MD 97 (Georgia Avenue)

High Injury Network (HIN) Report

From Bel Pre Rd to Hewitt Ave

Montgomery County Department of Transportation

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Table of Contents

1. INTRODUCTION

Montgomery County's Vision Zero Two Year Action Plan, dated November 2017, established a goal of reaching zero fatal and serious injury crashes on roadways in Montgomery County by the year 2030. To achieve this goal, the County identified roadway segments where fatal and serious injury crashes were concentrated. These roadway segments comprise the County's *High Injury Network* (HIN), where roadway safety improvement efforts are prioritized.

Subsequent Vision Zero Plans (including the 2020 Action Plan, 2030 Action Plan, and FY 22-23 Work Plan) expand on the work from the 2017 Two Year Action Plan by implementing recommendations from completed studies, advancing on-going initiatives, completing open action items, and identifying priority action items to assist with future budgeting and implementation decisions. In particular, the 2030 Action Plan and FY 22-23 Work Plan group all action items into one of three pillars to highlight the primary role roadway design and operation has on reducing traffic deaths. These three pillars include Complete Streets, Multimodal Future, and Culture of Safety. One priority action item under the Complete Streets pillar, labeled as "S-1: High Injury Network Projects", calls for implementing safety countermeasures on identified high-risk road segments and intersections (i.e., HIN roadways).

The 1.25-mile segment of MD 97 (Georgia Avenue) between Bel Pre Road and Hewitt Avenue, located in Aspen Hill, was identified as an HIN roadway based on its crash history. This study includes the analysis of fatal and serious injury crashes, along with recommended improvements to increase safety for all roadway users in the MD 97 corridor.

2. BACKGROUND

Study Area

The primary audit study limits include MD 97 (Georgia Avenue) from Bel Pre Road to Hewitt Avenue in Aspen Hill, Maryland (see **Figure 1**). MD 97 is assumed to run in a north-south direction, and consists of six through lanes (three lanes in each direction) with a wide grass median. The posted speed limit is 35 MPH south of MD 185 (Connecticut Avenue) and 45 MPH north of MD 185. There are several driveway entrances/access points to commercial properties and apartment complexes throughout the corridor. The *Complete Streets Design Guide (CSDG)* street type is most similar to a Boulevard and a Town Center Boulevard north and south of MD 185, respectively.

Concrete sidewalks are present along northbound (NB) and southbound (SB) MD 97, though there is little to no buffer between the sidewalks and the edge of travel lanes. There appears to be limited right of way to expand to provide such buffers. Bicycle facilities are not provided. Ride On and WMATA bus service is provide along the corridor, as shown in **Figure 1**.

The MD 97 study corridor includes the following intersections:

- MD 97 at Bel Pre Road – signalized
- MD 97 at Crystal Springs Apartments Driveway – unsignalized
- MD 97 at Heathfield Road/Postgate Terrace – signalized
- MD 97 at Home Depot Driveway – unsignalized
- MD 97 at MD 185 (Connecticut Avenue) – signalized
- MD 97 at Northgate Plaza – unsignalized
- MD 97 at Aspen Hill Road – signalized
- MD 97 at Wendy Lane – unsignalized
- MD 97 at Ralph Road – unsignalized
- MD 97 at Hewitt Avenue – signalized

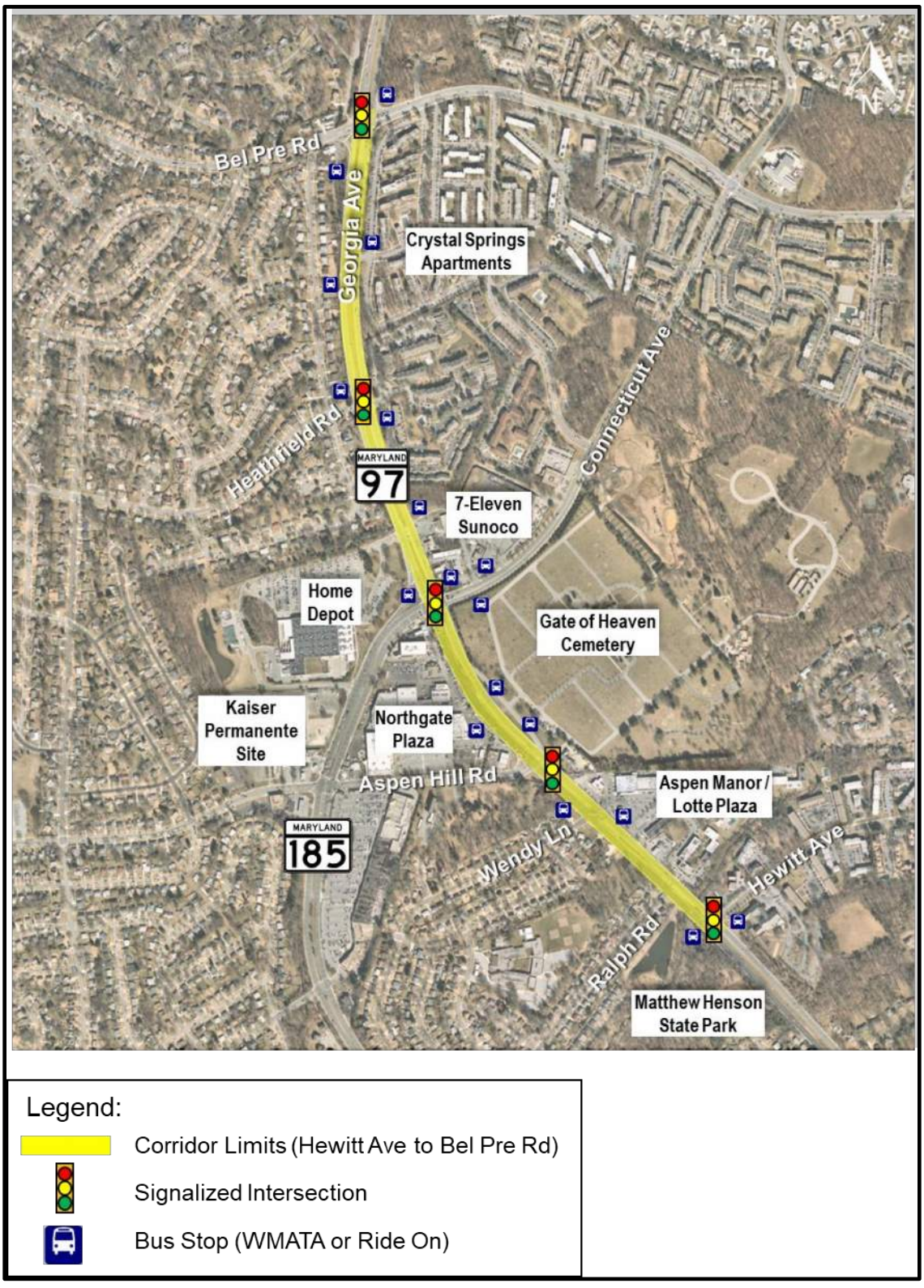


Figure 1. MD 97 HIN Study Limits

Intersections

MD 97 (Georgia Avenue) at Bel Pre Road

Vehicular Facilities

MD 97 at Bel Pre Road is a four-legged intersection and includes a full-color traffic signal, with mast arm structures and roadway luminaires. The NB and SB MD 97 double left-turn movements have exclusive signal phasing, while the eastbound (EB) and westbound (WB) Bel Pre Road approaches have split signal phasing. Right turns for all approaches are channelized and operate under yield control.

Pedestrian / Bicyclist / Transit Facilities

Accessible pedestrian signals and countdown pedestrian signals (APS/CPS) are provided for all approaches, except for the north leg and crossing the channelized right turn lanes, which are not controlled by the traffic signal. Marked crosswalks are provided across all approaches except for the north leg. Sidewalk facilities are provided along MD 97 and Bel Pre Road approaches. Ride On bus Route 49 and WMATA bus Routes Y2, Y7, and Y8 service bus stops at this intersection.

MD 97 (Georgia Avenue) at Crystal Springs Apartments Driveway

Vehicular Facilities

MD 97 at Crystal Springs Apartments Driveway is an unsignalized three-legged intersection, with stop control provided along the WB Crystal Springs Apartment Driveway approach. Vehicular access to Crystal Springs Apartments Driveway is provided for right-in, right-out movements only (no median opening along MD 97 at this location).

Pedestrian / Bicyclist / Transit Facilities

Sidewalk facilities are provided along the MD 97 approaches, along with a walking path internal to the Crystal Springs Apartment complex located on north side of intersection. The grass median shows a noticeable wear aligning with the nearby bus stop along SB MD 97, and the internal walking path. WMATA bus Routes Y2, Y7, and Y8 service bus stops at this intersection.

MD 97 (Georgia Avenue) at Heathfield Road/Postgate Terrace

Vehicular Facilities

MD 97 at Bel Pre Road is a four-legged intersection and includes a full-color traffic signal, with mast arm structures and roadway luminaires. The NB and SB MD 97 left-turn movements have exclusive-permissive signal phasing, while the EB (Heathfield Road) and WB (Postgate Terrace) approaches have permissive signal phasing.

Pedestrian / Bicyclist / Transit Facilities

Accessible pedestrian signals and countdown pedestrian signals (APS/CPS) are provided for all approaches. Marked crosswalks are provided across all approaches. Sidewalk facilities are provided along MD 97, Heathfield Road, and the south side of Postgate Terrace at this intersection. WMATA bus Routes Y2, Y7, and Y8 service bus stops at this intersection.

MD 97 (Georgia Avenue) at Home Depot Driveway

Vehicular Facilities

MD 97 at Home Depot Driveway is an unsignalized three-legged intersection, with the Home Depot Driveway along the EB approach (stop controlled), and several closely spaced driveways (including those to 7-Eleven) with access to MD 97 on the east side of the intersection. There is an opening in the grass median along MD 97 that allows for full movement access at the intersection, though there are signs present that restrict certain vehicle turning movements by time of day. NB left turns from MD 97 to the Home Depot Driveway are prohibited from 6AM to 9AM on weekdays, while EB left turns from the Home Depot Driveway to NB MD 97 are prohibited on weekday from 6AM to 9AM and 4PM to 7PM.

Pedestrian / Bicyclist / Transit Facilities

A marked crosswalk is provided across the Home Deport Driveway, set back approximately 20 feet from the driveway apron; however, an unmarked secondary pedestrian crossing area is located immediately adjacent to MD 97, on the driveway apron. The marked crossing location does not have Americans with Disabilities Act (ADA) compliant pedestrian ramps nor an ADA compliant pedestrian refuge island. Sidewalk facilities are provided along MD 97 and the south side of the Home Depot Driveway at this intersection. WMATA bus Routes Y2, Y7, and Y8 service the NB bus stop at this intersection.

MD 97 (Georgia Avenue) at MD 185 (Connecticut Avenue)

Vehicular Facilities

MD 97 at MD 185 is a four-legged intersection and includes a full-color traffic signal, with mast arm structures and roadway luminaires. The NB MD 97 left-turn movements have exclusive signal phasing, while the SB MD 97 left-turn movements have exclusive-permissive signal phasing. The EB and WB Connecticut Avenue approaches operate with split signal phasing. The right turn movement from SB MD 97 to WB MD 185 consists of two channelized, uncontrolled right turn lanes.

Pedestrian / Bicyclist / Transit Facilities

Accessible pedestrian signals and countdown pedestrian signals (APS/CPS) are provided for all approaches, except for crossing the SB MD 97 channelized right turn lanes, which are not controlled by the traffic signal. Marked crosswalks are provided across all approaches. Sidewalk facilities are provided along MD 97 and MD 185 at this intersection, with the exception of the portion of the right turn channelization island running along MD 185 in the northwest (NW) corner. Ride On bus Routes 26, 34, and 41, and WMATA bus Routes Y2, Y7, Y8, and L8 service bus stops at this intersection.

MD 97 (Georgia Avenue) at Northgate Plaza

Vehicular Facilities

MD 97 at Northgate Plaza is an unsignalized three-legged intersection, with stop control provided along the EB Northgate Plaza Shopping Center driveway approach. The driveway is bifurcated, serving inbound turns (from MD 97) and outbound right turns only. The NB MD 97 approach includes a left turn lane, the while the SB approach includes separate auxiliary lanes for right turns into the shopping center and U-turns to NB MD 97.

Pedestrian / Bicyclist / Transit Facilities

Sidewalk facilities are provided along MD 97 and internal to Northgate Plaza at this intersection. WMATA bus Routes Y2, Y7, and Y8 service bus stops at this intersection.

MD 97 (Georgia Avenue) at Aspen Hill Road

Vehicular Facilities

MD 97 at Aspen Hill Road is a four-legged intersection and includes a full-color traffic signal, with mast arm structures and roadway luminaires. The east leg of the intersection is a skewed access road to Gate of Heaven Cemetery that accommodates two-way travel. The NB MD 97 double left-turn movement and SB MD 97 left-turn movement have exclusive signal phasing. The EB Aspen Hill Road and WB Gate of Heaven Cemetery Access Road approaches operate in split signal phasing, with the EB Aspen Hill right turns having an overlap phase with NB MD 97 left turns. Right turns for the SB approach are uncontrolled and channelized.

Pedestrian / Bicyclist / Transit Facilities

Accessible pedestrian signals and countdown pedestrian signals (APS/CPS) are provided for crossing the south, east, and west intersection legs approaches (excluding the SB MD 97 channelized right turn lane, which is not controlled by the traffic signal). Marked crosswalks are provided across all legs, except for the north leg. Sidewalk facilities are provided along MD 97, the south side of Aspen Hill Road, and the north side of Aspen Hill Road outside of the NW corner's right turn channelization island. WMATA bus Routes Y2, Y7, and Y8 service the NB bus stop at this intersection.

MD 97 (Georgia Avenue) at Wendy Lane

Vehicular Facilities

MD 97 at Wendy Lane is an unsignalized four-legged intersection that is stop-controlled along the Wendy Lane/Aspen Manor Shopping Center Driveway approaches (Wendy Lane comprises the west leg of the intersection, while Aspen Manor Shopping Center Driveway comprises the east leg). The NB and SB MD 97 left turns are separated by a monolithic median, which restricts Wendy Lane and Aspen Manor Shopping Center Driveway approaches to allow right-turns only.

Pedestrian / Bicyclist / Transit Facilities

Sidewalk facilities are provided along MD 97 and Wendy Lane approaches. WMATA bus Routes Y2, Y7, and Y8 service bus stops at this intersection.

MD 97 (Georgia Avenue) at Ralph Road

Vehicular Facilities

MD 97 at Ralph Road is an unsignalized three-legged intersection, with Ralph Road along the EB approach (stop controlled), and a driveway to Aspen Hill Apartments with direct access to MD 97 on the east side of the intersection (also stop controlled). The NB and SB MD 97 approaches include left-turn lanes, and side street approaches permit all movements.

Pedestrian / Bicyclist / Transit Facilities

Sidewalk facilities are provided along MD 97 and Ralph Road approaches. There are no bus stops at this intersection.

MD 97 (Georgia Avenue) at Hewitt Avenue

Vehicular Facilities

MD 97 at Hewitt Avenue is a three-legged intersection and includes a full-color traffic signal, with mast arm structures and roadway luminaires. The SB MD 97 left-turn movement has exclusive-permissive signal phasing. The WB Hewitt Avenue approach includes separate left- and right-turn lanes that are controlled by a permissive signal phase. The Matthew Henson Trail crosses MD 97 at this intersection, with the marked south leg crosswalk serving as the crossing location.

Pedestrian / Bicyclist / Transit Facilities

Accessible pedestrian signals (APS), countdown pedestrian signals (CPS), and marked crosswalks are provided for all approaches. Sidewalk facilities are provided along MD 97 and Hewitt Avenue at this intersection, along with direct access to the paved Matthew Henson Trail. Ride On bus Route 51 and WMATA bus Routes Y2, Y7, and Y8 service bus stops at this intersection.

Figure 2 shows the existing lane use and traffic control at all study intersections within the corridor.

Pedestrian Level of Comfort

Pedestrian Level of Comfort (PLOC) is a metric used to identify how comfortable it is to walk under various conditions and was used to evaluate the study corridor roadway. The 4 primary ratings for PLOC include "Very Comfortable" (1), "Somewhat Comfortable" (2), "Uncomfortable" (3), and "Undesirable" (4). **Figure 3** summarizes the PLOC scores obtained from the Montgomery Planning GIS and Mapping online database and confirmed during the field inventory. The roadways that have been identified with PLOC scores of "Uncomfortable" or "Undesirable" MD 97, MD 185, Bel Pre Road, and Aspen Hill Road, as well as all crossings within the study area. PLOC Methodology is detailed online.

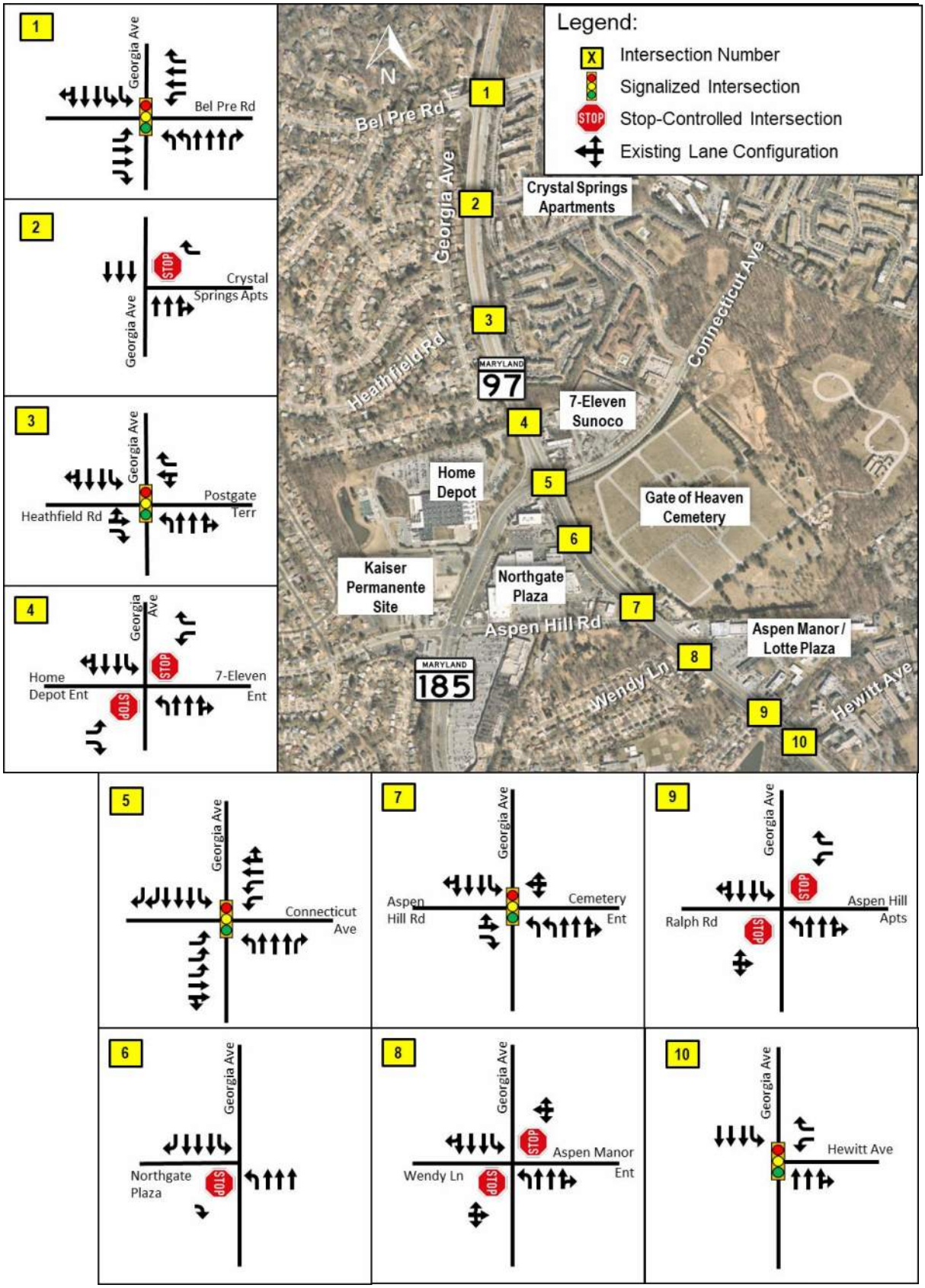


Figure 2. Existing Lane Use and Traffic Control

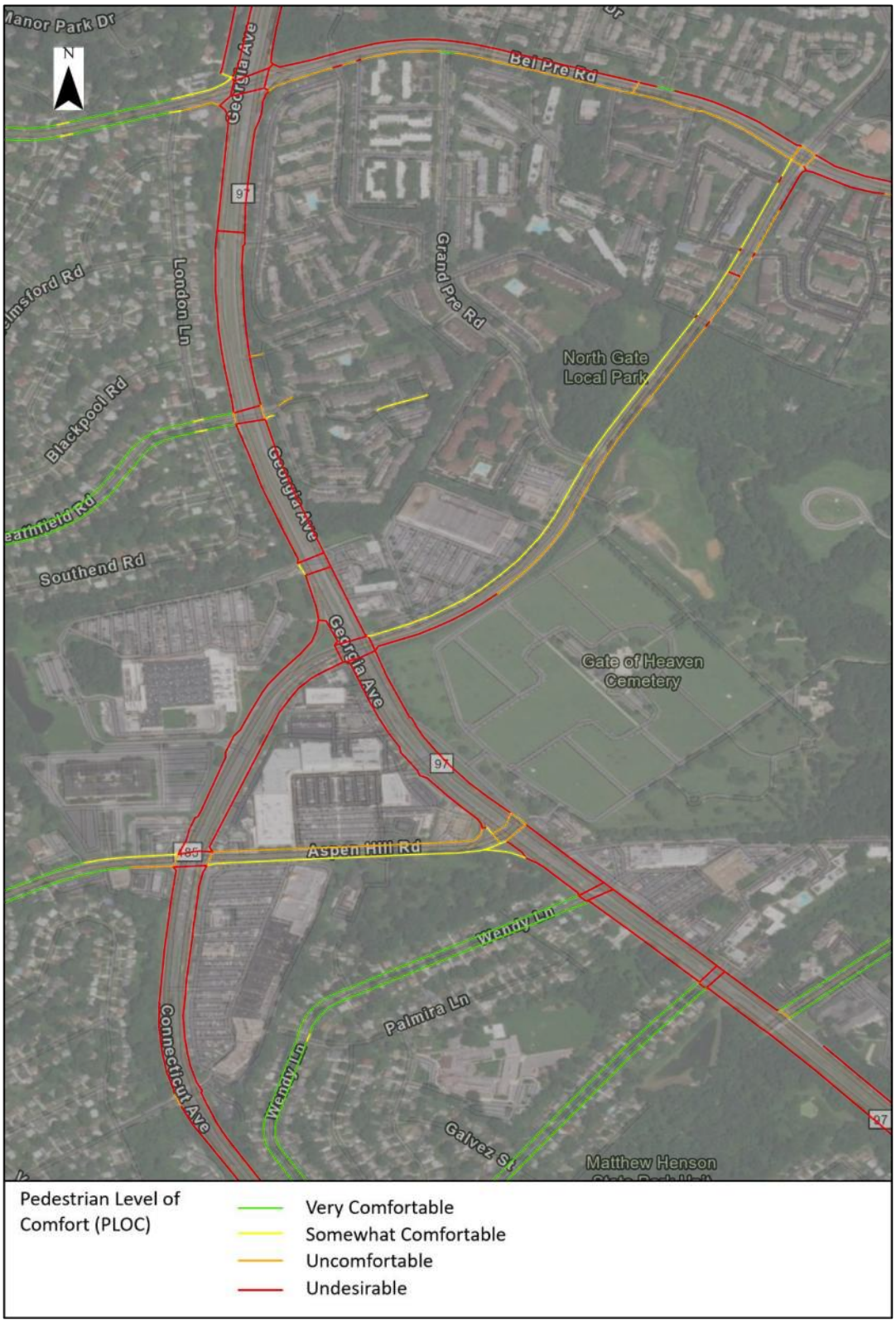


Figure 3. PLOC Map

Traffic Data

MCDOT determined Annual Average Daily Traffic (AADT) volumes for the study area, measured in vehicles per day (vpd), based on available traffic counts from MDOT SHA's Internet Traffic Monitoring System (I-TMS). Traffic counts used were collected on Tuesday, August 28, 2018, and Wednesday, August 29, 2018. AM and PM peak hour turning movement volumes, measured in vehicles per hour (vph), were also determined for each study intersection within the corridor. These turning movement volumes were based on traffic counts collected in December 2018 and November 2019 as part of the December 2019 *Kaiser Aspen Hill Local Transportation Area Review*, and counts collected on Wednesday, September 21, 2021. The AADT and peak hour volume data are shown in **Table 1** and **Figure 4,** respectively. Pedestrian and bicycle counts are included in **Figure 5** and **Figure 6,** respectively.

Please note that due to the impact of the COVID-19 pandemic reducing overall traffic volumes, AADT and peak hour turning movement counts from 2018 and 2019 were used as a basis for this study (counts from September 2021 were used as a supplemental data resource). These pre-COVID counts were used to analyze a more conservative scenario that does not reflect traffic conditions observed during the pandemic. Traffic count data is provided in **Appendix A**.

Table 1. Roadway AADT Data

Road	Segment	Count Year	AADT (vpd)
MD 97 (Georgia Avenue)	Bel Pre Road to MD 185 (Connecticut Avenue)	2018	48,342
MD 97 (Georgia Avenue)	MD 185 (Connecticut Avenue) to Hewitt Avenue	2018	31,936

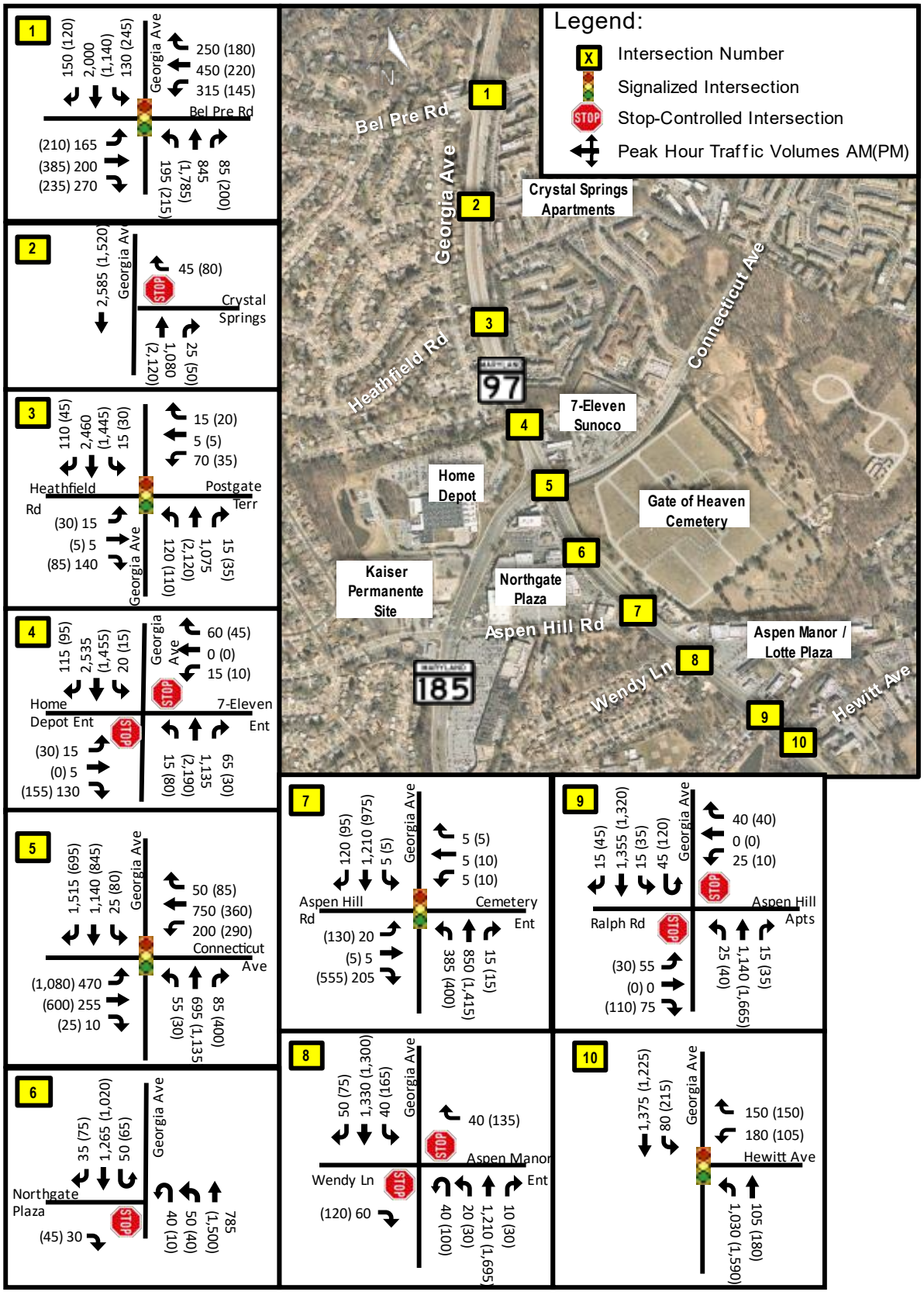


Figure 4. Existing AM and PM Peak Hour Volumes

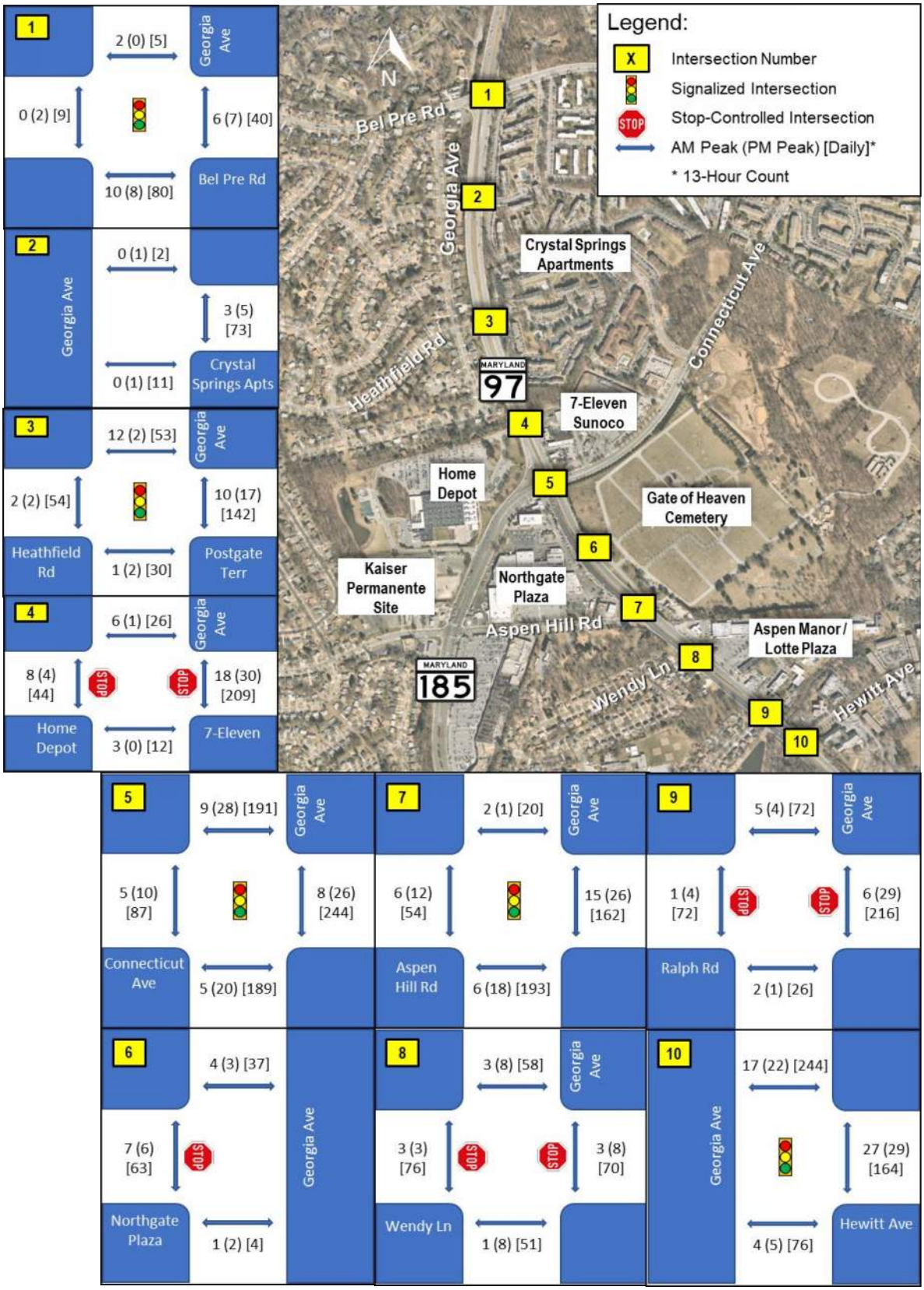


Figure 5. Existing Pedestrian Volumes

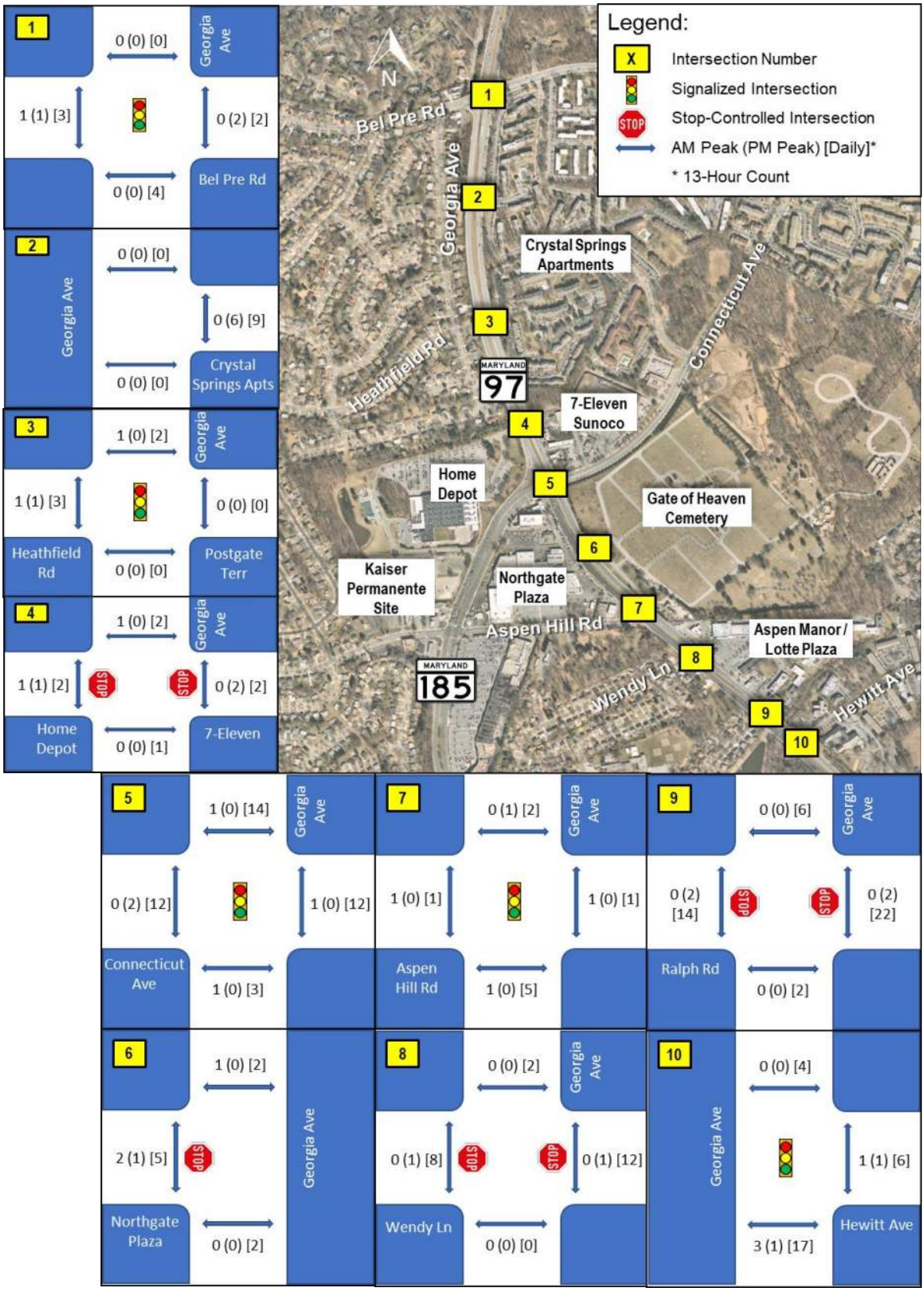


Figure 6. Existing Bicycle Volumes

Speed Data

MCDOT collected vehicle speed data over a 48-hour period along MD 97 for Tuesday, March 22, 2022, through Wednesday, March 23, 2022. This speed data was collected in both NB and SB directions at two locations – approximately 300 feet south of Wendy Lane and approximately 1,150 feet south of Bel Pre Road. A summary of the speed data is provided in **Table 2**. Detailed speed reports can be found in **Appendix B.**

Table 2. MD 97 Speed Data

Location	Direction of Travel	Average Speed (mph)	85th Percentile Speed (mph)	10-mph Pace Speed (mph)
Posted Speed Limit 35 mph				
MD 97 - 300' south of Wendy Lane	NB	34	43	31 – 40
MD 97 - 300' south of Wendy Lane	SB	39	42	31 – 40
Posted Speed Limit 45 mph				
MD 97 – 1,150' south of Bel Pre Rd	NB	41	48	31 – 40
MD 97 – 1,150' south of Bel Pre Rd	SB	41	48	31 – 40

Speed data from March 2022 indicates that most vehicles exceed the posted speed limit along MD 97 to the south of MD 185, where the speed limit is posted 35 MPH. The speed distribution at the location north of MD 185 indicated that most drivers obeyed the posted speed limit of 45 MPH. 85th percentile speeds at locations closer to Wendy Lane were found to be approximately 8 MPH above posted speed limits, while 85th percentile speeds north of MD 185 were approximately 3 MPH above posted speed limits. The SB direction was generally found to have higher average and maximum speeds, which may be influenced by the change in elevation along the study corridor (SB is mostly downhill, while NB is mostly uphill).

The segments of MD 97 north and south of MD 185 were evaluated using FHWA's USLIMITS2 methodology. The USLIMITS2 tool is a web-based resource for recommending reasonable, safe, and consistent speed limits for roadway segments. Factors considered in the evaluation include operating speeds, AADT, roadway characteristics, geometric conditions, land development, crash history, presence of on-street parking, and pedestrian and bicycle activity. Using USLIMITS2, a posted speed limit of 35 MPH is recommended for the segment of MD 97 between Hewitt Avenue and MD 185, and a posted speed limit of 40 MPH is recommended for the segment of MD 97 between MD 185 and Bel Pre Road.

The USLIMITS2 printouts can be found in **Appendix B**.

Public Transit and Ridership

Available public transit within/crossing the study limits includes Montgomery County Ride On bus Route 51 along Hewitt Avenue and MD 97; Routes 26, 34, and 41 along MD 185; and Route 49 along Bel Pre Road. WMATA bus service includes Routes Y2, Y7, and Y8 along MD 97, and Route L8 along MD 185. Bus routes travel between the locations given below:

- WMATA Routes Y2 and Y8 – between MedStar Montgomery Medical Center in Olney and Silver Spring Transit Center
- WMATA Route Y7 – between the Intercounty Connector Park & Ride in Norbeck and Silver Spring Transit Center
- WMATA Route L8 – between Aspen Hill and Friendship Heights
- MCDOT Ride On Route 51 – Norbeck Road Park & Ride and Glenmont Metro Station
- MCDOT Ride On Route 26 – between Glenmont Metro Station and Montgomery Mall in Bethesda
- MCDOT Ride On Route 34 – between Aspen Hill and Friendship Heights Metro Station
- MCDOT Ride On Route 41 – between Aspen Hill and Glenmont Metro Station

Bus stops are marked by Ride On and/or WMATA signs, with route information provided on each sign. The stops are not consistently located on either the nearside or far side of the intersections within the MD 97 corridor. Seven (7) of the 16 bus stops along MD 97 are located within approximately 200 feet of a protected, signalized crossing of MD 97. Four (4) of the bus stops are located greater than 600 feet from a protected crossing.

Recent average daily bus ridership data was provided by MCDOT's Division of Transit Services and WMATA's Office of Bus Planning for 2019. **Figure 7** shows the locations of all bus stops within the study corridor, the Ride On and/or WMATA bus stop ID numbers at each stop, and the daily person ridership at each stop (i.e., daily boarding and alighting). A review of the data indicated that daily boarding and alighting varied throughout the study area (**Table 3**), with the highest total ridership occurring on NB MD 97 at MD 185 (far side), WB MD 185 at MD 97 (near side), EB MD 185 at MD 97 (far side) followed by NB MD 97 at Hewitt Avenue (near side). The lowest ridership location along MD 97 within the study area is WMATA Stop ID 2000873, which runs NB opposite the Northgate Plaza driveway.

Table 3. MD 97 Corridor Bus Stop Daily Ridership, 2019

Location	Stop ID	Bus Route	Boardings	Alightings
NB MD 97 at Bel Pre Road (far side)	WMATA 2001362	Y2, Y7, Y8	**38**	**46**
SB MD 97 at Bel Pre Road (far side)	WMATA 2000913	Y2, Y7, Y8	**91**	**26**
WB Bel Pre Road at MD 97 (far side)	Ride On 29106	49	**12**	**6**
NB MD 97 at Crystal Springs Apartments (far side)	WMATA 2000905	Y2, Y7, Y8	**20**	**100**
SB MD 97 at Crystal Springs Apartments (midblock)	WMATA 2000904	Y2, Y7, Y8	**51**	**5**
SB MD 97 at Heathfield Road (nearside)	WMATA 2000897	Y2, Y7, Y8	**55**	**6**
NB MD 97 at Postgate Terrace (nearside)	WMATA 2001361	Y2, Y7, Y8	**9**	**52**
NB MD 97 at Home Depot (far side)	WMATA 2000892	Y2, Y7, Y8	**9**	**27**
SB MD 97 at MD 185 (nearside)	WMATA 2000883	Y2, Y7, Y8	**143**	**47**
NB MD 97 at MD 185 (far side)	WMATA 2000890	Y2, Y7, Y8	**95**	**175**
WB Connecticut Avenue at MD 97 (nearside)	WMATA 2000885 Ride On 21344	L8 26, 34, 41 **Total:**	60 97 **157**	24 78 **102**
EB MD 185 at MD 97 (far side)	WMATA 2000882 Ride On 21330	L8 26, 34, 41 **Total:**	19 86 **105**	59 66 **125**
NB MD 97 at Northgate Plaza (far side)	WMATA 2000873	Y2, Y7, Y8	**4**	**22**
SB MD 97 at Northgate Plaza (far side)	WMATA 2000867	Y2, Y7, Y8	**112**	**23**
NB MD 97 at Aspen Hill Road (far side)	WMATA 2000864	Y2, Y7, Y8	**7**	**54**
SB MD 97 at Wendy Lane (nearside)	WMATA 2000861	Y2, Y7, Y8	**74**	**10**
NB MD 97 at Wendy Lane (nearside)	WMATA 2000857	Y2, Y7, Y8	**27**	**73**
SB MD 97 at Hewitt Avenue (nearside)	WMATA 2001356	Y2, Y7, Y8	**175**	**23**
NB MD 97 at Hewitt Avenue (nearside)	WMATA 2000839 Ride On 29154	Y2, Y7, Y8 51 **Total:**	52 5 **57**	166 2 **168**

Note: Ride On ridership data combines daily boardings and alightings. Discrete boarding and alighting data are not available.

Figure 7. Transit Ridership

Land Use

The MD 97 study area falls within two context zone classifications, according to MDOT SHA's *Context Driven* guide (Context Driven Resources). The northern part of the study area, which includes MD 97 from Bel Pre Road to MD 185, falls within the Suburban Activity Center context zone. The southern part of the study area, along MD 97 from MD 185 to Hewitt Avenue, is classified as being within a Suburban context zone. A Suburban Activity Center, as defined in the *Context Driven* guide, is typically found along major arterials and features a medium diversity of uses, along with a much lower density than that found in an urban core, urban center, and traditional town center. A Suburban Activity Center typically consists of detached low-rise structures with a range of setbacks, with off-street parking typically being present between the structures and roadway. These areas often serve a variety of transportation modes and trip types and require a balanced approach between access and mobility. A Suburban context zone, as defined in the *Context Driven* guide, typically consists of moderate to low diversity of uses primarily containing single family residential development on lot sizes ranging from 1/8th of an acre to 1 acre. Office parks and small commercial strip retail are scattered throughout, along with neighborhood-level civic and cultural facilities. Buildings are primarily oriented toward parking, which is usually provided off-street.

The actual roadway and land use characteristics of the MD 97 study area (along with Bel Pre Road, MD 185, Aspen Hill Road, and Hewitt Avenue corridors) largely reflect the description of either Suburban Activity Center or Suburban.

Other Corridor Studies, Plans, and Redevelopment

This MD 97 HIN study involved the review of several previous studies, plans, and redevelopment documents that overlapped in full or in part with the limits of this study area. Previous roadway safety recommendations/upgrades served as resources and were considered when developing the roadway safety recommendations tables found later in this report. The studies, plans, and redevelopment documents considered are summarized below.

Aspen Hill Vision Zero Study, 2019

The Aspen Hill Vision Zero Study identifies strategies to improve safety for all people walking, biking, rolling, driving, and using transit in Aspen Hill. The entirety of the MD 97 HIN corridor lies within the Aspen Hill Vision Zero Study area boundaries. The Study states that proposed short- and long-term measures prioritize access and safety improvements, focusing on people, how and where they travel, and their comfort traveling in their neighborhood. Measures identified in the study included traffic signal timing and phasing improvements, high visibility crosswalk installations, median refuge island installations, removal of channelized right-turn lanes, right turn on red restrictions, bus stop improvements/upgrades, providing a buffer between pedestrians and moving vehicles, new traffic signals, vehicle speed reduction strategies, and providing unobstructed sidewalks, among others.

MD 185 Pedestrian Road Safety Audit (PRSA), 2011

The Connecticut Ave PRSA was conducted in 2011 by MCDOT, with the intent of identify existing pedestrian- and bicyclist-related safety issues and developing recommendation to improve pedestrian and bicyclist safety. The PRSA study limits included the MD 185 (Connecticut Avenue) corridor from Independence Street to MD 97 (Georgia Avenue) in Aspen Hill. The PRSA overlaps with the MD 97 HIN study at the intersection of MD 185 and MD 97. General recommendations from the MD 185 PRSA at/near the MD 185/MD 97 intersection are provided below.

- Install pedestrian warning signs, high visibility crosswalk, and advance stop line along the double channelized right turn from SB MD 97 to WB MD 185.

- Implement pavement markings, geometric changes, and/or signalized treatments to slow the speed of vehicles in the channelized right turn lanes.
- Install continental style crosswalks (also referred to as high visibility crosswalks) on all approaches.
- Improve/upgrade pedestrian signal timings and pedestrian facilities (e.g. APS/CPS, median refuge islands).
- Implement improvements to increase the sight distance between NB MD 97 right turning vehicles to NB Connecticut Avenue and pedestrians crossing Connecticut Avenue in the SE corner of the intersection, and/or to alert drivers to yield to pedestrians at this location.
- Consolidate access points to reduce pedestrian exposure to turning vehicles.
- Evaluate the need for a traffic signal at the MD 97/Home Depot Driveway intersection.
- Implement speed limit reductions in the corridor.

MDOT SHA Improvements

MDOT SHA has implemented several improvements along the study area, listed below:

- Installed "Stop Here For Peds" sign with stop line along the double channelized right-turn from SB MD 97 to WB MD 185.
- Installed a Leading Pedestrian Interval for north and south leg crossing at MD 97/Hewitt Ave intersection.
- Speed limit reductions along MD 97 (reduction from 50 mph to 45 mph between MD 185 and Bel Pre Road; reduction from 45 mph to 35 mph between Hewitt Avenue and MD 185).
- Installed full-color traffic signal and ADA upgrades at MD 97/Heathfield Road.
- Pedestrian Improvements at MD 97 and Bel Pre Rd in November 2020.
    - Installation of advance pedestrian warning signs on all approaches.
    - Installation of pedestrian warning sign on the right shoulder for the EB channelized right-turn.
    - Replace existing crosswalk markings (east, west, and south legs; and crossings of channelizations) with continental style markings.

MDOT SHA MD 97 Road Diet Study

MDOT SHA is conducting a comprehensive road diet study to analyze the operational impacts of removing/repurposing one general purpose travel lane along NB and SB MD 97 between Bel Pre Road and Randolph Road in Aspen Hill and Glenmont. It should be noted that since the study release date and its recommendations are to be determined, this MD 97 HIN study developed safety recommendations that were considered independently from (but did not preclude) a road diet on MD 97. It is understood that specific recommendations from this HIN study may need additional coordination between MCDOT and MDOT SHA to determine their appropriateness or feasibility if a road diet is ultimately pursued.

Montgomery County Humane Society Campus - 13730 Georgia Avenue Development

The Montgomery County Humane Society Campus is a proposed 16,000 SF office, veterinary clinic, education, and animal service space to be located on the SW corner of the MD 97/Aspen Hill Road intersection. Preliminary Site Plan approval was given for this development by Maryland-National Capital Park and Planning Commission (MNCPPC) on October 15, 2020, with proposed improvements to include a widened grass-buffered sidewalk along EB Aspen Hill Road along the approximate 500-foot property frontage extending westerly from MD 97, and a new grass-buffered shared use path along SB MD 97 between Aspen Hill Road and Wendy Lane.

Kaiser Permanente Aspen Hill Development

Kaiser Permanente Aspen Hill is a proposed 180,000 SF medical office building to be located along Aspen Hill Road, approximately 250 feet west of MD 185, but with a main access driveway to be collocated with the existing Home Depot access driveway on MD 185, approximately 750 feet south of MD 97. The proposed site is expected to generate more than 350 and 600 person trips in the AM and PM peak hours, respectively. Preliminary Site Plan approval was given for this development by Maryland-National Capital Park and Planning Commission (MNCPPC) on June 24, 2021, with proposed improvements to include a full traffic signal at the MD 185/Home Depot Driveway intersection, and a grass-buffered shared use path along WB MD 185 from the Home Depot Driveway to Aspen Hill Road for approximately 600 feet, and along WB Aspen Hill Road extending westerly from MD 185 for approximately 400 feet.

3. CRASH DATA SUMMARY

The following is a summary of the corridor-wide police-reported crash history from January 1, 2015, through December 31, 2021, for fatal, serious, and minor injury crashes in the MD 97 study corridor, acquired through the dataMontgomery open data portal. This crash data was reviewed to evaluate patterns and trends to assist in determining appropriate safety recommendations for the corridor. 125 total applicable crashes were reported during this timeframe including three (3) fatal, 16 serious injury, and 106 minor injury incidents. While there were additional no apparent injury and property damage only crashes, those were not included for the purposes of this study. These crashes were not included due to the Vision Zero goal of focusing on serious injury and fatal crashes, with minor injury crashes serving as a supplementary data source.

The crash locations from the northern limit at Bel Pre Road to the southern limit at Hewitt Avenue, including crossover, driveway, and parking lot data are shown in **Figure 9**, **Figure 10**, and **Figure 11**, and crash data is provided in **Appendix C**. The crashes occurred at or in the vicinity of the following locations:

- MD 97 at Bel Pre Road – **22 crashes**
- MD 97 between Bel Pre Road and Heathfield Road – **five (5) crashes**
- MD 97 at Heathfield Road / Postgate Terrace – **nine (9) crashes**
- MD 97 between Heathfield Road and Home Depot Entrance – **one (1) crash**
- MD 97 at Home Depot Driveway / Crossover – **19 crashes**
- MD 97 at Connecticut Ave (MD 185) – **25 crashes**
- MD 97 between Connecticut Ave and Aspen Hill Road – **four (4) crashes**
- MD 97 at Aspen Hill Road – **four (4) crashes**
- MD 97 between Aspen Hill Road and Wendy Ln – **one (1) crash**
- MD 97 at Wendy Ln – **three (3) crashes**
- MD 97 between Wendy Ln and Ralph Road – **five (5) crashes**
- MD 97 at Ralph Road – **eight (8) crashes**
- MD 97 at Hewitt Ave – **19 crashes**

Please note that the locations shown are approximate and may have positions that are slightly altered to display the data more clearly and accurately.

The following sections discuss crash trends along the corridor.

Crash Severity

Of the 125 total applicable crashes in the study corridor, there were **three (3)** fatal crashes, **17** serious injury crashes, and **105** minor injury crashes over the 7-year period. Of these fatal, serious, and minor injury

crashes, two (2) fatal, seven (7) serious injury, and 28 minor injury crashes involved a pedestrian, bicyclist, or another conveyance such as a skateboard or scooter. **Figure 9, Figure 10,** and **Figure 11** show the locations of each crash by severity and type. **Figure 8** displays overall crash frequency (the sum of fatal + serious injury + and minor injury crashes) by year, and **Figure 12, Figure 13,** and **Figure 14** show crash frequencies for fatal, serious injury, and minor injury crashes, respectively, by year.

Over the seven-year period, two of the three fatal crashes occurred at the intersection of MD 97 and Hewitt Avenue. The first fatal crash at this intersection occurred in December 2017. A motorist was attempting to make a left turn from WB Hewitt Avenue onto SB MD 97 when it was struck by another motorist traveling along NB MD 97. The motorist traveling along MD 97 suffered fatal injuries. This crash occurred on a cloudy night, on a dry surface, under lit roadway conditions. The traffic signal was noted to be in flash mode at the time of the crash (1:49 AM).

The second fatal crash at the intersection of MD 97 and Hewitt Avenue occurred in June 2018. A motorist traveling along SB MD 97 struck a pedestrian, who suffered fatal injuries. The fatal crash occurred on a clear night, on a dry surface, under lit roadway conditions. The pedestrian's actions prior to the crash were unknown.

The third fatal crash occurred in January 2020 at the MD 97/Aspen Hill Road/southern entrance to the Gate of Heaven Cemetery intersection. A motorist traveling along NB MD 97 struck a pedestrian walking within the roadway, who suffered fatal injuries. The fatal crash occurred on a clear night, on a dry surface, under lit roadway conditions. The pedestrian was noted to be in the roadway, north of the intersection, outside of a crosswalk.

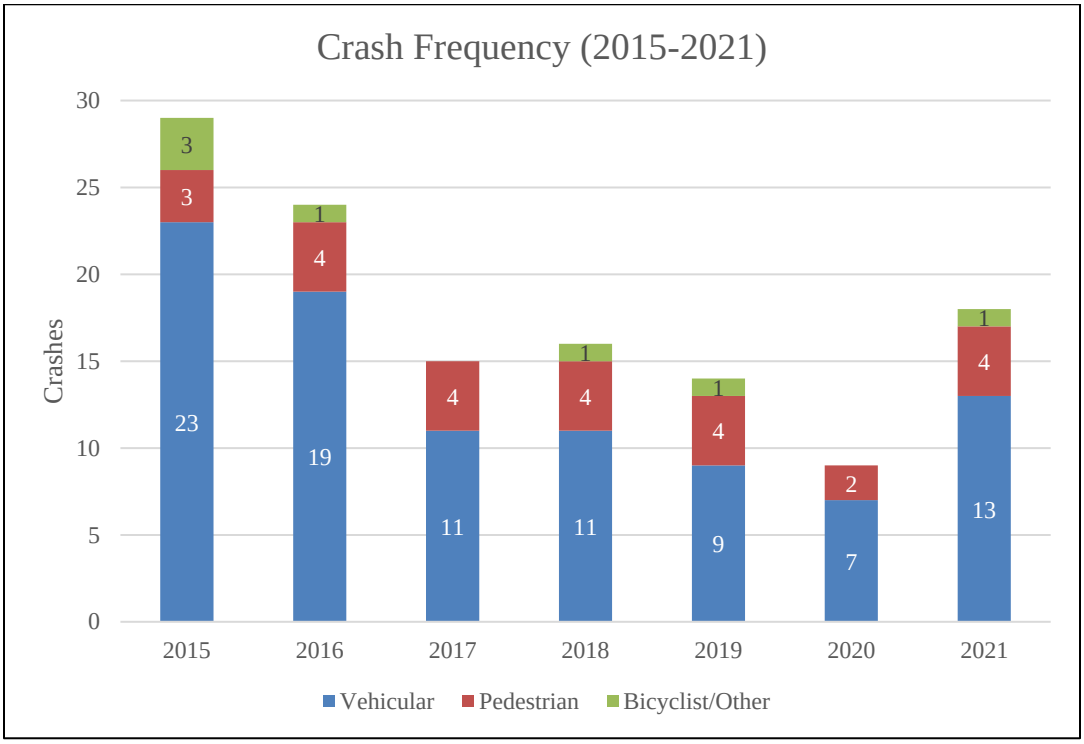


Figure 8. Overall Crash Frequency (2015-2021) - Fatal, Serious Injury, and Minor Injury Crashes

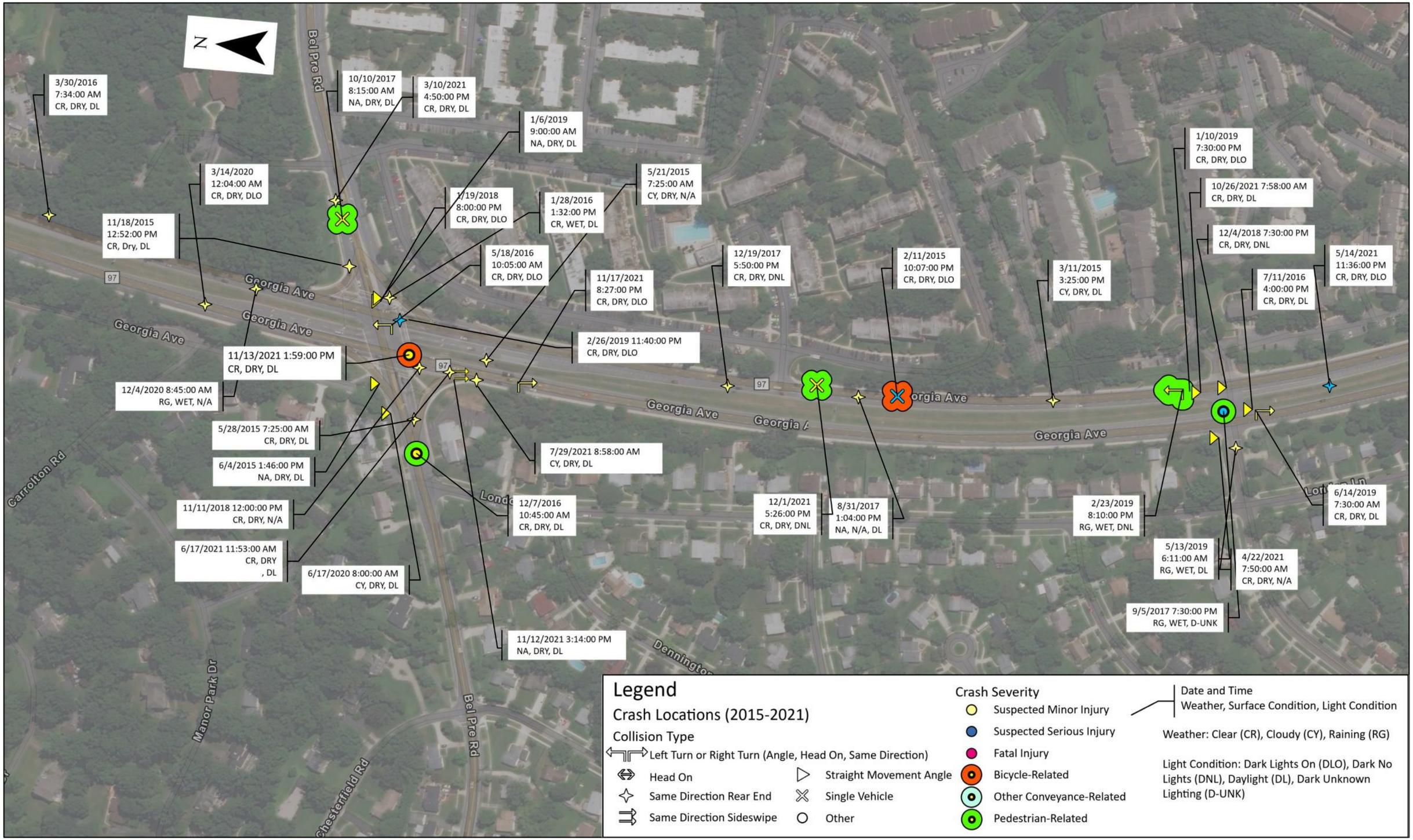


Figure 9. Crash Location Map – Bel Pre Road to Heathfield Road / Postgate Terrace

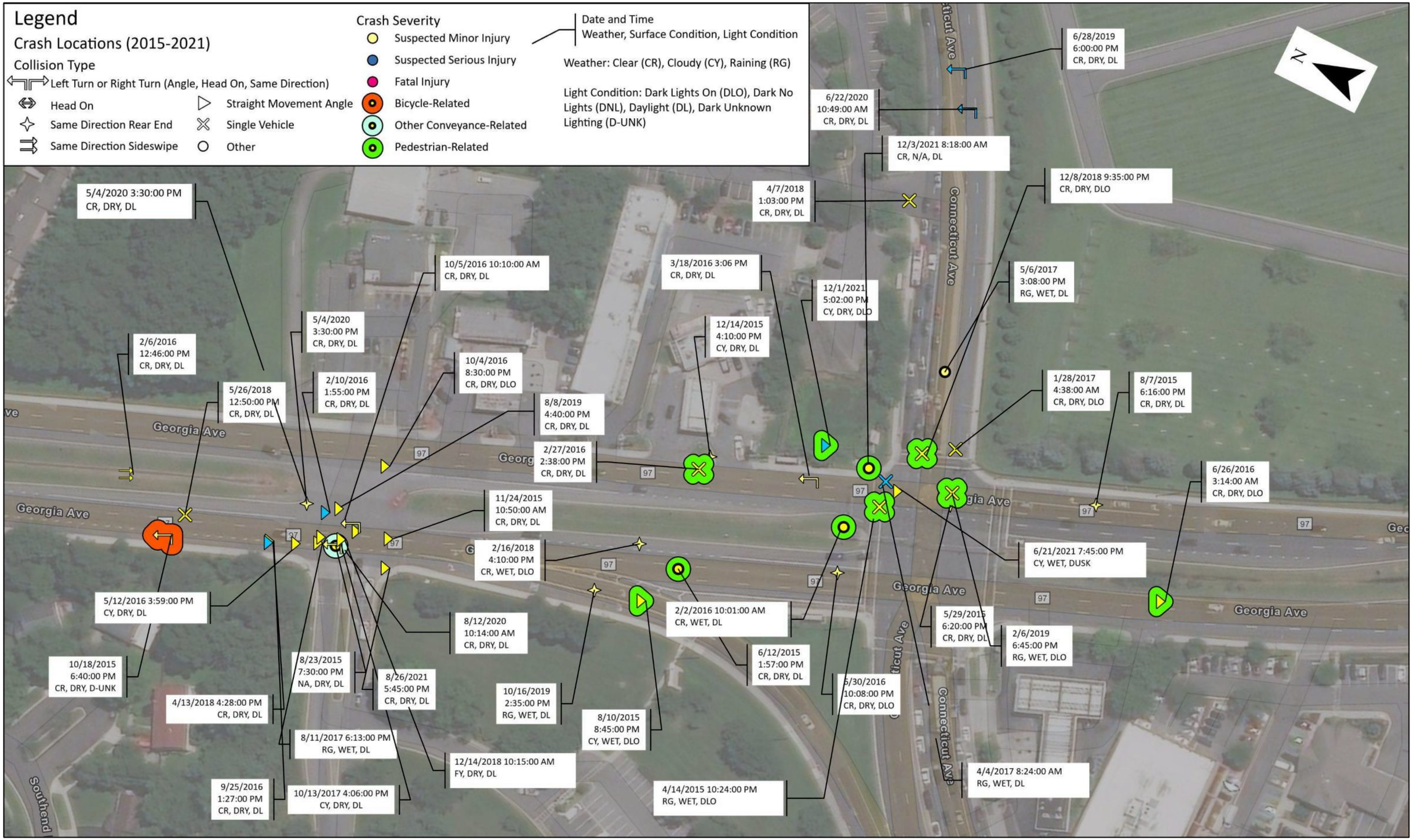


Figure 10. Crash Location Map – South of Heathfield Road to Northgate Plaza Driveway

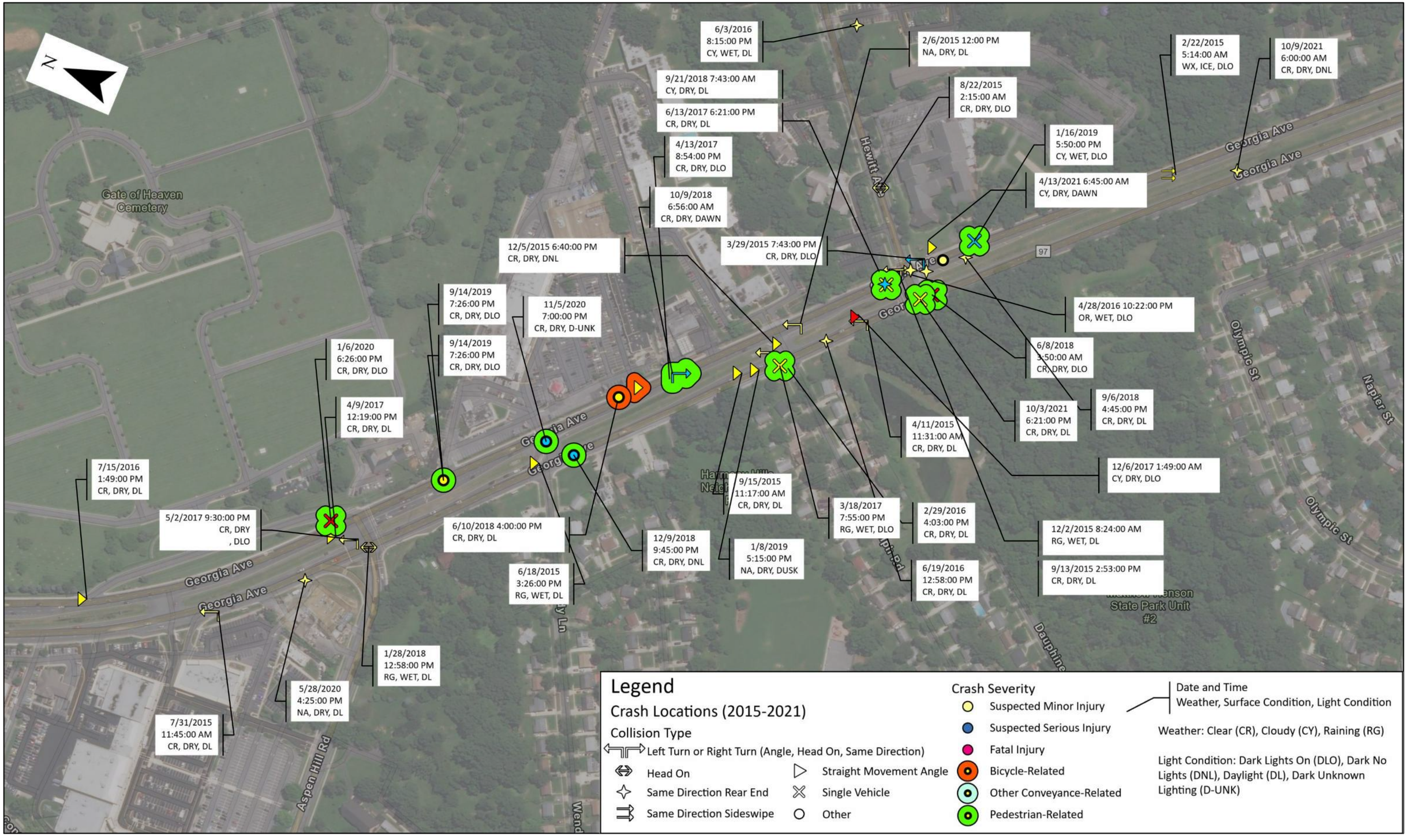


Figure 11. Crash Location Map - Northgate Plaza Driveway to Hewitt Avenue

As shown above, the number of crashes decreases from 2015 to 2017 and has remained consistent from 2017 through 2021, with variations in 2020, likely a result of traffic changes due to the COVID-19 pandemic. It should be noted that traffic volumes were lower in 2020 and 2021 due to the COVID-19 pandemic. Showing a comparable or increased crashes in 2021 relative to 2017 through 2019 indicates that crash rates were likely higher in 2021 for all severities shown.

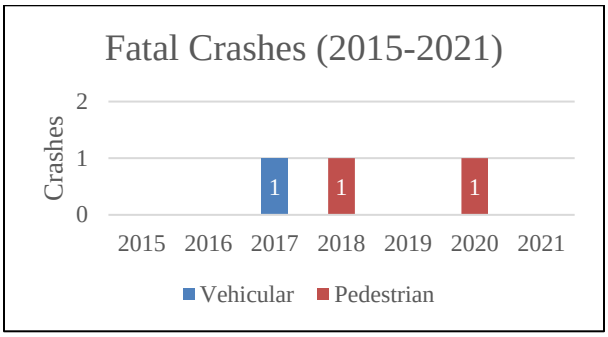


Figure 12. Fatal Crash Frequency (2015-2021)

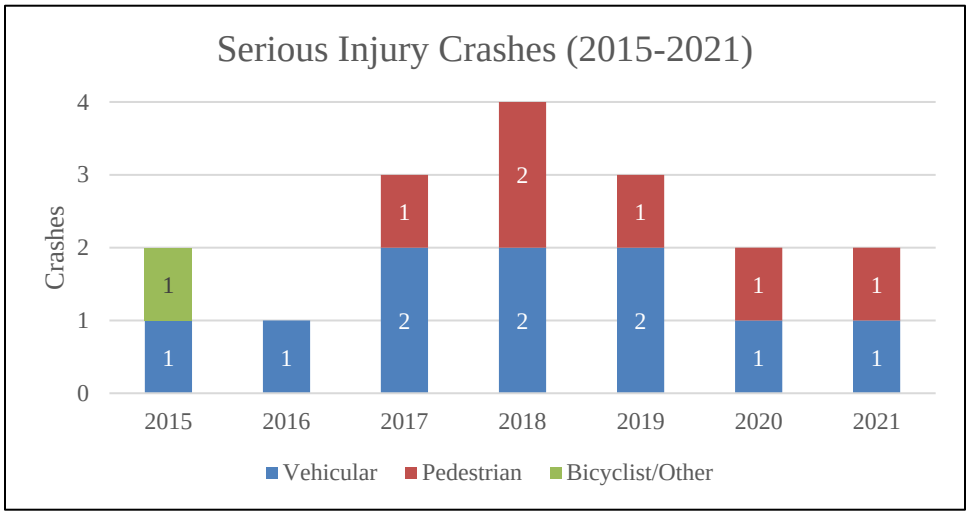


Figure 13. Serious Injury Crash Frequency (2015-2021)

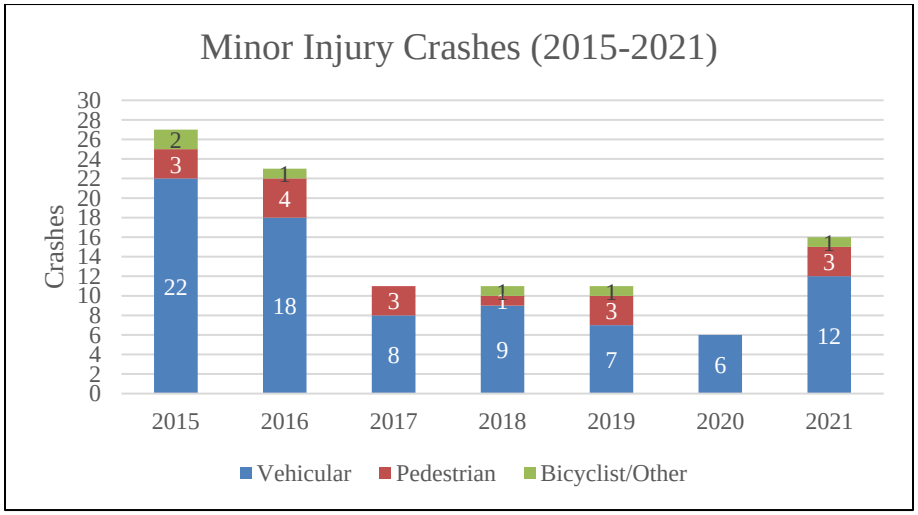


Figure 14. Minor Injury Crash Frequency (2015-2021)

Crash Type

Table 4 presents the summary of the total number of crashes distributed by crash type from 2015 through 2021. Data shown in the table indicates straight movement angle crashes and read end crashes were the most common crash types during the study period and each accounted for 27% of the total crashes that were classified as fatal, serious injury or minor injury. **Figure 9, Figure 10,** and **Figure 11** show the locations of each crash by type within the corridor. It should be noted that the two fatal crashes classified as single vehicle crashes were pedestrian involved crashes.

Table 4. Crash Types by Severity (2015-2021)

Crash Type	Total Crashes	Fatal Crashes	Serious Injury Crashes	Minor Injury Crashes
Left Turn (Head On, Angle, Same Direction)	15 (12%)	0	3	12
Right Turn	4 (3%)	0	1	3
Rear End	34 (27%)	0	4	30
Single Vehicle	19 (15%)	2	3	14
Straight Movement Angle	34 (27%)	1	3	30
Sideswipe	3 (2%)	0	0	3
Head On	2 (2%)	0	0	2
Other	14 (11%)	0	3	11
Total	**125 (100%)**	**3**	**17**	**105**

Crashes by Time of Day

Table 5 summarizes the relationship between vehicular peak hours and injury severity crashes.

Table 5. Crash Time of Day by Severity (2015-2021)

Time of Day	Total Crashes	Fatal Crashes	Serious Injury Crashes	Minor Injury Crashes
Pre-AM Peak (12-6AM)	7 (6%)	2	0	5
AM Peak (6-9AM)	19 (15%)	0	3	16
Midday (9AM-4PM)	44 (35%)	0	2	42
PM Peak (4-7PM)	28 (22%)	1	4	23
Post-PM Peak (7PM-12AM)	27 (22%)	0	8	19
Total	**125 (100%)**	**3**	**17**	**105**

As shown above, the plurality (37%) of crashes occurred during AM and PM peak periods, though two (2) of three (3) fatal crashes occurred in the pre-AM peak, and more than half (eight of 17) serious injury crashes occurred in the post-PM peak.

Crashes by Lighting Condition

The summary of crashes based on roadway lighting conditions is presented in **Table 6** by severity. 58% (73) of the total fatal, serious injury, and minor injury crashes occurred during daylight conditions. Approximately 35% (47) occurred when it was dark, but only 6% (seven) incidents occurred when it was dark with no lights. There is continuous roadway lighting along the corridor along the west side of MD 97 provided by leased lights on utility poles, as well as intersection lighting on traffic signal equipment. It is not clear to what degree lighting conditions contributed to the recorded serious injury or minor injury crashes. However, all fatal crash incidents (three) occurred during dark conditions with roadway lights on.

Table 6. Crash Lighting Condition by Severity (2015-2021)

Lighting Condition	Total Crashes	Fatal Crashes	Serious Injury Crashes	Minor Injury Crashes
Daylight	73 (58%)	0	6	67
Dusk	2 (2%)	0	0	2
Dawn	3 (2%)	0	1	2
Dark (Lights On)	32 (26%)	3	7	22
Dark (Lights Off)	7 (6%)	0	1	6
Dark (Lights Unknown)	4 (3%)	0	2	2
Unknown	4 (3%)	0	0	4
Total	**125 (100%)**	**3**	**17**	**105**

Crashes by Weather and Surface Conditions

The summary of crashes based on weather and surface conditions are presented in **Table 7** by severity. Based on the crash data, most of the crashes 67% (84) occurred in non-adverse weather conditions. 11% (14) of crashes occurred in rainy conditions. The three (3) fatal crashes included two (2) in clear conditions, and one (1) in cloudy conditions. Most serious injury crashes (12 of 17) occurred under clear conditions.

Table 7. Crash Weather Conditions by Severity (2015-2021)

Weather	Total Crashes	Fatal Crashes	Serious Injury Crashes	Minor Injury Crashes
Clear	84 (67%)	2	12	70
Cloudy	15 (12%)	1	3	11
Raining	14 (11%)	0	2	12
Foggy	1 (1%)	0	0	1
Other	2 (2%)	0	0	2
Unknown	9 (7%)	0	0	9
Total	**125 (100%)**	**3**	**17**	**105**

The summary of crashes by roadway surface condition is presented in **Figure 15**. Most of the crashes (79%) occurred on dry pavement conditions. Of the 22 crashes that occurred on wet pavement, 11 occurred in daylight, nine (9) occurred at night, one (1) occurred at dusk, and one (1) is unknown. Of the same 22 crashes, five (5) were single vehicle crashes, six (6) were read end crashes, two (2) were same direction turns, six (6) were angle or head-on collisions, and three (3) were unknown. Eight (8) of the 22 crashes in wet surface conditions involved a pedestrian.

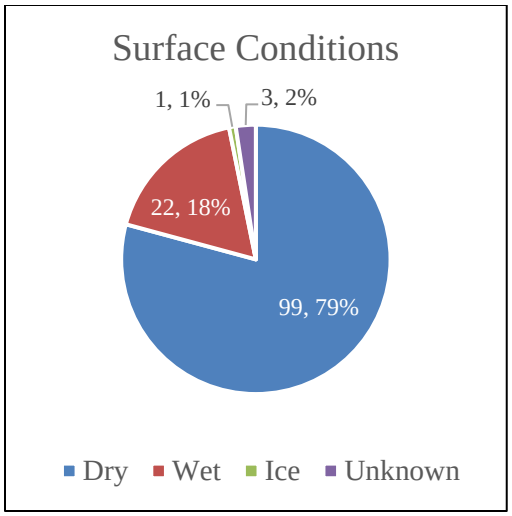


Figure 15. Crashes by Surface Conditions

Pedestrian and Bicyclist Involved Crashes

Table 8 presents the summary of pedestrian- and bicyclist-involved crashes. Pedestrians were involved in two (2) of the three (3) fatal crashes in the study area – one at the intersection with Hewitt Avenue and one at the intersection with Aspen Hill Rd.

Table 8. Pedestrian and Bicyclist Involved Crashes by Severity (2015-2021)

Non-Motorist Involved	Total Crashes	Fatal Crashes	Serious Injury Crashes	Minor Injury Crashes
Pedestrian	28 (76%)	2	6	20
Bicyclist / Other	9 (24%)	0	1	8
Total	**37 (100%)**	**2**	**7**	**28**

One of the two fatal crashes occurred in June 2018 at the intersection of MD 97 and Hewitt Avenue. A motorist traveling along SB MD 97 struck a pedestrian, who suffered fatal injuries. The fatal crash occurred on a clear night, on a dry surface, under lit roadway surface conditions. The pedestrian's actions prior to the crash were unknown.

The second fatal crash occurred in January 2020 at the intersection of MD 97 and Aspen Hill Road / Gate of Heaven Cemetery (south) entrance. A motorist traveling along NB MD 97 struck a pedestrian walking within the roadway, who suffered fatal injuries. The fatal crash occurred on a clear night, on a dry surface, under lit roadway surface conditions. The pedestrian was noted to be in the roadway in the rightmost lane, north of the intersection, outside of a crosswalk.

There were six (6) pedestrian-involved and one (1) bicyclist-involved serious injury crashes:

- The bicyclist-involved crash occurred in February 2015 approximately 750 feet north of the MD 97 intersection with Chesterwood Drive (Postgate Terrace). A motorist traveling along NB MD 97 struck the bicyclist in the rightmost lane. The bicyclist was wearing a reflective vest, helmet, and had flashing lights on the bicycle. The crash occurred on a clear night, on a dry surface, under lit roadway surface conditions.

- The first pedestrian-involved crash occurred in September 2017 at the intersection of MD 97 and Heathfield Road. A motorist making a U-turn from SB to NB MD 97 struck a pedestrian crossing

MD 97. The crash occurred on a rainy night, on a wet roadway surface, under unknown lighting conditions.

- The second pedestrian-involved crash occurred in October 2018 along MD 97, approximately 400 feet south of Wendy Lane. A motorist traveling NB on MD 97 struck another motorist that was attempting to exit the Citgo gas station driveway. The vehicle then departed the roadway, onto the adjacent sidewalk, and struck four pedestrians. The crash occurred on a clear morning, on a dry roadway surface.

- The third pedestrian-involved crash occurred in December 2018 along MD 97, approximately 150 feet south of Wendy Lane. A motorist traveling NB struck a pedestrian crossing MD 97 midblock. The crash occurred on a clear night, on a dry roadway surface, under unlit roadway surface conditions. Alcohol odor was detected on the pedestrian's breath.

- The fourth pedestrian-involved crash occurred in January 2019 along MD 97 at Hewitt Avenue. A motorist making a right turn from Hewitt Avenue onto NB MD 97 struck a pedestrian crossing MD 97. The crash occurred on a cloudy evening, on a wet roadway surface, under lit roadway surface conditions. The pedestrian was noted that have "darted" out into the roadway to catch a bus.

- The fifth pedestrian-involved crash occurred in November 2020 along MD 97 at the intersection with Wendy Lane. A motorist traveling NB along MD 97 struck a pedestrian crossing MD 97. The crash occurred on a clear evening, on a dry roadway surface, under unknown lighting conditions.

- The sixth and final pedestrian-involved crash occurred in December 2021 along SB MD 97 at the intersection with MD 185. The crash occurred on a cloudy evening, on a dry roadway surface, under lit roadway surface conditions.

4. FIELD REVIEW AND OBSERVATIONS

On August 24, 2021, a field assessment was performed for the study corridor by the audit team. The assessment reviewed pavement conditions and markings, roadway signing, sidewalk conditions, signalization, sight distance (measured on aerial imagery), ADA compliance (visual review for sidewalks, slopes field measured for ramps), intersection and roadway configurations, and travel behavior by various travel modes. The following summarized the field observations, relates the observations to the crash data shown in **Figure 9, Figure 10, and Figure 11** where applicable, and identifies potential areas for improvement. **Appendix D** provides photographs of the issues identified in the field review.

Pavement Conditions and Markings

Based on visual inspection, the roadway pavement and pavement markings along the study segment are generally in good condition. MD 97 was observed to have minor longitudinal joint and fatigue cracking throughout the study area, as well as damage in most median noses from erosion and vehicle overruns. Some median noses show minor erosion where the grass median meets the pavement. Potholes or similar pavement fatigue was observed in MD 97 at Heathfield Road, the Home Depot Driveway (SB lanes), and the east crossing of Connecticut Avenue.

Raised pavement markers or snow-plowable recessed pavement markers were not installed south of MD 185. Transverse crosswalk markings, faded stop lines, and worn longitudinal lines were observed throughout the corridor, and side street approaches. There are significant distances between marked crossings of MD 97, corresponding to existing protected crosswalks in the corridor. Distances between marked crosswalks across MD 97 exceed 1,000 feet. Wide median crossovers generally do not include pavement markings unless there is a monolithic median provided for restricting movements.

Roadway Signing

Based on visual inspection, signs within the study area are generally in good condition. However, proper maintenance must be practiced in spring/summer months to ensure that signs are not obscured by overgrown foliage.

Signing appears to follow the guidance of MDOT SHA's Street Name Sign Policy guide signing at the intersection and in advance of intersections. Uncontrolled crossings of channelized right turn lanes are supplemented with the appropriate warning signs. However, some signs are missing, in poor condition, or excessive. This includes object markers, wayfinding signing, lane use assignment signing, turn restriction signing, and Do Not Enter / Wrong Way signing.

Sidewalk Conditions

In general, pedestrian ramps throughout the study area have the appropriate dimensions and slopes to meet ADA accessibility requirements, though some were missing detectable warning surfaces (DWS), were oriented in a direction out of alignment with the crosswalk, or were damaged. Median cut-thru or pedestrian refuges are not provided for most intersections. Several locations included concrete that was chipping and/or had minor vertical discontinuities.

Most sidewalk segments, while directly adjacent to the travel way with little to no buffer, are generally in good condition. However, proper maintenance is required to ensure that hazards and pinch points are not created by foliage overgrowth or drainage and sediment issues. Many locations have grasses or weeds growing out of the sidewalk joints. There are also many locations where vertical deflections in sidewalk surface greater than 0.5 inch were observed.

While continuous sidewalk is provided throughout the corridor, it has little to no offset from the travel way, which makes walking an uncomfortable experience. One of the serious injury crashes involved a vehicle departing the roadway and striking 4 school children waiting for the bus on the sidewalk. It is not clear if a buffer would have provided some level of protection from that event.

Signalization

The signalized intersections within the study area have MDOT SHA standard structures and equipment. All existing traffic signal indications have Light-Emitting Diode (LED) lighting, but no signal heads have reflective backplates. Accessible pedestrian signals and countdown pedestrian signals (APS/CPS) are provided for all marked crosswalks controlled by a traffic signal. Traffic signal phasing, lane use, and traffic signal timing parameters (pedestrian clearance, yellow and all red internals, etc.) appear to be appropriate throughout the corridor. Some remarkable traffic signal observations are listed below:

- Exclusive-permissive left turn phasing is provided on NB and/or SB MD 97 approaches at Hewitt Avenue, MD 185, and Heathfield Road / Postgate Terrace. These may create an adverse safety risk for turning vehicles during certain times of day based on the number of opposing through lanes, operating speeds, and traffic volumes.

- The MD 97 at Home Depot Driveway is uncontrolled. This location may justify installation of a full-color traffic signal based on traffic volumes, crash history, pedestrian safety, and/or left turn risk.

It should also be noted that crashes reported in the vicinity of the channelized right turn lanes from SB MD 97 to westbound MD 185 included collision types such as rear end, sideswipes, and straight movement angle. The geometry of the right turn channelization lanes in combination with the yield condition and/or uncontrolled crosswalk activity may contribute to the crash risk.

Sight Distance

Based on visual inspection, sight distance appears to be adequate at the majority of intersections and driveways within the study area. A formal measurement of sight lines was not performed in the field, but areas of concern have been further evaluated using aerial imagery. Locations with sight distance constraints are listed below:

- NB MD 97 right turn approaching the east leg crossing of Connecticut Avenue – a motorist has an obstructed view of a pedestrian entering the crosswalk from the south due to fencing and grading in the southeast (SE) corner of the intersection (sight distance is approximately 75 feet).
- EB Home Depot Driveway, looking north along MD 97 - foliage obstructs the sight line for a motorist (sight distance is approximately 250 feet).
- EB Heathfield Road stop line, looking north along MD 97 - foliage and the bus shelter obstruct the sight line for a motorist performing a right turn on red, requiring vehicles to encroach on the west leg crosswalk to get adequate sight distance to see oncoming traffic.

Nineteen (19) injury crashes were reported at the intersection at the crossover intersection for the Home Depot Driveway, where sight distance was observed to be problematic. Fewer crashes occurred at the Wendy Lane intersection than the Ralph Lane intersection, though Wendy Lane prohibits outbound left turns.

Lighting

Roadway lighting was observed during daylight and nighttime conditions. Continuous roadway lighting is provided on utility poles along SB MD 97 throughout the study area. Intersection lighting is provided on traffic signal equipment, if not in conflict with overhead utilities. LED roadway luminaires are installed on traffic signal equipment in the typical locations and orientations. No continuous lighting is provided along NB MD 97. Some leased lights were malfunctioning or physically damaged.

Roadway Operations

Road user behaviors were observed during the audit team's field walk on August 24, 2021, as well as during observations of ADA conditions, nighttime lighting, and traffic operations on September 7, 2021, September 13, 2021, and March 29, 2022, respectively. Automobile, pedestrian, bicyclist, and bus transit, activity was observed and documented during these field visits. Some of the notable observations for each mode type are listed below.

Motorist Behavior

- SB motorists appeared to be traveling at higher speeds than NB, because of the roadway grade (downhill).
- Multiple instances were noted were a motorist chose to not make a right turn on red, and the trailing vehicles honked their horns, voiced frustrations, and even drove into the other approach lane to make a right turn on red from the incorrect lane.
- Motorists were observed performing permissive left turns throughout the corridor with less than desirable gaps in traffic.
- NB MD 97 at Bel Pre Road queue lengths extended through the Crystal Springs Apartments entrance.

- At the MD 97 at Bel Pre Road intersection, the EB free right turns were regularly queueing while waiting for gaps in SB MD 97 traffic.
- Turning restrictions at the Home Depot Entrance were violated by multiple approaches.
- Motorists existing Home Depot were observed to have difficulty judging and finding gaps to traffic to enter MD 97.
- Motorists' queuing, yielding, and turning maneuvers within the Home Depot Entrance median crossover were observed to be inconsistent and potentially hazardous.
- Home Depot Entrance right turns and NB MD 97 U-turns were observed to be occasional conflicts.
- Vehicular movements using the median crossover at the Northgate Plaza entrance were disorderly, with many motorists queue jumping or waiting side-by-side in the crossover.
- A significant portion of Aspen Hill Road right turns onto SB MD 97 were right turns on red.
- Outbound motorists from Ralph Road wishing to turn left to NB MD 97 or go straight across were observed having difficulty completing that maneuver. Most required two-stage turns, stopping in the median crossover.
- Queues from SB MD 97 at Hewitt Avenue were observed to extend through the Ralph Road intersection. This made entering SB travel lanes difficult for motorists from the Ralph Road and Aspen Hill Apartments entrance.
- Permissive left turns from Hewitt Avenue to SB MD 97 were observed in conflict with the south leg pedestrian crossing.
- The SB MD 97 left turn lane queue was observed to exceed the storage length at the Hewitt Avenue traffic signal.

In general, traffic within the corridor operated as anticipated and observed queue lengths were not problematic. It is important to note that this phenomenon may be due to a temporary reduction in peak period traffic volumes due to the COVID-19 pandemic. Signal cycle failure was only observed for NB left turns at Bel Pre Road during the AM peak period. Vehicle platoons along the MD 97 corridor would clear in one signal cycle. Uncontrolled and stop-controlled median crossovers appear to encourage or permit riskier motorist behaviors. Many unusual or unexpected movements and queuing behaviors were observed to create near collision between vehicles at the MD 97 intersection with the Home Depot Driveway.

Pedestrian Behavior

Pedestrian activity was observed throughout the study area, both crossing and traveling along MD 97. Most pedestrians appeared to be using transit and/or traveling between the residential and commercial land uses.

- An unimproved pedestrian path was identified, and pedestrian activity was observed, in the grass median of MD 97 in the vicinity of the Crystal Springs Apartments Driveway. The path is likely used to cross MD 97 midblock and access the Ride On bus stop along SB MD 97, opposite and south of the driveway. Multiple footpaths in the grass were also observed along the Crystal Spring Apartments frontage.

- Some pedestrians were observed at all signalized crossings to perform two-stage crossings of MD 97 – crossing the first direction when a gap in traffic was available and crossing the second direction when the pedestrian signal phase was active.

- Several pedestrians were observed to cross MD 97 at the Home Depot Driveway.

- Crossing the dual right turn channelized lanes from SB MD 97 to westbound MD 185 was difficult. Motorists were reluctant to stop, and the choice lane complicates pedestrians' abilities to accurately anticipate the actions of approaching motorists.

- Pedestrians were observed crossing MD 97 at Wendy Lane where crosswalks are not marked or accessible. All were observed accessing the transit stops. Most pedestrians used the monolithic median to navigate the crossing.

- The Matthew Henson Trail crosses MD 97 at Hewitt Avenue, where the trail users crossing movement conflicts with permissive left turns from Hewitt Avenue.

- Several pedestrians crossed the street with the concurrent vehicular phase without activating the pedestrian signal, though the pedestrian signal for crossing MD 97 at Hewitt Avenue was activated for most signal cycles during the PM peak.

- Midblock pedestrian (crossing MD 97) activity along the Northgate Plaza frontage was frequent.

- A pedestrian goat path is present along WB MD 185 at MD 97, in the channelized island and crossing the dual right turn lanes.

Bicyclist Behavior

- Infrequent bicyclist activity was observed traveling within MD 97 during field observations.

- Share the Road sign assemblies were located along the corridor, but it is anticipated that only experienced bicyclists would travel in the roadway along MD 97.

Other Observations

- Transit buses were observed having difficulty completing a right turn from NB MD 97 onto EB Hewitt Avenue due to intersection design constraints (available turning radius and WB left turn lane stop line placement).

- Bus arrival and departure times/activities potentially influenced the likelihood of a pedestrian violating signal indications. Pedestrians were observed to use gaps in traffic rather than waiting for a pedestrian WALK phase to catch a departing bus.

5. SUMMARY OF RECOMMENDED IMPROVEMENTS

Based on field observations and available data, several potential improvements were identified by MCDOT that could address the safety issues identified along the MD 97 study corridor. These recommendations are compiled by timeframe (expected time to complete from point of project initiation), including Short-Term (0-6 months), Mid-Term (6-12 months), and Long-Term (12+ months), as well as by cost, including low (<$100K), moderate ($100K - $250K), and high (>$250K). A summary of the recommendations is provided in the tables below. Issue number correlate to photographs numbered in **Appendix D**.

It should be noted that some potential recommendations from previous studies and from this HIN study required additional operational analysis to determine their feasibility. This operational analysis can be found

in **Appendix E** along with additional detail regarding recommendations that were excluded based on operational constraints. Recommendations that were likely to be feasible from a traffic operations standpoint have been included in the tables below.

Table 9. Summary of Recommendations

Location 1: MD 97 and Bel Pre Rd				
Location/ Issue No.	**Observation/Issue**	**Recommendation (Primary Responsible Agency/Secondary Responsible Agency)**	**Timeframe**	**Relative Cost**
1.01	Ped-Vehicle Conflicts. Lack of high visibility crosswalk markings.	Replace all crosswalks with continental crosswalks. (MDOT SHA)	Short	Low
1.02	Maintenance. Sediment collecting in gutter pans and sprawling foliage in pedestrian pathways.	Trim foliage / overgrowth along curb lines and gutter pans at all legs of the intersection. (MDOT SHA)	Short	Low
1.03	Ped Facility Limitations. Missing warning sign for uncontrolled crossing of channelized right turn.	Install a pedestrian sign (W11-2) and supplemental arrow plaque (W16-7p) along EB Bel Pre Rd on the outside edge of the channelized right turn lane to SB MD 97. (MDOT SHA)	Short	Low
1.04	Maintenance. Missing extension lines for guiding dual turn lanes through intersection.	Provide dotted extension lines through the intersection for NB and SB MD 97 double left turn movements. (MDOT SHA)	Short	Low
1.05	Maintenance. Sign has insufficient retroreflectivity.	Replace the pedestrian sign (W11-2) and arrow plaque (W16-7p) on the channelization island from NB MD 97 to EB Bel Pre Road. (MDOT SHA)	Short	Low
1.06	Maintenance. Sign struck and damaged in median.	Repair the damaged "Keep Right" sign (R4-7) within the median on the east leg. (MDOT SHA)	Short	Low
1.07	Maintenance. Sign face illegible.	Replace the faded "Do Not Enter" signs (R5-1) facing SB oncoming traffic, along NB MD 97, south of Bel Pre Rd. (MDOT SHA)	Short	Low
1.08	Maintenance. Broken condulet for pole mounted enclosure.	Repair the exposed wiring on the signal mast arm in the northeast (NE) corner channelized island. (MCDOT)	Short	Low
1.09	Aggressive / Inattentive Motorist Behaviors. Signal heads lack reflective backplates.	Install backplates on all traffic signal heads. (MDOT SHA)	Mid	Low/ Mod
1.10	Ped Facility Limitations. Crossing of north leg is unsignalized and inaccessible.	Install a marked north leg crosswalk (crossing MD 97). *Note that this recommendation would need to be completed in conjunction with installation of new pedestrian ramps and pedestrian signals, which are mid- to long-term recommendations.* (MDOT SHA)	Mid to Long	Mod
1.11	Maintenance. Pushbutton sign has the incorrect street name.	Replace "Pushbutton to Cross" (R10-3(1)) sign for south leg crossing MD 97 in the SE quadrant. (MCDOT)	Short	Low
1.12	Ped Facility Limitations. Parallel ramp exceeds maximum running slope of 8.3%.	Replace non-compliant sidewalk in the NE corner. (MDOT SHA)	Mid	Low

1.13	Drainage pattern crosses level landing.	Reconstruct pedestrian ramp(s) to ensure positive drainage and eliminate pooling in level landing in the NW quadrant. (MDOT SHA)	Mid	Low
1.14	Ped-Vehicle Conflicts. Permissive left turns create conflicts with pedestrians and oncoming traffic.	Modify the WB Bel Pre Road traffic signal phasing to include a lead/lag exclusive left turn phase. Permissive left turns will also remain, running with WB Bel Pre Road through movements. (MDOT SHA)	Mid to Long	Low
1.15	Ped-Vehicle Conflicts. Motorists not yielding right-of-way to pedestrians in crossing.	Remove the channelized right turn lanes on all intersection approaches; alternatively, install a treatment to encourage slower vehicular turn speeds (installation of aprons or reverse ramps would likely be a *mid-term* recommendation). (MDOT SHA)	Long	Mod/ High
1.16	Ped-Vehicle Conflicts. Lengthy crossings for pedestrians and motorists taking turns quickly.	Install a median refuge island on all intersection legs. Install APS/CPS in refuge islands where pedestrian phasing is not automatic. (MDOT SHA)	Mid to Long	Mod/ High
1.17	Ped-Vehicle Conflicts. Roadway lighting missing for uncontrolled crossings of right turn channelizations, all corners.	Perform a photometric lighting analysis to determine if intersection crosswalks are lit to acceptable standards. If not, install lighting to illuminate crosswalks to acceptable standards, especially over the channelized right-turn crosswalks on all approaches. (MDOT SHA/PEPCO)	Mid	Mod
1.18	Maintenance. Pavement markings in poor condition.	Restripe all longitudinal pavement markings along Bel Pre Rd west leg. (MCDOT)	Short	Low
1.19	Vehicular Operations. Queues along Bel Pre Road hinder access for driveways and side streets.	Install DO NOT BLOCK THE INTERSECTION signing (R10-7) and pavement marking treatments on Bel Pre Rd for the church and apartment driveways to the east, and London Lane to the west. (MCDOT)	Short	Low
1.20	Maintenance. Nearside traffic signal head in SE curbed island is facing towards uncontrolled right turn lane.	Reorient traffic signal head to face towards NB MD 97 thru lanes. (MCDOT)	Short	Low
1.21	Vehicular Operations. Mitigate future delay associated with removal of channelized right turn lanes.	Provide overlap phases for EB and WB Bel Pre Road right turns that run concurrent with NB and SB MD 97 left turns. (MDOT SHA)	Long	Mod

Location 2: MD 97 between Bel Pre Rd and Heathfield Road				
Location / Issue No.	**Observation/Issue**	**Recommendation (Primary Responsible Agency/Secondary Responsible Agency)**	**Timeframe**	**Relative Cost**
2.01	Maintenance. Foliage overgrowth blocking visibility of signing along sidewalk segment.	Trim foliage blocking all signs and along sidewalk in the SB direction. (MDOT SHA)	Short	Low
2.02	Ped-Vehicle Conflicts. No marked crossing of wide driveway.	Install continental crosswalk markings across the Crystal Springs Apartments Driveway. (MDOT SHA)	Short	Low
2.03	Maintenance. Divided highway with no crossover. Missing signing to indicate travel direction.	Install a "One Way" sign (R6-1) in the median of MD 97 for vehicles exiting the Crystal Springs Apartments Driveway. (MDOT SHA)	Short	Low
2.04	Maintenance. Divided highway with no crossover. Missing signing to indicate travel direction.	Install "Do Not Enter" signs (R5-1) facing north along NB MD 97, just south of the Crystal Springs Apartments Driveway. (MDOT SHA)	Short	Low
2.05	Roadway Geometry. NB and SB bus stops are offset approximately 250 feet, creating the desire to cross the street at two uncontrolled points.	If feasible, relocate WMATA bus stop 200904 (along SB MD 97) to be across from the Crystal Springs Apartment Driveway. (MDOT SHA/[MCDOT and WMATA])	Mid	Low
2.06	Maintenance. Accessible audio message button is broken.	Repair the bus audio message for the bus stop along SB MD 97 just south of Bel Pre Rd (WMATA ID 2000913). (WMATA)	Short	Low
2.07	Maintenance. Sidewalk damaged.	Repair the exposed aggregate sidewalk along NB MD 97, just north of Postgate Terrace. (MCDOT)	Short	Low
2.08	Ped-Vehicle Conflicts. Limited nighttime visibility of roadside and bus shelters.	Perform a photometric lighting analysis to determine if roadside lighting along NB and SB MD 97 meets acceptable standards. If not, install lighting to illuminate the roadside along NB and SB MD 97 to acceptable standards. (MDOT SHA)	Mid	High
2.09	Midblock / Uncontrolled Pedestrian Crossings. Pedestrians observed using midblock crossing and “goat path” in grass indicates regular use.	Install a Pedestrian Hybrid Beacon (PHB) for pedestrians accessing the bus stops across from and near the Crystal Springs Apartments Driveway. (MDOT SHA)	Mid to Long	High
2.10	Ped Facility Limitations. No lighting in vicinity of bus shelters.	Perform a photometric lighting analysis to determine if bus stops (WMATA ID 2000904, 2000905, and 2000913) are lit to acceptable standards. If not, install lighting to illuminate bus stops (WMATA ID 2000904, 2000905, and 2000913) to acceptable standards and improve pedestrian conspicuity. (MDOT SHA)	Mid	Mod
2.11	Aggressive / Inattentive Motorist Behaviors	Request that Montgomery County Police Department consider additional speed enforcement for MD 97. (MCPD/MCDOT)	Short to Mid	Low

Location 3: MD 97 and Heathfield Road/Postgate Terrace				
Location / Issue No.	**Observation/Issue**	**Recommendation (Primary Responsible Agency/Secondary Responsible Agency)**	**Timeframe**	**Relative Cost**
3.01	Maintenance. Incorrect or leftover advance street name warning signing for approaches to Heathfield Road / Postgate Terrace signalized intersection.	Remove the advance "Intersection Warning" sign (W2-1) with supplemental warning street name signs and the two "Signal Ahead" warning signs (W3-3) with supplemental "NEW" plaques (W16-14(1)) along NB MD 97 in the median south of Heathfield Rd. Replace with a single posted "Advance Street Name/Next Signal (Two Roads)" (D3-2(2)) sign in the median. (MDOT SHA)	Short	Low
3.02	Maintenance. Utility pole has loose cables hanging from it.	Repair the exposed wires in the NE corner. (MDOT SHA)	Short	Low
3.03	Maintenance. Grasses and foliage growing into pedestrian pathways.	Remove/trim foliage in all quadrants, legs, and in the median of the intersection. (MDOT SHA)	Short	Low
3.04	Maintenance. Sign supports sinking or shifting.	Straighten the crooked "Connecticut Avenue Next Signal" guide sign in the south leg median of MD 97 (facing north), approximately 70 feet south of Heathfield Road. (MDOT SHA)	Short	Low
3.05	Maintenance. Sign has incorrect arrow.	Modify the "Connecticut Avenue Next Signal" guide sign in the south leg median of SB MD 97 (facing north), approximately 70 feet south of Heathfield Road, to an advance right-turn (Type C) arrow. (MDOT SHA)	Short to Mid	Low
3.06	Maintenance. Sidewalk surface is chipping.	Repair the exposed aggregate sidewalk near NB bus stop (WMATA ID 2001361). (MCDOT)	Short to Mid	Low
3.07	Aggressive / Inattentive Motorist Behaviors. Signal heads lack reflective backplates.	Install backplates on all traffic signal heads. (MDOT SHA)	Mid	Low / Mod
3.08	Ped-Vehicle Conflicts. No intersection lighting is present in the NE, SW, or SE corners of the intersection.	Perform a photometric lighting analysis to determine if the NE, SW, and SE corners of the intersection, and intersection crosswalks, are lit to acceptable standards. If not, install lighting to illuminate the NE, SW, and SE corners, and intersection crosswalks to acceptable standards. (MDOT SHA)	Mid	Mod
3.09	Maintenance. Audible message malfunction.	Repair the APS pushbutton station without audible message for north crossing (NE quadrant). (MCDOT)	Short	Low
3.10	Maintenance. MDOT SHA APS design guidance non-compliance.	Reorient the APS pushbutton station that is facing away from the sidewalk in the SE corner of the intersection. (MCDOT)	Short	Low
3.11	Roadway Geometry. Existing pedestal pole for APS pushbutton crossing Postgate Terrace is less than 18 inches from the curb face.	Move existing pedestal pole or revise curb line on NE corner to provide proper minimum offset from roadway. (MDOT SHA)	Short to Mid	Low / Mod

3.12	Ped Facility Limitations. Slopes for sidewalks and ramps exceed the allowable tolerances for cross and/or running slope.	Reconstruct the following: -Sidewalk ramp in NW corner (running slope > 8%) -Sidewalk in NE corner (cross slope >2%) -Sidewalk ramp in SE corner (running slope >8%) (MDOT SHA)	Mid	Low / Mod
3.13	Ped-Vehicle Conflicts. Permissive left turns create conflicts with pedestrians and oncoming traffic.	Modify existing NB and SB MD 97 left-turn exclusive-permissive phasing to exclusive phasing only. (MDOT SHA)	Short	Low
3.14	Ped Facility Limitations. Shared level landing for north and east crossings is non-ADA compliant.	Separate the shared level landings in the NE and SE corners of the intersection to meet ADA compliance. (MDOT SHA)	Mid	Mod / High
3.15	Ped-Vehicle Conflicts. Foliage and sediment reduce walkable path in the median refuge islands.	Install curb around the nose of the north and south leg pedestrian refuge islands in the median of MD 97; trim/clear foliage along the walking path in the south leg refuge island. (MDOT SHA)	Mid	Low / Mod
3.16	Ped-Vehicle Conflicts. Right turns on red conflict with pedestrian crossings and have limited sight lines along MD 97.	Implement No Turn On Red restrictions by installing R11-10b signing for all approaches. (MDOT SHA)	Short	Low

Location 4: MD 97 between Heathfield Rd and the Home Depot Driveway				
Location / Issue No.	**Observation/Issue**	**Recommendation (Primary Responsible Agency/Secondary Responsible Agency)**	**Timeframe**	**Relative Cost**
4.01	Maintenance. Sign face in poor condition.	Replace the faded choice lane sign (R3-8) along SB MD 97 approaching MD 185. (MDOT SHA)	Short	Low
4.02	Maintenance. Foliage obstructing sign visibility.	Trim foliage along both directions along sidewalk, especially those blocking signs along the SB MD 97 direction. (MDOT SHA)	Short	Low
4.03	Maintenance. Sidewalk surface is chipping.	Replace exposed aggregate sidewalk in poor condition along the SB direction of MD 97 – approximately 800 linear feet. (MCDOT)	Mid	Low
4.04	Vehicular Operations. Intent of motorists in rightmost SB MD 97 lane is difficult to determine if turning at Home Depot or MD 185.	Install additional pavement marking symbols to supplement existing signs and markings for the continuous right turn lane / lane drop condition approaching MD 185 along MD 97 SB. (MDOT SHA)	Short to Mid	Low / Mod
4.05	Ped Facility Limitations. Limited visibility of roadside during nighttime.	Upgrade the continuous lighting along SB MD 97 and to LED. Install continuous lighting along NB MD 97. (MDOT SHA)	Mid	Mod / High
4.06	Aggressive / Inattentive Motorist Behaviors	Request that Montgomery County Police Department consider speed enforcement for MD 97. (MCPD/MCDOT)	Short	Low

4.07	Roadside Design	Provide positive protection for roadside critical slope within clear zone along SB MD 97 – approximately 600 linear feet. (MDOT SHA)	Mid	Low / Mod

Location 5: MD 97 at the Home Depot Driveway				
Location / Issue No.	**Observation/Issue**	**Recommendation (Primary Responsible Agency/Secondary Responsible Agency)**	**Timeframe**	**Relative Cost**
5.01	Ped-Vehicle Conflicts. Missing stop line.	Install a stop line on the EB Home Depot Driveway approach to MD 97. (MDOT SHA)	Short	Low
5.02	Ped-Vehicle Conflicts. Motorists observed not yielding right of way to pedestrians on sidewalk crossing driveway apron.	Install continental crosswalk markings along the Home Depot Driveway (west leg) (MDOT SHA)	Short	Low
5.03	Ped-Vehicle Conflicts. Two crossings located at Home Depot driveway. Offset crossing is not ADA-compliant.	Remove the existing crosswalk and median cut through along the Home Depot Driveway (west leg), approximately 35 feet west of MD 97, to clarify that the crossing is in the driveway apron. Pull back the median nose on the west leg to provide a full 10 feet of crosswalk width at the newly relocated crosswalk in the driveway apron. (MDOT SHA)	Mid	Mod
5.04	Maintenance. Curb and sidewalk damaged by vehicle overruns.	Repair the curb in the southwest (SW) quadrant of the Home Depot Driveway intersection. (MCDOT)	Mid	Low
5.05	Ped Facility Limitations. Steep slope hazard behind bus stop.	Install a railing at the bus stop (WMATA ID 2000892) along NB MD 97 opposite the Home Depot driveway to protect from the land slope behind the stop. (MDOT SHA)	Mid	Low
5.06	Maintenance. Sight line obstructed by foliage.	Trim foliage along SB MD 97 between Heathfield Road and the Home Depot Driveway and/or consider other options to improve the poor sight distance for motorists exiting the Home Depot Driveway looking north. (MDOT SHA)	Short to Mid	Low
5.07	Maintenance. Sign clutter has confusing messaging for time of day turn restrictions.	Combine the "No Left Turn (Time-Day Message)" signs (R3-2(1)) exiting the Home Depot to reduce clutter. (MDOT SHA)	Short	Low
5.08	Vehicular Operations. Unexpected and inconsistent road user behaviors and risky gap acceptance.	Implement a double yellow centerline and yield line markings in the open median of MD 97 at the Home Depot/7-Eleven driveways to alleviate driver confusion with where to turn and store. (MDOT SHA)	Short	Low

5.09	Ped Facility Limitations. Damaged sidewalk from vehicle overruns and >8% running slope.	Replace sidewalk ramp (that has running slope > 8%) in the NW corner. (MDOT SHA)	Mid	Low
5.10	Maintenance. Pavement fatigue.	Repair the rutting/waffled pavement along the Home Depot Driveway exit. (MDOT SHA)	Mid to Long	Mod
5.11	Vehicular Operations. Observed pedestrian and bicycle conflicts with motor vehicles. Motorists have difficulty making turns due to limited gaps in traffic and numerous vehicular movements in an uncontrolled intersection.	Install a full-color traffic signal with APS/CPS for all legs. NB and SB MD 97 left-turn phasing will be exclusive only. Side street phasing will be permissive. (MDOT SHA)	Mid to Long	High
5.12	Vehicular Operations. There appears to be limited visibility of median crossover in the dark.	Perform a photometric lighting analysis to determine if the MD 97 median crossover at the Home Depot Driveway is lit to acceptable standards. If not, install lighting to illuminate the median to acceptable standards. (MDOT SHA)	Mid	Mod
5.13	Ped-Vehicle Conflicts. Many driveways and properties with multiple accesses along MD 97 creating conflict points.	If feasible, consolidate the driveways along NB MD 97 in the vicinity of this intersection if/when redevelopment occurs, to limit vehicle-pedestrian conflict points. (MDOT SHA)	Long	Mod / High

Location 6: MD 97 and MD 185				
Location / Issue No.	**Observation/Issue**	**Recommendation (Primary Responsible Agency/Secondary Responsible Agency)**	**Timeframe**	**Relative Cost**
6.01	Ped-Vehicle Conflicts. Transverse crosswalk markings provided for signalized crossings.	Install continental crosswalk markings across all intersection legs. Restripe continental crosswalk markings across the channelized right turn lanes from SB MD 97 to SB MD 185. (MDOT SHA)	Short	Low
6.02	Maintenance. Existing warning signs are undersized for multilane, conventional roadways.	Upgrade the existing 30"x30" pedestrian warning signs (W11-2), located at the crosswalk in the SB MD 97 channelized right turn lanes, to 36"x36". (MDOT SHA)	Short	Low
6.03	Maintenance. Missing object marker.	Install an object marker (OM1-3) at the head of the SB MD 97 right-turn channelization island. (MDOT SHA)	Short	Low
6.04	Maintenance. Grass sprawling into walkable pathways.	Trim foliage on all legs and quadrants of the intersection. (MDOT SHA)	Short	Low
6.05	Vehicular Operations. Pavement marking layout along SB MD 97. Drivers observed unexpectedly crossing over the painted gore area between the through and right turn.	Install flex posts at the heads of each painted chevron pavement marking (6 total) in the painted gore area between SB MD 97 (Georgia Avenue) through lanes and the channelized right turn lanes, on the approach to MD 185 (Connecticut Avenue). (MDOT SHA)	Short	Low
6.06	Maintenance. Sidewalk surface is chipping.	Repair exposed aggregate sidewalk in the NW corner. (MCDOT)	Short to Mid	Low

6.07	Maintenance. CPS is malfunctioning, no countdown.	Replace malfunctioning CPS in the SW quadrant for pedestrians crossing the west leg of the intersection (crossing MD 185). (MCDOT)	Short	Low
6.08	Maintenance. Missing pedestrian information sign.	Replace "Push button to Cross" (R10-3(1)) sign for crossing the north leg (crossing MD 97) in the NE corner. (MCDOT)	Short	Low
6.09	Ped-Vehicle Conflicts. Pedestrian clearance times are shorter than required for 3.5 ft/sec walking speed based on crossing lengths.	Revise pedestrian clearance times for crossing the west MD 185, north MD 97, and south MD 97 intersection legs to meet appropriate flashing don't walk time for 3.5 ft/sec walking speed. (MCDOT)	Short	Low
6.10	Maintenance. Pedestrian information sign does not list roadway name.	Replace "Push button to Cross" (R10-3(1)) sign for crossing the west leg (crossing MD 185) in the NW corner. (MCDOT)	Short	Low
6.11	Maintenance. Sidewalk in poor condition.	Repair the sidewalk and curb at the bus stop (WMATA ID 2000890) in the NE corner. (MCDOT)	Short	Low
6.12	Maintenance. Sign damaged / struck by vehicle.	Repair/replace the knocked over "Stop for Pedestrians at All Crosswalks" sign on the east leg along EB Connecticut Ave. (MDOT SHA)	Short	Low
6.13	Maintenance. Sidewalk and curb damaged.	Repair sidewalk in the SE corner. (MCDOT)	Short to Mid	Low
6.14	Aggressive / Inattentive Motorist Behaviors. Signal heads lack reflective backplates.	Install backplates on all traffic signal heads. (MDOT SHA)	Mid	Mod
6.15	Ped-Vehicle Conflicts. Fence line obstructs sight line at intersection.	Install a post-mounted "Right Turning Traffic Must Yield to Pedestrians" (R10-15R) sign along NB MD 97, on the approach to Connecticut Avenue. (MDOT SHA)	Short	Low
6.16	Vehicular Operations. Narrow shoulder requires buses to straddle the shoulder and travel lane when stopping along SB MD 97.	Restripe/realign the lane markings and edge lines along the SB MD 97 (Georgia Avenue) approach to MD 185 (Connecticut Avenue), from the head of the painted gore area (between the through lanes and channelized right turn lanes) to the MD 185 (Connecticut Avenue) intersection (approximately 315 feet). This restripe/realignment is meant to provide a SB shoulder wide enough for WMATA buses to fully store when they service WMATA bus stop 200883. Also, ensure that any SB lane markings and edge lines are properly transitioned beyond the MD 185 (Connecticut Avenue) intersection to avoid lane shifts through the MD 185 intersection. This improvement should be implemented in conjunction with that for issue 6.18. (MDOT SHA/WMATA)	Mid to Long	Mod
6.17	Aggressive / Inattentive Motorist Behaviors. Observed turning movements at higher speeds.	Restripe narrower approach lane widths for the SB MD 97 double channelized right turn lanes to encourage slower turning speeds (this recommendation can serve as an interim improvement for the SB MD 97 channelized	Mid	Mod

		right turn lanes, implemented prior to recommendation 6.18). (MDOT SHA)		
6.18	Ped-Vehicle Conflicts. Limited motorist compliance at uncontrolled pedestrian crossing at the SB MD 97 channelized right turn lanes to MD 185.	If feasible, reduce the curb radius through curb line relocation or, alternatively, implement truck aprons for the SB MD 97 channelized right turn lanes to reduce vehicle turning speeds. This recommendation should be implemented in conjunction with those for issue 6.16. (MDOT SHA)	Mid to Long	Mod / High
6.19	Aggressive / Inattentive Motorist Behaviors. Permissive left turns create conflicts with pedestrians and oncoming traffic.	Modify the left-turn phasing along the SB MD 97 approach from exclusive-permissive to exclusive only phasing. (MDOT SHA)	Mid	Low
6.20	Ped-Vehicle Conflicts. Crossings are lengthy and have insufficient pedestrian clearance intervals existing. Pedestrian arriving at the crossing after the walk phase were observed stopping in the median.	Extend the MD 97 medians on the north and south legs of the intersection to provide pedestrian refuge islands. Provide APS/CPS within the refuge islands. (MDOT SHA)	Mid to Long	Mod
6.21	Ped-Vehicle Conflicts. Existing roadway lighting configuration does not appear to fully illuminate crosswalks spanning the south, east, and west intersection legs.	Perform a photometric lighting analysis to determine if the south (crossing MD 97), east (crossing Connecticut Avenue), and west leg (crossing MD 185 [Connecticut Avenue]) crosswalks are lit to acceptable standards. If not, install lighting to illuminate crosswalks to acceptable standards. (MDOT SHA)	Mid	Mod
6.22	Ped-Vehicle Conflicts. Sight lines are limited by fence.	Remove/modify the fence in the vicinity of the SE intersection corner to improve sight distance between pedestrians crossing MD 185 and NB MD 97 right turning vehicles. (MDOT SHA)	Mid to Long	Mod
6.23	Aggressive / Inattentive Motorist Behaviors. Many driveways and properties with multiple accesses along NB MD 97 creating conflict points.	If feasible, consolidate access points to/from the driveways along NB MD 97, between MD 185 and 7-Eleven driveways, if/when redevelopment occurs. (MDOT SHA)	Long	Mod / High
6.25	Enforcement	Request that Montgomery County Police Department install red-light cameras on the NB MD 97, EB MD 185, and WB Connecticut Avenue approaches. (MCPD/MCDOT)	Mid	Mod
6.26	Vehicular Operations. R10-12 signs shall not be used along MDOT SHA roadway.	Remove LEFT TURN YIELD (R10-12) sign for SB approach. (MDOT SHA)	Short	Low
6.27	Ped-Vehicle Conflicts. Missing sidewalk link on SW corner right turn channelization island.	Provide a sidewalk connection along the southern edge of the double right turn channelization island, from the NW corner of the MD 97/MD 185 intersection to WB MD 185 (with a buffer between new sidewalk and WB MD 185). This improvement should be implemented in	Long	Mod / High

		conjunction with that for issues 6.16 and 6.18. (MDOT SHA)		
6.28	Maintenance. Object markers not installed for MD 185 concrete median noses.	Install OM1-3 object markers for the MD 185 median noses on the east and west legs. (MDOT SHA)	Short	Low
6.29	Roadway Geometry. Observed many pedestrians and several bicyclists crossing high use driveways.	If feasible, consolidate the gas station driveways in the SW corner of the intersection if/when redevelopment occurs, to reduce vehicle-vehicle and vehicle-pedestrian conflict points. (MDOT SHA)	Long	Mod / High
6.30	Ped-Vehicle Conflicts. Right turns on red conflict with pedestrian crossings and have limited sight lines.	Implement No Turn On Red restrictions by installing R11-10b signing for the NB MD 97, NB MD 185, and WB Connecticut Avenue approaches. (MDOT SHA)	Short	Low
6.31	Vehicular Operations. NB MD 97 right turn lane queue length exceeds storage if NTOR implemented for NB MD 97 rights.	Provide an overlap phase for NB MD 97 right turns that runs concurrent with the WB Connecticut Avenue approach phase. (MDOT SHA)	Short	Low
6.32	Ped-Vehicle Conflicts. Heavy NB MD 97 right turn volume with limited sight distance.	Provide an LPI prior to the NB MD 97 phase (for crossing Connecticut Avenue). (MDOT SHA)	Short	Low
6.33	Ped Facilities. The pedestrian push button in the NW corner of the intersection for the west leg crosswalk (crossing MD 185) is mounted higher than the ADA max height of 42”.	Lower the pedestrian push button in the NW corner of the intersection for the west leg (crossing MD 185), so that it is mounted according to ADA guidelines. (MCDOT)	Short	Low

