0	289	0	0	0	289	1038
12:30 PM	35	96	23	0	0	154	74	54	30	0	0	158	0	391	54	0	0	445	0	345	0	0	1	345	1102
12:45 PM	34	107	31	0	0	172	83	55	27	0	0	165	0	350	54	0	0	404	0	325	0	0	1	325	1066
Hourly Total	143	419	108	0	0	670	378	215	127	0	0	720	0	1428	196	0	0	1624	0	1257	0	0	2	1257	4271
1:00 PM	48	95	27	0	0	170	94	64	30	0	3	188	0	355	47	0	3	402	0	338	0	0	3	338	1098
1:15 PM	35	84	40	0	0	159	94	57	22	0	0	173	0	387	45	0	1	432	0	369	0	0	0	369	1133
1:30 PM	41	83	20	0	0	144	94	44	37	0	0	175	0	391	47	0	1	438	0	352	1	0	0	353	1110
1:45 PM	41	105	29	0	0	175	95	55	28	0	0	178	0	339	60	0	1	399	0	307	0	0	0	307	1059
Hourly Total	165	367	116	0	0	648	377	220	117	0	3	714	0	1472	199	0	6	1671	0	1366	1	0	3	1367	4400
2:00 PM	1	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Grand Total	449	1158	363	0	0	1970	1140	659	377	0	3	2176	0	4356	601	0	6	4957	0	4030	1	1	6	4032	13135
Approach %	22.8	58.8	18.4	0.0	-	-	52.4	30.3	17.3	0.0	-	-	0.0	87.9	12.1	0.0	-	-	0.0	100.0	0.0	0.0	-	-	-
Total %	3.4	8.8	2.8	0.0	-	15.0	8.7	5.0	2.9	0.0	-	16.6	0.0	33.2	4.6	0.0	-	37.7	0.0	30.7	0.0	0.0	-	30.7	-
Lights	439	1114	363	0	-	1916	1123	635	359	0	-	2117	0	4279	581	0	-	4860	0	3959	1	1	-	3961	12854
% Lights	97.8	96.2	100.0	-	-	97.3	98.5	96.4	95.2	-	-	97.3	-	98.2	96.7	-	-	98.0	-	98.2	100.0	100.0	-	98.2	97.9
Buses	6	0	0	0	-	6	0	0	0	0	-	0	0	7	0	0	-	7	0	4	0	0	-	4	17
% Buses	1.3	0.0	0.0	-	-	0.3	0.0	0.0	0.0	-	-	0.0	-	0.2	0.0	-	-	0.1	-	0.1	0.0	0.0	-	0.1	0.1
Trucks	4	44	0	0	-	48	17	24	18	0	-	59	0	70	20	0	-	90	0	67	0	0	-	67	264
% Trucks	0.9	3.8	0.0	-	-	2.4	1.5	3.6	4.8	-	-	2.7	-	1.6	3.3	-	-	1.8	-	1.7	0.0	0.0	-	1.7	2.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	6	-	-	-	-	-	6	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-







www.TSTData.com  
184 Baker Rd

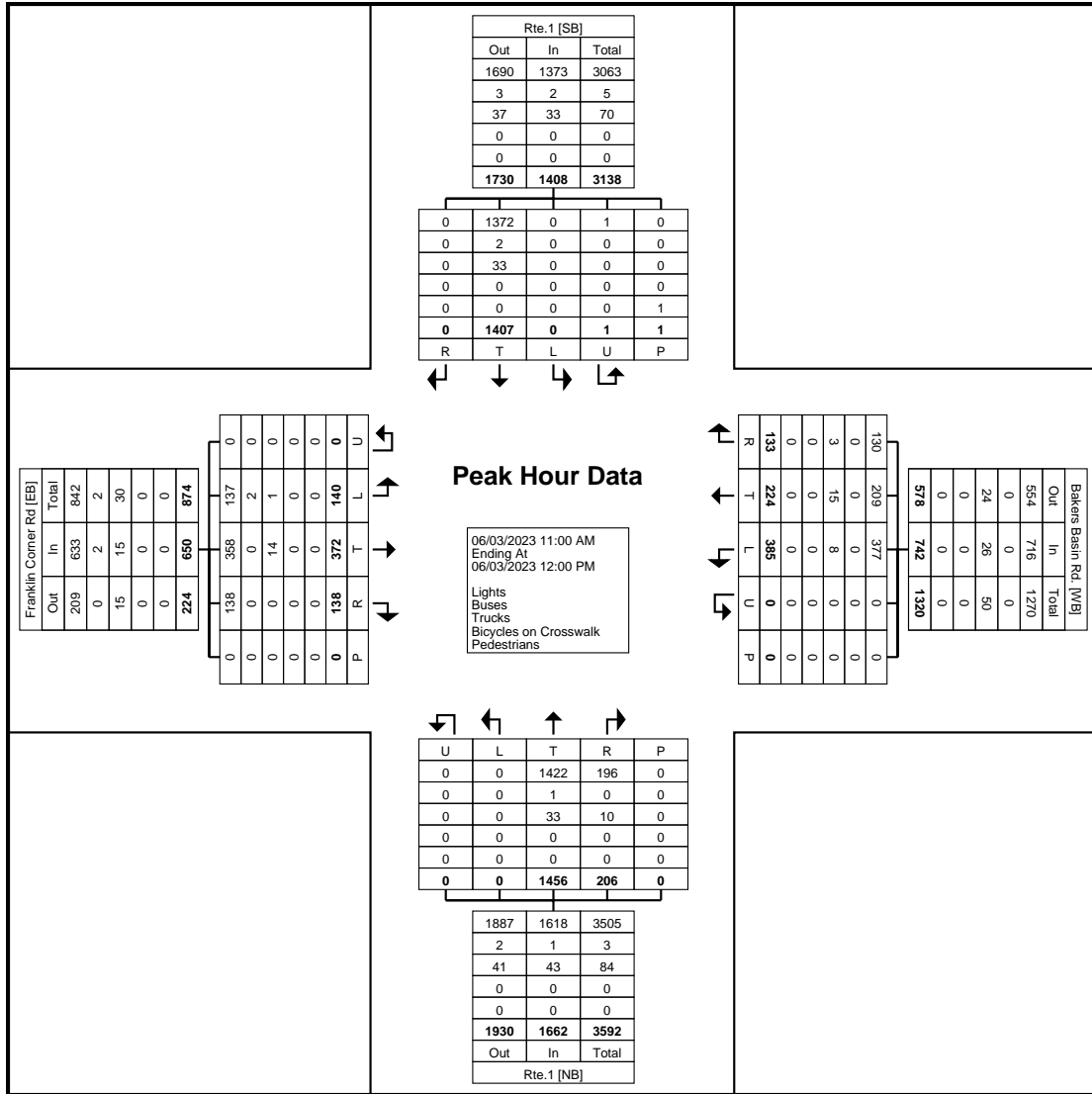
Lawrenceville, NJ  
Route 1 & Franklin Rd/Bakers  
Basin Rd  
Saturday, June 3, 2023  
Location: 40.275107, -  
74.706197

Coatesville, Pennsylvania, United States 19320  
610-466-1469  
Serving Transportation Professionals Since 1995

Count Name: Rte.1 & Franklin  
Corner Rd. (6/3)  
Site Code:  
Start Date: 06/03/2023  
Page No: 3

### Turning Movement Peak Hour Data (11:00 AM)

Start Time	Franklin Corner Rd Eastbound						Bakers Basin Rd. Westbound						Rte.1 Northbound						Rte.1 Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
11:00 AM	32	90	39	0	0	161	82	60	37	0	0	179	0	377	52	0	0	429	0	362	0	0	0	362	1131
11:15 AM	25	81	35	0	0	141	117	56	26	0	0	199	0	341	44	0	0	385	0	342	0	1	1	343	1068
11:30 AM	45	99	36	0	0	180	98	58	42	0	0	198	0	335	57	0	0	392	0	317	0	0	0	317	1087
11:45 AM	38	102	28	0	0	168	88	50	28	0	0	166	0	403	53	0	0	456	0	386	0	0	0	386	1176
Total	140	372	138	0	0	650	385	224	133	0	0	742	0	1456	206	0	0	1662	0	1407	0	1	1	1408	4462
Approach %	21.5	57.2	21.2	0.0	-	-	51.9	30.2	17.9	0.0	-	-	0.0	87.6	12.4	0.0	-	-	0.0	99.9	0.0	0.1	-	-	-
Total %	3.1	8.3	3.1	0.0	-	14.6	8.6	5.0	3.0	0.0	-	16.6	0.0	32.6	4.6	0.0	-	37.2	0.0	31.5	0.0	0.0	-	31.6	-
PHF	0.778	0.912	0.885	0.000	-	0.903	0.823	0.933	0.792	0.000	-	0.932	0.000	0.903	0.904	0.000	-	0.911	0.000	0.911	0.000	0.250	-	0.912	0.949
Lights	137	358	138	0	-	633	377	209	130	0	-	716	0	1422	196	0	-	1618	0	1372	0	1	-	1373	4340
% Lights	97.9	96.2	100.0	-	-	97.4	97.9	93.3	97.7	-	-	96.5	-	97.7	95.1	-	-	97.4	-	97.5	-	100.0	-	97.5	97.3
Buses	2	0	0	0	-	2	0	0	0	0	-	0	0	1	0	0	-	1	0	2	0	0	-	2	5
% Buses	1.4	0.0	0.0	-	-	0.3	0.0	0.0	0.0	-	-	0.0	-	0.1	0.0	-	-	0.1	-	0.1	-	0.0	-	0.1	0.1
Trucks	1	14	0	0	-	15	8	15	3	0	-	26	0	33	10	0	-	43	0	33	0	0	-	33	117
% Trucks	0.7	3.8	0.0	-	-	2.3	2.1	6.7	2.3	-	-	3.5	-	2.3	4.9	-	-	2.6	-	2.3	-	0.0	-	2.3	2.6
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-



Turning Movement Peak Hour Data Plot (11:00 AM)



Lawrenceville, NJ  
 Route 1 SB Jughandle &  
 Franklin Corner Rd  
 Tuesday, June 6, 2023  
 Location: 40.275292, -  
 74.706823

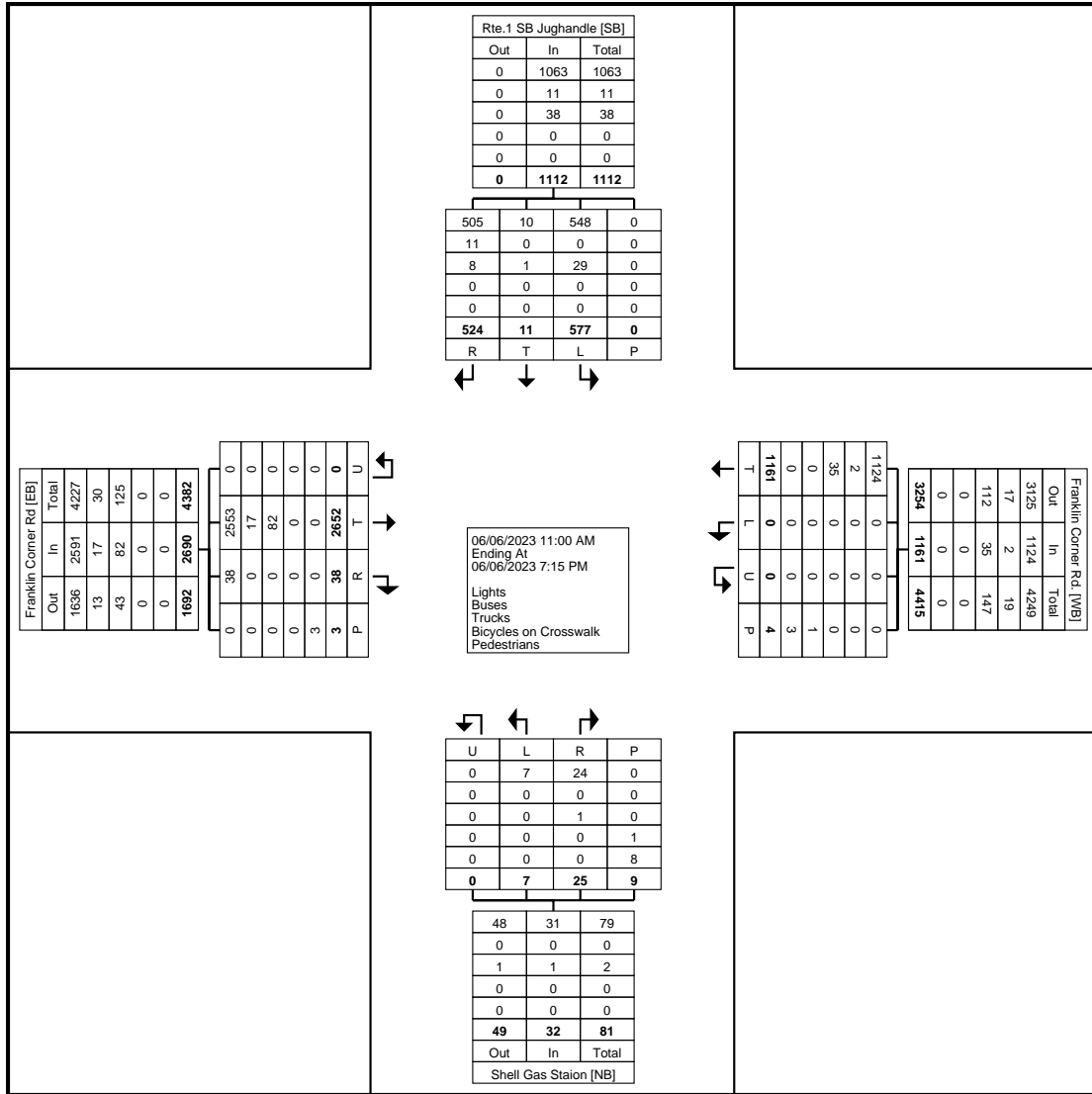
www.TSTData.com  
 184 Baker Rd

Coatesville, Pennsylvania, United States 19320  
 610-466-1469  
 Serving Transportation Professionals Since 1995

Count Name: Rte.1 SB  
 Jughandle & Franklin Corner Rd.  
 (6/6)  
 Site Code:  
 Start Date: 06/06/2023  
 Page No: 1

### Turning Movement Data

Start Time	Franklin Corner Rd Eastbound					Franklin Corner Rd. Westbound					Shell Gas Staion Northbound					Rte.1 SB Jughandle Southbound					Int. Total
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
11:00 AM	110	5	0	0	115	0	60	0	0	60	1	2	0	0	3	21	0	23	0	44	222
11:15 AM	110	2	0	0	112	0	59	0	0	59	1	0	0	0	1	39	0	23	0	62	234
11:30 AM	113	3	0	0	116	0	53	0	0	53	1	1	0	0	2	29	1	27	0	57	228
11:45 AM	127	1	0	0	128	0	78	0	1	78	0	1	0	1	1	34	1	32	0	67	274
Hourly Total	460	11	0	0	471	0	250	0	1	250	3	4	0	1	7	123	2	105	0	230	958
12:00 PM	150	0	0	0	150	0	57	0	0	57	0	1	0	1	1	36	1	25	0	62	270
12:15 PM	156	1	0	0	157	0	61	0	1	61	0	1	0	0	1	40	0	28	0	68	287
12:30 PM	129	1	0	0	130	0	61	0	0	61	1	0	0	0	1	32	0	30	0	62	254
12:45 PM	144	3	0	1	147	0	82	0	0	82	1	2	0	1	3	32	1	34	0	67	299
Hourly Total	579	5	0	1	584	0	261	0	1	261	2	4	0	2	6	140	2	117	0	259	1110
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	137	1	0	0	138	0	50	0	0	50	0	3	0	0	3	23	1	30	0	54	245
4:15 PM	163	1	0	0	164	0	58	0	0	58	0	1	0	1	1	23	0	31	0	54	277
4:30 PM	168	0	0	0	168	0	62	0	0	62	0	0	0	2	0	23	0	21	0	44	274
4:45 PM	131	4	0	0	135	0	56	0	0	56	0	2	0	1	2	36	0	21	0	57	250
Hourly Total	599	6	0	0	605	0	226	0	0	226	0	6	0	4	6	105	1	103	0	209	1046
5:00 PM	159	1	0	0	160	0	58	0	0	58	1	0	0	0	1	19	0	28	0	47	266
5:15 PM	148	5	0	0	153	0	48	0	1	48	0	2	0	0	2	20	0	29	0	49	252
5:30 PM	138	3	0	0	141	0	59	0	0	59	0	1	0	0	1	27	1	22	0	50	251
5:45 PM	140	3	0	0	143	0	48	0	0	48	0	0	0	0	0	18	1	21	0	40	231
Hourly Total	585	12	0	0	597	0	213	0	1	213	1	3	0	0	4	84	2	100	0	186	1000
6:00 PM	140	1	0	0	141	0	54	0	0	54	1	1	0	0	2	27	1	33	0	61	258
6:15 PM	117	1	0	0	118	0	63	0	0	63	0	5	0	0	5	37	1	24	0	62	248
6:30 PM	90	1	0	0	91	0	62	0	1	62	0	1	0	2	1	30	2	20	0	52	206
6:45 PM	82	1	0	2	83	0	32	0	0	32	0	1	0	0	1	31	0	22	0	53	169
Hourly Total	429	4	0	2	433	0	211	0	1	211	1	8	0	2	9	125	4	99	0	228	881
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	2652	38	0	3	2690	0	1161	0	4	1161	7	25	0	9	32	577	11	524	0	1112	4995
Approach %	98.6	1.4	0.0	-	-	0.0	100.0	0.0	-	-	21.9	78.1	0.0	-	-	51.9	1.0	47.1	-	-	-
Total %	53.1	0.8	0.0	-	53.9	0.0	23.2	0.0	-	23.2	0.1	0.5	0.0	-	0.6	11.6	0.2	10.5	-	22.3	-
Lights	2553	38	0	-	2591	0	1124	0	-	1124	7	24	0	-	31	548	10	505	-	1063	4809
% Lights	96.3	100.0	-	-	96.3	-	96.8	-	-	96.8	100.0	96.0	-	-	96.9	95.0	90.9	96.4	-	95.6	96.3
Buses	17	0	0	-	17	0	2	0	-	2	0	0	0	-	0	0	0	11	-	11	30
% Buses	0.6	0.0	-	-	0.6	-	0.2	-	-	0.2	0.0	0.0	-	-	0.0	0.0	0.0	2.1	-	1.0	0.6
Trucks	82	0	0	-	82	0	35	0	-	35	0	1	0	-	1	29	1	8	-	38	156
% Trucks	3.1	0.0	-	-	3.0	-	3.0	-	-	3.0	0.0	4.0	-	-	3.1	5.0	9.1	1.5	-	3.4	3.1
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	1	-	-	-	-	1	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	25.0	-	-	-	-	11.1	-	-	-	-	-	-	-
Pedestrians	-	-	-	3	-	-	-	-	3	-	-	-	-	8	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	75.0	-	-	-	-	88.9	-	-	-	-	-	-	-



Turning Movement Data Plot



Lawrenceville, NJ  
 Route 1 SB Jughandle &  
 Franklin Corner Rd  
 Tuesday, June 6, 2023  
 Location: 40.275292, -  
 74.706823

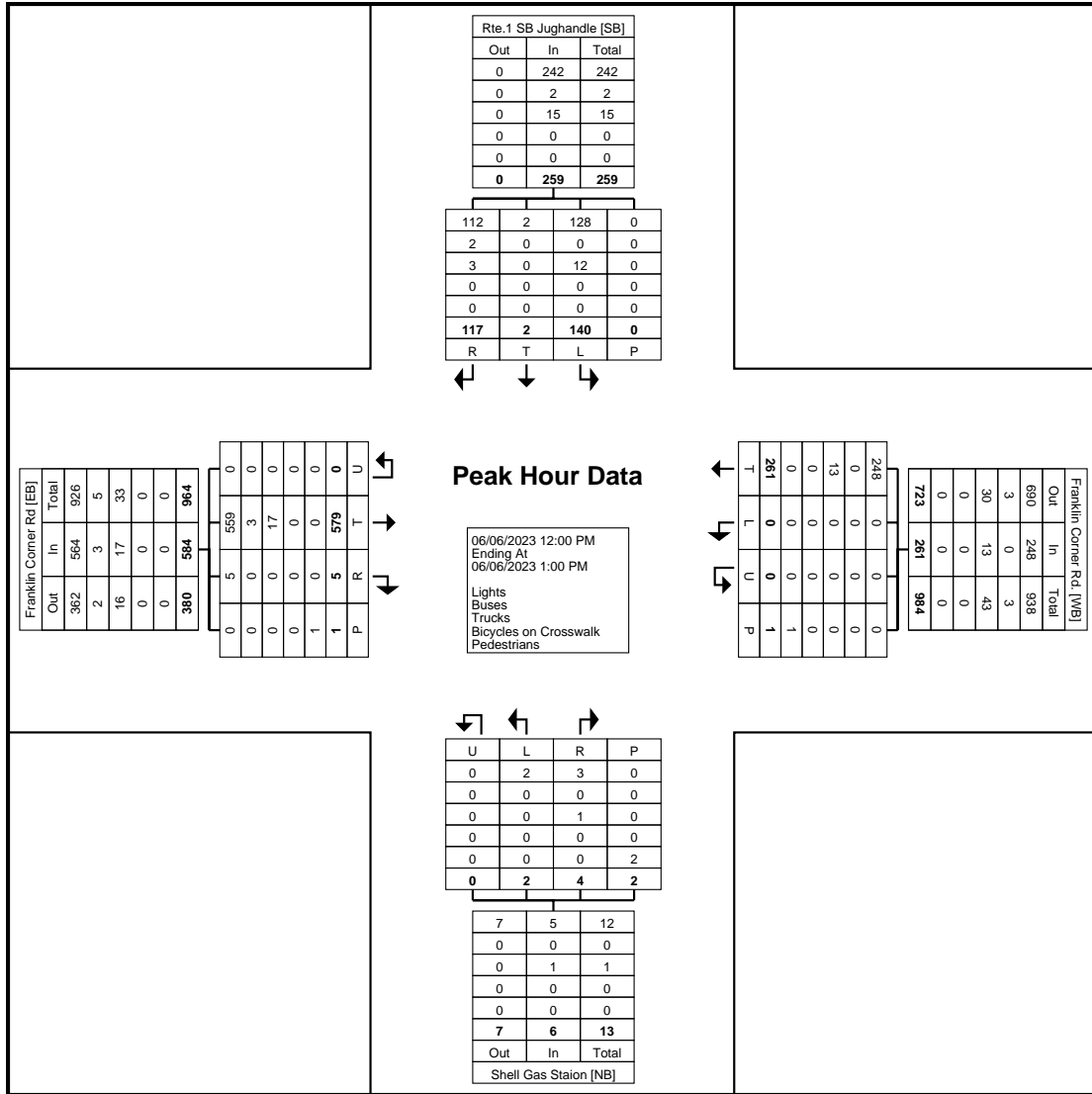
www.TSTData.com  
 184 Baker Rd

Coatesville, Pennsylvania, United States 19320  
 610-466-1469  
 Serving Transportation Professionals Since 1995

Count Name: Rte.1 SB  
 Jughandle & Franklin Corner Rd.  
 (6/6)  
 Site Code:  
 Start Date: 06/06/2023  
 Page No: 3

### Turning Movement Peak Hour Data (12:00 PM)

Start Time	Franklin Corner Rd Eastbound					Franklin Corner Rd. Westbound					Shell Gas Staion Northbound					Rte.1 SB Jughandle Southbound					Int. Total
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
12:00 PM	150	0	0	0	150	0	57	0	0	57	0	1	0	1	1	36	1	25	0	62	270
12:15 PM	156	1	0	0	157	0	61	0	1	61	0	1	0	0	1	40	0	28	0	68	287
12:30 PM	129	1	0	0	130	0	61	0	0	61	1	0	0	0	1	32	0	30	0	62	254
12:45 PM	144	3	0	1	147	0	82	0	0	82	1	2	0	1	3	32	1	34	0	67	299
<b>Total</b>	<b>579</b>	<b>5</b>	<b>0</b>	<b>1</b>	<b>584</b>	<b>0</b>	<b>261</b>	<b>0</b>	<b>1</b>	<b>261</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>140</b>	<b>2</b>	<b>117</b>	<b>0</b>	<b>259</b>	<b>1110</b>
Approach %	99.1	0.9	0.0	-	-	0.0	100.0	0.0	-	-	33.3	66.7	0.0	-	-	54.1	0.8	45.2	-	-	-
Total %	52.2	0.5	0.0	-	52.6	0.0	23.5	0.0	-	23.5	0.2	0.4	0.0	-	0.5	12.6	0.2	10.5	-	23.3	-
PHF	0.928	0.417	0.000	-	0.930	0.000	0.796	0.000	-	0.796	0.500	0.500	0.000	-	0.500	0.875	0.500	0.860	-	0.952	0.928
Lights	559	5	0	-	564	0	248	0	-	248	2	3	0	-	5	128	2	112	-	242	1059
% Lights	96.5	100.0	-	-	96.6	-	95.0	-	-	95.0	100.0	75.0	-	-	83.3	91.4	100.0	95.7	-	93.4	95.4
Buses	3	0	0	-	3	0	0	0	-	0	0	0	0	-	0	0	0	2	-	2	5
% Buses	0.5	0.0	-	-	0.5	-	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	1.7	-	0.8	0.5
Trucks	17	0	0	-	17	0	13	0	-	13	0	1	0	-	1	12	0	3	-	15	46
% Trucks	2.9	0.0	-	-	2.9	-	5.0	-	-	5.0	0.0	25.0	-	-	16.7	8.6	0.0	2.6	-	5.8	4.1
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	0.0	-	-	-	-	0.0	-	-	-	-	-	-	-
Pedestrians	-	-	-	1	-	-	-	-	1	-	-	-	-	2	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	-	-	-



Turning Movement Peak Hour Data Plot (12:00 PM)



Lawrenceville, NJ  
 Route 1 SB Jughandle &  
 Franklin Corner Rd  
 Tuesday, June 6, 2023  
 Location: 40.275292, -  
 74.706823

www.TSTData.com  
 184 Baker Rd

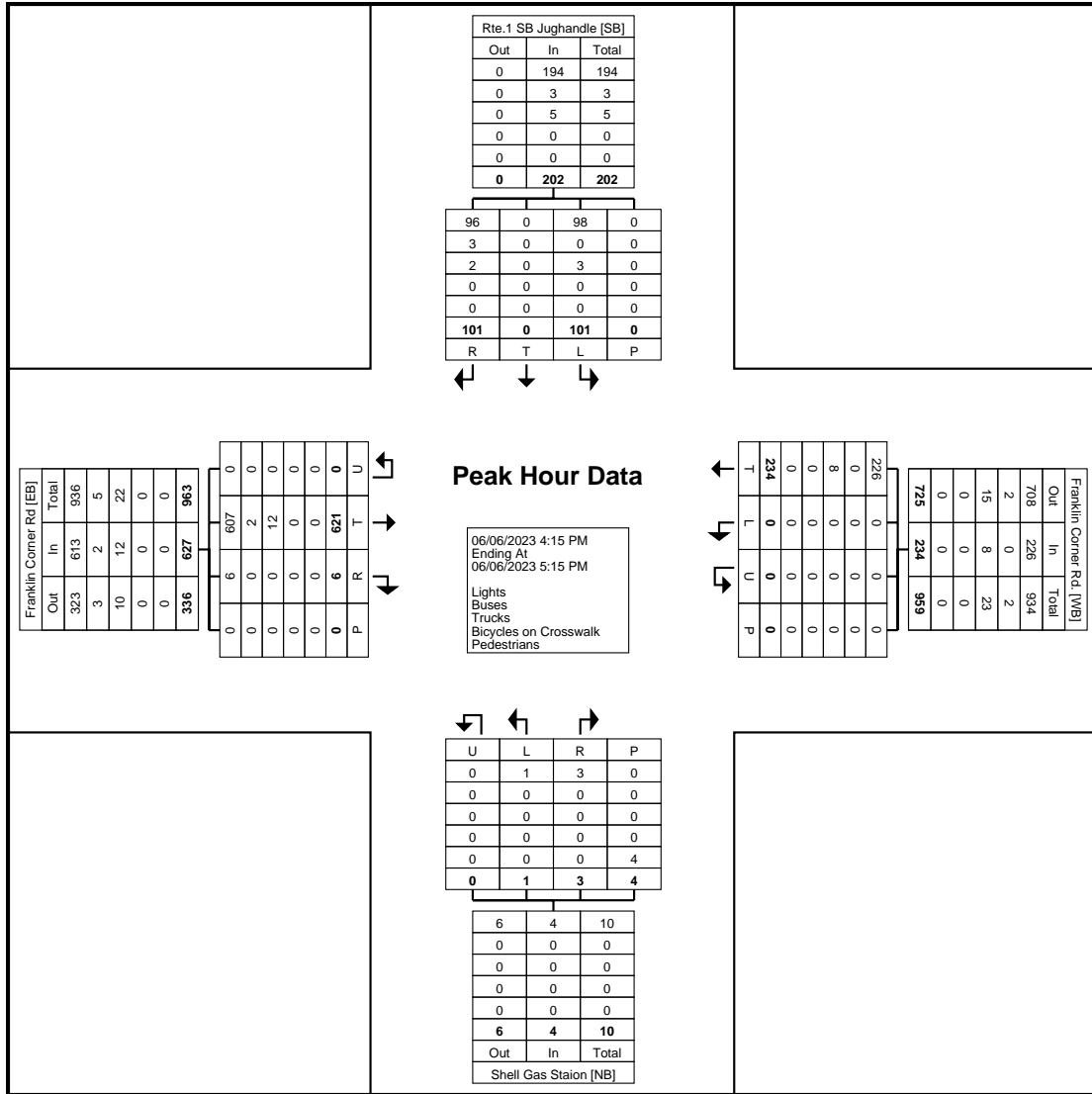
Coatesville, Pennsylvania, United States 19320  
 610-466-1469  
 Serving Transportation Professionals Since 1995

Count Name: Rte.1 SB  
 Jughandle & Franklin Corner Rd.  
 (6/6)  
 Site Code:  
 Start Date: 06/06/2023  
 Page No: 5

### Turning Movement Peak Hour Data (4:15 PM)

Start Time	Franklin Corner Rd Eastbound					Franklin Corner Rd. Westbound					Shell Gas Staion Northbound					Rte.1 SB Jughandle Southbound					Int. Total
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
4:15 PM	163	1	0	0	164	0	58	0	0	58	0	1	0	1	1	23	0	31	0	54	277
4:30 PM	168	0	0	0	168	0	62	0	0	62	0	0	0	2	0	23	0	21	0	44	274
4:45 PM	131	4	0	0	135	0	56	0	0	56	0	2	0	1	2	36	0	21	0	57	250
5:00 PM	159	1	0	0	160	0	58	0	0	58	1	0	0	0	1	19	0	28	0	47	266
<b>Total</b>	<b>621</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>627</b>	<b>0</b>	<b>234</b>	<b>0</b>	<b>0</b>	<b>234</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>101</b>	<b>0</b>	<b>101</b>	<b>0</b>	<b>202</b>	<b>1067</b>
Approach %	99.0	1.0	0.0	-	-	0.0	100.0	0.0	-	-	25.0	75.0	0.0	-	-	50.0	0.0	50.0	-	-	-
Total %	58.2	0.6	0.0	-	58.8	0.0	21.9	0.0	-	21.9	0.1	0.3	0.0	-	0.4	9.5	0.0	9.5	-	18.9	-
PHF	0.924	0.375	0.000	-	0.933	0.000	0.944	0.000	-	0.944	0.250	0.375	0.000	-	0.500	0.701	0.000	0.815	-	0.886	0.963
Lights	607	6	0	-	613	0	226	0	-	226	1	3	0	-	4	98	0	96	-	194	1037
% Lights	97.7	100.0	-	-	97.8	-	96.6	-	-	96.6	100.0	100.0	-	-	100.0	97.0	-	95.0	-	96.0	97.2
Buses	2	0	0	-	2	0	0	0	-	0	0	0	0	-	0	0	0	3	-	3	5
% Buses	0.3	0.0	-	-	0.3	-	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0	-	3.0	-	1.5	0.5
Trucks	12	0	0	-	12	0	8	0	-	8	0	0	0	-	0	3	0	2	-	5	25
% Trucks	1.9	0.0	-	-	1.9	-	3.4	-	-	3.4	0.0	0.0	-	-	0.0	3.0	-	2.0	-	2.5	2.3
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	4	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-





Turning Movement Peak Hour Data Plot (4:15 PM)



Lawrenceville, NJ  
 Route 1 SB Jughandle &  
 Franklin Corner Rd  
 Saturday, June 3, 2023  
 Location: 40.275292, -  
 74.706823

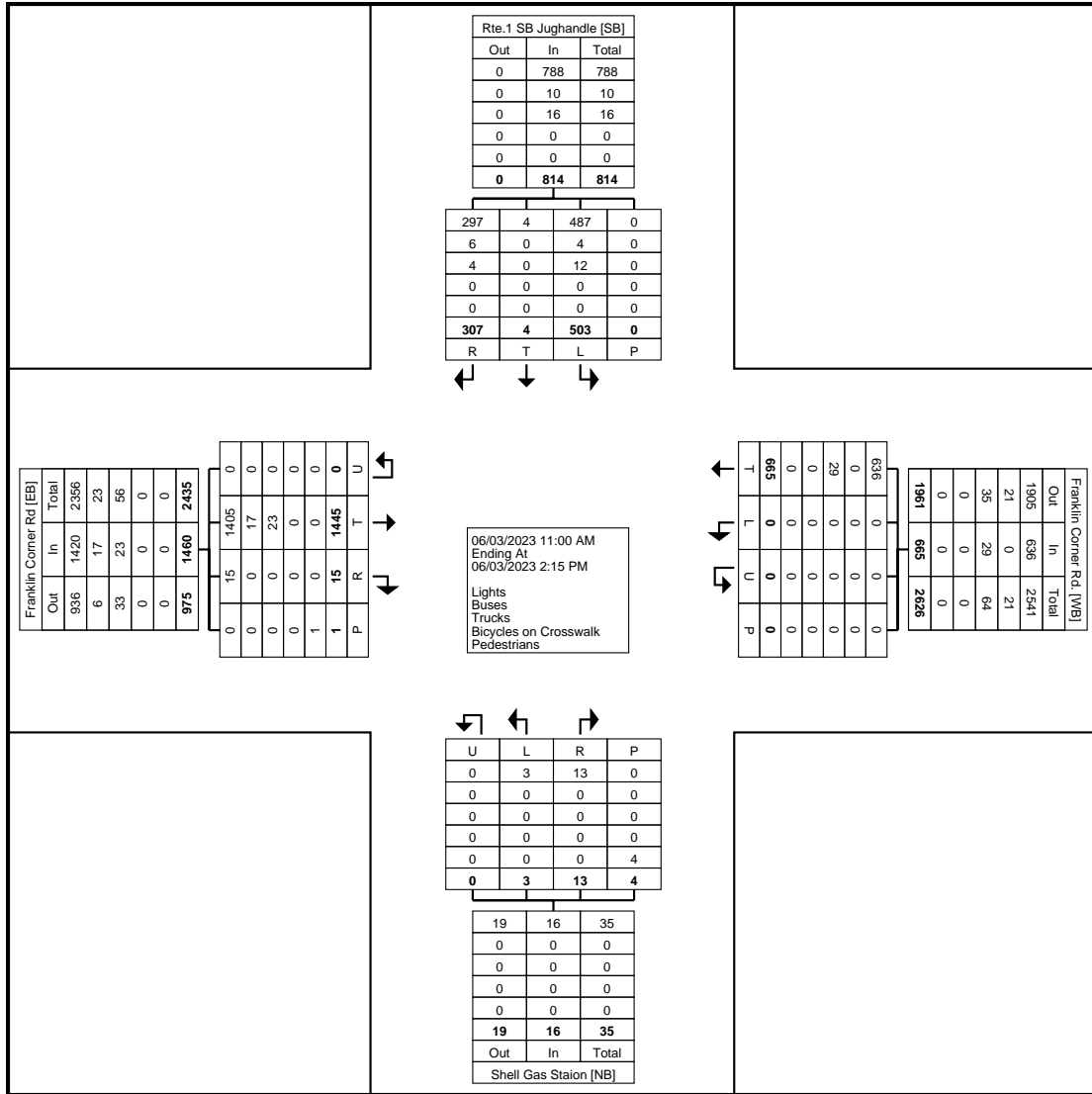
www.TSTData.com  
 184 Baker Rd

Coatesville, Pennsylvania, United States 19320  
 610-466-1469  
 Serving Transportation Professionals Since 1995

Count Name: Rte.1 SB  
 Jughandle & Franklin Corner Rd.  
 (6/3)  
 Site Code:  
 Start Date: 06/03/2023  
 Page No: 1

### Turning Movement Data

Start Time	Franklin Corner Rd Eastbound					Franklin Corner Rd. Westbound					Shell Gas Staion Northbound					Rte.1 SB Jughandle Southbound					Int. Total
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
11:00 AM	125	0	0	0	125	0	60	0	0	60	0	0	0	0	0	36	0	28	0	64	249
11:15 AM	107	2	0	1	109	0	56	0	0	56	0	0	0	0	0	38	0	27	0	65	230
11:30 AM	120	6	0	0	126	0	58	0	0	58	0	1	0	1	1	51	0	24	0	75	260
11:45 AM	125	0	0	0	125	0	51	0	0	51	0	1	0	1	1	46	0	30	0	76	253
Hourly Total	477	8	0	1	485	0	225	0	0	225	0	2	0	2	2	171	0	109	0	280	992
12:00 PM	119	1	0	0	120	0	67	0	0	67	0	1	0	0	1	43	1	21	0	65	253
12:15 PM	130	0	0	0	130	0	40	0	0	40	0	2	0	0	2	42	0	30	0	72	244
12:30 PM	108	2	0	0	110	0	56	0	0	56	0	1	0	0	1	46	0	24	0	70	237
12:45 PM	134	2	0	0	136	0	57	0	0	57	1	1	0	0	2	33	0	23	0	56	251
Hourly Total	491	5	0	0	496	0	220	0	0	220	1	5	0	0	6	164	1	98	0	263	985
1:00 PM	128	0	0	0	128	0	63	0	0	63	0	0	0	0	0	45	0	29	0	74	265
1:15 PM	123	1	0	0	124	0	57	0	0	57	0	3	0	0	3	35	2	22	0	59	243
1:30 PM	116	0	0	0	116	0	50	0	0	50	1	1	0	1	2	34	1	27	0	62	230
1:45 PM	110	1	0	0	111	0	50	0	0	50	1	2	0	1	3	54	0	21	0	75	239
Hourly Total	477	2	0	0	479	0	220	0	0	220	2	6	0	2	8	168	3	99	0	270	977
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Grand Total	1445	15	0	1	1460	0	665	0	0	665	3	13	0	4	16	503	4	307	0	814	2955
Approach %	99.0	1.0	0.0	-	-	0.0	100.0	0.0	-	-	18.8	81.3	0.0	-	-	61.8	0.5	37.7	-	-	-
Total %	48.9	0.5	0.0	-	49.4	0.0	22.5	0.0	-	22.5	0.1	0.4	0.0	-	0.5	17.0	0.1	10.4	-	27.5	-
Lights	1405	15	0	-	1420	0	636	0	-	636	3	13	0	-	16	487	4	297	-	788	2860
% Lights	97.2	100.0	-	-	97.3	-	95.6	-	-	95.6	100.0	100.0	-	-	100.0	96.8	100.0	96.7	-	96.8	96.8
Buses	17	0	0	-	17	0	0	0	-	0	0	0	0	-	0	4	0	6	-	10	27
% Buses	1.2	0.0	-	-	1.2	-	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.8	0.0	2.0	-	1.2	0.9
Trucks	23	0	0	-	23	0	29	0	-	29	0	0	0	-	0	12	0	4	-	16	68
% Trucks	1.6	0.0	-	-	1.6	-	4.4	-	-	4.4	0.0	0.0	-	-	0.0	2.4	0.0	1.3	-	2.0	2.3
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-
Pedestrians	-	-	-	1	-	-	-	-	0	-	-	-	-	4	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-



Turning Movement Data Plot



Lawrenceville, NJ  
 Route 1 SB Jughandle &  
 Franklin Corner Rd  
 Saturday, June 3, 2023  
 Location: 40.275292, -  
 74.706823

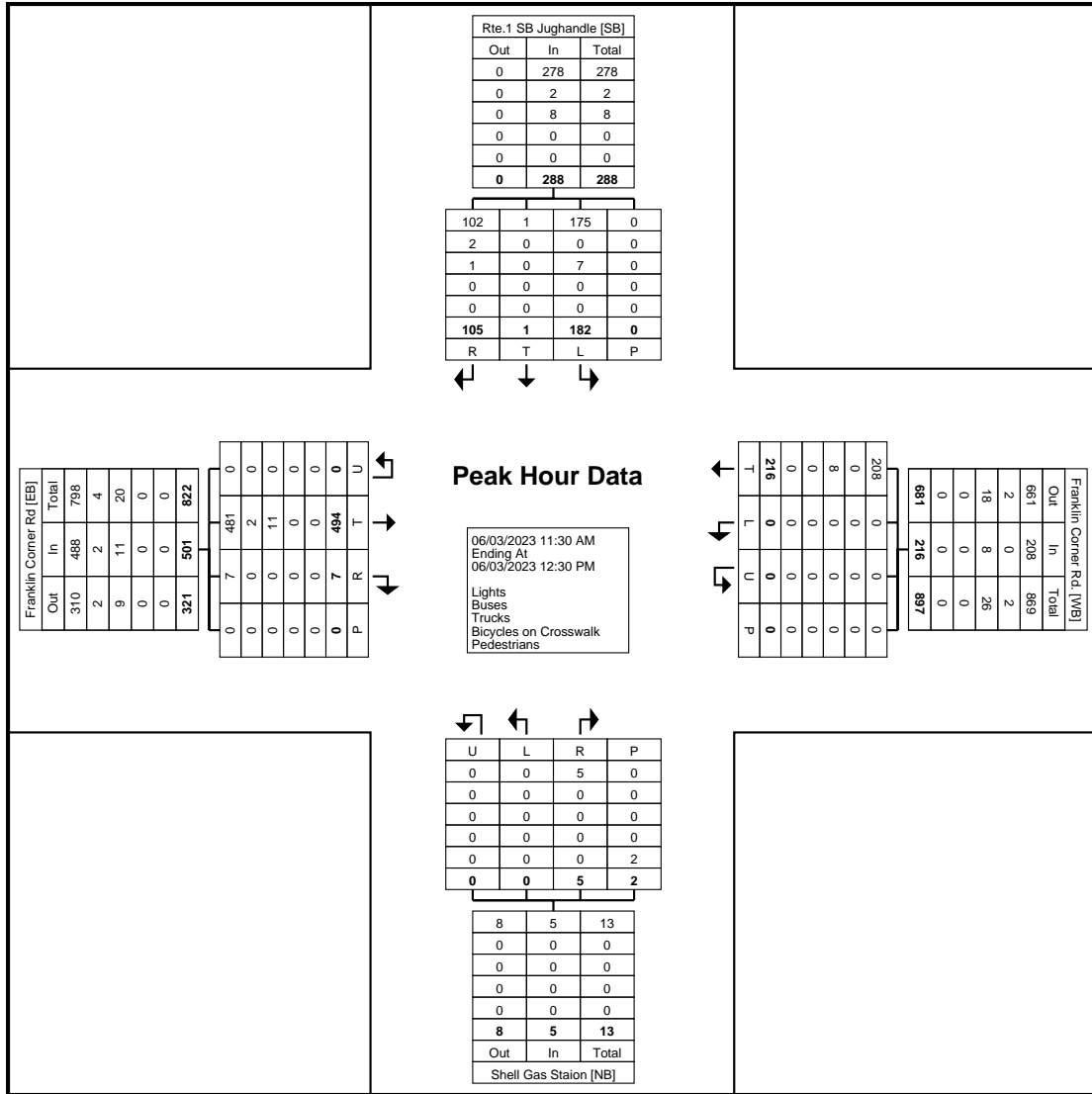
www.TSTData.com  
 184 Baker Rd

Coatesville, Pennsylvania, United States 19320  
 610-466-1469  
 Serving Transportation Professionals Since 1995

Count Name: Rte.1 SB  
 Jughandle & Franklin Corner Rd.  
 (6/3)  
 Site Code:  
 Start Date: 06/03/2023  
 Page No: 3

### Turning Movement Peak Hour Data (11:30 AM)

Start Time	Franklin Corner Rd Eastbound					Franklin Corner Rd. Westbound					Shell Gas Staion Northbound					Rte.1 SB Jughandle Southbound					Int. Total
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
11:30 AM	120	6	0	0	126	0	58	0	0	58	0	1	0	1	1	51	0	24	0	75	260
11:45 AM	125	0	0	0	125	0	51	0	0	51	0	1	0	1	1	46	0	30	0	76	253
12:00 PM	119	1	0	0	120	0	67	0	0	67	0	1	0	0	1	43	1	21	0	65	253
12:15 PM	130	0	0	0	130	0	40	0	0	40	0	2	0	0	2	42	0	30	0	72	244
<b>Total</b>	<b>494</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>501</b>	<b>0</b>	<b>216</b>	<b>0</b>	<b>0</b>	<b>216</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>2</b>	<b>5</b>	<b>182</b>	<b>1</b>	<b>105</b>	<b>0</b>	<b>288</b>	<b>1010</b>
Approach %	98.6	1.4	0.0	-	-	0.0	100.0	0.0	-	-	0.0	100.0	0.0	-	-	63.2	0.3	36.5	-	-	-
Total %	48.9	0.7	0.0	-	49.6	0.0	21.4	0.0	-	21.4	0.0	0.5	0.0	-	0.5	18.0	0.1	10.4	-	28.5	-
PHF	0.950	0.292	0.000	-	0.963	0.000	0.806	0.000	-	0.806	0.000	0.625	0.000	-	0.625	0.892	0.250	0.875	-	0.947	0.971
Lights	481	7	0	-	488	0	208	0	-	208	0	5	0	-	5	175	1	102	-	278	979
% Lights	97.4	100.0	-	-	97.4	-	96.3	-	-	96.3	-	100.0	-	-	100.0	96.2	100.0	97.1	-	96.5	96.9
Buses	2	0	0	-	2	0	0	0	-	0	0	0	0	-	0	0	0	2	-	2	4
% Buses	0.4	0.0	-	-	0.4	-	0.0	-	-	0.0	-	0.0	-	-	0.0	0.0	0.0	1.9	-	0.7	0.4
Trucks	11	0	0	-	11	0	8	0	-	8	0	0	0	-	0	7	0	1	-	8	27
% Trucks	2.2	0.0	-	-	2.2	-	3.7	-	-	3.7	-	0.0	-	-	0.0	3.8	0.0	1.0	-	2.8	2.7
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	2	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-



Turning Movement Peak Hour Data Plot (11:30 AM)



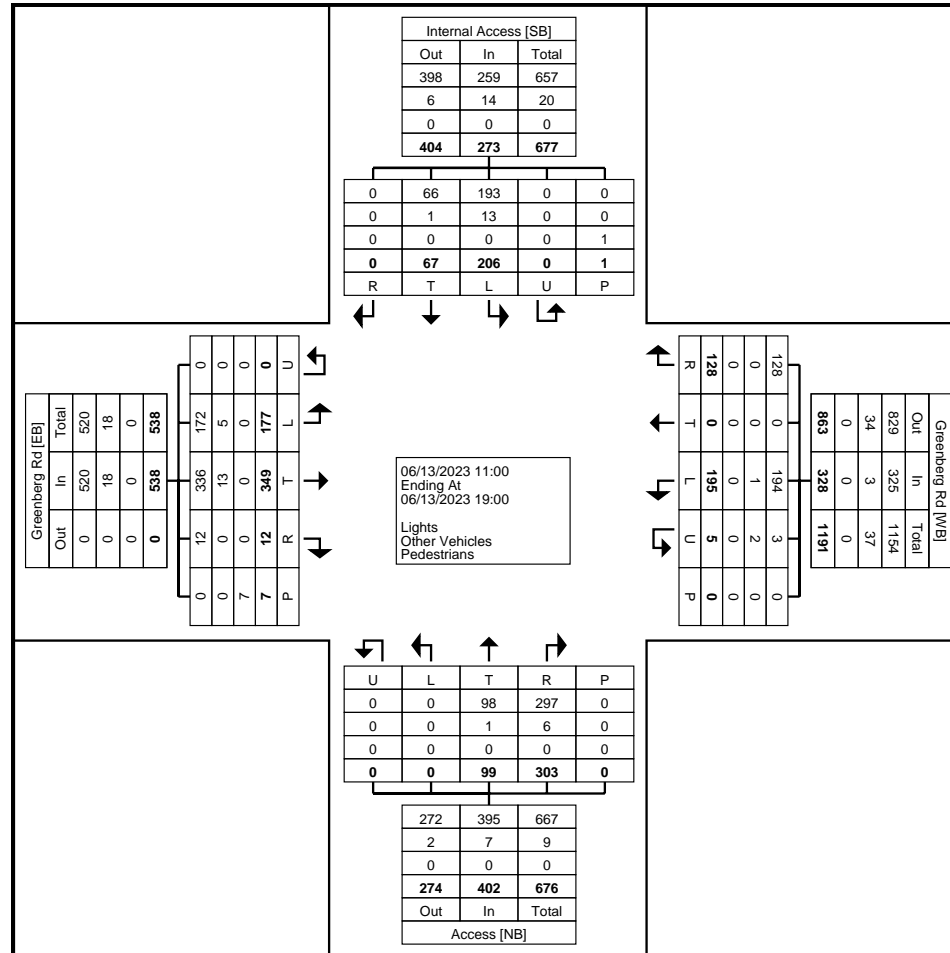
McMahon a Bowman Company  
425 Commerce Drive, Suite 200

Fort Washington, Pennsylvania, United States 19034  
215-283-9444

Count Name: 010014-01-001 CFA Lawrenceville  
- Internal Int at McDs  
Site Code:  
Start Date: 06/13/2023  
Page No: 1

### Turning Movement Data

Start Time	Internal Access Southbound						Greenberg Rd Westbound						Access Northbound						Greenberg Rd Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
11:00	8	0	0	0	0	8	10	0	5	0	0	15	0	6	14	0	0	20	10	12	1	0	0	23	66
11:15	11	2	0	0	0	13	16	0	3	0	0	19	0	6	18	0	0	24	11	25	1	0	0	37	93
11:30	13	3	0	0	0	16	13	0	3	0	0	16	0	5	17	0	0	22	10	19	0	0	0	29	83
11:45	18	6	0	0	1	24	11	0	8	1	0	20	0	5	16	0	0	21	18	24	1	0	3	43	108
Hourly Total	50	11	0	0	1	61	50	0	19	1	0	70	0	22	65	0	0	87	49	80	3	0	3	132	350
12:00	12	1	0	0	0	13	12	0	14	2	0	28	0	1	23	0	0	24	12	16	2	0	0	30	95
12:15	19	6	0	0	0	25	12	0	12	1	0	25	0	15	19	0	0	34	13	20	0	0	0	33	117
12:30	18	17	0	0	0	35	17	0	13	0	0	30	0	12	10	0	0	22	18	20	2	0	2	40	127
12:45	19	11	0	0	0	30	4	0	12	0	0	16	0	8	12	0	0	20	11	23	1	0	0	35	101
Hourly Total	68	35	0	0	0	103	45	0	51	3	0	99	0	36	64	0	0	100	54	79	5	0	2	138	440
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16:00	5	2	0	0	0	7	11	0	3	0	0	14	0	5	15	0	0	20	6	17	0	0	0	23	64
16:15	6	2	0	0	0	8	13	0	3	0	0	16	0	2	18	0	0	20	3	11	0	0	0	14	58
16:30	7	1	0	0	0	8	2	0	5	0	0	7	0	8	17	0	0	25	11	23	0	0	0	34	74
16:45	6	3	0	0	0	9	7	0	11	0	0	18	0	2	18	0	0	20	7	23	0	0	0	30	77
Hourly Total	24	8	0	0	0	32	33	0	22	0	0	55	0	17	68	0	0	85	27	74	0	0	0	101	273
17:00	17	4	0	0	0	21	10	0	7	0	0	17	0	5	19	0	0	24	10	15	1	0	2	26	88
17:15	13	4	0	0	0	17	7	0	4	0	0	11	0	5	12	0	0	17	8	17	0	0	0	25	70
17:30	9	1	0	0	0	10	10	0	2	0	0	12	0	1	12	0	0	13	5	12	1	0	0	18	53
17:45	5	2	0	0	0	7	10	0	4	1	0	15	0	4	14	0	0	18	6	10	2	0	0	18	58
Hourly Total	44	11	0	0	0	55	37	0	17	1	0	55	0	15	57	0	0	72	29	54	4	0	2	87	269
18:00	4	0	0	0	0	4	11	0	5	0	0	16	0	0	16	0	0	16	7	22	0	0	0	29	65
18:15	4	1	0	0	0	5	5	0	3	0	0	8	0	3	12	0	0	15	1	16	0	0	0	17	45
18:30	1	0	0	0	0	1	6	0	7	0	0	13	0	3	10	0	0	13	4	14	0	0	0	18	45
18:45	11	1	0	0	0	12	8	0	4	0	0	12	0	3	11	0	0	14	6	10	0	0	0	16	54
Hourly Total	20	2	0	0	0	22	30	0	19	0	0	49	0	9	49	0	0	58	18	62	0	0	0	80	209
Grand Total	206	67	0	0	1	273	195	0	128	5	0	328	0	99	303	0	0	402	177	349	12	0	7	538	1541
Approach %	75.5	24.5	0.0	0.0	-	-	59.5	0.0	39.0	1.5	-	-	0.0	24.6	75.4	0.0	-	-	32.9	64.9	2.2	0.0	-	-	-
Total %	13.4	4.3	0.0	0.0	-	17.7	12.7	0.0	8.3	0.3	-	21.3	0.0	6.4	19.7	0.0	-	26.1	11.5	22.6	0.8	0.0	-	34.9	-
Lights	193	66	0	0	-	259	194	0	128	3	-	325	0	98	297	0	-	395	172	336	12	0	-	520	1499
% Lights	93.7	98.5	-	-	-	94.9	99.5	-	100.0	60.0	-	99.1	-	99.0	98.0	-	-	98.3	97.2	96.3	100.0	-	-	96.7	97.3
Other Vehicles	13	1	0	0	-	14	1	0	0	2	-	3	0	1	6	0	-	7	5	13	0	0	-	18	42
% Other Vehicles	6.3	1.5	-	-	-	5.1	0.5	-	0.0	40.0	-	0.9	-	1.0	2.0	-	-	1.7	2.8	3.7	0.0	-	-	3.3	2.7
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	7	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-



Turning Movement Data Plot



McMahon a Bowman Company  
425 Commerce Drive, Suite 200

Fort Washington, Pennsylvania, United States 19034  
215-283-9444

Count Name: 010014-01-001 CFA Lawrenceville  
- Internal Int at McDs  
Site Code:  
Start Date: 06/13/2023  
Page No: 3

### Turning Movement Peak Hour Data (11:45)

Start Time	Internal Access Southbound						Greenberg Rd Westbound						Access Northbound						Greenberg Rd Eastbound						Int. Total	
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total		
11:45	18	6	0	0	1	24	11	0	8	1	0	20	0	5	16	0	0	21	18	24	1	0	3	43	108	
12:00	12	1	0	0	0	13	12	0	14	2	0	28	0	1	23	0	0	24	12	16	2	0	0	30	95	
12:15	19	6	0	0	0	25	12	0	12	1	0	25	0	15	19	0	0	34	13	20	0	0	0	33	117	
12:30	18	17	0	0	0	35	17	0	13	0	0	30	0	12	10	0	0	22	18	20	2	0	2	40	127	
Total	67	30	0	0	1	97	52	0	47	4	0	103	0	33	68	0	0	101	61	80	5	0	5	146	447	
Approach %	69.1	30.9	0.0	0.0	-	-	50.5	0.0	45.6	3.9	-	-	0.0	32.7	67.3	0.0	-	-	41.8	54.8	3.4	0.0	-	-	-	
Total %	15.0	6.7	0.0	0.0	-	21.7	11.6	0.0	10.5	0.9	-	23.0	0.0	7.4	15.2	0.0	-	22.6	13.6	17.9	1.1	0.0	-	32.7	-	
PHF	0.882	0.441	0.000	0.000	-	0.693	0.765	0.000	0.839	0.500	-	0.858	0.000	0.550	0.739	0.000	-	0.743	0.847	0.833	0.625	0.000	-	0.849	0.880	
Lights	62	29	0	0	-	91	52	0	47	2	-	101	0	32	67	0	-	99	58	74	5	0	-	137	428	
% Lights	92.5	96.7	-	-	-	93.8	100.0	-	100.0	50.0	-	98.1	-	97.0	98.5	-	-	98.0	95.1	92.5	100.0	-	-	-	93.8	95.7
Other Vehicles	5	1	0	0	-	6	0	0	0	2	-	2	0	1	1	0	-	2	3	6	0	0	-	9	19	
% Other Vehicles	7.5	3.3	-	-	-	6.2	0.0	-	0.0	50.0	-	1.9	-	3.0	1.5	-	-	2.0	4.9	7.5	0.0	-	-	6.2	4.3	
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	5	-	-	
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	







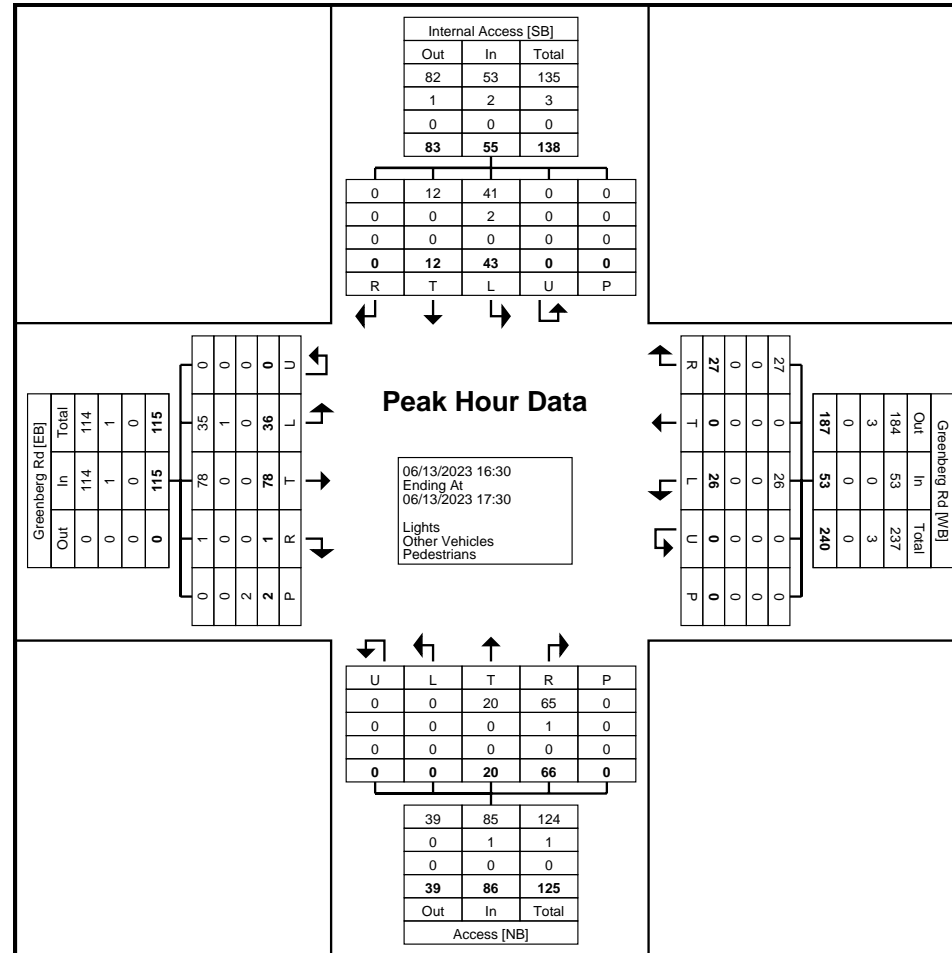
McMahon a Bowman Company  
425 Commerce Drive, Suite 200

Fort Washington, Pennsylvania, United States 19034  
215-283-9444

Count Name: 010014-01-001 CFA Lawrenceville  
- Internal Int at McDs  
Site Code:  
Start Date: 06/13/2023  
Page No: 5

### Turning Movement Peak Hour Data (16:30)

Start Time	Internal Access Southbound						Greenberg Rd Westbound						Access Northbound						Greenberg Rd Eastbound						Int. Total	
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total		
16:30	7	1	0	0	0	8	2	0	5	0	0	7	0	8	17	0	0	25	11	23	0	0	0	34	74	
16:45	6	3	0	0	0	9	7	0	11	0	0	18	0	2	18	0	0	20	7	23	0	0	0	30	77	
17:00	17	4	0	0	0	21	10	0	7	0	0	17	0	5	19	0	0	24	10	15	1	0	2	26	88	
17:15	13	4	0	0	0	17	7	0	4	0	0	11	0	5	12	0	0	17	8	17	0	0	0	25	70	
Total	43	12	0	0	0	55	26	0	27	0	0	53	0	20	66	0	0	86	36	78	1	0	2	115	309	
Approach %	78.2	21.8	0.0	0.0	-	-	49.1	0.0	50.9	0.0	-	-	0.0	23.3	76.7	0.0	-	-	31.3	67.8	0.9	0.0	-	-	-	
Total %	13.9	3.9	0.0	0.0	-	17.8	8.4	0.0	8.7	0.0	-	17.2	0.0	6.5	21.4	0.0	-	27.8	11.7	25.2	0.3	0.0	-	37.2	-	
PHF	0.632	0.750	0.000	0.000	-	0.655	0.650	0.000	0.614	0.000	-	0.736	0.000	0.625	0.868	0.000	-	0.860	0.818	0.848	0.250	0.000	-	0.846	0.878	
Lights	41	12	0	0	-	53	26	0	27	0	-	53	0	20	65	0	-	85	35	78	1	0	-	114	305	
% Lights	95.3	100.0	-	-	-	96.4	100.0	-	100.0	-	-	100.0	-	100.0	98.5	-	-	98.8	97.2	100.0	100.0	-	-	-	99.1	98.7
Other Vehicles	2	0	0	0	-	2	0	0	0	0	-	0	0	0	1	0	-	1	1	0	0	0	-	1	4	
% Other Vehicles	4.7	0.0	-	-	-	3.6	0.0	-	0.0	-	-	0.0	-	0.0	1.5	-	-	1.2	2.8	0.0	0.0	-	-	-	0.9	1.3
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	



Turning Movement Peak Hour Data Plot (16:30)



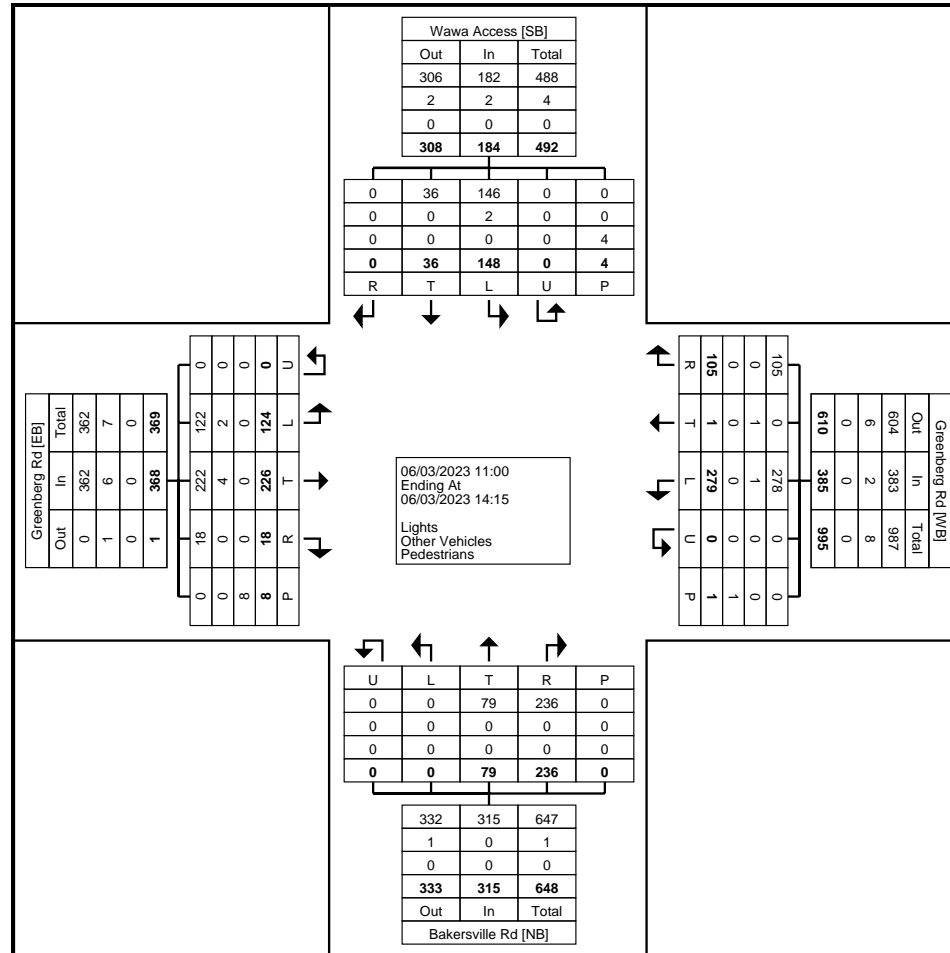
McMahon a Bowman Company  
425 Commerce Drive, Suite 200

Fort Washington, Pennsylvania, United States 19034  
215-283-9444

Count Name: 010014-01-001 Lawrenceville CFA  
- Internal Intersection  
Site Code:  
Start Date: 06/03/2023  
Page No: 1

### Turning Movement Data

Start Time	Wawa Access Southbound						Greenberg Rd Westbound						Bakersville Rd Northbound						Greenberg Rd Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
11:00	8	1	0	0	0	9	29	0	6	0	0	35	0	5	19	0	0	24	6	22	3	0	0	31	99
11:15	7	3	0	0	0	10	26	0	5	0	0	31	0	4	24	0	0	28	9	27	1	0	0	37	106
11:30	8	5	0	0	1	13	20	0	11	0	0	31	0	9	13	0	0	22	10	19	1	0	1	30	96
11:45	9	3	0	0	1	12	22	0	11	0	0	33	0	7	22	0	0	29	8	20	2	0	1	30	104
Hourly Total	32	12	0	0	2	44	97	0	33	0	0	130	0	25	78	0	0	103	33	88	7	0	2	128	405
12:00	14	1	0	0	0	15	28	0	5	0	0	33	0	8	17	0	0	25	6	17	1	0	1	24	97
12:15	16	3	0	0	0	19	26	1	10	0	0	37	0	8	18	0	0	26	9	18	1	0	0	28	110
12:30	15	1	0	0	0	16	30	0	14	0	0	44	0	7	25	0	0	32	11	18	3	0	1	32	124
12:45	15	2	0	0	1	17	19	0	12	0	0	31	0	7	26	0	0	33	9	25	0	0	1	34	115
Hourly Total	60	7	0	0	1	67	103	1	41	0	0	145	0	30	86	0	0	116	35	78	5	0	3	118	446
13:00	13	6	0	0	1	19	18	0	9	0	0	27	0	9	13	0	0	22	14	14	0	0	1	28	96
13:15	20	4	0	0	0	24	14	0	9	0	1	23	0	5	20	0	0	25	16	19	1	0	0	36	108
13:30	12	2	0	0	0	14	28	0	5	0	0	33	0	3	14	0	0	17	11	12	2	0	0	25	89
13:45	11	5	0	0	0	16	19	0	8	0	0	27	0	7	24	0	0	31	15	15	3	0	2	33	107
Hourly Total	56	17	0	0	1	73	79	0	31	0	1	110	0	24	71	0	0	95	56	60	6	0	3	122	400
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
Grand Total	148	36	0	0	4	184	279	1	105	0	1	385	0	79	236	0	0	315	124	226	18	0	8	368	1252
Approach %	80.4	19.6	0.0	0.0	-	-	72.5	0.3	27.3	0.0	-	-	0.0	25.1	74.9	0.0	-	-	33.7	61.4	4.9	0.0	-	-	-
Total %	11.8	2.9	0.0	0.0	-	14.7	22.3	0.1	8.4	0.0	-	30.8	0.0	6.3	18.8	0.0	-	25.2	9.9	18.1	1.4	0.0	-	29.4	-
Lights	146	36	0	0	-	182	278	0	105	0	-	383	0	79	236	0	-	315	122	222	18	0	-	362	1242
% Lights	98.6	100.0	-	-	-	98.9	99.6	0.0	100.0	-	-	99.5	-	100.0	100.0	-	-	100.0	98.4	98.2	100.0	-	-	98.4	99.2
Other Vehicles	2	0	0	0	-	2	1	1	0	0	-	2	0	0	0	0	-	0	2	4	0	0	-	6	10
% Other Vehicles	1.4	0.0	-	-	-	1.1	0.4	100.0	0.0	-	-	0.5	-	0.0	0.0	-	-	0.0	1.6	1.8	0.0	-	-	1.6	0.8
Pedestrians	-	-	-	-	4	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	8	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-



Turning Movement Data Plot



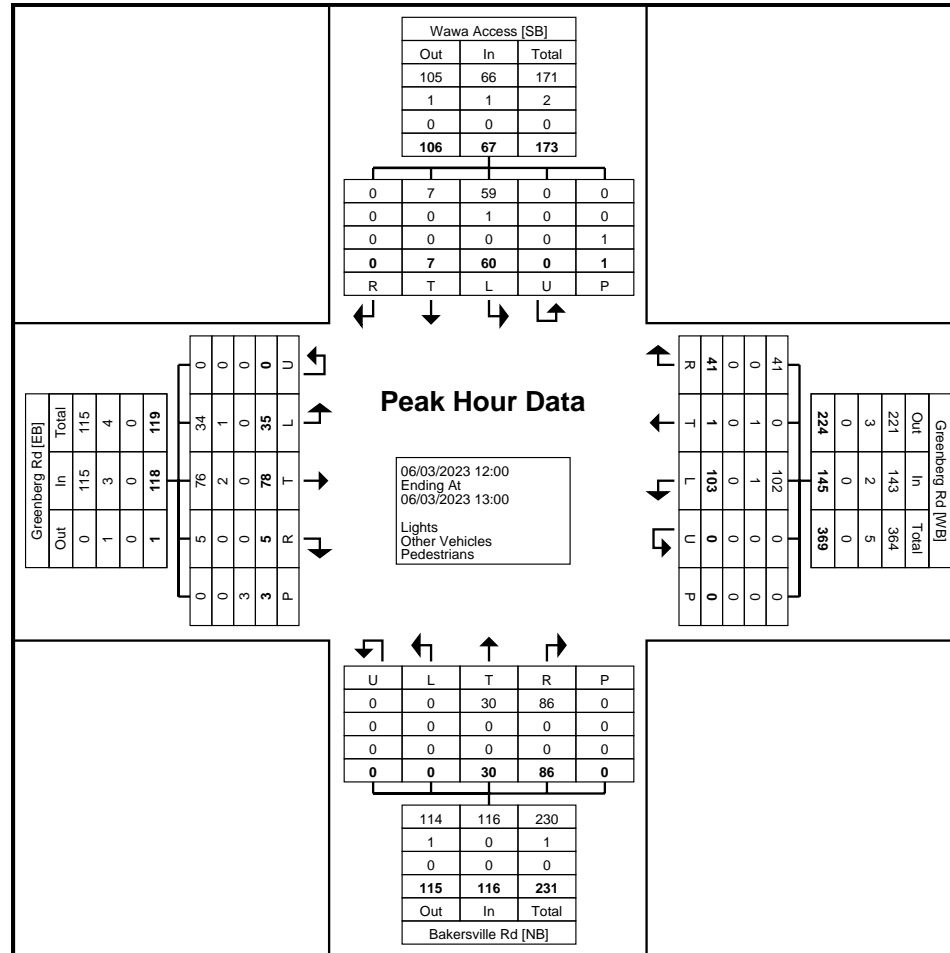
McMahon a Bowman Company  
425 Commerce Drive, Suite 200