Location 7: MD 97 between MD 185 and Aspen Hill Road				
Location / Issue No.	**Observation/Issue**	**Recommendation (Primary Responsible Agency/Secondary Responsible Agency)**	**Timeframe**	**Relative Cost**
7.01	Ped-Vehicle Conflicts. No markings (stop line or crosswalk), or DWS at crossing.	Install continental crosswalk markings across the Gate of Heaven Cemetery driveway along NB MD 97, approximately 450 feet south of MD 185. Install detectable warning surfaces across the pedestrian ramps at this location. (MDOT SHA)	Short	Low
7.02	Maintenance. Sign tilting.	Straighten out the "Right Lane Must Turn Right" sign (R3-7R) along NB MD 97 approaching Connecticut Avenue. (MDOT SHA)	Short	Low
7.03	Maintenance. Sidewalk vertical discontinuities.	Bevel the sidewalk along the NB MD 97 roadway to remove vertical discontinuities between Gate of Heaven Cemetery driveways. (MCDOT)	Short to Mid	Low
7.04	Maintenance. Leased light not working.	Repair light outages along SB MD 97 near the Shell driveway, and along SB MD 97 near the Northgate Shopping Center driveway (PEPCO #777455-870090). (MDOT SHA/PEPCO)	Short	Low

7.05	Ped Facility Limitations. Storm inlet structure at different elevation than sidewalk.	Repair sidewalk to be flush with existing storm drain structure along NB MD 97 approximately 50 feet south of MD 185. (MCDOT)	Short	Low
7.06	Vehicular Operations. Two NB bus stops are approximately 500 feet apart, with one stop (WMATA 2000873) creating desire to cross MD 97 midblock.	If feasible, combine NB MD 97 WMATA bus stop 2000873 with bus stop 2000864. Relocate bus stop 2000864 to the south side of Aspen Hill Road to encourage bus patrons to use the marked protected marked crosswalk to cross MD 97 (See recommendation 8.09). (MDOT SHA and WMATA)	Short to Mid	Low
7.07	Vehicular Operations. Large median cross over. Traffic counts indicate some illegal left turns out of Northgate Plaza.	Install an S-shaped monolithic median to physically restrict illegal left turning movements out of the Northgate Plaza Shopping Center driveway (similar to MD 97 at Wendy Lane). (MDOT SHA)	Mid	Low / Mod
7.08	Vehicular Operations. Several driveway access points along SB MD 97.	As parcels are redeveloped, consolidate driveways or narrow driveway openings along SB MD 97 to reduce vehicle-vehicle and pedestrian-vehicle conflict points. (MDOT SHA)	Long	Mod / High

Location 8: MD 97 and Aspen Hill Road				
Location / Issue No.	**Observation/Issue**	**Recommendation (Primary Responsible Agency/Secondary Responsible Agency)**	**Timeframe**	**Relative Cost**
8.01	Maintenance. Transverse crosswalk markings at side street crossings.	Install continental crosswalk markings across the east and west leg crosswalks (crossing Gate of Heaven Cemetery driveway and Aspen Hill Road). (MDOT SHA)	Short	Low
8.02	Maintenance. CPS malfunction.	Replace malfunctioning CPS for the east leg crossing (WALK does not display on NE corner) (for crossing Gate of Heaven Cemetery driveway). (MCDOT)	Short	Low
8.03	Maintenance. CPS malfunction.	Replace malfunctioning CPS for the south leg crossing (countdown does not display on SW corner) (for crossing MD 97). (MCDOT)	Short	Low
8.04	Aggressive / Inattentive Motorist Behaviors. No extension lines for dual left turn movement.	Provide extension lines through the intersection for the double left turning movement from NB MD 97 to WB Aspen Hill Road. (MDOT SHA)	Short	Low
8.05	Aggressive / Inattentive Motorist Behaviors. Signal heads lack reflective backplates.	Install backplates for all intersection traffic signal heads. (MDOT SHA)	Mid	Mod
8.06	Ped Facility Limitations. Pedestrian cut-through in median along Aspen Hill Road approach is not ADA compliant.	Remove the back-to-back detectable warning surfaces in the narrow west leg median cut-through (crossing Aspen Hill Road) or widen the median to provide a median refuge island with at least 2 feet separating the detectable warning surfaces. (MDOT SHA)	Short to Mid	Low

8.07	Maintenance. Foliage obstructing walkable pathways.	Trim foliage on all legs and quadrants of the intersection. (MDOT SHA)	Short	Low
8.08	Maintenance. Leased light fixture damaged.	Repair broken luminaire housing for leased light on PEPCO utility pole in NW corner channelized island. (MDOT SHA/PEPCO)	Short	Low
8.09	Ped-Vehicle Conflicts. North leg crossing is not signalized or accessible, and there is a bus stop just north of the intersection along NB MD 97.	Relocate WMATA bus stop 2000864 from just north of Aspen Hill Road to just south of Aspen Hill Road, to encourage bus patrons to use the protected marked crosswalk to cross MD 97. (WMATA)	Short to Mid	Low
8.10	Ped Facility Limitations. Pinch point in sidewalk created by utility pole.	Remove the utility pole located in the sidewalk in the SW quadrant of the intersection. (MDOT SHA)	Long	Mod
8.11	Ped-Vehicle Conflicts. Crossings are lengthy. Pedestrian arriving at the crossing after the walk phase stop in the median.	Install median refuge islands on the south leg of the intersection (for crossing MD 97). Install pedestrian pushbuttons in the refuge island. (MDOT SHA)	Mid to Long	Mod
8.12	Ped-Vehicle Conflicts. Motorists not yielding right-of-way to pedestrians in crossing.	Remove channelized right-turn lane for SB MD 97. Alternatively, consider implementing a truck apron to reduce the speed of turning vehicles. (MDOT SHA)	Mid to Long	Mod / High
8.13	Vehicular Operations. Nearside signal head does not match the rightmost signal head on the mast arm.	Replace the nearside 3-section signal head along the EB Aspen Hill Rd approach with a 5-section signal head, matching the display on the signal mast arm. (MDOT SHA)	Short to Mid	Low
8.14	Maintenance. Missing object marker.	Install an OM1-3 object marker in the median nose for the west leg of Aspen Hill Rd. (MDOT SHA)	Short	Low
8.15	Maintenance. Missing object marker.	Install an OM1-3 object marker in the NE corner for the curb nose created by the Gate of Heaven Cemetery driveway. (MDOT SHA)	Short	Low

Location 9: MD 97 between Aspen Hill Rd and Wendy Lane				
Location / Issue No.	**Observation/Issue**	**Recommendation (Primary Responsible Agency/Secondary Responsible Agency)**	**Timeframe**	**Relative Cost**
9.01	Maintenance. Foliage obstructing walkable paths along NB and SB MD 97.	Trim foliage along the MD 97 sidewalks and at the driveway across Wendy Lane. (MDOT SHA)	Short	Low
9.02	Maintenance. Curb damaged around storm inlet.	Repair the damaged curb at the storm inlet structure along NB MD 97, approximately 200 feet north of Wendy Lane. (MDOT SHA)	Short to Mid	Low
9.03	Maintenance. Foliage obstructing signs.	Trim foliage blocking Wendy Ln advance intersection guide sign along SB MD 97 sidewalk. (MDOT SHA)	Short	Low
9.04	Maintenance. Pothole in travel lane.	Repair pothole in the rightmost lane of NB north of Wendy Ln, in front of the northernmost driveway to the Aspen Manor shopping center. (MDOT SHA)	Short	Low

Location 10: MD 97 and Wendy Lane				
Location / Issue No.	**Observation/Issue**	**Recommendation (Primary Responsible Agency/Secondary Responsible Agency)**	**Timeframe**	**Relative Cost**
10.01	Maintenance. Crossings unmarked.	Install continental crosswalk markings across Wendy Lane (west leg). (MDOT SHA)	Short	Low
10.02	Maintenance. Sediment collects in ramp and grass growing in pavement joints.	Remove overgrowth at the detectable warning surfaces/ pedestrian ramps in the NW and SW corners (for crossing Wendy Lane). (MDOT SHA)	Short	Low
10.03	Ped-Vehicle Conflicts. Many driveway access points along SB MD 97 creating conflicts.	Install continental crosswalk markings across the 3 Aspen Manor / Lotte Plaza Shopping Center driveways and 2 Citgo gas station driveways along NB MD 97. (MDOT SHA)	Short to Mid	Low
10.04	Maintenance. Leased light fixture malfunction.	Repair dark light in the SW corner on utility pole (PEPCO #779453-030720). (MDOT SHA/PEPCO)	Short	Low
10.05	Vehicular Operations. Dark areas in median opening.	Perform a photometric lighting analysis to determine if the median of MD 97 at Wendy Lane is lit to acceptable standards. If not, install lighting to illuminate the median to acceptable standards. (MDOT SHA)	Mid	Mod
10.06	Ped-Vehicle Conflicts. Observed pedestrian and bicycle conflicts with motor vehicles. Motorists have difficulty making turns.	Install a full color traffic signal at Wendy Lane, with continental crosswalk markings, pedestrian ramps, and APS/CPS. (MDOT SHA)	Mid to Long	Mod / High
10.07	Vehicular Operations. Some motorists observed treating NB and SB MD 97 left turn movements as a free-flow movement, rather than yielding to oncoming traffic.	Install yield line markings in the median for NB and SB MD 97 left/U-turns. (MDOT SHA)	Short	Low
10.08	Maintenance. Advance intersection guide sign missing.	Install an advance intersection sign for Wendy Lane in the median of MD 97 for NB MD 97 traffic. (MDOT SHA)	Short	Low

Location 11: MD 97 between Wendy Lane and Ralph Road				
Location / Issue No.	**Observation/Issue**	**Recommendation (Primary Responsible Agency/Secondary Responsible Agency)**	**Timeframe**	**Relative Cost**
11.01	Maintenance. Sidewalk damage from utility work.	Repair curb and sidewalk damage along SB MD 97 near fire hydrant approximately 120 feet north of Ralph Road. (MCDOT)	Short	Low
11.02	Maintenance. Speed limit sign missing for right side along SB MD 97, south of Wendy Lane.	Install speed limit signs both in the median and on the right shoulder along SB MD 97. (MDOT SHA)	Short	Low
11.03	Maintenance. Advance intersection guide sign obstructed by foliage.	Trim foliage along SB MD 97 currently blocking the "Ralph Rd" guide sign adjacent to the sidewalk. (MDOT SHA)	Short	Low

Location 12: MD 97 and Ralph Road				
Location / Issue No.	**Observation/Issue**	**Recommendation (Primary Responsible Agency/Secondary Responsible Agency)**	**Timeframe**	**Relative Cost**
12.01	Maintenance. Grass growing in sidewalk joints.	Remove overgrowth at the detectable warning surfaces on all pedestrian ramps at the intersection. (MDOT SHA)	Short	Low
12.02	Ped-Vehicle Conflicts. Unmarked crossings of stop-controlled approaches.	Install continental crosswalk pavement markings across Ralph Road and Aspen Hill Apartments driveway. (MDOT SHA)	Short	Low
12.03	Ped-Vehicle Conflicts. Observed pedestrian and bicycle conflicts with motor vehicles. Motorists have difficulty making turns.	Install a full color traffic signal at Ralph Road, with continental crosswalk markings, pedestrian ramps, and APS/CPS. (MDOT SHA)	Mid to Long	Mod / High

Location 13: MD 97 between Ralph Rd and Hewitt Ave				
Location / Issue No.	**Observation/Issue**	**Recommendation (Primary Responsible Agency/Secondary Responsible Agency)**	**Timeframe**	**Relative Cost**
13.01	Maintenance. Sidewalk and driveway apron damaged and collecting sediment.	Repair the sidewalk damage along SB MD 97 at the maintenance driveway apron. (MCDOT)	Short	Low
13.02	Maintenance. Grass obstructing walkable pathway.	Trim foliage along the sidewalks along both NB and SB MD 97. (MDOT SHA)	Short	Low

Location 14: MD 97 and Hewitt Ave				
Location / Issue No.	**Observation/Issue**	**Recommendation (Primary Responsible Agency/Secondary Responsible Agency)**	**Timeframe**	**Relative Cost**
14.01	Ped Facility Limitations. Matthew Henson Trail wayfinding signs have spelling errors, and pathway is not intuitive from SE.	Modify the existing wayfinding signing for the Matthew Henson Trail to fix spelling errors, address sign clutter, and clarify wayfinding signing versus information signing. (MDOT SHA/MNCPPC)	Short	Low
14.02	Maintenance. Level landing collects sediment.	Remove overgrowth and sediment at the detectable warning surfaces at the pedestrian ramps (NW and SW corners). Ensure gutter pan provides positive flow away from the landing. (MDOT SHA)	Short	Low / Mod
14.03	Ped-Vehicle Conflicts. Crossings are lengthy. Pedestrian arriving at the crossing after the walk phase stop in the median.	Install pedestrian refuge islands in the medians of MD 97 on the north and south legs. Install pedestrian pushbuttons in the refuge islands. (MDOT SHA)	Mid to Long	Mod / High
14.04	Ped Facility Limitations. Frequent vulnerable road user activity at intersection due to transit stops and trail access.	Reduce the signal cycle length to 120 seconds. (MCDOT)	Short to Mid	Low
14.05	Vehicular Operations. Permissive left turns create conflicts with pedestrians and oncoming traffic.	Modify the existing left turn phasing for SB MD 97 lefts from exclusive-permissive phasing to exclusive only phasing. (MDOT SHA)	Mid	Low

14.06	Ped Facility Limitations. Trail crossing increases bicycle activity.	Consider a grade separated trail crossing for the Matthew Henson Trail. (MDOT SHA/MNCPPC)	Long	High
14.07	Ped-Vehicle Conflicts. Motorists turning right on red conflict with pedestrians in crosswalks.	Employ no right turn on red restrictions for the NB MD 97 approach with a R10-11b sign. (MDOT SHA)	Mid	Low
14.08	Ped-Vehicle Conflicts. Dark areas at night in crossing of east leg (across Hewitt Avenue) and north leg (crossing MD 97, along SB MD 97 lanes).	Perform a photometric lighting analysis to determine if all intersection leg crosswalks are lit to acceptable standards. If not, install lighting to illuminate crosswalks to acceptable standards. (MDOT SHA)	Mid	Low / Mod
14.09	Vehicular Operations. Wide left shoulder along NB MD 97 is hatched to discourage U-turns, but there are no signed restrictions.	Install signing that prohibits U-turns (R3-4) on the NB MD 97 approach, supplementing the existing pavement markings that discourage such U-turns. (MDOT SHA)	Short	Low
14.10	Vehicular Operations. Pavement markings along Hewitt Avenue are unclear when second lane opens, and only provides a RLMTR sign.	Provide clearer lane use assignment along the WB Hewitt Ave approach with signing and pavement marking symbols – pavement marking arrows and R3-5L and R3-5R signs on traffic signal mast arm. (MDOT SHA)	Short	Low
14.11	Maintenance. Missing advanced intersection guide signs.	Install advance intersection guide signing for Hewitt Ave along the NB and SB MD 97 approaches. (MDOT SHA)	Short	Low
14.12	Ped-Vehicle Conflicts. Heavy NB MD 97 right turn volume in conflict with pedestrians.	Provide an LPI prior to the NB MD 97 phase for crossing Hewitt Avenue. (MDOT SHA)	Short	Low

Corridor-Wide				
Location / Issue No.	**Observation/Issue**	**Recommendation (Primary Responsible Agency/Secondary Responsible Agency)**	**Timeframe**	**Relative Cost**
00.01	Maintenance	Trim foliage and trim trees along the corridor to ensure they are beyond the back of the sidewalk and all hanging branches are more than 7 ft above the sidewalk. (MDOT SHA)	Short to Mid	Low
00.02	Ped-Vehicle Conflicts	Install continental crosswalk markings across all driveways along NB and SB MD 97 between Bel Pre Road and Hewitt Avenue. (MDOT SHA)	Short to Mid	Low / Mod
00.03	Ped-Vehicle Conflicts	For driveways that do not have concrete driveways, install DWS to supplement crosswalk markings (Recommendation 00.02) at high volume or wide driveway crossings. (MDOT SHA)	Short	Low
00.04	Aggressive / Inattentive Motorist Behaviors. Speed evaluation recommends a lower posted speed limit north of MD 185.	Narrow the widths of the NB and SB MD 97 lanes such that inner lanes are 10 feet, and the curb lanes are 11 feet, to encourage slower vehicular speeds. Consider this in conjunction with Recommendation 00.05. (MDOT SHA)	Mid to Long	Mod / High

00.05	Ped Facility Limitations. Montgomery Planning PLOC methodology indicates "Undesirable" sidewalk facilities along the MD 97 corridor.	If feasible, narrow the median width along MD 97. Realign travel lanes toward the center of the roadway to allow for additional pedestrian/bicyclist space and/or a buffer between the curbside travel lanes and the sidewalk. Alternatively, consider the results of MDOT SHA's upcoming road diet analysis report when determining the appropriate method to achieve the additional pedestrian/bicyclist and/or buffer space. Consider this in conjunction with narrowed lanes, as described in Recommendation 00.04. (MDOT SHA)	Long	High
00.06	Ped Facility Limitations. Hispanic population in area. Spanish signing observed along corridor.	If feasible, provide pedestrian information signs and audible messages in English and Spanish. (MDOT SHA)	Mid	Low
00.07	Enforcement.	Request that Montgomery County Police Department install automated speed cameras along MD 97 to enforce speed limits. (MCPD/MCDOT)	Mid	Low
00.08	Aggressive / Inattentive Motorist Behaviors. Speed data evaluation indicates that a 40 MPH posted speed limit may be appropriate north of MD 185.	Modify posted speed limit to 40 MPH along MD 97, north of MD 185 based on results from the USLIMITS2 evaluation and recommended target speed for Boulevard street type in the CSDG. (MDOT SHA)	Short	Low
00.09	Aggressive / Inattentive Motorist Behaviors	Request that Montgomery County Police Department install red-light cameras at signalized intersections along MD 97. (MCPD/MCDOT)	Mid	Mod
00.10	Maintenance	Install recessed raised pavement markings (RPMs) along MD 97 in accordance with MDOT SHA's pavement marking material policy. This would likely be in conjunction with a roadway resurfacing. (MDOT SHA)	Mid	High
00.11	Traffic Operations	Modify traffic signal timing offsets and signal timing schedule optimizations at all intersections. (MCDOT)	Short	Low
00.12	Roadway Geometry. Pavement fatigue at bus stop locations.	Install concrete bus pads at transit stops along MD 97 to reduce pavement fatigue that can negatively impact traffic operations and safety. (MDOT SHA)	Mid	High
00.13	Traffic Operations	Install One Way (R6-1), Do Not Enter (R5-1), and Wrong Way (R6-1a) signing as appropriate along the corridor at signalized intersection and uncontrolled median crossovers. (MDOT SHA)	Mid	Low

APPENDIX A – Traffic Count Materials

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

Maryland Department of Transportation
State Highway Administration
Data Services Division
Turning Movement Summary Report

Station ID: S2001150070 County: Montgomery Comments:

Date: 9/15/2021 12:00:00 AM Town: none

Location: MD 97 at Bel Pre Rd Weather: CLEAR

Interval: 60 Min

PEAK	AM PERIOD	Start	End	Volume	LOS	V/C	PM PERIOD	Start	End	Volume	LOS	V/C
Hours	6:00AM-12:00PM	08:00	09:00	4099	B	0.68	12:00PM-19:00PM	17:00	18:00	4434	B	0.64

	MD 97					MD 97					BEL PRE RD					BEL PRE RD					
	From North					From South					From East					From West					
Begin Hour	**U.Turn**	**Left**	**Through**	**Right**	**TOTAL**	**U.Turn**	**Left**	**Through**	**Right**	**TOTAL**	**U.Turn**	**Left**	**Through**	**Right**	**TOTAL**	**U.Turn**	**Left**	**Through**	**Right**	**TOTAL**	**GrandTotal**
00:00	1	12	83	8	104	4	7	75	30	116	0	7	11	13	31	0	4	34	20	58	309
01:00	0	10	39	6	55	1	5	47	18	71	0	12	9	12	33	0	0	12	8	20	179
02:00	0	7	36	3	46	1	7	38	10	56	0	5	8	7	20	0	3	8	7	18	140
03:00	0	3	39	2	44	2	7	30	10	49	0	12	5	8	25	0	2	7	7	16	134
04:00	0	6	120	2	128	7	9	79	8	103	0	20	22	24	66	0	16	12	14	42	339
05:00	0	24	312	9	345	20	30	248	25	323	0	74	91	57	222	0	46	28	32	106	996
06:00	1	44	816	15	876	32	84	540	64	720	2	151	185	143	481	0	78	64	92	234	2311
07:00	1	116	1249	95	1461	27	140	840	86	1093	0	236	290	203	729	0	125	176	172	473	3756
08:00	1	133	1500	93	1727	26	141	865	93	1125	0	197	290	226	713	0	165	186	183	534	4099
09:00	5	97	1080	67	1249	16	146	644	74	880	0	125	179	166	470	0	80	167	179	426	3025
10:00	2	109	812	50	973	29	99	653	68	849	2	106	121	131	360	1	84	128	158	371	2553
11:00	0	109	787	53	949	20	97	739	76	932	0	87	152	154	393	0	53	150	146	349	2623
12:00	4	129	874	58	1065	31	107	790	101	1029	0	112	146	152	410	0	73	138	172	383	2887
13:00	3	152	840	72	1067	27	107	888	116	1138	1	108	142	157	408	0	79	134	149	362	2975
14:00	0	170	988	109	1267	26	111	989	128	1254	0	113	167	158	438	0	81	195	190	466	3425
15:00	0	195	866	115	1176	20	133	1249	186	1588	0	130	207	241	578	0	152	281	207	640	3982
16:00	5	217	1049	132	1403	38	122	1447	172	1779	1	122	182	228	533	0	143	329	217	689	4404
17:00	2	225	1059	144	1430	43	132	1390	182	1747	0	133	208	245	586	0	143	306	222	671	4434
18:00	1	196	885	107	1189	34	132	1132	193	1491	0	128	150	219	497	2	96	306	178	582	3759
19:00	0	196	728	74	998	25	116	773	166	1080	0	120	134	177	431	0	68	212	134	414	2923
20:00	0	175	503	84	762	23	58	572	130	783	0	90	98	105	293	0	40	167	96	303	2141
21:00	1	123	414	42	580	23	33	391	107	554	0	61	74	83	218	0	24	118	92	234	1586
22:00	0	84	281	35	400	9	39	274	71	393	0	55	52	61	168	0	28	82	72	182	1143
23:00	0	34	136	11	181	10	20	171	42	243	0	17	41	45	103	0	6	63	39	108	635
TOTAL	**27**	**2566**	**15496**	**1386**	**19475**	**494**	**1882**	**14864**	**2156**	**19396**	**6**	**2221**	**2964**	**3015**	**8206**	**3**	**1589**	**3303**	**2786**	**7681**	**54758**
AMPEAK	**1**	**133**	**1500**	**93**	**1727**	**26**	**141**	**865**	**93**	**1125**	**0**	**197**	**290**	**226**	**713**	**0**	**165**	**186**	**183**	**534**	**4099**
PMPEAK	**2**	**225**	**1059**	**144**	**1430**	**43**	**132**	**1390**	**182**	**1747**	**0**	**133**	**208**	**245**	**586**	**0**	**143**	**306**	**222**	**671**	**4434**
DAYPEAK	**2**	**225**	**1059**	**144**	**1430**	**43**	**132**	**1390**	**182**	**1747**	**0**	**133**	**208**	**245**	**586**	**0**	**143**	**306**	**222**	**671**	**4434**

Maryland Department of Transportation
State Highway Administration
Data Services Division
Turning Movement Summary Report

Station ID: S2001150070 County: Montgomery Comments:

Date: 9/15/2021 12:00:00 AM Town: none

Location: MD 97 at Bel Pre Rd Weather: CLEAR

Interval: 60 Min

PEAK	AM PERIOD	Start	End	Volume	LOS	V/C	PM PERIOD	Start	End	Volume	LOS	V/C
Hours	6:00AM-12:00PM	08:00	09:00	4099	B	0.68	12:00PM-19:00PM	17:00	18:00	4434	B	0.64

	MD 97			MD 97			BEL PRE RD			BEL PRE RD		
	From North			From South			From East			From West		
Begin Hour	**School Children**	**Pedestrians**	**Bicycles**	**School Children**	**Pedestrians**	**Bicycles**	**School Children**	**Pedestrians**	**Bicycles**	**School Children**	**Pedestrians**	**Bicycles**
00:00	0	0	0	0	2	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	2	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	2	0	0	0	0	0	0	0
05:00	0	0	0	0	5	0	0	1	0	0	0	0
06:00	0	1	0	0	12	0	0	4	0	0	0	0
07:00	0	0	0	0	13	0	0	2	0	0	0	1
08:00	0	0	0	0	7	0	0	1	0	0	0	0
09:00	0	0	0	0	2	0	0	1	0	0	0	0
10:00	0	0	0	0	3	0	0	1	0	0	0	0
11:00	0	0	0	0	4	0	0	0	0	0	1	0
12:00	0	0	0	0	6	0	0	0	0	0	1	0
13:00	0	0	0	0	4	0	0	0	0	0	0	0
14:00	0	0	0	0	3	0	0	1	0	0	1	0
15:00	0	1	0	0	3	0	0	3	1	0	0	0
16:00	0	1	0	0	3	0	0	2	0	0	1	0
17:00	0	0	0	0	5	0	0	0	0	0	0	0
18:00	0	0	0	0	6	2	0	0	0	0	0	0
19:00	0	0	0	0	10	0	0	0	0	0	0	0
20:00	0	0	0	0	4	0	0	1	0	0	0	0
21:00	0	0	0	0	1	0	0	0	0	0	0	0
22:00	0	0	0	0	1	1	0	0	0	0	1	0
23:00	0	0	0	0	1	0	0	0	0	0	0	0
TOTAL	**0**	**3**	**0**	**0**	**99**	**3**	**0**	**17**	**1**	**0**	**5**	**1**
AMPEAK	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**1**	**0**	**0**	**0**	**0**
PMPEAK	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
DAYPEAK	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Maryland Department of Transportation
State Highway Administration
Data Services Division

Turning Movement Summary Report

Station ID: S2001150070 County: Montgomery Comments:

Date: 9/15/2021 12:00:00 AM Town: none

Location: MD 97 at Bel Pre Rd Weather: CLEAR

Interval: 60 Min

PEAK	AM PERIOD	Start	End	Volume	LOS	V/C	PM PERIOD	Start	End	Volume	LOS	V/C
Hours	6:00AM-12:00PM	08:00	09:00	4099	B	0.68	12:00PM-19:00PM	17:00	18:00	4434	B	0.64

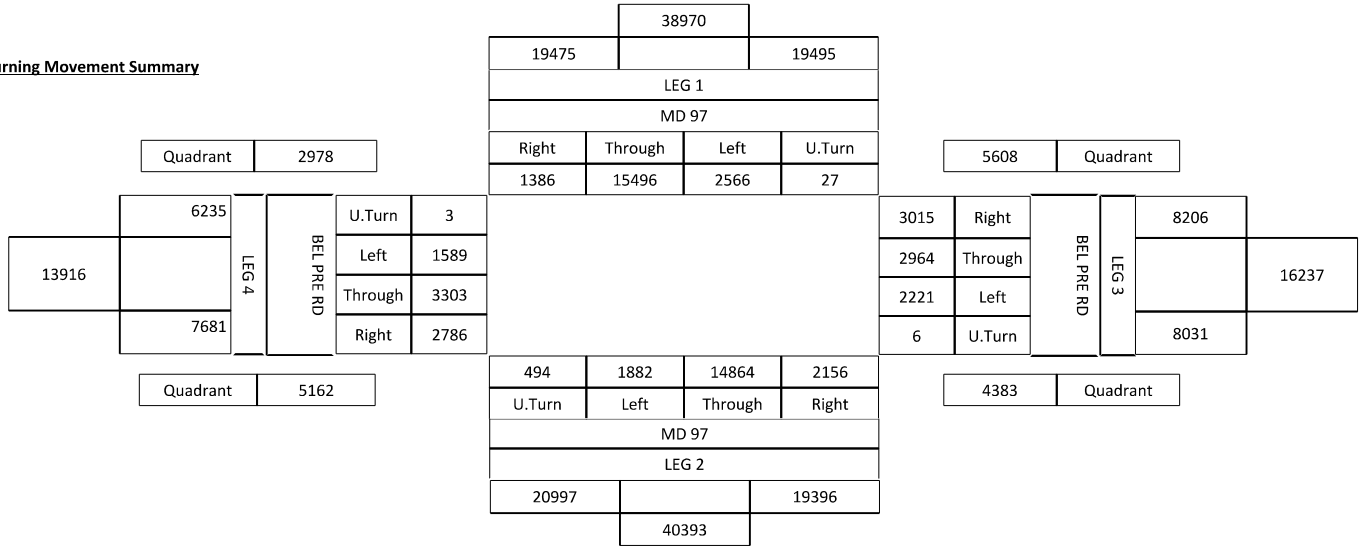
MD 97 — From North

MD 97 — From South

BEL PRE RD — From East

BEL PRE RD — From West

Turning Movement Summary



Maryland Department of Transportation
State Highway Administration
Data Services Division

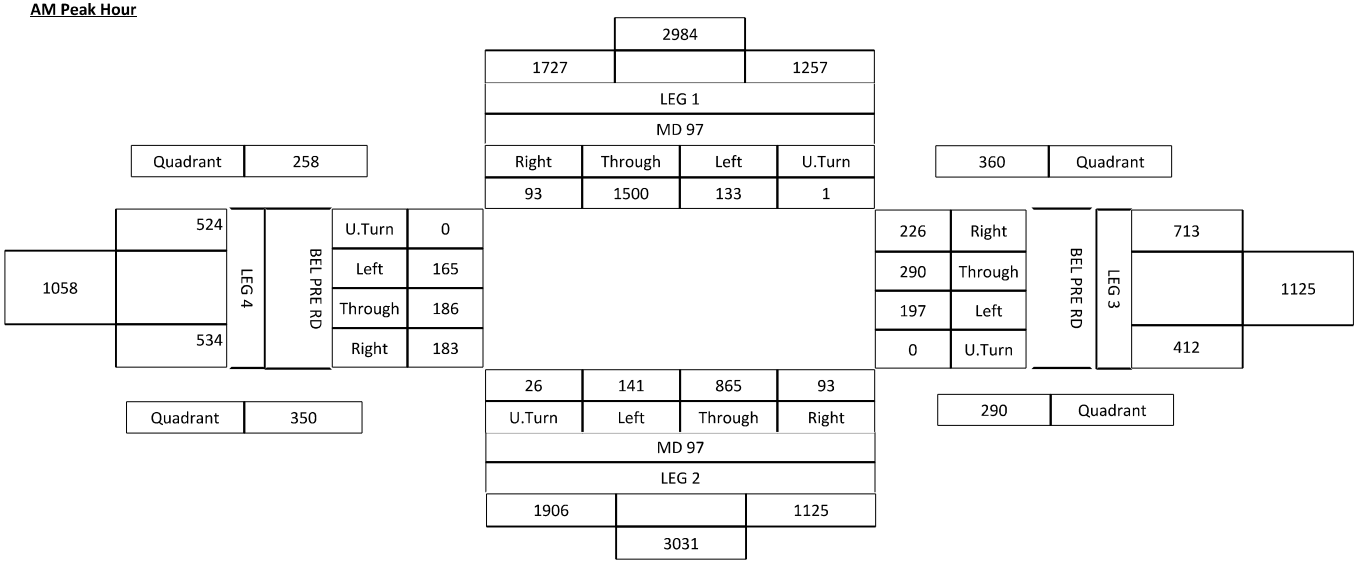
Turning Movement Summary Report

Station ID:	S2001150070	County:	Montgomery	Comments:	
Date:	9/15/2021 12:00:00 AM	Town:	none		
Location:	MD 97 at Bel Pre Rd	Weather:	CLEAR		
Interval:	60 Min				

PEAK	AM PERIOD	Start	End	Volume	LOS	V/C	PM PERIOD	Start	End	Volume	LOS	V/C
Hours	6:00AM-12:00PM	08:00	09:00	4099	B	0.68	12:00PM-19:00PM	17:00	18:00	4434	B	0.64

MD 97	MD 97	BEL PRE RD	BEL PRE RD
From North	From South	From East	From West

AM Peak Hour



Maryland Department of Transportation
State Highway Administration
Data Services Division
Turning Movement Summary Report

Station ID: S2001150070 County: Montgomery Comments:

Date: 9/15/2021 12:00:00 AM Town: none

Location: MD 97 at Bel Pre Rd Weather: CLEAR

Interval: 60 Min

PEAK	AM PERIOD	Start	End	Volume	LOS	V/C	PM PERIOD	Start	End	Volume	LOS	V/C
Hours	6:00AM-12:00PM	08:00	09:00	4099	B	0.68	12:00PM-19:00PM	17:00	18:00	4434	B	0.64

MD 97 — From North

MD 97 — From South

BEL PRE RD — From East

BEL PRE RD — From West

PM Peak Hour

3210

1430 | 1780

LEG 1

MD 97

Right	Through	Left	U.Turn
144	1059	225	2

Quadrant 287 | 472 Quadrant

484 | 1155 | 671

LEG 4 — BEL PRE RD

U.Turn	0
Left	143
Through	306
Right	222

245	Right
208	Through
133	Left
0	U.Turn

BEL PRE RD — LEG 3

586 | 1299 | 713

U.Turn	Left	Through	Right
43	132	1390	182

Quadrant 397 | 315 Quadrant

MD 97

LEG 2

1457 | 1747

3204

Maryland Department of Transportation
State Highway Administration
Data Services Division

Turning Movement Summary Report

Station ID: S2001150070
County: Montgomery
Comments:

Date: 9/15/2021 12:00:00 AM
Town: none

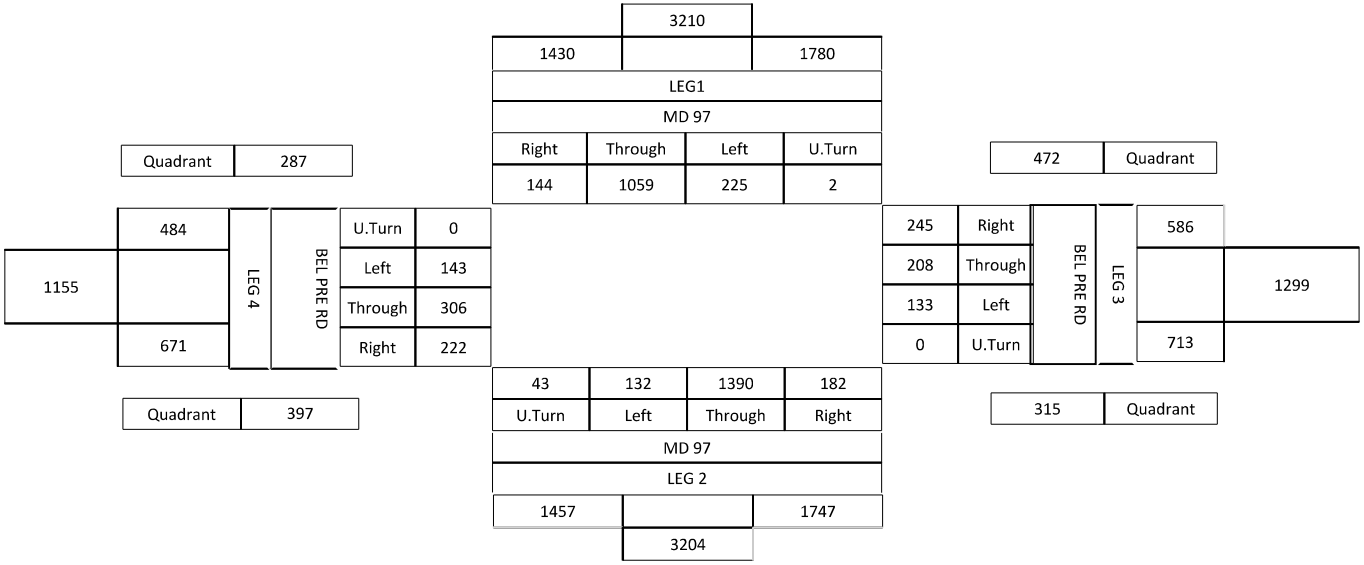
Location: MD 97 at Bel Pre Rd
Weather: CLEAR

Interval: 60 Min

PEAK	AM PERIOD	Start	End	Volume	LOS	V/C	PM PERIOD	Start	End	Volume	LOS	V/C
Hours	6:00AM-12:00PM	08:00	09:00	4099	B	0.68	12:00PM-19:00PM	17:00	18:00	4434	B	0.64

MD 97 | BEL PRE RD | BEL PRE RD

From North | From South | From East | From West



Montgomery County Department of Transportation
Division of Traffic Engineering & Operations
Turning Movement Counts - Field Sheet

MCV Associates, Inc.
4605-C Pinecrest Office Park Drive
Alexandria VA 22312-1442

Request No: WO#71317
Location: MD 97 (Georgia Ave) @ Crystal Springs Apts Driveway
Date: 9/29/2021 Wednesday
Recorder:
Interval (dd) : 15 (In Minutes)

County: Montgomery
Town: Aspen Hill
Weather: Sunny

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-7:00PM	Start	End	Volume	LOS	V/C
		07:15	08:15	3321	A	0.52		16:00	17:00	3419	A	0.48

Street Name-->	MD 97 (Georgia Ave) From North					MD 97 (Georgia Ave) From South					Crystal Springs Apts Driveway From East					0 From West					GRAND
HOUR BEGINNING	U turn	Left	Through	Right	Total	U turn	Left	Through	Right	Total	U turn	Left	Through	Right	Total	U turn	Left	Through	Right	Total	TOTAL
06:00	0	0	200	0	200	0	0	113	1	114	0	0	0	10	10	0	0	0	0	0	324
06:15	0	0	255	0	255	0	0	155	7	162	0	0	0	15	15	0	0	0	0	0	432
06:30	0	0	302	0	302	0	0	192	10	202	0	0	0	14	14	0	0	0	0	0	518
06:45	0	0	420	0	420	0	0	194	12	206	0	0	0	18	18	0	0	0	0	0	644
07:00	0	0	496	0	496	0	0	184	12	196	0	0	0	27	27	0	0	0	0	0	719
07:15	**0**	**0**	**499**	**0**	**499**	**0**	**0**	**258**	**10**	**268**	**0**	**0**	**0**	**18**	**18**	**0**	**0**	**0**	**0**	**0**	**785**
07:30	**0**	**0**	**498**	**0**	**498**	**0**	**0**	**297**	**10**	**307**	**0**	**0**	**0**	**10**	**10**	**0**	**0**	**0**	**0**	**0**	**815**
07:45	**0**	**0**	**539**	**0**	**539**	**0**	**0**	**274**	**2**	**276**	**0**	**0**	**0**	**14**	**14**	**0**	**0**	**0**	**0**	**0**	**829**
08:00	**0**	**0**	**570**	**0**	**570**	**0**	**0**	**306**	**7**	**313**	**0**	**0**	**0**	**9**	**9**	**0**	**0**	**0**	**0**	**0**	**892**
08:15	0	0	466	0	466	0	0	285	9	294	0	0	0	11	11	0	0	0	0	0	771
08:30	0	0	472	0	472	0	0	269	12	281	0	0	0	18	18	0	0	0	0	0	771
08:45	0	0	458	0	458	0	0	243	10	253	0	0	0	6	6	0	0	0	0	0	717
09:00	0	0	365	0	365	0	0	214	7	221	0	0	0	16	16	0	0	0	0	0	602
09:15	0	0	354	0	354	0	0	215	4	219	0	0	0	4	4	0	0	0	0	0	577
09:30	0	0	314	0	314	0	0	226	13	239	0	0	0	9	9	0	0	0	0	0	562
09:45	0	0	300	0	300	0	0	204	4	208	0	0	0	7	7	0	0	0	0	0	515
10:00	0	0	292	0	292	0	0	181	3	184	0	0	0	9	9	0	0	0	0	0	485
10:15	0	0	275	0	275	0	0	219	7	226	0	0	0	8	8	0	0	0	0	0	509
10:30	0	0	289	0	289	0	0	199	13	212	0	0	0	13	13	0	0	0	0	0	514
10:45	0	0	273	0	273	0	0	214	7	221	0	0	0	6	6	0	0	0	0	0	500
11:00	0	0	267	0	267	0	0	235	9	244	0	0	0	5	5	0	0	0	0	0	516
11:15	0	0	256	0	256	0	0	230	10	240	0	0	0	10	10	0	0	0	0	0	506
11:30	0	0	294	0	294	0	0	228	9	237	0	0	0	9	9	0	0	0	0	0	540
11:45	0	0	311	0	311	0	0	249	9	258	0	0	0	15	15	0	0	0	0	0	584
12:00	0	0	292	0	292	0	0	227	10	237	0	0	0	10	10	0	0	0	0	0	539
12:15	0	0	319	0	319	0	0	279	14	293	0	0	0	7	7	0	0	0	0	0	619
12:30	0	0	279	0	279	0	0	279	7	286	0	0	0	11	11	0	0	0	0	0	576
12:45	0	0	291	0	291	0	0	272	8	280	0	0	0	5	5	0	0	0	0	0	576
13:00	0	0	258	0	258	0	0	241	12	253	0	0	0	9	9	0	0	0	0	0	520
13:15	0	0	318	0	318	0	0	232	15	247	0	0	0	13	13	0	0	0	0	0	578
13:30	0	0	277	0	277	0	0	259	14	273	0	0	0	10	10	0	0	0	0	0	560
13:45	0	0	289	0	289	0	0	267	7	274	0	0	0	7	7	0	0	0	0	0	570
14:00	0	0	329	0	329	0	0	287	9	296	0	0	0	11	11	0	0	0	0	0	636
14:15	0	0	323	0	323	0	0	295	9	304	0	0	0	6	6	0	0	0	0	0	633
14:30	0	0	308	0	308	0	0	333	13	346	0	0	0	8	8	0	0	0	0	0	662
14:45	0	0	353	0	353	0	0	351	9	360	0	0	0	16	16	0	0	0	0	0	729
15:00	0	0	341	0	341	0	0	411	16	427	0	0	0	10	10	0	0	0	0	0	778
15:15	0	0	370	0	370	0	0	397	13	410	0	0	0	18	18	0	0	0	0	0	798
15:30	0	0	333	0	333	0	0	383	17	400	0	0	0	9	9	0	0	0	0	0	742
15:45	0	0	392	0	392	0	0	396	20	416	0	0	0	7	7	0	0	0	0	0	815
16:00	**0**	**0**	**378**	**0**	**378**	**0**	**0**	**417**	**17**	**434**	**0**	**0**	**0**	**20**	**20**	**0**	**0**	**0**	**0**	**0**	**832**
16:15	**0**	**0**	**380**	**0**	**380**	**0**	**0**	**480**	**9**	**489**	**0**	**0**	**0**	**8**	**8**	**0**	**0**	**0**	**0**	**0**	**877**
16:30	**0**	**0**	**368**	**0**	**368**	**0**	**0**	**465**	**28**	**493**	**0**	**0**	**0**	**21**	**21**	**0**	**0**	**0**	**0**	**0**	**882**
16:45	**0**	**0**	**325**	**0**	**325**	**0**	**0**	**473**	**15**	**488**	**0**	**0**	**0**	**15**	**15**	**0**	**0**	**0**	**0**	**0**	**828**
17:00	0	0	370	0	370	0	0	407	22	429	0	0	0	13	13	0	0	0	0	0	812
17:15	0	0	373	0	373	0	0	451	18	469	0	0	0	17	17	0	0	0	0	0	859
17:30	0	0	374	0	374	0	0	396	27	423	0	0	0	15	15	0	0	0	0	0	812
17:45	0	0	378	0	378	0	0	384	26	410	0	0	0	16	16	0	0	0	0	0	804
18:00	0	0	358	0	358	0	0	401	25	426	0	0	0	14	14	0	0	0	0	0	798
18:15	0	0	331	0	331	0	0	381	15	396	0	0	0	10	10	0	0	0	0	0	737
18:30	0	0	352	0	352	0	0	381	18	399	0	0	0	14	14	0	0	0	0	0	765
18:45	0	0	286	0	286	0	0	339	17	356	0	0	0	13	13	0	0	0	0	0	655
TOTAL	**0**	**0**	**18110**	**0**	**18110**	**0**	**0**	**15268**	**627**	**15895**	**0**	**0**	**0**	**614**	**614**	**0**	**0**	**0**	**0**	**0**	**34619**
AM Peak Vol	0	0	2106	0	2106	0	0	1135	29	1164	0	0	0	51	51	0	0	0	0	0	3321
PM Peak Vol	0	0	1451	0	1451	0	0	1835	69	1904	0	0	0	64	64	0	0	0	0	0	3419

Montgomery County Department of Transportation
Division of Traffic Engineering & Operations
Turning Movement Counts - Field Sheet

MCV Associates, Inc.
4605-C Pinecrest Office Park Drive
Alexandria VA 22312-1442

Request No: WO#71317
Location: MD 97 (Georgia Ave) @ Crystal Springs Apts Driveway
Date: 9/29/2021 Wednesday
Recorder:
Interval (dd) : 15 (In Minutes)

County: Montgomery
Town: Aspen Hill
Weather: Sunny

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-7:00PM	Start	End	Volume	LOS	V/C
		07:15	08:15	3321	A	0.52		16:00	17:00	3419	A	0.48

PEDESTRIANS & BICYCLES

Street Name	North Leg: MD 97 (Georgia Ave)				South Leg: MD 97 (Georgia Ave)				East Leg: Crystal Springs Apts Driveway				West Leg: 0			
Hour	Pedestrians		Bicycles		Pedestrians		Bicycles		Pedestrians		Bicycles		Pedestrians		Bicycles	
Ending	East-West	West-East	East-West	West-East	East-West	West-East	East-West	West-East	South-North	North-South	South-North	North-South	South-North	North-South	South-North	North-South
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
07:15	**0**	**1**	0	0	**1**	0	0	0	**0**	4	0	1	**0**	0	0	0
07:30	**0**	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0
07:45	**0**	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0
08:00	**0**	**0**	0	0	**0**	0	0	0	**0**	2	0	0	**0**	0	0	0
08:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
08:30	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
11:45	0	0	0	0	1	0	0	0	2	1	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
12:15	1	0	0	0	3	0	0	0	1	1	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0
12:45	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
16:00	**0**	**0**	0	0	**0**	0	0	0	**0**	1	0	0	**0**	0	0	0
16:15	**0**	**0**	0	0	**1**	0	0	0	**0**	0	0	0	**0**	0	0	0
16:30	**0**	**0**	0	0	**0**	0	0	0	**0**	1	0	0	**0**	0	0	0
16:45	**1**	**0**	0	0	**0**	0	0	0	**0**	1	0	6	**0**	0	0	0
17:00	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0
18:00	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0
18:15	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0
TOTAL	**2**	**2**	**0**	**0**	**11**	**0**	**0**	**0**	**31**	**42**	**1**	**8**	**0**	**0**	**0**	**0**
AM Peak Vol	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0
PM Peak Vol	1	0	0	0	1	0	0	0	2	3	0	6	0	0	0	0

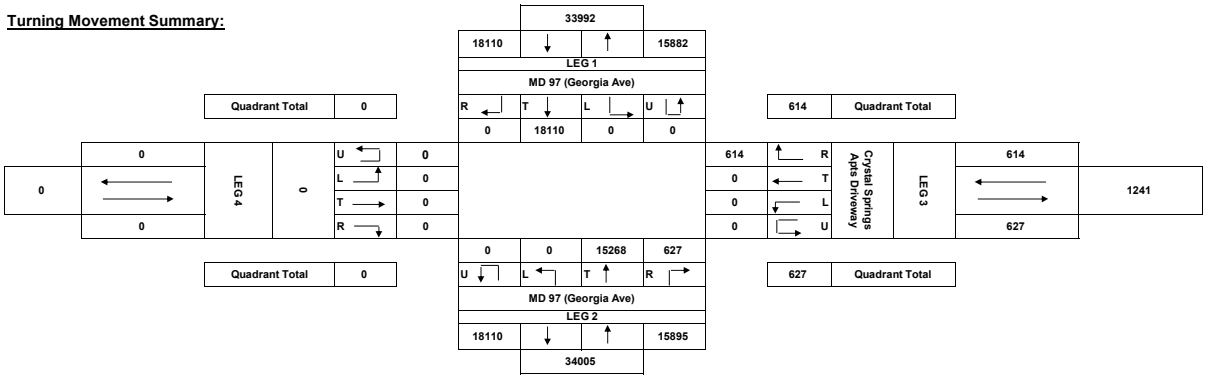
Montgomery County Department of Transportation
Division of Traffic Engineering & Operations
Turning Movement Counts - Field Sheet

MCV Associates, Inc.
4605-C Pinecrest Office Park Drive
Alexandria VA 22312-1442

Request No:	WO#71317
Location:	MD 97 (Georgia Ave) @ Crystal Springs Apts Driveway
Date:	9/29/2021 Wednesday
Recorder:	
Interval (dd) : (In Minutes)	15
County:	Montgomery
Town:	Aspen Hill
Weather:	Sunny

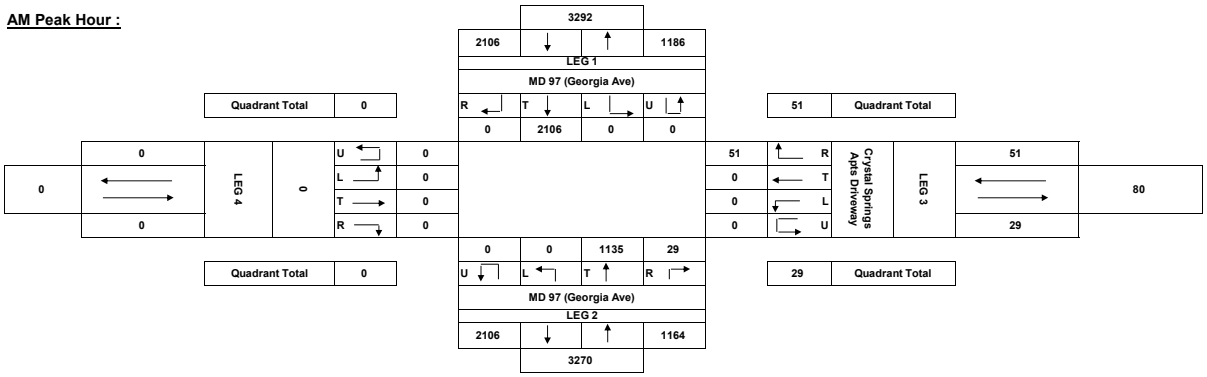
PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-7:00PM	Start	End	Volume	LOS	V/C
		07:15	08:15	3321	A	0.52		16:00	17:00	3419	A	0.48

Turning Movement Summary:

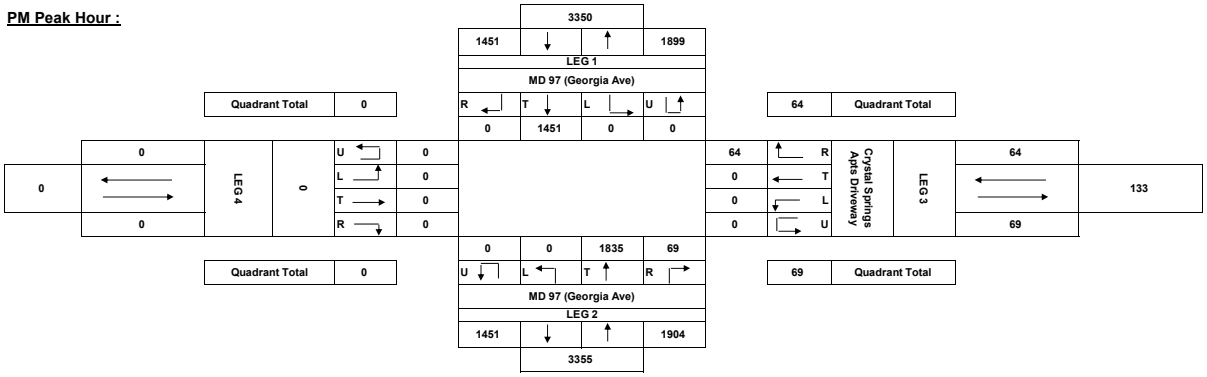


Comments:

AM Peak Hour :



PM Peak Hour :



Maryland Department of Transportation
State Highway Administration
Data Services Division
Turning Movement Summary Report

Station ID: S2001150208 County: Montgomery Comments:

Date: 2/21/2018 6:00:00 AM Town: none

Location: MD 97 at Heathfield Rd/Postgate Terr Weather: Sunny/Warm

Interval: 60 Min

PEAK	AM PERIOD	Start	End	Volume	LOS	V/C	PM PERIOD	Start	End	Volume	LOS	V/C
Hours	6:00AM-12:00PM	08:00	09:00	3992	D	0.87	12:00PM-19:00PM	17:00	18:00	3885	B	0.65

	MD 97					MD 97					Postgate Terrace					Heathfield Rd					
	From North					From South					From East					From West					
Begin Hour	**U.Turn**	**Left**	**Through**	**Right**	**TOTAL**	**U.Turn**	**Left**	**Through**	**Right**	**TOTAL**	**U.Turn**	**Left**	**Through**	**Right**	**TOTAL**	**U.Turn**	**Left**	**Through**	**Right**	**TOTAL**	**GrandTotal**
06:00	0	3	1763	16	1782	14	41	589	11	655	0	71	6	17	94	0	23	1	95	119	2650
07:00	3	1	2596	75	2675	21	76	935	12	1044	0	49	4	15	68	0	6	2	88	96	3883
08:00	6	16	2503	119	2644	23	91	990	15	1119	0	68	5	19	92	0	24	2	111	137	3992
09:00	0	10	1845	17	1872	5	39	923	14	981	0	24	2	6	32	0	12	1	50	63	2948
10:00	6	12	1239	16	1273	6	47	870	19	942	0	20	2	8	30	0	12	1	67	80	2325
11:00	1	7	1119	17	1144	4	44	955	6	1009	0	17	3	7	27	0	20	3	59	82	2262
12:00	5	9	1129	15	1158	4	61	1107	17	1189	0	32	2	14	48	0	10	1	49	60	2455
13:00	3	11	1076	9	1099	3	58	1144	22	1227	0	28	3	7	38	0	6	0	66	72	2436
14:00	0	13	1193	26	1232	7	88	1332	20	1447	0	23	1	6	30	3	20	0	87	110	2819
15:00	4	20	1269	43	1336	8	86	1612	28	1734	0	32	4	9	45	0	28	2	89	119	3234
16:00	12	12	1364	27	1415	5	125	1969	33	2132	0	29	4	12	45	0	26	5	89	120	3712
17:00	8	20	1386	44	1458	3	122	2100	34	2259	0	36	3	14	53	0	27	4	84	115	3885
18:00	9	29	1240	55	1333	11	154	1808	55	2028	0	40	10	6	56	0	32	2	123	157	3574
TOTAL	**57**	**163**	**19722**	**479**	**20421**	**114**	**1032**	**16334**	**286**	**17766**	**0**	**469**	**49**	**140**	**658**	**3**	**246**	**24**	**1057**	**1330**	**40175**
AMPEAK	**6**	**16**	**2503**	**119**	**2644**	**23**	**91**	**990**	**15**	**1119**	**0**	**68**	**5**	**19**	**92**	**0**	**24**	**2**	**111**	**137**	**3992**
PMPEAK	**8**	**20**	**1386**	**44**	**1458**	**3**	**122**	**2100**	**34**	**2259**	**0**	**36**	**3**	**14**	**53**	**0**	**27**	**4**	**84**	**115**	**3885**
DAYPEAK	**6**	**16**	**2503**	**119**	**2644**	**23**	**91**	**990**	**15**	**1119**	**0**	**68**	**5**	**19**	**92**	**0**	**24**	**2**	**111**	**137**	**3992**

Maryland Department of Transportation
State Highway Administration
Data Services Division

Turning Movement Summary Report

Station ID: S2001150208 County: Montgomery Comments:

Date: 2/21/2018 6:00:00 AM Town: none

Location: MD 97 at Heathfield Rd/Postgate Terr Weather: Sunny/Warm

Interval: 60 Min

PEAK	AM PERIOD	Start	End	Volume	LOS	V/C	PM PERIOD	Start	End	Volume	LOS	V/C
Hours	6:00AM-12:00PM	08:00	09:00	3992	D	0.87	12:00PM-19:00PM	17:00	18:00	3885	B	0.65

	MD 97			MD 97			Postgate Terrace			Heathfield Rd		
	From North			From South			From East			From West		
Begin Hour	**School Children**	**Pedestrians**	**Bicycles**	**School Children**	**Pedestrians**	**Bicycles**	**School Children**	**Pedestrians**	**Bicycles**	**School Children**	**Pedestrians**	**Bicycles**
06:00	0	20	1	0	3	0	0	7	0	0	0	0
07:00	0	4	0	0	0	0	0	1	0	0	2	1
08:00	0	10	0	0	0	0	0	2	0	0	1	0
09:00	0	6	0	0	0	0	0	2	0	0	1	0
10:00	0	8	0	0	0	0	0	7	0	0	0	0
11:00	0	8	0	0	2	0	0	0	1	0	0	0
12:00	0	3	1	0	1	0	0	3	0	0	0	0
13:00	0	6	0	0	0	0	0	6	1	0	0	1
14:00	0	9	0	0	0	1	0	2	1	0	1	0
15:00	0	3	0	0	1	0	0	14	0	0	3	0
16:00	0	9	0	0	1	0	0	10	0	0	1	0
17:00	0	10	2	0	1	2	0	14	0	0	2	0
18:00	0	4	0	0	0	0	0	17	0	0	0	0
TOTAL	**0**	**100**	**4**	**0**	**9**	**3**	**0**	**85**	**3**	**0**	**11**	**2**
AMPEAK	**0**	**10**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**
PMPEAK	**0**	**10**	**2**	**0**	**1**	**2**	**0**	**14**	**0**	**0**	**2**	**0**
DAYPEAK	**0**	**10**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**

Maryland Department of Transportation
State Highway Administration
Data Services Division

Turning Movement Summary Report

Station ID:	S2001150208	County:	Montgomery	Comments:	
Date:	2/21/2018 6:00:00 AM	Town:	none		
Location:	MD 97 at Heathfield Rd/Postgate Terr	Weather:	Sunny/Warm		
Interval:	60 Min				

PEAK	AM PERIOD	Start	End	Volume	LOS	V/C	PM PERIOD	Start	End	Volume	LOS	V/C
Hours	6:00AM-12:00PM	08:00	09:00	3992	D	0.87	12:00PM-19:00PM	17:00	18:00	3885	B	0.65

MD 97	MD 97	Postgate Terrace	Heathfield Rd
From North	From South	From East	From West

Turning Movement Summary

					37198						
				20421		16777					
				LEG 1							
				MD 97							
Quadrant	728		Right	Through	Left	U.Turn		360	Quadrant		
			479	19722	163	57					
	1563	LEG 4	U.Turn	3			140	Right	Postgate Terrace	LEG 3	658
2893		Heathfield Rd	Left	246			49	Through			1131
			Through	24			469	Left			
	1330		Right	1057			0	U.Turn			473
Quadrant	2203		114	1032	16334	286		755	Quadrant		
			U.Turn	Left	Through	Right					
				MD 97							
				LEG 2							
				21362		17766					
					39128						

Montgomery County Department of Transportation
Division of Traffic Engineering & Operations
Turning Movement Counts - Field Sheet

MCV Associates, Inc.
4605-C Pinecrest Office Park Drive
Alexandria VA 22312-1442

Request No: WO#1317
Location: MD 97 (Georgia Ave) @ 7-11 Driveway
Date: 9/29/2021 Wednesday
Recorder:
Interval (dd) : 15
(In Minutes)

County: Montgomery
Town: Behtesda
Weather: Sunny

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-7:00PM	Start	End	Volume	LOS	V/C
		07:15	08:15	3646	A	0.60		16:15	17:15	3929	A	0.54

Street Name-->	MD 97 (Georgia Ave) From North					MD 97 (Georgia Ave) From South					7-11 Driveway From East					Home Depot Driveway From West					GRAND
HOUR BEGINNING	U turn	Left	Through	Right	Total	U turn	Left	Through	Right	Total	U turn	Left	Through	Right	Total	U turn	Left	Through	Right	Total	TOTAL
06:00	0	2	203	18	223	3	6	106	11	126	0	1	0	10	11	0	4	1	6	11	371
06:15	0	5	269	8	282	2	3	155	15	175	0	8	1	10	19	0	4	1	15	20	496
06:30	1	2	293	25	321	1	7	195	15	218	0	4	2	9	15	0	0	0	13	13	567
06:45	0	6	426	33	465	0	4	188	17	209	0	6	1	14	21	0	6	2	26	34	729
07:00	0	6	478	46	530	3	2	201	15	221	0	4	0	17	21	0	1	1	22	24	796
07:15	**0**	**4**	**498**	**39**	**541**	**4**	**5**	**266**	**15**	**290**	**0**	**10**	**0**	**16**	**26**	**0**	**4**	**2**	**29**	**35**	**892**
07:30	**0**	**5**	**479**	**21**	**505**	**3**	**7**	**285**	**11**	**306**	**0**	**5**	**0**	**16**	**21**	**0**	**2**	**4**	**34**	**40**	**872**
07:45	**0**	**4**	**485**	**38**	**527**	**1**	**3**	**288**	**5**	**297**	**0**	**5**	**0**	**13**	**18**	**0**	**4**	**5**	**37**	**46**	**888**
08:00	**0**	**5**	**564**	**51**	**620**	**4**	**6**	**298**	**10**	**318**	**0**	**6**	**0**	**9**	**15**	**0**	**6**	**1**	**34**	**41**	**994**
08:15	0	5	445	46	496	2	9	274	25	310	0	2	1	24	27	0	9	2	44	55	888
08:30	0	5	456	41	502	3	2	259	18	282	0	6	0	19	25	0	13	2	35	50	859
08:45	0	2	437	48	487	1	9	249	9	268	0	4	1	12	17	0	14	5	35	54	826
09:00	0	3	343	41	387	7	10	215	12	244	0	3	2	11	16	0	20	0	27	47	694
09:15	0	2	354	49	405	6	17	202	9	234	0	4	0	9	13	0	19	2	39	60	712
09:30	1	2	293	34	330	3	26	218	12	259	0	4	0	12	16	0	13	1	42	56	661
09:45	0	2	273	43	318	5	26	188	11	230	0	3	0	8	11	0	17	0	39	56	615
10:00	0	2	283	48	333	7	26	166	9	208	0	1	0	11	12	0	28	0	47	75	628
10:15	0	1	258	36	295	9	27	212	12	260	0	2	1	9	12	0	17	0	48	65	632
10:30	2	3	272	37	314	6	25	208	6	245	0	7	1	7	15	0	17	1	48	66	640
10:45	0	2	271	40	313	10	26	207	7	250	0	1	0	12	13	0	26	1	61	88	664
11:00	0	2	251	43	296	11	22	219	6	258	0	1	0	4	5	0	30	1	46	77	636
11:15	0	1	228	32	261	3	27	221	6	257	0	3	1	3	7	0	26	0	48	74	599
11:30	0	3	268	37	308	6	20	234	4	264	0	3	1	4	8	0	24	3	42	69	649
11:45	0	2	286	36	324	14	23	232	5	274	0	2	1	9	12	0	21	1	45	67	677
12:00	0	4	280	42	326	8	27	228	4	267	0	3	0	4	7	0	26	1	52	79	679
12:15	0	2	296	37	335	14	26	275	10	325	0	3	1	11	15	0	27	1	41	69	744
12:30	0	1	274	36	311	5	31	278	3	317	0	2	0	7	9	0	22	0	51	73	710
12:45	1	1	260	43	305	6	24	260	4	294	0	1	0	5	6	0	23	3	39	65	670
13:00	0	3	249	36	288	6	28	246	5	285	0	0	0	8	8	0	19	1	46	66	647
13:15	0	1	275	34	310	7	30	241	9	287	0	4	0	5	9	0	25	1	56	82	688
13:30	0	1	272	31	304	4	23	253	11	291	0	3	1	8	12	0	26	0	57	83	690
13:45	1	2	291	25	319	2	31	262	8	303	0	2	1	8	11	0	16	2	50	68	701
14:00	2	6	282	37	327	6	16	279	14	315	0	9	0	13	22	0	16	1	44	61	725
14:15	1	3	304	24	332	7	29	321	6	363	0	3	0	8	11	0	22	1	54	77	783
14:30	0	1	289	32	322	5	16	330	10	361	0	2	0	12	14	0	21	1	50	72	769
14:45	1	0	317	36	354	5	27	363	9	404	0	2	0	10	12	0	21	1	35	57	827
15:00	0	3	331	35	369	6	25	417	11	459	0	1	0	6	7	0	25	1	41	67	902
15:15	1	6	346	38	391	5	18	398	12	433	0	6	0	11	17	0	25	0	53	78	919
15:30	1	0	329	24	354	2	17	398	12	429	0	3	1	13	17	0	23	0	44	67	867
15:45	1	7	372	24	404	9	20	407	7	443	0	3	0	9	12	0	20	1	28	49	908
16:00	0	6	344	38	388	7	16	426	13	462	0	5	0	11	16	0	15	0	39	54	920
16:15	**0**	**3**	**359**	**35**	**397**	**5**	**21**	**495**	**13**	**534**	**0**	**3**	**2**	**14**	**19**	**0**	**18**	**0**	**45**	**63**	**1013**
16:30	**0**	**3**	**367**	**27**	**397**	**10**	**18**	**501**	**13**	**542**	**0**	**5**	**1**	**12**	**18**	**0**	**10**	**0**	**33**	**43**	**1000**
16:45	**0**	**2**	**323**	**34**	**359**	**10**	**20**	**508**	**7**	**545**	**0**	**4**	**0**	**10**	**14**	**1**	**11**	**1**	**45**	**58**	**976**
17:00	**0**	**5**	**352**	**44**	**401**	**8**	**24**	**434**	**12**	**478**	**0**	**4**	**0**	**9**	**13**	**0**	**17**	**0**	**31**	**48**	**940**
17:15	0	5	344	38	387	10	23	463	10	506	0	1	0	15	16	0	19	2	38	59	968
17:30	0	3	362	24	389	6	19	447	12	484	0	4	1	10	15	0	10	0	50	60	948
17:45	0	3	366	35	404	9	19	428	5	461	0	3	0	13	16	0	15	0	51	66	947
18:00	1	4	343	28	376	12	16	416	16	460	0	1	2	4	7	0	16	0	45	61	904
18:15	0	1	323	23	347	10	30	389	14	443	0	7	1	16	24	0	13	2	44	59	873
18:30	0	6	324	36	366	4	24	404	7	439	0	3	0	14	17	0	18	1	45	64	886
18:45	0	5	290	29	324	6	26	380	9	421	0	5	0	9	14	1	9	0	53	63	822
TOTAL	**14**	**163**	**17277**	**1815**	**19269**	**308**	**982**	**15533**	**531**	**17354**	**0**	**187**	**24**	**543**	**754**	**2**	**853**	**57**	**2122**	**3034**	**40411**
AM Peak Vol	0	18	2026	149	2193	12	21	1137	41	1211	0	26	0	54	80	0	16	12	134	162	3646
PM Peak Vol	0	13	1401	140	1554	33	83	1938	45	2099	0	16	3	45	64	1	56	1	154	212	3929

Montgomery County Department of Transportation
Division of Traffic Engineering & Operations
Turning Movement Counts - Field Sheet

MCV Associates, Inc.
4605-C Pinecrest Office Park Drive
Alexandria VA 22312-1442

Request No: WO#1317
Location: MD 97 (Georgia Ave) @ 7-11 Driveway
Date: 9/29/2021 Wednesday
Recorder:
Interval (dd) : 15 (In Minutes)

County: Montgomery
Town: Behtesda
Weather: Sunny

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-7:00PM	Start	End	Volume	LOS	V/C
		07:15	08:15	3646	A	0.60		16:15	17:15	3929	A	0.54

PEDESTRIANS & BICYCLES

Street Name	North Leg: MD 97 (Georgia Ave)				South Leg: MD 97 (Georgia Ave)				East Leg: 7-11 Driveway				West Leg: Home Depot Driveway			
Hour	Pedestrians		Bicycles		Pedestrians		Bicycles		Pedestrians		Bicycles		Pedestrians		Bicycles	
Ending	East-West	West-East	East-West	West-East	East-West	West-East	East-West	West-East	South-North	North-South	South-North	North-South	South-North	North-South	South-North	North-South
06:00	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	1	0	0	0	0	0	0	0	2	2	0	0	0	2	0	0
07:00	4	0	0	0	0	0	0	0	0	2	0	0	0	1	0	1
07:15	**6**	**0**	1	0	**2**	0	0	0	**1**	2	0	0	**1**	6	0	0
07:30	**1**	**0**	0	0	**0**	0	0	0	**0**	3	0	0	**0**	4	0	0
07:45	**2**	**0**	0	0	**0**	1	0	0	**0**	0	0	0	**1**	1	0	0
08:00	**2**	**0**	0	0	**0**	0	0	0	**1**	2	0	0	**0**	4	0	0
08:15	2	1	0	0	0	0	0	0	3	2	0	0	1	3	0	0
08:30	0	1	0	0	1	1	1	0	0	1	0	0	0	3	0	0
08:45	0	1	0	0	1	0	0	0	1	2	0	1	1	2	0	0
09:00	0	0	0	0	0	2	0	0	0	2	1	0	0	0	0	0
09:15	1	0	0	0	0	0	0	0	2	2	0	0	0	2	0	0
09:30	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0
09:45	0	1	0	0	1	0	0	0	1	2	0	0	0	0	0	0
10:00	1	0	0	0	1	0	0	0	3	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
10:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0
11:15	0	0	0	0	0	0	0	0	2	4	0	0	0	0	0	0
11:30	0	0	0	0	1	0	0	0	1	3	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	2	0	0	2	1	0	0
12:00	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0
12:15	0	0	0	0	0	0	1	0	2	1	0	1	1	0	0	0
12:30	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0
12:45	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0
13:00	0	0	0	0	0	1	0	0	0	1	0	0	2	0	0	0
13:15	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
13:30	0	0	0	0	0	0	0	0	0	2	0	1	0	1	0	0
13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
14:30	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	2	2	0	0	0	2	0	0
15:00	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0
15:15	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0
15:30	0	0	0	0	1	1	0	0	1	1	0	0	1	0	0	0
15:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	4	0	0	0	2	0	0
16:15	**0**	**0**	0	0	**0**	0	0	0	**1**	0	0	0	**0**	0	0	0
16:30	**0**	**0**	0	0	**0**	0	0	0	**1**	4	0	0	**1**	2	0	0
16:45	**0**	**0**	0	0	**0**	0	0	0	**2**	2	0	1	**0**	0	0	3
17:00	**0**	**0**	0	0	**0**	0	0	0	**2**	7	0	0	**0**	0	1	0
17:15	2	0	0	0	0	1	0	0	2	1	0	0	0	1	0	0
17:30	0	0	0	0	1	2	0	0	3	1	0	0	0	1	0	0
17:45	0	0	0	0	0	0	0	0	4	3	0	0	0	0	0	0
18:00	0	0	0	0	0	1	0	0	7	0	0	0	0	1	0	1
18:15	0	0	0	0	0	0	0	0	2	4	0	0	1	0	1	0
18:30	0	0	0	0	0	0	0	0	4	4	0	0	0	1	0	0
18:45	0	0	0	0	1	0	0	0	2	2	0	0	0	3	0	0
TOTAL	**25**	**4**	**1**	**0**	**16**	**12**	**2**	**0**	**60**	**91**	**2**	**4**	**12**	**46**	**3**	**5**
AM Peak Vol	7	1	0	0	0	1	0	0	4	7	0	0	2	12	0	0
PM Peak Vol	2	0	0	0	0	1	0	0	7	14	0	1	1	3	1	3

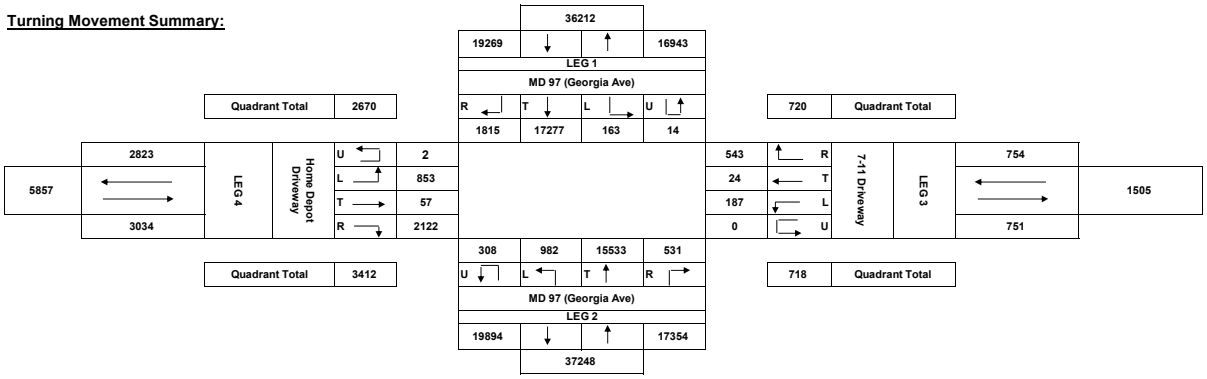
Montgomery County Department of Transportation
Division of Traffic Engineering & Operations
Turning Movement Counts - Field Sheet

MCV Associates, Inc.
4605-C Pinecrest Office Park Drive
Alexandria VA 22312-1442

Request No:	WO#1317		
Location:	MD 97 (Georgia Ave) @ 7-11 Driveway	County:	Montgomery
Date:	9/29/2021 Wednesday	Town:	Behtesda
Recorder:		Weather:	Sunny
Interval (dd) : (In Minutes)	15		

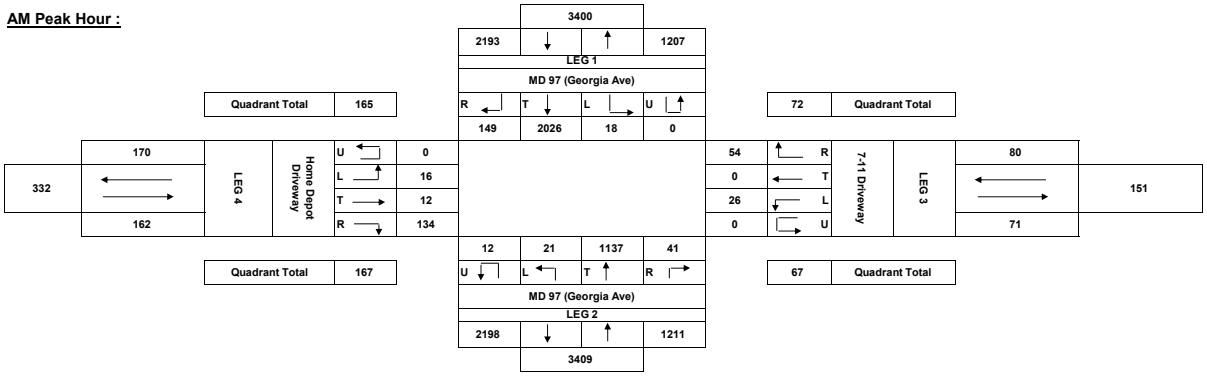
PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-7:00PM	Start	End	Volume	LOS	V/C
		07:15	08:15	3646	A	0.60		16:15	17:15	3929	A	0.54

Turning Movement Summary:

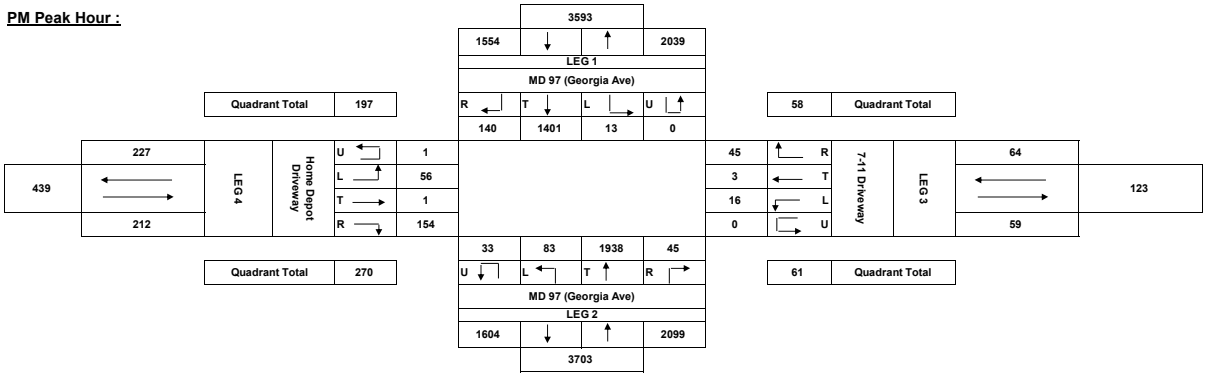


Comments:

AM Peak Hour :



PM Peak Hour :



Montgomery County Department of Transportation
Division of Traffic Engineering & Operations
Turning Movement Counts - Field Sheet

MCV Associates, Inc.
4605-C Pinecrest Office Park Drive
Alexandria VA 22312-1442

Request No: WO#1317
Location: MD 97 (Georgia Ave) @ MD 185 (Connecticut Ave)
Date: 9/29/2021 Wednesday
Recorder:
Interval (dd) : 15 (In Minutes)

County: Montgomery
Town: Aspen Hill
Weather: Sunny

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-7:00PM	Start	End	Volume	LOS	V/C
		07:15	08:15	4492	A	0.49		16:00	17:00	5170	B	0.71

Street Name-->	MD 97 (Georgia Ave) From North					MD 97 (Georgia Ave) From South					MD 185 (Connecticut Ave) From East					MD 185 (Connecticut Ave) From West					GRAND
HOUR BEGINNING	U turn	Left	Through	Right	Total	U turn	Left	Through	Right	Total	U turn	Left	Through	Right	Total	U turn	Left	Through	Right	Total	TOTAL
06:00	1	4	101	111	217	1	1	72	10	84	0	29	47	8	84	0	46	22	1	69	454
06:15	3	4	124	163	294	1	2	106	14	123	0	21	81	8	110	0	57	30	2	89	616
06:30	1	1	125	179	306	0	6	147	15	168	0	38	91	9	138	0	59	21	2	82	694
06:45	5	6	212	238	461	0	6	137	20	163	0	49	113	3	165	1	67	42	2	112	901
07:00	4	8	189	293	494	0	6	125	21	152	0	61	148	10	219	0	79	39	2	120	985
07:15	**6**	**2**	**224**	**307**	**539**	**0**	**12**	**157**	**27**	**196**	**0**	**53**	**139**	**11**	**203**	**1**	**102**	**52**	**2**	**157**	**1095**
07:30	**5**	**4**	**227**	**294**	**530**	**1**	**10**	**156**	**34**	**201**	**0**	**52**	**131**	**15**	**198**	**0**	**117**	**59**	**1**	**177**	**1106**
07:45	**8**	**6**	**218**	**287**	**519**	**1**	**15**	**146**	**29**	**191**	**0**	**29**	**82**	**9**	**120**	**0**	**119**	**82**	**2**	**203**	**1033**
08:00	**6**	**13**	**224**	**362**	**605**	**0**	**16**	**174**	**33**	**223**	**0**	**53**	**147**	**22**	**222**	**0**	**131**	**76**	**1**	**208**	**1258**
08:15	6	12	230	230	478	2	12	164	32	210	0	48	121	15	184	0	110	61	2	173	1045
08:30	9	14	202	279	504	0	7	142	32	181	0	54	114	12	180	0	113	47	1	161	1026
08:45	8	5	216	239	468	0	11	145	29	185	0	55	118	13	186	0	93	48	3	144	983
09:00	4	11	201	169	385	0	10	137	50	197	0	74	115	12	201	0	92	58	3	153	936
09:15	6	8	182	208	404	2	10	124	37	173	0	57	83	13	153	0	81	60	1	142	872
09:30	1	17	145	160	323	1	5	122	23	151	0	55	106	23	184	0	110	68	4	182	840
09:45	3	11	151	155	320	1	4	134	31	170	0	44	80	16	140	0	73	56	3	132	762
10:00	6	8	165	154	333	0	6	105	37	148	0	61	81	18	160	0	82	63	3	148	789
10:15	3	7	160	146	316	1	7	139	31	178	0	58	104	20	182	0	89	61	7	157	833
10:30	7	11	161	154	333	1	4	134	36	175	0	50	83	17	150	0	91	67	3	161	819
10:45	9	17	162	155	343	0	5	135	43	183	0	51	77	15	143	0	84	77	4	165	834
11:00	4	9	147	142	302	1	7	115	33	156	0	54	70	23	147	1	107	56	3	167	772
11:15	3	18	152	115	288	3	4	155	40	202	0	47	77	13	137	0	89	57	2	148	775
11:30	5	9	162	145	321	2	8	125	54	189	0	61	76	15	152	0	109	66	6	181	843
11:45	3	13	176	149	341	1	7	144	50	202	0	57	66	11	134	0	110	79	9	198	875
12:00	5	19	167	154	345	2	6	139	56	203	0	48	96	19	163	0	106	73	5	184	895
12:15	5	14	191	136	346	1	7	140	55	203	0	55	82	18	155	0	145	116	6	267	971
12:30	6	20	154	149	329	3	4	156	49	212	2	57	77	26	162	0	119	84	5	208	911
12:45	4	12	162	130	308	4	0	148	51	203	0	52	76	22	150	0	121	73	7	201	862
13:00	5	13	161	129	308	2	2	127	57	188	0	65	85	23	173	0	125	94	3	222	891
13:15	4	12	175	151	342	3	14	149	65	231	0	60	83	12	155	0	116	83	6	205	933
13:30	1	22	163	148	334	3	5	131	57	196	0	49	83	30	162	0	118	89	8	215	907
13:45	3	27	171	136	337	2	3	149	61	215	0	62	96	25	183	0	119	84	4	207	942
14:00	4	12	180	148	344	4	1	153	43	201	0	57	79	15	151	0	136	84	8	228	924
14:15	3	9	196	165	373	3	8	188	55	254	0	51	90	25	166	0	138	100	2	240	1033
14:30	5	14	182	142	343	1	2	165	67	235	0	52	98	25	175	0	157	109	3	269	1022
14:45	2	8	179	164	353	0	6	186	76	268	0	41	97	24	162	0	186	112	4	302	1085
15:00	1	15	199	170	385	1	3	205	62	271	0	58	83	28	169	0	206	123	4	333	1158
15:15	6	15	205	178	404	1	9	180	63	253	0	61	92	25	178	0	212	110	4	326	1161
15:30	4	13	225	137	379	2	10	199	65	276	0	65	88	14	167	2	203	109	0	314	1136
15:45	8	11	204	183	406	4	6	182	81	273	0	59	89	14	162	0	216	121	3	340	1181
16:00	**5**	**23**	**215**	**162**	**405**	**1**	**4**	**212**	**104**	**321**	**0**	**61**	**74**	**21**	**156**	**2**	**212**	**151**	**7**	**372**	**1254**
16:15	**9**	**11**	**228**	**150**	**398**	**0**	**9**	**272**	**81**	**362**	**0**	**64**	**79**	**19**	**162**	**1**	**235**	**153**	**1**	**390**	**1312**
16:30	**13**	**15**	**232**	**165**	**425**	**2**	**3**	**276**	**79**	**360**	**0**	**70**	**95**	**18**	**183**	**0**	**227**	**143**	**5**	**375**	**1343**
16:45	**5**	**14**	**213**	**151**	**383**	**1**	**3**	**258**	**93**	**355**	**0**	**63**	**67**	**20**	**150**	**1**	**234**	**133**	**5**	**373**	**1261**
17:00	5	17	217	156	395	0	4	227	88	319	0	66	99	19	184	1	220	127	2	350	1248
17:15	6	10	203	170	389	1	0	234	86	321	0	72	102	15	189	0	232	134	1	367	1266
17:30	8	17	228	163	416	0	8	223	85	316	0	37	66	12	115	0	230	136	3	369	1216
17:45	8	18	226	176	428	1	8	206	84	299	0	67	98	13	178	0	223	135	2	360	1265
18:00	10	11	237	153	411	3	5	200	84	292	0	55	76	15	146	1	210	121	5	337	1186
18:15	6	20	213	146	385	1	5	211	81	298	0	71	88	19	178	0	197	123	7	327	1188
18:30	5	14	209	146	374	3	7	215	103	328	0	67	89	21	177	0	193	137	4	334	1213
18:45	9	22	191	135	357	2	4	207	83	296	0	65	85	23	173	2	173	110	2	287	1113
TOTAL	**271**	**646**	**9782**	**9127**	**19826**	**70**	**327**	**8578**	**2775**	**11750**	**2**	**2861**	**4762**	**891**	**8516**	**13**	**7219**	**4514**	**185**	**11931**	**52023**
AM Peak Vol	25	25	893	1250	2193	2	53	633	123	811	0	187	499	57	743	1	469	269	6	745	4492
PM Peak Vol	32	63	888	628	1611	4	19	1018	357	1398	0	258	315	78	651	4	908	580	18	1510	5170

Montgomery County Department of Transportation
Division of Traffic Engineering & Operations
Turning Movement Counts - Field Sheet

MCV Associates, Inc.
4605-C Pinecrest Office Park Drive
Alexandria VA 22312-1442

Request No: WO#1317
Location: MD 97 (Georgia Ave) @ MD 185 (Connecticut Ave)
Date: 9/29/2021 Wednesday
Recorder:
Interval (dd) : 15 (In Minutes)

County: Montgomery
Town: Aspen Hill
Weather: Sunny

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-7:00PM	Start	End	Volume	LOS	V/C
		07:15	08:15	4492	A	0.49		16:00	17:00	5170	B	0.71

PEDESTRIANS & BICYCLES

Street Name	North Leg MD 97 (Georgia Ave)				South Leg MD 97 (Georgia Ave)				East Leg MD 185 (Connecticut Ave)				West Leg MD 185 (Connecticut Ave)			
Hour	Pedestrians		Bicycles		Pedestrians		Bicycles		Pedestrians		Bicycles		Pedestrians		Bicycles	
Ending	East-West	West-East	East-West	West-East	East-West	West-East	East-West	West-East	South-North	North-South	South-North	North-South	South-North	North-South	South-North	North-South
06:00	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0
06:15	3	2	0	0	1	0	0	0	0	2	0	0	0	0	0	0
06:30	0	1	0	0	0	2	0	0	1	0	0	0	1	0	0	0
06:45	2	1	0	0	0	1	0	0	4	1	0	0	3	1	0	0
07:00	3	1	0	0	2	0	1	0	4	3	0	0	0	0	0	0
07:15	**3**	**3**	0	0	**1**	0	0	0	**1**	1	0	0	**1**	0	0	0
07:30	**1**	**1**	0	0	**0**	1	0	0	**2**	0	0	0	**2**	0	0	0
07:45	**3**	**1**	0	0	**0**	1	0	1	**3**	0	1	0	**0**	0	0	0
08:00	**2**	**0**	1	0	**0**	2	0	0	**1**	0	0	0	**1**	1	0	0
08:15	1	0	0	0	1	0	0	0	1	1	0	0	1	0	0	0
08:30	3	1	0	0	1	0	0	0	1	1	0	0	0	0	0	0
08:45	1	2	1	0	3	0	0	0	4	1	0	1	1	1	0	0
09:00	4	0	0	1	4	0	0	0	3	2	0	0	0	0	1	0
09:15	2	1	0	0	3	2	0	1	2	2	0	0	2	0	0	0
09:30	2	1	0	0	1	1	0	0	1	2	0	0	0	2	0	0
09:45	4	1	0	0	5	1	0	0	2	3	0	0	1	1	0	0
10:00	0	2	0	0	0	0	0	0	0	2	0	0	0	1	0	0
10:15	3	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0
10:30	2	1	0	0	2	1	0	0	0	0	1	0	0	0	0	0
10:45	3	0	0	0	4	0	0	0	0	2	0	0	0	0	0	0
11:00	0	2	0	0	0	3	0	0	1	0	0	0	1	0	0	0
11:15	1	2	0	0	6	2	1	0	1	6	0	0	2	0	0	0
11:30	1	1	0	0	1	2	0	0	2	1	0	0	3	0	0	1
11:45	4	3	0	0	1	1	0	0	5	2	0	0	1	0	0	0
12:00	3	1	0	0	2	2	0	0	2	3	0	0	0	0	0	0
12:15	0	2	0	0	0	2	0	0	1	3	0	0	2	0	0	0
12:30	0	0	0	0	3	5	0	0	3	3	0	0	0	0	0	0
12:45	0	2	0	0	2	7	0	0	5	5	0	0	0	0	0	0
13:00	1	0	0	0	3	2	0	0	1	1	0	0	0	0	0	0
13:15	4	2	0	0	2	1	0	0	1	2	0	0	0	0	0	0
13:30	4	3	0	0	1	0	1	0	1	4	1	0	0	0	0	0
13:45	0	5	0	0	7	0	0	1	1	5	0	2	0	0	0	0
14:00	3	1	0	0	4	2	0	0	1	3	0	0	0	1	1	1
14:15	2	1	0	0	0	3	0	0	5	0	0	0	0	0	0	0
14:30	2	2	0	0	2	1	0	0	0	7	0	0	1	1	0	0
14:45	2	3	0	0	3	3	0	1	5	3	0	0	4	3	0	0
15:00	4	1	0	0	0	0	0	0	0	2	0	0	2	2	0	0
15:15	4	1	0	0	2	1	0	0	3	2	0	0	0	0	0	0
15:30	3	4	0	0	1	2	0	0	1	4	0	0	1	1	0	0
15:45	3	1	0	0	4	0	0	0	0	5	0	0	1	3	0	0
16:00	**1**	**3**	0	0	**1**	2	0	0	**0**	3	0	0	**4**	1	0	0
16:15	**8**	**0**	0	0	**5**	4	0	0	**2**	8	0	0	**0**	2	0	0
16:30	**1**	**6**	0	0	**0**	0	0	0	**2**	0	0	0	**3**	0	0	0
16:45	**3**	**4**	0	0	**0**	3	0	0	**3**	3	0	0	**1**	0	0	1
17:00	6	0	0	0	4	4	0	0	2	6	0	0	0	4	1	0
17:15	3	1	0	0	1	5	0	0	5	3	0	0	2	1	1	0
17:30	0	0	0	0	0	5	0	5	3	2	5	0	0	0	2	1
17:45	1	0	0	0	5	2	0	0	2	5	0	0	0	1	0	0
18:00	0	4	0	0	2	8	0	0	6	5	1	0	2	3	0	0
18:15	2	5	0	0	1	3	0	0	3	4	0	0	7	1	0	0
18:30	0	0	0	0	4	3	0	2	7	7	0	0	0	1	0	1
18:45	0	3	0	0	2	1	0	0	4	4	0	0	1	4	1	0
TOTAL	**108**	**83**	**2**	**1**	**97**	**92**	**3**	**11**	**109**	**135**	**9**	**3**	**51**	**36**	**7**	**5**
AM Peak Vol	7	2	1	0	1	4	0	1	7	1	1	0	4	1	0	0
PM Peak Vol	18	10	0	0	9	11	0	0	9	17	0	0	4	6	1	1

Montgomery County Department of Transportation
Division of Traffic Engineering & Operations
Turning Movement Counts - Field Sheet

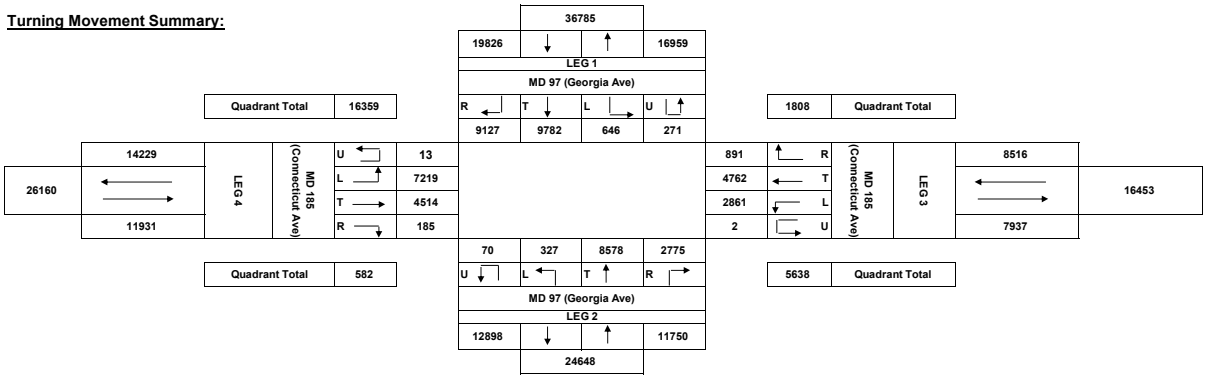
MCV Associates, Inc.
4605-C Pinecrest Office Park Drive
Alexandria VA 22312-1442

Request No:	WO#1317
Location:	MD 97 (Georgia Ave) @ MD 185 (Connecticut Ave)
Date:	9/29/2021 Wednesday
Recorder:	
Interval (dd) : (In Minutes)	15

County: Montgomery
Town: Aspen Hill
Weather: Sunny

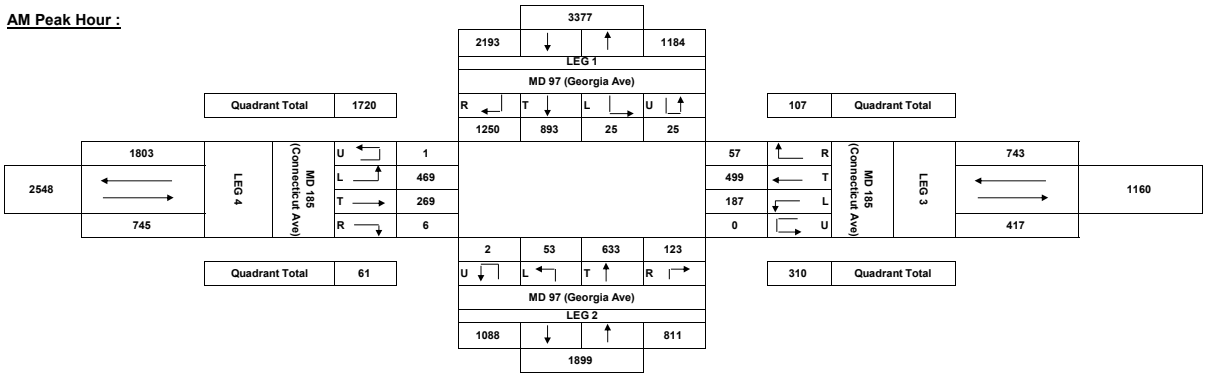
PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-7:00PM	Start	End	Volume	LOS	V/C
		07:15	08:15	4492	A	0.49		16:00	17:00	5170	B	0.71

Turning Movement Summary:

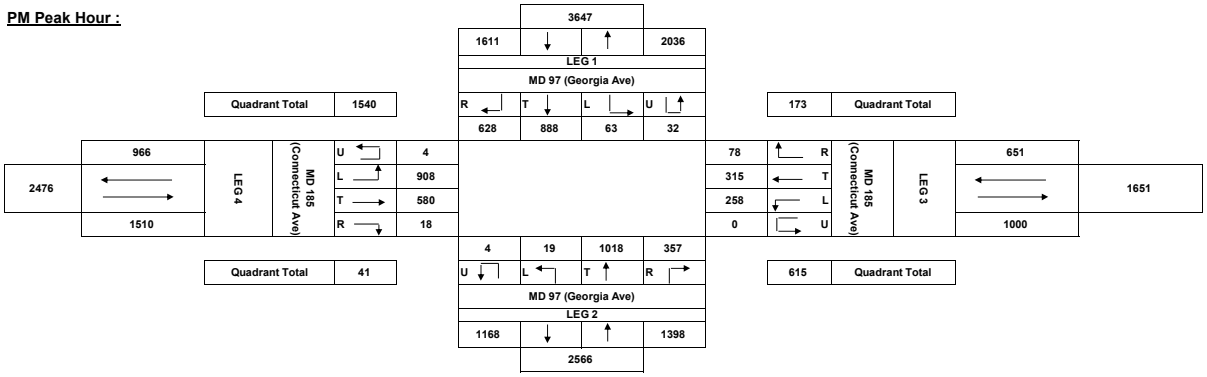


Comments:

AM Peak Hour :



PM Peak Hour :



Montgomery County Department of Transportation
Division of Traffic Engineering & Operations
Turning Movement Counts - Field Sheet

MCV Associates, Inc.
4605-C Pinecrest Office Park Drive
Alexandria VA 22312-1442

Request No: WO#1317
Location: Georgia Ave (MD97) @ Northgate Plaza Driveway
Date: 9/29/2021 Wednesday
Recorder:
Interval (dd) : 15 (In Minutes)

County: Montgomery
Town: Aspen Hill
Weather: Sunny

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-7:00PM	Start	End	Volume	LOS	V/C
		07:30	08:30	2019	A	0.29		16:00	17:00	2632	A	0.35

Street Name-->	Georgia Ave (MD97) From North					Georgia Ave (MD 97) From South					Northgate Plaza Driveway From East					Northgate Plaza Driveway From West					GRAND
HOUR BEGINNING	U turn	Left	Through	Right	Total	U turn	Left	Through	Right	Total	U turn	Left	Through	Right	Total	U turn	Left	Through	Right	Total	TOTAL
06:00	3	0	121	1	125	15	7	85	0	107	0	0	0	0	0	0	0	0	5	5	237
06:15	10	0	138	4	152	7	13	110	0	130	0	0	0	0	0	0	1	0	2	3	285
06:30	3	0	159	4	166	4	13	171	0	188	0	0	0	0	0	0	1	0	1	2	356
06:45	5	0	232	16	253	16	6	153	0	175	0	0	0	0	0	0	0	0	7	7	435
07:00	10	0	242	2	254	13	12	157	0	182	0	0	0	0	0	0	0	0	6	6	442
07:15	11	0	263	4	278	14	10	193	0	217	0	0	0	0	0	0	0	0	5	5	500
07:30	**10**	**0**	**268**	**6**	**284**	**8**	**8**	**192**	**0**	**208**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**5**	**497**
07:45	**6**	**0**	**252**	**8**	**266**	**9**	**11**	**203**	**0**	**223**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**4**	**493**
08:00	**13**	**0**	**258**	**10**	**281**	**11**	**17**	**209**	**0**	**237**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**10**	**528**
08:15	**15**	**0**	**268**	**5**	**288**	**9**	**9**	**190**	**0**	**208**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**5**	**501**
08:30	15	0	250	6	271	3	11	174	0	188	0	0	0	0	0	0	0	0	5	5	464
08:45	9	0	260	10	279	8	8	182	0	198	0	0	0	0	0	0	0	0	7	7	484
09:00	10	0	262	9	281	6	16	187	0	209	0	0	0	0	0	0	0	0	11	11	501
09:15	7	0	221	17	245	5	13	168	0	186	0	0	0	0	0	0	0	0	8	8	439
09:30	7	0	181	14	202	3	9	152	0	164	0	0	0	0	0	0	0	0	10	10	376
09:45	9	0	170	18	197	5	9	167	0	181	0	0	0	0	0	0	0	0	7	7	385
10:00	11	0	197	26	234	3	11	122	0	136	0	0	0	0	0	0	0	0	10	10	380
10:15	16	0	193	22	231	2	15	164	0	181	0	0	0	0	0	0	0	0	7	7	419
10:30	7	0	194	15	216	3	10	165	0	178	0	0	0	0	0	0	0	0	11	11	405
10:45	10	0	199	20	229	4	13	166	0	183	0	0	0	0	0	0	0	0	8	8	420
11:00	5	0	180	18	203	2	7	152	0	161	0	0	0	0	0	0	0	0	7	7	371
11:15	14	0	174	17	205	5	8	200	0	213	0	0	0	0	0	0	1	0	10	11	429
11:30	21	0	199	24	244	1	24	168	0	193	0	0	0	0	0	0	0	0	11	11	448
11:45	15	0	208	25	248	3	8	179	0	190	0	0	0	0	0	0	0	0	13	13	451
12:00	17	0	190	28	235	4	15	182	0	201	0	0	0	0	0	0	0	0	11	11	447
12:15	18	0	221	31	270	1	14	188	0	203	0	0	0	0	0	0	0	0	14	14	487
12:30	16	0	183	24	223	3	10	187	0	200	0	0	0	0	0	0	0	0	22	22	445
12:45	11	0	187	30	228	2	6	166	0	174	0	0	0	0	0	0	0	0	9	9	411
13:00	12	0	192	25	229	3	8	166	0	177	0	0	0	0	0	0	0	0	14	14	420
13:15	25	0	213	25	263	3	13	207	0	223	0	0	0	0	0	0	0	0	18	18	504
13:30	22	0	196	18	236	1	6	175	0	182	0	0	0	0	0	0	0	0	17	17	435
13:45	21	0	221	19	261	1	13	196	0	210	0	0	0	0	0	0	1	0	13	14	485
14:00	17	0	225	19	261	5	6	183	0	194	0	0	0	0	0	0	0	0	13	13	468
14:15	18	0	208	21	247	4	14	233	0	251	0	0	0	0	0	0	0	0	19	19	517
14:30	14	0	213	20	247	4	8	222	0	234	0	0	0	0	0	0	1	0	14	15	496
14:45	9	0	202	19	230	3	6	260	0	269	0	0	0	0	0	0	0	0	12	12	511
15:00	17	0	225	25	267	3	15	232	0	250	0	0	0	0	0	0	0	0	20	20	537
15:15	24	0	244	22	290	3	17	237	0	257	0	0	0	0	0	0	0	0	16	16	563
15:30	17	0	265	33	315	4	8	252	0	264	0	0	0	0	0	0	1	0	12	13	592
15:45	14	0	256	14	284	3	16	262	0	281	0	0	0	0	0	0	0	0	12	12	577
16:00	**16**	**0**	**263**	**20**	**299**	**5**	**6**	**321**	**0**	**332**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**7**	**638**
16:15	**19**	**0**	**270**	**20**	**309**	**2**	**12**	**313**	**0**	**327**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**11**	**647**
16:30	**17**	**0**	**278**	**24**	**319**	**1**	**7**	**344**	**0**	**352**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**19**	**19**	**690**
16:45	**13**	**0**	**259**	**21**	**293**	**3**	**10**	**340**	**0**	**353**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**10**	**11**	**657**
17:00	20	0	275	18	313	3	8	294	0	305	0	0	0	0	0	0	0	0	8	8	626
17:15	22	0	255	18	295	0	8	294	0	302	0	0	0	0	0	0	0	0	11	11	608
17:30	14	0	247	24	285	1	11	300	0	312	0	0	0	0	0	0	0	0	11	11	608
17:45	13	0	261	27	301	4	10	278	0	292	0	0	0	0	0	0	0	0	19	19	612
18:00	22	0	287	19	328	3	9	279	0	291	0	0	0	0	0	0	0	0	10	10	629
18:15	14	0	271	17	302	5	7	293	0	305	0	0	0	0	0	0	0	0	17	17	624
18:30	23	0	251	26	300	3	11	297	0	311	0	0	0	0	0	0	0	0	9	9	620
18:45	12	0	244	26	282	8	11	291	0	310	0	0	0	0	0	0	0	0	20	20	612
TOTAL	**719**	**0**	**11691**	**934**	**13344**	**244**	**553**	**11001**	**0**	**11798**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**563**	**570**	**25712**
AM Peak Vol	44	0	1046	29	1119	37	45	794	0	876	0	0	0	0	0	0	0	0	24	24	2019
PM Peak Vol	65	0	1070	85	1220	11	35	1318	0	1364	0	0	0	0	0	0	1	0	47	48	2632

Montgomery County Department of Transportation
Division of Traffic Engineering & Operations
Turning Movement Counts - Field Sheet

MCV Associates, Inc.
4605-C Pinecrest Office Park Drive
Alexandria VA 22312-1442

Request No: WO#1317
Location: Georgia Ave (MD97) @ Northgate Plaza Driveway
Date: 9/29/2021 Wednesday
Recorder:
Interval (dd) : 15 (In Minutes)

MCDOT Montgomery County Department of Transportation

County: Montgomery
Town: Aspen Hill
Weather: Sunny

PEAK HOURS	**AM PERIOD 6:00AM-12:00PM**	Start	End	Volume	LOS	V/C	**PM PERIOD 12:00PM-7:00PM**	Start	End	Volume	LOS	V/C
		07:30	08:30	**2019**	**A**	**0.29**		16:00	17:00	**2632**	**A**	**0.35**

PEDESTRIANS & BICYCLES

Street Name	North Leg Georgia Ave (MD97)				South Leg Georgia Ave (MD 97)				East Leg Northgate Plaza Driveway				West Leg Northgate Plaza Driveway			
Hour	Pedestrians		Bicycles		Pedestrians		Bicycles		Pedestrians		Bicycles		Pedestrians		Bicycles	
Ending	East-West	West-East	East-West	West-East	East-West	West-East	East-West	West-East	South-North	North-South	South-North	North-South	South-North	North-South	South-North	North-South
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	**1**	**0**	0	0	**0**	0	1	0	**0**	0	0	0	**0**	2	0	0
07:45	**1**	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0
08:00	**0**	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0
08:15	**0**	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0
09:30	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45	1	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0
10:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	2	0	0	0	0	0	0	0	0	0	0	0	5	0	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
11:30	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1
11:45	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0
12:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	2	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
12:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0
13:00	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
13:30	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
14:15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
14:45	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
16:00	**0**	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**1**	1	0	0
16:15	**0**	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0
16:30	**0**	**1**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	1
16:45	**0**	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0
17:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1
18:45	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
TOTAL	**15**	**8**	**1**	**0**	**4**	**1**	**1**	**0**	**0**	**0**	**1**	**0**	**14**	**29**	**2**	**3**
AM Peak Vol	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM Peak Vol	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	1

Montgomery County Department of Transportation
Division of Traffic Engineering & Operations
Turning Movement Counts - Field Sheet

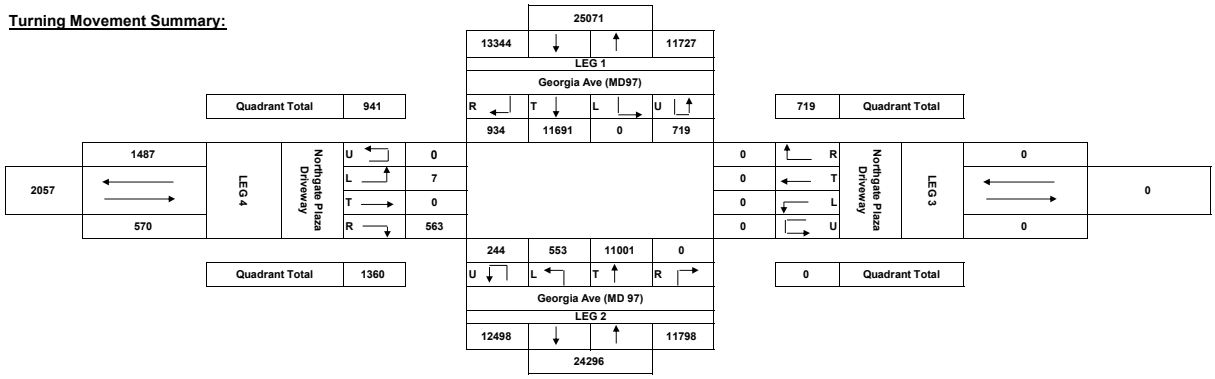
MCV Associates, Inc.
4605-C Pinecrest Office Park Drive
Alexandria VA 22312-1442

Request No:	WO#1317
Location:	Georgia Ave (MD97) @ Northgate Plaza Driveway
Date:	9/29/2021 Wednesday
Recorder:	
Interval (dd) : (In Minutes)	15

County: Montgomery
Town: Aspen Hill
Weather: Sunny

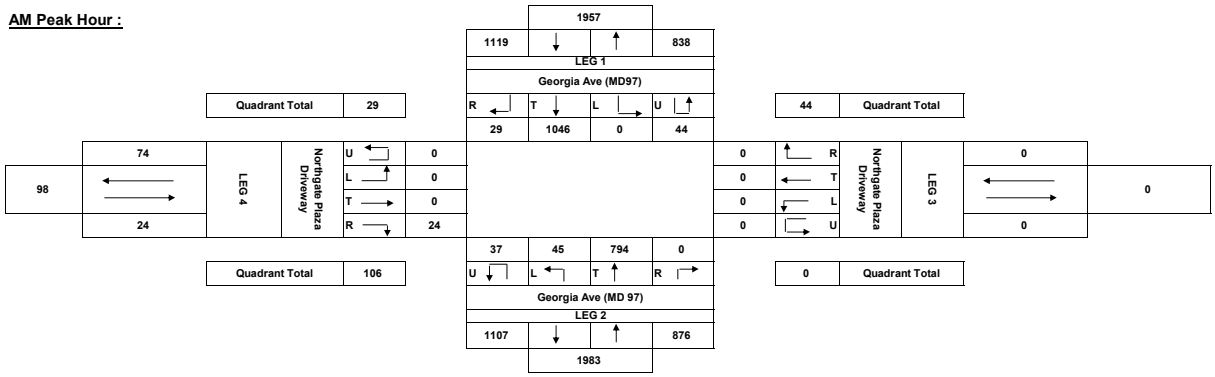
PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-7:00PM	Start	End	Volume	LOS	V/C
		07:30	08:30	2019	A	0.29		16:00	17:00	2632	A	0.35

Turning Movement Summary:

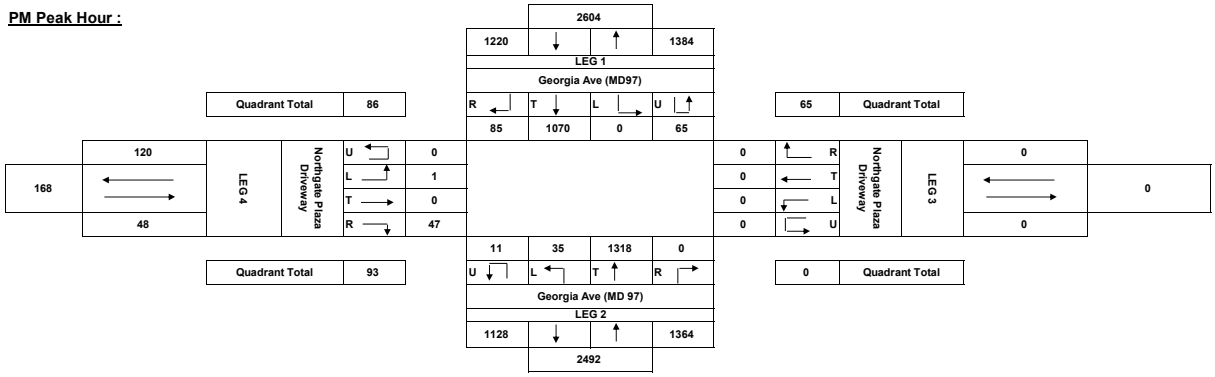


Comments:

AM Peak Hour :



PM Peak Hour :



MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

Maryland Department of Transportation
State Highway Administration
Data Services Division
Turning Movement Summary Report

Station ID: S2004150001 | County: Montgomery | Comments:

Date: 12/6/2017 12:00:00 AM | Town: none

Location: MD 185 at ASPEN HILL RD | Weather: Sunny/Cold

Interval: 60 Min

PEAK	AM PERIOD	Start	End	Volume	LOS	V/C	PM PERIOD	Start	End	Volume	LOS	V/C
Hours	6:00AM-12:00PM	08:00	09:00	4671	F	1.02	12:00PM-19:00PM	17:00	18:00	4473	C	0.8

	MD 185					MD 185					ASPEN HILL RD					ASPEN HILL RD					
	From North					From South					From East					From West					
Begin Hour	**U.Turn**	**Left**	**Through**	**Right**	**TOTAL**	**U.Turn**	**Left**	**Through**	**Right**	**TOTAL**	**U.Turn**	**Left**	**Through**	**Right**	**TOTAL**	**U.Turn**	**Left**	**Through**	**Right**	**TOTAL**	**GrandTotal**
00:00	1	5	36	25	67	2	18	131	25	176	0	11	23	7	41	0	26	26	16	68	352
01:00	2	4	36	6	48	1	10	43	8	62	0	7	6	2	15	0	9	11	8	28	153
02:00	1	5	30	13	49	2	9	55	24	90	0	35	5	5	45	0	7	3	12	22	206
03:00	2	2	59	12	75	0	9	53	20	82	0	46	3	3	52	0	5	5	8	18	227
04:00	3	25	169	30	227	1	21	83	23	128	0	119	5	4	128	0	13	9	22	44	527
05:00	12	125	634	70	841	1	65	290	68	424	0	259	24	20	303	1	42	48	64	155	1723
06:00	9	129	1765	224	2127	6	156	517	117	796	0	282	70	44	396	0	114	66	139	319	3638
07:00	6	133	2102	373	2614	7	337	751	102	1197	0	263	105	27	395	0	150	117	152	419	4625
08:00	14	114	2021	367	2516	10	297	877	140	1324	0	219	99	24	342	0	179	142	168	489	4671
09:00	10	78	1375	303	1766	11	166	636	131	944	0	150	204	30	384	0	129	165	118	412	3506
10:00	8	71	955	200	1234	13	110	513	106	742	0	120	129	58	307	0	142	165	89	396	2679
11:00	5	89	838	193	1125	12	147	702	126	987	0	140	191	68	399	0	168	165	88	421	2932
12:00	12	84	805	176	1077	10	167	739	135	1051	0	116	189	89	394	0	175	208	109	492	3014
13:00	10	81	868	193	1152	9	129	830	156	1124	0	135	177	105	417	0	181	228	93	502	3195
14:00	10	75	866	182	1133	8	161	986	160	1315	0	152	189	83	424	0	206	238	118	562	3434
15:00	9	103	811	185	1108	15	209	1362	179	1765	0	132	251	80	463	0	284	356	117	757	4093
16:00	7	96	794	215	1112	12	215	1514	220	1961	0	154	223	101	478	0	307	413	111	831	4382
17:00	8	103	847	204	1162	20	187	1510	246	1963	0	132	284	101	517	0	301	412	118	831	4473
18:00	7	93	735	186	1021	11	207	1301	226	1745	0	130	254	102	486	0	266	393	84	743	3995
19:00	6	71	567	139	783	11	197	957	164	1329	0	106	210	58	374	0	211	235	87	533	3019
20:00	7	55	407	103	572	10	147	711	113	981	2	94	153	57	306	0	154	182	60	396	2255
21:00	3	40	355	67	465	7	100	541	77	725	0	78	124	28	230	0	124	136	74	334	1754
22:00	6	22	221	84	333	7	63	321	61	452	0	40	82	22	144	0	78	85	38	201	1130
23:00	4	11	110	29	154	3	43	197	27	270	0	15	35	13	63	0	49	53	40	142	629
TOTAL	**162**	**1614**	**17406**	**3579**	**22761**	**189**	**3170**	**15620**	**2654**	**21633**	**2**	**2935**	**3035**	**1131**	**7103**	**1**	**3320**	**3861**	**1933**	**9115**	**60612**
AMPEAK	**14**	**114**	**2021**	**367**	**2516**	**10**	**297**	**877**	**140**	**1324**	**0**	**219**	**99**	**24**	**342**	**0**	**179**	**142**	**168**	**489**	**4671**
PMPEAK	**8**	**103**	**847**	**204**	**1162**	**20**	**187**	**1510**	**246**	**1963**	**0**	**132**	**284**	**101**	**517**	**0**	**301**	**412**	**118**	**831**	**4473**
DAYPEAK	**14**	**114**	**2021**	**367**	**2516**	**10**	**297**	**877**	**140**	**1324**	**0**	**219**	**99**	**24**	**342**	**0**	**179**	**142**	**168**	**489**	**4671**

Maryland Department of Transportation
State Highway Administration
Data Services Division
Turning Movement Summary Report

Station ID: S2004150001 County: Montgomery Comments:

Date: 12/6/2017 12:00:00 AM Town: none

Location: MD 185 at ASPEN HILL RD Weather: Sunny/Cold

Interval: 60 Min

PEAK	AM PERIOD	Start	End	Volume	LOS	V/C	PM PERIOD	Start	End	Volume	LOS	V/C
Hours	6:00AM-12:00PM	08:00	09:00	4671	F	1.02	12:00PM-19:00PM	17:00	18:00	4473	C	0.8

	MD 185			MD 185			ASPEN HILL RD			ASPEN HILL RD		
	From North			From South			From East			From West		
Begin Hour	**School Children**	**Pedestrians**	**Bicycles**	**School Children**	**Pedestrians**	**Bicycles**	**School Children**	**Pedestrians**	**Bicycles**	**School Children**	**Pedestrians**	**Bicycles**
00:00	0	0	0	0	0	0	0	2	0	0	0	1
01:00	0	1	0	0	0	0	0	0	0	0	0	0
02:00	0	1	0	0	0	0	0	0	0	0	0	0
03:00	0	1	0	0	0	0	0	1	0	0	0	0
04:00	0	2	0	0	0	0	0	0	0	0	0	0
05:00	0	6	0	0	0	0	0	5	0	0	2	0
06:00	0	3	0	0	12	0	0	8	0	0	8	0
07:00	0	13	0	0	7	0	0	8	0	0	5	0
08:00	0	11	0	0	7	0	0	7	0	0	5	0
09:00	0	6	0	0	9	0	0	12	0	0	5	0
10:00	0	11	0	0	11	0	0	8	0	0	7	0
11:00	0	8	0	0	4	0	0	8	0	0	3	0
12:00	0	11	0	0	14	0	0	10	0	0	4	0
13:00	0	16	0	0	10	0	0	16	0	0	5	0
14:00	0	12	0	0	10	0	0	10	0	0	3	0
15:00	0	13	1	0	32	0	0	17	0	0	7	0
16:00	0	21	0	0	15	0	0	21	1	0	6	0
17:00	0	11	1	0	16	0	0	14	1	0	6	0
18:00	0	14	0	0	12	0	0	13	0	0	6	0
19:00	0	6	0	0	13	0	0	8	0	0	4	0
20:00	0	4	0	0	5	0	0	2	0	0	2	0
21:00	0	4	0	0	3	0	0	0	0	0	0	0
22:00	0	1	0	0	4	0	0	1	0	0	0	0
23:00	0	0	0	0	0	0	0	1	0	0	0	0
TOTAL	**0**	**176**	**2**	**0**	**184**	**0**	**0**	**172**	**2**	**0**	**78**	**1**
AMPEAK	**0**	**11**	**0**	**0**	**7**	**0**	**0**	**7**	**0**	**0**	**5**	**0**
PMPEAK	**0**	**11**	**1**	**0**	**16**	**0**	**0**	**14**	**1**	**0**	**6**	**0**
DAYPEAK	**0**	**11**	**0**	**0**	**7**	**0**	**0**	**7**	**0**	**0**	**5**	**0**

Maryland Department of Transportation
State Highway Administration
Data Services Division

Turning Movement Summary Report

Station ID: S2004150001 County: Montgomery Comments:

Date: 12/6/2017 12:00:00 AM Town: none

Location: MD 185 at ASPEN HILL RD Weather: Sunny/Cold

Interval: 60 Min

PEAK	AM PERIOD	Start	End	Volume	LOS	V/C	PM PERIOD	Start	End	Volume	LOS	V/C
Hours	6:00AM-12:00PM	08:00	09:00	4671	F	1.02	12:00PM-19:00PM	17:00	18:00	4473	C	0.8

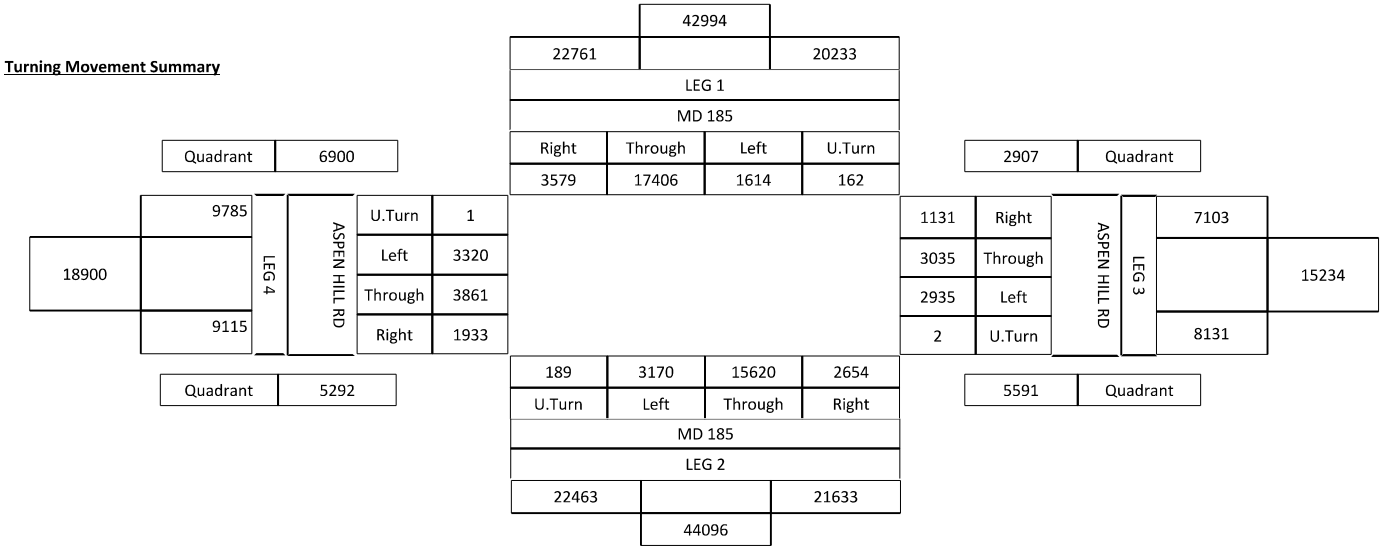
MD 185 — From North

MD 185 — From South

ASPEN HILL RD — From East

ASPEN HILL RD — From West

Turning Movement Summary



Maryland Department of Transportation
State Highway Administration
Data Services Division
Turning Movement Summary Report

Station ID: S2004150001 County: Montgomery Comments:

Date: 12/6/2017 12:00:00 AM Town: none

Location: MD 185 at ASPEN HILL RD Weather: Sunny/Cold

Interval: 60 Min

PEAK	AM PERIOD	Start	End	Volume	LOS	V/C	PM PERIOD	Start	End	Volume	LOS	V/C
Hours	6:00AM-12:00PM	08:00	09:00	4671	F	1.02	12:00PM-19:00PM	17:00	18:00	4473	C	0.8

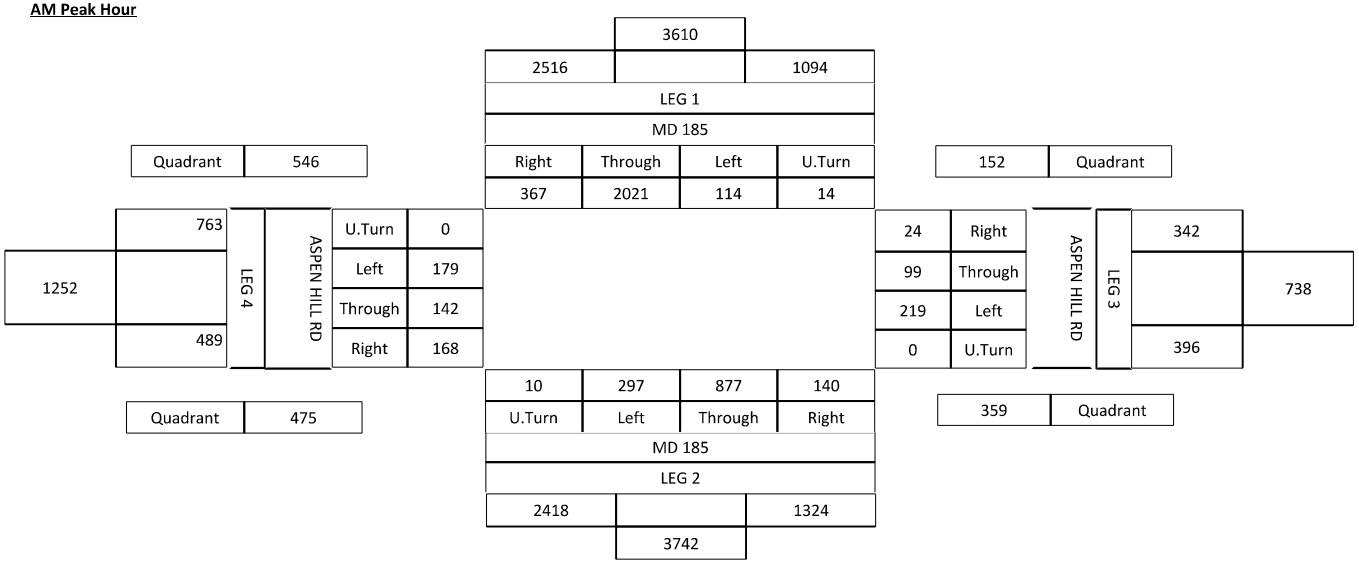
MD 185 — From North

MD 185 — From South

ASPEN HILL RD — From East

ASPEN HILL RD — From West

AM Peak Hour



Maryland Department of Transportation
State Highway Administration
Data Services Division

Turning Movement Summary Report

Station ID: S2004150001 County: Montgomery Comments:

Date: 12/6/2017 12:00:00 AM Town: none

Location: MD 185 at ASPEN HILL RD Weather: Sunny/Cold

Interval: 60 Min

PEAK	AM PERIOD	Start	End	Volume	LOS	V/C	PM PERIOD	Start	End	Volume	LOS	V/C
Hours	6:00AM-12:00PM	08:00	09:00	4671	F	1.02	12:00PM-19:00PM	17:00	18:00	4473	C	0.8

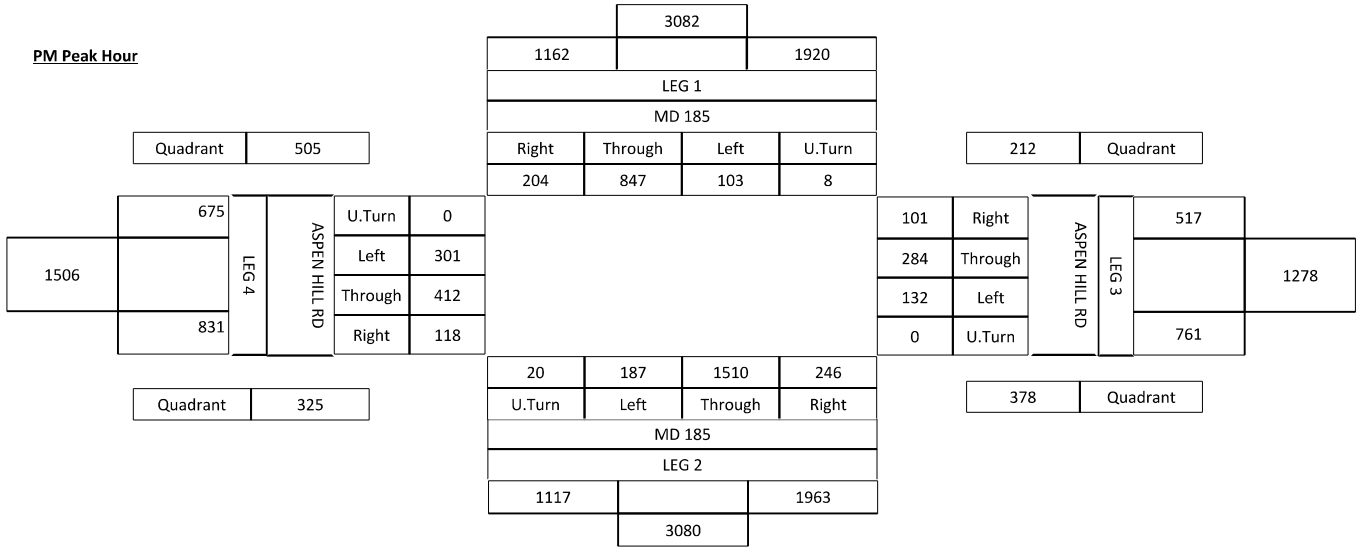
MD 185 — From North

MD 185 — From South

ASPEN HILL RD — From East

ASPEN HILL RD — From West

PM Peak Hour



Maryland Department of Transportation
State Highway Administration
Data Services Division

Turning Movement Summary Report

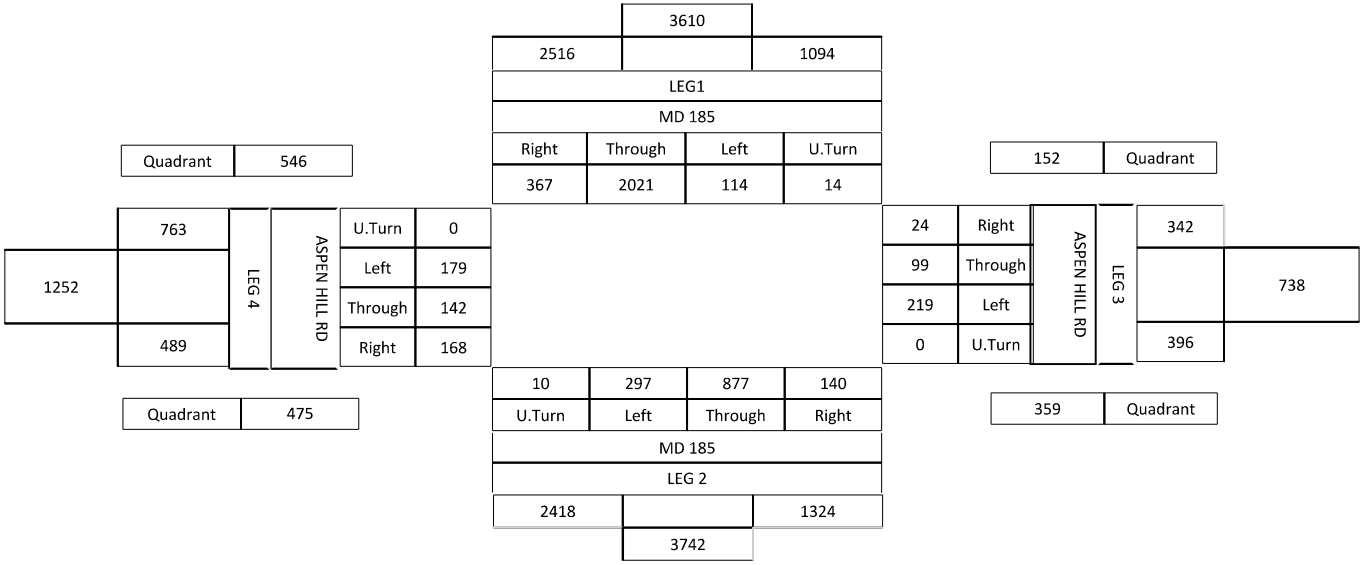
Station ID:	S2004150001	County:	Montgomery	Comments:	
Date:	12/6/2017 12:00:00 AM	Town:	none		
Location:	MD 185 at ASPEN HILL RD	Weather:	Sunny/Cold		
Interval:	60 Min				

PEAK	AM PERIOD	Start	End	Volume	LOS	V/C	PM PERIOD	Start	End	Volume	LOS	V/C
Hours	6:00AM-12:00PM	08:00	09:00	4671	F	1.02	12:00PM-19:00PM	17:00	18:00	4473	C	0.8

MD 185 — From North / From South

ASPEN HILL RD — From East

ASPEN HILL RD — From West



Montgomery County Department of Transportation
Division of Traffic Engineering & Operations
Turning Movement Counts - Field Sheet

MCV Associates, Inc.
4605-C Pinecrest Office Park Drive
Alexandria VA 22312-1442

Request No: WO#1317
Location: Georgia Ave (MD 97) @ Driveway
Date: 9/29/2021 Wednesday
Recorder:
Interval (dd) : 15
(In Minutes)

County: Montgomery
Town: Aspen Hill
Weather: Sunny

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-7:00PM	Start	End	Volume	LOS	V/C
		07:15	08:15	2478	A	0.31		16:00	17:00	3393	A	0.46

Street Name-->	Georgia Ave (MD 97) From North					Georgia Ave (MD 97) From South					Driveway From East					Wendy Lane From West					GRAND
HOUR BEGINNING	U turn	Left	Through	Right	Total	U turn	Left	Through	Right	Total	U turn	Left	Through	Right	Total	U turn	Left	Through	Right	Total	TOTAL
06:00	0	3	132	3	138	9	2	129	2	142	0	0	0	2	2	0	2	0	12	14	296
06:15	0	2	146	4	152	9	1	148	0	158	0	0	0	2	2	0	0	0	7	7	319
06:30	0	5	173	3	181	10	5	220	0	235	0	0	0	7	7	0	0	0	17	17	440
06:45	0	10	242	9	261	9	3	204	1	217	0	0	0	15	15	0	1	0	20	21	514
07:00	0	4	266	6	276	11	4	232	0	247	0	0	0	3	3	0	0	0	32	32	558
07:15	**0**	**11**	**266**	**7**	**284**	**16**	**3**	**277**	**1**	**297**	**0**	**0**	**0**	**5**	**5**	**0**	**0**	**0**	**21**	**21**	**607**
07:30	**0**	**8**	**286**	**9**	**303**	**8**	**3**	**254**	**3**	**268**	**0**	**0**	**0**	**11**	**11**	**0**	**0**	**0**	**17**	**17**	**599**
07:45	**0**	**4**	**282**	**10**	**296**	**6**	**9**	**307**	**3**	**325**	**0**	**0**	**0**	**4**	**4**	**0**	**0**	**0**	**8**	**8**	**633**
08:00	**0**	**10**	**281**	**14**	**305**	**12**	**6**	**275**	**4**	**297**	**0**	**0**	**0**	**14**	**14**	**0**	**1**	**0**	**22**	**23**	**639**
08:15	0	15	278	20	313	9	4	250	3	266	0	0	0	7	7	0	0	0	12	12	598
08:30	0	15	259	22	296	12	3	240	2	257	0	0	0	7	7	0	0	0	8	8	568
08:45	1	15	275	26	317	15	6	249	7	277	0	0	0	8	8	0	0	0	12	12	614
09:00	0	16	289	30	335	14	13	261	7	295	0	0	0	8	8	0	0	0	28	28	666
09:15	0	28	242	18	288	16	10	232	3	261	0	0	0	15	15	0	0	0	28	28	592
09:30	1	20	207	6	234	15	8	190	4	217	0	0	0	12	12	0	0	0	26	26	489
09:45	0	16	183	4	203	15	5	206	2	228	0	0	0	12	12	0	0	0	13	13	456
10:00	0	29	211	4	244	13	4	188	8	213	0	0	0	7	7	0	0	0	14	14	478
10:15	1	21	190	10	222	24	1	204	8	237	0	0	0	16	16	0	0	0	8	8	483
10:30	0	25	216	7	248	16	4	195	8	223	0	0	0	16	16	0	0	0	11	11	498
10:45	0	25	205	3	233	17	2	205	5	229	0	0	0	16	16	0	0	0	9	9	487
11:00	0	34	189	5	228	15	4	196	9	224	0	0	0	18	18	0	0	0	8	8	478
11:15	3	25	212	4	244	12	1	215	8	236	0	0	0	20	20	0	0	0	9	9	509
11:30	1	38	210	4	253	11	3	268	8	290	0	0	0	16	16	0	0	0	11	11	570
11:45	0	31	224	5	260	16	6	219	8	249	0	0	0	22	22	0	0	0	4	4	535
12:00	1	42	208	10	261	16	4	228	7	255	0	0	0	21	21	0	0	0	13	13	550
12:15	0	38	247	5	290	29	8	248	7	292	0	0	0	11	11	0	0	0	6	6	599
12:30	0	28	223	9	260	26	3	216	14	259	0	0	0	21	21	0	1	0	3	4	544
12:45	1	17	250	9	277	19	0	222	1	242	0	0	0	18	18	0	1	0	7	8	545
13:00	0	30	215	5	250	15	4	213	3	235	0	0	0	19	19	0	0	0	6	6	510
13:15	0	42	250	11	303	23	6	234	10	273	0	0	0	16	16	0	0	0	12	12	604
13:30	0	36	212	6	254	23	2	221	4	250	0	0	0	21	21	0	0	0	8	8	533
13:45	1	38	255	8	302	21	8	235	5	269	0	0	0	22	22	0	0	0	17	17	610
14:00	0	29	264	8	301	17	3	232	7	259	0	0	0	21	21	0	0	0	10	10	591
14:15	1	36	243	10	290	20	5	258	6	289	0	1	0	23	24	0	0	0	8	8	611
14:30	0	31	236	14	281	26	7	262	12	307	0	0	0	22	22	0	0	0	10	10	620
14:45	1	29	254	11	295	20	7	288	11	326	0	0	0	29	29	0	0	0	10	10	660
15:00	1	39	281	27	348	28	9	311	9	357	0	0	0	21	21	0	0	0	6	6	732
15:15	0	40	280	24	344	29	6	276	12	323	0	0	0	21	21	0	0	0	10	10	698
15:30	1	45	301	15	362	29	10	292	9	340	0	0	0	24	24	0	0	0	13	13	739
15:45	0	38	324	25	387	26	11	303	8	348	0	0	0	21	21	0	0	0	21	21	777
16:00	**1**	**36**	**291**	**27**	**355**	**24**	**13**	**376**	**8**	**421**	**0**	**0**	**0**	**26**	**26**	**0**	**0**	**0**	**29**	**29**	**831**
16:15	**0**	**48**	**310**	**23**	**381**	**30**	**5**	**354**	**11**	**400**	**0**	**0**	**0**	**23**	**23**	**0**	**0**	**0**	**46**	**46**	**850**
16:30	**2**	**41**	**334**	**14**	**391**	**32**	**7**	**380**	**6**	**425**	**0**	**0**	**0**	**21**	**21**	**0**	**0**	**0**	**28**	**28**	**865**
16:45	**1**	**41**	**323**	**9**	**374**	**31**	**7**	**394**	**5**	**437**	**0**	**0**	**0**	**21**	**21**	**0**	**0**	**0**	**15**	**15**	**847**
17:00	0	50	300	19	369	33	13	327	12	385	0	0	0	28	28	0	0	0	22	22	804
17:15	1	32	293	16	342	46	8	329	13	396	0	0	0	29	29	0	0	0	8	8	775
17:30	1	40	297	14	352	41	17	356	11	425	0	0	0	23	23	0	1	0	17	18	818
17:45	0	32	313	17	362	36	8	336	13	393	0	0	0	24	24	0	0	0	11	11	790
18:00	0	56	350	16	422	36	13	322	6	377	0	0	0	21	21	0	0	0	9	9	829
18:15	1	42	370	14	427	33	6	331	9	379	0	0	0	28	28	0	0	0	10	10	844
18:30	0	59	295	16	370	36	6	333	8	383	1	0	0	29	30	0	0	0	11	11	794
18:45	0	57	293	24	374	41	9	304	11	365	0	0	0	27	27	0	0	0	14	14	780
TOTAL	**21**	**1502**	**13276**	**639**	**15438**	**1096**	**315**	**13545**	**342**	**15298**	**1**	**1**	**0**	**894**	**896**	**0**	**7**	**0**	**737**	**744**	**32376**
AM Peak Vol	0	33	1115	40	1188	42	21	1113	11	1187	0	0	0	34	34	0	1	0	68	69	2478
PM Peak Vol	4	166	1258	73	1501	117	32	1504	30	1683	0	0	0	91	91	0	0	0	118	118	3393

Montgomery County Department of Transportation
Division of Traffic Engineering & Operations
Turning Movement Counts - Field Sheet

MCV Associates, Inc.
4605-C Pinecrest Office Park Drive
Alexandria VA 22312-1442

Request No: WO#1317
Location: Georgia Ave (MD 97) @ Driveway
Date: 9/29/2021 Wednesday
Recorder:
Interval (dd) : 15 (In Minutes)

County: Montgomery
Town: Aspen Hill
Weather: Sunny

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-7:00PM	Start	End	Volume	LOS	V/C
		07:15	08:15	2478	A	0.31		16:00	17:00	3393	A	0.46

PEDESTRIANS & BICYCLES

Street Name	North Leg Georgia Ave (MD 97)				South Leg Georgia Ave (MD 97)				East Leg Driveway				West Leg Wendy Lane			
Hour	Pedestrians		Bicycles		Pedestrians		Bicycles		Pedestrians		Bicycles		Pedestrians		Bicycles	
Ending	East-West	West-East	East-West	West-East	East-West	West-East	East-West	West-East	South-North	North-South	South-North	North-South	South-North	North-South	South-North	North-South
06:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
06:15	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
06:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
07:15	**1**	**0**	0	0	**1**	0	0	0	**2**	0	1	0	**0**	0	0	0
07:30	**1**	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0
07:45	**0**	**0**	0	0	**0**	0	0	0	**1**	0	0	0	**1**	1	0	0
08:00	**2**	**0**	0	0	**0**	0	0	0	**2**	0	0	0	**1**	0	0	0
08:15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
09:00	0	0	0	0	1	0	0	0	2	0	0	0	0	1	0	0
09:15	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
09:30	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
09:45	1	0	1	0	1	0	0	0	1	0	0	0	2	0	0	1
10:00	4	1	0	0	3	0	0	0	0	2	2	0	3	1	0	1
10:15	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
10:30	0	0	0	0	1	0	0	0	0	0	1	0	1	2	0	0
10:45	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11:00	0	1	0	0	2	1	0	0	0	0	0	1	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0
11:30	3	1	0	0	2	1	0	0	4	0	0	0	0	0	0	0
11:45	1	0	0	0	1	3	0	0	0	0	0	0	1	0	0	0
12:00	1	1	0	0	1	1	0	0	2	0	0	0	0	0	0	0
12:15	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0
12:30	1	0	0	0	1	1	0	0	0	0	1	0	0	1	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0
13:00	0	1	0	0	0	0	0	0	1	1	0	0	2	0	0	0
13:15	3	0	0	0	2	0	0	0	0	1	0	0	1	3	0	0
13:30	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0
13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
14:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
14:15	2	1	0	0	2	1	0	0	1	0	1	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	3	0	0	0	1	1	0	0
14:45	1	0	0	0	1	0	0	0	0	0	0	0	1	2	1	1
15:00	1	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0
15:15	0	0	0	0	0	0	0	0	1	0	0	0	1	4	1	0
15:30	0	0	0	0	0	0	0	0	0	1	0	0	2	1	0	1
15:45	1	0	0	0	1	1	0	0	0	1	2	0	1	2	0	0
16:00	**1**	**0**	0	0	**1**	0	0	0	**4**	3	0	0	**1**	3	0	0
16:15	**1**	**0**	0	0	**0**	0	0	0	**0**	1	0	0	**0**	0	0	0
16:30	**0**	**1**	0	0	**0**	1	0	0	**0**	0	0	1	**2**	0	0	1
16:45	**2**	**2**	0	0	**2**	2	0	0	**3**	2	0	0	**1**	0	0	0
17:00	0	2	0	0	3	0	0	0	1	1	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	1	3	0	1	1	3	0	1
17:30	1	0	0	0	0	0	0	0	1	0	0	0	2	2	0	0
17:45	6	0	0	0	4	0	0	0	1	0	1	0	1	1	0	0
18:00	2	2	1	0	1	1	0	0	3	2	0	0	2	0	0	0
18:15	1	0	0	0	2	0	0	0	1	2	0	0	1	0	0	0
18:30	0	1	0	0	0	0	0	0	1	0	0	0	1	2	0	0
18:45	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
TOTAL	**41**	**17**	**2**	**0**	**37**	**14**	**0**	**0**	**48**	**22**	**9**	**3**	**38**	**38**	**2**	**6**
AM Peak Vol	3	0	0	0	1	0	0	0	3	0	0	0	2	1	0	0
PM Peak Vol	3	5	0	0	5	3	0	0	4	4	0	1	3	0	0	1

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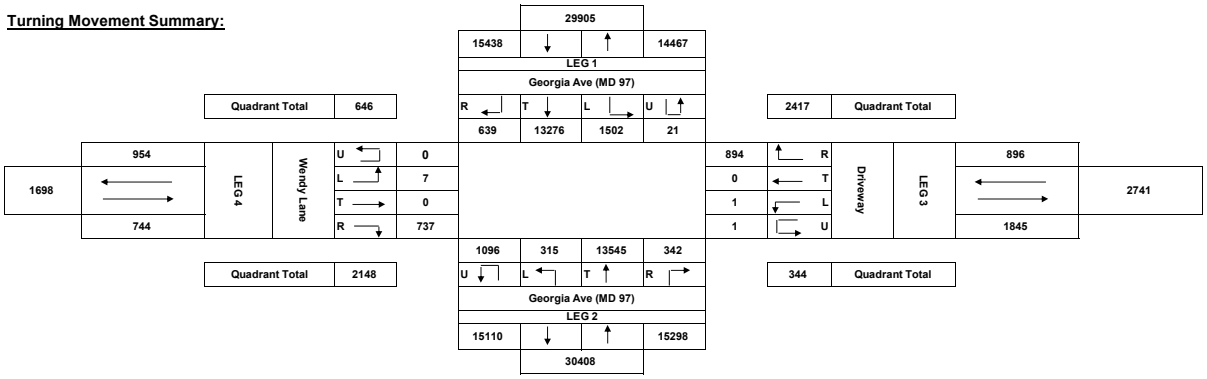
Location:	Georgia Ave (MD 97) @ Driveway
Date:	9/29/2021 Wednesday
Recorder:	
Interval (dd) : (In Minutes)	15
County:	Montgomery
Town:	Aspen Hill
Weather:	Sunny

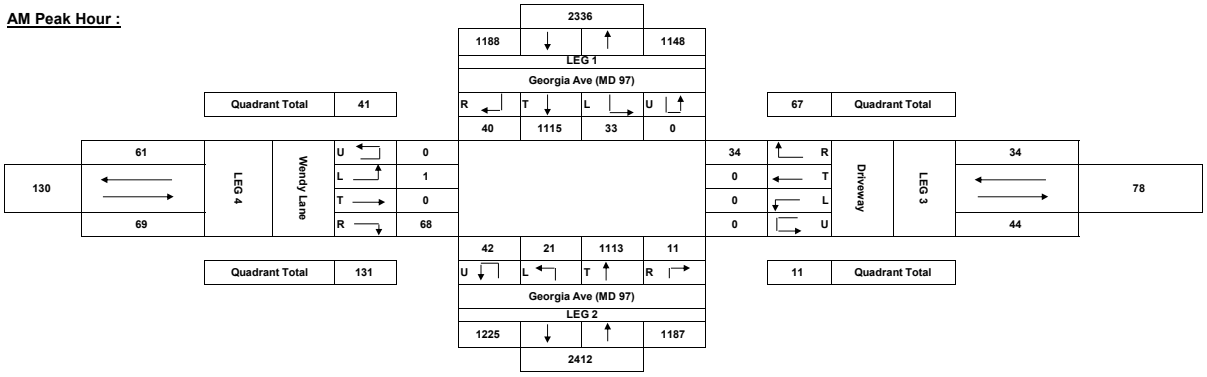
PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-7:00PM	Start	End	Volume	LOS	V/C
		07:15	08:15	2478	A	0.31		16:00	17:00	3393	A	0.46

Turning Movement Summary:

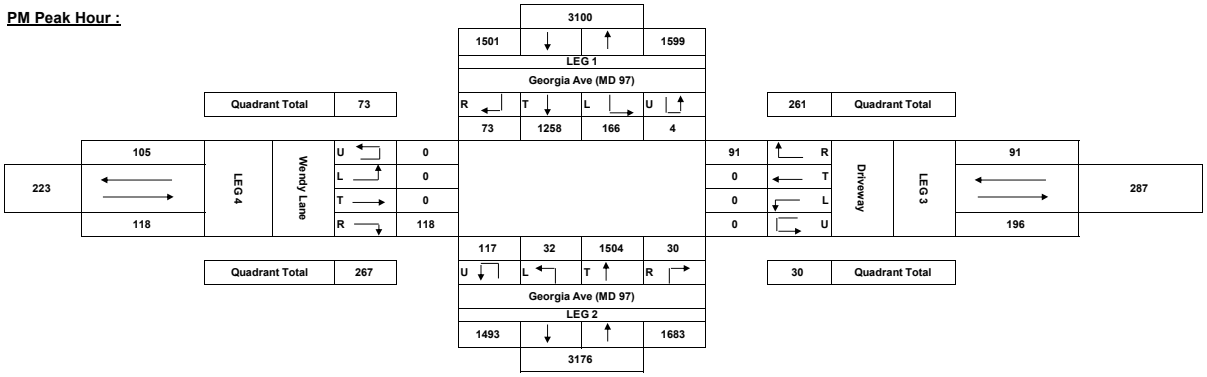


Comments:

AM Peak Hour :



PM Peak Hour :



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Interval (dd) : 15 (In Minutes)

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PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-7:00PM	Start	End	Volume	LOS	V/C
		07:15	08:15	2485	A	0.38		16:00	17:00	3209	A	0.52

Street Name-->	Georgia Ave (MD 97) From North					Georgia Ave (MD 97) From South					Driveway From East					Ralph Road From West					GRAND
HOUR BEGINNING	U turn	Left	Through	Right	Total	U turn	Left	Through	Right	Total	U turn	Left	Through	Right	Total	U turn	Left	Through	Right	Total	TOTAL
06:00	8	2	145	2	157	4	0	118	3	125	0	3	0	8	11	0	10	0	8	18	311
06:15	6	1	153	1	161	5	0	138	3	146	0	5	0	10	15	0	5	0	6	11	333
06:30	17	3	182	2	204	1	3	191	2	197	0	5	0	6	11	0	14	0	10	24	436
06:45	15	4	250	5	274	6	3	187	7	203	0	6	0	7	13	0	13	0	19	32	522
07:00	14	4	287	4	309	0	2	218	4	224	0	9	0	16	25	0	12	1	16	29	587
07:15	**9**	**2**	**278**	**3**	**292**	**5**	**5**	**248**	**5**	**263**	**0**	**10**	**0**	**13**	**23**	**0**	**17**	**0**	**17**	**34**	**612**
07:30	**11**	**4**	**302**	**5**	**322**	**2**	**2**	**225**	**2**	**231**	**0**	**8**	**0**	**7**	**15**	**0**	**13**	**0**	**13**	**26**	**594**
07:45	**12**	**3**	**280**	**6**	**301**	**1**	**2**	**297**	**2**	**302**	**0**	**4**	**0**	**12**	**16**	**0**	**9**	**0**	**18**	**27**	**646**
08:00	**11**	**5**	**302**	**2**	**320**	**1**	**9**	**258**	**4**	**272**	**0**	**1**	**0**	**7**	**8**	**0**	**16**	**0**	**17**	**33**	**633**
08:15	12	3	280	4	299	3	7	228	10	248	0	4	0	10	14	0	12	1	8	21	582
08:30	9	2	272	2	285	2	8	231	3	244	0	7	1	8	16	0	12	0	7	19	564
08:45	15	8	268	4	295	1	13	249	1	264	0	2	0	12	14	0	6	0	11	17	590
09:00	21	4	309	7	341	1	23	249	3	276	0	5	0	9	14	0	14	1	15	30	661
09:15	14	6	260	5	285	2	11	218	3	234	0	1	3	5	9	0	16	1	17	34	562
09:30	15	3	232	3	253	4	4	196	0	204	0	2	0	3	5	0	6	0	6	12	474
09:45	12	3	193	7	215	0	1	205	3	209	0	1	0	1	2	0	7	0	12	19	445
10:00	19	2	212	3	236	1	1	171	2	175	0	6	0	7	13	0	3	0	5	8	432
10:15	9	4	202	2	217	1	5	191	4	201	0	4	0	4	8	0	8	0	5	13	439
10:30	14	1	231	5	251	2	1	199	1	203	0	2	0	3	5	0	6	0	4	10	469
10:45	12	3	213	2	230	0	4	183	4	191	0	2	0	7	9	0	11	0	9	20	450
11:00	10	4	195	5	214	1	2	204	2	209	0	1	1	3	5	0	5	0	3	8	436
11:15	7	3	212	6	228	2	1	211	0	214	0	3	1	1	5	0	10	2	6	18	465
11:30	9	2	215	6	232	0	3	274	1	278	0	4	0	5	9	0	4	0	3	7	526
11:45	9	4	227	6	246	2	2	217	2	223	0	2	0	1	3	0	5	0	8	13	485
12:00	11	2	224	3	240	0	1	228	1	230	0	2	0	2	4	0	9	0	7	16	490
12:15	10	4	261	4	279	0	3	249	2	254	0	1	0	5	6	0	4	0	3	7	546
12:30	6	0	250	6	262	2	3	234	1	240	0	0	0	5	5	0	4	0	7	11	518
12:45	13	8	254	3	278	2	6	223	3	234	0	3	0	3	6	0	4	0	4	8	526
13:00	7	2	227	2	238	1	6	220	1	228	0	5	0	3	8	0	3	0	4	7	481
13:15	15	1	264	6	286	2	3	221	6	232	0	1	0	5	6	0	5	0	6	11	535
13:30	6	3	232	3	244	1	3	219	4	227	0	4	0	11	15	0	8	0	4	12	498
13:45	7	4	273	6	290	4	9	221	4	238	0	1	0	3	4	0	10	1	5	16	548
14:00	17	6	263	7	293	1	6	227	1	235	0	2	0	4	6	0	5	0	8	13	547
14:15	7	2	258	4	271	4	5	259	4	272	0	1	0	2	3	0	7	0	11	18	564
14:30	10	6	245	5	266	4	12	265	5	286	0	3	0	8	11	0	6	0	7	13	576
14:45	7	5	268	8	288	1	5	298	3	307	0	4	0	5	9	0	8	1	4	13	617
15:00	9	7	295	7	318	1	7	334	5	347	0	1	0	12	13	0	6	0	8	14	692
15:15	14	4	306	7	331	1	11	282	9	303	0	2	0	8	10	0	4	0	13	17	661
15:30	17	9	308	9	343	1	12	296	2	311	0	1	0	6	7	0	2	0	10	12	673
15:45	19	10	323	14	366	2	13	307	5	327	0	4	0	7	11	0	9	0	12	21	725
16:00	**21**	**8**	**323**	**9**	**361**	**1**	**7**	**359**	**5**	**372**	**0**	**1**	**0**	**6**	**7**	**0**	**7**	**1**	**29**	**37**	**777**
16:15	**41**	**10**	**325**	**10**	**386**	**0**	**7**	**349**	**5**	**361**	**0**	**3**	**0**	**4**	**7**	**0**	**10**	**0**	**19**	**29**	**783**
16:30	**35**	**12**	**341**	**16**	**404**	**4**	**9**	**391**	**13**	**417**	**0**	**3**	**0**	**9**	**12**	**0**	**7**	**0**	**24**	**31**	**864**
16:45	**22**	**5**	**332**	**12**	**371**	**1**	**10**	**368**	**6**	**385**	**0**	**3**	**0**	**7**	**10**	**0**	**8**	**0**	**11**	**19**	**785**
17:00	14	9	342	7	372	2	10	347	4	363	0	5	0	10	15	0	8	0	15	23	773
17:15	14	11	309	12	346	0	6	358	10	374	0	6	1	7	14	0	12	0	10	22	756
17:30	16	3	332	4	355	1	11	356	9	377	0	2	0	12	14	0	11	0	8	19	765
17:45	20	4	325	12	361	1	11	345	3	360	0	2	0	11	13	0	4	1	10	15	749
18:00	17	8	360	12	397	1	6	318	9	334	0	2	0	2	4	0	10	0	8	18	753
18:15	17	10	309	7	343	4	11	331	9	355	0	1	0	10	11	0	9	0	5	14	723
18:30	15	7	305	11	338	0	9	349	6	364	0	6	0	7	13	0	8	0	7	15	730
18:45	21	16	311	10	358	3	4	300	8	315	0	6	0	15	21	0	12	0	9	21	715
TOTAL	**718**	**256**	**13865**	**313**	**15152**	**92**	**318**	**13360**	**214**	**13984**	**0**	**172**	**7**	**354**	**533**	**0**	**434**	**10**	**511**	**955**	**30624**
AM Peak Vol	43	14	1162	16	1235	9	18	1028	13	1068	0	23	0	39	62	0	55	0	65	120	2485
PM Peak Vol	119	35	1321	47	1522	6	33	1467	29	1535	0	10	0	26	36	0	32	1	83	116	3209

Montgomery County Department of Transportation
Division of Traffic Engineering & Operations
Turning Movement Counts - Field Sheet

MCV Associates, Inc.
4605-C Pinecrest Office Park Drive
Alexandria VA 22312-1442

Request No: WO# 1317
Location: Georgia Ave (MD 97) @ Driveway
Date: 9/29/2021 Wednesday
Recorder:
Interval (dd) : 15 (In Minutes)

County: Montgomery
Town: Aspen Hill
Weather: Sunny

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-7:00PM	Start	End	Volume	LOS	V/C
		07:15	08:15	2485	A	0.38		16:00	17:00	3209	A	0.52

PEDESTRIANS & BICYCLES

Street Name	North Leg: Georgia Ave (MD 97)				South Leg: Georgia Ave (MD 97)				East Leg: Driveway				West Leg: Ralph Road			
Hour	Pedestrians		Bicycles		Pedestrians		Bicycles		Pedestrians		Bicycles		Pedestrians		Bicycles	
Ending	East-West	West-East	East-West	West-East	East-West	West-East	East-West	West-East	South-North	North-South	South-North	North-South	South-North	North-South	South-North	North-South
06:00	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	0
06:15	2	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
06:30	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0
06:45	1	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1
07:00	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
07:15	**1**	**0**	0	0	**2**	0	0	0	**3**	0	1	0	**0**	0	0	0
07:30	**2**	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0
07:45	**1**	**0**	0	0	**1**	0	0	0	**3**	0	0	0	**1**	0	0	0
08:00	**2**	**0**	0	0	**1**	0	0	0	**1**	0	0	0	**0**	0	0	0
08:15	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
08:30	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0
08:45	1	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0
09:00	3	0	0	0	4	0	0	0	1	1	0	0	1	0	0	0
09:15	0	1	0	0	0	0	0	0	4	0	0	0	1	0	0	0
09:30	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0
09:45	0	1	0	0	0	0	0	0	1	3	2	1	2	0	0	0
10:00	2	0	0	1	1	0	0	1	3	3	0	0	4	1	0	1
10:15	2	0	0	0	0	0	0	0	2	1	0	1	0	1	0	0
10:30	2	2	0	0	1	0	0	0	0	3	1	0	2	3	0	0
10:45	2	0	0	0	2	0	0	0	5	0	0	0	0	0	0	0
11:00	1	1	0	0	1	0	0	0	2	5	0	1	0	0	0	0
11:15	3	2	0	0	1	1	0	0	3	2	0	0	1	2	0	0
11:30	0	0	0	0	0	0	0	0	3	1	0	1	0	0	0	0
11:45	0	1	0	0	0	0	0	0	4	3	0	0	1	0	0	0
12:00	1	0	0	0	1	0	0	0	0	2	1	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
12:30	0	0	0	0	0	0	0	0	1	0	1	0	2	0	0	0
12:45	1	0	0	0	1	0	0	0	1	0	0	0	1	3	0	0
13:00	0	0	0	0	0	0	0	0	4	1	0	0	2	0	0	0
13:15	0	2	0	0	0	1	0	0	3	3	0	0	1	1	0	0
13:30	1	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0
13:45	1	0	2	0	1	0	0	0	0	0	0	0	0	1	0	0
14:00	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0
14:15	0	1	0	0	0	0	0	0	2	1	1	0	0	1	0	0
14:30	0	0	0	0	0	0	0	0	4	1	0	0	1	3	1	0
14:45	0	1	0	1	2	0	0	0	3	0	0	1	2	1	1	0
15:00	0	0	0	0	0	0	0	0	2	5	0	0	0	0	0	0
15:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2	1	1
15:30	1	1	0	0	0	0	0	0	4	3	0	0	0	1	0	1
15:45	0	1	0	0	0	0	0	0	1	1	2	0	0	1	0	0
16:00	**0**	**4**	0	0	**0**	0	0	0	**3**	5	1	0	**1**	3	0	0
16:15	**0**	**3**	0	0	**0**	0	0	0	**1**	3	0	0	**0**	0	0	0
16:30	**0**	**0**	0	0	**0**	0	0	0	**4**	0	0	2	**1**	1	0	1
16:45	**0**	**0**	0	0	**0**	1	0	0	**4**	7	0	0	**2**	0	1	0
17:00	0	1	0	0	0	0	0	0	7	3	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	8	6	0	1	1	1	0	1
17:30	0	2	0	1	0	0	0	0	7	4	0	0	0	2	0	0
17:45	0	2	0	0	1	0	0	0	1	5	0	0	1	2	1	0
18:00	0	2	0	1	0	0	0	1	5	1	1	0	1	1	2	0
18:15	0	1	0	0	0	1	0	0	5	2	1	0	1	1	0	0
18:30	0	3	0	0	0	0	0	0	2	2	0	0	1	1	0	1
18:45	0	3	0	0	0	0	0	0	4	3	0	0	1	3	0	0
TOTAL	**33**	**39**	**2**	**4**	**21**	**5**	**0**	**2**	**130**	**86**	**12**	**10**	**35**	**37**	**7**	**7**
AM Peak Vol	5	0	0	0	2	0	0	0	6	0	0	0	1	0	0	0
PM Peak Vol	0	4	0	0	0	1	0	0	16	13	0	2	3	1	1	1

Montgomery County Department of Transportation
Division of Traffic Engineering & Operations
Turning Movement Counts - Field Sheet

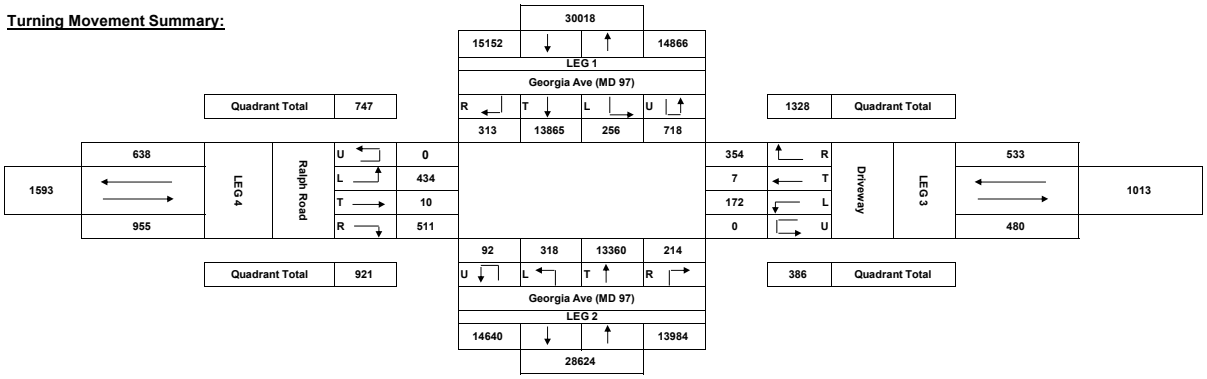
MCV Associates, Inc.
4605-C Pinecrest Office Park Drive
Alexandria VA 22312-1442

Request No:	WO# 1317
Location:	Georgia Ave (MD 97) @ Driveway
Date:	9/29/2021 Wednesday
Recorder:	
Interval (dd) : (In Minutes)	15

County: Montgomery
Town: Aspen Hill
Weather: Sunny

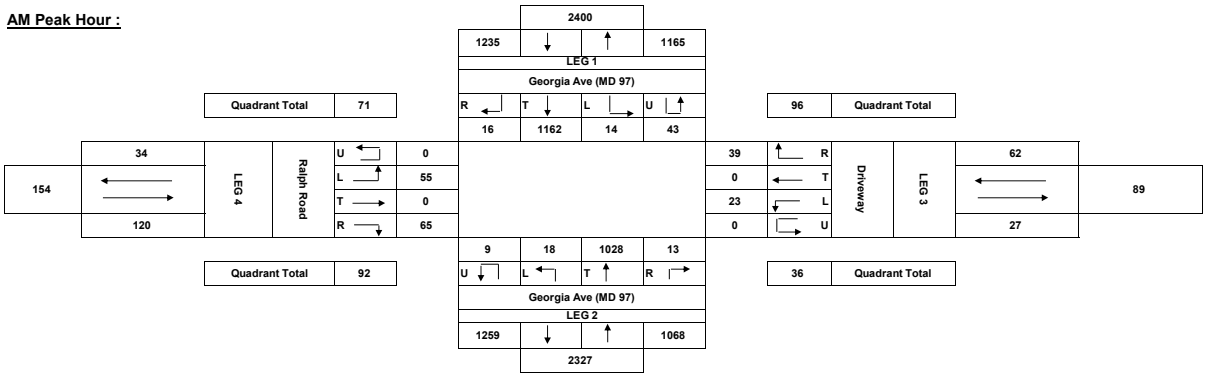
PEAK HOURS	Start	End	Volume	LOS	V/C		Start	End	Volume	LOS	V/C
AM PERIOD 6:00AM-12:00PM	07:15	08:15	2485	A	0.38	PM PERIOD 12:00PM-7:00PM	16:00	17:00	3209	A	0.52

Turning Movement Summary:

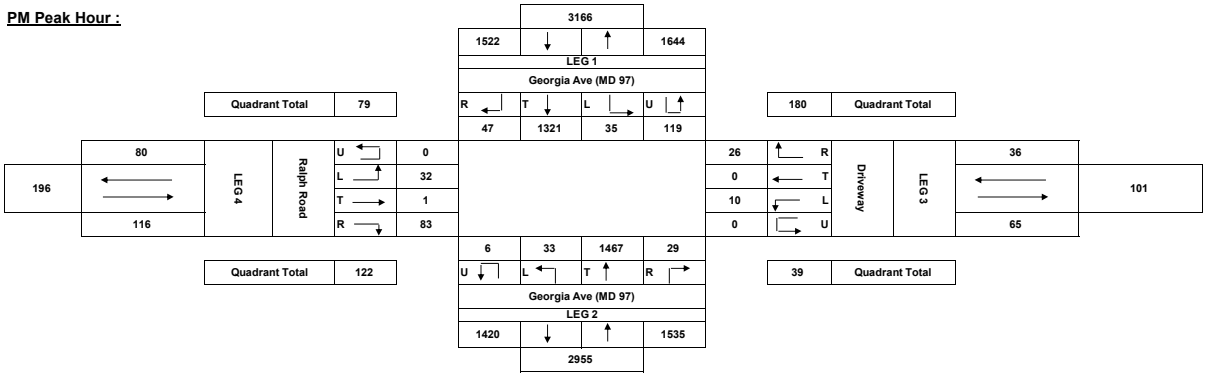


Comments:

AM Peak Hour :



PM Peak Hour :



Montgomery County Department of Transportation
Division of Traffic Engineering & Operations
Turning Movement Counts - Field Sheet

MCV Associates, Inc.
4605-C Pinecrest Office Park Drive
Alexandria VA 22312-1442

Request No: WO# 1317
Location: Georgia Ave (MD 97) @ Hewitt Ave
Date: 9/29/2021 Wednesday
Recorder:
Interval (dd) : 15 (In Minutes)

County: Montgomery
Town: Aspen Hill
Weather: Sunny

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-7:00PM	Start	End	Volume	LOS	V/C
		07:15	08:15	2597	A	0.51		16:30	17:30	3216	B	0.68

Street Name-->	Georgia Ave (MD 97) From North					Georgia Ave (MD 97) From South					Hewitt Ave From East					0 From West					GRAND
HOUR BEGINNING	U turn	Left	Through	Right	Total	U turn	Left	Through	Right	Total	U turn	Left	Through	Right	Total	U turn	Left	Through	Right	Total	TOTAL
06:00	0	11	148	0	159	0	0	97	4	101	0	18	0	29	47	0	0	0	0	0	307
06:15	0	12	160	0	172	0	0	113	17	130	0	22	0	35	57	0	0	0	0	0	359
06:30	0	12	182	0	194	0	0	159	6	165	0	29	0	42	71	0	0	0	0	0	430
06:45	0	18	261	0	279	0	0	159	17	176	0	31	0	43	74	0	0	0	0	0	529
07:00	0	19	285	0	304	0	0	173	24	197	0	60	0	50	110	0	0	0	0	0	611
07:15	**1**	**22**	**279**	**0**	**302**	**0**	**0**	**199**	**18**	**217**	**0**	**48**	**0**	**62**	**110**	**0**	**0**	**0**	**0**	**0**	**629**
07:30	**0**	**27**	**297**	**0**	**324**	**0**	**0**	**213**	**27**	**240**	**0**	**41**	**0**	**49**	**90**	**0**	**0**	**0**	**0**	**0**	**654**
07:45	**1**	**26**	**270**	**0**	**297**	**0**	**0**	**264**	**43**	**307**	**0**	**39**	**0**	**36**	**75**	**0**	**0**	**0**	**0**	**0**	**679**
08:00	**2**	**28**	**296**	**0**	**326**	**0**	**0**	**223**	**24**	**247**	**0**	**31**	**0**	**31**	**62**	**0**	**0**	**0**	**0**	**0**	**635**
08:15	0	30	259	0	289	0	0	199	14	213	0	35	0	49	84	0	0	0	0	0	586
08:30	1	22	267	0	290	0	0	195	15	210	0	26	0	46	72	0	0	0	0	0	572
08:45	0	30	251	0	281	0	0	214	22	236	0	28	0	50	78	0	0	0	0	0	595
09:00	3	28	293	0	324	0	0	229	21	250	0	27	0	51	78	0	0	0	0	0	652
09:15	1	35	242	0	278	0	0	184	9	193	0	31	0	47	78	0	0	0	0	0	549
09:30	0	25	222	0	247	1	0	184	21	206	0	23	0	29	52	0	0	0	0	0	505
09:45	0	23	186	0	209	0	0	190	11	201	0	25	0	17	42	0	0	0	0	0	452
10:00	0	15	200	0	215	1	0	143	6	150	0	20	0	31	51	0	0	0	0	0	416
10:15	0	15	197	0	212	0	0	181	22	203	0	18	0	30	48	0	0	0	0	0	463
10:30	0	18	213	0	231	0	0	169	12	181	0	20	0	28	48	0	0	0	0	0	460
10:45	0	18	212	0	230	0	0	173	14	187	0	11	0	18	29	0	0	0	0	0	446
11:00	1	18	182	0	201	0	0	189	11	200	0	17	0	26	43	0	0	0	0	0	444
11:15	2	24	200	0	226	0	0	193	12	205	0	12	0	23	35	0	0	0	0	0	466
11:30	1	16	201	0	218	0	0	223	13	236	0	15	0	54	69	0	0	0	0	0	523
11:45	0	22	218	0	240	1	0	191	18	210	0	13	0	32	45	0	0	0	0	0	495
12:00	0	25	195	0	220	0	0	205	8	213	0	8	0	26	34	0	0	0	0	0	467
12:15	0	36	232	0	268	0	0	230	20	250	0	15	0	24	39	0	0	0	0	0	557
12:30	2	30	224	0	256	0	0	224	18	242	0	10	0	20	30	0	0	0	0	0	528
12:45	0	30	228	0	258	0	0	208	20	228	0	14	0	31	45	0	0	0	0	0	531
13:00	0	23	216	0	239	0	0	193	23	216	0	21	0	35	56	0	0	0	0	0	511
13:15	0	24	225	0	249	0	0	189	21	210	0	21	0	37	58	0	0	0	0	0	517
13:30	2	33	225	0	260	0	0	193	21	214	0	13	0	31	44	0	0	0	0	0	518
13:45	1	31	248	0	280	1	0	206	22	229	0	16	0	37	53	0	0	0	0	0	562
14:00	1	26	246	0	273	0	0	202	17	219	0	22	0	38	60	0	0	0	0	0	552
14:15	1	35	226	0	262	0	0	231	23	254	0	20	0	36	56	0	0	0	0	0	572
14:30	1	27	236	0	264	0	0	246	25	271	0	21	0	33	54	0	0	0	0	0	589
14:45	0	31	218	0	249	0	0	266	36	302	0	29	0	37	66	0	0	0	0	0	617
15:00	3	34	281	0	318	0	0	317	32	349	0	22	0	31	53	0	0	0	0	0	720
15:15	3	63	254	0	320	1	0	258	39	298	0	35	0	42	77	0	0	0	0	0	695
15:30	3	37	268	0	308	0	0	269	31	300	0	27	0	43	70	0	0	0	0	0	678
15:45	3	51	292	0	346	0	0	285	32	317	0	25	0	45	70	0	0	0	0	0	733
16:00	3	51	289	0	343	0	0	327	42	369	0	28	0	40	68	0	0	0	0	0	780
16:15	2	54	283	0	339	1	0	322	37	360	0	15	0	19	34	0	0	0	0	0	733
16:30	**3**	**53**	**308**	**0**	**364**	**1**	**0**	**354**	**35**	**390**	**0**	**33**	**0**	**64**	**97**	**0**	**0**	**0**	**0**	**0**	**851**
16:45	**2**	**58**	**293**	**0**	**353**	**0**	**0**	**335**	**42**	**377**	**0**	**32**	**0**	**49**	**81**	**0**	**0**	**0**	**0**	**0**	**811**
17:00	**1**	**53**	**299**	**0**	**353**	**0**	**0**	**321**	**46**	**367**	**0**	**34**	**0**	**40**	**74**	**0**	**0**	**0**	**0**	**0**	**794**
17:15	**1**	**41**	**278**	**0**	**320**	**0**	**0**	**331**	**44**	**375**	**0**	**27**	**0**	**38**	**65**	**0**	**0**	**0**	**0**	**0**	**760**
17:30	1	57	278	0	336	0	0	336	51	387	0	37	0	40	77	0	0	0	0	0	800
17:45	0	49	287	0	336	0	0	305	48	353	0	31	0	54	85	0	0	0	0	0	774
18:00	0	57	320	0	377	0	0	309	43	352	0	40	0	34	74	0	0	0	0	0	803
18:15	2	43	278	0	323	0	0	319	39	358	0	31	0	36	67	0	0	0	0	0	748
18:30	0	48	267	0	315	0	0	310	41	351	0	32	0	48	80	0	0	0	0	0	746
18:45	2	58	271	0	331	0	0	281	44	325	0	26	0	31	57	0	0	0	0	0	713
TOTAL	**50**	**1672**	**12786**	**0**	**14508**	**7**	**0**	**12029**	**1301**	**13337**	**0**	**1325**	**0**	**1947**	**3272**	**0**	**0**	**0**	**0**	**0**	**31117**
AM Peak Vol	4	103	1142	0	1249	0	0	899	112	1011	0	159	0	178	337	0	0	0	0	0	2597
PM Peak Vol	7	205	1178	0	1390	1	0	1341	167	1509	0	126	0	191	317	0	0	0	0	0	3216

Montgomery County Department of Transportation
Division of Traffic Engineering & Operations
Turning Movement Counts - Field Sheet

MCV Associates, Inc.
4605-C Pinecrest Office Park Drive
Alexandria VA 22312-1442

Request No: WO# 1317
Location: Georgia Ave (MD 97) @ Hewitt Ave
Date: 9/29/2021 Wednesday
Recorder:
Interval (dd) : 15 (In Minutes)

County: Montgomery
Town: Aspen Hill
Weather: Sunny

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-7:00PM	Start	End	Volume	LOS	V/C
		07:15	08:15	2597	A	0.51		16:30	17:30	3216	B	0.68

PEDESTRIANS & BICYCLES

Street Name	North Leg: Georgia Ave (MD 97)				South Leg: Georgia Ave (MD 97)				East Leg: Hewitt Ave				West Leg: 0			
Hour	Pedestrians		Bicycles		Pedestrians		Bicycles		Pedestrians		Bicycles		Pedestrians		Bicycles	
Ending	East-West	West-East	East-West	West-East	East-West	West-East	East-West	West-East	South-North	North-South	South-North	North-South	South-North	North-South	South-North	North-South
06:00	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
06:15	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	3	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0
06:45	4	1	1	1	0	1	0	1	0	9	0	0	0	0	0	0
07:00	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
07:15	**2**	**1**	1	0	**1**	0	2	0	**0**	1	0	1	**0**	0	0	0
07:30	**1**	**0**	0	0	**1**	0	1	0	**0**	0	0	0	**0**	0	0	0
07:45	**3**	**0**	1	0	**2**	0	0	0	**0**	0	0	0	**0**	0	0	0
08:00	**5**	**1**	0	0	**0**	1	0	0	**1**	0	0	0	**0**	0	0	0
08:15	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
08:30	2	1	0	0	0	2	1	0	2	0	0	0	0	0	0	0
08:45	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0
09:00	7	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0
09:15	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
09:30	5	0	0	0	2	0	0	0	3	2	0	0	0	0	0	0
09:45	2	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0
10:00	3	1	0	0	0	0	1	0	0	2	0	0	0	0	0	0
10:15	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
10:30	3	1	0	0	0	0	0	1	0	2	1	0	0	0	0	0
10:45	6	2	0	0	0	1	0	0	2	0	0	0	0	0	0	0
11:00	3	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0
11:15	2	1	0	0	3	1	0	0	0	0	0	0	0	0	0	0
11:30	0	2	0	0	1	0	0	2	1	0	0	0	0	0	0	0
11:45	0	0	0	0	3	0	0	0	1	0	0	0	0	0	0	0
12:00	1	0	0	0	1	2	1	0	1	0	0	0	0	0	0	0
12:15	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
12:30	3	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0
12:45	2	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0
13:00	0	1	0	0	2	1	0	0	3	0	0	0	0	0	0	0
13:15	2	0	0	0	0	2	2	0	1	0	0	0	0	0	0	0
13:30	2	1	0	0	3	0	0	0	0	3	0	0	0	0	0	0
13:45	1	0	0	0	2	0	1	1	6	0	0	0	0	0	0	0
14:00	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0
14:30	5	2	0	1	1	0	1	0	0	0	0	0	0	0	0	0
14:45	5	3	1	0	0	0	0	7	2	0	0	0	0	0	0	0
15:00	0	0	0	0	1	1	0	0	5	0	0	0	0	0	0	0
15:15	7	3	0	0	0	3	7	1	2	1	0	0	0	0	0	0
15:30	1	1	0	0	0	2	0	0	3	1	0	0	0	0	0	0
15:45	1	1	0	0	0	0	0	2	0	2	0	0	0	0	0	0
16:00	2	1	0	0	1	3	0	2	5	1	1	0	0	0	0	0
16:15	1	6	1	0	1	3	0	1	0	0	0	0	0	0	0	0
16:30	**1**	**5**	0	0	**0**	2	1	1	**2**	0	0	2	**0**	0	0	0
16:45	**7**	**1**	1	0	**3**	0	3	0	**3**	0	0	0	**0**	0	0	0
17:00	**0**	**0**	0	0	**0**	1	1	1	**3**	3	0	1	**0**	0	0	0
17:15	**1**	**1**	1	0	**1**	0	2	0	**4**	0	0	0	**0**	0	0	0
17:30	0	4	0	0	1	0	0	2	3	2	0	0	0	0	0	0
17:45	4	0	1	0	3	3	0	0	1	0	0	0	0	0	0	0
18:00	0	2	0	1	2	0	0	3	0	3	0	0	0	0	0	0
18:15	1	4	1	0	2	0	0	2	0	1	0	0	0	0	0	0
18:30	4	0	0	0	0	1	0	1	2	1	0	1	0	0	0	0
18:45	1	1	0	0	1	0	0	0	1	2	0	0	0	0	0	0
TOTAL	**115**	**53**	**11**	**4**	**42**	**41**	**26**	**29**	**66**	**42**	**3**	**5**	**0**	**0**	**0**	**0**
AM Peak Vol	11	1	1	0	3	2	1	0	1	0	0	0	0	0	0	0
PM Peak Vol	8	6	2	0	5	1	6	3	13	5	0	1	0	0	0	0

Montgomery County Department of Transportation
Division of Traffic Engineering & Operations
Turning Movement Counts - Field Sheet

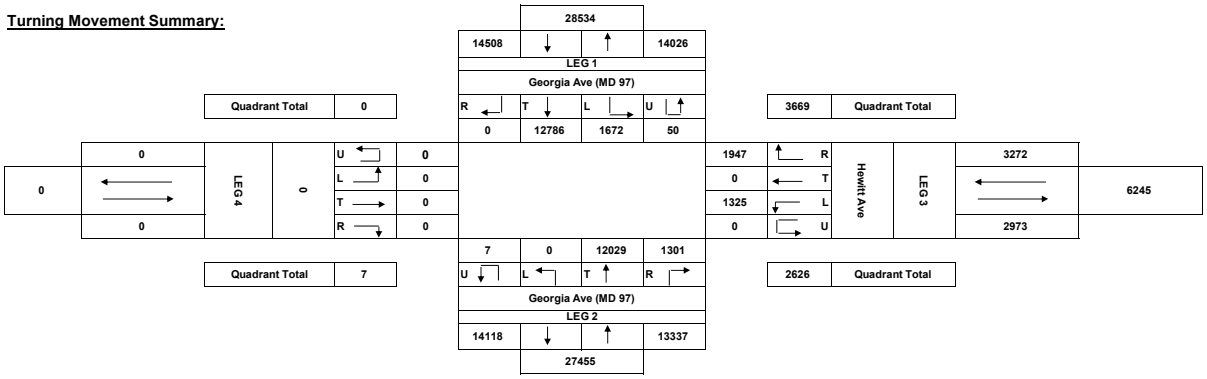
MCV Associates, Inc.
4605-C Pinecrest Office Park Drive
Alexandria VA 22312-1442

Request No:	WO# 1317
Location:	Georgia Ave (MD 97) @ Hewitt Ave
Date:	9/29/2021 Wednesday
Recorder:	
Interval (dd) : (In Minutes)	15

County: Montgomery
Town: Aspen Hill
Weather: Sunny

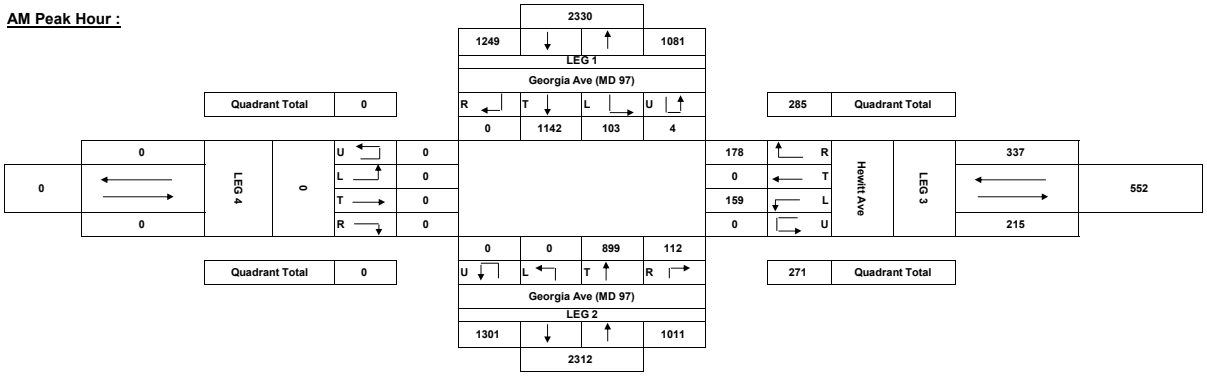
PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-7:00PM	Start	End	Volume	LOS	V/C
		07:15	08:15	2597	A	0.51		16:30	17:30	3216	B	0.68

Turning Movement Summary:

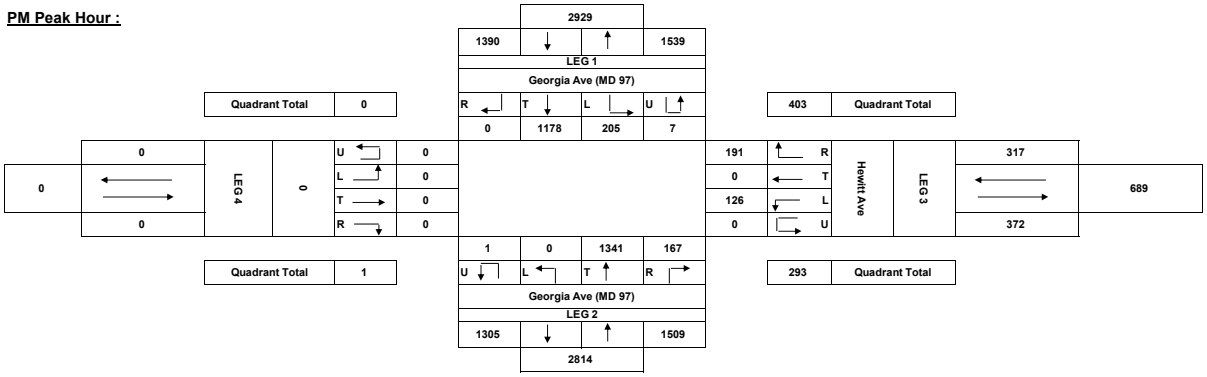


Comments:

AM Peak Hour :



PM Peak Hour :



Maryland Department of Transportation
State Highway Administration
Data Services Division
Volume Detail Report

Location ID: B2742

Location: MD97-.20 MI N OF MD185

County: Montgomery

Date Range: 05/11/2021 **to** 05/12/2021

Week Of: 05/09/2021 Direction:NorthBound

Begin Hour	05/09 Sun	05/10 Mon	05/11 Tue	05/12 Wed	05/13 Thu	05/14 Fri	05/15 Sat	DAILY AVG	WEEKDAY AVG	WEEKEND AVG
0:00	0	0	114	160	0	0	0	137	137	0
1:00	0	0	68	89	0	0	0	79	79	0
2:00	0	0	51	58	0	0	0	55	55	0
3:00	0	0	45	45	0	0	0	45	45	0
4:00	0	0	84	100	0	0	0	92	92	0
5:00	0	0	302	292	0	0	0	297	297	0
6:00	0	0	720	720	0	0	0	720	720	0
7:00	0	0	949	1,014	0	0	0	982	982	0
8:00	0	0	964	996	0	0	0	980	980	0
9:00	0	0	945	963	0	0	0	954	954	0
10:00	0	0	890	1,003	0	0	0	947	947	0
11:00	0	0	974	1,083	0	0	0	1,029	1,029	0
12:00	0	0	1,162	1,260	0	0	0	1,211	1,211	0
13:00	0	0	1,141	1,278	0	0	0	1,210	1,210	0
14:00	0	0	1,309	1,478	0	0	0	1,394	1,394	0
15:00	0	0	1,525	1,734	0	0	0	1,630	1,630	0
16:00	0	0	1,747	1,774	0	0	0	1,761	1,761	0
17:00	0	0	1,632	1,911	0	0	0	1,772	1,772	0
18:00	0	0	1,426	1,667	0	0	0	1,547	1,547	0
19:00	0	0	1,159	1,224	0	0	0	1,192	1,192	0
20:00	0	0	921	1,117	0	0	0	1,019	1,019	0
21:00	0	0	675	814	0	0	0	745	745	0
22:00	0	0	509	563	0	0	0	536	536	0
23:00	0	0	338	367	0	0	0	353	353	0
TOTAL	**0**	**0**	**19,650**	**21,710**	**0**	**0**	**0**	**20,680**	**20,680**	**0**
AM Peak Hour	**0:00**	**0:00**	**12:00**	**12:00**	**0:00**	**0:00**	**0:00**			
6PM-12PM Volume	**0**	**0**	**1,162**	**1,260**	**0**	**0**	**0**			
PM Peak Hour	**0:00**	**0:00**	**16:00**	**17:00**	**0:00**	**0:00**	**0:00**			
PM Peak Volume	**0**	**0**	**1,747**	**1,911**	**0**	**0**	**0**			

Maryland Department of Transportation
State Highway Administration
Data Services Division
Volume Detail Report

Location ID: B2742

Location: MD97-.20 MI N OF MD185

County: Montgomery

Date Range: 05/11/2021 **to** 05/12/2021

Week Of: 05/09/2021 Direction:SouthBound

Begin Hour	05/09 Sun	05/10 Mon	05/11 Tue	05/12 Wed	05/13 Thu	05/14 Fri	05/15 Sat	DAILY AVG	WEEKDAY AVG	WEEKEND AVG
0:00	0	0	101	133	0	0	0	117	117	0
1:00	0	0	57	61	0	0	0	59	59	0
2:00	0	0	52	55	0	0	0	54	54	0
3:00	0	0	73	69	0	0	0	71	71	0
4:00	0	0	179	179	0	0	0	179	179	0
5:00	0	0	469	496	0	0	0	483	483	0
6:00	0	0	1,144	1,195	0	0	0	1,170	1,170	0
7:00	0	0	1,761	1,722	0	0	0	1,742	1,742	0
8:00	0	0	1,739	1,645	0	0	0	1,692	1,692	0
9:00	0	0	1,326	1,394	0	0	0	1,360	1,360	0
10:00	0	0	1,176	1,256	0	0	0	1,216	1,216	0
11:00	0	0	1,178	1,287	0	0	0	1,233	1,233	0
12:00	0	0	1,280	1,322	0	0	0	1,301	1,301	0
13:00	0	0	1,205	1,435	0	0	0	1,320	1,320	0
14:00	0	0	1,257	1,409	0	0	0	1,333	1,333	0
15:00	0	0	1,379	1,471	0	0	0	1,425	1,425	0
16:00	0	0	1,411	1,584	0	0	0	1,498	1,498	0
17:00	0	0	1,494	1,639	0	0	0	1,567	1,567	0
18:00	0	0	1,344	1,356	0	0	0	1,350	1,350	0
19:00	0	0	1,054	1,097	0	0	0	1,076	1,076	0
20:00	0	0	870	1,001	0	0	0	936	936	0
21:00	0	0	626	770	0	0	0	698	698	0
22:00	0	0	446	464	0	0	0	455	455	0
23:00	0	0	266	286	0	0	0	276	276	0
TOTAL	**0**	**0**	**21,887**	**23,326**	**0**	**0**	**0**	**22,607**	**22,607**	**0**
AM Peak Hour	**0:00**	**0:00**	**7:00**	**7:00**	**0:00**	**0:00**	**0:00**			
6PM-12PM Volume	**0**	**0**	**1,761**	**1,722**	**0**	**0**	**0**			
PM Peak Hour	**0:00**	**0:00**	**17:00**	**17:00**	**0:00**	**0:00**	**0:00**			
PM Peak Volume	**0**	**0**	**1,494**	**1,639**	**0**	**0**	**0**			

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

Maryland Department of Transportation
State Highway Administration
Data Services Division
Volume Detail Report

Location ID: B2742

Location: MD97-.20 MI N OF MD185

County: Montgomery

Date Range: 05/11/2021 **to** 05/12/2021

***** Summary Of Total Report *****

Begin Hour	SUN	MON	TUE	WED	THU	FRI	SAT	DAILY AVG	WEEKDAY AVG	WEEKEND AVG
0:00	0	0	215	293	0	0	0	254	254	0
1:00	0	0	125	150	0	0	0	138	138	0
2:00	0	0	103	113	0	0	0	108	108	0
3:00	0	0	118	114	0	0	0	116	116	0
4:00	0	0	263	279	0	0	0	271	271	0
5:00	0	0	771	788	0	0	0	780	780	0
6:00	0	0	1,864	1,915	0	0	0	1,890	1,890	0
7:00	0	0	2,710	2,736	0	0	0	2,723	2,723	0
8:00	0	0	2,703	2,641	0	0	0	2,672	2,672	0
9:00	0	0	2,271	2,357	0	0	0	2,314	2,314	0
10:00	0	0	2,066	2,259	0	0	0	2,163	2,163	0
11:00	0	0	2,152	2,370	0	0	0	2,261	2,261	0
12:00	0	0	2,442	2,582	0	0	0	2,512	2,512	0
13:00	0	0	2,346	2,713	0	0	0	2,530	2,530	0
14:00	0	0	2,566	2,887	0	0	0	2,727	2,727	0
15:00	0	0	2,904	3,205	0	0	0	3,055	3,055	0
16:00	0	0	3,158	3,358	0	0	0	3,258	3,258	0
17:00	0	0	3,126	3,550	0	0	0	3,338	3,338	0
18:00	0	0	2,770	3,023	0	0	0	2,897	2,897	0
19:00	0	0	2,213	2,321	0	0	0	2,267	2,267	0
20:00	0	0	1,791	2,118	0	0	0	1,955	1,955	0
21:00	0	0	1,301	1,584	0	0	0	1,443	1,443	0
22:00	0	0	955	1,027	0	0	0	991	991	0
23:00	0	0	604	653	0	0	0	629	629	0
TOTAL	**0**	**0**	**41,537**	**45,036**	**0**	**0**	**0**	**43,287**	**43,287**	**0**
AM Peak Hour	**0:00**	**0:00**	**7:00**	**7:00**	**0:00**	**0:00**	**0:00**			
6PM-12PM Volume	**0**	**0**	**2,710**	**2,736**	**0**	**0**	**0**			
PM Peak Hour	**0:00**	**0:00**	**16:00**	**17:00**	**0:00**	**0:00**	**0:00**			
PM Peak Volume	**0**	**0**	**3,158**	**3,550**	**0**	**0**	**0**			

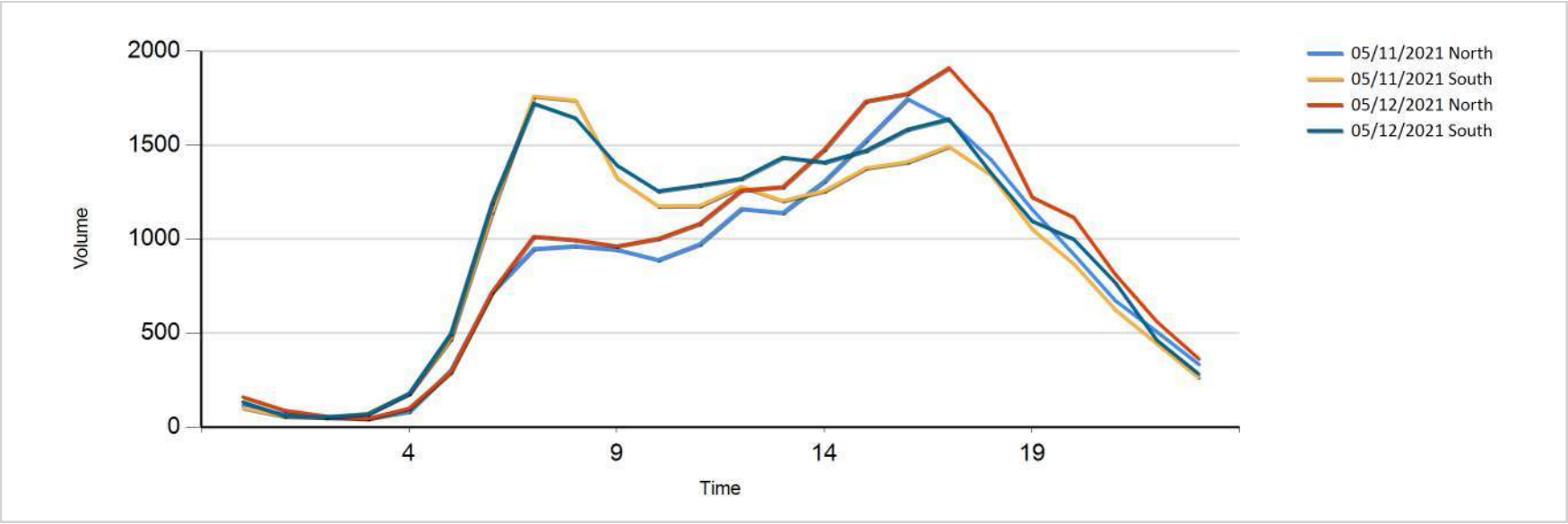
Maryland Department of Transportation
State Highway Administration
Data Services Division
Volume Detail Report

Location ID: B2742

Location: MD97-.20 MI N OF MD185

County: Montgomery

Date Range: 05/11/2021 **to** 05/12/2021



Maryland Department of Transportation
State Highway Administration
Data Services Division
Volume Detail Report

Location ID: B2741

Location: MD97-.20 MI S OF MD185

County: Montgomery

Date Range: 05/11/2021 **to** 05/12/2021

Week Of: 05/09/2021 Direction:NorthBound

Begin Hour	05/09 Sun	05/10 Mon	05/11 Tue	05/12 Wed	05/13 Thu	05/14 Fri	05/15 Sat	DAILY AVG	WEEKDAY AVG	WEEKEND AVG
0:00	0	0	98	125	0	0	0	112	112	0
1:00	0	0	60	68	0	0	0	64	64	0
2:00	0	0	50	47	0	0	0	49	49	0
3:00	0	0	29	31	0	0	0	30	30	0
4:00	0	0	63	83	0	0	0	73	73	0
5:00	0	0	267	273	0	0	0	270	270	0
6:00	0	0	626	639	0	0	0	633	633	0
7:00	0	0	731	765	0	0	0	748	748	0
8:00	0	0	712	717	0	0	0	715	715	0
9:00	0	0	688	691	0	0	0	690	690	0
10:00	0	0	644	693	0	0	0	669	669	0
11:00	0	0	691	751	0	0	0	721	721	0
12:00	0	0	811	845	0	0	0	828	828	0
13:00	0	0	823	808	0	0	0	816	816	0
14:00	0	0	862	965	0	0	0	914	914	0
15:00	0	0	1,050	1,152	0	0	0	1,101	1,101	0
16:00	0	0	1,253	1,169	0	0	0	1,211	1,211	0
17:00	0	0	1,111	1,253	0	0	0	1,182	1,182	0
18:00	0	0	1,108	1,096	0	0	0	1,102	1,102	0
19:00	0	0	878	1,146	0	0	0	1,012	1,012	0
20:00	0	0	722	944	0	0	0	833	833	0
21:00	0	0	514	678	0	0	0	596	596	0
22:00	0	0	383	490	0	0	0	437	437	0
23:00	0	0	231	312	0	0	0	272	272	0
TOTAL	**0**	**0**	**14,405**	**15,741**	**0**	**0**	**0**	**15,073**	**15,073**	**0**
AM Peak Hour	**0:00**	**0:00**	**12:00**	**12:00**	**0:00**	**0:00**	**0:00**			
6PM-12PM Volume	**0**	**0**	**811**	**845**	**0**	**0**	**0**			
PM Peak Hour	**0:00**	**0:00**	**16:00**	**17:00**	**0:00**	**0:00**	**0:00**			
PM Peak Volume	**0**	**0**	**1,253**	**1,253**	**0**	**0**	**0**			

Maryland Department of Transportation
State Highway Administration
Data Services Division
Volume Detail Report

Location ID: B2741

Location: MD97-.20 MI S OF MD185

County: Montgomery

Date Range: 05/11/2021 **to** 05/12/2021

Week Of: 05/09/2021 Direction:SouthBound

Begin Hour	05/09 Sun	05/10 Mon	05/11 Tue	05/12 Wed	05/13 Thu	05/14 Fri	05/15 Sat	DAILY AVG	WEEKDAY AVG	WEEKEND AVG
0:00	0	0	72	121	0	0	0	97	97	0
1:00	0	0	55	55	0	0	0	55	55	0
2:00	0	0	38	36	0	0	0	37	37	0
3:00	0	0	38	42	0	0	0	40	40	0
4:00	0	0	117	104	0	0	0	111	111	0
5:00	0	0	269	275	0	0	0	272	272	0
6:00	0	0	640	723	0	0	0	682	682	0
7:00	0	0	957	955	0	0	0	956	956	0
8:00	0	0	1,002	945	0	0	0	974	974	0
9:00	0	0	801	823	0	0	0	812	812	0
10:00	0	0	769	843	0	0	0	806	806	0
11:00	0	0	813	865	0	0	0	839	839	0
12:00	0	0	802	911	0	0	0	857	857	0
13:00	0	0	884	1,007	0	0	0	946	946	0
14:00	0	0	837	979	0	0	0	908	908	0
15:00	0	0	1,020	1,013	0	0	0	1,017	1,017	0
16:00	0	0	1,062	1,043	0	0	0	1,053	1,053	0
17:00	0	0	1,113	961	0	0	0	1,037	1,037	0
18:00	0	0	1,070	875	0	0	0	973	973	0
19:00	0	0	842	630	0	0	0	736	736	0
20:00	0	0	686	702	0	0	0	694	694	0
21:00	0	0	521	585	0	0	0	553	553	0
22:00	0	0	396	472	0	0	0	434	434	0
23:00	0	0	239	339	0	0	0	289	289	0
TOTAL	**0**	**0**	**15,043**	**15,304**	**0**	**0**	**0**	**15,174**	**15,174**	**0**
AM Peak Hour	**0:00**	**0:00**	**8:00**	**7:00**	**0:00**	**0:00**	**0:00**			
6PM-12PM Volume	**0**	**0**	**1,002**	**955**	**0**	**0**	**0**			
PM Peak Hour	**0:00**	**0:00**	**17:00**	**16:00**	**0:00**	**0:00**	**0:00**			
PM Peak Volume	**0**	**0**	**1,113**	**1,043**	**0**	**0**	**0**			

Maryland Department of Transportation
State Highway Administration
Data Services Division
Volume Detail Report

Location ID: B2741

Location: MD97-.20 MI S OF MD185

County: Montgomery

Date Range: 05/11/2021 **to** 05/12/2021

***** Summary Of Total Report *****

Begin Hour	SUN	MON	TUE	WED	THU	FRI	SAT	DAILY AVG	WEEKDAY AVG	WEEKEND AVG
0:00	0	0	170	246	0	0	0	208	208	0
1:00	0	0	115	123	0	0	0	119	119	0
2:00	0	0	88	83	0	0	0	86	86	0
3:00	0	0	67	73	0	0	0	70	70	0
4:00	0	0	180	187	0	0	0	184	184	0
5:00	0	0	536	548	0	0	0	542	542	0
6:00	0	0	1,266	1,362	0	0	0	1,314	1,314	0
7:00	0	0	1,688	1,720	0	0	0	1,704	1,704	0
8:00	0	0	1,714	1,662	0	0	0	1,688	1,688	0
9:00	0	0	1,489	1,514	0	0	0	1,502	1,502	0
10:00	0	0	1,413	1,536	0	0	0	1,475	1,475	0
11:00	0	0	1,504	1,616	0	0	0	1,560	1,560	0
12:00	0	0	1,613	1,756	0	0	0	1,685	1,685	0
13:00	0	0	1,707	1,815	0	0	0	1,761	1,761	0
14:00	0	0	1,699	1,944	0	0	0	1,822	1,822	0
15:00	0	0	2,070	2,165	0	0	0	2,118	2,118	0
16:00	0	0	2,315	2,212	0	0	0	2,264	2,264	0
17:00	0	0	2,224	2,214	0	0	0	2,219	2,219	0
18:00	0	0	2,178	1,971	0	0	0	2,075	2,075	0
19:00	0	0	1,720	1,776	0	0	0	1,748	1,748	0
20:00	0	0	1,408	1,646	0	0	0	1,527	1,527	0
21:00	0	0	1,035	1,263	0	0	0	1,149	1,149	0
22:00	0	0	779	962	0	0	0	871	871	0
23:00	0	0	470	651	0	0	0	561	561	0
TOTAL	**0**	**0**	**29,448**	**31,045**	**0**	**0**	**0**	**30,247**	**30,247**	**0**
AM Peak Hour	**0:00**	**0:00**	**8:00**	**12:00**	**0:00**	**0:00**	**0:00**			
6PM-12PM Volume	**0**	**0**	**1,714**	**1,756**	**0**	**0**	**0**			
PM Peak Hour	**0:00**	**0:00**	**16:00**	**17:00**	**0:00**	**0:00**	**0:00**			
PM Peak Volume	**0**	**0**	**2,315**	**2,214**	**0**	**0**	**0**			

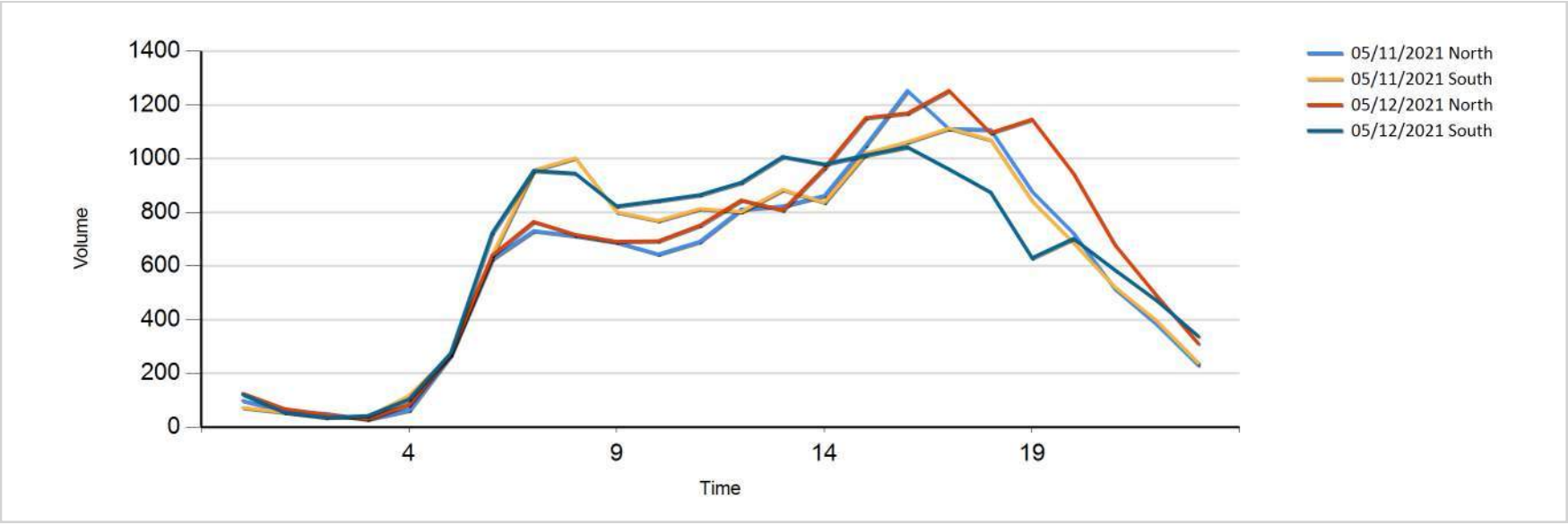
Maryland Department of Transportation
State Highway Administration
Data Services Division
Volume Detail Report

Location ID: B2741

Location: MD97-.20 MI S OF MD185

County: Montgomery

Date Range: 05/11/2021 **to** 05/12/2021



APPENDIX B – Speed Data Materials

USLIMITS2 Speed Zoning Report

Project Overview

Project Name: Georgia97HIN-North

Analyst: Will Wu

Date: 2022-06-27

Basic Project Information
Route Name: MD 97 Georgia Avenue
From: Bel Pre Road
To: Connecticut Avenue
State: Maryland
County: Montgomery County
City: Aspen Hill CDP
Route Type: Road Section in Developed Area
Route Status: Existing

Crash Data Information
Crash Data Years: 7.00
Crash AADT: 43287 veh/day
Total Number of Crashes: 297
Total Number of Injury Crashes: 145
Section Crash Rate: 401 per 100 MVM
Section Injury Crash Rate: 196 per 100 MVM
Crash Rate Average for Similar Roads: 188
Injury Rate Average for Similar Roads: 72

Roadway Information
Section Length: .67 mile(s)
Statutory Speed Limit: 55 mph
Existing Speed Limit: 45 mph
Adverse Alignment: No
One-Way Street: No
Divided/Undivided: Divided
Number of Through Lanes: 6
Area Type: Commercial
Number of Driveways: 9
Number of Signals: 3

Traffic Information
85th Percentile Speed: 48 mph
50th Percentile Speed: 41 mph
AADT: 43287 veh/day
On Street Parking and Usage: Not High
Pedestrian / Bicyclist Activity: High

Project Description: Speed evaluation. Georgia Avenue north of Connecticut Avenue.

Recommended Speed Limit:

Note: The section crash rate of 401 per 100 MVM is above the critical rate (214). The injury crash rate for the section of 196 per 100 MVM is above the critical rate (89). A comprehensive crash study should be undertaken to identify engineering and traffic control deficiencies and appropriate corrective actions. The speed limit should only be reduced as a last measure after all other treatments have either been tried or ruled out.

Note: The road section is in an area with high pedestrian or bicycle activity. Consider implementing engineering measures to reduce speeds before lowering the recommended speed limit. See Engineering Countermeasures for Speed Management and PedSafe for more guidance.

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Equations Used in the Crash Data Calculations

Exposure (M)
M = (Section AADT * 365 * Section Length * Duration of Crash Data) / (100000000)
M = (43287 * 365 * .67 * 7.00) / (100000000)
M = 0.7410

Crash Rate (Rc)
Rc = (Section Crash Average * 100000000) / (Section AADT * 365 * Section Length)
Rc = (42.43 * 100000000) / (43287 * 365 * .67)
Rc = 400.81 crashes per 100 MVM

Injury Rate (Ri)
Ri = (Section Injury Crash Average * 100000000) / (Section AADT * 365 * Section Length)
Ri = (20.71 * 100000000) / (43287 * 365 * .67)
Ri = 195.68 injuries per 100 MVM

Critical Crash Rate (Cc)
Cc = Crash Average of Similar Sections + 1.645 * (Crash Average of Similar Sections / Exposure) ^ (1/2) + (1 / (2 * Exposure))
Cc = 187.61 + 1.645 * (187.61 / 0.7410) ^ (1/2) + (1 / (2 * 0.7410))
Cc = 214.46 crashes per 100 MVM

Critical Injury Rate (Ic)
Ic = Injury Crash Average of Similar Sections + 1.645 * (Injury Crash Average of Similar Sections / Exposure) ^ (1/2) + (1 / (2 * Exposure))
Ic = 71.73 + 1.645 * (71.73 / 0.7410) ^ (1/2) + (1 / (2 * 0.7410))
Ic = 88.59 injuries per 100 MVM

USLIMITS2 Speed Zoning Report

Project Overview

Project Name: Georgia97HIN-South

Analyst: Will Wu

Date: 2022-06-27

Basic Project Information
Route Name: MD 97 Georgia Avenue
From: Connecticut Avenue
To: Hewitt Avenue
State: Maryland
County: Montgomery County
City: Aspen Hill CDP
Route Type: Road Section in Developed Area
Route Status: Existing

Crash Data Information
Crash Data Years: 7.00
Crash AADT: 30247 veh/day
Total Number of Crashes: 218
Total Number of Injury Crashes: 104
Section Crash Rate: 486 per 100 MVM
Section Injury Crash Rate: 232 per 100 MVM
Crash Rate Average for Similar Roads: 242
Injury Rate Average for Similar Roads: 86

Roadway Information
Section Length: .58 mile(s)
Statutory Speed Limit: 55 mph
Existing Speed Limit: 35 mph
Adverse Alignment: No
One-Way Street: No
Divided/Undivided: Divided
Number of Through Lanes: 6
Area Type:
Number of Driveways: 15
Number of Signals: 3

Traffic Information
85th Percentile Speed: 42 mph
50th Percentile Speed: 37 mph
AADT: 30247 veh/day
On Street Parking and Usage: Not High
Pedestrian / Bicyclist Activity: High

Project Description: Speed evaluation. Georgia Avenue south of Connecticut Avenue.

Recommended Speed Limit:

Note: The section crash rate of 486 per 100 MVM is above the critical rate (281). The injury crash rate for the section of 232 per 100 MVM is above the critical rate (109). A comprehensive crash study should be undertaken to identify engineering and traffic control deficiencies and appropriate corrective actions. The speed limit should only be reduced as a last measure after all other treatments have either been tried or ruled out.

Note: The road section is in an area with high pedestrian or bicycle activity. Consider implementing engineering measures to reduce speeds before lowering the recommended speed limit. See Engineering Countermeasures for Speed Management and PedSafe for more guidance.

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Equations Used in the Crash Data Calculations

Exposure (M)
M = (Section AADT * 365 * Section Length * Duration of Crash Data) / (100000000)
M = (30247 * 365 * .58 * 7.00) / (100000000)
M = 0.4482

Crash Rate (Rc)
Rc = (Section Crash Average * 100000000) / (Section AADT * 365 * Section Length)
Rc = (31.14 * 100000000) / (30247 * 365 * .58)
Rc = 486.36 crashes per 100 MVM

Injury Rate (Ri)
Ri = (Section Injury Crash Average * 100000000) / (Section AADT * 365 * Section Length)
Ri = (14.86 * 100000000) / (30247 * 365 * .58)
Ri = 232.02 injuries per 100 MVM

Critical Crash Rate (Cc)
Cc = Crash Average of Similar Sections + 1.645 * (Crash Average of Similar Sections / Exposure) ^ (1/2) + (1 / (2 * Exposure))
Cc = 242.05 + 1.645 * (242.05 / 0.4482) ^ (1/2) + (1 / (2 * 0.4482))
Cc = 281.39 crashes per 100 MVM

Critical Injury Rate (Ic)
Ic = Injury Crash Average of Similar Sections + 1.645 * (Injury Crash Average of Similar Sections / Exposure) ^ (1/2) + (1 / (2 * Exposure))
Ic = 85.60 + 1.645 * (85.60 / 0.4482) ^ (1/2) + (1 / (2 * 0.4482))
Ic = 109.44 injuries per 100 MVM

Count Name MD 97 NB - 300' south of Wendy Ln - Ln 1 and 2
Start Date 3/22/2022
Start Time 0:00
Site Code 0097211
Station ID

Date	Time	0 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100	>100 to 110	> 110	Total
3/22/2022	00:00	0	0	0	2	1	0	0	0	0	0	0	0	3
3/22/2022	00:15	1	6	2	2	2	0	0	0	0	0	0	0	13
3/22/2022	00:30	0	0	3	2	3	1	0	0	0	0	0	0	9
3/22/2022	00:45	1	0	1	1	3	0	0	0	0	0	0	0	6
3/22/2022	01:00	0	1	0	1	1	0	0	0	0	0	0	0	3
3/22/2022	01:15	0	1	1	3	1	0	0	0	0	0	0	0	6
3/22/2022	01:30	1	0	1	2	0	0	0	0	0	0	0	0	4
3/22/2022	01:45	0	1	2	3	0	0	0	0	0	0	0	0	6
3/22/2022	02:00	1	1	0	0	0	0	0	0	0	0	0	0	2
3/22/2022	02:15	0	1	2	0	1	0	0	0	0	0	0	0	4
3/22/2022	02:30	0	0	2	1	1	0	0	0	0	0	0	0	4
3/22/2022	02:45	0	0	1	0	0	0	0	0	0	0	0	0	1
3/22/2022	03:00	0	1	1	0	0	0	0	0	0	0	0	0	2
3/22/2022	03:15	0	0	0	0	0	0	0	0	0	0	0	0	0
3/22/2022	03:30	0	0	0	0	2	0	0	0	0	0	0	0	2
3/22/2022	03:45	0	1	0	3	2	0	0	0	0	0	0	0	6
3/22/2022	04:00	0	1	0	3	0	0	0	0	0	0	0	0	4
3/22/2022	04:15	0	2	1	0	0	0	0	0	0	0	0	0	3
3/22/2022	04:30	0	1	0	0	0	0	0	0	0	0	0	0	1
3/22/2022	04:45	0	2	3	2	2	1	0	0	0	0	0	0	10
3/22/2022	05:00	1	2	0	2	1	1	0	0	0	0	0	0	7
3/22/2022	05:15	2	1	3	4	3	2	0	0	0	0	0	0	15
3/22/2022	05:30	1	1	3	5	5	0	0	0	0	0	0	0	15
3/22/2022	05:45	0	5	3	6	5	1	0	0	0	0	0	0	20
3/22/2022	06:00	0	8	5	8	9	2	0	0	0	0	0	0	32
3/22/2022	06:15	0	7	10	9	4	3	0	0	0	0	0	0	33
3/22/2022	06:30	0	4	10	20	9	1	0	0	0	0	0	0	44
3/22/2022	06:45	0	3	14	14	5	0	0	0	0	0	0	0	36
3/22/2022	07:00	1	5	17	16	12	2	0	0	0	0	0	0	53
3/22/2022	07:15	0	8	14	23	11	0	0	0	0	0	0	0	56
3/22/2022	07:30	0	8	14	25	10	1	1	0	0	0	0	0	59
3/22/2022	07:45	2	10	19	31	14	1	0	0	0	0	0	0	77
3/22/2022	08:00	1	4	17	13	17	5	1	0	0	0	0	0	58
3/22/2022	08:15	1	6	13	26	15	3	0	0	0	0	0	0	64
3/22/2022	08:30	0	9	13	19	10	1	0	0	0	0	0	0	52
3/22/2022	08:45	0	3	19	28	9	1	0	0	0	0	0	0	60
3/22/2022	09:00	3	12	15	20	5	0	0	0	0	0	0	0	55
3/22/2022	09:15	1	8	27	25	8	0	0	0	0	0	0	0	69
3/22/2022	09:30	0	3	19	19	6	4	0	0	0	0	0	0	51
3/22/2022	09:45	1	10	16	12	5	0	0	0	0	0	0	0	44
3/22/2022	10:00	3	2	14	17	6	0	0	0	0	0	0	1	43
3/22/2022	10:15	2	5	24	11	6	0	0	0	0	0	0	0	48
3/22/2022	10:30	1	7	14	12	13	1	0	0	0	0	0	0	48
3/22/2022	10:45	0	5	16	21	7	0	0	0	0	0	0	0	49
3/22/2022	11:00	0	6	18	21	2	0	0	0	0	0	0	0	47
3/22/2022	11:15	1	5	16	16	7	0	0	0	0	0	0	0	45
3/22/2022	11:30	1	10	25	18	9	0	0	0	0	0	0	0	63
3/22/2022	11:45	0	10	22	16	7	2	0	0	0	0	0	0	57
3/22/2022	12:00	0	9	28	23	9	0	0	0	1	0	0	0	70
3/22/2022	12:15	0	14	25	18	8	0	0	0	0	0	0	0	65
3/22/2022	12:30	1	15	35	14	4	2	0	0	0	0	0	0	71
3/22/2022	12:45	2	14	17	12	4	0	0	0	0	0	0	0	49
3/22/2022	13:00	1	11	36	36	6	0	0	0	0	0	0	0	90
3/22/2022	13:15	0	13	22	15	1	0	0	0	0	0	0	0	51
3/22/2022	13:30	1	16	16	17	8	1	0	0	0	0	0	0	59
3/22/2022	13:45	1	11	13	13	9	2	0	0	0	0	0	0	49
3/22/2022	14:00	0	7	22	14	6	0	1	0	0	0	0	0	50
3/22/2022	14:15	1	13	27	17	6	0	0	0	0	0	0	0	64
3/22/2022	14:30	2	8	29	25	4	0	0	0	0	0	0	0	68
3/22/2022	14:45	1	11	29	15	7	0	0	0	0	0	0	0	63
3/22/2022	15:00	0	7	23	31	13	0	0	0	0	0	0	0	74
3/22/2022	15:15	1	19	29	17	10	1	0	0	0	0	0	0	77
3/22/2022	15:30	1	21	37	33	5	1	0	0	0	0	0	0	98
3/22/2022	15:45	0	17	25	21	5	2	0	0	0	0	0	0	70
3/22/2022	16:00	0	12	41	25	7	1	0	0	0	0	0	0	86
3/22/2022	16:15	1	19	30	27	8	1	0	0	0	0	0	0	86
3/22/2022	16:30	0	12	35	37	11	0	0	0	0	0	0	0	95
3/22/2022	16:45	5	32	44	21	2	0	0	0	0	0	0	0	104
3/22/2022	17:00	1	17	43	29	4	0	0	0	0	0	0	0	94
3/22/2022	17:15	0	22	45	14	2	2	0	0	0	0	0	0	85
3/22/2022	17:30	0	23	47	25	6	2	0	0	0	0	0	0	103
3/22/2022	17:45	0	16	40	28	5	0	0	0	0	0	0	0	89
3/22/2022	18:00	3	25	51	18	6	0	0	0	0	0	0	0	103
3/22/2022	18:15	2	20	39	24	4	0	0	0	0	0	0	0	89
3/22/2022	18:30	1	23	33	34	2	2	0	0	0	0	0	0	95
3/22/2022	18:45	1	28	41	19	5	2	0	0	0	0	0	0	96
3/22/2022	19:00	1	21	37	12	1	1	0	0	0	0	0	0	73
3/22/2022	19:15	2	25	35	17	2	0	0	0	0	0	0	0	81
3/22/2022	19:30	2	23	30	19	2	0	0	0	0	0	0	0	76
3/22/2022	19:45	3	14	27	13	2	0	0	0	0	0	0	0	59
3/22/2022	20:00	0	18	27	14	5	0	0	0	0	0	0	0	64
3/22/2022	20:15	3	14	21	18	2	1	0	0	0	0	0	0	59
3/22/2022	20:30	0	10	21	15	3	0	0	0	0	0	0	0	49
3/22/2022	20:45	0	5	18	12	7	0	0	0	0	0	0	0	42
3/22/2022	21:00	0	9	11	8	5	1	0	0	0	0	0	0	34
3/22/2022	21:15	1	5	10	17	10	1	0	0	0	0	0	0	44
3/22/2022	21:30	0	3	5	5	6	2	0	0	0	0	0	0	21
3/22/2022	21:45	1	5	6	13	7	0	0	0	0	0	0	0	32
3/22/2022	22:00	0	4	6	10	8	0	0	0	0	0	0	0	28
3/22/2022	22:15	0	7	4	17	2	0	0	0	0	0	0	0	30
3/22/2022	22:30	0	3	2	7	10	1	0	0	0	0	0	0	23
3/22/2022	22:45	0	1	2	10	4	0	0	0	0	0	0	0	17
3/22/2022	23:00	0	4	4	7	4	1	0	0	0	0	0	0	20
3/22/2022	23:15	0	1	2	3	3	2	1	0	0	0	0	0	12
3/22/2022	23:30	0	2	1	7	1	2	0	0	0	0	0	0	13
3/22/2022	23:45	0	0	2	6	3	0	0	0	0	0	0	0	11
Complete Day		65	815	1593	1334	493	64	4	0	1	0	0	1	4370

Count Name MD 97 NB - 300' south of Wendy Ln - Ln 1 and 2
Start Date 3/22/2022
Start Time 0:00
Site Code 0097211
Station ID

Date	Time	0 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100	>100 to 110	> 110	Total
3/22/2022	00:00	1	0	1	6	12	2	1	0	0	0	0	0	23
3/22/2022	00:15	1	3	4	7	4	1	0	0	0	0	0	0	20
3/22/2022	00:30	1	1	0	10	5	1	0	0	1	0	0	0	19
3/22/2022	00:45	1	1	0	8	5	1	0	0	0	0	0	0	16
3/22/2022	01:00	1	2	3	3	12	1	0	0	0	0	0	0	22
3/22/2022	01:15	0	1	1	3	4	0	1	0	0	0	0	0	10
3/22/2022	01:30	1	0	0	4	2	0	1	0	0	0	0	0	8
3/22/2022	01:45	1	0	0	2	1	2	2	0	0	0	0	0	8
3/22/2022	02:00	0	1	1	3	1	0	0	0	0	0	0	0	6
3/22/2022	02:15	0	1	2	6	5	0	0	0	0	0	0	0	14
3/22/2022	02:30	0	3	2	2	0	1	0	0	0	0	0	0	8
3/22/2022	02:45	1	1	1	6	3	1	0	0	0	0	0	0	13
3/22/2022	03:00	1	1	0	0	2	0	0	0	0	0	0	0	4
3/22/2022	03:15	0	1	0	1	4	2	1	0	0	0	0	0	9
3/22/2022	03:30	1	0	0	0	2	0	0	0	0	0	0	0	3
3/22/2022	03:45	0	1	0	2	2	0	1	0	0	0	0	0	6
3/22/2022	04:00	0	1	2	3	5	1	2	0	0	0	0	0	14
3/22/2022	04:15	0	3	0	5	6	0	0	1	0	0	0	0	15
3/22/2022	04:30	1	2	3	6	5	2	0	0	0	0	0	0	19
3/22/2022	04:45	0	4	0	3	10	5	0	0	0	0	0	0	22
3/22/2022	05:00	1	4	3	6	7	1	1	0	0	0	0	0	23
3/22/2022	05:15	2	4	2	9	16	5	0	0	0	0	0	0	38
3/22/2022	05:30	1	3	2	16	15	2	1	0	0	0	0	0	40
3/22/2022	05:45	2	5	5	21	24	2	0	0	0	0	0	0	59
3/22/2022	06:00	2	8	4	21	27	1	0	0	0	0	0	0	63
3/22/2022	06:15	2	8	6	22	30	4	0	2	0	0	0	0	74
3/22/2022	06:30	2	10	5	43	27	1	0	0	0	0	0	0	88
3/22/2022	06:45	1	7	10	31	30	4	1	0	0	0	0	0	84
3/22/2022	07:00	2	4	3	33	35	3	0	0	0	0	0	0	80
3/22/2022	07:15	2	5	10	49	37	9	0	0	0	0	0	0	112
3/22/2022	07:30	0	5	15	64	23	6	0	1	0	0	0	0	114
3/22/2022	07:45	1	8	8	69	35	5	0	0	0	0	0	0	126
3/22/2022	08:00	3	3	13	54	36	3	1	0	0	0	0	0	113
3/22/2022	08:15	1	4	4	49	41	1	0	0	0	0	0	0	100
3/22/2022	08:30	4	7	7	46	29	4	1	0	0	0	0	0	98
3/22/2022	08:45	1	4	3	32	33	5	1	0	0	0	0	0	79
3/22/2022	09:00	2	4	16	45	33	3	0	0	0	0	0	0	103
3/22/2022	09:15	1	6	6	58	27	3	1	0	0	0	0	0	102
3/22/2022	09:30	3	3	3	38	35	1	0	0	0	0	0	0	83
3/22/2022	09:45	3	10	5	44	16	4	0	0	0	0	0	0	82
3/22/2022	10:00	2	2	2	43	26	0	0	0	0	0	0	0	75
3/22/2022	10:15	2	6	7	26	18	3	0	0	0	0	0	0	62
3/22/2022	10:30	1	11	5	40	21	3	0	0	0	0	0	0	81
3/22/2022	10:45	1	5	7	45	21	2	0	0	0	0	0	0	81
3/22/2022	11:00	1	5	5	20	19	3	0	0	0	0	0	0	53
3/22/2022	11:15	1	4	6	36	14	3	0	0	0	0	0	0	64
3/22/2022	11:30	4	7	7	48	19	2	0	0	0	0	0	0	87
3/22/2022	11:45	0	8	7	29	29	4	0	0	0	0	0	0	77
3/22/2022	12:00	0	3	5	28	29	5	0	0	0	0	0	0	70
3/22/2022	12:15	4	5	10	46	17	0	0	0	0	0	0	0	82
3/22/2022	12:30	1	5	4	40	27	2	0	0	0	0	0	0	79
3/22/2022	12:45	2	5	4	34	22	1	0	0	0	0	0	0	68
3/22/2022	13:00	2	4	9	52	17	5	0	0	0	0	0	0	89
3/22/2022	13:15	1	5	12	41	28	3	0	0	0	0	0	0	90
3/22/2022	13:30	1	7	8	36	32	3	0	0	0	0	0	0	87
3/22/2022	13:45	1	10	8	43	37	7	0	0	0	0	0	0	106
3/22/2022	14:00	2	8	11	48	20	2	0	0	0	0	0	0	91
3/22/2022	14:15	0	7	16	50	12	2	0	0	0	0	0	0	87
3/22/2022	14:30	1	4	10	51	41	1	0	0	0	1	0	0	109
3/22/2022	14:45	0	5	11	45	31	0	0	0	0	0	0	0	92
3/22/2022	15:00	1	3	15	59	39	1	0	0	0	0	0	0	118
3/22/2022	15:15	1	9	13	70	25	4	0	0	0	0	0	0	122
3/22/2022	15:30	3	2	12	68	22	1	0	0	0	0	0	0	108
3/22/2022	15:45	1	4	8	67	29	1	0	0	0	0	0	0	110
3/22/2022	16:00	0	6	4	66	28	0	0	0	0	0	0	0	104
3/22/2022	16:15	1	5	43	71	16	1	0	0	0	0	0	0	137
3/22/2022	16:30	3	5	10	83	33	2	0	0	0	0	0	0	136
3/22/2022	16:45	4	11	12	62	35	0	0	0	0	0	0	0	124
3/22/2022	17:00	3	5	12	79	35	2	0	0	0	0	0	0	136
3/22/2022	17:15	3	6	8	104	20	0	0	0	0	0	0	0	141
3/22/2022	17:30	2	5	25	83	27	2	0	0	0	0	0	0	144
3/22/2022	17:45	1	7	41	56	19	2	0	0	0	0	0	0	126
3/22/2022	18:00	3	10	17	77	16	0	0	0	0	0	0	0	123
3/22/2022	18:15	5	11	19	60	33	0	0	0	0	0	0	0	128
3/22/2022	18:30	4	8	18	64	17	3	0	0	0	0	0	0	114
3/22/2022	18:45	2	3	8	65	28	2	0	0	0	0	0	0	108
3/22/2022	19:00	4	7	19	44	16	0	0	0	0	0	0	0	90
3/22/2022	19:15	6	11	5	64	17	2	0	0	0	0	0	0	105
3/22/2022	19:30	1	7	8	54	25	1	0	0	0	0	0	0	96
3/22/2022	19:45	4	13	9	38	24	2	0	0	0	0	0	0	90
3/22/2022	20:00	1	10	13	53	19	0	0	0	0	0	0	0	96
3/22/2022	20:15	3	5	9	43	25	5	1	0	0	0	0	0	91
3/22/2022	20:30	6	8	2	40	23	1	0	0	0	0	0	0	80
3/22/2022	20:45	1	4	5	40	21	3	0	0	0	0	0	0	74
3/22/2022	21:00	2	5	6	21	16	1	1	0	0	0	0	0	52
3/22/2022	21:15	2	4	6	24	22	2	1	0	0	0	0	0	61
3/22/2022	21:30	3	7	8	16	23	2	0	0	0	0	0	0	59
3/22/2022	21:45	3	8	3	25	15	6	0	0	0	0	0	1	61
3/22/2022	22:00	1	1	5	18	18	5	1	0	0	0	0	0	49
3/22/2022	22:15	0	5	8	28	20	5	0	0	0	0	0	0	66
3/22/2022	22:30	1	8	6	9	22	4	0	0	1	0	0	0	51
3/22/2022	22:45	0	1	3	17	11	2	0	0	0	0	0	0	34
3/22/2022	23:00	1	8	3	20	18	1	0	0	0	0	0	0	51
3/22/2022	23:15	0	5	1	8	12	2	0	0	0	0	0	0	28
3/22/2022	23:30	1	0	2	11	16	1	0	0	0	0	0	0	31
3/22/2022	23:45	2	1	3	7	8	1	0	0	0	0	0	0	22
Complete Day		153	473	693	3345	1919	205	20	4	2	1	0	1	6816

Count Name MD 97 NB - 300' south of Wendy Ln - Ln 1 and 2
Start Date 3/23/2022
Start Time 0:00
Site Code 0097211
Station ID

Date	Time	0 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100	>100 to 110	> 110	Total
3/23/2022	00:00	0	1	1	3	2	0	1	0	0	0	0	0	8
3/23/2022	00:15	0	1	0	2	1	0	1	0	0	0	0	0	5
3/23/2022	00:30	0	3	0	1	1	0	0	0	0	0	0	0	5
3/23/2022	00:45	0	1	1	2	1	1	0	0	0	0	0	0	6
3/23/2022	01:00	0	2	0	0	2	1	0	0	0	0	0	0	5
3/23/2022	01:15	0	1	2	1	0	0	0	0	0	0	0	0	4
3/23/2022	01:30	1	0	1	0	0	0	0	0	0	0	0	0	2
3/23/2022	01:45	0	1	1	0	2	0	0	0	0	0	0	0	4
3/23/2022	02:00	0	0	1	0	2	1	0	0	0	0	0	0	4
3/23/2022	02:15	0	0	2	1	0	1	0	0	0	0	0	0	4
3/23/2022	02:30	0	0	0	2	0	0	0	0	0	0	0	0	2
3/23/2022	02:45	0	0	0	0	0	1	0	0	0	0	0	0	1
3/23/2022	03:00	0	0	0	0	0	0	0	0	0	0	0	0	0
3/23/2022	03:15	0	3	0	1	0	0	0	0	0	0	0	0	4
3/23/2022	03:30	0	0	0	0	0	0	0	0	0	0	0	0	0
3/23/2022	03:45	0	1	1	0	0	0	0	0	0	0	0	0	2
3/23/2022	04:00	0	0	1	0	0	0	0	0	0	0	0	0	1
3/23/2022	04:15	0	3	1	2	1	0	0	0	0	0	0	0	7
3/23/2022	04:30	0	0	0	0	1	1	0	0	0	0	0	0	2
3/23/2022	04:45	1	1	5	0	1	1	0	0	0	0	0	0	9
3/23/2022	05:00	1	0	2	4	1	2	0	0	0	0	0	0	10
3/23/2022	05:15	0	3	2	1	3	0	0	1	0	0	0	0	10
3/23/2022	05:30	0	5	4	11	5	1	0	0	0	0	0	0	26
3/23/2022	05:45	1	2	6	10	6	0	0	0	0	0	0	0	25
3/23/2022	06:00	0	3	2	7	8	1	0	0	0	0	0	0	21
3/23/2022	06:15	1	3	5	16	1	1	0	0	0	0	0	0	27
3/23/2022	06:30	1	3	5	16	12	0	0	0	0	0	0	0	37
3/23/2022	06:45	1	4	16	10	7	1	0	0	0	0	0	0	39
3/23/2022	07:00	1	5	7	12	9	2	1	0	0	0	0	0	37
3/23/2022	07:15	0	4	12	23	11	1	0	0	0	0	0	0	51
3/23/2022	07:30	0	9	18	23	3	4	0	0	0	0	0	0	57
3/23/2022	07:45	0	8	22	20	14	3	0	0	0	0	0	0	67
3/23/2022	08:00	1	4	7	21	9	4	0	0	0	0	0	0	46
3/23/2022	08:15	0	9	12	21	14	0	0	0	0	0	0	0	56
3/23/2022	08:30	1	8	16	21	9	2	0	0	0	0	0	0	57
3/23/2022	08:45	1	7	21	30	4	1	0	1	0	0	0	0	65
3/23/2022	09:00	1	11	30	15	3	0	0	0	0	0	0	0	60
3/23/2022	09:15	2	9	14	19	11	4	0	0	0	0	0	0	59
3/23/2022	09:30	2	6	18	17	9	2	0	0	0	0	0	0	54
3/23/2022	09:45	3	8	11	15	5	0	0	0	0	0	0	0	42
3/23/2022	10:00	1	3	1	3	0	0	0	0	0	0	0	0	8
3/23/2022	10:15	1	3	6	0	0	0	0	0	0	0	0	0	10
3/23/2022	10:30	4	4	9	1	0	0	0	0	0	0	0	0	18
3/23/2022	10:45	2	5	6	2	0	0	0	0	0	0	0	0	15
3/23/2022	11:00	0	4	2	1	0	0	0	0	0	0	0	0	7
3/23/2022	11:15	1	2	3	2	0	0	0	0	0	0	0	0	8
3/23/2022	11:30	0	3	5	2	0	0	0	0	0	0	0	0	10
3/23/2022	11:45	1	2	6	3	0	0	0	0	0	0	0	0	12
3/23/2022	12:00	0	4	13	1	0	0	0	0	0	0	0	0	18
3/23/2022	12:15	1	3	5	0	0	0	0	0	0	0	0	0	9
3/23/2022	12:30	0	4	3	1	0	0	0	0	0	0	0	0	8
3/23/2022	12:45	1	6	3	1	1	0	0	0	0	0	0	0	12
3/23/2022	13:00	0	4	3	3	0	0	0	0	0	0	0	0	10
3/23/2022	13:15	1	0	3	0	0	0	0	0	0	0	0	0	4
3/23/2022	13:30	2	9	2	0	0	0	0	0	0	0	0	0	13
3/23/2022	13:45	1	3	4	0	0	0	0	0	0	0	0	0	8
3/23/2022	14:00	3	10	10	5	2	0	0	0	0	0	0	0	30
3/23/2022	14:15	0	12	35	13	1	0	0	0	0	0	0	0	61
3/23/2022	14:30	0	13	26	21	2	0	0	0	0	0	0	0	62
3/23/2022	14:45	1	17	39	19	2	1	0	0	0	0	0	0	79
3/23/2022	15:00	0	11	32	26	1	1	0	0	0	0	0	0	71
3/23/2022	15:15	0	26	32	17	2	1	0	0	0	0	0	0	78
3/23/2022	15:30	3	21	31	17	3	0	0	0	0	0	0	0	75
3/23/2022	15:45	2	17	35	24	7	1	0	0	0	0	0	0	86
3/23/2022	16:00	2	25	38	16	10	1	0	0	0	0	0	0	92
3/23/2022	16:15	2	20	40	14	0	0	0	0	0	0	0	0	76
3/23/2022	16:30	2	20	40	23	4	0	1	0	0	0	0	0	90
3/23/2022	16:45	0	26	36	20	5	1	0	0	0	0	0	0	88
3/23/2022	17:00	2	22	40	16	0	0	0	0	0	0	0	0	80
3/23/2022	17:15	1	23	37	17	1	0	0	0	0	0	0	0	79
3/23/2022	17:30	1	13	44	25	5	1	0	0	0	0	0	0	89
3/23/2022	17:45	1	21	28	16	1	0	0	0	0	0	0	0	67
3/23/2022	18:00	1	21	45	17	3	0	0	0	0	0	0	0	87
3/23/2022	18:15	3	16	43	17	0	0	0	0	0	0	0	0	79
3/23/2022	18:30	2	24	34	17	3	0	0	0	0	0	0	0	80
3/23/2022	18:45	0	19	18	19	6	0	0	0	0	0	0	0	62
3/23/2022	19:00	1	12	34	15	2	0	0	0	0	0	0	0	64
3/23/2022	19:15	1	11	25	19	2	0	0	0	0	0	0	0	58
3/23/2022	19:30	0	12	27	12	3	0	0	0	0	0	0	0	54
3/23/2022	19:45	0	11	14	21	1	1	0	0	0	0	0	0	48
3/23/2022	20:00	0	14	17	12	3	0	0	0	0	0	0	0	46
3/23/2022	20:15	0	12	24	10	2	0	0	0	0	0	0	0	48
3/23/2022	20:30	0	11	20	9	4	0	0	0	0	0	0	0	44
3/23/2022	20:45	0	4	18	13	1	0	0	0	0	0	0	0	36
3/23/2022	21:00	0	4	8	14	6	1	0	0	0	0	0	0	33
3/23/2022	21:15	0	2	7	18	2	1	0	0	0	0	0	0	30
3/23/2022	21:30	0	3	14	13	4	1	0	0	0	0	0	0	35
3/23/2022	21:45	0	1	4	16	2	1	0	0	0	0	0	0	24
3/23/2022	22:00	0	1	6	12	3	0	0	0	0	0	0	0	22
3/23/2022	22:15	0	1	7	7	7	0	0	0	0	0	0	0	22
3/23/2022	22:30	0	2	4	12	4	0	0	0	0	0	0	0	22
3/23/2022	22:45	0	3	1	5	2	1	0	0	0	0	0	0	12
3/23/2022	23:00	0	0	4	8	1	0	0	0	0	0	0	0	13
3/23/2022	23:15	0	1	2	4	2	1	0	0	0	0	0	0	10
3/23/2022	23:30	0	2	0	5	1	0	0	0	0	0	0	0	8
3/23/2022	23:45	1	0	2	3	7	0	0	0	0	0	0	0	13
Complete Day		64	672	1242	934	276	50	4	2	0	0	0	0	3244