Fort Washington, Pennsylvania, United States 19034  
215-283-9444

Count Name: 010014-01-001 Lawrenceville CFA  
- Internal Intersection  
Site Code:  
Start Date: 06/03/2023  
Page No: 3

### Turning Movement Peak Hour Data (12:00)

Start Time	Wawa Access Southbound						Greenberg Rd Westbound						Bakersville Rd Northbound						Greenberg Rd Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
12:00	14	1	0	0	0	15	28	0	5	0	0	33	0	8	17	0	0	25	6	17	1	0	1	24	97
12:15	16	3	0	0	0	19	26	1	10	0	0	37	0	8	18	0	0	26	9	18	1	0	0	28	110
12:30	15	1	0	0	0	16	30	0	14	0	0	44	0	7	25	0	0	32	11	18	3	0	1	32	124
12:45	15	2	0	0	1	17	19	0	12	0	0	31	0	7	26	0	0	33	9	25	0	0	1	34	115
<b>Total</b>	<b>60</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>67</b>	<b>103</b>	<b>1</b>	<b>41</b>	<b>0</b>	<b>0</b>	<b>145</b>	<b>0</b>	<b>30</b>	<b>86</b>	<b>0</b>	<b>0</b>	<b>116</b>	<b>35</b>	<b>78</b>	<b>5</b>	<b>0</b>	<b>3</b>	<b>118</b>	<b>446</b>
Approach %	89.6	10.4	0.0	0.0	-	-	71.0	0.7	28.3	0.0	-	-	0.0	25.9	74.1	0.0	-	-	29.7	66.1	4.2	0.0	-	-	-
Total %	13.5	1.6	0.0	0.0	-	15.0	23.1	0.2	9.2	0.0	-	32.5	0.0	6.7	19.3	0.0	-	26.0	7.8	17.5	1.1	0.0	-	26.5	-
PHF	0.938	0.583	0.000	0.000	-	0.882	0.858	0.250	0.732	0.000	-	0.824	0.000	0.938	0.827	0.000	-	0.879	0.795	0.780	0.417	0.000	-	0.868	0.899
Lights	59	7	0	0	-	66	102	0	41	0	-	143	0	30	86	0	-	116	34	76	5	0	-	115	440
% Lights	98.3	100.0	-	-	-	98.5	99.0	0.0	100.0	-	-	98.6	-	100.0	100.0	-	-	100.0	97.1	97.4	100.0	-	-	97.5	98.7
Other Vehicles	1	0	0	0	-	1	1	1	0	0	-	2	0	0	0	0	-	0	1	2	0	0	-	3	6
% Other Vehicles	1.7	0.0	-	-	-	1.5	1.0	100.0	0.0	-	-	1.4	-	0.0	0.0	-	-	0.0	2.9	2.6	0.0	-	-	2.5	1.3
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	3	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

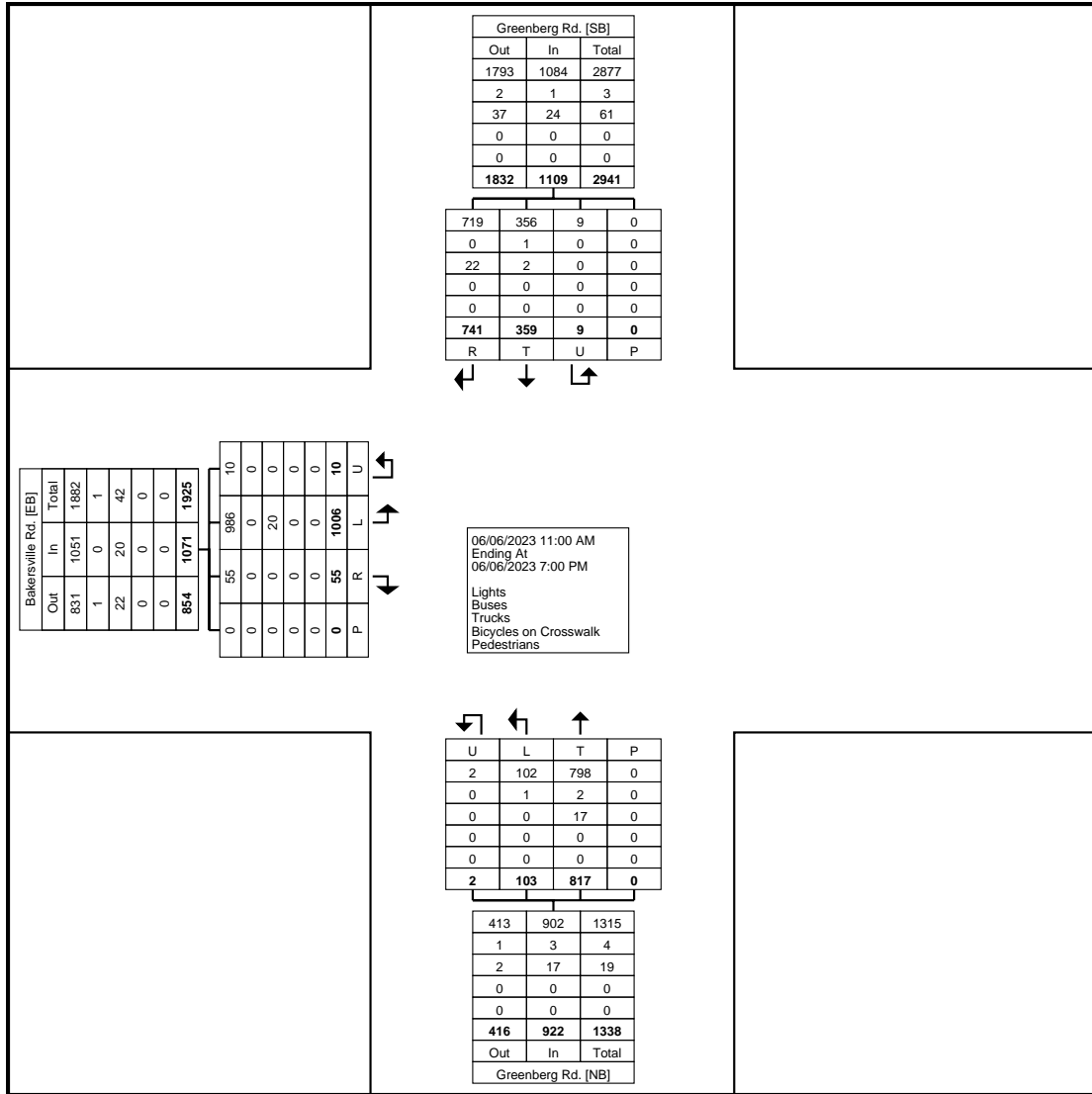


Turning Movement Peak Hour Data Plot (12:00)



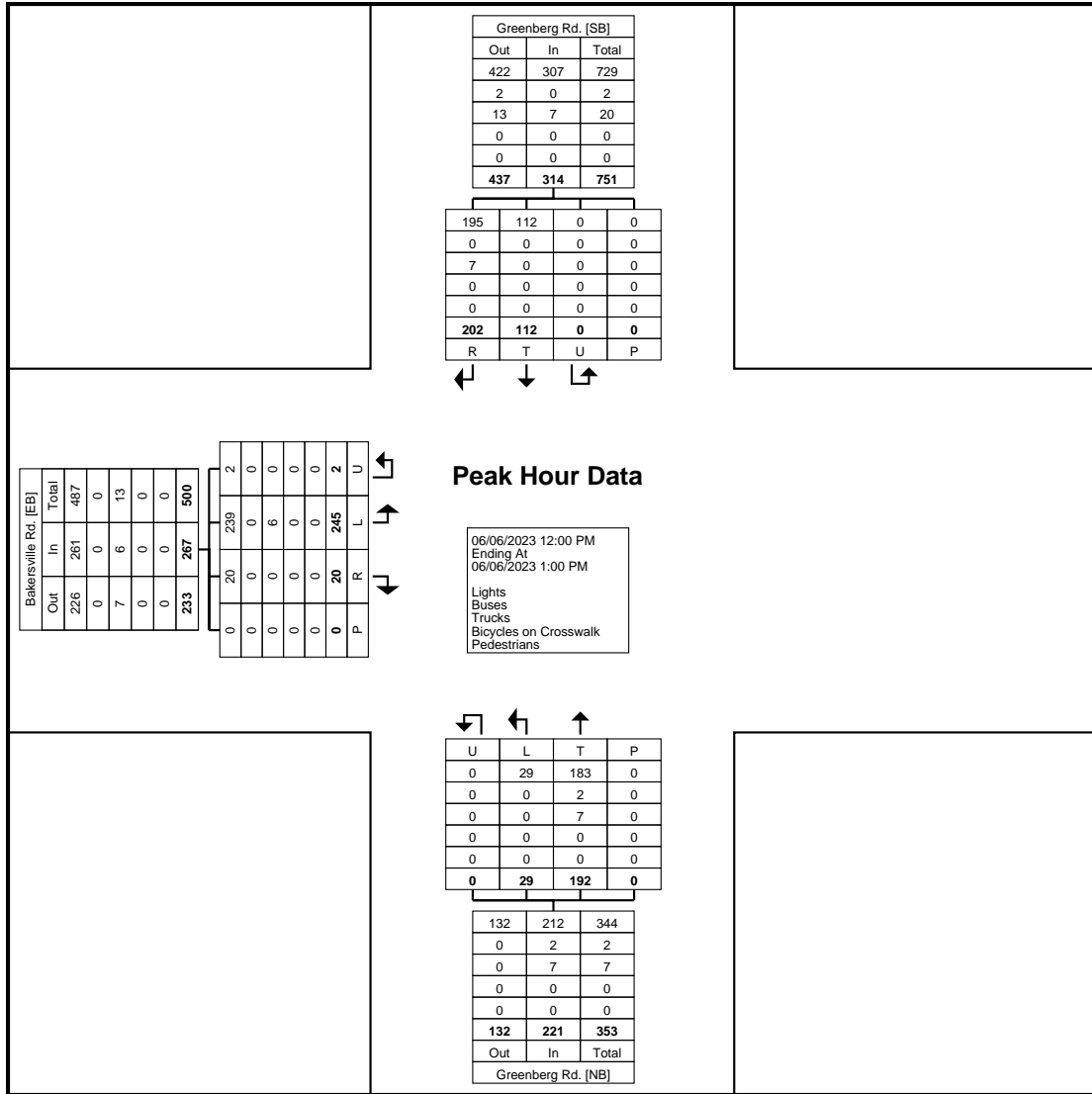


Lawrenceville, NJ  
Greenberg Rd & Bakersville Rd  
Tuesday, June 6, 2023  
Location: 40.273382, -  
74.705865



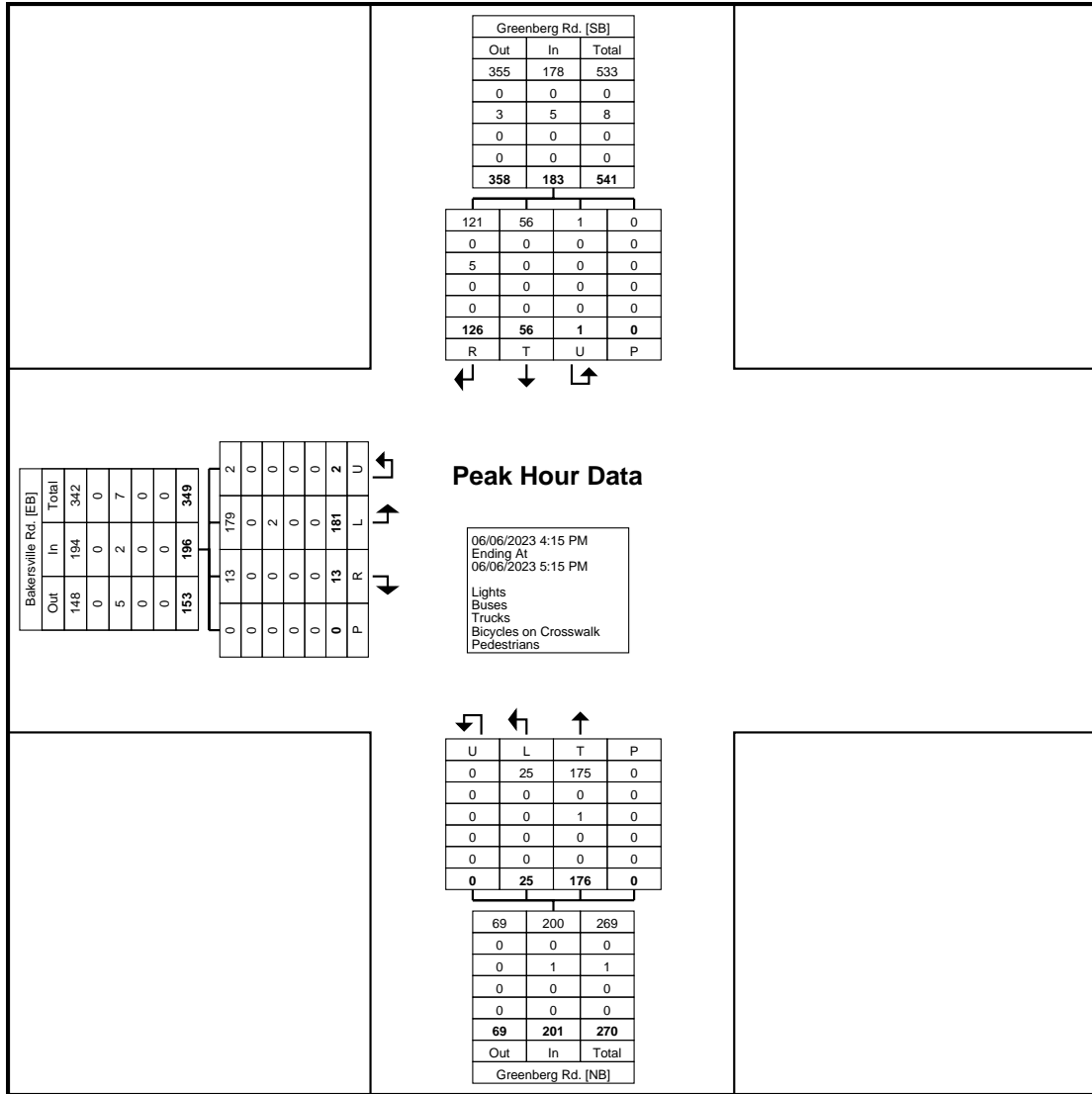
Turning Movement Data Plot





Turning Movement Peak Hour Data Plot (12:00 PM)

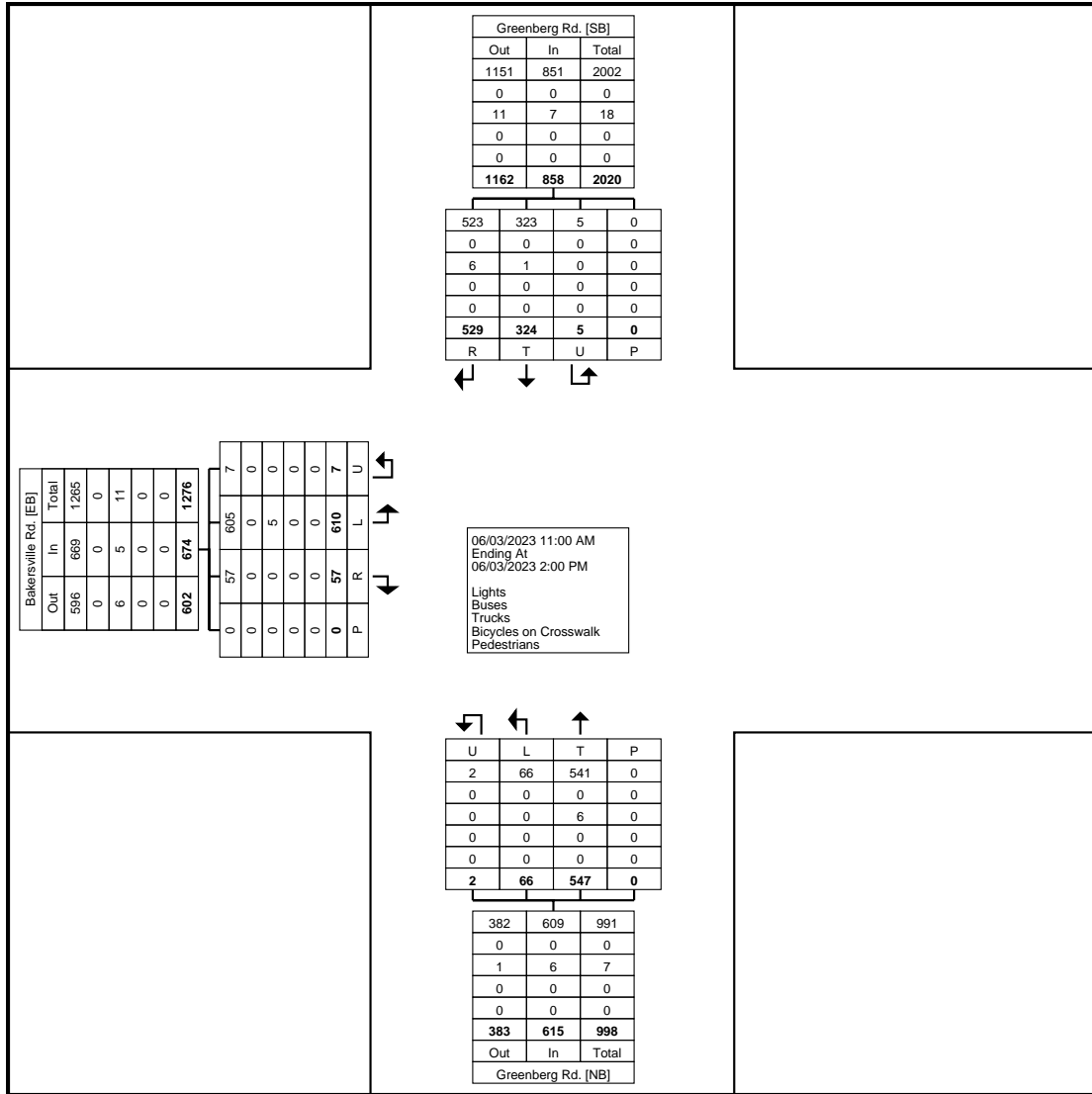




Turning Movement Peak Hour Data Plot (4:15 PM)



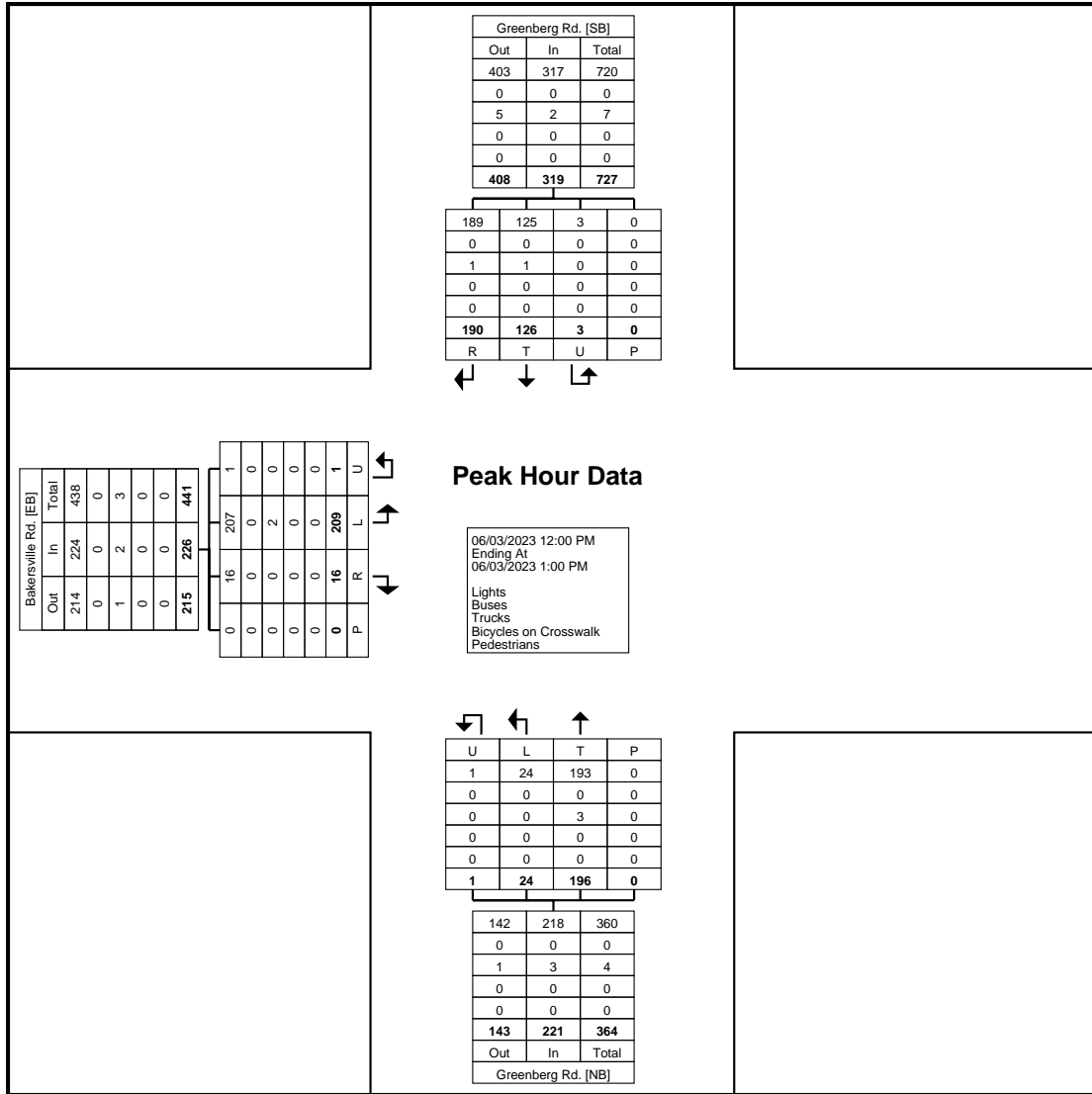
Lawrenceville, NJ  
Greenberg Rd & Bakersville Rd  
Saturday, June 3, 2023  
Location: 40.273382, -  
74.705865



Turning Movement Data Plot

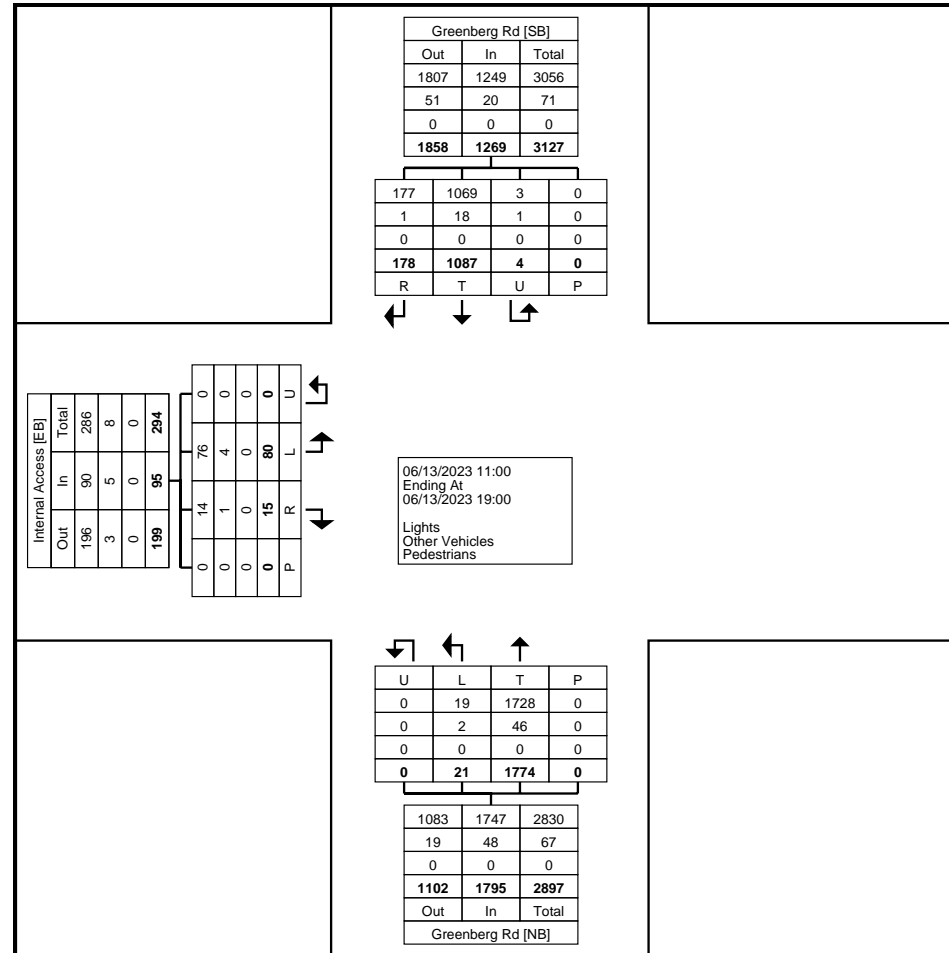






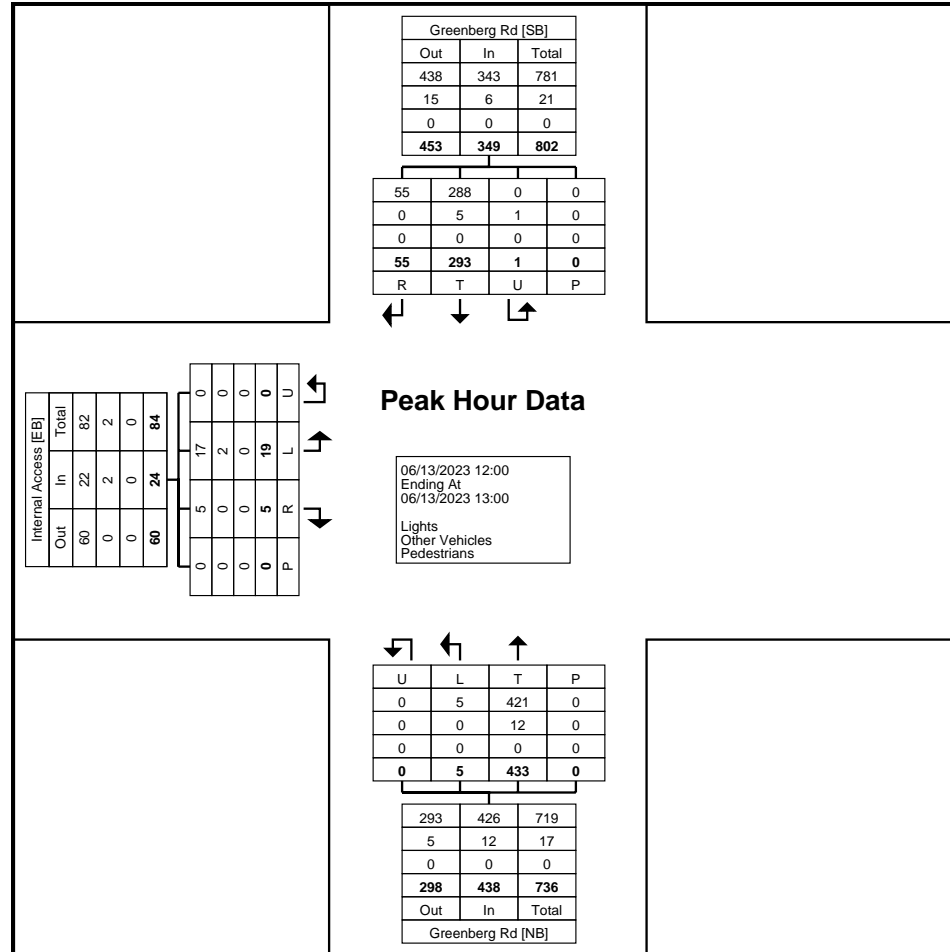
Turning Movement Peak Hour Data Plot (12:00 PM)





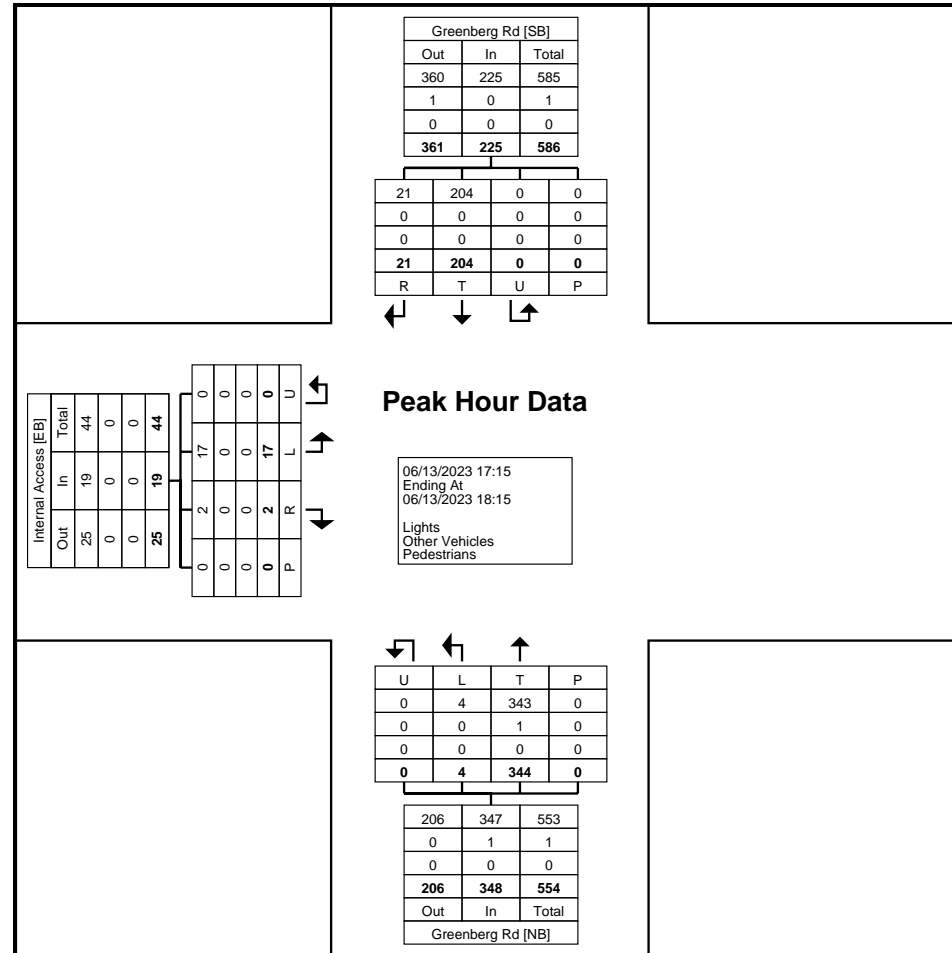
Turning Movement Data Plot





Turning Movement Peak Hour Data Plot (12:00)

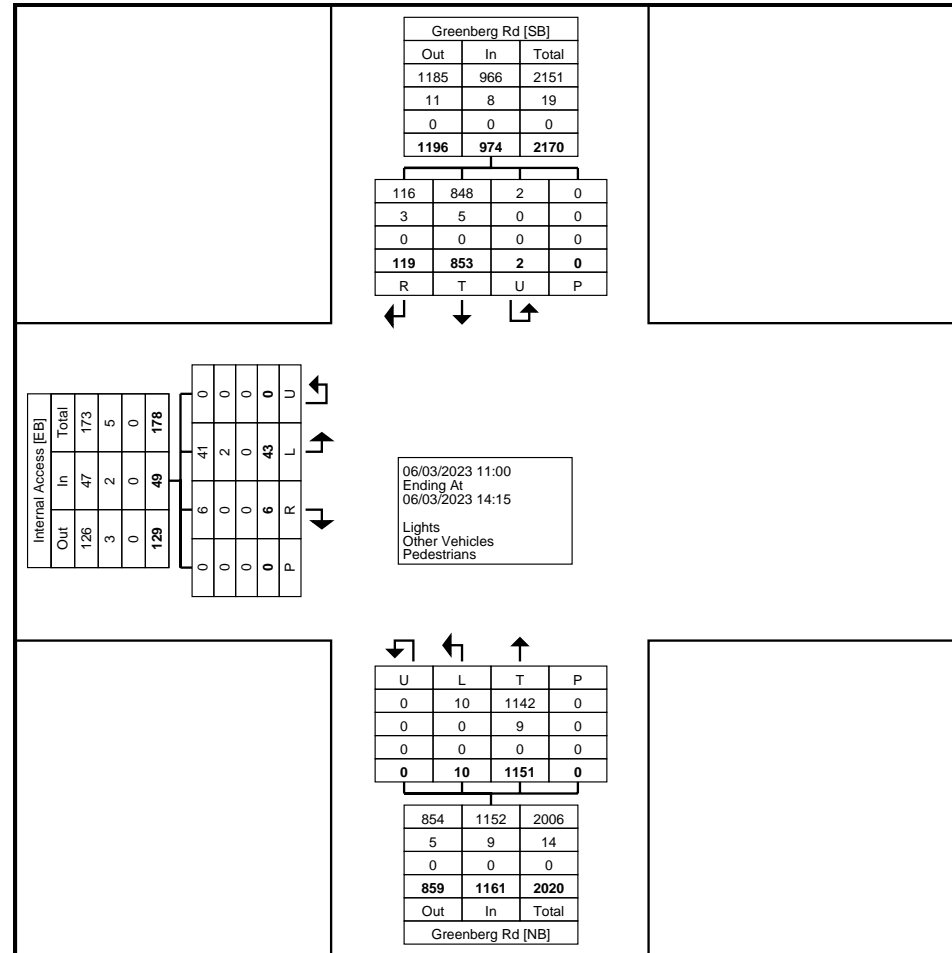




Turning Movement Peak Hour Data Plot (17:15)

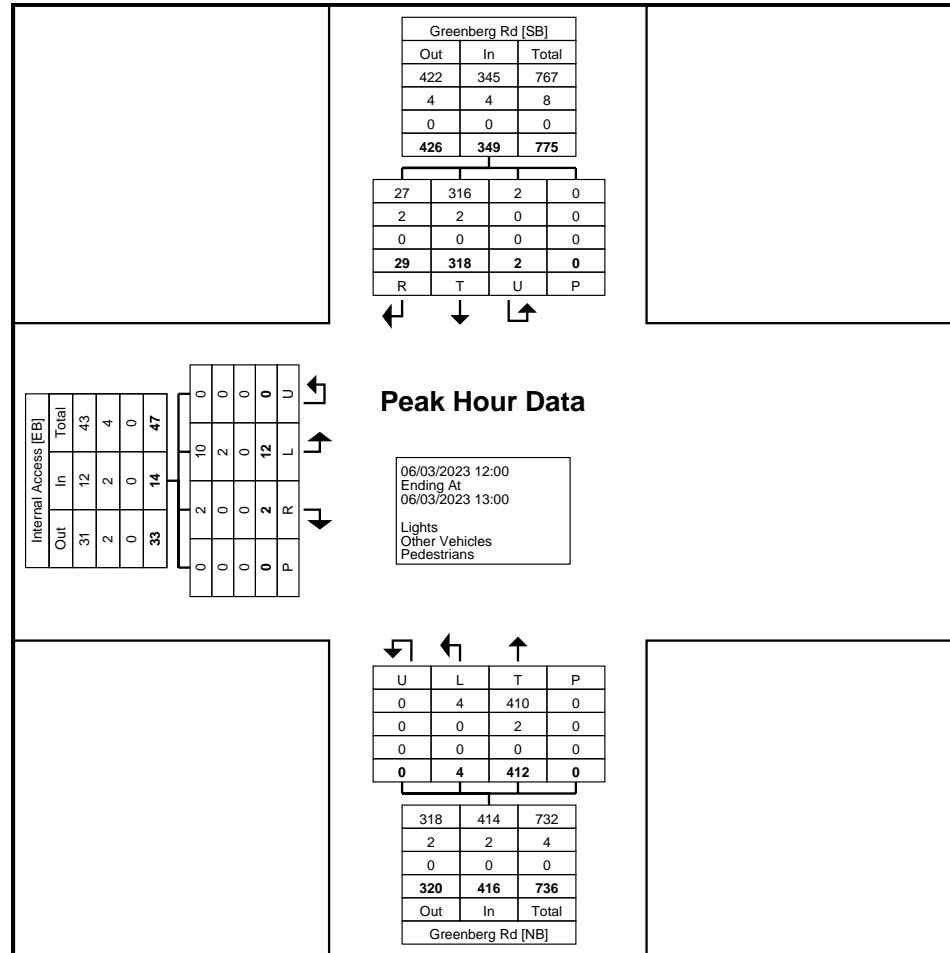






Turning Movement Data Plot





Turning Movement Peak Hour Data Plot (12:00)



Lawrenceville, NJ  
 Bakers Basin Rd & Greenberg Rd  
 Tuesday, June 6, 2023  
 Location: 40.274642, -74.704671

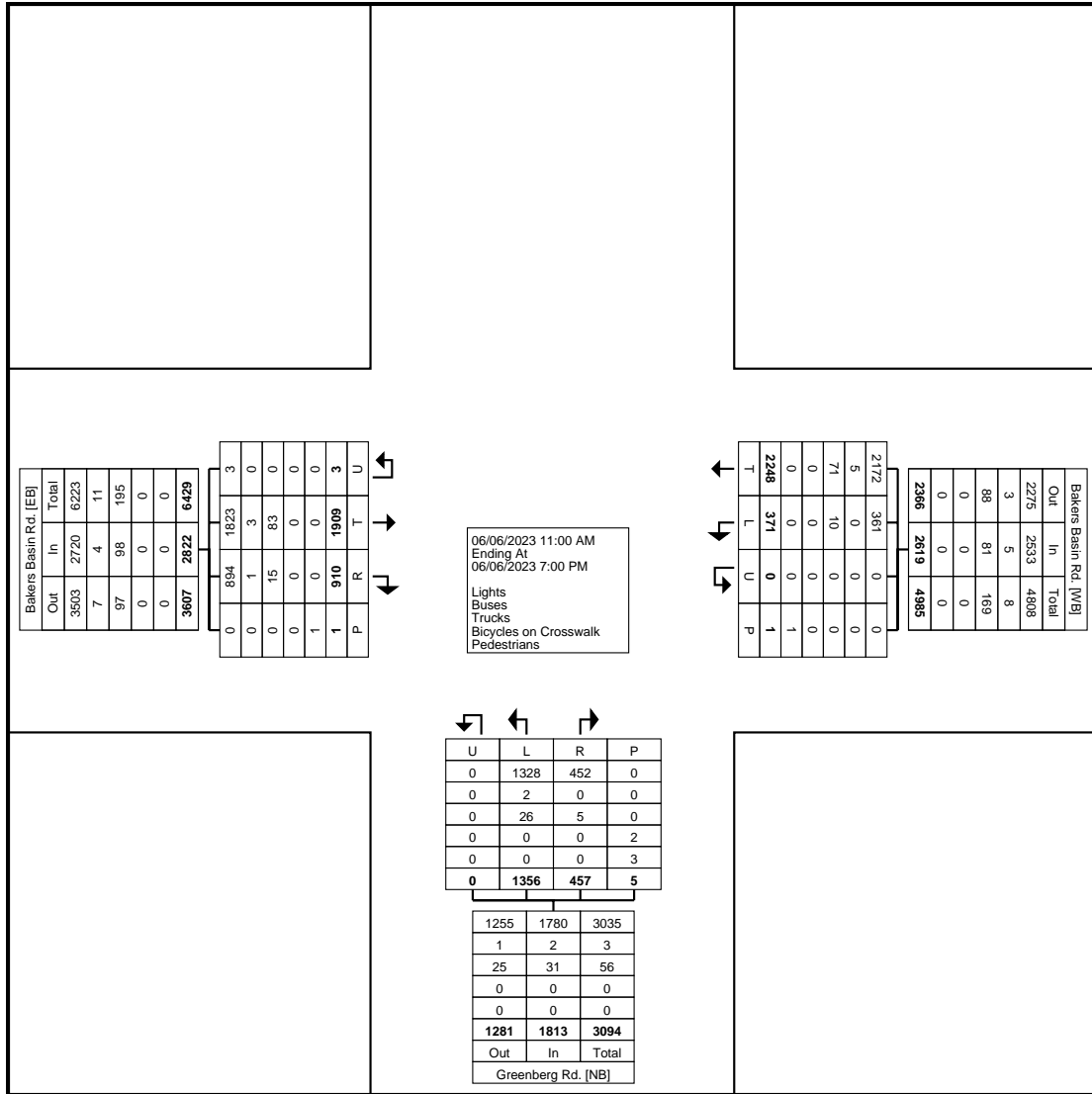
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Coatesville, Pennsylvania, United States 19320  
 610-466-1469  
 Serving Transportation Professionals Since 1995

Count Name: Bakers Basin Rd. & Greenberg Rd. (6/6)  
 Site Code:  
 Start Date: 06/06/2023  
 Page No: 1

### Turning Movement Data

Start Time	Bakers Basin Rd. Eastbound					Bakers Basin Rd. Westbound					Greenberg Rd. Northbound					Int. Total
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	
11:00 AM	75	36	0	0	111	19	84	0	0	103	63	20	0	0	83	297
11:15 AM	73	52	0	0	125	20	91	0	0	111	58	29	0	0	87	323
11:30 AM	84	52	0	0	136	14	98	0	0	112	80	25	0	0	105	353
11:45 AM	86	45	0	0	131	25	110	0	0	135	84	21	0	0	105	371
Hourly Total	318	185	0	0	503	78	383	0	0	461	285	95	0	0	380	1344
12:00 PM	60	79	0	0	139	26	97	0	0	123	94	30	0	2	124	386
12:15 PM	74	64	0	1	138	19	100	0	1	119	91	22	0	1	113	370
12:30 PM	68	60	0	0	128	28	95	0	0	123	83	24	0	0	107	358
12:45 PM	84	62	0	0	146	24	101	0	0	125	78	23	0	0	101	372
Hourly Total	286	265	0	1	551	97	393	0	1	490	346	99	0	3	445	1486
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	89	35	0	0	124	10	116	0	0	126	61	21	0	0	82	332
4:15 PM	124	36	0	0	160	23	141	0	0	164	45	27	0	0	72	396
4:30 PM	126	27	0	0	153	18	133	0	0	151	71	22	0	0	93	397
4:45 PM	132	40	0	0	172	15	129	0	0	144	66	15	0	0	81	397
Hourly Total	471	138	0	0	609	66	519	0	0	585	243	85	0	0	328	1522
5:00 PM	127	36	0	0	163	14	143	0	0	157	65	21	0	1	86	406
5:15 PM	127	38	1	0	166	13	148	0	0	161	52	20	0	1	72	399
5:30 PM	124	36	0	0	160	17	136	0	0	153	63	20	0	0	83	396
5:45 PM	105	38	0	0	143	19	123	0	0	142	53	27	0	0	80	365
Hourly Total	483	148	1	0	632	63	550	0	0	613	233	88	0	2	321	1566
6:00 PM	112	44	0	0	156	18	111	0	0	129	55	30	0	0	85	370
6:15 PM	88	55	0	0	143	16	104	0	0	120	77	18	0	0	95	358
6:30 PM	72	39	1	0	112	14	107	0	0	121	65	20	0	0	85	318
6:45 PM	79	36	1	0	116	19	81	0	0	100	52	22	0	0	74	290
Hourly Total	351	174	2	0	527	67	403	0	0	470	249	90	0	0	339	1336
Grand Total	1909	910	3	1	2822	371	2248	0	1	2619	1356	457	0	5	1813	7254
Approach %	67.6	32.2	0.1	-	-	14.2	85.8	0.0	-	-	74.8	25.2	0.0	-	-	-
Total %	26.3	12.5	0.0	-	38.9	5.1	31.0	0.0	-	36.1	18.7	6.3	0.0	-	25.0	-
Lights	1823	894	3	-	2720	361	2172	0	-	2533	1328	452	0	-	1780	7033
% Lights	95.5	98.2	100.0	-	96.4	97.3	96.6	-	-	96.7	97.9	98.9	-	-	98.2	97.0
Buses	3	1	0	-	4	0	5	0	-	5	2	0	0	-	2	11
% Buses	0.2	0.1	0.0	-	0.1	0.0	0.2	-	-	0.2	0.1	0.0	-	-	0.1	0.2
Trucks	83	15	0	-	98	10	71	0	-	81	26	5	0	-	31	210
% Trucks	4.3	1.6	0.0	-	3.5	2.7	3.2	-	-	3.1	1.9	1.1	-	-	1.7	2.9
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	2	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	0.0	-	-	-	-	40.0	-	-
Pedestrians	-	-	-	1	-	-	-	-	1	-	-	-	-	3	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	60.0	-	-



Turning Movement Data Plot



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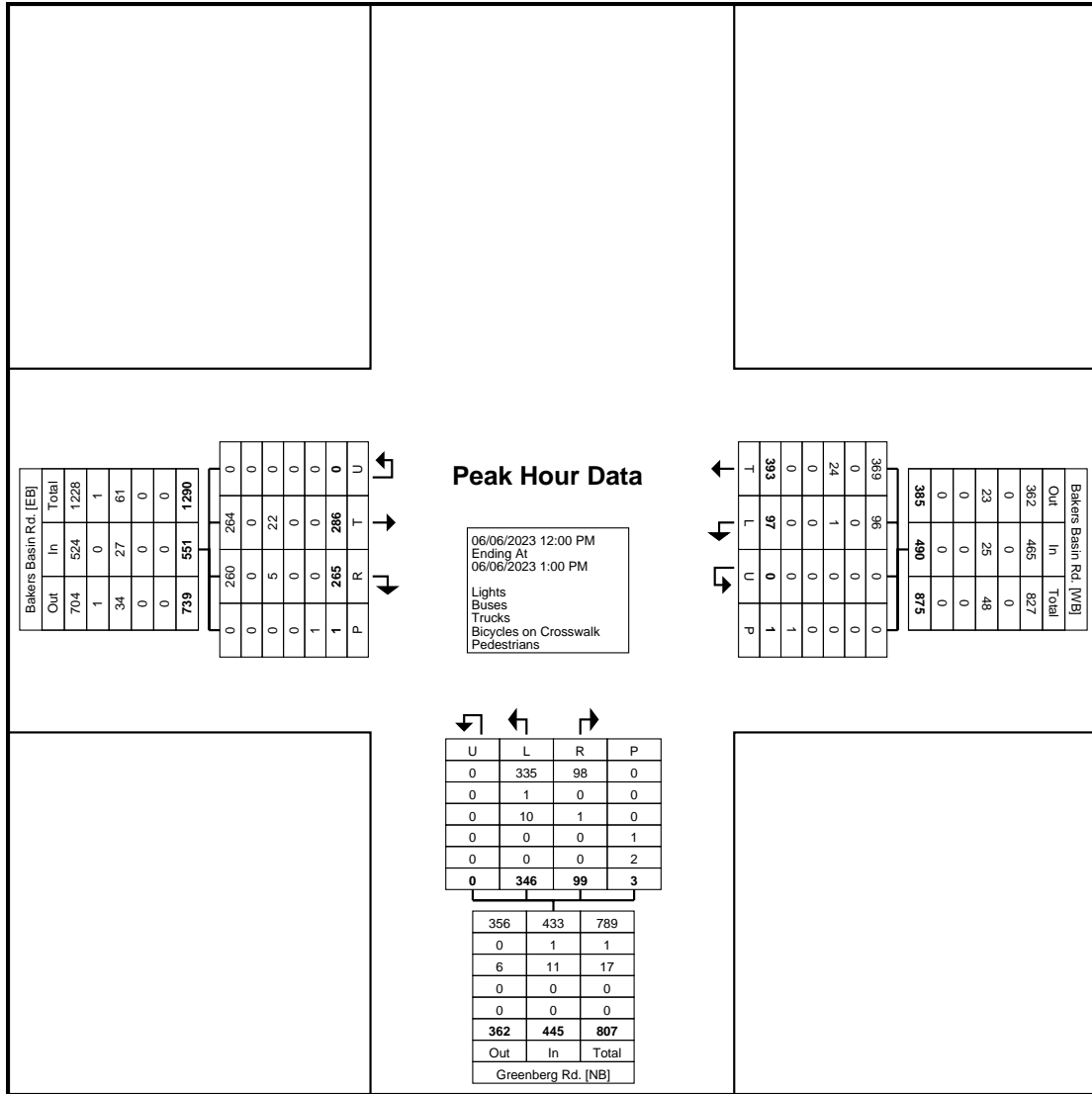
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610-466-1469  
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Lawrenceville, NJ  
Bakers Basin Rd & Greenberg Rd  
Tuesday, June 6, 2023  
Location: 40.274642, -74.704671

Count Name: Bakers Basin Rd. & Greenberg Rd. (6/6)  
Site Code:  
Start Date: 06/06/2023  
Page No: 3

### Turning Movement Peak Hour Data (12:00 PM)

Start Time	Bakers Basin Rd. Eastbound					Bakers Basin Rd. Westbound					Greenberg Rd. Northbound					Int. Total
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	
12:00 PM	60	79	0	0	139	26	97	0	0	123	94	30	0	2	124	386
12:15 PM	74	64	0	1	138	19	100	0	1	119	91	22	0	1	113	370
12:30 PM	68	60	0	0	128	28	95	0	0	123	83	24	0	0	107	358
12:45 PM	84	62	0	0	146	24	101	0	0	125	78	23	0	0	101	372
<b>Total</b>	<b>286</b>	<b>265</b>	<b>0</b>	<b>1</b>	<b>551</b>	<b>97</b>	<b>393</b>	<b>0</b>	<b>1</b>	<b>490</b>	<b>346</b>	<b>99</b>	<b>0</b>	<b>3</b>	<b>445</b>	<b>1486</b>
Approach %	51.9	48.1	0.0	-	-	19.8	80.2	0.0	-	-	77.8	22.2	0.0	-	-	-
Total %	19.2	17.8	0.0	-	37.1	6.5	26.4	0.0	-	33.0	23.3	6.7	0.0	-	29.9	-
PHF	0.851	0.839	0.000	-	0.943	0.866	0.973	0.000	-	0.980	0.920	0.825	0.000	-	0.897	0.962
Lights	264	260	0	-	524	96	369	0	-	465	335	98	0	-	433	1422
% Lights	92.3	98.1	-	-	95.1	99.0	93.9	-	-	94.9	96.8	99.0	-	-	97.3	95.7
Buses	0	0	0	-	0	0	0	0	-	0	1	0	0	-	1	1
% Buses	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.3	0.0	-	-	0.2	0.1
Trucks	22	5	0	-	27	1	24	0	-	25	10	1	0	-	11	63
% Trucks	7.7	1.9	-	-	4.9	1.0	6.1	-	-	5.1	2.9	1.0	-	-	2.5	4.2
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	0.0	-	-	-	-	33.3	-	-
Pedestrians	-	-	-	1	-	-	-	-	1	-	-	-	-	2	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	66.7	-	-



Turning Movement Peak Hour Data Plot (12:00 PM)



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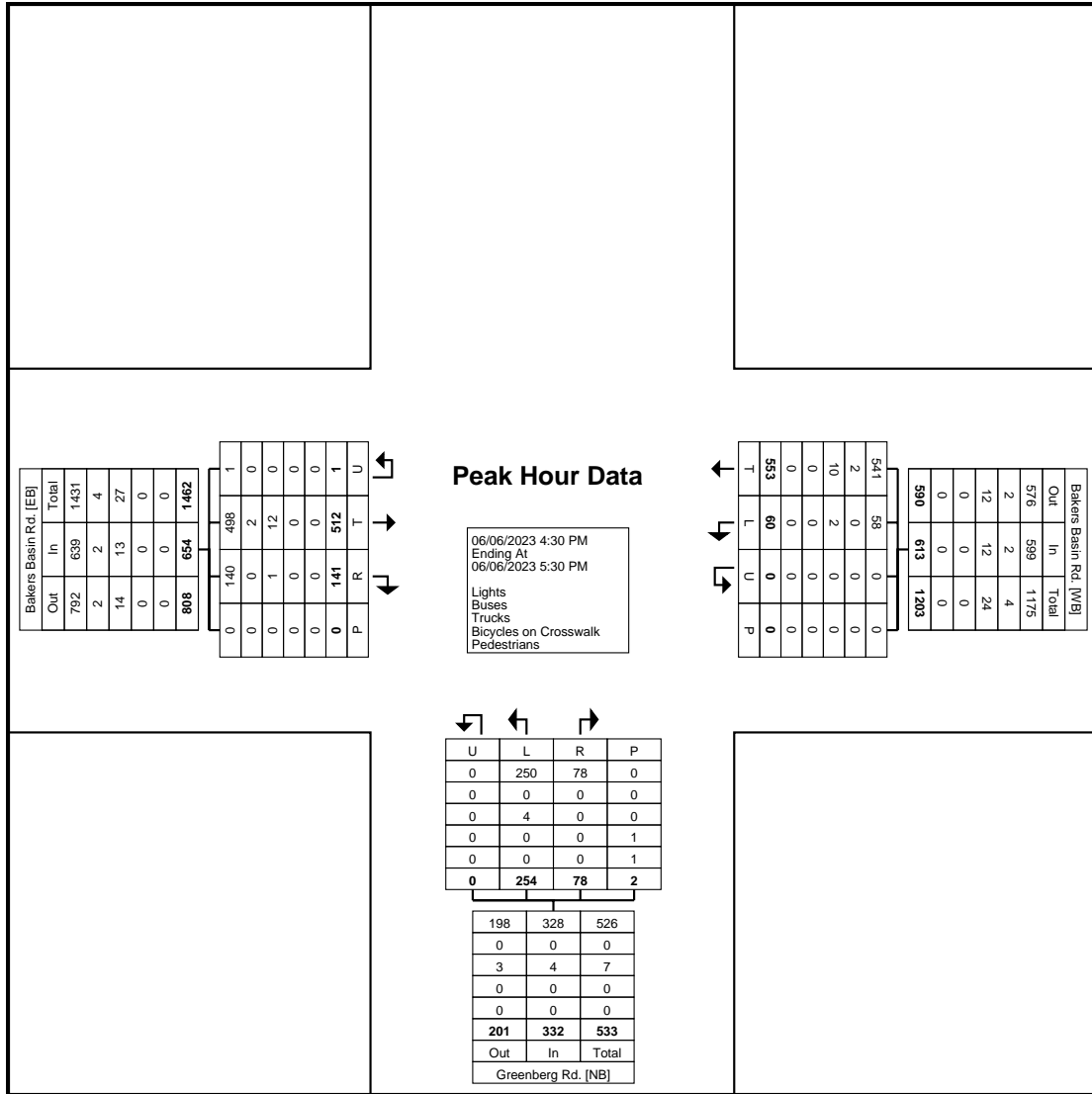
Lawrenceville, NJ  
Bakers Basin Rd & Greenberg Rd  
Tuesday, June 6, 2023  
Location: 40.274642, -74.704671

Count Name: Bakers Basin Rd. & Greenberg Rd. (6/6)  
Site Code:  
Start Date: 06/06/2023  
Page No: 5

### Turning Movement Peak Hour Data (4:30 PM)

Start Time	Bakers Basin Rd. Eastbound					Bakers Basin Rd. Westbound					Greenberg Rd. Northbound					Int. Total
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	
4:30 PM	126	27	0	0	153	18	133	0	0	151	71	22	0	0	93	397
4:45 PM	132	40	0	0	172	15	129	0	0	144	66	15	0	0	81	397
5:00 PM	127	36	0	0	163	14	143	0	0	157	65	21	0	1	86	406
5:15 PM	127	38	1	0	166	13	148	0	0	161	52	20	0	1	72	399
<b>Total</b>	<b>512</b>	<b>141</b>	<b>1</b>	<b>0</b>	<b>654</b>	<b>60</b>	<b>553</b>	<b>0</b>	<b>0</b>	<b>613</b>	<b>254</b>	<b>78</b>	<b>0</b>	<b>2</b>	<b>332</b>	<b>1599</b>
<b>Approach %</b>	<b>78.3</b>	<b>21.6</b>	<b>0.2</b>	<b>-</b>	<b>-</b>	<b>9.8</b>	<b>90.2</b>	<b>0.0</b>	<b>-</b>	<b>-</b>	<b>76.5</b>	<b>23.5</b>	<b>0.0</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total %</b>	<b>32.0</b>	<b>8.8</b>	<b>0.1</b>	<b>-</b>	<b>40.9</b>	<b>3.8</b>	<b>34.6</b>	<b>0.0</b>	<b>-</b>	<b>38.3</b>	<b>15.9</b>	<b>4.9</b>	<b>0.0</b>	<b>-</b>	<b>20.8</b>	<b>-</b>
<b>PHF</b>	<b>0.970</b>	<b>0.881</b>	<b>0.250</b>	<b>-</b>	<b>0.951</b>	<b>0.833</b>	<b>0.934</b>	<b>0.000</b>	<b>-</b>	<b>0.952</b>	<b>0.894</b>	<b>0.886</b>	<b>0.000</b>	<b>-</b>	<b>0.892</b>	<b>0.985</b>
<b>Lights</b>	<b>498</b>	<b>140</b>	<b>1</b>	<b>-</b>	<b>639</b>	<b>58</b>	<b>541</b>	<b>0</b>	<b>-</b>	<b>599</b>	<b>250</b>	<b>78</b>	<b>0</b>	<b>-</b>	<b>328</b>	<b>1566</b>
<b>% Lights</b>	<b>97.3</b>	<b>99.3</b>	<b>100.0</b>	<b>-</b>	<b>97.7</b>	<b>96.7</b>	<b>97.8</b>	<b>-</b>	<b>-</b>	<b>97.7</b>	<b>98.4</b>	<b>100.0</b>	<b>-</b>	<b>-</b>	<b>98.8</b>	<b>97.9</b>
<b>Buses</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>-</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>-</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-</b>	<b>0</b>	<b>4</b>
<b>% Buses</b>	<b>0.4</b>	<b>0.0</b>	<b>0.0</b>	<b>-</b>	<b>0.3</b>	<b>0.0</b>	<b>0.4</b>	<b>-</b>	<b>-</b>	<b>0.3</b>	<b>0.0</b>	<b>0.0</b>	<b>-</b>	<b>-</b>	<b>0.0</b>	<b>0.3</b>
<b>Trucks</b>	<b>12</b>	<b>1</b>	<b>0</b>	<b>-</b>	<b>13</b>	<b>2</b>	<b>10</b>	<b>0</b>	<b>-</b>	<b>12</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>-</b>	<b>4</b>	<b>29</b>
<b>% Trucks</b>	<b>2.3</b>	<b>0.7</b>	<b>0.0</b>	<b>-</b>	<b>2.0</b>	<b>3.3</b>	<b>1.8</b>	<b>-</b>	<b>-</b>	<b>2.0</b>	<b>1.6</b>	<b>0.0</b>	<b>-</b>	<b>-</b>	<b>1.2</b>	<b>1.8</b>
<b>Bicycles on Crosswalk</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>-</b>
<b>% Bicycles on Crosswalk</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>50.0</b>	<b>-</b>	<b>-</b>
<b>Pedestrians</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>-</b>
<b>% Pedestrians</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>50.0</b>	<b>-</b>	<b>-</b>





Turning Movement Peak Hour Data Plot (4:30 PM)



www.TSTData.com  
184 Baker Rd

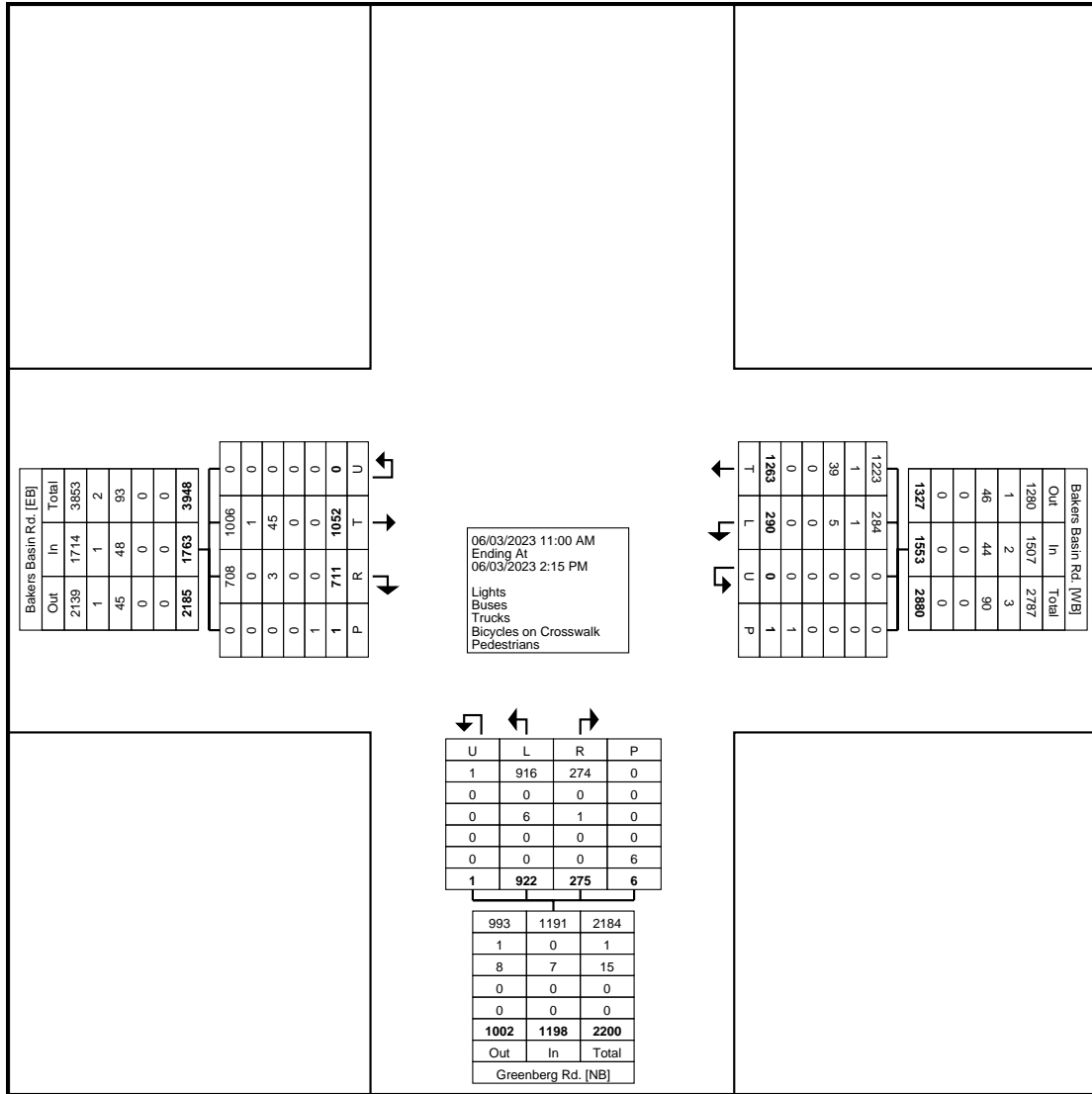
Lawrenceville, NJ  
Bakers Basin Rd & Greenberg Rd  
Saturday, June 3, 2023  
Location: 40.274642, -74.704671

Coatesville, Pennsylvania, United States 19320  
610-466-1469  
Serving Transportation Professionals Since 1995

Count Name: Bakers Basin Rd. & Greenberg Rd. (6/3)  
Site Code:  
Start Date: 06/03/2023  
Page No: 1

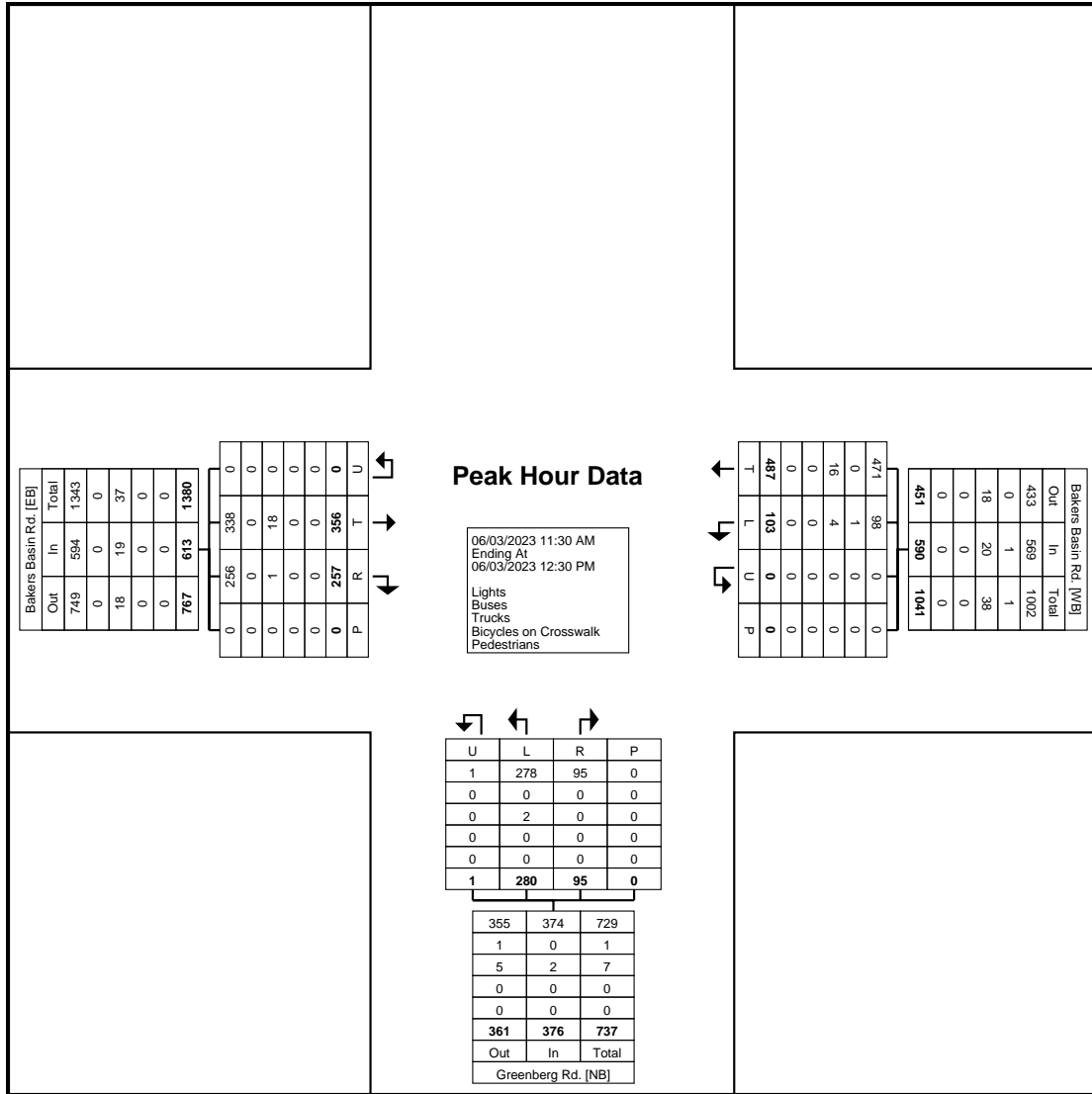
### Turning Movement Data

Start Time	Bakers Basin Rd. Eastbound					Bakers Basin Rd. Westbound					Greenberg Rd. Northbound					Int. Total
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	
11:00 AM	91	54	0	0	145	18	102	0	0	120	79	23	0	0	102	367
11:15 AM	76	46	0	0	122	31	118	0	0	149	74	25	0	0	99	370
11:30 AM	96	62	0	0	158	30	137	0	0	167	70	15	0	0	85	410
11:45 AM	100	56	0	0	156	12	122	0	0	134	57	34	0	0	91	381
Hourly Total	363	218	0	0	581	91	479	0	0	570	280	97	0	0	377	1528
12:00 PM	83	63	0	0	146	26	119	0	0	145	77	24	1	0	102	393
12:15 PM	77	76	0	0	153	35	109	0	0	144	76	22	0	0	98	395
12:30 PM	92	59	0	0	151	29	86	0	1	115	84	22	0	0	106	372
12:45 PM	97	65	0	0	162	21	69	0	0	90	90	24	0	3	114	366
Hourly Total	349	263	0	0	612	111	383	0	1	494	327	92	1	3	420	1526
1:00 PM	86	54	0	1	140	15	112	0	0	127	76	22	0	2	98	365
1:15 PM	87	48	0	0	135	26	89	0	0	115	91	20	0	1	111	361
1:30 PM	71	61	0	0	132	20	113	0	0	133	70	25	0	0	95	360
1:45 PM	96	67	0	0	163	27	87	0	0	114	78	19	0	0	97	374
Hourly Total	340	230	0	1	570	88	401	0	0	489	315	86	0	3	401	1460
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	1052	711	0	1	1763	290	1263	0	1	1553	922	275	1	6	1198	4514
Approach %	59.7	40.3	0.0	-	-	18.7	81.3	0.0	-	-	77.0	23.0	0.1	-	-	-
Total %	23.3	15.8	0.0	-	39.1	6.4	28.0	0.0	-	34.4	20.4	6.1	0.0	-	26.5	-
Lights	1006	708	0	-	1714	284	1223	0	-	1507	916	274	1	-	1191	4412
% Lights	95.6	99.6	-	-	97.2	97.9	96.8	-	-	97.0	99.3	99.6	100.0	-	99.4	97.7
Buses	1	0	0	-	1	1	1	0	-	2	0	0	0	-	0	3
% Buses	0.1	0.0	-	-	0.1	0.3	0.1	-	-	0.1	0.0	0.0	0.0	-	0.0	0.1
Trucks	45	3	0	-	48	5	39	0	-	44	6	1	0	-	7	99
% Trucks	4.3	0.4	-	-	2.7	1.7	3.1	-	-	2.8	0.7	0.4	0.0	-	0.6	2.2
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	0.0	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	1	-	-	-	-	1	-	-	-	-	6	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-



Turning Movement Data Plot





Turning Movement Peak Hour Data Plot (11:30 AM)



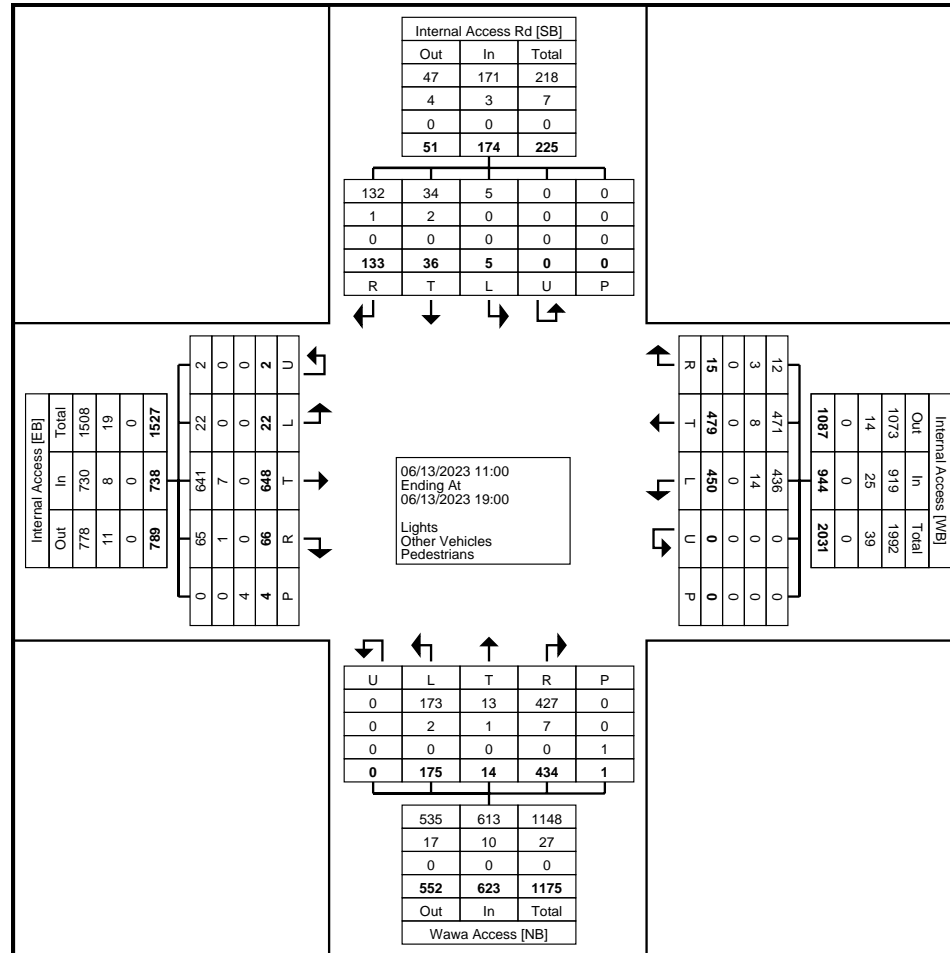
McMahon a Bowman Company  
425 Commerce Drive, Suite 200

Fort Washington, Pennsylvania, United States 19034  
215-283-9444

Count Name: 010014-01-001 CFA Lawrenceville  
- Internal Int  
Site Code:  
Start Date: 06/13/2023  
Page No: 1

### Turning Movement Data

Start Time	Internal Access Rd Southbound						Internal Access Westbound						Wawa Access Northbound						Internal Access Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
11:00	0	2	8	0	0	10	18	15	0	0	0	33	7	0	23	0	0	30	2	35	3	0	0	40	113
11:15	0	7	8	0	0	15	19	15	1	0	0	35	10	1	24	0	0	35	0	31	3	0	0	34	119
11:30	0	4	5	0	0	9	29	23	1	0	0	53	11	1	25	0	0	37	1	31	5	0	0	37	136
11:45	1	2	14	0	0	17	31	33	0	0	0	64	13	2	29	0	0	44	0	32	5	0	0	37	162
Hourly Total	1	15	35	0	0	51	97	86	2	0	0	185	41	4	101	0	0	146	3	129	16	0	0	148	530
12:00	1	2	7	0	0	10	32	38	1	0	0	71	8	1	28	0	0	37	1	50	3	0	0	54	172
12:15	0	3	21	0	0	24	30	35	2	0	0	67	12	1	33	0	1	46	5	48	6	0	0	59	196
12:30	0	2	10	0	0	12	29	40	2	0	0	71	10	2	24	0	0	36	2	37	2	0	1	41	160
12:45	0	4	7	0	0	11	15	38	1	0	0	54	16	2	24	0	0	42	4	41	5	1	0	51	158
Hourly Total	1	11	45	0	0	57	106	151	6	0	0	263	46	6	109	0	1	161	12	176	16	1	1	205	686
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16:00	0	1	4	0	0	5	13	23	1	0	0	37	7	2	8	0	0	17	0	33	3	0	0	36	95
16:15	0	1	1	0	0	2	22	17	1	0	0	40	3	0	18	0	0	21	0	24	3	1	0	28	91
16:30	0	0	6	0	0	6	17	17	0	0	0	34	8	0	16	0	0	24	1	26	4	0	0	31	95
16:45	1	1	2	0	0	4	19	22	0	0	0	41	5	0	22	0	0	27	1	33	4	0	0	38	110
Hourly Total	1	3	13	0	0	17	71	79	2	0	0	152	23	2	64	0	0	89	2	116	14	1	0	133	391
17:00	0	2	7	0	0	9	29	21	1	0	0	51	15	0	26	0	0	41	2	21	5	0	0	28	129
17:15	0	0	2	0	0	2	18	20	0	0	0	38	11	2	19	0	0	32	1	27	2	0	0	30	102
17:30	1	0	4	0	0	5	24	25	1	0	0	50	7	0	12	0	0	19	0	29	3	0	1	32	106
17:45	0	0	3	0	0	3	26	22	1	0	0	49	6	0	22	0	0	28	0	29	3	0	2	32	112
Hourly Total	1	2	16	0	0	19	97	88	3	0	0	188	39	2	79	0	0	120	3	106	13	0	3	122	449
18:00	1	0	8	0	0	9	23	19	0	0	0	42	8	0	22	0	0	30	0	30	0	0	0	30	111
18:15	0	0	5	0	0	5	12	25	0	0	0	37	6	0	23	0	0	29	0	28	2	0	0	30	101
18:30	0	4	6	0	0	10	18	15	1	0	0	34	5	0	16	0	0	21	1	33	1	0	0	35	100
18:45	0	1	5	0	0	6	26	16	1	0	0	43	7	0	20	0	0	27	1	30	4	0	0	35	111
Hourly Total	1	5	24	0	0	30	79	75	2	0	0	156	26	0	81	0	0	107	2	121	7	0	0	130	423
Grand Total	5	36	133	0	0	174	450	479	15	0	0	944	175	14	434	0	1	623	22	648	66	2	4	738	2479
Approach %	2.9	20.7	76.4	0.0	-	-	47.7	50.7	1.6	0.0	-	-	28.1	2.2	69.7	0.0	-	-	3.0	87.8	8.9	0.3	-	-	-
Total %	0.2	1.5	5.4	0.0	-	7.0	18.2	19.3	0.6	0.0	-	38.1	7.1	0.6	17.5	0.0	-	25.1	0.9	26.1	2.7	0.1	-	29.8	-
Lights	5	34	132	0	-	171	436	471	12	0	-	919	173	13	427	0	-	613	22	641	65	2	-	730	2433
% Lights	100.0	94.4	99.2	-	-	98.3	96.9	98.3	80.0	-	-	97.4	98.9	92.9	98.4	-	-	98.4	100.0	98.9	98.5	100.0	-	98.9	98.1
Other Vehicles	0	2	1	0	-	3	14	8	3	0	-	25	2	1	7	0	-	10	0	7	1	0	-	8	46
% Other Vehicles	0.0	5.6	0.8	-	-	1.7	3.1	1.7	20.0	-	-	2.6	1.1	7.1	1.6	-	-	1.6	0.0	1.1	1.5	0.0	-	1.1	1.9
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	4	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



Turning Movement Data Plot



McMahon a Bowman Company  
425 Commerce Drive, Suite 200

Fort Washington, Pennsylvania, United States 19034  
215-283-9444

Count Name: 010014-01-001 CFA Lawrenceville  
- Internal Int  
Site Code:  
Start Date: 06/13/2023  
Page No: 3

### Turning Movement Peak Hour Data (11:45)

Start Time	Internal Access Rd Southbound						Internal Access Westbound						Wawa Access Northbound						Internal Access Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
11:45	1	2	14	0	0	17	31	33	0	0	0	64	13	2	29	0	0	44	0	32	5	0	0	37	162
12:00	1	2	7	0	0	10	32	38	1	0	0	71	8	1	28	0	0	37	1	50	3	0	0	54	172
12:15	0	3	21	0	0	24	30	35	2	0	0	67	12	1	33	0	1	46	5	48	6	0	0	59	196
12:30	0	2	10	0	0	12	29	40	2	0	0	71	10	2	24	0	0	36	2	37	2	0	1	41	160
Total	2	9	52	0	0	63	122	146	5	0	0	273	43	6	114	0	1	163	8	167	16	0	1	191	690
Approach %	3.2	14.3	82.5	0.0	-	-	44.7	53.5	1.8	0.0	-	-	26.4	3.7	69.9	0.0	-	-	4.2	87.4	8.4	0.0	-	-	-
Total %	0.3	1.3	7.5	0.0	-	9.1	17.7	21.2	0.7	0.0	-	39.6	6.2	0.9	16.5	0.0	-	23.6	1.2	24.2	2.3	0.0	-	27.7	-
PHF	0.500	0.750	0.619	0.000	-	0.656	0.953	0.913	0.625	0.000	-	0.961	0.827	0.750	0.864	0.000	-	0.886	0.400	0.835	0.667	0.000	-	0.809	0.880
Lights	2	9	52	0	-	63	121	144	4	0	-	269	41	5	110	0	-	156	8	167	16	0	-	191	679
% Lights	100.0	100.0	100.0	-	-	100.0	99.2	98.6	80.0	-	-	98.5	95.3	83.3	96.5	-	-	95.7	100.0	100.0	100.0	-	-	100.0	98.4
Other Vehicles	0	0	0	0	-	0	1	2	1	0	-	4	2	1	4	0	-	7	0	0	0	0	-	0	11
% Other Vehicles	0.0	0.0	0.0	-	-	0.0	0.8	1.4	20.0	-	-	1.5	4.7	16.7	3.5	-	-	4.3	0.0	0.0	0.0	-	-	0.0	1.6
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-







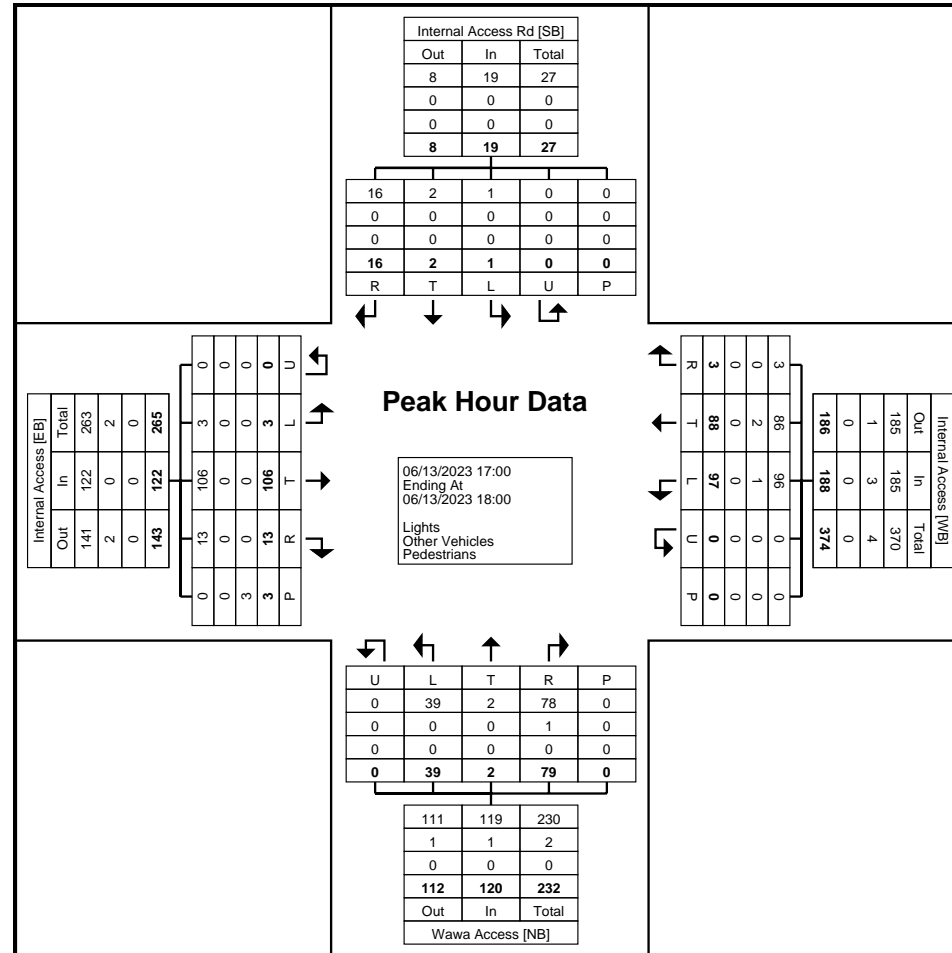
McMahon a Bowman Company  
425 Commerce Drive, Suite 200

Fort Washington, Pennsylvania, United States 19034  
215-283-9444

Count Name: 010014-01-001 CFA Lawrenceville  
- Internal Int  
Site Code:  
Start Date: 06/13/2023  
Page No: 5

### Turning Movement Peak Hour Data (17:00)

Start Time	Internal Access Rd Southbound						Internal Access Westbound						Wawa Access Northbound						Internal Access Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
17:00	0	2	7	0	0	9	29	21	1	0	0	51	15	0	26	0	0	41	2	21	5	0	0	28	129
17:15	0	0	2	0	0	2	18	20	0	0	0	38	11	2	19	0	0	32	1	27	2	0	0	30	102
17:30	1	0	4	0	0	5	24	25	1	0	0	50	7	0	12	0	0	19	0	29	3	0	1	32	106
17:45	0	0	3	0	0	3	26	22	1	0	0	49	6	0	22	0	0	28	0	29	3	0	2	32	112
Total	1	2	16	0	0	19	97	88	3	0	0	188	39	2	79	0	0	120	3	106	13	0	3	122	449
Approach %	5.3	10.5	84.2	0.0	-	-	51.6	46.8	1.6	0.0	-	-	32.5	1.7	65.8	0.0	-	-	2.5	86.9	10.7	0.0	-	-	-
Total %	0.2	0.4	3.6	0.0	-	4.2	21.6	19.6	0.7	0.0	-	41.9	8.7	0.4	17.6	0.0	-	26.7	0.7	23.6	2.9	0.0	-	27.2	-
PHF	0.250	0.250	0.571	0.000	-	0.528	0.836	0.880	0.750	0.000	-	0.922	0.650	0.250	0.760	0.000	-	0.732	0.375	0.914	0.650	0.000	-	0.953	0.870
Lights	1	2	16	0	-	19	96	86	3	0	-	185	39	2	78	0	-	119	3	106	13	0	-	122	445
% Lights	100.0	100.0	100.0	-	-	100.0	99.0	97.7	100.0	-	-	98.4	100.0	100.0	98.7	-	-	99.2	100.0	100.0	100.0	-	-	100.0	99.1
Other Vehicles	0	0	0	0	-	0	1	2	0	0	-	3	0	0	1	0	-	1	0	0	0	0	-	0	4
% Other Vehicles	0.0	0.0	0.0	-	-	0.0	1.0	2.3	0.0	-	-	1.6	0.0	0.0	1.3	-	-	0.8	0.0	0.0	0.0	-	-	0.0	0.9
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	3	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-



Turning Movement Peak Hour Data Plot (17:00)



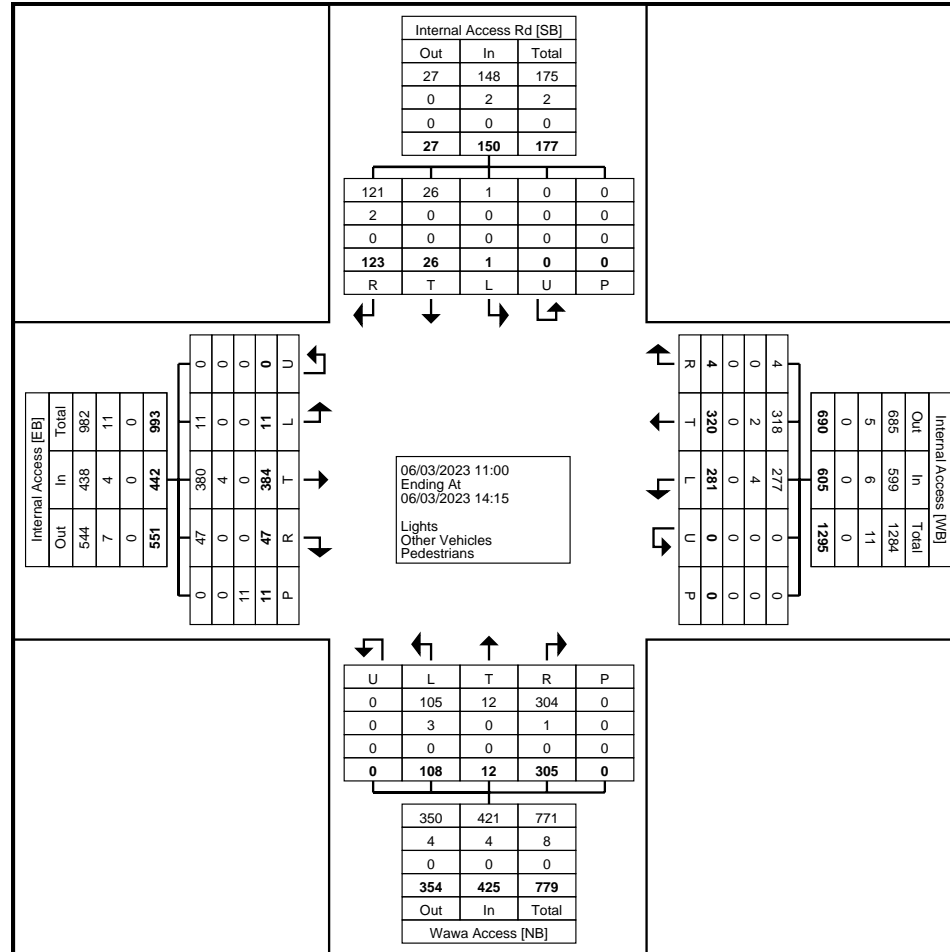
McMahon a Bowman Company  
425 Commerce Drive, Suite 200

Fort Washington, Pennsylvania, United States 19034  
215-283-9444

Count Name: 010014-01-001 Lawrenceville CFA  
- Internal Int2  
Site Code:  
Start Date: 06/03/2023  
Page No: 1

### Turning Movement Data

Start Time	Internal Access Rd Southbound						Internal Access Westbound						Wawa Access Northbound						Internal Access Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
11:00	0	4	11	0	0	15	26	19	2	0	0	47	7	1	39	0	0	47	1	27	3	0	0	31	140
11:15	0	2	10	0	0	12	25	23	0	0	0	48	13	1	19	0	0	33	1	27	6	0	0	34	127
11:30	1	1	6	0	0	8	25	36	0	0	0	61	12	0	26	0	0	38	0	28	6	0	2	34	141
11:45	0	3	10	0	0	13	22	17	0	0	0	39	9	0	21	0	0	30	1	30	2	0	0	33	115
Hourly Total	1	10	37	0	0	48	98	95	2	0	0	195	41	2	105	0	0	148	3	112	17	0	2	132	523
12:00	0	1	12	0	0	13	25	33	0	0	0	58	3	0	22	0	0	25	1	39	3	0	1	43	139
12:15	0	0	13	0	0	13	22	31	1	0	0	54	11	2	21	0	0	34	1	32	0	0	3	33	134
12:30	0	4	8	0	0	12	23	32	0	0	0	55	10	1	30	0	0	41	2	33	7	0	1	42	150
12:45	0	3	9	0	0	12	17	32	1	0	0	50	7	2	23	0	0	32	0	30	1	0	2	31	125
Hourly Total	0	8	42	0	0	50	87	128	2	0	0	217	31	5	96	0	0	132	4	134	11	0	7	149	548
13:00	0	1	8	0	0	9	27	16	0	0	0	43	9	0	23	0	0	32	1	42	4	0	2	47	131
13:15	0	2	17	0	0	19	19	22	0	0	0	41	12	3	31	0	0	46	2	25	5	0	0	32	138
13:30	0	1	7	0	0	8	31	29	0	0	0	60	6	0	29	0	0	35	1	31	7	0	0	39	142
13:45	0	4	12	0	0	16	19	30	0	0	0	49	9	2	21	0	0	32	0	40	3	0	0	43	140
Hourly Total	0	8	44	0	0	52	96	97	0	0	0	193	36	5	104	0	0	145	4	138	19	0	2	161	551
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	1	26	123	0	0	150	281	320	4	0	0	605	108	12	305	0	0	425	11	384	47	0	11	442	1622
Approach %	0.7	17.3	82.0	0.0	-	-	46.4	52.9	0.7	0.0	-	-	25.4	2.8	71.8	0.0	-	-	2.5	86.9	10.6	0.0	-	-	-
Total %	0.1	1.6	7.6	0.0	-	9.2	17.3	19.7	0.2	0.0	-	37.3	6.7	0.7	18.8	0.0	-	26.2	0.7	23.7	2.9	0.0	-	27.3	-
Lights	1	26	121	0	-	148	277	318	4	0	-	599	105	12	304	0	-	421	11	380	47	0	-	438	1606
% Lights	100.0	100.0	98.4	-	-	98.7	98.6	99.4	100.0	-	-	99.0	97.2	100.0	99.7	-	-	99.1	100.0	99.0	100.0	-	-	99.1	99.0
Other Vehicles	0	0	2	0	-	2	4	2	0	0	-	6	3	0	1	0	-	4	0	4	0	0	-	4	16
% Other Vehicles	0.0	0.0	1.6	-	-	1.3	1.4	0.6	0.0	-	-	1.0	2.8	0.0	0.3	-	-	0.9	0.0	1.0	0.0	-	-	0.9	1.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	11	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-



Turning Movement Data Plot



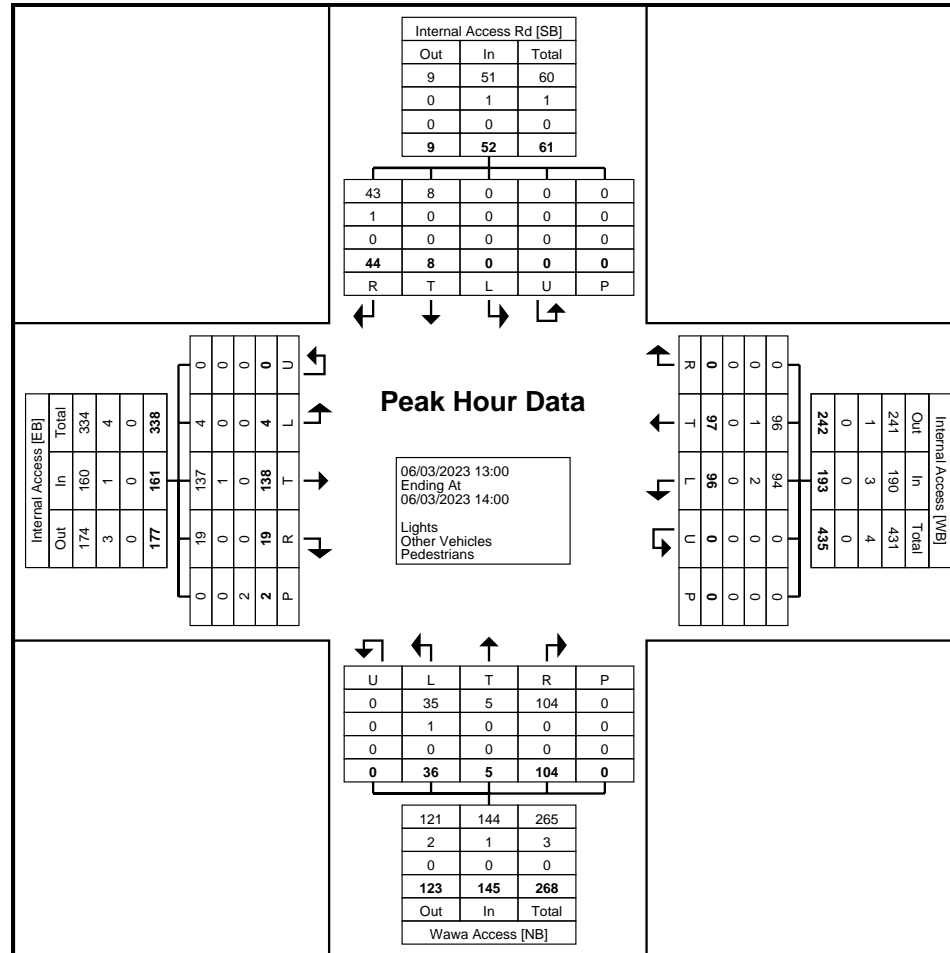
McMahon a Bowman Company  
425 Commerce Drive, Suite 200

Fort Washington, Pennsylvania, United States 19034  
215-283-9444

Count Name: 010014-01-001 Lawrenceville CFA  
- Internal Int2  
Site Code:  
Start Date: 06/03/2023  
Page No: 3

### Turning Movement Peak Hour Data (13:00)

Start Time	Internal Access Rd Southbound						Internal Access Westbound						Wawa Access Northbound						Internal Access Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
13:00	0	1	8	0	0	9	27	16	0	0	0	43	9	0	23	0	0	32	1	42	4	0	2	47	131
13:15	0	2	17	0	0	19	19	22	0	0	0	41	12	3	31	0	0	46	2	25	5	0	0	32	138
13:30	0	1	7	0	0	8	31	29	0	0	0	60	6	0	29	0	0	35	1	31	7	0	0	39	142
13:45	0	4	12	0	0	16	19	30	0	0	0	49	9	2	21	0	0	32	0	40	3	0	0	43	140
Total	0	8	44	0	0	52	96	97	0	0	0	193	36	5	104	0	0	145	4	138	19	0	2	161	551
Approach %	0.0	15.4	84.6	0.0	-	-	49.7	50.3	0.0	0.0	-	-	24.8	3.4	71.7	0.0	-	-	2.5	85.7	11.8	0.0	-	-	-
Total %	0.0	1.5	8.0	0.0	-	9.4	17.4	17.6	0.0	0.0	-	35.0	6.5	0.9	18.9	0.0	-	26.3	0.7	25.0	3.4	0.0	-	29.2	-
PHF	0.000	0.500	0.647	0.000	-	0.684	0.774	0.808	0.000	0.000	-	0.804	0.750	0.417	0.839	0.000	-	0.788	0.500	0.821	0.679	0.000	-	0.856	0.970
Lights	0	8	43	0	-	51	94	96	0	0	-	190	35	5	104	0	-	144	4	137	19	0	-	160	545
% Lights	-	100.0	97.7	-	-	98.1	97.9	99.0	-	-	-	98.4	97.2	100.0	100.0	-	-	99.3	100.0	99.3	100.0	-	-	99.4	98.9
Other Vehicles	0	0	1	0	-	1	2	1	0	0	-	3	1	0	0	0	-	1	0	1	0	0	-	1	6
% Other Vehicles	-	0.0	2.3	-	-	1.9	2.1	1.0	-	-	-	1.6	2.8	0.0	0.0	-	-	0.7	0.0	0.7	0.0	-	-	0.6	1.1
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-



Turning Movement Peak Hour Data Plot (13:00)



McMahon a Bowman Company  
425 Commerce Drive, Suite 200

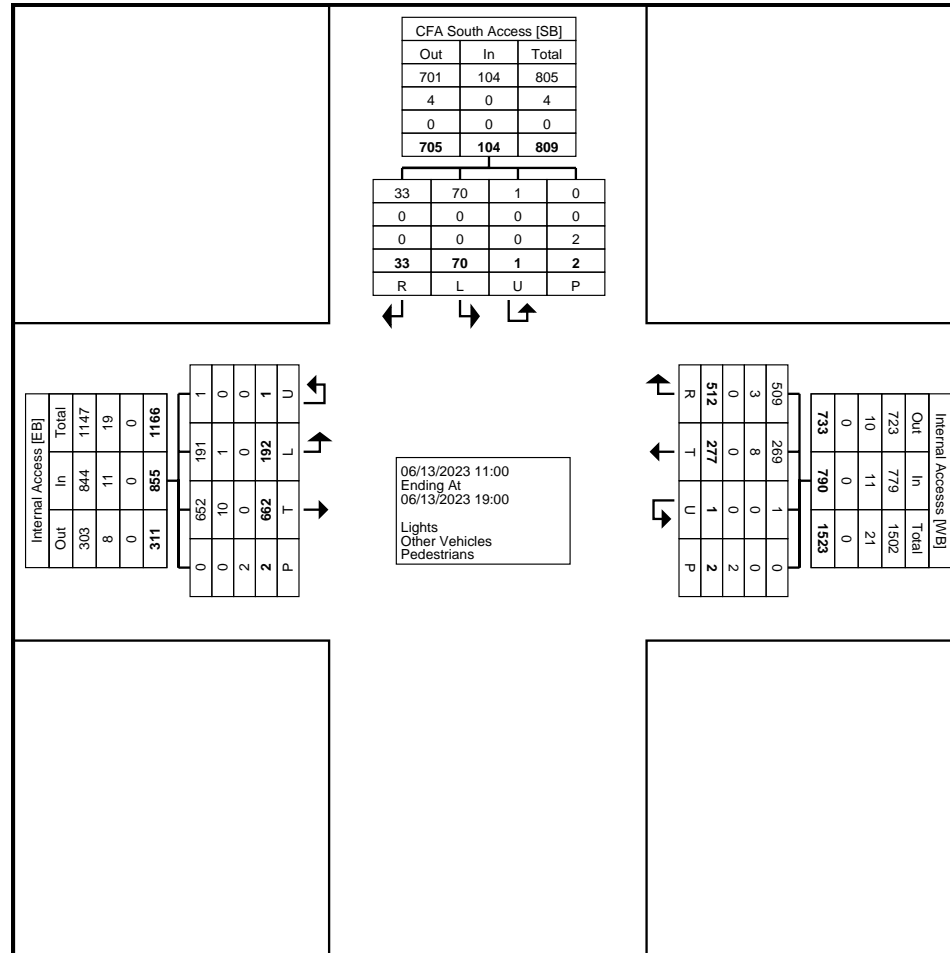
Fort Washington, Pennsylvania, United States 19034  
215-283-9444

Count Name: 010014-01-001 CFA Lawrenceville  
Access & CFA South  
Site Code:  
Start Date: 06/13/2023  
Page No: 1

### Turning Movement Data

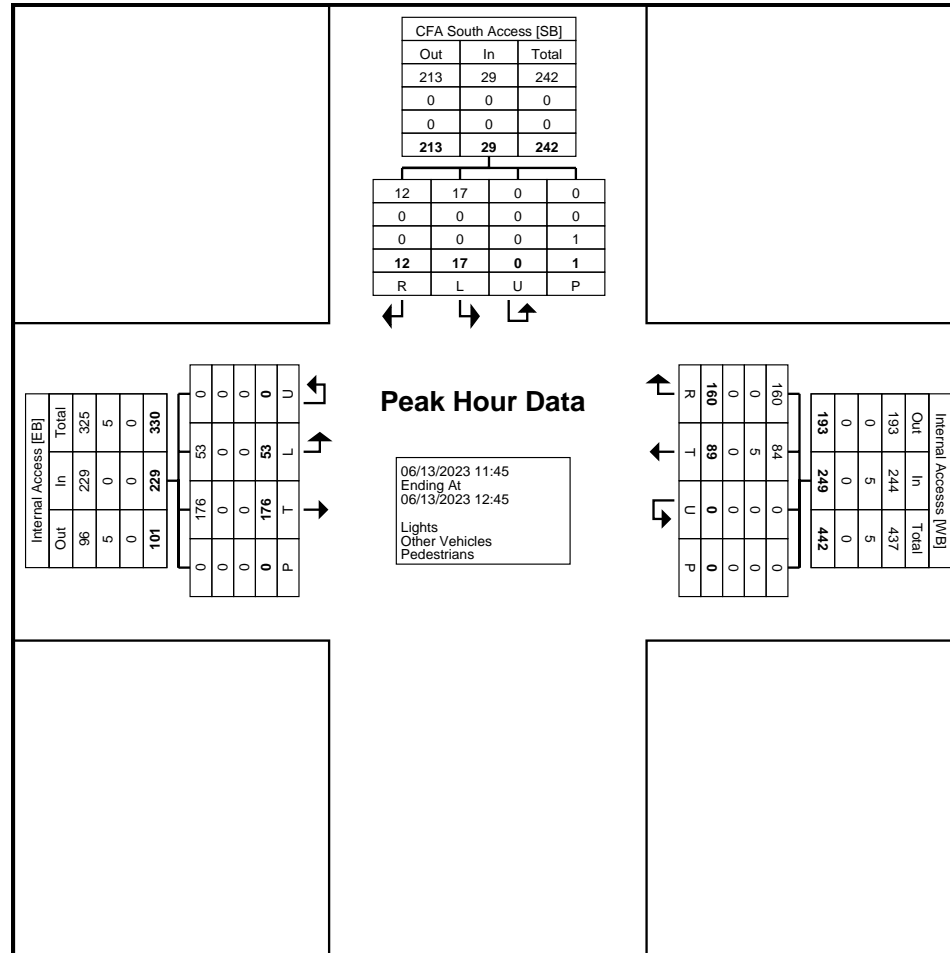
Start Time	CFA South Access Southbound					Internal Access Westbound					Internal Access Eastbound					Int. Total
	Left	Right	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	
11:00	1	0	0	0	1	4	22	0	0	26	15	39	1	0	55	82
11:15	2	0	1	0	3	16	19	0	0	35	7	35	0	0	42	80
11:30	0	2	0	0	2	14	22	0	0	36	13	32	0	0	45	83
11:45	2	2	0	0	4	16	43	0	0	59	16	42	0	0	58	121
Hourly Total	5	4	1	0	10	50	106	0	0	156	51	148	1	0	200	366
12:00	6	2	0	0	8	22	37	0	0	59	11	44	0	0	55	122
12:15	3	4	0	0	7	28	43	0	0	71	14	55	0	0	69	147
12:30	6	4	0	1	10	23	37	0	0	60	12	35	0	0	47	117
12:45	6	2	0	0	8	16	44	1	0	61	12	39	0	0	51	120
Hourly Total	21	12	0	1	33	89	161	1	0	251	49	173	0	0	222	506
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16:00	2	0	0	0	2	13	18	0	0	31	9	33	0	0	42	75
16:15	3	1	0	0	4	9	16	0	0	25	5	23	0	0	28	57
16:30	7	0	0	0	7	9	22	0	0	31	3	26	0	0	29	67
16:45	1	1	0	1	2	11	20	0	0	31	12	39	0	0	51	84
Hourly Total	13	2	0	1	15	42	76	0	0	118	29	121	0	0	150	283
17:00	3	4	0	0	7	22	19	0	2	41	7	19	0	0	26	74
17:15	6	2	0	0	8	16	16	0	0	32	9	27	0	0	36	76
17:30	2	2	0	0	4	14	23	0	0	37	12	30	0	0	42	83
17:45	5	0	0	0	5	11	19	0	0	30	7	27	0	2	34	69
Hourly Total	16	8	0	0	24	63	77	0	2	140	35	103	0	2	138	302
18:00	6	1	0	0	7	10	23	0	0	33	8	24	0	0	32	72
18:15	3	2	0	0	5	9	30	0	0	39	7	33	0	0	40	84
18:30	4	3	0	0	7	5	19	0	0	24	5	29	0	0	34	65
18:45	2	1	0	0	3	9	20	0	0	29	8	31	0	0	39	71
Hourly Total	15	7	0	0	22	33	92	0	0	125	28	117	0	0	145	292
Grand Total	70	33	1	2	104	277	512	1	2	790	192	662	1	2	855	1749
Approach %	67.3	31.7	1.0	-	-	35.1	64.8	0.1	-	-	22.5	77.4	0.1	-	-	-
Total %	4.0	1.9	0.1	-	5.9	15.8	29.3	0.1	-	45.2	11.0	37.9	0.1	-	48.9	-
Lights	70	33	1	-	104	269	509	1	-	779	191	652	1	-	844	1727
% Lights	100.0	100.0	100.0	-	100.0	97.1	99.4	100.0	-	98.6	99.5	98.5	100.0	-	98.7	98.7
Other Vehicles	0	0	0	-	0	8	3	0	-	11	1	10	0	-	11	22
% Other Vehicles	0.0	0.0	0.0	-	0.0	2.9	0.6	0.0	-	1.4	0.5	1.5	0.0	-	1.3	1.3
Pedestrians	-	-	-	2	-	-	-	-	2	-	-	-	-	2	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-





Turning Movement Data Plot





Turning Movement Peak Hour Data Plot (11:45)



McMahon a Bowman Company  
425 Commerce Drive, Suite 200

Fort Washington, Pennsylvania, United States 19034  
215-283-9444

Count Name: 010014-01-001 CFA Lawrenceville  
Access & CFA South  
Site Code:  
Start Date: 06/13/2023  
Page No: 5

### Turning Movement Peak Hour Data (16:45)

Start Time	CFA South Access Southbound					Internal Access Westbound					Internal Access Eastbound					Int. Total
	Left	Right	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	
16:45	1	1	0	1	2	11	20	0	0	31	12	39	0	0	51	84
17:00	3	4	0	0	7	22	19	0	2	41	7	19	0	0	26	74
17:15	6	2	0	0	8	16	16	0	0	32	9	27	0	0	36	76
17:30	2	2	0	0	4	14	23	0	0	37	12	30	0	0	42	83
Total	12	9	0	1	21	63	78	0	2	141	40	115	0	0	155	317
Approach %	57.1	42.9	0.0	-	-	44.7	55.3	0.0	-	-	25.8	74.2	0.0	-	-	-
Total %	3.8	2.8	0.0	-	6.6	19.9	24.6	0.0	-	44.5	12.6	36.3	0.0	-	48.9	-
PHF	0.500	0.563	0.000	-	0.656	0.716	0.848	0.000	-	0.860	0.833	0.737	0.000	-	0.760	0.943
Lights	12	9	0	-	21	63	78	0	-	141	40	115	0	-	155	317
% Lights	100.0	100.0	-	-	100.0	100.0	100.0	-	-	100.0	100.0	100.0	-	-	100.0	100.0
Other Vehicles	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Other Vehicles	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Pedestrians	-	-	-	1	-	-	-	-	2	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	-	-	-





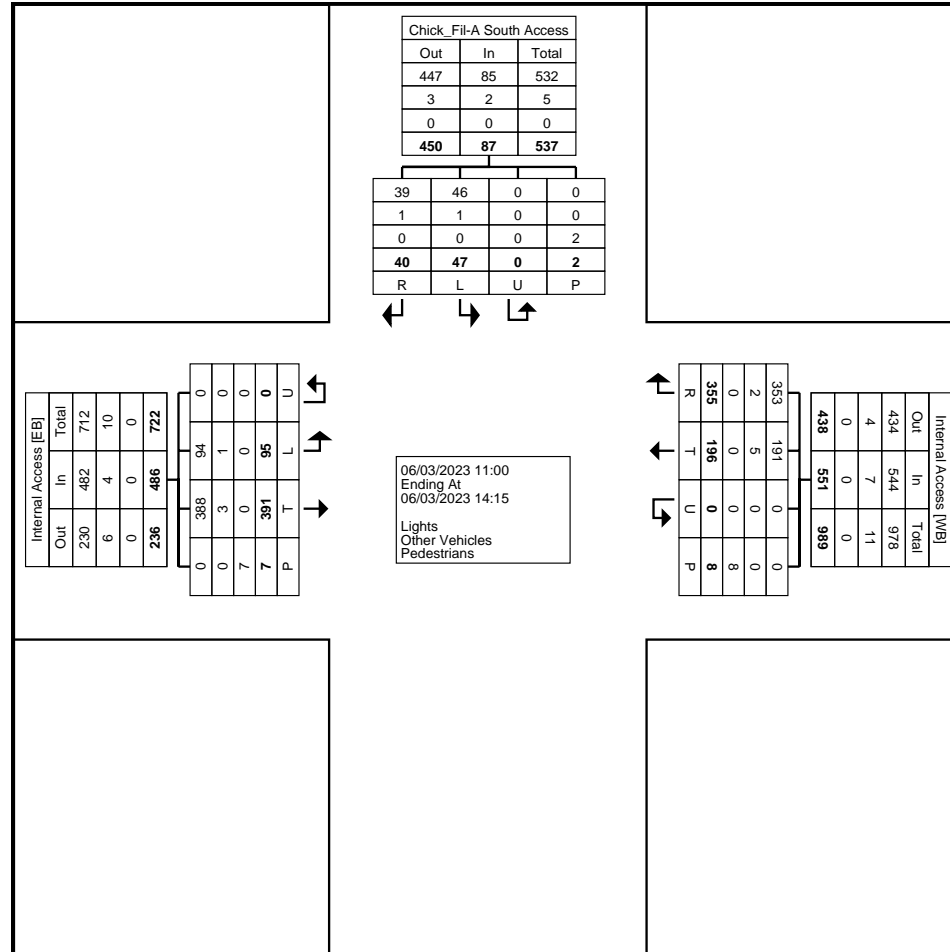
McMahon a Bowman Company  
425 Commerce Drive, Suite 200

Fort Washington, Pennsylvania, United States 19034  
215-283-9444

Count Name: 010014-01-001 Lawrenceville CFA  
- Internal Access & CFA South  
Site Code:  
Start Date: 06/03/2023  
Page No: 1

### Turning Movement Data

Start Time	Chick_Fil-A South Access Southbound					Internal Access Westbound					Internal Access Eastbound					Int. Total
	Left	Right	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	
11:00	0	3	0	0	3	18	20	0	0	38	3	29	0	1	32	73
11:15	2	2	0	0	4	18	29	0	0	47	5	34	0	0	39	90
11:30	6	2	0	0	8	20	32	0	0	52	4	27	0	2	31	91
11:45	7	7	0	0	14	14	21	0	0	35	9	25	0	0	34	83
Hourly Total	15	14	0	0	29	70	102	0	0	172	21	115	0	3	136	337
12:00	6	3	0	0	9	12	39	0	1	51	7	39	0	0	46	106
12:15	5	7	0	2	12	14	39	0	3	53	9	28	0	0	37	102
12:30	3	1	0	0	4	15	32	0	1	47	12	38	0	0	50	101
12:45	2	4	0	0	6	18	34	0	1	52	7	28	0	0	35	93
Hourly Total	16	15	0	2	31	59	144	0	6	203	35	133	0	0	168	402
13:00	2	4	0	0	6	13	19	0	2	32	5	46	0	0	51	89
13:15	4	5	0	0	9	18	32	0	0	50	9	27	0	0	36	95
13:30	6	2	0	0	8	11	32	0	0	43	10	35	0	0	45	96
13:45	4	0	0	0	4	25	26	0	0	51	15	35	0	4	50	105
Hourly Total	16	11	0	0	27	67	109	0	2	176	39	143	0	4	182	385
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	47	40	0	2	87	196	355	0	8	551	95	391	0	7	486	1124
Approach %	54.0	46.0	0.0	-	-	35.6	64.4	0.0	-	-	19.5	80.5	0.0	-	-	-
Total %	4.2	3.6	0.0	-	7.7	17.4	31.6	0.0	-	49.0	8.5	34.8	0.0	-	43.2	-
Lights	46	39	0	-	85	191	353	0	-	544	94	388	0	-	482	1111
% Lights	97.9	97.5	-	-	97.7	97.4	99.4	-	-	98.7	98.9	99.2	-	-	99.2	98.8
Other Vehicles	1	1	0	-	2	5	2	0	-	7	1	3	0	-	4	13
% Other Vehicles	2.1	2.5	-	-	2.3	2.6	0.6	-	-	1.3	1.1	0.8	-	-	0.8	1.2
Pedestrians	-	-	-	2	-	-	-	-	8	-	-	-	-	7	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-



Turning Movement Data Plot



McMahon a Bowman Company  
425 Commerce Drive, Suite 200

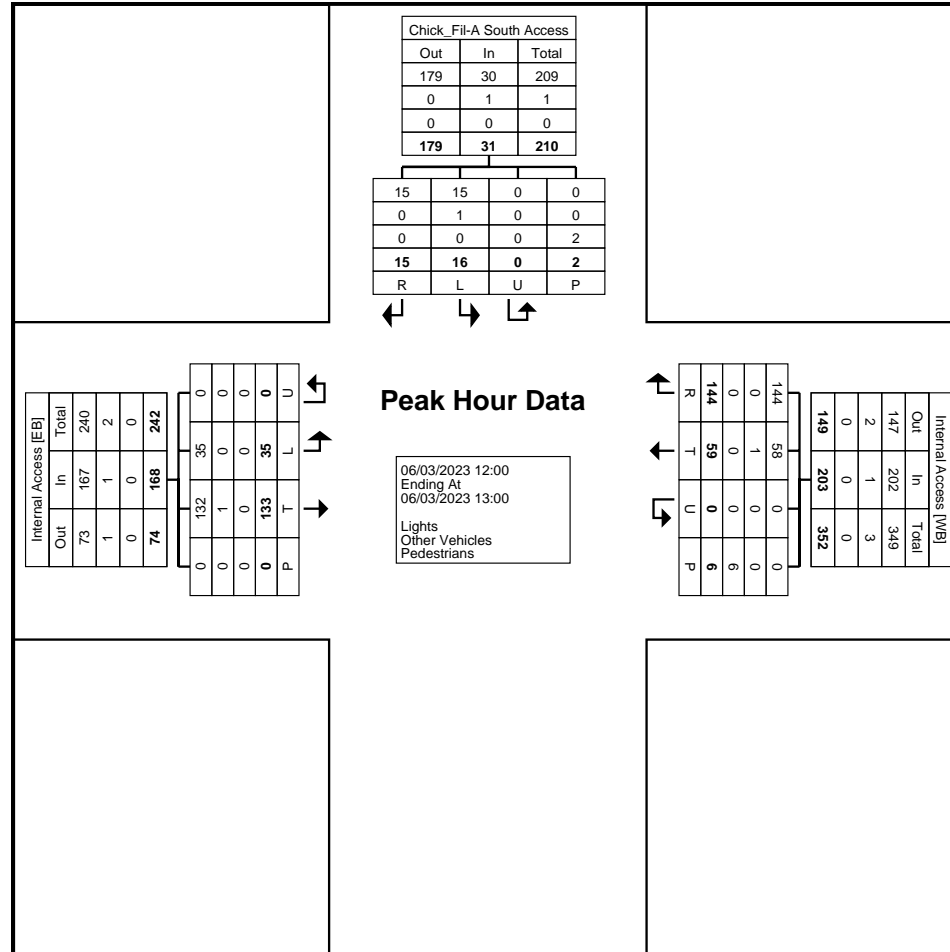
Fort Washington, Pennsylvania, United States 19034  
215-283-9444

Count Name: 010014-01-001 Lawrenceville CFA  
- Internal Access & CFA South  
Site Code:  
Start Date: 06/03/2023  
Page No: 3

### Turning Movement Peak Hour Data (12:00)

Start Time	Chick_Fil-A South Access Southbound					Internal Access Westbound					Internal Access Eastbound					Int. Total
	Left	Right	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	
12:00	6	3	0	0	9	12	39	0	1	51	7	39	0	0	46	106
12:15	5	7	0	2	12	14	39	0	3	53	9	28	0	0	37	102
12:30	3	1	0	0	4	15	32	0	1	47	12	38	0	0	50	101
12:45	2	4	0	0	6	18	34	0	1	52	7	28	0	0	35	93
Total	16	15	0	2	31	59	144	0	6	203	35	133	0	0	168	402
Approach %	51.6	48.4	0.0	-	-	29.1	70.9	0.0	-	-	20.8	79.2	0.0	-	-	-
Total %	4.0	3.7	0.0	-	7.7	14.7	35.8	0.0	-	50.5	8.7	33.1	0.0	-	41.8	-
PHF	0.667	0.536	0.000	-	0.646	0.819	0.923	0.000	-	0.958	0.729	0.853	0.000	-	0.840	0.948
Lights	15	15	0	-	30	58	144	0	-	202	35	132	0	-	167	399
% Lights	93.8	100.0	-	-	96.8	98.3	100.0	-	-	99.5	100.0	99.2	-	-	99.4	99.3
Other Vehicles	1	0	0	-	1	1	0	0	-	1	0	1	0	-	1	3
% Other Vehicles	6.3	0.0	-	-	3.2	1.7	0.0	-	-	0.5	0.0	0.8	-	-	0.6	0.7
Pedestrians	-	-	-	2	-	-	-	-	6	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	-	-	-





Turning Movement Peak Hour Data Plot (12:00)

# McMahon a Bowman Company

425 Commerce Drive, Suite 200  
Fort Washington, PA 19034

Municipality: Lawrence Township  
Location: Internal Access Road &  
Chick-Fil-a North Access  
Counter: M

File Name : CFAlaw01w  
Site Code : 00000000  
Start Date : 6/13/2023  
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles

Start Time	ChickFilA North Access Southbound		Internal Access Rd Westbound		Internal Access Rd Eastbound		Int. Total
	Left	Right	Thru	Right	Left	Thru	
11:00	27	9	7	0	3	28	74
11:15	25	10	11	6	6	16	74
11:30	20	13	9	7	2	25	76
11:45	29	21	12	6	3	28	99
<b>Total</b>	<b>101</b>	<b>53</b>	<b>39</b>	<b>19</b>	<b>14</b>	<b>97</b>	<b>323</b>
12:00	34	7	14	8	4	23	90
12:15	43	22	22	9	7	23	126
12:30	20	30	24	4	5	29	112
12:45	33	27	16	2	2	19	99
<b>Total</b>	<b>130</b>	<b>86</b>	<b>76</b>	<b>23</b>	<b>18</b>	<b>94</b>	<b>427</b>
*** BREAK ***							
16:00	20	11	12	1	1	21	66
16:15	16	7	9	2	4	13	51
16:30	12	12	7	2	3	18	54
16:45	23	5	7	4	4	25	68
<b>Total</b>	<b>71</b>	<b>35</b>	<b>35</b>	<b>9</b>	<b>12</b>	<b>77</b>	<b>239</b>
17:00	18	7	22	3	1	13	64
17:15	15	13	16	4	5	20	73
17:30	18	10	9	7	1	23	68
17:45	21	13	8	3	6	15	66
<b>Total</b>	<b>72</b>	<b>43</b>	<b>55</b>	<b>17</b>	<b>13</b>	<b>71</b>	<b>271</b>
18:00	16	10	8	3	5	15	57
18:15	23	15	8	3	1	18	68
18:30	21	12	7	1	3	13	57
18:45	18	9	7	3	2	22	61
<b>Total</b>	<b>78</b>	<b>46</b>	<b>30</b>	<b>10</b>	<b>11</b>	<b>68</b>	<b>243</b>
<b>Grand Total</b>	<b>452</b>	<b>263</b>	<b>235</b>	<b>78</b>	<b>68</b>	<b>407</b>	<b>1503</b>
Apprch %	63.2	36.8	75.1	24.9	14.3	85.7	
Total %	30.1	17.5	15.6	5.2	4.5	27.1	
Passenger Vehicles	448	263	221	77	68	396	1473
% Passenger Vehicles	99.1	100	94	98.7	100	97.3	98
Heavy Vehicles	4	0	14	1	0	11	30
% Heavy Vehicles	0.9	0	6	1.3	0	2.7	2

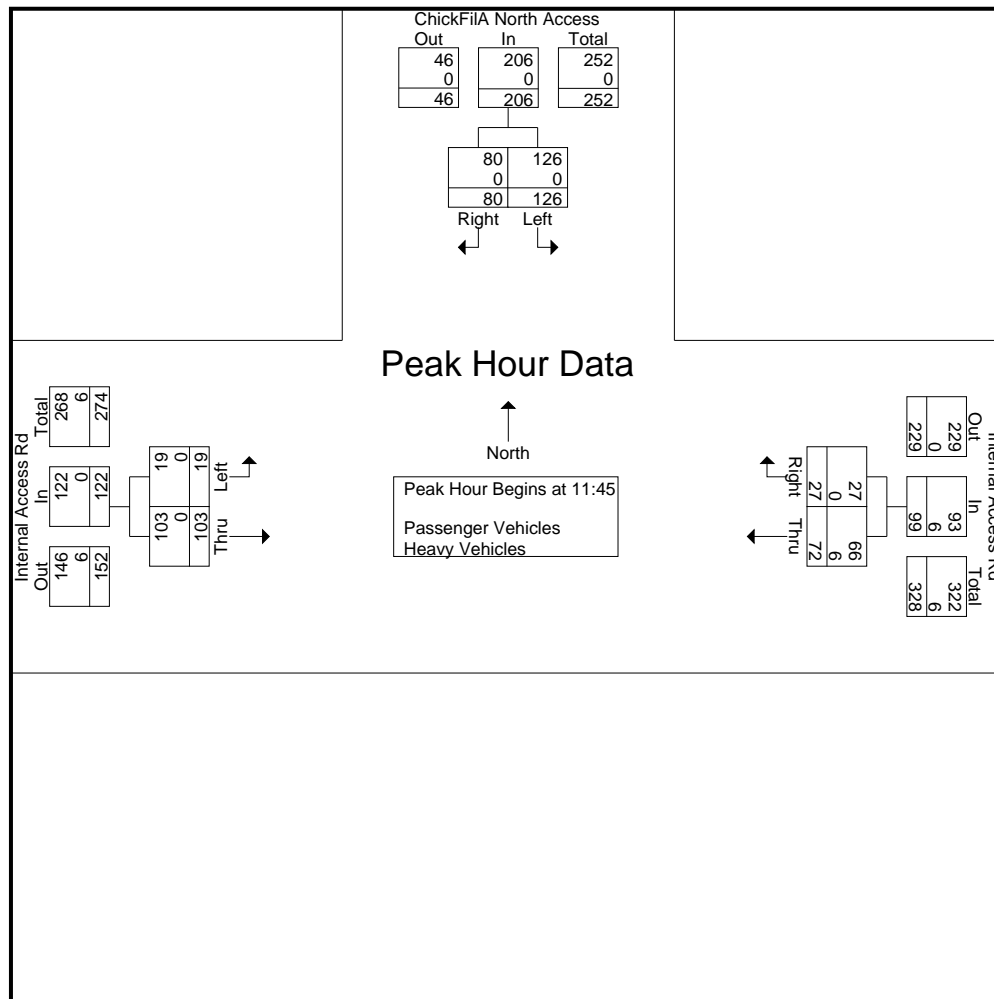
# McMahon a Bowman Company

425 Commerce Drive, Suite 200  
Fort Washington, PA 19034

Municipality: Lawrence Township  
Location: Internal Access Road &  
Chick-Fil-a North Access  
Counter: M

File Name : CFAlaw01w  
Site Code : 00000000  
Start Date : 6/13/2023  
Page No : 2

Start Time	ChickFilA North Access Southbound			Internal Access Rd Westbound			Internal Access Rd Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 11:00 to 13:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 11:45										
11:45	29	21	50	12	6	18	3	28	31	99
12:00	34	7	41	14	8	22	4	23	27	90
12:15	43	22	65	22	9	31	7	23	30	126
12:30	20	30	50	24	4	28	5	29	34	112
Total Volume	126	80	206	72	27	99	19	103	122	427
% App. Total	61.2	38.8		72.7	27.3		15.6	84.4		
PHF	.733	.667	.792	.750	.750	.798	.679	.888	.897	.847
Passenger Vehicles	126	80	206	66	27	93	19	103	122	421
% Passenger Vehicles	100	100	100	91.7	100	93.9	100	100	100	98.6
Heavy Vehicles	0	0	0	6	0	6	0	0	0	6
% Heavy Vehicles	0	0	0	8.3	0	6.1	0	0	0	1.4



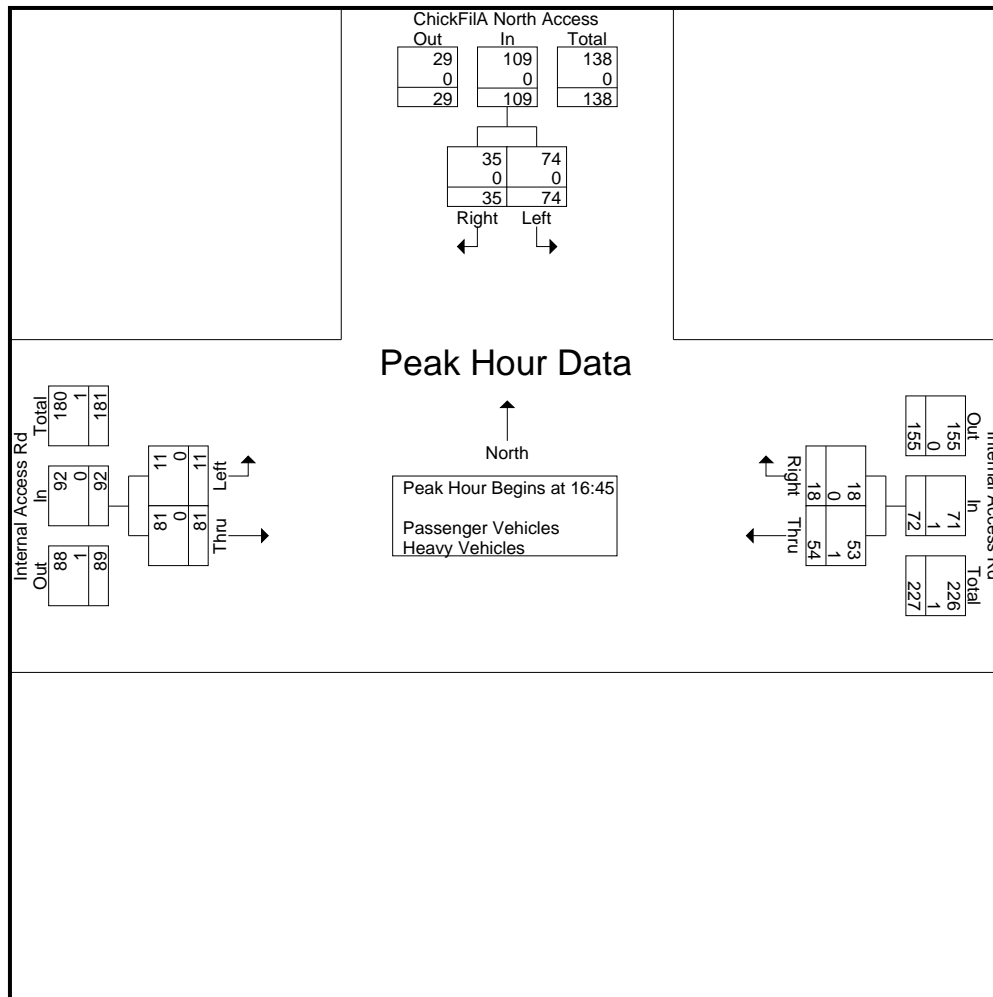
# McMahon a Bowman Company

425 Commerce Drive, Suite 200  
Fort Washington, PA 19034

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Location: Internal Access Road &  
Chick-Fil-a North Access  
Counter: M

File Name : CFAlaw01w  
Site Code : 00000000  
Start Date : 6/13/2023  
Page No : 3

Start Time	ChickFilA North Access Southbound			Internal Access Rd Westbound			Internal Access Rd Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 14:00 to 18:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 16:45										
16:45	23	5	28	7	4	11	4	25	29	68
17:00	18	7	25	22	3	25	1	13	14	64
17:15	15	13	28	16	4	20	5	20	25	73
17:30	18	10	28	9	7	16	1	23	24	68
<b>Total Volume</b>	<b>74</b>	<b>35</b>	<b>109</b>	<b>54</b>	<b>18</b>	<b>72</b>	<b>11</b>	<b>81</b>	<b>92</b>	<b>273</b>
<b>% App. Total</b>	<b>67.9</b>	<b>32.1</b>		<b>75</b>	<b>25</b>		<b>12</b>	<b>88</b>		
<b>PHF</b>	<b>.804</b>	<b>.673</b>	<b>.973</b>	<b>.614</b>	<b>.643</b>	<b>.720</b>	<b>.550</b>	<b>.810</b>	<b>.793</b>	<b>.935</b>
Passenger Vehicles	74	35	109	53	18	71	11	81	92	272
% Passenger Vehicles	100	100	100	98.1	100	98.6	100	100	100	99.6
Heavy Vehicles	0	0	0	1	0	1	0	0	0	1
% Heavy Vehicles	0	0	0	1.9	0	1.4	0	0	0	0.4





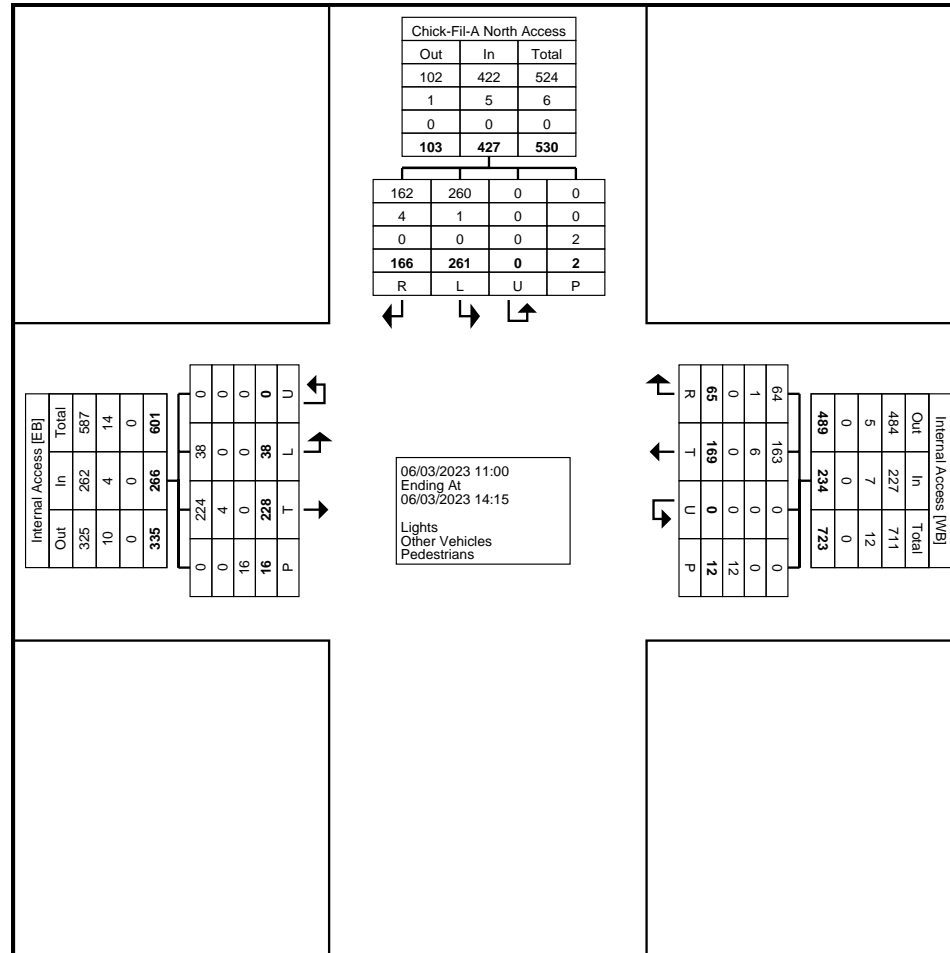
McMahon a Bowman Company  
425 Commerce Drive, Suite 200

Fort Washington, Pennsylvania, United States 19034  
215-283-9444

Count Name: 010014-01-001 Lawrenceville CFA  
- Access & North Access  
Site Code:  
Start Date: 06/03/2023  
Page No: 1

### Turning Movement Data

Start Time	Chick-Fil-A North Access Southbound					Internal Access Westbound					Internal Access Eastbound					Int. Total
	Left	Right	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	
11:00	19	10	0	0	29	14	4	0	1	18	1	14	0	2	15	62
11:15	20	10	0	0	30	19	2	0	2	21	1	21	0	1	22	73
11:30	11	13	0	0	24	21	2	0	0	23	4	19	0	3	23	70
11:45	21	10	0	2	31	14	6	0	2	20	4	13	0	2	17	68
Hourly Total	71	43	0	2	114	68	14	0	5	82	10	67	0	8	77	273
12:00	20	9	0	0	29	9	4	0	0	13	2	22	0	1	24	66
12:15	27	16	0	0	43	16	8	0	1	24	4	12	0	1	16	83
12:30	23	18	0	0	41	11	6	0	2	17	1	27	0	1	28	86
12:45	19	23	0	0	42	14	5	0	3	19	2	18	0	1	20	81
Hourly Total	89	66	0	0	155	50	23	0	6	73	9	79	0	4	88	316
13:00	38	11	0	0	49	15	2	0	1	17	3	13	0	0	16	82
13:15	13	10	0	0	23	16	7	0	0	23	3	23	0	0	26	72
13:30	22	17	0	0	39	9	3	0	0	12	3	18	0	3	21	72
13:45	28	19	0	0	47	11	16	0	0	27	10	28	0	1	38	112
Hourly Total	101	57	0	0	158	51	28	0	1	79	19	82	0	4	101	338
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	261	166	0	2	427	169	65	0	12	234	38	228	0	16	266	927
Approach %	61.1	38.9	0.0	-	-	72.2	27.8	0.0	-	-	14.3	85.7	0.0	-	-	-
Total %	28.2	17.9	0.0	-	46.1	18.2	7.0	0.0	-	25.2	4.1	24.6	0.0	-	28.7	-
Lights	260	162	0	-	422	163	64	0	-	227	38	224	0	-	262	911
% Lights	99.6	97.6	-	-	98.8	96.4	98.5	-	-	97.0	100.0	98.2	-	-	98.5	98.3
Other Vehicles	1	4	0	-	5	6	1	0	-	7	0	4	0	-	4	16
% Other Vehicles	0.4	2.4	-	-	1.2	3.6	1.5	-	-	3.0	0.0	1.8	-	-	1.5	1.7
Pedestrians	-	-	-	2	-	-	-	-	12	-	-	-	-	16	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-



Turning Movement Data Plot



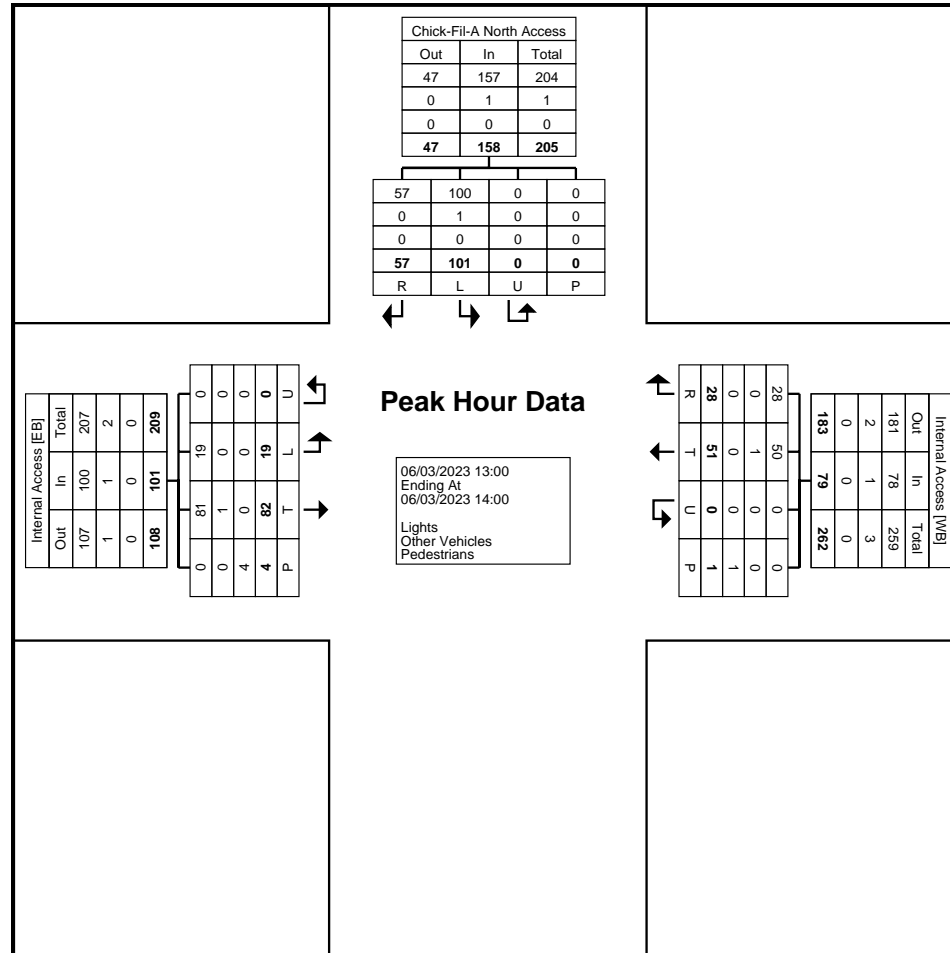
McMahon a Bowman Company  
425 Commerce Drive, Suite 200

Fort Washington, Pennsylvania, United States 19034  
215-283-9444

Count Name: 010014-01-001 Lawrenceville CFA  
- Access & North Access  
Site Code:  
Start Date: 06/03/2023  
Page No: 3

### Turning Movement Peak Hour Data (13:00)

Start Time	Chick-Fil-A North Access Southbound					Internal Access Westbound					Internal Access Eastbound					Int. Total
	Left	Right	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	
13:00	38	11	0	0	49	15	2	0	1	17	3	13	0	0	16	82
13:15	13	10	0	0	23	16	7	0	0	23	3	23	0	0	26	72
13:30	22	17	0	0	39	9	3	0	0	12	3	18	0	3	21	72
13:45	28	19	0	0	47	11	16	0	0	27	10	28	0	1	38	112
Total	101	57	0	0	158	51	28	0	1	79	19	82	0	4	101	338
Approach %	63.9	36.1	0.0	-	-	64.6	35.4	0.0	-	-	18.8	81.2	0.0	-	-	-
Total %	29.9	16.9	0.0	-	46.7	15.1	8.3	0.0	-	23.4	5.6	24.3	0.0	-	29.9	-
PHF	0.664	0.750	0.000	-	0.806	0.797	0.438	0.000	-	0.731	0.475	0.732	0.000	-	0.664	0.754
Lights	100	57	0	-	157	50	28	0	-	78	19	81	0	-	100	335
% Lights	99.0	100.0	-	-	99.4	98.0	100.0	-	-	98.7	100.0	98.8	-	-	99.0	99.1
Other Vehicles	1	0	0	-	1	1	0	0	-	1	0	1	0	-	1	3
% Other Vehicles	1.0	0.0	-	-	0.6	2.0	0.0	-	-	1.3	0.0	1.2	-	-	1.0	0.9
Pedestrians	-	-	-	0	-	-	-	-	1	-	-	-	-	4	-	-
% Pedestrians	-	-	-	-	-	-	-	-	100.0	-	-	-	-	100.0	-	-