Count Name MD 97 NB - 300' south of Wendy Ln - Ln 1 and 2
Start Date 3/23/2022
Start Time 0:00
Site Code 0097211
Station ID

Date	Time	0 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100	>100 to 110	> 110	Total
3/23/2022	00:00	0	1	0	9	11	3	0	0	0	0	0	0	24
3/23/2022	00:15	0	2	4	7	6	2	2	0	0	0	0	0	23
3/23/2022	00:30	0	3	0	8	9	2	0	0	0	0	0	0	22
3/23/2022	00:45	0	1	0	3	3	2	0	0	0	0	0	0	9
3/23/2022	01:00	1	1	0	6	5	1	0	0	0	0	0	0	14
3/23/2022	01:15	0	0	0	7	3	1	0	0	0	0	0	0	11
3/23/2022	01:30	1	2	4	4	3	0	0	0	0	0	0	0	14
3/23/2022	01:45	0	0	1	4	5	2	0	0	0	0	0	0	12
3/23/2022	02:00	0	1	0	3	1	3	0	0	0	0	0	0	8
3/23/2022	02:15	1	1	0	1	3	2	0	0	0	0	0	0	8
3/23/2022	02:30	1	2	0	3	3	0	1	0	0	0	0	0	10
3/23/2022	02:45	0	0	0	4	5	1	0	0	0	0	0	0	10
3/23/2022	03:00	0	1	0	1	2	1	0	0	0	0	0	0	5
3/23/2022	03:15	0	1	0	2	3	0	0	0	0	0	0	0	6
3/23/2022	03:30	0	0	0	3	2	0	0	0	0	0	0	0	5
3/23/2022	03:45	0	2	0	0	5	0	1	0	0	0	0	0	8
3/23/2022	04:00	1	2	1	2	3	2	0	0	0	0	0	0	11
3/23/2022	04:15	0	1	2	7	7	2	0	0	0	0	0	0	19
3/23/2022	04:30	0	1	0	5	5	2	0	0	0	0	0	0	13
3/23/2022	04:45	1	2	2	10	5	1	0	0	0	0	0	0	21
3/23/2022	05:00	1	2	2	9	9	4	0	0	0	0	0	0	27
3/23/2022	05:15	1	2	2	10	8	4	0	1	0	0	0	0	28
3/23/2022	05:30	0	4	4	11	22	1	3	0	0	0	0	0	45
3/23/2022	05:45	0	4	1	10	19	6	3	0	0	0	0	0	43
3/23/2022	06:00	1	1	6	16	20	3	0	0	0	0	0	0	47
3/23/2022	06:15	0	2	5	32	20	5	0	0	0	0	0	0	64
3/23/2022	06:30	2	5	7	44	23	5	0	0	0	0	0	0	86
3/23/2022	06:45	3	7	7	37	23	3	1	0	0	0	0	0	81
3/23/2022	07:00	1	6	3	38	26	4	0	0	0	0	0	0	78
3/23/2022	07:15	1	5	6	58	21	4	1	0	0	0	0	0	96
3/23/2022	07:30	1	6	9	52	37	6	0	0	0	0	0	0	111
3/23/2022	07:45	0	2	20	56	42	1	0	0	0	0	0	0	121
3/23/2022	08:00	3	5	9	48	53	9	0	0	0	0	0	0	127
3/23/2022	08:15	1	5	4	47	31	3	0	0	0	0	0	0	91
3/23/2022	08:30	1	5	9	46	29	5	0	0	0	0	0	0	95
3/23/2022	08:45	0	2	4	53	25	2	0	0	0	0	0	0	86
3/23/2022	09:00	1	4	22	39	27	1	0	0	0	0	0	0	94
3/23/2022	09:15	0	8	12	36	26	4	0	0	0	0	0	0	86
3/23/2022	09:30	6	7	4	42	17	1	0	0	0	0	0	0	77
3/23/2022	09:45	1	14	11	34	18	2	0	0	0	0	0	0	80
3/23/2022	10:00	1	4	4	1	0	0	0	0	0	0	0	0	10
3/23/2022	10:15	1	5	1	5	0	0	0	0	0	0	0	0	12
3/23/2022	10:30	2	2	5	2	0	0	0	0	0	0	0	0	11
3/23/2022	10:45	0	1	7	1	0	0	0	0	0	0	0	0	9
3/23/2022	11:00	2	3	5	3	0	0	0	0	0	0	0	0	13
3/23/2022	11:15	0	2	1	0	0	0	0	0	0	0	0	0	3
3/23/2022	11:30	2	5	2	2	0	0	0	0	0	0	0	0	11
3/23/2022	11:45	1	6	6	4	0	0	0	0	0	0	0	0	17
3/23/2022	12:00	0	2	9	2	0	0	0	0	0	0	0	0	13
3/23/2022	12:15	0	2	2	4	0	0	0	0	0	0	0	0	8
3/23/2022	12:30	0	2	5	1	0	0	0	0	0	0	0	0	8
3/23/2022	12:45	0	4	4	6	0	0	0	0	0	0	0	0	14
3/23/2022	13:00	3	3	4	2	0	0	0	0	0	0	0	0	12
3/23/2022	13:15	2	5	5	3	0	0	0	0	0	0	0	0	15
3/23/2022	13:30	3	5	5	4	0	0	0	0	0	0	0	0	17
3/23/2022	13:45	1	2	6	3	0	0	0	0	0	0	0	0	12
3/23/2022	14:00	3	6	16	53	3	0	0	0	0	0	0	0	81
3/23/2022	14:15	2	6	19	48	14	1	0	0	0	0	0	0	90
3/23/2022	14:30	3	5	16	41	20	0	0	0	0	0	0	0	85
3/23/2022	14:45	2	9	19	79	9	1	0	0	0	0	0	0	119
3/23/2022	15:00	3	4	10	77	18	2	0	0	0	0	0	0	114
3/23/2022	15:15	4	8	15	81	26	4	0	0	0	0	0	0	138
3/23/2022	15:30	3	12	27	65	26	3	0	0	0	0	0	0	136
3/23/2022	15:45	2	6	22	62	21	2	0	0	0	0	0	0	115
3/23/2022	16:00	2	1	26	80	16	0	0	0	0	0	0	0	125
3/23/2022	16:15	4	5	38	64	13	1	0	0	0	0	0	0	125
3/23/2022	16:30	2	7	22	70	21	0	1	0	0	0	0	0	123
3/23/2022	16:45	3	8	14	77	21	3	0	0	0	0	0	0	126
3/23/2022	17:00	2	10	14	73	12	1	0	0	0	0	0	0	112
3/23/2022	17:15	2	4	37	61	21	3	0	0	0	0	0	0	128
3/23/2022	17:30	0	10	15	88	17	1	0	0	0	0	0	0	131
3/23/2022	17:45	3	8	23	73	26	1	0	0	0	0	0	0	134
3/23/2022	18:00	1	7	20	68	26	0	1	0	0	0	0	0	123
3/23/2022	18:15	1	11	12	75	18	4	0	0	0	0	0	0	121
3/23/2022	18:30	4	12	10	79	21	1	0	0	0	0	0	0	127
3/23/2022	18:45	2	9	17	57	18	0	0	0	0	0	0	0	103
3/23/2022	19:00	3	9	19	46	16	1	0	0	0	0	0	0	94
3/23/2022	19:15	1	7	10	47	17	0	0	0	0	0	0	0	82
3/23/2022	19:30	3	5	16	54	10	0	0	0	0	0	0	0	88
3/23/2022	19:45	2	6	7	41	14	1	0	0	0	0	0	0	71
3/23/2022	20:00	3	5	13	61	14	3	0	0	0	0	0	0	99
3/23/2022	20:15	2	4	10	44	6	0	0	0	0	0	0	0	66
3/23/2022	20:30	2	8	14	33	6	0	0	0	0	0	0	0	63
3/23/2022	20:45	1	3	13	46	13	1	0	0	0	0	0	0	77
3/23/2022	21:00	2	4	10	35	17	2	0	0	0	0	0	0	70
3/23/2022	21:15	1	5	4	32	8	0	0	0	0	0	0	0	50
3/23/2022	21:30	1	9	14	39	10	1	0	0	0	0	0	0	74
3/23/2022	21:45	1	5	4	27	11	0	0	0	0	0	0	0	48
3/23/2022	22:00	0	1	5	31	10	2	0	0	0	0	0	0	49
3/23/2022	22:15	1	5	1	24	10	0	0	0	0	0	0	0	41
3/23/2022	22:30	2	5	5	22	10	1	0	0	0	0	0	0	45
3/23/2022	22:45	1	4	1	16	11	0	0	0	0	0	0	0	33
3/23/2022	23:00	0	1	2	18	13	3	0	0	0	0	0	0	37
3/23/2022	23:15	0	2	0	12	8	2	0	0	0	0	0	0	24
3/23/2022	23:30	0	1	6	12	14	2	0	0	0	0	0	0	35
3/23/2022	23:45	0	0	5	7	7	2	0	0	0	0	0	0	21
Complete Day		122	410	783	2868	1177	149	14	1	0	0	0	0	5524

Count Name MD 97 NB - 300' south of Wendy Ln - Ln 3
Start Date 3/22/2022
Start Time 0:00
Site Code 0097212
Station ID

Date	Time	0 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100	>100 to 110	> 110	Total
3/22/2022	00:00	0	0	1	4	6	3	1	0	0	0	0	0	15
3/22/2022	00:15	0	1	1	5	4	1	0	0	0	0	0	0	12
3/22/2022	00:30	0	0	0	3	3	1	0	0	0	0	0	0	7
3/22/2022	00:45	0	0	1	3	4	2	0	0	0	0	0	0	10
3/22/2022	01:00	0	0	0	0	3	2	0	0	0	0	0	0	5
3/22/2022	01:15	0	0	0	1	4	1	0	0	0	0	0	0	6
3/22/2022	01:30	0	0	0	0	2	3	0	0	0	0	0	0	5
3/22/2022	01:45	0	0	0	0	1	1	0	0	0	0	0	0	2
3/22/2022	02:00	0	0	0	1	3	0	0	0	0	0	0	0	4
3/22/2022	02:15	0	0	0	2	2	0	0	0	0	0	0	0	4
3/22/2022	02:30	0	0	0	1	6	1	0	0	0	0	0	0	8
3/22/2022	02:45	0	0	1	1	1	0	0	0	0	0	0	0	3
3/22/2022	03:00	0	0	0	1	2	1	0	0	0	0	0	0	4
3/22/2022	03:15	0	1	0	0	2	0	0	0	0	0	0	0	3
3/22/2022	03:30	0	0	0	0	0	0	0	0	0	0	0	0	0
3/22/2022	03:45	0	0	0	1	4	1	0	0	0	0	0	0	6
3/22/2022	04:00	0	1	0	2	2	0	0	0	0	0	0	0	5
3/22/2022	04:15	0	0	0	3	2	0	0	0	0	0	0	0	5
3/22/2022	04:30	0	0	0	3	3	3	0	0	0	0	0	0	9
3/22/2022	04:45	0	0	0	8	6	4	0	0	0	0	0	0	18
3/22/2022	05:00	0	1	2	7	9	1	1	0	0	0	0	0	21
3/22/2022	05:15	0	0	1	9	14	6	1	0	0	0	0	0	31
3/22/2022	05:30	0	4	2	8	17	7	0	0	0	0	0	0	38
3/22/2022	05:45	0	1	7	18	25	4	1	0	0	0	0	0	56
3/22/2022	06:00	0	1	2	18	19	5	0	0	0	0	0	0	45
3/22/2022	06:15	1	0	6	32	35	7	1	1	0	0	0	0	83
3/22/2022	06:30	0	4	8	47	29	5	0	0	0	0	0	0	93
3/22/2022	06:45	0	2	3	46	43	4	0	0	0	0	0	0	98
3/22/2022	07:00	0	2	7	50	50	3	0	0	0	0	0	0	112
3/22/2022	07:15	0	2	6	69	57	7	2	0	0	0	0	0	143
3/22/2022	07:30	0	0	4	90	49	4	0	1	0	0	0	0	148
3/22/2022	07:45	0	0	9	104	53	4	0	0	0	0	0	0	170
3/22/2022	08:00	0	3	15	91	57	6	0	0	0	0	0	0	172
3/22/2022	08:15	0	0	0	66	68	4	0	1	0	0	0	0	139
3/22/2022	08:30	0	2	8	55	60	5	1	0	0	0	0	0	131
3/22/2022	08:45	0	1	4	60	53	5	0	0	0	0	0	0	123
3/22/2022	09:00	0	2	10	115	22	0	0	0	0	0	0	0	149
3/22/2022	09:15	0	1	6	73	45	3	1	0	0	0	0	0	129
3/22/2022	09:30	0	3	5	48	48	5	0	0	0	0	0	0	109
3/22/2022	09:45	0	2	4	58	31	1	0	0	0	0	0	0	96
3/22/2022	10:00	0	0	8	45	31	6	0	0	0	0	0	0	90
3/22/2022	10:15	0	2	9	52	35	5	0	0	0	0	0	0	103
3/22/2022	10:30	0	4	5	53	31	3	0	0	0	0	0	0	96
3/22/2022	10:45	0	1	2	50	42	0	0	0	0	0	0	0	95
3/22/2022	11:00	0	2	3	36	33	2	0	0	0	0	0	0	76
3/22/2022	11:15	0	2	5	59	36	2	1	0	0	0	0	0	105
3/22/2022	11:30	0	0	5	72	31	5	0	0	0	0	0	0	113
3/22/2022	11:45	1	2	9	54	46	4	0	0	0	0	0	0	116
3/22/2022	12:00	0	5	11	64	36	0	1	0	0	0	0	0	117
3/22/2022	12:15	1	2	11	58	40	1	0	0	0	0	0	0	113
3/22/2022	12:30	0	0	2	38	48	6	0	0	0	0	0	0	94
3/22/2022	12:45	0	2	5	53	47	4	0	0	0	0	0	0	111
3/22/2022	13:00	0	0	4	61	40	5	0	0	0	0	0	0	110
3/22/2022	13:15	0	4	22	66	20	1	1	0	0	0	0	0	114
3/22/2022	13:30	0	0	1	72	44	4	0	0	0	0	0	0	121
3/22/2022	13:45	0	0	4	37	56	5	0	0	0	0	0	0	102
3/22/2022	14:00	0	3	6	65	43	2	0	0	0	0	0	0	119
3/22/2022	14:15	0	5	18	66	29	0	0	0	0	0	0	0	118
3/22/2022	14:30	0	2	2	75	63	2	2	0	0	0	0	0	146
3/22/2022	14:45	0	1	5	78	59	4	0	0	0	0	0	0	147
3/22/2022	15:00	0	1	10	75	40	5	0	0	0	0	0	0	131
3/22/2022	15:15	0	4	9	117	28	0	0	0	0	0	0	0	158
3/22/2022	15:30	0	1	22	103	24	4	0	0	0	0	0	0	154
3/22/2022	15:45	0	1	12	78	44	4	0	0	0	0	0	0	139
3/22/2022	16:00	0	0	7	103	54	5	0	0	0	0	0	0	169
3/22/2022	16:15	0	2	54	117	17	1	0	0	0	0	0	0	191
3/22/2022	16:30	0	1	7	88	58	4	0	0	0	0	0	0	158
3/22/2022	16:45	0	1	11	117	44	1	0	0	0	0	0	0	174
3/22/2022	17:00	0	1	17	99	49	4	0	0	0	0	0	0	170
3/22/2022	17:15	1	5	5	112	36	3	2	0	0	0	0	0	164
3/22/2022	17:30	0	4	17	132	29	2	0	0	0	0	0	0	184
3/22/2022	17:45	0	4	23	108	30	2	0	0	0	0	0	0	167
3/22/2022	18:00	0	5	22	93	38	1	0	0	0	0	0	0	159
3/22/2022	18:15	0	2	6	118	29	1	0	0	0	0	0	0	156
3/22/2022	18:30	0	2	11	97	38	6	2	0	0	0	0	0	156
3/22/2022	18:45	0	3	15	88	55	4	0	0	0	0	0	0	165
3/22/2022	19:00	0	1	19	83	33	1	0	0	0	0	0	0	137
3/22/2022	19:15	0	1	5	74	26	3	0	0	0	0	0	0	109
3/22/2022	19:30	0	4	9	73	32	1	0	0	0	0	0	0	119
3/22/2022	19:45	0	4	6	49	45	3	0	0	0	0	0	0	107
3/22/2022	20:00	0	5	8	60	34	4	0	0	0	0	0	0	111
3/22/2022	20:15	0	1	4	47	21	4	0	0	0	0	0	0	77
3/22/2022	20:30	0	4	4	37	23	0	0	0	0	0	0	0	68
3/22/2022	20:45	0	3	7	45	24	0	0	0	0	0	0	0	79
3/22/2022	21:00	0	1	3	34	34	5	0	0	0	0	0	0	77
3/22/2022	21:15	0	0	3	25	32	4	1	0	0	0	0	0	65
3/22/2022	21:30	0	5	8	31	26	3	0	0	0	0	0	0	73
3/22/2022	21:45	0	1	2	27	29	1	0	0	0	0	0	0	60
3/22/2022	22:00	0	0	1	18	27	3	0	0	0	0	0	0	49
3/22/2022	22:15	0	1	1	22	28	4	0	0	0	0	0	0	56
3/22/2022	22:30	0	0	5	10	15	2	1	0	0	0	0	0	33
3/22/2022	22:45	0	0	1	7	16	1	0	0	0	0	0	0	25
3/22/2022	23:00	0	1	0	13	17	0	1	0	0	0	0	0	32
3/22/2022	23:15	0	0	0	3	15	2	0	0	0	0	0	0	20
3/22/2022	23:30	0	0	1	8	7	7	0	0	0	0	0	0	23
3/22/2022	23:45	0	0	2	0	8	1	0	0	0	0	0	0	11
Complete Day		4	140	587	4568	2759	267	21	3	0	0	0	0	8349

Count Name MD 97 NB - 300' south of Wendy Ln - Ln 3
Start Date 3/23/2022
Start Time 0:00
Site Code 0097212
Station ID

Date	Time	0 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100	>100 to 110	> 110	Total
3/23/2022	00:00	0	0	1	8	9	1	0	0	0	0	0	0	19
3/23/2022	00:15	0	0	1	6	2	3	0	0	0	0	0	0	12
3/23/2022	00:30	0	0	1	5	3	1	0	0	0	0	0	0	10
3/23/2022	00:45	0	0	0	1	6	3	0	0	0	0	0	0	10
3/23/2022	01:00	0	1	0	3	3	1	0	0	0	0	0	0	8
3/23/2022	01:15	0	0	1	1	4	2	0	0	0	0	0	0	8
3/23/2022	01:30	0	0	0	0	3	2	1	0	0	0	0	0	6
3/23/2022	01:45	0	0	0	4	3	0	0	0	0	0	0	0	7
3/23/2022	02:00	0	1	0	1	1	0	0	0	0	0	0	0	3
3/23/2022	02:15	0	0	0	0	5	0	1	0	0	0	0	0	6
3/23/2022	02:30	1	0	0	1	5	2	0	0	0	0	0	0	9
3/23/2022	02:45	0	0	0	1	1	1	0	0	0	0	0	0	3
3/23/2022	03:00	0	1	1	0	1	0	0	0	0	0	0	0	3
3/23/2022	03:15	0	0	0	3	1	1	0	0	0	0	0	0	5
3/23/2022	03:30	0	0	1	0	3	0	0	0	0	0	0	0	4
3/23/2022	03:45	0	0	0	2	2	0	0	0	0	0	0	0	4
3/23/2022	04:00	0	0	0	0	3	1	0	0	0	0	0	0	4
3/23/2022	04:15	0	0	0	3	1	1	0	0	0	0	0	0	5
3/23/2022	04:30	0	0	2	5	1	0	0	0	0	0	0	0	8
3/23/2022	04:45	0	0	0	6	7	0	0	0	0	0	0	0	13
3/23/2022	05:00	0	0	1	11	9	0	0	1	0	0	0	0	22
3/23/2022	05:15	0	0	3	17	15	2	0	0	0	0	0	0	37
3/23/2022	05:30	0	0	1	8	17	1	0	0	0	0	0	0	27
3/23/2022	05:45	0	0	3	13	22	8	0	0	0	0	0	0	46
3/23/2022	06:00	0	2	3	20	13	9	1	0	0	0	0	0	48
3/23/2022	06:15	0	0	1	30	34	3	0	0	0	0	0	0	68
3/23/2022	06:30	0	4	5	49	31	6	0	0	0	0	0	0	95
3/23/2022	06:45	0	2	7	49	36	2	0	0	0	0	0	0	96
3/23/2022	07:00	0	0	8	56	41	3	0	0	0	0	0	0	108
3/23/2022	07:15	0	2	9	76	39	4	0	0	0	0	0	0	130
3/23/2022	07:30	0	2	9	108	43	4	0	0	0	0	0	0	166
3/23/2022	07:45	0	7	30	117	31	1	0	0	0	0	0	0	186
3/23/2022	08:00	0	2	7	98	61	4	0	0	0	0	0	0	172
3/23/2022	08:15	0	2	10	87	36	4	0	0	0	0	0	0	139
3/23/2022	08:30	0	0	5	74	51	3	0	0	0	0	0	0	133
3/23/2022	08:45	0	0	6	80	59	6	0	0	0	0	0	0	151
3/23/2022	09:00	0	2	17	70	29	2	0	0	0	0	0	0	120
3/23/2022	09:15	0	2	8	77	44	2	0	0	0	0	0	0	133
3/23/2022	09:30	1	2	4	69	29	6	0	0	0	0	0	0	111
3/23/2022	09:45	0	1	6	49	28	2	0	0	0	0	0	0	86
3/23/2022	10:00	0	3	9	13	0	0	0	0	0	0	0	0	25
3/23/2022	10:15	1	3	6	5	0	0	0	0	0	0	0	0	15
3/23/2022	10:30	0	1	6	3	0	0	0	0	0	0	0	0	10
3/23/2022	10:45	0	0	3	4	0	0	0	0	0	0	0	0	7
3/23/2022	11:00	0	2	5	5	0	0	0	0	0	0	0	0	12
3/23/2022	11:15	0	1	3	3	0	0	0	0	0	0	0	0	7
3/23/2022	11:30	0	0	3	10	1	0	0	0	0	0	0	0	14
3/23/2022	11:45	1	0	5	4	1	0	0	0	0	0	0	0	11
3/23/2022	12:00	0	0	2	6	1	0	0	0	0	0	0	0	9
3/23/2022	12:15	0	0	3	7	0	0	0	0	0	0	0	0	10
3/23/2022	12:30	0	0	6	1	0	0	0	0	0	0	0	0	7
3/23/2022	12:45	0	1	4	4	0	0	0	0	0	0	0	0	9
3/23/2022	13:00	2	1	5	8	0	0	0	0	0	0	0	0	16
3/23/2022	13:15	0	0	4	6	0	0	0	0	0	0	0	0	10
3/23/2022	13:30	0	1	1	8	1	0	0	0	0	0	0	0	11
3/23/2022	13:45	0	0	4	8	0	0	0	0	0	0	0	0	12
3/23/2022	14:00	0	2	14	120	8	0	0	0	0	0	0	0	144
3/23/2022	14:15	0	1	8	65	26	4	0	0	0	0	0	0	104
3/23/2022	14:30	0	1	2	80	30	3	0	0	0	0	0	0	116
3/23/2022	14:45	0	4	33	98	22	0	0	0	0	0	0	0	157
3/23/2022	15:00	0	2	5	79	36	3	0	0	0	0	0	0	125
3/23/2022	15:15	0	3	14	104	29	1	0	0	0	0	0	0	151
3/23/2022	15:30	0	3	20	82	33	0	0	0	0	0	0	0	138
3/23/2022	15:45	0	0	33	80	35	1	0	0	0	0	0	0	149
3/23/2022	16:00	1	1	28	89	32	1	0	0	0	0	0	0	152
3/23/2022	16:15	0	1	14	118	27	1	0	0	0	0	0	0	161
3/23/2022	16:30	0	2	21	97	41	3	0	0	0	0	0	0	164
3/23/2022	16:45	0	1	6	110	47	1	0	0	0	0	0	0	165
3/23/2022	17:00	0	3	12	96	35	2	0	0	0	0	0	0	148
3/23/2022	17:15	0	4	31	115	24	1	0	0	0	0	0	0	175
3/23/2022	17:30	0	3	14	82	43	2	0	0	0	0	0	0	144
3/23/2022	17:45	0	1	22	85	33	1	0	0	0	0	0	0	142
3/23/2022	18:00	0	2	20	83	31	4	0	0	0	0	0	0	140
3/23/2022	18:15	1	0	20	103	20	3	0	0	0	0	0	0	147
3/23/2022	18:30	0	4	15	86	43	1	0	0	0	0	0	0	149
3/23/2022	18:45	0	2	11	82	29	3	0	0	0	0	0	0	127
3/23/2022	19:00	0	0	11	65	21	3	0	0	0	0	0	0	100
3/23/2022	19:15	0	2	1	69	24	1	0	0	0	0	0	0	97
3/23/2022	19:30	0	4	5	59	22	0	0	0	0	0	0	0	90
3/23/2022	19:45	0	5	4	47	21	1	0	0	0	0	0	0	78
3/23/2022	20:00	0	1	7	50	22	1	0	0	0	0	0	0	81
3/23/2022	20:15	0	3	4	41	16	1	0	0	0	0	0	0	65
3/23/2022	20:30	0	1	12	37	14	5	0	0	0	0	0	0	69
3/23/2022	20:45	0	4	5	38	17	0	0	0	0	0	0	0	64
3/23/2022	21:00	0	0	2	38	14	2	0	0	0	0	0	0	56
3/23/2022	21:15	0	0	2	36	15	0	0	0	0	0	0	0	53
3/23/2022	21:30	0	4	4	41	7	1	0	0	0	0	0	0	57
3/23/2022	21:45	0	2	4	21	24	3	0	0	0	0	0	0	54
3/23/2022	22:00	0	1	2	24	18	0	0	0	0	0	0	0	45
3/23/2022	22:15	0	1	3	20	19	0	0	0	0	0	0	0	43
3/23/2022	22:30	0	2	1	15	16	6	1	0	0	0	0	0	41
3/23/2022	22:45	0	1	2	13	7	3	0	0	0	0	0	0	26
3/23/2022	23:00	0	1	3	7	7	1	0	0	0	0	0	0	19
3/23/2022	23:15	0	0	2	13	10	1	0	0	0	0	0	0	26
3/23/2022	23:30	0	1	0	11	8	3	1	0	0	0	0	0	24
3/23/2022	23:45	0	0	1	11	11	2	1	0	0	0	0	0	26
Complete Day		8	119	638	3813	1673	160	6	1	0	0	0	0	6418

Count Name MD 97 NB - 1150' south of Bel Pre Rd - Ln 1 and 2
Start Date 3/22/2022
Start Time 0:00
Site Code 009711
Station ID
5437

Date	Time	0 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100	>100 to 110	> 110	Total
3/22/2022	00:00	0	0	3	7	2	3	0	0	0	0	0	0	15
3/22/2022	00:15	0	0	3	7	6	1	0	0	0	0	0	0	17
3/22/2022	00:30	0	0	1	4	5	0	0	0	0	0	0	0	10
3/22/2022	00:45	0	0	0	6	3	1	0	0	0	0	0	0	10
3/22/2022	01:00	0	0	1	1	1	1	0	0	0	0	0	0	4
3/22/2022	01:15	0	0	1	4	2	0	1	1	0	0	0	0	9
3/22/2022	01:30	0	0	2	3	0	0	0	0	0	0	0	0	5
3/22/2022	01:45	0	0	2	1	1	0	0	0	0	0	0	0	4
3/22/2022	02:00	0	0	1	1	2	0	0	0	0	0	0	0	4
3/22/2022	02:15	0	0	1	0	2	0	0	0	0	0	0	0	3
3/22/2022	02:30	0	0	0	2	0	0	0	0	0	0	0	0	2
3/22/2022	02:45	0	0	0	1	1	2	0	0	0	0	0	0	4
3/22/2022	03:00	0	0	0	1	1	0	0	0	0	0	0	0	2
3/22/2022	03:15	0	0	0	2	2	0	0	0	0	0	0	0	4
3/22/2022	03:30	0	0	0	1	0	0	0	0	0	0	0	0	1
3/22/2022	03:45	0	0	1	0	1	0	0	0	0	0	0	0	2
3/22/2022	04:00	0	0	1	4	2	0	0	0	0	0	0	0	7
3/22/2022	04:15	0	0	1	0	2	0	0	0	0	0	0	0	3
3/22/2022	04:30	0	0	0	1	2	2	0	0	0	0	0	0	5
3/22/2022	04:45	0	0	1	5	3	0	0	0	0	0	0	0	9
3/22/2022	05:00	0	0	1	1	3	2	0	0	0	0	0	0	7
3/22/2022	05:15	0	0	2	4	6	2	0	0	0	0	0	0	14
3/22/2022	05:30	0	0	0	4	11	3	1	0	0	0	0	0	19
3/22/2022	05:45	0	0	0	6	12	6	0	0	0	0	0	0	24
3/22/2022	06:00	0	0	1	12	12	3	0	0	0	0	0	0	28
3/22/2022	06:15	0	0	5	12	14	6	1	0	0	0	0	0	38
3/22/2022	06:30	0	0	1	18	23	5	1	0	0	0	0	0	48
3/22/2022	06:45	0	0	15	23	20	2	0	0	0	0	0	0	60
3/22/2022	07:00	0	0	6	20	11	3	1	0	0	0	0	0	41
3/22/2022	07:15	0	0	9	23	17	3	1	0	0	0	0	0	53
3/22/2022	07:30	0	0	10	41	24	2	0	0	0	0	0	0	77
3/22/2022	07:45	0	0	12	52	24	2	0	1	0	0	0	0	91
3/22/2022	08:00	0	0	9	45	25	6	1	0	0	0	0	0	86
3/22/2022	08:15	0	0	8	46	22	5	0	0	0	0	0	0	81
3/22/2022	08:30	0	1	12	35	17	3	0	0	0	0	0	0	68
3/22/2022	08:45	0	0	14	27	23	7	0	0	0	0	0	0	71
3/22/2022	09:00	0	0	4	28	21	4	0	0	0	0	0	0	57
3/22/2022	09:15	0	0	15	30	16	7	0	0	0	0	0	0	68
3/22/2022	09:30	0	0	9	38	15	3	1	0	0	0	0	0	66
3/22/2022	09:45	0	0	7	22	23	5	1	0	0	0	0	0	58
3/22/2022	10:00	0	0	3	21	26	6	0	0	0	0	0	0	56
3/22/2022	10:15	0	0	0	28	22	3	0	0	0	0	0	0	53
3/22/2022	10:30	0	0	4	36	20	3	1	0	0	0	0	0	64
3/22/2022	10:45	0	0	7	28	22	2	0	0	0	0	0	0	59
3/22/2022	11:00	0	0	3	29	22	5	0	0	0	0	0	0	59
3/22/2022	11:15	0	0	2	31	26	9	1	0	0	0	0	0	69
3/22/2022	11:30	0	0	9	36	19	6	1	0	0	0	0	0	71
3/22/2022	11:45	0	0	7	26	25	2	1	0	0	0	0	0	61
3/22/2022	12:00	0	1	5	37	23	8	1	0	0	0	0	0	75
3/22/2022	12:15	0	0	6	30	29	4	0	0	0	0	0	0	69
3/22/2022	12:30	0	0	6	33	27	7	0	0	0	0	0	0	73
3/22/2022	12:45	0	1	3	30	31	0	0	0	0	0	0	0	65
3/22/2022	13:00	0	1	4	37	28	6	0	0	0	0	0	0	76
3/22/2022	13:15	0	0	3	30	38	6	0	0	0	0	0	0	77
3/22/2022	13:30	0	0	7	46	30	2	0	0	0	0	0	0	85
3/22/2022	13:45	0	0	6	49	23	4	0	0	0	0	0	0	82
3/22/2022	14:00	0	0	2	32	29	1	0	0	0	0	0	0	64
3/22/2022	14:15	0	0	6	41	32	8	0	0	0	0	0	0	87
3/22/2022	14:30	0	0	8	53	34	4	0	0	0	0	0	0	99
3/22/2022	14:45	0	0	4	49	27	4	0	0	0	0	0	0	84
3/22/2022	15:00	0	0	17	60	26	2	0	0	0	0	0	0	105
3/22/2022	15:15	0	1	29	48	8	1	0	0	0	0	0	0	87
3/22/2022	15:30	0	4	33	44	17	0	0	0	0	0	0	0	98
3/22/2022	15:45	0	0	20	50	26	5	0	0	0	0	0	0	101
3/22/2022	16:00	0	0	20	39	41	8	0	0	0	0	0	0	108
3/22/2022	16:15	0	0	7	62	29	8	0	0	0	0	0	0	106
3/22/2022	16:30	0	1	32	54	35	8	0	0	0	0	0	0	130
3/22/2022	16:45	0	0	8	76	46	3	0	0	0	0	0	0	133
3/22/2022	17:00	0	0	13	59	39	9	0	0	0	0	0	0	120
3/22/2022	17:15	0	0	17	62	40	5	0	0	0	0	0	0	124
3/22/2022	17:30	0	0	23	71	26	0	1	0	0	0	0	0	121
3/22/2022	17:45	0	0	22	69	17	6	0	0	0	0	0	0	114
3/22/2022	18:00	0	0	13	54	31	6	0	0	0	0	0	0	104
3/22/2022	18:15	0	0	9	62	28	6	2	0	0	0	0	0	107
3/22/2022	18:30	0	0	14	58	35	4	0	0	0	0	0	0	111
3/22/2022	18:45	0	0	19	43	37	5	1	0	0	0	0	0	105
3/22/2022	19:00	0	2	19	43	24	2	0	0	0	0	0	0	90
3/22/2022	19:15	0	0	27	43	23	1	0	0	0	0	0	0	94
3/22/2022	19:30	0	4	9	43	16	2	0	0	0	0	0	0	74
3/22/2022	19:45	0	0	20	34	26	5	2	0	0	0	0	0	87
3/22/2022	20:00	0	0	11	35	21	7	0	0	0	0	0	0	74
3/22/2022	20:15	0	0	14	42	10	2	0	0	0	0	0	0	68
3/22/2022	20:30	0	0	16	32	15	0	0	0	0	0	0	0	63
3/22/2022	20:45	0	0	10	28	24	3	1	0	0	0	0	0	66
3/22/2022	21:00	0	1	12	26	18	2	0	0	0	0	0	0	59
3/22/2022	21:15	0	0	4	24	22	1	1	0	0	0	0	0	52
3/22/2022	21:30	0	0	5	29	12	2	0	0	0	0	0	0	48
3/22/2022	21:45	0	0	9	25	14	1	0	1	0	0	0	0	50
3/22/2022	22:00	0	0	1	25	15	5	1	0	0	0	0	0	47
3/22/2022	22:15	0	0	6	16	16	2	0	0	0	0	0	0	40
3/22/2022	22:30	0	0	2	18	10	2	0	0	0	0	0	0	32
3/22/2022	22:45	0	0	1	16	12	5	0	0	0	0	0	0	34
3/22/2022	23:00	0	1	2	16	8	1	0	0	0	0	0	0	28
3/22/2022	23:15	0	0	1	11	7	1	0	0	0	0	0	0	20
3/22/2022	23:30	0	0	1	7	5	2	0	0	0	0	0	0	15
3/22/2022	23:45	0	0	1	9	9	0	0	0	0	0	0	0	19
Complete Day		0	18	721	2673	1698	301	23	3	0	0	0	0	5437

Count Name MD 97 NB - 1150' south of Bel Pre Rd - Ln 1 and 2
Start Date 3/22/2022
Start Time 0:00
Site Code 009711
Station ID

Date	Time	0 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100	>100 to 110	> 110	Total
3/22/2022	00:00	0	0	0	3	17	2	1	0	0	0	0	0	23
3/22/2022	00:15	0	0	0	5	4	1	0	0	0	0	0	0	10
3/22/2022	00:30	0	0	1	2	2	0	0	0	0	0	0	0	5
3/22/2022	00:45	0	0	0	3	8	0	0	1	0	0	0	0	12
3/22/2022	01:00	0	0	0	1	7	4	1	0	0	0	0	0	13
3/22/2022	01:15	0	0	0	2	7	1	0	0	0	0	0	0	10
3/22/2022	01:30	0	0	0	1	6	1	0	0	0	0	0	0	8
3/22/2022	01:45	0	0	0	0	4	1	0	0	0	0	0	0	5
3/22/2022	02:00	0	0	0	0	1	1	0	0	0	0	0	0	2
3/22/2022	02:15	0	0	1	1	4	0	0	0	0	0	0	0	6
3/22/2022	02:30	0	0	0	0	3	0	0	0	0	0	0	0	3
3/22/2022	02:45	0	0	0	3	1	2	0	0	0	0	0	0	6
3/22/2022	03:00	0	0	1	0	2	1	0	0	0	0	0	0	4
3/22/2022	03:15	0	0	0	0	3	2	0	0	0	0	0	0	5
3/22/2022	03:30	0	0	0	1	1	2	0	0	0	0	0	0	4
3/22/2022	03:45	0	0	0	0	4	1	0	0	0	0	0	0	5
3/22/2022	04:00	0	0	0	0	2	3	0	0	0	0	0	0	5
3/22/2022	04:15	0	0	0	1	9	5	0	1	0	0	0	0	16
3/22/2022	04:30	0	0	0	4	8	3	0	0	0	0	0	0	15
3/22/2022	04:45	0	0	0	1	12	6	0	0	0	0	0	0	19
3/22/2022	05:00	0	0	1	0	13	5	0	0	0	0	0	0	19
3/22/2022	05:15	0	0	0	7	12	14	1	0	0	0	0	0	34
3/22/2022	05:30	0	0	0	9	23	3	1	0	0	0	0	0	36
3/22/2022	05:45	0	0	1	6	34	9	1	1	0	0	0	0	52
3/22/2022	06:00	0	0	0	10	33	10	1	0	0	0	0	0	54
3/22/2022	06:15	0	0	1	16	35	11	0	0	0	0	0	0	63
3/22/2022	06:30	0	0	1	18	35	8	1	0	0	0	0	0	63
3/22/2022	06:45	0	0	0	32	36	3	1	0	0	0	0	0	72
3/22/2022	07:00	0	0	3	23	33	7	1	0	0	0	0	0	67
3/22/2022	07:15	0	0	1	44	33	3	1	0	0	0	0	0	82
3/22/2022	07:30	0	0	1	53	37	5	0	0	0	0	0	0	96
3/22/2022	07:45	0	0	3	44	55	8	0	0	0	0	0	0	110
3/22/2022	08:00	0	0	1	53	42	11	0	0	0	0	0	0	107
3/22/2022	08:15	0	0	1	57	49	12	0	0	0	0	0	0	119
3/22/2022	08:30	0	0	0	45	41	4	0	0	0	0	0	0	90
3/22/2022	08:45	0	0	3	37	46	8	0	0	0	0	0	0	94
3/22/2022	09:00	0	1	2	32	51	4	0	0	0	0	0	0	90
3/22/2022	09:15	0	0	0	34	43	6	0	0	0	0	0	0	83
3/22/2022	09:30	0	0	1	29	53	8	0	0	0	0	0	0	91
3/22/2022	09:45	0	0	1	19	59	5	0	0	0	0	0	0	84
3/22/2022	10:00	0	0	0	30	49	7	0	0	0	0	0	0	86
3/22/2022	10:15	0	0	0	19	52	8	0	0	0	0	0	0	79
3/22/2022	10:30	0	0	0	23	50	4	0	0	0	0	0	0	77
3/22/2022	10:45	0	0	1	28	60	6	0	0	0	0	0	0	95
3/22/2022	11:00	0	0	0	19	49	8	0	0	0	0	0	0	76
3/22/2022	11:15	0	0	0	25	43	6	0	0	0	0	0	0	74
3/22/2022	11:30	0	0	5	30	47	8	2	0	0	0	0	0	92
3/22/2022	11:45	0	0	0	25	61	10	0	0	0	0	0	0	96
3/22/2022	12:00	0	1	0	31	52	5	0	0	0	0	0	0	89
3/22/2022	12:15	0	0	1	38	58	6	0	0	0	0	0	0	103
3/22/2022	12:30	0	0	1	22	64	5	0	0	0	0	0	0	92
3/22/2022	12:45	0	0	1	25	59	3	0	0	0	0	0	0	88
3/22/2022	13:00	0	0	0	35	47	5	1	0	0	0	0	0	88
3/22/2022	13:15	0	0	2	29	58	9	0	0	0	0	0	0	98
3/22/2022	13:30	0	0	1	51	57	7	0	0	0	0	0	0	116
3/22/2022	13:45	0	0	0	31	67	11	0	0	0	0	0	0	109
3/22/2022	14:00	0	0	0	52	53	3	0	0	0	0	0	0	108
3/22/2022	14:15	0	0	0	38	62	6	1	0	0	0	0	0	107
3/22/2022	14:30	0	0	1	29	70	9	0	0	0	0	0	0	109
3/22/2022	14:45	0	0	0	44	65	8	1	0	0	0	0	0	118
3/22/2022	15:00	0	0	9	61	72	10	0	0	0	0	0	0	152
3/22/2022	15:15	0	2	29	92	39	5	0	0	0	0	0	0	167
3/22/2022	15:30	2	1	11	93	47	5	0	0	0	0	0	0	159
3/22/2022	15:45	0	0	1	60	67	4	1	0	0	0	0	0	133
3/22/2022	16:00	0	0	9	47	87	8	0	0	0	0	0	0	151
3/22/2022	16:15	0	0	2	43	80	10	2	0	0	0	0	0	137
3/22/2022	16:30	0	0	4	64	72	7	1	0	0	0	0	0	148
3/22/2022	16:45	0	0	11	69	69	9	0	0	0	0	0	0	158
3/22/2022	17:00	0	0	0	35	102	8	0	0	0	0	0	0	145
3/22/2022	17:15	0	0	1	75	75	5	0	0	0	0	0	0	156
3/22/2022	17:30	0	0	10	87	78	1	0	0	0	0	0	0	176
3/22/2022	17:45	0	0	19	73	67	8	0	0	0	0	0	0	167
3/22/2022	18:00	0	0	6	67	83	5	0	0	0	0	0	0	161
3/22/2022	18:15	0	0	1	65	72	5	0	0	0	0	0	0	143
3/22/2022	18:30	0	0	0	60	62	8	0	0	0	0	0	0	130
3/22/2022	18:45	0	0	2	56	52	6	0	0	0	0	0	0	116
3/22/2022	19:00	0	0	0	44	46	5	0	0	0	0	0	0	95
3/22/2022	19:15	0	0	7	53	32	1	0	0	0	0	0	0	93
3/22/2022	19:30	0	2	8	36	40	4	0	0	0	0	0	0	90
3/22/2022	19:45	0	0	2	47	40	7	0	0	0	0	0	0	96
3/22/2022	20:00	0	0	0	40	31	2	0	0	0	0	0	0	73
3/22/2022	20:15	0	0	0	28	38	7	0	0	0	0	0	0	73
3/22/2022	20:30	0	0	0	27	32	4	0	0	0	0	0	0	63
3/22/2022	20:45	0	0	0	31	32	6	0	0	0	0	0	0	69
3/22/2022	21:00	0	1	0	14	36	6	0	0	0	0	0	0	57
3/22/2022	21:15	0	0	2	29	23	4	0	0	0	0	0	0	58
3/22/2022	21:30	0	0	0	11	27	7	0	0	0	0	0	0	45
3/22/2022	21:45	0	0	0	12	34	3	1	0	0	0	0	0	50
3/22/2022	22:00	0	0	0	10	21	7	1	0	0	0	0	0	39
3/22/2022	22:15	0	0	0	15	22	8	2	0	1	0	0	0	48
3/22/2022	22:30	0	0	1	10	26	6	1	0	0	0	0	0	44
3/22/2022	22:45	0	0	0	6	27	2	0	0	0	0	0	0	35
3/22/2022	23:00	0	0	0	9	19	2	0	0	0	0	0	0	30
3/22/2022	23:15	0	0	0	2	23	4	0	0	0	0	0	0	29
3/22/2022	23:30	0	0	0	5	17	5	0	0	0	0	0	0	27
3/22/2022	23:45	0	0	0	2	14	2	0	0	0	0	0	0	18
Complete Day		2	8	172	2698	3695	510	24	3	1	0	0	0	7113

Count Name MD 97 NB - 1150' south of Bel Pre Rd - Ln 1 and 2
Start Date 3/23/2022
Start Time 0:00
Site Code 009711
Station ID

Date	Time	0 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100	>100 to 110	> 110	Total
3/23/2022	00:00	0	0	4	9	4	1	0	0	0	0	0	0	18
3/23/2022	00:15	0	0	1	5	7	0	0	0	0	0	0	0	13
3/23/2022	00:30	0	0	1	4	2	0	1	0	0	0	0	0	8
3/23/2022	00:45	0	0	1	3	3	1	0	0	0	0	0	0	8
3/23/2022	01:00	0	0	2	2	2	0	0	0	0	0	0	0	6
3/23/2022	01:15	0	0	2	6	5	0	0	0	0	0	0	0	13
3/23/2022	01:30	0	0	0	2	0	0	0	0	0	0	0	0	2
3/23/2022	01:45	0	0	1	1	3	0	0	0	0	0	0	0	5
3/23/2022	02:00	0	0	0	3	3	1	0	0	0	0	0	0	7
3/23/2022	02:15	0	0	1	1	1	1	0	0	0	0	0	0	4
3/23/2022	02:30	0	0	1	3	1	0	0	0	0	0	0	0	5
3/23/2022	02:45	0	0	0	3	3	0	0	0	0	0	0	0	6
3/23/2022	03:00	0	0	1	3	1	0	0	0	0	0	0	0	5
3/23/2022	03:15	0	0	0	2	0	0	0	0	0	0	0	0	2
3/23/2022	03:30	0	0	0	2	1	0	0	0	0	0	0	0	3
3/23/2022	03:45	0	0	0	1	3	0	0	0	0	0	0	0	4
3/23/2022	04:00	0	0	1	0	1	1	0	0	0	0	0	0	3
3/23/2022	04:15	0	0	0	1	4	1	0	0	0	0	0	0	6
3/23/2022	04:30	0	0	1	3	3	0	0	0	0	0	0	0	7
3/23/2022	04:45	0	0	1	4	4	1	0	0	0	0	0	0	10
3/23/2022	05:00	0	0	0	0	4	2	0	0	0	0	0	0	6
3/23/2022	05:15	0	0	1	10	3	1	0	0	0	0	0	0	15
3/23/2022	05:30	0	0	1	5	4	3	0	0	0	0	0	0	13
3/23/2022	05:45	0	0	1	9	8	3	0	0	0	0	0	0	21
3/23/2022	06:00	0	0	6	9	13	2	1	1	0	0	0	0	32
3/23/2022	06:15	0	0	2	19	14	5	0	0	0	0	0	0	40
3/23/2022	06:30	0	0	0	19	17	3	1	0	0	0	0	0	40
3/23/2022	06:45	0	0	6	25	11	3	0	0	0	0	0	0	45
3/23/2022	07:00	0	1	5	27	19	1	1	0	0	0	0	0	54
3/23/2022	07:15	0	0	9	25	16	1	1	0	0	0	0	0	52
3/23/2022	07:30	0	0	11	35	21	4	0	0	0	0	0	0	71
3/23/2022	07:45	0	0	4	32	35	7	0	0	0	0	0	0	78
3/23/2022	08:00	0	0	3	43	32	4	3	0	0	0	0	0	85
3/23/2022	08:15	0	0	9	39	17	3	0	0	0	0	0	0	68
3/23/2022	08:30	0	0	16	34	17	3	1	0	0	0	0	0	71
3/23/2022	08:45	0	0	6	42	19	3	0	0	0	0	0	0	70
3/23/2022	09:00	0	1	10	18	13	3	0	0	0	0	0	0	45
3/23/2022	09:15	0	0	2	41	13	3	0	0	0	0	0	0	59
3/23/2022	09:30	0	0	6	34	22	6	0	0	0	0	0	0	68
3/23/2022	09:45	0	0	6	26	18	1	1	0	0	0	0	0	52
3/23/2022	10:00	0	0	6	14	10	3	0	0	0	0	0	0	33
3/23/2022	10:15	0	0	2	23	18	3	0	0	0	0	0	0	46
3/23/2022	10:30	0	0	5	21	15	5	0	1	0	0	0	0	47
3/23/2022	10:45	0	0	3	13	21	9	0	0	0	0	0	0	46
3/23/2022	11:00	0	0	6	22	13	4	0	0	1	0	0	0	46
3/23/2022	11:15	0	0	6	21	21	6	0	0	0	0	0	0	54
3/23/2022	11:30	0	0	1	24	17	2	0	0	0	0	0	0	44
3/23/2022	11:45	0	1	3	30	17	2	1	0	0	0	0	0	54
3/23/2022	12:00	0	0	5	43	19	5	0	0	0	0	0	0	72
3/23/2022	12:15	0	0	11	36	27	1	0	0	0	0	0	0	75
3/23/2022	12:30	0	0	6	33	16	1	0	0	0	0	0	0	56
3/23/2022	12:45	0	0	8	29	20	2	0	0	0	0	0	0	59
3/23/2022	13:00	0	1	14	39	15	1	0	0	0	0	0	0	70
3/23/2022	13:15	0	0	9	34	20	3	0	0	0	0	0	0	66
3/23/2022	13:30	0	0	10	39	11	3	1	0	0	0	0	0	64
3/23/2022	13:45	0	0	8	37	20	3	0	0	0	0	0	0	68
3/23/2022	14:00	0	0	12	47	22	2	0	0	0	0	0	0	83
3/23/2022	14:15	0	0	7	45	19	5	1	0	0	0	0	0	77
3/23/2022	14:30	0	0	8	59	19	4	1	0	0	0	0	0	91
3/23/2022	14:45	0	0	14	49	25	3	1	0	0	0	0	0	92
3/23/2022	15:00	0	0	1	43	45	6	1	0	0	0	0	0	96
3/23/2022	15:15	0	0	19	62	30	5	0	0	0	0	0	0	116
3/23/2022	15:30	0	0	12	58	29	7	0	0	0	0	0	0	106
3/23/2022	15:45	0	0	16	51	34	4	0	0	0	0	0	0	105
3/23/2022	16:00	0	1	23	61	27	3	2	0	0	0	0	0	117
3/23/2022	16:15	0	0	15	45	33	3	0	0	0	0	0	0	96
3/23/2022	16:30	1	2	26	48	26	5	0	0	0	0	0	0	108
3/23/2022	16:45	0	0	13	54	38	3	0	0	0	0	0	0	108
3/23/2022	17:00	0	0	25	50	32	1	0	0	0	0	0	0	108
3/23/2022	17:15	0	0	15	68	30	6	0	0	0	0	0	0	119
3/23/2022	17:30	0	0	15	74	32	1	1	0	0	0	0	0	123
3/23/2022	17:45	0	0	17	71	15	1	0	0	0	0	0	0	104
3/23/2022	18:00	0	1	13	59	23	6	1	0	0	0	0	0	103
3/23/2022	18:15	0	0	13	46	27	7	0	0	0	0	0	0	93
3/23/2022	18:30	0	0	13	54	27	5	0	0	0	0	0	0	99
3/23/2022	18:45	0	0	11	42	34	4	0	0	0	0	0	0	91
3/23/2022	19:00	0	1	18	43	17	0	0	0	0	0	0	0	79
3/23/2022	19:15	0	4	17	48	8	0	0	0	0	0	0	0	77
3/23/2022	19:30	0	0	26	31	25	1	0	0	0	0	0	0	83
3/23/2022	19:45	0	1	12	37	13	1	0	0	0	0	0	0	64
3/23/2022	20:00	0	0	15	40	13	1	0	0	0	0	0	0	69
3/23/2022	20:15	0	0	9	34	9	1	0	0	0	0	0	0	53
3/23/2022	20:30	0	1	18	26	6	1	0	0	0	0	0	0	52
3/23/2022	20:45	0	1	17	22	7	4	0	0	0	0	0	0	51
3/23/2022	21:00	0	0	8	33	10	3	0	0	0	0	0	0	54
3/23/2022	21:15	0	0	11	21	7	0	0	0	0	0	0	0	39
3/23/2022	21:30	0	0	6	15	5	1	0	0	0	0	0	0	27
3/23/2022	21:45	0	0	6	20	9	1	0	0	0	0	0	0	36
3/23/2022	22:00	0	0	4	20	8	1	0	0	0	0	0	0	33
3/23/2022	22:15	0	0	11	10	8	0	0	0	0	0	0	0	29
3/23/2022	22:30	0	0	4	11	13	3	0	0	0	0	0	0	31
3/23/2022	22:45	0	0	3	20	10	3	0	0	0	0	0	0	36
3/23/2022	23:00	0	0	4	15	8	3	0	0	0	0	0	0	30
3/23/2022	23:15	0	0	1	12	5	0	0	0	0	0	0	0	18
3/23/2022	23:30	0	0	3	8	7	0	0	0	0	0	0	0	18
3/23/2022	23:45	0	0	3	8	3	0	0	0	0	0	0	0	14
Complete Day		1	16	709	2568	1405	226	20	2	1	0	0	0	4948

Count Name MD 97 NB - 1150' south of Bel Pre Rd - Ln 1 and 2
Start Date 3/23/2022
Start Time 0:00
Site Code 009711
Station ID 6473

Date	Time	0 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100	>100 to 110	> 110	Total
3/23/2022	00:00	0	0	0	1	10	6	0	0	0	0	0	0	17
3/23/2022	00:15	0	0	0	2	6	2	0	0	0	0	0	0	10
3/23/2022	00:30	0	0	0	3	3	2	0	0	0	0	0	0	8
3/23/2022	00:45	0	0	0	2	6	3	0	0	0	0	0	0	11
3/23/2022	01:00	0	0	0	3	5	0	0	0	0	0	0	0	8
3/23/2022	01:15	0	0	0	6	1	0	0	0	0	0	0	0	7
3/23/2022	01:30	0	0	0	1	4	0	0	0	0	0	0	0	5
3/23/2022	01:45	0	0	1	2	2	2	0	0	0	0	0	0	7
3/23/2022	02:00	0	0	0	5	2	1	0	0	0	0	0	0	8
3/23/2022	02:15	0	0	0	1	1	2	0	0	0	0	0	0	4
3/23/2022	02:30	0	0	1	3	0	0	0	0	0	0	0	0	4
3/23/2022	02:45	0	0	0	1	4	2	1	0	0	0	0	0	8
3/23/2022	03:00	0	0	0	1	1	1	0	0	0	0	0	0	3
3/23/2022	03:15	0	0	0	0	4	2	0	0	0	0	0	0	6
3/23/2022	03:30	0	0	0	1	3	3	0	0	0	0	0	0	7
3/23/2022	03:45	0	0	0	1	4	1	1	0	0	0	0	0	7
3/23/2022	04:00	0	0	0	2	3	1	0	0	0	0	0	0	6
3/23/2022	04:15	0	0	0	2	11	2	0	0	0	0	0	0	15
3/23/2022	04:30	0	0	0	3	7	3	0	0	0	0	0	0	13
3/23/2022	04:45	0	0	0	1	10	5	0	0	0	0	0	0	16
3/23/2022	05:00	0	0	0	1	13	5	1	0	0	0	0	0	20
3/23/2022	05:15	0	0	0	8	15	4	1	0	1	0	0	0	29
3/23/2022	05:30	0	0	0	10	23	7	0	0	0	0	0	0	40
3/23/2022	05:45	0	0	0	10	25	8	3	1	0	0	0	0	47
3/23/2022	06:00	0	0	1	11	31	7	0	0	0	0	0	0	50
3/23/2022	06:15	0	0	1	16	33	4	0	0	0	0	0	0	54
3/23/2022	06:30	0	0	1	23	32	9	0	0	0	0	0	0	65
3/23/2022	06:45	0	0	0	25	33	11	0	0	0	0	0	0	69
3/23/2022	07:00	0	0	0	25	31	6	1	0	0	0	0	0	63
3/23/2022	07:15	0	0	1	33	40	3	0	0	0	0	0	0	77
3/23/2022	07:30	0	0	1	40	43	4	1	0	0	0	0	0	89
3/23/2022	07:45	0	0	1	48	58	7	0	0	0	0	0	0	114
3/23/2022	08:00	0	0	1	43	53	7	1	0	0	0	0	0	105
3/23/2022	08:15	0	0	4	49	53	8	0	0	0	0	0	0	114
3/23/2022	08:30	0	0	0	40	50	5	3	0	0	0	0	0	98
3/23/2022	08:45	0	0	0	38	52	5	0	0	0	0	0	0	95
3/23/2022	09:00	1	4	1	22	43	4	0	0	0	0	0	0	75
3/23/2022	09:15	0	0	0	32	39	7	0	0	0	0	0	0	78
3/23/2022	09:30	0	0	0	35	34	10	0	0	0	0	0	0	79
3/23/2022	09:45	0	0	1	24	35	4	0	0	0	0	0	0	64
3/23/2022	10:00	0	0	0	8	43	1	0	0	0	0	0	0	52
3/23/2022	10:15	0	0	0	26	36	4	1	0	0	0	0	0	67
3/23/2022	10:30	0	0	0	21	33	8	0	0	0	0	0	0	62
3/23/2022	10:45	0	0	0	17	43	8	1	0	0	0	0	0	69
3/23/2022	11:00	0	0	0	18	48	5	0	1	0	0	0	0	72
3/23/2022	11:15	0	0	1	16	59	4	1	0	0	0	0	0	81
3/23/2022	11:30	0	0	0	13	42	4	0	0	0	0	0	0	59
3/23/2022	11:45	0	0	0	18	34	4	0	0	0	0	0	0	56
3/23/2022	12:00	0	0	0	41	48	5	0	0	0	0	0	0	94
3/23/2022	12:15	0	0	0	27	57	4	0	0	0	0	0	0	88
3/23/2022	12:30	0	0	1	30	41	6	0	0	0	0	0	0	78
3/23/2022	12:45	0	0	0	37	35	3	0	0	0	0	0	0	75
3/23/2022	13:00	0	0	0	54	31	2	1	0	0	0	0	0	88
3/23/2022	13:15	0	0	1	25	52	6	0	0	0	0	0	0	84
3/23/2022	13:30	0	0	0	36	45	3	0	0	0	0	0	0	84
3/23/2022	13:45	0	0	2	34	31	3	0	0	0	0	0	0	70
3/23/2022	14:00	0	0	4	56	44	4	1	0	0	0	0	0	109
3/23/2022	14:15	0	0	1	50	59	0	0	0	0	0	0	0	110
3/23/2022	14:30	0	0	4	41	52	10	1	0	0	0	0	0	108
3/23/2022	14:45	0	0	0	47	70	8	0	0	0	0	0	0	125
3/23/2022	15:00	0	0	0	32	77	7	0	1	0	0	0	0	117
3/23/2022	15:15	0	0	1	76	69	5	0	0	0	0	0	0	151
3/23/2022	15:30	0	0	1	49	81	8	0	0	0	0	0	0	139
3/23/2022	15:45	0	0	3	45	71	13	0	0	0	0	0	0	132
3/23/2022	16:00	0	0	5	59	64	6	0	0	0	0	0	0	134
3/23/2022	16:15	1	0	10	61	63	4	0	0	0	0	0	0	139
3/23/2022	16:30	1	1	2	83	73	7	0	0	0	0	0	0	167
3/23/2022	16:45	0	0	0	49	99	6	1	0	0	0	0	0	155
3/23/2022	17:00	0	0	2	80	66	6	0	0	0	0	0	0	154
3/23/2022	17:15	0	0	5	72	70	6	1	0	0	0	0	0	154
3/23/2022	17:30	0	0	2	84	55	8	0	0	0	0	0	0	149
3/23/2022	17:45	0	0	6	84	40	4	0	0	0	0	0	0	134
3/23/2022	18:00	0	0	5	65	70	3	0	0	0	0	0	0	143
3/23/2022	18:15	0	0	2	46	57	10	1	0	0	0	0	0	116
3/23/2022	18:30	0	0	0	62	58	3	0	0	0	0	0	0	123
3/23/2022	18:45	0	0	0	54	56	8	0	0	0	0	0	0	118
3/23/2022	19:00	0	0	4	43	44	4	0	0	0	0	0	0	95
3/23/2022	19:15	0	0	1	47	29	4	0	0	0	0	0	0	81
3/23/2022	19:30	0	0	7	33	32	2	0	0	0	0	0	0	74
3/23/2022	19:45	0	0	2	39	30	2	0	0	0	0	0	0	73
3/23/2022	20:00	0	0	0	42	30	0	0	0	0	0	0	0	72
3/23/2022	20:15	0	0	0	30	38	1	0	0	0	0	0	0	69
3/23/2022	20:30	0	0	5	27	18	3	0	0	0	0	0	0	53
3/23/2022	20:45	0	0	7	20	30	3	0	0	0	0	0	0	60
3/23/2022	21:00	0	0	1	26	33	5	0	0	0	0	0	0	65
3/23/2022	21:15	0	0	3	32	16	3	0	0	0	0	0	0	54
3/23/2022	21:30	0	0	1	18	24	0	0	0	0	0	0	0	43
3/23/2022	21:45	0	0	3	14	20	1	0	0	0	0	0	0	38
3/23/2022	22:00	0	0	0	12	30	6	0	0	0	0	0	0	48
3/23/2022	22:15	0	0	0	16	17	4	0	0	0	0	0	0	37
3/23/2022	22:30	0	0	1	15	14	2	0	0	0	0	0	0	32
3/23/2022	22:45	0	0	0	5	20	6	0	0	0	0	0	0	31
3/23/2022	23:00	0	0	0	8	13	1	0	0	0	0	0	0	22
3/23/2022	23:15	0	0	0	14	15	1	0	0	0	0	0	0	30
3/23/2022	23:30	0	0	1	6	12	3	0	0	0	0	0	0	22
3/23/2022	23:45	0	0	0	8	10	4	1	0	0	0	0	0	23
Complete Day		3	5	109	2645	3270	414	23	3	1	0	0	0	6473

Count Name MD 97 NB - 1150' south of Bel Pre Rd - Ln 3
Start Date 3/22/2022
Start Time 0:00
Site Code 0097111
Station ID

Date	Time	0 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100	>100 to 110	> 110	Total
3/22/2022	00:00	0	0	0	2	8	4	0	0	0	0	0	0	14
3/22/2022	00:15	0	0	0	0	2	0	0	0	0	0	0	0	2
3/22/2022	00:30	0	0	0	1	5	2	0	0	0	0	0	0	8
3/22/2022	00:45	0	0	0	2	5	3	0	0	0	0	0	0	10
3/22/2022	01:00	0	0	0	0	0	0	0	0	0	0	0	0	0
3/22/2022	01:15	0	0	0	1	1	1	0	0	0	0	0	0	3
3/22/2022	01:30	0	0	0	0	3	1	0	0	0	0	0	0	4
3/22/2022	01:45	0	0	0	1	0	0	1	0	0	0	0	0	2
3/22/2022	02:00	0	0	0	0	3	0	1	0	0	0	0	0	4
3/22/2022	02:15	0	0	0	1	2	0	0	0	0	0	0	0	3
3/22/2022	02:30	0	0	0	0	5	0	0	0	0	0	0	0	5
3/22/2022	02:45	0	0	0	0	0	0	0	0	0	0	0	0	0
3/22/2022	03:00	0	0	0	0	1	0	0	0	0	0	0	0	1
3/22/2022	03:15	0	0	1	0	1	2	0	0	0	0	0	0	4
3/22/2022	03:30	0	0	0	0	1	1	0	0	0	0	0	0	2
3/22/2022	03:45	0	0	0	0	4	0	1	0	0	0	0	0	5
3/22/2022	04:00	0	0	0	1	1	0	0	0	0	0	0	0	2
3/22/2022	04:15	0	0	0	3	1	1	0	0	0	0	0	0	5
3/22/2022	04:30	0	0	0	0	2	1	0	0	0	0	0	0	3
3/22/2022	04:45	0	0	0	1	6	2	1	0	0	0	0	0	10
3/22/2022	05:00	0	0	0	3	8	2	1	0	0	0	0	0	14
3/22/2022	05:15	0	0	0	3	15	7	1	0	0	0	0	0	26
3/22/2022	05:30	0	0	0	4	12	11	0	0	0	0	0	0	27
3/22/2022	05:45	0	0	0	5	27	14	1	0	0	0	0	0	47
3/22/2022	06:00	0	0	0	7	22	6	1	0	0	0	0	0	36
3/22/2022	06:15	0	0	0	4	36	11	5	0	0	0	0	0	56
3/22/2022	06:30	0	0	0	11	51	11	1	0	0	0	0	0	74
3/22/2022	06:45	0	0	1	18	42	5	0	0	0	0	0	0	66
3/22/2022	07:00	0	0	1	19	42	5	1	0	0	0	0	0	68
3/22/2022	07:15	0	0	0	29	59	9	1	0	0	0	0	0	98
3/22/2022	07:30	0	0	1	36	52	5	2	0	0	0	0	0	96
3/22/2022	07:45	0	0	0	37	72	5	0	0	0	0	0	0	114
3/22/2022	08:00	0	0	3	34	65	5	0	0	0	0	0	0	107
3/22/2022	08:15	0	0	0	40	70	7	1	0	0	0	0	0	118
3/22/2022	08:30	0	0	1	22	63	10	0	0	0	0	0	0	96
3/22/2022	08:45	0	0	0	30	46	14	0	0	0	0	0	0	90
3/22/2022	09:00	0	0	1	23	62	7	0	0	0	0	0	0	93
3/22/2022	09:15	0	0	0	23	46	10	0	0	0	0	0	0	79
3/22/2022	09:30	0	0	0	16	57	10	0	0	0	0	0	0	83
3/22/2022	09:45	0	0	1	8	61	9	1	0	0	0	0	0	80
3/22/2022	10:00	0	0	0	15	45	12	0	0	0	0	0	0	72
3/22/2022	10:15	0	0	1	16	55	9	0	0	0	0	0	0	81
3/22/2022	10:30	0	0	1	13	58	7	0	0	0	0	0	0	79
3/22/2022	10:45	0	0	0	15	44	11	0	0	0	0	0	0	70
3/22/2022	11:00	0	0	1	12	54	11	0	0	0	0	0	0	78
3/22/2022	11:15	0	0	0	16	49	14	0	0	0	0	0	0	79
3/22/2022	11:30	0	0	0	23	59	13	0	0	0	0	0	0	95
3/22/2022	11:45	0	0	0	17	57	11	1	0	0	0	0	0	86
3/22/2022	12:00	0	0	1	37	39	10	0	0	0	0	0	0	87
3/22/2022	12:15	0	0	0	21	51	8	1	0	0	0	0	0	81
3/22/2022	12:30	0	0	0	23	47	10	3	0	0	0	0	0	83
3/22/2022	12:45	0	0	0	12	60	11	1	0	0	0	0	0	84
3/22/2022	13:00	0	0	0	20	59	10	3	0	0	0	0	0	92
3/22/2022	13:15	0	0	0	19	64	11	0	0	0	0	0	0	94
3/22/2022	13:30	0	0	0	25	82	7	3	0	0	0	0	0	117
3/22/2022	13:45	0	0	0	11	69	18	0	0	0	0	0	0	98
3/22/2022	14:00	0	0	3	36	67	13	0	0	0	0	0	0	119
3/22/2022	14:15	0	0	0	13	74	11	0	0	0	0	0	0	98
3/22/2022	14:30	0	0	0	20	77	9	2	0	0	0	0	0	108
3/22/2022	14:45	0	0	0	21	84	11	1	0	0	0	0	0	117
3/22/2022	15:00	0	0	0	34	69	19	0	0	0	0	0	0	122
3/22/2022	15:15	0	0	5	76	71	9	0	0	0	0	0	0	161
3/22/2022	15:30	0	0	0	54	84	11	0	1	0	0	0	0	150
3/22/2022	15:45	0	0	0	29	90	22	2	0	0	0	0	0	143
3/22/2022	16:00	0	0	8	19	98	17	0	0	0	0	0	0	142
3/22/2022	16:15	0	0	0	43	101	20	0	0	0	0	0	0	164
3/22/2022	16:30	0	0	0	58	86	13	2	0	0	0	0	0	159
3/22/2022	16:45	0	0	4	47	120	8	1	0	0	0	0	0	180
3/22/2022	17:00	0	0	0	44	102	13	0	0	0	0	0	0	159
3/22/2022	17:15	0	0	3	44	91	16	1	0	0	0	0	0	155
3/22/2022	17:30	0	0	11	81	89	5	0	0	0	0	0	0	186
3/22/2022	17:45	0	0	0	56	77	12	0	0	0	0	0	0	145
3/22/2022	18:00	0	0	6	25	97	12	0	1	0	0	0	0	141
3/22/2022	18:15	0	0	0	51	84	15	0	0	0	0	0	0	150
3/22/2022	18:30	0	0	0	26	92	7	0	0	0	0	0	0	125
3/22/2022	18:45	0	0	0	56	64	2	0	0	0	0	0	0	122
3/22/2022	19:00	0	0	0	31	58	8	0	0	0	0	0	0	97
3/22/2022	19:15	0	0	1	41	54	4	0	0	0	0	0	0	100
3/22/2022	19:30	0	0	4	40	34	2	0	0	0	0	0	0	80
3/22/2022	19:45	0	0	2	45	45	4	0	0	0	0	0	0	96
3/22/2022	20:00	0	0	1	19	55	5	0	0	0	0	0	0	80
3/22/2022	20:15	0	0	1	23	34	12	0	0	0	0	0	0	70
3/22/2022	20:30	0	0	2	26	33	11	0	0	0	0	0	0	72
3/22/2022	20:45	0	0	0	11	39	8	1	0	0	0	0	0	59
3/22/2022	21:00	0	0	0	6	36	11	2	0	0	0	0	0	55
3/22/2022	21:15	0	0	0	12	45	9	0	0	0	0	0	0	66
3/22/2022	21:30	0	0	0	2	27	8	0	0	0	0	0	0	37
3/22/2022	21:45	0	0	1	11	19	5	1	0	0	0	0	0	37
3/22/2022	22:00	0	0	0	7	27	7	1	0	0	0	0	0	42
3/22/2022	22:15	0	0	0	6	23	9	1	0	0	0	0	0	39
3/22/2022	22:30	0	0	0	3	18	7	0	0	0	0	0	0	28
3/22/2022	22:45	0	0	1	5	9	7	0	0	0	0	0	0	22
3/22/2022	23:00	0	0	0	1	12	6	0	0	0	0	0	0	19
3/22/2022	23:15	0	0	0	1	16	4	0	0	0	0	0	0	21
3/22/2022	23:30	0	0	1	2	13	4	0	0	0	0	0	0	20
3/22/2022	23:45	0	0	0	2	4	0	0	0	0	0	0	0	6
Complete Day		0	0	68	1807	4169	730	47	2	0	0	0	0	6823

Start Date 3/23/2022
Start Time 0:00
Site Code 0097111
Station ID

Date	Time	0 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100	>100 to 110	> 110	Total
3/23/2022	00:00	0	0	0	1	6	3	0	0	0	0	0	0	10
3/23/2022	00:15	0	0	0	3	5	4	0	0	0	0	0	0	12
3/23/2022	00:30	0	0	1	0	2	2	0	0	0	0	0	0	5
3/23/2022	00:45	0	0	0	1	2	3	0	0	0	0	0	0	6
3/23/2022	01:00	0	0	0	0	1	2	1	0	0	0	0	0	4
3/23/2022	01:15	0	0	0	0	3	0	0	0	0	0	0	0	3
3/23/2022	01:30	0	0	0	0	6	1	0	0	0	0	0	0	7
3/23/2022	01:45	0	0	0	1	2	1	0	0	0	0	0	0	4
3/23/2022	02:00	0	0	0	2	2	1	0	0	0	0	0	0	5
3/23/2022	02:15	0	0	0	0	1	1	0	0	0	0	0	0	2
3/23/2022	02:30	0	0	0	0	4	2	0	0	0	0	0	0	6
3/23/2022	02:45	0	0	0	0	1	0	1	0	0	0	0	0	2
3/23/2022	03:00	0	0	0	2	2	0	0	0	0	0	0	0	4
3/23/2022	03:15	0	0	0	0	0	1	0	0	0	0	0	0	1
3/23/2022	03:30	0	0	0	1	3	0	0	0	0	0	0	0	4
3/23/2022	03:45	0	0	0	1	1	0	0	0	0	0	0	0	2
3/23/2022	04:00	0	0	0	2	0	1	0	0	0	0	0	0	3
3/23/2022	04:15	0	0	0	1	5	1	1	0	0	0	0	0	8
3/23/2022	04:30	0	0	0	1	2	1	1	0	0	0	0	0	5
3/23/2022	04:45	0	0	1	2	5	1	0	0	0	0	0	0	9
3/23/2022	05:00	0	0	0	4	5	4	2	0	0	0	0	0	15
3/23/2022	05:15	0	0	0	0	12	6	2	0	0	0	0	0	20
3/23/2022	05:30	0	0	0	5	18	6	1	0	0	0	0	0	30
3/23/2022	05:45	0	0	0	5	23	11	2	0	0	0	0	0	41
3/23/2022	06:00	0	0	0	3	28	5	1	0	0	0	0	0	37
3/23/2022	06:15	0	0	0	8	31	10	0	0	0	0	0	0	49
3/23/2022	06:30	0	0	1	7	41	11	1	1	0	0	0	0	62
3/23/2022	06:45	0	1	3	17	36	8	0	0	0	0	0	0	65
3/23/2022	07:00	0	0	1	13	48	8	0	0	0	0	0	0	70
3/23/2022	07:15	0	0	2	33	38	13	1	0	0	0	0	0	87
3/23/2022	07:30	0	0	0	31	53	12	0	0	0	0	0	0	96
3/23/2022	07:45	0	0	0	29	72	10	0	0	0	0	0	0	111
3/23/2022	08:00	0	0	2	44	56	10	1	0	0	0	0	0	113
3/23/2022	08:15	0	0	0	38	55	4	0	0	0	0	0	0	97
3/23/2022	08:30	0	0	1	37	57	3	1	0	0	0	0	0	99
3/23/2022	08:45	0	0	0	23	64	5	0	0	0	0	0	0	92
3/23/2022	09:00	0	2	2	19	41	6	0	0	0	0	0	0	70
3/23/2022	09:15	0	0	0	17	55	7	0	0	0	0	0	0	79
3/23/2022	09:30	0	0	0	23	56	7	1	0	0	0	0	0	87
3/23/2022	09:45	0	0	1	23	30	11	0	0	0	0	0	0	65
3/23/2022	10:00	0	0	0	6	33	7	0	0	0	0	0	0	46
3/23/2022	10:15	0	0	0	10	48	6	1	0	0	0	0	0	65
3/23/2022	10:30	0	0	0	11	51	10	0	0	0	0	0	0	72
3/23/2022	10:45	0	0	0	9	39	8	0	0	0	0	0	0	56
3/23/2022	11:00	0	0	0	9	41	5	0	0	0	0	0	0	55
3/23/2022	11:15	0	0	3	16	39	12	0	0	0	0	0	0	70
3/23/2022	11:30	0	0	0	11	52	10	0	0	0	0	0	0	73
3/23/2022	11:45	0	0	0	9	46	3	0	0	0	0	0	0	58
3/23/2022	12:00	0	0	0	24	55	7	0	0	0	0	0	0	86
3/23/2022	12:15	0	0	0	17	45	7	0	0	0	0	0	0	69
3/23/2022	12:30	0	0	0	16	47	5	0	0	0	0	0	0	68
3/23/2022	12:45	0	0	0	17	49	7	0	0	0	0	0	0	73
3/23/2022	13:00	0	0	1	26	47	6	0	0	0	0	0	0	80
3/23/2022	13:15	0	0	1	16	47	14	0	0	0	0	0	0	78
3/23/2022	13:30	0	0	0	26	49	7	1	0	0	0	0	0	83
3/23/2022	13:45	0	0	0	18	52	6	1	0	0	0	0	0	77
3/23/2022	14:00	0	0	4	39	58	3	0	0	0	0	0	0	104
3/23/2022	14:15	0	0	1	23	59	9	0	0	0	0	0	0	92
3/23/2022	14:30	0	0	1	32	68	14	0	0	0	0	0	0	115
3/23/2022	14:45	0	0	0	24	76	14	0	0	0	0	0	0	114
3/23/2022	15:00	0	0	0	20	91	17	1	0	0	0	0	0	129
3/23/2022	15:15	0	0	1	42	85	14	0	0	0	0	0	0	142
3/23/2022	15:30	0	0	2	31	82	18	1	0	0	0	0	0	134
3/23/2022	15:45	0	0	1	22	98	15	0	0	0	0	0	0	136
3/23/2022	16:00	0	0	3	20	104	16	1	0	0	0	0	0	144
3/23/2022	16:15	0	0	11	62	58	10	1	0	0	0	0	0	142
3/23/2022	16:30	0	0	3	54	81	11	0	0	0	0	0	0	149
3/23/2022	16:45	0	0	2	52	76	13	0	0	0	0	0	0	143
3/23/2022	17:00	0	0	0	43	77	11	0	0	0	0	0	0	131
3/23/2022	17:15	0	0	3	52	87	14	0	0	0	0	0	0	156
3/23/2022	17:30	0	0	1	67	81	8	0	0	0	0	0	0	157
3/23/2022	17:45	0	0	8	66	64	7	0	0	0	0	0	0	145
3/23/2022	18:00	0	0	0	56	86	3	0	0	0	0	0	0	145
3/23/2022	18:15	0	0	1	37	67	15	1	0	0	0	0	0	121
3/23/2022	18:30	0	0	1	30	88	11	0	0	0	0	0	0	130
3/23/2022	18:45	0	0	1	32	64	9	0	0	0	0	0	0	106
3/23/2022	19:00	0	0	2	27	48	4	0	0	0	0	0	0	81
3/23/2022	19:15	0	0	0	52	33	7	0	0	0	0	0	0	92
3/23/2022	19:30	0	0	2	32	40	1	0	0	0	0	0	0	75
3/23/2022	19:45	0	0	0	26	43	4	0	0	0	0	0	0	73
3/23/2022	20:00	0	0	0	38	25	1	0	0	0	0	0	0	64
3/23/2022	20:15	0	0	0	15	34	3	2	0	0	0	0	0	54
3/23/2022	20:30	0	0	0	27	25	2	0	0	0	0	0	0	54
3/23/2022	20:45	0	0	0	28	21	2	0	0	0	0	0	0	51
3/23/2022	21:00	0	0	0	14	26	2	0	0	0	0	0	0	42
3/23/2022	21:15	0	0	0	19	17	1	0	0	0	0	0	0	37
3/23/2022	21:30	0	0	0	18	16	2	0	0	0	0	0	0	36
3/23/2022	21:45	0	0	0	5	28	3	0	0	0	0	0	0	36
3/23/2022	22:00	0	0	1	7	27	4	0	0	0	0	0	0	39
3/23/2022	22:15	0	0	0	9	14	2	0	0	0	0	0	0	25
3/23/2022	22:30	0	0	0	4	19	2	0	0	0	0	0	0	25
3/23/2022	22:45	0	0	0	3	22	1	0	0	0	0	0	0	26
3/23/2022	23:00	0	0	2	4	7	4	0	0	0	0	0	0	17
3/23/2022	23:15	0	0	0	7	9	0	0	0	0	0	0	0	16
3/23/2022	23:30	0	0	0	5	10	5	0	0	0	0	0	0	20
3/23/2022	23:45	0	0	0	4	12	3	0	0	0	0	0	0	19
Complete Day		0	3	71	1786	3638	587	27	1	0	0	0	0	6113

Station Name:MD 97 SB (Ln 4)
Site ID:000000000097
Station Num:000000000222
Description:MD 97 - 300' south of Wendy Ln
City:Aspen Hill
County:Montgomery
Start Date/Time:03-22-2022 00:00
End Date/Time:03-22-2022 23:59

	10 MPH	20 MPH	30 MPH	40 MPH	50 MPH	60 MPH	70 MPH	80 MPH	90 MPH	100 MPH	110 MPH	> 110 MPH	All Speeds	Mean Speed
00:00	0	0	1	12	6	1	0	0	0	0	0	0	20	38.50
00:15	0	0	2	8	3	2	0	0	0	0	0	0	15	38.33
00:30	0	0	1	6	3	2	0	0	0	0	0	0	12	40.00
00:45	0	0	2	7	3	1	0	0	0	0	0	0	13	37.31
01:00	0	0	0	2	4	0	0	0	0	0	0	0	6	41.67
01:15	0	0	1	3	6	0	0	0	0	0	0	0	10	40.00
01:30	0	0	0	1	0	0	0	0	1	0	0	0	2	60.00
01:45	0	0	1	2	5	4	0	0	0	0	0	0	12	45.00
02:00	0	0	0	1	3	0	0	0	0	0	0	0	4	42.50
02:15	0	0	1	1	5	1	0	0	0	0	0	0	8	42.50
02:30	0	1	2	1	3	0	0	0	0	0	0	0	7	33.57
02:45	0	0	1	2	1	1	0	0	0	0	0	0	5	39.00
03:00	0	0	0	1	2	0	0	0	0	0	0	0	3	41.67
03:15	0	0	0	1	2	2	0	0	0	0	0	0	5	47.00
03:30	0	0	0	3	2	3	0	0	0	0	0	0	8	45.00
03:45	0	0	2	0	4	1	0	0	0	0	0	0	7	40.71
04:00	0	0	0	5	8	1	0	0	0	0	0	0	14	42.14
04:15	0	0	0	4	3	2	0	0	0	0	0	0	9	42.78
04:30	0	0	0	5	5	6	0	0	1	0	0	0	17	47.94
04:45	0	0	0	3	10	3	1	0	0	0	0	0	17	46.18
05:00	0	0	2	10	12	7	0	0	0	0	0	0	31	42.74
05:15	0	0	0	8	25	6	1	0	0	0	0	0	40	45.00
05:30	0	0	2	17	21	8	1	0	0	0	0	0	49	42.76
05:45	0	0	6	26	23	4	0	0	0	0	0	0	59	39.24
06:00	0	0	2	18	38	11	1	0	0	0	0	0	70	43.71
06:15	0	0	7	31	36	6	0	0	0	0	0	0	80	40.13
06:30	0	0	5	21	52	6	0	0	0	0	0	0	84	42.02
06:45	0	0	4	37	54	12	1	0	0	0	0	0	108	42.13
07:00	0	0	12	50	90	7	0	0	0	0	0	0	159	40.79
07:15	0	0	4	53	91	12	0	0	0	0	0	0	160	41.94
07:30	0	0	3	47	68	7	1	0	0	0	0	0	126	41.51
07:45	0	0	9	61	77	3	0	0	0	0	0	0	150	39.93
08:00	0	0	2	60	93	4	0	0	0	0	0	0	159	41.23
08:15	0	0	3	42	89	15	2	0	0	0	0	0	151	43.08
08:30	0	0	1	86	76	6	0	0	0	0	0	0	169	40.15
08:45	0	0	11	74	69	10	0	0	0	0	0	0	164	39.76
09:00	0	0	8	90	49	8	0	0	0	0	0	0	155	38.68
09:15	0	0	9	85	52	0	0	0	0	0	0	0	146	37.95
09:30	0	0	5	58	64	2	0	0	0	0	0	0	129	39.88
09:45	0	0	9	54	45	1	0	0	0	0	0	0	109	38.49
10:00	0	0	5	44	39	3	0	0	0	0	0	0	91	39.40
10:15	0	0	7	51	39	2	0	0	0	0	0	0	99	38.64
10:30	0	0	2	59	46	2	0	0	0	0	0	0	109	39.40
10:45	0	0	10	45	36	2	0	0	0	0	0	0	93	38.23
11:00	0	0	6	49	36	6	0	0	0	0	0	0	97	39.33
11:15	0	1	6	71	26	2	0	0	0	0	0	0	106	37.08
11:30	0	0	5	56	48	5	0	0	0	0	0	0	114	39.65
11:45	0	0	2	70	32	4	1	0	0	0	0	0	109	38.76
12:00	0	0	13	72	29	3	0	0	0	0	0	0	117	36.88
12:15	0	0	11	67	37	1	0	0	0	0	0	0	116	37.41
12:30	0	0	5	68	40	3	0	0	0	0	0	0	116	38.53
12:45	0	0	13	46	57	4	1	0	0	0	0	0	121	39.55
13:00	0	0	5	55	41	2	0	0	0	0	0	0	103	38.88
13:15	0	0	9	89	33	4	0	0	0	0	0	0	135	37.37
13:30	0	0	13	63	40	5	0	0	0	0	0	0	121	38.06
13:45	0	0	15	81	35	5	0	0	0	0	0	0	136	37.21
14:00	0	0	10	94	37	0	0	0	0	0	0	0	141	36.91
14:15	0	0	11	84	44	2	0	0	0	0	0	0	141	37.62
14:30	0	0	7	101	40	1	0	0	0	0	0	0	149	37.35
14:45	0	0	16	66	46	1	0	0	0	0	0	0	129	37.48
15:00	0	0	26	75	49	4	0	0	0	0	0	0	154	37.01
15:15	2	0	13	90	59	1	0	0	0	0	0	0	165	37.55
15:30	0	0	19	95	39	3	0	0	0	0	0	0	156	36.67
15:45	0	1	13	120	33	3	0	1	0	0	0	0	171	36.64
16:00	3	3	28	110	33	2	0	0	0	0	0	0	179	34.66
16:15	4	22	36	84	29	1	0	0	0	0	0	0	176	31.53
16:30	0	3	24	106	31	2	0	0	0	0	0	0	166	35.30
16:45	0	0	19	138	31	4	0	0	0	0	0	0	192	36.04
17:00	0	2	26	118	44	2	0	0	0	0	0	0	192	35.94
17:15	0	6	54	105	26	0	0	0	0	0	0	0	191	32.91
17:30	0	0	20	115	32	1	0	0	0	0	0	0	168	35.83
17:45	0	1	36	95	40	3	0	0	0	0	0	0	175	35.46
18:00	0	4	50	110	19	2	0	0	0	0	0	0	185	33.11
18:15	0	4	48	106	28	2	0	0	0	0	0	0	188	33.72
18:30	0	1	19	103	39	2	0	0	0	0	0	0	164	36.34
18:45	0	1	30	77	27	3	0	0	0	0	0	0	138	35.07
19:00	0	0	43	92	31	2	0	0	0	0	0	0	168	34.52
19:15	0	3	21	74	37	2	0	0	0	0	0	0	137	36.02
19:30	0	0	28	69	34	3	1	0	0	0	0	0	135	36.11
19:45	0	0	15	80	33	0	0	0	0	0	0	0	128	36.41
20:00	0	0	21	93	33	0	0	0	0	0	0	0	147	35.82
20:15	0	0	14	74	29	1	0	0	0	0	0	0	118	36.44
20:30	0	0	6	72	30	1	0	0	0	0	0	0	109	37.39
20:45	0	0	17	60	12	1	0	0	0	0	0	0	90	34.67
21:00	0	0	6	63	24	1	0	0	0	0	0	0	94	37.13
21:15	0	0	14	59	26	3	0	0	0	0	0	0	102	36.76
21:30	0	0	6	45	30	3	0	0	0	0	0	0	84	38.57
21:45	0	0	1	29	27	4	0	0	0	0	0	0	61	40.57
22:00	0	0	4	31	22	1	0	0	0	0	0	0	58	38.45
22:15	0	0	1	31	27	0	0	0	0	0	0	0	59	39.41
22:30	0	0	3	19	14	2	0	0	0	0	0	0	38	38.95
22:45	0	0	3	18	13	1	0	0	0	0	0	0	35	38.43
23:00	0	0	2	15	10	2	0	0	0	0	0	0	29	39.14
23:15	0	0	5	14	14	0	0	0	0	0	0	0	33	37.73
23:30	0	0	0	11	15	1	0	0	0	0	0	0	27	41.30
23:45	0	0	5	13	13	2	0	0	0	0	0	0	33	38.64
Total	9	53	965	4936	3016	287	11	1	2	0	0	0	9280	

Station Name:MD 97 SB (Ln 4)
Site ID:000000000097
Station Num:000000000222
Description:MD 97 - 300' south of Wendy Ln
City:Aspen Hill
County:Montgomery
Start Date/Time:03-23-2022 00:00
End Date/Time:03-23-2022 23:59

	10 MPH	20 MPH	30 MPH	40 MPH	50 MPH	60 MPH	70 MPH	80 MPH	90 MPH	100 MPH	110 MPH	> 110 MPH	All Speeds	Mean Speed
00:00	0	0	1	10	10	2	0	0	0	0	0	0	23	40.65
00:15	0	0	2	11	5	1	0	0	0	0	0	0	19	37.63
00:30	0	0	0	4	5	1	0	0	0	0	0	0	10	42.00
00:45	0	0	1	2	0	1	0	0	0	0	0	0	4	37.50
01:00	0	0	1	5	1	0	1	0	0	0	0	0	8	38.75
01:15	0	0	0	5	2	2	1	0	0	0	0	0	10	44.00
01:30	0	1	2	4	3	2	0	0	0	0	0	0	12	37.50
01:45	0	0	2	1	3	0	0	0	0	0	0	0	6	36.67
02:00	0	0	0	3	1	0	0	0	0	0	0	0	4	37.50
02:15	0	0	1	2	1	0	0	0	0	0	0	0	4	35.00
02:30	0	0	2	2	4	0	1	0	0	0	0	0	9	40.56
02:45	0	0	0	0	1	0	0	0	0	0	0	0	1	45.00
03:00	0	0	1	1	0	1	0	0	0	0	0	0	3	38.33
03:15	0	0	0	0	2	1	0	0	0	0	0	0	3	48.33
03:30	0	0	0	3	4	2	0	0	0	0	0	0	9	43.89
03:45	0	0	1	5	3	2	0	0	0	0	0	0	11	40.45
04:00	0	0	1	4	4	1	0	0	0	0	0	0	10	40.00
04:15	0	0	0	2	4	1	0	0	0	0	0	0	7	43.57
04:30	0	0	0	2	7	4	0	0	0	0	0	0	13	46.54
04:45	0	0	1	3	15	3	0	0	0	0	0	0	22	44.09
05:00	0	0	1	3	17	4	1	0	0	0	0	0	26	45.38
05:15	0	0	2	14	13	13	0	0	0	0	0	0	42	43.81
05:30	0	0	1	19	16	6	0	0	0	0	0	0	42	41.43
05:45	0	0	1	22	29	0	1	1	0	0	0	0	54	41.48
06:00	0	0	2	10	57	6	0	0	0	0	0	0	75	43.93
06:15	0	0	4	24	42	11	1	0	0	0	0	0	82	42.68
06:30	0	0	5	25	49	8	0	0	0	0	0	0	87	41.90
06:45	0	0	6	40	62	10	0	0	0	0	0	0	118	41.44
07:00	0	0	3	72	68	6	0	0	0	0	0	0	149	40.17
07:15	0	0	3	50	83	8	0	0	0	0	0	0	144	41.67
07:30	1	0	3	69	55	10	0	0	0	0	0	0	138	40.00
07:45	0	0	9	71	64	6	0	0	0	0	0	0	150	39.47
08:00	2	0	16	88	44	5	0	0	0	0	0	0	155	37.06
08:15	0	0	3	60	98	3	0	0	0	0	0	0	164	41.16
08:30	0	0	3	52	66	13	0	0	0	0	0	0	134	41.64
08:45	0	0	5	46	92	6	0	0	0	0	0	0	149	41.64
09:00	0	7	20	70	44	1	0	0	0	0	0	0	142	35.85
09:15	0	0	21	92	33	3	0	0	0	0	0	0	149	36.21
09:30	0	0	19	62	38	8	0	0	0	0	0	0	127	37.76
09:45	0	0	11	61	52	1	0	0	0	0	0	0	125	38.44
10:00	0	9	62	24	0	2	0	0	0	0	0	0	97	27.16
10:15	0	5	45	44	6	0	0	0	0	0	0	0	100	30.10
10:30	0	4	49	24	0	0	0	0	0	0	0	0	77	27.60
10:45	0	8	50	23	1	0	0	0	0	0	0	0	82	27.07
11:00	0	0	41	27	4	0	0	0	0	0	0	0	72	29.86
11:15	0	5	29	24	0	0	0	0	0	0	0	0	58	28.28
11:30	0	4	41	32	5	0	0	0	0	0	0	0	82	29.63
11:45	0	8	45	32	3	0	0	0	0	0	0	0	88	28.41
12:00	0	4	39	32	2	0	0	0	0	0	0	0	77	29.16
12:15	0	2	41	42	10	0	0	0	0	0	0	0	95	31.32
12:30	0	2	52	34	2	0	0	0	0	0	0	0	90	29.00
12:45	0	7	50	47	4	0	0	0	0	0	0	0	108	29.44
13:00	0	2	39	40	3	0	0	0	0	0	0	0	84	30.24
13:15	0	1	29	63	4	0	0	0	0	0	0	0	97	32.22
13:30	0	6	56	43	6	1	0	0	0	0	0	0	112	29.64
13:45	1	1	22	64	6	0	0	0	0	0	0	0	94	32.77
14:00	0	0	16	74	23	0	0	0	0	0	0	0	113	35.62
14:15	0	0	9	77	29	3	0	0	0	0	0	0	118	37.20
14:30	0	0	13	92	20	0	0	0	0	0	0	0	125	35.56
14:45	0	1	16	96	21	0	0	0	0	0	0	0	134	35.22
15:00	0	0	18	87	31	2	0	0	0	0	0	0	138	36.23
15:15	2	0	31	95	27	2	0	0	0	0	0	0	157	34.62
15:30	0	0	24	112	26	0	0	0	0	0	0	0	162	35.12
15:45	0	2	47	102	27	1	0	0	0	0	0	0	179	33.77
16:00	7	15	55	96	15	2	0	0	0	0	0	0	190	30.42
16:15	1	18	53	76	12	0	0	0	0	0	0	0	160	30.00
16:30	0	0	32	102	21	1	0	0	0	0	0	0	156	34.42
16:45	1	1	29	102	28	2	0	0	0	0	0	0	163	34.88
17:00	0	0	42	105	21	1	0	0	0	0	0	0	169	33.88
17:15	1	0	47	98	33	0	0	0	0	0	0	0	179	34.05
17:30	0	0	31	95	30	2	0	0	0	0	0	0	158	35.19
17:45	0	1	19	110	21	4	0	0	0	0	0	0	155	35.52
18:00	0	2	35	91	24	1	0	0	0	0	0	0	153	34.15
18:15	0	0	22	101	24	1	0	0	0	0	0	0	148	35.27
18:30	0	0	24	104	7	2	0	0	0	0	0	0	137	34.05
18:45	0	0	22	98	15	1	0	0	0	0	0	0	136	34.63
19:00	0	0	19	90	15	2	0	0	0	0	0	0	126	35.00
19:15	0	0	23	64	22	0	0	0	0	0	0	0	109	34.91
19:30	0	0	27	78	20	0	0	0	0	0	0	0	125	34.44
19:45	0	0	21	72	17	1	0	0	0	0	0	0	111	34.82
20:00	0	0	19	66	12	3	0	0	0	0	0	0	100	34.90
20:15	0	0	12	78	6	0	0	0	0	0	0	0	96	34.38
20:30	0	0	12	50	17	1	0	0	0	0	0	0	80	35.88
20:45	0	0	12	51	13	1	0	0	0	0	0	0	77	35.39
21:00	0	0	11	44	19	1	0	0	0	0	0	0	75	36.33
21:15	0	1	12	54	6	2	0	0	0	0	0	0	75	34.47
21:30	0	0	10	42	22	1	0	0	0	0	0	0	75	36.87
21:45	0	0	5	47	13	1	0	0	0	0	0	0	66	36.52
22:00	0	0	6	33	19	0	0	0	0	0	0	0	58	37.24
22:15	0	0	6	37	16	0	0	0	0	0	0	0	59	36.69
22:30	0	0	3	27	19	1	0	0	0	0	0	0	50	38.60
22:45	0	0	2	30	9	2	1	0	0	0	0	0	44	38.18
23:00	0	0	3	15	7	0	0	0	0	0	0	0	25	36.60
23:15	0	0	4	20	12	1	0	0	0	0	0	0	37	37.70
23:30	0	0	1	6	13	0	0	0	0	0	0	0	20	41.00
23:45	0	0	3	14	3	1	0	0	0	0	0	0	21	35.95
Total	16	117	1640	4445	1888	198	7	1	0	0	0	0	8312	

Station Name:MD 97 SB (Ln 6 & 5)
Site ID:000000000097
Station Num:000000000221
Description:MD 97 - 300' south of Wendy Ln
City:Aspen Hill
County:Montgomery
Start Date/Time:03-22-2022 00:00
End Date/Time:03-22-2022 23:59

		10 MPH	20 MPH	30 MPH	40 MPH	50 MPH	60 MPH	70 MPH	80 MPH	90 MPH	100 MPH	110 MPH	> 110 MPH	All Speeds	Mean Speed
0:00	**Lane 5 (South)**	0	0	0	7	10	2	2	0	0	0	0	0	21	44.52
0:15	**Lane 5 (South)**	0	0	1	2	6	0	0	0	0	0	0	0	9	40.56
0:30	**Lane 5 (South)**	0	0	1	3	2	0	0	0	0	0	0	0	6	36.67
0:45	**Lane 5 (South)**	0	0	0	4	4	2	0	0	0	0	0	0	10	43.00
1:00	**Lane 5 (South)**	0	0	0	4	4	3	0	0	0	0	0	0	11	44.09
1:15	**Lane 5 (South)**	0	0	0	5	6	1	0	0	0	0	0	0	12	41.67
1:30	**Lane 5 (South)**	0	0	0	2	5	1	0	0	0	0	0	0	8	43.75
1:45	**Lane 5 (South)**	0	0	0	3	1	1	0	0	0	0	0	0	5	41.00
2:00	**Lane 5 (South)**	0	0	0	0	2	1	1	0	0	0	0	0	4	52.50
2:15	**Lane 5 (South)**	0	0	1	0	5	0	0	0	0	0	0	0	6	41.67
2:30	**Lane 5 (South)**	0	0	1	0	3	0	0	0	0	0	0	0	4	40.00
2:45	**Lane 5 (South)**	0	0	1	2	1	1	0	0	0	0	0	0	5	39.00
3:00	**Lane 5 (South)**	0	0	0	0	5	0	0	0	0	0	0	0	5	45.00
3:15	**Lane 5 (South)**	0	0	0	0	3	2	0	0	0	0	0	0	5	49.00
3:30	**Lane 5 (South)**	0	0	0	1	6	1	0	0	0	0	0	0	8	45.00
3:45	**Lane 5 (South)**	0	0	0	0	4	2	0	0	0	0	0	0	6	48.33
4:00	**Lane 5 (South)**	0	0	0	1	9	2	0	0	0	0	0	0	12	45.83
4:15	**Lane 5 (South)**	0	0	0	2	9	2	0	0	0	0	0	0	13	45.00
4:30	**Lane 5 (South)**	0	0	1	5	10	5	1	0	0	0	0	0	22	45.00
4:45	**Lane 5 (South)**	0	0	0	2	13	9	2	0	0	0	0	0	26	49.23
5:00	**Lane 5 (South)**	0	0	0	7	23	5	1	0	0	0	0	0	36	45.00
5:15	**Lane 5 (South)**	0	0	0	9	20	11	1	0	0	0	0	0	41	45.98
5:30	**Lane 5 (South)**	0	0	2	4	26	9	0	0	0	0	0	0	41	45.24
5:45	**Lane 5 (South)**	0	0	0	23	22	7	0	0	0	0	0	0	52	41.92
6:00	**Lane 5 (South)**	0	0	1	12	48	6	0	0	0	0	0	0	67	43.81
6:15	**Lane 5 (South)**	0	0	1	28	38	10	0	0	0	0	0	0	77	42.40
6:30	**Lane 5 (South)**	0	0	2	12	50	8	0	0	0	0	0	0	72	43.89
6:45	**Lane 5 (South)**	0	0	2	29	59	1	0	0	0	0	0	0	91	41.48
7:00	**Lane 5 (South)**	0	0	1	38	56	12	0	0	0	0	0	0	107	42.38
7:15	**Lane 5 (South)**	0	0	3	31	73	15	0	0	0	0	0	0	122	43.20
7:30	**Lane 5 (South)**	0	1	3	28	73	16	1	0	0	0	0	0	122	43.44
7:45	**Lane 5 (South)**	0	0	3	33	61	7	1	0	0	0	0	0	105	42.14
8:00	**Lane 5 (South)**	0	0	1	39	57	4	2	0	0	0	0	0	103	41.80
8:15	**Lane 5 (South)**	0	0	1	32	89	5	1	0	0	0	0	0	128	42.89
8:30	**Lane 5 (South)**	0	0	1	31	77	19	1	0	0	0	0	0	129	44.07
8:45	**Lane 5 (South)**	0	0	1	32	73	9	0	0	0	0	0	0	115	42.83
9:00	**Lane 5 (South)**	0	0	4	62	44	4	0	0	0	0	0	0	114	39.21
9:15	**Lane 5 (South)**	0	0	4	40	54	2	0	0	0	0	0	0	100	40.40
9:30	**Lane 5 (South)**	0	0	3	38	52	2	0	0	0	0	0	0	95	40.58
9:45	**Lane 5 (South)**	0	0	4	29	44	3	1	0	0	0	0	0	81	41.05
10:00	**Lane 5 (South)**	0	0	4	30	52	1	0	0	0	0	0	0	87	40.75
10:15	**Lane 5 (South)**	0	0	4	23	50	8	0	0	0	0	0	0	85	42.29
10:30	**Lane 5 (South)**	0	0	0	38	41	3	0	0	0	0	1	0	83	41.51
10:45	**Lane 5 (South)**	0	0	2	47	37	2	0	0	0	0	0	0	88	39.43
11:00	**Lane 5 (South)**	0	0	2	49	36	4	0	0	0	0	0	0	91	39.62
11:15	**Lane 5 (South)**	0	1	3	36	50	2	0	0	0	0	0	0	92	40.33
11:30	**Lane 5 (South)**	1	0	1	41	39	5	0	0	0	0	0	0	87	40.17
11:45	**Lane 5 (South)**	0	0	1	34	40	3	0	0	0	0	0	0	78	40.77
12:00	**Lane 5 (South)**	0	0	3	55	31	2	0	0	0	0	0	0	91	38.52
12:15	**Lane 5 (South)**	0	0	2	45	40	3	0	0	0	0	0	0	90	39.89
12:30	**Lane 5 (South)**	0	0	2	42	40	3	1	0	0	0	0	0	88	40.34
12:45	**Lane 5 (South)**	0	0	6	31	53	3	0	0	0	0	0	0	93	40.70
13:00	**Lane 5 (South)**	0	0	1	30	45	4	0	1	0	0	0	0	81	41.91
13:15	**Lane 5 (South)**	0	0	0	52	38	4	0	0	0	0	0	0	94	39.89
13:30	**Lane 5 (South)**	0	0	0	40	45	5	0	0	0	0	0	0	90	41.11
13:45	**Lane 5 (South)**	0	0	3	46	46	0	1	0	0	0	0	0	96	39.79
14:00	**Lane 5 (South)**	0	0	1	44	41	5	0	0	0	0	0	0	91	40.49
14:15	**Lane 5 (South)**	0	0	4	55	37	4	1	0	0	0	0	0	101	39.36
14:30	**Lane 5 (South)**	0	0	5	63	40	1	0	0	0	0	0	0	109	38.39
14:45	**Lane 5 (South)**	0	0	2	37	40	6	0	0	0	0	0	0	85	40.88
15:00	**Lane 5 (South)**	0	0	4	46	49	2	0	0	0	0	0	0	101	39.85
15:15	**Lane 5 (South)**	0	0	6	52	39	5	0	0	0	0	0	0	102	39.22
15:30	**Lane 5 (South)**	0	0	7	56	43	3	1	0	0	0	0	0	110	39.09
15:45	**Lane 5 (South)**	0	1	5	49	54	6	0	1	0	0	0	0	116	40.43
16:00	**Lane 5 (South)**	0	0	3	67	56	4	0	0	0	0	0	0	130	39.69
16:15	**Lane 5 (South)**	1	2	29	53	29	4	0	0	0	0	0	0	118	35.08
16:30	**Lane 5 (South)**	0	1	10	76	42	4	0	0	0	0	0	0	133	37.86
16:45	**Lane 5 (South)**	0	0	9	60	38	3	0	0	0	0	0	0	110	38.18
17:00	**Lane 5 (South)**	0	3	8	60	58	4	2	0	0	0	0	0	135	39.30
17:15	**Lane 5 (South)**	0	2	34	79	34	3	0	0	0	0	0	0	152	35.13
17:30	**Lane 5 (South)**	0	0	8	67	29	5	0	0	0	0	0	0	109	37.84
17:45	**Lane 5 (South)**	0	3	15	68	50	5	0	0	0	0	0	0	141	37.77
18:00	**Lane 5 (South)**	0	0	14	77	31	2	1	0	0	0	0	0	125	36.92
18:15	**Lane 5 (South)**	0	0	18	68	31	1	0	0	0	0	0	0	118	36.27
18:30	**Lane 5 (South)**	0	0	8	80	32	6	0	0	0	0	0	0	126	37.86
18:45	**Lane 5 (South)**	0	0	3	70	39	7	0	0	0	0	0	0	119	39.20
19:00	**Lane 5 (South)**	0	1	11	69	28	1	0	0	0	0	0	0	110	36.55
19:15	**Lane 5 (South)**	0	0	7	58	23	3	0	0	0	0	0	0	91	37.42
19:30	**Lane 5 (South)**	0	0	8	67	22	1	1	0	0	0	0	0	99	36.92
19:45	**Lane 5 (South)**	0	0	9	52	34	2	0	0	0	0	0	0	97	37.99
20:00	**Lane 5 (South)**	0	0	8	62	25	2	0	0	0	0	0	0	97	37.16
20:15	**Lane 5 (South)**	0	1	4	44	26	3	0	0	0	0	0	0	78	38.33
20:30	**Lane 5 (South)**	0	0	1	45	36	1	0	0	0	0	0	0	83	39.46
20:45	**Lane 5 (South)**	0	0	2	36	13	3	0	0	0	0	0	0	54	38.15
21:00	**Lane 5 (South)**	0	0	4	38	22	3	0	0	0	0	0	0	67	38.58
21:15	**Lane 5 (South)**	0	0	2	25	19	4	0	1	1	0	0	0	52	41.54
21:30	**Lane 5 (South)**	0	0	2	36	18	3	0	0	0	0	0	0	59	38.73
21:45	**Lane 5 (South)**	0	0	1	22	22	4	0	0	0	0	0	0	49	40.92
22:00	**Lane 5 (South)**	0	0	0	14	24	4	0	1	0	0	0	0	43	43.37
22:15	**Lane 5 (South)**	0	0	1	19	25	1	0	0	0	0	0	0	46	40.65
22:30	**Lane 5 (South)**	0	0	0	8	15	2	0	0	0	0	0	0	25	42.60
22:45	**Lane 5 (South)**	0	0	0	14	11	1	0	0	0	0	0	0	26	40.00
23:00	**Lane 5 (South)**	0	0	2	12	16	4	0	0	0	0	0	0	34	41.47
23:15	**Lane 5 (South)**	0	0	2	11	11	1	0	0	0	0	0	0	25	39.40
23:30	**Lane 5 (South)**	0	0	1	11	7	0	0	0	0	0	0	0	19	38.16
23:45	**Lane 5 (South)**	0	0	0	2	7	3	0	0	0	0	0	0	12	45.83

Station Name:MD 97 SB (Ln 6 & 5)
Site ID:000000000097
Station Num:000000000221
Description:MD 97 - 300' south of Wendy Ln
City:Aspen Hill
County:Montgomery
Start Date/Time:03-22-2022 00:00
End Date/Time:03-22-2022 23:59

		10 MPH	20 MPH	30 MPH	40 MPH	50 MPH	60 MPH	70 MPH	80 MPH	90 MPH	100 MPH	110 MPH	> 110 MPH	All Speeds	Mean Speed
00:00	Lane 6 (South)	0	0	2	3	1	0	0	0	0	0	0	0	6	33.33
00:15	Lane 6 (South)	0	0	2	3	0	0	0	0	0	0	0	0	5	31.00
00:30	Lane 6 (South)	0	0	0	2	1	0	0	0	0	0	0	0	3	38.33
00:45	Lane 6 (South)	0	0	1	0	1	0	0	0	0	0	0	0	2	35.00
01:00	Lane 6 (South)	0	0	0	3	2	0	0	0	0	0	0	0	5	39.00
01:15	Lane 6 (South)	0	0	0	3	2	1	1	0	0	0	0	0	7	45.00
01:30	Lane 6 (South)	0	0	0	0	1	0	0	0	0	0	0	0	1	45.00
01:45	Lane 6 (South)	0	0	1	0	0	1	0	0	0	0	0	0	2	40.00
02:00	Lane 6 (South)	0	0	0	0	1	0	0	0	0	0	0	0	1	45.00
02:15	Lane 6 (South)	0	0	0	2	0	0	0	0	0	0	0	0	2	35.00
02:30	Lane 6 (South)	0	0	0	1	1	0	0	0	0	0	0	0	2	40.00
02:45	Lane 6 (South)	0	0	0	0	1	0	0	0	0	0	0	0	1	45.00
03:00	Lane 6 (South)	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
03:15	Lane 6 (South)	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
03:30	Lane 6 (South)	0	0	0	3	0	0	0	0	0	0	0	0	3	35.00
03:45	Lane 6 (South)	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
04:00	Lane 6 (South)	0	0	0	1	1	0	0	0	0	0	0	0	2	40.00
04:15	Lane 6 (South)	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
04:30	Lane 6 (South)	0	0	0	1	2	1	0	0	0	0	0	0	4	45.00
04:45	Lane 6 (South)	0	0	0	1	0	0	0	0	0	0	0	0	1	35.00
05:00	Lane 6 (South)	0	0	1	2	2	1	0	0	0	0	0	0	6	40.00
05:15	Lane 6 (South)	0	0	1	4	2	2	1	0	0	0	0	0	10	43.00
05:30	Lane 6 (South)	0	0	1	5	9	3	1	0	0	0	0	0	19	43.95
05:45	Lane 6 (South)	0	1	2	4	9	0	0	0	0	0	0	0	16	38.13
06:00	Lane 6 (South)	0	0	0	4	14	7	0	0	0	0	0	0	25	46.20
06:15	Lane 6 (South)	0	0	1	4	19	7	0	0	0	0	0	0	31	45.32
06:30	Lane 6 (South)	0	0	1	19	8	4	0	0	0	0	0	0	32	39.69
06:45	Lane 6 (South)	0	0	4	26	15	4	0	0	0	0	0	0	49	38.88
07:00	Lane 6 (South)	0	0	2	17	23	4	2	0	0	0	0	0	48	42.29
07:15	Lane 6 (South)	0	0	0	17	25	8	1	0	0	0	0	0	51	43.63
07:30	Lane 6 (South)	0	0	3	18	29	10	0	0	0	0	0	0	60	42.67
07:45	Lane 6 (South)	0	0	4	14	31	4	1	0	0	0	0	0	54	42.04
08:00	Lane 6 (South)	0	0	6	16	36	10	0	0	0	0	0	0	68	42.35
08:15	Lane 6 (South)	0	0	1	25	44	6	0	0	0	0	0	0	76	42.24
08:30	Lane 6 (South)	0	0	3	11	32	6	0	0	0	0	0	0	52	42.88
08:45	Lane 6 (South)	0	0	1	14	25	7	2	0	0	0	0	0	49	43.98
09:00	Lane 6 (South)	0	0	4	19	18	1	1	0	0	0	0	0	43	39.42
09:15	Lane 6 (South)	0	1	2	23	14	1	0	0	0	0	0	0	41	37.93
09:30	Lane 6 (South)	0	0	3	18	16	4	0	0	0	0	0	0	41	40.12
09:45	Lane 6 (South)	0	0	6	9	24	0	0	0	0	0	0	0	39	39.62
10:00	Lane 6 (South)	0	0	1	14	16	2	0	0	0	0	0	0	33	40.76
10:15	Lane 6 (South)	0	0	2	20	13	4	0	0	0	0	0	0	39	39.87
10:30	Lane 6 (South)	0	0	4	12	10	2	0	0	0	0	0	0	28	38.57
10:45	Lane 6 (South)	0	0	1	16	20	3	0	0	0	0	0	0	40	41.25
11:00	Lane 6 (South)	0	0	5	15	11	1	0	0	0	0	0	0	32	37.50
11:15	Lane 6 (South)	0	0	4	10	19	4	0	0	0	0	0	0	37	41.22
11:30	Lane 6 (South)	0	0	0	14	17	2	0	0	0	0	0	0	33	41.36
11:45	Lane 6 (South)	0	0	3	17	19	1	0	0	0	0	0	0	40	39.50
12:00	Lane 6 (South)	0	0	3	25	13	0	0	0	0	0	0	0	41	37.44
12:15	Lane 6 (South)	0	0	4	22	14	3	0	0	0	0	0	0	43	38.72
12:30	Lane 6 (South)	0	1	2	9	7	0	1	0	0	0	0	0	20	38.00
12:45	Lane 6 (South)	0	1	7	23	15	2	0	0	0	0	0	0	48	37.08
13:00	Lane 6 (South)	0	0	4	12	14	3	0	0	0	0	0	0	33	39.85
13:15	Lane 6 (South)	0	0	4	25	25	1	0	1	0	0	0	0	56	39.82
13:30	Lane 6 (South)	0	0	1	23	12	4	0	0	0	0	0	0	40	39.75
13:45	Lane 6 (South)	0	0	8	21	22	1	0	0	0	0	0	0	52	38.08
14:00	Lane 6 (South)	0	0	2	18	27	3	0	0	0	0	0	0	50	41.20
14:15	Lane 6 (South)	0	1	2	29	18	2	0	0	0	0	0	0	52	38.46
14:30	Lane 6 (South)	0	0	11	29	18	4	0	0	0	0	0	0	62	37.42
14:45	Lane 6 (South)	0	1	3	20	22	2	0	0	0	0	0	0	48	39.38
15:00	Lane 6 (South)	0	0	4	19	29	4	1	0	0	0	0	0	57	41.32
15:15	Lane 6 (South)	0	0	3	30	19	4	0	0	0	0	0	0	56	39.29
15:30	Lane 6 (South)	0	0	5	45	16	2	0	0	0	0	0	0	68	37.21
15:45	Lane 6 (South)	0	0	2	24	25	5	0	0	0	0	0	0	56	40.89
16:00	Lane 6 (South)	0	0	3	42	13	2	0	0	0	0	0	0	60	37.33
16:15	Lane 6 (South)	0	0	20	39	14	2	1	0	0	0	0	0	76	35.13
16:30	Lane 6 (South)	0	0	8	25	26	3	1	0	0	0	0	0	63	39.29
16:45	Lane 6 (South)	0	0	2	34	29	4	0	0	0	0	0	0	69	40.07
17:00	Lane 6 (South)	0	0	6	42	21	0	0	0	0	0	0	0	69	37.17
17:15	Lane 6 (South)	0	1	9	50	20	4	0	0	0	0	0	0	84	37.02
17:30	Lane 6 (South)	0	1	6	31	28	2	0	0	0	0	0	0	68	38.53
17:45	Lane 6 (South)	0	0	4	27	35	1	0	0	0	0	0	0	67	39.93
18:00	Lane 6 (South)	0	0	5	51	7	3	0	0	0	0	0	0	66	36.21
18:15	Lane 6 (South)	0	0	12	46	16	3	0	0	0	0	0	0	77	36.30
18:30	Lane 6 (South)	0	0	1	43	23	3	0	0	0	0	0	0	70	39.00
18:45	Lane 6 (South)	0	1	6	34	14	2	0	0	0	0	0	0	57	36.75
19:00	Lane 6 (South)	0	0	3	42	12	0	0	0	0	0	0	0	57	36.58
19:15	Lane 6 (South)	0	0	7	32	19	0	0	0	0	0	0	0	58	37.07
19:30	Lane 6 (South)	0	0	7	37	16	1	0	0	0	0	0	0	61	36.80
19:45	Lane 6 (South)	0	0	1	37	14	0	0	0	0	0	0	0	52	37.50
20:00	Lane 6 (South)	0	0	7	36	8	0	0	0	0	0	0	0	51	35.20
20:15	Lane 6 (South)	0	1	3	19	13	1	0	0	0	0	0	0	37	37.70
20:30	Lane 6 (South)	0	0	1	28	10	0	0	0	0	0	0	0	39	37.31
20:45	Lane 6 (South)	0	0	4	23	9	1	0	0	0	0	0	0	37	36.89
21:00	Lane 6 (South)	0	0	2	18	10	0	0	0	1	0	0	0	31	39.19
21:15	Lane 6 (South)	0	0	3	20	8	2	0	0	0	0	0	0	33	37.73
21:30	Lane 6 (South)	0	0	3	12	8	1	1	0	0	0	0	0	25	39.00
21:45	Lane 6 (South)	0	0	1	9	8	2	0	0	0	0	0	0	20	40.50
22:00	Lane 6 (South)	0	0	1	11	10	0	0	0	0	0	0	0	22	39.09
22:15	Lane 6 (South)	0	0	0	6	5	2	0	0	0	0	0	0	13	41.92
22:30	Lane 6 (South)	0	0	1	5	8	0	0	0	0	0	0	0	14	40.00
22:45	Lane 6 (South)	0	0	0	5	6	1	0	0	0	0	0	0	12	41.67
23:00	Lane 6 (South)	0	0	1	2	3	1	0	0	0	0	0	0	7	40.71
23:15	Lane 6 (South)	0	0	0	4	0	0	0	0	0	0	0	0	4	35.00
23:30	Lane 6 (South)	0	0	1	10	1	0	1	0	0	0	0	0	13	37.31
23:45	Lane 6 (South)	0	0	2	2	1	0	0	0	0	0	0	0	5	33.00

Station Name:MD 97 SB (Ln 6 & 5)
Site ID:000000000097
Station Num:000000000221
Description:MD 97 - 300' south of Wendy Ln
City:Aspen Hill
County:Montgomery
Start Date/Time:03-23-2022 00:00
End Date/Time:03-23-2022 23:59