Turning Movement Peak Hour Data Plot (13:00)



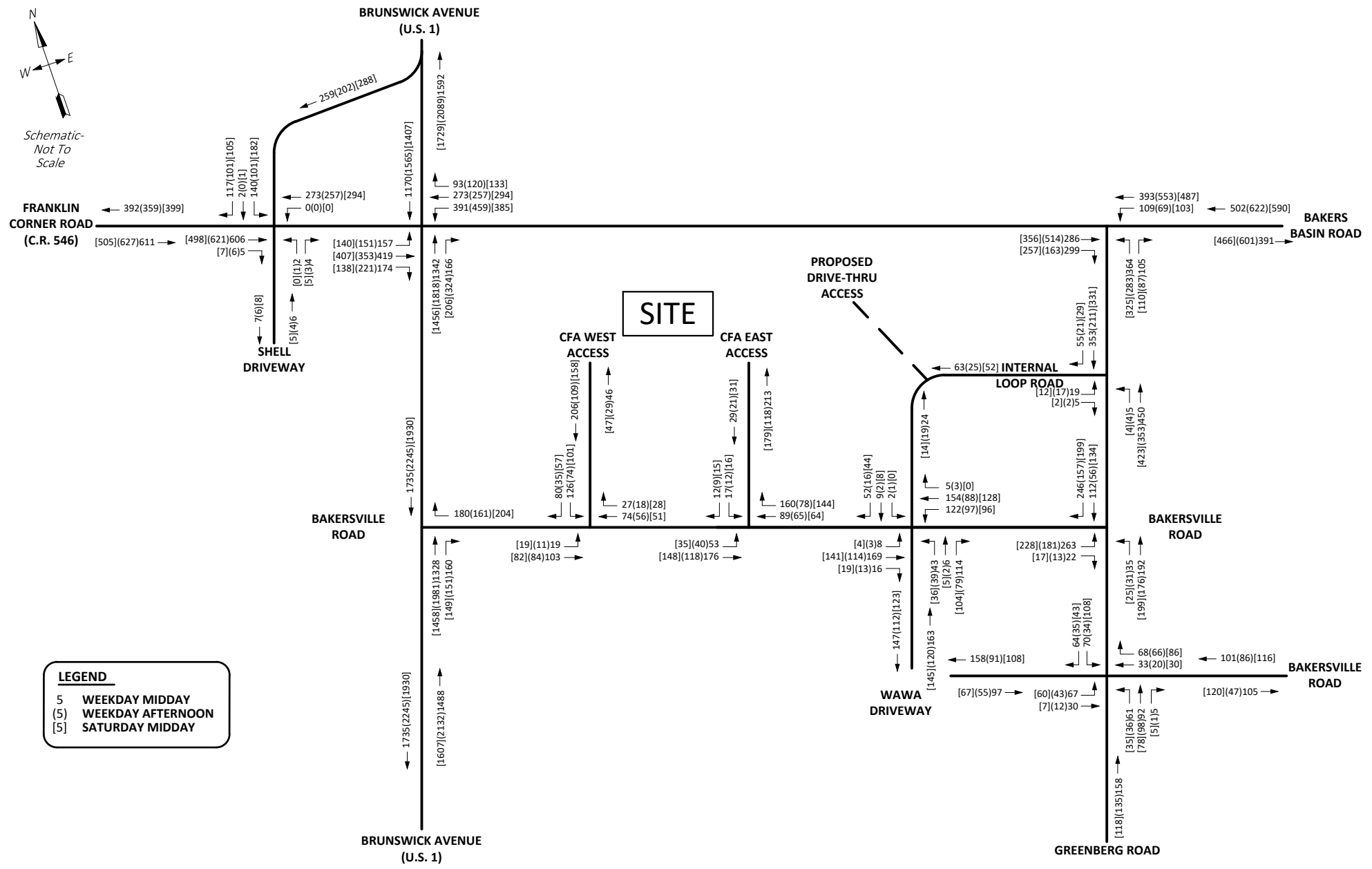


## **VOLUME BALANCING**





Schematic-  
Not To  
Scale

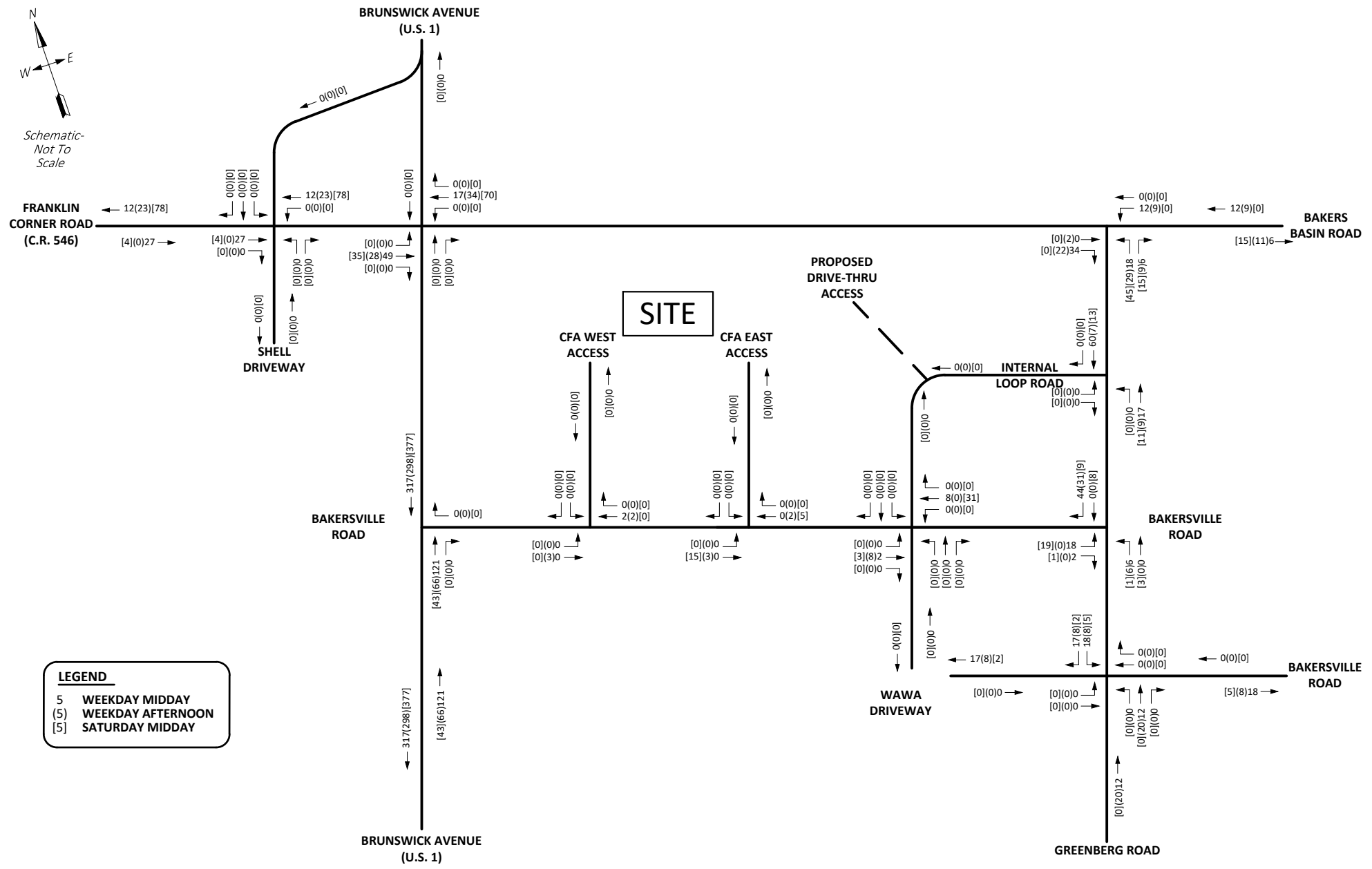


**FIGURE A**  
2023 Existing Unbalanced Peak Hour Traffic Volumes  
**LAWRENCEVILLE CHICK-FIL-A**  
LAWRENCE TOWNSHIP, MERCER COUNTY, NJ





Schematic-  
Not To  
Scale



**LEGEND**

5 WEEKDAY MIDDAY  
 (5) WEEKDAY AFTERNOON  
 [5] SATURDAY MIDDAY

**FIGURE B**  
 Balancing Adjustments  
**LAWRENCEVILLE CHICK-FIL-A**  
 LAWRENCE TOWNSHIP, MERCER COUNTY, NJ



## **BAKERS BASIN ROAD QUEUES**



## Approach Queues in Number of Vehicles

Weekday Midday

Bakers Basin Approach to US 1 in Lawrenceville, NJ

Tuesday, June 13, 2023

Interval	Vehicles		
	Left	Left/Thru	Thru/Right
11:00 AM to 11:05 AM	3	8	4
11:05 AM to 11:10 AM	5	8	5
11:10 AM to 11:15 AM	4	8	4
11:15 AM to 11:20 AM	6	8	5
11:20 AM to 11:25 AM	5	7	4
11:25 AM to 11:30 AM	5	7	5
11:30 AM to 11:35 AM	4	5	8
11:35 AM to 11:40 AM	8	8	6
11:40 AM to 11:45 AM	7	8	5
11:45 AM to 11:50 AM	7	9	6
11:50 AM to 11:55 AM	7	11	5
11:55 AM to 12:00 PM	8	11	5
12:00 PM to 12:05 PM	9	11	9
12:05 PM to 12:10 PM	8	10	9
12:10 PM to 12:00 AM	5	10	8
12:15 PM to 12:20 PM	6	12	10
12:20 PM to 12:25 PM	8	8	11
12:25 PM to 12:30 PM	9	9	7
12:30 PM to 12:35 PM	8	10	8
12:35 PM to 12:40 PM	8	8	8
12:40 PM to 12:45 PM	7	7	8
12:45 PM to 12:50 PM	6	6	7
12:50 PM to 12:55 PM	6	8	7
12:55 PM to 1:00 PM	5	7	4
Minimum	3	5	4
Average	6	9	7
Maximum	9	12	11
95th Percentile	9	11	10



## Approach Queues in Number of Vehicles

Weekday Afternoon

Bakers Basin Approach to US 1 in Lawrenceville, NJ

Tuesday, June 13, 2023

Interval	Vehicles		
	Left	Left/Thru	Thru/Right
4:00 PM to 4:05 PM	6	10	5
4:05 PM to 4:10 PM	11	14	12
4:10 PM to 4:15 PM	8	11	12
4:15 PM to 4:20 PM	7	8	10
4:20 PM to 4:25 PM	3	5	3
4:25 PM to 4:30 PM	4	7	2
4:30 PM to 4:35 PM	7	6	4
4:35 PM to 4:40 PM	3	7	4
4:40 PM to 4:45 PM	1	6	7
4:45 PM to 4:50 PM	2	8	8
4:50 PM to 4:55 PM	5	6	1
4:55 PM to 5:00 PM	9	9	6
5:00 PM to 5:05 PM	5	4	2
5:05 PM to 5:10 PM	0	5	4
5:10 PM to 5:15 PM	12	9	6
5:15 PM to 5:20 PM	7	6	8
5:20 PM to 5:25 PM	5	5	6
5:25 PM to 5:30 PM	11	9	13
5:30 PM to 5:35 PM	10	15	11
5:35 PM to 5:40 PM	4	6	3
5:40 PM to 5:45 PM	10	15	12
5:45 PM to 5:50 PM	11	16	13
5:50 PM to 5:55 PM	5	6	13
5:55 PM to 6:00 PM	6	9	7
6:00 PM to 6:05 PM	5	2	0
6:05 PM to 6:10 PM	5	8	7
6:10 PM to 6:15 PM	7	7	6
6:15 PM to 6:20 PM	6	10	12
6:20 PM to 6:25 PM	0	3	1
6:25 PM to 6:30 PM	9	15	4
6:30 PM to 6:35 PM	5	8	7
6:35 PM to 6:40 PM	2	3	3
6:40 PM to 6:45 PM	1	1	3
6:45 PM to 6:50 PM	5	6	2
6:50 PM to 6:55 PM	0	2	5
6:55 PM to 7:00 PM	1	3	1
Minimum	0	1	0
Average	6	8	6
Maximum	12	16	13
95th Percentile	11	15	13

## Approach Queues in Number of Vehicles

Saturday MIDDAY

Bakers Basin Approach to US 1 in Lawrenceville, NJ

Saturday, June 3, 2023

Interval	Vehicles		
	Left	Left/Thru	Thru/Right
11:00 AM to 11:05 AM	3	3	2
11:05 AM to 11:10 AM	4	3	7
11:10 AM to 11:15 AM	2	7	10
11:15 AM to 11:20 AM	8	6	9
11:20 AM to 11:25 AM	2	5	4
11:25 AM to 11:30 AM	4	7	1
11:30 AM to 11:35 AM	2	4	5
11:35 AM to 11:40 AM	3	6	6
11:40 AM to 11:45 AM	4	2	7
11:45 AM to 11:50 AM	9	12	8
11:50 AM to 11:55 AM	3	6	7
11:55 AM to 12:00 PM	6	11	12
12:00 PM to 12:05 PM	4	10	3
12:05 PM to 12:10 PM	5	12	13
12:10 PM to 12:15 PM	3	4	2
12:15 PM to 12:20 PM	5	4	2
12:20 PM to 12:25 PM	4	5	4
12:25 PM to 12:30 PM	5	9	6
12:30 PM to 12:35 PM	7	9	12
12:35 PM to 12:40 PM	4	5	3
12:40 PM to 12:45 PM	6	8	7
12:45 PM to 12:50 PM	9	7	9
12:50 PM to 12:55 PM	11	9	13
12:55 PM to 1:00 PM	8	6	6
1:00 PM to 1:05 PM	7	4	11
1:05 PM to 1:10 PM	8	5	11
1:10 PM to 1:15 PM	9	8	10
1:15 PM to 1:20 PM	8	5	8
1:20 PM to 1:25 PM	11	8	8
1:25 PM to 1:30 PM	8	5	7
1:30 PM to 1:35 PM	5	11	5
1:35 PM to 1:40 PM	6	8	6
1:40 PM to 1:45 PM	7	7	7
1:45 PM to 1:50 PM	8	5	5
1:50 PM to 1:55 PM	5	6	6
1:55 PM to 2:00 PM	5	4	5
Minimum	2	2	1
Average	6	7	7
Maximum	11	12	13
95th Percentile	10	11	12



## Appendix C

# Store Operational Data



**Table A - Comparison of ITE-Based Trip Generation Characteristics and Lawrenceville, NJ Chick-fil-A**

Time Period	11th Edition <sup>(1)</sup>	Peak Hour			All Intervals						
		Local Rate <sup>(3)</sup>	% Enter	% Exit	% Drive-Thru Entering	% Other Trips Entering	% Drive-Thru Exiting	% Other Trips Exiting	Maximum Observed Queue Range (vehicles) <sup>(4)</sup>		95th Percentile Maximum Queue (Vehicles) <sup>(4)</sup>
Weekday Midday Peak Hour (11:00 AM to 1:00 PM) <sup>(2)</sup>	50.94	94.09	50%	50%	56%	44%	58%	42%	2	31	29
Weekday Afternoon (4:00 PM to 7:00 PM)	33.03	57.40	52%	48%	60%	40%	57%	43%	0	20	15
Saturday Midday (11:00 AM to 2:00 PM)	55.25	74.71	53%	47%	54%	46%	55%	45%	2	24	21

(1) Based on rates from ITE's *Trip Generation Manual, 11th Edition* for Land Use Code 934: Fast-Food Restaurant with Drive-Through Window using variable of store size.

(2) Based on higher of weekday morning or weekday afternoon peak hour of generator for Land Use Code 934: Fast-Food Restaurant with Drive-Through Window for ITE Data.

(3) Peak hour trips divided by store size of 5,314 square feet.

(4) Queue measured in number of vehicles starting at the pick-up window.

Table B - WEEKDAY MIDDAY (11:00 AM to 1:00 PM)

Lawrenceville, NJ

Tuesday, June 13, 2023

Interval			Drive-Thru				Other Trips			TOTAL			PEAK HOUR	
			Enter	Exit	Total	Queue <sup>(1)</sup>	Enter	Exit	Total	Enter	Exit	Total		
11:00 AM	to	11:05 AM				2								
11:05 AM	to	11:10 AM	22	20	42	2	18	17	35	40	37	77	---	
11:10 AM	to	11:15 AM				4								
11:15 AM	to	11:20 AM				6								
11:20 AM	to	11:25 AM	18	20	38	9	20	17	37	38	37	75	---	
11:25 AM	to	11:30 AM				2								
11:30 AM	to	11:35 AM				3								
11:35 AM	to	11:40 AM	22	22	44	2	22	13	35	44	35	79	---	
11:40 AM	to	11:45 AM				4								
11:45 AM	to	11:50 AM				7								
11:50 AM	to	11:55 AM	36	35	71	5	32	19	51	68	54	122	353	
11:55 AM	to	12:00 PM				5								
12:00 PM	to	12:05 PM				10								
12:05 PM	to	12:10 PM	33	23	56	29	27	26	53	60	49	109	385	
12:10 PM	to	12:15 PM				31								
12:15 PM	to	12:20 PM				23								
12:20 PM	to	12:25 PM	40	45	85	23	33	27	60	73	72	145	455	
12:25 PM	to	12:30 PM				20								
12:30 PM	to	12:35 PM				15								
12:35 PM	to	12:40 PM	38	28	66	17	20	32	52	58	60	118	494	
12:40 PM	to	12:45 PM				27								
12:45 PM	to	12:50 PM				27								
12:50 PM	to	12:55 PM	36	48	84	13	24	20	44	60	68	128	500	
12:55 PM	to	1:00 PM				11								
<b>TOTAL All INTERVALS</b>			<b>245</b>	<b>241</b>	<b>486</b>	<b>31</b>	<b>196</b>	<b>171</b>	<b>367</b>	<b>441</b>	<b>412</b>	<b>853</b>		
<b>PEAK HOUR/MAX QUEUE</b>			<b>147</b>	<b>144</b>	<b>291</b>	<b>31</b>	<b>104</b>	<b>105</b>	<b>209</b>	<b>251</b>	<b>249</b>	<b>500</b>		

(1) Queue measured in number of vehicles starting at the pick-up window.

Table C - WEEKDAY AFTERNOON (4:00 PM to 7:00 PM)

Lawrenceville, NJ

Tuesday, June 13, 2023

Interval			Drive-Thru				Other Trips			TOTAL			PEAK HOUR
			Enter	Exit	Total	Queue <sup>(1)</sup>	Enter	Exit	Total	Enter	Exit	Total	
4:00 PM	to	4:05 PM	25	22	47	9	4	11	15	29	33	62	---
4:05 PM	to	4:10 PM				5							
4:10 PM	to	4:15 PM				6							
4:15 PM	to	4:20 PM	16	12	28	5	11	15	26	27	27	54	---
4:20 PM	to	4:25 PM				2							
4:25 PM	to	4:30 PM				0							
4:30 PM	to	4:35 PM	18	17	35	2	12	14	26	30	31	61	---
4:35 PM	to	4:40 PM				1							
4:40 PM	to	4:45 PM				3							
4:45 PM	to	4:50 PM	18	22	40	1	22	8	30	40	30	70	247
4:50 PM	to	4:55 PM				5							
4:55 PM	to	5:00 PM				5							
5:00 PM	to	5:05 PM	15	17	32	0	15	15	30	30	32	62	247
5:05 PM	to	5:10 PM				9							
5:10 PM	to	5:15 PM				5							
5:15 PM	to	5:20 PM	15	17	32	3	19	19	38	34	36	70	263
5:20 PM	to	5:25 PM				2							
5:25 PM	to	5:30 PM				7							
5:30 PM	to	5:35 PM	22	20	42	6	21	12	33	43	32	75	277
5:35 PM	to	5:40 PM				6							
5:40 PM	to	5:45 PM				4							
5:45 PM	to	5:50 PM	23	22	45	7	12	17	29	35	39	74	281
5:50 PM	to	5:55 PM				6							
5:55 PM	to	6:00 PM				3							
6:00 PM	to	6:05 PM	22	17	39	2	17	16	33	39	33	72	291
6:05 PM	to	6:10 PM				7							
6:10 PM	to	6:15 PM				7							
6:15 PM	to	6:20 PM	26	21	47	14	15	22	37	41	43	84	305
6:20 PM	to	6:25 PM				20							
6:25 PM	to	6:30 PM				19							
6:30 PM	to	6:35 PM	27	21	48	8	1	19	20	28	40	68	298
6:35 PM	to	6:40 PM				5							
6:40 PM	to	6:45 PM				6							
6:45 PM	to	6:50 PM	20	22	42	1	13	8	21	33	30	63	287
6:50 PM	to	6:55 PM				4							
6:55 PM	to	7:00 PM				7							
<b>TOTAL All INTERVALS</b>			<b>247</b>	<b>230</b>	<b>340</b>	<b>20</b>	<b>162</b>	<b>176</b>	<b>338</b>	<b>409</b>	<b>406</b>	<b>815</b>	
<b>PEAK HOUR/MAX QUEUE</b>			<b>93</b>	<b>80</b>	<b>173</b>	<b>20</b>	<b>65</b>	<b>67</b>	<b>132</b>	<b>158</b>	<b>147</b>	<b>305</b>	

(1) Queue measured in number of vehicles starting at the pick-up window.



Table D - SATURDAY MIDDAY (11:00 AM to 2:00 PM)

Lawrenceville, NJ

Saturday, June 3, 2023

Interval			Drive-Thru				Other Trips			TOTAL			PEAK HOUR	
			Enter	Exit	Total	Queue <sup>(1)</sup>	Enter	Exit	Total	Enter	Exit	Total		
11:00 AM	to	11:05 AM				3								
11:05 AM	to	11:10 AM	14	11	25	6	14	21	35	28	32	60	---	
11:10 AM	to	11:15 AM				3								
11:15 AM	to	11:20 AM				3								
11:20 AM	to	11:25 AM	24	21	45	5	13	13	26	37	34	71	---	
11:25 AM	to	11:30 AM				12								
11:30 AM	to	11:35 AM				11								
11:35 AM	to	11:40 AM	25	21	46	10	17	11	28	42	32	74	---	
11:40 AM	to	11:45 AM				9								
11:45 AM	to	11:50 AM				7								
11:50 AM	to	11:55 AM	20	22	42	5	20	23	43	40	45	85	290	
11:55 AM	to	12:00 PM				9								
12:00 PM	to	12:05 PM				16								
12:05 PM	to	12:10 PM	28	29	57	17	24	9	33	52	38	90	320	
12:10 PM	to	12:15 PM				14								
12:15 PM	to	12:20 PM				16								
12:20 PM	to	12:25 PM	29	31	60	11	31	24	55	60	55	115	364	
12:25 PM	to	12:30 PM				14								
12:30 PM	to	12:35 PM				16								
12:35 PM	to	12:40 PM	27	28	55	19	24	17	41	51	45	96	386	
12:40 PM	to	12:45 PM				14								
12:45 PM	to	12:50 PM				14								
12:50 PM	to	12:55 PM	28	26	54	13	20	22	42	48	48	96	397	
12:55 PM	to	1:00 PM				16								
1:00 PM	to	1:05 PM				21								
1:05 PM	to	1:10 PM	24	29	53	11	5	26	31	29	55	84	391	
1:10 PM	to	1:15 PM				4								
1:15 PM	to	1:20 PM				2								
1:20 PM	to	1:25 PM	28	26	54	7	23	6	29	51	32	83	359	
1:25 PM	to	1:30 PM				19								
1:30 PM	to	1:35 PM				24								
1:35 PM	to	1:40 PM	25	20	45	14	23	27	50	48	47	95	358	
1:40 PM	to	1:45 PM				15								
1:45 PM	to	1:50 PM				16								
1:50 PM	to	1:55 PM	26	21	47	22	41	30	71	67	51	118	380	
1:55 PM	to	2:00 PM				19								
<b>TOTAL All INTERVALS</b>			<b>298</b>	<b>285</b>	<b>583</b>	<b>24</b>	<b>255</b>	<b>229</b>	<b>484</b>	<b>553</b>	<b>514</b>	<b>1067</b>		
<b>PEAK HOUR/MAX QUEUE</b>			<b>112</b>	<b>114</b>	<b>226</b>	<b>19</b>	<b>99</b>	<b>72</b>	<b>171</b>	<b>211</b>	<b>186</b>	<b>397</b>		

(1) Queue measured in number of vehicles starting at the pick-up window.



**Drive-Through Maximum Observed Queues**

**Weekday Midday**

CFA Store: Lawrenceville, NJ

Date: Tuesday, June 13, 2023 .

Interval	Vehicles										TOTAL	
	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Area 7	Area 8	Area 9	Area 10		
11:00 AM to 11:05 AM	2	0	0	0	0	0	0	0	0	0	0	2
11:05 AM to 11:10 AM	2	0	0	0	0	0	0	0	0	0	0	2
11:10 AM to 11:15 AM	2	0	2	0	0	0	0	0	0	0	0	4
11:15 AM to 11:20 AM	2	0	4	0	0	0	0	0	0	0	0	6
11:20 AM to 11:25 AM	2	0	7	0	0	0	0	0	0	0	0	9
11:25 AM to 11:30 AM	2	0	0	0	0	0	0	0	0	0	0	2
11:30 AM to 11:35 AM	2	0	1	0	0	0	0	0	0	0	0	3
11:35 AM to 11:40 AM	2	0	0	0	0	0	0	0	0	0	0	2
11:40 AM to 11:45 AM	2	0	2	0	0	0	0	0	0	0	0	4
11:45 AM to 11:50 AM	2	0	5	0	0	0	0	0	0	0	0	7
11:50 AM to 11:55 AM	2	0	3	0	0	0	0	0	0	0	0	5
11:55 AM to 12:00 PM	2	0	3	0	0	0	0	0	0	0	0	5
12:00 PM to 12:05 PM	2	0	3	0	3	2	0	0	0	0	0	10
12:05 PM to 12:10 PM	2	0	7	0	7	7	6	0	0	0	0	29
12:10 PM to 12:00 AM	2	0	7	0	7	7	6	2	0	0	0	31
12:15 PM to 12:20 PM	2	0	7	0	7	7	0	0	0	0	0	23
12:20 PM to 12:25 PM	2	0	7	0	7	7	0	0	0	0	0	23
12:25 PM to 12:30 PM	2	0	7	0	5	6	0	0	0	0	0	20
12:30 PM to 12:35 PM	2	0	7	0	4	2	0	0	0	0	0	15
12:35 PM to 12:40 PM	2	0	7	0	4	4	0	0	0	0	0	17
12:40 PM to 12:45 PM	2	0	7	0	7	7	4	0	0	0	0	27
12:45 PM to 12:50 PM	2	0	7	0	7	7	4	0	0	0	0	27
12:50 PM to 12:55 PM	2	0	5	0	3	3	0	0	0	0	0	13
12:55 PM to 1:00 PM	2	0	2	0	3	4	0	0	0	0	0	11



# Drive-Through Maximum Observed Queues

Saturday Middy

CFA Store: Lawrenceville, NJ

Saturday, June 3, 2023

Interval	Vehicles										TOTAL	
	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Area 7	Area 8	Area 9	Area 10		
11:00 AM to 11:05 AM	2	0	1	0	0	0	0	0	0	0	0	3
11:05 AM to 11:10 AM	2	0	4	0	0	0	0	0	0	0	0	6
11:10 AM to 11:15 AM	2	0	1	0	0	0	0	0	0	0	0	3
11:15 AM to 11:20 AM	2	0	1	0	0	0	0	0	0	0	0	3
11:20 AM to 11:25 AM	2	0	3	0	0	0	0	0	0	0	0	5
11:25 AM to 11:30 AM	2	0	6	0	2	2	0	0	0	0	0	12
11:30 AM to 11:35 AM	2	0	2	0	4	3	0	0	0	0	0	11
11:35 AM to 11:40 AM	3	0	1	0	3	3	0	0	0	0	0	10
11:40 AM to 11:45 AM	3	0	1	0	2	3	0	0	0	0	0	9
11:45 AM to 11:50 AM	3	0	3	0	1	0	0	0	0	0	0	7
11:50 AM to 11:55 AM	2	0	1	0	1	1	0	0	0	0	0	5
11:55 AM to 12:00 PM	2	0	6	0	0	1	0	0	0	0	0	9
12:00 PM to 12:05 PM	3	0	6	0	3	4	0	0	0	0	0	16
12:05 PM to 12:10 PM	2	0	6	0	4	5	0	0	0	0	0	17
12:10 PM to 12:15 PM	2	0	4	0	5	3	0	0	0	0	0	14
12:15 PM to 12:20 PM	2	0	7	0	3	4	0	0	0	0	0	16
12:20 PM to 12:25 PM	2	0	5	0	2	2	0	0	0	0	0	11
12:25 PM to 12:30 PM	2	0	5	0	3	4	0	0	0	0	0	14
12:30 PM to 12:35 PM	2	0	6	0	4	4	0	0	0	0	0	16
12:35 PM to 12:40 PM	2	0	7	0	5	5	0	0	0	0	0	19
12:40 PM to 12:45 PM	2	0	7	0	2	3	0	0	0	0	0	14
12:45 PM to 12:50 PM	2	0	6	0	3	3	0	0	0	0	0	14
12:50 PM to 12:55 PM	2	0	3	0	3	5	0	0	0	0	0	13
12:55 PM to 1:00 PM	2	0	6	0	4	4	0	0	0	0	0	16
1:00 PM to 1:05 PM	2	0	7	0	5	4	3	0	0	0	0	21
1:05 PM to 1:10 PM	2	0	7	0	2	0	0	0	0	0	0	11
1:10 PM to 1:15 PM	2	0	1	0	1	0	0	0	0	0	0	4
1:15 PM to 1:20 PM	2	0	0	0	0	0	0	0	0	0	0	2
1:20 PM to 1:25 PM	2	0	3	0	2	0	0	0	0	0	0	7
1:25 PM to 1:30 PM	2	0	5	0	5	5	2	0	0	0	0	19
1:30 PM to 1:35 PM	2	0	7	0	6	6	3	0	0	0	0	24
1:35 PM to 1:40 PM	2	0	6	0	3	3	0	0	0	0	0	14
1:40 PM to 1:45 PM	2	0	5	0	4	4	0	0	0	0	0	15
1:45 PM to 1:50 PM	2	0	5	0	4	5	0	0	0	0	0	16
1:50 PM to 1:55 PM	2	0	7	0	5	4	4	0	0	0	0	22
1:55 PM to 2:00 PM	2	0	8	0	5	4	0	0	0	0	0	19

## Appendix D

# Volume Development Spreadsheets



**Brunswick Avenue (US 1) & Bakersville Road**  
**INTERSECTION VOLUME PROJECTION SUMMARY**  
**Weekday Midday 11 AM - 1 PM**

		EASTBOUND			WESTBOUND Bakersville Road			NORTHBOUND Brunswick Avenue (US 1)			SOUTHBOUND Brunswick Avenue (US 1)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
EXISTING VOLUMES		0	0	0	0	0	180	0	1207	160	0	1418	0
Seasonal Adjustment Factor	1.000	0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	0	0	0	0	0	0	121	0	0	317	0
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>180</b>	<b>0</b>	<b>1328</b>	<b>160</b>	<b>0</b>	<b>1735</b>	<b>0</b>
Background Growth to 2025	2.01%	0	0	0	0	0	0	0	30	0	0	35	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>180</b>	<b>0</b>	<b>1358</b>	<b>160</b>	<b>0</b>	<b>1770</b>	<b>0</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	0	0	0	0	0	0	0	0	0	0	0	0
Total New Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>180</b>	<b>0</b>	<b>1358</b>	<b>160</b>	<b>0</b>	<b>1770</b>	<b>0</b>

**Brunswick Avenue (US 1) & Bakersville Road**  
**INTERSECTION VOLUME PROJECTION SUMMARY**  
**Weekday 4 PM - 6 PM**

		EASTBOUND			WESTBOUND Bakersville Road			NORTHBOUND Brunswick Avenue (US 1)			SOUTHBOUND Brunswick Avenue (US 1)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
EXISTING VOLUMES		0	0	0	0	0	161	0	1915	151	0	1947	0
Seasonal Adjustment Factor	1.000	0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	0	0	0	0	0	0	66	0	0	298	0
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>161</b>	<b>0</b>	<b>1981</b>	<b>151</b>	<b>0</b>	<b>2245</b>	<b>0</b>
Background Growth to 2025	2.01%	0	0	0	0	0	0	0	44	0	0	45	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>161</b>	<b>0</b>	<b>2025</b>	<b>151</b>	<b>0</b>	<b>2290</b>	<b>0</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	0	0	0	0	0	0	0	0	0	0	0	0
Total New Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>161</b>	<b>0</b>	<b>2025</b>	<b>151</b>	<b>0</b>	<b>2290</b>	<b>0</b>

**Brunswick Avenue (US 1) & Bakersville Road**  
**INTERSECTION VOLUME PROJECTION SUMMARY**  
**Saturday Midday 10 AM - 2 PM**

		EASTBOUND			WESTBOUND Bakersville Road			NORTHBOUND Brunswick Avenue (US 1)			SOUTHBOUND Brunswick Avenue (US 1)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
EXISTING VOLUMES		0	0	0	0	0	204	0	1415	149	0	1553	0
Seasonal Adjustment Factor	1.000	0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	0	0	0	0	0	0	43	0	0	377	0
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>204</b>	<b>0</b>	<b>1458</b>	<b>149</b>	<b>0</b>	<b>1930</b>	<b>0</b>
Background Growth to 2025	2.01%	0	0	0	0	0	0	0	33	0	0	39	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>204</b>	<b>0</b>	<b>1491</b>	<b>149</b>	<b>0</b>	<b>1969</b>	<b>0</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	0	0	0	0	0	0	0	0	0	0	0	0
Total New Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>204</b>	<b>0</b>	<b>1491</b>	<b>149</b>	<b>0</b>	<b>1969</b>	<b>0</b>



**Brunswick Avenue (US 1) & Franklin Corner Road (C.R. 546) / Bakers Basin Road**  
**INTERSECTION VOLUME PROJECTION SUMMARY**  
**Weekday Midday 11 AM - 1 PM**

		EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND		
		Franklin Corner Road (C.R. 546)			Bakers Basin Road			Brunswick Avenue (US 1)			Brunswick Avenue (US 1)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
EXISTING VOLUMES	1.000	157	370	174	391	256	93	0	1342	166	0	1170	0
Seasonal Adjustment Factor		0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	49	0	0	17	0	0	0	0	0	0	0
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>157</b>	<b>419</b>	<b>174</b>	<b>391</b>	<b>273</b>	<b>93</b>	<b>0</b>	<b>1342</b>	<b>166</b>	<b>0</b>	<b>1170</b>	<b>0</b>
Background Growth to 2025	2.01%	3	9	3	8	5	2	0	27	3	0	24	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>160</b>	<b>428</b>	<b>177</b>	<b>399</b>	<b>278</b>	<b>95</b>	<b>0</b>	<b>1369</b>	<b>169</b>	<b>0</b>	<b>1194</b>	<b>0</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	0	0	0	0	0	0	0	0	0	0	0	0
Total New Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>160</b>	<b>428</b>	<b>177</b>	<b>399</b>	<b>278</b>	<b>95</b>	<b>0</b>	<b>1369</b>	<b>169</b>	<b>0</b>	<b>1194</b>	<b>0</b>

**Brunswick Avenue (US 1) & Franklin Corner Road (C.R. 546) / Bakers Basin Road**  
**INTERSECTION VOLUME PROJECTION SUMMARY**  
**Weekday 4 PM - 6 PM**

		EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND		
		Franklin Corner Road (C.R. 546)			Bakers Basin Road			Brunswick Avenue (US 1)			Brunswick Avenue (US 1)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
EXISTING VOLUMES	1.000	151	325	221	459	223	120	0	1818	324	0	1565	0
Seasonal Adjustment Factor		0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	28	0	0	34	0	0	0	0	0	0	0
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>151</b>	<b>353</b>	<b>221</b>	<b>459</b>	<b>257</b>	<b>120</b>	<b>0</b>	<b>1818</b>	<b>324</b>	<b>0</b>	<b>1565</b>	<b>0</b>
Background Growth to 2025	2.01%	3	7	4	9	5	2	0	37	7	0	32	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>154</b>	<b>360</b>	<b>225</b>	<b>468</b>	<b>262</b>	<b>122</b>	<b>0</b>	<b>1855</b>	<b>331</b>	<b>0</b>	<b>1597</b>	<b>0</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	0	0	0	0	0	0	0	0	0	0	0	0
Total New Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>154</b>	<b>360</b>	<b>225</b>	<b>468</b>	<b>262</b>	<b>122</b>	<b>0</b>	<b>1855</b>	<b>331</b>	<b>0</b>	<b>1597</b>	<b>0</b>

**Brunswick Avenue (US 1) & Franklin Corner Road (C.R. 546) / Bakers Basin Road**  
**INTERSECTION VOLUME PROJECTION SUMMARY**  
**Saturday Midday 10 AM - 2 PM**

		EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND		
		Franklin Corner Road (C.R. 546)			Bakers Basin Road			Brunswick Avenue (US 1)			Brunswick Avenue (US 1)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
EXISTING VOLUMES	1.000	140	372	138	385	224	133	0	1456	206	0	1407	0
Seasonal Adjustment Factor		0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	35	0	0	70	0	0	0	0	0	0	0
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>140</b>	<b>407</b>	<b>138</b>	<b>385</b>	<b>294</b>	<b>133</b>	<b>0</b>	<b>1456</b>	<b>206</b>	<b>0</b>	<b>1407</b>	<b>0</b>
Background Growth to 2025	2.01%	3	8	3	8	6	3	0	29	4	0	28	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>143</b>	<b>415</b>	<b>141</b>	<b>393</b>	<b>300</b>	<b>136</b>	<b>0</b>	<b>1485</b>	<b>210</b>	<b>0</b>	<b>1435</b>	<b>0</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	0	0	0	0	0	0	0	0	0	0	0	0
Total New Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>143</b>	<b>415</b>	<b>141</b>	<b>393</b>	<b>300</b>	<b>136</b>	<b>0</b>	<b>1485</b>	<b>210</b>	<b>0</b>	<b>1435</b>	<b>0</b>

### Shell Gas / Jughandle & Franklin Corner Road (C.R. 546)

#### INTERSECTION VOLUME PROJECTION SUMMARY

Weekday Midday 11 AM - 1 PM

		EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND		
		Franklin Corner Road (C.R. 546)			Franklin Corner Road (C.R. 546)			Shell Gas			Jughandle		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
EXISTING VOLUMES		0	579	5	0	261	0	2	0	4	140	2	117
Seasonal Adjustment Factor	1.000	0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	27	0	0	12	0	0	0	0	0	0	0
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>0</b>	<b>606</b>	<b>5</b>	<b>0</b>	<b>273</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>140</b>	<b>2</b>	<b>117</b>
Background Growth to 2025	2.01%	0	12	0	0	5	0	0	0	0	3	0	2
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>618</b>	<b>5</b>	<b>0</b>	<b>278</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>143</b>	<b>2</b>	<b>119</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	0	0	0	0	0	0	0	0	0	0	0	0
Total New Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>618</b>	<b>5</b>	<b>0</b>	<b>278</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>143</b>	<b>2</b>	<b>119</b>

### Shell Gas / Jughandle & Franklin Corner Road (C.R. 546)

#### INTERSECTION VOLUME PROJECTION SUMMARY

Weekday 4 PM - 6 PM

		EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND		
		Franklin Corner Road (C.R. 546)			Franklin Corner Road (C.R. 546)			Shell Gas			Jughandle		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
EXISTING VOLUMES		0	621	6	0	234	0	1	0	3	101	0	101
Seasonal Adjustment Factor	1.000	0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	0	0	0	23	0	0	0	0	0	0	0
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>0</b>	<b>621</b>	<b>6</b>	<b>0</b>	<b>257</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>101</b>	<b>0</b>	<b>101</b>
Background Growth to 2025	2.01%	0	12	0	0	5	0	0	0	0	2	0	2
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>633</b>	<b>6</b>	<b>0</b>	<b>262</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>103</b>	<b>0</b>	<b>103</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	0	0	0	0	0	0	0	0	0	0	0	0
Total New Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>633</b>	<b>6</b>	<b>0</b>	<b>262</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>103</b>	<b>0</b>	<b>103</b>

### Shell Gas / Jughandle & Franklin Corner Road (C.R. 546)

#### INTERSECTION VOLUME PROJECTION SUMMARY

Saturday Midday 10 AM - 2 PM

		EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND		
		Franklin Corner Road (C.R. 546)			Franklin Corner Road (C.R. 546)			Shell Gas			Jughandle		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
EXISTING VOLUMES		0	494	7	0	216	0	0	0	5	182	1	105
Seasonal Adjustment Factor	1.000	0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	4	0	0	78	0	0	0	0	0	0	0
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>0</b>	<b>498</b>	<b>7</b>	<b>0</b>	<b>294</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>182</b>	<b>1</b>	<b>105</b>
Background Growth to 2025	2.01%	0	10	0	0	6	0	0	0	0	4	0	2
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>508</b>	<b>7</b>	<b>0</b>	<b>300</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>186</b>	<b>1</b>	<b>107</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	0	0	0	0	0	0	0	0	0	0	0	0
Total New Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>508</b>	<b>7</b>	<b>0</b>	<b>300</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>186</b>	<b>1</b>	<b>107</b>

**Greenberg Road & Wawa Driveway / Bakersville Road**  
**INTERSECTION VOLUME PROJECTION SUMMARY**  
**Weekday Midday 11 AM - 1 PM**

		EASTBOUND Wawa Driveway			WESTBOUND Bakersville Road			NORTHBOUND Greenberg Road			SOUTHBOUND Greenberg Road		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
		EXISTING VOLUMES		67	30	0	0	33	68	61	80	5	52
Seasonal Adjustment Factor	1.000	0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	0	0	0	0	0	0	12	0	18	0	17
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>67</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>33</b>	<b>68</b>	<b>61</b>	<b>92</b>	<b>5</b>	<b>70</b>	<b>0</b>	<b>64</b>
Background Growth to 2025	2.01%	0	0	0	0	0	0	0	2	0	0	0	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>67</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>33</b>	<b>68</b>	<b>61</b>	<b>94</b>	<b>5</b>	<b>70</b>	<b>0</b>	<b>64</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	0	0	0	0	0	0	0	0	0	0	0	0
Total New Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>67</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>33</b>	<b>68</b>	<b>61</b>	<b>94</b>	<b>5</b>	<b>70</b>	<b>0</b>	<b>64</b>

**Greenberg Road & Wawa Driveway / Bakersville Road**  
**INTERSECTION VOLUME PROJECTION SUMMARY**  
**Weekday 4 PM - 6 PM**

		EASTBOUND Wawa Driveway			WESTBOUND Bakersville Road			NORTHBOUND Greenberg Road			SOUTHBOUND Greenberg Road		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
		EXISTING VOLUMES		43	12	0	0	20	66	36	78	1	26
Seasonal Adjustment Factor	1.000	0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	0	0	0	0	0	0	20	0	8	0	8
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>43</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>66</b>	<b>36</b>	<b>98</b>	<b>1</b>	<b>34</b>	<b>0</b>	<b>35</b>
Background Growth to 2025	2.01%	0	0	0	0	0	0	0	2	0	0	0	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>43</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>66</b>	<b>36</b>	<b>100</b>	<b>1</b>	<b>34</b>	<b>0</b>	<b>35</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	0	0	0	0	0	0	0	0	0	0	0	0
Total New Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>43</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>66</b>	<b>36</b>	<b>100</b>	<b>1</b>	<b>34</b>	<b>0</b>	<b>35</b>

**Greenberg Road & Wawa Driveway / Bakersville Road**  
**INTERSECTION VOLUME PROJECTION SUMMARY**  
**Saturday Midday 10 AM - 2 PM**

		EASTBOUND Wawa Driveway			WESTBOUND Bakersville Road			NORTHBOUND Greenberg Road			SOUTHBOUND Greenberg Road		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
		EXISTING VOLUMES		60	7	0	0	30	86	35	78	5	103
Seasonal Adjustment Factor	1.000	0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	0	0	0	0	0	0	0	0	5	0	2
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>60</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>86</b>	<b>35</b>	<b>78</b>	<b>5</b>	<b>108</b>	<b>0</b>	<b>43</b>
Background Growth to 2025	2.01%	0	0	0	0	0	0	0	2	0	0	0	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>60</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>86</b>	<b>35</b>	<b>80</b>	<b>5</b>	<b>108</b>	<b>0</b>	<b>43</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	0	0	0	0	0	0	0	0	0	0	0	0
Total New Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>60</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>86</b>	<b>35</b>	<b>80</b>	<b>5</b>	<b>108</b>	<b>0</b>	<b>43</b>

**Greenberg Road & Bakersville Road**  
**INTERSECTION VOLUME PROJECTION SUMMARY**  
**Weekday Midday 11 AM - 1 PM**

		EASTBOUND Bakersville Road			WESTBOUND Bakersville Road			NORTHBOUND Greenberg Road			SOUTHBOUND Greenberg Road		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
		EXISTING VOLUMES		245	0	20	0	0	0	29	192	0	0
Seasonal Adjustment Factor	1.000	0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		18	0	2	0	0	0	6	0	0	0	0	44
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>263</b>	<b>0</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>35</b>	<b>192</b>	<b>0</b>	<b>0</b>	<b>112</b>	<b>246</b>
Background Growth to 2025	2.01%	0	0	0	0	0	0	0	2	0	0	0	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>263</b>	<b>0</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>35</b>	<b>194</b>	<b>0</b>	<b>0</b>	<b>112</b>	<b>246</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	0	0	0	0	0	0	0	0	0	0	0	-92
Total New Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	-92
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>263</b>	<b>0</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>35</b>	<b>194</b>	<b>0</b>	<b>0</b>	<b>112</b>	<b>154</b>

**Greenberg Road & Bakersville Road**  
**INTERSECTION VOLUME PROJECTION SUMMARY**  
**Weekday 4 PM - 6 PM**

		EASTBOUND Bakersville Road			WESTBOUND Bakersville Road			NORTHBOUND Greenberg Road			SOUTHBOUND Greenberg Road		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
		EXISTING VOLUMES		181	0	13	0	0	0	25	176	0	0
Seasonal Adjustment Factor	1.000	0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	0	0	0	0	0	6	0	0	0	0	31
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>181</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>31</b>	<b>176</b>	<b>0</b>	<b>0</b>	<b>56</b>	<b>157</b>
Background Growth to 2025	2.01%	0	0	0	0	0	0	0	2	0	0	0	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>181</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>31</b>	<b>178</b>	<b>0</b>	<b>0</b>	<b>56</b>	<b>157</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	0	0	0	0	0	0	0	0	0	0	0	-48
Total New Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	-48
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>181</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>31</b>	<b>178</b>	<b>0</b>	<b>0</b>	<b>56</b>	<b>109</b>

**Greenberg Road & Bakersville Road**  
**INTERSECTION VOLUME PROJECTION SUMMARY**  
**Saturday Midday 10 AM - 2 PM**

		EASTBOUND Bakersville Road			WESTBOUND Bakersville Road			NORTHBOUND Greenberg Road			SOUTHBOUND Greenberg Road		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
		EXISTING VOLUMES		209	0	16	0	0	0	24	196	0	0
Seasonal Adjustment Factor	1.000	0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		19	0	1	0	0	0	1	3	0	0	8	9
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>228</b>	<b>0</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>199</b>	<b>0</b>	<b>0</b>	<b>134</b>	<b>199</b>
Background Growth to 2025	2.01%	0	0	0	0	0	0	0	2	0	0	0	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>228</b>	<b>0</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>201</b>	<b>0</b>	<b>0</b>	<b>134</b>	<b>199</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	0	0	0	0	0	0	0	0	0	0	0	-83
Total New Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	-83
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>228</b>	<b>0</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>201</b>	<b>0</b>	<b>0</b>	<b>134</b>	<b>116</b>

**Greenberg Road & Internal Loop Road**  
**INTERSECTION VOLUME PROJECTION SUMMARY**  
**Weekday Midday 11 AM - 1 PM**

		EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND		
		Internal Loop Road			Greenberg Road			Greenberg Road			Greenberg Road		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
EXISTING VOLUMES		19	0	5	0	0	0	5	433	0	0	293	55
Seasonal Adjustment Factor	1.000	0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	0	0	0	0	0	0	17	0	0	60	0
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>19</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>450</b>	<b>0</b>	<b>0</b>	<b>353</b>	<b>55</b>
Background Growth to 2025	2.01%	0	0	0	0	0	0	0	2	0	0	0	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>19</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>452</b>	<b>0</b>	<b>0</b>	<b>353</b>	<b>55</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	0	0	0	0	0	0	0	0	0	0	-92	92
Total New Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	-92	92
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>19</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>452</b>	<b>0</b>	<b>0</b>	<b>261</b>	<b>147</b>

**Greenberg Road & Internal Loop Road**  
**INTERSECTION VOLUME PROJECTION SUMMARY**  
**Weekday 4 PM - 6 PM**

		EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND		
		Internal Loop Road			Greenberg Road			Greenberg Road			Greenberg Road		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
EXISTING VOLUMES		17	0	2	0	0	0	4	344	0	0	204	21
Seasonal Adjustment Factor	1.000	0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	0	0	0	0	0	0	9	0	0	7	0
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>17</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>353</b>	<b>0</b>	<b>0</b>	<b>211</b>	<b>21</b>
Background Growth to 2025	2.01%	0	0	0	0	0	0	0	2	0	0	0	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>17</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>355</b>	<b>0</b>	<b>0</b>	<b>211</b>	<b>21</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	0	0	0	0	0	0	0	0	0	0	-48	48
Total New Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	-48	48
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>17</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>355</b>	<b>0</b>	<b>0</b>	<b>163</b>	<b>69</b>

**Greenberg Road & Internal Loop Road**  
**INTERSECTION VOLUME PROJECTION SUMMARY**  
**Saturday Midday 10 AM - 2 PM**

		EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND		
		Internal Loop Road			Greenberg Road			Greenberg Road			Greenberg Road		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
EXISTING VOLUMES		12	0	2	0	0	0	4	412	0	0	318	29
Seasonal Adjustment Factor	1.000	0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	0	0	0	0	0	0	11	0	0	13	0
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>12</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>423</b>	<b>0</b>	<b>0</b>	<b>331</b>	<b>29</b>
Background Growth to 2025	2.01%	0	0	0	0	0	0	0	2	0	0	0	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>12</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>425</b>	<b>0</b>	<b>0</b>	<b>331</b>	<b>29</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	0	0	0	0	0	0	0	0	0	0	-83	83
Total New Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	-83	83
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>12</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>425</b>	<b>0</b>	<b>0</b>	<b>248</b>	<b>112</b>

## Greenberg Road & Bakers Basin Road

### INTERSECTION VOLUME PROJECTION SUMMARY

Weekday Midday 11 AM - 1 PM

		EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND		
		Bakers Basin Road			Bakers Basin Road			Greenberg Road					
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
EXISTING VOLUMES		0	286	265	97	393	0	346	0	99	0	0	0
Seasonal Adjustment Factor	1.000	0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	0	34	12	0	0	18	0	6	0	0	0
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>0</b>	<b>286</b>	<b>299</b>	<b>109</b>	<b>393</b>	<b>0</b>	<b>364</b>	<b>0</b>	<b>105</b>	<b>0</b>	<b>0</b>	<b>0</b>
Background Growth to 2025	2.01%	0	12	0	0	13	0	2	0	0	0	0	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>298</b>	<b>299</b>	<b>109</b>	<b>406</b>	<b>0</b>	<b>366</b>	<b>0</b>	<b>105</b>	<b>0</b>	<b>0</b>	<b>0</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	0	0	0	0	0	0	0	0	0	0	0	0
Total New Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>298</b>	<b>299</b>	<b>109</b>	<b>406</b>	<b>0</b>	<b>366</b>	<b>0</b>	<b>105</b>	<b>0</b>	<b>0</b>	<b>0</b>

## Greenberg Road & Bakers Basin Road

### INTERSECTION VOLUME PROJECTION SUMMARY

Weekday 4 PM - 6 PM

		EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND		
		Bakers Basin Road			Bakers Basin Road			Greenberg Road					
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
EXISTING VOLUMES		0	512	141	60	553	0	254	0	78	0	0	0
Seasonal Adjustment Factor	1.000	0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	2	22	9	0	0	29	0	9	0	0	0
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>0</b>	<b>514</b>	<b>163</b>	<b>69</b>	<b>553</b>	<b>0</b>	<b>283</b>	<b>0</b>	<b>87</b>	<b>0</b>	<b>0</b>	<b>0</b>
Background Growth to 2025	2.01%	0	14	0	0	14	0	2	0	0	0	0	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>528</b>	<b>163</b>	<b>69</b>	<b>567</b>	<b>0</b>	<b>285</b>	<b>0</b>	<b>87</b>	<b>0</b>	<b>0</b>	<b>0</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	0	0	0	0	0	0	0	0	0	0	0	0
Total New Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>528</b>	<b>163</b>	<b>69</b>	<b>567</b>	<b>0</b>	<b>285</b>	<b>0</b>	<b>87</b>	<b>0</b>	<b>0</b>	<b>0</b>

## Greenberg Road & Bakers Basin Road

### INTERSECTION VOLUME PROJECTION SUMMARY

Saturday Midday 10 AM - 2 PM

		EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND		
		Bakers Basin Road			Bakers Basin Road			Greenberg Road					
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
EXISTING VOLUMES		0	356	257	103	487	0	280	0	95	0	0	0
Seasonal Adjustment Factor	1.000	0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	0	0	0	0	0	45	0	15	0	0	0
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>0</b>	<b>356</b>	<b>257</b>	<b>103</b>	<b>487</b>	<b>0</b>	<b>325</b>	<b>0</b>	<b>110</b>	<b>0</b>	<b>0</b>	<b>0</b>
Background Growth to 2025	2.01%	0	12	0	0	16	0	1	0	1	0	0	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>368</b>	<b>257</b>	<b>103</b>	<b>503</b>	<b>0</b>	<b>326</b>	<b>0</b>	<b>111</b>	<b>0</b>	<b>0</b>	<b>0</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	0	0	0	0	0	0	0	0	0	0	0	0
Total New Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>368</b>	<b>257</b>	<b>103</b>	<b>503</b>	<b>0</b>	<b>326</b>	<b>0</b>	<b>111</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Wawa Driveway / Internal Loop Road & Bakersville Road**  
**INTERSECTION VOLUME PROJECTION SUMMARY**  
**Weekday Midday 11 AM - 1 PM**

		EASTBOUND Bakersville Road			WESTBOUND Bakersville Road			NORTHBOUND Wawa Driveway			SOUTHBOUND Internal Loop Road		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
		EXISTING VOLUMES	1.000	8	167	16	122	146	5	43	6	114	2
Seasonal Adjustment Factor		0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	2	0	0	8	0	0	0	0	0	0	0
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>8</b>	<b>169</b>	<b>16</b>	<b>122</b>	<b>154</b>	<b>5</b>	<b>43</b>	<b>6</b>	<b>114</b>	<b>2</b>	<b>9</b>	<b>52</b>
Background Growth to 2025	2.01%	0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>8</b>	<b>169</b>	<b>16</b>	<b>122</b>	<b>154</b>	<b>5</b>	<b>43</b>	<b>6</b>	<b>114</b>	<b>2</b>	<b>9</b>	<b>52</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	40	0	0	0	-105	13	0	0	0	0	0	0
Total New Site Trip Assignment		40	0	0	0	-105	13	0	0	0	0	0	0
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>48</b>	<b>169</b>	<b>16</b>	<b>122</b>	<b>49</b>	<b>18</b>	<b>43</b>	<b>6</b>	<b>114</b>	<b>2</b>	<b>9</b>	<b>52</b>

**Wawa Driveway / Internal Loop Road & Bakersville Road**  
**INTERSECTION VOLUME PROJECTION SUMMARY**  
**Weekday 4 PM - 6 PM**

		EASTBOUND Bakersville Road			WESTBOUND Bakersville Road			NORTHBOUND Wawa Driveway			SOUTHBOUND Internal Loop Road		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
		EXISTING VOLUMES	1.000	3	106	13	97	88	3	39	2	79	1
Seasonal Adjustment Factor		0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	8	0	0	0	0	0	0	0	0	0	0
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>3</b>	<b>114</b>	<b>13</b>	<b>97</b>	<b>88</b>	<b>3</b>	<b>39</b>	<b>2</b>	<b>79</b>	<b>1</b>	<b>2</b>	<b>16</b>
Background Growth to 2025	2.01%	0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>3</b>	<b>114</b>	<b>13</b>	<b>97</b>	<b>88</b>	<b>3</b>	<b>39</b>	<b>2</b>	<b>79</b>	<b>1</b>	<b>2</b>	<b>16</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	31	0	0	0	-57	9	0	0	0	0	0	0
Total New Site Trip Assignment		31	0	0	0	-57	9	0	0	0	0	0	0
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>34</b>	<b>114</b>	<b>13</b>	<b>97</b>	<b>31</b>	<b>12</b>	<b>39</b>	<b>2</b>	<b>79</b>	<b>1</b>	<b>2</b>	<b>16</b>

**Wawa Driveway / Internal Loop Road & Bakersville Road**  
**INTERSECTION VOLUME PROJECTION SUMMARY**  
**Saturday Midday 10 AM - 2 PM**

		EASTBOUND Bakersville Road			WESTBOUND Bakersville Road			NORTHBOUND Wawa Driveway			SOUTHBOUND Internal Loop Road		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
		EXISTING VOLUMES	1.000	4	138	19	96	97	0	36	5	104	0
Seasonal Adjustment Factor		0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	3	0	0	31	0	0	0	0	0	0	0
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>4</b>	<b>141</b>	<b>19</b>	<b>96</b>	<b>128</b>	<b>0</b>	<b>36</b>	<b>5</b>	<b>104</b>	<b>0</b>	<b>8</b>	<b>44</b>
Background Growth to 2025	2.01%	0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>4</b>	<b>141</b>	<b>19</b>	<b>96</b>	<b>128</b>	<b>0</b>	<b>36</b>	<b>5</b>	<b>104</b>	<b>0</b>	<b>8</b>	<b>44</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	29	0	0	0	-93	10	0	0	0	0	0	0
Total New Site Trip Assignment		29	0	0	0	-93	10	0	0	0	0	0	0
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>33</b>	<b>141</b>	<b>19</b>	<b>96</b>	<b>35</b>	<b>10</b>	<b>36</b>	<b>5</b>	<b>104</b>	<b>0</b>	<b>8</b>	<b>44</b>





**Western CFA Driveway & Bakersville Road**  
**INTERSECTION VOLUME PROJECTION SUMMARY**  
**Weekday Midday 11 AM - 1 PM**

		EASTBOUND Bakersville Road			WESTBOUND Bakersville Road			NORTHBOUND			SOUTHBOUND Western CFA Driveway		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
		EXISTING VOLUMES	1.000	19	103	0	0	72	27	0	0	0	126
Seasonal Adjustment Factor		0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	0	0	0	2	0	0	0	0	0	0	0
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>19</b>	<b>103</b>	<b>0</b>	<b>0</b>	<b>74</b>	<b>27</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>126</b>	<b>0</b>	<b>80</b>
Background Growth to 2025	2.01%	0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>19</b>	<b>103</b>	<b>0</b>	<b>0</b>	<b>74</b>	<b>27</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>126</b>	<b>0</b>	<b>80</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	-19	19	0	0	-12	-27	0	0	0	17	0	12
Total New Site Trip Assignment		-19	19	0	0	-12	-27	0	0	0	17	0	12
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>122</b>	<b>0</b>	<b>0</b>	<b>62</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>143</b>	<b>0</b>	<b>92</b>

**Western CFA Driveway & Bakersville Road**  
**INTERSECTION VOLUME PROJECTION SUMMARY**  
**Weekday 4 PM - 6 PM**

		EASTBOUND Bakersville Road			WESTBOUND Bakersville Road			NORTHBOUND			SOUTHBOUND Western CFA Driveway		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
		EXISTING VOLUMES	1.000	11	81	0	0	54	18	0	0	0	74
Seasonal Adjustment Factor		0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	3	0	0	2	0	0	0	0	0	0	0
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>11</b>	<b>84</b>	<b>0</b>	<b>0</b>	<b>56</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>74</b>	<b>0</b>	<b>35</b>
Background Growth to 2025	2.01%	0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>11</b>	<b>84</b>	<b>0</b>	<b>0</b>	<b>56</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>74</b>	<b>0</b>	<b>35</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	-11	11	0	0	-9	-18	0	0	0	12	0	9
Total New Site Trip Assignment		-11	11	0	0	-9	-18	0	0	0	12	0	9
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>95</b>	<b>0</b>	<b>0</b>	<b>47</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>86</b>	<b>0</b>	<b>44</b>

**Western CFA Driveway & Bakersville Road**  
**INTERSECTION VOLUME PROJECTION SUMMARY**  
**Saturday Midday 10 AM - 2 PM**

		EASTBOUND Bakersville Road			WESTBOUND Bakersville Road			NORTHBOUND			SOUTHBOUND Western CFA Driveway		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
		EXISTING VOLUMES	1.000	19	82	0	0	51	28	0	0	0	101
Seasonal Adjustment Factor		0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>19</b>	<b>82</b>	<b>0</b>	<b>0</b>	<b>51</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>101</b>	<b>0</b>	<b>57</b>
Background Growth to 2025	2.01%	0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>19</b>	<b>82</b>	<b>0</b>	<b>0</b>	<b>51</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>101</b>	<b>0</b>	<b>57</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN	-19	19	0	0	-15	-28	0	0	0	16	0	15
Total New Site Trip Assignment		-19	19	0	0	-15	-28	0	0	0	16	0	15
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>101</b>	<b>0</b>	<b>0</b>	<b>36</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>117</b>	<b>0</b>	<b>72</b>

**Internal Loop Road & Proposed CFA Drive-Thru Access**  
**INTERSECTION VOLUME PROJECTION SUMMARY**  
**Weekday Midday 11 AM - 1 PM**

		EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND		
		Proposed CFA Drive-Thru Access						Internal Loop Road			Internal Loop Road		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
EXISTING VOLUMES	1.000	0	0	0	0	0	0	0	24	0	0	63	0
Seasonal Adjustment Factor		0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>63</b>	<b>0</b>
Background Growth to 2025	2.01%	0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>63</b>	<b>0</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN							53	0	0	0	0	92
Total New Site Trip Assignment		0	0	0	0	0	0	53	0	0	0	0	92
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>53</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>63</b>	<b>92</b>

**Internal Loop Road & Proposed CFA Drive-Thru Access**  
**INTERSECTION VOLUME PROJECTION SUMMARY**  
**Weekday 4 PM - 6 PM**

		EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND		
		Proposed CFA Drive-Thru Access						Internal Loop Road			Internal Loop Road		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
EXISTING VOLUMES	1.000	0	0	0	0	0	0	0	19	0	0	25	0
Seasonal Adjustment Factor		0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>0</b>
Background Growth to 2025	2.01%	0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>0</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN							40	0	0	0	0	48
Total New Site Trip Assignment		0	0	0	0	0	0	40	0	0	0	0	48
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>40</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>48</b>

**Internal Loop Road & Proposed CFA Drive-Thru Access**  
**INTERSECTION VOLUME PROJECTION SUMMARY**  
**Saturday Midday 10 AM - 2 PM**

		EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND		
		Proposed CFA Drive-Thru Access						Internal Loop Road			Internal Loop Road		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
EXISTING VOLUMES	1.000	0	0	0	0	0	0	0	14	0	0	52	0
Seasonal Adjustment Factor		0	0	0	0	0	0	0	0	0	0	0	0
Balancing Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
Additional Adjustment		0	0	0	0	0	0	0	0	0	0	0	0
<b>ADJUSTED EXISTING VOLUMES</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>52</b>	<b>0</b>
Background Growth to 2025	2.01%	0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development New Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Pass-by Trip Assignments		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITHOUT DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>52</b>	<b>0</b>
Re-distribution of Existing Trips	DIST IN DIST OUT ASSIGN							39	0	0	0	0	83
Total New Site Trip Assignment		0	0	0	0	0	0	39	0	0	0	0	83
Total Pass-by Site Trip Assignment		0	0	0	0	0	0	0	0	0	0	0	0
<b>2025 WITH DEVELOPMENT VOLUMES</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>39</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>52</b>	<b>83</b>



## Appendix E

# Capacity/Level-of-Service Methodology



## CAPACITY/LEVEL-OF-SERVICE ANALYSIS METHODOLOGY

The detailed capacity/level-of-service analysis contained in this transportation impact study was performed in accordance with the standard techniques contained in the *Highway Capacity Manual 6<sup>th</sup> Edition*. By definition, capacity represents “the maximum sustainable hourly flow rate at which persons or vehicles reasonably can be expected to traverse a point or a uniform section of a lane or roadway during a given time period under prevailing roadway, environmental, traffic, and control conditions.” The level at which an intersection or a uniform section of a lane or roadway function can be expressed in terms of a level of service. Level of service (LOS) is defined as “a quantitative stratification of a performance measure or measures that represent quality of service, measured on an A-F scale, with LOS A representing the best operating conditions from the traveler’s perspective and LOS F the worst.”

### *Stop-Controlled Intersections*

At unsignalized stop-controlled intersections, such as two-way stop-controlled (TWSC) or all-way stop-controlled (AWSC), a methodology for evaluating the relative functioning of these intersections is based upon the control delay. For these types of unsignalized intersections, the analysis of the control delay is based upon the following data:

- Number and configuration of lanes on each approach;
- Percentage of heavy vehicles on each approach;
- Demand flow rate for each entering vehicular movement and pedestrian crossing movement;
- Unique geometric factors such as, channelization aspects; two-way left-turn lanes, raised or striped median storage; approach grades, flared approaches on the minor street; and upstream signals within 0.25 miles.

At TWSC intersections, only drivers on the minor street approaches are required to stop before proceeding into the intersection and left-turning drivers from the major street may have to yield to on-coming major street through or right-turning traffic, but are not required to stop in the absence of on-coming traffic. The capacity at stop-controlled legs is based primarily on three factors: the distribution of gaps in the major stream, driver judgment in selecting the gaps, and the follow-up headways required by each driver in a queue.

At AWSC intersections, every vehicle is required to stop at the intersection before proceeding, and as a result, the decision to proceed is a function of the traffic conditions on the other approaches. Each driver proceeds only after determining that no vehicles are currently in the intersection and that it is the driver’s turn to proceed. Capacity at an AWSC intersection is described by the saturation headway or time between departures of successive vehicles on a given approach for a particular case assuming a continuous queue; departure headway or the average time between departures of successive vehicles on a given approach accounting for the probability of each possible case; and service time or the average time sent by a vehicle in first position waiting to depart.

At both TWSC and AWSC intersections, the level of service is based upon the control delay, as well as the corresponding volume-to-capacity ratio for each movement/lane group. For TWSC intersections, the level of service is not calculated for major-street approaches or for the intersection as a whole; however, the intersection-wide level of service is calculated for AWSC intersections. The following table provides a summary of the relationship between the level of service, control delay, and volume-to-capacity ratio for TWSC and AWSC intersections.

Control Delay (Sec/Veh)	<u>LOS by Volume-to-Capacity Ratio</u>	
	$v/c \leq 1.0$	$v/c > 1.0$
$\leq 10$	A	F
> 10 – 15	B	F
> 15 – 25	C	F
> 25 – 35	D	F
> 35 – 50	E	F
> 50	F	F

### *Signalized Intersections*

At three or four-legged signalized intersections, a methodology for evaluating the capacity and quality of service provided to road users traveling through the signalized intersection. For signalized intersections, the level of service can be characterized for the entire intersection, each approach, and each lane group. The level of service is based upon the control delay and volume-to-capacity ratio. The delay quantifies the increase in travel time due to the traffic signal control and is a surrogate measure of driver discomfort and fuel consumption, while the volume-to-capacity ratio quantifies the degree to which a phase's capacity is utilized by a lane group. Input data in determining the delay and volume-to-capacity ratio include:

- Demand flow rate for each entering vehicular movement and pedestrian crossing movement, including right-turn on red volumes and percent of heavy vehicles;
- Initial queue for each lane group;
- Number and configuration of lanes on each approach;
- Type of signal control and phase sequence;
- Allocation of minimum/maximum green times and clearance intervals (Yellow plus All Red phases); and
- Phase recall.

At signalized intersections, the level of service is based upon the control delay, as well as the corresponding volume-to-capacity ratio for each movement/lane group. The following table provides a summary of the relationship between the level of service, control delay, and volume-to-capacity ratio for signalized intersections.

Control Delay (Sec/Veh)	<u>LOS by Volume-to-Capacity Ratio</u>	
	$v/c \leq 1.0$	$v/c > 1.0$
$\leq 10$	A	F
> 10 – 20	B	F
> 20 – 35	C	F
> 35 – 55	D	F
> 55 – 80	E	F
> 80	F	F

## Roundabouts

A roundabout is a type of unsignalized intersection, generally with a circular shape that is characterized by yield on entry and circulation around a central island. The corresponding control delay and level-of-service criteria for a roundabout are the same as for a two-way or all-way stop-controlled intersection. The methodology utilized within the latest *Highway Capacity Manual 6<sup>th</sup> Edition* is limited to isolated roundabouts with up to two entry lanes and up to one bypass lane per approach. The analysis does not account for the geometric features of the roundabout (diameter, entry lane widths, approach grades, etc.) or the presence of adjacent traffic control signals that could influence the roundabout operations.

The capacity of a roundabout is influenced by the entering flow of traffic, the circulating flow, and the exiting flow. The capacity of an approach decreases as the conflicting flow increases. In general, the primary conflicting flow is the circulating flow that passes directly by an entry approach. As a result, the capacity of a roundabout is a function of the entering flow and the circulating flow. The analysis of the capacity is based upon the number and configuration of lanes on each approach, the demand volumes for each entering volume movement and each potential pedestrian crossing movement, the percentage of heavy vehicles, the volume distribution across lanes for multi-lane entries, and the length of the analysis period (typically the peak 15-minute period).