		10 MPH	20 MPH	30 MPH	40 MPH	50 MPH	60 MPH	70 MPH	80 MPH	90 MPH	100 MPH	110 MPH	> 110 MPH	All Speeds	Mean Speed
0:00	Lane 5 (South)	0	0	0	8	11	2	1	0	0	0	0	0	22	43.18
0:15	Lane 5 (South)	0	0	0	7	5	2	0	0	0	0	0	0	14	41.43
0:30	Lane 5 (South)	0	0	0	4	3	1	0	0	0	0	0	0	8	41.25
0:45	Lane 5 (South)	0	0	2	0	7	1	1	0	0	0	0	0	11	44.09
1:00	Lane 5 (South)	0	0	0	3	2	0	1	0	0	0	0	0	6	43.33
1:15	Lane 5 (South)	0	0	0	5	7	1	0	0	0	0	0	0	13	41.92
1:30	Lane 5 (South)	0	0	0	5	2	1	0	0	0	0	0	0	8	40.00
1:45	Lane 5 (South)	0	0	0	1	7	0	0	0	0	0	0	0	8	43.75
2:00	Lane 5 (South)	0	0	0	3	2	1	0	0	0	0	0	0	6	41.67
2:15	Lane 5 (South)	0	0	1	3	5	0	0	0	0	0	0	0	9	39.44
2:30	Lane 5 (South)	0	0	0	0	2	1	0	0	0	0	0	0	3	48.33
2:45	Lane 5 (South)	0	0	0	2	3	1	0	0	0	0	0	0	6	43.33
3:00	Lane 5 (South)	0	0	0	1	4	2	0	0	0	0	0	0	7	46.43
3:15	Lane 5 (South)	0	0	0	0	8	2	0	0	0	0	0	0	10	47.00
3:30	Lane 5 (South)	0	0	0	3	3	1	0	0	0	0	0	0	7	42.14
3:45	Lane 5 (South)	0	0	0	2	3	1	0	0	0	0	0	0	6	43.33
4:00	Lane 5 (South)	0	0	0	4	9	2	0	0	0	0	0	0	15	43.67
4:15	Lane 5 (South)	0	0	0	5	8	3	0	0	0	0	0	0	16	43.75
4:30	Lane 5 (South)	0	0	1	5	15	5	0	0	0	0	0	0	26	44.23
4:45	Lane 5 (South)	0	0	0	4	14	5	1	0	0	0	0	0	24	46.25
5:00	Lane 5 (South)	0	0	0	5	19	4	1	0	0	0	0	0	29	45.34
5:15	Lane 5 (South)	0	0	0	11	24	7	0	0	0	0	0	0	42	44.05
5:30	Lane 5 (South)	0	0	0	14	18	7	0	0	0	0	0	0	39	43.21
5:45	Lane 5 (South)	0	0	2	13	28	6	1	1	0	0	0	0	51	43.82
6:00	Lane 5 (South)	0	0	0	13	48	11	2	0	0	0	0	0	74	45.27
6:15	Lane 5 (South)	0	0	2	31	39	5	1	0	0	0	0	0	78	41.41
6:30	Lane 5 (South)	0	0	2	12	49	6	0	0	0	0	0	0	69	43.55
6:45	Lane 5 (South)	0	0	2	23	61	8	1	0	0	0	0	0	95	43.21
7:00	Lane 5 (South)	0	0	5	38	69	12	0	0	0	0	0	0	124	42.10
7:15	Lane 5 (South)	0	0	5	38	68	6	0	0	0	0	0	0	117	41.41
7:30	Lane 5 (South)	0	0	1	49	46	9	0	0	0	0	0	0	105	41.00
7:45	Lane 5 (South)	0	0	2	57	49	6	0	0	0	0	0	0	114	40.18
8:00	Lane 5 (South)	0	0	4	52	65	5	0	0	0	0	0	0	126	40.63
8:15	Lane 5 (South)	0	0	3	45	69	8	0	0	0	0	0	0	125	41.56
8:30	Lane 5 (South)	0	0	0	41	56	9	0	0	0	0	0	0	106	41.98
8:45	Lane 5 (South)	0	3	0	32	73	10	0	0	0	0	0	0	118	42.37
9:00	Lane 5 (South)	0	0	7	56	32	5	0	0	0	0	0	0	100	38.50
9:15	Lane 5 (South)	0	0	7	45	49	3	0	0	0	0	0	0	104	39.62
9:30	Lane 5 (South)	0	1	1	64	28	7	0	0	0	0	0	0	101	38.86
9:45	Lane 5 (South)	0	0	2	35	37	2	0	0	0	0	0	0	76	40.13
10:00	Lane 5 (South)	0	3	46	27	8	0	0	0	0	0	0	0	84	29.76
10:15	Lane 5 (South)	0	2	38	46	3	0	0	0	0	0	0	0	89	30.62
10:30	Lane 5 (South)	0	5	46	44	2	0	0	0	0	0	0	0	97	29.43
10:45	Lane 5 (South)	0	8	48	34	1	0	0	0	0	0	0	0	91	28.08
11:00	Lane 5 (South)	0	3	40	36	1	0	0	0	0	0	0	0	80	29.38
11:15	Lane 5 (South)	0	2	38	51	3	1	0	0	0	0	0	0	95	31.11
11:30	Lane 5 (South)	0	5	28	49	6	0	0	0	0	0	0	0	88	31.36
11:45	Lane 5 (South)	0	4	55	46	5	0	0	0	0	0	0	0	110	29.73
12:00	Lane 5 (South)	0	2	36	51	5	0	0	0	1	0	0	0	95	31.84
12:15	Lane 5 (South)	0	1	30	56	8	0	0	0	0	0	0	0	95	32.47
12:30	Lane 5 (South)	0	0	30	62	12	0	0	0	0	0	0	0	104	33.27
12:45	Lane 5 (South)	0	3	23	63	8	0	0	0	0	0	0	0	97	32.84
13:00	Lane 5 (South)	0	3	23	51	9	0	0	0	0	0	0	0	86	32.67
13:15	Lane 5 (South)	0	0	21	63	12	0	0	0	0	0	0	0	96	34.06
13:30	Lane 5 (South)	0	4	23	57	9	1	0	0	0	0	0	0	94	32.87
13:45	Lane 5 (South)	0	0	23	56	15	0	0	0	0	0	0	0	94	34.15
14:00	Lane 5 (South)	0	0	9	64	26	1	0	0	0	0	0	0	100	36.90
14:15	Lane 5 (South)	0	0	6	63	38	2	0	0	0	0	0	0	109	38.30
14:30	Lane 5 (South)	0	0	3	59	37	2	0	0	0	0	0	0	101	38.76
14:45	Lane 5 (South)	0	0	9	56	24	2	0	0	0	0	0	0	91	37.09
15:00	Lane 5 (South)	0	0	13	64	32	2	0	0	0	0	0	0	111	37.07
15:15	Lane 5 (South)	0	1	15	67	22	2	0	0	0	0	0	0	107	35.84
15:30	Lane 5 (South)	0	1	10	60	23	3	0	0	0	0	0	0	97	36.75
15:45	Lane 5 (South)	0	0	14	69	26	1	0	0	0	0	0	0	110	36.27
16:00	Lane 5 (South)	0	2	31	68	11	3	0	0	0	0	0	0	115	33.43
16:15	Lane 5 (South)	0	4	30	55	18	1	0	0	0	0	0	0	108	33.33
16:30	Lane 5 (South)	0	1	14	88	20	2	0	0	0	0	0	0	125	35.64
16:45	Lane 5 (South)	0	0	9	76	37	3	1	0	0	0	0	0	126	37.94
17:00	Lane 5 (South)	0	0	12	60	35	1	0	0	0	0	0	0	108	37.31
17:15	Lane 5 (South)	0	0	21	76	26	0	0	0	0	0	0	0	123	35.41
17:30	Lane 5 (South)	0	0	9	80	34	2	0	0	0	0	0	0	125	37.32
17:45	Lane 5 (South)	0	0	8	74	37	1	0	0	0	0	0	0	120	37.58
18:00	Lane 5 (South)	0	0	14	81	26	0	0	0	0	0	0	0	121	35.99
18:15	Lane 5 (South)	0	0	2	58	36	0	0	0	0	0	0	0	96	38.54
18:30	Lane 5 (South)	0	0	14	61	26	1	0	0	0	0	0	0	102	36.37
18:45	Lane 5 (South)	0	0	16	47	19	2	0	0	0	0	0	0	84	35.83
19:00	Lane 5 (South)	0	0	15	55	25	2	0	0	0	0	0	0	97	36.44
19:15	Lane 5 (South)	0	0	9	58	20	1	0	0	0	0	0	0	88	36.48
19:30	Lane 5 (South)	0	0	9	47	16	1	0	0	0	0	0	0	73	36.23
19:45	Lane 5 (South)	0	0	12	51	18	3	0	0	0	0	0	0	84	36.43
20:00	Lane 5 (South)	0	0	14	44	8	2	0	0	0	0	0	0	68	34.71
20:15	Lane 5 (South)	0	1	5	41	17	0	0	0	0	0	0	0	64	36.56
20:30	Lane 5 (South)	0	0	8	39	13	2	0	0	0	0	0	0	62	36.45
20:45	Lane 5 (South)	0	0	3	39	20	0	0	0	0	0	0	0	62	37.74
21:00	Lane 5 (South)	0	0	6	28	21	3	0	0	0	0	0	0	58	38.62
21:15	Lane 5 (South)	0	0	1	28	13	2	0	0	0	0	0	0	44	38.64
21:30	Lane 5 (South)	0	0	1	24	18	5	0	0	0	0	0	0	48	40.63
21:45	Lane 5 (South)	0	0	2	22	12	2	0	0	0	0	0	0	38	38.68
22:00	Lane 5 (South)	0	0	3	24	13	1	0	0	0	0	0	0	41	37.93
22:15	Lane 5 (South)	0	0	0	17	11	2	0	0	0	0	0	0	30	40.00
22:30	Lane 5 (South)	0	0	0	19	16	1	1	0	0	0	0	0	37	40.68
22:45	Lane 5 (South)	0	0	0	12	9	2	0	0	0	0	0	0	23	40.65
23:00	Lane 5 (South)	0	0	1	14	11	0	0	0	0	0	0	0	26	38.85
23:15	Lane 5 (South)	0	0	1	12	10	0	0	0	0	0	0	0	23	38.91
23:30	Lane 5 (South)	0	0	1	7	5	2	0	0	0	0	0	0	15	40.33
23:45	Lane 5 (South)	0	0	0	6	11	0	0	0	0	0	0	0	17	41.47

Station Name:MD 97 SB (Ln 6 & 5)
Site ID:000000000097
Station Num:000000000221
Description:MD 97 - 300' south of Wendy Ln
City:Aspen Hill
County:Montgomery
Start Date/Time:03-23-2022 00:00
End Date/Time:03-23-2022 23:59

		10 MPH	20 MPH	30 MPH	40 MPH	50 MPH	60 MPH	70 MPH	80 MPH	90 MPH	100 MPH	110 MPH	> 110 MPH	All Speeds	Mean Speed
00:00	Lane 6 (South)	0	0	0	3	1	1	0	0	0	0	0	0	5	41.00
00:15	Lane 6 (South)	0	0	0	3	0	0	0	0	0	0	0	0	3	35.00
00:30	Lane 6 (South)	0	0	1	1	0	0	0	0	0	0	0	0	2	30.00
00:45	Lane 6 (South)	0	0	1	0	1	0	0	0	0	0	0	0	2	35.00
01:00	Lane 6 (South)	0	0	0	1	0	0	0	0	0	0	0	0	1	35.00
01:15	Lane 6 (South)	0	0	0	2	1	0	0	0	0	0	0	0	3	38.33
01:30	Lane 6 (South)	0	0	0	0	0	1	0	0	0	0	0	0	1	55.00
01:45	Lane 6 (South)	0	0	1	0	0	0	0	0	0	0	0	0	1	25.00
02:00	Lane 6 (South)	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
02:15	Lane 6 (South)	0	0	1	0	1	0	0	0	0	0	0	0	2	35.00
02:30	Lane 6 (South)	0	0	0	2	0	0	0	0	0	0	0	0	2	35.00
02:45	Lane 6 (South)	0	0	0	0	1	0	0	0	0	0	0	0	1	45.00
03:00	Lane 6 (South)	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
03:15	Lane 6 (South)	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
03:30	Lane 6 (South)	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
03:45	Lane 6 (South)	0	0	0	2	1	0	0	0	0	0	0	0	3	38.33
04:00	Lane 6 (South)	0	0	1	1	2	0	0	0	0	0	0	0	4	37.50
04:15	Lane 6 (South)	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
04:30	Lane 6 (South)	0	0	1	0	1	0	0	0	0	0	0	0	2	35.00
04:45	Lane 6 (South)	0	0	0	1	2	1	0	0	0	0	0	0	4	45.00
05:00	Lane 6 (South)	0	0	1	0	1	2	0	0	0	0	0	0	4	45.00
05:15	Lane 6 (South)	0	0	1	5	7	2	0	0	0	0	0	0	15	41.67
05:30	Lane 6 (South)	0	1	1	3	9	3	0	0	0	0	0	0	17	42.06
05:45	Lane 6 (South)	0	1	1	9	16	1	0	0	0	0	0	0	28	40.36
06:00	Lane 6 (South)	0	0	1	6	10	2	2	0	0	0	0	0	21	44.05
06:15	Lane 6 (South)	0	0	1	12	13	2	0	0	0	0	0	0	28	40.71
06:30	Lane 6 (South)	0	0	0	10	10	8	1	0	0	0	0	0	29	45.00
06:45	Lane 6 (South)	0	0	2	12	19	4	0	0	0	0	0	0	37	41.76
07:00	Lane 6 (South)	0	1	1	8	16	6	0	0	0	0	0	0	32	42.81
07:15	Lane 6 (South)	0	0	3	13	30	4	0	0	0	0	0	0	50	42.00
07:30	Lane 6 (South)	0	0	4	14	25	5	0	0	0	0	0	0	48	41.46
07:45	Lane 6 (South)	0	0	1	31	16	3	0	0	0	0	0	0	51	39.12
08:00	Lane 6 (South)	0	0	5	30	33	4	0	0	0	0	0	0	72	40.00
08:15	Lane 6 (South)	0	0	3	16	27	8	0	0	0	0	0	0	54	42.41
08:30	Lane 6 (South)	0	0	5	15	24	10	0	0	0	0	0	0	54	42.22
08:45	Lane 6 (South)	0	0	6	12	31	4	0	0	0	0	0	0	53	41.23
09:00	Lane 6 (South)	0	1	1	18	22	3	0	0	0	0	0	0	45	40.56
09:15	Lane 6 (South)	0	0	3	20	27	2	0	0	0	0	0	0	52	40.38
09:30	Lane 6 (South)	1	0	4	11	18	1	1	0	0	0	0	0	36	39.44
09:45	Lane 6 (South)	0	1	3	13	14	4	0	0	0	0	0	0	35	39.86
10:00	Lane 6 (South)	0	1	24	23	4	0	0	0	0	0	0	0	52	30.77
10:15	Lane 6 (South)	0	0	18	45	2	1	0	0	0	0	0	0	66	32.88
10:30	Lane 6 (South)	0	0	18	25	3	0	0	0	0	0	0	0	46	31.74
10:45	Lane 6 (South)	0	5	19	34	2	0	0	0	0	0	0	0	60	30.50
11:00	Lane 6 (South)	0	1	21	27	2	0	0	0	0	0	0	0	51	30.88
11:15	Lane 6 (South)	0	0	17	32	4	0	0	0	0	0	0	0	53	32.55
11:30	Lane 6 (South)	0	0	20	30	4	0	0	0	0	0	0	0	54	32.04
11:45	Lane 6 (South)	0	0	22	17	2	0	0	0	0	0	0	0	41	30.12
12:00	Lane 6 (South)	0	0	33	28	2	0	0	0	0	0	0	0	63	30.08
12:15	Lane 6 (South)	0	0	16	26	6	0	0	0	0	0	0	0	48	32.92
12:30	Lane 6 (South)	0	0	13	27	5	0	0	0	0	0	0	0	45	33.22
12:45	Lane 6 (South)	0	1	16	35	5	0	0	0	0	0	0	0	57	32.72
13:00	Lane 6 (South)	0	0	9	30	2	0	0	0	0	0	0	0	41	33.29
13:15	Lane 6 (South)	0	0	9	27	6	0	0	0	0	0	0	0	42	34.29
13:30	Lane 6 (South)	0	0	23	31	4	0	0	0	0	0	0	0	58	31.72
13:45	Lane 6 (South)	0	0	11	38	5	0	0	0	0	0	0	0	54	33.89
14:00	Lane 6 (South)	0	0	4	31	17	0	0	0	0	0	0	0	52	37.50
14:15	Lane 6 (South)	0	0	6	38	17	1	0	0	0	0	0	0	62	37.10
14:30	Lane 6 (South)	0	0	11	30	12	1	0	0	0	0	0	0	54	35.56
14:45	Lane 6 (South)	0	0	5	26	21	0	0	0	0	0	0	0	52	38.08
15:00	Lane 6 (South)	0	0	5	30	13	4	0	0	0	0	0	0	52	38.08
15:15	Lane 6 (South)	0	0	3	32	13	3	0	0	0	0	0	0	51	38.14
15:30	Lane 6 (South)	0	0	5	36	15	1	0	0	0	0	0	0	57	37.11
15:45	Lane 6 (South)	0	0	5	43	16	1	0	0	0	0	0	0	65	37.00
16:00	Lane 6 (South)	0	0	13	32	15	1	0	0	0	0	0	0	61	35.66
16:15	Lane 6 (South)	0	2	13	43	13	0	0	0	0	0	0	0	71	34.44
16:30	Lane 6 (South)	0	0	6	44	9	1	0	0	0	0	0	0	60	35.83
16:45	Lane 6 (South)	0	0	6	42	8	1	0	0	0	0	0	0	57	35.70
17:00	Lane 6 (South)	0	0	7	41	9	2	1	0	0	0	0	0	60	36.50
17:15	Lane 6 (South)	0	2	10	52	16	0	0	0	0	0	0	0	80	35.25
17:30	Lane 6 (South)	0	0	3	52	10	1	0	0	0	0	0	0	66	36.36
17:45	Lane 6 (South)	0	0	4	53	16	2	0	0	0	0	0	0	75	37.13
18:00	Lane 6 (South)	0	1	10	41	12	0	0	0	0	0	0	0	64	35.00
18:15	Lane 6 (South)	0	0	1	35	16	0	1	0	0	0	0	0	53	38.40
18:30	Lane 6 (South)	0	0	5	26	12	2	0	0	0	0	0	0	45	37.44
18:45	Lane 6 (South)	0	0	10	30	9	2	0	0	0	0	0	0	51	35.59
19:00	Lane 6 (South)	0	0	7	28	10	2	0	0	0	0	0	0	47	36.49
19:15	Lane 6 (South)	0	0	3	30	10	0	0	0	0	0	0	0	43	36.63
19:30	Lane 6 (South)	0	1	4	23	5	0	0	0	0	0	0	0	33	34.70
19:45	Lane 6 (South)	0	1	8	28	4	0	0	0	0	0	0	0	41	33.54
20:00	Lane 6 (South)	0	0	10	18	5	1	0	0	0	0	0	0	34	34.12
20:15	Lane 6 (South)	0	1	3	17	1	0	0	0	0	0	0	0	22	33.18
20:30	Lane 6 (South)	0	0	6	20	4	0	0	0	0	0	0	0	30	34.33
20:45	Lane 6 (South)	0	0	8	10	7	0	0	0	0	0	0	0	25	34.60
21:00	Lane 6 (South)	0	0	3	18	3	1	0	0	0	0	0	0	25	35.80
21:15	Lane 6 (South)	0	0	7	14	5	0	0	0	0	0	0	0	26	34.23
21:30	Lane 6 (South)	0	0	4	20	4	0	0	0	0	0	0	0	28	35.00
21:45	Lane 6 (South)	0	0	0	14	5	1	0	0	0	0	0	0	20	38.50
22:00	Lane 6 (South)	0	0	0	10	2	1	0	0	0	0	0	0	13	38.08
22:15	Lane 6 (South)	0	1	2	7	1	0	0	0	0	0	0	0	11	32.27
22:30	Lane 6 (South)	0	0	0	3	2	0	0	0	0	0	0	0	5	39.00
22:45	Lane 6 (South)	0	0	1	5	1	0	0	0	0	0	0	0	7	35.00
23:00	Lane 6 (South)	0	0	0	6	3	0	0	0	0	0	0	0	9	38.33
23:15	Lane 6 (South)	0	0	1	6	1	0	0	0	0	0	0	0	8	35.00
23:30	Lane 6 (South)	0	1	1	6	0	0	0	0	0	0	0	0	8	31.25
23:45	Lane 6 (South)	0	0	0	6	0	0	0	0	0	0	0	0	6	35.00

Count Name MD 97 SB - 1150' south of Bel Pre Rd - Ln 4
Start Date 3/22/2022
Start Time 0:00
Site Code 0097122
Station ID

Date	Time	0 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100	>100 to 110	> 110	Total
3/22/2022	00:00	0	0	0	4	3	3	0	0	0	0	0	0	10
3/22/2022	00:15	0	0	0	2	5	5	0	0	0	0	0	0	12
3/22/2022	00:30	0	0	0	5	1	2	0	0	0	0	0	0	8
3/22/2022	00:45	0	0	0	1	2	1	0	0	0	0	0	0	4
3/22/2022	01:00	0	0	0	1	1	2	0	0	0	0	0	0	4
3/22/2022	01:15	0	0	0	1	2	3	1	0	0	0	0	0	7
3/22/2022	01:30	0	0	0	1	2	2	0	0	0	0	0	0	5
3/22/2022	01:45	0	0	0	3	3	1	0	0	0	0	0	0	7
3/22/2022	02:00	0	0	0	2	4	0	0	0	0	0	0	0	6
3/22/2022	02:15	0	0	0	0	1	2	0	0	0	0	0	0	3
3/22/2022	02:30	0	0	0	0	2	1	0	0	0	0	0	0	3
3/22/2022	02:45	0	0	0	1	1	0	0	0	0	0	0	0	2
3/22/2022	03:00	0	0	0	0	4	0	0	0	0	0	0	0	4
3/22/2022	03:15	0	0	0	0	3	2	0	0	0	0	0	0	5
3/22/2022	03:30	0	0	0	0	1	0	0	0	0	0	0	0	1
3/22/2022	03:45	0	0	0	1	1	3	0	0	0	0	0	0	5
3/22/2022	04:00	0	0	0	1	5	4	0	0	0	0	0	0	10
3/22/2022	04:15	0	0	0	2	3	1	0	0	0	0	0	0	6
3/22/2022	04:30	0	0	0	1	4	3	1	0	1	0	0	0	10
3/22/2022	04:45	0	0	0	2	6	3	0	0	0	0	0	0	11
3/22/2022	05:00	0	0	0	1	9	14	3	0	0	0	0	0	27
3/22/2022	05:15	0	0	0	1	17	16	0	0	0	0	0	0	34
3/22/2022	05:30	0	0	0	8	15	13	0	0	0	0	0	0	36
3/22/2022	05:45	0	0	0	5	28	8	0	0	0	0	0	0	41
3/22/2022	06:00	0	0	0	3	31	12	0	0	0	0	0	0	46
3/22/2022	06:15	0	0	0	21	33	9	0	0	0	0	0	0	63
3/22/2022	06:30	0	0	2	10	44	14	1	0	0	0	0	0	71
3/22/2022	06:45	0	0	0	13	68	17	1	0	0	0	0	0	99
3/22/2022	07:00	0	0	0	29	81	17	0	0	0	0	0	0	127
3/22/2022	07:15	0	0	0	19	100	13	0	0	0	0	0	0	132
3/22/2022	07:30	0	0	1	23	109	15	1	0	0	0	0	0	149
3/22/2022	07:45	0	0	0	30	96	15	1	0	0	0	0	0	142
3/22/2022	08:00	0	0	1	23	117	14	0	0	0	0	0	0	155
3/22/2022	08:15	0	0	0	12	135	14	0	0	0	0	0	0	161
3/22/2022	08:30	0	0	0	22	95	23	0	0	0	0	0	0	140
3/22/2022	08:45	0	0	0	13	99	32	1	0	0	0	0	0	145
3/22/2022	09:00	0	0	1	9	58	20	3	0	0	0	0	0	91
3/22/2022	09:15	0	0	1	17	66	9	0	0	0	0	0	0	93
3/22/2022	09:30	0	0	0	11	62	7	0	0	0	0	0	0	80
3/22/2022	09:45	0	0	0	23	45	7	0	0	0	0	0	0	75
3/22/2022	10:00	0	0	0	13	40	10	1	0	0	0	0	0	64
3/22/2022	10:15	0	0	0	24	42	7	1	0	0	0	0	0	74
3/22/2022	10:30	0	0	1	21	50	8	0	0	0	0	0	0	80
3/22/2022	10:45	0	0	0	19	59	5	0	0	0	0	0	0	83
3/22/2022	11:00	0	0	0	18	45	8	0	0	0	0	0	0	71
3/22/2022	11:15	0	0	0	19	54	4	1	0	0	0	0	0	78
3/22/2022	11:30	0	0	0	18	54	6	1	0	0	0	0	0	79
3/22/2022	11:45	0	0	0	13	39	13	0	0	0	0	0	0	65
3/22/2022	12:00	0	0	1	14	61	5	0	0	0	0	0	0	81
3/22/2022	12:15	0	0	1	11	53	7	1	0	1	0	0	0	74
3/22/2022	12:30	0	0	0	8	52	6	0	0	0	0	0	0	66
3/22/2022	12:45	0	0	0	17	55	7	2	0	0	0	0	0	81
3/22/2022	13:00	0	0	2	11	46	6	0	0	0	0	0	0	65
3/22/2022	13:15	0	0	0	18	43	10	0	0	0	0	0	0	71
3/22/2022	13:30	0	0	0	20	58	4	0	0	0	0	0	0	82
3/22/2022	13:45	0	0	0	20	48	10	0	0	0	0	0	0	78
3/22/2022	14:00	0	0	1	44	33	10	0	0	0	0	0	0	88
3/22/2022	14:15	0	0	0	12	51	8	0	0	0	0	0	0	71
3/22/2022	14:30	0	0	0	42	45	3	1	0	0	0	0	0	91
3/22/2022	14:45	0	0	0	17	56	8	0	0	0	0	0	0	81
3/22/2022	15:00	0	0	0	22	52	7	0	0	0	0	0	0	81
3/22/2022	15:15	0	0	0	30	54	9	0	0	0	0	0	0	93
3/22/2022	15:30	0	0	0	31	54	9	0	0	0	0	0	0	94
3/22/2022	15:45	0	0	0	17	69	9	1	0	0	0	0	0	96
3/22/2022	16:00	0	0	1	27	55	9	1	0	0	0	0	0	93
3/22/2022	16:15	0	0	0	12	72	12	2	0	0	0	0	0	98
3/22/2022	16:30	0	0	1	51	46	7	1	1	0	0	0	0	107
3/22/2022	16:45	0	0	0	23	65	14	0	0	0	0	0	0	102
3/22/2022	17:00	0	0	1	47	51	10	0	1	0	0	0	0	110
3/22/2022	17:15	0	0	0	46	60	9	0	0	0	0	0	0	115
3/22/2022	17:30	0	0	3	47	51	10	0	0	0	0	0	0	111
3/22/2022	17:45	0	0	3	40	47	17	0	1	0	0	0	0	108
3/22/2022	18:00	0	0	0	17	70	9	0	0	0	0	0	0	96
3/22/2022	18:15	0	0	2	32	49	10	0	0	0	0	0	0	93
3/22/2022	18:30	0	0	1	15	63	16	0	0	0	0	0	0	95
3/22/2022	18:45	0	0	0	24	45	6	1	0	0	0	0	0	76
3/22/2022	19:00	0	0	0	24	37	5	0	0	2	0	0	0	68
3/22/2022	19:15	0	0	1	25	45	5	0	0	1	0	0	0	77
3/22/2022	19:30	0	0	6	22	19	10	0	0	0	0	0	0	57
3/22/2022	19:45	0	0	0	22	35	8	1	0	0	0	0	0	66
3/22/2022	20:00	0	0	2	38	19	6	0	0	0	0	0	0	65
3/22/2022	20:15	0	0	1	32	25	1	0	0	0	0	0	0	59
3/22/2022	20:30	0	0	5	26	16	2	1	0	0	0	0	0	50
3/22/2022	20:45	0	0	1	24	15	2	1	1	0	0	0	0	44
3/22/2022	21:00	0	0	0	14	40	5	0	0	0	0	0	0	59
3/22/2022	21:15	0	0	0	27	22	1	3	2	0	0	0	0	55
3/22/2022	21:30	0	0	1	26	12	2	0	0	0	0	0	0	41
3/22/2022	21:45	0	0	0	13	23	2	0	0	0	0	0	0	38
3/22/2022	22:00	0	0	1	4	28	4	0	0	0	0	0	0	37
3/22/2022	22:15	0	0	0	1	23	4	0	0	0	0	0	0	28
3/22/2022	22:30	0	0	0	4	16	7	2	0	0	0	0	0	29
3/22/2022	22:45	0	0	3	2	9	1	0	0	0	0	0	0	15
3/22/2022	23:00	0	0	0	2	5	4	1	0	1	0	0	0	13
3/22/2022	23:15	0	0	1	5	11	1	1	0	0	0	0	0	19
3/22/2022	23:30	0	0	1	7	6	3	1	0	0	0	0	0	18
3/22/2022	23:45	0	0	0	1	7	2	0	0	0	0	0	0	10
Complete Day		0	0	47	1500	3662	710	38	6	6	0	0	0	5969

Count Name MD 97 SB - 1150' south of Bel Pre Rd - Ln 4
Start Date 3/23/2022
Start Time 0:00
Site Code 0097122
Station ID

Date	Time	0 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100	>100 to 110	> 110	Total
3/23/2022	00:00	0	0	0	2	6	3	0	0	0	0	0	0	11
3/23/2022	00:15	0	0	0	2	3	3	1	0	0	0	0	0	9
3/23/2022	00:30	0	0	0	1	2	3	0	0	0	0	0	0	6
3/23/2022	00:45	0	0	0	1	1	2	0	0	0	0	0	0	4
3/23/2022	01:00	0	0	0	1	0	0	0	0	0	0	0	0	1
3/23/2022	01:15	0	0	0	1	3	2	0	0	0	0	0	0	6
3/23/2022	01:30	0	0	0	0	1	3	0	1	0	0	0	0	5
3/23/2022	01:45	0	0	0	1	1	1	0	0	0	0	0	0	3
3/23/2022	02:00	0	0	0	1	1	1	0	0	0	0	0	0	3
3/23/2022	02:15	0	0	0	0	1	1	0	0	0	0	0	0	2
3/23/2022	02:30	0	0	0	2	1	1	0	0	0	0	0	0	4
3/23/2022	02:45	0	0	0	1	3	0	0	0	0	0	0	0	4
3/23/2022	03:00	0	0	1	0	0	1	0	0	0	0	0	0	2
3/23/2022	03:15	0	0	0	1	2	2	0	0	0	0	0	0	5
3/23/2022	03:30	0	0	0	0	3	4	0	0	0	0	0	0	7
3/23/2022	03:45	0	0	0	3	2	2	0	0	0	0	0	0	7
3/23/2022	04:00	0	0	0	1	3	3	0	0	0	0	0	0	7
3/23/2022	04:15	0	0	0	1	6	5	0	0	0	0	0	0	12
3/23/2022	04:30	0	0	0	1	3	4	1	0	1	0	0	0	10
3/23/2022	04:45	0	0	0	3	6	5	1	0	1	0	0	0	16
3/23/2022	05:00	0	0	0	0	13	5	1	0	0	0	0	0	19
3/23/2022	05:15	0	0	1	2	14	14	3	0	0	0	0	0	34
3/23/2022	05:30	0	0	0	6	13	10	1	1	0	0	0	0	31
3/23/2022	05:45	0	0	0	5	20	14	1	1	0	0	0	0	41
3/23/2022	06:00	0	0	0	5	34	9	1	0	0	0	0	0	49
3/23/2022	06:15	0	0	0	12	35	9	0	0	0	0	0	0	56
3/23/2022	06:30	0	0	1	19	39	13	3	0	0	0	0	0	75
3/23/2022	06:45	0	0	0	13	63	16	5	0	0	0	0	0	97
3/23/2022	07:00	0	0	0	25	83	21	2	0	0	0	0	0	131
3/23/2022	07:15	0	0	0	17	91	15	2	0	0	0	0	0	125
3/23/2022	07:30	0	0	0	5	94	32	0	0	0	0	0	0	131
3/23/2022	07:45	0	0	0	23	106	19	0	0	0	0	0	0	148
3/23/2022	08:00	0	0	0	33	99	17	0	0	0	0	0	0	149
3/23/2022	08:15	0	0	0	25	101	27	0	0	0	0	0	0	153
3/23/2022	08:30	0	0	0	25	95	18	0	0	0	0	0	0	138
3/23/2022	08:45	0	0	0	13	90	18	1	0	0	0	0	0	122
3/23/2022	09:00	0	0	1	13	64	22	0	0	0	0	0	0	100
3/23/2022	09:15	0	0	1	14	44	30	2	0	0	0	0	0	91
3/23/2022	09:30	0	0	0	12	53	18	0	0	0	0	0	0	83
3/23/2022	09:45	0	0	0	22	50	9	0	0	0	0	0	0	81
3/23/2022	10:00	0	0	3	23	46	9	0	0	0	0	0	0	81
3/23/2022	10:15	0	0	3	6	55	6	1	0	0	0	0	0	71
3/23/2022	10:30	0	0	0	18	59	4	0	0	0	0	0	0	81
3/23/2022	10:45	0	0	1	17	53	11	0	0	0	0	0	0	82
3/23/2022	11:00	0	0	1	17	45	9	0	0	0	0	0	0	72
3/23/2022	11:15	0	0	1	25	44	7	0	0	0	0	0	0	77
3/23/2022	11:30	0	0	0	11	44	9	3	1	0	0	0	0	68
3/23/2022	11:45	0	0	0	21	44	7	2	0	0	0	0	0	74
3/23/2022	12:00	0	0	13	32	45	4	2	0	0	0	0	0	96
3/23/2022	12:15	0	0	6	54	42	1	0	0	0	0	0	0	103
3/23/2022	12:30	0	0	3	69	29	0	1	0	0	0	0	0	102
3/23/2022	12:45	0	0	3	48	27	3	0	0	0	0	0	0	81
3/23/2022	13:00	0	0	0	31	28	6	0	0	0	0	0	0	65
3/23/2022	13:15	0	0	4	40	29	0	0	0	0	0	0	0	73
3/23/2022	13:30	0	0	2	28	34	8	1	0	0	0	0	0	73
3/23/2022	13:45	0	0	0	11	43	7	0	0	0	0	0	0	61
3/23/2022	14:00	0	0	0	36	40	6	0	0	0	0	0	0	82
3/23/2022	14:15	0	0	5	30	37	4	1	0	0	0	0	0	77
3/23/2022	14:30	0	0	2	35	44	6	0	0	0	0	0	0	87
3/23/2022	14:45	0	0	0	37	45	7	0	0	0	0	0	0	89
3/23/2022	15:00	0	0	0	30	47	6	0	0	0	0	0	0	83
3/23/2022	15:15	0	0	0	26	46	9	0	0	0	0	0	0	81
3/23/2022	15:30	0	0	0	22	59	6	1	0	0	0	0	0	88
3/23/2022	15:45	0	0	2	35	55	6	0	0	0	0	0	0	98
3/23/2022	16:00	0	0	2	52	44	5	0	0	0	0	0	0	103
3/23/2022	16:15	0	0	0	26	51	6	0	0	0	0	0	0	83
3/23/2022	16:30	0	0	3	35	48	8	0	0	0	0	0	0	94
3/23/2022	16:45	0	0	0	34	44	12	1	0	0	0	0	0	91
3/23/2022	17:00	0	0	2	43	55	3	2	0	0	0	0	0	105
3/23/2022	17:15	0	0	1	38	59	11	0	0	0	0	0	0	109
3/23/2022	17:30	0	0	2	27	49	8	1	0	0	0	0	0	87
3/23/2022	17:45	0	0	0	35	39	9	1	0	0	0	0	0	84
3/23/2022	18:00	0	0	0	26	44	7	0	1	0	0	0	0	78
3/23/2022	18:15	0	0	3	32	34	8	1	0	0	0	0	0	78
3/23/2022	18:30	0	0	0	38	27	5	0	0	0	0	0	0	70
3/23/2022	18:45	0	0	1	19	32	5	0	0	0	0	0	0	57
3/23/2022	19:00	0	0	7	31	9	4	0	0	0	0	0	0	51
3/23/2022	19:15	0	0	8	31	20	3	0	0	0	0	0	0	62
3/23/2022	19:30	0	0	1	41	26	4	0	0	0	0	0	0	72
3/23/2022	19:45	0	0	2	21	22	2	0	0	0	0	0	0	47
3/23/2022	20:00	0	0	1	33	16	0	0	0	0	0	0	0	50
3/23/2022	20:15	0	0	1	40	16	0	0	0	0	0	0	0	57
3/23/2022	20:30	0	0	3	22	15	2	1	0	0	0	0	0	43
3/23/2022	20:45	0	0	3	18	15	3	1	0	0	0	0	0	40
3/23/2022	21:00	0	0	1	23	18	1	0	0	0	0	0	0	43
3/23/2022	21:15	0	0	6	15	9	2	0	0	0	0	0	0	32
3/23/2022	21:30	0	0	1	21	14	1	0	0	0	0	0	0	37
3/23/2022	21:45	0	0	0	10	15	2	0	0	0	0	0	0	27
3/23/2022	22:00	0	0	3	10	21	4	0	0	0	0	0	0	38
3/23/2022	22:15	0	0	1	10	11	0	0	0	0	0	0	0	22
3/23/2022	22:30	0	0	0	7	16	3	0	0	0	0	0	0	26
3/23/2022	22:45	0	0	1	10	13	2	0	0	0	0	0	0	26
3/23/2022	23:00	0	0	0	5	10	1	0	0	0	0	0	0	16
3/23/2022	23:15	0	0	1	6	10	3	0	0	0	0	0	0	20
3/23/2022	23:30	0	0	0	6	8	2	0	0	0	0	0	0	16
3/23/2022	23:45	0	0	0	3	8	1	1	0	0	0	0	0	13
Complete Day		0	0	108	1782	3107	650	46	5	2	0	0	0	5700

Count Name MD 97 SB - 1150' south of Bel Pre Rd - Ln 6 and 5
Start Date 3/22/2022
Start Time 0:00
Site Code 009712
Station ID

Date	Time	0 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100	>100 to 110	> 110	Total
3/22/2022	00:00	0	0	0	1	3	0	0	0	0	0	0	0	4
3/22/2022	00:15	0	0	0	3	1	1	0	0	0	0	0	0	5
3/22/2022	00:30	0	0	0	2	2	0	0	0	0	0	0	0	4
3/22/2022	00:45	0	0	0	1	1	0	0	0	0	0	0	0	2
3/22/2022	01:00	0	0	0	0	1	1	0	0	0	0	0	0	2
3/22/2022	01:15	0	0	0	1	1	0	0	0	0	0	0	0	2
3/22/2022	01:30	0	0	1	1	0	1	0	0	0	0	0	0	3
3/22/2022	01:45	0	0	0	0	0	0	0	0	0	0	0	0	0
3/22/2022	02:00	0	0	0	0	0	0	0	0	0	0	0	0	0
3/22/2022	02:15	0	0	0	2	0	0	0	0	0	0	0	0	2
3/22/2022	02:30	0	0	0	0	0	0	0	0	0	0	0	0	0
3/22/2022	02:45	0	0	0	0	1	0	0	0	0	0	0	0	1
3/22/2022	03:00	0	0	0	0	0	0	0	0	0	0	0	0	0
3/22/2022	03:15	0	0	0	1	1	0	0	0	0	0	0	0	2
3/22/2022	03:30	0	0	0	0	0	0	0	0	0	0	0	0	0
3/22/2022	03:45	0	0	0	0	0	0	0	0	0	0	0	0	0
3/22/2022	04:00	0	0	0	0	1	0	0	0	0	0	0	0	1
3/22/2022	04:15	0	0	0	1	1	2	0	0	0	0	0	0	4
3/22/2022	04:30	0	0	0	2	3	4	1	1	0	0	0	0	11
3/22/2022	04:45	0	0	1	2	4	3	1	0	0	0	0	0	11
3/22/2022	05:00	0	0	0	1	7	4	1	0	0	0	0	0	13
3/22/2022	05:15	0	0	1	1	6	9	3	0	0	0	0	0	20
3/22/2022	05:30	0	0	1	2	5	5	0	0	0	0	0	0	13
3/22/2022	05:45	0	1	0	3	11	2	1	0	0	0	0	0	18
3/22/2022	06:00	0	0	1	4	22	6	0	0	0	0	0	0	33
3/22/2022	06:15	0	0	1	19	28	6	2	0	0	0	0	0	56
3/22/2022	06:30	0	0	1	14	36	8	1	0	0	0	0	0	60
3/22/2022	06:45	0	0	2	30	35	9	2	0	0	0	0	0	78
3/22/2022	07:00	0	0	0	50	64	8	1	0	0	0	0	0	123
3/22/2022	07:15	0	0	5	23	65	16	2	0	0	0	0	0	111
3/22/2022	07:30	0	0	8	43	71	12	0	0	0	0	0	0	134
3/22/2022	07:45	0	0	7	71	69	8	0	0	0	0	0	0	155
3/22/2022	08:00	0	4	1	70	65	7	0	0	0	0	0	0	147
3/22/2022	08:15	0	0	16	81	51	4	1	0	0	0	0	0	153
3/22/2022	08:30	0	1	3	46	80	9	0	0	0	0	0	0	139
3/22/2022	08:45	0	0	7	72	55	9	1	0	0	0	0	0	144
3/22/2022	09:00	0	0	0	38	68	8	0	0	0	0	0	0	114
3/22/2022	09:15	0	0	2	46	52	3	0	0	0	0	0	0	103
3/22/2022	09:30	0	0	2	34	44	5	1	0	0	0	0	0	86
3/22/2022	09:45	0	0	0	39	50	10	0	0	0	0	0	0	99
3/22/2022	10:00	0	0	5	39	21	7	0	0	0	0	0	0	72
3/22/2022	10:15	0	0	0	40	29	1	0	0	0	0	0	0	70
3/22/2022	10:30	0	1	3	65	43	4	0	0	0	0	0	0	116
3/22/2022	10:45	0	0	1	35	40	4	0	0	0	0	0	0	80
3/22/2022	11:00	0	0	2	46	36	4	0	0	0	0	0	0	88
3/22/2022	11:15	0	0	0	41	43	1	0	0	0	0	0	0	85
3/22/2022	11:30	0	0	2	29	48	0	0	0	0	0	0	0	79
3/22/2022	11:45	0	0	2	35	32	3	0	0	0	0	0	0	72
3/22/2022	12:00	0	0	3	45	32	3	0	0	0	0	0	0	83
3/22/2022	12:15	0	0	2	39	48	1	0	0	0	0	0	0	90
3/22/2022	12:30	0	0	2	51	34	2	0	0	0	0	0	0	89
3/22/2022	12:45	0	0	1	43	27	3	0	0	0	0	0	0	74
3/22/2022	13:00	0	0	0	39	37	4	0	0	0	0	0	0	80
3/22/2022	13:15	0	0	3	47	25	2	2	0	0	0	0	0	79
3/22/2022	13:30	0	0	0	46	29	3	0	0	0	0	0	0	78
3/22/2022	13:45	0	0	1	49	34	2	0	0	0	0	0	0	86
3/22/2022	14:00	0	0	5	57	29	3	0	0	0	0	0	0	94
3/22/2022	14:15	0	0	1	38	38	6	0	0	0	0	0	0	83
3/22/2022	14:30	0	0	7	63	38	2	1	0	0	0	0	0	111
3/22/2022	14:45	0	1	7	57	31	4	0	0	0	0	0	0	100
3/22/2022	15:00	0	0	1	51	40	3	0	0	0	0	0	0	95
3/22/2022	15:15	0	0	3	67	29	1	0	0	0	0	0	0	100
3/22/2022	15:30	0	0	2	55	39	8	0	0	0	0	0	0	104
3/22/2022	15:45	0	0	3	42	37	8	0	0	0	0	0	0	90
3/22/2022	16:00	0	0	2	43	44	6	1	0	0	0	0	0	96
3/22/2022	16:15	0	0	4	61	30	3	0	0	0	0	0	0	98
3/22/2022	16:30	0	0	5	47	47	7	0	0	0	0	0	0	106
3/22/2022	16:45	0	0	4	60	50	7	0	0	0	0	0	0	121
3/22/2022	17:00	0	0	1	50	40	2	0	0	0	0	0	0	93
3/22/2022	17:15	0	0	4	43	51	8	1	0	0	0	0	0	107
3/22/2022	17:30	0	0	2	55	33	6	1	0	0	0	0	0	97
3/22/2022	17:45	0	1	5	38	31	7	0	0	0	0	0	0	82
3/22/2022	18:00	0	0	0	30	45	8	0	0	0	0	0	0	83
3/22/2022	18:15	0	0	2	54	33	7	0	0	0	0	0	0	96
3/22/2022	18:30	0	1	3	38	41	4	0	0	0	0	0	0	87
3/22/2022	18:45	0	0	3	25	36	1	0	0	0	0	0	0	65
3/22/2022	19:00	0	0	0	33	34	2	0	0	0	0	0	0	69
3/22/2022	19:15	0	0	4	30	33	3	0	0	0	0	0	0	70
3/22/2022	19:30	0	1	7	20	22	5	0	0	0	0	0	0	55
3/22/2022	19:45	0	0	2	31	11	2	0	0	0	0	0	0	46
3/22/2022	20:00	0	0	2	34	9	4	0	0	0	0	0	0	49
3/22/2022	20:15	0	0	9	29	21	0	0	0	0	0	0	0	59
3/22/2022	20:30	0	0	2	24	10	1	0	0	0	0	0	0	37
3/22/2022	20:45	0	0	4	24	9	0	0	0	0	0	0	0	37
3/22/2022	21:00	0	0	1	16	27	2	0	0	0	0	0	0	46
3/22/2022	21:15	0	0	1	20	15	3	0	0	0	0	0	0	39
3/22/2022	21:30	0	0	2	17	16	5	0	0	0	0	0	0	40
3/22/2022	21:45	0	0	2	10	7	3	1	0	0	0	0	0	23
3/22/2022	22:00	0	0	2	6	13	1	2	0	0	0	0	0	24
3/22/2022	22:15	0	0	0	3	8	0	1	0	0	0	0	0	12
3/22/2022	22:30	0	0	2	6	9	2	0	0	0	0	0	0	19
3/22/2022	22:45	0	0	0	5	6	0	1	0	0	0	0	0	12
3/22/2022	23:00	0	0	0	3	3	1	1	0	0	0	0	0	8
3/22/2022	23:15	0	0	1	1	4	0	0	0	0	0	0	0	6
3/22/2022	23:30	0	0	1	4	3	0	0	0	0	0	0	0	8
3/22/2022	23:45	0	0	1	1	1	0	0	0	0	0	0	0	3
Complete Day		0	11	194	2684	2485	339	30	1	0	0	0	0	5744

Count Name MD 97 SB - 1150' south of Bel Pre Rd - Ln 6 and 5
Start Date 3/22/2022
Start Time 0:00
Site Code 009712
Station ID

Date	Time	0 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100	>100 to 110	> 110	Total
3/22/2022	00:00	0	0	0	8	11	6	0	0	0	0	0	0	25
3/22/2022	00:15	0	0	0	1	5	1	0	0	0	0	0	0	7
3/22/2022	00:30	0	0	0	3	5	2	2	0	0	0	0	0	12
3/22/2022	00:45	0	0	0	5	6	3	0	0	0	0	0	0	14
3/22/2022	01:00	0	0	0	3	11	2	0	0	0	0	0	0	16
3/22/2022	01:15	0	0	0	1	9	0	1	0	0	0	0	0	11
3/22/2022	01:30	0	0	0	2	5	0	0	0	0	0	0	0	7
3/22/2022	01:45	0	0	0	2	5	1	0	0	0	0	0	0	8
3/22/2022	02:00	0	0	0	1	2	2	3	0	0	0	0	0	8
3/22/2022	02:15	0	0	0	3	5	0	0	0	0	0	0	0	8
3/22/2022	02:30	0	0	0	3	6	2	0	0	0	0	0	0	11
3/22/2022	02:45	0	0	0	0	3	2	1	0	0	0	0	0	6
3/22/2022	03:00	0	0	0	1	5	1	0	0	0	0	0	0	7
3/22/2022	03:15	0	0	0	1	5	6	0	0	0	0	0	0	12
3/22/2022	03:30	0	0	0	2	6	2	0	0	0	0	0	0	10
3/22/2022	03:45	0	0	0	2	5	3	0	0	0	0	0	0	10
3/22/2022	04:00	0	0	0	1	17	3	0	0	0	0	0	0	21
3/22/2022	04:15	0	0	0	2	6	3	2	0	0	0	0	0	13
3/22/2022	04:30	0	0	0	3	15	9	1	1	0	0	0	0	29
3/22/2022	04:45	0	0	0	9	20	15	0	0	0	0	0	0	44
3/22/2022	05:00	0	0	0	9	32	17	1	0	0	0	0	0	59
3/22/2022	05:15	0	0	0	8	25	23	2	0	0	0	0	0	58
3/22/2022	05:30	0	0	1	11	36	14	3	0	0	0	0	0	65
3/22/2022	05:45	0	0	2	19	51	11	3	0	0	0	0	0	86
3/22/2022	06:00	0	0	0	23	58	23	3	0	0	0	0	0	107
3/22/2022	06:15	0	0	0	42	55	20	0	0	0	0	0	0	117
3/22/2022	06:30	0	0	2	48	81	18	1	0	0	0	0	0	150
3/22/2022	06:45	0	0	0	57	104	11	0	0	0	0	0	0	172
3/22/2022	07:00	0	0	3	90	87	5	0	0	0	0	0	0	185
3/22/2022	07:15	0	0	2	91	113	10	0	0	0	0	0	0	216
3/22/2022	07:30	0	0	2	73	142	15	0	0	0	0	0	0	232
3/22/2022	07:45	0	0	4	118	88	6	0	0	0	0	0	0	216
3/22/2022	08:00	1	0	2	117	107	9	0	0	0	0	0	0	236
3/22/2022	08:15	0	0	20	118	87	8	0	0	0	0	0	0	233
3/22/2022	08:30	0	0	1	76	119	11	1	0	0	0	0	0	208
3/22/2022	08:45	0	0	1	84	94	14	1	0	0	0	0	0	194
3/22/2022	09:00	0	0	1	38	116	17	1	0	0	0	0	0	173
3/22/2022	09:15	0	0	2	50	85	17	0	0	0	0	0	0	154
3/22/2022	09:30	0	0	5	62	89	9	0	0	0	0	0	0	165
3/22/2022	09:45	0	0	2	41	69	6	1	1	0	0	0	0	120
3/22/2022	10:00	0	0	3	54	70	5	0	0	0	0	0	0	132
3/22/2022	10:15	0	0	0	67	45	9	0	0	0	0	0	0	121
3/22/2022	10:30	0	0	5	39	69	10	0	0	0	0	0	0	123
3/22/2022	10:45	0	0	0	48	54	11	0	0	0	0	0	0	113
3/22/2022	11:00	0	0	0	41	63	6	1	0	0	0	0	0	111
3/22/2022	11:15	0	0	0	43	47	11	0	0	0	0	0	0	101
3/22/2022	11:30	0	0	0	34	70	5	1	1	0	0	0	0	111
3/22/2022	11:45	0	0	0	40	64	13	0	0	0	0	0	0	117
3/22/2022	12:00	0	0	0	56	62	4	0	0	0	0	0	0	122
3/22/2022	12:15	0	0	0	32	78	10	0	0	0	0	0	0	120
3/22/2022	12:30	0	0	0	41	58	8	0	0	0	0	0	0	107
3/22/2022	12:45	0	0	0	55	59	5	0	0	0	0	0	0	119
3/22/2022	13:00	0	0	1	37	66	8	0	1	0	0	0	0	113
3/22/2022	13:15	0	0	5	56	69	4	0	0	0	0	0	0	134
3/22/2022	13:30	0	0	2	53	74	5	0	0	0	0	0	0	134
3/22/2022	13:45	0	0	0	48	56	7	0	0	0	0	0	0	111
3/22/2022	14:00	0	0	3	63	55	3	0	0	0	0	0	0	124
3/22/2022	14:15	0	0	0	55	63	11	0	0	0	0	0	0	129
3/22/2022	14:30	0	0	6	76	76	6	1	0	0	0	0	0	165
3/22/2022	14:45	0	0	5	59	62	7	1	0	0	0	0	0	134
3/22/2022	15:00	0	0	0	51	60	17	0	0	0	0	0	0	128
3/22/2022	15:15	0	0	2	76	47	4	1	1	0	0	0	0	131
3/22/2022	15:30	0	0	1	75	75	17	0	0	0	0	0	0	168
3/22/2022	15:45	0	0	2	72	74	10	0	0	0	0	0	0	158
3/22/2022	16:00	0	0	3	72	73	5	1	0	0	0	0	0	154
3/22/2022	16:15	0	0	0	68	64	9	1	0	0	0	0	0	142
3/22/2022	16:30	0	0	2	80	68	7	1	0	0	0	0	0	158
3/22/2022	16:45	0	0	1	49	87	10	3	0	0	0	0	0	150
3/22/2022	17:00	0	0	3	89	70	7	1	0	0	0	0	0	170
3/22/2022	17:15	0	0	9	90	54	6	0	0	0	0	0	0	159
3/22/2022	17:30	0	0	9	68	68	10	1	0	0	0	0	0	156
3/22/2022	17:45	0	4	10	53	78	14	2	0	1	0	0	0	162
3/22/2022	18:00	0	0	2	66	80	10	1	0	0	0	0	0	159
3/22/2022	18:15	0	0	10	50	76	12	0	0	0	0	0	0	148
3/22/2022	18:30	0	0	2	61	60	5	1	0	0	0	0	0	129
3/22/2022	18:45	0	0	0	40	86	8	1	0	0	0	0	0	135
3/22/2022	19:00	0	0	1	61	57	6	0	0	0	0	0	0	125
3/22/2022	19:15	0	0	5	41	40	3	0	0	0	0	0	0	89
3/22/2022	19:30	0	0	2	50	37	6	0	0	0	0	0	0	95
3/22/2022	19:45	0	0	4	58	29	7	0	0	0	0	0	0	98
3/22/2022	20:00	0	0	11	43	37	2	0	0	0	0	0	0	93
3/22/2022	20:15	0	0	7	34	37	1	0	0	0	0	0	0	79
3/22/2022	20:30	0	0	8	50	20	2	1	0	0	0	0	0	81
3/22/2022	20:45	0	0	6	35	24	7	0	0	0	0	0	0	72
3/22/2022	21:00	0	0	0	35	46	5	0	0	0	0	0	0	86
3/22/2022	21:15	0	0	3	41	21	4	2	0	0	0	0	0	71
3/22/2022	21:30	0	0	8	30	27	9	0	0	0	0	0	0	74
3/22/2022	21:45	0	0	0	14	25	4	0	1	0	0	0	0	44
3/22/2022	22:00	0	0	1	13	36	2	0	0	0	0	0	0	52
3/22/2022	22:15	0	0	0	11	35	7	0	1	0	0	0	0	54
3/22/2022	22:30	0	0	0	11	22	7	0	0	0	0	0	0	40
3/22/2022	22:45	0	0	0	7	23	9	1	0	0	0	0	0	40
3/22/2022	23:00	0	0	0	5	15	7	2	0	0	0	0	0	29
3/22/2022	23:15	0	0	1	9	14	7	0	0	0	0	0	0	31
3/22/2022	23:30	0	0	0	6	13	3	0	0	0	0	0	0	22
3/22/2022	23:45	0	0	1	7	16	4	0	0	0	0	0	0	28
Complete Day		1	4	194	3846	4744	728	51	7	1	0	0	0	9576

Count Name MD 97 SB - 1150' south of Bel Pre Rd - Ln 6 and 5
Start Date 3/23/2022
Start Time 0:00
Site Code 009712
Station ID

Date	Time	0 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100	>100 to 110	> 110	Total
3/23/2022	00:00	0	0	0	0	3	2	0	0	0	0	0	0	5
3/23/2022	00:15	0	0	0	1	0	0	0	0	0	0	0	0	1
3/23/2022	00:30	0	0	1	0	1	0	0	0	0	0	0	0	2
3/23/2022	00:45	0	0	0	2	1	2	0	0	0	0	0	0	5
3/23/2022	01:00	0	0	0	2	0	0	0	0	0	0	0	0	2
3/23/2022	01:15	0	0	0	0	0	0	0	0	0	0	0	0	0
3/23/2022	01:30	0	0	1	0	1	0	0	0	0	0	0	0	2
3/23/2022	01:45	0	0	0	0	0	0	0	0	0	0	0	0	0
3/23/2022	02:00	0	0	1	0	0	1	0	0	0	0	0	0	2
3/23/2022	02:15	0	0	0	0	0	0	0	0	0	0	0	0	0
3/23/2022	02:30	0	0	0	0	0	0	0	0	0	0	0	0	0
3/23/2022	02:45	0	0	0	2	0	0	0	0	0	0	0	0	2
3/23/2022	03:00	0	0	0	0	0	0	0	0	0	0	0	0	0
3/23/2022	03:15	0	0	0	1	1	1	0	0	0	0	0	0	3
3/23/2022	03:30	0	0	0	0	0	0	0	0	0	0	0	0	0
3/23/2022	03:45	0	0	0	1	0	0	0	0	0	0	0	0	1
3/23/2022	04:00	0	0	0	1	1	0	1	0	0	0	0	0	3
3/23/2022	04:15	0	0	0	0	0	0	0	0	0	0	0	0	0
3/23/2022	04:30	0	0	1	3	1	0	1	0	0	0	0	0	6
3/23/2022	04:45	0	0	1	0	3	5	1	0	0	0	0	0	10
3/23/2022	05:00	0	0	0	0	3	3	1	0	0	0	0	0	7
3/23/2022	05:15	0	0	1	3	4	6	1	0	0	0	0	0	15
3/23/2022	05:30	0	0	0	2	12	7	1	0	0	0	0	0	22
3/23/2022	05:45	0	1	0	6	16	8	0	0	0	0	0	0	31
3/23/2022	06:00	0	0	1	14	19	4	1	0	0	0	0	0	39
3/23/2022	06:15	0	0	4	4	18	9	0	0	0	0	0	0	35
3/23/2022	06:30	0	0	0	11	46	11	3	0	0	0	0	0	71
3/23/2022	06:45	0	0	1	21	51	6	0	0	0	0	0	0	79
3/23/2022	07:00	0	0	2	41	57	5	0	0	0	0	0	0	105
3/23/2022	07:15	0	0	1	41	59	3	0	0	0	0	0	0	104
3/23/2022	07:30	0	0	3	51	62	11	0	0	0	0	0	0	127
3/23/2022	07:45	0	0	11	53	73	17	0	0	0	0	0	0	154
3/23/2022	08:00	0	0	4	71	81	8	1	0	0	0	0	0	165
3/23/2022	08:15	0	0	3	34	78	14	1	0	0	0	0	0	130
3/23/2022	08:30	0	0	4	31	90	12	0	0	0	0	0	0	137
3/23/2022	08:45	0	0	0	36	77	7	1	0	0	0	0	0	121
3/23/2022	09:00	0	0	10	38	49	8	1	0	0	0	0	0	106
3/23/2022	09:15	0	0	0	18	54	13	0	0	0	0	0	0	85
3/23/2022	09:30	0	0	0	36	56	5	0	0	0	0	0	0	97
3/23/2022	09:45	0	1	1	28	50	5	0	0	0	0	0	0	85
3/23/2022	10:00	0	0	3	42	30	6	0	0	0	0	0	0	81
3/23/2022	10:15	0	0	3	34	37	3	0	0	0	0	0	0	77
3/23/2022	10:30	0	1	1	45	25	1	0	0	0	0	0	0	73
3/23/2022	10:45	0	0	1	30	31	4	0	0	0	0	0	0	66
3/23/2022	11:00	0	0	0	27	28	2	1	0	0	0	0	0	58
3/23/2022	11:15	0	0	0	12	32	5	0	0	0	0	0	0	49
3/23/2022	11:30	0	0	1	38	30	6	0	0	0	0	0	0	75
3/23/2022	11:45	0	0	0	51	31	1	0	0	0	0	0	0	83
3/23/2022	12:00	0	0	8	41	8	0	1	0	0	0	0	0	58
3/23/2022	12:15	0	0	5	11	1	0	0	0	0	0	0	0	17
3/23/2022	12:30	0	0	4	9	0	0	0	0	0	0	0	0	13
3/23/2022	12:45	0	0	4	39	6	0	0	0	0	0	0	0	49
3/23/2022	13:00	0	0	11	53	21	4	0	0	0	0	0	0	89
3/23/2022	13:15	0	0	0	60	27	1	0	0	0	0	0	0	88
3/23/2022	13:30	0	0	5	57	32	1	0	0	0	0	0	0	95
3/23/2022	13:45	0	0	0	46	33	0	0	0	0	0	0	0	79
3/23/2022	14:00	0	0	2	49	24	1	0	0	0	0	0	0	76
3/23/2022	14:15	0	0	4	47	33	2	0	0	0	0	0	0	86
3/23/2022	14:30	0	1	7	43	28	8	0	0	0	0	0	0	87
3/23/2022	14:45	0	1	2	72	29	0	0	0	0	0	0	0	104
3/23/2022	15:00	0	1	5	39	34	3	1	0	0	0	0	0	83
3/23/2022	15:15	0	0	8	47	37	4	0	0	0	0	0	0	96
3/23/2022	15:30	0	0	4	30	42	3	0	0	0	0	0	0	79
3/23/2022	15:45	0	0	4	48	33	4	0	0	0	0	0	0	89
3/23/2022	16:00	0	0	7	50	48	5	1	0	0	0	0	0	111
3/23/2022	16:15	0	1	4	46	23	2	0	0	0	0	0	0	76
3/23/2022	16:30	0	0	2	54	33	1	0	0	0	0	0	0	90
3/23/2022	16:45	0	1	4	33	28	4	0	0	0	0	0	0	70
3/23/2022	17:00	0	0	4	51	37	3	0	0	0	0	0	0	95
3/23/2022	17:15	0	0	2	53	37	5	1	0	0	0	0	0	98
3/23/2022	17:30	0	0	4	58	20	1	0	0	0	0	0	0	83
3/23/2022	17:45	0	0	1	39	41	4	0	0	0	0	0	0	85
3/23/2022	18:00	0	0	2	29	24	3	0	0	0	0	0	0	58
3/23/2022	18:15	0	0	7	28	32	5	0	0	0	0	0	0	72
3/23/2022	18:30	0	0	1	48	20	0	0	0	0	0	0	0	69
3/23/2022	18:45	0	0	9	24	19	1	0	0	0	0	0	0	53
3/23/2022	19:00	0	0	7	30	18	1	0	0	0	0	0	0	56
3/23/2022	19:15	0	0	5	38	7	1	0	0	0	0	0	0	51
3/23/2022	19:30	0	0	1	35	13	0	0	0	0	0	0	0	49
3/23/2022	19:45	0	0	5	18	8	1	0	0	0	0	0	0	32
3/23/2022	20:00	0	0	7	16	12	1	0	0	0	0	0	0	36
3/23/2022	20:15	0	0	1	19	8	1	0	0	0	0	0	0	29
3/23/2022	20:30	0	0	0	17	10	0	0	0	0	0	0	0	27
3/23/2022	20:45	0	0	5	27	2	2	0	0	0	0	0	0	36
3/23/2022	21:00	0	0	1	9	10	1	0	0	0	0	0	0	21
3/23/2022	21:15	0	1	4	20	7	1	0	0	0	0	0	0	33
3/23/2022	21:30	0	0	2	10	6	1	0	0	0	0	0	0	19
3/23/2022	21:45	0	0	0	6	9	4	0	0	0	0	0	0	19
3/23/2022	22:00	0	0	1	9	8	0	0	0	0	0	0	0	18
3/23/2022	22:15	0	0	1	1	8	1	0	0	0	0	0	0	11
3/23/2022	22:30	0	0	3	4	4	0	0	0	0	0	0	0	11
3/23/2022	22:45	0	0	0	5	4	4	0	0	0	0	0	0	13
3/23/2022	23:00	0	0	1	3	1	0	0	0	0	0	0	0	5
3/23/2022	23:15	0	0	1	1	5	0	0	0	0	0	0	0	7
3/23/2022	23:30	0	0	0	2	1	1	0	0	0	0	0	0	4
3/23/2022	23:45	0	0	0	4	5	1	0	0	0	0	0	0	10
Complete Day		0	9	225	2309	2107	287	19	0	0	0	0	0	4956

Count Name MD 97 SB - 1150' south of Bel Pre Rd - Ln 6 and 5
Start Date 3/23/2022
Start Time 0:00
Site Code 009712
Station ID

Date	Time	0 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100	>100 to 110	> 110	Total
3/23/2022	00:00	0	0	0	6	7	10	0	0	0	0	0	0	23
3/23/2022	00:15	0	0	0	2	12	3	0	0	0	0	0	0	17
3/23/2022	00:30	0	0	0	3	7	0	0	0	0	0	0	0	10
3/23/2022	00:45	0	0	0	0	4	3	0	0	0	0	0	0	7
3/23/2022	01:00	0	0	0	2	5	1	0	0	0	0	0	0	8
3/23/2022	01:15	0	0	0	3	7	2	0	0	0	0	0	0	12
3/23/2022	01:30	0	0	0	2	5	3	0	0	0	0	0	0	10
3/23/2022	01:45	0	0	1	2	5	1	0	0	0	0	0	0	9
3/23/2022	02:00	0	0	0	1	3	2	0	0	0	0	0	0	6
3/23/2022	02:15	0	0	0	2	10	2	1	0	0	0	0	0	15
3/23/2022	02:30	0	0	0	2	2	1	2	0	0	0	0	0	7
3/23/2022	02:45	0	0	0	2	2	0	0	0	0	0	0	0	4
3/23/2022	03:00	0	0	0	1	7	1	1	0	0	0	0	0	10
3/23/2022	03:15	0	0	1	2	6	4	0	0	0	0	0	0	13
3/23/2022	03:30	0	0	0	3	4	4	2	0	0	0	0	0	13
3/23/2022	03:45	0	0	0	1	13	5	0	0	0	0	0	0	19
3/23/2022	04:00	0	0	0	2	8	3	0	0	0	0	0	0	13
3/23/2022	04:15	0	0	1	2	10	5	2	0	0	0	0	0	20
3/23/2022	04:30	0	0	0	2	12	12	0	0	0	0	0	0	26
3/23/2022	04:45	0	0	1	3	23	10	0	0	0	0	0	0	37
3/23/2022	05:00	0	0	1	7	28	10	1	1	0	0	0	0	48
3/23/2022	05:15	0	0	0	9	39	11	0	0	0	0	0	0	59
3/23/2022	05:30	0	0	1	14	24	16	5	0	0	0	0	0	60
3/23/2022	05:45	0	0	2	16	37	17	4	2	0	0	0	0	78
3/23/2022	06:00	0	0	1	24	61	15	1	1	0	0	0	0	103
3/23/2022	06:15	0	0	1	50	63	12	1	0	0	0	0	0	127
3/23/2022	06:30	0	0	0	34	77	21	2	0	0	0	0	0	134
3/23/2022	06:45	0	0	3	64	71	13	0	0	0	0	0	0	151
3/23/2022	07:00	0	0	3	67	125	9	0	0	0	0	0	0	204
3/23/2022	07:15	0	0	8	85	109	17	0	0	0	0	0	0	219
3/23/2022	07:30	0	0	0	79	119	15	0	0	0	0	0	0	213
3/23/2022	07:45	0	0	2	74	121	8	0	0	0	0	0	0	205
3/23/2022	08:00	1	0	1	121	80	7	1	0	0	0	0	0	211
3/23/2022	08:15	0	0	1	89	115	16	0	0	1	0	0	0	222
3/23/2022	08:30	0	0	1	78	103	16	0	0	0	0	0	0	198
3/23/2022	08:45	0	0	0	57	112	10	0	0	0	0	0	0	179
3/23/2022	09:00	0	0	0	69	104	12	0	0	0	0	0	0	185
3/23/2022	09:15	0	0	2	31	103	21	0	0	0	0	0	0	157
3/23/2022	09:30	0	0	1	45	69	12	1	0	0	0	0	0	128
3/23/2022	09:45	0	0	1	54	77	4	1	0	0	0	0	0	137
3/23/2022	10:00	0	0	0	43	69	5	0	0	0	0	0	0	117
3/23/2022	10:15	0	0	1	36	75	4	2	0	0	0	0	0	118
3/23/2022	10:30	0	0	0	45	65	5	0	0	0	0	0	0	115
3/23/2022	10:45	0	0	4	62	59	4	0	0	0	0	0	0	129
3/23/2022	11:00	0	0	1	53	72	3	1	0	0	0	0	0	130
3/23/2022	11:15	0	0	0	61	67	5	0	0	0	0	0	0	133
3/23/2022	11:30	0	0	0	39	75	12	0	0	0	0	0	0	126
3/23/2022	11:45	0	0	1	47	57	6	0	0	0	0	0	0	111
3/23/2022	12:00	0	0	28	65	48	2	0	0	0	0	0	0	143
3/23/2022	12:15	0	1	35	117	25	2	0	0	0	0	0	0	180
3/23/2022	12:30	0	0	39	109	21	1	0	0	0	0	0	0	170
3/23/2022	12:45	0	1	26	79	36	2	0	0	0	0	0	0	144
3/23/2022	13:00	0	0	1	65	31	6	0	0	0	0	0	0	103
3/23/2022	13:15	0	0	2	71	44	1	0	0	0	0	0	0	118
3/23/2022	13:30	0	0	5	57	44	3	2	0	0	0	0	0	111
3/23/2022	13:45	0	0	3	71	39	5	1	0	0	0	0	0	119
3/23/2022	14:00	0	0	4	61	52	5	1	0	0	0	0	0	123
3/23/2022	14:15	0	7	10	76	58	0	0	0	0	0	0	0	151
3/23/2022	14:30	0	0	10	56	67	3	1	0	0	0	0	0	137
3/23/2022	14:45	0	0	7	64	53	1	1	0	0	0	0	0	126
3/23/2022	15:00	0	0	2	65	62	14	2	0	0	0	0	0	145
3/23/2022	15:15	0	0	1	57	75	9	0	0	0	0	0	0	142
3/23/2022	15:30	0	0	6	50	71	10	0	0	0	0	0	0	137
3/23/2022	15:45	0	0	4	69	61	4	0	0	0	0	0	0	138
3/23/2022	16:00	0	0	1	80	65	7	0	0	0	0	0	0	153
3/23/2022	16:15	0	0	9	70	60	6	0	1	0	0	0	0	146
3/23/2022	16:30	0	0	1	80	50	10	1	0	0	0	0	0	142
3/23/2022	16:45	0	0	1	71	53	7	1	0	0	0	0	0	133
3/23/2022	17:00	0	0	1	79	59	4	2	0	0	0	0	0	145
3/23/2022	17:15	0	0	13	70	64	3	1	0	0	0	0	0	151
3/23/2022	17:30	0	0	4	108	43	2	0	0	0	0	0	0	157
3/23/2022	17:45	0	0	0	56	68	6	1	0	0	0	0	0	131
3/23/2022	18:00	0	0	2	43	52	7	1	0	0	0	0	0	105
3/23/2022	18:15	0	0	16	58	51	6	1	0	0	0	0	0	132
3/23/2022	18:30	0	0	1	72	57	2	1	0	0	0	0	0	133
3/23/2022	18:45	0	0	2	52	46	6	0	0	0	0	0	0	106
3/23/2022	19:00	0	0	20	42	24	2	0	0	0	0	0	0	88
3/23/2022	19:15	0	0	12	57	26	2	0	0	0	0	0	0	97
3/23/2022	19:30	0	0	4	46	24	2	0	0	0	0	0	0	76
3/23/2022	19:45	0	0	9	39	30	1	0	0	0	0	0	0	79
3/23/2022	20:00	0	0	1	41	22	3	1	0	0	0	0	0	68
3/23/2022	20:15	0	0	17	54	19	2	0	0	0	0	0	0	92
3/23/2022	20:30	0	1	3	35	21	3	0	0	0	0	0	0	63
3/23/2022	20:45	0	0	6	35	19	2	0	0	0	0	0	0	62
3/23/2022	21:00	0	0	9	37	16	2	0	0	0	0	0	0	64
3/23/2022	21:15	0	0	10	46	26	2	0	0	0	0	0	0	84
3/23/2022	21:30	0	0	3	37	18	5	1	0	0	0	0	0	64
3/23/2022	21:45	0	0	1	26	22	7	0	0	0	0	0	0	56
3/23/2022	22:00	0	0	0	27	23	2	0	0	0	0	0	0	52
3/23/2022	22:15	0	0	1	15	13	4	0	0	0	0	0	0	33
3/23/2022	22:30	0	0	0	10	22	2	0	0	0	0	0	0	34
3/23/2022	22:45	0	0	0	6	11	4	1	0	0	0	0	0	22
3/23/2022	23:00	0	0	1	16	6	1	0	0	0	0	0	0	24
3/23/2022	23:15	0	0	0	12	18	4	0	0	0	0	0	0	34
3/23/2022	23:30	0	0	0	5	12	1	0	0	0	0	0	0	18
3/23/2022	23:45	0	0	0	8	14	2	1	0	0	0	0	0	25
Complete Day		1	10	371	4061	4169	565	49	5	1	0	0	0	9232

APPENDIX C - Fatal, Serious Injury, and Minor Injury Crash Summary

Report Number	Local Case Number	ACRS Report Type	Collision Type	Crash Date Time	Lane Direction	Intersection Type	Junction	Light	KSI	FATAL CRASH	BIKE INVOLVED	BIKE INVOLVED KSI	BIKE HIGHEST INJURY	PED INVOLVED	PED INVOLVED KSI	PED HIGHEST INJURY	MOTORIST HIGHEST	DRIVER HIGHEST	PASSENGER HIGHEST	Non Motorist Related	Road Condition	Road Division	Surface Condition	Traffic Control	Traffic Control Functioning	Weather	ROAD NAME	REFERENCE ROADNAME	MILEPOINT	Mile Point Direction	Mile Point Distance
MCP2588000N	15006050	Injury Crash	HEAD ON LEFT TURN	2/6/2015 12:30	N	FOUR-WAY INTERSECTION	INTERSECTION RELATED	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	3	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	N/A	GEORGIA AVE	RALPH RD	6.5	N	7
MCP2546000R	15007033	Injury Crash	SINGLE VEHICLE	2/11/2015 22:07	N	N/A	NON INTERSECTION	DARK LIGHTS ON	1	0	1	1	4	0	0	0	1	1	0	BICYCLIST	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	CHESTERWOOD DR	7.28	N	750
MCP2704000H	15008552	Injury Crash	SAME DIRECTION SIDESWIPE	2/22/2015 5:14	N	N/A	NON INTERSECTION	DARK LIGHTS ON	0	0	0	0	0	0	0	0	3	3	1	<Null>	NO DEFECTS	TWO-WAY, NOT DIVIDED	ICE	N/A	<Null>	WINTRY MIX	GEORGIA AVE	HEWITT AVE	6.42	N	0
MCP2617000G	15009888	Injury Crash	SAME DIR REAR END	3/2/2015 15:53	S	FOUR-WAY INTERSECTION	INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	TRAFFIC SIGNAL	Y	CLEAR	GEORGIA AVE	HEWITT AVE	6.42	N	0
MCP2039000Z	15011271	Injury Crash	SAME DIR REAR END	3/11/2015 15:25	N	N/A	NON INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	CLOUDY	GEORGIA AVE	HEATHFIELD RD	7.28	N	100
MCP2546000V	15014473	Injury Crash	HEAD ON LEFT TURN	3/29/2015 19:43	N	T-INTERSECTION	INTERSECTION	DARK LIGHTS ON	1	0	0	0	0	0	0	0	4	4	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	TRAFFIC SIGNAL	Y	CLEAR	GEORGIA AVE	HEWITT AVE	6.42	N	0
MCP2753000S	15016763	Injury Crash	SAME DIR REND LEFT TURN	4/11/2015 11:31	S	T-INTERSECTION	INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	1	3	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	TRAFFIC SIGNAL	Y	CLEAR	GEORGIA AVE	HEWITT AVE	6.42	N	0
MCP2725000R	15017405	Injury Crash	SINGLE VEHICLE	4/14/2015 22:24	N	FOUR-WAY INTERSECTION	INTERSECTION	DARK LIGHTS ON	0	0	0	0	0	1	0	3	3	3	0	PEDESTRIAN	N/A	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	WET	TRAFFIC SIGNAL	Y	RAINING	GEORGIA AVE	CONNECTICUT AVE	7	N	0
MCP28200011	15024336	Injury Crash	SAME DIR REAR END	5/21/2015 7:25	E	FOUR-WAY INTERSECTION	INTERSECTION RELATED	N/A	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, NOT DIVIDED	DRY	YIELD SIGN	<Null>	CLOUDY	BEL PRE RD	GEORGIA AVE	1.96	W	0
MCP2753000Y	15025664	Injury Crash	SAME DIR REAR END	5/28/2015 7:25	W	N/A	NON INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, UNPROTECTED PAINTED MIN 4 FEET	DRY	NO CONTROLS	<Null>	CLEAR	BEL PRE RD	GEORGIA AVE	1.96	W	30
MCP2948000B	15025978	Injury Crash	SAME DIR REAR END	5/29/2015 18:20	N	FOUR-WAY INTERSECTION	INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	N/A	<Null>	CLEAR	GEORGIA AVE	CONNECTICUT AVE	7	N	0
MCP1573000P	15027060	Injury Crash	STRAIGHT MOVEMENT ANGLE	6/4/2015 13:46	S	FOUR-WAY INTERSECTION	INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	TRAFFIC SIGNAL	Y	N/A	GEORGIA AVE	BEL PRE RD	7.67	N	0
MCP2588000W	15028626	Injury Crash	OTHER	6/12/2015 13:57	S	FOUR-WAY INTERSECTION	INTERSECTION RELATED	DAYLIGHT	0	0	0	0	0	1	0	3	1	1	0	PEDESTRIAN	NO DEFECTS	TWO-WAY, DIVIDED, UNPROTECTED PAINTED MIN 4 FEET	DRY	N/A	<Null>	CLEAR	GEORGIA AVE	CONNECTICUT AVE	7	N	20
MCP2720001B	15029765	Injury Crash	STRAIGHT MOVEMENT ANGLE	6/18/2015 15:26	N	FOUR-WAY INTERSECTION	INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	WET	NO CONTROLS	<Null>	RAINING	GEORGIA AVE	DIRECTIONAL CROSSOVER	6.64	N	0
MCP2947000P	15037889	Injury Crash	HEAD ON LEFT TURN	7/31/2015 11:45	S	N/A	NON INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	1	<Null>	NO DEFECTS	TWO-WAY, NOT DIVIDED	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	ASPEN HILL RD	6.75	N	300
MCP2746000Y	15039323	Injury Crash	SAME DIR REAR END	8/7/2015 18:16	N	FOUR-WAY INTERSECTION	INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, NOT DIVIDED	DRY	TRAFFIC SIGNAL	Y	CLEAR	GEORGIA AVE	CONNECTICUT AVE	7	N	0
MCP27470014	15039852	Injury Crash	STRAIGHT MOVEMENT ANGLE	8/10/2015 20:45	S	FOUR-WAY INTERSECTION	INTERSECTION RELATED	DARK LIGHTS ON	<Null>	<Null>	<Null>	<Null>	0	<Null>	<Null>	3	1	1	0	PEDESTRIAN	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	WET	NO CONTROLS	<Null>	CLOUDY	GEORGIA AVE	CONNECTICUT AVE	7	S	0
MCP2695000D	15042025	Injury Crash	HEAD ON	8/22/2015 2:15	E	T-INTERSECTION	INTERSECTION RELATED	DARK LIGHTS ON	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, NOT DIVIDED	DRY	OTHER	Y	CLEAR	GEORGIA AVE	HEWITT AVE	6.42	N	0
MCP2849001H	15042321	Injury Crash	OTHER	8/23/2015 19:30	S	OTHER	COMMERCIAL DRIVEWAY	DAYLIGHT	0	0	0	0	0	1	0	3	1	1	1	OTHER CONVEYANCE	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	N/A	GEORGIA AVE	ENT TO BUSINESS	7.1	S	0
MCP26120014	15046330	Injury Crash	HEAD ON LEFT TURN	9/13/2015 14:53	N	FOUR-WAY INTERSECTION	INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	TRAFFIC SIGNAL	Y	CLEAR	GEORGIA AVE	HEWITT AVE	6.42	N	0
MCP25880010	15046304	Injury Crash	STRAIGHT MOVEMENT ANGLE	9/15/2015 11:17	S	FOUR-WAY INTERSECTION	INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	3	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, UNPROTECTED PAINTED MIN 4 FEET	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	RALPH RD	6.5	N	0
MCP2396000V	15048464	Injury Crash	STRAIGHT MOVEMENT ANGLE	9/24/2015 14:52	S	N/A	COMMERCIAL DRIVEWAY	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	3	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, UNPROTECTED PAINTED MIN 4 FEET	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	ENT TO BUSINESS	7.1	N	<Null>
MCP2720001L	15052916	Injury Crash	HEAD ON LEFT TURN	10/18/2015 18:40	S	FOUR-WAY INTERSECTION	INTERSECTION	DARK -- UNKNOWN LIGHTING	0	0	1	0	3	0	0	0	1	1	0	BICYCLIST	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	CROSSOVER	7.1	N	0
MCP25880018	15058882	Injury Crash	SAME DIR REAR END	11/18/2015 12:52	N	FOUR-WAY INTERSECTION	INTERSECTION RELATED	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	1	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	YIELD SIGN	<Null>	CLEAR	GEORGIA AVE	SPUR FR BEL PRE RD	7.69	N	10
MCP2966001C	15060038	Injury Crash	STRAIGHT MOVEMENT ANGLE	11/24/2015 10:50	S	FOUR-WAY INTERSECTION	INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	ENT TO BUSINESS	6.98	N	0
MCP2796002P	15061488	Injury Crash	SAME DIRECTION RIGHT TURN	12/2/2015 8:24	N	T-INTERSECTION	INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	WET	TRAFFIC SIGNAL	Y	RAINING	GEORGIA AVE	HEWITT AVE	6.42	N	0
MCP27770028	15062195	Injury Crash	STRAIGHT MOVEMENT ANGLE	12/5/2015 18:40	S	T-INTERSECTION	INTERSECTION	DARK NO LIGHTS	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	RALPH RD	6.5	N	0
MCP25130003	15063877	Injury Crash	SAME DIR REAR END	12/14/2015 16:10	N	FOUR-WAY INTERSECTION	INTERSECTION RELATED	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	3	<Null>	NO DEFECTS	TWO-WAY, NOT DIVIDED	DRY	TRAFFIC SIGNAL	Y	CLOUDY	GEORGIA AVE	CONNECTICUT AVE	7	N	0
MCP2612001B	15065351	Injury Crash	OTHER	12/21/2015 18:57	S	T-INTERSECTION	INTERSECTION	DARK LIGHTS ON	0	0	0	0	0	0	0	0	3	3	3	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	N/A	TRAFFIC SIGNAL	Y	CLEAR	GEORGIA AVE	HEWITT AVE	6.42	N	0
MCP2947001H	16004555	Injury Crash	SAME DIR REAR END	1/28/2016 13:32	N	FOUR-WAY INTERSECTION	INTERSECTION RELATED	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	1	<Null>	NO DEFECTS	TWO-WAY, NOT DIVIDED	WET	TRAFFIC SIGNAL	Y	CLEAR	GEORGIA AVE	BEL PRE RD	7.67	S	100
MCP1168000G	16005415	Injury Crash	OTHER	2/2/2016 10:01	N	OTHER	CROSSOVER RELATED	DAYLIGHT	0	0	0	0	0	1	0	3	1	1	0	PEDESTRIAN	OTHER	OTHER	WET	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	CONNECTICUT AVE	7	S	300
MCP2953000X	16006222	Injury Crash	SAME DIRECTION SIDESWIPE	2/6/2016 12:46	N	N/A	NON INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	1	3	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	N/A	<Null>	CLEAR	GEORGIA AVE	CONNECTICUT AVE	7	N	200
MCP3006000J	16006922	Injury Crash	STRAIGHT MOVEMENT ANGLE	2/10/2016 13:55	S	T-INTERSECTION	COMMERCIAL DRIVEWAY	DAYLIGHT	1	0	0	0	0	0	0	0	4	2	4	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, UNPROTECTED PAINTED MIN 4 FEET	DRY	STOP SIGN	<Null>	CLEAR	GEORGIA AVE	ENT TO BUSINESS	7.1	N	0
MCP2991000M	16009802	Injury Crash	SINGLE VEHICLE	2/27/2016 14:38	W	N/A	NON INTERSECTION	DAYLIGHT	0	0	0	0	0	1	0	3	1	1	0	PEDESTRIAN	NO DEFECTS	N/A	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	CONNECTICUT AVE	7	N	100
MCP27960031	16010109	Injury Crash	STRAIGHT MOVEMENT ANGLE	2/29/2016 16:03	S	T-INTERSECTION	INTERSECTION RELATED	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	3	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	N/A	<Null>	CLEAR	GEORGIA AVE	RALPH RD	6.5	N	0
MCP27960034	16012761	Injury Crash	SAME DIR BOTH LEFT TURN	3/15/2016 13:35	S	N/A	CROSSOVER RELATED	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	CROSSOVER	6.5	N	0
MCP2516000R	16013390	Injury Crash	SAME DIRECTION LEFT TURN	3/18/2016 15:06	N	N/A	NON INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	3	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	N/A	<Null>	CLEAR	GEORGIA AVE	CONNECTICUT AVE	7	N	10
MCP28200024	16015500	Injury Crash	SAME DIR REAR END	3/30/2016 7:34	N	N/A	NON INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	N/A	<Null>	CLEAR	GEORGIA AVE	BEL PRE RD	7.67	N	200
MCP2695000F	16021021	Injury Crash	SAME DIR REAR END	4/28/2016 22:22	N	FOUR-WAY INTERSECTION	INTERSECTION	DARK LIGHTS ON	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, UNPROTECTED PAINTED MIN 4 FEET	WET	TRAFFIC SIGNAL	Y	OTHER	GEORGIA AVE	HEWITT AVE	6.42	N	0
MCP2237000B	16023608	Injury Crash	STRAIGHT MOVEMENT ANGLE	5/12/2016 15:59	S	FOUR-WAY INTERSECTION	INTERSECTION RELATED	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	3	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	CLOUDY	GEORGIA AVE	ENT TO BUSINESS	6.81	S	0
MCP2755000M	16024777	Injury Crash	HEAD ON LEFT TURN	5/18/2016 10:05	S	FOUR-WAY INTERSECTION	INTERSECTION	DARK LIGHTS ON	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, UNPROTECTED PAINTED MIN 4 FEET	DRY	TRAFFIC SIGNAL	Y	CLEAR	GEORGIA AVE	BEL PRE RD	7.67	N	0
MCP27200020	16025889	Injury Crash	SINGLE VEHICLE	5/24/2016 20:58	S	FOUR-WAY INTERSECTION	INTERSECTION	DARK -- UNKNOWN LIGHTING	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	SPUR TO MD 185	7.066	N	0
MCP2992000N	16027868	Injury Crash	SAME DIR REAR END	6/3/2016 20:15	E	N/A	NON INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, NOT DIVIDED	WET	NO CONTROLS	<Null>	CLOUDY	HEWITT AVE	GEORGIA AVE	0.88	E	0
MCP27530014	16031016	Injury Crash	SAME DIR REAR END	6/19/2016 12:58	S	FOUR-WAY INTERSECTION	INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	3	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	TRAFFIC SIGNAL	Y	CLEAR	GEORGIA AVE	HEWITT AVE	6.42	N	0
MCP3014000P	16032310	Injury Crash	STRAIGHT MOVEMENT ANGLE	6/26/2016 3:14	S	N/A	N/A	DARK LIGHTS ON	0	0	0	0	0	1	0	3	1	1	0	PEDESTRIAN	NO DEFECTS	TWO-WAY, DIVIDED, UNPROTECTED PAINTED MIN 4 FEET	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	CONNECTICUT AVE	7	S	200
MCP2885001J	16033214	Injury Crash	SAME DIR REAR END	6/30/2016 22:08	S	FOUR-WAY INTERSECTION	INTERSECTION RELATED	DARK LIGHTS ON	0	0	0	0	0	0	0	0	3	3	1	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	TRAFFIC SIGNAL	Y	CLEAR	GEORGIA AVE	CONNECTICUT AVE	7	N	15
MCP1119002L	16035111	Injury Crash	STRAIGHT MOVEMENT ANGLE	7/11/2016 16:00	S	FOUR-WAY INTERSECTION	INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	2	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, UNPROTECTED PAINTED MIN 4 FEET	DRY	STOP SIGN	<Null>	CLEAR	GEORGIA AVE	HEATHFIELD RD	7.28	N	0
MCP13790049	16035872	Injury Crash	STRAIGHT MOVEMENT ANGLE	7/15/2016 13:49	N	T-INTERSECTION	OTHER DRIVEWAY	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	STOP SIGN	<Null>	CLEAR	GEORGIA AVE	EXIT FR CEMETERY	6.91	N	0
MCP27530017	16037782	Injury Crash	STRAIGHT MOVEMENT ANGLE	7/26/2016 10:40	N	N/A	NON INTERSECTION	DAYLIGHT	<Null>	<Null>	<Null>	<Null>	3	<Null>	<Null>	0	1	1	1	BICYCLIST	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	STOP SIGN	<Null>	CLEAR	GEORGIA AVE	LOTTE PLAZA	6.589	N	0
MCP9113001Y	16049329	Injury Crash	STRAIGHT MOVEMENT ANGLE	9/25/2016 13:27	S	N/A	NON INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	CONNECTICUT AVE	7	N	150
MCP29170018	16051039	Injury Crash	STRAIGHT MOVEMENT ANGLE	10/4/2016 20:30	N	N/A	NON INTERSECTION	DARK LIGHTS ON	0	0	0	0	0	0	0	0	3	3	3	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	CONNECTICUT AVE	7	N	300
MCP30070012	16051133	Injury Crash	HEAD ON LEFT TURN	10/5/2016 10:10	S	FOUR-WAY INTERSECTION	INTERSECTION RELATED	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, NOT DIVIDED	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	CONNECTICUT AVE	7	N	50
MCP2973002F	16062778	Injury Crash	OTHER	12/7/2016 10:45	E	N/A	NON INTERSECTION	DAYLIGHT	0	0	0	0	0	1	0	3	1	1	0	PEDESTRIAN	NO DEFECTS	TWO-WAY, NOT DIVIDED	DRY	TRAFFIC SIGNAL	Y	CLEAR	BEL PRE RD	GEORGIA AVE	1.96	W	200
MCP2997000N	17004883	Injury Crash	SINGLE VEHICLE	1/28/2017 4:38	S	N/A	NON INTERSECTION	DARK LIGHTS ON	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	TRAFFIC SIGNAL	Y	CLEAR	CONNECTICUT AVE	GEORGIA AVE	0	N	10
MCP2975001J	17013978	Injury Crash	SINGLE VEHICLE	3/18/2017 19:55	E	T-INTERSECTION	INTERSECTION	DARK LIGHTS ON	0	0	0	0	0	1	0	3	1	1	0	PEDESTRIAN	NO DEFECTS	TWO-WAY, NOT DIVIDED	WET	STOP SIGN	<Null>	RAINING	RALPH RD	GEORGIA AVE	0	S	0
MCP3050000J	170500296	Injury Crash	SINGLE VEHICLE	4/4/2017 8:24	N	FOUR-WAY INTERSECTION	INTERSECTION	DAYLIGHT	1	0	0	0	0	0	0	0	4	4	1	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	WET	TRAFFIC SIGNAL	Y	RAINING	CONNECTICUT AVE	GEORGIA AVE	0	N	0
MCP2782001Z	170501239	Injury Crash	STRAIGHT MOVEMENT ANGLE	4/9/2017 12:19	N	FOUR-WAY INTERSECTION	INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	1	3	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	TRAFFIC SIGNAL	Y	CLEAR	GEORGIA AVE	ASPEN HILL RD	6.75	N	0
MCP2348002L	170502018	Injury Crash	SAME DIR REAR END	4/13/2017 20:54	N	N/A	NON INTERSECTION	DARK LIGHTS ON	1	0	0	0	0	0	0	0	4	4	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, UNPROTECTED PAINTED MIN 4 FEET	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	ENT TO BUSINESS	6.54	N	20
MCP2975001M	170505565	Injury Crash	HEAD ON LEFT TURN	5/2/2017 21:30	S	FOUR-WAY INTERSECTION	INTERSECTION	DARK LIGHTS ON	0	0	0	0	0	0	0	0	3	3	2	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	TRAFFIC SIGNAL	Y	CLEAR	GEORGIA AVE	ASPEN HILL RD	6.75	N	0
MCP2182000P	170506291	Injury Crash	OTHER	5/6/2017 15:08	W	N/A	NON INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	WET	NO CONTROLS	<Null>	RAINING	CONNECTICUT AVE	GEORGIA AVE	0	N	375
MCP2437002Q	170513484	Injury Crash	SINGLE VEHICLE	6/13/2017 18:21	N	T-INTERSECTION	INTERSECTION	DAYLIGHT	0	0	0	0	0	1	0	3	1	1	0	PEDESTRIAN	NO DEFECTS	TWO-WAY, DIVIDED, UNPROTECTED PAINTED MIN 4 FEET	DRY	TRAFFIC SIGNAL	Y	CLEAR	GEORGIA AVE	HEWITT AVE	6.42	N	0
MCP2953001N	170524390	Injury Crash	STRAIGHT MOVEMENT ANGLE	8/11/2017 18:13	S	N/A	NON INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	WET	N/A	<Null>	RAINING	GEORGIA AVE	CONNECTICUT AVE	7	N	200
MCP29600024	170527967	Injury Crash	SAME DIR REAR END	8/31/2017 13:04	N	N/A	N/A	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	1	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	N/A	NO CONTROLS	<Null>	N/A	GEORGIA AVE	BEL PRE RD	7.67	S	0.1
MCP29660038	170528869	Injury Crash	OTHER	9/5/2017 19:30	N	FOUR-WAY INTERSECTION	INTERSECTION	DARK -- UNKNOWN LIGHTING	1	0	0	0	0	1	1	4	1	1	1	PEDESTRIAN	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	WET	NO CONTROLS	<Null>	RAINING	GEORGIA AVE	HEATHFIELD RD	7.28	N	0
MCP3007002F	170535765	Injury Crash	SINGLE VEHICLE	10/10/2017 8:15	W	N/A	N/A	DAYLIGHT	0	0	0	0	0	1	0	3	1	1	0	PEDESTRIAN	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	N/A	<Null>	N/A	BEL PRE RD	GEORGIA AVE	1.96	E	25
MCP2722002N	170536472	Injury Crash	HEAD ON LEFT TURN	10/13/2017 16:06	S	FOUR-WAY INTERSECTION	INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	CLOUDY	GEORGIA AVE	ENT TO BUSINESS	7.1	N	0
MCP1301000W	170546870	Fatal Crash	STRAIGHT MOVEMENT ANGLE	12/6/2017 1:49	N	T-INTERSECTION	INTERSECTION	DARK LIGHTS ON	1	1	0	0	0	0	0	0	5	5	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, UNPROTECTED PAINTED MIN 4 FEET	DRY	FLASHING TRAFFIC SIGNAL	Y	CLOUDY	GEORGIA AVE	HEWITT AVE	6.42	N	0
MCP2917002B	170549562	Injury Crash	SAME DIR REAR END	12/19/2017 17:50	N	FOUR-WAY INTERSECTION	INTERSECTION RELATED	DARK NO LIGHTS	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	TRAFFIC SIGNAL	Y	CLEAR	GEORGIA AVE	BEL PRE RD	7.67	N	0
MCP30500021	180003180	Injury Crash	STRAIGHT MOVEMENT ANGLE	1/19/2018 20:00	N	FOUR-WAY INTERSECTION	INTERSECTION	DARK LIGHTS ON	0	0	0	0	0	0	0	0	3	3	1	<Null>	NO DEFECTS	OTHER	DRY	TRAFFIC SIGNAL	Y	CLEAR	GEORGIA AVE	BEL PRE RD	7.67	N	0
MCP9321001X	180004776	Injury Crash	HEAD ON	1/28/2018 12:58	S	N/A	NON INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	3	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	WET	NO CONTROLS	<Null>	RAINING	GEORGIA AVE	ENT TO SHOPPING CENTER	6.571	N	0
MCP30500023	180008259	Injury Crash	SAME DIR REAR END	2/16/2018 16:10	S	FOUR-WAY INTERSECTION	INTERSECTION RELATED	DARK LIGHTS ON	0	0	0	0	0	0	0	0	3	1	3	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	WET	TRAFFIC SIGNAL	Y	CLEAR	GEORGIA AVE	CONNECTICUT AVE	7	S	50
MCP9113003G	180016894	Injury Crash	SINGLE VEHICLE	4/7/2018 13:03	S	N/A	N/A	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	CLEAR	CONNECTICUT AVE	GEORGIA AVE	0	N	100
MCP29950039	180018082	Injury Crash	STRAIGHT MOVEMENT ANGLE	4/13/2018 16:28	S	OTHER	CROSSOVER RELATED	DAYLIGHT	1	0	0	0	0	0	0	0	4	4	4	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, UNPROTECTED PAINTED MIN 4 FEET	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	CONNECTICUT AVE	7	N	0.2
MCP3122000S	180025867	Injury Crash	SINGLE VEHICLE	5/26/2018 12:50	S	N/A	N/A	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	3	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	N/A	<Null>	CLEAR	GEORGIA AVE	ENT TO BUSINESS	7.1	N	100
MCP2546002G	180028225	Fatal Crash	SINGLE VEHICLE	6/8/2018 3:50	S	N/A	NON INTERSECTION	DARK LIGHTS ON	1	1	0	0	0	1	1	5	1	1	0	PEDESTRIAN	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	UNKNOWN	<Null>	CLEAR	GEORGIA AVE	HEWITT AVE	6.42	S	15
MCP2844002Y	180028683	Injury Crash	OTHER	6/10/2018 16:00	W	T-INTERSECTION	COMMERCIAL DRIVEWAY	DAYLIGHT	0	0	1	0	3	0	0	0	1	1	0	BICYCLIST	NO DEFECTS	TWO-WAY, NOT DIVIDED	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	ENT TO SHOPPING CENTER	6.571	S	25
MCP3050002N	180044545	Injury Crash	SAME DIR REAR END	9/6/2018 16:45	N	FOUR-WAY INTERSECTION	INTERSECTION RELATED	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	TRAFFIC SIGNAL	Y	CLEAR	GEORGIA AVE	HEWITT AVE	6.42	N	100
MCP91130040	180047167	Injury Crash	SAME DIR REAR END	9/21/2018 7:43	N	N/A	NON INTERSECTION	DAYLIGHT	1	0	0	0	0	0	0	0	4	4	4	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	TRAFFIC SIGNAL	Y	CLOUDY	GEORGIA AVE	HEWITT AVE	6.42	N	50
MCP2546002K	180050432	Injury Crash	ANGLE MEETS RIGHT TURN	10/9/2018 6:56	N	N/A	COMMERCIAL DRIVEWAY	DAWN	1	0	0	0	0	1	1	4	2	2	1	PEDESTRIAN	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	WENDY LA	6.64	S	400
MCP3130000T	180056591	Injury Crash	SAME DIR REAR END	11/11/2018 12:00	S	FOUR-WAY INTERSECTION	INTERSECTION RELATED	N/A	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, UNPROTECTED PAINTED MIN 4 FEET	DRY	YIELD SIGN	<Null>	CLEAR	GEORGIA AVE	BEL PRE RD	7.67	S	30
MCP29170038	180060690	Injury Crash	STRAIGHT MOVEMENT ANGLE	12/4/2018 19:30	N	OTHER	INTERSECTION	DARK NO LIGHTS	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	HEATHFIELD RD	7.28	N	0
MCP3078002K	180061458	Injury Crash	SINGLE VEHICLE	12/8/2018 21:35	S	FOUR-WAY INTERSECTION	INTERSECTION	DARK LIGHTS ON	0	0	0	0	0	1	0	3	1	1	0	PEDESTRIAN	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	TRAFFIC SIGNAL	Y	CLEAR	GEORGIA AVE	CONNECTICUT AVE	7	N	0
MCP2995003V	180061595	Injury Crash	OTHER	12/9/2018 21:45	S	OTHER	OTHER	DARK NO LIGHTS	1	0	0	0	0	1	1	4	1	1	0	PEDESTRIAN	NO DEFECTS	TWO-WAY, DIVIDED, UNPROTECTED PAINTED MIN 4 FEET	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	WENDY LA	6.64	S	150
MCP3130000Y	180062413	Injury Crash	STRAIGHT MOVEMENT ANGLE	12/14/2018 10:15	S	N/A	CROSSOVER RELATED	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, UNPROTECTED PAINTED MIN 4 FEET	DRY	NO CONTROLS	<Null>	FOGGY	GEORGIA AVE	CONNECTICUT AVE	7	N	200
MCP2960003S	19000913	Injury Crash	STRAIGHT MOVEMENT ANGLE	1/6/2019 9:00	N	FOUR-WAY INTERSECTION	INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	1	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	TRAFFIC SIGNAL	Y	N/A	GEORGIA AVE	BEL PRE RD	7.67	N	0
MCP2782002V	190001289	Injury Crash	STRAIGHT MOVEMENT ANGLE	1/8/2019 17:15	S	N/A	CROSSOVER RELATED	DUSK	0	0	0	0	0	0	0	0	3	3	3	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	N/A	GEORGIA AVE	RALPH RD	6.5	S	0
MCP2363001H	190001653	Injury Crash	ANGLE MEETS LEFT TURN	1/10/2019 19:30	N	FOUR-WAY INTERSECTION	INTERSECTION	DARK LIGHTS ON	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	HEATHFIELD RD	7.28	N	0
MCP2617006T	190002554	Injury Crash	SINGLE VEHICLE	1/16/2019 17:50	N	FOUR-WAY INTERSECTION	INTERSECTION	DARK LIGHTS ON	<Null>	<Null>	<Null>	<Null>	0	<Null>	<Null>	4	1	1	0	PEDESTRIAN	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	WET	TRAFFIC SIGNAL	Y	CLOUDY	GEORGIA AVE	HEWITT AVE	6.42	N	0
MCP27220033	190005955	Injury Crash	SINGLE VEHICLE	2/6/2019 18:45	N	FOUR-WAY INTERSECTION	INTERSECTION	DARK LIGHTS ON	0	0	0	0	0	1	0	3	1	1	0	PEDESTRIAN	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	WET	TRAFFIC SIGNAL	Y	RAINING	CONNECTICUT AVE	GEORGIA AVE	0	N	0
MCP2917003Q	190008744	Injury Crash	SAME DIRECTION LEFT TURN	2/23/2019 20:10	N	FOUR-WAY INTERSECTION	INTERSECTION	DARK NO LIGHTS	0	0	0	0	0	1	0	3	1	1	0	PEDESTRIAN	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	WET	NO CONTROLS	<Null>	RAINING	GEORGIA AVE	HEATHFIELD RD	7.28	N	0
MCP20010010	190009257	Injury Crash	SAME DIR REAR END	2/26/2019 23:40	N	FOUR-WAY INTERSECTION	INTERSECTION	DARK LIGHTS ON	1	0	0	0	0	0	0	0	4	4	2	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, UNPROTECTED PAINTED MIN 4 FEET	DRY	TRAFFIC SIGNAL	Y	CLEAR	GEORGIA AVE	BEL PRE RD	7.67	N	0
MCP2588005R	190022468	Injury Crash	STRAIGHT MOVEMENT ANGLE	5/13/2019 6:11	S	FOUR-WAY INTERSECTION	INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	3	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	WET	TRAFFIC SIGNAL	Y	RAINING	GEORGIA AVE	HEATHFIELD RD	7.28	N	0
MCP91130051	190028376	Injury Crash	ANGLE MEETS RIGHT TURN	6/14/2019 7:30	S	FOUR-WAY INTERSECTION	INTERSECTION RELATED	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	1	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	TRAFFIC SIGNAL	Y	CLEAR	GEORGIA AVE	HEATHFIELD RD	7.28	S	50
MCP3179000T	190030887	Injury Crash	HEAD ON LEFT TURN	6/28/2019 18:00	S	T-INTERSECTION	INTERSECTION	DAYLIGHT	1	0	0	0	0	0	0	0	4	4	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, UNPROTECTED PAINTED MIN 4 FEET	DRY	STOP SIGN	<Null>	CLEAR	CONNECTICUT AVE	GEORGIA AVE	8.3	N	0
MCP2620001T	190037866	Injury Crash	STRAIGHT MOVEMENT ANGLE	8/8/2019 16:40	S	OTHER	INTERSECTION RELATED	DAYLIGHT	0	0	0	0	0	0	0	0	3	1	3	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	CONNECTICUT AVE	7	N	100
MCP3059003X	190044082	Injury Crash	OTHER	9/14/2019 19:26	N	N/A	NON INTERSECTION	DARK LIGHTS ON	0	0	1	0	3	1	0	1	1	1	0	BICYCLIST	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	N/A	<Null>	CLEAR	GEORGIA AVE	ASPEN HILL RD	6.75	S	100
MCP3059003X	190044082	Injury Crash	OTHER	9/14/2019 19:26	N	N/A	NON INTERSECTION	DARK LIGHTS ON	0	0	1	0	3	1	0	1	1	1	0	PEDESTRIAN	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	N/A	<Null>	CLEAR	GEORGIA AVE	ASPEN HILL RD	6.75	S	100
MCP3023003D	190049633	Injury Crash	SAME DIR REAR END	10/16/2019 14:35	S	OTHER	INTERCHANGE RELATED	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	2	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	WET	NO CONTROLS	<Null>	RAINING	GEORGIA AVE	CONNECTICUT AVE	7	S	0
MCP20010017	200000963	Fatal Crash	SINGLE VEHICLE	1/6/2020 18:26	N	FOUR-WAY INTERSECTION	INTERSECTION	DARK LIGHTS ON	1	1	0	0	0	1	1	5	1	1	0	PEDESTRIAN	NO DEFECTS	TWO-WAY, DIVIDED, UNPROTECTED PAINTED MIN 4 FEET	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	ENT TO CEMETERY	6.75	N	0
MCP2720004D	200012521	Injury Crash	SAME DIR REAR END	3/14/2020 0:04	S	N/A	NON INTERSECTION	DARK LIGHTS ON	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	BEL PRE RD	7.67	N	300
MCP3225000G	200018200	Injury Crash	SAME DIR REAR END	5/4/2020 15:30	S	N/A	NON INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	CONNECTICUT AVE	7	N	600
MCP32300012	200021182	Injury Crash	SAME DIR REAR END	5/28/2020 16:25	S	N/A	N/A	DAYLIGHT	0	0	0	0	0	0	0	0	3	1	3	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, UNPROTECTED PAINTED MIN 4 FEET	DRY	N/A	<Null>	N/A	GEORGIA AVE	ASPEN HILL RD	6.75	N	200
MCP3130002K	200023699	Injury Crash	STRAIGHT MOVEMENT ANGLE	6/17/2020 8:00	W	FOUR-WAY INTERSECTION	INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	TRAFFIC SIGNAL	Y	CLOUDY	GEORGIA AVE	BEL PRE RD	7.67	N	0
MCP3118002Z	200024379	Injury Crash	HEAD ON LEFT TURN	6/22/2020 10:49	W	N/A	CROSSOVER RELATED	DAYLIGHT	1	0	0	0	0	0	0	0	4	4	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, UNPROTECTED PAINTED MIN 4 FEET	DRY	NO CONTROLS	<Null>	CLEAR	CONNECTICUT AVE	GEORGIA AVE	0	N	200
MCP9113006D	200031349	Injury Crash	STRAIGHT MOVEMENT ANGLE	8/12/2020 10:14	S	N/A	N/A	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	CONNECTICUT AVE	7	N	0
MCP2617008T	200043733	Injury Crash	OTHER	11/5/2020 19:00	N	FOUR-WAY INTERSECTION	INTERSECTION RELATED	DARK -- UNKNOWN LIGHTING	1	0	0	0	0	1	1	4	1	1	1	PEDESTRIAN	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	WENDY LA	6.64	S	10
MCP31300032	200047760	Injury Crash	SAME DIR REAR END	12/4/2020 8:45	N	N/A	N/A	N/A	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	WET	NO CONTROLS	<Null>	RAINING	GEORGIA AVE	BEL PRE RD	7.67	N	100
MCP27230059	210009057	Injury Crash	SAME DIR REAR END	3/10/2021 16:50	W	N/A	NON INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	3	<Null>	NO DEFECTS	TWO-WAY, NOT DIVIDED	DRY	NO CONTROLS	<Null>	CLEAR	BEL PRE RD	GEORGIA AVE	1.96	E	50
MCP3122003W	210013722	Injury Crash	STRAIGHT MOVEMENT ANGLE	4/13/2021 6:45	N	T-INTERSECTION	INTERSECTION	DAWN	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	TRAFFIC SIGNAL	Y	CLOUDY	GEORGIA AVE	HEWITT AVE	6.42	N	0
MCP3130003D	210014947	Injury Crash	SAME DIR REAR END	4/22/2021 7:50	S	FOUR-WAY INTERSECTION	INTERSECTION	N/A	0	0	0	0	0	0	0	0	3	3	1	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	TRAFFIC SIGNAL	Y	CLEAR	GEORGIA AVE	HEATHFIELD RD	7.28	N	0
MCP2720005Q	210018251	Injury Crash	SAME DIR REAR END	5/14/2021 23:36	S	FOUR-WAY INTERSECTION	INTERSECTION	DARK LIGHTS ON	1	0	0	0	0	0	0	0	4	4	4	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	TRAFFIC SIGNAL	Y	CLEAR	GEORGIA AVE	HEATHFIELD RD	7.28	N	0
MCP2753004T	210023157	Injury Crash	SAME DIR REAR END	6/17/2021 11:53	S	N/A	NON INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	BEL PRE RD	7.67	S	30
MCP2617009M	210023793	Injury Crash	STRAIGHT MOVEMENT ANGLE	6/21/2021 19:45	N	FOUR-WAY INTERSECTION	INTERSECTION	DUSK	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	WET	TRAFFIC SIGNAL	Y	CLOUDY	GEORGIA AVE	CONNECTICUT AVE	7	N	0
MCP2753004W	210029376	Injury Crash	SAME DIR REAR END	7/29/2021 8:58	S	FOUR-WAY INTERSECTION	INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	1	3	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	TRAFFIC SIGNAL	Y	CLOUDY	GEORGIA AVE	BEL PRE RD	7.67	N	0
MCP3190002N	210032701	Injury Crash	SINGLE VEHICLE	8/22/2021 6:20	W	FOUR-WAY INTERSECTION	OTHER	DAWN	0	0	0	0	0	0	0	0	3	3	0	<Null>	N/A	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	CONNECTICUT AVE	7	N	0
MCP3230002D	210033362	Injury Crash	STRAIGHT MOVEMENT ANGLE	8/26/2021 17:45	S	T-INTERSECTION	INTERSECTION RELATED	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, UNPROTECTED PAINTED MIN 4 FEET	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	CONNECTICUT AVE	7	N	300
MCP3197002L	210039329	Injury Crash	SINGLE VEHICLE	10/3/2021 18:21	W	T-INTERSECTION	INTERSECTION RELATED	DAYLIGHT	0	0	0	0	0	1	0	3	1	1	0	PEDESTRIAN	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	TRAFFIC SIGNAL	Y	CLEAR	HEWITT AVE	GEORGIA AVE	0.88	W	0
MCP31300044	210040312	Injury Crash	SAME DIR REAR END	10/9/2021 6:00	S	N/A	NON INTERSECTION	DARK NO LIGHTS	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	HEWITT AVE	6.42	S	500
MCP3190002Y	210043045	Injury Crash	STRAIGHT MOVEMENT ANGLE	10/26/2021 7:58	N	FOUR-WAY INTERSECTION	INTERSECTION	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	0	<Null>	NO DEFECTS	OTHER	DRY	TRAFFIC SIGNAL	Y	CLEAR	GEORGIA AVE	CHESTERWOOD DR	7.28	N	0
MCP137800Z8	210045911	Injury Crash	SAME DIRECTION SIDESWIPE	11/12/2021 15:14	S	FOUR-WAY INTERSECTION	INTERSECTION RELATED	DAYLIGHT	0	0	0	0	0	0	0	0	3	3	2	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	YIELD SIGN	<Null>	N/A	GEORGIA AVE	SPUR FR BEL PRE RD	7.622	S	0
MCP30550038	210046054	Injury Crash	OTHER	11/13/2021 13:59	S	FOUR-WAY INTERSECTION	INTERSECTION	DAYLIGHT	0	0	1	0	3	0	0	0	1	1	0	BICYCLIST	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	TRAFFIC SIGNAL	Y	CLEAR	GEORGIA AVE	BEL PRE RD	7.67	N	0
MCP32460016	210046731	Injury Crash	SAME DIRECTION RIGHT TURN	11/17/2021 20:27	S	N/A	NON INTERSECTION	DARK LIGHTS ON	0	0	0	0	0	0	0	0	3	1	3	<Null>	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	N/A	<Null>	CLEAR	BEL PRE RD	GEORGIA AVE	1.96	E	300
MCP136600BK	210048792	Injury Crash	STRAIGHT MOVEMENT ANGLE	12/1/2021 17:02	S	FOUR-WAY INTERSECTION	INTERSECTION	DARK LIGHTS ON	1	0	0	0	0	1	1	4	1	1	0	PEDESTRIAN	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	TRAFFIC SIGNAL	Y	CLOUDY	CONNECTICUT AVE	GEORGIA AVE	0	N	0
MCP3050005H	210048794	Injury Crash	SINGLE VEHICLE	12/1/2021 17:26	N	N/A	NON INTERSECTION	DARK NO LIGHTS	0	0	0	0	0	1	0	3	1	1	0	PEDESTRIAN	NO DEFECTS	TWO-WAY, DIVIDED, POSITIVE MEDIAN BARRIER	DRY	NO CONTROLS	<Null>	CLEAR	GEORGIA AVE	ENT TO APTS	7.49	S	25
MCP1119009G	210049041	Injury Crash	OTHER	12/3/2021 8:18	N	FOUR-WAY INTERSECTION	INTERSECTION	DAYLIGHT	0	0	0	0	0	1	0	3	1	1	0	PEDESTRIAN	NO DEFECTS	TWO-WAY, DIVIDED, UNPROTECTED PAINTED MIN 4 FEET	N/A	TRAFFIC SIGNAL	Y	CLEAR	GEORGIA AVE	CONNECTICUT AVE	7	N	0

APPENDIX D – Photographs

Photo 1.01. Crosswalk for west leg of Bel Pre Road.

Photo 1.02. Growth and sediment in sidewalk and gutter – NW corner of Bel Pre Road.

Photo 1.03. Missing pedestrian warning sign assembly – SW corner of Bel Pre Road.

Photo 1.04. No extension lines for dual left turns – Bel Pre Rd intersection.

Photo 1.05. Faded warning sign on traffic signal pole – SE corner of Bel Pre Road.

Photo 1.06. Damaged sign – east median of Bel Pre Road.

Photo 1.07. Faded sign – NB MD 97 approach to Bel Pre Road.

Photo 1.08. Broken condulet – NE corner of Bel Pre Road.

Photo 1.09. Traffic signal display – WB Bel Pre Road approach.

Photo 1.10. North crossing of MD 97 at Bel Pre Road.

Photo 1.11. Pedestrian sign – SE corner of Bel Pre Road.

Photo 1.12. Parallel ramp in NE corner of Bel Pre Road.

Photo 1.13. Level landing – NW corner of Bel Pre Road.

Photo 1.15. Right turn channelization – SE corner of Bel Pre Road.

Photo 1.16. Median nose – east leg of Bel Pre Road.

Photo 1.17. Uncontrolled pedestrian crossing in dark – SE corner of Bel Pre Road.

Photo 1.18. Pavement markings along west leg of Bel Pre Road.

Photo 2.01. Foliage blocking signs along SB MD 97 sidewalk, south of Bel Pre Road.

Photo 2.02. Crystal Springs Apartments driveway crossing.

Photo 2.03. Median opposite Crystal Springs Apartments.

Photo 2.05. Sight line looking south from Crystal Springs Apartments driveway.

Photo 2.06. WMATA ID 2000913. Bus shelter with broken audio message button.

Photo 2.07. Damaged sidewalk along MD 97 NB.

Photo 2.08. Roadside and bus shelter view during nighttime (WMATA ID 2000913).

Photo 2.09. Pedestrian path in grass median for bus stop (WMATA ID 2000913).

Photo 2.10. Bus shelter along MD 97, north of Crystal Springs Apartments (WMATA ID 2000905).

Photo 3.01. Existing signal and intersection warning signs along NB MD 97 approaching Postgate Terrace.

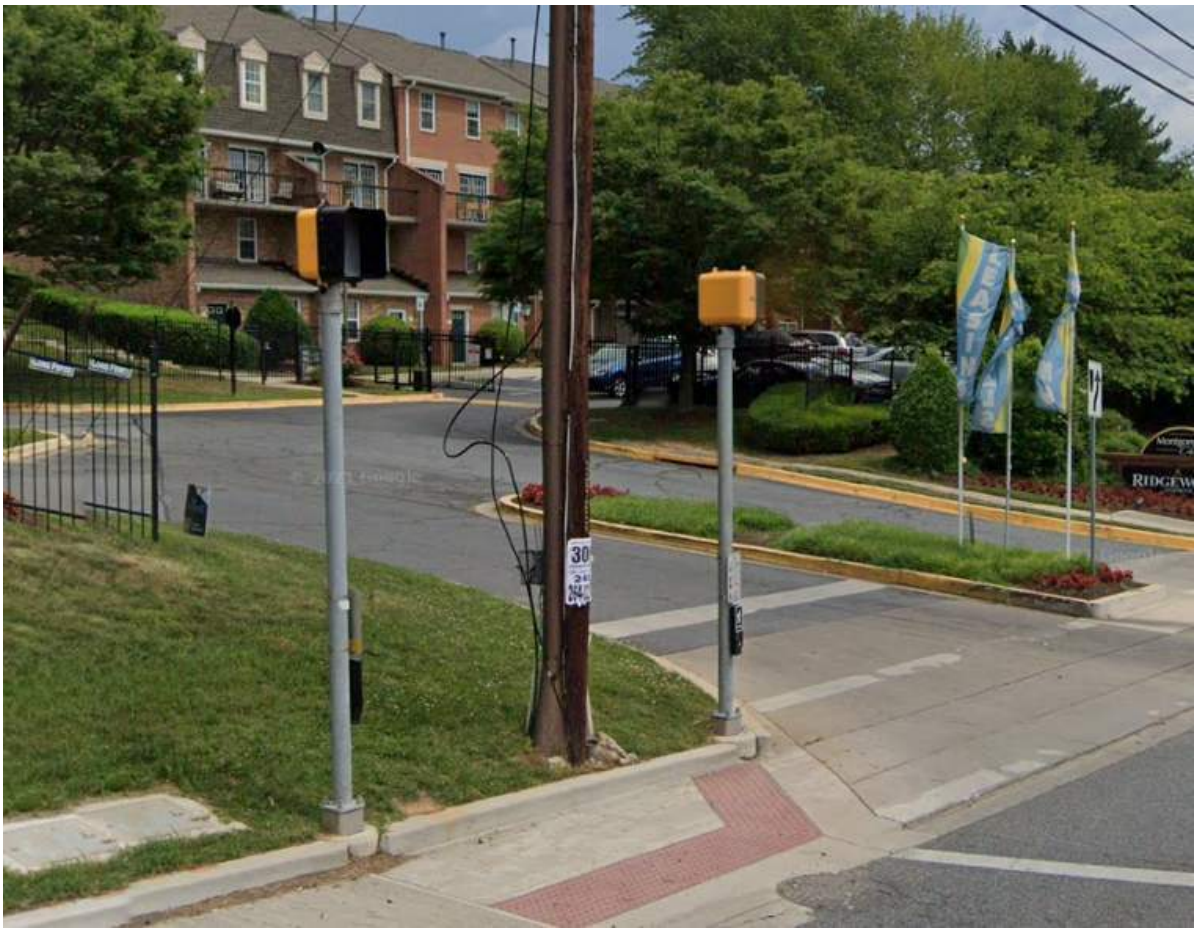


Photo 3.02. Wiring hanging off PEPCO pole #

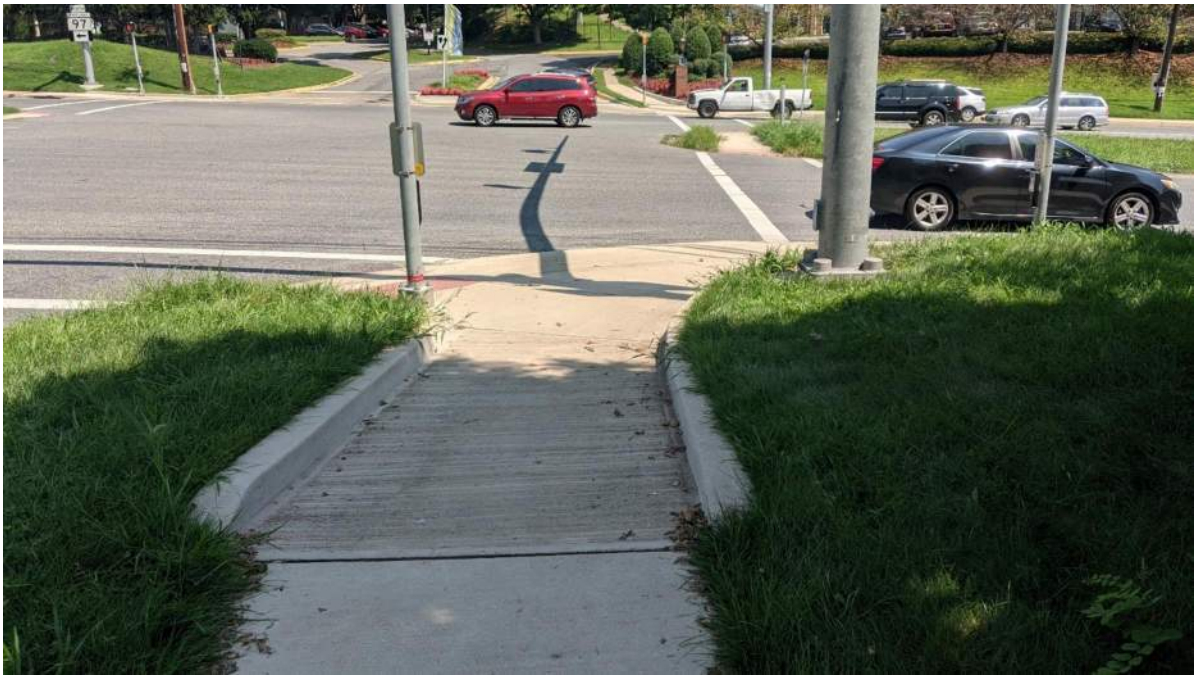


Photo 3.03. Grass sprawling into sidewalk and median at Heathfield Road.