The results of the HCM 6<sup>th</sup> Edition Roundabout analysis provide an estimate of average delay for each approach to the roundabout, which are as follows from Exhibit 21-1, which are based on the volume-to-capacity ratio and control delay for each approach. When the volume-to capacity ratio exceeds 1.0, the level-of-service is automatically reported as LOS F, despite the corresponding control delay for the approach.

Control Delay (Sec/Veh)	LOS by Volume-to-Capacity Ratio	
	$v/c \leq 1.0$	$v/c > 1.0$
$\leq 10$	A	F
> 10 – 15	B	F
> 15 – 25	C	F
> 25 – 35	D	F
> 35 – 50	E	F
> 50	F	F

It should also be noted that the *Highway Capacity Manual 6<sup>th</sup> Edition* also recommends reviewing the exiting flow of traffic to determine if additional exit lanes are appropriate. A Federal Highway Administration document provides guidance that a double-exit lane may be needed if the exiting flows exceed 1,200 vehicles per hour.





Appendix F

2023 Existing  
Capacity/Level-of-Service  
Analysis Worksheets



**SYNCHRO**



Lanes, Volumes, Timings  
 1: Brunswick Avenue (U.S. 1) & Bakersville Road

2023 Existing Conditions  
 Weekday MIDDAY



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↵	↕↕↕			↕↕↕
Traffic Volume (vph)	0	180	1328	160	0	1735
Future Volume (vph)	0	180	1328	160	0	1735
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	12	12	12	12
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	0.91
Frt		0.865	0.984			
Flt Protected						
Satd. Flow (prot)	0	1791	4597	0	0	4673
Flt Permitted						
Satd. Flow (perm)	0	1791	4597	0	0	4673
Link Speed (mph)	25		55			55
Link Distance (ft)	219		556			396
Travel Time (s)	6.0		6.9			4.9
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	0%	4%	12%	3%	0%	11%
Adj. Flow (vph)	0	182	1341	162	0	1753
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	182	1503	0	0	1753
Enter Blocked Intersection	No	No	Yes	No	Yes	Yes
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		8			8
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.85	0.85	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other  
 Control Type: Unsignalized

Intersection						
Int Delay, s/veh	1.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗ ↑↑↑	↑↑↑			↑↑↑
Traffic Vol, veh/h	0	180	1328	160	0	1735
Future Vol, veh/h	0	180	1328	160	0	1735
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Free	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	0	4	12	3	0	11
Mvmt Flow	0	182	1341	162	0	1753

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	671	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	7.18	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.94	-
Pot Cap-1 Maneuver	0	338	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	-	338	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27.4	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 338	-
HCM Lane V/C Ratio	- 0.538	-
HCM Control Delay (s)	- 27.4	-
HCM Lane LOS	- D	-
HCM 95th %tile Q(veh)	- 3	-

Lanes, Volumes, Timings

2023 Existing Conditions

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road

	Weekday Midday											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	157	419	174	391	273	93	0	1342	166	0	1170	0
Future Volume (vph)	157	419	174	391	273	93	0	1342	166	0	1170	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	12	12	12	12	12	12	12
Storage Length (ft)	0		0	280		0	0		0	0		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	25			65			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.973				0.850			
Flt Protected	0.950			0.950	0.985							
Satd. Flow (prot)	1694	1733	1553	1512	3030	0	0	3282	1553	0	3223	0
Flt Permitted	0.950			0.950	0.985							
Satd. Flow (perm)	1694	1733	1553	1512	3030	0	0	3282	1553	0	3223	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			99		15				115			
Link Speed (mph)		40			35			55			55	
Link Distance (ft)		194			452			396			265	
Travel Time (s)		3.3			8.8			4.9			3.3	
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 (%)	3%	6%	4%	5%	4%	12%	0%	10%	4%	0%	12%	0%
Adj. Flow (vph)	164	436	181	407	284	97	0	1398	173	0	1219	0
Shared Lane Traffic (%)				41%								
Lane Group Flow (vph)	164	436	181	240	548	0	0	1398	173	0	1219	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			8			8	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.04	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	20		9	15		9	15		9
Number of Detectors	1	1	1	1	1			2	2		2	
Detector Template												
Leading Detector (ft)	50	50	50	57	57			206	206		236	
Trailing Detector (ft)	-10	-10	-10	-10	-10			0	0		0	
Detector 1 Position(ft)	-10	-10	-10	-10	-10			0	0		0	
Detector 1 Size(ft)	60	60	60	67	67			40	40		40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Detector 2 Position(ft)								200	200		230	
Detector 2 Size(ft)								6	6		6	
Detector 2 Type								Cl+Ex	Cl+Ex		Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0	0.0		0.0	
Turn Type	Split	NA	Perm	Split	NA			NA	Perm		NA	



Lanes, Volumes, Timings

2023 Existing Conditions

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road Weekday Midday

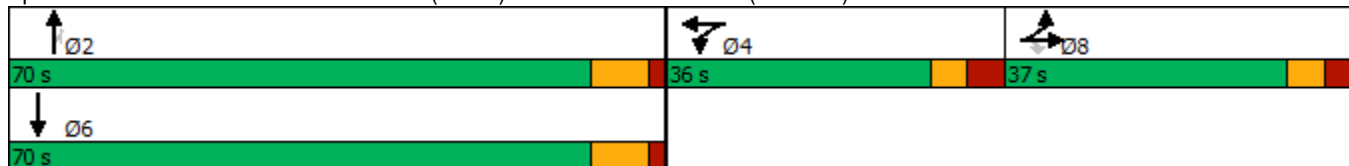


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	8	8		4	4			2			6	
Permitted Phases			8						2			
Detector Phase	8	8	8	4	4			2	2		6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0			7.0	7.0		7.0	
Minimum Split (s)	14.0	14.0	14.0	15.0	15.0			15.0	15.0		15.0	
Total Split (s)	37.0	37.0	37.0	36.0	36.0			70.0	70.0		70.0	
Total Split (%)	25.9%	25.9%	25.9%	25.2%	25.2%			49.0%	49.0%		49.0%	
Maximum Green (s)	30.0	30.0	30.0	28.0	28.0			62.0	62.0		62.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0			6.0	6.0		6.0	
All-Red Time (s)	3.0	3.0	3.0	4.0	4.0			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	8.0	8.0			8.0	8.0		8.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Recall Mode	Min	Min	Min	Min	Min			Min	Min		Min	

Intersection Summary

Area Type: Other  
 Cycle Length: 143  
 Actuated Cycle Length: 142.1  
 Natural Cycle: 140  
 Control Type: Actuated-Uncoordinated

Splits and Phases: 2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road



HCM 6th Signalized Intersection Summary

2023 Existing Conditions

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road

	Weekday Midday											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	157	419	174	391	273	93	0	1342	166	0	1170	0
Future Volume (veh/h)	157	419	174	391	273	93	0	1342	166	0	1170	0
Initial Q (Qb), 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	1856	1811	1841	1826	1841	1722	0	1752	1841	0	1722	0
Adj Flow Rate, veh/h	164	436	134	259	491	87	0	1398	144	0	1219	0
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, %	3	6	4	5	4	12	0	10	4	0	12	0
Cap, veh/h	380	390	336	313	548	97	0	1464	686	0	1440	0
Arrive On Green	0.22	0.22	0.22	0.18	0.18	0.18	0.00	0.44	0.44	0.00	0.44	0.00
Sat Flow, veh/h	1767	1811	1560	1739	3048	537	0	3416	1560	0	3444	0
Grp Volume(v), veh/h	164	436	134	259	296	282	0	1398	144	0	1219	0
Grp Sat Flow(s),veh/h/ln	1767	1811	1560	1739	1841	1744	0	1664	1560	0	1636	0
Q Serve(g_s), s	11.2	30.0	10.3	20.0	21.9	22.1	0.0	56.5	7.9	0.0	46.4	0.0
Cycle Q Clear(g_c), s	11.2	30.0	10.3	20.0	21.9	22.1	0.0	56.5	7.9	0.0	46.4	0.0
Prop In Lane	1.00		1.00	1.00		0.31	0.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	380	390	336	313	331	314	0	1464	686	0	1440	0
V/C Ratio(X)	0.43	1.12	0.40	0.83	0.89	0.90	0.00	0.95	0.21	0.00	0.85	0.00
Avail Cap(c_a), veh/h	380	390	336	349	370	350	0	1480	694	0	1455	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(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	47.3	54.7	47.0	55.1	55.9	56.0	0.0	37.7	24.1	0.0	34.8	0.0
Incr Delay (d2), s/veh	0.3	81.9	0.3	12.5	20.1	22.3	0.0	13.8	0.1	0.0	4.5	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	8.6	32.0	7.2	14.9	17.6	17.2	0.0	32.2	5.1	0.0	25.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.6	136.6	47.3	67.6	76.0	78.3	0.0	51.5	24.1	0.0	39.4	0.0
LnGrp LOS	D	F	D	E	E	E	A	D	C	A	D	A
Approach Vol, veh/h		734			837			1542			1219	
Approach Delay, s/veh		100.4			74.2			49.0			39.4	
Approach LOS		F			E			D			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		69.3		33.1		69.3		37.0				
Change Period (Y+Rc), s		8.0		8.0		8.0		7.0				
Max Green Setting (Gmax), s		62.0		28.0		62.0		30.0				
Max Q Clear Time (g_c+I1), s		58.5		24.1		48.4		32.0				
Green Ext Time (p_c), s		2.8		1.0		8.2		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				59.9								
HCM 6th LOS				E								
<b>Notes</b>												
User approved volume balancing among the lanes for turning movement.												

Lanes, Volumes, Timings

2023 Existing Conditions

3: Shell Driveway/U.S. 1 Jughandle & Franklin Corner Road (C.R. 546)

Weekday Middy



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑			↑↓			↑↓	↑↓
Traffic Volume (vph)	0	606	5	0	273	0	2	0	4	140	2	117
Future Volume (vph)	0	606	5	0	273	0	2	0	4	140	2	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	12	12	16	16	16	16	16	12
Grade (%)		0%			0%			-3%				1%
Storage Length (ft)	200		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999						0.910				0.850
Flt Protected								0.984			0.953	
Satd. Flow (prot)	0	4864	0	0	3438	0	0	1678	0	0	1875	1545
Flt Permitted								0.984			0.953	
Satd. Flow (perm)	0	4864	0	0	3438	0	0	1678	0	0	1875	1545
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		410			194			112			393	
Travel Time (s)		7.0			3.3			3.1			10.7	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	3%	0%	0%	5%	0%	0%	0%	25%	9%	0%	4%
Adj. Flow (vph)	0	652	5	0	294	0	2	0	4	151	2	126
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	657	0	0	294	0	0	6	0	0	153	126
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	2 veh	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.04	1.04	1.00	1.04	1.00	1.00	0.83	0.83	0.83	*1.00	0.85	1.01
Turning Speed (mph)	15		9	15		9	15		9	20		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

\* User Entered Value

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑			↑↑			↔			↑		↗
Traffic Vol, veh/h	0	606	5	0	273	0	2	0	4	140	2	117
Future Vol, veh/h	0	606	5	0	273	0	2	0	4	140	2	117
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	-3	-	-	1	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	3	0	0	5	0	0	0	25	9	0	4
Mvmt Flow	0	652	5	0	294	0	2	0	4	151	2	126

















Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	657	0	0	803	949	329	555	951	147
Stage 1	-	-	-	-	-	-	655	655	-	294	294	-
Stage 2	-	-	-	-	-	-	148	294	-	261	657	-
Critical Hdwy	-	-	-	5.3	-	-	6.35	5.9	7.3	7.33	6.7	7.08
Critical Hdwy Stg 1	-	-	-	-	-	-	6.7	4.9	-	6.88	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.9	4.9	-	7.08	5.7	-
Follow-up Hdwy	-	-	-	3.1	-	-	3.65	4	4.15	3.74	4	3.34
Pot Cap-1 Maneuver	0	-	-	578	-	0	350	307	535	409	248	864
Stage 1	0	-	-	-	-	0	399	519	-	637	662	-
Stage 2	0	-	-	-	-	0	833	707	-	658	448	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	578	-	-	298	307	535	406	248	864
Mov Cap-2 Maneuver	-	-	-	-	-	-	346	407	-	480	349	-
Stage 1	-	-	-	-	-	-	399	519	-	637	662	-
Stage 2	-	-	-	-	-	-	709	707	-	653	448	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	13.1	13.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	453	-	-	578	-	477	864
HCM Lane V/C Ratio	0.014	-	-	-	-	0.32	0.146
HCM Control Delay (s)	13.1	-	-	0	-	16.1	9.9
HCM Lane LOS	B	-	-	A	-	C	A
HCM 95th %tile Q(veh)	0	-	-	0	-	1.4	0.5

Lanes, Volumes, Timings  
4: Greenberg Road & Wawa Driveway/Bakersville Road

2023 Existing Conditions  
Weekday MIDDAY

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	67	30	0	0	33	68	61	92	5	70	0	64
Future Volume (vph)	67	30	0	0	33	68	61	92	5	70	0	64
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	13	14	14	13	12	12
Grade (%)		0%			1%			0%			0%	
Storage Length (ft)	0		0	0		0	160		0	0		130
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			85			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.910			0.992				0.850
Flt Protected		0.967					0.950			0.950		
Satd. Flow (prot)	0	1726	0	0	1681	0	1776	1869	0	1865	0	1615
Flt Permitted		0.967					0.950			0.950		
Satd. Flow (perm)	0	1726	0	0	1681	0	1776	1869	0	1865	0	1615
Link Speed (mph)		25			25			25				25
Link Distance (ft)		123			284			359				304
Travel Time (s)		3.4			7.7			9.8				8.3
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	8%	3%	0%	0%	3%	2%	5%	8%	0%	0%	0%	0%
Adj. Flow (vph)	76	34	0	0	38	77	69	105	6	80	0	73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	110	0	0	115	0	69	111	0	80	0	73
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			13				13
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	0.96	0.92	0.92	0.96	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Lanes, Volumes, Timings  
5: Greenberg Road & Bakersville Road

2023 Existing Conditions  
Weekday Middy



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	263	22	35	192	112	246
Future Volume (vph)	263	22	35	192	112	246
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	14	14	14	14
Grade (%)	0%			-1%	0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.990				0.907	
Flt Protected	0.956			0.992		
Satd. Flow (prot)	1942	0	0	1939	1789	0
Flt Permitted	0.956			0.992		
Satd. Flow (perm)	1942	0	0	1939	1789	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	149			304	324	
Travel Time (s)	4.1			8.3	8.8	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	0%	0%	5%	0%	4%
Adj. Flow (vph)	299	25	40	218	127	280
Shared Lane Traffic (%)						
Lane Group Flow (vph)	324	0	0	258	407	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	15			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.91	0.91	0.92	0.92
Turning Speed (mph)	15	9	15			9
Sign Control	Yield			Yield	Yield	
<b>Intersection Summary</b>						
Area Type:	Other					
Control Type:	Roundabout					

Intersection			
Intersection Delay, s/veh	5.8		
Intersection LOS	A		
Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	324	258	407
Demand Flow Rate, veh/h	330	269	418
Vehicles Circulating, veh/h	127	305	40
Vehicles Exiting, veh/h	331	152	534
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.5	6.4	5.7
Approach LOS	A	A	A
Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	330	269	418
Cap Entry Lane, veh/h	1212	1011	1325
Entry HV Adj Factor	0.982	0.959	0.974
Flow Entry, veh/h	324	258	407
Cap Entry, veh/h	1190	970	1290
V/C Ratio	0.272	0.266	0.316
Control Delay, s/veh	5.5	6.4	5.7
LOS	A	A	A
95th %tile Queue, veh	1	1	1

Lanes, Volumes, Timings  
6: Greenberg Road & Internal Loop Road

2023 Existing Conditions  
Weekday Middy



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	19	5	5	450	353	55
Future Volume (vph)	19	5	5	450	353	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	14	14	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.974				0.982	
Flt Protected	0.961			0.999		
Satd. Flow (prot)	1851	0	0	1966	1956	0
Flt Permitted	0.961			0.999		
Satd. Flow (perm)	1851	0	0	1966	1956	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	401			324	282	
Travel Time (s)	10.9			8.8	7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	11%	0%	0%	3%	2%	0%
Adj. Flow (vph)	21	5	5	489	384	60
Shared Lane Traffic (%)						
Lane Group Flow (vph)	26	0	0	494	444	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	16			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.85	0.85	0.92	0.92	0.92	0.92
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other  
Control Type: Unsignalized



Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			4	4	
Traffic Vol, veh/h	19	5	5	450	353	55
Future Vol, veh/h	19	5	5	450	353	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	11	0	0	3	2	0
Mvmt Flow	21	5	5	489	384	60

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	913	414	444	0	0
Stage 1	414	-	-	-	-
Stage 2	499	-	-	-	-
Critical Hdwy	6.51	6.2	4.1	-	-
Critical Hdwy Stg 1	5.51	-	-	-	-
Critical Hdwy Stg 2	5.51	-	-	-	-
Follow-up Hdwy	3.599	3.3	2.2	-	-
Pot Cap-1 Maneuver	293	643	1127	-	-
Stage 1	648	-	-	-	-
Stage 2	592	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	291	643	1127	-	-
Mov Cap-2 Maneuver	291	-	-	-	-
Stage 1	644	-	-	-	-
Stage 2	592	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.9	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1127	-	328	-	-
HCM Lane V/C Ratio	0.005	-	0.08	-	-
HCM Control Delay (s)	8.2	0	16.9	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Lanes, Volumes, Timings  
7: Greenberg Road & Bakers Basin Road

2023 Existing Conditions  
Weekday Middy

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↖	↗
Traffic Volume (vph)	286	299	109	393	364	105
Future Volume (vph)	286	299	109	393	364	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	11	16	10	11
Storage Length (ft)		220	110		0	115
Storage Lanes		1	1		1	1
Taper Length (ft)			55		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1701	1583	1728	2031	1636	1546
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1701	1583	1728	2031	1636	1546
Link Speed (mph)	35			35	25	
Link Distance (ft)	452			328	282	
Travel Time (s)	8.8			6.4	7.7	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	8%	2%	1%	6%	3%	1%
Adj. Flow (vph)	298	311	114	409	379	109
Shared Lane Traffic (%)						
Lane Group Flow (vph)	298	311	114	409	379	109
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			11	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.00	1.04	0.85	*1.04	1.04
Turning Speed (mph)		9	20		20	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

\* User Entered Value

Intersection						
Int Delay, s/veh	63.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↘	↗
Traffic Vol, veh/h	286	299	109	393	364	105
Future Vol, veh/h	286	299	109	393	364	105
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	220	110	-	0	115
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	8	2	1	6	3	1
Mvmt Flow	298	311	114	409	379	109

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	609	0	935 298
Stage 1	-	-	-	-	298 -
Stage 2	-	-	-	-	637 -
Critical Hdwy	-	-	4.11	-	6.43 6.21
Critical Hdwy Stg 1	-	-	-	-	5.43 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	-	-	2.209	-	3.527 3.309
Pot Cap-1 Maneuver	-	-	974	-	~ 293 744
Stage 1	-	-	-	-	751 -
Stage 2	-	-	-	-	525 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	974	-	~ 259 744
Mov Cap-2 Maneuver	-	-	-	-	~ 259 -
Stage 1	-	-	-	-	751 -
Stage 2	-	-	-	-	464 -

Approach	EB	WB	NB
HCM Control Delay, s	0	2	208
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	259	744	-	-	974	-
HCM Lane V/C Ratio	1.464	0.147	-	-	0.117	-
HCM Control Delay (s)	264.9	10.7	-	-	9.2	-
HCM Lane LOS	F	B	-	-	A	-
HCM 95th %tile Q(veh)	21.6	0.5	-	-	0.4	-

















Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Lanes, Volumes, Timings

2023 Existing Conditions

8: Wawa Driveway/Internal Loop Road & Bakersville Road

Weekday Middy

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	169	16	122	154	5	43	6	114	2	9	52
Future Volume (vph)	8	169	16	122	154	5	43	6	114	2	9	52
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	15	15	15	15	15	12	12	12
Grade (%)		-1%			0%			-1%			0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989			0.997			0.906			0.888	
Flt Protected		0.998			0.979			0.987			0.999	
Satd. Flow (prot)	0	2073	0	0	2013	0	0	1793	0	0	1686	0
Flt Permitted		0.998			0.979			0.987			0.999	
Satd. Flow (perm)	0	2073	0	0	2013	0	0	1793	0	0	1686	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		55			149			115			401	
Travel Time (s)		1.5			4.1			3.1			10.9	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	1%	1%	20%	5%	17%	4%	0%	0%	0%
Adj. Flow (vph)	9	192	18	139	175	6	49	7	130	2	10	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	219	0	0	320	0	0	186	0	0	71	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	
<b>Intersection Summary</b>												
Area Type:	Other											
Control Type:	Unsignalized											

HCM 6th TWSC  
8: Wawa Driveway/Internal Loop Road & Bakersville Road

2023 Existing Conditions  
Weekday Middy

Intersection												
Int Delay, s/veh	5.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	169	16	122	154	5	43	6	114	2	9	52
Future Vol, veh/h	8	169	16	122	154	5	43	6	114	2	9	52
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-1	-	-	0	-	-	-1	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	1	1	20	5	17	4	0	0	0
Mvmt Flow	9	192	18	139	175	6	49	7	130	2	10	59

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	181	0	0	210	0	0	710	678	201	744	684	178
Stage 1	-	-	-	-	-	-	219	219	-	456	456	-
Stage 2	-	-	-	-	-	-	491	459	-	288	228	-
Critical Hdwy	4.1	-	-	4.11	-	-	6.95	6.47	6.14	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.95	5.47	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.95	5.47	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.209	-	-	3.545	4.153	3.336	3.5	4	3.3
Pot Cap-1 Maneuver	1407	-	-	1367	-	-	358	369	839	333	374	870
Stage 1	-	-	-	-	-	-	786	703	-	588	572	-
Stage 2	-	-	-	-	-	-	569	556	-	724	719	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1407	-	-	1367	-	-	296	325	839	252	329	870
Mov Cap-2 Maneuver	-	-	-	-	-	-	296	325	-	252	329	-
Stage 1	-	-	-	-	-	-	780	698	-	584	507	-
Stage 2	-	-	-	-	-	-	461	493	-	602	714	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			3.4			15			11.1		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	544	1407	-	-	1367	-	-	663
HCM Lane V/C Ratio	0.34	0.006	-	-	0.101	-	-	0.108
HCM Control Delay (s)	15	7.6	0	-	7.9	0	-	11.1
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	1.5	0	-	-	0.3	-	-	0.4

Lanes, Volumes, Timings  
 9: Bakersville Road & CFA East Access

2023 Existing Conditions  
 Weekday Middy



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	53	176	89	160	17	12
Future Volume (vph)	53	176	89	160	17	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	12	12
Grade (%)		-1%	0%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.913		0.944	
Flt Protected		0.989			0.971	
Satd. Flow (prot)	0	2077	1868	0	1742	0
Flt Permitted		0.989			0.971	
Satd. Flow (perm)	0	2077	1868	0	1742	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		71	55		121	
Travel Time (s)		1.9	1.5		3.3	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	0%	0%	6%	0%	0%	0%
Adj. Flow (vph)	62	205	103	186	20	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	267	289	0	34	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.88	0.88	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
<b>Intersection Summary</b>						
Area Type:	Other					
Control Type:	Unsignalized					

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	53	176	89	160	17	12
Future Vol, veh/h	53	176	89	160	17	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-1	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	6	0	0	0
Mvmt Flow	62	205	103	186	20	14

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	289	0	-	0	525 196
Stage 1	-	-	-	-	196 -
Stage 2	-	-	-	-	329 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	1284	-	-	-	516 850
Stage 1	-	-	-	-	842 -
Stage 2	-	-	-	-	734 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1284	-	-	-	488 850
Mov Cap-2 Maneuver	-	-	-	-	488 -
Stage 1	-	-	-	-	797 -
Stage 2	-	-	-	-	734 -

Approach	EB	WB	SB
HCM Control Delay, s	1.8	0	11.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1284	-	-	-	592
HCM Lane V/C Ratio	0.048	-	-	-	0.057
HCM Control Delay (s)	7.9	0	-	-	11.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.2

Lanes, Volumes, Timings  
 10: Bakersville Road & CFA West Access

2023 Existing Conditions  
 Weekday Middy



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	19	103	74	27	126	80
Future Volume (vph)	19	103	74	27	126	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	16	16
Grade (%)		0%	1%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.964		0.948	
Flt Protected		0.992			0.970	
Satd. Flow (prot)	0	2073	1894	0	1980	0
Flt Permitted		0.992			0.970	
Satd. Flow (perm)	0	2073	1894	0	1980	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		219	71		111	
Travel Time (s)		6.0	1.9		3.0	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	0%	0%	8%	0%	0%	0%
Adj. Flow (vph)	22	121	87	32	148	94
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	143	119	0	242	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		16	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.89	0.89	0.85	0.85
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other  
 Control Type: Unsignalized



Intersection						
Int Delay, s/veh	5.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	19	103	74	27	126	80
Future Vol, veh/h	19	103	74	27	126	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	1	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	8	0	0	0
Mvmt Flow	22	121	87	32	148	94

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	119	0	-	0	268
Stage 1	-	-	-	-	103
Stage 2	-	-	-	-	165
Critical Hdwy	4.1	-	-	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	2.2	-	-	-	3.5
Pot Cap-1 Maneuver	1482	-	-	-	726
Stage 1	-	-	-	-	926
Stage 2	-	-	-	-	869
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1482	-	-	-	714
Mov Cap-2 Maneuver	-	-	-	-	714
Stage 1	-	-	-	-	911
Stage 2	-	-	-	-	869

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	11.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1482	-	-	-	792
HCM Lane V/C Ratio	0.015	-	-	-	0.306
HCM Control Delay (s)	7.5	0	-	-	11.5
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	1.3

Lanes, Volumes, Timings  
 1: Brunswick Avenue (U.S. 1) & Bakersville Road

2023 Existing Conditions  
 Weekday Afternoon



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↵	↕↕↕			↕↕↕
Traffic Volume (vph)	0	161	1981	151	0	2245
Future Volume (vph)	0	161	1981	151	0	2245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	12	12	12	12
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	0.91
Frt		0.865	0.989			
Flt Protected						
Satd. Flow (prot)	0	1844	5036	0	0	5036
Flt Permitted						
Satd. Flow (perm)	0	1844	5036	0	0	5036
Link Speed (mph)	25		55			55
Link Distance (ft)	219		556			396
Travel Time (s)	6.0		6.9			4.9
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	1%	2%	0%	0%	3%
Adj. Flow (vph)	0	173	2130	162	0	2414
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	173	2292	0	0	2414
Enter Blocked Intersection	No	No	Yes	No	Yes	Yes
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		8			8
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.85	0.85	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other  
 Control Type: Unsignalized

Intersection						
Int Delay, s/veh	3.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗ ↑↑↑	↑↑↑			↑↑↑
Traffic Vol, veh/h	0	161	1981	151	0	2245
Future Vol, veh/h	0	161	1981	151	0	2245
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Free	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	1	2	0	0	3
Mvmt Flow	0	173	2130	162	0	2414

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	-	1065	0	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.12	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.91	-	-	-	-
Pot Cap-1 Maneuver	0	189	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	189	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	95.7	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 189	-
HCM Lane V/C Ratio	- 0.916	-
HCM Control Delay (s)	- 95.7	-
HCM Lane LOS	- F	-
HCM 95th %tile Q(veh)	- 7.1	-

Lanes, Volumes, Timings

2023 Existing Conditions

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road

Weekday Afternoon



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	151	353	221	459	257	120	0	1818	324	0	1565	0
Future Volume (vph)	151	353	221	459	257	120	0	1818	324	0	1565	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	12	12	12	12	12	12	12
Storage Length (ft)	0		0	280		0	0		0	0		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	25			65			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Fr <sub>t</sub>			0.850		0.968				0.850			
Fl <sub>t</sub> Protected	0.950			0.950	0.984							
Satd. Flow (prot)	1728	1801	1599	1572	3104	0	0	3539	1568	0	3539	0
Fl <sub>t</sub> Permitted	0.950			0.950	0.984							
Satd. Flow (perm)	1728	1801	1599	1572	3104	0	0	3539	1568	0	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			81		16				147			
Link Speed (mph)		40			35			55				55
Link Distance (ft)		194			452			396				265
Travel Time (s)		3.3			8.8			4.9				3.3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	2%	1%	1%	3%	4%	0%	2%	3%	0%	2%	0%
Adj. Flow (vph)	159	372	233	483	271	126	0	1914	341	0	1647	0
Shared Lane Traffic (%)				39%								
Lane Group Flow (vph)	159	372	233	295	585	0	0	1914	341	0	1647	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			8			8	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.04	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1			2	2			2
Detector Template												
Leading Detector (ft)	50	50	50	57	57			206	206		236	
Trailing Detector (ft)	-10	-10	-10	-10	-10			0	0		0	
Detector 1 Position(ft)	-10	-10	-10	-10	-10			0	0		0	
Detector 1 Size(ft)	60	60	60	67	67			40	40		40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Detector 2 Position(ft)								200	200		230	
Detector 2 Size(ft)								6	6		6	
Detector 2 Type								Cl+Ex	Cl+Ex		Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0	0.0		0.0	
Turn Type	Split	NA	Perm	Split	NA			NA	Perm		NA	

Lanes, Volumes, Timings

2023 Existing Conditions

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road

Weekday Afternoon

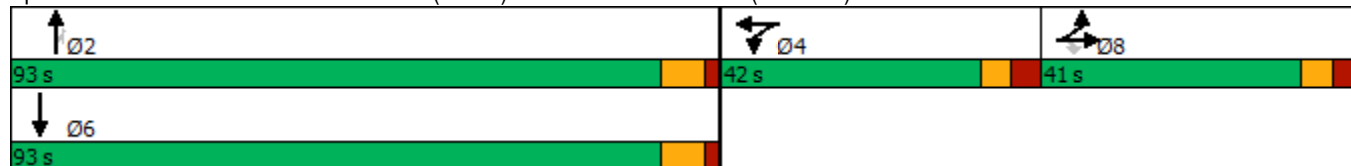


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	8	8		4	4			2			6	
Permitted Phases			8						2			
Detector Phase	8	8	8	4	4			2	2		6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0			7.0	7.0		7.0	
Minimum Split (s)	14.0	14.0	14.0	15.0	15.0			15.0	15.0		15.0	
Total Split (s)	41.0	41.0	41.0	42.0	42.0			93.0	93.0		93.0	
Total Split (%)	23.3%	23.3%	23.3%	23.9%	23.9%			52.8%	52.8%		52.8%	
Maximum Green (s)	34.0	34.0	34.0	34.0	34.0			85.0	85.0		85.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0			6.0	6.0		6.0	
All-Red Time (s)	3.0	3.0	3.0	4.0	4.0			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	8.0	8.0			8.0	8.0		8.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Recall Mode	Min	Min	Min	Min	Min			Min	Min		Min	

Intersection Summary

Area Type: Other  
 Cycle Length: 176  
 Actuated Cycle Length: 176  
 Natural Cycle: 150  
 Control Type: Actuated-Uncoordinated

Splits and Phases: 2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road



# HCM 6th Signalized Intersection Summary

2023 Existing Conditions

## 2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road

Wednesday Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	151	353	221	459	257	120	0	1818	324	0	1565	0
Future Volume (veh/h)	151	353	221	459	257	120	0	1818	324	0	1565	0
Initial Q (Qb), 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	1885	1870	1885	1885	1856	1841	0	1870	1856	0	1870	0
Adj Flow Rate, veh/h	159	372	194	293	537	125	0	1914	294	0	1647	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	2	1	1	3	4	0	2	3	0	2	0
Cap, veh/h	347	361	309	347	563	130	0	1716	759	0	1716	0
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.00	0.48	0.48	0.00	0.48	0.00
Sat Flow, veh/h	1795	1870	1598	1795	2914	675	0	3647	1572	0	3741	0
Grp Volume(v), veh/h	159	372	194	293	341	321	0	1914	294	0	1647	0
Grp Sat Flow(s),veh/h/ln	1795	1870	1598	1795	1856	1734	0	1777	1572	0	1777	0
Q Serve(g_s), s	13.8	34.0	19.6	27.7	32.0	32.2	0.0	85.0	20.9	0.0	78.6	0.0
Cycle Q Clear(g_c), s	13.8	34.0	19.6	27.7	32.0	32.2	0.0	85.0	20.9	0.0	78.6	0.0
Prop In Lane	1.00		1.00	1.00		0.39	0.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	347	361	309	347	358	335	0	1716	759	0	1716	0
V/C Ratio(X)	0.46	1.03	0.63	0.84	0.95	0.96	0.00	1.12	0.39	0.00	0.96	0.00
Avail Cap(c_a), veh/h	347	361	309	347	358	335	0	1716	759	0	1716	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(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	62.9	71.0	65.2	68.5	70.2	70.3	0.0	45.5	28.9	0.0	43.8	0.0
Incr Delay (d2), s/veh	0.4	55.2	3.1	16.4	34.7	37.7	0.0	60.5	0.1	0.0	13.3	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	10.5	29.8	12.9	20.5	25.7	24.7	0.0	66.7	12.3	0.0	45.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.2	126.2	68.3	84.8	104.9	108.0	0.0	106.0	29.1	0.0	57.2	0.0
LnGrp LOS	E	F	E	F	F	F	A	F	C	A	E	A
Approach Vol, veh/h		725			955			2208			1647	
Approach Delay, s/veh		96.9			99.8			95.8			57.2	
Approach LOS		F			F			F			E	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		93.0		42.0		93.0		41.0				
Change Period (Y+Rc), s		8.0		8.0		8.0		7.0				
Max Green Setting (Gmax), s		85.0		34.0		85.0		34.0				
Max Q Clear Time (g_c+I1), s		87.0		34.2		80.6		36.0				
Green Ext Time (p_c), s		0.0		0.0		3.8		0.0				

### Intersection Summary

HCM 6th Ctrl Delay	85.1
HCM 6th LOS	F

### Notes























User approved volume balancing among the lanes for turning movement.

Lanes, Volumes, Timings

2023 Existing Conditions

3: Shell Driveway/U.S. 1 Jughandle & Franklin Corner Road (C.R. 546)

Weekday Afternoon

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			 			 			 	
Traffic Volume (vph)	0	621	6	0	257	0	1	0	3	101	0	101
Future Volume (vph)	0	621	6	0	257	0	1	0	3	101	0	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	12	12	16	16	16	16	16	12
Grade (%)		0%			0%			-3%			1%	
Storage Length (ft)	200		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999						0.899				0.850
Flt Protected								0.988			0.950	
Satd. Flow (prot)	0	4912	0	0	3505	0	0	1941	0	0	1976	1530
Flt Permitted								0.988			0.950	
Satd. Flow (perm)	0	4912	0	0	3505	0	0	1941	0	0	1976	1530
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		410			194			112			393	
Travel Time (s)		7.0			3.3			3.1			10.7	
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 (%)	0%	2%	0%	0%	3%	0%	0%	0%	0%	3%	0%	5%
Adj. Flow (vph)	0	647	6	0	268	0	1	0	3	105	0	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	653	0	0	268	0	0	4	0	0	105	105
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	2 veh	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.04	1.04	1.00	1.04	1.00	1.00	0.83	0.83	0.83	*1.00	0.85	1.01
Turning Speed (mph)	15		9	15		9	15		9	20		9
Sign Control		Free			Free			Stop			Stop	
<b>Intersection Summary</b>												
Area Type:	Other											
Control Type:	Unsignalized											
* User Entered Value												

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑				↑↑			↔			↑ ↑	
Traffic Vol, veh/h	0	621	6	0	257	0	1	0	3	101	0	101
Future Vol, veh/h	0	621	6	0	257	0	1	0	3	101	0	101
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	-3	-	-	1	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	2	0	0	3	0	0	0	0	3	0	5
Mvmt Flow	0	647	6	0	268	0	1	0	3	105	0	105

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	653	0	0	784	918	327	527	921	134
Stage 1	-	-	-	-	-	-	650	650	-	268	268	-
Stage 2	-	-	-	-	-	-	134	268	-	259	653	-
Critical Hdwy	-	-	-	5.3	-	-	6.35	5.9	6.8	7.21	6.7	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	6.7	4.9	-	6.76	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.9	4.9	-	6.96	5.7	-
Follow-up Hdwy	-	-	-	3.1	-	-	3.65	4	3.9	3.68	4	3.35
Pot Cap-1 Maneuver	0	-	-	581	-	0	359	319	591	440	259	878
Stage 1	0	-	-	-	-	0	402	522	-	676	681	-
Stage 2	0	-	-	-	-	0	847	723	-	675	450	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	581	-	-	316	319	591	438	259	878
Mov Cap-2 Maneuver	-	-	-	-	-	-	354	415	-	507	356	-
Stage 1	-	-	-	-	-	-	402	522	-	676	681	-
Stage 2	-	-	-	-	-	-	746	723	-	671	450	-



















Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			12.2			11.9		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	506	-	-	581	-	507	878
HCM Lane V/C Ratio	0.008	-	-	-	-	0.208	0.12
HCM Control Delay (s)	12.2	-	-	0	-	14	9.7
HCM Lane LOS	B	-	-	A	-	B	A
HCM 95th %tile Q(veh)	0	-	-	0	-	0.8	0.4



Lanes, Volumes, Timings  
4: Greenberg Road & Wawa Driveway/Bakersville Road

2023 Existing Conditions  
Weekday Afternoon

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	12	0	0	20	66	36	98	1	34	0	35
Future Volume (vph)	43	12	0	0	20	66	36	98	1	34	0	35
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	13	14	14	13	12	12
Grade (%)		0%			1%			0%			0%	
Storage Length (ft)	0		0	0		0	160		0	0		130
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			85			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.897			0.999				0.850
Flt Protected		0.963					0.950			0.950		
Satd. Flow (prot)	0	1761	0	0	1670	0	1811	2025	0	1865	0	1615
Flt Permitted		0.963					0.950			0.950		
Satd. Flow (perm)	0	1761	0	0	1670	0	1811	2025	0	1865	0	1615
Link Speed (mph)		25			25			25				25
Link Distance (ft)		123			284			359				304
Travel Time (s)		3.4			7.7			9.8				8.3
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	5%	0%	0%	0%	0%	2%	3%	0%	0%	0%	0%	0%
Adj. Flow (vph)	49	14	0	0	23	75	41	111	1	39	0	40
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	63	0	0	98	0	41	112	0	39	0	40
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			13				13
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	0.96	0.92	0.92	0.96	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Lanes, Volumes, Timings  
5: Greenberg Road & Bakersville Road

2023 Existing Conditions  
Weekday Afternoon



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	181	13	31	176	56	157
Future Volume (vph)	181	13	31	176	56	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	14	14	14	14
Grade (%)	0%			-1%	0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.991				0.900	
Flt Protected	0.955			0.993		
Satd. Flow (prot)	1960	0	0	2006	1772	0
Flt Permitted	0.955			0.993		
Satd. Flow (perm)	1960	0	0	2006	1772	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	149			304	324	
Travel Time (s)	4.1			8.3	8.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	0%	0%	1%	0%	4%
Adj. Flow (vph)	197	14	34	191	61	171
Shared Lane Traffic (%)						
Lane Group Flow (vph)	211	0	0	225	232	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	15			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.91	0.91	0.92	0.92
Turning Speed (mph)	15	9	15			9
Sign Control	Yield			Yield	Yield	
<b>Intersection Summary</b>						
Area Type:	Other					
Control Type:	Roundabout					

Intersection			
Intersection Delay, s/veh	4.5		
Intersection LOS	A		
Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	211	225	232
Demand Flow Rate, veh/h	213	227	239
Vehicles Circulating, veh/h	61	199	34
Vehicles Exiting, veh/h	212	75	392
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.2	5.0	4.3
Approach LOS	A	A	A
Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	213	227	239
Cap Entry Lane, veh/h	1297	1126	1333
Entry HV Adj Factor	0.991	0.992	0.971
Flow Entry, veh/h	211	225	232
Cap Entry, veh/h	1284	1117	1294
V/C Ratio	0.164	0.202	0.179
Control Delay, s/veh	4.2	5.0	4.3
LOS	A	A	A
95th %tile Queue, veh	1	1	1

Lanes, Volumes, Timings  
6: Greenberg Road & Internal Loop Road

2023 Existing Conditions  
Weekday Afternoon



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	17	2	4	353	211	21
Future Volume (vph)	17	2	4	353	211	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	14	14	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.986				0.988	
Flt Protected	0.957			0.999		
Satd. Flow (prot)	2032	0	0	2025	2002	0
Flt Permitted	0.957			0.999		
Satd. Flow (perm)	2032	0	0	2025	2002	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	401			324	282	
Travel Time (s)	10.9			8.8	7.7	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	18	2	4	376	224	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	20	0	0	380	246	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	16			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.85	0.85	0.92	0.92	0.92	0.92
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other  
Control Type: Unsignalized

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	17	2	4	353	211	21
Future Vol, veh/h	17	2	4	353	211	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	18	2	4	376	224	22

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	619	235	246	0	-	0
Stage 1	235	-	-	-	-	-
Stage 2	384	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	455	809	1332	-	-	-
Stage 1	809	-	-	-	-	-
Stage 2	693	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	453	809	1332	-	-	-
Mov Cap-2 Maneuver	453	-	-	-	-	-
Stage 1	806	-	-	-	-	-
Stage 2	693	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.9	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1332	-	475	-	-
HCM Lane V/C Ratio	0.003	-	0.043	-	-
HCM Control Delay (s)	7.7	0	12.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Lanes, Volumes, Timings  
7: Greenberg Road & Bakers Basin Road

2023 Existing Conditions  
Weekday Afternoon

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↙	↑	↖	↗
Traffic Volume (vph)	514	163	69	553	283	87
Future Volume (vph)	514	163	69	553	283	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	11	16	10	11
Storage Length (ft)		220	110		0	115
Storage Lanes		1	1		1	1
Taper Length (ft)			55		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1783	1599	1694	2111	1652	1561
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1783	1599	1694	2111	1652	1561
Link Speed (mph)	35			35	25	
Link Distance (ft)	452			328	282	
Travel Time (s)	8.8			6.4	7.7	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	3%	1%	3%	2%	2%	0%
Adj. Flow (vph)	519	165	70	559	286	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	519	165	70	559	286	88
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			11	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.00	1.04	0.85	*1.04	1.04
Turning Speed (mph)		9	20		20	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

\* User Entered Value

Intersection						
Int Delay, s/veh	55.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↘	↗
Traffic Vol, veh/h	514	163	69	553	283	87
Future Vol, veh/h	514	163	69	553	283	87
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	220	110	-	0	115
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	3	1	3	2	2	0
Mvmt Flow	519	165	70	559	286	88

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	684	0	1218
Stage 1	-	-	-	-	519
Stage 2	-	-	-	-	699
Critical Hdwy	-	-	4.13	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.227	-	3.518
Pot Cap-1 Maneuver	-	-	905	-	~ 199
Stage 1	-	-	-	-	597
Stage 2	-	-	-	-	493
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	905	-	~ 184
Mov Cap-2 Maneuver	-	-	-	-	~ 184
Stage 1	-	-	-	-	597
Stage 2	-	-	-	-	455

Approach	EB	WB	NB
HCM Control Delay, s	0	1	247.7
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	184	561	-	-	905	-
HCM Lane V/C Ratio	1.554	0.157	-	-	0.077	-
HCM Control Delay (s)	\$ 320	12.6	-	-	9.3	-
HCM Lane LOS	F	B	-	-	A	-
HCM 95th %tile Q(veh)	18.5	0.6	-	-	0.2	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Lanes, Volumes, Timings

2023 Existing Conditions

8: Wawa Driveway/Internal Loop Road & Bakersville Road

Weekday Afternoon



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	3	114	13	97	88	3	39	2	79	1	2	16
Future Volume (vph)	3	114	13	97	88	3	39	2	79	1	2	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	15	15	15	15	15	12	12	12
Grade (%)		-1%			0%			-1%			0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986			0.998			0.911			0.884	
Flt Protected		0.999			0.975			0.984			0.998	
Satd. Flow (prot)	0	2069	0	0	2004	0	0	1871	0	0	1676	0
Flt Permitted		0.999			0.975			0.984			0.998	
Satd. Flow (perm)	0	2069	0	0	2004	0	0	1871	0	0	1676	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		55			149			115			401	
Travel Time (s)		1.5			4.1			3.1			10.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	0%	0%	1%	2%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	3	131	15	111	101	3	45	2	91	1	2	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	149	0	0	215	0	0	138	0	0	21	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized



HCM 6th TWSC  
 8: Wawa Driveway/Internal Loop Road & Bakersville Road

2023 Existing Conditions  
 Weekday Afternoon

Intersection												
Int Delay, s/veh	5.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	114	13	97	88	3	39	2	79	1	2	16
Future Vol, veh/h	3	114	13	97	88	3	39	2	79	1	2	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-1	-	-	0	-	-	-1	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	1	2	0	0	0	1	0	0	0
Mvmt Flow	3	131	15	111	101	3	45	2	91	1	2	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	104	0	0	146	0	0	480	471	139	516	477	103
Stage 1	-	-	-	-	-	-	145	145	-	325	325	-
Stage 2	-	-	-	-	-	-	335	326	-	191	152	-
Critical Hdwy	4.1	-	-	4.11	-	-	6.9	6.3	6.11	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.9	5.3	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.9	5.3	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.209	-	-	3.5	4	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	1500	-	-	1442	-	-	513	507	915	473	490	957
Stage 1	-	-	-	-	-	-	870	787	-	692	653	-
Stage 2	-	-	-	-	-	-	696	664	-	815	775	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1500	-	-	1442	-	-	469	464	915	397	449	957
Mov Cap-2 Maneuver	-	-	-	-	-	-	469	464	-	397	449	-
Stage 1	-	-	-	-	-	-	868	785	-	691	599	-
Stage 2	-	-	-	-	-	-	624	610	-	731	773	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	4	11.5	9.6
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	690	1500	-	-	1442	-	-	802
HCM Lane V/C Ratio	0.2	0.002	-	-	0.077	-	-	0.027
HCM Control Delay (s)	11.5	7.4	0	-	7.7	0	-	9.6
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.7	0	-	-	0.3	-	-	0.1

Lanes, Volumes, Timings  
 9: Bakersville Road & CFA East Access

2023 Existing Conditions  
 Weekday Afternoon



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	40	118	65	78	12	9
Future Volume (vph)	40	118	65	78	12	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	12	12
Grade (%)		-1%	0%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.926		0.941	
Flt Protected		0.987			0.973	
Satd. Flow (prot)	0	2073	1935	0	1740	0
Flt Permitted		0.987			0.973	
Satd. Flow (perm)	0	2073	1935	0	1740	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		71	55		121	
Travel Time (s)		1.9	1.5		3.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	43	126	69	83	13	10
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	169	152	0	23	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.88	0.88	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other  
 Control Type: Unsignalized

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Vol, veh/h	40	118	65	78	12	9
Future Vol, veh/h	40	118	65	78	12	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-1	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	43	126	69	83	13	10

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	152	0	-	0	323
Stage 1	-	-	-	-	111
Stage 2	-	-	-	-	212
Critical Hdwy	4.1	-	-	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	2.2	-	-	-	3.5
Pot Cap-1 Maneuver	1441	-	-	-	675
Stage 1	-	-	-	-	919
Stage 2	-	-	-	-	828
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1441	-	-	-	653
Mov Cap-2 Maneuver	-	-	-	-	653
Stage 1	-	-	-	-	890
Stage 2	-	-	-	-	828

Approach	EB	WB	SB
HCM Control Delay, s	1.9	0	9.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1441	-	-	-	753
HCM Lane V/C Ratio	0.03	-	-	-	0.03
HCM Control Delay (s)	7.6	0	-	-	9.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Lanes, Volumes, Timings  
 10: Bakersville Road & CFA West Access

2023 Existing Conditions  
 Weekday Afternoon



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	11	84	56	18	74	35
Future Volume (vph)	11	84	56	18	74	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	16	16
Grade (%)		0%	1%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.968		0.957	
Flt Protected		0.994			0.967	
Satd. Flow (prot)	0	2077	1983	0	1993	0
Flt Permitted		0.994			0.967	
Satd. Flow (perm)	0	2077	1983	0	1993	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		219	71		111	
Travel Time (s)		6.0	1.9		3.0	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	12	89	60	19	79	37
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	101	79	0	116	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		16	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.89	0.89	0.85	0.85
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
<b>Intersection Summary</b>						
Area Type:	Other					
Control Type:	Unsignalized					

Intersection						
Int Delay, s/veh	4.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	11	84	56	18	74	35
Future Vol, veh/h	11	84	56	18	74	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	1	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	2	0	0	0
Mvmt Flow	12	89	60	19	79	37

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	79	0	-	0	183 70
Stage 1	-	-	-	-	70 -
Stage 2	-	-	-	-	113 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	1532	-	-	-	811 998
Stage 1	-	-	-	-	958 -
Stage 2	-	-	-	-	917 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1532	-	-	-	805 998
Mov Cap-2 Maneuver	-	-	-	-	805 -
Stage 1	-	-	-	-	950 -
Stage 2	-	-	-	-	917 -

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	9.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1532	-	-	-	858
HCM Lane V/C Ratio	0.008	-	-	-	0.135
HCM Control Delay (s)	7.4	0	-	-	9.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.5

Lanes, Volumes, Timings  
 1: Brunswick Avenue (U.S. 1) & Bakersville Road

2023 Existing Conditions  
 Saturday MIDDAY



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕↕↕↕			↕↕↕
Traffic Volume (vph)	0	204	1458	149	0	1930
Future Volume (vph)	0	204	1458	149	0	1930
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	12	12	12	12
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	0.91
Frt		0.865	0.986			
Flt Protected						
Satd. Flow (prot)	0	1808	5019	0	0	5085
Flt Permitted						
Satd. Flow (perm)	0	1808	5019	0	0	5085
Link Speed (mph)	25		55			55
Link Distance (ft)	219		556			396
Travel Time (s)	6.0		6.9			4.9
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	2%	1%	0%	2%
Adj. Flow (vph)	0	208	1488	152	0	1969
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	208	1640	0	0	1969
Enter Blocked Intersection	No	No	Yes	No	Yes	Yes
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		8			8
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.85	0.85	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other  
 Control Type: Unsignalized

Intersection						
Int Delay, s/veh	2.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗ ↑↑↑	↑↑↑ ↘			↑↑↑
Traffic Vol, veh/h	0	204	1458	149	0	1930
Future Vol, veh/h	0	204	1458	149	0	1930
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Free	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	3	2	1	0	2
Mvmt Flow	0	208	1488	152	0	1969

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	-	744	0	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.16	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.93	-	-	-	-
Pot Cap-1 Maneuver	0	305	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	305	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	38.8	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 305	-
HCM Lane V/C Ratio	- 0.683	-
HCM Control Delay (s)	- 38.8	-
HCM Lane LOS	- E	-
HCM 95th %tile Q(veh)	- 4.7	-

Lanes, Volumes, Timings

2023 Existing Conditions

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road Saturday Midday



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	407	138	385	294	133	0	1456	206	0	1407	0
Future Volume (vph)	140	407	138	385	294	133	0	1456	206	0	1407	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	12	12	12	12	12	12	12
Storage Length (ft)	0		0	280		0	0		0	0		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	25			65			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Fr <sub>t</sub>			0.850		0.963				0.850			
Fl <sub>t</sub> Protected	0.950			0.950	0.989							
Satd. Flow (prot)	1711	1766	1615	1557	3041	0	0	3539	1538	0	3539	0
Fl <sub>t</sub> Permitted	0.950			0.950	0.989							
Satd. Flow (perm)	1711	1766	1615	1557	3041	0	0	3539	1538	0	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			99		25				131			
Link Speed (mph)		40			35			55			55	
Link Distance (ft)		194			452			396			265	
Travel Time (s)		3.3			8.8			4.9			3.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	4%	0%	2%	7%	2%	0%	2%	5%	0%	2%	0%
Adj. Flow (vph)	147	428	145	405	309	140	0	1533	217	0	1481	0
Shared Lane Traffic (%)				30%								
Lane Group Flow (vph)	147	428	145	283	571	0	0	1533	217	0	1481	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			8			8	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.04	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1			2	2		2	
Detector Template												
Leading Detector (ft)	50	50	50	57	57			206	206		236	
Trailing Detector (ft)	-10	-10	-10	-10	-10			0	0		0	
Detector 1 Position(ft)	-10	-10	-10	-10	-10			0	0		0	
Detector 1 Size(ft)	60	60	60	67	67			40	40		40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Detector 2 Position(ft)								200	200		230	
Detector 2 Size(ft)								6	6		6	
Detector 2 Type								Cl+Ex	Cl+Ex		Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0	0.0		0.0	
Turn Type	Split	NA	Perm	Split	NA			NA	Perm		NA	



Lanes, Volumes, Timings

2023 Existing Conditions

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road Saturday Midday

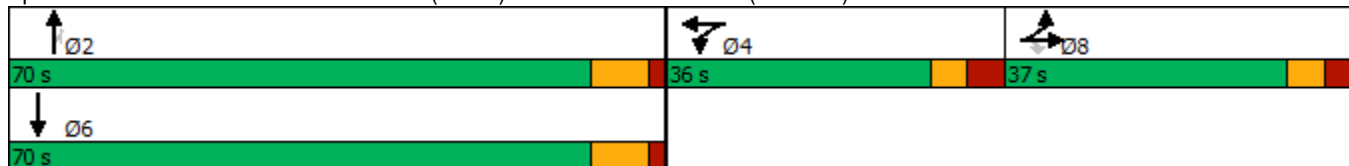


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	8	8		4	4			2				6
Permitted Phases			8						2			
Detector Phase	8	8	8	4	4			2	2			6
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0			7.0	7.0			7.0
Minimum Split (s)	14.0	14.0	14.0	15.0	15.0			15.0	15.0			15.0
Total Split (s)	37.0	37.0	37.0	36.0	36.0			70.0	70.0			70.0
Total Split (%)	25.9%	25.9%	25.9%	25.2%	25.2%			49.0%	49.0%			49.0%
Maximum Green (s)	30.0	30.0	30.0	28.0	28.0			62.0	62.0			62.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0			6.0	6.0			6.0
All-Red Time (s)	3.0	3.0	3.0	4.0	4.0			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	8.0	8.0			8.0	8.0			8.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0	2.0			2.0
Recall Mode	Min	Min	Min	Min	Min			Min	Min			Min

Intersection Summary

Area Type: Other  
 Cycle Length: 143  
 Actuated Cycle Length: 142.3  
 Natural Cycle: 140  
 Control Type: Actuated-Uncoordinated






















Splits and Phases: 2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road



# HCM 6th Signalized Intersection Summary

2023 Existing Conditions

## 2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	407	138	385	294	133	0	1456	206	0	1407	0
Future Volume (veh/h)	140	407	138	385	294	133	0	1456	206	0	1407	0
Initial Q (Qb), 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	1870	1841	1900	1870	1796	1870	0	1870	1826	0	1870	0
Adj Flow Rate, veh/h	147	428	145	285	477	140	0	1533	217	0	1481	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	4	0	2	7	2	0	2	5	0	2	0
Cap, veh/h	375	388	339	343	515	150	0	1546	673	0	1546	0
Arrive On Green	0.21	0.21	0.21	0.19	0.19	0.19	0.00	0.44	0.44	0.00	0.44	0.00
Sat Flow, veh/h	1781	1841	1610	1781	2673	779	0	3647	1547	0	3741	0
Grp Volume(v), veh/h	147	428	145	285	319	298	0	1533	217	0	1481	0
Grp Sat Flow(s),veh/h/ln	1781	1841	1610	1781	1796	1656	0	1777	1547	0	1777	0
Q Serve(g_s), s	10.1	30.0	11.1	21.9	24.9	25.2	0.0	61.1	13.1	0.0	57.5	0.0
Cycle Q Clear(g_c), s	10.1	30.0	11.1	21.9	24.9	25.2	0.0	61.1	13.1	0.0	57.5	0.0
Prop In Lane	1.00		1.00	1.00		0.47	0.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	375	388	339	343	346	319	0	1546	673	0	1546	0
V/C Ratio(X)	0.39	1.10	0.43	0.83	0.92	0.93	0.00	0.99	0.32	0.00	0.96	0.00
Avail Cap(c_a), veh/h	375	388	339	350	353	325	0	1546	673	0	1546	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(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	48.4	56.2	48.8	55.3	56.5	56.6	0.0	40.0	26.4	0.0	39.0	0.0
Incr Delay (d2), s/veh	0.2	76.9	0.3	14.2	28.2	31.9	0.0	20.7	0.1	0.0	14.0	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	8.0	31.3	7.9	16.6	20.0	19.3	0.0	38.0	8.2	0.0	34.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.6	133.2	49.1	69.4	84.6	88.4	0.0	60.7	26.5	0.0	53.0	0.0
LnGrp LOS	D	F	D	E	F	F	A	E	C	A	D	A
Approach Vol, veh/h		720			902			1750			1481	
Approach Delay, s/veh		99.0			81.1			56.5			53.0	
Approach LOS		F			F			E			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		70.0		35.5		70.0		37.0				
Change Period (Y+Rc), s		8.0		8.0		8.0		7.0				
Max Green Setting (Gmax), s		62.0		28.0		62.0		30.0				
Max Q Clear Time (g_c+I1), s		63.1		27.2		59.5		32.0				
Green Ext Time (p_c), s		0.0		0.3		2.1		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				66.3								
HCM 6th LOS				E								
<b>Notes</b>												
User approved volume balancing among the lanes for turning movement.												

Lanes, Volumes, Timings

2023 Existing Conditions

3: Shell Driveway/U.S. 1 Jughandle & Franklin Corner Road (C.R. 546)

Saturday Midday



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑			↑			↑	↑
Traffic Volume (vph)	0	498	7	0	294	0	0	0	5	182	1	105
Future Volume (vph)	0	498	7	0	294	0	0	0	5	182	1	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	12	12	16	16	16	16	16	12
Grade (%)		0%			0%			-3%			1%	
Storage Length (ft)	200		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998						0.865				0.850
Flt Protected											0.953	
Satd. Flow (prot)	0	4860	0	0	3471	0	0	1891	0	0	1964	1560
Flt Permitted											0.953	
Satd. Flow (perm)	0	4860	0	0	3471	0	0	1891	0	0	1964	1560
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		410			194			112			393	
Travel Time (s)		7.0			3.3			3.1			10.7	
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%	3%	0%	0%	4%	0%	0%	0%	0%	4%	0%	3%
Adj. Flow (vph)	0	513	7	0	303	0	0	0	5	188	1	108
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	520	0	0	303	0	0	5	0	0	189	108
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	2 veh	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.04	1.04	1.00	1.04	1.00	1.00	0.83	0.83	0.83	*1.00	0.85	1.01
Turning Speed (mph)	15		9	15		9	15		9	20		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

\* User Entered Value

**Intersection**

Int Delay, s/veh 3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑			↔			↑	↑
Traffic Vol, veh/h	0	498	7	0	294	0	0	0	5	182	1	105
Future Vol, veh/h	0	498	7	0	294	0	0	0	5	182	1	105
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	-3	-	-	1	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	3	0	0	4	0	0	0	0	4	0	3
Mvmt Flow	0	513	7	0	303	0	0	0	5	188	1	108



















Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	520	0	0	669	820	260	508	823	152
Stage 1	-	-	-	-	-	-	517	517	-	303	303	-
Stage 2	-	-	-	-	-	-	152	303	-	205	520	-
Critical Hdwy	-	-	-	5.3	-	-	6.35	5.9	6.8	7.23	6.7	7.06
Critical Hdwy Stg 1	-	-	-	-	-	-	6.7	4.9	-	6.78	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.9	4.9	-	6.98	5.7	-
Follow-up Hdwy	-	-	-	3.1	-	-	3.65	4	3.9	3.69	4	3.33
Pot Cap-1 Maneuver	0	-	-	670	-	0	417	358	648	451	297	860
Stage 1	0	-	-	-	-	0	484	585	-	641	656	-
Stage 2	0	-	-	-	-	0	830	702	-	727	520	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	670	-	-	364	358	648	447	297	860
Mov Cap-2 Maneuver	-	-	-	-	-	-	414	452	-	512	397	-
Stage 1	-	-	-	-	-	-	484	585	-	641	656	-
Stage 2	-	-	-	-	-	-	724	702	-	721	520	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			10.6			13.8		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	648	-	-	670	-	511	860
HCM Lane V/C Ratio	0.008	-	-	-	-	0.369	0.126
HCM Control Delay (s)	10.6	-	-	0	-	16.1	9.8
HCM Lane LOS	B	-	-	A	-	C	A
HCM 95th %tile Q(veh)	0	-	-	0	-	1.7	0.4

Lanes, Volumes, Timings  
4: Greenberg Road & Wawa Driveway/Bakersville Road

2023 Existing Conditions  
Saturday Midday

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	7	0	0	30	86	35	78	5	108	0	43
Future Volume (vph)	60	7	0	0	30	86	35	78	5	108	0	43
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	13	14	14	13	12	12
Grade (%)		0%			1%			0%			0%	
Storage Length (ft)	0		0	0		0	160		0	0		130
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			85			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.900			0.990				0.850
Flt Protected		0.957					0.950			0.950		
Satd. Flow (prot)	0	1786	0	0	1701	0	1811	1952	0	1847	0	1615
Flt Permitted		0.957					0.950			0.950		
Satd. Flow (perm)	0	1786	0	0	1701	0	1811	1952	0	1847	0	1615
Link Speed (mph)		25			25			25				25
Link Distance (ft)		123			284			359				304
Travel Time (s)		3.4			7.7			9.8				8.3
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 (%)	2%	0%	0%	0%	0%	0%	3%	3%	0%	1%	0%	0%
Adj. Flow (vph)	67	8	0	0	33	96	39	87	6	120	0	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	75	0	0	129	0	39	93	0	120	0	48
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			13				13
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	0.96	0.92	0.92	0.96	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Lanes, Volumes, Timings  
5: Greenberg Road & Bakersville Road

2023 Existing Conditions  
Saturday MIDDAY



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	228	17	25	199	134	199
Future Volume (vph)	228	17	25	199	134	199
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	14	14	14	14
Grade (%)	0%			-1%	0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.991				0.919	
Flt Protected	0.956			0.994		
Satd. Flow (prot)	1962	0	0	1989	1844	0
Flt Permitted	0.956			0.994		
Satd. Flow (perm)	1962	0	0	1989	1844	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	149			304	324	
Travel Time (s)	4.1			8.3	8.8	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	0%	0%	2%	1%	1%
Adj. Flow (vph)	238	18	26	207	140	207
Shared Lane Traffic (%)						
Lane Group Flow (vph)	256	0	0	233	347	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	15			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.91	0.91	0.92	0.92
Turning Speed (mph)	15	9	15			9
Sign Control	Yield			Yield	Yield	
<b>Intersection Summary</b>						
Area Type:	Other					
Control Type:	Roundabout					

Intersection			
Intersection Delay, s/veh	5.1		
Intersection LOS	A		
Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	256	233	347
Demand Flow Rate, veh/h	258	237	350
Vehicles Circulating, veh/h	141	240	26
Vehicles Exiting, veh/h	235	159	451
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.9	5.4	5.0
Approach LOS	A	A	A
Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	258	237	350
Cap Entry Lane, veh/h	1195	1080	1344
Entry HV Adj Factor	0.992	0.983	0.990
Flow Entry, veh/h	256	233	347
Cap Entry, veh/h	1186	1061	1331
V/C Ratio	0.216	0.219	0.260
Control Delay, s/veh	4.9	5.4	5.0
LOS	A	A	A
95th %tile Queue, veh	1	1	1

Lanes, Volumes, Timings  
6: Greenberg Road & Internal Loop Road

2023 Existing Conditions  
Saturday MIDDAY



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	12	2	4	423	331	29
Future Volume (vph)	12	2	4	423	331	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	14	14	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.981				0.989	
Flt Protected	0.959					
Satd. Flow (prot)	1768	0	0	2007	1975	0
Flt Permitted	0.959					
Satd. Flow (perm)	1768	0	0	2007	1975	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	401			324	282	
Travel Time (s)	10.9			8.8	7.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	17%	0%	0%	1%	1%	7%
Adj. Flow (vph)	12	2	4	436	341	30
Shared Lane Traffic (%)						
Lane Group Flow (vph)	14	0	0	440	371	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	16			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.85	0.85	0.92	0.92	0.92	0.92
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other  
Control Type: Unsignalized



Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			Y	Y	
Traffic Vol, veh/h	12	2	4	423	331	29
Future Vol, veh/h	12	2	4	423	331	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	17	0	0	1	1	7
Mvmt Flow	12	2	4	436	341	30

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	800	356	371	0	-	0
Stage 1	356	-	-	-	-	-
Stage 2	444	-	-	-	-	-
Critical Hdwy	6.57	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.57	-	-	-	-	-
Critical Hdwy Stg 2	5.57	-	-	-	-	-
Follow-up Hdwy	3.653	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	334	693	1199	-	-	-
Stage 1	677	-	-	-	-	-
Stage 2	616	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	333	693	1199	-	-	-
Mov Cap-2 Maneuver	333	-	-	-	-	-
Stage 1	674	-	-	-	-	-
Stage 2	616	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.4	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1199	-	360	-	-
HCM Lane V/C Ratio	0.003	-	0.04	-	-
HCM Control Delay (s)	8	0	15.4	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Lanes, Volumes, Timings  
7: Greenberg Road & Bakers Basin Road

2023 Existing Conditions  
Saturday Midday

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↖	↗
Traffic Volume (vph)	356	257	103	487	325	110
Future Volume (vph)	356	257	103	487	325	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	11	16	10	11
Storage Length (ft)		220	110		0	115
Storage Lanes		1	1		1	1
Taper Length (ft)			55		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1749	1615	1662	2091	1668	1561
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1749	1615	1662	2091	1668	1561
Link Speed (mph)	35			35	25	
Link Distance (ft)	452			328	282	
Travel Time (s)	8.8			6.4	7.7	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	5%	0%	5%	3%	1%	0%
Adj. Flow (vph)	371	268	107	507	339	115
Shared Lane Traffic (%)						
Lane Group Flow (vph)	371	268	107	507	339	115
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			11	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.00	1.04	0.85	*1.04	1.04
Turning Speed (mph)		9	20		20	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

\* User Entered Value

Intersection						
Int Delay, s/veh	66.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↘	↗
Traffic Vol, veh/h	356	257	103	487	325	110
Future Vol, veh/h	356	257	103	487	325	110
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	220	110	-	0	115
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	5	0	5	3	1	0
Mvmt Flow	371	268	107	507	339	115

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	639	0	1092
Stage 1	-	-	-	-	371
Stage 2	-	-	-	-	721
Critical Hdwy	-	-	4.15	-	6.41
Critical Hdwy Stg 1	-	-	-	-	5.41
Critical Hdwy Stg 2	-	-	-	-	5.41
Follow-up Hdwy	-	-	2.245	-	3.509
Pot Cap-1 Maneuver	-	-	931	-	~ 239
Stage 1	-	-	-	-	700
Stage 2	-	-	-	-	483
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	931	-	~ 212
Mov Cap-2 Maneuver	-	-	-	-	~ 212
Stage 1	-	-	-	-	700
Stage 2	-	-	-	-	427

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	249.6
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	212	679	-	-	931	-
HCM Lane V/C Ratio	1.597	0.169	-	-	0.115	-
HCM Control Delay (s)	\$ 330.2	11.4	-	-	9.4	-
HCM Lane LOS	F	B	-	-	A	-
HCM 95th %tile Q(veh)	21.7	0.6	-	-	0.4	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Lanes, Volumes, Timings

2023 Existing Conditions

8: Wawa Driveway/Internal Loop Road & Bakersville Road

Saturday MIDDAY



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	4	141	19	96	128	0	36	5	104	0	8	44
Future Volume (vph)	4	141	19	96	128	0	36	5	104	0	8	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	15	15	15	15	15	12	12	12
Grade (%)		-1%			0%			-1%			0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.984						0.903			0.885	
Flt Protected		0.999			0.979			0.988				
Satd. Flow (prot)	0	2047	0	0	2017	0	0	1860	0	0	1653	0
Flt Permitted		0.999			0.979			0.988				
Satd. Flow (perm)	0	2047	0	0	2017	0	0	1860	0	0	1653	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		55			149			115			401	
Travel Time (s)		1.5			4.1			3.1			10.9	
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%	1%	0%	2%	1%	0%	3%	0%	0%	0%	0%	2%
Adj. Flow (vph)	4	145	20	99	132	0	37	5	107	0	8	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	169	0	0	231	0	0	149	0	0	53	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

HCM 6th TWSC  
 8: Wawa Driveway/Internal Loop Road & Bakersville Road

2023 Existing Conditions  
 Saturday Midday

Intersection												
Int Delay, s/veh	5.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	141	19	96	128	0	36	5	104	0	8	44
Future Vol, veh/h	4	141	19	96	128	0	36	5	104	0	8	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-1	-	-	0	-	-	-1	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	1	0	2	1	0	3	0	0	0	0	2
Mvmt Flow	4	145	20	99	132	0	37	5	107	0	8	45

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	132	0	0	165	0	0	520	493	155	549	503	132
Stage 1	-	-	-	-	-	-	163	163	-	330	330	-
Stage 2	-	-	-	-	-	-	357	330	-	219	173	-
Critical Hdwy	4.1	-	-	4.12	-	-	6.93	6.3	6.1	7.1	6.5	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.93	5.3	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.93	5.3	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.218	-	-	3.527	4	3.3	3.5	4	3.318
Pot Cap-1 Maneuver	1466	-	-	1413	-	-	479	493	900	450	474	917
Stage 1	-	-	-	-	-	-	844	774	-	687	649	-
Stage 2	-	-	-	-	-	-	672	661	-	788	760	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1466	-	-	1413	-	-	422	454	900	369	437	917
Mov Cap-2 Maneuver	-	-	-	-	-	-	422	454	-	369	437	-
Stage 1	-	-	-	-	-	-	841	772	-	685	600	-
Stage 2	-	-	-	-	-	-	582	611	-	687	758	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			3.3			11.7			9.9		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	684	1466	-	-	1413	-	-	784
HCM Lane V/C Ratio	0.219	0.003	-	-	0.07	-	-	0.068
HCM Control Delay (s)	11.7	7.5	0	-	7.7	0	-	9.9
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.8	0	-	-	0.2	-	-	0.2

Lanes, Volumes, Timings  
 9: Bakersville Road & CFA East Access

2023 Existing Conditions  
 Saturday MIDDAY



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	35	148	64	144	16	15
Future Volume (vph)	35	148	64	144	16	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	12	12
Grade (%)		-1%	0%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.906		0.935	
Flt Protected		0.991			0.975	
Satd. Flow (prot)	0	2065	1882	0	1732	0
Flt Permitted		0.991			0.975	
Satd. Flow (perm)	0	2065	1882	0	1732	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		71	55		121	
Travel Time (s)		1.9	1.5		3.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	1%	2%	0%	0%	0%
Adj. Flow (vph)	37	156	67	152	17	16
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	193	219	0	33	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.88	0.88	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
<b>Intersection Summary</b>						
Area Type:	Other					
Control Type:	Unsignalized					