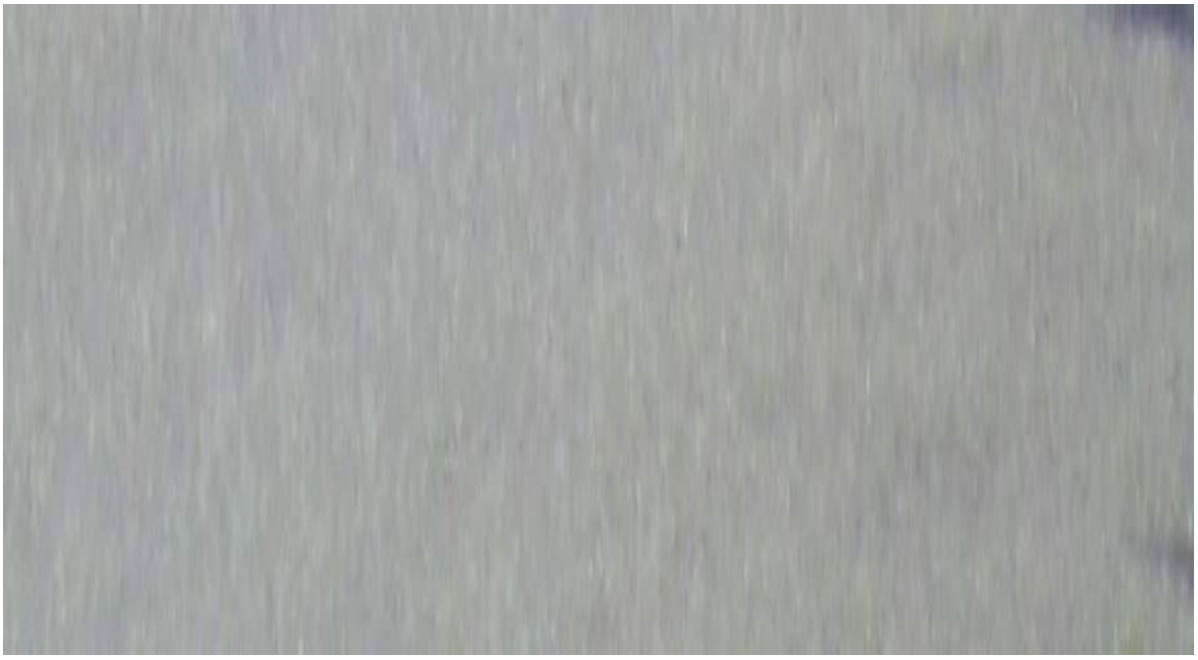


Photo 3.04. Advance street name sign supports shifting.

Photo 3.05. Sidewalk surface chipping – SE corner of Postgate Terrace.

Photo 3.07. Signal heads without reflective backplates.

Photo 3.08. No intersection lighting at MD 97 at Heathfield Road / Postgate Terrace.

Photo 3.09. APS pushbutton has no audible message – NE corner of Postgate Terrace.

Photo 3.10. APS pushbutton and sign facing away from intersection – SE corner of Postgate Terrace.

Photo 3.11. Pedestal pole less than 18" from curb face – NE corner of Postgate Terrace.

Photo 3.12. Sidewalk running slope – SE corner of Postgate Terrace.

Photo 3.13. Left turn phasing – SB MD 97 at Heathfield Road.

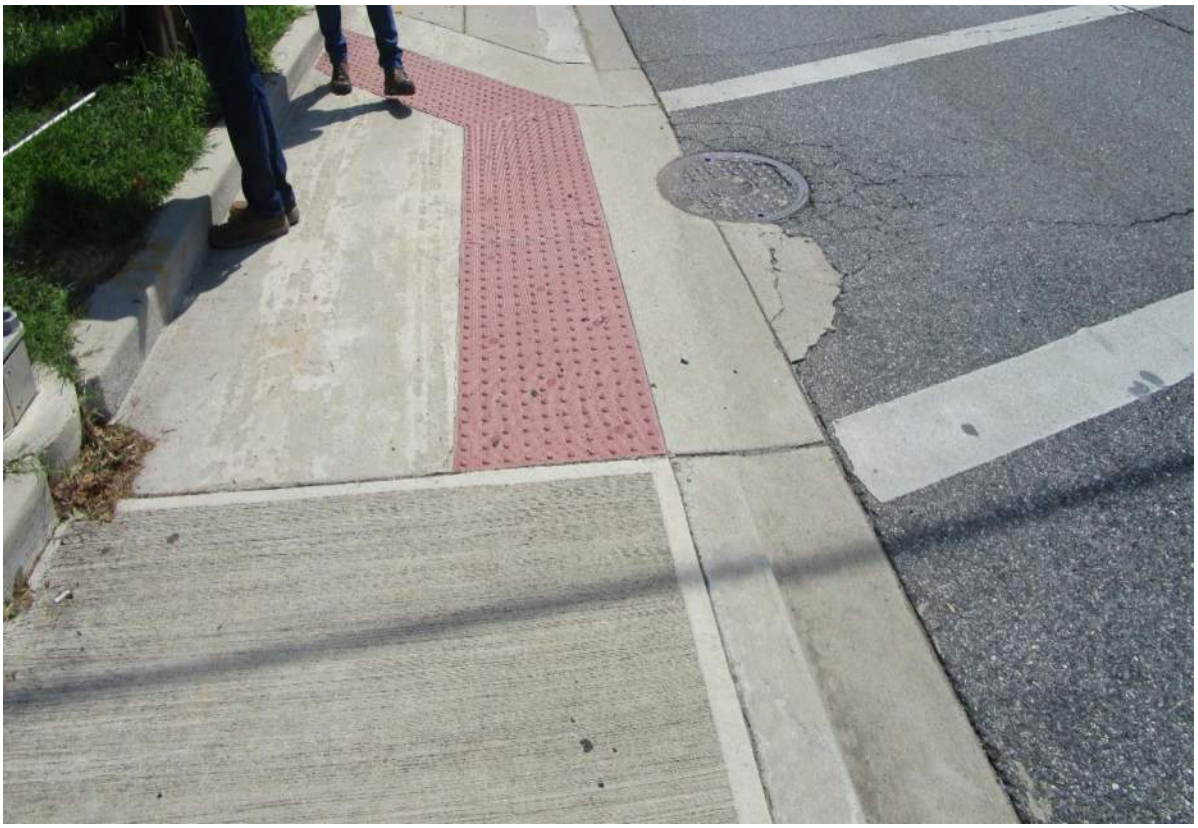


Photo 3.14. Shared level landing – NE corner of Postgate Terrace.

Photo 3.15. South median cut thru and nose – MD 97 at Heathfield Road / Postgate Terrace.

Photo 3.16. Postgate Terrace approach.

Photo 4.01. Choice lane sign in poor condition – SB MD 97 approaching Home Depot.

Photo 3.02. Vegetation obstructing sign visibility.

Photo 3.03. Sidewalk surface chipping along SB MD 97.

Photo 4.04. Home Depot driveway looking north along MD 97.

Photo 4.05. NB MD 97 near Home Depot.

Photo 5.01. Home Depot driveway approach.

Photo 5.02. Home Depot driveway apron.

Photo 5.03. Non-compliant crossing offset from driveway apron – Home Depot.

Photo 5.04. Curb and sidewalk damage – SW corner of Home Depot driveway.

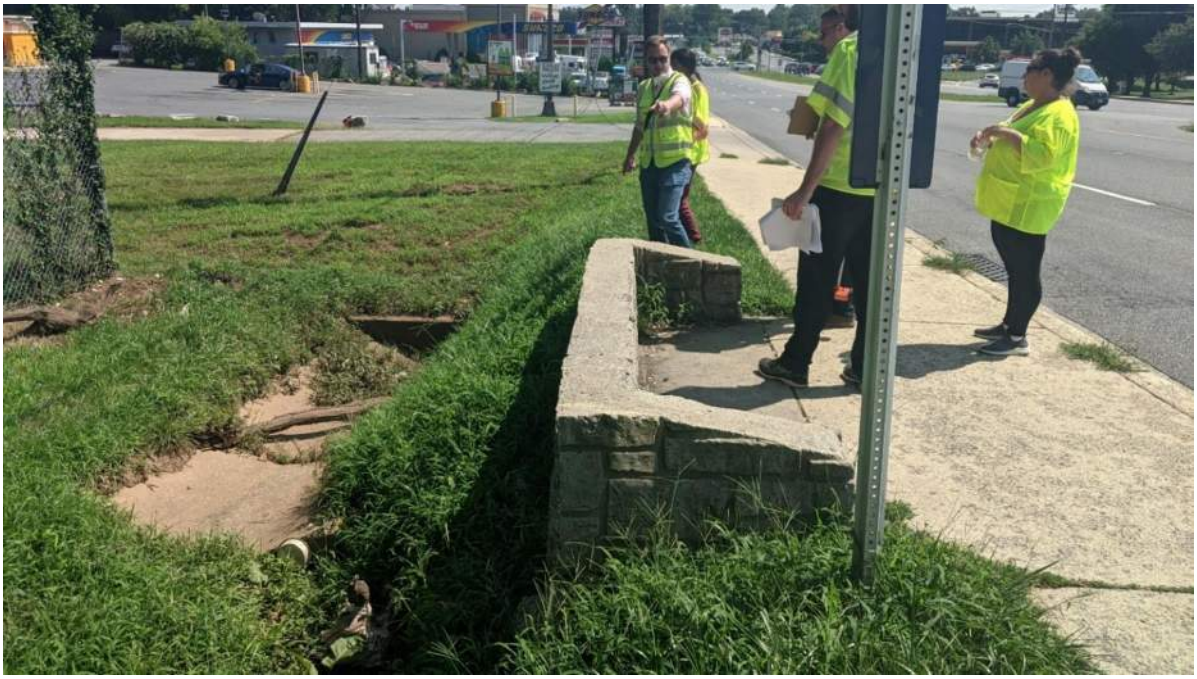


Photo. 5.05. Critical slope behind bus stop (WMATA ID 2000892).

Photo 5.07. Sign clutter – Home Depot driveway.

Photo 5.08. Median crossover at Home Depot driveway.

Photo 5.09. Sidewalk damage – NW corner of Home Depot driveway.

Photo 5.10. Home Depot driveway pavement condition.

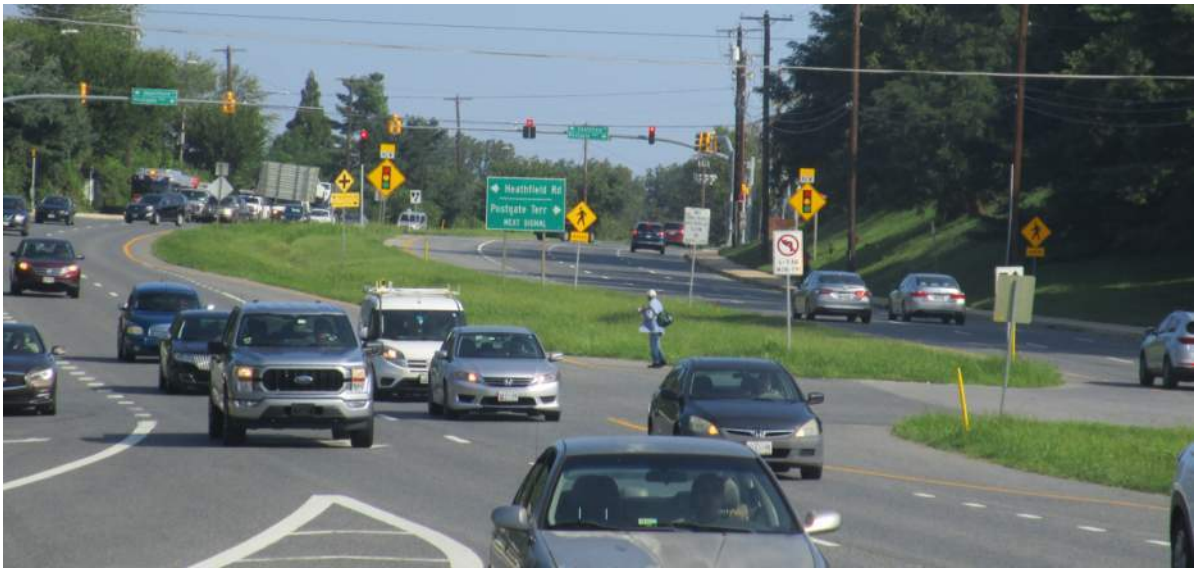


Photo 5.11. Pedestrian at uncontrolled crossing at Home Depot crossover.

Photo 5.12. Home Depot median crossover at nighttime.

Photo 5.14. Many driveways access points along NB MD 97.

Photo 5.15. Two-stage turn in median crossover – Home Depot.

Photo 6.01. Transverse crosswalk marking – north leg crossing MD 97 at MD 185.

Photo 6.02. Existing warning signs for uncontrolled crossing of dual right turn lane at MD 185.

Photo 6.04. Grass sprawl onto sidewalk – NW corner of MD 97 at MD 185.

Photo 6.05. Channelization nose missing object marker.

Photo 6.06. Sidewalk in poor condition – NW corner of MD 97 at MD 185.

Photo 6.07. CPS not displaying countdown.

Photo 6.08. Missing pedestrian information sign – NE corner of MD 97 at MD 185.

Photo 6.10. Pedestrian information sign – NW corner of MD 97 at MD 185.

Photo 6.11. WMATA ID 2000890 bus shelter – NE corner of MD 97 at MD 185.

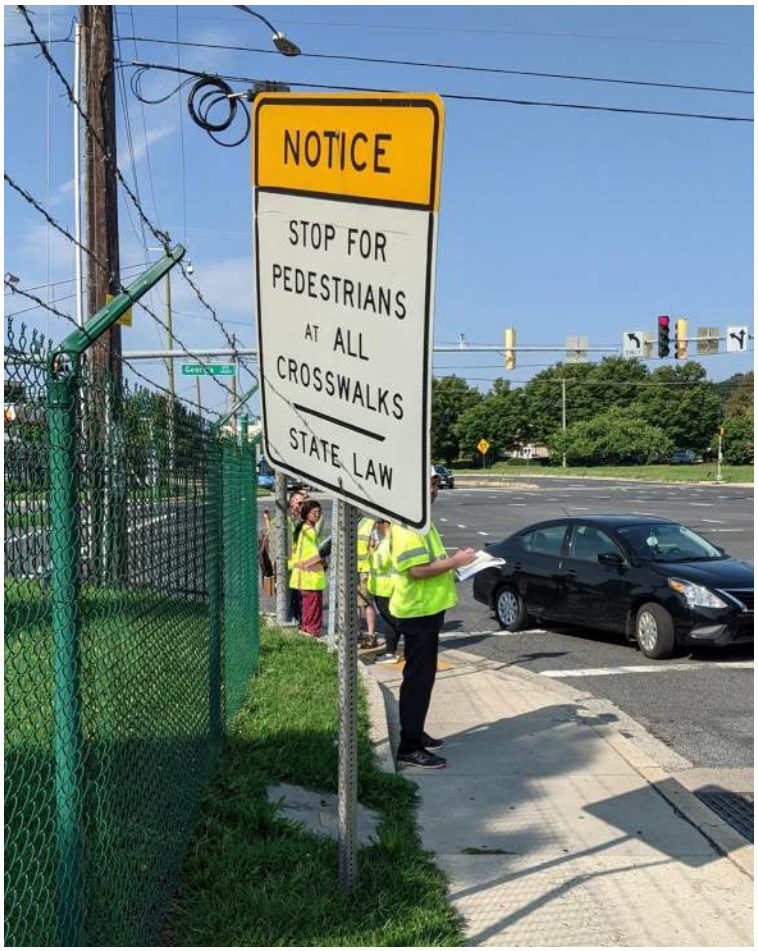


Photo 6.12. Damaged sign – SE corner of MD 97 at MD 185.

Photo 6.13. Damaged sidewalk and curb – SE corner of MD 97 at MD 185.

Photo 6.14. Existing traffic signal head displays – NB MD 97 at MD 185.

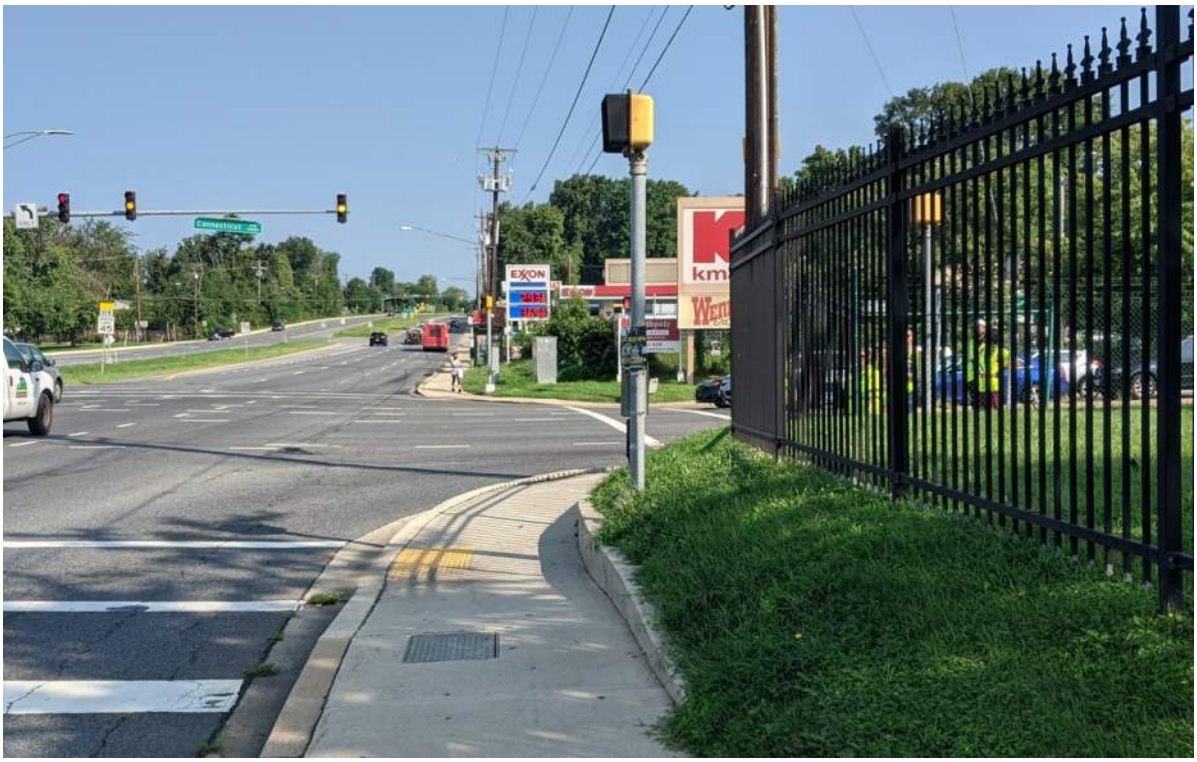


Photo 6.15. Sight line of crossing obstructed by fence line along NB MD 97 approach.

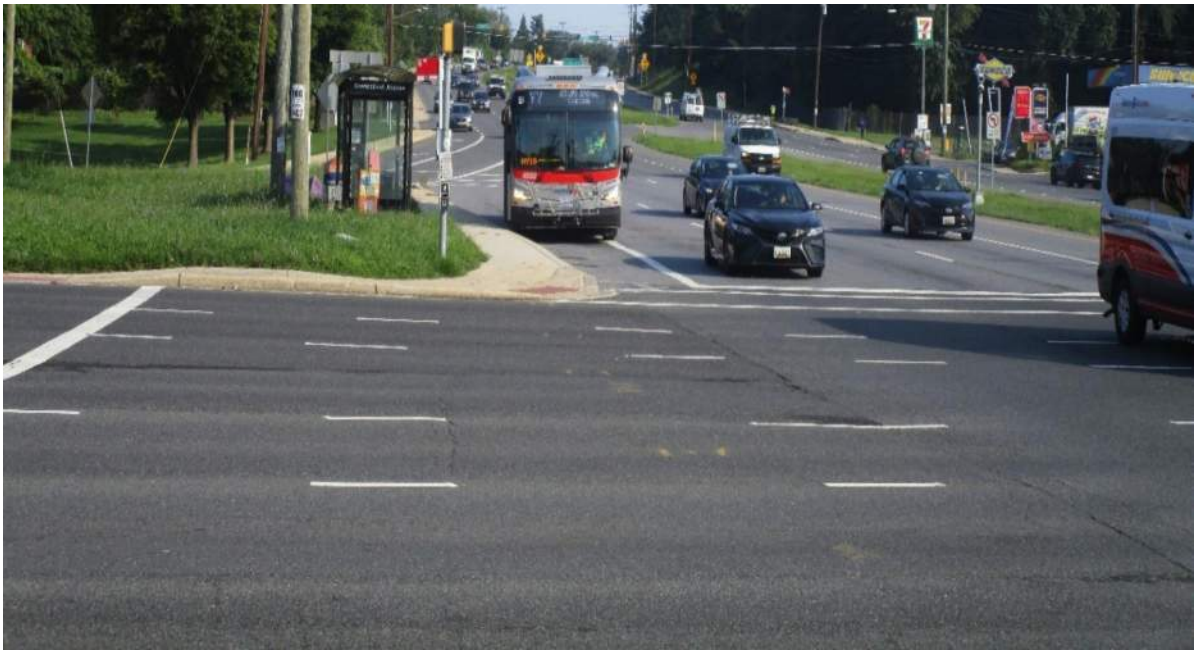


Photo 6.16. Bus approaching stop along SB MD 97 at MD 185.

Photo 6.17. Lane configuration – SB MD 97 at MD 185.

Photo 6.18. Dual right turn channelization – SB MD 97 approaching MD 185.

Photo 6.19. E/P phasing for SB MD 97 left turns.

Photo 6.20. Pedestrian waiting in median – north crossing of MD 97 at MD 185.

Photo 6.21. Intersection lighting does not cover MD 185 crossings.

Photo 6.22. Fence line limits intersection visibility – SE corner of MD 185.

Photo 6.23. Driveway aprons and curb cuts along NB MD 97.

Photo 6.24. NB MD 97 lane shift through MD 185 intersection.

Photo 6.27. "Goat path" along missing sidewalk link in NW corner of MD 185 intersection.

Photo 6.28. West leg median nose – MD 185.

Photo 6.29. Bike conflict with gas station driveway – SW corner of MD 185.

Photo 7.01. Gate of Heaven Cemetery northern driveway crossing.

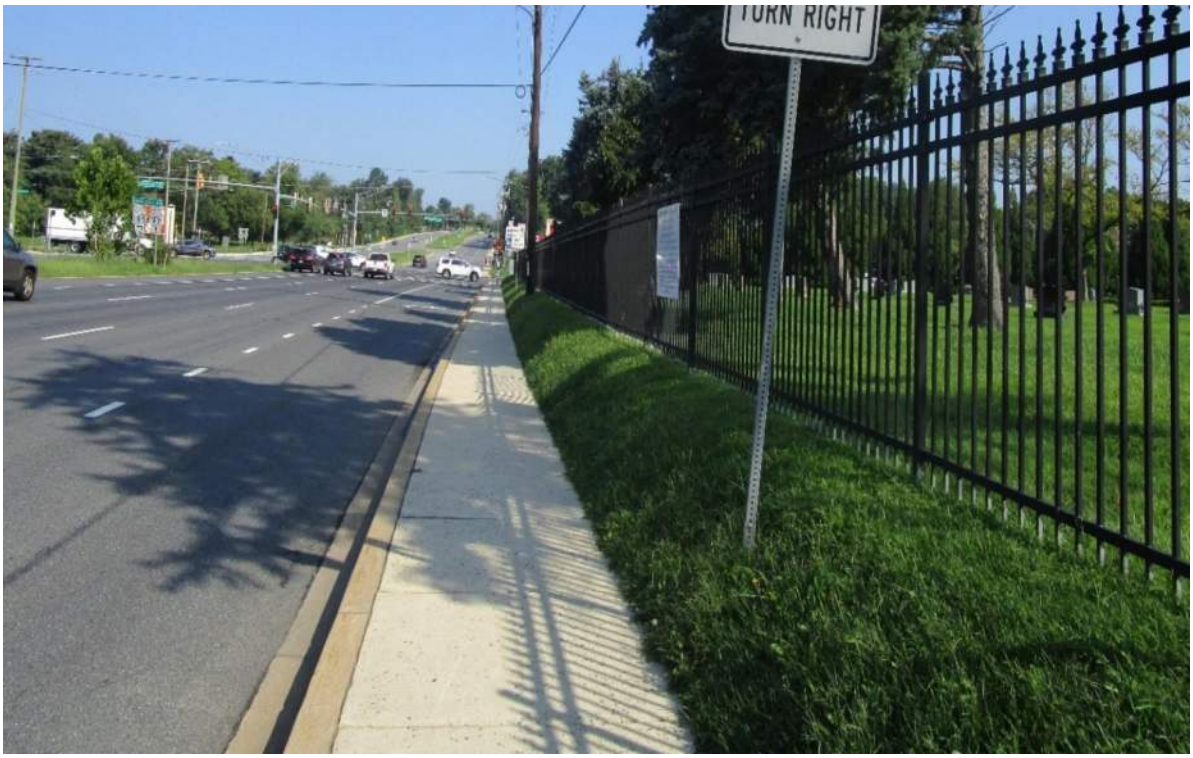


Photo 7.02. Sign support slipping and sign tilting.

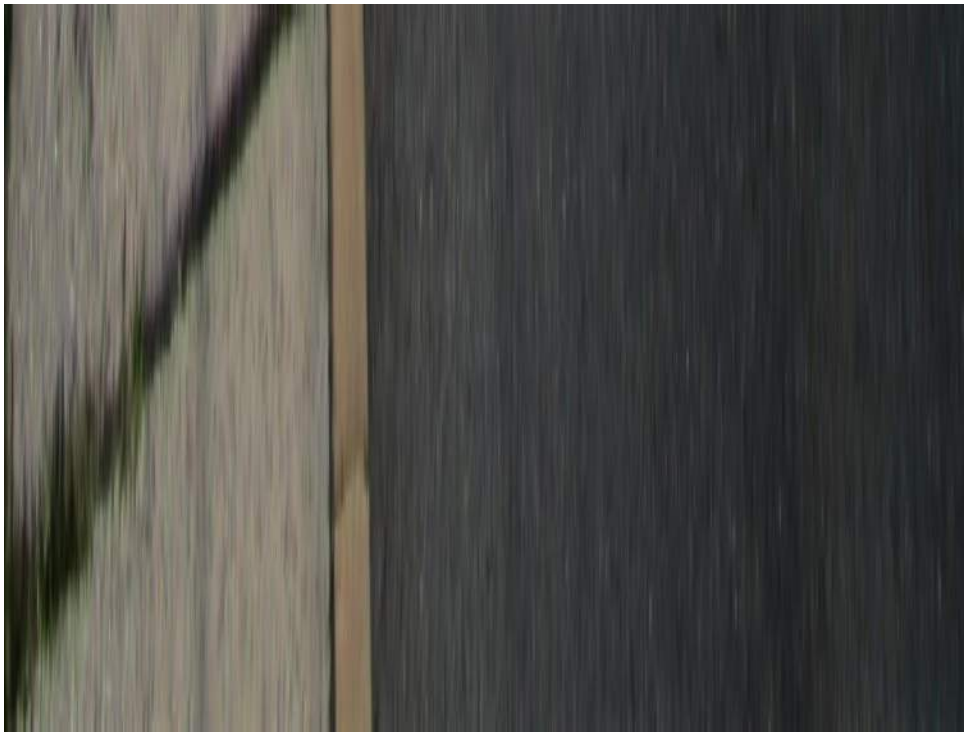


Photo 7.03. Vertical discontinuities in sidewalk along NB MD 97, near Aspen Hill Rd.

Photo 7.04. Leased light not working (PEPCO #777455-870090).

Photo 7.05. Storm inlet structure is not flush with sidewalk – NB MD 97 near MD 185.

Photo 7.06. Missing ADA bus pad at bus stop (WMATA ID 2000864).

Photo 7.07. Median crossover at Northgate Plaza driveway.

Photo 8.01. East leg crossing – Gate of Heaven Cemetery driveway.

Photo 8.02. Malfunctioning CPS display – Gate of Heaven Cemetery driveway.

Photo 8.03. Malfunctioning CPS display – SW corner at Aspen Hill Road.

Photo 8.04. Dual left turn from NB MD 97 to WB Aspen Hill Road.

Photo 8.05. NB MD 97 signal head display at Aspen Hill Road.

Photo 8.06. Median cut thru – west leg of Aspen Hill Road.

Photo 8.07. Grass sprawling into walkable pathway.

Photo 8.08. Damaged leased light fixture on PEPCO pole – NW corner of Aspen Hill Road.

Photo 8.09. North leg unmarked crossing of MD 97 at Aspen Hill Road.

Photo 8.10. Utility pole creating ADA pinch point in sidewalk – SW corner of Aspen Hill Road.

Photo 8.11. South leg crossing of MD 97 at Aspen Hill Road.

Photo 8.12. SB MD 97 to WB Aspen Hill Road right turn channelization.

Photo 8.13. Nearside signal head mismatch with mast arm display – Aspen Hill Road approach.

Photo 8.14. Aspen Hill Road median nose missing object marker.

Photo 8.15. Tubular markers in grass nose at Gate of Heaven Cemetery driveway.

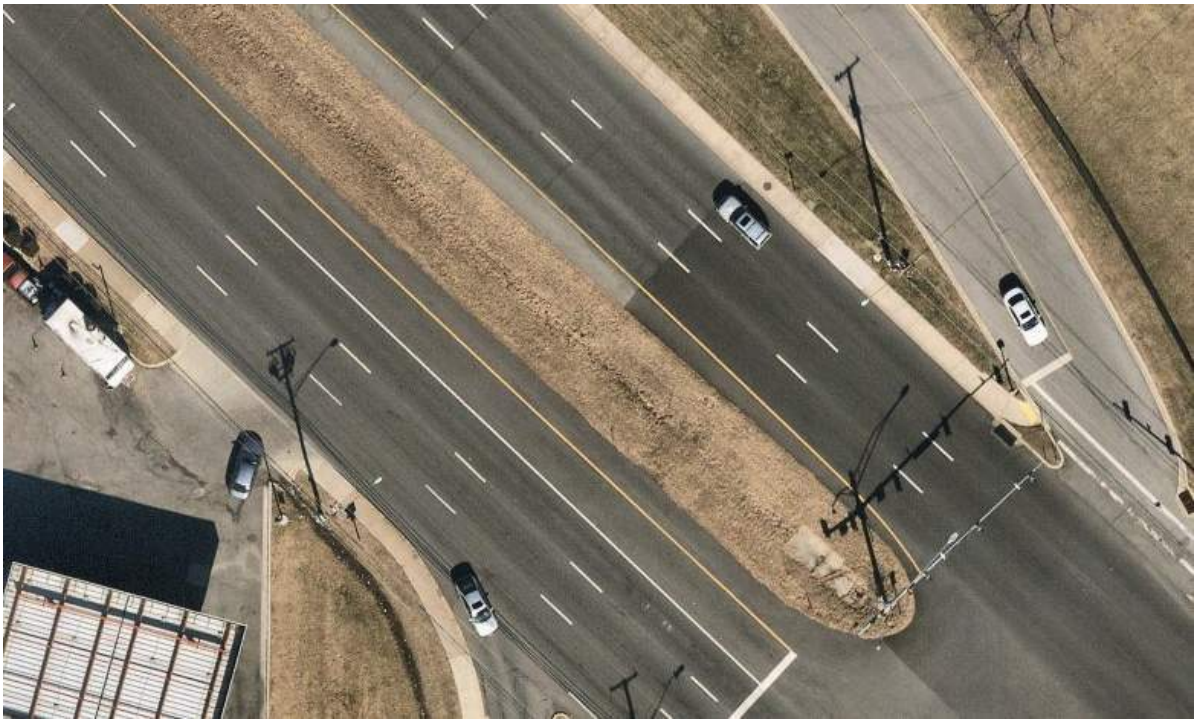


Photo 8.16. SB MD 97 left turn lane at Aspen Hill Road.

Photo 9.01. Vegetation overgrowth along SB MD 97 sidewalk, south of Aspen Hill Road.

Photo 9.02. Damaged storm inlet / curbing along NB MD 97 near northernmost Aspen Manor driveway.

Photo 9.03. Vegetation obstructing sign visibility – SB MD 97.

Photo 9.04. Pothole in roadway – NB MD 97.

Photo 10.01, 10.02. Unmarked crossing of Wendy Lane. Sediment and growth in sidewalk.

Photo 10.03. Unmarked driveway crossings along NB MD 97 for Aspen Manor / Lotte Plaza access.

Photo 10.04. Curb cut south of Wendy Lane.

Photo 10.05, 10.06. Leased light fixture out – SW corner of Wendy Lane.

Photo 10.07. Pedestrian crossing MD 97 at Wendy Lane intersection.

Photo 10.08. Left turn restriction supplementing stop line for Wendy Lane approach.

Photo 10.09, 10.11. S-shaped monolithic median in Wendy Lane crossover.

Photo 11.01. Sidewalk damage – SB MD 97 near Ralph Road.

Photo 11.02. Missing speed limit sign on right.

Photo 11.03. Vegetation blocking advance intersection sign for Ralph Rd – SB MD 97.

Photo 11.04. Curb cut along SB MD 97 approximately 350 feet south of Wendy Lane.

Photo 12.01. Ralph Road median crossover.

Photo 12.02. Grass growing in sidewalk joints – SW corner of Ralph Road.

Photo 12.03. Unmarked crossing of Ralph Road.

Photo 12.04. Concurrent U-turns at Ralph Road median crossover.

Photo 13.01. Damage and sediment at maintain access along SB MD 97, north of Hewitt Avenue.

Photo 13.02. Grass sprawl and growing out of sidewalk joints – SB MD 97.

Photo 14.01. Matthew Henson Trail WB approach to MD 97.

Photo 14.02. Sediment collected in NW level landing for crossing MD 97 at Hewitt Avenue.

Photo 14.03. Pedestrian crossing south leg of MD 97 at Hewitt Avenue.

Photo 14.06. SB MD 97 traffic signal display at Hewitt Avenue.

Photo 14.09. NB MD 97 approach to Hewitt Avenue at night.

Photo 14.10. SB MD 97 left turn lane at Hewitt Avenue.

Photo 14.11. NB MD 97 approach to Hewitt Avenue.

APPENDIX E – Recommendation Methodology and Synchro Reports

MEMORANDUM

700 East Pratt Street,Suite 500
Baltimore, MD 21202
Phone 410.728.2900
Fax 410.728.2834

Date: June 27, 2022
To: Mr. Eric Sideras, P.E.
Montgomery County Department of Transportation
From: William Wu, P.E., PTOE, Project Manager, RK&K
Kylie Snyder, P.E. PTOE, Project Engineer, RK&K
Reference: MD 97 HIN Study
Subject: MD 97 (Georgia Ave) HIN Study Support – Operational Analysis

INTRODUCTION

The purpose of this memorandum is to document the data, analysis, findings, and conclusions of an operational traffic study along the corridor of MD 97 (Georgia Avenue) in Aspen Hill, Maryland. A High Injury Network (HIN) study was conducted for MD 97 from Bel Pre Road to Hewitt Avenue and included operational changes to improve pedestrian and vehicular safety, such as restricting turns on red, modifying vehicular phasing changes, installing Leading Pedestrian Intervals (LPIs), and geometric changes. The objective of this study is to determine the capacity and queuing impacts associated with various improvements recommended as part of the study.

STUDY AREA

The study area includes five (5) signalized intersections and five (5) unsignalized intersections including major driveways along MD 97. As part of the analysis, the corridor of MD 185 from MD 97 to Independence Street was included, which includes two (2) additional signalized intersections and one (1) unsignalized intersection. The study area is shown in Figure 1.

MD 97 is a six-lane, divided State-owned roadway that runs in the north-south direction. The posted speed limit is 45 mph from Bel Pre Rd to MD 185, and 35 mph from MD 185 to Hewitt Ave.

MD 185 is a State-owned roadway that also runs in the north-south direction with a posted speed limit of 45 mph.

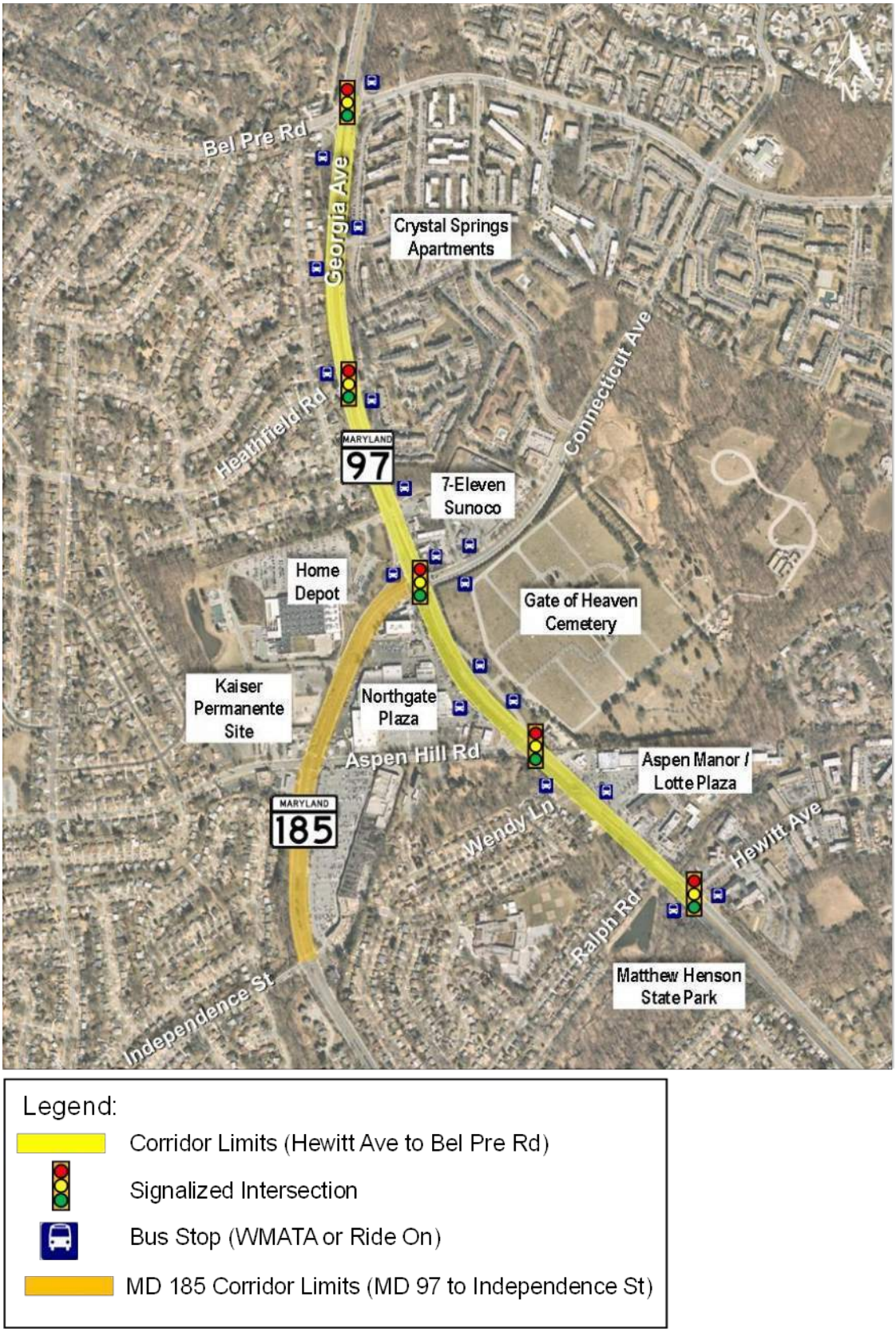


Figure 1: Study Area

Traffic Volumes

Peak period turning movement counts were obtained from MDOT SHA's Internet Traffic Monitoring System (I-TMS) and collected in December 2018 and November 2019 as part of the December 2019 Kaiser Aspen Hill Local Area Transportation Review. Peak period counts were also collected by MCDOT in September 2021 and compared to the Kaiser Aspen Hill Local Area Transportation Review 2019 study traffic volumes. Although the 2021 volumes were collected within the COVID-19 pandemic, the volumes were comparable to pre-pandemic, and the 2021 volumes were used. Volumes were balanced throughout the network, and the resultant 2021 peak hour volumes used in this analysis are shown in Figure 2. Existing lane use at the study intersections is shown in Figure 3.

Synchro and SimTraffic Analysis

Synchro, version 11, and the companion simulation software SimTraffic were used to evaluate the traffic operations of the network. The analysis is based on the existing intersection geometry, peak hour volumes, and existing signal timings. Existing signal timings were obtained from MCDOT. The measures of effectiveness (MOEs) evaluated include delay, measured in seconds per vehicle, and Level of Service (LOS).

SimTraffic, a microsimulation model within the Synchro software package, was also used to obtain detailed queuing data. The queuing analyses were calibrated to the travel time data collection and to field observations conducted in March 2022. The queuing analysis results are based on an average of five one-hour simulation runs.

Delay was rounded to the nearest whole second. Delays that were determined to be greater than 150 seconds were noted as such. It is important to note that Synchro does not provide the capability for vehicles to make two-stage left-turns. Therefore, actual delays experienced may be less than what is being reported at several unsignalized intersections due to this limitation.

LOS for signalized intersections is based on the Highway Capacity Manual (HCM). LOS for unsignalized intersections is measured by Intersection Capacity Utilization (ICU).

Queues that extended beyond the storage capacity were noted. However, there are instances where the through queue blocked a turning vehicle from moving into the turn lane. In these instances, the turning queue was noted as being less than the turn bay length rather than the value in the SimTraffic report.

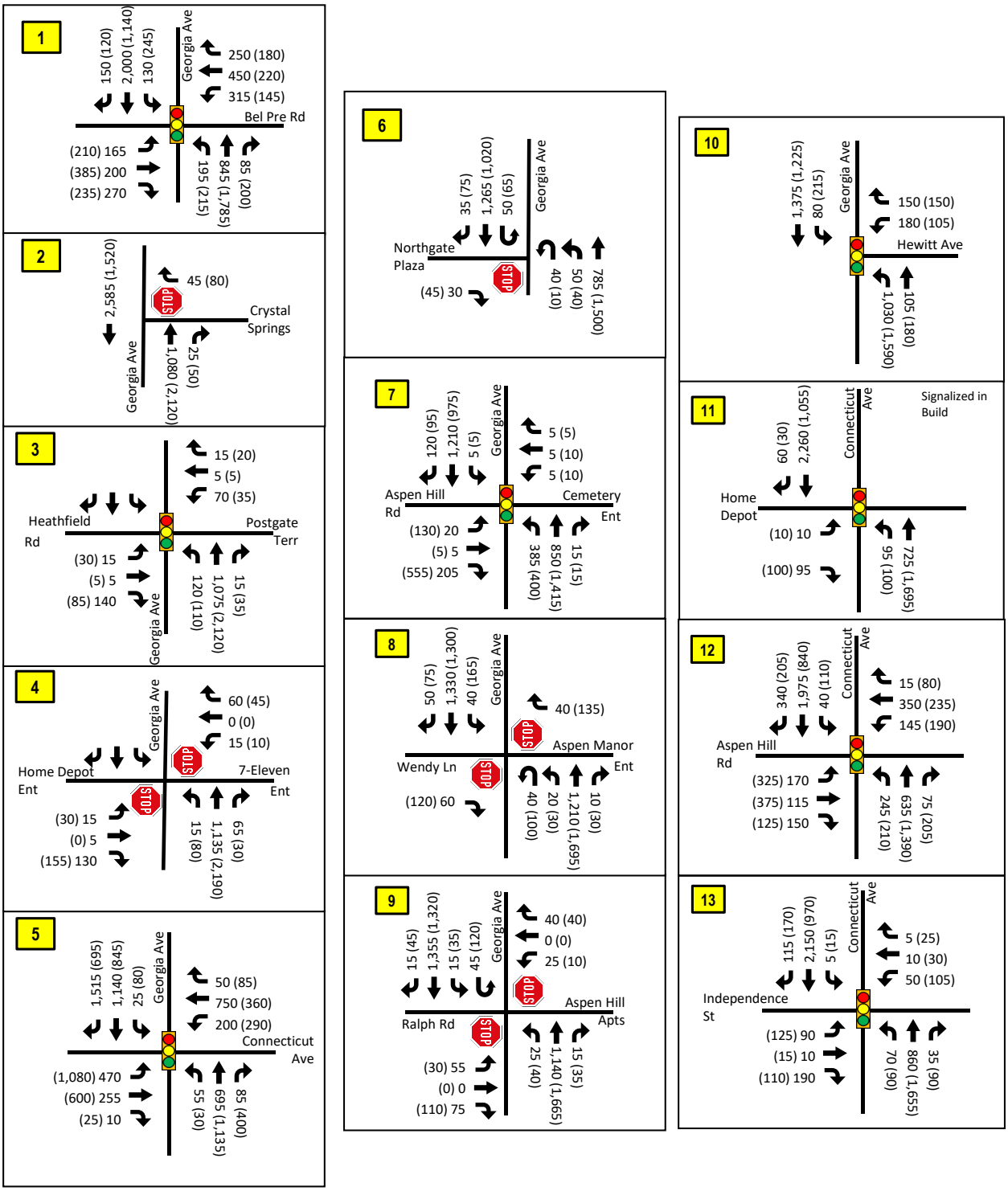


Figure 2: Existing Traffic Volumes

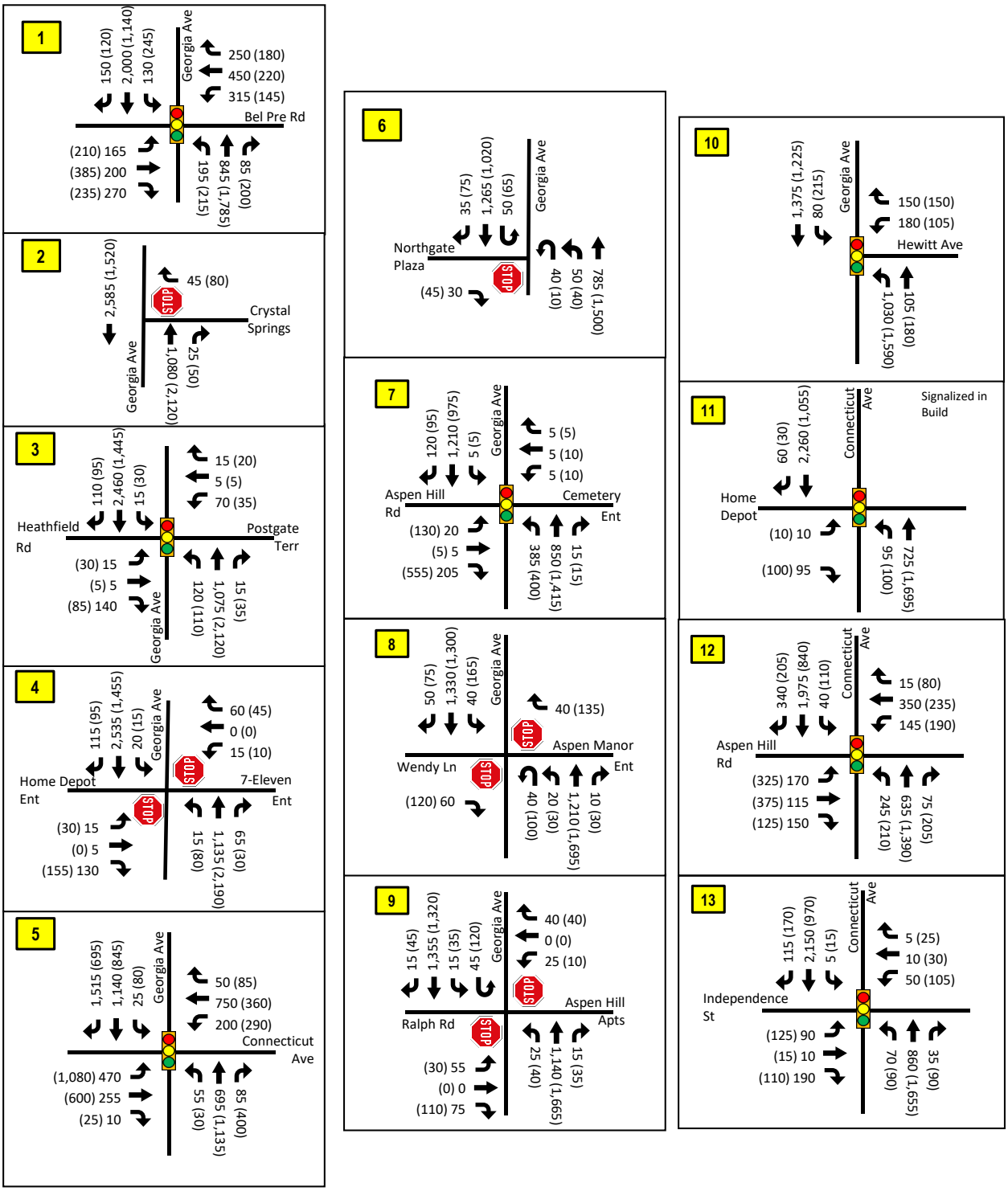


Figure 3: Existing Lane Use and Traffic Control

Existing Conditions Traffic Analysis

The results of the capacity and queuing analyses for the existing condition are summarized in Table 1. The results indicate that while there are several failing movements and approaches throughout the network, all

intersections operate at LOS E or better in the AM peak period and operate at LOS D or better in the PM peak period. The southbound approach is the heavier movement in the morning and the northbound approach is the heavier movement in the evening.

The southbound approach of MD 97 to MD 185 exceeds the storage capacity, extending back to the Home Depot/7-Eleven driveway unsignalized intersection, as observed in the field. Similarly, the southbound approach of MD 185 approaching Aspen Hill Rd extends past the Home Depot driveway unsignalized intersection on MD 185, as observed in the field. There are also many queues that exceed the storage capacity at turn bays throughout the corridor in both peak periods throughout the network.

In the AM peak period, the westbound approach along Aspen Hill Rd at MD 97, as well as along Independence St at MD 185, are both significant, even exceeding 150 seconds. This calculation is not expected to be correct as volumes are low at Aspen Hill Rd (25 vehicles at most in one hour) and would be able to clear each cycle within the allotted green time of 17 seconds. The westbound approach at Aspen Hill Rd is split-phased and would not conflict with any other movements. At MD 185 and Independence St, there would be 8 vehicles at most per cycle and is expected to clear in the allotted green time of 40 seconds.

Existing Build Alternatives Analysis

Several alternatives were developed and analyzed as part of the proposed improvements to the network to improve pedestrian and motorist safety. Improvements were developed following the Pedestrian Road Safety Audit (PRSA), in coordination with the 2011 MD 185 PRSA, MDOT SHA improvements, and MDOT SHA Georgia Ave Road Diet study, and following recommendations from the 2019 Aspen Hill Vision Zero study. The following list of recommended improvements were analyzed in Synchro/SimTraffic using existing (2021) volumes and the results are summarized in Table 2.

Networkwide

- Traffic signal timing optimization
- Modify offsets to improve flow along MD 97 (southbound in the AM peak period and northbound in the PM peak period) based on the signal optimization at intersections

MD 97 at Heathfield Rd/Postgate Terrace

- Revise to exclusive-only northbound left-turn phasing
- Revise to exclusive-only southbound left-turn phasing
- Restrict turns on red for all approaches

MD 97 at MD 185

- Revise to exclusive-only southbound left-turn phasing
- Restrict turns on red for all approaches
- Install northbound right-turn overlap with westbound MD 185 phase
- Extend the pedestrian crossing times for the west leg, south leg, and north leg to give adequate crossing time, assuming a 3.5 feet/second walking speed, per the MdMUTCD
- Install a leading Pedestrian Interval (LPI) for the east leg crossing (prior to the northbound

vehicular phase) to address the limited sight distance due to the fence in the southeast corner

MD 97 at Hewitt Ave

- Revise to exclusive-only southbound left-turn phasing
- Restrict turns on red for the northbound approach
- Install an LPI for the north leg crossing (prior to the westbound vehicular phase) and the east leg crossing (prior to the northbound vehicular phase)
- Reduce the cycle length of 120 seconds

MD 185 at Home Depot

- Install a full-color traffic signal with a 180-second cycle length
    - The proposed traffic signal has been approved as part of the approval of the future development. The assumption was made that the signal will be installed in the near-term and should be analyzed as part of the short/mid-term improvements
- Geometric changes from the Kaiser Aspen Hill Local Area Transportation Review 2019 study such as:
    - Removing all right-turn channelization
    - Installing a south leg crosswalk
    - A 100-ft eastbound right-turn storage lane
- Provide an eastbound right-turn overlap with the northbound left-turn phase
- Provide a southbound right-turn overlap with the eastbound left-turn phase
- Provide exclusive-only northbound left-turn phasing

MD 185 at Aspen Hill Rd

- Restrict turns on red for all approaches
- Install an LPI for the north leg and south leg crossings (prior to the eastbound/westbound vehicular phases)

MD 185 at Independence St

- Restrict turns on red for all approaches
- Install an LPI for all legs

The results indicate that all intersections along the MD 97 corridor operate at LOS D or better in both peak periods. Similar to existing conditions, there are several movements and approaches that are projected to fail, and several queues that exceed its storage capacity.

The following movements are projected to worsen to a failing condition, exceed storage capacity, or improve from a LOS F from existing conditions:

- MD 97 at Bel Pre Rd
    - The northbound right-turn is projected to improve from LOS F in existing conditions to LOS B under build conditions in the AM peak period, decreasing delay by over 138 seconds. An additional 5 seconds of green time for the existing build condition to favor the MD 97 approaches reduces queues and therefore allows right-turning

vehicles to move into the turn lane faster.
    - The westbound left and through movements are projected to fail in the PM peak period under build conditions. Green time is added to the MD 97 approaches and is therefore taken away from Bel Pre Rd. Queues are not projected to exceed storage capacity.
- MD 97 at Heathfield Rd/Postgate Terrace
    - The northbound left-turning movement is projected to worsen from LOS E (A) in existing conditions to LOS F (F) under build conditions. This is due to the revision to left-turn exclusive-only phasing.
    - The southbound left-turning movement is projected to worsen from LOS A (B) in existing conditions to LOS F (F) under build conditions. This is due to the revision to left-turn exclusive-only phasing. Although the southbound left-turn volumes are low in both peak periods, vehicles must wait for the full cycle to receive a green arrow if they arrive at the end of the phase. An exclusive left-turn phase is justified based on the number of opposing thru lanes, conflicting traffic volumes, and operating speeds.
    - The westbound approach is projected to improve from LOS F (F) to LOS F (E), significantly reducing delays. The westbound approach is given 11 seconds more green time in the build condition compared to existing conditions.
- MD 97 at MD 185
    - The eastbound approach is projected to improve from LOS F in existing conditions to LOS E under build conditions in the AM peak period. The south leg pedestrian clearance interval was increased, extending the minimum split for the eastbound approach. Adding 4 seconds of green time reduced delays in the build condition compared to existing conditions. The PM peak period is not projected to improve due to much higher volumes along the approach.
    - The southbound left-turn movement is projected to worsen from LOS C (D) in existing conditions to LOS F (F) under build conditions. This is due to the revision to left-turn exclusive-only phasing.
- MD 97 at Aspen Hill Rd
    - The northbound left-turn movement is projected to improve in the AM peak period from LOS F in existing conditions to LOS E under build conditions. The intersection offset was optimized to favor flow along MD 97.
    - As noted in existing conditions, the westbound approach is projected to fail in both peak periods. At most, there are 25 vehicles in one-hour, calculating only 2 cars per cycle which is expected to always clear during the allotted 17 seconds of green time. The westbound approach is split-phased and would not conflict with any other movements.
- MD 97 at Hewitt Ave
    - The southbound left-turn queue is expected to exceed its storage capacity in both peak periods under build conditions This is due to the revision to left-turn exclusive-only phasing. Although southbound left-turn volumes are low in the peak periods, an exclusive left-turn phase is justified based on the number of opposing thru lanes and operating speeds.
    - The westbound left-turn movement is projected to improve from LOS F in existing

conditions to LOS D in build conditions in the AM peak period. This is due to the reduction in cycle length from 180 seconds in existing conditions to 120 seconds under build conditions, allowing the westbound approach to receive a green signal indication more frequently.

- MD 185 at Independence St
    - Several movements and approaches are projected to worsen due to the installation of the LPI phase for all 4 legs, reducing time for the vehicular phases, as well as the implementation of a turn on red restriction for all approaches.
- MD 185 at Aspen Hill Rd
    - The southbound queue is projected to worsen in the AM peak period by about 700 feet. Although signal timings and offsets were optimized, the installation of LPI, right turn on red restrictions, and modifications to the signal timings throughout the network is expected to increase delays and queues for the critical movement along southbound MD 97 and MD 185.
- MD 185 at Home Depot
    - The intersection is modified from an unsignalized intersection with MD 185 approaches free flowing and right-turning movements operating free, to fully signalizing each movement. These modifications are expected to increase delays and queues.

The list of alternatives below were considered but ultimately not chosen as a recommended improvement.

- MD 97 at Bel Pre Rd
    - Exclusive-only left-turn phasing for the eastbound/westbound approaches
        - By making the phasing exclusive-only, the left-turn movement must wait over 90 seconds for the green arrow if they arrive at the end of the exclusive phase. Because of this, queues are projected to increase and spill onto Bel Pre Rd as there is less time to clear during the cycle. Delay for the eastbound left-turn movement was projected to increase by over 30 seconds, and delay for the westbound left-turn movement was projected to increase by about 90 seconds.
- MD 97 at Heathfield Rd
    - Reducing the cycle length to 90 seconds (half of the existing 180 seconds)
        - While reducing the cycle length operated well in the PM peak period, the AM peak period showed more red time for the critical approach along southbound MD 97. By reducing the cycle length in half, the eastbound/westbound approaches used about half of the full cycle to account for the pedestrian phase. This reduced the southbound green time and failed the approach.
- MD 185 at MD 97
    - LPI for all four legs of the intersection.
        - Adding an LPI to all four legs is projected to worsen all movements to LOS E or LOS F in the PM peak period
    - LPI for the north leg and south leg (prior to the eastbound/westbound vehicular phases).

        - Adding an LPI to all four legs is projected to worsen all movements to LOS E or LOS F in the PM peak period
    - The MD 185 PRSA does not recommend LPI at this location.
- MD 97 at Hewitt Ave
    - Reducing the cycle length to 90 seconds (half of the existing 180 seconds)
        - By reducing the cycle length in half, the westbound approach used about half of the full cycle to account for the pedestrian phase. This reduced the southbound green time and failed the approach.
- MD 185 at Independence St
    - Reducing the cycle length to 90 seconds (half of the existing 180 seconds)
        - There is not enough time for all pedestrian clearance intervals to occur without significantly failing the southbound approach.
    - Split Phasing
        - Split phasing is projected to fail the intersection if operating with an LPI.
- MD 185 at Aspen Hill Rd
    - Exclusive-only eastbound left and westbound left phasing
        - The left-turn queue surpasses its storage length and spills back onto Aspen Hill Rd, creating excessive queues for the through movement. There are no opportunities to adjust the splits without significantly affecting other movements, and the delay and LOS were projected to fail.
        - The MD 185 PRSA report concludes the intersection would fail in the AM peak and may not be recommended at this intersection.
- MD 185 at Home Depot
    - Reducing the cycle length to 90 seconds (half of the existing 180 seconds)
        - By reducing the cycle length in half, the eastbound approach used about half of the full cycle to account for the new south leg crosswalk pedestrian phase. This reduced the southbound green time and significantly increased delays and queues.

2040 Future No-Build Traffic Analysis

To develop future year 2040 volumes, the background developments were first added to existing 2021 volumes. The background developments included the Montgomery County Humane Society Campus, and the Kaiser Permanente Aspen Hill Development. These developments are planned but not yet built. Growth rates were analyzed and taken from the MWCOG model. A growth rate of 0.25% was applied to applicable movements along MD 97, and a growth rate of 0.20% was applied to applicable movements along MD 185. These volumes were balanced throughout the network, and the resultant 2040 peak hour no-build volumes used in this analysis is shown in Figure 4.

In the future no-build condition, no changes were made to the geometry of the roadway or signal phasing. Signal timing and offset optimization were considered at each of the intersections. The only geometrical modification from existing conditions to future no-build conditions included the full signal at the intersection of MD 185 and Home Depot. The results of the capacity and queuing analyses for the future no-build condition are summarized in Table 3.

The results indicate that many movements and approaches are projected to fail in the future with no operational improvements. The southbound queue in the AM peak period is projected to extend from MD 185 at Aspen Hill Rd to MD 97 at Home Depot/7-Eleven. The unsignalized intersection of MD 97 at Home Depot/7-Eleven is projected to have significant delays for the driveways, reaching over 150 seconds. It is important to note that Synchro does not provide the capability for vehicles to make two-stage left-turns. Therefore, actual delays experienced may be less than what is being reported at several unsignalized intersections due to this limitation.

2040 Future Build Traffic Analysis

As part of the future build analysis, some modifications to existing intersections were proposed, including modifying an unsignalized intersection to a Pedestrian Hybrid Beacon (PHB), fully signalizing unsignalized intersections, and redistributing volumes. 5 intersections are included in these modifications, and the traffic control device used with the redistributed 2040 volumes are shown in Figure 5. The following list of recommended improvements were analyzed in Synchro/SimTraffic using future (2040) volumes and the results are summarized in Table 4.

Networkwide

- All Existing Build improvements except
    - MD 185 at Aspen Hill Rd LPI
        - Although this was a priority in the Vision Zero improvements, the LPI phase takes five (5) seconds away from the eastbound left-turn phase which extends the eastbound left-turn queue onto Aspen Hill Rd for a significant distance. Allowing the five (5) seconds to return to the left-turn phase removes spillback.
- MD 97 at Bel Pre Rd
    - Eastbound right-turn overlap phase with northbound left-turn phase
    - Westbound right-turn overlap phase with southbound left-turn phase
    - Westbound lead/lag exclusive/permissive left-turn phasing
    - Removal of right-turn channelization
- MD 97 at Crystal Springs Apartments
    - Provide a PHB
        - 180-second cycle length, actuated
- MD 97 at Home Depot/7-Eleven
    - Fully signalize
        - 180-second cycle length
        - Northbound/southbound exclusive-only left-turn movements, with permissive phasing for eastbound/westbound
- MD 97 at MD 185
    - Reduce the speed limit for the double channelized southbound MD 97 right-turn segment to 20-mph (from 35-mph) to model a tighter turning radius
- MD 97 at Aspen Hill Rd
    - Remove southbound right-turn channelization
- MD 97 at Wendy Rd

    - Fully signalize
        - 90-second cycle length
        - Northbound/southbound exclusive/permissive left-turn phasing, with permissive phasing for eastbound/westbound
- MD 97 at Ralph Rd
    - Fully signalize
        - 120-second cycle length
        - Northbound/southbound exclusive/permissive left-turn phasing, with permissive phasing for eastbound/westbound

The results indicate that all intersections along the MD 97 corridor operate at LOS E or better in both peak periods. Similar to future no-build conditions, many movements and approaches are projected to fail, and several queues exceed their storage capacity.

The following movements are projected to worsen to a failing condition, exceed its storage capacity, or improve from a LOS F from existing conditions:

- MD 97 at Bel Pre Rd
    - Eastbound left-turn is projected to worsen from LOS E under future no-build conditions to LOS F under future build conditions in the AM peak period. To effectively clear the westbound left-turn and through queues, about seven (7) seconds was taken away from the exclusive eastbound left-turn phase, failing the movement. The queue is not projected to increase by more than 150 feet.
    - Eastbound right-turn is projected to worsen from LOS A under future no-build conditions to LOS F under future build conditions in the AM peak period. The eastbound right-turn is permitted on red, however is typically blocked when the conflicting movements are given the green time, such as southbound and westbound left-turns. These movements are heavy and do not allow for large gaps throughout the one-hour period. Additionally, the removal of the right-turn channelization brings right-turns to the intersection, restricting their previously free movement.
    - Westbound left-turn and through movements are projected to improve from LOS F/F under future no-build conditions to LOS E/E under build conditions, respectively, due to the exclusive lead/lag left-turn phasing, allowing more opportunities to turn without conflicting traffic.
    - Northbound right-turn is projected to improve from LOS F under future no-build conditions to LOS C under future build conditions, due to the northbound right-turn overlap phase that is provided.
    - All right-turns exceed their storage capacity in one or both peaks due to the removal of the right-turn channelization.
- MD 97 at Heathfield Rd/Postgate Terrace
    - Westbound approach is projected to improve from LOS F under future no-build conditions to LOS E under future build conditions in the PM peak period. This is due to the additional six (6) seconds of green time that is provided to the eastbound/westbound phases in the build condition.
    - Northbound left-turn is projected to improve from LOS F under future no-build

conditions to LOS E under future build conditions in the AM peak period. An additional eight (8) seconds is given to this movement. Although the phasing has been modified from exclusive/permissive to exclusive-only, the northbound left-turn volumes are low in the AM peak period and are able to clear in the allotted phase.
    - Northbound left-turn is projected to worsen from LOS B under future no-build conditions to LOS F under future build conditions in the PM peak period. Although an additional nine (9) seconds is given to this movement, the northbound approach is the critical movement in the PM peak period and the modification from exclusive/permissive phasing to exclusive-only phasing affects this operation. More green time was not able to be given to the movement as southbound is still heavy in the PM peak period and needs the time allotted.
    - Southbound left-turn is projected to worsen from LOS A (D) under future no-build conditions to LOS F (F) under no-build conditions. This is due to the change in left-turn phasing to exclusive-only.
- MD 97 at Home Depot/7-Eleven
    - Eastbound and westbound approaches are projected to improve from LOS F under future no-build conditions to LOS E under future build conditions. Under no-build conditions, the intersection is unsignalized and Synchro is not able to provide a 2-stage left-turn for these approaches. Therefore, delay is excessive as vehicles are not able to find an adequate gap in both directions of traffic. With signalization, the MD 97 mainline approaches are stopped, and the side streets can clear.
    - Northbound left-turn worsens from LOS C under future no-build conditions to LOS F under future build conditions in the AM peak period. When the intersection was unsignalized, the left-turn movement was able to turn in any available gap but must now wait for a green signal indication, sometimes taking a full cycle.
    - Southbound left-turn is projected to worsen from LOS B (D) under future no-build conditions to LOS F (F) under future build conditions in both peak periods. When the intersection was unsignalized, the left-turn movement was able to turn in any available gap but must now wait for a green signal indication, sometimes taking a full cycle.
- MD 97 at MD 185
    - Westbound left-turn is projected to improve from LOS F under future no-build conditions to LOS E under future build conditions in the PM peak period. As part of increasing the pedestrian clearance time for the north leg crossing, the westbound vehicular split was increased, providing four (4) more seconds to the approach.
    - Southbound left-turn is projected to worsen from LOS C (D) under future no-build conditions to LOS F (F) under future build conditions. This is due to the change in left-turn phasing to exclusive-only.
- MD 97 at Aspen Hill Rd
    - Eastbound and northbound left-turns are projected to worsen from LOS E under future no-build conditions to LOS F under future build conditions in the PM peak period. The intersection offset was adjusted and optimized to favor the critical movement along the northbound approach. The northbound left-turn and eastbound right-turn are served under the same phase and are both benefitted from optimizing

the offset.
    - The southbound right-turn exceeds the storage capacity due to the removal of the right-turn channelization.
- MD 97 at Wendy Ln
    - Northbound queue exceeds the storage capacity, spilling back to the Ralph Rd signal upstream. This is due to the modification to a full signal at the intersection. The offsets much favor the northbound approach to ensure safe and effective progression.
- MD 97 at Ralph Rd
    - Westbound is projected to improve from LOS F under future no-build conditions to LOS D under future build conditions in the PM peak period. Under no-build conditions, the intersection is unsignalized and Synchro is not able to provide a 2-stage left-turn for the approach. Therefore, delay is excessive as vehicles are not able to find an adequate gap in both directions of traffic. With signalization, the MD 97 mainline approaches are stopped, and the side streets can clear.
- MD 97 at Hewitt Avenue
    - Westbound left-turn is projected to improve from LOS F under future no-build conditions to LOS D under future build conditions in the AM peak period. By reducing the cycle length, the westbound approach receives a green signal indication more frequently and delays are expected to reduce.
    - Southbound left exceeds its storage capacity in both peak periods. This is due to the change in left-turn phasing to exclusive-only, providing less opportunities for the queue to clear.
- MD 185 at Independence St
    - Eastbound is projected to worsen from LOS E under future no-build conditions to LOS F under future build conditions in the AM peak period. Although comparable green time is given to the approach, LPI phases are provided for all four legs of the intersection, affecting vehicular operations slightly.
    - Southbound left-turn is projected to improve from LOS F under future no-build conditions to LOS E under future build conditions in the AM peak period. The intersection offset was adjusted and optimized to favor the critical movement along the southbound approach.
- MD 185 at Aspen Hill Rd
    - Eastbound left-turn is projected to worsen from LOS E under future no-build conditions to LOS F under future build conditions in the PM peak period. Although the exclusive left-turn phase timings did not change, more green time was given to the critical approaches along MD 185 in the northbound and southbound direction, taking time away from the eastbound and westbound approaches.
    - The eastbound approach is projected to worsen from LOS E under future no-build conditions to LOS F under future build conditions in the AM peak period. To favor the southbound progression, green time was taken away from the eastbound/westbound approaches and given to the MD 185 approaches. The eastbound left-turn delay and queue are excessive, extending delays and queues for all eastbound movements.
    - Northbound left-turn is projected to improve from LOS F under future no-build

conditions to LOS E under future build conditions in the AM peak period. An additional two (2) seconds of green time was given to the exclusive left-turn phase.
    - The overall intersection is projected to improve from LOS F under future no-build conditions to LOS E under future build conditions in the AM peak period. By giving maximum time to the critical approach along southbound MD 185 as well as optimizing the intersection offsets, delays are projected to reduce and improve LOS.
- MD 185 at Home Depot
    - The northbound left-turn is projected to worsen from LOS E under future no-build conditions to LOS F under future build conditions in the PM peak period. Several iterations were analyzed to reduce the delays by extending the northbound left-turn phase, but the movement is projected to fail under all the trials.

The list of alternatives below were considered but ultimately not chosen as a recommended improvement.

- MD 97 at MD 185
    - Signalizing the double channelized right-turn in cluster with MD 185
        - Southbound queues in the AM peak period extended past Bel Pre Rd
    - Remove the double channelized right-turn, and tie the turn lanes into the existing signalized intersection at MD 97 and MD 185
        - The rightmost southbound lane extends past Bel Pre Rd in the AM peak period
    - Remove the rightmost southbound lane approaching MD 185 to model a bus lane
        - By removing a third lane approaching the intersection altogether, queues spilled through the intersection with Home Depot/7-Eleven and extended up to Heathfield Rd/Postgate Terrace.

Conclusions

Based on the analysis results, implementing the signal timing and phasing modifications, installing LPIs, converting unsignalized intersections to signalized intersections, and making geometrical changes to intersection movements to benefit pedestrian and vehicular safety is projected to operate at LOS E or better along MD 97 in both peak periods. Although some movements are projected to fail and exceed storage capacity, the overall intersection operations and networkwide operations are not projected to fail in the short-, mid-, or long-term.

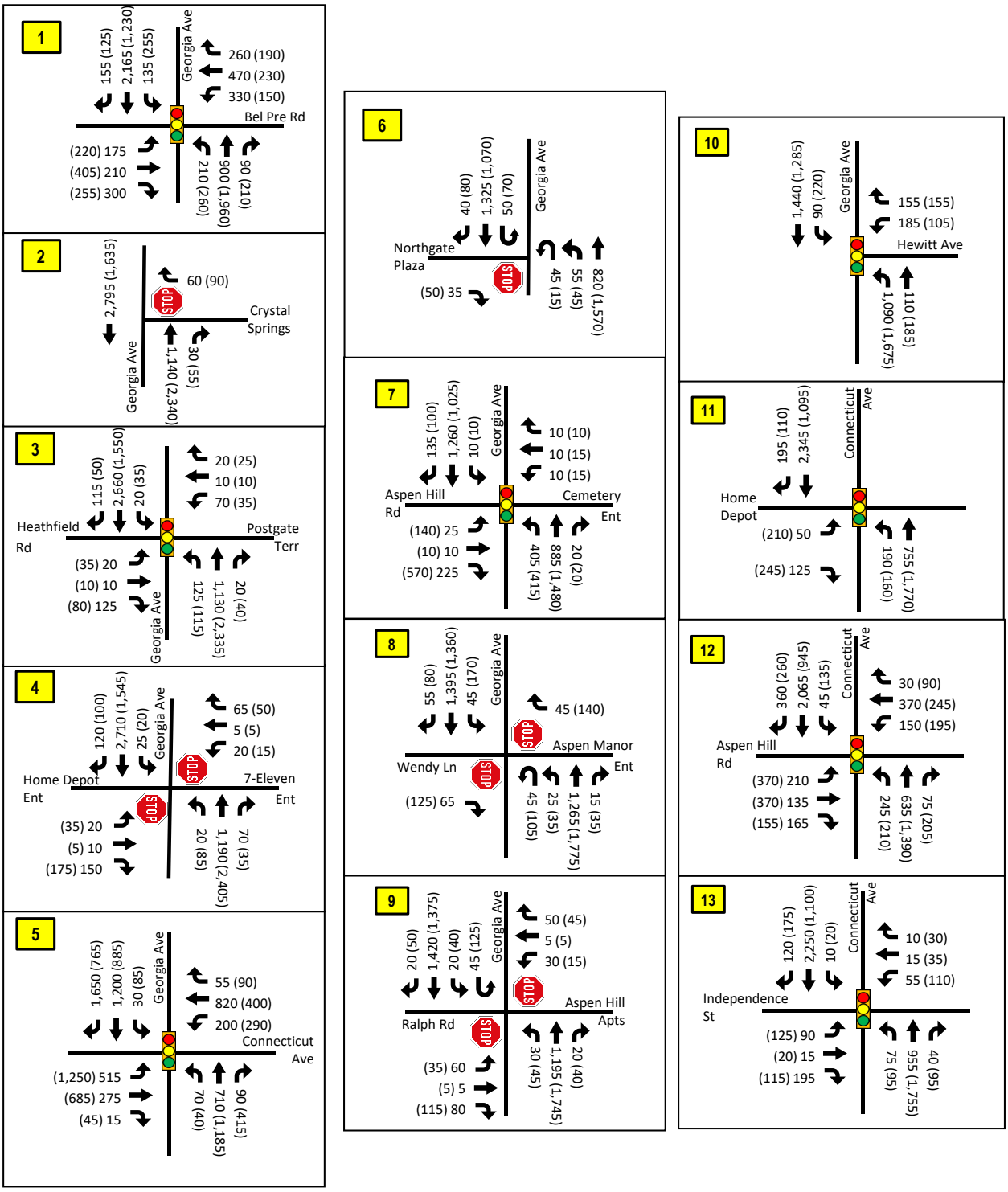


Figure 4: Future 2040 No-Build Volumes

Table 1: Existing Conditions Capacity and Queuing Analysis

	Movement	AM Peak					PM Peak				
		Delay (s)	**LOS**	**Average Queue (ft)**	**95th Queue (ft)**	**Storage Length**	**Delay (s)**	**LOS**	**Average Queue (ft)**	**95th Queue (ft)**	**Storage Length**
MD 97 at Bel Pre Rd	EBL	64	E	125	200	180	66	E	175	250	180
	EBT	68	E	100	200	-	79	E	250	600**	-
	EBR	<1	A	<265	<265	265	<1	A	<265	<265	265
	EB	38	D	-	-	-	53	D	-	-	-
	WBL	90	F	225	350	280	65	E	100	200	280
	WBT	80	E	250	475	-	71	E	100	175	-
	WBR	<1	A	<150	<150	150	<1	A	<150	<150	150
	WB	63	E	-	-	-	46	D	-	-	-
	NBL	82	F	100	200	455	109	F	100	200	455
	NBT	31	C	150	250	900	33	C	325	500	900
	NBR	>150	F	<200	<200	200	9	A	<200	<200	200
	NB	51	D	-	-	-	39	D	-	-	-
	SBL	85	F	50	100	560	89	F	100	150	560
	SBT	51	D	675	1,075	-	33	C	175	275	-
	SBR	29	C	<40	<40	40	25	C	<40	<40	40
	SB	51	D	-	-	-	41	D	-	-	-
	Overall	**52**	**D**	**-**	**-**	**-**	**43**	**D**	**-**	**-**	**-**
MD 97 at Crystal Springs Apartment	WB	9	A	25	50	225	9	A	50	100	225
	SB	0	-	75	500	900	0	-	<25	125	900
	Overall	**<1**	**ICU A**	**-**	**-**	**-**	**<1**	**ICU A**	**-**	**-**	**-**
MD 97 at Heathfield Rd/Postgate Terrace	EB	68	E	200	400	350	88	F	100	225	350
	WB	<150	F	125	250	250	106	F	50	125	250
	NBL	77	E	100	200	350	5	A	50	100	350
	NBTR	16	B	125	250	850	2	A	100	200	850
	NB	22	C	-	-	-	2	A	-	-	-
	SBL	3	A	<25	25	350	18	B	25	50	350

	SBTR	8	A	125	250	1,025	9	A	150	325	1,025
	SB	8	A	-	-	-	9	A	-	-	-
	Overall	**23**	**C**	**-**	**-**	**-**	**9**	**A**	**-**	**-**	**-**
MD 97 at Home Depot Ent/7-Eleven	EBLT	>150	F	25	75	1,100	138	F	25	75	1,100
	EBR	12	B	50	75	1,100	11	B	75	150	1,100
	EB	71	F	-	-	-	31	D	-	-	-
	WBLT	32	D	25	50	100	>150	F	25	50	100
	WBR	9	A	25	50	100	9	A	25	75	100
	WB	14	B	-	-	-	127	F	-	-	-
	NBL	22	C	25	25	250	14	B	50	75	250
	SBL	11	-	<25	25	235	21	C	<25	25	235
	SB	<1	-	25	250	850	<1	-	<25	25	850
	Overall	**3**	**ICU C**	**-**	**-**	**-**	**4**	**ICU C**	**-**	**-**	**-**
MD 97 at MD 185	EBL	91	F	175	250	425	54	D	300	400	425
	EBTR	90	F	125	200	1,350	49	D	200	325	1,350
	EB	91	F	-	-	-	52	D	-	-	-
	WBL	65	E	100	225	280	87	F	125	200	280
	WBLTR	72	E	325	450	-	76	E	200	325	-
	WB	71	E	-	-	-	79	E	-	-	-
	NBL	103	F	50	100	330	118	F	25	75	330
	NBT	31	C	125	200	675	40	D	225	425	675
	NBR	72	E	25	75	280	24	D	150	300**	280
	NB	40	D	-	-	-	38	D	-	-	-
	SBL	28	C	25	125	200	40	D	100	225	200
	SBT	32	C	300	500	475	42	D	225	350	475
	SB	32	C	-	-	-	42	D	-	-	-
	Overall	**56**	**E**	**-**	**-**	**-**	**50**	**D**	**-**	**-**	**-**
MD 97 at Northgate Plaza	EBR	9	A	25	50	250	9	A	25	50	250
	NBUL	10	B	50	100	175	9	A	25	50	175
	SBUL	0	-	25	50	150	0	-	50	100	150
	Overall	**<1**	**ICU A**	**-**	**-**	**-**	**<1**	**ICU A**	**-**	**-**	**-**
MD 97 at Aspen Hill Rd	EBLT	69	E	25	50	900	70	E	150	250	900
	EBR	52	D	100	175	900	80	F	375	575	900

	EB	54	D	-	-	-	78	E	-	-	-
	WBLTR	99	F	25	50	215	95	F	25	75	215
	NBL	97	F	200	275	250	72	E	175	250	250
	NBTR	11	B	75	175	470	8	A	100	250	470
	NB	38	D	-	-	-	22	C	-	-	-
	SBL	122	F	<25	25	190	129	F	<25	25	190
	SBT	11	B	75	175	475	14	B	125	225	475
	SBR	1	A	<70	<70	70	46	D	<70	<70	70
	SB	11	B	-	-	-	17	B	-	-	-
	Overall	**29**	**C**	**-**	**-**	**-**	**32**	**C**	**-**	**-**	**-**
MD 97 at Wendy Ln	EBR	9	A	25	50	-	9	A	200	450	-
	WBR	9	A	25	50	-	9	A	50	100	-
	NBUL	11	B	25	75	200	12	B	75	150	200
	SBL	12	B	25	50	150	21	D	100	200	150
	Overall	**<1**	**ICU A**	**-**	**-**	**-**	**2**	**ICU A**	**-**	**-**	**-**
MD 97 at Ralph Rd	EB*	24	C	50	75	-	13	B	75	250	-
	WBLTR	17	C	50	100	370	28	D	50	125	370
	NBL	11	B	<25	25	125	12	B	25	50	125
	SBUL	11	B	25	75	175	15	B	75	150	175
	Overall	**2**	**ICU A**	**-**	**-**	**-**	**1**	**ICU B**	**-**	**-**	**-**
MD 97 at Hewitt Ave	WBL	85	F	100	125	90	79	E	75	125	90
	WBR	66	E	200	400	435	72	E	100	200	435
	WB	77	E	-	-	-	75	E	-	-	-
	NBTR	11	B	150	275	-	15	B	225	400	-
	SBL	6	A	50	100	140	35	E	125	175	140
	SBT	4	A	125	225	350	5	A	125	275	350
	SB	4	A	-	-	-	9	A	-	-	-
	Overall	**15**	**B**	**-**	**-**	**-**	**18**	**B**	**-**	**-**	**-**
MD 185 at Independence St	EBL	79	E	75	150	100	79	E	100	150	100
	EBTR	72	E	125	225	-	64	175	175	400**	-
	EB	74	E	-	-	-	71	E	-	-	-
	WB	>150	F	50	125	-	118	F	150	225	-
	NBL	86	F	50	125	250	87	F	100	175	250

	NBTR	6	A	50	150	-	14	B	175	275	-
	NB	12	B	-	-	-	18	B	-	-	-
	SBL	107	F	0	0	270	106	F	<25	25	270
	SBTR	5	A	50	250	1,325	8	A	50	100	1,325
	SB	5	A	-	-	-	9	A	-	-	-
	Overall	**18**	**B**	**-**	**-**	**-**	**23**	**C**	**-**	**-**	**-**
MD 185 at Aspen Hill Rd	EBL	71	E	125	225	300	60	E	225	350	300
	EBTR	66	E	150	275	-	72		275	425	-
	EB	68	E	-	-	-	67	E	-	-	-
	WBL	60	E	75	200	410	60	E	150	250	410
	WBTR	76	E	125	275	450	73	E	100	200	450
	WB	72	E	-	-	-	68	E	-	-	-
	NBL	97	F	125	200	350	92	F	125	200	350
	NBT	18	B	75	150	1,325	33	C	250	325	1,325
	NBR	12	B	<25	25	350	19	B	25	100	350
	NB	38	D	-	-	-	38	D	-	-	-
	SBL	89	F	25	75	650	81	F	100	175	325
	SBTR	53	D	575	1,400	650	54	D	325	450	650
	SB	54	D	-	-	-	57	E	-	-	-
	Overall	**53**	**D**	**-**	**-**	**-**	**53**	**D**	**-**	**-**	**-**
MD 185 at Home Depot (MD 185 is NB/SB)	EBL	-	-	25	100	600	-	-	<25	25	600
	EBR	-	-	25	125	600	-	-	<25	25	600
	NBL	-	-	100	175	215	-	-	25	75	215
	SBT	-	-	175	775	775	-	-	0	<25	775
	SBR	-	-	75	350	775	-	-	-	-	775
	Overall	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

- Indicates that the queue exceeds storage capacity

*****A right-turn lane was provided for the software analysis due to the limitation of cars being capable of making a 2-stage left-turn in Synchro/SimTraffic. The right-turn lane results were taken in this case

**Blocked by the adjacent lane queue

Table 2: Existing Build Alternatives Capacity and Queuing Analysis

	Movement	AM Peak					PM Peak				
		Delay (s)	**LOS**	**Average Queue (ft)**	**95th Queue (ft)**	**Storage Length**	**Delay (s)**	**LOS**	**Average Queue (ft)**	**95th Queue (ft)**	**Storage Length**
MD 97 at Bel Pre Rd	EBL	70	E	125	200	180	71	E	150	250	180
	EBT	67	E	100	225	-	78	E	200	450	-
	EBR	<1	A	<265	<265	265	<1	A	<265	<265	265
	EB	39	D	-	-	-	54	D	-	-	-
	WBL	108	F	250	375	280	103	F	100	200	280
	WBT	79	E	375	800	-	80	F	100	175	-
	WBR	<1	A	<150	<150	150	<1	A	<150	<150	150
	WB	69	E	-	-	-	60	E	-	-	-
	NBL	106	F	100	150	455	91	F	100	175	455
	NBT	13	B	100	150	900	23	C	275	450	900
	NBR	12	B	<200	<200	200	16	B	<200	<200	200
	NB	29	C	-	-	-	29	C	-	-	-
	SBL	86	F	25	75	560	87	F	100	150	560
	SBT	48	D	500	700	-	29	C	150	300	-
	SBR	28	C	<40	<40	40	22	C	<40	<40	40
	SB	49	D	-	-	-	38	D	-	-	-
	Overall	**48**	**D**	**-**	**-**	**-**	**39**	**D**	**-**	**-**	**-**
MD 97 at Crystal Springs Apartment	WB	9	A	25	50	225	9	A	50	100	225
	SB	0	-	75	475	900	0	-	-	-	900
	Overall	**<1**	**ICU A**	**-**	**-**	**-**	**<1**	**ICU A**	**-**	**-**	**-**
MD 97 at Heathfield Rd/Postgate Terrace	EB	72	E	150	250	350	90	F	125	225	350
	WB	133	F	100	175	250	77	E	50	100	250
	NBL	100	F	100	200	350	83	F	125	200	350
	NBTR	14	B	100	225	850	11	B	200	350	850
	NB	22	C	-	-	-	14	B	-	-	-
	SBL	102	F	<25	50	350	70	E	25	50	350
	SBTR	13	B	325	525	1,025	17	B	250	425	1,025

	SB	13	B	-	-	-	18	B	-	-	-
	Overall	**23**	**C**	**-**	**-**	**-**	**20**	**B**	**-**	**-**	**-**
MD 97 at Home Depot Ent/7-Eleven	EBLT	>150	F	25	100	1,100	66	F	25	75	1,100
	EBR	13	B	50	100	1,100	9	A	75	125	1,100
	EB	47	E	-	-	-	19	C	-	-	-
	WBLT	18	C	25	75	100	>150	F	<25	25	100
	WBR	9	A	25	50	100	9	A	25	75	100
	WB	11	B	-	-	-	65	F	-	-	-
	NBL	19	C	25	50	250	13	B	50	100	250
	SBL	11	-	<25	50	235	20	C	25	50	235
	SB	<1	-	200	675	850	<1	-	<25	125	850
	Overall	**2**	**ICU C**	**-**	**-**	**-**	**2**	**ICU C**	**-**	**-**	**-**
MD 97 at MD 185	EBL	66	E	175	250	425	58	E	275	300	425
	EBTR	63	E	150	200	1,350	50	D	200	325	1,350
	EB	65	E	-	-	-	55	E	-	-	-
	WBL	64	E	100	225	280	78	E	125	225	280
	WBLTR	71	E	300	425	-	72	E	200	325	-
	WB	69	E	-	-	-	73	E	-	-	-
	NBL	109	F	50	125	330	105	F	50	125	330
	NBT	30	D	150	250	675	54	D	300	500	675
	NBR	11	B	25	100	280	34	D	225	375**	280
	NB	33	C	-	-	-	50	D	-	-	-
	SBL	82	F	50	175	200	100	F	100	200	200
	SBT	49	D	475	925	475	44	D	175	275	475
	SB	80	D	-	-	-	48	D	-	-	-
	Overall	**54**	**D**	**-**	**-**	**-**	**55**	**D**	**-**	**-**	**-**
MD 97 at Northgate Plaza	EBR	9	A	25	50	250	9	A	25	50	250
	NBUL	10	B	25	75	175	9	A	25	75	175
	SBUL	0	-	25	50	150	0	-	25	75	150
	Overall	**<1**	**ICU A**	**-**	**-**	**-**	**<1**	**ICU A**	**-**	**-**	**-**
MD 97 at Aspen Hill Rd	EBLT	69	E	25	75	900	70	E	125	225	900
	EBR	52	D	75	125	900	80	F	250	425	900
	EB	54	D	-	-	-	78	E	-	-	-

	WBLTR	99	F	25	50	215	95	F	25	75	215
	NBL	80	E	150	275	250	71	E	150	250	250
	NBTR	14	B	75	200	470	18	B	200	400	470
	NB	34	C	-	-	-	29	C	-	-	-
	SBL	124	F	<25	25	190	120	F	<25	50	190
	SBT	12	B	100	200	475	20	B	150	275	475
	SBR	2	A	<70	<70	70	51	D	<70	<70**	70
	SB	11	B	-	-	-	23	C	-	-	-
	Overall	**28**	**C**	**-**	**-**	**-**	**38**	**D**	**-**	**-**	**-**
MD 97 at Wendy Ln	EBR	9	A	25	50	-	9	A	150	325	-
	WBR	9	A	25	50	-	11	B	50	100	-
	NBUL	11	B	25	50	200	12	B	75	125	200
	SBL	11	B	25	50	150	14	B	100	200	150
	Overall	**<1**	**ICU A**	**-**	**-**	**-**	**2**	**ICU A**	**-**	**-**	**-**
MD 97 at Ralph Rd	EB*	15	B	50	75	-	11	B	50	150	-
	WBLTR	12	B	50	75	370	17	C	50	75	370
	NBL	11	B	<25	25	125	12	B	25	50	125
	SBUL	9	A	25	50	175	11	B	75	150	175
	Overall	**1**	**ICU A**	**-**	**-**	**-**	**1**	**ICU B**	**-**	**-**	**-**
MD 97 at Hewitt Ave	WBL	51	D	100	125	90	49	D	75	125	90
	WBR	42	D	150	300	435	46	D	75	150	435
	WB	47	D	-	-	-	47	D	-	-	-
	NBTR	21	C	225	325	-	35	C	350	500	-
	SBL	57	E	75	150	140	50	D	150	175	140
	SBT	9	A	175	325	350	7	A	150	325	350
	SB	12	B	-	-	-	13	B	-	-	-
	Overall	**19**	**B**	**-**	**-**	**-**	**27**	**C**	**-**	**-**	**-**
MD 185 at Independence St	EBL	70	E	75	150	100	78	E	100	150	100
	EBTR	97	F	250	425	-	69	E	150	300	-
	EB	89	F	-	-	-	73	E	-	-	-
	WB	95	F	50	125	-	115	F	125	225	-
	NBL	88	F	75	125	250	87	F	100	200	250
	NBTR	12	B	75	200	-	20	B	225	375	-

	NB	18	B	-	-	-	23	C	-	-	-
	SBL	112	F	0	<25	270	93	F	<25	25	270
	SBTR	8	A	75	275	1,325	13	B	100	175	1,325
	SB	9	A	-	-	-	14	B	-	-	-
	Overall	**19**	**B**	**-**	**-**	**-**	**28**	**C**	**-**	**-**	**-**
MD 185 at Aspen Hill Rd	EBL	81	F	125	225	300	69	E	225	325	300
	EBTR	72	E	175	300	-	74	E	250	375	-
	EB	76	E	-	-	-	72	E	-	-	-
	WBL	62	E	150	250	410	69	E	175	300	410
	WBTR	79	E	200	300	450	77	E	200	275	450
	WB	74	E	-	-	-	74	E	-	-	-
	NBL	93	F	150	275	350	113	F	125	200	350
	NBT	19	B	75	175	1,325	29	C	200	325	1,325
	NBR	18	B	<25	50	350	24	C	100	225	350
	NB	38	D	-	-	-	38	D	-	-	-
	SBL	125	F	50	150	650	88	F	100	175	325
	SBTR	76	E	550	2,100	650	36	D	275	400	650
	SB	76	E	-	-	-	41	D	-	-	-
	Overall	**66**	**E**	**-**	**-**	**-**	**50**	**D**	**-**	**-**	**-**
MD 185 at Home Depot (MD 185 is NB/SB)	EBL	77.8	E	25	125	600	79	E	25	50	600
	EBR	68	E	75	150	600	67	E	50	75	600
	EB	69	E	-	-	-	68	E	-	-	-
	NBL	102	F	100	175	215	117	F	100	175	215
	NBT	2	A	<25	50	-	1	A	<25	50	-
	NB	14	B	-	-	-	7	A	-	-	-
	SBT	19	B	300	1,500	775	9	A	125	275	775
	SBR	18	B	75	350	775	2	A	<25	75	775
	SB	19	B	-	-	-	9	A	-	-	-
	Overall	**19**	**B**	**-**	**-**	**-**	**11**	**B**	**-**	**-**	**-**

- Indicates that the queue exceeds storage capacity

*****A right-turn lane was provided for the software analysis due to the limitation of cars being capable of making a 2-stage left-turn in Synchro/SimTraffic. The right-turn lane results were taken in this case

**Blocked by the adjacent lane queue

Table 3: Future No-Build Capacity and Queuing Analysis

	Movement	AM Peak					PM Peak				
		Delay (s)	**LOS**	**Average Queue (ft)**	**95th Queue (ft)**	**Storage Length**	**Delay (s)**	**LOS**	**Average Queue (ft)**	**95th Queue (ft)**	**Storage Length**
MD 97 at Bel Pre Rd	EBL	65	E	125	225	180	68	E	175	250	180
	EBT	67	E	125	250	-	79	E	250	700	-
	EBR	<1	A	<265	<265	265	<1	A	<265	<265	265
	EB	37	D	-	-	-	53	D	-	-	-
	WBL	99	F	225	350	280	66	E	100	175	280
	WBT	81	F	250	425	-	70	E	100	175	-
	WBR	<1	A	<150	<150	150	<1	A	<150	<150	150
	WB	67	E	-	-	-	46	D	-	-	-
	NBL	85	F	100	175	455	106	F	175	400	455
	NBT	32	C	150	250	900	52	D	450	700	900
	NBR	122	F	<200	<200	200	11	B	<200	<200	200
	NB	48	D	-	-	-	54	D	-	-	-
	SBL	85	F	25	75	560	89	F	100	175	560
	SBT	66	E	1,525	2,675	-	36	D	200	350	-
	SBR	30	D	<40	<40	40	27	D	<40	<40	40
	SB	65	E	-	-	-	44	D	-	-	-
	Overall	**58**	**E**	**-**	**-**	**-**	**50**	**D**	**-**	**-**	**-**
MD 97 at Crystal Springs Apartment	WB	9	A	25	50	225	10	B	75	125	225
	SB	0	-	100	550	900	0	-	<25	125	900
	Overall	**<1**	**ICU B**	**-**	**-**	**-**	**<1**	**ICU B**	**-**	**-**	**-**
MD 97 at Heathfield Rd/Postgate Terrace	EB	66	E	125	225	350	89	F	100	200	350
	WB	148	F	100	200	250	87	F	75	125	250
	NBL	127	F	100	200	350	15	B	50	100	350
	NBTR	18	B	150	275	850	4	A	175	300	850
	NB	29	C	-	-	-	4	A	-	-	-
	SBL	4	A	<25	25	350	37	D	25	100	350
	SBTR	11	B	225	350	1,025	13	B	250	450	1,025

	SB	11	B	-	-	-	14	B	-	-	-
	Overall	**24**	**C**	**-**	**-**	**-**	**13**	**B**	**-**	**-**	**-**
MD 97 at Home Depot Ent/7-Eleven	EBLT	>150	F	75	175	1,100	>150	F	50	150	1,100
	EBR	14	B	75	125	1,100	10	B	125	250	1,100
	EB	>150	F	-	-	-	>150	F	-	-	-
	WBLT	>150	F	50	100	100	>150	F	25	75	100
	WBR	9	A	25	50	100	9	A	25	75	100
	WB	>150	F	-	-	-	>150	F	-	-	-
	NBL	24	C	25	75	250	15	B	75	125	250
	SBL	11	B	<25	50	235	26	D	<25	25	235
	SB	<1	-	200	675	850	<1	-	<25	125	850
	Overall	**>150**	**ICU D**	**-**	**-**	**-**	**>150**	**ICU C**	**-**	**-**	**-**
MD 97 at MD 185	EBL	89	F	175	250	425	75	E	425	975	425
	EBTR	87	F	150	225	1,350	62	E	275	950	1,350
	EB	88	F	-	-	-	70	E	-	-	-
	WBL	63	E	150	275	280	89	F	125	225	280
	WBLTR	74	E	450	750	-	76	E	250	400	-
	WB	72	E	-	-	-	79	E	-	-	-
	NBL	103	F	75	150	330	121	F	50	150	330
	NBT	35	D	125	225	675	41	D	250	425	675
	NBR	71	E	25	50	280	20	C	175	325**	280
	NB	45	D	-	-	-	38	D	-	-	-
	SBL	32	C	25	125	200	49	D	100	225	200
	SBT	38	D	325	700	475	44	D	225	375	475
	SB	38	D	-	-	-	45	D	-	-	-
	Overall	**59**	**E**	**-**	**-**	**-**	**57**	**E**	**-**	**-**	**-**
MD 97 at Northgate Plaza	EBR	9	A	25	50	250	9	A	25	50	250
	NBUL	10	B	50	100	175	10	B	25	50	175
	SBUL	0	-	25	50	150	0	-	50	100	150
	Overall	**<1**	**ICU A**	**-**	**-**	**-**	**<1**	**ICU A**	**-**	**-**	**-**
MD 97 at Aspen Hill Rd	EBLT	69	E	25	75	900	72	E	150	250	900
	EBR	54	D	125	225	900	81	F	400	600	900
	EB	56	E	-	-	-	79	E	-	-	-

	WBLTR	>150	F	50	200	215	103	F	50	100	215
	NBL	100	F	200	300	250	68	E	175	275	250
	NBTR	12	B	100	250	470	9	A	150	275	470
	NB	39	D	-	-	-	22	C	-	-	-
	SBL	112	F	25	50	190	114	F	25	50	190
	SBT	10	B	100	175	475	17	B	150	250	475
	SBR	1	A	<70	<70	70	32	C	<70	<70**	70
	SB	10	B	-	-	-	19	B	-	-	-
	Overall	**36**	**D**	**-**	**-**	**-**	**33**	**C**	**-**	**-**	**-**
MD 97 at Wendy Ln	EBR	9	A	25	75	-	9	A	225	500	-
	WBR	9	A	25	50	-	9	A	75	125	-
	NBUL	11	B	50	100	200	12	B	100	175	200
	SBL	12	B	25	50	150	22	C	125	225	150
	Overall	**<1**	**ICU A**	**-**	**-**	**-**	**2**	**ICU A**	**-**	**-**	**-**
MD 97 at Ralph Rd	EB*	40	E	50	75	-	17	C	125	400	-
	WBLTR	28	D	50	125	370	127	F	375	700	370
	NBL	12	B	<25	25	125	13	B	25	50	125
	SBUL	11	B	25	75	175	15	C	100	175	175
	Overall	**3**	**ICU A**	**-**	**-**	**-**	**3**	**ICU C**	**-**	**-**	**-**
MD 97 at Hewitt Ave	WBL	86	F	100	125	90	79	E	75	125	90
	WBR	66	E	200	400	435	72	E	100	225	435
	WB	77	E	-	-	-	75	E	-	-	-
	NBTR	12	B	175	300	-	17	B	250	400	-
	SBL	10	B	50	100	140	39	D	125	200	140
	SBT	4	A	150	225	350	5	A	150	300	350
	SB	5	A	-	-	-	10	B	-	-	-
	Overall	**15**	**B**	**-**	**-**	**-**	**19**	**B**	**-**	**-**	**-**
MD 185 at Independence St	EBL	74	E	75	150	100	76	E	100	150	100
	EBTR	69	E	150	300	-	62	E	150	350	-
	EB	71	E	-	-	-	69	E	-	-	-
	WB	>150	F	75	125	-	128	F	175	250	-
	NBL	86	F	75	150	250	88	F	100	200	250
	NBTR	9	A	75	200	-	16	B	175	300	-

	NB	14	B	-	-	-	19	B	-	-	-
	SBL	103	F	<25	25	270	102	F	<25	50	270
	SBTR	5	A	75	125	1,325	9	A	50	125	1,325
	SB	6	A	-	-	-	10	V	-	-	-
	Overall	**17**	**B**	**-**	**-**	**-**	**25**	**C**	**-**	**-**	**-**
MD 185 at Aspen Hill Rd	EBL	97	F	175	300	300	74	E	250	375	300
	EBTR	66	E	175	350	-	71	E	275	475	-
	EB	79	E	-	-	-	72	E	-	-	-
	WBL	58	E	75	175	410	61	E	150	275	410
	WBTR	77	E	125	250	450	74	E	125	225	450
	WB	72	E	-	-	-	69	E	-	-	-
	NBL	89	F	150	250	350	91	F	150	325	350
	NBT	20	C	100	175	1,325	38	D	325	500	1,325
	NBR	7	A	<25	25	350	25	D	100	300	350
	NB	37	D	-	-	-	43	D	-	-	-
	SBL	115	F	25	75	650	87	F	125	500	325
	SBTR	106	F	525	1,875	650	64	E	400	550	650
	SB	107	F	-	-	-	66	E	-	-	-
	Overall	**80**	**F**	**-**	**-**	**-**	**58**	**E**	**-**	**-**	**-**
MD 185 at Home Depot (MD 185 is NB/SB)	EBL	78	E	75	200	600	92	F	575	>600	600
	EBR	57	E	75	150	600	57	E	100	175	600
	EB	63	E	-	-	-	73	E	-	-	-
	NBL	100	F	175	275	215	71	E	150	250	215
	NBT	2	A	75	300	-	12	B	125	350	-
	NB	22	C	-	-	-	17	B	-	-	-
	SBT	14	B	650	1,200	775	12	B	150	275	775
	SBR	5	A	275	1,150**	775	2	A	25	50	775
	SB	13	B	-	-	-	11	B	-	-	-
	Overall	**18**	**B**	**-**	**-**	**-**	**23**	**C**	**-**	**-**	**-**

- Indicates that the queue exceeds storage capacity

*****A right-turn lane was provided for the software analysis due to the limitation of cars being capable of making a 2-stage left-turn in Synchro/SimTraffic. The right-turn lane results were taken in this case

**Blocked by the adjacent lane queue

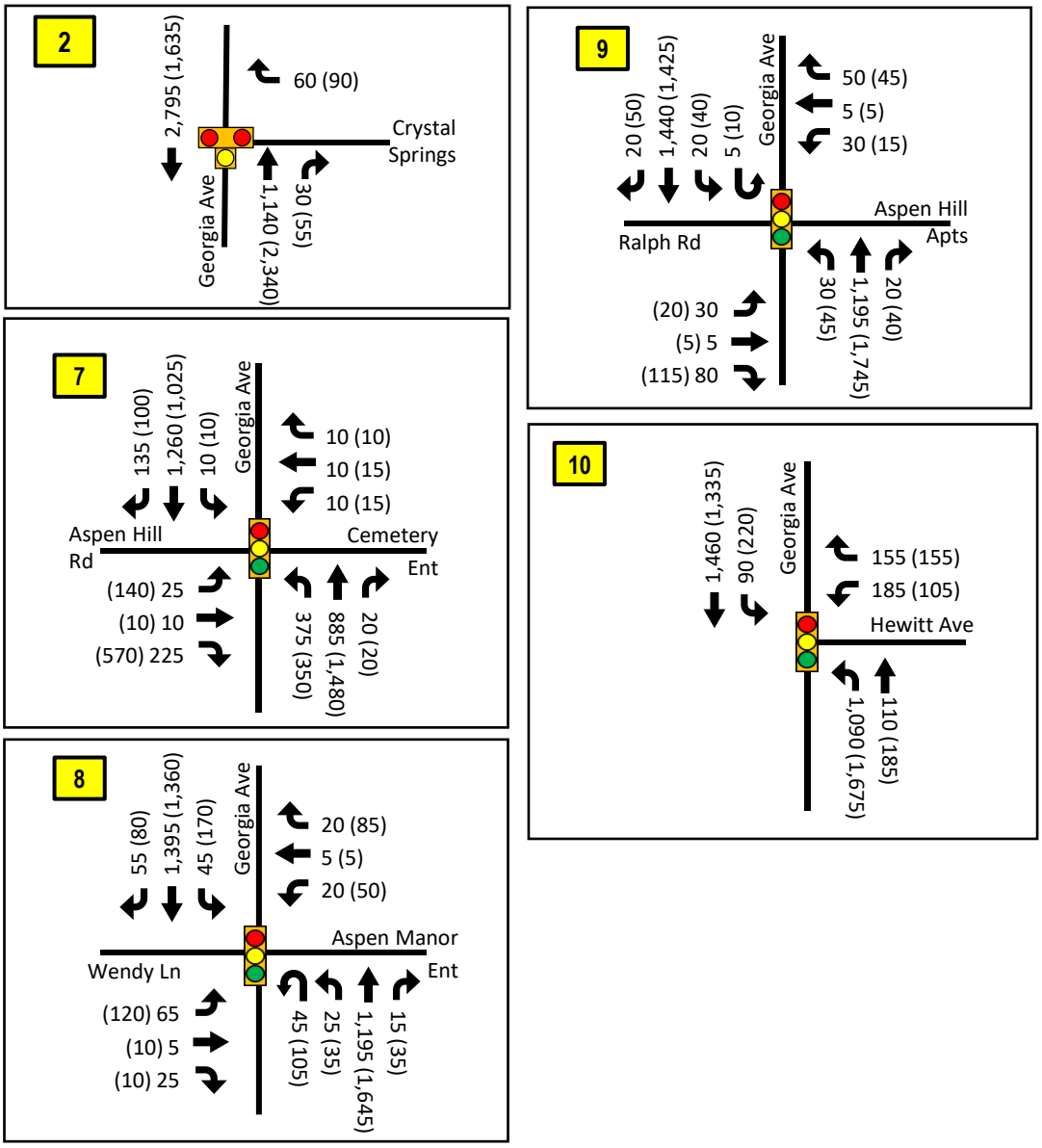


Figure 5: 2040 Build Volumes

Table 4: Future Build Capacity and Queuing Analysis

	Movement	AM Peak					PM Peak				
		Delay (s)	**LOS**	**Average Queue (ft)**	**95th Queue (ft)**	**Storage Length**	**Delay (s)**	**LOS**	**Average Queue (ft)**	**95th Queue (ft)**	**Storage Length**
MD 97 at Bel Pre Rd	EBL	95	F	150	225	180	79	E	175	250	180
	EBT	77	E	150	350	-	79	E	250	525	-
	EBR	85	F	175	250	265	56	E	100	225	265
	EB	85	F	-	-	-	72	E	-	-	-
	WBL	71	E	225	350	280	77	E	100	175	280
	WBT	67	E	275	450	-	73	E	100	200	-
	WBR	53	D	150	225	150	58	E	100	175	150
	WB	65	E	-	-	-	69	E	-	-	-
	NBL	108	F	125	225	455	95	F	125	275	455
	NBT	29	C	125	225	900	78	E	425	625	900
	NBR	29	C	<25	75	200	68	E	150	300	200
	NB	43	D	-	-	-	79	E	-	-	-
	SBL	85	F	25	75	560	97	F	125	200	560
	SBT	68	E	950	1,475	-	40	D	200	325	-
	SBR	30	C	50**	75**	40	29	C	25	75**	40
	SB	67	E	-	-	-	48	D	-	-	-
	Overall	**64**	**E**	**-**	**-**	**-**	**68**	**E**	**-**	**-**	**-**
MD 97 at Crystal Springs Apartment	WB	<1	A	25	50	225	<1	A	50	100	225
	SB	2	A	150	550	900	<1		25	200	900
	Overall	**2**	**A**	**-**	**-**	**-**	**<1**	**A**	**-**	**-**	**-**
MD 97 at Heathfield Rd/Postgate Terrace	EB	74	E	175	300	350	93	F	100	200	350
	WB	>150	F	100	200	250	79	E	50	125	250
	NBL	73	E	100	200	350	90	F	100	200	350
	NBTR	18	B	75	175	850	8	A	175	325	850
	NB	24	C	-	-	-	12	B	-	-	-
	SBL	129	F	25	75	350	93	F	50	100	350
	SBTR	15	B	400	700	1,025	7	A	100	225	1,025

	SB	16	B	-	-	-	8	A	-	-	-
	Overall	**26**	**C**	**-**	**-**	**-**	**15**	**B**	**-**	**-**	**-**
MD 97 at Home Depot Ent/7-Eleven	EBLT	72	E	25	75	1,100	79	E	50	75	1,100
	EBR	81	F	50	125	1,100	76	E	75	150	1,100
	EB	79	E	-	-	-	76	E	-	-	-
	WBLT	73	E	25	75	100	76	E	25	50	100
	WBR	71	E	25	75	100	75	E	25	75	100
	WB	71	E	-	-	-	75	E	-	-	-
	NBL	97	F	25	50	250	75	E	75	100	250
	NBTR	<1	A	50	100	475	6	A	125	200	475
	NB	2	A	-	-	-	8	A	-	-	-
	SBL	114	F	25	100	235	82	F	25	50	235
	SBTR	8	A	225	675	940	5	A	175	300	940
	SB	9	A	-	-	-	6	A	-	-	-
	Overall	**11**	**B**	**-**	**-**	**-**	**12**	**B**	**-**	**-**	**-**
MD 97 at MD 185	EBL	89	F	175	225	425	75	E	350	550	425
	EBTR	86	F	150	225	1,350	60	E	375	575	1,350
	EB	88	F	-	-	-	69	E	-	-	-
	WBL	60	E	100	225	280	79	E	100	200	280
	WBLTR	70	E	350	500	-	72	E	275	425	-
	WB	68	E	-	-	-	74	E	-	-	-
	NBL	117	F	75	175	330	114	F	50	175	330
	NBT	34	C	125	225	675	62	E	325	575	675
	NBR	16	B	25	75	280	46	D	250	375**	280
	NB	39	D	-	-	-	59	E	-	-	-
	SBL	112	F	50	150	200	113	F	125	225	200
	SBT	36	D	325	1,000	475	67	E	275	425	475
	SB	38	D	-	-	-	71	E	-	-	-
	Overall	**56**	**E**	**-**	**-**	**-**	**67**	**E**	**-**	**-**	**-**
MD 97 at Northgate Plaza	EBR	9	A	25	50	250	9	A	25	50	250
	NBUL	10	B	50	100	175	10	A	25	75	175
	SBUL	0	-	25	50	150	0	-	50	100	150
	Overall	**<1**	**ICU A**	**-**	**-**	**-**	**<1**	**ICU A**	**-**	**-**	**-**

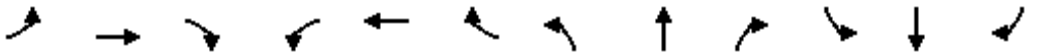
MD 97 at Aspen Hill Rd	EBLT	69	E	25	50	900	71	E	125	250	900
	EBR	54	D	50	100	900	84	F	250	475	900
	EB	56	E	-	-	-	82	F	-	-	-
	WBLTR	>150	F	50	200	215	103	F	50	100	215
	NBL	88	F	175	300	250	82	F	150	275	250
	NBTR	17		100	275	470	30	C	250	425	470
	NB	38	D	-	-	-	40	D	-	-	-
	SBL	111	F	<25	25	190	108	F	<25	50	190
	SBT	9	A	100	175	475	21	C	125	225	475
	SBR	<1	A	25	100**	70	28	C	50	100**	70
	SB	9	A	-	-	-	22	C	-	-	-
	Overall	**35**	**D**	**-**	**-**	**-**	**43**	**D**	**-**	**-**	**-**
MD 97 at Wendy Ln	EB	37	D	50	125	-	37	D	75	125	-
	WBR	34	C	25	75	-	34	C	75	125	-
	NBUL	8	A	25	100	200	15	B	100	225	200
	NBTR	10	B	200	700	650	22	C	100	450	650
	NB	10	A	-	-	-	21	C	-	-	-
	SBL	8	A	25	50	150	34	C	125	250	150
	SBTR	11	B	250	275	525	28	C	300	425	525
	SB	11	B	-	-	-	28	C	-	-	-
	Overall	**12**	**B**	**-**	**-**	**-**	**25**	**C**	**-**	**-**	**-**
MD 97 at Ralph Rd	EB	59	E	100	150	-	59	E	100	200	-
	WB	53	D	75	125	370	48	D	50	125	370
	NBL	9	A	25	100	125	3	A	25	50	125
	NBTR	11	B	200	700	375	3	A	25	100	375
	NB	11	B	-	-	-	3	A	-	-	-
	SBUL	5	A	25	75	175	9	A	25	75	175
	SBTR	9	A	125	250	650	11	B	100	225	650
	SB	9	A	-	-	-	11	B	-	-	-
	Overall	**13**	**B**	**-**	**-**	**-**	**9**	**A**	**-**	**-**	**-**
MD 97 at Hewitt Ave	WBL	51	D	100	125	90	49	D	75	125	90
	WBR	42	D	125	275	435	46	D	75	150	435

	WB	47	D	-	-	-	47	D	-	-	-
	NBTR	22	C	225	350	-	39	D	375	575	-
	SBL	50	D	75	175	140	56	E	150	200	140
	SBT	9	A	200	350	350	7	A	150	350	350
	SB	12	B	-	-	-	14	B	-	-	-
	Overall	**20**	**B**	**-**	**-**	**-**	**29**	**C**	**-**	**-**	**-**
MD 185 at Independence St	EBL	70	E	75	150	100	73	E	100	150	100
	EBTR	98	F	300	525	-	66	E	175	325	-
	EB	89	F	-	-	-	69	E	-	-	-
	WB	129	F	75	150	-	113	F	150	225	-
	NBL	91	F	75	150	250	87	F	125	225	250
	NBTR	14	B	100	225	-	23	C	250	425	-
	NB	19	B	-	-	-	26	C	-	-	-
	SBL	60	E	<25	100	270	94	F	<25	50	270
	SBTR	51	D	600	725	1,325	15	B	125	200	1,325
	SB	51	D	-	-	-	16	B	-	-	-
	Overall	**47**	**D**	**-**	**-**	**-**	**30**	**C**	**-**	**-**	**-**
MD 185 at Aspen Hill Rd	EBL	118	F	175	300	300	80	F	250	375	300
	EBTR	72	E	225	350	-	72	E	300	525	-
	EB	91	F	-	-	-	75	E	-	-	-
	WBL	61	E	100	200	410	66	E	150	250	410
	WBTR	79	E	225	325	450	79	E	200	275	450
	WB	74	E	-	-	-	74	E	-	-	-
	NBL	72	E	125	225	350	110	F	150	250	350
	NBT	22	C	125	250	1,325	31	C	225	375	1,325
	NBR	18	B	25	75	350	26	C	100	250	350
	NB	35	C	-	-	-	40	D	-	-	-
	SBL	115	F	50	100	650	84	F	100	200	325
	SBTR	84	F	425	1,350	650	39	D	375	525	650
	SB	84	F	-	-	-	44	D	-	-	-
	Overall	**70**	**E**	**-**	**-**	**-**	**52**	**D**	**-**	**-**	**-**
MD 185 at Home Depot	EBL	78	E	75	175	600	87	F	500	>600	600
	EBR	53	D	75	150	100	56	E	100	175	100

(MD 185 is NB/SB)	EB	60	E	-	-	-	70	E	-	-	-
	NBL	95	F	200	275	215	86	F	150	250	215
	NBT	2	A	100	350	-	6	A	125	275	-
	NB	21	C	-	-	-	12	B	-	-	-
	SBT	19	B	375	825	775	22	C	175	300	775
	SBR	6	A	175	425**	775	18	B	25	150	775
	SB	18	B	-	-	-	22	C	-	-	-
	Overall	**21**	**C**	**-**	**-**	**-**	**24**	**C**	**-**	**-**	**-**

- Indicates that the queue exceeds storage capacity

**Blocked by the adjacent lane queue



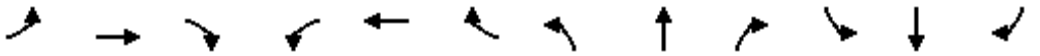
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	165	200	270	315	450	250	195	845	85	130	2000	150
Future Volume (vph)	165	200	270	315	450	250	195	845	85	130	2000	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1600	1900	1900	1750	1900
Total Lost time (s)	9.0	7.0	4.0	9.0	7.0	4.0	8.5	7.0	7.0	8.5	7.0	7.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	*1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	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	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1561	1764	3539	1583	3433	4282	1561	3433	5147	1561
Flt Permitted	0.20	1.00	1.00	0.49	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	368	3539	1561	902	3539	1583	3433	4282	1561	3433	5147	1561
Peak-hour factor, PHF	0.90	0.90	0.90	0.86	0.86	0.86	0.94	0.94	0.94	0.97	0.97	0.97
Adj. Flow (vph)	183	222	300	366	523	291	207	899	90	134	2062	155
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	48	0	0	71
Lane Group Flow (vph)	183	222	300	366	523	291	207	899	42	134	2062	84
Confl. Peds. (#/hr)			7	7			1		1	1		1
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4		Free	8		Free			6			2
Actuated Green, G (s)	48.8	29.0	180.0	55.2	32.2	180.0	15.1	84.4	84.4	12.1	81.4	81.4
Effective Green, g (s)	48.8	29.0	180.0	55.2	32.2	180.0	15.1	84.4	84.4	12.1	81.4	81.4
Actuated g/C Ratio	0.27	0.16	1.00	0.31	0.18	1.00	0.08	0.47	0.47	0.07	0.45	0.45
Clearance Time (s)	9.0	7.0		9.0	7.0		8.5	7.0	7.0	8.5	7.0	7.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	0.2	0.2	3.0	0.2	0.2
Lane Grp Cap (vph)	253	570	1561	386	633	1583	287	2007	731	230	2327	705
v/s Ratio Prot	0.08	0.06		c0.12	0.15		c0.06	0.21		0.04	c0.40	
v/s Ratio Perm	0.12		c0.19	c0.17		0.18			0.03			0.05
v/c Ratio	0.72	0.39	0.19	0.95	0.83	0.18	0.72	0.45	0.06	0.58	0.89	0.12
Uniform Delay, d1	54.3	67.6	0.0	57.6	71.2	0.0	80.4	32.1	26.1	81.5	45.1	28.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.94	6.66	1.00	1.00	1.00
Incremental Delay, d2	9.8	0.4	0.3	32.3	8.7	0.3	8.3	0.7	0.1	3.7	5.4	0.3
Delay (s)	64.1	68.0	0.3	89.9	79.9	0.3	82.7	31.0	174.0	85.2	50.5	28.9
Level of Service	E	E	A	F	E	A	F	C	F	F	D	C
Approach Delay (s)		38.2			63.4			50.7			51.1	
Approach LOS		D			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	52.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	31.5
Intersection Capacity Utilization	103.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	45	1080	25	0	2585
Future Volume (Veh/h)	0	45	1080	25	0	2585
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	49	1174	27	0	2810
Pedestrians	5					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			1091			919
pX, platoon unblocked	0.67	0.92			0.92	
vC, conflicting volume	2129	410			1206	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	131	52			918	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			100	
cM capacity (veh/h)	564	920			676	