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	35	148	64	144	16	15
Future Vol, veh/h	35	148	64	144	16	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-1	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	1	2	0	0	0
Mvmt Flow	37	156	67	152	17	16

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	219	0	-	0	373 143
Stage 1	-	-	-	-	143 -
Stage 2	-	-	-	-	230 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	1362	-	-	-	632 910
Stage 1	-	-	-	-	889 -
Stage 2	-	-	-	-	813 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1362	-	-	-	613 910
Mov Cap-2 Maneuver	-	-	-	-	613 -
Stage 1	-	-	-	-	862 -
Stage 2	-	-	-	-	813 -

Approach	EB	WB	SB
HCM Control Delay, s	1.5	0	10.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1362	-	-	-	728
HCM Lane V/C Ratio	0.027	-	-	-	0.045
HCM Control Delay (s)	7.7	0	-	-	10.2
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Lanes, Volumes, Timings  
 10: Bakersville Road & CFA West Access

2023 Existing Conditions  
 Saturday MIDDAY



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	19	82	51	28	101	57
Future Volume (vph)	19	82	51	28	101	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	16	16
Grade (%)		0%	1%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.952		0.951	
Flt Protected		0.991			0.969	
Satd. Flow (prot)	0	2054	1954	0	1972	0
Flt Permitted		0.991			0.969	
Satd. Flow (perm)	0	2054	1954	0	1972	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		219	71		111	
Travel Time (s)		6.0	1.9		3.0	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles (%)	0%	1%	2%	0%	1%	0%
Adj. Flow (vph)	25	109	68	37	135	76
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	134	105	0	211	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		16	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.89	0.89	0.85	0.85
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other  
 Control Type: Unsignalized



Intersection						
Int Delay, s/veh	5.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	19	82	51	28	101	57
Future Vol, veh/h	19	82	51	28	101	57
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	1	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	0	1	2	0	1	0
Mvmt Flow	25	109	68	37	135	76

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	105	0	-	0	246
Stage 1	-	-	-	-	87
Stage 2	-	-	-	-	159
Critical Hdwy	4.1	-	-	-	6.41
Critical Hdwy Stg 1	-	-	-	-	5.41
Critical Hdwy Stg 2	-	-	-	-	5.41
Follow-up Hdwy	2.2	-	-	-	3.509
Pot Cap-1 Maneuver	1499	-	-	-	745
Stage 1	-	-	-	-	939
Stage 2	-	-	-	-	872
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1499	-	-	-	732
Mov Cap-2 Maneuver	-	-	-	-	732
Stage 1	-	-	-	-	922
Stage 2	-	-	-	-	872

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1499	-	-	-	805
HCM Lane V/C Ratio	0.017	-	-	-	0.262
HCM Control Delay (s)	7.4	0	-	-	11.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	1

**SIMTRAFFIC**



Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	11:55	11:55	11:55	11:55	11:55	11:55
End Time	1:00	1:00	1:00	1:00	1:00	1:00
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	4953	4856	4661	4832	4764	4815
Vehs Exited	4883	4763	4639	4827	4773	4779
Starting Vehs	105	78	118	121	142	108
Ending Vehs	175	171	140	126	133	148
Travel Distance (mi)	1245	1214	1183	1237	1200	1216
Travel Time (hr)	185.6	309.8	284.4	277.4	272.5	265.9
Total Delay (hr)	143.3	268.7	244.5	235.5	232.1	224.8
Total Stops	5222	5179	4790	5350	4677	5042
Fuel Used (gal)	82.8	109.7	102.5	103.2	100.0	99.7

Interval #0 Information Seeding

Start Time	11:55
End Time	12:00
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information

Start Time	12:00
End Time	12:15
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1227	1307	1204	1256	1206	1237
Vehs Exited	1207	1239	1198	1245	1233	1223
Starting Vehs	105	78	118	121	142	108
Ending Vehs	125	146	124	132	115	126
Travel Distance (mi)	315	323	306	324	309	316
Travel Time (hr)	28.3	33.8	28.5	30.6	27.4	29.7
Total Delay (hr)	17.6	23.0	18.4	19.6	17.0	19.1
Total Stops	1255	1326	1199	1273	1253	1261
Fuel Used (gal)	16.6	18.1	16.3	17.5	16.1	16.9

SimTraffic Simulation Summary  
 Weekday Midday

2023 Existing Conditions

Interval #2 Information

Start Time 12:15  
 End Time 12:30  
 Total Time (min) 15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1396	1272	1273	1324	1276	1306
Vehs Exited	1349	1299	1251	1260	1271	1286
Starting Vehs	125	146	124	132	115	126
Ending Vehs	172	119	146	196	120	148
Travel Distance (mi)	329	309	311	322	309	316
Travel Time (hr)	36.7	47.6	46.9	50.3	41.8	44.7
Total Delay (hr)	25.4	37.2	36.4	39.4	31.4	34.0
Total Stops	1464	1335	1282	1440	1241	1351
Fuel Used (gal)	19.3	21.1	20.7	21.8	19.4	20.5

Interval #3 Information

Start Time 12:30  
 End Time 12:45  
 Total Time (min) 15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1135	1100	1083	1142	1045	1101
Vehs Exited	1190	1057	1107	1195	1066	1124
Starting Vehs	172	119	146	196	120	148
Ending Vehs	117	162	122	143	99	122
Travel Distance (mi)	298	275	284	300	269	285
Travel Time (hr)	47.8	97.4	89.7	76.4	85.2	79.3
Total Delay (hr)	37.8	88.1	79.9	66.2	76.2	69.6
Total Stops	1219	1168	1221	1349	989	1190
Fuel Used (gal)	20.6	30.7	29.5	27.3	27.9	27.2

Interval #4 Information Recording

Start Time 12:45  
 End Time 1:00  
 Total Time (min) 15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1195	1177	1101	1110	1237	1160
Vehs Exited	1137	1168	1083	1127	1203	1144
Starting Vehs	117	162	122	143	99	122
Ending Vehs	175	171	140	126	133	148
Travel Distance (mi)	303	307	282	290	312	299
Travel Time (hr)	72.8	130.9	119.4	120.2	118.1	112.3
Total Delay (hr)	62.5	120.4	109.9	110.3	107.6	102.1
Total Stops	1284	1350	1088	1288	1194	1237
Fuel Used (gal)	26.3	39.8	36.1	36.6	36.5	35.1

4: Greenberg Road & Wawa Driveway/Bakersville Road Performance by lane

Lane	EB	WB	NB	NB	SB	SB	All
Movements Served	LT	TR	L	TR	L	R	
Denied Del/Veh (s)							0.6
Total Del/Veh (s)	5.3	5.2	4.2	10.3	0.7	0.3	4.9

7: Greenberg Road & Bakers Basin Road Performance by lane

Lane	EB	EB	WB	WB	NB	NB	All
Movements Served	T	R	L	T	L	R	
Denied Del/Veh (s)							0.8
Total Del/Veh (s)	5.4	2.3	7.7	1.3	53.0	4.2	15.9

Total Zone Performance

Denied Del/Veh (s)				1.7			
Total Del/Veh (s)				1061.1			

Queuing and Blocking Report  
Weekday Midday

2023 Existing Conditions

Intersection: 4: Greenberg Road & Wawa Driveway/Bakersville Road

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LT	TR	L	TR	L	R
Maximum Queue (ft)	87	86	99	100	12	34
Average Queue (ft)	33	36	26	22	1	2
95th Queue (ft)	63	64	64	75	9	15
Link Distance (ft)	69	244		301	209	
Upstream Blk Time (%)	1					
Queuing Penalty (veh)	0					
Storage Bay Dist (ft)			160			130
Storage Blk Time (%)				1		
Queuing Penalty (veh)				1		

Intersection: 7: Greenberg Road & Bakers Basin Road

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	11	36	95	31	308	150
Average Queue (ft)	0	4	33	1	210	105
95th Queue (ft)	6	22	66	14	342	203
Link Distance (ft)	352			296	200	
Upstream Blk Time (%)					34	
Queuing Penalty (veh)					163	
Storage Bay Dist (ft)		220	110			115
Storage Blk Time (%)			0		59	0
Queuing Penalty (veh)			0		62	0

Zone Summary

Zone wide Queuing Penalty: 225

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	4:55	4:55	4:55	4:55	4:55	4:55
End Time	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	5577	5450	5721	5735	5728	5642
Vehs Exited	5472	5373	5629	5709	5672	5572
Starting Vehs	105	95	126	170	162	129
Ending Vehs	210	172	218	196	218	202
Travel Distance (mi)	1451	1422	1480	1504	1490	1469
Travel Time (hr)	334.0	242.2	260.7	289.0	315.4	288.3
Total Delay (hr)	287.9	197.1	213.7	241.4	268.2	241.7
Total Stops	6225	5880	5915	6115	6209	6066
Fuel Used (gal)	123.6	102.0	107.9	115.8	120.8	114.0

Interval #0 Information Seeding

Start Time	4:55
End Time	5:00
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1420	1412	1378	1334	1423	1391
Vehs Exited	1352	1356	1371	1328	1422	1367
Starting Vehs	105	95	126	170	162	129
Ending Vehs	173	151	133	176	163	158
Travel Distance (mi)	361	366	368	353	377	365
Travel Time (hr)	36.1	35.3	36.7	43.8	47.0	39.8
Total Delay (hr)	24.8	23.8	25.1	32.7	35.1	28.3
Total Stops	1364	1353	1323	1375	1563	1397
Fuel Used (gal)	19.7	19.6	20.1	21.3	23.1	20.8



SimTraffic Simulation Summary  
 Weekday Afternoon

2023 Existing Conditions

Interval #2 Information

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

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1568	1489	1528	1561	1522	1530
Vehs Exited	1487	1438	1474	1548	1480	1486
Starting Vehs	173	151	133	176	163	158
Ending Vehs	254	202	187	189	205	205
Travel Distance (mi)	391	372	379	401	382	385
Travel Time (hr)	71.3	53.5	49.8	81.4	70.4	65.3
Total Delay (hr)	58.8	41.7	37.8	68.6	58.2	53.0
Total Stops	1749	1624	1517	1672	1605	1636
Fuel Used (gal)	29.3	24.5	23.9	31.9	28.7	27.6

Interval #3 Information

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

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1324	1279	1420	1419	1374	1361
Vehs Exited	1352	1323	1413	1409	1387	1376
Starting Vehs	254	202	187	189	205	205
Ending Vehs	226	158	194	199	192	193
Travel Distance (mi)	357	350	371	371	363	363
Travel Time (hr)	94.6	59.2	79.9	78.2	92.5	80.9
Total Delay (hr)	83.2	48.0	68.0	66.5	81.0	69.4
Total Stops	1565	1439	1565	1497	1514	1516
Fuel Used (gal)	33.3	25.2	30.5	30.4	32.9	30.4

Interval #4 Information

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

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1265	1270	1395	1421	1409	1350
Vehs Exited	1281	1256	1371	1424	1383	1341
Starting Vehs	226	158	194	199	192	193
Ending Vehs	210	172	218	196	218	202
Travel Distance (mi)	342	334	362	379	368	357
Travel Time (hr)	132.0	94.3	94.4	85.6	105.5	102.3
Total Delay (hr)	121.0	83.6	82.9	73.6	93.8	91.0
Total Stops	1547	1464	1510	1571	1527	1523
Fuel Used (gal)	41.3	32.7	33.5	32.2	36.2	35.2

4: Greenberg Road & Wawa Driveway/Bakersville Road Performance by lane

Lane	EB	WB	NB	NB	SB	SB	All
Movements Served	LT	TR	L	TR	L	R	
Denied Del/Veh (s)							0.5
Total Del/Veh (s)	6.1	7.3	3.9	8.2	1.3	0.1	5.9

7: Greenberg Road & Bakers Basin Road Performance by lane

Lane	EB	EB	WB	WB	NB	NB	All
Movements Served	T	R	L	T	L	R	
Denied Del/Veh (s)							1.2
Total Del/Veh (s)	3.0	1.2	7.0	1.7	83.1	6.6	16.6

Total Zone Performance

Denied Del/Veh (s)							2.4
Total Del/Veh (s)							788.7

Queuing and Blocking Report  
 Weekday Afternoon

2023 Existing Conditions

Intersection: 4: Greenberg Road & Wawa Driveway/Bakersville Road

Movement	EB	WB	NB	NB	SB
Directions Served	LT	TR	L	TR	R
Maximum Queue (ft)	62	86	47	45	4
Average Queue (ft)	26	34	17	14	0
95th Queue (ft)	50	65	39	36	3
Link Distance (ft)	69	244		301	
Upstream Blk Time (%)	0				
Queuing Penalty (veh)	0				
Storage Bay Dist (ft)			160		130
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 7: Greenberg Road & Bakers Basin Road

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	27	57	70	115	283	150
Average Queue (ft)	0	3	25	9	203	93
95th Queue (ft)	6	19	59	51	341	201
Link Distance (ft)	352			296	200	
Upstream Blk Time (%)					42	
Queuing Penalty (veh)					155	
Storage Bay Dist (ft)		220	110			115
Storage Blk Time (%)			0	0	62	
Queuing Penalty (veh)			0	0	54	

Zone Summary

Zone wide Queuing Penalty: 210

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	11:55	11:55	11:55	11:55	11:55	11:55
End Time	1:00	1:00	1:00	1:00	1:00	1:00
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	4698	4798	5103	5016	4742	4871
Vehs Exited	4677	4799	5038	4946	4689	4828
Starting Vehs	114	117	76	98	81	94
Ending Vehs	135	116	141	168	134	137
Travel Distance (mi)	1234	1258	1318	1301	1232	1269
Travel Time (hr)	383.4	317.3	206.2	226.8	353.3	297.4
Total Delay (hr)	342.8	275.9	163.2	183.9	312.3	255.6
Total Stops	4974	5030	5793	5606	4723	5226
Fuel Used (gal)	127.2	112.8	89.7	94.0	120.1	108.8

Interval #0 Information Seeding

Start Time	11:55
End Time	12:00
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	12:00
End Time	12:15
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1189	1282	1212	1255	1257	1238
Vehs Exited	1157	1245	1168	1234	1223	1204
Starting Vehs	114	117	76	98	81	94
Ending Vehs	146	154	120	119	115	130
Travel Distance (mi)	316	333	306	326	324	321
Travel Time (hr)	38.9	35.8	27.8	28.3	30.0	32.2
Total Delay (hr)	28.4	24.9	17.8	17.5	19.4	21.6
Total Stops	1124	1344	1229	1225	1238	1227
Fuel Used (gal)	18.9	18.9	16.1	16.7	17.3	17.6

SimTraffic Simulation Summary  
 Saturday Midday

2023 Existing Conditions

Interval #2 Information

Start Time	12:15
End Time	12:30
Total Time (min)	15
Volumes adjusted by PHF, Growth Factors.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1189	1193	1327	1282	1169	1232
Vehs Exited	1157	1202	1232	1207	1136	1184
Starting Vehs	146	154	120	119	115	130
Ending Vehs	178	145	215	194	148	174
Travel Distance (mi)	306	310	328	320	297	312
Travel Time (hr)	79.5	64.8	53.1	48.4	64.0	62.0
Total Delay (hr)	69.4	54.4	42.3	37.9	53.9	51.6
Total Stops	1208	1291	1545	1385	1227	1331
Fuel Used (gal)	27.8	24.8	22.8	21.3	24.3	24.2

Interval #3 Information

Start Time	12:30
End Time	12:45
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1205	1181	1267	1285	1159	1217
Vehs Exited	1253	1190	1302	1319	1184	1251
Starting Vehs	178	145	215	194	148	174
Ending Vehs	130	136	180	160	123	140
Travel Distance (mi)	322	309	340	341	304	323
Travel Time (hr)	122.5	105.0	63.0	62.2	113.1	93.2
Total Delay (hr)	112.0	94.9	52.0	51.1	103.0	82.6
Total Stops	1501	1287	1566	1475	1165	1396
Fuel Used (gal)	38.5	33.8	25.7	25.6	35.4	31.8

Interval #4 Information

Start Time	12:45
End Time	1:00
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1115	1142	1297	1194	1157	1179
Vehs Exited	1110	1162	1336	1186	1146	1185
Starting Vehs	130	136	180	160	123	140
Ending Vehs	135	116	141	168	134	137
Travel Distance (mi)	291	306	343	314	307	312
Travel Time (hr)	142.6	111.7	62.3	87.9	146.2	110.1
Total Delay (hr)	133.0	101.6	51.0	77.4	136.0	99.8
Total Stops	1141	1108	1453	1521	1093	1258
Fuel Used (gal)	41.9	35.2	25.2	30.3	43.2	35.2

4: Greenberg Road & Wawa Driveway/Bakersville Road Performance by lane

Lane	EB	WB	NB	NB	SB	SB	All
Movements Served	LT	TR	L	TR	L	R	
Denied Del/Veh (s)							0.4
Total Del/Veh (s)	4.3	4.6	4.0	6.1	0.4	0.2	3.5

7: Greenberg Road & Bakers Basin Road Performance by lane

Lane	EB	EB	WB	WB	NB	NB	All
Movements Served	T	R	L	T	L	R	
Denied Del/Veh (s)							0.4
Total Del/Veh (s)	4.0	1.8	6.9	1.5	59.0	4.9	14.4

Total Zone Performance

Denied Del/Veh (s)							0.9
Total Del/Veh (s)							1009.2

Queuing and Blocking Report  
 Saturday Midday

2023 Existing Conditions

Intersection: 4: Greenberg Road & Wawa Driveway/Bakersville Road

Movement	EB	WB	NB	NB	SB
Directions Served	LT	TR	L	TR	R
Maximum Queue (ft)	53	67	35	58	18
Average Queue (ft)	24	35	15	14	1
95th Queue (ft)	43	56	35	40	9
Link Distance (ft)	69	244		301	
Upstream Blk Time (%)	0				
Queuing Penalty (veh)	0				
Storage Bay Dist (ft)			160		130
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 7: Greenberg Road & Bakers Basin Road

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	4	52	73	68	298	150
Average Queue (ft)	0	6	32	4	187	98
95th Queue (ft)	3	28	65	41	325	198
Link Distance (ft)	352			296	200	
Upstream Blk Time (%)					29	
Queuing Penalty (veh)					127	
Storage Bay Dist (ft)		220	110			115
Storage Blk Time (%)				0	51	
Queuing Penalty (veh)				0	56	

Zone Summary

Zone wide Queuing Penalty: 183

# **CALIBRATION OF SIMTRAFFIC**





Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	11:55	11:55	11:55	11:55	11:55	11:55
End Time	1:00	1:00	1:00	1:00	1:00	1:00
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	4953	4856	4661	4832	4764	4815
Vehs Exited	4883	4763	4639	4827	4773	4779
Starting Vehs	105	78	118	121	142	108
Ending Vehs	175	171	140	126	133	148
Travel Distance (mi)	1245	1214	1183	1237	1200	1216
Travel Time (hr)	185.6	309.8	284.4	277.4	272.5	265.9
Total Delay (hr)	143.3	268.7	244.5	235.5	232.1	224.8
Total Stops	5222	5179	4790	5350	4677	5042
Fuel Used (gal)	82.8	109.7	102.5	103.2	100.0	99.7

Interval #0 Information Seeding

Start Time	11:55
End Time	12:00
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information

Start Time	12:00
End Time	12:15
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1227	1307	1204	1256	1206	1237
Vehs Exited	1207	1239	1198	1245	1233	1223
Starting Vehs	105	78	118	121	142	108
Ending Vehs	125	146	124	132	115	126
Travel Distance (mi)	315	323	306	324	309	316
Travel Time (hr)	28.3	33.8	28.5	30.6	27.4	29.7
Total Delay (hr)	17.6	23.0	18.4	19.6	17.0	19.1
Total Stops	1255	1326	1199	1273	1253	1261
Fuel Used (gal)	16.6	18.1	16.3	17.5	16.1	16.9

SimTraffic Simulation Summary  
 Weekday Midday

2023 Existing Conditions

Interval #2 Information

Start Time	12:15
End Time	12:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1396	1272	1273	1324	1276	1306
Vehs Exited	1349	1299	1251	1260	1271	1286
Starting Vehs	125	146	124	132	115	126
Ending Vehs	172	119	146	196	120	148
Travel Distance (mi)	329	309	311	322	309	316
Travel Time (hr)	36.7	47.6	46.9	50.3	41.8	44.7
Total Delay (hr)	25.4	37.2	36.4	39.4	31.4	34.0
Total Stops	1464	1335	1282	1440	1241	1351
Fuel Used (gal)	19.3	21.1	20.7	21.8	19.4	20.5

Interval #3 Information

Start Time	12:30
End Time	12:45
Total Time (min)	15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1135	1100	1083	1142	1045	1101
Vehs Exited	1190	1057	1107	1195	1066	1124
Starting Vehs	172	119	146	196	120	148
Ending Vehs	117	162	122	143	99	122
Travel Distance (mi)	298	275	284	300	269	285
Travel Time (hr)	47.8	97.4	89.7	76.4	85.2	79.3
Total Delay (hr)	37.8	88.1	79.9	66.2	76.2	69.6
Total Stops	1219	1168	1221	1349	989	1190
Fuel Used (gal)	20.6	30.7	29.5	27.3	27.9	27.2

Interval #4 Information Recording

Start Time	12:45
End Time	1:00
Total Time (min)	15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1195	1177	1101	1110	1237	1160
Vehs Exited	1137	1168	1083	1127	1203	1144
Starting Vehs	117	162	122	143	99	122
Ending Vehs	175	171	140	126	133	148
Travel Distance (mi)	303	307	282	290	312	299
Travel Time (hr)	72.8	130.9	119.4	120.2	118.1	112.3
Total Delay (hr)	62.5	120.4	109.9	110.3	107.6	102.1
Total Stops	1284	1350	1088	1288	1194	1237
Fuel Used (gal)	26.3	39.8	36.1	36.6	36.5	35.1

SimTraffic Performance Report  
Weekday Midday

2023 Existing Conditions

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road Performance by lan

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	T	R	L	LT	TR	T	T	R	T	T	
Denied Del/Veh (s)												1.5
Total Del/Veh (s)	49.6	46.1	6.5	43.0	62.4	56.1	40.2	35.8	17.3	25.5	21.4	36.4

Queuing and Blocking Report  
 Weekday Midday

2023 Existing Conditions

Intersection: 2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	LT	TR	T	T	R	T	T
Maximum Queue (ft)	113	163	95	331	363	320	399	386	364	271	258
Average Queue (ft)	79	131	48	179	233	212	346	322	133	194	158
95th Queue (ft)	121	151	85	281	324	305	413	400	374	322	296
Link Distance (ft)	84	84	84		352	352	307	307	307	128	128
Upstream Blk Time (%)	29	76	1	0	0	0	23	15	3	28	18
Queuing Penalty (veh)	74	191	3	0	1	1	114	77	15	161	106
Storage Bay Dist (ft)				280							
Storage Blk Time (%)				0	3						
Queuing Penalty (veh)				0	7						

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	4:55	4:55	4:55	4:55	4:55	4:55
End Time	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	5577	5450	5721	5735	5728	5642
Vehs Exited	5472	5373	5629	5709	5672	5572
Starting Vehs	105	95	126	170	162	129
Ending Vehs	210	172	218	196	218	202
Travel Distance (mi)	1451	1422	1480	1504	1490	1469
Travel Time (hr)	334.0	242.2	260.7	289.0	315.4	288.3
Total Delay (hr)	287.9	197.1	213.7	241.4	268.2	241.7
Total Stops	6225	5880	5915	6115	6209	6066
Fuel Used (gal)	123.6	102.0	107.9	115.8	120.8	114.0

Interval #0 Information Seeding

Start Time	4:55
End Time	5:00
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1420	1412	1378	1334	1423	1391
Vehs Exited	1352	1356	1371	1328	1422	1367
Starting Vehs	105	95	126	170	162	129
Ending Vehs	173	151	133	176	163	158
Travel Distance (mi)	361	366	368	353	377	365
Travel Time (hr)	36.1	35.3	36.7	43.8	47.0	39.8
Total Delay (hr)	24.8	23.8	25.1	32.7	35.1	28.3
Total Stops	1364	1353	1323	1375	1563	1397
Fuel Used (gal)	19.7	19.6	20.1	21.3	23.1	20.8

SimTraffic Simulation Summary  
 Weekday Afternoon

2023 Existing Conditions

Interval #2 Information

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

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1568	1489	1528	1561	1522	1530
Vehs Exited	1487	1438	1474	1548	1480	1486
Starting Vehs	173	151	133	176	163	158
Ending Vehs	254	202	187	189	205	205
Travel Distance (mi)	391	372	379	401	382	385
Travel Time (hr)	71.3	53.5	49.8	81.4	70.4	65.3
Total Delay (hr)	58.8	41.7	37.8	68.6	58.2	53.0
Total Stops	1749	1624	1517	1672	1605	1636
Fuel Used (gal)	29.3	24.5	23.9	31.9	28.7	27.6

Interval #3 Information

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

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1324	1279	1420	1419	1374	1361
Vehs Exited	1352	1323	1413	1409	1387	1376
Starting Vehs	254	202	187	189	205	205
Ending Vehs	226	158	194	199	192	193
Travel Distance (mi)	357	350	371	371	363	363
Travel Time (hr)	94.6	59.2	79.9	78.2	92.5	80.9
Total Delay (hr)	83.2	48.0	68.0	66.5	81.0	69.4
Total Stops	1565	1439	1565	1497	1514	1516
Fuel Used (gal)	33.3	25.2	30.5	30.4	32.9	30.4

Interval #4 Information

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

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1265	1270	1395	1421	1409	1350
Vehs Exited	1281	1256	1371	1424	1383	1341
Starting Vehs	226	158	194	199	192	193
Ending Vehs	210	172	218	196	218	202
Travel Distance (mi)	342	334	362	379	368	357
Travel Time (hr)	132.0	94.3	94.4	85.6	105.5	102.3
Total Delay (hr)	121.0	83.6	82.9	73.6	93.8	91.0
Total Stops	1547	1464	1510	1571	1527	1523
Fuel Used (gal)	41.3	32.7	33.5	32.2	36.2	35.2

SimTraffic Performance Report  
 Weekday Afternoon

2023 Existing Conditions

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road Performance by lan

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	T	R	L	LT	TR	T	T	R	T	T	
Denied Del/Veh (s)												0.8
Total Del/Veh (s)	57.2	51.8	9.1	55.0	79.0	65.6	50.4	50.9	30.5	28.1	25.4	43.6



Queuing and Blocking Report  
 Weekday Afternoon

2023 Existing Conditions

Intersection: 2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	LT	TR	T	T	R	T	T
Maximum Queue (ft)	119	139	107	344	389	364	391	384	371	270	262
Average Queue (ft)	85	125	59	238	281	256	360	360	321	228	220
95th Queue (ft)	123	140	99	339	370	354	372	372	462	341	344
Link Distance (ft)	84	84	84		352	352	307	307	307	128	128
Upstream Blk Time (%)	37	76	3	0	1	1	52	59	24	39	33
Queuing Penalty (veh)	89	184	7	0	6	2	371	422	172	304	259
Storage Bay Dist (ft)				280							
Storage Blk Time (%)				1	10						
Queuing Penalty (veh)				4	23						

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	11:55	11:55	11:55	11:55	11:55	11:55
End Time	1:00	1:00	1:00	1:00	1:00	1:00
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	4698	4798	5103	5016	4742	4871
Vehs Exited	4677	4799	5038	4946	4689	4828
Starting Vehs	114	117	76	98	81	94
Ending Vehs	135	116	141	168	134	137
Travel Distance (mi)	1234	1258	1318	1301	1232	1269
Travel Time (hr)	383.4	317.3	206.2	226.8	353.3	297.4
Total Delay (hr)	342.8	275.9	163.2	183.9	312.3	255.6
Total Stops	4974	5030	5793	5606	4723	5226
Fuel Used (gal)	127.2	112.8	89.7	94.0	120.1	108.8

Interval #0 Information Seeding

Start Time	11:55
End Time	12:00
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	12:00
End Time	12:15
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1189	1282	1212	1255	1257	1238
Vehs Exited	1157	1245	1168	1234	1223	1204
Starting Vehs	114	117	76	98	81	94
Ending Vehs	146	154	120	119	115	130
Travel Distance (mi)	316	333	306	326	324	321
Travel Time (hr)	38.9	35.8	27.8	28.3	30.0	32.2
Total Delay (hr)	28.4	24.9	17.8	17.5	19.4	21.6
Total Stops	1124	1344	1229	1225	1238	1227
Fuel Used (gal)	18.9	18.9	16.1	16.7	17.3	17.6

SimTraffic Simulation Summary  
 Saturday Midday

2023 Existing Conditions

Interval #2 Information

Start Time	12:15
End Time	12:30
Total Time (min)	15
Volumes adjusted by PHF, Growth Factors.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1189	1193	1327	1282	1169	1232
Vehs Exited	1157	1202	1232	1207	1136	1184
Starting Vehs	146	154	120	119	115	130
Ending Vehs	178	145	215	194	148	174
Travel Distance (mi)	306	310	328	320	297	312
Travel Time (hr)	79.5	64.8	53.1	48.4	64.0	62.0
Total Delay (hr)	69.4	54.4	42.3	37.9	53.9	51.6
Total Stops	1208	1291	1545	1385	1227	1331
Fuel Used (gal)	27.8	24.8	22.8	21.3	24.3	24.2

Interval #3 Information

Start Time	12:30
End Time	12:45
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1205	1181	1267	1285	1159	1217
Vehs Exited	1253	1190	1302	1319	1184	1251
Starting Vehs	178	145	215	194	148	174
Ending Vehs	130	136	180	160	123	140
Travel Distance (mi)	322	309	340	341	304	323
Travel Time (hr)	122.5	105.0	63.0	62.2	113.1	93.2
Total Delay (hr)	112.0	94.9	52.0	51.1	103.0	82.6
Total Stops	1501	1287	1566	1475	1165	1396
Fuel Used (gal)	38.5	33.8	25.7	25.6	35.4	31.8

Interval #4 Information

Start Time	12:45
End Time	1:00
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1115	1142	1297	1194	1157	1179
Vehs Exited	1110	1162	1336	1186	1146	1185
Starting Vehs	130	136	180	160	123	140
Ending Vehs	135	116	141	168	134	137
Travel Distance (mi)	291	306	343	314	307	312
Travel Time (hr)	142.6	111.7	62.3	87.9	146.2	110.1
Total Delay (hr)	133.0	101.6	51.0	77.4	136.0	99.8
Total Stops	1141	1108	1453	1521	1093	1258
Fuel Used (gal)	41.9	35.2	25.2	30.3	43.2	35.2

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	T	R	L	LT	TR	T	T	R	T	T	
Denied Del/Veh (s)												0.3
Total Del/Veh (s)	44.2	48.8	4.9	41.7	64.7	56.5	47.8	45.5	27.8	24.9	21.9	40.2

Queuing and Blocking Report  
 Saturday Midday

2023 Existing Conditions

Intersection: 2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	LT	TR	T	T	R	T	T
Maximum Queue (ft)	103	156	76	310	369	346	385	393	386	261	274
Average Queue (ft)	75	130	37	185	240	229	351	339	252	166	141
95th Queue (ft)	118	149	63	289	329	311	396	400	495	330	312
Link Distance (ft)	84	84	84		352	352	307	307	307	128	128
Upstream Blk Time (%)	18	74	0	0	1	0	35	36	15	26	19
Queuing Penalty (veh)	42	169	0	0	3	2	196	198	81	180	132
Storage Bay Dist (ft)				280							
Storage Blk Time (%)				0	4						
Queuing Penalty (veh)				0	8						

## Appendix G

# 2025 Future Base Configuration Capacity/Level-of-Service Analysis Worksheets



**SYNCHRO**





Lanes, Volumes, Timings  
 1: Brunswick Avenue (U.S. 1) & Bakersville Road

2025 Future Base Configuration  
 Weekday Middy



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	180	1358	160	0	1770
Future Volume (vph)	0	180	1358	160	0	1770
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	12	12	12	12
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	0.91
Frt		0.865	0.984			
Flt Protected						
Satd. Flow (prot)	0	1791	4596	0	0	4673
Flt Permitted						
Satd. Flow (perm)	0	1791	4596	0	0	4673
Link Speed (mph)	25		55			55
Link Distance (ft)	219		556			396
Travel Time (s)	6.0		6.9			4.9
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	0%	4%	12%	3%	0%	11%
Adj. Flow (vph)	0	182	1372	162	0	1788
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	182	1534	0	0	1788
Enter Blocked Intersection	No	No	Yes	No	Yes	Yes
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		8			8
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.85	0.85	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other  
 Control Type: Unsignalized

Intersection						
Int Delay, s/veh	1.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗ ↑↑↑	↑↑↑			↑↑↑
Traffic Vol, veh/h	0	180	1358	160	0	1770
Future Vol, veh/h	0	180	1358	160	0	1770
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Free	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	0	4	12	3	0	11
Mvmt Flow	0	182	1372	162	0	1788

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	-	686	0	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.18	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.94	-	-	-	-
Pot Cap-1 Maneuver	0	331	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	331	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	28.4	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 331	-
HCM Lane V/C Ratio	- 0.549	-
HCM Control Delay (s)	- 28.4	-
HCM Lane LOS	- D	-
HCM 95th %tile Q(veh)	- 3.1	-

Lanes, Volumes, Timings

2025 Future Base Configuration

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road Weekday Midday



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	428	177	399	278	95	0	1369	169	0	1194	0
Future Volume (vph)	160	428	177	399	278	95	0	1369	169	0	1194	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	12	12	12	12	12	12	12
Storage Length (ft)	0		0	280		0	0		0	0		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	25			65			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.973				0.850			
Flt Protected	0.950			0.950	0.985							
Satd. Flow (prot)	1694	1733	1553	1512	3030	0	0	3282	1553	0	3223	0
Flt Permitted	0.950			0.950	0.985							
Satd. Flow (perm)	1694	1733	1553	1512	3030	0	0	3282	1553	0	3223	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			99		15				115			
Link Speed (mph)		40			35			55			55	
Link Distance (ft)		194			452			396			265	
Travel Time (s)		3.3			8.8			4.9			3.3	
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 (%)	3%	6%	4%	5%	4%	12%	0%	10%	4%	0%	12%	0%
Adj. Flow (vph)	167	446	184	416	290	99	0	1426	176	0	1244	0
Shared Lane Traffic (%)				41%								
Lane Group Flow (vph)	167	446	184	245	560	0	0	1426	176	0	1244	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			8			8	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.04	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1			2	2		2	
Detector Template												
Leading Detector (ft)	50	50	50	57	57			206	206		236	
Trailing Detector (ft)	-10	-10	-10	-10	-10			0	0		0	
Detector 1 Position(ft)	-10	-10	-10	-10	-10			0	0		0	
Detector 1 Size(ft)	60	60	60	67	67			40	40		40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Detector 2 Position(ft)								200	200		230	
Detector 2 Size(ft)								6	6		6	
Detector 2 Type								Cl+Ex	Cl+Ex		Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0	0.0		0.0	
Turn Type	Split	NA	Perm	Split	NA			NA	Perm		NA	

Lanes, Volumes, Timings

2025 Future Base Configuration

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road Weekday Middy

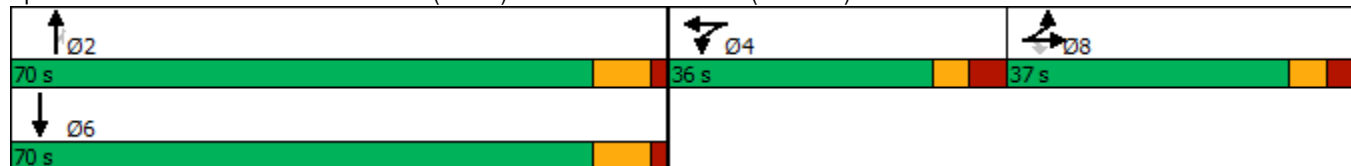


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	8	8		4	4			2				6
Permitted Phases			8						2			
Detector Phase	8	8	8	4	4			2	2			6
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0			7.0	7.0			7.0
Minimum Split (s)	14.0	14.0	14.0	15.0	15.0			15.0	15.0			15.0
Total Split (s)	37.0	37.0	37.0	36.0	36.0			70.0	70.0			70.0
Total Split (%)	25.9%	25.9%	25.9%	25.2%	25.2%			49.0%	49.0%			49.0%
Maximum Green (s)	30.0	30.0	30.0	28.0	28.0			62.0	62.0			62.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0			6.0	6.0			6.0
All-Red Time (s)	3.0	3.0	3.0	4.0	4.0			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	8.0	8.0			8.0	8.0			8.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0	2.0			2.0
Recall Mode	Min	Min	Min	Min	Min			Min	Min			Min

Intersection Summary

Area Type: Other  
 Cycle Length: 143  
 Actuated Cycle Length: 142.3  
 Natural Cycle: 140  
 Control Type: Actuated-Uncoordinated

Splits and Phases: 2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road



HCM 6th Signalized Intersection Summary

2025 Future Base Configuration

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road Weekday Midday



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	428	177	399	278	95	0	1369	169	0	1194	0
Future Volume (veh/h)	160	428	177	399	278	95	0	1369	169	0	1194	0
Initial Q (Qb), 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	1856	1811	1841	1826	1841	1722	0	1752	1841	0	1722	0
Adj Flow Rate, veh/h	167	446	137	265	502	89	0	1426	147	0	1244	0
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, %	3	6	4	5	4	12	0	10	4	0	12	0
Cap, veh/h	377	387	333	318	556	98	0	1465	687	0	1440	0
Arrive On Green	0.21	0.21	0.21	0.18	0.18	0.18	0.00	0.44	0.44	0.00	0.44	0.00
Sat Flow, veh/h	1767	1811	1560	1739	3047	538	0	3416	1560	0	3444	0
Grp Volume(v), veh/h	167	446	137	265	302	289	0	1426	147	0	1244	0
Grp Sat Flow(s),veh/h/ln	1767	1811	1560	1739	1841	1744	0	1664	1560	0	1636	0
Q Serve(g_s), s	11.5	30.0	10.6	20.6	22.6	22.8	0.0	59.0	8.2	0.0	48.2	0.0
Cycle Q Clear(g_c), s	11.5	30.0	10.6	20.6	22.6	22.8	0.0	59.0	8.2	0.0	48.2	0.0
Prop In Lane	1.00		1.00	1.00		0.31	0.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	377	387	333	318	336	318	0	1465	687	0	1440	0
V/C Ratio(X)	0.44	1.15	0.41	0.83	0.90	0.91	0.00	0.97	0.21	0.00	0.86	0.00
Avail Cap(c_a), veh/h	377	387	333	347	367	348	0	1469	688	0	1444	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(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	48.0	55.3	47.6	55.4	56.2	56.3	0.0	38.5	24.3	0.0	35.5	0.0
Incr Delay (d2), s/veh	0.3	94.6	0.3	13.7	21.8	24.1	0.0	17.3	0.1	0.0	5.4	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	8.8	34.1	7.4	15.5	18.2	17.8	0.0	34.1	5.2	0.0	26.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.3	149.8	47.9	69.1	78.0	80.3	0.0	55.9	24.4	0.0	40.9	0.0
LnGrp LOS	D	F	D	E	E	F	A	E	C	A	D	A
Approach Vol, veh/h		750			856			1573			1244	
Approach Delay, s/veh		108.6			76.0			52.9			40.9	
Approach LOS		F			E			D			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		69.9		33.7		69.9		37.0				
Change Period (Y+Rc), s		8.0		8.0		8.0		7.0				
Max Green Setting (Gmax), s		62.0		28.0		62.0		30.0				
Max Q Clear Time (g_c+I1), s		61.0		24.8		50.2		32.0				
Green Ext Time (p_c), s		0.9		0.9		7.5		0.0				

Intersection Summary

HCM 6th Ctrl Delay	63.5
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

Lanes, Volumes, Timings

2025 Future Base Configuration

3: Shell Driveway/U.S. 1 Jughandle & Franklin Corner Road (C.R. 546)

Weekday Middy



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑			↑↓			↑↓	↑↓
Traffic Volume (vph)	0	618	5	0	278	0	2	0	4	143	2	119
Future Volume (vph)	0	618	5	0	278	0	2	0	4	143	2	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	12	12	16	16	16	16	16	12
Grade (%)		0%			0%			-3%				1%
Storage Length (ft)	200		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999						0.910				0.850
Flt Protected								0.984			0.953	
Satd. Flow (prot)	0	4864	0	0	3438	0	0	1678	0	0	1875	1545
Flt Permitted								0.984			0.953	
Satd. Flow (perm)	0	4864	0	0	3438	0	0	1678	0	0	1875	1545
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		410			194			112			393	
Travel Time (s)		7.0			3.3			3.1			10.7	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	3%	0%	0%	5%	0%	0%	0%	25%	9%	0%	4%
Adj. Flow (vph)	0	665	5	0	299	0	2	0	4	154	2	128
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	670	0	0	299	0	0	6	0	0	156	128
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	2 veh	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.04	1.04	1.00	1.04	1.00	1.00	0.83	0.83	0.83	*1.00	0.85	1.01
Turning Speed (mph)	15		9	15		9	15		9	20		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

\* User Entered Value

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑			↔			↑	↗
Traffic Vol, veh/h	0	618	5	0	278	0	2	0	4	143	2	119
Future Vol, veh/h	0	618	5	0	278	0	2	0	4	143	2	119
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	-3	-	-	1	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	3	0	0	5	0	0	0	25	9	0	4
Mvmt Flow	0	665	5	0	299	0	2	0	4	154	2	128

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	670	0	0	819	967	335	565	969	150
Stage 1	-	-	-	-	-	-	668	668	-	299	299	-
Stage 2	-	-	-	-	-	-	151	299	-	266	670	-
Critical Hdwy	-	-	-	5.3	-	-	6.35	5.9	7.3	7.33	6.7	7.08
Critical Hdwy Stg 1	-	-	-	-	-	-	6.7	4.9	-	6.88	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.9	4.9	-	7.08	5.7	-
Follow-up Hdwy	-	-	-	3.1	-	-	3.65	4	4.15	3.74	4	3.34
Pot Cap-1 Maneuver	0	-	-	570	-	0	342	301	530	403	242	860
Stage 1	0	-	-	-	-	0	392	514	-	632	659	-
Stage 2	0	-	-	-	-	0	831	704	-	653	442	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	570	-	-	290	301	530	400	242	860
Mov Cap-2 Maneuver	-	-	-	-	-	-	339	402	-	475	344	-
Stage 1	-	-	-	-	-	-	392	514	-	632	659	-
Stage 2	-	-	-	-	-	-	705	704	-	648	442	-



















Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			13.2			13.4		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	446	-	-	570	-	473	860
HCM Lane V/C Ratio	0.014	-	-	-	-	0.33	0.149
HCM Control Delay (s)	13.2	-	-	0	-	16.3	9.9
HCM Lane LOS	B	-	-	A	-	C	A
HCM 95th %tile Q(veh)	0	-	-	0	-	1.4	0.5



Lanes, Volumes, Timings  
4: Greenberg Road & Wawa Driveway/Bakersville Road

2025 Future Base Configuration  
Weekday Middy

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	67	30	0	0	33	68	61	94	5	70	0	64
Future Volume (vph)	67	30	0	0	33	68	61	94	5	70	0	64
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	13	14	14	13	12	12
Grade (%)		0%			1%			0%			0%	
Storage Length (ft)	0		0	0		0	160		0	0		130
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			85			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.910			0.992				0.850
Flt Protected		0.967					0.950			0.950		
Satd. Flow (prot)	0	1726	0	0	1681	0	1776	1869	0	1865	0	1615
Flt Permitted		0.967					0.950			0.950		
Satd. Flow (perm)	0	1726	0	0	1681	0	1776	1869	0	1865	0	1615
Link Speed (mph)		25			25			25				25
Link Distance (ft)		123			65			359				304
Travel Time (s)		3.4			1.8			9.8				8.3
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	8%	3%	0%	0%	3%	2%	5%	8%	0%	0%	0%	0%
Adj. Flow (vph)	76	34	0	0	38	77	69	107	6	80	0	73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	110	0	0	115	0	69	113	0	80	0	73
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			13				13
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	0.96	0.92	0.92	0.96	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Lanes, Volumes, Timings  
5: Greenberg Road & Bakersville Road

2025 Future Base Configuration  
Weekday Middy



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	263	22	35	194	112	246
Future Volume (vph)	263	22	35	194	112	246
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	14	14	14	14
Grade (%)	0%			-1%	0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.990				0.907	
Flt Protected	0.956			0.992		
Satd. Flow (prot)	1942	0	0	1938	1789	0
Flt Permitted	0.956			0.992		
Satd. Flow (perm)	1942	0	0	1938	1789	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	149			304	324	
Travel Time (s)	4.1			8.3	8.8	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	0%	0%	5%	0%	4%
Adj. Flow (vph)	299	25	40	220	127	280
Shared Lane Traffic (%)						
Lane Group Flow (vph)	324	0	0	260	407	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	15			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.91	0.91	0.92	0.92
Turning Speed (mph)	15	9	15			9
Sign Control	Yield			Yield	Yield	
<b>Intersection Summary</b>						
Area Type:	Other					
Control Type:	Roundabout					

Intersection			
Intersection Delay, s/veh	5.8		
Intersection LOS	A		
Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	324	260	407
Demand Flow Rate, veh/h	330	271	418
Vehicles Circulating, veh/h	127	305	40
Vehicles Exiting, veh/h	331	152	536
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.5	6.4	5.7
Approach LOS	A	A	A
Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	330	271	418
Cap Entry Lane, veh/h	1212	1011	1325
Entry HV Adj Factor	0.982	0.959	0.974
Flow Entry, veh/h	324	260	407
Cap Entry, veh/h	1190	970	1290
V/C Ratio	0.272	0.268	0.316
Control Delay, s/veh	5.5	6.4	5.7
LOS	A	A	A
95th %tile Queue, veh	1	1	1

Lanes, Volumes, Timings  
6: Greenberg Road & Internal Loop Road

2025 Future Base Configuration  
Weekday Middy



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	19	5	5	452	353	55
Future Volume (vph)	19	5	5	452	353	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	14	14	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.974				0.982	
Flt Protected	0.961			0.999		
Satd. Flow (prot)	1851	0	0	1966	1956	0
Flt Permitted	0.961			0.999		
Satd. Flow (perm)	1851	0	0	1966	1956	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	401			324	282	
Travel Time (s)	10.9			8.8	7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	11%	0%	0%	3%	2%	0%
Adj. Flow (vph)	21	5	5	491	384	60
Shared Lane Traffic (%)						
Lane Group Flow (vph)	26	0	0	496	444	0
Enter Blocked Intersection	No	No	No	Yes	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	16			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.85	0.85	0.92	0.92	0.92	0.92
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other  
Control Type: Unsignalized

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	19	5	5	452	353	55
Future Vol, veh/h	19	5	5	452	353	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	11	0	0	3	2	0
Mvmt Flow	21	5	5	491	384	60







Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	915	414	444	0	0
Stage 1	414	-	-	-	-
Stage 2	501	-	-	-	-
Critical Hdwy	6.51	6.2	4.1	-	-
Critical Hdwy Stg 1	5.51	-	-	-	-
Critical Hdwy Stg 2	5.51	-	-	-	-
Follow-up Hdwy	3.599	3.3	2.2	-	-
Pot Cap-1 Maneuver	292	643	1127	-	-
Stage 1	648	-	-	-	-
Stage 2	591	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	290	643	1127	-	-
Mov Cap-2 Maneuver	290	-	-	-	-
Stage 1	644	-	-	-	-
Stage 2	591	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1127	-	327	-	-
HCM Lane V/C Ratio	0.005	-	0.08	-	-
HCM Control Delay (s)	8.2	0	17	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Lanes, Volumes, Timings  
7: Greenberg Road & Bakers Basin Road

2025 Future Base Configuration  
Weekday Middy

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	298	299	109	406	366	105
Future Volume (vph)	298	299	109	406	366	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	11	16	10	11
Storage Length (ft)		220	110		0	115
Storage Lanes		1	1		1	1
Taper Length (ft)			55		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1701	1583	1728	2031	1636	1546
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1701	1583	1728	2031	1636	1546
Link Speed (mph)	35			35	25	
Link Distance (ft)	452			328	282	
Travel Time (s)	8.8			6.4	7.7	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	8%	2%	1%	6%	3%	1%
Adj. Flow (vph)	310	311	114	423	381	109
Shared Lane Traffic (%)						
Lane Group Flow (vph)	310	311	114	423	381	109
Enter Blocked Intersection	No	No	No	No	Yes	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			11	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.00	1.04	0.85	*1.04	1.04
Turning Speed (mph)		9	20		20	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

\* User Entered Value

Intersection						
Int Delay, s/veh	68.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↘	↗
Traffic Vol, veh/h	298	299	109	406	366	105
Future Vol, veh/h	298	299	109	406	366	105
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	220	110	-	0	115
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	8	2	1	6	3	1
Mvmt Flow	310	311	114	423	381	109

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	621	0	961
Stage 1	-	-	-	-	310
Stage 2	-	-	-	-	651
Critical Hdwy	-	-	4.11	-	6.43
Critical Hdwy Stg 1	-	-	-	-	5.43
Critical Hdwy Stg 2	-	-	-	-	5.43
Follow-up Hdwy	-	-	2.209	-	3.527
Pot Cap-1 Maneuver	-	-	965	-	~ 283
Stage 1	-	-	-	-	741
Stage 2	-	-	-	-	517
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	965	-	~ 250
Mov Cap-2 Maneuver	-	-	-	-	~ 250
Stage 1	-	-	-	-	741
Stage 2	-	-	-	-	456

Approach	EB	WB	NB
HCM Control Delay, s	0	2	229.2
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	250	732	-	-	965	-
HCM Lane V/C Ratio	1.525	0.149	-	-	0.118	-
HCM Control Delay (s)	291.9	10.8	-	-	9.2	-
HCM Lane LOS	F	B	-	-	A	-
HCM 95th %tile Q(veh)	22.7	0.5	-	-	0.4	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Lanes, Volumes, Timings

2025 Future Base Configuration

8: Wawa Driveway/Internal Loop Road & Bakersville Road

Weekday Middy



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	8	169	16	122	154	5	43	6	114	2	9	52
Future Volume (vph)	8	169	16	122	154	5	43	6	114	2	9	52
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	15	15	15	15	15	12	12	12
Grade (%)		-1%			0%			-1%			0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989			0.997			0.906			0.888	
Flt Protected		0.998			0.979			0.987			0.999	
Satd. Flow (prot)	0	2073	0	0	2013	0	0	1793	0	0	1686	0
Flt Permitted		0.998			0.979			0.987			0.999	
Satd. Flow (perm)	0	2073	0	0	2013	0	0	1793	0	0	1686	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		55			149			115			401	
Travel Time (s)		1.5			4.1			3.1			10.9	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	1%	1%	20%	5%	17%	4%	0%	0%	0%
Adj. Flow (vph)	9	192	18	139	175	6	49	7	130	2	10	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	219	0	0	320	0	0	186	0	0	71	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized



HCM 6th TWSC  
 8: Wawa Driveway/Internal Loop Road & Bakersville Road

2025 Future Base Configuration  
 Weekday Middy

Intersection												
Int Delay, s/veh	5.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	169	16	122	154	5	43	6	114	2	9	52
Future Vol, veh/h	8	169	16	122	154	5	43	6	114	2	9	52
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-1	-	-	0	-	-	-1	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	1	1	20	5	17	4	0	0	0
Mvmt Flow	9	192	18	139	175	6	49	7	130	2	10	59

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	181	0	0	210	0	0	710	678	201	744	684	178
Stage 1	-	-	-	-	-	-	219	219	-	456	456	-
Stage 2	-	-	-	-	-	-	491	459	-	288	228	-
Critical Hdwy	4.1	-	-	4.11	-	-	6.95	6.47	6.14	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.95	5.47	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.95	5.47	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.209	-	-	3.545	4.153	3.336	3.5	4	3.3
Pot Cap-1 Maneuver	1407	-	-	1367	-	-	358	369	839	333	374	870
Stage 1	-	-	-	-	-	-	786	703	-	588	572	-
Stage 2	-	-	-	-	-	-	569	556	-	724	719	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1407	-	-	1367	-	-	296	325	839	252	329	870
Mov Cap-2 Maneuver	-	-	-	-	-	-	296	325	-	252	329	-
Stage 1	-	-	-	-	-	-	780	698	-	584	507	-
Stage 2	-	-	-	-	-	-	461	493	-	602	714	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			3.4			15			11.1		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	544	1407	-	-	1367	-	-	663
HCM Lane V/C Ratio	0.34	0.006	-	-	0.101	-	-	0.108
HCM Control Delay (s)	15	7.6	0	-	7.9	0	-	11.1
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	1.5	0	-	-	0.3	-	-	0.4

Lanes, Volumes, Timings  
 9: Bakersville Road & CFA East Access

2025 Future Base Configuration  
 Weekday Middy



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	53	176	89	160	17	12
Future Volume (vph)	53	176	89	160	17	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	12	12
Grade (%)		-1%	0%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.913		0.944	
Flt Protected		0.989			0.971	
Satd. Flow (prot)	0	2077	1868	0	1742	0
Flt Permitted		0.989			0.971	
Satd. Flow (perm)	0	2077	1868	0	1742	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		71	55		121	
Travel Time (s)		1.9	1.5		3.3	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	0%	0%	6%	0%	0%	0%
Adj. Flow (vph)	62	205	103	186	20	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	267	289	0	34	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.88	0.88	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
<b>Intersection Summary</b>						
Area Type:	Other					
Control Type:	Unsignalized					

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Vol, veh/h	53	176	89	160	17	12
Future Vol, veh/h	53	176	89	160	17	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-1	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	6	0	0	0
Mvmt Flow	62	205	103	186	20	14

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	289	0	-	0	525 196
Stage 1	-	-	-	-	196 -
Stage 2	-	-	-	-	329 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	1284	-	-	-	516 850
Stage 1	-	-	-	-	842 -
Stage 2	-	-	-	-	734 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1284	-	-	-	488 850
Mov Cap-2 Maneuver	-	-	-	-	488 -
Stage 1	-	-	-	-	797 -
Stage 2	-	-	-	-	734 -

Approach	EB	WB	SB
HCM Control Delay, s	1.8	0	11.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1284	-	-	-	592
HCM Lane V/C Ratio	0.048	-	-	-	0.057
HCM Control Delay (s)	7.9	0	-	-	11.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.2

Lanes, Volumes, Timings  
 10: Bakersville Road & CFA West Access

2025 Future Base Configuration  
 Weekday Middy



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	19	103	74	27	126	80
Future Volume (vph)	19	103	74	27	126	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	16	16
Grade (%)		0%	1%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.964		0.948	
Flt Protected		0.992			0.970	
Satd. Flow (prot)	0	2073	1894	0	1980	0
Flt Permitted		0.992			0.970	
Satd. Flow (perm)	0	2073	1894	0	1980	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		219	71		111	
Travel Time (s)		6.0	1.9		3.0	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	0%	0%	8%	0%	0%	0%
Adj. Flow (vph)	22	121	87	32	148	94
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	143	119	0	242	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		16	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.89	0.89	0.85	0.85
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
<b>Intersection Summary</b>						
Area Type:	Other					
Control Type:	Unsignalized					

Intersection						
Int Delay, s/veh	5.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	19	103	74	27	126	80
Future Vol, veh/h	19	103	74	27	126	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	1	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	8	0	0	0
Mvmt Flow	22	121	87	32	148	94

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	119	0	-	0	268
Stage 1	-	-	-	-	103
Stage 2	-	-	-	-	165
Critical Hdwy	4.1	-	-	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	2.2	-	-	-	3.5
Pot Cap-1 Maneuver	1482	-	-	-	726
Stage 1	-	-	-	-	926
Stage 2	-	-	-	-	869
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1482	-	-	-	714
Mov Cap-2 Maneuver	-	-	-	-	714
Stage 1	-	-	-	-	911
Stage 2	-	-	-	-	869

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	11.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1482	-	-	-	792
HCM Lane V/C Ratio	0.015	-	-	-	0.306
HCM Control Delay (s)	7.5	0	-	-	11.5
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	1.3

Lanes, Volumes, Timings  
 1: Brunswick Avenue (U.S. 1) & Bakersville Road

2025 Future Base Configuration  
 Weekday Afternoon



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	161	2025	151	0	2290
Future Volume (vph)	0	161	2025	151	0	2290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	12	12	12	12
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	0.91
Frt		0.865	0.990			
Flt Protected						
Satd. Flow (prot)	0	1844	5041	0	0	5036
Flt Permitted						
Satd. Flow (perm)	0	1844	5041	0	0	5036
Link Speed (mph)	25		55			55
Link Distance (ft)	219		556			396
Travel Time (s)	6.0		6.9			4.9
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	1%	2%	0%	0%	3%
Adj. Flow (vph)	0	173	2177	162	0	2462
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	173	2339	0	0	2462
Enter Blocked Intersection	No	No	Yes	No	Yes	Yes
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		8			8
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.85	0.85	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other  
 Control Type: Unsignalized

Intersection						
Int Delay, s/veh	3.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗ ↑↑↑	↑↑↑			↑↑↑
Traffic Vol, veh/h	0	161	2025	151	0	2290
Future Vol, veh/h	0	161	2025	151	0	2290
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Free	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	1	2	0	0	3
Mvmt Flow	0	173	2177	162	0	2462

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	-	1089	0	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.12	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.91	-	-	-	-
Pot Cap-1 Maneuver	0	182	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	182	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

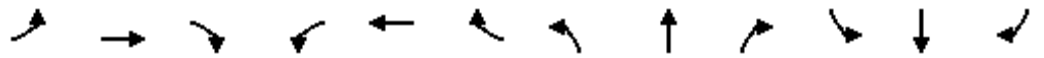
Approach	WB	NB	SB
HCM Control Delay, s	106.5	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 182	-
HCM Lane V/C Ratio	- 0.951	-
HCM Control Delay (s)	- 106.5	-
HCM Lane LOS	- F	-
HCM 95th %tile Q(veh)	- 7.5	-

Lanes, Volumes, Timings

2025 Future Base Configuration

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road Weekday Afternoon



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	154	360	225	468	262	122	0	1855	331	0	1597	0
Future Volume (vph)	154	360	225	468	262	122	0	1855	331	0	1597	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	12	12	12	12	12	12	12
Storage Length (ft)	0		0	280		0	0		0	0		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	25			65			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.968				0.850			
Flt Protected	0.950			0.950	0.984							
Satd. Flow (prot)	1728	1801	1599	1572	3104	0	0	3539	1568	0	3539	0
Flt Permitted	0.950			0.950	0.984							
Satd. Flow (perm)	1728	1801	1599	1572	3104	0	0	3539	1568	0	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			81		16				147			
Link Speed (mph)		40			35			55			55	
Link Distance (ft)		194			452			396			265	
Travel Time (s)		3.3			8.8			4.9			3.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	2%	1%	1%	3%	4%	0%	2%	3%	0%	2%	0%
Adj. Flow (vph)	162	379	237	493	276	128	0	1953	348	0	1681	0
Shared Lane Traffic (%)				39%								
Lane Group Flow (vph)	162	379	237	301	596	0	0	1953	348	0	1681	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			8			8	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.04	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1			2	2		2	
Detector Template												
Leading Detector (ft)	50	50	50	57	57			206	206		236	
Trailing Detector (ft)	-10	-10	-10	-10	-10			0	0		0	
Detector 1 Position(ft)	-10	-10	-10	-10	-10			0	0		0	
Detector 1 Size(ft)	60	60	60	67	67			40	40		40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Detector 2 Position(ft)								200	200		230	
Detector 2 Size(ft)								6	6		6	
Detector 2 Type								Cl+Ex	Cl+Ex		Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0	0.0		0.0	
Turn Type	Split	NA	Perm	Split	NA			NA	Perm		NA	



Lanes, Volumes, Timings

2025 Future Base Configuration

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road Weekday Afternoon

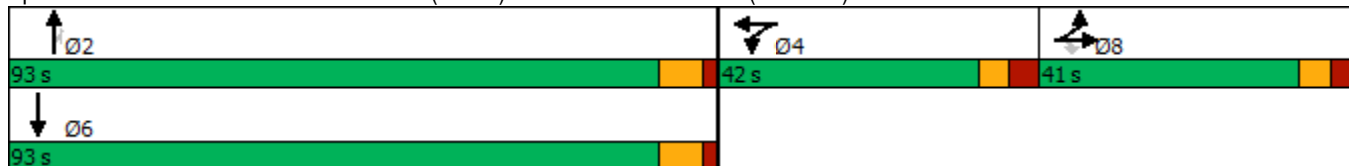


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	8	8		4	4			2				6
Permitted Phases			8						2			
Detector Phase	8	8	8	4	4			2	2			6
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0			7.0	7.0			7.0
Minimum Split (s)	14.0	14.0	14.0	15.0	15.0			15.0	15.0			15.0
Total Split (s)	41.0	41.0	41.0	42.0	42.0			93.0	93.0			93.0
Total Split (%)	23.3%	23.3%	23.3%	23.9%	23.9%			52.8%	52.8%			52.8%
Maximum Green (s)	34.0	34.0	34.0	34.0	34.0			85.0	85.0			85.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0			6.0	6.0			6.0
All-Red Time (s)	3.0	3.0	3.0	4.0	4.0			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	8.0	8.0			8.0	8.0			8.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0	2.0			2.0
Recall Mode	Min	Min	Min	Min	Min			Min	Min			Min

Intersection Summary

Area Type: Other  
 Cycle Length: 176  
 Actuated Cycle Length: 176  
 Natural Cycle: 140  
 Control Type: Actuated-Uncoordinated

Splits and Phases: 2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road



HCM 6th Signalized Intersection Summary

2025 Future Base Configuration

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road Weekday Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	360	225	468	262	122	0	1855	331	0	1597	0
Future Volume (veh/h)	154	360	225	468	262	122	0	1855	331	0	1597	0
Initial Q (Qb), 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	1885	1870	1885	1885	1856	1841	0	1870	1856	0	1870	0
Adj Flow Rate, veh/h	162	379	198	299	548	127	0	1953	301	0	1681	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	2	1	1	3	4	0	2	3	0	2	0
Cap, veh/h	347	361	309	347	563	130	0	1716	759	0	1716	0
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.00	0.48	0.48	0.00	0.48	0.00
Sat Flow, veh/h	1795	1870	1598	1795	2917	673	0	3647	1572	0	3741	0
Grp Volume(v), veh/h	162	379	198	299	348	327	0	1953	301	0	1681	0
Grp Sat Flow(s),veh/h/ln	1795	1870	1598	1795	1856	1734	0	1777	1572	0	1777	0
Q Serve(g_s), s	14.1	34.0	20.1	28.4	32.8	33.0	0.0	85.0	21.5	0.0	81.7	0.0
Cycle Q Clear(g_c), s	14.1	34.0	20.1	28.4	32.8	33.0	0.0	85.0	21.5	0.0	81.7	0.0
Prop In Lane	1.00		1.00	1.00		0.39	0.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	347	361	309	347	358	335	0	1716	759	0	1716	0
V/C Ratio(X)	0.47	1.05	0.64	0.86	0.97	0.98	0.00	1.14	0.40	0.00	0.98	0.00
Avail Cap(c_a), veh/h	347	361	309	347	358	335	0	1716	759	0	1716	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(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	63.0	71.0	65.4	68.7	70.5	70.6	0.0	45.5	29.1	0.0	44.6	0.0
Incr Delay (d2), s/veh	0.4	60.7	3.5	18.6	39.4	42.5	0.0	69.8	0.1	0.0	17.0	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	10.6	30.8	13.2	21.1	26.7	25.7	0.0	70.4	12.6	0.0	48.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.3	131.7	68.9	87.3	109.9	113.1	0.0	115.3	29.2	0.0	61.6	0.0
LnGrp LOS	E	F	E	F	F	F	A	F	C	A	E	A
Approach Vol, veh/h		739			974			2254			1681	
Approach Delay, s/veh		99.9			104.0			103.8			61.6	
Approach LOS		F			F			F			E	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		93.0		42.0		93.0		41.0				
Change Period (Y+Rc), s		8.0		8.0		8.0		7.0				
Max Green Setting (Gmax), s		85.0		34.0		85.0		34.0				
Max Q Clear Time (g_c+I1), s		87.0		35.0		83.7		36.0				
Green Ext Time (p_c), s		0.0		0.0		1.2		0.0				

Intersection Summary

HCM 6th Ctrl Delay	90.8
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

Lanes, Volumes, Timings

2025 Future Base Configuration

3: Shell Driveway/U.S. 1 Jughandle & Franklin Corner Road (C.R. 546)

Weekday Afternoon



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑			↕			↕	↗
Traffic Volume (vph)	0	633	6	0	262	0	1	0	3	103	0	103
Future Volume (vph)	0	633	6	0	262	0	1	0	3	103	0	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	12	12	16	16	16	16	16	12
Grade (%)		0%			0%			-3%			1%	
Storage Length (ft)	200		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999						0.899				0.850
Flt Protected								0.988			0.950	
Satd. Flow (prot)	0	4912	0	0	3505	0	0	1941	0	0	1976	1530
Flt Permitted								0.988			0.950	
Satd. Flow (perm)	0	4912	0	0	3505	0	0	1941	0	0	1976	1530
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		410			194			112			393	
Travel Time (s)		7.0			3.3			3.1			10.7	
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 (%)	0%	2%	0%	0%	3%	0%	0%	0%	0%	3%	0%	5%
Adj. Flow (vph)	0	659	6	0	273	0	1	0	3	107	0	107
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	665	0	0	273	0	0	4	0	0	107	107
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	2 veh	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.04	1.04	1.00	1.04	1.00	1.00	0.83	0.83	0.83	*1.00	0.85	1.01
Turning Speed (mph)	15		9	15		9	15		9	20		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

\* User Entered Value

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑			↔			↑	↑
Traffic Vol, veh/h	0	633	6	0	262	0	1	0	3	103	0	103
Future Vol, veh/h	0	633	6	0	262	0	1	0	3	103	0	103
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	-3	-	-	1	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	2	0	0	3	0	0	0	0	3	0	5
Mvmt Flow	0	659	6	0	273	0	1	0	3	107	0	107



















Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	665	0	0	799	935	333	537	938	137
Stage 1	-	-	-	-	-	-	662	662	-	273	273	-
Stage 2	-	-	-	-	-	-	137	273	-	264	665	-
Critical Hdwy	-	-	-	5.3	-	-	6.35	5.9	6.8	7.21	6.7	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	6.7	4.9	-	6.76	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.9	4.9	-	6.96	5.7	-
Follow-up Hdwy	-	-	-	3.1	-	-	3.65	4	3.9	3.68	4	3.35
Pot Cap-1 Maneuver	0	-	-	573	-	0	352	313	586	434	253	874
Stage 1	0	-	-	-	-	0	395	516	-	671	677	-
Stage 2	0	-	-	-	-	0	844	720	-	670	444	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	573	-	-	309	313	586	432	253	874
Mov Cap-2 Maneuver	-	-	-	-	-	-	347	409	-	502	351	-
Stage 1	-	-	-	-	-	-	395	516	-	671	677	-
Stage 2	-	-	-	-	-	-	740	720	-	666	444	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			12.3			11.9		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	500	-	-	573	-	502	874
HCM Lane V/C Ratio	0.008	-	-	-	-	0.214	0.123
HCM Control Delay (s)	12.3	-	-	0	-	14.1	9.7
HCM Lane LOS	B	-	-	A	-	B	A
HCM 95th %tile Q(veh)	0	-	-	0	-	0.8	0.4

Lanes, Volumes, Timings  
4: Greenberg Road & Wawa Driveway/Bakersville Road

2025 Future Base Configuration  
Weekday Afternoon

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	12	0	0	20	66	36	100	1	34	0	35
Future Volume (vph)	43	12	0	0	20	66	36	100	1	34	0	35
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	13	14	14	13	12	12
Grade (%)		0%			1%			0%			0%	
Storage Length (ft)	0		0	0		0	160		0	0		130
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			85			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.897			0.999				0.850
Flt Protected		0.963					0.950			0.950		
Satd. Flow (prot)	0	1761	0	0	1670	0	1811	2025	0	1865	0	1615
Flt Permitted		0.963					0.950			0.950		
Satd. Flow (perm)	0	1761	0	0	1670	0	1811	2025	0	1865	0	1615
Link Speed (mph)		25			25			25				25
Link Distance (ft)		123			65			359				304
Travel Time (s)		3.4			1.8			9.8				8.3
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	5%	0%	0%	0%	0%	2%	3%	0%	0%	0%	0%	0%
Adj. Flow (vph)	49	14	0	0	23	75	41	114	1	39	0	40
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	63	0	0	98	0	41	115	0	39	0	40
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			13				13
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	0.96	0.92	0.92	0.96	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop				Free

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Lanes, Volumes, Timings  
5: Greenberg Road & Bakersville Road

2025 Future Base Configuration  
Weekday Afternoon



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	181	13	31	178	56	157
Future Volume (vph)	181	13	31	178	56	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	14	14	14	14
Grade (%)	0%			-1%	0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.991				0.900	
Flt Protected	0.955			0.993		
Satd. Flow (prot)	1960	0	0	2005	1772	0
Flt Permitted	0.955			0.993		
Satd. Flow (perm)	1960	0	0	2005	1772	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	149			304	324	
Travel Time (s)	4.1			8.3	8.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	0%	0%	1%	0%	4%
Adj. Flow (vph)	197	14	34	193	61	171
Shared Lane Traffic (%)						
Lane Group Flow (vph)	211	0	0	227	232	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	15			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.91	0.91	0.92	0.92
Turning Speed (mph)	15	9	15			9
Sign Control	Yield			Yield	Yield	

Intersection Summary

Area Type: Other  
Control Type: Roundabout

Intersection			
Intersection Delay, s/veh	4.5		
Intersection LOS	A		
Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	211	227	232
Demand Flow Rate, veh/h	213	229	239
Vehicles Circulating, veh/h	61	199	34
Vehicles Exiting, veh/h	212	75	394
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.2	5.1	4.3
Approach LOS	A	A	A
Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	213	229	239
Cap Entry Lane, veh/h	1297	1126	1333
Entry HV Adj Factor	0.991	0.992	0.971
Flow Entry, veh/h	211	227	232
Cap Entry, veh/h	1284	1117	1294
V/C Ratio	0.164	0.203	0.179
Control Delay, s/veh	4.2	5.1	4.3
LOS	A	A	A
95th %tile Queue, veh	1	1	1

Lanes, Volumes, Timings  
6: Greenberg Road & Internal Loop Road

2025 Future Base Configuration  
Weekday Afternoon



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	17	2	4	355	211	21
Future Volume (vph)	17	2	4	355	211	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	14	14	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.986				0.988	
Flt Protected	0.957			0.999		
Satd. Flow (prot)	2032	0	0	2025	2002	0
Flt Permitted	0.957			0.999		
Satd. Flow (perm)	2032	0	0	2025	2002	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	401			324	282	
Travel Time (s)	10.9			8.8	7.7	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	18	2	4	378	224	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	20	0	0	382	246	0
Enter Blocked Intersection	No	No	No	Yes	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	16			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.85	0.85	0.92	0.92	0.92	0.92
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other  
Control Type: Unsignalized



Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	2	4	355	211	21
Future Vol, veh/h	17	2	4	355	211	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	18	2	4	378	224	22

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	621	235	246	0	0
Stage 1	235	-	-	-	-
Stage 2	386	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	454	809	1332	-	-
Stage 1	809	-	-	-	-
Stage 2	691	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	452	809	1332	-	-
Mov Cap-2 Maneuver	452	-	-	-	-
Stage 1	806	-	-	-	-
Stage 2	691	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.9	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1332	-	474	-	-
HCM Lane V/C Ratio	0.003	-	0.043	-	-
HCM Control Delay (s)	7.7	0	12.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Lanes, Volumes, Timings  
7: Greenberg Road & Bakers Basin Road

2025 Future Base Configuration  
Weekday Afternoon

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↙	↑	↖	↗
Traffic Volume (vph)	528	163	69	567	285	87
Future Volume (vph)	528	163	69	567	285	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	11	16	10	11
Storage Length (ft)		220	110		0	115
Storage Lanes		1	1		1	1
Taper Length (ft)			55		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1783	1599	1694	2111	1652	1561
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1783	1599	1694	2111	1652	1561
Link Speed (mph)	35			35	25	
Link Distance (ft)	452			328	282	
Travel Time (s)	8.8			6.4	7.7	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	3%	1%	3%	2%	2%	0%
Adj. Flow (vph)	533	165	70	573	288	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	533	165	70	573	288	88
Enter Blocked Intersection	No	No	No	No	Yes	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			11	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.00	1.04	0.85	*1.04	1.04
Turning Speed (mph)		9	20		20	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

\* User Entered Value

Intersection						
Int Delay, s/veh	60.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↘	↗
Traffic Vol, veh/h	528	163	69	567	285	87
Future Vol, veh/h	528	163	69	567	285	87
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	220	110	-	0	115
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	3	1	3	2	2	0
Mvmt Flow	533	165	70	573	288	88

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	698	0	1246
Stage 1	-	-	-	-	533
Stage 2	-	-	-	-	713
Critical Hdwy	-	-	4.13	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.227	-	3.518
Pot Cap-1 Maneuver	-	-	894	-	~ 192
Stage 1	-	-	-	-	588
Stage 2	-	-	-	-	486
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	894	-	~ 177
Mov Cap-2 Maneuver	-	-	-	-	~ 177
Stage 1	-	-	-	-	588
Stage 2	-	-	-	-	448

Approach	EB	WB	NB
HCM Control Delay, s	0	1	273.2
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	177	551	-	-	894	-
HCM Lane V/C Ratio	1.626	0.159	-	-	0.078	-
HCM Control Delay (s)	\$ 352.7	12.8	-	-	9.4	-
HCM Lane LOS	F	B	-	-	A	-
HCM 95th %tile Q(veh)	19.4	0.6	-	-	0.3	-

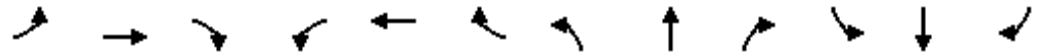
Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Lanes, Volumes, Timings

2025 Future Base Configuration

8: Wawa Driveway/Internal Loop Road & Bakersville Road

Weekday Afternoon



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	3	114	13	97	88	3	39	2	79	1	2	16
Future Volume (vph)	3	114	13	97	88	3	39	2	79	1	2	16
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	15	15	15	15	15	12	12	12
Grade (%)		-1%			0%			-1%			0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986			0.998			0.911			0.884	
Flt Protected		0.999			0.975			0.984			0.998	
Satd. Flow (prot)	0	2069	0	0	2004	0	0	1871	0	0	1676	0
Flt Permitted		0.999			0.975			0.984			0.998	
Satd. Flow (perm)	0	2069	0	0	2004	0	0	1871	0	0	1676	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		55			149			115			401	
Travel Time (s)		1.5			4.1			3.1			10.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	0%	0%	1%	2%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	3	131	15	111	101	3	45	2	91	1	2	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	149	0	0	215	0	0	138	0	0	21	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

HCM 6th TWSC  
 8: Wawa Driveway/Internal Loop Road & Bakersville Road

2025 Future Base Configuration  
 Weekday Afternoon

Intersection												
Int Delay, s/veh	5.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	114	13	97	88	3	39	2	79	1	2	16
Future Vol, veh/h	3	114	13	97	88	3	39	2	79	1	2	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-1	-	-	0	-	-	-1	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	1	2	0	0	0	1	0	0	0
Mvmt Flow	3	131	15	111	101	3	45	2	91	1	2	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	104	0	0	146	0	0	480	471	139	516	477	103
Stage 1	-	-	-	-	-	-	145	145	-	325	325	-
Stage 2	-	-	-	-	-	-	335	326	-	191	152	-
Critical Hdwy	4.1	-	-	4.11	-	-	6.9	6.3	6.11	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.9	5.3	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.9	5.3	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.209	-	-	3.5	4	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	1500	-	-	1442	-	-	513	507	915	473	490	957
Stage 1	-	-	-	-	-	-	870	787	-	692	653	-
Stage 2	-	-	-	-	-	-	696	664	-	815	775	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1500	-	-	1442	-	-	469	464	915	397	449	957
Mov Cap-2 Maneuver	-	-	-	-	-	-	469	464	-	397	449	-
Stage 1	-	-	-	-	-	-	868	785	-	691	599	-
Stage 2	-	-	-	-	-	-	624	610	-	731	773	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			4			11.5			9.6		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	690	1500	-	-	1442	-	-	802
HCM Lane V/C Ratio	0.2	0.002	-	-	0.077	-	-	0.027
HCM Control Delay (s)	11.5	7.4	0	-	7.7	0	-	9.6
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.7	0	-	-	0.3	-	-	0.1

Lanes, Volumes, Timings  
 9: Bakersville Road & CFA East Access

2025 Future Base Configuration  
 Weekday Afternoon



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	40	118	65	78	12	9
Future Volume (vph)	40	118	65	78	12	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	12	12
Grade (%)		-1%	0%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.926		0.941	
Flt Protected		0.987			0.973	
Satd. Flow (prot)	0	2073	1935	0	1740	0
Flt Permitted		0.987			0.973	
Satd. Flow (perm)	0	2073	1935	0	1740	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		71	55		121	
Travel Time (s)		1.9	1.5		3.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	43	126	69	83	13	10
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	169	152	0	23	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.88	0.88	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other  
 Control Type: Unsignalized

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Vol, veh/h	40	118	65	78	12	9
Future Vol, veh/h	40	118	65	78	12	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-1	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	43	126	69	83	13	10

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	152	0	-	0	323
Stage 1	-	-	-	-	111
Stage 2	-	-	-	-	212
Critical Hdwy	4.1	-	-	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	2.2	-	-	-	3.5
Pot Cap-1 Maneuver	1441	-	-	-	675
Stage 1	-	-	-	-	919
Stage 2	-	-	-	-	828
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1441	-	-	-	653
Mov Cap-2 Maneuver	-	-	-	-	653
Stage 1	-	-	-	-	890
Stage 2	-	-	-	-	828

Approach	EB	WB	SB
HCM Control Delay, s	1.9	0	9.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1441	-	-	-	753
HCM Lane V/C Ratio	0.03	-	-	-	0.03
HCM Control Delay (s)	7.6	0	-	-	9.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Lanes, Volumes, Timings  
 10: Bakersville Road & CFA West Access

2025 Future Base Configuration  
 Weekday Afternoon



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	11	84	56	18	74	35
Future Volume (vph)	11	84	56	18	74	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	16	16
Grade (%)		0%	1%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.968		0.957	
Flt Protected		0.994			0.967	
Satd. Flow (prot)	0	2077	1983	0	1993	0
Flt Permitted		0.994			0.967	
Satd. Flow (perm)	0	2077	1983	0	1993	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		219	71		111	
Travel Time (s)		6.0	1.9		3.0	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	12	89	60	19	79	37
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	101	79	0	116	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		16	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.89	0.89	0.85	0.85
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other  
 Control Type: Unsignalized



Intersection						
Int Delay, s/veh	4.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	11	84	56	18	74	35
Future Vol, veh/h	11	84	56	18	74	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	1	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	2	0	0	0
Mvmt Flow	12	89	60	19	79	37

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	79	0	-	0	183 70
Stage 1	-	-	-	-	70 -
Stage 2	-	-	-	-	113 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	1532	-	-	-	811 998
Stage 1	-	-	-	-	958 -
Stage 2	-	-	-	-	917 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1532	-	-	-	805 998
Mov Cap-2 Maneuver	-	-	-	-	805 -
Stage 1	-	-	-	-	950 -
Stage 2	-	-	-	-	917 -

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	9.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1532	-	-	-	858
HCM Lane V/C Ratio	0.008	-	-	-	0.135
HCM Control Delay (s)	7.4	0	-	-	9.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.5

Lanes, Volumes, Timings  
 1: Brunswick Avenue (U.S. 1) & Bakersville Road

2025 Future Base Configuration  
 Saturday MIDDAY



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕↕↕↗			↕↕↕
Traffic Volume (vph)	0	204	1491	149	0	1969
Future Volume (vph)	0	204	1491	149	0	1969
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	12	12	12	12
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	0.91
Frt		0.865	0.986			
Flt Protected						
Satd. Flow (prot)	0	1808	5019	0	0	5085
Flt Permitted						
Satd. Flow (perm)	0	1808	5019	0	0	5085
Link Speed (mph)	25		55			55
Link Distance (ft)	219		556			396
Travel Time (s)	6.0		6.9			4.9
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	2%	1%	0%	2%
Adj. Flow (vph)	0	208	1521	152	0	2009
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	208	1673	0	0	2009
Enter Blocked Intersection	No	No	Yes	No	Yes	Yes
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		8			8
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.85	0.85	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other  
 Control Type: Unsignalized

Intersection						
Int Delay, s/veh	2.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗ ↑↑↑	↑↑↑			↑↑↑
Traffic Vol, veh/h	0	204	1491	149	0	1969
Future Vol, veh/h	0	204	1491	149	0	1969
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Free	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	3	2	1	0	2
Mvmt Flow	0	208	1521	152	0	2009

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	-	761	0	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.16	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.93	-	-	-	-
Pot Cap-1 Maneuver	0	297	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	297	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	41.2	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 297	-
HCM Lane V/C Ratio	- 0.701	-
HCM Control Delay (s)	- 41.2	-
HCM Lane LOS	- E	-
HCM 95th %tile Q(veh)	- 4.9	-

Lanes, Volumes, Timings

2025 Future Base Configuration

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road Saturday Midday



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↔			↑↑	↗		↑↑	
Traffic Volume (vph)	143	415	141	393	300	136	0	1485	210	0	1435	0
Future Volume (vph)	143	415	141	393	300	136	0	1485	210	0	1435	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	12	12	12	12	12	12	12
Storage Length (ft)	0		0	280		0	0		0	0		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	25			65			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.963				0.850			
Flt Protected	0.950			0.950	0.989							
Satd. Flow (prot)	1711	1766	1615	1557	3040	0	0	3539	1538	0	3539	0
Flt Permitted	0.950			0.950	0.989							
Satd. Flow (perm)	1711	1766	1615	1557	3040	0	0	3539	1538	0	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			99		25				131			
Link Speed (mph)		40			35			55			55	
Link Distance (ft)		194			452			396			265	
Travel Time (s)		3.3			8.8			4.9			3.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	4%	0%	2%	7%	2%	0%	2%	5%	0%	2%	0%
Adj. Flow (vph)	151	437	148	414	316	143	0	1563	221	0	1511	0
Shared Lane Traffic (%)				30%								
Lane Group Flow (vph)	151	437	148	290	583	0	0	1563	221	0	1511	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			8			8	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.04	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	20		9	15		9	15		9
Number of Detectors	1	1	1	1	1			2	2		2	
Detector Template												
Leading Detector (ft)	50	50	50	57	57			206	206		236	
Trailing Detector (ft)	-10	-10	-10	-10	-10			0	0		0	
Detector 1 Position(ft)	-10	-10	-10	-10	-10			0	0		0	
Detector 1 Size(ft)	60	60	60	67	67			40	40		40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Detector 2 Position(ft)								200	200		230	
Detector 2 Size(ft)								6	6		6	
Detector 2 Type								Cl+Ex	Cl+Ex		Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0	0.0		0.0	
Turn Type	Split	NA	Perm	Split	NA			NA	Perm		NA	

Lanes, Volumes, Timings

2025 Future Base Configuration

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road Saturday Midday

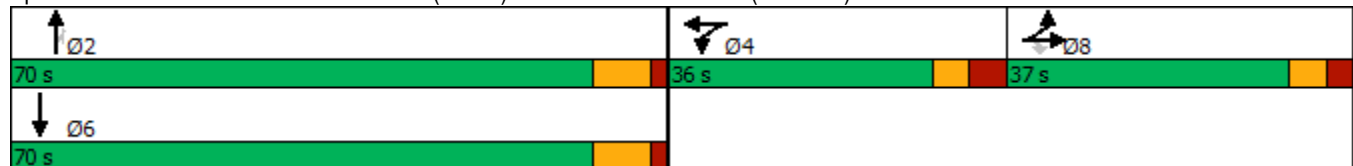


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	8	8		4	4			2			6	
Permitted Phases			8						2			
Detector Phase	8	8	8	4	4			2	2		6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0			7.0	7.0		7.0	
Minimum Split (s)	14.0	14.0	14.0	15.0	15.0			15.0	15.0		15.0	
Total Split (s)	37.0	37.0	37.0	36.0	36.0			70.0	70.0		70.0	
Total Split (%)	25.9%	25.9%	25.9%	25.2%	25.2%			49.0%	49.0%		49.0%	
Maximum Green (s)	30.0	30.0	30.0	28.0	28.0			62.0	62.0		62.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0			6.0	6.0		6.0	
All-Red Time (s)	3.0	3.0	3.0	4.0	4.0			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	8.0	8.0			8.0	8.0		8.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Recall Mode	Min	Min	Min	Min	Min			Min	Min		Min	

Intersection Summary

Area Type:	Other
Cycle Length:	143
Actuated Cycle Length:	142.6
Natural Cycle:	150
Control Type:	Actuated-Uncoordinated

Splits and Phases: 2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road



HCM 6th Signalized Intersection Summary

2025 Future Base Configuration

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road Saturday Midday



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↔			↑↑	↗		↑↑	
Traffic Volume (veh/h)	143	415	141	393	300	136	0	1485	210	0	1435	0
Future Volume (veh/h)	143	415	141	393	300	136	0	1485	210	0	1435	0
Initial Q (Qb), 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	1870	1841	1900	1870	1796	1870	0	1870	1826	0	1870	0
Adj Flow Rate, veh/h	151	437	148	291	488	143	0	1563	221	0	1511	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	4	0	2	7	2	0	2	5	0	2	0
Cap, veh/h	374	386	338	348	522	152	0	1542	671	0	1542	0
Arrive On Green	0.21	0.21	0.21	0.20	0.20	0.20	0.00	0.43	0.43	0.00	0.43	0.00
Sat Flow, veh/h	1781	1841	1610	1781	2674	778	0	3647	1547	0	3741	0
Grp Volume(v), veh/h	151	437	148	291	327	304	0	1563	221	0	1511	0
Grp Sat Flow(s),veh/h/ln	1781	1841	1610	1781	1796	1656	0	1777	1547	0	1777	0
Q Serve(g_s), s	10.5	30.0	11.4	22.5	25.6	25.9	0.0	62.0	13.5	0.0	59.9	0.0
Cycle Q Clear(g_c), s	10.5	30.0	11.4	22.5	25.6	25.9	0.0	62.0	13.5	0.0	59.9	0.0
Prop In Lane	1.00		1.00	1.00		0.47	0.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	374	386	338	348	351	324	0	1542	671	0	1542	0
V/C Ratio(X)	0.40	1.13	0.44	0.84	0.93	0.94	0.00	1.01	0.33	0.00	0.98	0.00
Avail Cap(c_a), veh/h	374	386	338	349	352	324	0	1542	671	0	1542	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(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	48.7	56.5	49.1	55.3	56.6	56.7	0.0	40.5	26.7	0.0	39.9	0.0
Incr Delay (d2), s/veh	0.3	86.4	0.3	15.2	30.4	34.1	0.0	26.4	0.1	0.0	18.3	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	8.2	33.0	8.1	17.1	20.7	19.9	0.0	40.4	8.4	0.0	36.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.0	142.9	49.5	70.5	87.0	90.8	0.0	66.9	26.8	0.0	58.1	0.0
LnGrp LOS	D	F	D	E	F	F	A	F	C	A	E	A
Approach Vol, veh/h		736			922			1784			1511	
Approach Delay, s/veh		104.8			83.0			61.9			58.1	
Approach LOS		F			F			E			E	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		70.0		35.9		70.0		37.0				
Change Period (Y+Rc), s		8.0		8.0		8.0		7.0				
Max Green Setting (Gmax), s		62.0		28.0		62.0		30.0				
Max Q Clear Time (g_c+I1), s		64.0		27.9		61.9		32.0				
Green Ext Time (p_c), s		0.0		0.0		0.1		0.0				

Intersection Summary

HCM 6th Ctrl Delay	71.1
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

Lanes, Volumes, Timings

2025 Future Base Configuration

3: Shell Driveway/U.S. 1 Jughandle & Franklin Corner Road (C.R. 546)

Saturday Midday



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑			↕			↕	↗
Traffic Volume (vph)	0	508	7	0	300	0	0	0	5	186	1	107
Future Volume (vph)	0	508	7	0	300	0	0	0	5	186	1	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	12	12	16	16	16	16	16	12
Grade (%)		0%			0%			-3%			1%	
Storage Length (ft)	200		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998						0.865				0.850
Flt Protected											0.953	
Satd. Flow (prot)	0	4860	0	0	3471	0	0	1891	0	0	1964	1560
Flt Permitted											0.953	
Satd. Flow (perm)	0	4860	0	0	3471	0	0	1891	0	0	1964	1560
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		410			194			112			393	
Travel Time (s)		7.0			3.3			3.1			10.7	
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%	3%	0%	0%	4%	0%	0%	0%	0%	4%	0%	3%
Adj. Flow (vph)	0	524	7	0	309	0	0	0	5	192	1	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	531	0	0	309	0	0	5	0	0	193	110
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	2 veh	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.04	1.04	1.00	1.04	1.00	1.00	0.83	0.83	0.83	*1.00	0.85	1.01
Turning Speed (mph)	15		9	15		9	15		9	20		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

\* User Entered Value

**Intersection**

Int Delay, s/veh 3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑				↑↑			↔			↑	↗
Traffic Vol, veh/h	0	508	7	0	300	0	0	0	5	186	1	107
Future Vol, veh/h	0	508	7	0	300	0	0	0	5	186	1	107
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	-3	-	-	1	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	3	0	0	4	0	0	0	0	4	0	3
Mvmt Flow	0	524	7	0	309	0	0	0	5	192	1	110

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	531	0	0	683	837	266	519	840	155
Stage 1	-	-	-	-	-	-	528	528	-	309	309	-
Stage 2	-	-	-	-	-	-	155	309	-	210	531	-
Critical Hdwy	-	-	-	5.3	-	-	6.35	5.9	6.8	7.23	6.7	7.06
Critical Hdwy Stg 1	-	-	-	-	-	-	6.7	4.9	-	6.78	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.9	4.9	-	6.98	5.7	-
Follow-up Hdwy	-	-	-	3.1	-	-	3.65	4	3.9	3.69	4	3.33
Pot Cap-1 Maneuver	0	-	-	662	-	0	410	351	643	444	290	856
Stage 1	0	-	-	-	-	0	477	580	-	636	652	-
Stage 2	0	-	-	-	-	0	827	698	-	722	514	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	662	-	-	356	351	643	440	290	856
Mov Cap-2 Maneuver	-	-	-	-	-	-	408	446	-	506	391	-
Stage 1	-	-	-	-	-	-	477	580	-	636	652	-
Stage 2	-	-	-	-	-	-	719	698	-	716	514	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	0		0		10.6		14.1	
HCM LOS					B		B	

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	643	-	-	662	-	505	856
HCM Lane V/C Ratio	0.008	-	-	-	-	0.382	0.129
HCM Control Delay (s)	10.6	-	-	0	-	16.5	9.8
HCM Lane LOS	B	-	-	A	-	C	A
HCM 95th %tile Q(veh)	0	-	-	0	-	1.8	0.4



Lanes, Volumes, Timings  
4: Greenberg Road & Wawa Driveway/Bakersville Road

2025 Future Base Configuration  
Saturday Midday



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕		↕
Traffic Volume (vph)	60	7	0	0	30	86	35	80	5	108	0	43
Future Volume (vph)	60	7	0	0	30	86	35	80	5	108	0	43
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	13	14	14	13	12	12
Grade (%)		0%			1%			0%			0%	
Storage Length (ft)	0		0	0		0	160		0	0		130
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			85			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.900			0.991				0.850
Flt Protected		0.957					0.950			0.950		
Satd. Flow (prot)	0	1786	0	0	1701	0	1811	1954	0	1847	0	1615
Flt Permitted		0.957					0.950			0.950		
Satd. Flow (perm)	0	1786	0	0	1701	0	1811	1954	0	1847	0	1615
Link Speed (mph)		25			25			25				25
Link Distance (ft)		123			65			359				304
Travel Time (s)		3.4			1.8			9.8				8.3
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 (%)	2%	0%	0%	0%	0%	0%	3%	3%	0%	1%	0%	0%
Adj. Flow (vph)	67	8	0	0	33	96	39	89	6	120	0	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	75	0	0	129	0	39	95	0	120	0	48
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			13				13
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	0.96	0.92	0.92	0.96	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Lanes, Volumes, Timings  
5: Greenberg Road & Bakersville Road

2025 Future Base Configuration  
Saturday MIDDAY



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	228	17	25	201	134	199
Future Volume (vph)	228	17	25	201	134	199
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	14	14	14	14
Grade (%)	0%			-1%	0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.991				0.919	
Flt Protected	0.956			0.994		
Satd. Flow (prot)	1962	0	0	1989	1844	0
Flt Permitted	0.956			0.994		
Satd. Flow (perm)	1962	0	0	1989	1844	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	149			304	324	
Travel Time (s)	4.1			8.3	8.8	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	0%	0%	2%	1%	1%
Adj. Flow (vph)	238	18	26	209	140	207
Shared Lane Traffic (%)						
Lane Group Flow (vph)	256	0	0	235	347	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	15			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.91	0.91	0.92	0.92
Turning Speed (mph)	15	9	15			9
Sign Control	Yield			Yield	Yield	
<b>Intersection Summary</b>						
Area Type:	Other					
Control Type:	Roundabout					

Intersection			
Intersection Delay, s/veh	5.1		
Intersection LOS	A		
Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	256	235	347
Demand Flow Rate, veh/h	258	239	350
Vehicles Circulating, veh/h	141	240	26
Vehicles Exiting, veh/h	235	159	453
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.9	5.5	5.0
Approach LOS	A	A	A
Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	258	239	350
Cap Entry Lane, veh/h	1195	1080	1344
Entry HV Adj Factor	0.992	0.983	0.990
Flow Entry, veh/h	256	235	347
Cap Entry, veh/h	1186	1061	1331
V/C Ratio	0.216	0.221	0.260
Control Delay, s/veh	4.9	5.5	5.0
LOS	A	A	A
95th %tile Queue, veh	1	1	1

Lanes, Volumes, Timings  
6: Greenberg Road & Internal Loop Road

2025 Future Base Configuration  
Saturday MIDDAY



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	12	2	4	425	331	29
Future Volume (vph)	12	2	4	425	331	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	14	14	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.981				0.989	
Flt Protected	0.959					
Satd. Flow (prot)	1768	0	0	2007	1975	0
Flt Permitted	0.959					
Satd. Flow (perm)	1768	0	0	2007	1975	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	401			324	282	
Travel Time (s)	10.9			8.8	7.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	17%	0%	0%	1%	1%	7%
Adj. Flow (vph)	12	2	4	438	341	30
Shared Lane Traffic (%)						
Lane Group Flow (vph)	14	0	0	442	371	0
Enter Blocked Intersection	No	No	No	Yes	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	16			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.85	0.85	0.92	0.92	0.92	0.92
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other  
Control Type: Unsignalized

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	2	4	425	331	29
Future Vol, veh/h	12	2	4	425	331	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	17	0	0	1	1	7
Mvmt Flow	12	2	4	438	341	30

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	802	356	371	0	-	0
Stage 1	356	-	-	-	-	-
Stage 2	446	-	-	-	-	-
Critical Hdwy	6.57	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.57	-	-	-	-	-
Critical Hdwy Stg 2	5.57	-	-	-	-	-
Follow-up Hdwy	3.653	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	333	693	1199	-	-	-
Stage 1	677	-	-	-	-	-
Stage 2	615	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	332	693	1199	-	-	-
Mov Cap-2 Maneuver	332	-	-	-	-	-
Stage 1	674	-	-	-	-	-
Stage 2	615	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.4	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1199	-	359	-	-
HCM Lane V/C Ratio	0.003	-	0.04	-	-
HCM Control Delay (s)	8	0	15.4	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Lanes, Volumes, Timings  
7: Greenberg Road & Bakers Basin Road

2025 Future Base Configuration  
Saturday MIDDAY

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↖	↗
Traffic Volume (vph)	368	257	103	503	326	111
Future Volume (vph)	368	257	103	503	326	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	11	16	10	11
Storage Length (ft)		220	110		0	115
Storage Lanes		1	1		1	1
Taper Length (ft)			55		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1749	1615	1662	2091	1668	1561
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1749	1615	1662	2091	1668	1561
Link Speed (mph)	35			35	25	
Link Distance (ft)	452			328	282	
Travel Time (s)	8.8			6.4	7.7	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	5%	0%	5%	3%	1%	0%
Adj. Flow (vph)	383	268	107	524	340	116
Shared Lane Traffic (%)						
Lane Group Flow (vph)	383	268	107	524	340	116
Enter Blocked Intersection	No	No	No	No	Yes	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			11	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.00	1.04	0.85	*1.04	1.04
Turning Speed (mph)		9	20		20	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

\* User Entered Value

Intersection						
Int Delay, s/veh	73.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↘	↗
Traffic Vol, veh/h	368	257	103	503	326	111
Future Vol, veh/h	368	257	103	503	326	111
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	220	110	-	0	115
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	5	0	5	3	1	0
Mvmt Flow	383	268	107	524	340	116

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	651	0	1121
Stage 1	-	-	-	-	383
Stage 2	-	-	-	-	738
Critical Hdwy	-	-	4.15	-	6.41
Critical Hdwy Stg 1	-	-	-	-	5.41
Critical Hdwy Stg 2	-	-	-	-	5.41
Follow-up Hdwy	-	-	2.245	-	3.509
Pot Cap-1 Maneuver	-	-	921	-	~ 229
Stage 1	-	-	-	-	691
Stage 2	-	-	-	-	475
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	921	-	~ 202
Mov Cap-2 Maneuver	-	-	-	-	~ 202
Stage 1	-	-	-	-	691
Stage 2	-	-	-	-	420

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	277.7
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	202	669	-	-	921	-
HCM Lane V/C Ratio	1.681	0.173	-	-	0.116	-
HCM Control Delay (s)	\$ 368.3	11.5	-	-	9.4	-
HCM Lane LOS	F	B	-	-	A	-
HCM 95th %tile Q(veh)	22.8	0.6	-	-	0.4	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Lanes, Volumes, Timings

2025 Future Base Configuration

8: Wawa Driveway/Internal Loop Road & Bakersville Road

Saturday MIDDAY



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	4	141	19	96	128	0	36	5	104	0	8	44
Future Volume (vph)	4	141	19	96	128	0	36	5	104	0	8	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	15	15	15	15	15	12	12	12
Grade (%)		-1%			0%			-1%			0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.984						0.903			0.885	
Flt Protected		0.999			0.979			0.988				
Satd. Flow (prot)	0	2047	0	0	2017	0	0	1860	0	0	1653	0
Flt Permitted		0.999			0.979			0.988				
Satd. Flow (perm)	0	2047	0	0	2017	0	0	1860	0	0	1653	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		55			149			115			401	
Travel Time (s)		1.5			4.1			3.1			10.9	
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%	1%	0%	2%	1%	0%	3%	0%	0%	0%	0%	2%
Adj. Flow (vph)	4	145	20	99	132	0	37	5	107	0	8	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	169	0	0	231	0	0	149	0	0	53	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized



HCM 6th TWSC  
 8: Wawa Driveway/Internal Loop Road & Bakersville Road

2025 Future Base Configuration  
 Saturday Midday

Intersection												
Int Delay, s/veh	5.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	141	19	96	128	0	36	5	104	0	8	44
Future Vol, veh/h	4	141	19	96	128	0	36	5	104	0	8	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-1	-	-	0	-	-	-1	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	1	0	2	1	0	3	0	0	0	0	2
Mvmt Flow	4	145	20	99	132	0	37	5	107	0	8	45

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	132	0	0	165	0	0	520	493	155	549	503	132
Stage 1	-	-	-	-	-	-	163	163	-	330	330	-
Stage 2	-	-	-	-	-	-	357	330	-	219	173	-
Critical Hdwy	4.1	-	-	4.12	-	-	6.93	6.3	6.1	7.1	6.5	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.93	5.3	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.93	5.3	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.218	-	-	3.527	4	3.3	3.5	4	3.318
Pot Cap-1 Maneuver	1466	-	-	1413	-	-	479	493	900	450	474	917
Stage 1	-	-	-	-	-	-	844	774	-	687	649	-
Stage 2	-	-	-	-	-	-	672	661	-	788	760	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1466	-	-	1413	-	-	422	454	900	369	437	917
Mov Cap-2 Maneuver	-	-	-	-	-	-	422	454	-	369	437	-
Stage 1	-	-	-	-	-	-	841	772	-	685	600	-
Stage 2	-	-	-	-	-	-	582	611	-	687	758	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			3.3			11.7			9.9		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	684	1466	-	-	1413	-	-	784
HCM Lane V/C Ratio	0.219	0.003	-	-	0.07	-	-	0.068
HCM Control Delay (s)	11.7	7.5	0	-	7.7	0	-	9.9
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.8	0	-	-	0.2	-	-	0.2

Lanes, Volumes, Timings  
 9: Bakersville Road & CFA East Access

2025 Future Base Configuration  
 Saturday MIDDAY



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	35	148	64	144	16	15
Future Volume (vph)	35	148	64	144	16	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	12	12
Grade (%)		-1%	0%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.906		0.935	
Flt Protected		0.991			0.975	
Satd. Flow (prot)	0	2065	1882	0	1732	0
Flt Permitted		0.991			0.975	
Satd. Flow (perm)	0	2065	1882	0	1732	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		71	55		121	
Travel Time (s)		1.9	1.5		3.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	1%	2%	0%	0%	0%
Adj. Flow (vph)	37	156	67	152	17	16
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	193	219	0	33	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.88	0.88	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
<b>Intersection Summary</b>						
Area Type:	Other					
Control Type:	Unsignalized					

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Vol, veh/h	35	148	64	144	16	15
Future Vol, veh/h	35	148	64	144	16	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-1	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	1	2	0	0	0
Mvmt Flow	37	156	67	152	17	16

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	219	0	-	0	373
Stage 1	-	-	-	-	143
Stage 2	-	-	-	-	230
Critical Hdwy	4.1	-	-	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	2.2	-	-	-	3.5
Pot Cap-1 Maneuver	1362	-	-	-	632
Stage 1	-	-	-	-	889
Stage 2	-	-	-	-	813
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1362	-	-	-	613
Mov Cap-2 Maneuver	-	-	-	-	613
Stage 1	-	-	-	-	862
Stage 2	-	-	-	-	813

Approach	EB	WB	SB
HCM Control Delay, s	1.5	0	10.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1362	-	-	-	728
HCM Lane V/C Ratio	0.027	-	-	-	0.045
HCM Control Delay (s)	7.7	0	-	-	10.2
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Lanes, Volumes, Timings  
 10: Bakersville Road & CFA West Access

2025 Future Base Configuration  
 Saturday MIDDAY



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Volume (vph)	19	82	51	28	101	57
Future Volume (vph)	19	82	51	28	101	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	16	16
Grade (%)		0%	1%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.952		0.951	
Flt Protected		0.991			0.969	
Satd. Flow (prot)	0	2054	1954	0	1972	0
Flt Permitted		0.991			0.969	
Satd. Flow (perm)	0	2054	1954	0	1972	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		219	71		111	
Travel Time (s)		6.0	1.9		3.0	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles (%)	0%	1%	2%	0%	1%	0%
Adj. Flow (vph)	25	109	68	37	135	76
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	134	105	0	211	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		16	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.89	0.89	0.85	0.85
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
<b>Intersection Summary</b>						
Area Type:	Other					
Control Type:	Unsignalized					

Intersection						
Int Delay, s/veh	5.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	19	82	51	28	101	57
Future Vol, veh/h	19	82	51	28	101	57
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	1	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	0	1	2	0	1	0
Mvmt Flow	25	109	68	37	135	76

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	105	0	-	0	246 87
Stage 1	-	-	-	-	87 -
Stage 2	-	-	-	-	159 -
Critical Hdwy	4.1	-	-	-	6.41 6.2
Critical Hdwy Stg 1	-	-	-	-	5.41 -
Critical Hdwy Stg 2	-	-	-	-	5.41 -
Follow-up Hdwy	2.2	-	-	-	3.509 3.3
Pot Cap-1 Maneuver	1499	-	-	-	745 977
Stage 1	-	-	-	-	939 -
Stage 2	-	-	-	-	872 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1499	-	-	-	732 977
Mov Cap-2 Maneuver	-	-	-	-	732 -
Stage 1	-	-	-	-	922 -
Stage 2	-	-	-	-	872 -

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1499	-	-	-	805
HCM Lane V/C Ratio	0.017	-	-	-	0.262
HCM Control Delay (s)	7.4	0	-	-	11.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	1

**SIMTRAFFIC**



Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	11:57	11:57	11:57	11:57	11:57	11:57
End Time	1:00	1:00	1:00	1:00	1:00	1:00
Total Time (min)	63	63	63	63	63	63
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	5188	5020	4880	4994	4939	5002
Vehs Exited	5101	4995	4714	4864	4868	4909
Starting Vehs	95	98	79	89	105	89
Ending Vehs	182	123	245	219	176	188
Travel Distance (mi)	1463	1420	1371	1391	1402	1410
Travel Time (hr)	169.4	255.1	281.6	329.2	224.8	252.0
Total Delay (hr)	119.9	207.1	235.2	282.3	177.0	204.3
Total Stops	5535	5763	5222	5510	5846	5574
Fuel Used (gal)	83.5	101.6	106.0	117.0	94.9	100.6

Interval #0 Information Seeding

Start Time	11:57
End Time	12:00
Total Time (min)	3
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	12:00
End Time	12:15
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1259	1314	1306	1297	1220	1279
Vehs Exited	1223	1256	1206	1226	1173	1217
Starting Vehs	95	98	79	89	105	89
Ending Vehs	131	156	179	160	152	153
Travel Distance (mi)	352	368	367	356	349	358
Travel Time (hr)	29.8	39.4	33.6	33.5	30.7	33.4
Total Delay (hr)	17.7	27.0	21.2	21.6	18.8	21.3
Total Stops	1292	1626	1363	1306	1377	1389
Fuel Used (gal)	17.6	20.4	18.7	18.3	17.6	18.5



**Interval #2 Information**

Start Time	12:15
End Time	12:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1416	1445	1354	1296	1417	1388
Vehs Exited	1357	1393	1358	1286	1370	1353
Starting Vehs	131	156	179	160	152	153
Ending Vehs	190	208	175	170	199	188
Travel Distance (mi)	382	393	377	359	387	380
Travel Time (hr)	40.3	48.4	42.4	51.2	44.7	45.4
Total Delay (hr)	27.5	35.1	29.7	39.1	31.7	32.6
Total Stops	1543	1564	1452	1395	1663	1522
Fuel Used (gal)	21.5	23.1	21.5	22.7	22.3	22.2

**Interval #3 Information**

Start Time	12:30
End Time	12:45
Total Time (min)	15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1277	1151	1007	1159	1208	1159
Vehs Exited	1304	1220	1056	1166	1238	1197
Starting Vehs	190	208	175	170	199	188
Ending Vehs	163	139	126	163	169	148
Travel Distance (mi)	376	342	299	332	354	341
Travel Time (hr)	45.8	70.3	79.0	102.5	54.9	70.5
Total Delay (hr)	33.2	58.8	68.8	91.3	42.9	59.0
Total Stops	1340	1376	1164	1390	1502	1351
Fuel Used (gal)	21.8	26.4	27.3	33.4	23.8	26.5

**Interval #4 Information**

Start Time	12:45
End Time	1:00
Total Time (min)	15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1236	1110	1213	1242	1094	1176
Vehs Exited	1217	1126	1094	1186	1087	1140
Starting Vehs	163	139	126	163	169	148
Ending Vehs	182	123	245	219	176	188
Travel Distance (mi)	353	317	329	344	313	331
Travel Time (hr)	53.5	97.0	126.6	141.9	94.5	102.7
Total Delay (hr)	41.6	86.3	115.4	130.1	83.6	91.4
Total Stops	1360	1197	1243	1419	1304	1300
Fuel Used (gal)	22.6	31.6	38.6	42.6	31.1	33.3

4: Greenberg Road & Wawa Driveway/Bakersville Road Performance by lane

Lane	EB	WB	NB	NB	SB	SB	All
Movements Served	LT	TR	L	TR	L	R	
Denied Del/Veh (s)							0.6
Total Del/Veh (s)	4.7	4.6	4.2	6.0	0.4	0.3	3.8

7: Greenberg Road & Bakers Basin Road Performance by lane

Lane	EB	EB	WB	WB	NB	NB	All
Movements Served	T	R	L	T	L	R	
Denied Del/Veh (s)							0.8
Total Del/Veh (s)	5.1	2.2	7.9	1.3	54.8	4.2	15.9

Total Zone Performance

Denied Del/Veh (s)				1.7			
Total Del/Veh (s)				1087.0			

Intersection: 4: Greenberg Road & Wawa Driveway/Bakersville Road

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LT	TR	L	TR	L	R
Maximum Queue (ft)	82	61	55	59	3	47
Average Queue (ft)	34	34	24	17	0	2
95th Queue (ft)	63	54	44	41	2	19
Link Distance (ft)	69	300		301	210	
Upstream Blk Time (%)	0					
Queuing Penalty (veh)	0					
Storage Bay Dist (ft)			160			130
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 7: Greenberg Road & Bakers Basin Road

Movement	EB	EB	WB	NB	NB
Directions Served	T	R	L	L	R
Maximum Queue (ft)	10	45	102	303	150
Average Queue (ft)	0	3	35	207	103
95th Queue (ft)	7	20	76	344	204
Link Distance (ft)	352			200	
Upstream Blk Time (%)				35	
Queuing Penalty (veh)				164	
Storage Bay Dist (ft)		220	110		115
Storage Blk Time (%)			0	55	0
Queuing Penalty (veh)			0	58	0

Zone Summary

Zone wide Queuing Penalty: 223

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	4:55	4:55	4:55	4:55	4:55	4:55
End Time	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	5699	5348	5761	5478	5466	5547
Vehs Exited	5599	5282	5673	5426	5396	5474
Starting Vehs	109	153	143	150	119	133
Ending Vehs	209	219	231	202	189	209
Travel Distance (mi)	1703	1580	1709	1633	1621	1649
Travel Time (hr)	327.9	444.2	302.2	309.0	324.5	341.6
Total Delay (hr)	273.5	393.5	247.8	256.7	273.0	288.9
Total Stops	6749	6177	6760	6323	6446	6491
Fuel Used (gal)	128.4	150.7	122.6	121.6	124.7	129.6

Interval #0 Information Seeding

Start Time	4:55
End Time	5:00
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1418	1422	1401	1414	1402	1412
Vehs Exited	1358	1402	1368	1385	1354	1374
Starting Vehs	109	153	143	150	119	133
Ending Vehs	169	173	176	179	167	172
Travel Distance (mi)	422	422	413	422	416	419
Travel Time (hr)	44.9	47.7	54.2	44.1	43.2	46.8
Total Delay (hr)	31.4	34.2	41.2	30.7	30.0	33.5
Total Stops	1542	1547	1543	1578	1559	1552
Fuel Used (gal)	23.2	23.9	25.2	23.0	22.4	23.5

SimTraffic Simulation Summary  
 Weekday Afternoon

2025 Future Base Configuration

Interval #2 Information

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

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1562	1458	1545	1488	1521	1515
Vehs Exited	1499	1425	1476	1462	1456	1463
Starting Vehs	169	173	176	179	167	172
Ending Vehs	232	206	245	205	232	222
Travel Distance (mi)	441	422	443	435	430	434
Travel Time (hr)	78.4	67.9	64.7	60.3	69.5	68.2
Total Delay (hr)	64.2	54.3	50.5	46.3	55.8	54.2
Total Stops	1903	1689	1761	1723	1820	1774
Fuel Used (gal)	31.9	28.7	28.6	27.4	29.4	29.2

Interval #3 Information

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

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1396	1074	1431	1314	1384	1319
Vehs Exited	1388	1087	1432	1328	1368	1319
Starting Vehs	232	206	245	205	232	222
Ending Vehs	240	193	244	191	248	219
Travel Distance (mi)	423	323	430	396	419	398
Travel Time (hr)	99.2	132.7	89.9	82.9	90.2	99.0
Total Delay (hr)	85.7	122.2	76.2	70.3	77.0	86.3
Total Stops	1736	1301	1738	1578	1666	1601
Fuel Used (gal)	36.1	40.5	34.2	31.4	33.9	35.2

Interval #4 Information

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

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1323	1394	1384	1262	1159	1303
Vehs Exited	1354	1368	1397	1251	1218	1317
Starting Vehs	240	193	244	191	248	219
Ending Vehs	209	219	231	202	189	209
Travel Distance (mi)	417	413	422	379	356	398
Travel Time (hr)	105.3	196.0	93.4	121.7	121.6	127.6
Total Delay (hr)	92.1	182.7	79.9	109.3	110.2	114.9
Total Stops	1568	1640	1718	1444	1401	1555
Fuel Used (gal)	37.2	57.6	34.6	39.7	38.9	41.6

4: Greenberg Road & Wawa Driveway/Bakersville Road Performance by lane

Lane	EB	WB	NB	NB	SB	SB	All
Movements Served	LT	TR	L	TR	L	R	
Denied Del/Veh (s)							0.5
Total Del/Veh (s)	5.7	12.9	4.0	11.2	0.4	0.2	7.8

7: Greenberg Road & Bakers Basin Road Performance by lane

Lane	EB	EB	WB	WB	NB	NB	All
Movements Served	T	R	L	T	L	R	
Denied Del/Veh (s)							0.9
Total Del/Veh (s)	3.1	1.4	7.5	2.3	70.0	6.5	14.6

Total Zone Performance

Denied Del/Veh (s)							1.8
Total Del/Veh (s)							840.5

Queuing and Blocking Report  
Weekday Afternoon

2025 Future Base Configuration

Intersection: 4: Greenberg Road & Wawa Driveway/Bakersville Road

Movement	EB	WB	NB	NB	SB
Directions Served	LT	TR	L	TR	R
Maximum Queue (ft)	62	92	40	65	10
Average Queue (ft)	23	37	16	16	0
95th Queue (ft)	47	84	35	59	5
Link Distance (ft)	69	300		301	
Upstream Blk Time (%)	1				
Queuing Penalty (veh)	0				
Storage Bay Dist (ft)			160		130
Storage Blk Time (%)				1	
Queuing Penalty (veh)				0	

Intersection: 7: Greenberg Road & Bakers Basin Road

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	21	46	103	176	283	150
Average Queue (ft)	1	6	28	18	184	85
95th Queue (ft)	10	30	70	102	323	192
Link Distance (ft)	352			296	200	
Upstream Blk Time (%)				0	30	
Queuing Penalty (veh)				0	112	
Storage Bay Dist (ft)		220	110			115
Storage Blk Time (%)				1	50	
Queuing Penalty (veh)				1	44	

Zone Summary

Zone wide Queuing Penalty: 157

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	11:55	11:55	11:55	11:55	11:55	11:55
End Time	1:00	1:00	1:00	1:00	1:00	1:00
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	4643	5020	4942	4984	4789	4874
Vehs Exited	4620	4940	4930	4950	4705	4830
Starting Vehs	115	119	144	109	120	115
Ending Vehs	138	199	156	143	204	166
Travel Distance (mi)	1378	1478	1475	1486	1418	1447
Travel Time (hr)	450.0	379.8	280.7	285.9	488.1	376.9
Total Delay (hr)	404.9	331.5	232.3	236.9	441.5	329.4
Total Stops	5339	6304	5880	5692	6018	5847
Fuel Used (gal)	145.5	133.2	109.5	110.4	155.7	130.8

Interval #0 Information Seeding

Start Time	11:55
End Time	12:00
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	12:00
End Time	12:15
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1297	1391	1304	1286	1328	1319
Vehs Exited	1224	1290	1268	1254	1215	1249
Starting Vehs	115	119	144	109	120	115
Ending Vehs	188	220	180	141	233	185
Travel Distance (mi)	378	406	388	379	383	387
Travel Time (hr)	38.9	50.3	39.4	29.9	37.5	39.2
Total Delay (hr)	26.6	37.1	26.8	17.4	25.1	26.6
Total Stops	1495	1781	1522	1301	1474	1516
Fuel Used (gal)	20.5	24.2	20.9	18.2	20.1	20.8



**Interval #2 Information**

Start Time	12:15
End Time	12:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1128	1316	1360	1335	1209	1267
Vehs Exited	1124	1320	1337	1286	1221	1255
Starting Vehs	188	220	180	141	233	185
Ending Vehs	192	216	203	190	221	200
Travel Distance (mi)	334	384	403	388	356	373
Travel Time (hr)	77.0	73.0	46.0	50.5	93.2	68.0
Total Delay (hr)	66.0	60.4	32.9	37.8	81.5	55.7
Total Stops	1188	1543	1687	1595	1588	1521
Fuel Used (gal)	28.0	28.9	23.1	23.4	32.5	27.2

**Interval #3 Information**

Start Time	12:30
End Time	12:45
Total Time (min)	15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1159	1097	1159	1191	1090	1137
Vehs Exited	1176	1148	1184	1200	1094	1161
Starting Vehs	192	216	203	190	221	200
Ending Vehs	175	165	178	181	217	181
Travel Distance (mi)	339	331	351	363	326	342
Travel Time (hr)	148.5	108.9	77.6	86.5	164.4	117.2
Total Delay (hr)	137.4	98.1	66.0	74.5	153.6	105.9
Total Stops	1390	1474	1418	1401	1443	1424
Fuel Used (gal)	44.5	35.3	28.6	30.8	47.9	37.4

**Interval #4 Information**

Start Time	12:45
End Time	1:00
Total Time (min)	15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1059	1216	1119	1172	1162	1149
Vehs Exited	1096	1182	1141	1210	1175	1160
Starting Vehs	175	165	178	181	217	181
Ending Vehs	138	199	156	143	204	166
Travel Distance (mi)	326	356	334	357	353	345
Travel Time (hr)	185.6	147.7	117.7	119.0	192.9	152.6
Total Delay (hr)	174.9	135.9	106.6	107.2	181.3	141.2
Total Stops	1266	1506	1253	1395	1513	1387
Fuel Used (gal)	52.5	44.8	36.9	38.0	55.2	45.5

4: Greenberg Road & Wawa Driveway/Bakersville Road Performance by lane

Lane	EB	WB	NB	NB	SB	SB	All
Movements Served	LT	TR	L	TR	L	R	
Denied Del/Veh (s)							0.4
Total Del/Veh (s)	4.6	4.6	4.1	6.5	0.5	0.2	3.7

7: Greenberg Road & Bakers Basin Road Performance by lane

Lane	EB	EB	WB	WB	NB	NB	All
Movements Served	T	R	L	T	L	R	
Denied Del/Veh (s)							0.4
Total Del/Veh (s)	4.3	1.8	7.0	2.0	74.3	5.7	18.1

Total Zone Performance

Denied Del/Veh (s)							1.0
Total Del/Veh (s)							1073.8

Intersection: 4: Greenberg Road & Wawa Driveway/Bakersville Road

Movement	EB	WB	NB	NB	SB
Directions Served	LT	TR	L	TR	R
Maximum Queue (ft)	64	75	31	53	20
Average Queue (ft)	27	35	17	16	1
95th Queue (ft)	49	57	35	39	9
Link Distance (ft)	69	300		301	
Upstream Blk Time (%)	0				
Queuing Penalty (veh)	0				
Storage Bay Dist (ft)			160		130
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 7: Greenberg Road & Bakers Basin Road

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	10	34	78	121	307	150
Average Queue (ft)	0	4	31	9	221	113
95th Queue (ft)	5	20	68	77	351	207
Link Distance (ft)	352			296	200	
Upstream Blk Time (%)				0	49	
Queuing Penalty (veh)				0	215	
Storage Bay Dist (ft)		220	110			115
Storage Blk Time (%)			0	1	67	
Queuing Penalty (veh)			0	1	74	

Zone Summary

Zone wide Queuing Penalty: 290

## Appendix H

# 2025 Future Build Configuration Capacity/Level-of-Service Analysis Worksheets



**SYNCHRO**



Lanes, Volumes, Timings  
 1: Brunswick Avenue (U.S. 1) & Bakersville Road

2025 Future Reconfigured  
 Weekday Middy



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	180	1358	160	0	1770
Future Volume (vph)	0	180	1358	160	0	1770
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	12	12	12	12
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	0.91
Frt		0.865	0.984			
Flt Protected						
Satd. Flow (prot)	0	1791	4596	0	0	4673
Flt Permitted						
Satd. Flow (perm)	0	1791	4596	0	0	4673
Link Speed (mph)	25		55			55
Link Distance (ft)	219		556			396
Travel Time (s)	6.0		6.9			4.9
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	0%	4%	12%	3%	0%	11%
Adj. Flow (vph)	0	182	1372	162	0	1788
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	182	1534	0	0	1788
Enter Blocked Intersection	No	No	Yes	No	Yes	Yes
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		8			8
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.85	0.85	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other

Control Type: Unsignalized



Intersection						
Int Delay, s/veh	1.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗ ↑↑↑	↑↑↑			↑↑↑
Traffic Vol, veh/h	0	180	1358	160	0	1770
Future Vol, veh/h	0	180	1358	160	0	1770
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Free	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	0	4	12	3	0	11
Mvmt Flow	0	182	1372	162	0	1788

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	686	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	7.18	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.94	-
Pot Cap-1 Maneuver	0	331	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %			
Mov Cap-1 Maneuver	-	331	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	28.4	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 331	-
HCM Lane V/C Ratio	- 0.549	-
HCM Control Delay (s)	- 28.4	-
HCM Lane LOS	- D	-
HCM 95th %tile Q(veh)	- 3.1	-

Lanes, Volumes, Timings

2025 Future Reconfigured

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road

Weekday Midday



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↔			↑↑	↗		↑↑	
Traffic Volume (vph)	160	428	177	399	278	95	0	1369	169	0	1194	0
Future Volume (vph)	160	428	177	399	278	95	0	1369	169	0	1194	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	12	12	12	12	12	12	12
Storage Length (ft)	0		0	280		0	0		0	0		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	25			65			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Fr <sub>t</sub>			0.850		0.973				0.850			
Fl <sub>t</sub> Protected	0.950			0.950	0.985							
Satd. Flow (prot)	1694	1733	1553	1512	3030	0	0	3282	1553	0	3223	0
Fl <sub>t</sub> Permitted	0.950			0.950	0.985							
Satd. Flow (perm)	1694	1733	1553	1512	3030	0	0	3282	1553	0	3223	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			99		15				115			
Link Speed (mph)		40			35			55			55	
Link Distance (ft)		194			452			396			265	
Travel Time (s)		3.3			8.8			4.9			3.3	
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 (%)	3%	6%	4%	5%	4%	12%	0%	10%	4%	0%	12%	0%
Adj. Flow (vph)	167	446	184	416	290	99	0	1426	176	0	1244	0
Shared Lane Traffic (%)				41%								
Lane Group Flow (vph)	167	446	184	245	560	0	0	1426	176	0	1244	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			8			8	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.04	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	20		9	15		9	15		9
Number of Detectors	1	1	1	1	1			2	2		2	
Detector Template												
Leading Detector (ft)	50	50	50	57	57			206	206		236	
Trailing Detector (ft)	-10	-10	-10	-10	-10			0	0		0	
Detector 1 Position(ft)	-10	-10	-10	-10	-10			0	0		0	
Detector 1 Size(ft)	60	60	60	67	67			40	40		40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Detector 2 Position(ft)								200	200		230	
Detector 2 Size(ft)								6	6		6	
Detector 2 Type								Cl+Ex	Cl+Ex		Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0	0.0		0.0	
Turn Type	Split	NA	Perm	Split	NA			NA	Perm		NA	

Lanes, Volumes, Timings

2025 Future Reconfigured

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road Weekday Midday

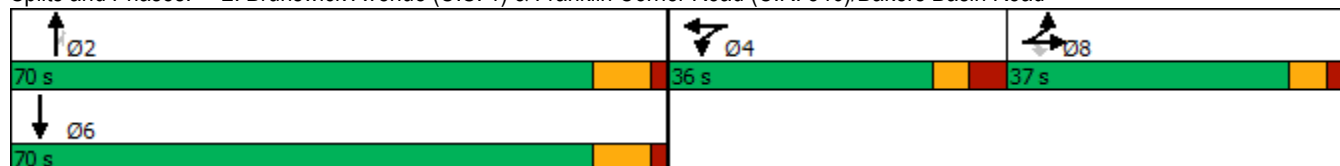


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	8	8		4	4			2				6
Permitted Phases			8						2			
Detector Phase	8	8	8	4	4			2	2			6
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0			7.0	7.0			7.0
Minimum Split (s)	14.0	14.0	14.0	15.0	15.0			15.0	15.0			15.0
Total Split (s)	37.0	37.0	37.0	36.0	36.0			70.0	70.0			70.0
Total Split (%)	25.9%	25.9%	25.9%	25.2%	25.2%			49.0%	49.0%			49.0%
Maximum Green (s)	30.0	30.0	30.0	28.0	28.0			62.0	62.0			62.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0			6.0	6.0			6.0
All-Red Time (s)	3.0	3.0	3.0	4.0	4.0			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	8.0	8.0			8.0	8.0			8.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0	2.0			2.0
Recall Mode	Min	Min	Min	Min	Min			Min	Min			Min

Intersection Summary

Area Type: Other  
 Cycle Length: 143  
 Actuated Cycle Length: 142.3  
 Natural Cycle: 140  
 Control Type: Actuated-Uncoordinated

Splits and Phases: 2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road



HCM 6th Signalized Intersection Summary

2025 Future Reconfigured

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road

Weekday Midday



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	428	177	399	278	95	0	1369	169	0	1194	0
Future Volume (veh/h)	160	428	177	399	278	95	0	1369	169	0	1194	0
Initial Q (Qb), 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	1856	1811	1841	1826	1841	1722	0	1752	1841	0	1722	0
Adj Flow Rate, veh/h	167	446	137	265	502	89	0	1426	147	0	1244	0
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, %	3	6	4	5	4	12	0	10	4	0	12	0
Cap, veh/h	377	387	333	318	556	98	0	1465	687	0	1440	0
Arrive On Green	0.21	0.21	0.21	0.18	0.18	0.18	0.00	0.44	0.44	0.00	0.44	0.00
Sat Flow, veh/h	1767	1811	1560	1739	3047	538	0	3416	1560	0	3444	0
Grp Volume(v), veh/h	167	446	137	265	302	289	0	1426	147	0	1244	0
Grp Sat Flow(s),veh/h/ln	1767	1811	1560	1739	1841	1744	0	1664	1560	0	1636	0
Q Serve(g_s), s	11.5	30.0	10.6	20.6	22.6	22.8	0.0	59.0	8.2	0.0	48.2	0.0
Cycle Q Clear(g_c), s	11.5	30.0	10.6	20.6	22.6	22.8	0.0	59.0	8.2	0.0	48.2	0.0
Prop In Lane	1.00		1.00	1.00		0.31	0.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	377	387	333	318	336	318	0	1465	687	0	1440	0
V/C Ratio(X)	0.44	1.15	0.41	0.83	0.90	0.91	0.00	0.97	0.21	0.00	0.86	0.00
Avail Cap(c_a), veh/h	377	387	333	347	367	348	0	1469	688	0	1444	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(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	48.0	55.3	47.6	55.4	56.2	56.3	0.0	38.5	24.3	0.0	35.5	0.0
Incr Delay (d2), s/veh	0.3	94.6	0.3	13.7	21.8	24.1	0.0	17.3	0.1	0.0	5.4	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	8.8	34.1	7.4	15.5	18.2	17.8	0.0	34.1	5.2	0.0	26.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.3	149.8	47.9	69.1	78.0	80.3	0.0	55.9	24.4	0.0	40.9	0.0
LnGrp LOS	D	F	D	E	E	F	A	E	C	A	D	A
Approach Vol, veh/h		750			856			1573			1244	
Approach Delay, s/veh		108.6			76.0			52.9			40.9	
Approach LOS		F			E			D			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		69.9		33.7		69.9		37.0				
Change Period (Y+Rc), s		8.0		8.0		8.0		7.0				
Max Green Setting (Gmax), s		62.0		28.0		62.0		30.0				
Max Q Clear Time (g_c+I1), s		61.0		24.8		50.2		32.0				
Green Ext Time (p_c), s		0.9		0.9		7.5		0.0				

Intersection Summary


















HCM 6th Ctrl Delay	63.5
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

Lanes, Volumes, Timings  
 3: Shell Driveway/U.S. 1 Jughandle & Franklin Corner Road (C.R. 546)

2025 Future Reconfigured  
 Weekday Middy

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	618	5	0	278	0	2	0	4	143	2	119
Future Volume (vph)	0	618	5	0	278	0	2	0	4	143	2	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	12	12	16	16	16	16	16	12
Grade (%)		0%			0%			-3%			1%	
Storage Length (ft)	200		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999						0.910				0.850
Flt Protected								0.984			0.953	
Satd. Flow (prot)	0	4864	0	0	3438	0	0	1678	0	0	1875	1545
Flt Permitted								0.984			0.953	
Satd. Flow (perm)	0	4864	0	0	3438	0	0	1678	0	0	1875	1545
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		410			194			112			393	
Travel Time (s)		7.0			3.3			3.1			10.7	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	3%	0%	0%	5%	0%	0%	0%	25%	9%	0%	4%
Adj. Flow (vph)	0	665	5	0	299	0	2	0	4	154	2	128
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	670	0	0	299	0	0	6	0	0	156	128
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	2 veh	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.04	1.04	1.00	1.04	1.00	1.00	0.83	0.83	0.83	*1.00	0.85	1.01
Turning Speed (mph)	15		9	15		9	15		9	20		9
Sign Control		Free			Free			Stop			Stop	
<b>Intersection Summary</b>												
Area Type:	Other											
Control Type:	Unsignalized											
* User Entered Value												

HCM 6th TWSC  
 3: Shell Driveway/U.S. 1 Jughandle & Franklin Corner Road (C.R. 546)

2025 Future Reconfigured  
 Weekday Middy

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑				↑↑			↔			↑ ↑	
Traffic Vol, veh/h	0	618	5	0	278	0	2	0	4	143	2	119
Future Vol, veh/h	0	618	5	0	278	0	2	0	4	143	2	119
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	-3	-	-	1	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	3	0	0	5	0	0	0	25	9	0	4
Mvmt Flow	0	665	5	0	299	0	2	0	4	154	2	128

















Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	670	0	0	819	967	335	565	969	150
Stage 1	-	-	-	-	-	-	668	668	-	299	299	-
Stage 2	-	-	-	-	-	-	151	299	-	266	670	-
Critical Hdwy	-	-	-	5.3	-	-	6.35	5.9	7.3	7.33	6.7	7.08
Critical Hdwy Stg 1	-	-	-	-	-	-	6.7	4.9	-	6.88	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.9	4.9	-	7.08	5.7	-
Follow-up Hdwy	-	-	-	3.1	-	-	3.65	4	4.15	3.74	4	3.34
Pot Cap-1 Maneuver	0	-	-	570	-	0	342	301	530	403	242	860
Stage 1	0	-	-	-	-	0	392	514	-	632	659	-
Stage 2	0	-	-	-	-	0	831	704	-	653	442	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	570	-	-	290	301	530	400	242	860
Mov Cap-2 Maneuver	-	-	-	-	-	-	339	402	-	475	344	-
Stage 1	-	-	-	-	-	-	392	514	-	632	659	-
Stage 2	-	-	-	-	-	-	705	704	-	648	442	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			13.2			13.4		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	446	-	-	570	-	473	860
HCM Lane V/C Ratio	0.014	-	-	-	-	0.33	0.149
HCM Control Delay (s)	13.2	-	-	0	-	16.3	9.9
HCM Lane LOS	B	-	-	A	-	C	A
HCM 95th %tile Q(veh)	0	-	-	0	-	1.4	0.5

Lanes, Volumes, Timings  
4: Greenberg Road & Wawa Driveway/Bakersville Road

2025 Future Reconfigured  
Weekday Middy

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	67	30	0	0	33	68	61	94	5	70	0	64
Future Volume (vph)	67	30	0	0	33	68	61	94	5	70	0	64
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	13	14	14	13	12	12
Grade (%)		0%			1%			0%			0%	
Storage Length (ft)	0		0	0		0	160		0	0		130
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			85			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.910			0.992				0.850
Flt Protected		0.967					0.950			0.950		
Satd. Flow (prot)	0	1726	0	0	1681	0	1776	1869	0	1865	0	1615
Flt Permitted		0.967					0.950			0.950		
Satd. Flow (perm)	0	1726	0	0	1681	0	1776	1869	0	1865	0	1615
Link Speed (mph)		25			25			25				25
Link Distance (ft)		123			340			359				304
Travel Time (s)		3.4			9.3			9.8				8.3
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	8%	3%	0%	0%	3%	2%	5%	8%	0%	0%	0%	0%
Adj. Flow (vph)	76	34	0	0	38	77	69	107	6	80	0	73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	110	0	0	115	0	69	113	0	80	0	73
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			13				13
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	0.96	0.92	0.92	0.96	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Lanes, Volumes, Timings  
5: Greenberg Road & Bakersville Road

2025 Future Reconfigured  
Weekday Middy



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	263	22	35	194	112	154
Future Volume (vph)	263	22	35	194	112	154
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	14	14	14	14
Grade (%)	0%			-1%	0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.990				0.922	
Flt Protected	0.956			0.992		
Satd. Flow (prot)	1942	0	0	1938	1826	0
Flt Permitted	0.956			0.992		
Satd. Flow (perm)	1942	0	0	1938	1826	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	149			304	324	
Travel Time (s)	4.1			8.3	8.8	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	0%	0%	5%	0%	4%
Adj. Flow (vph)	299	25	40	220	127	175
Shared Lane Traffic (%)						
Lane Group Flow (vph)	324	0	0	260	302	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	15			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.91	0.91	0.92	0.92
Turning Speed (mph)	15	9	15			9
Sign Control	Yield			Yield	Yield	

Intersection Summary

Area Type: Other  
Control Type: Roundabout



Intersection			
Intersection Delay, s/veh	5.5		
Intersection LOS	A		
Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	324	260	302
Demand Flow Rate, veh/h	330	271	309
Vehicles Circulating, veh/h	127	305	40
Vehicles Exiting, veh/h	222	152	536
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.5	6.4	4.8
Approach LOS	A	A	A
Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	330	271	309
Cap Entry Lane, veh/h	1212	1011	1325
Entry HV Adj Factor	0.982	0.959	0.977
Flow Entry, veh/h	324	260	302
Cap Entry, veh/h	1190	970	1295
V/C Ratio	0.272	0.268	0.233
Control Delay, s/veh	5.5	6.4	4.8
LOS	A	A	A
95th %tile Queue, veh	1	1	1

Lanes, Volumes, Timings  
6: Greenberg Road & Internal Loop Road

2025 Future Reconfigured  
Weekday MIDDAY



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	19	5	5	452	261	147
Future Volume (vph)	19	5	5	452	261	147
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	14	14	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.974				0.951	
Flt Protected	0.961			0.999		
Satd. Flow (prot)	1851	0	0	1966	1903	0
Flt Permitted	0.961			0.999		
Satd. Flow (perm)	1851	0	0	1966	1903	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	209			324	282	
Travel Time (s)	5.7			8.8	7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	11%	0%	0%	3%	2%	0%
Adj. Flow (vph)	21	5	5	491	284	160
Shared Lane Traffic (%)						
Lane Group Flow (vph)	26	0	0	496	444	0
Enter Blocked Intersection	1 veh	No	No	Yes	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	16			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.85	0.85	0.92	0.92	0.92	0.92
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other  
Control Type: Unsignalized

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			4	4	
Traffic Vol, veh/h	19	5	5	452	261	147
Future Vol, veh/h	19	5	5	452	261	147
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	11	0	0	3	2	0
Mvmt Flow	21	5	5	491	284	160

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	865	364	444	0	-	0
Stage 1	364	-	-	-	-	-
Stage 2	501	-	-	-	-	-
Critical Hdwy	6.51	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.51	-	-	-	-	-
Critical Hdwy Stg 2	5.51	-	-	-	-	-
Follow-up Hdwy	3.599	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	313	685	1127	-	-	-
Stage 1	684	-	-	-	-	-
Stage 2	591	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	311	685	1127	-	-	-
Mov Cap-2 Maneuver	311	-	-	-	-	-
Stage 1	680	-	-	-	-	-
Stage 2	591	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.1	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1127	-	351	-	-
HCM Lane V/C Ratio	0.005	-	0.074	-	-
HCM Control Delay (s)	8.2	0	16.1	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Lanes, Volumes, Timings  
7: Greenberg Road & Bakers Basin Road

2025 Future Reconfigured  
Weekday Middy



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	298	299	109	406	366	105
Future Volume (vph)	298	299	109	406	366	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	11	16	10	11
Storage Length (ft)		220	110		0	115
Storage Lanes		1	1		1	1
Taper Length (ft)			55		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1701	1583	1728	2031	1636	1546
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1701	1583	1728	2031	1636	1546
Link Speed (mph)	35			35	25	
Link Distance (ft)	452			328	282	
Travel Time (s)	8.8			6.4	7.7	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	8%	2%	1%	6%	3%	1%
Adj. Flow (vph)	310	311	114	423	381	109
Shared Lane Traffic (%)						
Lane Group Flow (vph)	310	311	114	423	381	109
Enter Blocked Intersection	No	No	No	No	Yes	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			11	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.00	1.04	0.85	*1.04	1.04
Turning Speed (mph)		9	20		20	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

\* User Entered Value

Intersection						
Int Delay, s/veh	68.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↘	↗
Traffic Vol, veh/h	298	299	109	406	366	105
Future Vol, veh/h	298	299	109	406	366	105
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	220	110	-	0	115
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	8	2	1	6	3	1
Mvmt Flow	310	311	114	423	381	109

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	621	0	961 310
Stage 1	-	-	-	-	310 -
Stage 2	-	-	-	-	651 -
Critical Hdwy	-	-	4.11	-	6.43 6.21
Critical Hdwy Stg 1	-	-	-	-	5.43 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	-	-	2.209	-	3.527 3.309
Pot Cap-1 Maneuver	-	-	965	-	~ 283 732
Stage 1	-	-	-	-	741 -
Stage 2	-	-	-	-	517 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	965	-	~ 250 732
Mov Cap-2 Maneuver	-	-	-	-	~ 250 -
Stage 1	-	-	-	-	741 -
Stage 2	-	-	-	-	456 -

















Approach	EB	WB	NB
HCM Control Delay, s	0	2	229.2
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	250	732	-	-	965	-
HCM Lane V/C Ratio	1.525	0.149	-	-	0.118	-
HCM Control Delay (s)	291.9	10.8	-	-	9.2	-
HCM Lane LOS	F	B	-	-	A	-
HCM 95th %tile Q(veh)	22.7	0.5	-	-	0.4	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Lanes, Volumes, Timings  
 8: Wawa Driveway/Internal Loop Road & Bakersville Road

2025 Future Reconfigured  
 Weekday Middy

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	169	16	122	49	18	43	6	114	2	9	52
Future Volume (vph)	48	169	16	122	49	18	43	6	114	2	9	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	15	15	15	15	15	12	12	12
Grade (%)		-1%			0%			-1%			0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.991			0.987			0.906			0.888	
Flt Protected		0.990			0.969			0.987			0.999	
Satd. Flow (prot)	0	2061	0	0	1945	0	0	1793	0	0	1686	0
Flt Permitted		0.990			0.969			0.987			0.999	
Satd. Flow (perm)	0	2061	0	0	1945	0	0	1793	0	0	1686	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		55			149			115			199	
Travel Time (s)		1.5			4.1			3.1			5.4	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	1%	1%	20%	5%	17%	4%	0%	0%	0%
Adj. Flow (vph)	55	192	18	139	56	20	49	7	130	2	10	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	265	0	0	215	0	0	186	0	0	71	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	
<b>Intersection Summary</b>												
Area Type:	Other											
Control Type:	Unsignalized											

HCM 6th TWSC  
 8: Wawa Driveway/Internal Loop Road & Bakersville Road

2025 Future Reconfigured  
 Weekday Middy

Intersection												
Int Delay, s/veh	6.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	48	169	16	122	49	18	43	6	114	2	9	52
Future Vol, veh/h	48	169	16	122	49	18	43	6	114	2	9	52
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-1	-	-	0	-	-	-1	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	1	1	20	5	17	4	0	0	0
Mvmt Flow	55	192	18	139	56	20	49	7	130	2	10	59

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	76	0	0	210	0	0	690	665	201	724	664	66
Stage 1	-	-	-	-	-	-	311	311	-	344	344	-
Stage 2	-	-	-	-	-	-	379	354	-	380	320	-
Critical Hdwy	4.1	-	-	4.11	-	-	6.95	6.47	6.14	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.95	5.47	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.95	5.47	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.209	-	-	3.545	4.153	3.336	3.5	4	3.3
Pot Cap-1 Maneuver	1536	-	-	1367	-	-	369	376	839	344	384	1003
Stage 1	-	-	-	-	-	-	705	643	-	676	640	-
Stage 2	-	-	-	-	-	-	650	617	-	646	656	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1536	-	-	1367	-	-	302	322	839	255	329	1003
Mov Cap-2 Maneuver	-	-	-	-	-	-	302	322	-	255	329	-
Stage 1	-	-	-	-	-	-	676	617	-	648	572	-
Stage 2	-	-	-	-	-	-	537	552	-	518	629	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.5			5.1			14.9			10.5		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	549	1536	-	-	1367	-	-	724
HCM Lane V/C Ratio	0.337	0.036	-	-	0.101	-	-	0.099
HCM Control Delay (s)	14.9	7.4	0	-	7.9	0	-	10.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	1.5	0.1	-	-	0.3	-	-	0.3