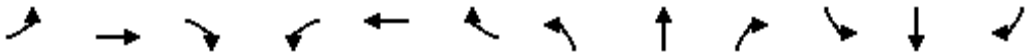
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	49	470	470	262	937	937	937
Volume Left	0	0	0	0	0	0	0
Volume Right	49	0	0	27	0	0	0
cSH	920	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.05	0.28	0.28	0.15	0.55	0.55	0.55
Queue Length 95th (ft)	4	0	0	0	0	0	0
Control Delay (s)	9.1	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	9.1	0.0			0.0		
Approach LOS	A						

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	53.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	5	140	70	5	15	120	1075	15	15	2460	110
Future Volume (vph)	15	5	140	70	5	15	120	1075	15	15	2460	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0			7.0		5.0	6.0		5.0	6.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.88			0.98		1.00	1.00		1.00	0.99	
Flt Protected		1.00			0.96		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1633			1745		1770	5073		1769	5047	
Flt Permitted		0.96			0.40		0.03	1.00		0.22	1.00	
Satd. Flow (perm)		1579			727		60	5073		417	5047	
Peak-hour factor, PHF	0.79	0.79	0.79	0.58	0.58	0.58	0.92	0.92	0.92	0.98	0.98	0.98
Adj. Flow (vph)	19	6	177	121	9	26	130	1168	16	15	2510	112
RTOR Reduction (vph)	0	107	0	0	4	0	0	1	0	0	3	0
Lane Group Flow (vph)	0	95	0	0	152	0	130	1183	0	15	2619	0
Confl. Peds. (#/hr)	10					10	1		2	2		1
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4			8			6			2		
Actuated Green, G (s)		30.0			30.0		137.0	128.4		122.8	119.2	
Effective Green, g (s)		30.0			30.0		137.0	128.4		122.8	119.2	
Actuated g/C Ratio		0.17			0.17		0.76	0.71		0.68	0.66	
Clearance Time (s)		7.0			7.0		5.0	6.0		5.0	6.0	
Vehicle Extension (s)		4.0			3.5		3.0	0.2		3.0	0.2	
Lane Grp Cap (vph)		263			121		167	3618		311	3342	
v/s Ratio Prot							c0.06	0.23		0.00	0.52	
v/s Ratio Perm		0.06			c0.21		c0.54			0.03		
v/c Ratio		0.36			1.25		0.78	0.33		0.05	0.78	
Uniform Delay, d1		66.5			75.0		57.8	9.6		9.2	21.3	
Progression Factor		1.00			1.00		1.01	1.61		0.32	0.30	
Incremental Delay, d2		1.2			165.4		19.0	0.2		0.0	1.1	
Delay (s)		67.7			240.4		77.1	15.8		3.0	7.6	
Level of Service		E			F		E	B		A	A	
Approach Delay (s)		67.7			240.4			21.8			7.6	
Approach LOS		E			F			C			A	

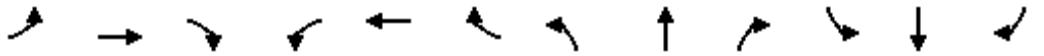
Intersection Summary			
HCM 2000 Control Delay	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	97.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	5	130	15	0	60	15	1135	65	20	2535	115
Future Volume (Veh/h)	15	5	130	15	0	60	15	1135	65	20	2535	115
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.74	0.74	0.74	0.91	0.91	0.91	0.97	0.97	0.97
Hourly flow rate (vph)	16	5	137	20	0	81	16	1247	71	21	2613	119
Pedestrians		14			12							
Lane Width (ft)		12.0			12.0							
Walking Speed (ft/s)		3.5			3.5							
Percent Blockage		1			1							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								553			933	
pX, platoon unblocked	0.68	0.68	0.63	0.68	0.68	0.90	0.63			0.90		
vC, conflicting volume	3257	4090	944	2379	4114	463	2746			1330		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1669	2902	0	370	2938	18	1699			980		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	54	46	80	87	100	91	93			97		
cM capacity (veh/h)	35	9	670	156	9	941	229			623		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	21	137	20	81	16	499	499	320	21	1045	1045	642
Volume Left	16	0	20	0	16	0	0	0	21	0	0	0
Volume Right	0	137	0	81	0	0	0	71	0	0	0	119
cSH	21	670	156	941	229	1700	1700	1700	623	1700	1700	1700
Volume to Capacity	1.01	0.20	0.13	0.09	0.07	0.29	0.29	0.19	0.03	0.61	0.61	0.38
Queue Length 95th (ft)	70	19	11	7	6	0	0	0	3	0	0	0
Control Delay (s)	457.6	11.7	31.5	9.2	21.9	0.0	0.0	0.0	11.0	0.0	0.0	0.0
Lane LOS	F	B	D	A	C				B			
Approach Delay (s)	71.0		13.6		0.3				0.1			
Approach LOS	F		B									

Intersection Summary				
Average Delay	3.0			
Intersection Capacity Utilization	73.0%	ICU Level of Service	C	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	470	255	10	200	750	50	55	695	85	25	1140	0
Future Volume (vph)	470	255	10	200	750	50	55	695	85	25	1140	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1750	1900
Total Lost time (s)	7.5	7.5		7.0	7.0		8.5	7.0	7.0	8.5	7.0	
Lane Util. Factor	0.94	0.95		0.86	0.86		1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	4990	3517		1522	4748		1770	5085	1531	1766	4684	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.32	1.00	
Satd. Flow (perm)	4990	3517		1522	4748		1770	5085	1531	587	4684	
Peak-hour factor, PHF	0.96	0.96	0.96	0.92	0.92	0.92	0.88	0.88	0.88	0.97	0.97	0.97
Adj. Flow (vph)	490	266	10	217	815	54	62	790	97	26	1175	0
RTOR Reduction (vph)	0	2	0	0	4	0	0	0	55	0	0	0
Lane Group Flow (vph)	490	274	0	195	887	0	63	790	42	26	1175	0
Confl. Peds. (#/hr)	10		7	7		10	5		10	10		5
Turn Type	Split	NA		Split	NA		Prot	NA	Perm	pm+pt	NA	
Protected Phases	3	3		4	4		1	6		5	2	
Permitted Phases									6	2		
Actuated Green, G (s)	25.7	25.7		40.5	40.5		12.3	78.6	78.6	76.7	71.5	
Effective Green, g (s)	25.7	25.7		40.5	40.5		12.3	78.6	78.6	76.7	71.5	
Actuated g/C Ratio	0.14	0.14		0.22	0.22		0.07	0.44	0.44	0.43	0.40	
Clearance Time (s)	7.5	7.5		7.0	7.0		8.5	7.0	7.0	8.5	7.0	
Vehicle Extension (s)	4.0	4.0		4.0	4.0		4.0	0.2	0.2	4.0	0.2	
Lane Grp Cap (vph)	712	502		342	1068		120	2220	668	284	1860	
v/s Ratio Prot	c0.10	0.08		0.13	c0.19		c0.04	c0.16		0.00	c0.25	
v/s Ratio Perm									0.03	0.04		
v/c Ratio	0.69	0.55		0.57	0.83		0.53	0.36	0.06	0.09	0.63	
Uniform Delay, d1	73.3	71.7		62.0	66.5		81.0	33.8	29.4	30.2	43.7	
Progression Factor	1.20	1.23		1.00	1.00		1.21	0.91	2.44	0.92	0.70	
Incremental Delay, d2	2.9	1.4		2.7	5.8		5.2	0.4	0.2	0.1	1.1	
Delay (s)	91.0	89.5		64.8	72.3		103.3	31.3	71.7	28.0	31.6	
Level of Service	F	F		E	E		F	C	E	C	C	
Approach Delay (s)		90.5			71.0			40.2			31.5	
Approach LOS		F			E			D			C	

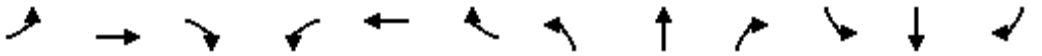
Intersection Summary			
HCM 2000 Control Delay	55.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	30.0
Intersection Capacity Utilization	83.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (veh/h)	0	0	30	0	0	0	40	50	785	0	50	0
Future Volume (Veh/h)	0	0	30	0	0	0	40	50	785	0	50	0
Sign Control		Stop			Stop				Free			
Grade		0%			0%				0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	33	0	0	0	0	54	853	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type									None			
Median storage veh)												
Upstream signal (ft)									547			
pX, platoon unblocked	0.85	0.85	0.81	0.85	0.85	0.93	0.00	0.81			0.00	0.93
vC, conflicting volume	1786	2355	477	1452	2374	284	0	1413			0	853
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	736	1408	0	341	1431	0	0	692			0	581
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			0.0	4.1
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			0.0	2.2
p0 queue free %	100	100	96	100	100	100	0	93			0	100
cM capacity (veh/h)	245	108	879	452	104	1009	0	729			0	921

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	33	54	284	284	284	0	550	550	313
Volume Left	0	54	0	0	0	0	0	0	0
Volume Right	33	0	0	0	0	0	0	0	38
cSH	879	729	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.04	0.07	0.17	0.17	0.17	0.00	0.32	0.32	0.18
Queue Length 95th (ft)	3	6	0	0	0	0	0	0	0
Control Delay (s)	9.3	10.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	B							
Approach Delay (s)	9.3	0.6				0.0			
Approach LOS	A								

Intersection Summary				
Average Delay	0.4			
Intersection Capacity Utilization	43.5%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	1265	35
Future Volume (Veh/h)	1265	35
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	1375	38
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	None	
Median storage veh)		
Upstream signal (ft)	801	
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	5	205	5	5	5	385	850	15	5	1210	120
Future Volume (vph)	20	5	205	5	5	5	385	850	15	5	1210	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.5	6.0		8.0		6.0	7.0		6.0	7.0	7.0
Lane Util. Factor		1.00	1.00		1.00		0.97	0.91		1.00	0.91	1.00
Frpb, ped/bikes		1.00	0.98		1.00		1.00	1.00		1.00	1.00	0.96
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.95		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.96	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1790	1546		1750		3433	5061		1770	5085	1518
Flt Permitted		0.96	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1790	1546		1750		3433	5061		1770	5085	1518
Peak-hour factor, PHF	0.77	0.77	0.77	0.25	0.25	0.25	0.88	0.88	0.88	0.97	0.97	0.97
Adj. Flow (vph)	26	6	266	20	20	20	438	966	17	5	1247	124
RTOR Reduction (vph)	0	0	60	0	10	0	0	1	0	0	0	63
Lane Group Flow (vph)	0	32	206	0	50	0	438	982	0	5	1247	61
Confl. Peds. (#/hr)			29	29			10		21	29		10
Turn Type	Split	NA	pm+ov	Split	NA		Prot	NA		Prot	NA	Perm
Protected Phases	4	4	1	3	3		1	6		5	2	
Permitted Phases			4									2
Actuated Green, G (s)		24.3	53.9		8.8		29.6	116.9		1.5	88.8	88.8
Effective Green, g (s)		24.3	53.9		8.8		29.6	116.9		1.5	88.8	88.8
Actuated g/C Ratio		0.14	0.30		0.05		0.16	0.65		0.01	0.49	0.49
Clearance Time (s)		7.5	6.0		8.0		6.0	7.0		6.0	7.0	7.0
Vehicle Extension (s)		3.0	5.0		5.0		5.0	0.2		3.0	0.2	0.2
Lane Grp Cap (vph)		241	462		85		564	3286		14	2508	748
v/s Ratio Prot		0.02	c0.07		c0.03		c0.13	0.19		0.00	c0.25	
v/s Ratio Perm			0.06									0.04
v/c Ratio		0.13	0.45		0.58		0.78	0.30		0.36	0.50	0.08
Uniform Delay, d1		68.6	51.0		83.8		72.0	13.7		88.8	30.6	24.1
Progression Factor		1.00	1.00		1.00		1.25	0.81		1.24	0.34	0.04
Incremental Delay, d2		0.3	1.4		14.8		7.5	0.2		12.5	0.6	0.2
Delay (s)		68.8	52.4		98.6		97.4	11.4		122.4	11.1	1.0
Level of Service		E	D		F		F	B		F	B	A
Approach Delay (s)		54.2			98.6			37.9			10.6	
Approach LOS		D			F			D			B	

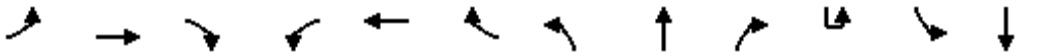
Intersection Summary			
HCM 2000 Control Delay	28.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	28.5
Intersection Capacity Utilization	72.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	0	0	60	0	0	40	40	20	1210	10	40	1330
Future Volume (Veh/h)	0	0	60	0	0	40	40	20	1210	10	40	1330
Sign Control		Stop			Stop				Free			Free
Grade		0%			0%				0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	65	0	0	43	0	22	1315	11	43	1446
Pedestrians		1			5							
Lane Width (ft)		12.0			12.0							
Walking Speed (ft/s)		3.5			3.5							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type									None			None
Median storage veh)												
Upstream signal (ft)									1156			557
pX, platoon unblocked	0.87	0.87	0.84	0.87	0.87	0.93	0.00	0.84			0.93	
vC, conflicting volume	2085	2935	510	2002	2956	449	0	1501			1331	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1220	2194	0	1125	2218	162	0	926			1107	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			2.2	
p0 queue free %	100	100	93	100	100	95	0	96			93	
cM capacity (veh/h)	103	35	909	118	33	794	0	615			582	

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	65	43	22	526	526	274	43	578	578	343
Volume Left	0	0	22	0	0	0	43	0	0	0
Volume Right	65	43	0	0	0	11	0	0	0	54
cSH	909	794	615	1700	1700	1700	582	1700	1700	1700
Volume to Capacity	0.07	0.05	0.04	0.31	0.31	0.16	0.07	0.34	0.34	0.20
Queue Length 95th (ft)	6	4	3	0	0	0	6	0	0	0
Control Delay (s)	9.3	9.8	11.1	0.0	0.0	0.0	11.7	0.0	0.0	0.0
Lane LOS	A	A	B				B			
Approach Delay (s)	9.3	9.8	0.2				0.3			
Approach LOS	A	A								

Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	43.9%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	50
Future Volume (Veh/h)	50
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	54
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	
Direction, Lane #	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	55	0	75	25	0	40	25	1140	15	45	15	1355
Future Volume (Veh/h)	55	0	75	25	0	40	25	1140	15	45	15	1355
Sign Control		Stop			Stop			Free				Free
Grade		0%			0%			0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	60	0	82	27	0	43	27	1239	16	0	16	1473
Pedestrians					12							
Lane Width (ft)					12.0							
Walking Speed (ft/s)					3.5							
Percent Blockage					1							
Right turn flare (veh)			12									
Median type								None				None
Median storage veh)												
Upstream signal (ft)								425				1288
pX, platoon unblocked	0.90	0.90	0.85	0.90	0.90	0.91	0.85			0.00	0.91	
vC, conflicting volume	2023	2834	499	1836	2834	433	1489			0	1267	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1051	1951	0	843	1951	14	975			0	934	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			0.0	4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			0.0	2.2	
p0 queue free %	59	100	91	86	100	95	96			0	98	
cM capacity (veh/h)	146	53	926	196	53	952	601			0	653	

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	142	70	27	496	496	264	16	589	589	311
Volume Left	60	27	27	0	0	0	16	0	0	0
Volume Right	82	43	0	0	0	16	0	0	0	16
cSH	347	382	601	1700	1700	1700	653	1700	1700	1700
Volume to Capacity	0.41	0.18	0.04	0.29	0.29	0.16	0.02	0.35	0.35	0.18
Queue Length 95th (ft)	48	17	4	0	0	0	2	0	0	0
Control Delay (s)	24.6	16.5	11.3	0.0	0.0	0.0	10.7	0.0	0.0	0.0
Lane LOS	C	C	B				B			
Approach Delay (s)	24.6	16.5	0.2				0.1			
Approach LOS	C	C								

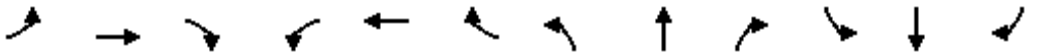
Intersection Summary				
Average Delay	1.7			
Intersection Capacity Utilization	50.4%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	15
Future Volume (Veh/h)	15
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	16
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	
Direction, Lane #	

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	180	150	1030	105	80	1375
Future Volume (vph)	180	150	1030	105	80	1375
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	6.0		6.0	6.0
Lane Util. Factor	1.00	1.00	0.91		1.00	0.91
Frpb, ped/bikes	1.00	0.97	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1537	4994		1770	5085
Flt Permitted	0.95	1.00	1.00		0.17	1.00
Satd. Flow (perm)	1770	1537	4994		318	5085
Peak-hour factor, PHF	0.90	0.90	0.87	0.87	0.92	0.92
Adj. Flow (vph)	200	167	1184	121	87	1495
RTOR Reduction (vph)	0	142	5	0	0	0
Lane Group Flow (vph)	200	25	1300	0	87	1495
Confl. Peds. (#/hr)	4	13		4	4	
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	4		2		1	6
Permitted Phases		4			6	
Actuated Green, G (s)	26.9	26.9	126.9		140.6	140.6
Effective Green, g (s)	26.9	26.9	126.9		140.6	140.6
Actuated g/C Ratio	0.15	0.15	0.71		0.78	0.78
Clearance Time (s)	6.5	6.5	6.0		6.0	6.0
Vehicle Extension (s)	3.0	3.0	0.2		3.0	0.2
Lane Grp Cap (vph)	264	229	3520		310	3971
v/s Ratio Prot	c0.11		0.26		0.01	c0.29
v/s Ratio Perm		0.02			0.21	
v/c Ratio	0.76	0.11	0.37		0.28	0.38
Uniform Delay, d1	73.4	66.2	10.6		5.9	6.1
Progression Factor	1.00	1.00	1.00		1.02	0.59
Incremental Delay, d2	11.7	0.2	0.3		0.5	0.3
Delay (s)	85.2	66.4	10.9		6.4	3.9
Level of Service	F	E	B		A	A
Approach Delay (s)	76.6		10.9			4.0
Approach LOS	E		B			A

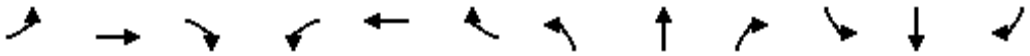
Intersection Summary			
HCM 2000 Control Delay	15.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	18.5
Intersection Capacity Utilization	60.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	10	190	50	10	5	70	860	35	5	2150	115
Future Volume (vph)	90	10	190	50	10	5	70	860	35	5	2150	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0			7.0		5.5	6.0		5.5	6.0	
Lane Util. Factor	1.00	1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.86			0.99		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00			0.96		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1765	1597			1774		1770	5051		1770	5047	
Flt Permitted	0.73	1.00			0.23		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1354	1597			433		1770	5051		1770	5047	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	11	207	54	11	5	76	935	38	5	2337	125
RTOR Reduction (vph)	0	162	0	0	2	0	0	1	0	0	2	0
Lane Group Flow (vph)	98	56	0	0	68	0	76	972	0	5	2460	0
Confl. Peds. (#/hr)	2					2			2	2		
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4			8								
Actuated Green, G (s)	23.1	23.1			23.1		14.0	136.8		1.6	124.4	
Effective Green, g (s)	23.1	23.1			23.1		14.0	136.8		1.6	124.4	
Actuated g/C Ratio	0.13	0.13			0.13		0.08	0.76		0.01	0.69	
Clearance Time (s)	7.0	7.0			7.0		5.5	6.0		5.5	6.0	
Vehicle Extension (s)	4.0	4.0			4.0		4.0	0.2		4.0	0.2	
Lane Grp Cap (vph)	173	204			55		137	3838		15	3488	
v/s Ratio Prot		0.03					c0.04	0.19		0.00	c0.49	
v/s Ratio Perm	0.07				c0.16							
v/c Ratio	0.57	0.27			1.24		0.55	0.25		0.33	0.71	
Uniform Delay, d1	73.7	70.9			78.5		80.0	6.4		88.7	16.7	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.13	0.28	
Incremental Delay, d2	5.1	1.0			199.9		5.9	0.2		7.5	0.5	
Delay (s)	78.8	71.9			278.3		85.9	6.6		107.9	5.2	
Level of Service	E	E			F		F	A		F	A	
Approach Delay (s)		74.0			278.3			12.3			5.4	
Approach LOS		E			F			B			A	

Intersection Summary			
HCM 2000 Control Delay	17.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	18.5
Intersection Capacity Utilization	87.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	170	115	150	145	350	15	245	635	75	40	1975	340
Future Volume (vph)	170	115	150	145	350	15	245	635	75	40	1975	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	7.0		6.5	7.0		5.5	7.0	7.0	5.5	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.97	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.91		1.00	0.99		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1767	3200		1766	3514		3433	5085	1538	1770	4956	
Flt Permitted	0.27	1.00		0.44	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	493	3200		817	3514		3433	5085	1538	1770	4956	
Peak-hour factor, PHF	0.91	0.91	0.91	0.87	0.87	0.87	0.77	0.77	0.77	0.97	0.97	0.97
Adj. Flow (vph)	187	126	165	167	402	17	318	825	97	41	2036	351
RTOR Reduction (vph)	0	138	0	0	2	0	0	0	43	0	12	0
Lane Group Flow (vph)	187	153	0	167	417	0	318	825	54	41	2375	0
Confl. Peds. (#/hr)	11		7	7		11	5		7	7		5
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8					6			
Actuated Green, G (s)	45.9	29.6		45.7	29.5		22.8	99.8	99.8	8.4	85.4	
Effective Green, g (s)	45.9	29.6		45.7	29.5		22.8	99.8	99.8	8.4	85.4	
Actuated g/C Ratio	0.25	0.16		0.25	0.16		0.13	0.55	0.55	0.05	0.47	
Clearance Time (s)	6.5	7.0		6.5	7.0		5.5	7.0	7.0	5.5	7.0	
Vehicle Extension (s)	3.0	4.0		5.0	4.0		5.0	0.2	0.2	3.0	0.2	
Lane Grp Cap (vph)	241	526		292	575		434	2819	852	82	2351	
v/s Ratio Prot	c0.07	0.05		0.05	0.12		c0.09	0.16		0.02	c0.48	
v/s Ratio Perm	c0.13			0.09					0.03			
v/c Ratio	0.78	0.29		0.57	0.73		0.73	0.29	0.06	0.50	1.01	
Uniform Delay, d1	56.6	66.0		55.5	71.4		75.7	21.3	18.5	83.8	47.3	
Progression Factor	1.00	1.00		1.00	1.00		1.18	0.85	0.61	1.02	0.74	
Incremental Delay, d2	14.4	0.4		4.3	4.8		7.5	0.3	0.1	3.3	18.1	
Delay (s)	71.0	66.4		59.8	76.3		96.7	18.3	11.5	88.6	52.9	
Level of Service	E	E		E	E		F	B	B	F	D	
Approach Delay (s)		68.2			71.6			37.9			53.5	
Approach LOS		E			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	53.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	26.0
Intersection Capacity Utilization	102.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Intersection has too many lanes per leg.

HCM All-Way analysis is limited to two lanes per leg.

Channelized right turn lanes are not counted.

Intersection Sign configuration not allowed in HCM analysis.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑		
Traffic Volume (vph)	230	0	0	510	0	0
Future Volume (vph)	230	0	0	510	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0			6.0		
Lane Util. Factor	0.95			0.95		
Frt	1.00			1.00		
Flt Protected	1.00			1.00		
Satd. Flow (prot)	3539			3539		
Flt Permitted	1.00			1.00		
Satd. Flow (perm)	3539			3539		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	250	0	0	554	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	250	0	0	554	0	0
Turn Type	NA			NA		
Protected Phases	2			6		
Permitted Phases						
Actuated Green, G (s)	11.4			11.4		
Effective Green, g (s)	11.4			11.4		
Actuated g/C Ratio	0.48			0.48		
Clearance Time (s)	6.0			6.0		
Vehicle Extension (s)	3.0			3.0		
Lane Grp Cap (vph)	1681			1681		
v/s Ratio Prot	0.07			c0.16		
v/s Ratio Perm						
v/c Ratio	0.15			0.33		
Uniform Delay, d1	3.6			3.9		
Progression Factor	1.00			1.00		
Incremental Delay, d2	0.0			0.1		
Delay (s)	3.6			4.0		
Level of Service	A			A		
Approach Delay (s)	3.6			4.0	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM 2000 Control Delay	3.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	24.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	19.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Traffic Volume (veh/h)	0	1215	1165	1515	0	0
Future Volume (Veh/h)	0	1215	1165	1515	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	1321	1266	1647	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		400	1086			
pX, platoon unblocked	0.63				0.67	0.63
vC, conflicting volume	2913				1596	633
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2861				0	0
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	81				687	680

Direction, Lane #	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	330	330	330	330	844	971	1098
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	549	1098
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.19	0.19	0.19	0.19	0.50	0.57	0.65
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS							
Approach Delay (s)	0.0				0.0		
Approach LOS							

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	65.9%	ICU Level of Service	C
Analysis Period (min)	15		

Arterial Level of Service: NB MD 97

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Hewitt Ave.	110	12.9	55.9	0.4	27
Aspen Hill Apt	109	2.2	10.6	0.1	27
Aspen Manor	108	1.1	15.4	0.1	32
Cemetery	107	8.5	19.6	0.1	19
	106	1.2	11.7	0.1	32
MD 185	105	34.3	49.0	0.2	11
	3000	2.5	9.2	0.1	30
7-11	104	0.6	3.6	0.0	29
Postgate Terr	103	9.0	23.1	0.2	27
Crystal Springs Apt	102	2.7	19.3	0.2	39
Bel Pre Rd	101	35.2	48.6	0.2	13
Total		110.2	266.0	1.7	23

Arterial Level of Service: SB MD 97

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Bel Pre Rd	101	93.8	180.1	1.1	23
Crystal Springs Apt	102	11.6	25.5	0.2	25
Heathfield Rd	103	13.1	29.6	0.2	25
Home Depot Ent.	104	12.1	26.0	0.2	24
	3000	2.4	4.7	0.0	22
MD 185	105	43.8	49.6	0.1	6
Northgate Plaza	106	3.7	19.5	0.2	28
Aspen Hill Rd	107	9.1	19.9	0.1	19
Wendy Ln	108	1.8	12.6	0.1	30
Ralph Rd	109	1.2	15.9	0.1	31
Hewitt Ave.	110	8.2	16.5	0.1	18
Total		200.9	399.9	2.4	21

Arterial Level of Service: NB MD 185

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Independence St	201	7.1	43.3	0.5	38
Aspen Hill Rd	202	18.7	38.6	0.3	26
Home Depot Ent	203	2.6	13.2	0.1	36
	1000	1.0	7.4	0.1	38
MD 97	105	74.9	80.4	0.1	4
Total		104.2	183.0	1.0	20

Arterial Level of Service: SB MD 185

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
MD 97	105	72.0	87.0	0.2	8
	1000	7.1	13.8	0.1	22
Home Depot Ent	203	6.9	14.1	0.1	20
Aspen Hill Rd	202	62.4	73.2	0.1	7
Independence St	201	12.0	34.1	0.3	29
Total		160.4	222.1	0.8	13

Intersection: 23: Bend

Movement	WB	WB
Directions Served	T	
Maximum Queue (ft)	361	330
Average Queue (ft)	138	60
95th Queue (ft)	371	245
Link Distance (ft)	361	361
Upstream Blk Time (%)	0	0
Queuing Penalty (veh)	1	0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 101: MD 97 & Bel Pre Rd

Movement	EB	EB	EB	EB	B23	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	R	T	L	T	T	R	L	L	T
Maximum Queue (ft)	203	306	256	265	40	305	572	562	175	195	232	244
Average Queue (ft)	119	88	87	37	1	235	254	256	105	98	104	130
95th Queue (ft)	205	192	172	175	22	345	480	486	243	172	188	220
Link Distance (ft)		361			2205		2748	2748				808
Upstream Blk Time (%)		0										
Queuing Penalty (veh)		0										
Storage Bay Dist (ft)	180		265	265		280			150	455	455	
Storage Blk Time (%)	4	0	0	0		9	5	27	1			
Queuing Penalty (veh)	21	1	0	1		22	17	70	1			

Intersection: 101: MD 97 & Bel Pre Rd

Movement	NB	NB	NB	SB	SB	SB	SB	SB	SB
Directions Served	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	256	298	223	120	584	950	977	990	65
Average Queue (ft)	152	158	14	44	205	630	666	683	54
95th Queue (ft)	235	252	105	99	603	1030	1054	1078	83
Link Distance (ft)	808	808				5872	5872	5872	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)			200	560	560				40
Storage Blk Time (%)		4	0		0	18		50	2
Queuing Penalty (veh)		3	0		0	24		75	15

Intersection: 102: MD 97 & Crystal Springs Apt

Movement	WB	NB	SB	SB
Directions Served	R	T	T	T
Maximum Queue (ft)	56	8	659	824
Average Queue (ft)	24	0	86	86
95th Queue (ft)	47	6	493	497
Link Distance (ft)	234	1036	808	808
Upstream Blk Time (%)			0	0
Queuing Penalty (veh)			1	2
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 103: MD 97 & Heathfield Rd/Postgate Terr

Movement	EB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LTR	LTR	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	359	273	210	205	208	262	28	240	260	257
Average Queue (ft)	204	122	96	77	87	114	7	100	114	117
95th Queue (ft)	397	253	189	191	213	259	23	236	256	260
Link Distance (ft)	346	247		860	860	860		1036	1036	1036
Upstream Blk Time (%)	20	8								
Queuing Penalty (veh)	0	0								
Storage Bay Dist (ft)			350				350			
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 104: MD 97 & Home Depot Ent./7-11

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	LT	R	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	89	101	61	76	48	4	6	23	44	210	528	278
Average Queue (ft)	33	50	17	30	13	0	0	1	11	14	40	27
95th Queue (ft)	78	83	50	59	35	3	4	11	34	136	241	152
Link Distance (ft)	1151	1151	213	213	75	75	75	75		860	860	860
Upstream Blk Time (%)					0							
Queuing Penalty (veh)					0							
Storage Bay Dist (ft)									235			
Storage Blk Time (%)										0		
Queuing Penalty (veh)										0		

Intersection: 105: MD 97 & MD 185

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	L	T	TR	L	LT	T	TR	L	T	T
Maximum Queue (ft)	230	258	273	244	229	241	305	532	490	130	238	227
Average Queue (ft)	133	148	163	125	115	107	227	291	317	59	124	118
95th Queue (ft)	202	224	239	198	192	226	328	439	451	111	203	196
Link Distance (ft)		261	261	261				968	968		682	682
Upstream Blk Time (%)	0	1	2	0	0							
Queuing Penalty (veh)	0	2	4	1	0							
Storage Bay Dist (ft)	425				300	280	280			330		
Storage Blk Time (%)	0	1		0	0	0	1	9			0	
Queuing Penalty (veh)	0	1		0	0	0	2	41			0	

Intersection: 105: MD 97 & MD 185

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	T
Maximum Queue (ft)	233	130	225	386	370	200
Average Queue (ft)	126	26	31	276	248	175
95th Queue (ft)	203	78	118	402	352	236
Link Distance (ft)	682			260	260	
Upstream Blk Time (%)				15	10	
Queuing Penalty (veh)				86	61	
Storage Bay Dist (ft)		280	200			175
Storage Blk Time (%)	0	0	0	27	25	14
Queuing Penalty (veh)	0	0	0	7	97	55

Intersection: 106: MD 97 & Northgate Plaza

Movement	EB	NB	SB	SB
Directions Served	R	UL	UL	T
Maximum Queue (ft)	76	121	94	11
Average Queue (ft)	17	40	22	0
95th Queue (ft)	47	93	61	8
Link Distance (ft)	253			682
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		175	150	
Storage Blk Time (%)			0	
Queuing Penalty (veh)			0	

Intersection: 107: MD 97 & Aspen Hill Rd/Cemetery

Movement	EB	EB	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	LTR	L	L	T	T	TR	L	T	T	T
Maximum Queue (ft)	84	216	83	283	317	275	159	154	41	192	222	240
Average Queue (ft)	23	97	14	185	200	81	57	64	7	67	71	86
95th Queue (ft)	60	181	55	263	280	187	123	131	26	142	154	179
Link Distance (ft)	894	894	216			470	470	470		472	472	472
Upstream Blk Time (%)						0						
Queuing Penalty (veh)						0						
Storage Bay Dist (ft)				250	250				190			
Storage Blk Time (%)				2	3	1				0		17
Queuing Penalty (veh)				5	9	2				0		21

Intersection: 107: MD 97 & Aspen Hill Rd/Cemetery

Movement	SB
Directions Served	R
Maximum Queue (ft)	95
Average Queue (ft)	19
95th Queue (ft)	80
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	70
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 108: MD 97 & Wendy Ln/Aspen Manor

Movement	EB	WB	NB	SB	SB	SB
Directions Served	R	R	UL	L	T	TR
Maximum Queue (ft)	85	55	82	57	13	15
Average Queue (ft)	27	18	27	15	0	1
95th Queue (ft)	59	40	63	40	8	8
Link Distance (ft)	1228	342			470	470
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			200	150		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 109: MD 97 & Ralph Rd/Aspen Hill Apt

Movement	EB	EB	WB	NB	NB	SB	SB
Directions Served	LT	R	LTR	L	TR	UL	TR
Maximum Queue (ft)	134	94	125	47	1	102	5
Average Queue (ft)	54	40	45	9	0	28	0
95th Queue (ft)	111	75	93	29	1	70	3
Link Distance (ft)	1188		370		352		650
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		300		125		175	
Storage Blk Time (%)						0	
Queuing Penalty (veh)						0	

Intersection: 110: MD 97 & Hewitt Ave.

Movement	WB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	R	T	T	TR	L	T	T	T
Maximum Queue (ft)	115	453	350	282	210	126	198	227	249
Average Queue (ft)	105	204	153	113	83	47	88	123	135
95th Queue (ft)	127	408	280	235	177	92	165	211	229
Link Distance (ft)		438	2204	2204	2204		352	352	352
Upstream Blk Time (%)		1							
Queuing Penalty (veh)		0							
Storage Bay Dist (ft)	90					140			
Storage Blk Time (%)	45	2					2		
Queuing Penalty (veh)	67	3					1		

Intersection: 201: MD 185 & Independence St

Movement	EB	EB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	LTR	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	124	266	155	149	179	133	110	0	351	386	161
Average Queue (ft)	78	122	62	57	60	32	27	0	44	67	62
95th Queue (ft)	138	235	128	122	157	95	83	0	233	258	142
Link Distance (ft)		872	167		2375	2375	2375		1317	1317	1317
Upstream Blk Time (%)			0						0	0	
Queuing Penalty (veh)			0						0	0	
Storage Bay Dist (ft)	100			250				270			
Storage Blk Time (%)	12	14									
Queuing Penalty (veh)	24	13									

Intersection: 202: MD 185 & Aspen Hill Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	NB
Directions Served	L	T	TR	L	T	TR	L	L	T	T	T	R
Maximum Queue (ft)	268	221	293	295	343	349	243	284	203	196	156	31
Average Queue (ft)	122	52	150	80	108	124	102	119	64	61	46	2
95th Queue (ft)	219	135	266	201	257	266	181	205	146	142	115	16
Link Distance (ft)		1834	1834		450	450			1317	1317	1317	
Upstream Blk Time (%)				0	0	0						
Queuing Penalty (veh)				0	0	0						
Storage Bay Dist (ft)	300			410			350	350				350
Storage Blk Time (%)	0	0		0	0		0	0				
Queuing Penalty (veh)	0	0		0	0		0	0				

Intersection: 202: MD 185 & Aspen Hill Rd

Movement	SB	SB	SB	SB
Directions Served	L	T	T	TR
Maximum Queue (ft)	114	613	655	683
Average Queue (ft)	29	478	535	567
95th Queue (ft)	78	706	739	773
Link Distance (ft)	618	618	618	618
Upstream Blk Time (%)		3	9	25
Queuing Penalty (veh)		17	54	148
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 203: MD 185 & Home Depot Ent

Movement	EB	EB	NB	NB	SB	SB	SB	SB
Directions Served	L	R	L	T	T	T	T	R
Maximum Queue (ft)	101	130	218	148	256	446	515	332
Average Queue (ft)	35	37	88	7	61	141	184	82
95th Queue (ft)	89	113	178	77	239	426	548	362
Link Distance (ft)	604	604		618	360	360	360	360
Upstream Blk Time (%)					0	2	10	3
Queuing Penalty (veh)					0	11	44	14
Storage Bay Dist (ft)			215					
Storage Blk Time (%)			2	0				
Queuing Penalty (veh)			4	0				

Intersection: 1000: MD 185

Movement	WB	WB	SB	SB
Directions Served	T	T	R	R
Maximum Queue (ft)	11	31	501	139
Average Queue (ft)	0	2	93	51
95th Queue (ft)	8	17	420	295
Link Distance (ft)	261	261	474	474
Upstream Blk Time (%)			4	3
Queuing Penalty (veh)			30	20
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2000: HAWK & Aspen Hill Rd

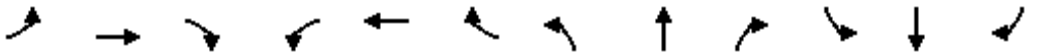
Movement	EB	EB	WB	WB
Directions Served	T	T	T	T
Maximum Queue (ft)	43	85	147	164
Average Queue (ft)	3	14	14	18
95th Queue (ft)	20	57	77	81
Link Distance (ft)	450	450	894	894
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3000: MD 97

Movement	SB	SB	SB
Directions Served	T	TR	R
Maximum Queue (ft)	120	142	108
Average Queue (ft)	19	35	19
95th Queue (ft)	84	120	78
Link Distance (ft)	75	75	75
Upstream Blk Time (%)	2	5	2
Queuing Penalty (veh)	20	48	15
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 1184



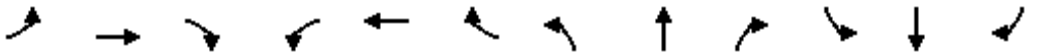
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	385	235	145	220	180	215	1785	200	245	1140	120
Future Volume (vph)	210	385	235	145	220	180	215	1785	200	245	1140	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1600	1900	1900	1750	1900
Total Lost time (s)	9.0	7.0	4.0	9.0	7.0	4.0	8.5	7.0	7.0	8.5	7.0	7.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	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	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1562	1768	3539	1583	3433	4282	1583	3433	4684	1583
Flt Permitted	0.47	1.00	1.00	0.26	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	880	3539	1562	485	3539	1583	3433	4282	1583	3433	4684	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.97	0.97	0.97	0.96	0.96	0.96
Adj. Flow (vph)	231	423	258	159	242	198	222	1840	206	255	1188	125
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	68	0	0	64
Lane Group Flow (vph)	231	423	258	159	242	198	222	1840	138	255	1188	61
Confl. Peds. (#/hr)			5	5								
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4		Free	8		Free			6			2
Actuated Green, G (s)	46.3	28.3	180.0	43.5	26.9	180.0	16.3	86.0	86.0	17.6	87.3	87.3
Effective Green, g (s)	46.3	28.3	180.0	43.5	26.9	180.0	16.3	86.0	86.0	17.6	87.3	87.3
Actuated g/C Ratio	0.26	0.16	1.00	0.24	0.15	1.00	0.09	0.48	0.48	0.10	0.48	0.48
Clearance Time (s)	9.0	7.0		9.0	7.0		8.5	7.0	7.0	8.5	7.0	7.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	0.2	0.2	3.0	0.2	0.2
Lane Grp Cap (vph)	315	556	1562	235	528	1583	310	2045	756	335	2271	767
v/s Ratio Prot	c0.07	c0.12		0.06	0.07		0.06	c0.43		c0.07	0.25	
v/s Ratio Perm	0.12		c0.17	0.10		0.13			0.09			0.04
v/c Ratio	0.73	0.76	0.17	0.68	0.46	0.13	0.72	0.90	0.18	0.76	0.52	0.08
Uniform Delay, d1	57.9	72.6	0.0	57.4	69.9	0.0	79.6	43.1	26.9	79.2	32.0	24.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.29	0.63	0.34	1.00	1.00	1.00
Incremental Delay, d2	8.5	6.1	0.2	7.5	0.6	0.2	6.6	6.0	0.5	9.8	0.9	0.2
Delay (s)	66.4	78.7	0.2	64.9	70.5	0.2	109.2	33.2	9.5	88.9	32.9	25.0
Level of Service	E	E	A	E	E	A	F	C	A	F	C	C
Approach Delay (s)		53.4			45.8			38.5			41.3	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	42.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	31.5
Intersection Capacity Utilization	95.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	80	2120	50	0	1520
Future Volume (Veh/h)	0	80	2120	50	0	1520
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	87	2304	54	0	1652
Pedestrians	9					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	1					
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			1091			919
pX, platoon unblocked	0.89	0.81			0.81	
vC, conflicting volume	2891	804			2367	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1429	0			1857	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	90			100	
cM capacity (veh/h)	111	868			258	

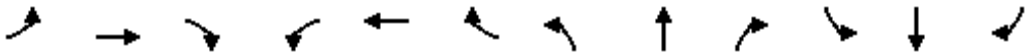
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	87	922	922	515	551	551	551
Volume Left	0	0	0	0	0	0	0
Volume Right	87	0	0	54	0	0	0
cSH	868	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.10	0.54	0.54	0.30	0.32	0.32	0.32
Queue Length 95th (ft)	8	0	0	0	0	0	0
Control Delay (s)	9.6	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	9.6	0.0			0.0		
Approach LOS	A						

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	53.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	5	85	35	5	20	110	2120	35	30	1445	45
Future Volume (vph)	30	5	85	35	5	20	110	2120	35	30	1445	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0			7.0		5.0	6.0		5.0	6.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes		0.99			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.90			0.95		1.00	1.00		1.00	1.00	
Flt Protected		0.99			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1641			1710		1770	5066		1770	5058	
Flt Permitted		0.89			0.50		0.14	1.00		0.06	1.00	
Satd. Flow (perm)		1476			874		255	5066		109	5058	
Peak-hour factor, PHF	0.78	0.78	0.78	0.78	0.78	0.78	0.96	0.96	0.96	0.97	0.97	0.97
Adj. Flow (vph)	38	6	109	45	6	26	115	2208	36	31	1490	46
RTOR Reduction (vph)	0	53	0	0	11	0	0	1	0	0	1	0
Lane Group Flow (vph)	0	100	0	0	66	0	115	2243	0	31	1535	0
Confl. Peds. (#/hr)	10		1	1		10	2		14	14		2
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4			8			6			2		
Actuated Green, G (s)		18.7			18.7		146.1	138.3		140.5	135.5	
Effective Green, g (s)		18.7			18.7		146.1	138.3		140.5	135.5	
Actuated g/C Ratio		0.10			0.10		0.81	0.77		0.78	0.75	
Clearance Time (s)		7.0			7.0		5.0	6.0		5.0	6.0	
Vehicle Extension (s)		4.0			3.5		3.0	0.2		3.0	0.2	
Lane Grp Cap (vph)		153			90		272	3892		131	3807	
v/s Ratio Prot							c0.02	c0.44		0.01	0.30	
v/s Ratio Perm		0.07			c0.08		0.32			0.18		
v/c Ratio		0.65			0.74		0.42	0.58		0.24	0.40	
Uniform Delay, d1		77.5			78.3		4.7	8.7		6.9	7.9	
Progression Factor		1.00			1.00		0.89	0.17		2.51	1.13	
Incremental Delay, d2		10.6			27.3		0.7	0.4		0.8	0.3	
Delay (s)		88.2			105.6		5.0	1.9		18.1	9.2	
Level of Service		F			F		A	A		B	A	
Approach Delay (s)		88.2			105.6			2.0			9.4	
Approach LOS		F			F			A			A	

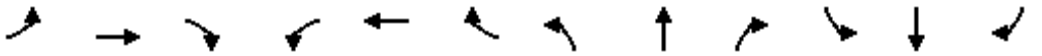
Intersection Summary			
HCM 2000 Control Delay	9.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	73.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	0	155	10	0	45	80	2190	30	15	1455	95
Future Volume (Veh/h)	30	0	155	10	0	45	80	2190	30	15	1455	95
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.88	0.88	0.88	0.81	0.81	0.81	0.93	0.93	0.93	0.96	0.96	0.96
Hourly flow rate (vph)	34	0	176	12	0	56	86	2355	32	16	1516	99
Pedestrians		2			23							
Lane Width (ft)		12.0			12.0							
Walking Speed (ft/s)		3.5			3.5							
Percent Blockage		0			2							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								553			933	
pX, platoon unblocked	0.85	0.85	0.90	0.85	0.85	0.80	0.90			0.80		
vC, conflicting volume	2612	4182	557	3279	4215	824	1617			2410		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1472	3311	104	2254	3351	0	1286			1893		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	40	100	79	0	100	93	82			93		
cM capacity (veh/h)	57	5	833	12	5	850	479			244		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	34	176	12	56	86	942	942	503	16	606	606	402
Volume Left	34	0	12	0	86	0	0	0	16	0	0	0
Volume Right	0	176	0	56	0	0	0	32	0	0	0	99
cSH	57	833	12	850	479	1700	1700	1700	244	1700	1700	1700
Volume to Capacity	0.60	0.21	1.00	0.07	0.18	0.55	0.55	0.30	0.07	0.36	0.36	0.24
Queue Length 95th (ft)	61	20	53	5	16	0	0	0	5	0	0	0
Control Delay (s)	137.5	10.5	674.4	9.5	14.1	0.0	0.0	0.0	20.8	0.0	0.0	0.0
Lane LOS	F	B	F	A	B				C			
Approach Delay (s)	31.0		126.9		0.5				0.2			
Approach LOS	D		F									

Intersection Summary				
Average Delay	3.8			
Intersection Capacity Utilization	64.7%	ICU Level of Service	C	
Analysis Period (min)	15			



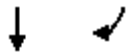
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1080	600	25	290	360	85	30	1135	400	80	845	0
Future Volume (vph)	1080	600	25	290	360	85	30	1135	400	80	845	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1750	1900
Total Lost time (s)	7.0	7.0		7.0	7.0		8.5	7.0	7.0	8.5	7.0	
Lane Util. Factor	0.94	0.95		0.86	0.86		1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.93	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	0.99		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	4990	3510		1522	4629		1770	5085	1470	1770	4684	
Flt Permitted	0.95	1.00		0.95	0.99		0.95	1.00	1.00	0.10	1.00	
Satd. Flow (perm)	4990	3510		1522	4629		1770	5085	1470	193	4684	
Peak-hour factor, PHF	0.93	0.93	0.93	0.91	0.91	0.91	0.96	0.96	0.96	0.94	0.94	0.94
Adj. Flow (vph)	1161	645	27	319	396	93	31	1182	417	85	899	0
RTOR Reduction (vph)	0	1	0	0	13	0	0	0	225	0	0	0
Lane Group Flow (vph)	1161	671	0	201	594	0	31	1182	192	85	899	0
Confl. Peds. (#/hr)	11		26	26		11	8		28	28		8
Turn Type	Split	NA		Split	NA		Prot	NA	Perm	pm+pt	NA	
Protected Phases	3	3		4	4		1	6		5	2	
Permitted Phases									6	2		
Actuated Green, G (s)	49.4	49.4		30.4	30.4		8.2	59.7	59.7	73.5	62.5	
Effective Green, g (s)	49.4	49.4		30.4	30.4		8.2	59.7	59.7	73.5	62.5	
Actuated g/C Ratio	0.27	0.27		0.17	0.17		0.05	0.33	0.33	0.41	0.35	
Clearance Time (s)	7.0	7.0		7.0	7.0		8.5	7.0	7.0	8.5	7.0	
Vehicle Extension (s)	4.0	4.0		4.0	4.0		4.0	0.2	0.2	4.0	0.2	
Lane Grp Cap (vph)	1369	963		257	781		80	1686	487	175	1626	
v/s Ratio Prot	c0.23	0.19		c0.13	0.13		0.02	c0.23		c0.03	c0.19	
v/s Ratio Perm									0.13	0.17		
v/c Ratio	0.85	0.70		0.78	0.76		0.39	0.70	0.40	0.49	0.55	
Uniform Delay, d1	61.8	58.6		71.6	71.3		83.5	52.4	46.3	37.1	47.5	
Progression Factor	0.80	0.80		1.00	1.00		1.37	0.73	0.47	0.99	0.87	
Incremental Delay, d2	4.1	1.8		15.1	4.7		3.9	2.3	2.2	2.7	1.3	
Delay (s)	53.7	48.8		86.7	76.0		118.4	40.3	24.1	39.4	42.4	
Level of Service	D	D		F	E		F	D	C	D	D	
Approach Delay (s)		51.9			78.6			37.7			42.1	
Approach LOS		D			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	49.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	29.5
Intersection Capacity Utilization	92.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

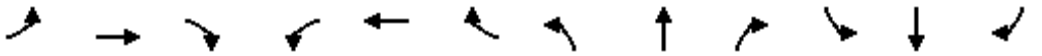
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (veh/h)	0	0	45	0	0	0	10	40	1500	0	65	0
Future Volume (Veh/h)	0	0	45	0	0	0	10	40	1500	0	65	0
Sign Control		Stop			Stop				Free			
Grade		0%			0%				0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	49	0	0	0	0	43	1630	0	0	0
Pedestrians		8										
Lane Width (ft)		12.0										
Walking Speed (ft/s)		3.5										
Percent Blockage		1										
Right turn flare (veh)												
Median type									None			
Median storage veh)												
Upstream signal (ft)									547			
pX, platoon unblocked	0.92	0.92	0.86	0.92	0.92	0.85	0.00	0.86			0.00	0.85
vC, conflicting volume	1787	2874	419	2135	2915	543	0	1199			0	1630
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	524	1707	0	902	1752	0	0	665			0	1120
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			0.0	4.1
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			0.0	2.2
p0 queue free %	100	100	95	100	100	100	0	95			0	100
cM capacity (veh/h)	379	78	926	193	73	921	0	786			0	526

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	49	43	543	543	543	0	444	444	304
Volume Left	0	43	0	0	0	0	0	0	0
Volume Right	49	0	0	0	0	0	0	0	82
cSH	926	786	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.05	0.05	0.32	0.32	0.32	0.00	0.26	0.26	0.18
Queue Length 95th (ft)	4	4	0	0	0	0	0	0	0
Control Delay (s)	9.1	9.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	A							
Approach Delay (s)	9.1	0.3				0.0			
Approach LOS	A								

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	39.2%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	1020	75
Future Volume (Veh/h)	1020	75
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	1109	82
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	None	
Median storage veh)		
Upstream signal (ft)	801	
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	5	555	10	10	5	400	1415	15	5	975	95
Future Volume (vph)	130	5	555	10	10	5	400	1415	15	5	975	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.5	6.0		8.0		6.0	7.0		6.0	7.0	7.0
Lane Util. Factor		1.00	1.00		1.00		0.97	0.91		1.00	0.91	1.00
Frpb, ped/bikes		1.00	0.98		1.00		1.00	1.00		1.00	1.00	0.96
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.97		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1777	1546		1777		3433	5070		1770	5085	1518
Flt Permitted		0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1777	1546		1777		3433	5070		1770	5085	1518
Peak-hour factor, PHF	0.96	0.96	0.96	0.57	0.57	0.57	0.96	0.96	0.96	0.94	0.94	0.94
Adj. Flow (vph)	135	5	578	18	18	9	417	1474	16	5	1037	101
RTOR Reduction (vph)	0	0	74	0	5	0	0	0	0	0	0	56
Lane Group Flow (vph)	0	140	504	0	40	0	417	1490	0	5	1037	45
Confl. Peds. (#/hr)			29	29			10		21	29		10
Turn Type	Split	NA	pm+ov	Split	NA		Prot	NA		Prot	NA	Perm
Protected Phases	4	4	1	3	3		1	6		5	2	
Permitted Phases			4									2
Actuated Green, G (s)		28.7	63.0		8.0		34.3	113.3		1.5	80.5	80.5
Effective Green, g (s)		28.7	63.0		8.0		34.3	113.3		1.5	80.5	80.5
Actuated g/C Ratio		0.16	0.35		0.04		0.19	0.63		0.01	0.45	0.45
Clearance Time (s)		7.5	6.0		8.0		6.0	7.0		6.0	7.0	7.0
Vehicle Extension (s)		3.0	5.0		5.0		5.0	0.2		3.0	0.2	0.2
Lane Grp Cap (vph)		283	541		78		654	3191		14	2274	678
v/s Ratio Prot		0.08	c0.18		c0.02		0.12	c0.29		0.00	0.20	
v/s Ratio Perm			0.15									0.03
v/c Ratio		0.49	0.93		0.52		0.64	0.47		0.36	0.46	0.07
Uniform Delay, d1		69.0	56.4		84.1		67.1	17.5		88.8	34.5	28.3
Progression Factor		1.00	1.00		1.00		1.03	0.42		1.30	0.38	1.62
Incremental Delay, d2		1.4	23.7		11.0		2.6	0.4		12.8	0.6	0.2
Delay (s)		70.4	80.2		95.1		71.6	7.9		128.6	13.6	46.1
Level of Service		E	F		F		E	A		F	B	D
Approach Delay (s)		78.3			95.1			21.8			17.0	
Approach LOS		E			F			C			B	

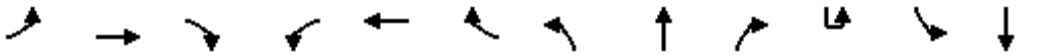
Intersection Summary			
HCM 2000 Control Delay	31.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	28.5
Intersection Capacity Utilization	76.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	0	0	120	0	0	135	100	30	1695	30	165	1300
Future Volume (Veh/h)	0	0	120	0	0	135	100	30	1695	30	165	1300
Sign Control		Stop			Stop				Free			Free
Grade		0%			0%				0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	130	0	0	147	0	33	1842	33	179	1413
Pedestrians		10			8							
Lane Width (ft)		12.0			12.0							
Walking Speed (ft/s)		3.5			3.5							
Percent Blockage		1			1							
Right turn flare (veh)												
Median type									None			None
Median storage veh)												
Upstream signal (ft)									1156			557
pX, platoon unblocked	0.91	0.91	0.87	0.91	0.91	0.84	0.00	0.87			0.84	
vC, conflicting volume	2649	3771	522	2892	3796	638	0	1505			1883	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1483	2717	0	1749	2744	0	0	1050			1394	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			2.2	
p0 queue free %	100	100	86	100	100	84	0	94			56	
cM capacity (veh/h)	41	10	932	26	9	907	0	566			407	

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	130	147	33	737	737	401	179	565	565	365
Volume Left	0	0	33	0	0	0	179	0	0	0
Volume Right	130	147	0	0	0	33	0	0	0	82
cSH	932	907	566	1700	1700	1700	407	1700	1700	1700
Volume to Capacity	0.14	0.16	0.06	0.43	0.43	0.24	0.44	0.33	0.33	0.21
Queue Length 95th (ft)	12	14	5	0	0	0	55	0	0	0
Control Delay (s)	9.5	9.7	11.7	0.0	0.0	0.0	20.6	0.0	0.0	0.0
Lane LOS	A	A	B				C			
Approach Delay (s)	9.5	9.7	0.2				2.2			
Approach LOS	A	A								

Intersection Summary				
Average Delay	1.7			
Intersection Capacity Utilization	51.5%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	75
Future Volume (Veh/h)	75
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	82
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	
Direction, Lane #	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	30	0	110	10	0	40	40	1665	35	120	35	1320
Future Volume (Veh/h)	30	0	110	10	0	40	40	1665	35	120	35	1320
Sign Control		Stop			Stop			Free				Free
Grade		0%			0%			0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	33	0	120	11	0	43	43	1810	38	0	38	1435
Pedestrians		7			41							
Lane Width (ft)		12.0			12.0							
Walking Speed (ft/s)		3.5			3.5							
Percent Blockage		1			4							
Right turn flare (veh)			12									
Median type								None				None
Median storage veh)												
Upstream signal (ft)								425				1288
pX, platoon unblocked	0.86	0.86	0.91	0.86	0.86	0.82	0.91			0.00	0.82	
vC, conflicting volume	2275	3518	510	2510	3523	663	1491			0	1889	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1186	2624	93	1459	2631	0	1177			0	1303	
tC, single (s)	*5.0	6.5	6.9	7.5	6.5	6.9	4.1			0.0	4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			0.0	2.2	
p0 queue free %	86	100	86	80	100	95	92			0	91	
cM capacity (veh/h)	229	16	850	54	16	851	530			0	414	

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	153	54	43	724	724	400	38	574	574	336
Volume Left	33	11	43	0	0	0	38	0	0	0
Volume Right	120	43	0	0	0	38	0	0	0	49
cSH	1060	214	530	1700	1700	1700	414	1700	1700	1700
Volume to Capacity	0.14	0.25	0.08	0.43	0.43	0.24	0.09	0.34	0.34	0.20
Queue Length 95th (ft)	13	24	7	0	0	0	8	0	0	0
Control Delay (s)	12.8	27.5	12.4	0.0	0.0	0.0	14.6	0.0	0.0	0.0
Lane LOS	B	D	B				B			
Approach Delay (s)	12.8	27.5	0.3				0.4			
Approach LOS	B	D								

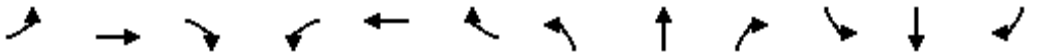
Intersection Summary					
Average Delay	1.3				
Intersection Capacity Utilization	61.3%	ICU Level of Service		B	
Analysis Period (min)	15				

* User Entered Value

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	45
Future Volume (Veh/h)	45
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	49
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	
Direction, Lane #	

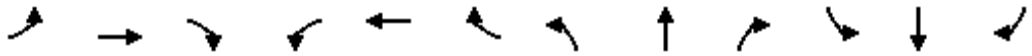
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	105	150	1590	180	215	1225
Future Volume (vph)	105	150	1590	180	215	1225
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	6.0		6.0	6.0
Lane Util. Factor	1.00	1.00	0.91		1.00	0.91
Frpb, ped/bikes	1.00	0.97	0.99		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.98		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1543	4946		1770	5085
Flt Permitted	0.95	1.00	1.00		0.08	1.00
Satd. Flow (perm)	1770	1543	4946		152	5085
Peak-hour factor, PHF	0.94	0.94	0.96	0.96	0.96	0.96
Adj. Flow (vph)	112	160	1656	188	224	1276
RTOR Reduction (vph)	0	142	6	0	0	0
Lane Group Flow (vph)	112	18	1838	0	224	1276
Confl. Peds. (#/hr)	9	10		16	16	
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	4		2		1	6
Permitted Phases		4			6	
Actuated Green, G (s)	20.2	20.2	122.3		147.3	147.3
Effective Green, g (s)	20.2	20.2	122.3		147.3	147.3
Actuated g/C Ratio	0.11	0.11	0.68		0.82	0.82
Clearance Time (s)	6.5	6.5	6.0		6.0	6.0
Vehicle Extension (s)	3.0	3.0	0.2		3.0	0.2
Lane Grp Cap (vph)	198	173	3360		295	4161
v/s Ratio Prot	c0.06		0.37		c0.08	0.25
v/s Ratio Perm		0.01			c0.54	
v/c Ratio	0.57	0.10	0.55		0.76	0.31
Uniform Delay, d1	75.7	71.8	14.7		35.6	4.0
Progression Factor	1.00	1.00	1.00		0.72	1.28
Incremental Delay, d2	3.7	0.3	0.6		9.5	0.2
Delay (s)	79.4	72.0	15.4		35.1	5.2
Level of Service	E	E	B		D	A
Approach Delay (s)	75.1		15.4			9.7
Approach LOS	E		B			A

Intersection Summary			
HCM 2000 Control Delay	17.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	18.5
Intersection Capacity Utilization	75.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	15	110	105	30	25	90	1655	90	15	970	170
Future Volume (vph)	125	15	110	105	30	25	90	1655	90	15	970	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0			7.0		5.5	6.0		5.5	6.0	
Lane Util. Factor	1.00	1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.97	1.00			1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.87			0.98		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1725	1616			1752		1770	5039		1770	4918	
Flt Permitted	0.65	1.00			0.60		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1182	1616			1085		1770	5039		1770	4918	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	136	16	120	114	33	27	98	1799	98	16	1054	185
RTOR Reduction (vph)	0	99	0	0	3	0	0	2	0	0	12	0
Lane Group Flow (vph)	136	37	0	0	171	0	98	1895	0	16	1227	0
Confl. Peds. (#/hr)	25					25	10		8	8		10
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4			8								
Actuated Green, G (s)	30.8	30.8			30.8		16.1	125.3		5.4	114.6	
Effective Green, g (s)	30.8	30.8			30.8		16.1	125.3		5.4	114.6	
Actuated g/C Ratio	0.17	0.17			0.17		0.09	0.70		0.03	0.64	
Clearance Time (s)	7.0	7.0			7.0		5.5	6.0		5.5	6.0	
Vehicle Extension (s)	4.0	4.0			4.0		4.0	0.2		4.0	0.2	
Lane Grp Cap (vph)	202	276			185		158	3507		53	3131	
v/s Ratio Prot		0.02					c0.06	c0.38		0.01	0.25	
v/s Ratio Perm	0.12				c0.16							
v/c Ratio	0.67	0.13			0.92		0.62	0.54		0.30	0.39	
Uniform Delay, d1	69.9	63.3			73.4		79.0	13.3		85.5	15.8	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.20	0.46	
Incremental Delay, d2	9.3	0.3			45.0		8.3	0.6		3.8	0.3	
Delay (s)	79.2	63.6			118.4		87.3	13.9		106.4	7.6	
Level of Service	E	E			F		F	B		F	A	
Approach Delay (s)		71.4			118.4			17.5			8.8	
Approach LOS		E			F			B			A	

Intersection Summary			
HCM 2000 Control Delay	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	18.5
Intersection Capacity Utilization	85.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	325	375	125	190	235	80	210	1390	205	110	840	205
Future Volume (vph)	325	375	125	190	235	80	210	1390	205	110	840	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	7.0		6.5	7.0		5.5	7.0	7.0	5.5	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.97	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.95	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.96		1.00	0.96		1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1767	3380		1766	3382		3433	5085	1511	1770	4910	
Flt Permitted	0.27	1.00		0.27	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	510	3380		509	3382		3433	5085	1511	1770	4910	
Peak-hour factor, PHF	0.96	0.96	0.96	0.87	0.87	0.87	0.97	0.97	0.97	0.96	0.96	0.96
Adj. Flow (vph)	339	391	130	218	270	92	216	1433	211	115	875	214
RTOR Reduction (vph)	0	19	0	0	21	0	0	0	89	0	18	0
Lane Group Flow (vph)	339	502	0	218	341	0	216	1433	122	115	1071	0
Confl. Peds. (#/hr)	11		16	16		11	6		14	14		6
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8					6			
Actuated Green, G (s)	66.5	36.2		52.9	29.1		18.5	77.0	77.0	17.0	75.5	
Effective Green, g (s)	66.5	36.2		52.9	29.1		18.5	77.0	77.0	17.0	75.5	
Actuated g/C Ratio	0.37	0.20		0.29	0.16		0.10	0.43	0.43	0.09	0.42	
Clearance Time (s)	6.5	7.0		6.5	7.0		5.5	7.0	7.0	5.5	7.0	
Vehicle Extension (s)	3.0	4.0		5.0	4.0		5.0	0.2	0.2	3.0	0.2	
Lane Grp Cap (vph)	404	679		315	546		352	2175	646	167	2059	
v/s Ratio Prot	c0.14	0.15		0.09	0.10		0.06	c0.28		c0.06	0.22	
v/s Ratio Perm	c0.17			0.11					0.08			
v/c Ratio	0.84	0.74		0.69	0.62		0.61	0.66	0.19	0.69	0.52	
Uniform Delay, d1	45.5	67.5		51.7	70.4		77.3	41.0	32.1	78.9	38.8	
Progression Factor	1.00	1.00		1.00	1.00		1.14	0.77	0.58	0.90	1.38	
Incremental Delay, d2	14.2	4.5		8.1	2.5		3.9	1.3	0.5	10.4	0.9	
Delay (s)	59.7	72.0		59.8	72.9		91.8	32.9	19.0	81.3	54.3	
Level of Service	E	E		E	E		F	C	B	F	D	
Approach Delay (s)		67.1			68.0			38.1			56.9	
Approach LOS		E			E			D			E	

Intersection Summary			
HCM 2000 Control Delay	52.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	26.0
Intersection Capacity Utilization	90.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection has too many lanes per leg.

HCM All-Way analysis is limited to two lanes per leg.

Channelized right turn lanes are not counted.

Intersection Sign configuration not allowed in HCM analysis.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑		
Traffic Volume (vph)	690	0	0	505	0	0
Future Volume (vph)	690	0	0	505	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0			6.0		
Lane Util. Factor	0.95			0.95		
Frt	1.00			1.00		
Flt Protected	1.00			1.00		
Satd. Flow (prot)	3539			3539		
Flt Permitted	1.00			1.00		
Satd. Flow (perm)	3539			3539		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	750	0	0	549	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	750	0	0	549	0	0
Turn Type	NA			NA		
Protected Phases	2			6		
Permitted Phases						
Actuated Green, G (s)	14.1			14.1		
Effective Green, g (s)	14.1			14.1		
Actuated g/C Ratio	0.53			0.53		
Clearance Time (s)	6.0			6.0		
Vehicle Extension (s)	3.0			3.0		
Lane Grp Cap (vph)	1868			1868		
v/s Ratio Prot	c0.21			0.16		
v/s Ratio Perm						
v/c Ratio	0.40			0.29		
Uniform Delay, d1	3.8			3.5		
Progression Factor	1.00			1.00		
Incremental Delay, d2	0.1			0.1		
Delay (s)	3.9			3.6		
Level of Service	A			A		
Approach Delay (s)	3.9			3.6	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM 2000 Control Delay	3.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	26.7	Sum of lost time (s)	10.5
Intersection Capacity Utilization	24.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Traffic Volume (veh/h)	0	2300	925	695	0	0
Future Volume (Veh/h)	0	2300	925	695	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	2500	1005	755	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		400	1086			
pX, platoon unblocked	0.90				0.86	0.90
vC, conflicting volume	1760				1630	502
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1622				230	225
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	357				635	701

Direction, Lane #	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	625	625	625	625	670	587	503
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	252	503
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.37	0.37	0.37	0.37	0.39	0.35	0.30
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS							
Approach Delay (s)	0.0				0.0		
Approach LOS							

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	36.7%	ICU Level of Service	A
Analysis Period (min)	15		

Arterial Level of Service: NB MD 97

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Hewitt Ave.	110	20.4	63.2	0.4	24
Aspen Hill Apt	109	3.3	11.7	0.1	25
Aspen Manor	108	1.9	16.2	0.1	31
Cemetery	107	8.5	19.6	0.1	19
	106	1.7	12.0	0.1	31
MD 185	105	38.8	53.5	0.2	10
	3000	4.2	10.9	0.1	25
7-11	104	1.0	4.1	0.0	26
Postgate Terr	103	6.6	20.8	0.2	31
Crystal Spring Apt	102	3.4	19.9	0.2	37
Bel Pre Rd	101	37.0	50.6	0.2	12
Total		126.9	282.4	1.7	21

Arterial Level of Service: SB MD 97

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Bel Pre Rd	101	34.0	89.0	0.7	28
Crystal Spring Apt	102	6.1	20.0	0.2	31
Heathfield Rd	103	15.0	31.5	0.2	24
Home Depot Ent.	104	6.6	20.5	0.2	31
	3000	1.3	3.6	0.0	29
MD 185	105	38.8	44.5	0.1	6
Northgate Plaza	106	4.1	19.9	0.2	27
Aspen Hill Rd	107	19.5	30.2	0.1	12
Wendy Ln	108	3.0	13.8	0.1	28
Ralph Rd	109	1.5	16.7	0.1	30
Hewitt Ave.	110	8.9	17.2	0.1	17
Total		138.9	306.9	1.9	23

Arterial Level of Service: NB MD 185

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Independence St	201	14.2	50.6	0.5	33
Aspen Hill Rd	202	45.1	66.2	0.3	15
Home Depot Ent	203	6.2	17.2	0.1	28
	1000	3.3	9.6	0.1	30
MD 97	105	51.9	57.6	0.1	5
Total		120.7	201.2	1.0	18

Arterial Level of Service: SB MD 185

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
MD 97	105	73.0	86.8	0.2	8
	1000	4.5	11.3	0.1	27
Home Depot Ent	203	1.5	8.5	0.1	34
Aspen Hill Rd	202	55.7	66.2	0.1	7
Independence St	201	7.5	29.7	0.3	34
Total		142.1	202.5	0.8	14

Intersection: 24: Bend

Movement	WB	WB
Directions Served	T	
Maximum Queue (ft)	191	107
Average Queue (ft)	17	5
95th Queue (ft)	102	46
Link Distance (ft)	361	361
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 101: MD 97 & Bel Pre Rd

Movement	EB	EB	EB	EB	B24	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	R	T	L	T	T	R	L	L	T
Maximum Queue (ft)	205	432	290	273	386	215	184	197	80	190	284	512
Average Queue (ft)	175	248	202	18	45	107	101	94	9	104	112	261
95th Queue (ft)	247	439	321	129	245	193	161	170	76	166	203	447
Link Distance (ft)		361			2203		2717	2717				808
Upstream Blk Time (%)		6										
Queuing Penalty (veh)		0										
Storage Bay Dist (ft)	180		265	265		280			150	455	455	
Storage Blk Time (%)	17	13	2	0		0		2				0
Queuing Penalty (veh)	105	82	8	0		0		3				0

Intersection: 101: MD 97 & Bel Pre Rd

Movement	NB	NB	NB	SB	SB	SB	SB	SB	SB
Directions Served	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	488	502	225	179	185	265	301	293	65
Average Queue (ft)	284	316	109	91	90	156	172	163	44
95th Queue (ft)	454	488	293	160	158	264	280	287	88
Link Distance (ft)	808	808				3584	3584	3584	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)			200	560	560				40
Storage Blk Time (%)		21	0					25	1
Queuing Penalty (veh)		42	0					30	5

Intersection: 102: MD 97 & Crystal Spring Apt

Movement	WB	NB	SB	SB
Directions Served	R	TR	T	T
Maximum Queue (ft)	106	15	158	5
Average Queue (ft)	47	1	6	0
95th Queue (ft)	90	10	115	3
Link Distance (ft)	234	1036	808	808
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 103: MD 97 & Heathfield Rd/Postgate Terr

Movement	EB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LTR	LTR	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	271	175	143	164	194	226	70	344	367	340
Average Queue (ft)	105	61	47	52	75	95	18	137	158	141
95th Queue (ft)	217	129	99	135	176	205	49	307	334	315
Link Distance (ft)	346	247		860	860	860		1036	1036	1036
Upstream Blk Time (%)	0	0								
Queuing Penalty (veh)	0	0								
Storage Bay Dist (ft)			350				350			
Storage Blk Time (%)								0		
Queuing Penalty (veh)								0		

Intersection: 104: MD 97 & Home Depot Ent./7-11

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	LT	R	L	T	TR	L	T	T	TR
Maximum Queue (ft)	93	160	60	80	100	15	11	51	17	38	16
Average Queue (ft)	34	70	13	30	38	0	0	9	1	2	1
95th Queue (ft)	75	138	43	66	84	5	7	33	12	17	5
Link Distance (ft)	1151	1151	213	213	76	76	76		860	860	860
Upstream Blk Time (%)					2						
Queuing Penalty (veh)					12						
Storage Bay Dist (ft)								235			
Storage Blk Time (%)											
Queuing Penalty (veh)											

Intersection: 105: MD 97 & MD 185

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	L	T	TR	L	LT	T	TR	L	T	T
Maximum Queue (ft)	278	388	401	390	279	226	259	324	359	91	384	415
Average Queue (ft)	213	257	285	198	180	119	160	145	192	36	206	215
95th Queue (ft)	305	381	409	325	277	207	236	255	313	77	338	355
Link Distance (ft)		280	280	280				968	968		682	682
Upstream Blk Time (%)	2	9	18	3	1							
Queuing Penalty (veh)	0	52	104	18	0							
Storage Bay Dist (ft)	425				300	280	280			330		
Storage Blk Time (%)	2	9		3	1	0	0	0			1	
Queuing Penalty (veh)	7	33		10	2	0	0	0			0	

Intersection: 105: MD 97 & MD 185

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	T
Maximum Queue (ft)	492	305	225	392	361	200
Average Queue (ft)	232	151	94	220	203	153
95th Queue (ft)	413	312	215	367	346	240
Link Distance (ft)	682			253	253	
Upstream Blk Time (%)				7	6	
Queuing Penalty (veh)				33	28	
Storage Bay Dist (ft)		280	200			175
Storage Blk Time (%)	3	0	0	14	12	6
Queuing Penalty (veh)	13	0	0	11	35	18

Intersection: 106: MD 97 & Northgate Plaza

Movement	EB	NB	SB	SB
Directions Served	R	UL	UL	TR
Maximum Queue (ft)	63	85	128	30
Average Queue (ft)	21	22	39	2
95th Queue (ft)	48	59	96	14
Link Distance (ft)	253			682
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		175	150	
Storage Blk Time (%)			0	
Queuing Penalty (veh)			2	

Intersection: 107: MD 97 & Aspen Hill Rd/Cemetery

Movement	EB	EB	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	LTR	L	L	T	T	TR	L	T	T	T
Maximum Queue (ft)	274	651	86	287	292	238	256	287	38	264	242	266
Average Queue (ft)	138	382	24	167	171	52	70	111	6	125	112	119
95th Queue (ft)	243	586	68	250	260	150	183	244	26	226	201	225
Link Distance (ft)	894	894	216			470	470	470		466	466	466
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)				250	250				190			
Storage Blk Time (%)				2	2	0				2		27
Queuing Penalty (veh)				8	9	1				0		26

Intersection: 107: MD 97 & Aspen Hill Rd/Cemetery

Movement	SB
Directions Served	R
Maximum Queue (ft)	95
Average Queue (ft)	22
95th Queue (ft)	87
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	70
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 108: MD 97 & Wendy Ln/Aspen Manor

Movement	EB	WB	NB	NB	SB	SB	SB	SB
Directions Served	R	R	UL	TR	L	T	T	TR
Maximum Queue (ft)	486	143	168	22	218	304	75	96
Average Queue (ft)	192	55	81	1	100	24	3	6
95th Queue (ft)	462	104	152	11	200	153	46	51
Link Distance (ft)	1228	342		650		470	470	470
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			200		150			
Storage Blk Time (%)			0		9	0		
Queuing Penalty (veh)			0		40	0		

Intersection: 109: MD 97 & Ralph Rd/Aspen Hill Apt

Movement	EB	EB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	LTR	L	T	T	TR	UL	T	T	TR
Maximum Queue (ft)	735	254	150	63	3	9	14	178	98	26	10
Average Queue (ft)	346	79	55	18	0	0	1	74	4	1	1
95th Queue (ft)	891	245	118	45	2	7	7	145	46	17	5
Link Distance (ft)	1188		370		352	352	352		650	650	650
Upstream Blk Time (%)	5										
Queuing Penalty (veh)	0										
Storage Bay Dist (ft)		300		125				175			
Storage Blk Time (%)	32	0						0	0		
Queuing Penalty (veh)	35	0						2	0		

Intersection: 110: MD 97 & Hewitt Ave.

Movement	WB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	R	T	T	TR	L	T	T	T
Maximum Queue (ft)	114	260	454	444	441	165	328	297	307
Average Queue (ft)	86	92	235	208	208	119	112	113	131
95th Queue (ft)	126	204	395	376	364	186	275	247	268
Link Distance (ft)		438	2204	2204	2204		352	352	352
Upstream Blk Time (%)							0	0	0
Queuing Penalty (veh)							2	0	0
Storage Bay Dist (ft)	90					140			
Storage Blk Time (%)	21	6				15	3		
Queuing Penalty (veh)	31	6				62	6		

Intersection: 201: MD 185 & Independence St

Movement	EB	EB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	LTR	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	125	487	198	206	298	295	296	48	80	101	127
Average Queue (ft)	107	180	154	95	161	156	167	8	17	34	47
95th Queue (ft)	147	409	232	175	267	260	270	32	54	84	107
Link Distance (ft)		872	179		2375	2375	2375		1338	1338	1338
Upstream Blk Time (%)			25								
Queuing Penalty (veh)			0								
Storage Bay Dist (ft)	100			250				270			
Storage Blk Time (%)	42	9		0	1						
Queuing Penalty (veh)	52	11		0	1						

Intersection: 202: MD 185 & Aspen Hill Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	NB
Directions Served	L	T	TR	L	T	TR	L	L	T	T	T	R
Maximum Queue (ft)	324	453	416	299	178	234	174	289	360	363	364	116
Average Queue (ft)	225	227	266	146	76	106	101	122	227	238	234	37
95th Queue (ft)	359	435	397	261	162	205	164	207	326	333	336	90
Link Distance (ft)		1838	1838		450	450			1338	1338	1338	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	300			410			350	350				350
Storage Blk Time (%)	9	1						0	1		1	
Queuing Penalty (veh)	16	2						0	2		1	

Intersection: 202: MD 185 & Aspen Hill Rd

Movement	SB	SB	SB	SB
Directions Served	L	T	T	TR
Maximum Queue (ft)	198	364	424	476
Average Queue (ft)	99	228	280	326
95th Queue (ft)	180	328	395	438
Link Distance (ft)	618	618	618	618
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 203: MD 185 & Home Depot Ent

Movement	EB	EB	NB	SB
Directions Served	L	R	L	T
Maximum Queue (ft)	41	61	104	4
Average Queue (ft)	10	4	31	0
95th Queue (ft)	32	30	70	3
Link Distance (ft)	604	604		348
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			215	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 1000: MD 185

Movement	EB	EB	EB	SB
Directions Served	T	T	T	R
Maximum Queue (ft)	171	188	93	365
Average Queue (ft)	14	17	4	17
95th Queue (ft)	103	111	39	183
Link Distance (ft)	348	348	348	481
Upstream Blk Time (%)	0	0		
Queuing Penalty (veh)	0	0		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2000: HAWK & Aspen Hill Rd

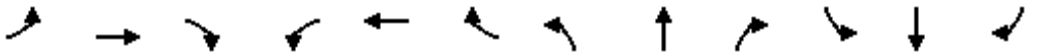
Movement	EB	EB	WB	WB
Directions Served	T	T	T	T
Maximum Queue (ft)	158	201	185	183
Average Queue (ft)	20	42	24	23
95th Queue (ft)	86	131	105	103
Link Distance (ft)	450	450	894	894
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3000: MD 97

Movement	NB	NB	SB	SB	SB
Directions Served	T	T	T	TR	R
Maximum Queue (ft)	50	55	85	123	39
Average Queue (ft)	2	2	6	9	1
95th Queue (ft)	37	40	45	64	17
Link Distance (ft)	253	253	76	76	76
Upstream Blk Time (%)		0	1	1	0
Queuing Penalty (veh)		0	3	5	0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 978



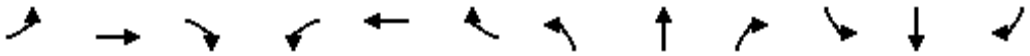
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	165	200	270	315	450	250	195	845	85	130	2000	150
Future Volume (vph)	165	200	270	315	450	250	195	845	85	130	2000	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1600	1900	1900	1750	1900
Total Lost time (s)	9.0	7.0	4.0	9.0	7.0	4.0	8.5	7.0	7.0	8.5	7.0	7.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	*1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	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	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1561	1764	3539	1583	3433	4282	1561	3433	5147	1561
Flt Permitted	0.19	1.00	1.00	0.51	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	359	3539	1561	945	3539	1583	3433	4282	1561	3433	5147	1561
Peak-hour factor, PHF	0.90	0.90	0.90	0.86	0.86	0.86	0.94	0.94	0.94	0.97	0.97	0.97
Adj. Flow (vph)	183	222	300	366	523	291	207	899	90	134	2062	155
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	47	0	0	70
Lane Group Flow (vph)	183	222	300	366	523	291	207	899	43	134	2062	85
Confl. Peds. (#/hr)			7	7			1		1	1		1
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4		Free	8		Free			6			2
Actuated Green, G (s)	48.2	30.3	180.0	52.4	32.4	180.0	15.2	86.5	86.5	11.7	83.0	83.0
Effective Green, g (s)	48.2	30.3	180.0	52.4	32.4	180.0	15.2	86.5	86.5	11.7	83.0	83.0
Actuated g/C Ratio	0.27	0.17	1.00	0.29	0.18	1.00	0.08	0.48	0.48	0.06	0.46	0.46
Clearance Time (s)	9.0	7.0		9.0	7.0		8.5	7.0	7.0	8.5	7.0	7.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	0.2	0.2	3.0	0.2	0.2
Lane Grp Cap (vph)	236	595	1561	366	637	1583	289	2057	750	223	2373	719
v/s Ratio Prot	0.08	0.06		c0.11	0.15		c0.06	0.21		0.04	c0.40	
v/s Ratio Perm	0.13		c0.19	c0.18		0.18			0.03			0.05
v/c Ratio	0.78	0.37	0.19	1.00	0.82	0.18	0.72	0.44	0.06	0.60	0.87	0.12
Uniform Delay, d1	54.9	66.4	0.0	61.0	71.0	0.0	80.3	30.7	25.0	81.9	43.6	27.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.22	0.40	0.48	1.00	1.00	1.00
Incremental Delay, d2	14.7	0.4	0.3	47.0	8.4	0.3	7.9	0.6	0.1	4.5	4.7	0.3
Delay (s)	69.6	66.8	0.3	108.1	79.4	0.3	105.6	12.9	12.1	86.4	48.3	28.0
Level of Service	E	E	A	F	E	A	F	B	B	F	D	C
Approach Delay (s)		39.2			68.8			28.9			49.1	
Approach LOS		D			E			C			D	

Intersection Summary			
HCM 2000 Control Delay	47.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	31.5
Intersection Capacity Utilization	103.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	45	1080	25	0	2585
Future Volume (Veh/h)	0	45	1080	25	0	2585
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	49	1174	27	0	2810
Pedestrians	5					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			1091			919
pX, platoon unblocked	0.68	0.91			0.91	
vC, conflicting volume	2129	410			1206	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	107	7			882	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			100	
cM capacity (veh/h)	593	972			691	

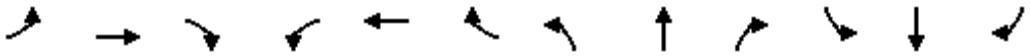
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	49	470	470	262	937	937	937
Volume Left	0	0	0	0	0	0	0
Volume Right	49	0	0	27	0	0	0
cSH	972	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.05	0.28	0.28	0.15	0.55	0.55	0.55
Queue Length 95th (ft)	4	0	0	0	0	0	0
Control Delay (s)	8.9	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	8.9	0.0			0.0		
Approach LOS	A						

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	53.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	5	140	70	5	15	120	1075	15	15	2460	110
Future Volume (vph)	15	5	140	70	5	15	120	1075	15	15	2460	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0			7.0		5.0	6.0		5.0	6.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.88			0.98		1.00	1.00		1.00	0.99	
Flt Protected		1.00			0.96		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1633			1745		1770	5073		1770	5047	
Flt Permitted		0.96			0.45		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1577			822		1770	5073		1770	5047	
Peak-hour factor, PHF	0.79	0.79	0.79	0.58	0.58	0.58	0.92	0.92	0.92	0.98	0.98	0.98
Adj. Flow (vph)	19	6	177	121	9	26	130	1168	16	15	2510	112
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	202	0	0	156	0	130	1184	0	15	2622	0
Confl. Peds. (#/hr)	10					10	1		2	2		1
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4			8								
Actuated Green, G (s)		35.4			35.4		16.7	123.2		3.4	109.9	
Effective Green, g (s)		35.4			35.4		16.7	123.2		3.4	109.9	
Actuated g/C Ratio		0.20			0.20		0.09	0.68		0.02	0.61	
Clearance Time (s)		7.0			7.0		5.0	6.0		5.0	6.0	
Vehicle Extension (s)		4.0			3.5		3.0	0.2		3.0	0.2	
Lane Grp Cap (vph)		310			161		164	3472		33	3081	
v/s Ratio Prot							c0.07	0.23		0.01	c0.52	
v/s Ratio Perm		0.13			c0.19							
v/c Ratio		0.65			0.97		0.79	0.34		0.45	0.85	
Uniform Delay, d1		66.6			71.8		80.0	11.7		87.4	28.4	
Progression Factor		1.00			1.00		0.98	1.16		1.10	0.37	
Incremental Delay, d2		5.4			61.2		21.4	0.3		5.7	1.9	
Delay (s)		72.0			133.0		99.4	13.8		102.2	12.5	
Level of Service		E			F		F	B		F	B	
Approach Delay (s)		72.0			133.0			22.3			13.0	
Approach LOS		E			F			C			B	

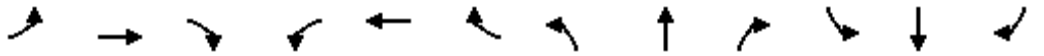
Intersection Summary			
HCM 2000 Control Delay	23.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	97.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	5	130	15	0	60	15	1135	65	20	2535	115
Future Volume (Veh/h)	15	5	130	15	0	60	15	1135	65	20	2535	115
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.74	0.74	0.74	0.91	0.91	0.91	0.97	0.97	0.97
Hourly flow rate (vph)	16	5	137	20	0	81	16	1247	71	21	2613	119
Pedestrians		14			12							
Lane Width (ft)		12.0			12.0							
Walking Speed (ft/s)		3.5			3.5							
Percent Blockage		1			1							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								553			933	
pX, platoon unblocked	0.62	0.62	0.57	0.62	0.62	0.89	0.57			0.89		
vC, conflicting volume	3257	4090	944	2379	4114	463	2746			1330		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1355	2692	0	0	2730	0	1425			952		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	71	58	78	93	100	92	94			97		
cM capacity (veh/h)	56	12	610	301	11	958	266			633		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	21	137	20	81	16	499	499	320	21	1045	1045	642
Volume Left	16	0	20	0	16	0	0	0	21	0	0	0
Volume Right	0	137	0	81	0	0	0	71	0	0	0	119
cSH	29	610	301	958	266	1700	1700	1700	633	1700	1700	1700
Volume to Capacity	0.71	0.22	0.07	0.08	0.06	0.29	0.29	0.19	0.03	0.61	0.61	0.38
Queue Length 95th (ft)	58	21	5	7	5	0	0	0	3	0	0	0
Control Delay (s)	270.8	12.6	17.8	9.1	19.4	0.0	0.0	0.0	10.9	0.0	0.0	0.0
Lane LOS	F	B	C	A	C				B			
Approach Delay (s)	46.9		10.8		0.2				0.1			
Approach LOS	E		B									

Intersection Summary				
Average Delay	2.1			
Intersection Capacity Utilization	73.0%	ICU Level of Service	C	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	470	255	10	200	750	50	55	695	85	25	1140	0
Future Volume (vph)	470	255	10	200	750	50	55	695	85	25	1140	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1750	1900
Total Lost time (s)	7.5	7.5		7.0	7.0		8.5	7.0	7.0	8.5	7.0	
Lane Util. Factor	0.94	0.95		0.86	0.86		1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	4990	3517		1522	4749		1770	5085	1557	1770	4684	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	4990	3517		1522	4749		1770	5085	1557	1770	4684	
Peak-hour factor, PHF	0.96	0.96	0.96	0.92	0.92	0.92	0.88	0.88	0.88	0.97	0.97	0.97
Adj. Flow (vph)	490	266	10	217	815	54	62	790	97	26	1175	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	490	276	0	195	891	0	63	790	97	26	1175	0
Confl. Peds. (#/hr)	10		7	7		10	5		10	10		5
Turn Type	Split	NA		Split	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	3	3		4	4		1	6	4	5	2	
Permitted Phases									6			
Actuated Green, G (s)	26.8	26.8		41.4	41.4		11.7	71.7	113.1	5.1	70.1	
Effective Green, g (s)	26.8	26.8		41.4	41.4		11.7	71.7	113.1	5.1	70.1	
Actuated g/C Ratio	0.15	0.15		0.23	0.23		0.06	0.40	0.63	0.03	0.39	
Clearance Time (s)	7.5	7.5		7.0	7.0		8.5	7.0	7.0	8.5	7.0	
Vehicle Extension (s)	4.0	4.0		4.0	4.0		4.0	0.2	4.0	4.0	0.2	
Lane Grp Cap (vph)	742	523		350	1092		115	2025	978	50	1824	
v/s Ratio Prot	c0.10	0.08		0.13	c0.19		c0.04	0.16	0.02	0.01	c0.25	
v/s Ratio Perm									0.04			
v/c Ratio	0.66	0.53		0.56	0.82		0.55	0.39	0.10	0.52	0.64	
Uniform Delay, d1	72.3	70.8		61.2	65.7		81.6	38.6	13.3	86.2	44.8	
Progression Factor	0.88	0.88		1.00	1.00		1.26	0.76	0.79	0.86	1.08	
Incremental Delay, d2	2.4	1.2		2.4	5.1		6.4	0.6	0.1	8.0	1.1	
Delay (s)	66.3	63.3		63.6	70.7		109.1	29.8	10.5	81.9	49.4	
Level of Service	E	E		E	E		F	C	B	F	D	
Approach Delay (s)		65.2			69.5			33.1			50.1	
Approach LOS		E			E			C			D	

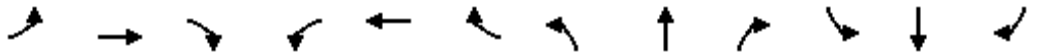
Intersection Summary			
HCM 2000 Control Delay	54.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	33.0
Intersection Capacity Utilization	85.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (veh/h)	0	0	30	0	0	0	40	50	785	0	50	0
Future Volume (Veh/h)	0	0	30	0	0	0	40	50	785	0	50	0
Sign Control		Stop			Stop				Free			
Grade		0%			0%				0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	33	0	0	0	0	54	853	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type									None			
Median storage veh)												
Upstream signal (ft)									547			
pX, platoon unblocked	0.84	0.84	0.81	0.84	0.84	0.93	0.00	0.81			0.00	0.93
vC, conflicting volume	1786	2355	477	1452	2374	284	0	1413			0	853
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	724	1399	0	328	1421	0	0	680			0	581
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			0.0	4.1
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			0.0	2.2
p0 queue free %	100	100	96	100	100	100	0	93			0	100
cM capacity (veh/h)	249	109	876	460	105	1009	0	734			0	921

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	33	54	284	284	284	0	550	550	313
Volume Left	0	54	0	0	0	0	0	0	0
Volume Right	33	0	0	0	0	0	0	0	38
cSH	876	734	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.04	0.07	0.17	0.17	0.17	0.00	0.32	0.32	0.18
Queue Length 95th (ft)	3	6	0	0	0	0	0	0	0
Control Delay (s)	9.3	10.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	B							
Approach Delay (s)	9.3	0.6				0.0			
Approach LOS	A								

Intersection Summary				
Average Delay	0.4			
Intersection Capacity Utilization	43.5%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	1265	35
Future Volume (Veh/h)	1265	35
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	1375	38
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	None	
Median storage veh)		
Upstream signal (ft)	801	
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	5	205	5	5	5	385	850	15	5	1210	120
Future Volume (vph)	20	5	205	5	5	5	385	850	15	5	1210	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.5	6.0		8.0		6.0	7.0		6.0	7.0	7.0
Lane Util. Factor		1.00	1.00		1.00		0.97	0.91		1.00	0.91	1.00
Frpb, ped/bikes		1.00	0.98		1.00		1.00	1.00		1.00	1.00	0.96
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.95		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.96	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1790	1546		1750		3433	5061		1770	5085	1518
Flt Permitted		0.96	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1790	1546		1750		3433	5061		1770	5085	1518
Peak-hour factor, PHF	0.77	0.77	0.77	0.25	0.25	0.25	0.88	0.88	0.88	0.97	0.97	0.97
Adj. Flow (vph)	26	6	266	20	20	20	438	966	17	5	1247	124
RTOR Reduction (vph)	0	0	60	0	10	0	0	1	0	0	0	63
Lane Group Flow (vph)	0	32	206	0	50	0	438	982	0	5	1247	61
Confl. Peds. (#/hr)			29	29			10		21	29		10
Turn Type	Split	NA	pm+ov	Split	NA		Prot	NA		Prot	NA	Perm
Protected Phases	4	4	1	3	3		1	6		5	2	
Permitted Phases			4									2
Actuated Green, G (s)		24.3	53.9		8.8		29.6	116.9		1.5	88.8	88.8
Effective Green, g (s)		24.3	53.9		8.8		29.6	116.9		1.5	88.8	88.8
Actuated g/C Ratio		0.14	0.30		0.05		0.16	0.65		0.01	0.49	0.49
Clearance Time (s)		7.5	6.0		8.0		6.0	7.0		6.0	7.0	7.0
Vehicle Extension (s)		3.0	5.0		5.0		5.0	0.2		3.0	0.2	0.2
Lane Grp Cap (vph)		241	462		85		564	3286		14	2508	748
v/s Ratio Prot		0.02	c0.07		c0.03		c0.13	0.19		0.00	c0.25	
v/s Ratio Perm			0.06									0.04
v/c Ratio		0.13	0.45		0.58		0.78	0.30		0.36	0.50	0.08
Uniform Delay, d1		68.6	51.0		83.8		72.0	13.7		88.8	30.6	24.1
Progression Factor		1.00	1.00		1.00		1.00	1.02		1.25	0.37	0.06
Incremental Delay, d2		0.3	1.4		14.8		7.7	0.2		12.4	0.6	0.2
Delay (s)		68.8	52.4		98.6		80.0	14.2		123.5	11.9	1.6
Level of Service		E	D		F		E	B		F	B	A
Approach Delay (s)		54.2			98.6			34.5			11.4	
Approach LOS		D			F			C			B	

Intersection Summary			
HCM 2000 Control Delay	27.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	28.5
Intersection Capacity Utilization	72.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

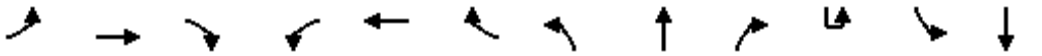
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	0	0	60	0	0	40	40	20	1210	10	40	1330
Future Volume (Veh/h)	0	0	60	0	0	40	40	20	1210	10	40	1330
Sign Control		Stop			Stop				Free			Free
Grade		0%			0%				0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	65	0	0	43	0	22	1315	11	43	1446
Pedestrians		1			5							
Lane Width (ft)		12.0			12.0							
Walking Speed (ft/s)		3.5			3.5							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type									None			None
Median storage veh)												
Upstream signal (ft)									1156			557
pX, platoon unblocked	0.90	0.90	0.84	0.90	0.90	0.88	0.00	0.84			0.88	
vC, conflicting volume	2085	2935	510	2002	2956	449	0	1501			1331	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	911	1856	0	819	1880	0	0	926			897	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			2.2	
p0 queue free %	100	100	93	100	100	95	0	96			93	
cM capacity (veh/h)	181	59	909	205	57	949	0	615			659	

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	65	43	22	526	526	274	43	578	578	343
Volume Left	0	0	22	0	0	0	43	0	0	0
Volume Right	65	43	0	0	0	11	0	0	0	54
cSH	909	949	615	1700	1700	1700	659	1700	1700	1700
Volume to Capacity	0.07	0.05	0.04	0.31	0.31	0.16	0.07	0.34	0.34	0.20
Queue Length 95th (ft)	6	4	3	0	0	0	5	0	0	0
Control Delay (s)	9.3	9.0	11.1	0.0	0.0	0.0	10.8	0.0	0.0	0.0
Lane LOS	A	A	B				B			
Approach Delay (s)	9.3	9.0	0.2				0.3			
Approach LOS	A	A								

Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	43.9%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	50
Future Volume (Veh/h)	50
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	54
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	

Direction, Lane #



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	55	0	75	25	0	40	25	1140	15	45	15	1355
Future Volume (Veh/h)	55	0	75	25	0	40	25	1140	15	45	15	1355
Sign Control		Stop			Stop			Free				Free
Grade		0%			0%			0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	60	0	82	27	0	43	27	1239	16	0	16	1473
Pedestrians					12							
Lane Width (ft)					12.0							
Walking Speed (ft/s)					3.5							
Percent Blockage					1							
Right turn flare (veh)			12									
Median type								None				None
Median storage veh)												
Upstream signal (ft)								425				1288
pX, platoon unblocked	0.91	0.91	0.85	0.91	0.91	0.84	0.85			0.00	0.84	
vC, conflicting volume	2023	2834	499	1836	2834	433	1489			0	1267	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	708	1596	0	503	1596	0	975			0	651	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			0.0	4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			0.0	2.2	
p0 queue free %	77	100	91	92	100	95	96			0	98	
cM capacity (veh/h)	264	89	926	350	89	900	601			0	773	

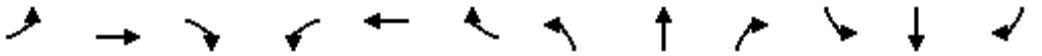
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	142	70	27	496	496	264	16	589	589	311
Volume Left	60	27	27	0	0	0	16	0	0	0
Volume Right	82	43	0	0	0	16	0	0	0	16
cSH	624	560	601	1700	1700	1700	773	1700	1700	1700
Volume to Capacity	0.23	0.12	0.04	0.29	0.29	0.16	0.02	0.35	0.35	0.18
Queue Length 95th (ft)	22	11	4	0	0	0	2	0	0	0
Control Delay (s)	14.9	12.3	11.3	0.0	0.0	0.0	9.8	0.0	0.0	0.0
Lane LOS	B	B	B				A			
Approach Delay (s)	14.9	12.3	0.2				0.1			
Approach LOS	B	B								

Intersection Summary					
Average Delay	1.1				
Intersection Capacity Utilization	50.4%	ICU Level of Service		A	
Analysis Period (min)	15				

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	15
Future Volume (Veh/h)	15
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	16
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	
Direction, Lane #	

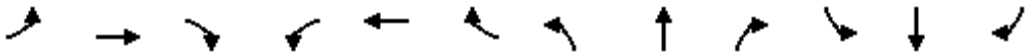
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	180	150	1030	105	80	1375
Future Volume (vph)	180	150	1030	105	80	1375
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	6.0		6.0	6.0
Lane Util. Factor	1.00	1.00	0.91		1.00	0.91
Frpb, ped/bikes	1.00	0.97	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1544	4993		1770	5085
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1544	4993		1770	5085
Peak-hour factor, PHF	0.90	0.90	0.87	0.87	0.92	0.92
Adj. Flow (vph)	200	167	1184	121	87	1495
RTOR Reduction (vph)	0	138	0	0	0	0
Lane Group Flow (vph)	200	29	1305	0	87	1495
Confl. Peds. (#/hr)	4	13		4	4	
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4				
Actuated Green, G (s)	20.8	20.8	60.1		10.6	81.7
Effective Green, g (s)	20.8	20.8	60.1		10.6	81.7
Actuated g/C Ratio	0.17	0.17	0.50		0.09	0.68
Clearance Time (s)	6.5	6.5	6.0		6.0	6.0
Vehicle Extension (s)	3.0	3.0	0.2		3.0	0.2
Lane Grp Cap (vph)	306	267	2500		156	3462
v/s Ratio Prot	c0.11		c0.26		0.05	c0.29
v/s Ratio Perm		0.02				
v/c Ratio	0.65	0.11	0.52		0.56	0.43
Uniform Delay, d1	46.2	41.8	20.2		52.5	8.7
Progression Factor	1.00	1.00	1.00		1.00	1.03
Incremental Delay, d2	4.9	0.2	0.8		4.3	0.4
Delay (s)	51.2	42.0	21.0		56.6	9.3
Level of Service	D	D	C		E	A
Approach Delay (s)	47.0		21.0			11.9
Approach LOS	D		C			B

Intersection Summary			
HCM 2000 Control Delay	19.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	24.5
Intersection Capacity Utilization	58.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



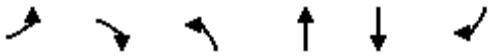
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	10	190	50	10	5	70	860	35	5	2150	115
Future Volume (vph)	90	10	190	50	10	5	70	860	35	5	2150	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0			7.0		5.5	6.0		5.5	6.0	
Lane Util. Factor	1.00	1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.86			0.99		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00			0.96		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1764	1597			1774		1770	5048		1770	5047	
Flt Permitted	0.73	1.00			0.33		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1348	1597			610		1770	5048		1770	5047	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	11	207	54	11	5	76	935	38	5	2337	125
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	98	218	0	0	70	0	76	973	0	5	2462	0
Confl. Peds. (#/hr)	2					2			2	2		
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4			8								
Actuated Green, G (s)	28.7	28.7			28.7		13.3	121.2		1.6	109.5	
Effective Green, g (s)	28.7	28.7			28.7		13.3	121.2		1.6	109.5	
Actuated g/C Ratio	0.16	0.16			0.16		0.07	0.67		0.01	0.61	
Clearance Time (s)	7.0	7.0			7.0		5.5	6.0		5.5	6.0	
Vehicle Extension (s)	3.0	3.0			3.0		4.0	0.2		4.0	0.2	
Lane Grp Cap (vph)	214	254			97		130	3398		15	3070	
v/s Ratio Prot		c0.14					c0.04	c0.19		0.00	c0.49	
v/s Ratio Perm	0.07				0.11							
v/c Ratio	0.46	0.86			0.72		0.58	0.29		0.33	0.80	
Uniform Delay, d1	68.6	73.7			71.9		80.7	11.9		88.7	27.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.20	0.29	
Incremental Delay, d2	1.6	23.8			23.1		7.7	0.2		5.6	0.7	
Delay (s)	70.2	97.4			94.9		88.4	12.1		112.1	8.4	
Level of Service	E	F			F		F	B		F	A	
Approach Delay (s)		89.0			94.9			17.6			8.6	
Approach LOS		F			F			B			A	

Intersection Summary			
HCM 2000 Control Delay	19.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	24.5
Intersection Capacity Utilization	86.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	170	115	150	145	350	15	245	635	75	40	1975	340
Future Volume (vph)	170	115	150	145	350	15	245	635	75	40	1975	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	7.0		6.5	7.0		5.5	7.0	7.0	5.5	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.97	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.91		1.00	0.99		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1767	3198		1765	3514		3433	5085	1538	1770	4956	
Flt Permitted	0.26	1.00		0.43	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	476	3198		797	3514		3433	5085	1538	1770	4956	
Peak-hour factor, PHF	0.91	0.91	0.91	0.87	0.87	0.87	0.77	0.77	0.77	0.97	0.97	0.97
Adj. Flow (vph)	187	126	165	167	402	17	318	825	97	41	2036	351
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	187	291	0	167	419	0	318	825	97	41	2387	0
Confl. Peds. (#/hr)	11		7	7		11	5		7	7		5
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8					6			
Actuated Green, G (s)	43.7	28.4		43.9	28.5		24.2	97.5	97.5	7.7	81.0	
Effective Green, g (s)	43.7	28.4		43.9	28.5		24.2	97.5	97.5	7.7	81.0	
Actuated g/C Ratio	0.24	0.16		0.24	0.16		0.13	0.54	0.54	0.04	0.45	
Clearance Time (s)	6.5	7.0		6.5	7.0		5.5	7.0	7.0	5.5	7.0	
Vehicle Extension (s)	3.0	4.0		5.0	4.0		5.0	0.2	0.2	3.0	0.2	
Lane Grp Cap (vph)	225	504		277	556		461	2754	833	75	2230	
v/s Ratio Prot	c0.07	0.09		0.05	0.12		c0.09	0.16		0.02	c0.48	
v/s Ratio Perm	c0.13			0.10					0.06			
v/c Ratio	0.83	0.58		0.60	0.75		0.69	0.30	0.12	0.55	1.07	
Uniform Delay, d1	59.1	70.2		57.0	72.4		74.3	22.6	20.2	84.4	49.5	
Progression Factor	1.00	1.00		1.00	1.00		1.18	0.83	0.86	1.39	0.72	
Incremental Delay, d2	22.2	1.9		5.4	6.1		5.4	0.3	0.3	6.9	40.1	
Delay (s)	81.3	72.2		62.4	78.5		92.7	18.9	17.6	124.5	75.6	
Level of Service	F	E		E	E		F	B	B	F	E	
Approach Delay (s)		75.7			73.9			37.8			76.4	
Approach LOS		E			E			D			E	

Intersection Summary			
HCM 2000 Control Delay	65.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	29.0
Intersection Capacity Utilization	100.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	10	95	95	725	2260	60
Future Volume (vph)	10	95	95	725	2260	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Lane Util. Factor	1.00	1.00	1.00	0.91	0.86	1.00
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1572	1770	5085	6408	1546
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1770	1572	1770	5085	6408	1546
Peak-hour factor, PHF	0.78	0.78	0.88	0.88	0.94	0.94
Adj. Flow (vph)	13	122	108	824	2404	64
RTOR Reduction (vph)	0	0	0	0	0	13
Lane Group Flow (vph)	13	122	108	824	2404	51
Confl. Peds. (#/hr)		3	3			3
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	4	5	5	2	6	4
Permitted Phases		4				6
Actuated Green, G (s)	13.6	29.9	16.3	152.4	129.1	142.7
Effective Green, g (s)	13.6	29.9	16.3	152.4	129.1	142.7
Actuated g/C Ratio	0.08	0.17	0.09	0.85	0.72	0.79
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	133	322	160	4305	4595	1285
v/s Ratio Prot	0.01	c0.03	c0.06	0.16	c0.38	0.00
v/s Ratio Perm		0.04				0.03
v/c Ratio	0.10	0.38	0.68	0.19	0.52	0.04
Uniform Delay, d1	77.5	66.8	79.3	2.5	11.5	4.0
Progression Factor	1.00	1.00	1.16	0.77	1.62	4.45
Incremental Delay, d2	0.3	0.7	10.1	0.1	0.3	0.0
Delay (s)	77.8	67.5	102.2	2.0	18.9	17.8
Level of Service	E	E	F	A	B	B
Approach Delay (s)	68.5			13.6	18.9	
Approach LOS	E			B	B	

Intersection Summary			
HCM 2000 Control Delay	19.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection Sign configuration not allowed in HCM analysis.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	230	0	0	510	0	0
Future Volume (vph)	230	0	0	510	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0			6.0		
Lane Util. Factor	0.95			0.95		
Frt	1.00			1.00		
Flt Protected	1.00			1.00		
Satd. Flow (prot)	3539			3539		
Flt Permitted	1.00			1.00		
Satd. Flow (perm)	3539			3539		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	250	0	0	554	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	250	0	0	554	0	0
Turn Type	NA			NA		
Protected Phases	2			6		
Permitted Phases						
Actuated Green, G (s)	11.4			11.4		
Effective Green, g (s)	11.4			11.4		
Actuated g/C Ratio	0.48			0.48		
Clearance Time (s)	6.0			6.0		
Vehicle Extension (s)	3.0			3.0		
Lane Grp Cap (vph)	1681			1681		
v/s Ratio Prot	0.07			c0.16		
v/s Ratio Perm						
v/c Ratio	0.15			0.33		
Uniform Delay, d1	3.6			3.9		
Progression Factor	1.00			1.00		
Incremental Delay, d2	0.0			0.1		
Delay (s)	3.6			4.0		
Level of Service	A			A		
Approach Delay (s)	3.6			4.0	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM 2000 Control Delay	3.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	24.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	19.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Traffic Volume (veh/h)	0	1215	1165	1515	0	0
Future Volume (Veh/h)	0	1215	1165	1515	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	1321	1266	1647	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		400	1086			
pX, platoon unblocked	0.57				0.62	0.57
vC, conflicting volume	2913				1596	633
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2848				0	0
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	74				633	620

Direction, Lane #	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	330	330	330	330	844	971	1098
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	549	1098
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.19	0.19	0.19	0.19	0.50	0.57	0.65
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS							
Approach Delay (s)	0.0				0.0		
Approach LOS							

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	65.9%	ICU Level of Service	C
Analysis Period (min)	15		

Arterial Level of Service: NB MD 97

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Hewitt Ave.	110	22.5	65.3	0.4	23
Aspen Hill Apt	109	3.2	11.6	0.1	25
Aspen Manor	108	1.2	15.5	0.1	32
Cemetery	107	9.5	20.6	0.1	18
	106	1.4	11.8	0.1	32
MD 185	105	37.0	51.7	0.2	11
	3000	3.1	9.9	0.1	28
7-11	104	0.8	3.8	0.0	28
Postgate Terr	103	8.7	22.9	0.2	28
Crystal Springs Apt	102	3.3	20.0	0.2	37
Bel Pre Rd	101	23.6	37.1	0.2	17
Total		114.4	270.1	1.7	22

Arterial Level of Service: SB MD 97

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Bel Pre Rd	101	60.1	147.0	1.1	28
Crystal Springs Apt	102	11.3	25.2	0.2	25
Heathfield Rd	103	28.5	45.0	0.2	17
Home Depot Ent.	104	18.5	32.4	0.2	20
	3000	6.5	8.9	0.0	12
MD 185	105	45.8	51.5	0.1	5
Northgate Plaza	106	4.4	20.2	0.2	27
Aspen Hill Rd	107	10.0	20.8	0.1	18
Wendy Ln	108	2.1	13.0	0.1	29
Ralph Rd	109	1.9	16.8	0.1	30
Hewitt Ave.	110	12.6	20.9	0.1	14
Total		201.8	401.8	2.4	21

Arterial Level of Service: NB MD 185

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Independence St	201	11.2	47.4	0.5	35
Aspen Hill Rd	202	20.3	40.5	0.3	25
Home Depot Ent	203	2.3	12.6	0.1	38
	1000	1.3	7.9	0.1	36
MD 97	105	55.2	60.7	0.1	5
Total		90.3	169.2	1.0	22

Arterial Level of Service: SB MD 185

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
MD 97	105	65.4	80.7	0.2	9
	1000	6.8	13.5	0.1	23
Home Depot Ent	203	13.5	20.5	0.1	14
Aspen Hill Rd	202	50.7	61.2	0.1	8
Independence St	201	13.3	35.2	0.3	28
Total		149.7	211.1	0.8	13

Intersection: 23: Bend

Movement	WB	WB
Directions Served	T	
Maximum Queue (ft)	325	284
Average Queue (ft)	94	36
95th Queue (ft)	296	166
Link Distance (ft)	361	361
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 101: MD 97 & Bel Pre Rd

Movement	EB	EB	EB	EB	B23	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	R	T	L	T	T	R	L	L	T
Maximum Queue (ft)	198	344	261	258	47	305	716	718	175	183	210	189
Average Queue (ft)	118	101	97	47	2	253	376	346	88	95	95	55
95th Queue (ft)	198	232	200	200	27	367	796	737	229	151	162	143
Link Distance (ft)		361			2205		2748	2748				808
Upstream Blk Time (%)		1										
Queuing Penalty (veh)		0										
Storage Bay Dist (ft)	180		265	265		280			150	455	455	
Storage Blk Time (%)	4	0	0	1		32	2	25	0			
Queuing Penalty (veh)	19	1	1	3		73	9	64	1			

Intersection: 101: MD 97 & Bel Pre Rd

Movement	NB	NB	NB	SB	SB	SB	SB	SB	SB
Directions Served	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	185	197	60	112	400	675	724	718	67
Average Queue (ft)	81	88	2	35	73	445	490	509	50
95th Queue (ft)	152	162	35	81	257	666	697	701	82
Link Distance (ft)	808	808				5872	5872	5872	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)			200	560	560				40
Storage Blk Time (%)		0			0	2		45	2
Queuing Penalty (veh)		0			0	3		67	13

Intersection: 102: MD 97 & Crystal Springs Apt

Movement	WB	SB	SB
Directions Served	R	T	T
Maximum Queue (ft)	56	657	826
Average Queue (ft)	24	41	78
95th Queue (ft)	46	334	463
Link Distance (ft)	234	808	808
Upstream Blk Time (%)		0	0
Queuing Penalty (veh)		1	1
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 103: MD 97 & Heathfield Rd/Postgate Terr

Movement	EB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LTR	LTR	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	286	222	225	211	226	262	59	478	618	499
Average Queue (ft)	150	93	112	62	68	89	12	293	327	317
95th Queue (ft)	249	185	195	171	187	232	41	474	524	489
Link Distance (ft)	346	247		860	860	860		1036	1036	1036
Upstream Blk Time (%)	0	0								
Queuing Penalty (veh)	0	0								
Storage Bay Dist (ft)			350				350			
Storage Blk Time (%)								4		
Queuing Penalty (veh)								1		

Intersection: 104: MD 97 & Home Depot Ent./7-11

Movement	EB	EB	WB	WB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	LT	R	L	TR	L	T	T	TR
Maximum Queue (ft)	112	119	86	80	64	6	82	833	866	867
Average Queue (ft)	37	57	25	30	14	0	9	142	210	159
95th Queue (ft)	93	99	66	60	44	3	50	511	674	576
Link Distance (ft)	1151	1151	213	213	75	75		860	860	860
Upstream Blk Time (%)					0			0	0	0
Queuing Penalty (veh)					0			0	1	0
Storage Bay Dist (ft)							235			
Storage Blk Time (%)								2		
Queuing Penalty (veh)								0		

Intersection: 105: MD 97 & MD 185

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	L	T	TR	L	LT	T	TR	L	T	T
Maximum Queue (ft)	235	262	295	237	227	267	304	495	465	148	246	269
Average Queue (ft)	132	149	172	142	131	104	218	277	297	59	130	132
95th Queue (ft)	213	238	262	208	196	227	325	414	425	119	226	234
Link Distance (ft)		261	261	261				968	968		682	682
Upstream Blk Time (%)	0	0	1	0	0							
Queuing Penalty (veh)	0	1	2	0	0							
Storage Bay Dist (ft)	425				300	280	280			330		
Storage Blk Time (%)	0	0		0	0	0	1	6				
Queuing Penalty (veh)	0	1		0	0	0	2	27				

Intersection: 105: MD 97 & MD 185

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	T
Maximum Queue (ft)	280	137	225	403	384	200
Average Queue (ft)	146	23	53	364	310	181
95th Queue (ft)	251	94	168	469	413	246
Link Distance (ft)	682			260	260	
Upstream Blk Time (%)				25	19	
Queuing Penalty (veh)				145	112	
Storage Bay Dist (ft)		280	200			175
Storage Blk Time (%)	0	0	0	31	27	13
Queuing Penalty (veh)	0	0	0	8	103	50

Intersection: 106: MD 97 & Northgate Plaza

Movement	EB	NB	NB	SB	SB
Directions Served	R	UL	T	UL	TR
Maximum Queue (ft)	64	116	6	78	13
Average Queue (ft)	18	34	0	20	0
95th Queue (ft)	44	83	4	58	7
Link Distance (ft)	253		472		682
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		175		150	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 107: MD 97 & Aspen Hill Rd/Cemetery

Movement	EB	EB	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	LTR	L	L	T	T	TR	L	T	T	T
Maximum Queue (ft)	87	167	106	290	316	294	192	249	34	244	241	264
Average Queue (ft)	27	63	14	160	161	66	46	63	6	73	81	94
95th Queue (ft)	69	130	62	262	269	188	136	173	25	160	169	193
Link Distance (ft)	894	894	216			470	470	470		472	472	472
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)				250	250				190			
Storage Blk Time (%)				2	3	0				0		19
Queuing Penalty (veh)				6	9	1				0		23

Intersection: 107: MD 97 & Aspen Hill Rd/Cemetery

Movement	SB
Directions Served	R
Maximum Queue (ft)	95
Average Queue (ft)	20
95th Queue (ft)	82
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	70
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 108: MD 97 & Wendy Ln/Aspen Manor

Movement	EB	WB	NB	SB	SB	SB
Directions Served	R	R	UL	L	T	TR
Maximum Queue (ft)	90	57	78	75	2	5
Average Queue (ft)	28	20	24	18	0	0
95th Queue (ft)	61	44	59	47	2	5
Link Distance (ft)	1228	342			470	470
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			200	150		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 109: MD 97 & Ralph Rd/Aspen Hill Apt

Movement	EB	EB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	LTR	L	T	TR	UL	T	T	TR
Maximum Queue (ft)	124	111	111	45	7	1	72	19	50	74
Average Queue (ft)	55	42	43	11	0	0	22	1	2	6
95th Queue (ft)	102	79	83	34	5	1	59	11	22	36
Link Distance (ft)	1188		370		352	352		650	650	650
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)		300		125			175			
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 110: MD 97 & Hewitt Ave.