Lanes, Volumes, Timings  
 9: Bakersville Road & CFA East Access

2025 Future Reconfigured  
 Weekday Middy



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↔			↗
Traffic Volume (vph)	32	233	62	82	0	0
Future Volume (vph)	32	233	62	82	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	12	12
Grade (%)		-1%	0%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.923			
Flt Protected		0.994				
Satd. Flow (prot)	0	2088	1880	0	0	1900
Flt Permitted		0.994				
Satd. Flow (perm)	0	2088	1880	0	0	1900
Link Speed (mph)		25	25		25	
Link Distance (ft)		71	55		121	
Travel Time (s)		1.9	1.5		3.3	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	0%	0%	6%	0%	0%	0%
Adj. Flow (vph)	37	271	72	95	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	308	167	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.88	0.88	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
<b>Intersection Summary</b>						
Area Type:	Other					
Control Type:	Unsignalized					



Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷			↶
Traffic Vol, veh/h	32	233	62	82	0	0
Future Vol, veh/h	32	233	62	82	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-1	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	6	0	0	0
Mvmt Flow	37	271	72	95	0	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	167	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.1	-	6.2
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.2	-	3.3
Pot Cap-1 Maneuver	1423	-	937
Stage 1	-	-	0
Stage 2	-	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1423	-	937
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1423	-	-	-	-
HCM Lane V/C Ratio	0.026	-	-	-	-
HCM Control Delay (s)	7.6	0	-	-	0
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	-

Lanes, Volumes, Timings  
 10: Bakersville Road & CFA West Access

2025 Future Reconfigured  
 Weekday Middy



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↔	
Traffic Volume (vph)	0	122	62	0	143	92
Future Volume (vph)	0	122	62	0	143	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	16	16
Grade (%)		0%	1%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>					0.947	
Fl <sub>t</sub> Protected					0.970	
Satd. Flow (prot)	0	2090	1926	0	1978	0
Fl <sub>t</sub> Permitted					0.970	
Satd. Flow (perm)	0	2090	1926	0	1978	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		219	71		111	
Travel Time (s)		6.0	1.9		3.0	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	0%	0%	8%	0%	0%	0%
Adj. Flow (vph)	0	144	73	0	168	108
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	144	73	0	276	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		16	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.89	0.89	0.85	0.85
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other  
 Control Type: Unsignalized

Intersection						
Int Delay, s/veh	6.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↓	
Traffic Vol, veh/h	0	122	62	0	143	92
Future Vol, veh/h	0	122	62	0	143	92
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	1	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	8	0	0	0
Mvmt Flow	0	144	73	0	168	108

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	217 73
Stage 1	-	-	-	-	73 -
Stage 2	-	-	-	-	144 -
Critical Hdwy	-	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	-	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	0	-	-	0	776 995
Stage 1	0	-	-	0	955 -
Stage 2	0	-	-	0	888 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	776 995
Mov Cap-2 Maneuver	-	-	-	-	776 -
Stage 1	-	-	-	-	955 -
Stage 2	-	-	-	-	888 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.3
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	849
HCM Lane V/C Ratio	-	-	0.326
HCM Control Delay (s)	-	-	11.3
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	1.4

Lanes, Volumes, Timings  
 11: Internal Loop Road & Proposed Drive-Thru Access

2025 Future Reconfigured  
 Weekday Middy



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	53	24	63	92
Future Volume (vph)	0	0	53	24	63	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Flt					0.920	
Flt Protected				0.967		
Satd. Flow (prot)	0	1900	0	1788	1748	0
Flt Permitted				0.967		
Satd. Flow (perm)	0	1900	0	1788	1748	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	137			199	209	
Travel Time (s)	3.7			5.4	5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	9%	0%	0%
Adj. Flow (vph)	0	0	58	26	68	100
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	84	168	0
Enter Blocked Intersection	No	No	No	Yes	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60	60	60			60
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

HCM 6th TWSC  
 11: Internal Loop Road & Proposed Drive-Thru Access

2025 Future Reconfigured  
 Weekday Midday

Intersection						
Int Delay, s/veh	1.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↖	↗	↖
Traffic Vol, veh/h	0	0	53	24	63	92
Future Vol, veh/h	0	0	53	24	63	92
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	9	0	0
Mvmt Flow	0	0	58	26	68	100

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	-	118	168	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.2	4.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	0	939	1422	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	939	1422	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	5.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1422	-	-	-	-
HCM Lane V/C Ratio	0.041	-	-	-	-
HCM Control Delay (s)	7.6	0	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-

Lanes, Volumes, Timings  
 1: Brunswick Avenue (U.S. 1) & Bakersville Road

2025 Future Reconfigured  
 Weekday Afternoon



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	161	2025	151	0	2290
Future Volume (vph)	0	161	2025	151	0	2290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	12	12	12	12
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	0.91
Frt		0.865	0.990			
Flt Protected						
Satd. Flow (prot)	0	1844	5041	0	0	5036
Flt Permitted						
Satd. Flow (perm)	0	1844	5041	0	0	5036
Link Speed (mph)	25		55			55
Link Distance (ft)	219		556			396
Travel Time (s)	6.0		6.9			4.9
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	1%	2%	0%	0%	3%
Adj. Flow (vph)	0	173	2177	162	0	2462
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	173	2339	0	0	2462
Enter Blocked Intersection	No	No	Yes	No	Yes	Yes
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		8			8
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.85	0.85	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other  
 Control Type: Unsignalized

Intersection						
Int Delay, s/veh	3.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗ ↑↑↑	↑↑↑			↑↑↑
Traffic Vol, veh/h	0	161	2025	151	0	2290
Future Vol, veh/h	0	161	2025	151	0	2290
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Free	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	1	2	0	0	3
Mvmt Flow	0	173	2177	162	0	2462

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	1089	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	7.12	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.91	-
Pot Cap-1 Maneuver	0	182	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	-	182	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	106.5	0	0
HCM LOS	F		

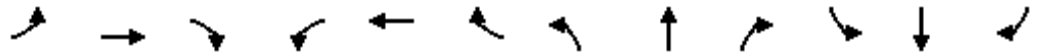
Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 182	-
HCM Lane V/C Ratio	- 0.951	-
HCM Control Delay (s)	- 106.5	-
HCM Lane LOS	- F	-
HCM 95th %tile Q(veh)	- 7.5	-

Lanes, Volumes, Timings

2025 Future Reconfigured

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road

Weekday Afternoon



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	154	360	225	468	262	122	0	1855	331	0	1597	0
Future Volume (vph)	154	360	225	468	262	122	0	1855	331	0	1597	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	12	12	12	12	12	12	12
Storage Length (ft)	0		0	280		0	0		0	0		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	25			65			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Fr <sub>t</sub>			0.850		0.968				0.850			
Fl <sub>t</sub> Protected	0.950			0.950	0.984							
Satd. Flow (prot)	1728	1801	1599	1572	3104	0	0	3539	1568	0	3539	0
Fl <sub>t</sub> Permitted	0.950			0.950	0.984							
Satd. Flow (perm)	1728	1801	1599	1572	3104	0	0	3539	1568	0	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			81		16				147			
Link Speed (mph)		40			35			55				55
Link Distance (ft)		194			452			396				265
Travel Time (s)		3.3			8.8			4.9				3.3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	2%	1%	1%	3%	4%	0%	2%	3%	0%	2%	0%
Adj. Flow (vph)	162	379	237	493	276	128	0	1953	348	0	1681	0
Shared Lane Traffic (%)				39%								
Lane Group Flow (vph)	162	379	237	301	596	0	0	1953	348	0	1681	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			8			8	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.04	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	20		9	15		9	15		9
Number of Detectors	1	1	1	1	1			2	2			2
Detector Template												
Leading Detector (ft)	50	50	50	57	57			206	206			236
Trailing Detector (ft)	-10	-10	-10	-10	-10			0	0			0
Detector 1 Position(ft)	-10	-10	-10	-10	-10			0	0			0
Detector 1 Size(ft)	60	60	60	67	67			40	40			40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0			0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0			0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0			0.0
Detector 2 Position(ft)								200	200			230
Detector 2 Size(ft)								6	6			6
Detector 2 Type								Cl+Ex	Cl+Ex			Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)								0.0	0.0			0.0
Turn Type	Split	NA	Perm	Split	NA			NA	Perm			NA



Lanes, Volumes, Timings

2025 Future Reconfigured

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road Weekday Afternoon

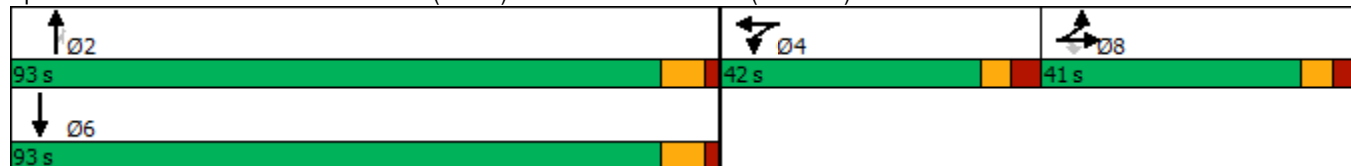


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	8	8		4	4			2			6	
Permitted Phases			8						2			
Detector Phase	8	8	8	4	4			2	2		6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0			7.0	7.0		7.0	
Minimum Split (s)	14.0	14.0	14.0	15.0	15.0			15.0	15.0		15.0	
Total Split (s)	41.0	41.0	41.0	42.0	42.0			93.0	93.0		93.0	
Total Split (%)	23.3%	23.3%	23.3%	23.9%	23.9%			52.8%	52.8%		52.8%	
Maximum Green (s)	34.0	34.0	34.0	34.0	34.0			85.0	85.0		85.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0			6.0	6.0		6.0	
All-Red Time (s)	3.0	3.0	3.0	4.0	4.0			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	8.0	8.0			8.0	8.0		8.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0	2.0		2.0	
Recall Mode	Min	Min	Min	Min	Min			Min	Min		Min	

Intersection Summary

Area Type: Other  
 Cycle Length: 176  
 Actuated Cycle Length: 176  
 Natural Cycle: 140  
 Control Type: Actuated-Uncoordinated

Splits and Phases: 2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road



HCM 6th Signalized Intersection Summary

2025 Future Reconfigured

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road

Weekday Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	360	225	468	262	122	0	1855	331	0	1597	0
Future Volume (veh/h)	154	360	225	468	262	122	0	1855	331	0	1597	0
Initial Q (Qb), 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	1885	1870	1885	1885	1856	1841	0	1870	1856	0	1870	0
Adj Flow Rate, veh/h	162	379	198	299	548	127	0	1953	301	0	1681	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	2	1	1	3	4	0	2	3	0	2	0
Cap, veh/h	347	361	309	347	563	130	0	1716	759	0	1716	0
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.00	0.48	0.48	0.00	0.48	0.00
Sat Flow, veh/h	1795	1870	1598	1795	2917	673	0	3647	1572	0	3741	0
Grp Volume(v), veh/h	162	379	198	299	348	327	0	1953	301	0	1681	0
Grp Sat Flow(s),veh/h/ln	1795	1870	1598	1795	1856	1734	0	1777	1572	0	1777	0
Q Serve(g_s), s	14.1	34.0	20.1	28.4	32.8	33.0	0.0	85.0	21.5	0.0	81.7	0.0
Cycle Q Clear(g_c), s	14.1	34.0	20.1	28.4	32.8	33.0	0.0	85.0	21.5	0.0	81.7	0.0
Prop In Lane	1.00		1.00	1.00		0.39	0.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	347	361	309	347	358	335	0	1716	759	0	1716	0
V/C Ratio(X)	0.47	1.05	0.64	0.86	0.97	0.98	0.00	1.14	0.40	0.00	0.98	0.00
Avail Cap(c_a), veh/h	347	361	309	347	358	335	0	1716	759	0	1716	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(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	63.0	71.0	65.4	68.7	70.5	70.6	0.0	45.5	29.1	0.0	44.6	0.0
Incr Delay (d2), s/veh	0.4	60.7	3.5	18.6	39.4	42.5	0.0	69.8	0.1	0.0	17.0	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	10.6	30.8	13.2	21.1	26.7	25.7	0.0	70.4	12.6	0.0	48.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.3	131.7	68.9	87.3	109.9	113.1	0.0	115.3	29.2	0.0	61.6	0.0
LnGrp LOS	E	F	E	F	F	F	A	F	C	A	E	A
Approach Vol, veh/h		739			974			2254			1681	
Approach Delay, s/veh		99.9			104.0			103.8			61.6	
Approach LOS		F			F			F			E	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		93.0		42.0		93.0		41.0				
Change Period (Y+Rc), s		8.0		8.0		8.0		7.0				
Max Green Setting (Gmax), s		85.0		34.0		85.0		34.0				
Max Q Clear Time (g_c+I1), s		87.0		35.0		83.7		36.0				
Green Ext Time (p_c), s		0.0		0.0		1.2		0.0				

Intersection Summary

HCM 6th Ctrl Delay	90.8
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

Lanes, Volumes, Timings

2025 Future Reconfigured

3: Shell Driveway/U.S. 1 Jughandle & Franklin Corner Road (C.R. 546)

Weekday Afternoon



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑			↑↓			↑	↑
Traffic Volume (vph)	0	633	6	0	262	0	1	0	3	103	0	103
Future Volume (vph)	0	633	6	0	262	0	1	0	3	103	0	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	12	12	16	16	16	16	16	12
Grade (%)		0%			0%			-3%				1%
Storage Length (ft)	200		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999						0.899				0.850
Flt Protected								0.988			0.950	
Satd. Flow (prot)	0	4912	0	0	3505	0	0	1941	0	0	1976	1530
Flt Permitted								0.988			0.950	
Satd. Flow (perm)	0	4912	0	0	3505	0	0	1941	0	0	1976	1530
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		410			194			112			393	
Travel Time (s)		7.0			3.3			3.1			10.7	
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 (%)	0%	2%	0%	0%	3%	0%	0%	0%	0%	3%	0%	5%
Adj. Flow (vph)	0	659	6	0	273	0	1	0	3	107	0	107
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	665	0	0	273	0	0	4	0	0	107	107
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	2 veh	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.04	1.04	1.00	1.04	1.00	1.00	0.83	0.83	0.83	*1.00	0.85	1.01
Turning Speed (mph)	15		9	15		9	15		9	20		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

\* User Entered Value

HCM 6th TWSC  
 3: Shell Driveway/U.S. 1 Jughandle & Franklin Corner Road (C.R. 546)

2025 Future Reconfigured  
 Weekday Afternoon

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑				↑↑			↔			↑	
Traffic Vol, veh/h	0	633	6	0	262	0	1	0	3	103	0	103
Future Vol, veh/h	0	633	6	0	262	0	1	0	3	103	0	103
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	-3	-	-	1	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	2	0	0	3	0	0	0	0	3	0	5
Mvmt Flow	0	659	6	0	273	0	1	0	3	107	0	107



















Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	665	0	0	799	935	333	537	938	137
Stage 1	-	-	-	-	-	-	662	662	-	273	273	-
Stage 2	-	-	-	-	-	-	137	273	-	264	665	-
Critical Hdwy	-	-	-	5.3	-	-	6.35	5.9	6.8	7.21	6.7	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	6.7	4.9	-	6.76	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.9	4.9	-	6.96	5.7	-
Follow-up Hdwy	-	-	-	3.1	-	-	3.65	4	3.9	3.68	4	3.35
Pot Cap-1 Maneuver	0	-	-	573	-	0	352	313	586	434	253	874
Stage 1	0	-	-	-	-	0	395	516	-	671	677	-
Stage 2	0	-	-	-	-	0	844	720	-	670	444	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	573	-	-	309	313	586	432	253	874
Mov Cap-2 Maneuver	-	-	-	-	-	-	347	409	-	502	351	-
Stage 1	-	-	-	-	-	-	395	516	-	671	677	-
Stage 2	-	-	-	-	-	-	740	720	-	666	444	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			12.3			11.9		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	500	-	-	573	-	502	874
HCM Lane V/C Ratio	0.008	-	-	-	-	0.214	0.123
HCM Control Delay (s)	12.3	-	-	0	-	14.1	9.7
HCM Lane LOS	B	-	-	A	-	B	A
HCM 95th %tile Q(veh)	0	-	-	0	-	0.8	0.4

Lanes, Volumes, Timings  
4: Greenberg Road & Wawa Driveway/Bakersville Road

2025 Future Reconfigured  
Weekday Afternoon

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	12	0	0	20	66	36	100	1	34	0	35
Future Volume (vph)	43	12	0	0	20	66	36	100	1	34	0	35
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	13	14	14	13	12	12
Grade (%)		0%			1%			0%			0%	
Storage Length (ft)	0		0	0		0	160		0	0		130
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			85			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.897			0.999				0.850
Flt Protected		0.963					0.950			0.950		
Satd. Flow (prot)	0	1761	0	0	1670	0	1811	2025	0	1865	0	1615
Flt Permitted		0.963					0.950			0.950		
Satd. Flow (perm)	0	1761	0	0	1670	0	1811	2025	0	1865	0	1615
Link Speed (mph)		25			25			25				25
Link Distance (ft)		123			340			359				304
Travel Time (s)		3.4			9.3			9.8				8.3
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	5%	0%	0%	0%	0%	2%	3%	0%	0%	0%	0%	0%
Adj. Flow (vph)	49	14	0	0	23	75	41	114	1	39	0	40
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	63	0	0	98	0	41	115	0	39	0	40
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			13				13
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	0.96	0.92	0.92	0.96	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop				Free

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Lanes, Volumes, Timings  
5: Greenberg Road & Bakersville Road

2025 Future Reconfigured  
Weekday Afternoon



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	181	13	31	178	56	109
Future Volume (vph)	181	13	31	178	56	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	14	14	14	14
Grade (%)	0%			-1%	0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.991				0.911	
Flt Protected	0.955			0.993		
Satd. Flow (prot)	1960	0	0	2005	1799	0
Flt Permitted	0.955			0.993		
Satd. Flow (perm)	1960	0	0	2005	1799	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	149			304	324	
Travel Time (s)	4.1			8.3	8.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	0%	0%	1%	0%	4%
Adj. Flow (vph)	197	14	34	193	61	118
Shared Lane Traffic (%)						
Lane Group Flow (vph)	211	0	0	227	179	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	15			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.91	0.91	0.92	0.92
Turning Speed (mph)	15	9	15			9
Sign Control	Yield			Yield	Yield	

Intersection Summary

Area Type: Other

Control Type: Roundabout

Intersection			
Intersection Delay, s/veh	4.4		
Intersection LOS	A		
Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	211	227	179
Demand Flow Rate, veh/h	213	229	184
Vehicles Circulating, veh/h	61	199	34
Vehicles Exiting, veh/h	157	75	394
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.2	5.1	3.9
Approach LOS	A	A	A
Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	213	229	184
Cap Entry Lane, veh/h	1297	1126	1333
Entry HV Adj Factor	0.991	0.992	0.973
Flow Entry, veh/h	211	227	179
Cap Entry, veh/h	1284	1117	1297
V/C Ratio	0.164	0.203	0.138
Control Delay, s/veh	4.2	5.1	3.9
LOS	A	A	A
95th %tile Queue, veh	1	1	0

Lanes, Volumes, Timings  
6: Greenberg Road & Internal Loop Road

2025 Future Reconfigured  
Weekday Afternoon



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	17	2	4	355	163	69
Future Volume (vph)	17	2	4	355	163	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	14	14	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.986				0.960	
Flt Protected	0.957			0.999		
Satd. Flow (prot)	2032	0	0	2025	1946	0
Flt Permitted	0.957			0.999		
Satd. Flow (perm)	2032	0	0	2025	1946	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	209			324	282	
Travel Time (s)	5.7			8.8	7.7	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	18	2	4	378	173	73
Shared Lane Traffic (%)						
Lane Group Flow (vph)	20	0	0	382	246	0
Enter Blocked Intersection	1 veh	No	No	Yes	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	16			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.85	0.85	0.92	0.92	0.92	0.92
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other  
Control Type: Unsignalized



Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	17	2	4	355	163	69
Future Vol, veh/h	17	2	4	355	163	69
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	18	2	4	378	173	73

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	596	210	246	0	0
Stage 1	210	-	-	-	-
Stage 2	386	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	470	835	1332	-	-
Stage 1	830	-	-	-	-
Stage 2	691	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	468	835	1332	-	-
Mov Cap-2 Maneuver	468	-	-	-	-
Stage 1	827	-	-	-	-
Stage 2	691	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.6	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1332	-	491	-	-
HCM Lane V/C Ratio	0.003	-	0.041	-	-
HCM Control Delay (s)	7.7	0	12.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Lanes, Volumes, Timings  
7: Greenberg Road & Bakers Basin Road

2025 Future Reconfigured  
Weekday Afternoon



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	528	163	69	567	285	87
Future Volume (vph)	528	163	69	567	285	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	11	16	10	11
Storage Length (ft)		220	110		0	115
Storage Lanes		1	1		1	1
Taper Length (ft)			55		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1783	1599	1694	2111	1652	1561
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1783	1599	1694	2111	1652	1561
Link Speed (mph)	35			35	25	
Link Distance (ft)	452			328	282	
Travel Time (s)	8.8			6.4	7.7	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	3%	1%	3%	2%	2%	0%
Adj. Flow (vph)	533	165	70	573	288	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	533	165	70	573	288	88
Enter Blocked Intersection	No	No	No	No	Yes	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			11	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.00	1.04	0.85	*1.04	1.04
Turning Speed (mph)		9	20		20	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

\* User Entered Value

Intersection						
Int Delay, s/veh	60.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↘	↗
Traffic Vol, veh/h	528	163	69	567	285	87
Future Vol, veh/h	528	163	69	567	285	87
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	220	110	-	0	115
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	3	1	3	2	2	0
Mvmt Flow	533	165	70	573	288	88

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	698	0	1246 533
Stage 1	-	-	-	-	533 -
Stage 2	-	-	-	-	713 -
Critical Hdwy	-	-	4.13	-	6.42 6.2
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	2.227	-	3.518 3.3
Pot Cap-1 Maneuver	-	-	894	-	~ 192 551
Stage 1	-	-	-	-	588 -
Stage 2	-	-	-	-	486 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	894	-	~ 177 551
Mov Cap-2 Maneuver	-	-	-	-	~ 177 -
Stage 1	-	-	-	-	588 -
Stage 2	-	-	-	-	448 -

Approach	EB	WB	NB
HCM Control Delay, s	0	1	273.2
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	177	551	-	-	894	-
HCM Lane V/C Ratio	1.626	0.159	-	-	0.078	-
HCM Control Delay (s)	\$ 352.7	12.8	-	-	9.4	-
HCM Lane LOS	F	B	-	-	A	-
HCM 95th %tile Q(veh)	19.4	0.6	-	-	0.3	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Lanes, Volumes, Timings  
 8: Wawa Driveway/Internal Loop Road & Bakersville Road

2025 Future Reconfigured  
 Weekday Afternoon



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	34	114	13	97	31	12	39	2	79	1	2	16
Future Volume (vph)	34	114	13	97	31	12	39	2	79	1	2	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	15	15	15	15	15	12	12	12
Grade (%)		-1%			0%			-1%			0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989			0.988			0.911			0.884	
Flt Protected		0.990			0.967			0.984			0.998	
Satd. Flow (prot)	0	2057	0	0	1974	0	0	1871	0	0	1676	0
Flt Permitted		0.990			0.967			0.984			0.998	
Satd. Flow (perm)	0	2057	0	0	1974	0	0	1871	0	0	1676	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		55			149			115			199	
Travel Time (s)		1.5			4.1			3.1			5.4	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	0%	0%	1%	2%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	39	131	15	111	36	14	45	2	91	1	2	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	185	0	0	161	0	0	138	0	0	21	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

HCM 6th TWSC  
8: Wawa Driveway/Internal Loop Road & Bakersville Road

2025 Future Reconfigured  
Weekday Afternoon

Intersection												
Int Delay, s/veh	5.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	34	114	13	97	31	12	39	2	79	1	2	16
Future Vol, veh/h	34	114	13	97	31	12	39	2	79	1	2	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-1	-	-	0	-	-	-1	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	1	2	0	0	0	1	0	0	0
Mvmt Flow	39	131	15	111	36	14	45	2	91	1	2	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	50	0	0	146	0	0	492	489	139	528	489	43
Stage 1	-	-	-	-	-	-	217	217	-	265	265	-
Stage 2	-	-	-	-	-	-	275	272	-	263	224	-
Critical Hdwy	4.1	-	-	4.11	-	-	6.9	6.3	6.11	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.9	5.3	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.9	5.3	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.209	-	-	3.5	4	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	1570	-	-	1442	-	-	504	496	915	464	482	1033
Stage 1	-	-	-	-	-	-	799	736	-	745	693	-
Stage 2	-	-	-	-	-	-	747	699	-	747	722	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1570	-	-	1442	-	-	454	444	915	383	432	1033
Mov Cap-2 Maneuver	-	-	-	-	-	-	454	444	-	383	432	-
Stage 1	-	-	-	-	-	-	777	716	-	725	638	-
Stage 2	-	-	-	-	-	-	673	644	-	653	703	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.6			5.3			11.6			9.4		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	679	1570	-	-	1442	-	-	836
HCM Lane V/C Ratio	0.203	0.025	-	-	0.077	-	-	0.026
HCM Control Delay (s)	11.6	7.4	0	-	7.7	0	-	9.4
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.8	0.1	-	-	0.3	-	-	0.1

Lanes, Volumes, Timings  
 9: Bakersville Road & CFA East Access

2025 Future Reconfigured  
 Weekday Afternoon



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔			↔
Traffic Volume (vph)	20	161	47	39	0	0
Future Volume (vph)	20	161	47	39	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	12	12
Grade (%)		-1%	0%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.939			
Flt Protected		0.995				
Satd. Flow (prot)	0	2090	1963	0	0	1900
Flt Permitted		0.995				
Satd. Flow (perm)	0	2090	1963	0	0	1900
Link Speed (mph)		25	25		25	
Link Distance (ft)		71	55		121	
Travel Time (s)		1.9	1.5		3.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	21	171	50	41	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	192	91	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.88	0.88	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
<b>Intersection Summary</b>						
Area Type:	Other					
Control Type:	Unsignalized					

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔			↔
Traffic Vol, veh/h	20	161	47	39	0	0
Future Vol, veh/h	20	161	47	39	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-1	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	21	171	50	41	0	0

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	91	0	-	0	-	71
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.1	-	-	-	-	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.2	-	-	-	-	3.3
Pot Cap-1 Maneuver	1517	-	-	-	0	997
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1517	-	-	-	-	997
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1517	-	-	-	-
HCM Lane V/C Ratio	0.014	-	-	-	-
HCM Control Delay (s)	7.4	0	-	-	0
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Lanes, Volumes, Timings  
 10: Bakersville Road & CFA West Access

2025 Future Reconfigured  
 Weekday Afternoon



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↔	
Traffic Volume (vph)	0	95	47	0	86	44
Future Volume (vph)	0	95	47	0	86	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	16	16
Grade (%)		0%	1%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.954	
Flt Protected					0.968	
Satd. Flow (prot)	0	2090	2039	0	1989	0
Flt Permitted					0.968	
Satd. Flow (perm)	0	2090	2039	0	1989	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		219	71		111	
Travel Time (s)		6.0	1.9		3.0	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	0	101	50	0	91	47
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	101	50	0	138	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		16	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.89	0.89	0.85	0.85
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other  
 Control Type: Unsignalized



Intersection						
Int Delay, s/veh	4.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↑	
Traffic Vol, veh/h	0	95	47	0	86	44
Future Vol, veh/h	0	95	47	0	86	44
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	1	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	2	0	0	0
Mvmt Flow	0	101	50	0	91	47

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	151 50
Stage 1	-	-	-	-	50 -
Stage 2	-	-	-	-	101 -
Critical Hdwy	-	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	-	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	0	-	-	0	846 1024
Stage 1	0	-	-	0	978 -
Stage 2	0	-	-	0	928 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	846 1024
Mov Cap-2 Maneuver	-	-	-	-	846 -
Stage 1	-	-	-	-	978 -
Stage 2	-	-	-	-	928 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.7
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	899
HCM Lane V/C Ratio	-	-	0.154
HCM Control Delay (s)	-	-	9.7
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	0.5

Lanes, Volumes, Timings  
 11: Internal Loop Road & Proposed Drive-Thru Access

2025 Future Reconfigured  
 Weekday Afternoon



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	40	19	25	48
Future Volume (vph)	0	0	40	19	25	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>					0.911	
Fl <sub>t</sub> Protected				0.967		
Satd. Flow (prot)	0	1900	0	1837	1731	0
Fl <sub>t</sub> Permitted				0.967		
Satd. Flow (perm)	0	1900	0	1837	1731	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	137			199	209	
Travel Time (s)	3.7			5.4	5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	0	43	21	27	52
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	64	79	0
Enter Blocked Intersection	No	No	No	Yes	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60	60	60			60
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection						
Int Delay, s/veh	2.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↖	↗	↖
Traffic Vol, veh/h	0	0	40	19	25	48
Future Vol, veh/h	0	0	40	19	25	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	43	21	27	52

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	-	53	79	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.2	4.1	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.3	2.2	-	-
Pot Cap-1 Maneuver	0	1020	1532	-	-
Stage 1	0	-	-	-	-
Stage 2	0	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	1020	1532	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1532	-	-	-	-
HCM Lane V/C Ratio	0.028	-	-	-	-
HCM Control Delay (s)	7.4	0	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-

Lanes, Volumes, Timings  
 1: Brunswick Avenue (U.S. 1) & Bakersville Road

2025 Future Reconfigured  
 Saturday Midday



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕↕↕↔			↕↕↕
Traffic Volume (vph)	0	204	1491	149	0	1969
Future Volume (vph)	0	204	1491	149	0	1969
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	12	12	12	12
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	0.91
Frt		0.865	0.986			
Flt Protected						
Satd. Flow (prot)	0	1808	5019	0	0	5085
Flt Permitted						
Satd. Flow (perm)	0	1808	5019	0	0	5085
Link Speed (mph)	25		55			55
Link Distance (ft)	219		556			396
Travel Time (s)	6.0		6.9			4.9
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	2%	1%	0%	2%
Adj. Flow (vph)	0	208	1521	152	0	2009
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	208	1673	0	0	2009
Enter Blocked Intersection	No	No	Yes	No	Yes	Yes
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		8			8
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	0.85	0.85	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other  
 Control Type: Unsignalized

Intersection						
Int Delay, s/veh	2.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗ ↑↑↑	↑↑↑			↑↑↑
Traffic Vol, veh/h	0	204	1491	149	0	1969
Future Vol, veh/h	0	204	1491	149	0	1969
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	Free	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	3	2	1	0	2
Mvmt Flow	0	208	1521	152	0	2009

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	-	761	0	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.16	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.93	-	-	-	-
Pot Cap-1 Maneuver	0	297	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	297	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	41.2	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 297	-
HCM Lane V/C Ratio	- 0.701	-
HCM Control Delay (s)	- 41.2	-
HCM Lane LOS	- E	-
HCM 95th %tile Q(veh)	- 4.9	-

Lanes, Volumes, Timings

2025 Future Reconfigured

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road Saturday MIDDAY



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	143	415	141	393	300	136	0	1485	210	0	1435	0
Future Volume (vph)	143	415	141	393	300	136	0	1485	210	0	1435	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	12	12	12	12	12	12	12
Storage Length (ft)	0		0	280		0	0		0	0		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	25			65			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.963				0.850			
Flt Protected	0.950			0.950	0.989							
Satd. Flow (prot)	1711	1766	1615	1557	3040	0	0	3539	1538	0	3539	0
Flt Permitted	0.950			0.950	0.989							
Satd. Flow (perm)	1711	1766	1615	1557	3040	0	0	3539	1538	0	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			99		25				131			
Link Speed (mph)		40			35			55			55	
Link Distance (ft)		194			452			396			265	
Travel Time (s)		3.3			8.8			4.9			3.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	4%	0%	2%	7%	2%	0%	2%	5%	0%	2%	0%
Adj. Flow (vph)	151	437	148	414	316	143	0	1563	221	0	1511	0
Shared Lane Traffic (%)				30%								
Lane Group Flow (vph)	151	437	148	290	583	0	0	1563	221	0	1511	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			8			8	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.04	1.04	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1			2	2		2	
Detector Template												
Leading Detector (ft)	50	50	50	57	57			206	206		236	
Trailing Detector (ft)	-10	-10	-10	-10	-10			0	0		0	
Detector 1 Position(ft)	-10	-10	-10	-10	-10			0	0		0	
Detector 1 Size(ft)	60	60	60	67	67			40	40		40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Detector 2 Position(ft)								200	200		230	
Detector 2 Size(ft)								6	6		6	
Detector 2 Type								Cl+Ex	Cl+Ex		Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0	0.0		0.0	
Turn Type	Split	NA	Perm	Split	NA			NA	Perm		NA	

Lanes, Volumes, Timings

2025 Future Reconfigured

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road Saturday Midday

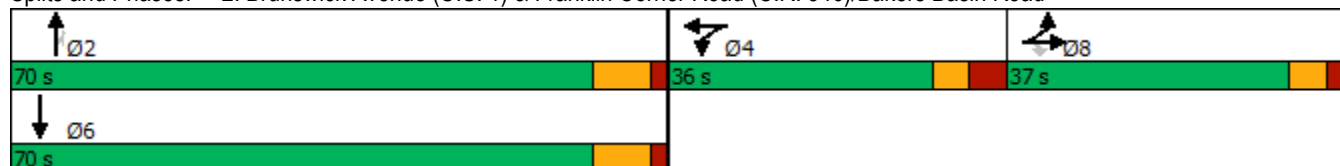


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	8	8		4	4			2				6
Permitted Phases			8						2			
Detector Phase	8	8	8	4	4			2	2			6
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0			7.0	7.0			7.0
Minimum Split (s)	14.0	14.0	14.0	15.0	15.0			15.0	15.0			15.0
Total Split (s)	37.0	37.0	37.0	36.0	36.0			70.0	70.0			70.0
Total Split (%)	25.9%	25.9%	25.9%	25.2%	25.2%			49.0%	49.0%			49.0%
Maximum Green (s)	30.0	30.0	30.0	28.0	28.0			62.0	62.0			62.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0			6.0	6.0			6.0
All-Red Time (s)	3.0	3.0	3.0	4.0	4.0			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	8.0	8.0			8.0	8.0			8.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0	2.0			2.0
Recall Mode	Min	Min	Min	Min	Min			Min	Min			Min

Intersection Summary

Area Type: Other  
 Cycle Length: 143  
 Actuated Cycle Length: 142.6  
 Natural Cycle: 150  
 Control Type: Actuated-Uncoordinated

Splits and Phases: 2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road



HCM 6th Signalized Intersection Summary

2025 Future Reconfigured

2: Brunswick Avenue (U.S. 1) & Franklin Corner Road (C.R. 546)/Bakers Basin Road Saturday MIDDAY



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	415	141	393	300	136	0	1485	210	0	1435	0
Future Volume (veh/h)	143	415	141	393	300	136	0	1485	210	0	1435	0
Initial Q (Qb), 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	1870	1841	1900	1870	1796	1870	0	1870	1826	0	1870	0
Adj Flow Rate, veh/h	151	437	148	291	488	143	0	1563	221	0	1511	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	4	0	2	7	2	0	2	5	0	2	0
Cap, veh/h	374	386	338	348	522	152	0	1542	671	0	1542	0
Arrive On Green	0.21	0.21	0.21	0.20	0.20	0.20	0.00	0.43	0.43	0.00	0.43	0.00
Sat Flow, veh/h	1781	1841	1610	1781	2674	778	0	3647	1547	0	3741	0
Grp Volume(v), veh/h	151	437	148	291	327	304	0	1563	221	0	1511	0
Grp Sat Flow(s),veh/h/ln	1781	1841	1610	1781	1796	1656	0	1777	1547	0	1777	0
Q Serve(g_s), s	10.5	30.0	11.4	22.5	25.6	25.9	0.0	62.0	13.5	0.0	59.9	0.0
Cycle Q Clear(g_c), s	10.5	30.0	11.4	22.5	25.6	25.9	0.0	62.0	13.5	0.0	59.9	0.0
Prop In Lane	1.00		1.00	1.00		0.47	0.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	374	386	338	348	351	324	0	1542	671	0	1542	0
V/C Ratio(X)	0.40	1.13	0.44	0.84	0.93	0.94	0.00	1.01	0.33	0.00	0.98	0.00
Avail Cap(c_a), veh/h	374	386	338	349	352	324	0	1542	671	0	1542	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(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	48.7	56.5	49.1	55.3	56.6	56.7	0.0	40.5	26.7	0.0	39.9	0.0
Incr Delay (d2), s/veh	0.3	86.4	0.3	15.2	30.4	34.1	0.0	26.4	0.1	0.0	18.3	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	8.2	33.0	8.1	17.1	20.7	19.9	0.0	40.4	8.4	0.0	36.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.0	142.9	49.5	70.5	87.0	90.8	0.0	66.9	26.8	0.0	58.1	0.0
LnGrp LOS	D	F	D	E	F	F	A	F	C	A	E	A
Approach Vol, veh/h		736			922			1784			1511	
Approach Delay, s/veh		104.8			83.0			61.9			58.1	
Approach LOS		F			F			E			E	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		70.0		35.9		70.0		37.0				
Change Period (Y+Rc), s		8.0		8.0		8.0		7.0				
Max Green Setting (Gmax), s		62.0		28.0		62.0		30.0				
Max Q Clear Time (g_c+I1), s		64.0		27.9		61.9		32.0				
Green Ext Time (p_c), s		0.0		0.0		0.1		0.0				

Intersection Summary

HCM 6th Ctrl Delay	71.1
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

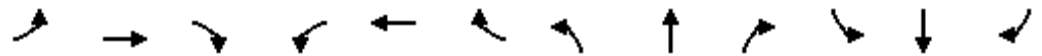


Lanes, Volumes, Timings

2025 Future Reconfigured

3: Shell Driveway/U.S. 1 Jughandle & Franklin Corner Road (C.R. 546)

Saturday Midday



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑			↑↓			↑	↑
Traffic Volume (vph)	0	508	7	0	300	0	0	0	5	186	1	107
Future Volume (vph)	0	508	7	0	300	0	0	0	5	186	1	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	12	12	16	16	16	16	16	12
Grade (%)		0%			0%			-3%			1%	
Storage Length (ft)	200		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998						0.865				0.850
Flt Protected											0.953	
Satd. Flow (prot)	0	4860	0	0	3471	0	0	1891	0	0	1964	1560
Flt Permitted											0.953	
Satd. Flow (perm)	0	4860	0	0	3471	0	0	1891	0	0	1964	1560
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		410			194			112			393	
Travel Time (s)		7.0			3.3			3.1			10.7	
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%	3%	0%	0%	4%	0%	0%	0%	0%	4%	0%	3%
Adj. Flow (vph)	0	524	7	0	309	0	0	0	5	192	1	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	531	0	0	309	0	0	5	0	0	193	110
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	2 veh	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.04	1.04	1.00	1.04	1.00	1.00	0.83	0.83	0.83	*1.00	0.85	1.01
Turning Speed (mph)	15		9	15		9	15		9	20		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

\* User Entered Value

HCM 6th TWSC  
 3: Shell Driveway/U.S. 1 Jughandle & Franklin Corner Road (C.R. 546)

2025 Future Reconfigured  
 Saturday Midday

Intersection												
Int Delay, s/veh	3.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑				↔↑			↔			↔	
Traffic Vol, veh/h	0	508	7	0	300	0	0	0	5	186	1	107
Future Vol, veh/h	0	508	7	0	300	0	0	0	5	186	1	107
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	-3	-	-	1	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	3	0	0	4	0	0	0	0	4	0	3
Mvmt Flow	0	524	7	0	309	0	0	0	5	192	1	110



















Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	531	0	0	683	837	266	519	840	155
Stage 1	-	-	-	-	-	-	528	528	-	309	309	-
Stage 2	-	-	-	-	-	-	155	309	-	210	531	-
Critical Hdwy	-	-	-	5.3	-	-	6.35	5.9	6.8	7.23	6.7	7.06
Critical Hdwy Stg 1	-	-	-	-	-	-	6.7	4.9	-	6.78	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.9	4.9	-	6.98	5.7	-
Follow-up Hdwy	-	-	-	3.1	-	-	3.65	4	3.9	3.69	4	3.33
Pot Cap-1 Maneuver	0	-	-	662	-	0	410	351	643	444	290	856
Stage 1	0	-	-	-	-	0	477	580	-	636	652	-
Stage 2	0	-	-	-	-	0	827	698	-	722	514	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	662	-	-	356	351	643	440	290	856
Mov Cap-2 Maneuver	-	-	-	-	-	-	408	446	-	506	391	-
Stage 1	-	-	-	-	-	-	477	580	-	636	652	-
Stage 2	-	-	-	-	-	-	719	698	-	716	514	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	10.6	14.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	643	-	-	662	-	505	856
HCM Lane V/C Ratio	0.008	-	-	-	-	0.382	0.129
HCM Control Delay (s)	10.6	-	-	0	-	16.5	9.8
HCM Lane LOS	B	-	-	A	-	C	A
HCM 95th %tile Q(veh)	0	-	-	0	-	1.8	0.4

Lanes, Volumes, Timings  
4: Greenberg Road & Wawa Driveway/Bakersville Road

2025 Future Reconfigured  
Saturday Midday

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	7	0	0	30	86	35	80	5	108	0	43
Future Volume (vph)	60	7	0	0	30	86	35	80	5	108	0	43
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	13	14	14	13	12	12
Grade (%)		0%			1%			0%			0%	
Storage Length (ft)	0		0	0		0	160		0	0		130
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			85			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.900			0.991				0.850
Flt Protected		0.957					0.950			0.950		
Satd. Flow (prot)	0	1786	0	0	1701	0	1811	1954	0	1847	0	1615
Flt Permitted		0.957					0.950			0.950		
Satd. Flow (perm)	0	1786	0	0	1701	0	1811	1954	0	1847	0	1615
Link Speed (mph)		25			25			25				25
Link Distance (ft)		123			340			359				304
Travel Time (s)		3.4			9.3			9.8				8.3
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 (%)	2%	0%	0%	0%	0%	0%	3%	3%	0%	1%	0%	0%
Adj. Flow (vph)	67	8	0	0	33	96	39	89	6	120	0	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	75	0	0	129	0	39	95	0	120	0	48
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			13				13
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	0.96	0.92	0.92	0.96	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Lanes, Volumes, Timings  
5: Greenberg Road & Bakersville Road

2025 Future Reconfigured  
Saturday Midday



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	228	17	25	201	134	116
Future Volume (vph)	228	17	25	201	134	116
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	14	14	14	14
Grade (%)	0%			-1%	0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.991				0.937	
Flt Protected	0.956			0.994		
Satd. Flow (prot)	1962	0	0	1989	1880	0
Flt Permitted	0.956			0.994		
Satd. Flow (perm)	1962	0	0	1989	1880	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	149			304	324	
Travel Time (s)	4.1			8.3	8.8	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	0%	0%	2%	1%	1%
Adj. Flow (vph)	238	18	26	209	140	121
Shared Lane Traffic (%)						
Lane Group Flow (vph)	256	0	0	235	261	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	15			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.91	0.91	0.92	0.92
Turning Speed (mph)	15	9	15			9
Sign Control	Yield			Yield	Yield	
<b>Intersection Summary</b>						
Area Type:	Other					
Control Type:	Roundabout					

Intersection			
Intersection Delay, s/veh	4.9		
Intersection LOS	A		
Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	256	235	261
Demand Flow Rate, veh/h	258	239	263
Vehicles Circulating, veh/h	141	240	26
Vehicles Exiting, veh/h	148	159	453
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.9	5.5	4.3
Approach LOS	A	A	A
Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	258	239	263
Cap Entry Lane, veh/h	1195	1080	1344
Entry HV Adj Factor	0.992	0.983	0.991
Flow Entry, veh/h	256	235	261
Cap Entry, veh/h	1186	1061	1331
V/C Ratio	0.216	0.221	0.196
Control Delay, s/veh	4.9	5.5	4.3
LOS	A	A	A
95th %tile Queue, veh	1	1	1

Lanes, Volumes, Timings  
6: Greenberg Road & Internal Loop Road

2025 Future Reconfigured  
Saturday MIDDAY



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	12	2	4	425	248	112
Future Volume (vph)	12	2	4	425	248	112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	14	14	14	14
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.981			0.958		
Flt Protected	0.959					
Satd. Flow (prot)	1768	0	0	2007	1888	0
Flt Permitted	0.959					
Satd. Flow (perm)	1768	0	0	2007	1888	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	209			324	282	
Travel Time (s)	5.7			8.8	7.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	17%	0%	0%	1%	1%	7%
Adj. Flow (vph)	12	2	4	438	256	115
Shared Lane Traffic (%)						
Lane Group Flow (vph)	14	0	0	442	371	0
Enter Blocked Intersection	No	No	No	Yes	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	16			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.85	0.85	0.92	0.92	0.92	0.92
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	2	4	425	248	112
Future Vol, veh/h	12	2	4	425	248	112
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	17	0	0	1	1	7
Mvmt Flow	12	2	4	438	256	115

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	760	314	371	0	-	0
Stage 1	314	-	-	-	-	-
Stage 2	446	-	-	-	-	-
Critical Hdwy	6.57	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.57	-	-	-	-	-
Critical Hdwy Stg 2	5.57	-	-	-	-	-
Follow-up Hdwy	3.653	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	353	731	1199	-	-	-
Stage 1	708	-	-	-	-	-
Stage 2	615	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	352	731	1199	-	-	-
Mov Cap-2 Maneuver	352	-	-	-	-	-
Stage 1	705	-	-	-	-	-
Stage 2	615	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.8	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1199	-	380	-	-
HCM Lane V/C Ratio	0.003	-	0.038	-	-
HCM Control Delay (s)	8	0	14.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Lanes, Volumes, Timings  
7: Greenberg Road & Bakers Basin Road

2025 Future Reconfigured  
Saturday Midday

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↙	↑	↖	↗
Traffic Volume (vph)	368	257	103	503	326	111
Future Volume (vph)	368	257	103	503	326	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	11	16	10	11
Storage Length (ft)		220	110		0	115
Storage Lanes		1	1		1	1
Taper Length (ft)			55		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1749	1615	1662	2091	1668	1561
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1749	1615	1662	2091	1668	1561
Link Speed (mph)	35			35	25	
Link Distance (ft)	452			328	282	
Travel Time (s)	8.8			6.4	7.7	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	5%	0%	5%	3%	1%	0%
Adj. Flow (vph)	383	268	107	524	340	116
Shared Lane Traffic (%)						
Lane Group Flow (vph)	383	268	107	524	340	116
Enter Blocked Intersection	No	No	No	No	1 veh	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			11	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.00	1.04	0.85	*1.00	1.04
Turning Speed (mph)		9	20		20	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

\* User Entered Value



Intersection						
Int Delay, s/veh	73.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↘	↗
Traffic Vol, veh/h	368	257	103	503	326	111
Future Vol, veh/h	368	257	103	503	326	111
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	220	110	-	0	115
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	5	0	5	3	1	0
Mvmt Flow	383	268	107	524	340	116

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	651	0	1121
Stage 1	-	-	-	-	383
Stage 2	-	-	-	-	738
Critical Hdwy	-	-	4.15	-	6.41
Critical Hdwy Stg 1	-	-	-	-	5.41
Critical Hdwy Stg 2	-	-	-	-	5.41
Follow-up Hdwy	-	-	2.245	-	3.509
Pot Cap-1 Maneuver	-	-	921	-	~ 229
Stage 1	-	-	-	-	691
Stage 2	-	-	-	-	475
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	921	-	~ 202
Mov Cap-2 Maneuver	-	-	-	-	~ 202
Stage 1	-	-	-	-	691
Stage 2	-	-	-	-	420

















Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	277.7
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	202	669	-	-	921	-
HCM Lane V/C Ratio	1.681	0.173	-	-	0.116	-
HCM Control Delay (s)	\$ 368.3	11.5	-	-	9.4	-
HCM Lane LOS	F	B	-	-	A	-
HCM 95th %tile Q(veh)	22.8	0.6	-	-	0.4	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Lanes, Volumes, Timings  
 8: Wawa Driveway/Internal Loop Road & Bakersville Road

2025 Future Reconfigured  
 Saturday MIDDAY

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	141	19	96	35	10	36	5	104	0	8	44
Future Volume (vph)	33	141	19	96	35	10	36	5	104	0	8	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	15	15	15	15	15	12	12	12
Grade (%)		-1%			0%			-1%			0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986			0.991			0.903			0.885	
Flt Protected		0.992			0.967			0.988				
Satd. Flow (prot)	0	2040	0	0	1971	0	0	1860	0	0	1653	0
Flt Permitted		0.992			0.967			0.988				
Satd. Flow (perm)	0	2040	0	0	1971	0	0	1860	0	0	1653	0
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		55			149			115			199	
Travel Time (s)		1.5			4.1			3.1			5.4	
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%	1%	0%	2%	1%	0%	3%	0%	0%	0%	0%	2%
Adj. Flow (vph)	34	145	20	99	36	10	37	5	107	0	8	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	199	0	0	145	0	0	149	0	0	53	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	
<b>Intersection Summary</b>												
Area Type:	Other											
Control Type:	Unsignalized											

HCM 6th TWSC  
 8: Wawa Driveway/Internal Loop Road & Bakersville Road

2025 Future Reconfigured  
 Saturday Midday

Intersection												
Int Delay, s/veh	6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	33	141	19	96	35	10	36	5	104	0	8	44
Future Vol, veh/h	33	141	19	96	35	10	36	5	104	0	8	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-1	-	-	0	-	-	-1	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	1	0	2	1	0	3	0	0	0	0	2
Mvmt Flow	34	145	20	99	36	10	37	5	107	0	8	45

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	46	0	0	165	0	0	489	467	155	518	472	41
Stage 1	-	-	-	-	-	-	223	223	-	239	239	-
Stage 2	-	-	-	-	-	-	266	244	-	279	233	-
Critical Hdwy	4.1	-	-	4.12	-	-	6.93	6.3	6.1	7.1	6.5	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.93	5.3	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.93	5.3	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.218	-	-	3.527	4	3.3	3.5	4	3.318
Pot Cap-1 Maneuver	1575	-	-	1413	-	-	501	509	900	471	493	1030
Stage 1	-	-	-	-	-	-	787	732	-	769	711	-
Stage 2	-	-	-	-	-	-	748	717	-	732	716	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1575	-	-	1413	-	-	438	461	900	382	447	1030
Mov Cap-2 Maneuver	-	-	-	-	-	-	438	461	-	382	447	-
Stage 1	-	-	-	-	-	-	768	714	-	751	660	-
Stage 2	-	-	-	-	-	-	655	665	-	625	699	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.3			5.3			11.6			9.5		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	695	1575	-	-	1413	-	-	858
HCM Lane V/C Ratio	0.215	0.022	-	-	0.07	-	-	0.062
HCM Control Delay (s)	11.6	7.3	0	-	7.7	0	-	9.5
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.8	0.1	-	-	0.2	-	-	0.2

Lanes, Volumes, Timings  
 9: Bakersville Road & CFA East Access

2025 Future Reconfigured  
 Saturday Midday



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↔			↗
Traffic Volume (vph)	25	193	36	79	0	0
Future Volume (vph)	25	193	36	79	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	12	12
Grade (%)		-1%	0%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.907			
Flt Protected		0.994				
Satd. Flow (prot)	0	2070	1884	0	0	1900
Flt Permitted		0.994				
Satd. Flow (perm)	0	2070	1884	0	0	1900
Link Speed (mph)		25	25		25	
Link Distance (ft)		71	55		121	
Travel Time (s)		1.9	1.5		3.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	1%	2%	0%	0%	0%
Adj. Flow (vph)	26	203	38	83	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	229	121	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.88	0.88	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
<b>Intersection Summary</b>						
Area Type:	Other					
Control Type:	Unsignalized					

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷			↶
Traffic Vol, veh/h	25	193	36	79	0	0
Future Vol, veh/h	25	193	36	79	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-1	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	1	2	0	0	0
Mvmt Flow	26	203	38	83	0	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	121	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.1	-	6.2
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.2	-	3.3
Pot Cap-1 Maneuver	1479	-	986
Stage 1	-	-	0
Stage 2	-	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1479	-	986
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1479	-	-	-	-
HCM Lane V/C Ratio	0.018	-	-	-	-
HCM Control Delay (s)	7.5	0	-	-	0
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	-

Lanes, Volumes, Timings  
 10: Bakersville Road & CFA West Access

2025 Future Reconfigured  
 Saturday Midday



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↔	
Traffic Volume (vph)	0	101	36	0	117	72
Future Volume (vph)	0	101	36	0	117	72
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	15	16	16
Grade (%)		0%	1%		0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>					0.949	
Fl <sub>t</sub> Protected					0.970	
Satd. Flow (prot)	0	2069	2039	0	1970	0
Fl <sub>t</sub> Permitted					0.970	
Satd. Flow (perm)	0	2069	2039	0	1970	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		219	71		111	
Travel Time (s)		6.0	1.9		3.0	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles (%)	0%	1%	2%	0%	1%	0%
Adj. Flow (vph)	0	135	48	0	156	96
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	135	48	0	252	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		16	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.88	0.88	0.89	0.89	0.85	0.85
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other  
 Control Type: Unsignalized

Intersection						
Int Delay, s/veh	6.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↓	
Traffic Vol, veh/h	0	101	36	0	117	72
Future Vol, veh/h	0	101	36	0	117	72
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	1	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	0	1	2	0	1	0
Mvmt Flow	0	135	48	0	156	96

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	183 48
Stage 1	-	-	-	-	48 -
Stage 2	-	-	-	-	135 -
Critical Hdwy	-	-	-	-	6.41 6.2
Critical Hdwy Stg 1	-	-	-	-	5.41 -
Critical Hdwy Stg 2	-	-	-	-	5.41 -
Follow-up Hdwy	-	-	-	-	3.509 3.3
Pot Cap-1 Maneuver	0	-	-	0	809 1027
Stage 1	0	-	-	0	977 -
Stage 2	0	-	-	0	894 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	809 1027
Mov Cap-2 Maneuver	-	-	-	-	809 -
Stage 1	-	-	-	-	977 -
Stage 2	-	-	-	-	894 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.7
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	880
HCM Lane V/C Ratio	-	-	0.286
HCM Control Delay (s)	-	-	10.7
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	1.2

Lanes, Volumes, Timings  
 11: Internal Loop Road & Proposed Drive-Thru Access

2025 Future Reconfigured  
 Saturday Midday



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	39	14	52	83
Future Volume (vph)	0	0	39	14	52	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>					0.917	
Fl <sub>t</sub> Protected				0.964		
Satd. Flow (prot)	0	1900	0	1762	1729	0
Fl <sub>t</sub> Permitted				0.964		
Satd. Flow (perm)	0	1900	0	1762	1729	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	137			199	209	
Travel Time (s)	3.7			5.4	5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	15%	2%	0%
Adj. Flow (vph)	0	0	42	15	57	90
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	57	147	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized



Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↖	↗	↖
Traffic Vol, veh/h	0	0	39	14	52	83
Future Vol, veh/h	0	0	39	14	52	83
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	15	2	0
Mvmt Flow	0	0	42	15	57	90

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	-	102	147	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.2	4.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	0	959	1447	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	959	1447	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	5.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1447	-	-	-	-
HCM Lane V/C Ratio	0.029	-	-	-	-
HCM Control Delay (s)	7.6	0	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-

**SIMTRAFFIC**



Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	11:55	11:55	11:55	11:55	11:55	11:55
End Time	1:00	1:00	1:00	1:00	1:00	1:00
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	4927	4501	4931	4756	4816	4786
Vehs Exited	4896	4462	4878	4733	4757	4745
Starting Vehs	93	108	107	87	83	91
Ending Vehs	124	147	160	110	142	131
Travel Distance (mi)	1366	1249	1362	1317	1329	1325
Travel Time (hr)	226.6	412.4	265.6	358.6	343.3	321.3
Total Delay (hr)	180.7	370.0	219.9	314.4	298.7	276.7
Total Stops	5518	5018	5734	5579	5793	5524
Fuel Used (gal)	93.6	132.1	103.3	122.3	119.7	114.2

Interval #0 Information Seeding

Start Time	11:55
End Time	12:00
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	12:00
End Time	12:15
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1249	1271	1337	1277	1249	1277
Vehs Exited	1192	1209	1270	1214	1175	1213
Starting Vehs	93	108	107	87	83	91
Ending Vehs	150	170	174	150	157	157
Travel Distance (mi)	341	342	363	345	336	345
Travel Time (hr)	30.0	35.5	35.5	33.6	30.1	32.9
Total Delay (hr)	18.6	24.0	23.4	22.1	18.8	21.4
Total Stops	1247	1353	1498	1325	1257	1333
Fuel Used (gal)	17.3	18.4	19.5	18.3	17.2	18.2

SimTraffic Simulation Summary  
 Weekday Midday

2025 Future Reconfigured

Interval #2 Information

Start Time	12:15
End Time	12:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1408	1099	1312	1282	1291	1276
Vehs Exited	1342	1109	1293	1237	1238	1244
Starting Vehs	150	170	174	150	157	157
Ending Vehs	216	160	193	195	210	190
Travel Distance (mi)	371	300	354	342	345	343
Travel Time (hr)	45.5	72.7	49.4	67.3	61.6	59.3
Total Delay (hr)	33.0	62.3	37.4	55.9	50.0	47.7
Total Stops	1691	1302	1415	1479	1464	1467
Fuel Used (gal)	21.9	25.9	22.4	26.0	24.8	24.2

Interval #3 Information

Start Time	12:30
End Time	12:45
Total Time (min)	15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1140	1051	1134	1153	1109	1114
Vehs Exited	1236	1064	1168	1188	1143	1160
Starting Vehs	216	160	193	195	210	190
Ending Vehs	120	147	159	160	176	148
Travel Distance (mi)	337	297	324	324	314	319
Travel Time (hr)	59.1	126.7	68.0	110.8	109.2	94.8
Total Delay (hr)	47.8	116.7	57.2	99.9	98.6	84.0
Total Stops	1423	1078	1370	1590	1614	1408
Fuel Used (gal)	24.0	38.0	25.6	35.3	34.7	31.5

Interval #4 Information

Start Time	12:45
End Time	1:00
Total Time (min)	15

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1130	1080	1148	1044	1167	1109
Vehs Exited	1126	1080	1147	1094	1201	1131
Starting Vehs	120	147	159	160	176	148
Ending Vehs	124	147	160	110	142	131
Travel Distance (mi)	317	309	322	305	334	318
Travel Time (hr)	91.9	177.5	112.6	146.9	142.4	134.3
Total Delay (hr)	81.3	166.9	101.9	136.5	131.3	123.6
Total Stops	1157	1285	1451	1185	1458	1304
Fuel Used (gal)	30.5	49.8	35.8	42.7	42.9	40.3

4: Greenberg Road & Wawa Driveway/Bakersville Road Performance by lane

Lane	EB	WB	NB	NB	SB	SB	All
Movements Served	LT	TR	L	TR	L	R	
Denied Del/Veh (s)							0.6
Total Del/Veh (s)	4.3	4.6	4.1	6.1	0.8	0.7	3.8

7: Greenberg Road & Bakers Basin Road Performance by lane

Lane	EB	EB	WB	WB	NB	NB	All
Movements Served	T	R	L	T	L	R	
Denied Del/Veh (s)							0.9
Total Del/Veh (s)	5.3	2.2	6.8	1.4	49.7	4.2	14.7

Total Zone Performance

Denied Del/Veh (s)							1.8
Total Del/Veh (s)							1159.5

Queuing and Blocking Report  
 Weekday Midday

2025 Future Reconfigured

Intersection: 4: Greenberg Road & Wawa Driveway/Bakersville Road

Movement	EB	WB	NB	NB	SB
Directions Served	LT	TR	L	TR	R
Maximum Queue (ft)	71	76	50	57	53
Average Queue (ft)	32	38	23	20	3
95th Queue (ft)	59	63	41	48	23
Link Distance (ft)	69	302		302	
Upstream Blk Time (%)	0				
Queuing Penalty (veh)	0				
Storage Bay Dist (ft)			160		130
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 7: Greenberg Road & Bakers Basin Road

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	16	56	98	53	262	150
Average Queue (ft)	1	5	28	2	185	104
95th Queue (ft)	9	27	68	33	284	204
Link Distance (ft)	352			296	201	
Upstream Blk Time (%)					31	
Queuing Penalty (veh)					150	
Storage Bay Dist (ft)		220	110			115
Storage Blk Time (%)			0	0	57	0
Queuing Penalty (veh)			0	0	60	0

Zone Summary

Zone wide Queuing Penalty: 211

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	4:55	4:55	4:55	4:55	4:55	4:55
End Time	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	5614	5726	5519	5812	5754	5681
Vehs Exited	5537	5573	5425	5727	5611	5574
Starting Vehs	118	145	135	121	101	119
Ending Vehs	195	298	229	206	244	234
Travel Distance (mi)	1622	1637	1587	1675	1660	1636
Travel Time (hr)	262.5	375.9	333.4	318.3	285.0	315.0
Total Delay (hr)	211.3	324.2	283.0	265.3	232.5	263.2
Total Stops	6382	6856	6310	6718	6687	6587
Fuel Used (gal)	111.6	137.4	126.4	126.4	117.7	123.9

Interval #0 Information Seeding

Start Time	4:55
End Time	5:00
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1454	1450	1453	1454	1452	1450
Vehs Exited	1387	1387	1379	1382	1361	1377
Starting Vehs	118	145	135	121	101	119
Ending Vehs	185	208	209	193	192	198
Travel Distance (mi)	415	409	413	412	414	413
Travel Time (hr)	43.9	50.9	46.1	44.0	39.4	44.9
Total Delay (hr)	30.8	38.1	33.1	31.0	26.4	31.9
Total Stops	1582	1573	1554	1542	1547	1559
Fuel Used (gal)	23.0	24.3	23.0	22.9	21.5	23.0



SimTraffic Simulation Summary  
Weekday Afternoon

2025 Future Reconfigured

Interval #2 Information

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

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1506	1604	1428	1512	1548	1519
Vehs Exited	1483	1517	1457	1462	1491	1481
Starting Vehs	185	208	209	193	192	198
Ending Vehs	208	295	180	243	249	231
Travel Distance (mi)	421	441	414	424	426	425
Travel Time (hr)	56.5	85.1	73.6	75.2	65.4	71.2
Total Delay (hr)	43.0	71.2	60.5	61.8	51.7	57.7
Total Stops	1678	1886	1654	1753	1830	1756
Fuel Used (gal)	26.3	33.6	30.2	30.8	28.6	29.9

Interval #3 Information

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

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1414	1395	1417	1474	1383	1415
Vehs Exited	1410	1446	1370	1475	1420	1424
Starting Vehs	208	295	180	243	249	231
Ending Vehs	212	244	227	242	212	222
Travel Distance (mi)	414	424	405	428	420	418
Travel Time (hr)	66.8	107.6	92.8	99.7	86.2	90.6
Total Delay (hr)	53.8	94.2	80.0	86.1	72.9	77.4
Total Stops	1669	1748	1629	1870	1638	1707
Fuel Used (gal)	28.6	38.0	34.0	36.7	33.2	34.1

Interval #4 Information

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

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1240	1277	1221	1372	1371	1293
Vehs Exited	1257	1223	1219	1408	1339	1287
Starting Vehs	212	244	227	242	212	222
Ending Vehs	195	298	229	206	244	234
Travel Distance (mi)	372	363	355	410	400	380
Travel Time (hr)	95.4	132.2	120.9	99.4	94.0	108.4
Total Delay (hr)	83.6	120.7	109.5	86.4	81.4	96.3
Total Stops	1453	1649	1473	1553	1672	1556
Fuel Used (gal)	33.7	41.4	39.2	36.0	34.3	36.9

4: Greenberg Road & Wawa Driveway/Bakersville Road Performance by lane

Lane	EB	WB	NB	NB	SB	SB	All
Movements Served	LT	TR	L	TR	L	R	
Denied Del/Veh (s)							0.6
Total Del/Veh (s)	7.7	11.0	4.0	9.5	0.8	0.4	7.5

7: Greenberg Road & Bakers Basin Road Performance by lane

Lane	EB	EB	WB	WB	NB	NB	All
Movements Served	T	R	L	T	L	R	
Denied Del/Veh (s)							1.5
Total Del/Veh (s)	3.0	1.8	8.4	2.4	95.8	6.1	19.3

Total Zone Performance

Denied Del/Veh (s)							2.9
Total Del/Veh (s)							1015.4

Queuing and Blocking Report  
 Weekday Afternoon

2025 Future Reconfigured

Intersection: 4: Greenberg Road & Wawa Driveway/Bakersville Road

Movement	EB	WB	NB	NB	SB
Directions Served	LT	TR	L	TR	R
Maximum Queue (ft)	71	99	40	51	12
Average Queue (ft)	24	39	17	16	1
95th Queue (ft)	52	90	37	41	8
Link Distance (ft)	69	302		302	
Upstream Blk Time (%)	1				
Queuing Penalty (veh)	0				
Storage Bay Dist (ft)			160		130
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 7: Greenberg Road & Bakers Basin Road

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (ft)	43	43	77	185	287	150
Average Queue (ft)	2	4	26	20	229	107
95th Queue (ft)	22	19	61	98	357	210
Link Distance (ft)	352			296	201	
Upstream Blk Time (%)					54	
Queuing Penalty (veh)					203	
Storage Bay Dist (ft)		220	110			115
Storage Blk Time (%)				1	72	0
Queuing Penalty (veh)				1	63	0

Zone Summary

Zone wide Queuing Penalty: 267

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	11:55	11:55	11:55	11:55	11:55	11:55
End Time	1:00	1:00	1:00	1:00	1:00	1:00
Total Time (min)	65	65	65	65	65	65
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4
Vehs Entered	5066	5049	4794	5012	5213	5031
Vehs Exited	5038	5001	4778	4976	5208	5002
Starting Vehs	129	137	118	112	134	121
Ending Vehs	157	185	134	148	139	150
Travel Distance (mi)	1465	1457	1378	1456	1519	1455
Travel Time (hr)	243.3	349.5	359.9	313.8	202.8	293.9
Total Delay (hr)	195.4	301.9	314.7	266.1	153.4	246.3
Total Stops	5715	5964	5481	5567	5853	5718
Fuel Used (gal)	101.1	125.4	124.9	116.7	93.2	112.2

Interval #0 Information Seeding

Start Time	11:55
End Time	12:00
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	12:00
End Time	12:15
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1339	1341	1231	1293	1288	1296
Vehs Exited	1301	1305	1209	1238	1244	1261
Starting Vehs	129	137	118	112	134	121
Ending Vehs	167	173	140	167	178	163
Travel Distance (mi)	392	391	356	374	372	377
Travel Time (hr)	36.6	39.8	32.8	35.6	34.7	35.9
Total Delay (hr)	23.9	27.2	21.2	23.3	22.6	23.7
Total Stops	1438	1519	1279	1382	1310	1383
Fuel Used (gal)	20.4	21.3	18.3	19.7	19.3	19.8

**Interval #2 Information Recording**

Start Time	12:15
End Time	12:30
Total Time (min)	15
Volumes adjusted by PHF, Growth Factors.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1301	1255	1313	1204	1425	1299
Vehs Exited	1311	1243	1247	1223	1407	1286
Starting Vehs	167	173	140	167	178	163
Ending Vehs	157	185	206	148	196	177
Travel Distance (mi)	368	354	365	344	402	367
Travel Time (hr)	55.3	57.3	59.8	60.0	48.0	56.1
Total Delay (hr)	43.2	45.7	47.8	48.5	35.0	44.0
Total Stops	1640	1447	1460	1266	1596	1480
Fuel Used (gal)	24.5	24.1	24.9	24.3	23.4	24.2

**Interval #3 Information Recording**

Start Time	12:30
End Time	12:45
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1233	1158	1112	1209	1314	1202
Vehs Exited	1260	1185	1144	1218	1359	1232
Starting Vehs	157	185	206	148	196	177
Ending Vehs	130	158	174	139	151	147
Travel Distance (mi)	361	339	323	353	394	354
Travel Time (hr)	69.2	112.5	114.5	101.0	58.3	91.1
Total Delay (hr)	57.4	101.3	103.9	89.6	45.6	79.5
Total Stops	1355	1443	1440	1395	1651	1450
Fuel Used (gal)	27.1	36.5	36.2	34.0	25.8	31.9

**Interval #4 Information Recording**

Start Time	12:45
End Time	1:00
Total Time (min)	15
Volumes adjusted by Growth Factors, Anti PHF.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1193	1295	1138	1306	1186	1221
Vehs Exited	1166	1268	1178	1297	1198	1221
Starting Vehs	130	158	174	139	151	147
Ending Vehs	157	185	134	148	139	150
Travel Distance (mi)	344	373	334	386	352	358
Travel Time (hr)	82.2	139.8	152.8	117.2	61.7	110.8
Total Delay (hr)	70.9	127.7	141.8	104.6	50.1	99.0
Total Stops	1282	1555	1302	1524	1296	1387
Fuel Used (gal)	29.1	43.5	45.4	38.7	24.7	36.3

4: Greenberg Road & Wawa Driveway/Bakersville Road Performance by lane

Lane	EB	WB	NB	NB	SB	SB	All
Movements Served	LT	TR	L	TR	L	R	
Denied Del/Veh (s)							0.4
Total Del/Veh (s)	4.6	4.8	4.1	6.1	0.4	0.4	3.6

7: Greenberg Road & Bakers Basin Road Performance by lane

Lane	EB	EB	WB	WB	NB	NB	All
Movements Served	T	R	L	T	L	R	
Denied Del/Veh (s)							0.6
Total Del/Veh (s)	4.0	1.8	7.0	1.3	62.6	5.1	15.7

Total Zone Performance

Denied Del/Veh (s)				1.2			
Total Del/Veh (s)				1036.6			

Intersection: 4: Greenberg Road & Wawa Driveway/Bakersville Road

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LT	TR	L	TR	L	R
Maximum Queue (ft)	66	81	36	50	3	19
Average Queue (ft)	26	37	18	15	0	1
95th Queue (ft)	51	61	36	35	3	8
Link Distance (ft)	69	302		302	215	
Upstream Blk Time (%)	0					
Queuing Penalty (veh)	0					
Storage Bay Dist (ft)			160			130
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 7: Greenberg Road & Bakers Basin Road

Movement	EB	WB	WB	NB	NB
Directions Served	R	L	T	L	R
Maximum Queue (ft)	45	90	32	315	150
Average Queue (ft)	5	33	1	206	108
95th Queue (ft)	25	70	20	348	203
Link Distance (ft)			296	201	
Upstream Blk Time (%)				38	
Queuing Penalty (veh)				166	
Storage Bay Dist (ft)	220	110			115
Storage Blk Time (%)		0	0	57	0
Queuing Penalty (veh)		0	0	63	0

Zone Summary

Zone wide Queuing Penalty: 230