Movement	WB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	R	T	T	TR	L	T	T	T
Maximum Queue (ft)	114	345	366	306	246	164	343	362	360
Average Queue (ft)	99	138	213	168	131	78	121	147	166
95th Queue (ft)	128	290	324	287	222	147	287	311	326
Link Distance (ft)		438	2204	2204	2204		352	352	352
Upstream Blk Time (%)							0	0	0
Queuing Penalty (veh)							1	1	2
Storage Bay Dist (ft)	90					140			
Storage Blk Time (%)	26	2				3	4		
Queuing Penalty (veh)	38	3				13	4		

Intersection: 201: MD 185 & Independence St

Movement	EB	EB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	LTR	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	125	433	143	145	252	178	146	5	384	401	198
Average Queue (ft)	79	260	60	65	86	45	46	0	60	84	87
95th Queue (ft)	153	422	123	127	208	127	118	4	245	263	167
Link Distance (ft)		872	167		2375	2375	2375		1317	1317	1317
Upstream Blk Time (%)			0								
Queuing Penalty (veh)			0								
Storage Bay Dist (ft)	100			250				270			
Storage Blk Time (%)	7	53			0						
Queuing Penalty (veh)	14	47			0						

Intersection: 202: MD 185 & Aspen Hill Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	NB
Directions Served	L	T	TR	L	T	TR	L	L	T	T	T	R
Maximum Queue (ft)	231	264	348	292	296	318	258	274	245	146	146	80
Average Queue (ft)	129	57	186	141	175	191	142	157	73	54	51	12
95th Queue (ft)	215	152	296	250	270	288	252	269	175	116	110	47
Link Distance (ft)		1834	1834		450	450			1317	1317	1317	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	300			410			350	350				350
Storage Blk Time (%)		0					1	1				
Queuing Penalty (veh)		0					1	1				

Intersection: 202: MD 185 & Aspen Hill Rd

Movement	SB	SB	SB	SB
Directions Served	L	T	T	TR
Maximum Queue (ft)	336	646	629	634
Average Queue (ft)	39	507	537	549
95th Queue (ft)	161	767	756	745
Link Distance (ft)	606	606	606	606
Upstream Blk Time (%)	0	3	4	5
Queuing Penalty (veh)	0	17	22	28
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 203: MD 185 & Home Depot Ent

Movement	EB	EB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	L	R	L	T	T	T	T	T	T	T	R
Maximum Queue (ft)	166	124	205	68	73	61	169	396	483	531	420
Average Queue (ft)	30	78	99	7	10	8	14	117	233	295	87
95th Queue (ft)	116	138	170	37	45	37	111	323	471	570	339
Link Distance (ft)	589			606	606	606	355	355	355	355	355
Upstream Blk Time (%)							0	1	4	7	1
Queuing Penalty (veh)							1	6	20	31	7
Storage Bay Dist (ft)		100	215								
Storage Blk Time (%)		11	0								
Queuing Penalty (veh)		1	1								

Intersection: 1000: MD 185

Movement	WB	WB	SB	SB
Directions Served	T	T	R	R
Maximum Queue (ft)	4	23	505	266
Average Queue (ft)	0	1	135	40
95th Queue (ft)	0	13	504	225
Link Distance (ft)	261	261	474	474
Upstream Blk Time (%)			1	0
Queuing Penalty (veh)			4	2
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2000: HAWK & Aspen Hill Rd

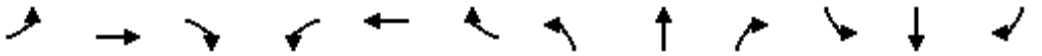
Movement	EB	EB	WB	WB
Directions Served	T	T	T	T
Maximum Queue (ft)	42	97	125	130
Average Queue (ft)	3	16	14	19
95th Queue (ft)	21	59	64	73
Link Distance (ft)	450	450	894	894
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3000: MD 97

Movement	SB	SB	SB
Directions Served	T	TR	R
Maximum Queue (ft)	182	188	137
Average Queue (ft)	117	99	37
95th Queue (ft)	225	208	111
Link Distance (ft)	75	75	75
Upstream Blk Time (%)	17	10	1
Queuing Penalty (veh)	149	86	12
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

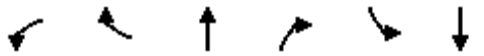
Network Summary

Network wide Queuing Penalty: 1260



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	385	235	145	220	180	215	1785	200	245	1140	120
Future Volume (vph)	210	385	235	145	220	180	215	1785	200	245	1140	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1600	1900	1900	1750	1900
Total Lost time (s)	9.0	7.0	4.0	9.0	7.0	4.0	8.5	7.0	7.0	8.5	7.0	7.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	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	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1562	1767	3539	1583	3433	4282	1583	3433	4684	1583
Flt Permitted	0.30	1.00	1.00	0.38	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	559	3539	1562	700	3539	1583	3433	4282	1583	3433	4684	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.97	0.97	0.97	0.96	0.96	0.96
Adj. Flow (vph)	231	423	258	159	242	198	222	1840	206	255	1188	125
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	92	0	0	61
Lane Group Flow (vph)	231	423	258	159	242	198	222	1840	114	255	1188	64
Confl. Peds. (#/hr)			5	5								
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4		Free	8		Free			6			2
Actuated Green, G (s)	48.8	28.8	180.0	30.4	19.4	180.0	15.9	90.7	90.7	18.0	92.8	92.8
Effective Green, g (s)	48.8	28.8	180.0	30.4	19.4	180.0	15.9	90.7	90.7	18.0	92.8	92.8
Actuated g/C Ratio	0.27	0.16	1.00	0.17	0.11	1.00	0.09	0.50	0.50	0.10	0.52	0.52
Clearance Time (s)	9.0	7.0		9.0	7.0		8.5	7.0	7.0	8.5	7.0	7.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	0.2	0.2	3.0	0.2	0.2
Lane Grp Cap (vph)	288	566	1562	183	381	1583	303	2157	797	343	2414	816
v/s Ratio Prot	c0.09	c0.12		0.05	0.07		0.06	c0.43		c0.07	0.25	
v/s Ratio Perm	c0.13		c0.17	0.09		0.13			0.07			0.04
v/c Ratio	0.80	0.75	0.17	0.87	0.64	0.13	0.73	0.85	0.14	0.74	0.49	0.08
Uniform Delay, d1	55.7	72.1	0.0	70.1	76.9	0.0	80.0	38.9	23.9	78.8	28.3	22.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.05	0.50	0.66	1.00	1.00	1.00
Incremental Delay, d2	14.8	5.4	0.2	32.6	3.4	0.2	7.4	3.8	0.3	8.4	0.7	0.2
Delay (s)	70.5	77.5	0.2	102.7	80.4	0.2	91.2	23.4	16.0	87.2	29.0	22.2
Level of Service	E	E	A	F	F	A	F	C	B	F	C	C
Approach Delay (s)		53.9			59.8			29.3			37.9	
Approach LOS		D			E			C			D	

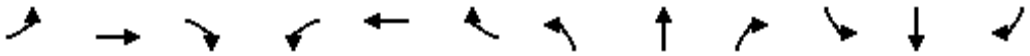
Intersection Summary			
HCM 2000 Control Delay	39.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	31.5
Intersection Capacity Utilization	95.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	80	2120	50	0	1520
Future Volume (Veh/h)	0	80	2120	50	0	1520
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	87	2304	54	0	1652
Pedestrians	9					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	1					
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			1091			919
pX, platoon unblocked	0.85	0.77			0.77	
vC, conflicting volume	2891	804			2367	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1355	0			1727	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	89			100	
cM capacity (veh/h)	118	827			276	

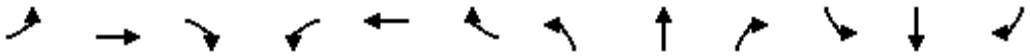
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	87	922	922	515	551	551	551
Volume Left	0	0	0	0	0	0	0
Volume Right	87	0	0	54	0	0	0
cSH	827	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.11	0.54	0.54	0.30	0.32	0.32	0.32
Queue Length 95th (ft)	9	0	0	0	0	0	0
Control Delay (s)	9.9	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	9.9	0.0			0.0		
Approach LOS	A						

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	53.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	5	85	35	5	20	110	2120	35	30	1445	45
Future Volume (vph)	30	5	85	35	5	20	110	2120	35	30	1445	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0			7.0		5.0	6.0		5.0	6.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes		0.99			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.90			0.95		1.00	1.00		1.00	1.00	
Flt Protected		0.99			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1641			1710		1770	5066		1770	5058	
Flt Permitted		0.89			0.57		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1480			1003		1770	5066		1770	5058	
Peak-hour factor, PHF	0.78	0.78	0.78	0.78	0.78	0.78	0.96	0.96	0.96	0.97	0.97	0.97
Adj. Flow (vph)	38	6	109	45	6	26	115	2208	36	31	1490	46
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	153	0	0	77	0	115	2244	0	31	1536	0
Confl. Peds. (#/hr)	10		1	1		10	2		14	14		2
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4			8								
Actuated Green, G (s)		24.8			24.8		17.0	129.7		7.5	120.2	
Effective Green, g (s)		24.8			24.8		17.0	129.7		7.5	120.2	
Actuated g/C Ratio		0.14			0.14		0.09	0.72		0.04	0.67	
Clearance Time (s)		7.0			7.0		5.0	6.0		5.0	6.0	
Vehicle Extension (s)		4.0			3.5		3.0	0.2		3.0	0.2	
Lane Grp Cap (vph)		203			138		167	3650		73	3377	
v/s Ratio Prot							c0.06	c0.44		0.02	0.30	
v/s Ratio Perm		c0.10			0.08							
v/c Ratio		0.75			0.56		0.69	0.61		0.42	0.45	
Uniform Delay, d1		74.7			72.5		78.9	12.6		84.1	14.3	
Progression Factor		1.00			1.00		0.97	0.83		0.79	1.13	
Incremental Delay, d2		15.5			5.3		6.9	0.5		3.6	0.4	
Delay (s)		90.1			77.8		83.4	11.0		69.8	16.6	
Level of Service		F			E		F	B		E	B	
Approach Delay (s)		90.1			77.8			14.5			17.6	
Approach LOS		F			E			B			B	

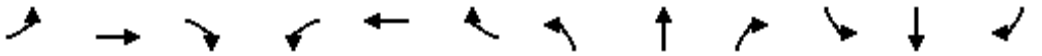
Intersection Summary			
HCM 2000 Control Delay	19.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	73.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	0	155	10	0	45	80	2190	30	15	1455	95
Future Volume (Veh/h)	30	0	155	10	0	45	80	2190	30	15	1455	95
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.88	0.88	0.88	0.81	0.81	0.81	0.93	0.93	0.93	0.96	0.96	0.96
Hourly flow rate (vph)	34	0	176	12	0	56	86	2355	32	16	1516	99
Pedestrians		2			23							
Lane Width (ft)		12.0			12.0							
Walking Speed (ft/s)		3.5			3.5							
Percent Blockage		0			2							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								553			933	
pX, platoon unblocked	0.86	0.86	0.86	0.86	0.86	0.79	0.86			0.79		
vC, conflicting volume	2612	4182	557	3279	4215	824	1617			2410		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1203	3028	0	1978	3067	0	1146			1853		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	63	100	81	41	100	93	83			94		
cM capacity (veh/h)	92	8	930	20	8	837	519			250		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	34	176	12	56	86	942	942	503	16	606	606	402
Volume Left	34	0	12	0	86	0	0	0	16	0	0	0
Volume Right	0	176	0	56	0	0	0	32	0	0	0	99
cSH	92	930	20	837	519	1700	1700	1700	250	1700	1700	1700
Volume to Capacity	0.37	0.19	0.59	0.07	0.17	0.55	0.55	0.30	0.06	0.36	0.36	0.24
Queue Length 95th (ft)	37	17	41	5	15	0	0	0	5	0	0	0
Control Delay (s)	65.8	9.8	323.2	9.6	13.3	0.0	0.0	0.0	20.4	0.0	0.0	0.0
Lane LOS	F	A	F	A	B				C			
Approach Delay (s)	18.8		64.9		0.5				0.2			
Approach LOS	C		F									

Intersection Summary				
Average Delay	2.2			
Intersection Capacity Utilization	64.7%	ICU Level of Service	C	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1080	600	25	290	360	85	30	1135	400	80	845	0
Future Volume (vph)	1080	600	25	290	360	85	30	1135	400	80	845	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1750	1900
Total Lost time (s)	7.0	7.0		7.0	7.0		8.5	7.0	7.0	8.5	7.0	
Lane Util. Factor	0.94	0.95		0.86	0.86		1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	0.99		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	4990	3511		1522	4631		1770	5085	1534	1770	4684	
Flt Permitted	0.95	1.00		0.95	0.99		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	4990	3511		1522	4631		1770	5085	1534	1770	4684	
Peak-hour factor, PHF	0.93	0.93	0.93	0.91	0.91	0.91	0.96	0.96	0.96	0.94	0.94	0.94
Adj. Flow (vph)	1161	645	27	319	396	93	31	1182	417	85	899	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	1161	672	0	201	607	0	31	1182	417	85	899	0
Confl. Peds. (#/hr)	11		26	26		11	8		28	28		8
Turn Type	Split	NA		Split	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	3	3		4	4		1	6	4	5	2	
Permitted Phases									6			
Actuated Green, G (s)	47.0	47.0		33.3	33.3		6.9	52.5	85.8	12.7	63.3	
Effective Green, g (s)	47.0	47.0		33.3	33.3		6.9	52.5	85.8	12.7	63.3	
Actuated g/C Ratio	0.26	0.26		0.18	0.18		0.04	0.29	0.48	0.07	0.35	
Clearance Time (s)	7.0	7.0		7.0	7.0		8.5	7.0	7.0	8.5	7.0	
Vehicle Extension (s)	4.0	4.0		4.0	4.0		4.0	0.2	4.0	4.0	0.2	
Lane Grp Cap (vph)	1302	916		281	856		67	1483	731	124	1647	
v/s Ratio Prot	c0.23	0.19		c0.13	0.13		0.02	c0.23	0.11	c0.05	c0.19	
v/s Ratio Perm									0.17			
v/c Ratio	0.89	0.73		0.72	0.71		0.46	0.80	0.57	0.69	0.55	
Uniform Delay, d1	64.0	60.8		68.9	68.8		84.7	58.8	33.9	81.7	46.8	
Progression Factor	0.79	0.77		1.00	1.00		1.16	0.84	0.98	1.04	0.91	
Incremental Delay, d2	7.8	3.1		8.9	2.9		6.3	4.2	1.2	14.8	1.2	
Delay (s)	58.2	49.7		77.8	71.7		104.8	53.6	34.5	100.1	43.7	
Level of Service	E	D		E	E		F	D	C	F	D	
Approach Delay (s)		55.1			73.2			49.7			48.5	
Approach LOS		E			E			D			D	

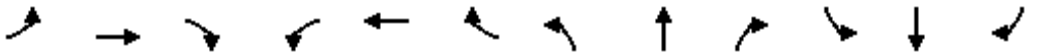
Intersection Summary			
HCM 2000 Control Delay	55.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	31.5
Intersection Capacity Utilization	95.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (veh/h)	0	0	45	0	0	0	10	40	1500	0	65	0
Future Volume (Veh/h)	0	0	45	0	0	0	10	40	1500	0	65	0
Sign Control		Stop			Stop				Free			
Grade		0%			0%				0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	49	0	0	0	0	43	1630	0	0	0
Pedestrians		8										
Lane Width (ft)		12.0										
Walking Speed (ft/s)		3.5										
Percent Blockage		1										
Right turn flare (veh)												
Median type									None			
Median storage veh)												
Upstream signal (ft)									547			
pX, platoon unblocked	0.92	0.92	0.86	0.92	0.92	0.85	0.00	0.86			0.00	0.85
vC, conflicting volume	1787	2874	419	2135	2915	543	0	1199			0	1630
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	530	1713	0	908	1758	0	0	670			0	1120
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			0.0	4.1
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			0.0	2.2
p0 queue free %	100	100	95	100	100	100	0	95			0	100
cM capacity (veh/h)	375	77	927	191	72	921	0	784			0	526

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	49	43	543	543	543	0	444	444	304
Volume Left	0	43	0	0	0	0	0	0	0
Volume Right	49	0	0	0	0	0	0	0	82
cSH	927	784	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.05	0.05	0.32	0.32	0.32	0.00	0.26	0.26	0.18
Queue Length 95th (ft)	4	4	0	0	0	0	0	0	0
Control Delay (s)	9.1	9.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	A							
Approach Delay (s)	9.1	0.3				0.0			
Approach LOS	A								

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	39.2%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	1020	75
Future Volume (Veh/h)	1020	75
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	1109	82
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	None	
Median storage veh)		
Upstream signal (ft)	801	
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	5	555	10	10	5	400	1415	15	5	975	95
Future Volume (vph)	130	5	555	10	10	5	400	1415	15	5	975	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.5	6.0		8.0		6.0	7.0		6.0	7.0	7.0
Lane Util. Factor		1.00	1.00		1.00		0.97	0.91		1.00	0.91	1.00
Frpb, ped/bikes		1.00	0.98		1.00		1.00	1.00		1.00	1.00	0.96
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.97		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1777	1546		1777		3433	5070		1770	5085	1518
Flt Permitted		0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1777	1546		1777		3433	5070		1770	5085	1518
Peak-hour factor, PHF	0.96	0.96	0.96	0.57	0.57	0.57	0.96	0.96	0.96	0.94	0.94	0.94
Adj. Flow (vph)	135	5	578	18	18	9	417	1474	16	5	1037	101
RTOR Reduction (vph)	0	0	74	0	5	0	0	0	0	0	0	56
Lane Group Flow (vph)	0	140	504	0	40	0	417	1490	0	5	1037	45
Confl. Peds. (#/hr)			29	29			10		21	29		10
Turn Type	Split	NA	pm+ov	Split	NA		Prot	NA		Prot	NA	Perm
Protected Phases	4	4	1	3	3		1	6		5	2	
Permitted Phases			4									2
Actuated Green, G (s)		28.7	63.0		8.0		34.3	113.3		1.5	80.5	80.5
Effective Green, g (s)		28.7	63.0		8.0		34.3	113.3		1.5	80.5	80.5
Actuated g/C Ratio		0.16	0.35		0.04		0.19	0.63		0.01	0.45	0.45
Clearance Time (s)		7.5	6.0		8.0		6.0	7.0		6.0	7.0	7.0
Vehicle Extension (s)		3.0	5.0		5.0		5.0	0.2		3.0	0.2	0.2
Lane Grp Cap (vph)		283	541		78		654	3191		14	2274	678
v/s Ratio Prot		0.08	c0.18		c0.02		0.12	c0.29		0.00	0.20	
v/s Ratio Perm			0.15									0.03
v/c Ratio		0.49	0.93		0.52		0.64	0.47		0.36	0.46	0.07
Uniform Delay, d1		69.0	56.4		84.1		67.1	17.5		88.8	34.5	28.3
Progression Factor		1.00	1.00		1.00		1.01	1.00		1.21	0.56	1.78
Incremental Delay, d2		1.4	23.7		11.0		2.8	0.5		13.0	0.6	0.2
Delay (s)		70.4	80.2		95.1		70.6	17.9		120.0	20.0	50.7
Level of Service		E	F		F		E	B		F	B	D
Approach Delay (s)		78.3			95.1			29.4			23.1	
Approach LOS		E			F			C			C	

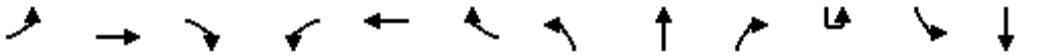
Intersection Summary			
HCM 2000 Control Delay	37.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	28.5
Intersection Capacity Utilization	76.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	0	0	120	0	0	135	100	30	1695	30	165	1300
Future Volume (Veh/h)	0	0	120	0	0	135	100	30	1695	30	165	1300
Sign Control		Stop			Stop				Free			Free
Grade		0%			0%				0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	130	0	0	147	0	33	1842	33	179	1413
Pedestrians		10			8							
Lane Width (ft)		12.0			12.0							
Walking Speed (ft/s)		3.5			3.5							
Percent Blockage		1			1							
Right turn flare (veh)												
Median type									None			None
Median storage veh)												
Upstream signal (ft)									1156			557
pX, platoon unblocked	0.78	0.78	0.87	0.78	0.78	0.72	0.00	0.87			0.72	
vC, conflicting volume	2649	3771	522	2892	3796	638	0	1505			1883	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	992	2428	0	1302	2459	0	0	1050			843	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			2.2	
p0 queue free %	100	100	86	100	100	81	0	94			68	
cM capacity (veh/h)	89	16	932	56	15	770	0	566			560	

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	130	147	33	737	737	401	179	565	565	365
Volume Left	0	0	33	0	0	0	179	0	0	0
Volume Right	130	147	0	0	0	33	0	0	0	82
cSH	932	770	566	1700	1700	1700	560	1700	1700	1700
Volume to Capacity	0.14	0.19	0.06	0.43	0.43	0.24	0.32	0.33	0.33	0.21
Queue Length 95th (ft)	12	18	5	0	0	0	34	0	0	0
Control Delay (s)	9.5	10.8	11.7	0.0	0.0	0.0	14.4	0.0	0.0	0.0
Lane LOS	A	B	B				B			
Approach Delay (s)	9.5	10.8	0.2				1.5			
Approach LOS	A	B								

Intersection Summary				
Average Delay	1.5			
Intersection Capacity Utilization	51.5%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	75
Future Volume (Veh/h)	75
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	82
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	
Direction, Lane #	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	30	0	110	10	0	40	40	1665	35	120	35	1320
Future Volume (Veh/h)	30	0	110	10	0	40	40	1665	35	120	35	1320
Sign Control		Stop			Stop			Free				Free
Grade		0%			0%			0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	33	0	120	11	0	43	43	1810	38	0	38	1435
Pedestrians		7			41							
Lane Width (ft)		12.0			12.0							
Walking Speed (ft/s)		3.5			3.5							
Percent Blockage		1			4							
Right turn flare (veh)			12									
Median type								None				None
Median storage veh)												
Upstream signal (ft)								425				1288
pX, platoon unblocked	0.72	0.72	0.91	0.72	0.72	0.68	0.91			0.00	0.68	
vC, conflicting volume	2275	3518	510	2510	3523	663	1491			0	1889	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	546	2262	93	871	2270	0	1177			0	643	
tC, single (s)	*5.0	6.5	6.9	7.5	6.5	6.9	4.1			0.0	4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			0.0	2.2	
p0 queue free %	91	100	86	91	100	94	92			0	94	
cM capacity (veh/h)	361	24	850	126	24	705	530			0	610	

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	153	54	43	724	724	400	38	574	574	336
Volume Left	33	11	43	0	0	0	38	0	0	0
Volume Right	120	43	0	0	0	38	0	0	0	49
cSH	1084	365	530	1700	1700	1700	610	1700	1700	1700
Volume to Capacity	0.14	0.15	0.08	0.43	0.43	0.24	0.06	0.34	0.34	0.20
Queue Length 95th (ft)	12	13	7	0	0	0	5	0	0	0
Control Delay (s)	11.2	16.6	12.4	0.0	0.0	0.0	11.3	0.0	0.0	0.0
Lane LOS	B	C	B				B			
Approach Delay (s)	11.2	16.6	0.3				0.3			
Approach LOS	B	C								

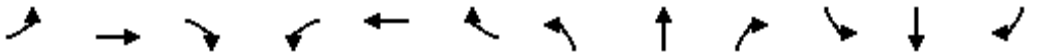
Intersection Summary				
Average Delay	1.0			
Intersection Capacity Utilization	61.3%	ICU Level of Service	B	
Analysis Period (min)	15			

* User Entered Value

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	45
Future Volume (Veh/h)	45
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	49
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	
Direction, Lane #	

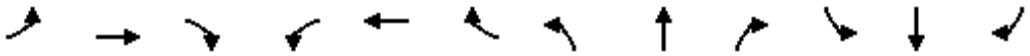
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	105	150	1590	180	215	1225
Future Volume (vph)	105	150	1590	180	215	1225
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	6.0		6.0	6.0
Lane Util. Factor	1.00	1.00	0.91		1.00	0.91
Frpb, ped/bikes	1.00	0.98	0.99		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.98		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1548	4944		1770	5085
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1548	4944		1770	5085
Peak-hour factor, PHF	0.94	0.94	0.96	0.96	0.96	0.96
Adj. Flow (vph)	112	160	1656	188	224	1276
RTOR Reduction (vph)	0	138	0	0	0	0
Lane Group Flow (vph)	112	22	1844	0	224	1276
Confl. Peds. (#/hr)	9	10		16	16	
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4				
Actuated Green, G (s)	16.4	16.4	52.6		22.5	86.1
Effective Green, g (s)	16.4	16.4	52.6		22.5	86.1
Actuated g/C Ratio	0.14	0.14	0.44		0.19	0.72
Clearance Time (s)	6.5	6.5	6.0		6.0	6.0
Vehicle Extension (s)	3.0	3.0	0.2		3.0	0.2
Lane Grp Cap (vph)	241	211	2167		331	3648
v/s Ratio Prot	c0.06		c0.37		c0.13	c0.25
v/s Ratio Perm		0.01				
v/c Ratio	0.46	0.10	0.85		0.68	0.35
Uniform Delay, d1	47.8	45.4	30.2		45.4	6.4
Progression Factor	1.00	1.00	1.00		0.98	1.09
Incremental Delay, d2	1.4	0.2	4.4		5.4	0.3
Delay (s)	49.2	45.6	34.6		50.0	7.2
Level of Service	D	D	C		D	A
Approach Delay (s)	47.1		34.6			13.6
Approach LOS	D		C			B

Intersection Summary			
HCM 2000 Control Delay	26.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	24.5
Intersection Capacity Utilization	74.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



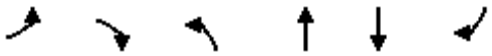
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	15	110	105	30	25	90	1655	90	15	970	170
Future Volume (vph)	125	15	110	105	30	25	90	1655	90	15	970	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0			7.0		5.5	6.0		5.5	6.0	
Lane Util. Factor	1.00	1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00		1.00	0.98	
Flpb, ped/bikes	0.97	1.00			1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.87			0.98		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1719	1616			1750		1770	5022		1770	4891	
Flt Permitted	0.65	1.00			0.60		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1178	1616			1091		1770	5022		1770	4891	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	136	16	120	114	33	27	98	1799	98	16	1054	185
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	136	136	0	0	174	0	98	1897	0	16	1239	0
Confl. Peds. (#/hr)	25					25	10		8	8		10
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4			8								
Actuated Green, G (s)	31.5	31.5			31.5		16.2	114.6		5.4	103.8	
Effective Green, g (s)	31.5	31.5			31.5		16.2	114.6		5.4	103.8	
Actuated g/C Ratio	0.18	0.18			0.18		0.09	0.64		0.03	0.58	
Clearance Time (s)	7.0	7.0			7.0		5.5	6.0		5.5	6.0	
Vehicle Extension (s)	4.0	4.0			3.0		4.0	0.2		4.0	0.2	
Lane Grp Cap (vph)	206	282			190		159	3197		53	2820	
v/s Ratio Prot		0.08					c0.06	c0.38		0.01	0.25	
v/s Ratio Perm	0.12				c0.16							
v/c Ratio	0.66	0.48			0.92		0.62	0.59		0.30	0.44	
Uniform Delay, d1	69.3	66.9			72.9		78.9	19.1		85.5	21.6	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.05	0.59	
Incremental Delay, d2	8.4	1.8			41.9		7.9	0.8		3.6	0.4	
Delay (s)	77.7	68.7			114.8		86.8	19.9		93.5	13.2	
Level of Service	E	E			F		F	B		F	B	
Approach Delay (s)		73.2			114.8			23.2			14.2	
Approach LOS		E			F			C			B	

Intersection Summary			
HCM 2000 Control Delay	28.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	24.5
Intersection Capacity Utilization	83.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	325	375	125	190	235	80	210	1390	205	110	840	205
Future Volume (vph)	325	375	125	190	235	80	210	1390	205	110	840	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	7.0		6.5	7.0		5.5	7.0	7.0	5.5	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.97	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.95	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.96		1.00	0.96		1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1767	3378		1765	3381		3433	5085	1511	1770	4910	
Flt Permitted	0.24	1.00		0.29	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	452	3378		533	3381		3433	5085	1511	1770	4910	
Peak-hour factor, PHF	0.96	0.96	0.96	0.87	0.87	0.87	0.97	0.97	0.97	0.96	0.96	0.96
Adj. Flow (vph)	339	391	130	218	270	92	216	1433	211	115	875	214
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	339	521	0	218	362	0	216	1433	211	115	1089	0
Confl. Peds. (#/hr)	11		16	16		11	6		14	14		6
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8					6			
Actuated Green, G (s)	65.4	36.0		48.2	27.4		17.4	76.1	76.1	16.1	74.8	
Effective Green, g (s)	65.4	36.0		48.2	27.4		17.4	76.1	76.1	16.1	74.8	
Actuated g/C Ratio	0.36	0.20		0.27	0.15		0.10	0.42	0.42	0.09	0.42	
Clearance Time (s)	6.5	7.0		6.5	7.0		5.5	7.0	7.0	5.5	7.0	
Vehicle Extension (s)	3.0	4.0		5.0	4.0		5.0	0.2	0.2	3.0	0.2	
Lane Grp Cap (vph)	379	675		285	514		331	2149	638	158	2040	
v/s Ratio Prot	c0.15	0.15		0.09	0.11		0.06	c0.28		c0.06	0.22	
v/s Ratio Perm	c0.18			0.12					0.14			
v/c Ratio	0.89	0.77		0.76	0.70		0.65	0.67	0.33	0.73	0.53	
Uniform Delay, d1	46.8	68.1		55.4	72.5		78.4	41.8	34.9	79.8	39.5	
Progression Factor	1.00	1.00		1.00	1.00		1.37	0.65	0.66	0.91	0.89	
Incremental Delay, d2	22.5	5.8		13.5	4.7		5.1	1.4	1.1	15.1	1.0	
Delay (s)	69.3	73.9		68.9	77.1		112.6	28.7	24.2	88.2	36.0	
Level of Service	E	E		E	E		F	C	C	F	D	
Approach Delay (s)		72.1			74.0			37.9			40.9	
Approach LOS		E			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	49.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	29.0
Intersection Capacity Utilization	88.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	10	100	100	1695	1055	30
Future Volume (vph)	10	100	100	1695	1055	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Lane Util. Factor	1.00	1.00	1.00	0.91	0.86	1.00
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1572	1770	5085	6408	1545
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1770	1572	1770	5085	6408	1545
Peak-hour factor, PHF	0.79	0.79	0.97	0.97	0.98	0.98
Adj. Flow (vph)	13	127	103	1747	1077	31
RTOR Reduction (vph)	0	49	0	0	0	6
Lane Group Flow (vph)	13	78	103	1747	1077	25
Confl. Peds. (#/hr)		3	3			3
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	4	5	5	2	6	4
Permitted Phases		4				6
Actuated Green, G (s)	12.5	28.3	15.8	153.5	130.7	143.2
Effective Green, g (s)	12.5	28.3	15.8	153.5	130.7	143.2
Actuated g/C Ratio	0.07	0.16	0.09	0.85	0.73	0.80
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	122	308	155	4336	4652	1289
v/s Ratio Prot	0.01	c0.02	c0.06	c0.34	0.17	0.00
v/s Ratio Perm		0.03				0.01
v/c Ratio	0.11	0.25	0.66	0.40	0.23	0.02
Uniform Delay, d1	78.5	66.6	79.5	3.0	8.1	3.8
Progression Factor	1.00	1.00	1.38	0.23	1.13	0.39
Incremental Delay, d2	0.4	0.4	7.4	0.2	0.1	0.0
Delay (s)	78.9	67.0	117.2	0.9	9.3	1.5
Level of Service	E	E	F	A	A	A
Approach Delay (s)	68.1			7.4	9.1	
Approach LOS	E			A	A	

Intersection Summary			
HCM 2000 Control Delay	10.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	56.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection Sign configuration not allowed in HCM analysis.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑		
Traffic Volume (vph)	690	0	0	505	0	0
Future Volume (vph)	690	0	0	505	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0			6.0		
Lane Util. Factor	0.95			0.95		
Frt	1.00			1.00		
Flt Protected	1.00			1.00		
Satd. Flow (prot)	3539			3539		
Flt Permitted	1.00			1.00		
Satd. Flow (perm)	3539			3539		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	750	0	0	549	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	750	0	0	549	0	0
Turn Type	NA			NA		
Protected Phases	2			6		
Permitted Phases						
Actuated Green, G (s)	14.1			14.1		
Effective Green, g (s)	14.1			14.1		
Actuated g/C Ratio	0.53			0.53		
Clearance Time (s)	6.0			6.0		
Vehicle Extension (s)	3.0			3.0		
Lane Grp Cap (vph)	1868			1868		
v/s Ratio Prot	c0.21			0.16		
v/s Ratio Perm						
v/c Ratio	0.40			0.29		
Uniform Delay, d1	3.8			3.5		
Progression Factor	1.00			1.00		
Incremental Delay, d2	0.1			0.1		
Delay (s)	3.9			3.6		
Level of Service	A			A		
Approach Delay (s)	3.9			3.6	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM 2000 Control Delay	3.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	26.7	Sum of lost time (s)	10.5
Intersection Capacity Utilization	24.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Traffic Volume (veh/h)	0	2300	925	695	0	0
Future Volume (Veh/h)	0	2300	925	695	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	2500	1005	755	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		400	1086			
pX, platoon unblocked	0.86				0.87	0.86
vC, conflicting volume	1760				1630	502
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1562				15	104
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	361				869	803

Direction, Lane #	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	625	625	625	625	670	587	503
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	252	503
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.37	0.37	0.37	0.37	0.39	0.35	0.30
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS							
Approach Delay (s)	0.0				0.0		
Approach LOS							

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	36.7%	ICU Level of Service	A
Analysis Period (min)	15		

Arterial Level of Service: NB MD 97

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Hewitt Ave.	110	37.9	80.3	0.4	19
Aspen Hill Apt	109	4.3	12.8	0.1	23
Aspen Manor	108	2.0	16.4	0.1	30
Cemetery	107	16.1	27.2	0.1	14
	106	2.6	12.9	0.1	29
MD 185	105	50.0	64.6	0.2	8
	3000	4.4	11.0	0.1	25
7-11	104	1.1	4.2	0.0	25
Postgate Terr	103	15.4	29.5	0.2	22
Crystal Spring Apt	102	4.5	21.0	0.2	35
Bel Pre Rd	101	26.9	40.4	0.2	16
Total		165.2	320.2	1.7	19

Arterial Level of Service: SB MD 97

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Bel Pre Rd	101	31.9	86.3	0.7	29
Crystal Spring Apt	102	5.7	19.6	0.2	32
Heathfield Rd	103	26.9	43.5	0.2	17
Home Depot Ent.	104	8.4	22.3	0.2	28
	3000	1.1	3.3	0.0	31
MD 185	105	41.5	47.3	0.1	6
Northgate Plaza	106	4.0	19.7	0.2	28
Aspen Hill Rd	107	19.1	29.8	0.1	13
Wendy Ln	108	3.7	14.5	0.1	26
Ralph Rd	109	1.7	16.8	0.1	30
Hewitt Ave.	110	9.0	17.2	0.1	17
Total		153.0	320.4	1.9	22

Arterial Level of Service: NB MD 185

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Independence St	201	22.4	58.5	0.5	28
Aspen Hill Rd	202	37.8	58.9	0.3	17
Home Depot Ent	203	6.5	17.3	0.1	28
	1000	3.8	10.3	0.1	28
MD 97	105	35.2	40.9	0.1	8
Total		105.7	185.9	1.0	20

Arterial Level of Service: SB MD 185

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
MD 97	105	69.1	83.0	0.2	9
	1000	4.5	11.4	0.1	27
Home Depot Ent	203	17.8	24.8	0.1	11
Aspen Hill Rd	202	44.6	55.0	0.1	9
Independence St	201	7.8	29.9	0.3	33
Total		143.9	204.0	0.8	14

Intersection: 24: Bend

Movement	WB	WB
Directions Served	T	
Maximum Queue (ft)	190	52
Average Queue (ft)	15	2
95th Queue (ft)	93	21
Link Distance (ft)	361	361
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 101: MD 97 & Bel Pre Rd

Movement	EB	EB	EB	EB	B24	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	R	T	L	T	T	R	L	L	T
Maximum Queue (ft)	205	423	290	216	201	236	197	210	53	173	217	371
Average Queue (ft)	158	198	175	9	12	104	97	96	13	97	101	194
95th Queue (ft)	239	362	285	89	92	204	160	179	87	163	180	355
Link Distance (ft)		361			2203		2717	2717				808
Upstream Blk Time (%)		2										
Queuing Penalty (veh)		0										
Storage Bay Dist (ft)	180		265	265		280			150	455	455	
Storage Blk Time (%)	10	11	1	0		0		2	0			
Queuing Penalty (veh)	66	69	3	0		0		3	0			

Intersection: 101: MD 97 & Bel Pre Rd

Movement	NB	NB	NB	SB	SB	SB	SB	SB	SB
Directions Served	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	411	444	225	174	174	304	316	338	65
Average Queue (ft)	226	263	107	84	88	148	162	158	47
95th Queue (ft)	392	445	291	155	152	267	286	306	88
Link Distance (ft)	808	808				3584	3584	3584	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)			200	560	560				40
Storage Blk Time (%)		14	0					24	1
Queuing Penalty (veh)		29	1					29	5

Intersection: 102: MD 97 & Crystal Spring Apt

Movement	WB	NB	NB
Directions Served	R	T	TR
Maximum Queue (ft)	115	11	17
Average Queue (ft)	51	0	1
95th Queue (ft)	93	8	9
Link Distance (ft)	234	1036	1036
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 103: MD 97 & Heathfield Rd/Postgate Terr

Movement	EB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LTR	LTR	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	252	128	237	311	344	360	81	428	468	434
Average Queue (ft)	121	49	115	157	187	211	23	211	238	219
95th Queue (ft)	215	105	196	284	334	356	60	403	429	402
Link Distance (ft)	346	247		860	860	860		1036	1036	1036
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)			350				350			
Storage Blk Time (%)				0				2		
Queuing Penalty (veh)				0				1		

Intersection: 104: MD 97 & Home Depot Ent./7-11

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	LT	R	L	T	TR	L	T	T	TR
Maximum Queue (ft)	90	179	39	107	114	21	20	57	133	179	49
Average Queue (ft)	31	70	8	34	43	1	1	13	5	6	2
95th Queue (ft)	75	133	31	72	92	13	9	40	97	121	19
Link Distance (ft)	1151	1151	213	213	76	76	76		860	860	860
Upstream Blk Time (%)					3	0					
Queuing Penalty (veh)					15	0					
Storage Bay Dist (ft)								235			
Storage Blk Time (%)											
Queuing Penalty (veh)											

Intersection: 105: MD 97 & MD 185

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	L	T	TR	L	LT	T	TR	L	T	T
Maximum Queue (ft)	279	332	391	318	278	245	273	379	368	235	437	426
Average Queue (ft)	195	238	275	200	198	118	166	160	210	46	248	256
95th Queue (ft)	307	347	388	290	271	215	258	298	326	124	392	403
Link Distance (ft)		280	280	280				968	968		682	682
Upstream Blk Time (%)	0	1	4	0	0							
Queuing Penalty (veh)	0	5	25	3	0							
Storage Bay Dist (ft)	425				300	280	280			330		
Storage Blk Time (%)	0	1		0	0	0	1	1			3	
Queuing Penalty (veh)	0	3		2	1	0	1	6			1	

Intersection: 105: MD 97 & MD 185

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	T
Maximum Queue (ft)	531	305	224	362	373	200
Average Queue (ft)	299	225	101	186	182	138
95th Queue (ft)	489	376	201	317	324	227
Link Distance (ft)	682			253	253	
Upstream Blk Time (%)	0			5	6	
Queuing Penalty (veh)	0			24	27	
Storage Bay Dist (ft)		280	200			175
Storage Blk Time (%)	10	6	0	13	11	8
Queuing Penalty (veh)	38	22	0	11	32	22

Intersection: 106: MD 97 & Northgate Plaza

Movement	EB	NB	SB	SB	SB
Directions Served	R	UL	UL	T	TR
Maximum Queue (ft)	57	81	88	18	35
Average Queue (ft)	22	24	32	1	2
95th Queue (ft)	46	64	73	9	16
Link Distance (ft)	253			682	682
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		175	150		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 107: MD 97 & Aspen Hill Rd/Cemetery

Movement	EB	EB	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	LTR	L	L	T	T	TR	L	T	T	T
Maximum Queue (ft)	262	482	110	279	306	325	380	423	71	340	291	331
Average Queue (ft)	129	249	29	153	161	111	148	203	8	142	132	149
95th Queue (ft)	220	434	84	246	256	271	335	405	44	261	247	274
Link Distance (ft)	894	894	216			470	470	470		466	466	466
Upstream Blk Time (%)								0				
Queuing Penalty (veh)								0				
Storage Bay Dist (ft)				250	250				190			
Storage Blk Time (%)				1	1	2				3		24
Queuing Penalty (veh)				5	6	7				0		23

Intersection: 107: MD 97 & Aspen Hill Rd/Cemetery

Movement	SB
Directions Served	R
Maximum Queue (ft)	95
Average Queue (ft)	39
95th Queue (ft)	113
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	70
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 108: MD 97 & Wendy Ln/Aspen Manor

Movement	EB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	R	R	UL	T	TR	L	T	T	TR
Maximum Queue (ft)	358	147	159	5	45	212	229	19	27
Average Queue (ft)	140	58	68	0	2	97	25	1	3
95th Queue (ft)	321	112	136	3	19	190	146	12	16
Link Distance (ft)	1228	342		650	650		470	470	470
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)			200			150			
Storage Blk Time (%)			0			7	0		
Queuing Penalty (veh)			0			30	0		

Intersection: 109: MD 97 & Ralph Rd/Aspen Hill Apt

Movement	EB	EB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	LTR	L	T	TR	UL	T	T	TR
Maximum Queue (ft)	207	158	108	70	8	15	172	78	60	28
Average Queue (ft)	92	58	43	20	0	1	76	3	0	2
95th Queue (ft)	245	144	87	48	3	9	144	54	3	17
Link Distance (ft)	1188		370		352	352		650	650	650
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)		300		125			175			
Storage Blk Time (%)	1	0					1			
Queuing Penalty (veh)	1	0					4			

Intersection: 110: MD 97 & Hewitt Ave.

Movement	WB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	R	T	T	TR	L	T	T	T
Maximum Queue (ft)	114	234	518	488	504	164	313	311	322
Average Queue (ft)	69	73	340	315	320	143	139	112	132
95th Queue (ft)	118	161	495	468	478	186	327	240	253
Link Distance (ft)		438	2204	2204	2204		352	352	352
Upstream Blk Time (%)							0	0	0
Queuing Penalty (veh)							1	0	0
Storage Bay Dist (ft)	90					140			
Storage Blk Time (%)	8	4				27	1		
Queuing Penalty (veh)	12	4				110	3		

Intersection: 201: MD 185 & Independence St

Movement	EB	EB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	LTR	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	125	331	201	274	378	371	387	39	122	155	192
Average Queue (ft)	97	158	136	101	201	204	215	7	45	72	96
95th Queue (ft)	150	308	214	201	358	361	366	26	104	139	171
Link Distance (ft)		872	179		2375	2375	2375		1338	1338	1338
Upstream Blk Time (%)			8								
Queuing Penalty (veh)			0								
Storage Bay Dist (ft)	100			250				270			
Storage Blk Time (%)	24	22		0	6						
Queuing Penalty (veh)	30	28		2	5						

Intersection: 202: MD 185 & Aspen Hill Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	NB
Directions Served	L	T	TR	L	T	TR	L	L	T	T	T	R
Maximum Queue (ft)	324	417	419	326	251	298	193	246	343	359	416	318
Average Queue (ft)	219	204	255	177	162	197	107	125	189	200	204	105
95th Queue (ft)	330	375	382	292	240	273	167	196	298	315	336	230
Link Distance (ft)		1838	1838		450	450			1338	1338	1338	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	300			410			350	350				350
Storage Blk Time (%)	3	1		0					0		0	0
Queuing Penalty (veh)	6	5		0					0		1	0

Intersection: 202: MD 185 & Aspen Hill Rd

Movement	SB	SB	SB	SB
Directions Served	L	T	T	TR
Maximum Queue (ft)	220	392	434	493
Average Queue (ft)	98	174	221	266
95th Queue (ft)	180	315	351	400
Link Distance (ft)	606	606	606	606
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 203: MD 185 & Home Depot Ent

Movement	EB	EB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	L	R	L	T	T	T	T	T	T	T	R
Maximum Queue (ft)	77	103	188	78	99	71	131	169	283	327	153
Average Queue (ft)	13	42	112	10	12	11	30	66	93	130	9
95th Queue (ft)	47	81	181	45	57	48	90	150	218	274	75
Link Distance (ft)	589			606	606	606	343	343	343	343	343
Upstream Blk Time (%)									0	0	0
Queuing Penalty (veh)									0	0	0
Storage Bay Dist (ft)		100	215								
Storage Blk Time (%)		1	0								
Queuing Penalty (veh)		0	2								

Intersection: 1000: MD 185

Movement	EB	EB	EB	SB
Directions Served	T	T	T	R
Maximum Queue (ft)	12	42	37	239
Average Queue (ft)	1	3	2	13
95th Queue (ft)	10	20	33	155
Link Distance (ft)	343	343	343	481
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2000: HAWK & Aspen Hill Rd

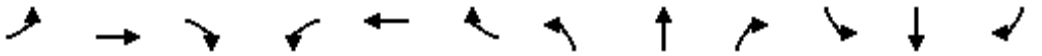
Movement	EB	EB	WB	WB
Directions Served	T	T	T	T
Maximum Queue (ft)	106	214	194	192
Average Queue (ft)	15	44	29	30
95th Queue (ft)	66	140	109	111
Link Distance (ft)	450	450	894	894
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3000: MD 97

Movement	SB	SB	SB
Directions Served	T	TR	R
Maximum Queue (ft)	32	67	14
Average Queue (ft)	1	3	1
95th Queue (ft)	15	26	11
Link Distance (ft)	76	76	76
Upstream Blk Time (%)	0	0	0
Queuing Penalty (veh)	0	2	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 732



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	175	210	300	330	470	260	210	900	90	135	2165	155
Future Volume (vph)	175	210	300	330	470	260	210	900	90	135	2165	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1600	1900	1900	1750	1900
Total Lost time (s)	9.0	7.0	4.0	9.0	7.0	4.0	8.5	7.0	7.0	8.5	7.0	7.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	*1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	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	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1561	1764	3539	1583	3433	4282	1561	3433	5147	1561
Flt Permitted	0.18	1.00	1.00	0.49	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	332	3539	1561	904	3539	1583	3433	4282	1561	3433	5147	1561
Peak-hour factor, PHF	0.90	0.90	0.90	0.86	0.86	0.86	0.94	0.94	0.94	0.97	0.97	0.97
Adj. Flow (vph)	194	233	333	384	547	302	223	957	96	139	2232	160
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	52	0	0	73
Lane Group Flow (vph)	194	233	333	384	547	302	223	957	44	139	2232	87
Confl. Peds. (#/hr)			7	7			1		1	1		1
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4		Free	8		Free			6			2
Actuated Green, G (s)	50.9	30.5	180.0	56.1	33.1	180.0	15.9	82.7	82.7	12.3	79.1	79.1
Effective Green, g (s)	50.9	30.5	180.0	56.1	33.1	180.0	15.9	82.7	82.7	12.3	79.1	79.1
Actuated g/C Ratio	0.28	0.17	1.00	0.31	0.18	1.00	0.09	0.46	0.46	0.07	0.44	0.44
Clearance Time (s)	9.0	7.0		9.0	7.0		8.5	7.0	7.0	8.5	7.0	7.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	0.2	0.2	3.0	0.2	0.2
Lane Grp Cap (vph)	256	599	1561	391	650	1583	303	1967	717	234	2261	685
v/s Ratio Prot	0.09	0.07		c0.13	0.15		c0.06	0.22		0.04	c0.43	
v/s Ratio Perm	0.13		c0.21	c0.18		0.19			0.03			0.06
v/c Ratio	0.76	0.39	0.21	0.98	0.84	0.19	0.74	0.49	0.06	0.59	0.99	0.13
Uniform Delay, d1	53.2	66.5	0.0	58.1	70.9	0.0	80.0	33.9	27.1	81.4	49.9	30.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.93	4.50	1.00	1.00	1.00
Incremental Delay, d2	12.1	0.4	0.3	40.5	9.6	0.3	8.6	0.8	0.2	4.0	16.1	0.4
Delay (s)	65.3	66.9	0.3	98.6	80.6	0.3	84.8	32.3	121.9	85.4	66.1	30.3
Level of Service	E	E	A	F	F	A	F	C	F	F	E	C
Approach Delay (s)		37.3			66.5			48.2			64.9	
Approach LOS		D			E			D			E	

Intersection Summary			
HCM 2000 Control Delay	57.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	31.5
Intersection Capacity Utilization	108.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

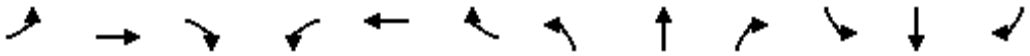
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	60	1140	30	0	2795
Future Volume (Veh/h)	0	60	1140	30	0	2795
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	65	1239	33	0	3038
Pedestrians	5					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			1091			919
pX, platoon unblocked	0.62	0.90			0.90	
vC, conflicting volume	2273	434			1277	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0	7			938	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	93			100	
cM capacity (veh/h)	632	967			654	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	65	496	496	281	1013	1013	1013
Volume Left	0	0	0	0	0	0	0
Volume Right	65	0	0	33	0	0	0
cSH	967	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.07	0.29	0.29	0.17	0.60	0.60	0.60
Queue Length 95th (ft)	5	0	0	0	0	0	0
Control Delay (s)	9.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A						
Approach Delay (s)	9.0	0.0			0.0		
Approach LOS	A						

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	57.3%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	10	125	70	10	20	125	1130	20	20	2660	115
Future Volume (vph)	20	10	125	70	10	20	125	1130	20	20	2660	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0			7.0		5.0	6.0		5.0	6.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.89			0.97		1.00	1.00		1.00	0.99	
Flt Protected		0.99			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1647			1742		1770	5069		1769	5049	
Flt Permitted		0.94			0.48		0.03	1.00		0.20	1.00	
Satd. Flow (perm)		1562			870		61	5069		371	5049	
Peak-hour factor, PHF	0.79	0.79	0.79	0.58	0.58	0.58	0.92	0.92	0.92	0.98	0.98	0.98
Adj. Flow (vph)	25	13	158	121	17	34	136	1228	22	20	2714	117
RTOR Reduction (vph)	0	75	0	0	5	0	0	1	0	0	2	0
Lane Group Flow (vph)	0	121	0	0	167	0	136	1249	0	20	2829	0
Confl. Peds. (#/hr)	10					10	1		2	2		1
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4			8			6			2		
Actuated Green, G (s)		34.0			34.0		133.0	124.2		121.8	118.0	
Effective Green, g (s)		34.0			34.0		133.0	124.2		121.8	118.0	
Actuated g/C Ratio		0.19			0.19		0.74	0.69		0.68	0.66	
Clearance Time (s)		7.0			7.0		5.0	6.0		5.0	6.0	
Vehicle Extension (s)		4.0			3.5		3.0	0.2		3.0	0.2	
Lane Grp Cap (vph)		295			164		140	3497		280	3309	
v/s Ratio Prot							c0.05	0.25		0.00	0.56	
v/s Ratio Perm		0.08			c0.19		c0.67			0.05		
v/c Ratio		0.41			1.02		0.97	0.36		0.07	0.85	
Uniform Delay, d1		64.2			73.0		63.0	11.5		9.7	24.3	
Progression Factor		1.00			1.00		1.01	1.55		0.37	0.38	
Incremental Delay, d2		1.3			75.4		64.0	0.3		0.0	1.4	
Delay (s)		65.5			148.4		127.4	18.1		3.6	10.6	
Level of Service		E			F		F	B		A	B	
Approach Delay (s)		65.5			148.4			28.8			10.6	
Approach LOS		E			F			C			B	

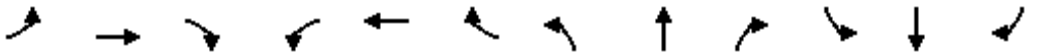
Intersection Summary			
HCM 2000 Control Delay	23.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	99.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	10	150	20	5	65	20	1190	70	25	2710	120
Future Volume (Veh/h)	20	10	150	20	5	65	20	1190	70	25	2710	120
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.74	0.74	0.74	0.91	0.91	0.91	0.97	0.97	0.97
Hourly flow rate (vph)	21	11	158	27	7	88	22	1308	77	26	2794	124
Pedestrians		14			12							
Lane Width (ft)		12.0			12.0							
Walking Speed (ft/s)		3.5			3.5							
Percent Blockage		1			1							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								553			933	
pX, platoon unblocked	0.60	0.60	0.54	0.60	0.60	0.89	0.54			0.89		
vC, conflicting volume	3494	4363	1007	2549	4386	486	2932			1397		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1599	3056	0	17	3095	4	1613			1024		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	0	73	0	0	91	90			96		
cM capacity (veh/h)	0	6	581	0	6	952	215			595		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	32	158	34	88	22	523	523	339	26	1118	1118	683
Volume Left	21	0	27	0	22	0	0	0	26	0	0	0
Volume Right	0	158	0	88	0	0	0	77	0	0	0	124
cSH	0	581	0	952	215	1700	1700	1700	595	1700	1700	1700
Volume to Capacity	Err	0.27	Err	0.09	0.10	0.31	0.31	0.20	0.04	0.66	0.66	0.40
Queue Length 95th (ft)	Err	27	Err	8	8	0	0	0	3	0	0	0
Control Delay (s)	Err	13.5	Err	9.2	23.7	0.0	0.0	0.0	11.3	0.0	0.0	0.0
Lane LOS	F	B	F	A	C				B			
Approach Delay (s)	Err		Err		0.4				0.1			
Approach LOS	F		F									

Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	77.7%	ICU Level of Service	D	
Analysis Period (min)	15			



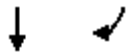
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	515	275	15	200	820	55	70	710	90	30	1200	0
Future Volume (vph)	515	275	15	200	820	55	70	710	90	30	1200	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1750	1900
Total Lost time (s)	7.5	7.5		7.0	7.0		8.5	7.0	7.0	8.5	7.0	
Lane Util. Factor	0.94	0.95		0.86	0.86		1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	4990	3507		1522	4748		1770	5085	1531	1767	4684	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.30	1.00	
Satd. Flow (perm)	4990	3507		1522	4748		1770	5085	1531	554	4684	
Peak-hour factor, PHF	0.96	0.96	0.96	0.92	0.92	0.92	0.88	0.88	0.88	0.97	0.97	0.97
Adj. Flow (vph)	536	286	16	217	891	60	80	807	102	31	1237	0
RTOR Reduction (vph)	0	3	0	0	4	0	0	0	60	0	0	0
Lane Group Flow (vph)	536	299	0	195	969	0	80	807	42	31	1237	0
Confl. Peds. (#/hr)	10		7	7		10	5		10	10		5
Turn Type	Split	NA		Split	NA		Prot	NA	Perm	pm+pt	NA	
Protected Phases	3	3		4	4		1	6		5	2	
Permitted Phases									6	2		
Actuated Green, G (s)	27.4	27.4		42.3	42.3		13.4	73.4	73.4	73.8	66.9	
Effective Green, g (s)	27.4	27.4		42.3	42.3		13.4	73.4	73.4	73.8	66.9	
Actuated g/C Ratio	0.15	0.15		0.23	0.23		0.07	0.41	0.41	0.41	0.37	
Clearance Time (s)	7.5	7.5		7.0	7.0		8.5	7.0	7.0	8.5	7.0	
Vehicle Extension (s)	4.0	4.0		4.0	4.0		4.0	0.2	0.2	4.0	0.2	
Lane Grp Cap (vph)	759	533		357	1115		131	2073	624	273	1740	
v/s Ratio Prot	c0.11	0.09		0.13	c0.20		c0.05	c0.16		0.00	c0.26	
v/s Ratio Perm									0.03	0.04		
v/c Ratio	0.71	0.56		0.55	0.87		0.61	0.39	0.07	0.11	0.71	
Uniform Delay, d1	72.5	70.7		60.4	66.2		80.8	37.5	32.4	32.1	48.3	
Progression Factor	1.19	1.21		1.00	1.00		1.17	0.93	2.18	1.00	0.76	
Incremental Delay, d2	3.2	1.6		2.1	7.6		8.9	0.5	0.2	0.2	1.6	
Delay (s)	89.2	87.0		62.6	73.8		103.3	35.3	71.0	32.3	38.2	
Level of Service	F	F		E	E		F	D	E	C	D	
Approach Delay (s)		88.4			71.9			44.5			38.0	
Approach LOS		F			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	58.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	30.0
Intersection Capacity Utilization	87.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

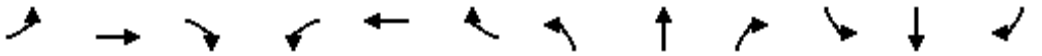
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (veh/h)	0	0	35	0	0	0	45	55	820	0	50	0
Future Volume (Veh/h)	0	0	35	0	0	0	45	55	820	0	50	0
Sign Control		Stop			Stop				Free			
Grade		0%			0%				0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	38	0	0	0	0	60	891	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type									None			
Median storage veh)												
Upstream signal (ft)									547			
pX, platoon unblocked	0.82	0.82	0.79	0.82	0.82	0.92	0.00	0.79			0.00	0.92
vC, conflicting volume	1878	2472	502	1529	2494	297	0	1483			0	891
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	701	1421	0	277	1447	0	0	664			0	595
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			0.0	4.1
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			0.0	2.2
p0 queue free %	100	100	96	100	100	100	0	92			0	100
cM capacity (veh/h)	251	102	853	482	99	1002	0	724			0	903

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	38	60	297	297	297	0	576	576	331
Volume Left	0	60	0	0	0	0	0	0	0
Volume Right	38	0	0	0	0	0	0	0	43
cSH	853	724	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.04	0.08	0.17	0.17	0.17	0.00	0.34	0.34	0.19
Queue Length 95th (ft)	3	7	0	0	0	0	0	0	0
Control Delay (s)	9.4	10.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	B							
Approach Delay (s)	9.4	0.7				0.0			
Approach LOS	A								

Intersection Summary				
Average Delay	0.4			
Intersection Capacity Utilization	45.4%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	1325	40
Future Volume (Veh/h)	1325	40
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	1440	43
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	None	
Median storage veh)		
Upstream signal (ft)	801	
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	10	225	10	10	10	405	885	20	10	1260	135
Future Volume (vph)	25	10	225	10	10	10	405	885	20	10	1260	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.5	6.0		8.0		6.0	7.0		6.0	7.0	7.0
Lane Util. Factor		1.00	1.00		1.00		0.97	0.91		1.00	0.91	1.00
Frpb, ped/bikes		1.00	0.98		1.00		1.00	1.00		1.00	1.00	0.67
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.95		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.97	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1799	1546		1750		3433	5054		1770	5085	1066
Flt Permitted		0.97	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1799	1546		1750		3433	5054		1770	5085	1066
Peak-hour factor, PHF	0.77	0.77	0.77	0.25	0.25	0.25	0.88	0.88	0.88	0.97	0.97	0.97
Adj. Flow (vph)	32	13	292	40	40	40	460	1006	23	10	1299	139
RTOR Reduction (vph)	0	0	51	0	10	0	0	1	0	0	0	71
Lane Group Flow (vph)	0	45	241	0	110	0	460	1028	0	10	1299	68
Confl. Peds. (#/hr)			29	29			10		21	1260		135
Turn Type	Split	NA	pm+ov	Split	NA		Prot	NA		Prot	NA	Perm
Protected Phases	4	4	1	3	3		1	6		5	2	
Permitted Phases			4									2
Actuated Green, G (s)		24.5	54.6		9.0		30.1	114.9		3.1	87.9	87.9
Effective Green, g (s)		24.5	54.6		9.0		30.1	114.9		3.1	87.9	87.9
Actuated g/C Ratio		0.14	0.30		0.05		0.17	0.64		0.02	0.49	0.49
Clearance Time (s)		7.5	6.0		8.0		6.0	7.0		6.0	7.0	7.0
Vehicle Extension (s)		3.0	5.0		5.0		5.0	0.2		3.0	0.2	0.2
Lane Grp Cap (vph)		244	468		87		574	3226		30	2483	520
v/s Ratio Prot		0.03	c0.09		c0.06		c0.13	0.20		0.01	c0.26	
v/s Ratio Perm			0.07									0.06
v/c Ratio		0.18	0.52		1.26		0.80	0.32		0.33	0.52	0.13
Uniform Delay, d1		68.9	51.8		85.5		72.1	14.8		87.4	31.6	25.2
Progression Factor		1.00	1.00		1.00		1.26	0.79		1.23	0.30	0.03
Incremental Delay, d2		0.4	1.9		181.3		8.6	0.3		5.1	0.6	0.4
Delay (s)		69.3	53.7		266.8		99.8	11.9		112.3	10.2	1.2
Level of Service		E	D		F		F	B		F	B	A
Approach Delay (s)		55.8			266.8			39.0			10.1	
Approach LOS		E			F			D			B	

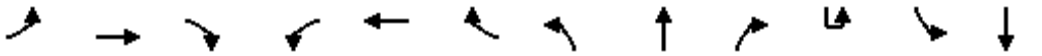
Intersection Summary			
HCM 2000 Control Delay	36.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	28.5
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	0	0	65	0	0	45	45	25	1265	15	45	1395
Future Volume (Veh/h)	0	0	65	0	0	45	45	25	1265	15	45	1395
Sign Control		Stop			Stop				Free			Free
Grade		0%			0%				0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	71	0	0	49	0	27	1375	16	49	1516
Pedestrians		1			5							
Lane Width (ft)		12.0			12.0							
Walking Speed (ft/s)		3.5			3.5							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type									None			None
Median storage veh)												
Upstream signal (ft)									1156			557
pX, platoon unblocked	0.87	0.87	0.83	0.87	0.87	0.92	0.00	0.83			0.92	
vC, conflicting volume	2206	3095	536	2116	3117	471	0	1577			1396	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1264	2290	0	1160	2316	143	0	971			1143	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			2.2	
p0 queue free %	100	100	92	100	100	94	0	95			91	
cM capacity (veh/h)	92	29	897	107	28	808	0	584			558	

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	71	49	27	550	550	291	49	606	606	363
Volume Left	0	0	27	0	0	0	49	0	0	0
Volume Right	71	49	0	0	0	16	0	0	0	60
cSH	897	808	584	1700	1700	1700	558	1700	1700	1700
Volume to Capacity	0.08	0.06	0.05	0.32	0.32	0.17	0.09	0.36	0.36	0.21
Queue Length 95th (ft)	6	5	4	0	0	0	7	0	0	0
Control Delay (s)	9.4	9.7	11.5	0.0	0.0	0.0	12.1	0.0	0.0	0.0
Lane LOS	A	A	B				B			
Approach Delay (s)	9.4	9.7	0.2				0.4			
Approach LOS	A	A								

Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	46.1%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	55
Future Volume (Veh/h)	55
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	60
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	
Direction, Lane #	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	60	5	80	30	5	50	30	1195	20	45	20	1420
Future Volume (Veh/h)	60	5	80	30	5	50	30	1195	20	45	20	1420
Sign Control		Stop			Stop			Free				Free
Grade		0%			0%			0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	65	5	87	33	5	54	33	1299	22	0	22	1543
Pedestrians					12							
Lane Width (ft)					12.0							
Walking Speed (ft/s)					3.5							
Percent Blockage					1							
Right turn flare (veh)			12									
Median type								None				None
Median storage veh)												
Upstream signal (ft)								425				1288
pX, platoon unblocked	0.90	0.90	0.84	0.90	0.90	0.90	0.84			0.00	0.90	
vC, conflicting volume	2154	2997	525	1949	2997	456	1565			0	1333	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1101	2043	0	872	2043	0	1022			0	968	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			0.0	4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			0.0	2.2	
p0 queue free %	45	89	90	80	89	94	94			0	96	
cM capacity (veh/h)	119	45	915	166	45	961	569			0	627	

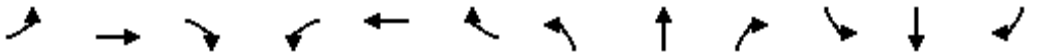
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	157	92	33	520	520	282	22	617	617	331
Volume Left	65	33	33	0	0	0	22	0	0	0
Volume Right	87	54	0	0	0	22	0	0	0	22
cSH	255	251	569	1700	1700	1700	627	1700	1700	1700
Volume to Capacity	0.62	0.37	0.06	0.31	0.31	0.17	0.04	0.36	0.36	0.19
Queue Length 95th (ft)	92	40	5	0	0	0	3	0	0	0
Control Delay (s)	39.9	27.5	11.7	0.0	0.0	0.0	10.9	0.0	0.0	0.0
Lane LOS	E	D	B				B			
Approach Delay (s)	39.9	27.5	0.3				0.2			
Approach LOS	E	D								

Intersection Summary					
Average Delay	3.0				
Intersection Capacity Utilization	52.9%	ICU Level of Service		A	
Analysis Period (min)	15				

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	20
Future Volume (Veh/h)	20
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	22
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	
Direction, Lane #	

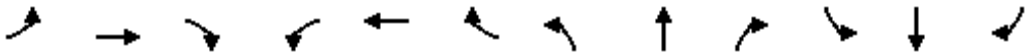
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	185	155	1090	110	90	1440
Future Volume (vph)	185	155	1090	110	90	1440
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	6.0		6.0	6.0
Lane Util. Factor	1.00	1.00	0.91		1.00	0.91
Frpb, ped/bikes	1.00	0.97	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1537	4995		1770	5085
Flt Permitted	0.95	1.00	1.00		0.15	1.00
Satd. Flow (perm)	1770	1537	4995		289	5085
Peak-hour factor, PHF	0.90	0.90	0.87	0.87	0.92	0.92
Adj. Flow (vph)	206	172	1253	126	98	1565
RTOR Reduction (vph)	0	146	4	0	0	0
Lane Group Flow (vph)	206	26	1375	0	98	1565
Confl. Peds. (#/hr)	4	13		4	4	
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	4		2		1	6
Permitted Phases		4			6	
Actuated Green, G (s)	27.4	27.4	126.1		140.1	140.1
Effective Green, g (s)	27.4	27.4	126.1		140.1	140.1
Actuated g/C Ratio	0.15	0.15	0.70		0.78	0.78
Clearance Time (s)	6.5	6.5	6.0		6.0	6.0
Vehicle Extension (s)	3.0	3.0	0.2		3.0	0.2
Lane Grp Cap (vph)	269	233	3499		290	3957
v/s Ratio Prot	c0.12		0.28		0.01	c0.31
v/s Ratio Perm		0.02			0.25	
v/c Ratio	0.77	0.11	0.39		0.34	0.40
Uniform Delay, d1	73.2	65.8	11.1		6.4	6.4
Progression Factor	1.00	1.00	1.00		1.49	0.63
Incremental Delay, d2	12.2	0.2	0.3		0.6	0.3
Delay (s)	85.5	66.0	11.5		10.2	4.3
Level of Service	F	E	B		B	A
Approach Delay (s)	76.6		11.5			4.7
Approach LOS	E		B			A

Intersection Summary			
HCM 2000 Control Delay	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	18.5
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



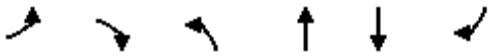
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	15	195	55	15	10	75	955	40	10	2250	120
Future Volume (vph)	90	15	195	55	15	10	75	955	40	10	2250	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0			7.0		5.5	6.0		5.5	6.0	
Lane Util. Factor	1.00	1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.86			0.98		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1765	1603			1767		1770	5051		1770	5047	
Flt Permitted	0.70	1.00			0.28		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1307	1603			514		1770	5051		1770	5047	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	16	212	60	16	11	82	1038	43	11	2446	130
RTOR Reduction (vph)	0	158	0	0	3	0	0	2	0	0	3	0
Lane Group Flow (vph)	98	70	0	0	84	0	82	1079	0	11	2573	0
Confl. Peds. (#/hr)	2					2			2	2		
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4			8								
Actuated Green, G (s)	26.6	26.6			26.6		14.6	131.4		3.5	120.3	
Effective Green, g (s)	26.6	26.6			26.6		14.6	131.4		3.5	120.3	
Actuated g/C Ratio	0.15	0.15			0.15		0.08	0.73		0.02	0.67	
Clearance Time (s)	7.0	7.0			7.0		5.5	6.0		5.5	6.0	
Vehicle Extension (s)	4.0	4.0			4.0		4.0	0.2		4.0	0.2	
Lane Grp Cap (vph)	193	236			75		143	3687		34	3373	
v/s Ratio Prot		0.04					c0.05	0.21		0.01	c0.51	
v/s Ratio Perm	0.07				c0.16							
v/c Ratio	0.51	0.30			1.11		0.57	0.29		0.32	0.76	
Uniform Delay, d1	70.7	68.4			76.7		79.7	8.3		87.1	20.2	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.17	0.24	
Incremental Delay, d2	2.8	1.0			138.5		6.5	0.2		0.7	0.2	
Delay (s)	73.5	69.3			215.2		86.2	8.5		102.6	5.1	
Level of Service	E	E			F		F	A		F	A	
Approach Delay (s)		70.6			215.2			14.0			5.5	
Approach LOS		E			F			B			A	

Intersection Summary			
HCM 2000 Control Delay	17.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	18.5
Intersection Capacity Utilization	90.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	135	165	150	370	30	270	705	80	45	2065	360
Future Volume (vph)	210	135	165	150	370	30	270	705	80	45	2065	360
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	7.0		6.5	7.0		5.5	7.0	7.0	5.5	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.97	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.92		1.00	0.99		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1768	3210		1766	3493		3433	5085	1538	1770	4954	
Flt Permitted	0.23	1.00		0.40	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	433	3210		750	3493		3433	5085	1538	1770	4954	
Peak-hour factor, PHF	0.91	0.91	0.91	0.87	0.87	0.87	0.77	0.77	0.77	0.97	0.97	0.97
Adj. Flow (vph)	231	148	181	172	425	34	351	916	104	46	2129	371
RTOR Reduction (vph)	0	135	0	0	3	0	0	0	48	0	14	0
Lane Group Flow (vph)	231	194	0	172	456	0	351	916	56	46	2486	0
Confl. Peds. (#/hr)	11		7	7		11	5		7	7		5
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8					6			
Actuated Green, G (s)	49.0	31.5		48.2	31.1		27.4	96.5	96.5	8.9	78.0	
Effective Green, g (s)	49.0	31.5		48.2	31.1		27.4	96.5	96.5	8.9	78.0	
Actuated g/C Ratio	0.27	0.18		0.27	0.17		0.15	0.54	0.54	0.05	0.43	
Clearance Time (s)	6.5	7.0		6.5	7.0		5.5	7.0	7.0	5.5	7.0	
Vehicle Extension (s)	3.0	4.0		5.0	4.0		5.0	0.2	0.2	3.0	0.2	
Lane Grp Cap (vph)	247	561		297	603		522	2726	824	87	2146	
v/s Ratio Prot	c0.09	0.06		0.05	0.13		c0.10	0.18		0.03	c0.50	
v/s Ratio Perm	c0.16			0.10					0.04			
v/c Ratio	0.94	0.35		0.58	0.76		0.67	0.34	0.07	0.53	1.16	
Uniform Delay, d1	57.8	65.2		53.7	70.8		72.1	23.6	20.1	83.5	51.0	
Progression Factor	1.00	1.00		1.00	1.00		1.17	0.84	0.35	1.32	0.59	
Incremental Delay, d2	39.6	0.5		4.3	5.7		4.3	0.3	0.2	4.6	76.0	
Delay (s)	97.4	65.7		58.0	76.5		88.7	20.1	7.2	115.2	106.3	
Level of Service	F	E		E	E		F	C	A	F	F	
Approach Delay (s)		78.8			71.5			36.7			106.5	
Approach LOS		E			E			D			F	

Intersection Summary			
HCM 2000 Control Delay	80.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	26.0
Intersection Capacity Utilization	107.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	50	125	190	755	2345	195
Future Volume (vph)	50	125	190	755	2345	195
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Lane Util. Factor	1.00	1.00	1.00	0.91	0.86	1.00
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1572	1770	5085	6408	1541
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1770	1572	1770	5085	6408	1541
Peak-hour factor, PHF	0.78	0.78	0.88	0.88	0.94	0.94
Adj. Flow (vph)	64	160	216	858	2495	207
RTOR Reduction (vph)	0	1	0	0	0	55
Lane Group Flow (vph)	64	159	216	858	2495	152
Confl. Peds. (#/hr)		5	5			5
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	4	5	5	2	6	4
Permitted Phases		4				6
Actuated Green, G (s)	17.0	43.6	26.6	149.0	115.4	132.4
Effective Green, g (s)	17.0	43.6	26.6	149.0	115.4	132.4
Actuated g/C Ratio	0.09	0.24	0.15	0.83	0.64	0.74
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	167	441	261	4209	4108	1193
v/s Ratio Prot	0.04	c0.05	c0.12	0.17	c0.39	0.01
v/s Ratio Perm		0.05				0.09
v/c Ratio	0.38	0.36	0.83	0.20	0.61	0.13
Uniform Delay, d1	76.6	56.6	74.5	3.2	19.0	6.9
Progression Factor	1.00	1.00	1.11	0.63	0.69	0.68
Incremental Delay, d2	1.5	0.5	17.4	0.1	0.4	0.0
Delay (s)	78.0	57.1	99.9	2.1	13.5	4.7
Level of Service	E	E	F	A	B	A
Approach Delay (s)	63.1			21.8	12.9	
Approach LOS	E			C	B	

Intersection Summary			
HCM 2000 Control Delay	18.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	70.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection Sign configuration not allowed in HCM analysis.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑		
Traffic Volume (vph)	260	0	0	550	0	0
Future Volume (vph)	260	0	0	550	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0			6.0		
Lane Util. Factor	0.95			0.95		
Frt	1.00			1.00		
Flt Protected	1.00			1.00		
Satd. Flow (prot)	3539			3539		
Flt Permitted	1.00			1.00		
Satd. Flow (perm)	3539			3539		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	283	0	0	598	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	283	0	0	598	0	0
Turn Type	NA			NA		
Protected Phases	2			6		
Permitted Phases						
Actuated Green, G (s)	11.9			11.9		
Effective Green, g (s)	11.9			11.9		
Actuated g/C Ratio	0.49			0.49		
Clearance Time (s)	6.0			6.0		
Vehicle Extension (s)	3.0			3.0		
Lane Grp Cap (vph)	1725			1725		
v/s Ratio Prot	0.08			c0.17		
v/s Ratio Perm						
v/c Ratio	0.16			0.35		
Uniform Delay, d1	3.5			3.9		
Progression Factor	1.00			1.00		
Incremental Delay, d2	0.0			0.1		
Delay (s)	3.5			4.0		
Level of Service	A			A		
Approach Delay (s)	3.5			4.0	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM 2000 Control Delay	3.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	24.4	Sum of lost time (s)	10.5
Intersection Capacity Utilization	20.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Traffic Volume (veh/h)	0	1280	1230	1650	0	0
Future Volume (Veh/h)	0	1280	1230	1650	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	1391	1337	1793	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		400	1086			
pX, platoon unblocked	0.54				0.59	0.54
vC, conflicting volume	3130				1685	668
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3240				0	0
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	49				605	588

Direction, Lane #	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	348	348	348	348	891	1043	1195
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	598	1195
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.20	0.20	0.20	0.20	0.52	0.61	0.70
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS							
Approach Delay (s)	0.0				0.0		
Approach LOS							

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		

Arterial Level of Service: NB MD 97

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Hewitt Ave.	110	14.6	57.6	0.4	27
Aspen Hill Apt	109	2.5	10.9	0.1	27
Aspen Manor	108	1.3	15.5	0.1	32
Cemetery	107	9.2	20.3	0.1	19
	106	1.2	11.6	0.1	32
MD 185	105	36.2	51.0	0.2	11
	3000	2.7	9.4	0.1	29
7-11	104	0.8	3.7	0.0	28
Postgate Terr	103	11.5	25.7	0.2	25
Crystal Springs Apt	102	3.3	20.0	0.2	37
Bel Pre Rd	101	32.5	46.0	0.2	14
Total		115.7	271.6	1.7	22

Arterial Level of Service: SB MD 97

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Bel Pre Rd	101	223.9	308.4	1.1	13
Crystal Springs Apt	102	12.0	25.8	0.2	24
Heathfield Rd	103	18.8	35.3	0.2	21
Home Depot Ent.	104	14.2	28.1	0.2	23
	3000	2.6	4.9	0.0	22
MD 185	105	43.2	49.0	0.1	6
Northgate Plaza	106	4.1	19.9	0.2	27
Aspen Hill Rd	107	9.4	20.3	0.1	18
Wendy Ln	108	1.9	12.7	0.1	30
Ralph Rd	109	1.3	16.1	0.1	31
Hewitt Ave.	110	9.3	17.6	0.1	17
Total		340.6	538.0	2.4	16

Arterial Level of Service: NB MD 185

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Independence St	201	8.4	44.4	0.5	37
Aspen Hill Rd	202	21.5	41.5	0.3	24
Home Depot Ent	203	4.4	14.9	0.1	32
	1000	1.5	8.1	0.1	35
MD 97	105	79.2	84.5	0.1	4
Total		115.0	193.5	1.0	19

Arterial Level of Service: SB MD 185

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
MD 97	105	98.0	112.8	0.2	6
	1000	7.6	14.3	0.1	22
Home Depot Ent	203	30.0	37.1	0.1	8
Aspen Hill Rd	202	52.2	62.6	0.1	8
Independence St	201	12.2	34.3	0.3	29
Total		199.9	261.2	0.8	11

Intersection: 23: Bend

Movement	WB	WB
Directions Served	T	
Maximum Queue (ft)	341	336
Average Queue (ft)	128	52
95th Queue (ft)	354	223
Link Distance (ft)	361	361
Upstream Blk Time (%)	0	0
Queuing Penalty (veh)	1	0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 101: MD 97 & Bel Pre Rd

Movement	EB	EB	EB	EB	B23	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	R	T	L	T	T	R	L	L	T
Maximum Queue (ft)	204	419	290	269	63	304	492	469	175	195	215	226
Average Queue (ft)	133	113	109	69	4	237	244	235	100	101	106	121
95th Queue (ft)	221	260	226	247	40	347	436	415	239	173	187	207
Link Distance (ft)		361			2205		2748	2748				808
Upstream Blk Time (%)		1										
Queuing Penalty (veh)		0										
Storage Bay Dist (ft)	180		265	265		280			150	455	455	
Storage Blk Time (%)	8	1	1	1		11	3	24	0			
Queuing Penalty (veh)	41	4	2	4		26	10	64	1			

Intersection: 101: MD 97 & Bel Pre Rd

Movement	NB	NB	NB	SB	SB	SB	SB	SB	SB
Directions Served	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	244	250	224	120	585	2385	2380	2424	65
Average Queue (ft)	144	151	11	33	280	1469	1495	1518	54
95th Queue (ft)	227	242	91	87	728	2629	2651	2666	81
Link Distance (ft)	808	808				5872	5872	5872	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)			200	560	560				40
Storage Blk Time (%)		4	0		0	48		54	2
Queuing Penalty (veh)		3	0		0	65		84	18

Intersection: 102: MD 97 & Crystal Springs Apt

Movement	WB	SB	SB	SB
Directions Served	R	T	T	T
Maximum Queue (ft)	52	820	826	433
Average Queue (ft)	28	57	104	15
95th Queue (ft)	48	398	539	190
Link Distance (ft)	234	808	808	808
Upstream Blk Time (%)		0	0	0
Queuing Penalty (veh)		1	2	1
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 103: MD 97 & Heathfield Rd/Postgate Terr

Movement	EB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LTR	LTR	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	276	274	208	222	243	253	42	308	368	372
Average Queue (ft)	116	96	101	107	118	146	9	188	220	221
95th Queue (ft)	220	210	188	223	240	284	31	312	343	350
Link Distance (ft)	346	1048		861	861	861		1037	1037	1037
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)			350				350			
Storage Blk Time (%)								0		
Queuing Penalty (veh)								0		

Intersection: 104: MD 97 & Home Depot Ent./7-11

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	LT	R	L	T	TR	L	T	T	TR
Maximum Queue (ft)	176	155	130	55	82	3	4	51	430	667	651
Average Queue (ft)	67	66	42	31	23	0	0	12	25	86	67
95th Queue (ft)	165	124	106	54	64	2	3	38	205	376	320
Link Distance (ft)	1151	1151	801	801	75	75	75		861	861	861
Upstream Blk Time (%)					2						0
Queuing Penalty (veh)					8						0
Storage Bay Dist (ft)								235			
Storage Blk Time (%)									0		
Queuing Penalty (veh)									0		

Intersection: 105: MD 97 & MD 185

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	L	T	TR	L	LT	T	TR	L	T	T
Maximum Queue (ft)	240	260	274	279	243	287	305	768	702	159	253	231
Average Queue (ft)	150	166	187	144	139	140	260	437	445	75	128	123
95th Queue (ft)	222	243	258	225	217	271	354	761	696	139	218	202
Link Distance (ft)		261	261	261				968	968		682	682
Upstream Blk Time (%)	0	0	2	1	0			0				
Queuing Penalty (veh)	0	1	6	1	0			0				
Storage Bay Dist (ft)	425				300	280	280			330		
Storage Blk Time (%)	0	0		1	0	0	3	23			0	
Queuing Penalty (veh)	0	1		1	0	0	9	111			0	

Intersection: 105: MD 97 & MD 185

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	T
Maximum Queue (ft)	244	67	223	386	378	200
Average Queue (ft)	136	24	30	287	261	183
95th Queue (ft)	222	58	117	413	372	234
Link Distance (ft)	682			260	260	
Upstream Blk Time (%)				14	11	
Queuing Penalty (veh)				83	66	
Storage Bay Dist (ft)		280	200			175
Storage Blk Time (%)	0		0	28	27	11
Queuing Penalty (veh)	0		0	9	109	44

Intersection: 106: MD 97 & Northgate Plaza

Movement	EB	NB	SB	SB
Directions Served	R	UL	UL	TR
Maximum Queue (ft)	74	135	73	18
Average Queue (ft)	21	46	19	1
95th Queue (ft)	52	100	51	8
Link Distance (ft)	253			682
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		175	150	
Storage Blk Time (%)		0		
Queuing Penalty (veh)		0		

Intersection: 107: MD 97 & Aspen Hill Rd/Cemetery

Movement	EB	EB	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	LTR	L	L	T	T	TR	L	T	T	T
Maximum Queue (ft)	105	271	244	300	326	346	216	209	50	163	194	221
Average Queue (ft)	33	116	50	187	195	93	58	63	13	75	81	90
95th Queue (ft)	80	215	195	279	295	248	142	148	40	146	154	180
Link Distance (ft)	894	894	533			470	470	470		472	472	472
Upstream Blk Time (%)						0						
Queuing Penalty (veh)						0						
Storage Bay Dist (ft)				250	250				190			
Storage Blk Time (%)				2	5	1				0		17
Queuing Penalty (veh)				5	14	3				0		23

Intersection: 107: MD 97 & Aspen Hill Rd/Cemetery

Movement	SB
Directions Served	R
Maximum Queue (ft)	95
Average Queue (ft)	21
95th Queue (ft)	84
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	70
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 108: MD 97 & Wendy Ln/Aspen Manor

Movement	EB	WB	NB	NB	SB	SB
Directions Served	R	R	UL	TR	L	TR
Maximum Queue (ft)	95	43	124	4	62	6
Average Queue (ft)	35	19	40	0	18	0
95th Queue (ft)	74	38	89	3	48	6
Link Distance (ft)	1228	342		650		470
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			200		150	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 109: MD 97 & Ralph Rd/Aspen Hill Apt

Movement	EB	EB	WB	NB	NB	NB	NB	SB	SB
Directions Served	LT	R	LTR	L	T	T	TR	UL	TR
Maximum Queue (ft)	173	82	168	46	4	4	0	78	9
Average Queue (ft)	84	38	62	11	0	0	0	28	0
95th Queue (ft)	169	71	129	35	3	3	0	63	4
Link Distance (ft)	1188		370		352	352	352		650
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)		300		125				175	
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 110: MD 97 & Hewitt Ave.

Movement	WB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	R	T	T	TR	L	T	T	T
Maximum Queue (ft)	115	492	381	336	256	151	194	230	238
Average Queue (ft)	103	205	167	120	87	50	104	139	151
95th Queue (ft)	131	408	306	260	198	102	179	215	234
Link Distance (ft)		1177	2204	2204	2204		352	352	352
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	90					140			
Storage Blk Time (%)	44	1				0	2		
Queuing Penalty (veh)	68	2				1	2		

Intersection: 201: MD 185 & Independence St

Movement	EB	EB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	LTR	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	125	358	168	181	225	178	168	31	137	149	155
Average Queue (ft)	77	148	70	75	84	46	42	2	38	57	65
95th Queue (ft)	140	294	134	150	195	130	117	14	102	128	137
Link Distance (ft)		872	167		2375	2375	2375		1317	1317	1317
Upstream Blk Time (%)			1								
Queuing Penalty (veh)			0								
Storage Bay Dist (ft)	100			250				270			
Storage Blk Time (%)	9	20			0						
Queuing Penalty (veh)	19	18			0						

Intersection: 202: MD 185 & Aspen Hill Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	NB
Directions Served	L	T	TR	L	T	TR	L	L	T	T	T	R
Maximum Queue (ft)	306	390	380	264	363	366	297	320	235	192	155	24
Average Queue (ft)	172	108	179	78	109	131	131	152	91	77	64	2
95th Queue (ft)	305	342	314	183	244	260	231	257	182	152	138	13
Link Distance (ft)		1834	1834		450	450			1317	1317	1317	
Upstream Blk Time (%)					0	0						
Queuing Penalty (veh)					0	0						
Storage Bay Dist (ft)	300			410			350	350				350
Storage Blk Time (%)	7				0		0	0	0			
Queuing Penalty (veh)	5				0		0	0	0			

Intersection: 202: MD 185 & Aspen Hill Rd

Movement	SB	SB	SB	SB
Directions Served	L	T	T	TR
Maximum Queue (ft)	121	613	650	618
Average Queue (ft)	33	453	496	516
95th Queue (ft)	85	686	733	718
Link Distance (ft)	606	606	606	606
Upstream Blk Time (%)		1	4	6
Queuing Penalty (veh)		4	25	36
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 203: MD 185 & Home Depot Ent

Movement	EB	EB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	L	R	L	T	T	T	T	T	T	T	R
Maximum Queue (ft)	256	125	239	406	156	114	248	342	483	546	531
Average Queue (ft)	82	81	174	81	22	20	26	217	335	431	283
95th Queue (ft)	197	140	263	300	85	67	134	347	496	655	596
Link Distance (ft)	589			606	606	606	355	355	355	355	355
Upstream Blk Time (%)							0	0	10	29	12
Queuing Penalty (veh)							0	0	51	149	60
Storage Bay Dist (ft)		100	215								
Storage Blk Time (%)	2	12	12								
Queuing Penalty (veh)	2	6	29								

Intersection: 1000: MD 185

Movement	WB	WB	WB	SB	SB
Directions Served	T	T	T	R	R
Maximum Queue (ft)	7	67	71	574	566
Average Queue (ft)	0	3	4	296	243
95th Queue (ft)	5	40	30	717	654
Link Distance (ft)	261	261	261	474	474
Upstream Blk Time (%)		0		12	8
Queuing Penalty (veh)		0		98	66
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2000: HAWK & Aspen Hill Rd

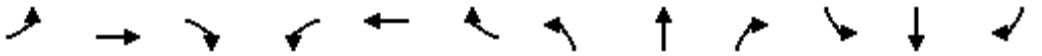
Movement	EB	EB	WB	WB
Directions Served	T	T	T	T
Maximum Queue (ft)	32	85	178	174
Average Queue (ft)	3	18	17	20
95th Queue (ft)	19	57	86	88
Link Distance (ft)	450	450	894	894
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3000: MD 97

Movement	SB	SB	SB
Directions Served	T	TR	R
Maximum Queue (ft)	131	168	143
Average Queue (ft)	18	69	39
95th Queue (ft)	77	181	121
Link Distance (ft)	75	75	75
Upstream Blk Time (%)	1	10	3
Queuing Penalty (veh)	9	94	28
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 1596



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	405	255	150	230	190	260	1960	210	255	1230	125
Future Volume (vph)	220	405	255	150	230	190	260	1960	210	255	1230	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1600	1900	1900	1750	1900
Total Lost time (s)	9.0	7.0	4.0	9.0	7.0	4.0	8.5	7.0	7.0	8.5	7.0	7.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	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	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1562	1769	3539	1583	3433	4282	1583	3433	4684	1583
Flt Permitted	0.46	1.00	1.00	0.24	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	864	3539	1562	450	3539	1583	3433	4282	1583	3433	4684	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.97	0.97	0.97	0.96	0.96	0.96
Adj. Flow (vph)	242	445	280	165	253	209	268	2021	216	266	1281	130
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	69	0	0	69
Lane Group Flow (vph)	242	445	280	165	253	209	268	2021	147	266	1281	61
Confl. Peds. (#/hr)			5	5								
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4		Free	8		Free			6			2
Actuated Green, G (s)	47.2	29.2	180.0	44.6	27.9	180.0	18.2	84.5	84.5	18.1	84.4	84.4
Effective Green, g (s)	47.2	29.2	180.0	44.6	27.9	180.0	18.2	84.5	84.5	18.1	84.4	84.4
Actuated g/C Ratio	0.26	0.16	1.00	0.25	0.15	1.00	0.10	0.47	0.47	0.10	0.47	0.47
Clearance Time (s)	9.0	7.0		9.0	7.0		8.5	7.0	7.0	8.5	7.0	7.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	0.2	0.2	3.0	0.2	0.2
Lane Grp Cap (vph)	317	574	1562	233	548	1583	347	2010	743	345	2196	742
v/s Ratio Prot	c0.08	c0.13		0.07	0.07		c0.08	c0.47		0.08	0.27	
v/s Ratio Perm	0.12		c0.18	0.11		0.13			0.09			0.04
v/c Ratio	0.76	0.78	0.18	0.71	0.46	0.13	0.77	1.01	0.20	0.77	0.58	0.08
Uniform Delay, d1	57.9	72.3	0.0	56.9	69.2	0.0	78.9	47.8	27.9	78.9	34.9	26.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.24	0.69	0.36	1.00	1.00	1.00
Incremental Delay, d2	10.4	6.5	0.3	9.4	0.6	0.2	8.4	19.3	0.5	10.2	1.1	0.2
Delay (s)	68.3	78.7	0.3	66.3	69.8	0.2	106.2	52.1	10.6	89.1	36.1	26.6
Level of Service	E	E	A	E	E	A	F	D	B	F	D	C
Approach Delay (s)		53.4			45.7			54.3			43.8	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	50.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	31.5
Intersection Capacity Utilization	100.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

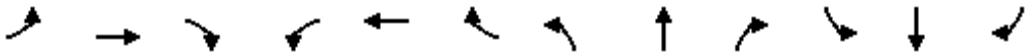
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	90	2340	55	0	1635
Future Volume (Veh/h)	0	90	2340	55	0	1635
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	98	2543	60	0	1777
Pedestrians	9					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	1					
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			1091			919
pX, platoon unblocked	0.84	0.75			0.75	
vC, conflicting volume	3174	887			2612	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1385	0			1969	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	88			100	
cM capacity (veh/h)	112	802			215	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	98	1017	1017	569	592	592	592
Volume Left	0	0	0	0	0	0	0
Volume Right	98	0	0	60	0	0	0
cSH	802	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.12	0.60	0.60	0.33	0.35	0.35	0.35
Queue Length 95th (ft)	10	0	0	0	0	0	0
Control Delay (s)	10.1	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B						
Approach Delay (s)	10.1	0.0			0.0		
Approach LOS	B						

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	58.7%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	10	80	35	10	25	115	2335	40	35	1550	50
Future Volume (vph)	35	10	80	35	10	25	115	2335	40	35	1550	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0			7.0		5.0	6.0		5.0	6.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes		0.99			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.91			0.95		1.00	1.00		1.00	1.00	
Flt Protected		0.99			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1658			1712		1770	5065		1770	5057	
Flt Permitted		0.86			0.57		0.12	1.00		0.04	1.00	
Satd. Flow (perm)		1441			1006		217	5065		76	5057	
Peak-hour factor, PHF	0.78	0.78	0.78	0.78	0.78	0.78	0.96	0.96	0.96	0.97	0.97	0.97
Adj. Flow (vph)	45	13	103	45	13	32	120	2432	42	36	1598	52
RTOR Reduction (vph)	0	39	0	0	12	0	0	1	0	0	1	0
Lane Group Flow (vph)	0	122	0	0	78	0	120	2473	0	36	1649	0
Confl. Peds. (#/hr)	10		1	1		10	2		14	14		2
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4			8			6			2		
Actuated Green, G (s)		21.7			21.7		143.2	135.0		137.4	132.1	
Effective Green, g (s)		21.7			21.7		143.2	135.0		137.4	132.1	
Actuated g/C Ratio		0.12			0.12		0.80	0.75		0.76	0.73	
Clearance Time (s)		7.0			7.0		5.0	6.0		5.0	6.0	
Vehicle Extension (s)		4.0			3.5		3.0	0.2		3.0	0.2	
Lane Grp Cap (vph)		173			121		243	3798		107	3711	
v/s Ratio Prot							c0.02	c0.49		0.01	0.33	
v/s Ratio Perm		c0.08			0.08		0.37			0.25		
v/c Ratio		0.71			0.64		0.49	0.65		0.34	0.44	
Uniform Delay, d1		76.1			75.4		6.4	11.0		10.8	9.5	
Progression Factor		1.00			1.00		2.18	0.30		3.26	1.36	
Incremental Delay, d2		13.2			11.6		0.9	0.5		1.6	0.3	
Delay (s)		89.3			87.0		14.7	3.8		37.0	13.2	
Level of Service		F			F		B	A		D	B	
Approach Delay (s)		89.3			87.0			4.3			13.7	
Approach LOS		F			F			A			B	

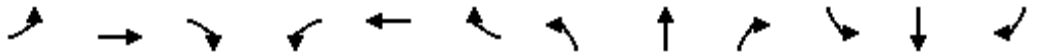
Intersection Summary			
HCM 2000 Control Delay	12.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	77.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	5	175	15	5	50	85	2405	35	20	1545	100
Future Volume (Veh/h)	35	5	175	15	5	50	85	2405	35	20	1545	100
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.88	0.88	0.88	0.81	0.81	0.81	0.93	0.93	0.93	0.96	0.96	0.96
Hourly flow rate (vph)	40	6	199	19	6	62	91	2586	38	21	1609	104
Pedestrians		2			23							
Lane Width (ft)		12.0			12.0							
Walking Speed (ft/s)		3.5			3.5							
Percent Blockage		0			2							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								553			933	
pX, platoon unblocked	0.85	0.85	0.87	0.85	0.85	0.79	0.87			0.79		
vC, conflicting volume	2814	4534	590	3590	4567	904	1715			2647		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1520	3546	32	2435	3585	0	1317			2144		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	0	78	0	0	93	80			89		
cM capacity (veh/h)	0	3	904	0	3	834	455			191		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	46	199	25	62	91	1034	1034	555	21	644	644	426
Volume Left	40	0	19	0	91	0	0	0	21	0	0	0
Volume Right	0	199	0	62	0	0	0	38	0	0	0	104
cSH	0	904	0	834	455	1700	1700	1700	191	1700	1700	1700
Volume to Capacity	Err	0.22	Err	0.07	0.20	0.61	0.61	0.33	0.11	0.38	0.38	0.25
Queue Length 95th (ft)	Err	21	Err	6	18	0	0	0	9	0	0	0
Control Delay (s)	Err	10.1	Err	9.7	14.9	0.0	0.0	0.0	26.2	0.0	0.0	0.0
Lane LOS	F	B	F	A	B				D			
Approach Delay (s)	Err		Err		0.5				0.3			
Approach LOS	F		F									

Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	69.5%	ICU Level of Service	C	
Analysis Period (min)	15			



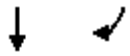
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1250	685	45	290	400	90	40	1185	415	85	885	0
Future Volume (vph)	1250	685	45	290	400	90	40	1185	415	85	885	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1750	1900
Total Lost time (s)	7.0	7.0		7.0	7.0		8.5	7.0	7.0	8.5	7.0	
Lane Util. Factor	0.94	0.95		0.86	0.86		1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.93	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	0.99		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	4990	3495		1522	4636		1770	5085	1470	1770	4684	
Flt Permitted	0.95	1.00		0.95	0.99		0.95	1.00	1.00	0.09	1.00	
Satd. Flow (perm)	4990	3495		1522	4636		1770	5085	1470	160	4684	
Peak-hour factor, PHF	0.93	0.93	0.93	0.91	0.91	0.91	0.96	0.96	0.96	0.94	0.94	0.94
Adj. Flow (vph)	1344	737	48	319	440	99	42	1234	432	90	941	0
RTOR Reduction (vph)	0	3	0	0	13	0	0	0	226	0	0	0
Lane Group Flow (vph)	1344	782	0	214	631	0	42	1234	206	90	941	0
Confl. Peds. (#/hr)	11		26	26		11	8		28	28		8
Turn Type	Split	NA		Split	NA		Prot	NA	Perm	pm+pt	NA	
Protected Phases	3	3		4	4		1	6		5	2	
Permitted Phases									6	2		
Actuated Green, G (s)	50.0	50.0		31.3	31.3		8.9	58.0	58.0	71.5	60.3	
Effective Green, g (s)	50.0	50.0		31.3	31.3		8.9	58.0	58.0	71.5	60.3	
Actuated g/C Ratio	0.28	0.28		0.17	0.17		0.05	0.32	0.32	0.40	0.33	
Clearance Time (s)	7.0	7.0		7.0	7.0		8.5	7.0	7.0	8.5	7.0	
Vehicle Extension (s)	4.0	4.0		4.0	4.0		4.0	0.2	0.2	4.0	0.2	
Lane Grp Cap (vph)	1386	970		264	806		87	1638	473	163	1569	
v/s Ratio Prot	c0.27	0.22		c0.14	0.14		0.02	c0.24		c0.03	0.20	
v/s Ratio Perm									0.14	0.18		
v/c Ratio	0.97	0.81		0.81	0.78		0.48	0.75	0.44	0.55	0.60	
Uniform Delay, d1	64.3	60.5		71.5	71.1		83.3	54.6	48.1	39.2	49.8	
Progression Factor	0.92	0.95		1.00	1.00		1.39	0.70	0.37	1.13	0.86	
Incremental Delay, d2	16.2	4.8		17.7	5.3		5.1	2.9	2.6	4.6	1.6	
Delay (s)	75.2	62.0		89.2	76.4		121.2	41.0	20.3	48.7	44.5	
Level of Service	E	E		F	E		F	D	C	D	D	
Approach Delay (s)		70.4			79.6			37.7			44.8	
Approach LOS		E			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	57.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	29.5
Intersection Capacity Utilization	95.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

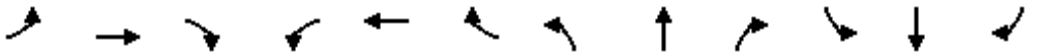
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (veh/h)	0	0	50	0	0	0	15	45	1570	0	70	0
Future Volume (Veh/h)	0	0	50	0	0	0	15	45	1570	0	70	0
Sign Control		Stop			Stop				Free			
Grade		0%			0%				0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	54	0	0	0	0	49	1707	0	0	0
Pedestrians		8										
Lane Width (ft)		12.0										
Walking Speed (ft/s)		3.5										
Percent Blockage		1										
Right turn flare (veh)												
Median type									None			
Median storage veh)												
Upstream signal (ft)									547			
pX, platoon unblocked	0.90	0.90	0.85	0.90	0.90	0.83	0.00	0.85			0.00	0.83
vC, conflicting volume	1882	3020	439	2247	3063	569	0	1258			0	1707
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	467	1728	0	871	1776	0	0	679			0	1123
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			0.0	4.1
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			0.0	2.2
p0 queue free %	100	100	94	100	100	100	0	94			0	100
cM capacity (veh/h)	406	73	913	197	69	897	0	765			0	511

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	54	49	569	569	569	0	465	465	320
Volume Left	0	49	0	0	0	0	0	0	0
Volume Right	54	0	0	0	0	0	0	0	87
cSH	913	765	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.06	0.06	0.33	0.33	0.33	0.00	0.27	0.27	0.19
Queue Length 95th (ft)	5	5	0	0	0	0	0	0	0
Control Delay (s)	9.2	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	B							
Approach Delay (s)	9.2	0.3				0.0			
Approach LOS	A								

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	40.9%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	1070	80
Future Volume (Veh/h)	1070	80
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	1163	87
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	None	
Median storage veh)		
Upstream signal (ft)	801	
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	20	570	15	15	10	415	1480	20	10	1025	100
Future Volume (vph)	140	20	570	15	15	10	415	1480	20	10	1025	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.5	6.0		8.0		6.0	7.0		6.0	7.0	7.0
Lane Util. Factor		1.00	1.00		1.00		0.97	0.91		1.00	0.91	1.00
Frpb, ped/bikes		1.00	0.98		1.00		1.00	1.00		1.00	1.00	0.69
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.97		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.96	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1785	1546		1765		3433	5067		1770	5085	1099
Flt Permitted		0.96	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1785	1546		1765		3433	5067		1770	5085	1099
Peak-hour factor, PHF	0.96	0.96	0.96	0.57	0.57	0.57	0.96	0.96	0.96	0.94	0.94	0.94
Adj. Flow (vph)	146	21	594	26	26	18	432	1542	21	11	1090	106
RTOR Reduction (vph)	0	0	54	0	7	0	0	1	0	0	0	62
Lane Group Flow (vph)	0	167	540	0	63	0	432	1562	0	11	1090	44
Confl. Peds. (#/hr)			29	29			10		21	1025		100
Turn Type	Split	NA	pm+ov	Split	NA		Prot	NA		Prot	NA	Perm
Protected Phases	4	4	1	3	3		1	6		5	2	
Permitted Phases			4									2
Actuated Green, G (s)		29.6	66.4		9.9		36.8	108.8		3.2	75.2	75.2
Effective Green, g (s)		29.6	66.4		9.9		36.8	108.8		3.2	75.2	75.2
Actuated g/C Ratio		0.16	0.37		0.06		0.20	0.60		0.02	0.42	0.42
Clearance Time (s)		7.5	6.0		8.0		6.0	7.0		6.0	7.0	7.0
Vehicle Extension (s)		3.0	5.0		5.0		5.0	0.2		3.0	0.2	0.2
Lane Grp Cap (vph)		293	570		97		701	3062		31	2124	459
v/s Ratio Prot		0.09	c0.19		c0.04		0.13	c0.31		0.01	0.21	
v/s Ratio Perm			0.16									0.04
v/c Ratio		0.57	0.95		0.65		0.62	0.51		0.35	0.51	0.10
Uniform Delay, d1		69.3	55.1		83.4		65.2	20.4		87.4	38.8	31.8
Progression Factor		1.00	1.00		1.00		1.02	0.44		1.24	0.42	0.98
Incremental Delay, d2		2.5	25.8		19.3		2.1	0.5		5.6	0.7	0.3
Delay (s)		71.9	80.9		102.7		68.4	9.5		113.9	17.0	31.6
Level of Service		E	F		F		E	A		F	B	C
Approach Delay (s)		78.9			102.7			22.2			19.1	
Approach LOS		E			F			C			B	

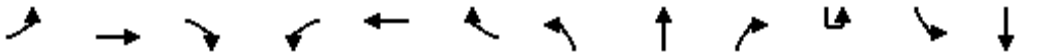
Intersection Summary			
HCM 2000 Control Delay	33.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	28.5
Intersection Capacity Utilization	78.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	0	0	125	0	0	140	105	35	1775	35	170	1360
Future Volume (Veh/h)	0	0	125	0	0	140	105	35	1775	35	170	1360
Sign Control		Stop			Stop				Free			Free
Grade		0%			0%				0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	136	0	0	152	0	38	1929	38	185	1478
Pedestrians		10			8							
Lane Width (ft)		12.0			12.0							
Walking Speed (ft/s)		3.5			3.5							
Percent Blockage		1			1							
Right turn flare (veh)												
Median type									None			None
Median storage veh)												
Upstream signal (ft)									1156			557
pX, platoon unblocked	0.89	0.89	0.85	0.89	0.89	0.82	0.00	0.85			0.82	
vC, conflicting volume	2772	3952	546	3031	3977	670	0	1575			1975	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1434	2756	0	1724	2784	0	0	1061			1413	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			2.2	
p0 queue free %	100	100	85	100	100	83	0	93			52	
cM capacity (veh/h)	41	8	913	25	8	880	0	549			388	

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	136	152	38	772	772	424	185	591	591	383
Volume Left	0	0	38	0	0	0	185	0	0	0
Volume Right	136	152	0	0	0	38	0	0	0	87
cSH	913	880	549	1700	1700	1700	388	1700	1700	1700
Volume to Capacity	0.15	0.17	0.07	0.45	0.45	0.25	0.48	0.35	0.35	0.23
Queue Length 95th (ft)	13	16	6	0	0	0	62	0	0	0
Control Delay (s)	9.6	9.9	12.0	0.0	0.0	0.0	22.4	0.0	0.0	0.0
Lane LOS	A	A	B				C			
Approach Delay (s)	9.6	9.9	0.2				2.4			
Approach LOS	A	A								

Intersection Summary				
Average Delay	1.8			
Intersection Capacity Utilization	53.6%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	80
Future Volume (Veh/h)	80
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	87
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	
Direction, Lane #	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	35	5	115	15	5	45	45	1745	40	125	40	1375
Future Volume (Veh/h)	35	5	115	15	5	45	45	1745	40	125	40	1375
Sign Control		Stop			Stop			Free				Free
Grade		0%			0%			0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	38	5	125	16	5	49	49	1897	43	0	43	1495
Pedestrians		7			41							
Lane Width (ft)		12.0			12.0							
Walking Speed (ft/s)		3.5			3.5							
Percent Blockage		1			4							
Right turn flare (veh)			20									
Median type								None				None
Median storage veh)												
Upstream signal (ft)								425				1288
pX, platoon unblocked	0.85	0.85	0.89	0.85	0.85	0.79	0.89			0.00	0.79	
vC, conflicting volume	2397	3694	532	2644	3700	695	1556			0	1981	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1127	2657	31	1419	2663	0	1184			0	1319	
tC, single (s)	*5.0	6.5	6.9	7.5	6.5	6.9	4.1			0.0	4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			0.0	2.2	
p0 queue free %	78	66	86	62	66	94	91			0	89	
cM capacity (veh/h)	171	15	913	42	15	825	516			0	396	

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	168	70	49	759	759	422	43	598	598	353
Volume Left	38	16	49	0	0	0	43	0	0	0
Volume Right	125	49	0	0	0	43	0	0	0	54
cSH	596	89	516	1700	1700	1700	396	1700	1700	1700
Volume to Capacity	0.28	0.79	0.09	0.45	0.45	0.25	0.11	0.35	0.35	0.21
Queue Length 95th (ft)	29	102	8	0	0	0	9	0	0	0
Control Delay (s)	16.7	126.5	12.7	0.0	0.0	0.0	15.2	0.0	0.0	0.0
Lane LOS	C	F	B				C			
Approach Delay (s)	16.7	126.5	0.3				0.4			
Approach LOS	C	F								

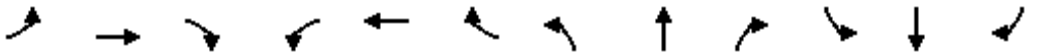
Intersection Summary				
Average Delay	3.4			
Intersection Capacity Utilization	64.4%	ICU Level of Service	C	
Analysis Period (min)	15			

* User Entered Value

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	50
Future Volume (Veh/h)	50
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	54
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	
Direction, Lane #	

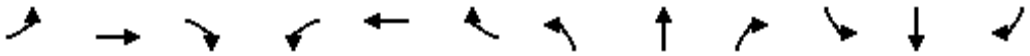
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	105	155	1675	185	220	1285
Future Volume (vph)	105	155	1675	185	220	1285
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	6.0		6.0	6.0
Lane Util. Factor	1.00	1.00	0.91		1.00	0.91
Frpb, ped/bikes	1.00	0.97	0.99		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1543	4949		1770	5085
Flt Permitted	0.95	1.00	1.00		0.07	1.00
Satd. Flow (perm)	1770	1543	4949		130	5085
Peak-hour factor, PHF	0.94	0.94	0.96	0.96	0.96	0.96
Adj. Flow (vph)	112	165	1745	193	229	1339
RTOR Reduction (vph)	0	146	6	0	0	0
Lane Group Flow (vph)	112	19	1932	0	229	1339
Confl. Peds. (#/hr)	9	10		16	16	
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	4		2		1	6
Permitted Phases		4			6	
Actuated Green, G (s)	20.2	20.2	119.9		147.3	147.3
Effective Green, g (s)	20.2	20.2	119.9		147.3	147.3
Actuated g/C Ratio	0.11	0.11	0.67		0.82	0.82
Clearance Time (s)	6.5	6.5	6.0		6.0	6.0
Vehicle Extension (s)	3.0	3.0	0.2		3.0	0.2
Lane Grp Cap (vph)	198	173	3296		301	4161
v/s Ratio Prot	c0.06		0.39		c0.09	0.26
v/s Ratio Perm		0.01			c0.53	
v/c Ratio	0.57	0.11	0.59		0.76	0.32
Uniform Delay, d1	75.7	71.8	16.5		42.8	4.0
Progression Factor	1.00	1.00	1.00		0.69	1.33
Incremental Delay, d2	3.7	0.3	0.8		9.3	0.2
Delay (s)	79.4	72.1	17.2		38.8	5.5
Level of Service	E	E	B		D	A
Approach Delay (s)	75.0		17.2			10.4
Approach LOS	E		B			B

Intersection Summary			
HCM 2000 Control Delay	18.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	18.5
Intersection Capacity Utilization	77.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



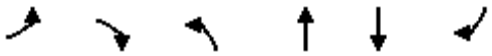
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	20	115	110	35	30	95	1755	95	20	1100	175
Future Volume (vph)	125	20	115	110	35	30	95	1755	95	20	1100	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0			7.0		5.5	6.0		5.5	6.0	
Lane Util. Factor	1.00	1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.98	1.00			1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.87			0.98		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1727	1625			1748		1770	5040		1770	4932	
Flt Permitted	0.63	1.00			0.59		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1151	1625			1063		1770	5040		1770	4932	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	136	22	125	120	38	33	103	1908	103	22	1196	190
RTOR Reduction (vph)	0	102	0	0	4	0	0	3	0	0	11	0
Lane Group Flow (vph)	136	45	0	0	187	0	103	2008	0	22	1375	0
Confl. Peds. (#/hr)	25					25	10		8	8		10
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4			8								
Actuated Green, G (s)	32.8	32.8			32.8		16.5	122.8		5.9	112.2	
Effective Green, g (s)	32.8	32.8			32.8		16.5	122.8		5.9	112.2	
Actuated g/C Ratio	0.18	0.18			0.18		0.09	0.68		0.03	0.62	
Clearance Time (s)	7.0	7.0			7.0		5.5	6.0		5.5	6.0	
Vehicle Extension (s)	4.0	4.0			4.0		4.0	0.2		4.0	0.2	
Lane Grp Cap (vph)	209	296			193		162	3438		58	3074	
v/s Ratio Prot		0.03					c0.06	c0.40		0.01	0.28	
v/s Ratio Perm	0.12				c0.18							
v/c Ratio	0.65	0.15			0.97		0.64	0.58		0.38	0.45	
Uniform Delay, d1	68.3	61.9			73.1		78.9	15.1		85.3	17.7	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.14	0.47	
Incremental Delay, d2	7.8	0.3			55.2		8.9	0.7		4.5	0.4	
Delay (s)	76.1	62.2			128.3		87.7	15.8		102.0	8.7	
Level of Service	E	E			F		F	B		F	A	
Approach Delay (s)		68.9			128.3			19.3			10.1	
Approach LOS		E			F			B			B	

Intersection Summary			
HCM 2000 Control Delay	24.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	18.5
Intersection Capacity Utilization	88.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	370	380	155	195	245	90	225	1470	215	135	945	260
Future Volume (vph)	370	380	155	195	245	90	225	1470	215	135	945	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	7.0		6.5	7.0		5.5	7.0	7.0	5.5	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.97	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.95	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.96		1.00	0.96		1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1767	3355		1766	3374		3433	5085	1511	1770	4892	
Flt Permitted	0.25	1.00		0.26	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	473	3355		487	3374		3433	5085	1511	1770	4892	
Peak-hour factor, PHF	0.96	0.96	0.96	0.87	0.87	0.87	0.97	0.97	0.97	0.96	0.96	0.96
Adj. Flow (vph)	385	396	161	224	282	103	232	1515	222	141	984	271
RTOR Reduction (vph)	0	25	0	0	23	0	0	0	93	0	22	0
Lane Group Flow (vph)	385	532	0	224	362	0	232	1515	129	141	1233	0
Confl. Peds. (#/hr)	11		16	16		11	6		14	14		6
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8					6			
Actuated Green, G (s)	68.6	38.1		53.6	29.6		19.3	72.2	72.2	19.7	72.6	
Effective Green, g (s)	68.6	38.1		53.6	29.6		19.3	72.2	72.2	19.7	72.6	
Actuated g/C Ratio	0.38	0.21		0.30	0.16		0.11	0.40	0.40	0.11	0.40	
Clearance Time (s)	6.5	7.0		6.5	7.0		5.5	7.0	7.0	5.5	7.0	
Vehicle Extension (s)	3.0	4.0		5.0	4.0		5.0	0.2	0.2	3.0	0.2	
Lane Grp Cap (vph)	413	710		315	554		368	2039	606	193	1973	
v/s Ratio Prot	c0.17	0.16		0.09	0.11		0.07	c0.30		c0.08	0.25	
v/s Ratio Perm	c0.19			0.12					0.09			
v/c Ratio	0.93	0.75		0.71	0.65		0.63	0.74	0.21	0.73	0.62	
Uniform Delay, d1	45.7	66.5		51.4	70.4		76.9	46.0	35.3	77.6	42.8	
Progression Factor	1.00	1.00		1.00	1.00		1.14	0.78	0.68	0.95	1.46	
Incremental Delay, d2	27.8	4.6		9.1	3.1		4.0	2.0	0.7	12.8	1.4	
Delay (s)	73.5	71.1		60.5	73.5		91.4	38.0	24.6	86.5	63.9	
Level of Service	E	E		E	E		F	D	C	F	E	
Approach Delay (s)		72.1			68.7			42.8			66.2	
Approach LOS		E			E			D			E	

Intersection Summary			
HCM 2000 Control Delay	58.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	26.0
Intersection Capacity Utilization	95.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	210	245	160	1770	1095	110
Future Volume (vph)	210	245	160	1770	1095	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	1.00	1.00	1.00	0.91	0.86	1.00
Frpb, ped/bikes	1.00	0.98	1.00	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1559	1770	5085	6408	1533
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1770	1559	1770	5085	6408	1533
Peak-hour factor, PHF	0.79	0.79	0.97	0.97	0.98	0.98
Adj. Flow (vph)	266	310	165	1825	1117	112
RTOR Reduction (vph)	0	12	0	0	0	22
Lane Group Flow (vph)	266	298	165	1825	1117	90
Confl. Peds. (#/hr)		11	10			10
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	4	5	5	2	6	4
Permitted Phases		4				6
Actuated Green, G (s)	32.8	54.9	22.1	138.2	111.6	144.4
Effective Green, g (s)	32.8	54.9	22.1	138.2	111.6	144.4
Actuated g/C Ratio	0.18	0.30	0.12	0.77	0.62	0.80
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	322	514	217	3904	3972	1268
v/s Ratio Prot	c0.15	0.07	c0.09	c0.36	0.17	0.01
v/s Ratio Perm		0.12				0.05
v/c Ratio	0.83	0.58	0.76	0.47	0.28	0.07
Uniform Delay, d1	70.9	52.8	76.4	7.6	15.7	3.7
Progression Factor	1.08	1.04	0.81	1.50	0.77	0.49
Incremental Delay, d2	15.6	1.7	9.5	0.3	0.2	0.0
Delay (s)	92.0	56.5	71.2	11.6	12.3	1.8
Level of Service	F	E	E	B	B	A
Approach Delay (s)	72.9			16.6	11.3	
Approach LOS	E			B	B	

Intersection Summary			
HCM 2000 Control Delay	23.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	65.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection Sign configuration not allowed in HCM analysis.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑		
Traffic Volume (vph)	730	0	0	530	0	0
Future Volume (vph)	730	0	0	530	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0			6.0		
Lane Util. Factor	0.95			0.95		
Frt	1.00			1.00		
Flt Protected	1.00			1.00		
Satd. Flow (prot)	3539			3539		
Flt Permitted	1.00			1.00		
Satd. Flow (perm)	3539			3539		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	793	0	0	576	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	793	0	0	576	0	0
Turn Type	NA			NA		
Protected Phases	2			6		
Permitted Phases						
Actuated Green, G (s)	15.1			15.1		
Effective Green, g (s)	15.1			15.1		
Actuated g/C Ratio	0.55			0.55		
Clearance Time (s)	6.0			6.0		
Vehicle Extension (s)	3.0			3.0		
Lane Grp Cap (vph)	1929			1929		
v/s Ratio Prot	c0.22			0.16		
v/s Ratio Perm						
v/c Ratio	0.41			0.30		
Uniform Delay, d1	3.7			3.4		
Progression Factor	1.00			1.00		
Incremental Delay, d2	0.1			0.1		
Delay (s)	3.8			3.5		
Level of Service	A			A		
Approach Delay (s)	3.8			3.5	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM 2000 Control Delay	3.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	27.7	Sum of lost time (s)	10.5
Intersection Capacity Utilization	25.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Traffic Volume (veh/h)	0	2525	970	765	0	0
Future Volume (Veh/h)	0	2525	970	765	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	2745	1054	832	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		400	1086			
pX, platoon unblocked	0.88				0.86	0.88
vC, conflicting volume	1886				1740	527
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1731				178	182
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	316				681	728

Direction, Lane #	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	686	686	686	686	703	629	555
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	277	555
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.40	0.40	0.40	0.40	0.41	0.37	0.33
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS							
Approach Delay (s)	0.0				0.0		
Approach LOS							

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	39.9%	ICU Level of Service	A
Analysis Period (min)	15		

Arterial Level of Service: NB MD 97

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Hewitt Ave.	110	19.5	62.6	0.4	25
Aspen Hill Apt	109	3.2	11.6	0.1	25
Aspen Manor	108	2.2	16.6	0.1	30
Cemetery	107	10.1	21.2	0.1	18
	106	2.1	12.5	0.1	30
MD 185	105	40.1	54.9	0.2	10
	3000	4.5	11.1	0.1	25
7-11	104	1.2	4.3	0.0	24
Postgate Terr	103	10.5	24.6	0.2	26
Crystal Spring Apt	102	5.2	21.7	0.2	34
Bel Pre Rd	101	50.0	63.5	0.2	10
Total		148.7	304.5	1.7	20

Arterial Level of Service: SB MD 97

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Bel Pre Rd	101	37.1	92.3	0.7	27
Crystal Spring Apt	102	6.7	20.5	0.2	31
Heathfield Rd	103	22.1	38.6	0.2	19
Home Depot Ent.	104	8.1	22.1	0.2	29
	3000	1.3	3.6	0.0	29
MD 185	105	45.5	51.2	0.1	5
Northgate Plaza	106	4.2	20.0	0.2	27
Aspen Hill Rd	107	23.4	34.2	0.1	11
Wendy Ln	108	3.3	14.1	0.1	27
	109	1.6	16.7	0.1	30
Hewitt Ave.	110	9.3	17.5	0.1	17
Total		162.6	330.9	1.9	21

Arterial Level of Service: NB MD 185

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Independence St	201	15.4	51.8	0.5	32
Aspen Hill Rd	202	63.3	84.6	0.3	12
Home Depot Ent	203	16.2	26.9	0.1	18
	1000	14.5	21.0	0.1	14
MD 97	105	68.4	74.2	0.1	4
Total		177.8	258.5	1.0	14

Arterial Level of Service: SB MD 185

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
MD 97	105	80.8	94.6	0.2	8
	1000	4.6	11.4	0.1	27
Home Depot Ent	203	2.2	9.1	0.1	31
Aspen Hill Rd	202	79.6	90.1	0.1	5
Independence St	201	7.2	29.4	0.3	34
Total		174.4	234.6	0.8	12

Intersection: 24: Bend

Movement	WB	WB
Directions Served	T	
Maximum Queue (ft)	214	100
Average Queue (ft)	25	5
95th Queue (ft)	126	51
Link Distance (ft)	361	361
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 101: MD 97 & Bel Pre Rd

Movement	EB	EB	EB	EB	B24	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	R	T	L	T	T	R	L	L	T
Maximum Queue (ft)	205	447	290	274	454	236	178	220	188	219	450	677
Average Queue (ft)	174	245	207	14	53	101	99	94	11	124	180	384
95th Queue (ft)	242	432	320	112	342	181	158	168	91	192	403	662
Link Distance (ft)		361			2203		2717	2717				808
Upstream Blk Time (%)		5										0
Queuing Penalty (veh)		0										1
Storage Bay Dist (ft)	180		265	265		280			200	455	455	
Storage Blk Time (%)	15	14	1	0		0		0	1		0	4
Queuing Penalty (veh)	104	97	5	0		0		0	1		0	11

Intersection: 101: MD 97 & Bel Pre Rd

Movement	NB	NB	NB	SB	SB	SB	SB	SB	SB
Directions Served	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	698	709	225	203	211	321	337	334	65
Average Queue (ft)	416	442	139	100	100	182	199	188	49
95th Queue (ft)	685	708	318	170	176	318	326	338	86
Link Distance (ft)	808	808				3584	3584	3584	
Upstream Blk Time (%)	0	1							
Queuing Penalty (veh)	3	5							
Storage Bay Dist (ft)			200	560	560				40
Storage Blk Time (%)		33	0					29	1
Queuing Penalty (veh)		69	1					36	6

Intersection: 102: MD 97 & Crystal Spring Apt

Movement	WB	NB	NB	NB	SB
Directions Served	R	T	T	TR	T
Maximum Queue (ft)	147	12	32	56	159
Average Queue (ft)	64	0	2	3	6
95th Queue (ft)	121	8	23	27	116
Link Distance (ft)	234	1036	1036	1036	808
Upstream Blk Time (%)					0
Queuing Penalty (veh)					0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 103: MD 97 & Heathfield Rd/Postgate Terr

Movement	EB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LTR	LTR	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	244	140	114	212	269	318	190	432	460	440
Average Queue (ft)	109	63	51	114	138	164	25	217	243	230
95th Queue (ft)	208	118	101	217	264	299	101	419	439	421
Link Distance (ft)	346	247		860	860	860		1036	1036	1036
Upstream Blk Time (%)	0									
Queuing Penalty (veh)	0									
Storage Bay Dist (ft)			350				350			
Storage Blk Time (%)								2		
Queuing Penalty (veh)								1		

Intersection: 104: MD 97 & Home Depot Ent./7-11

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	LT	R	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	151	292	94	92	117	4	16	18	48	4	13	28
Average Queue (ft)	58	119	29	32	39	0	1	1	12	0	0	1
95th Queue (ft)	153	256	77	68	89	3	9	6	35	3	8	11
Link Distance (ft)	1133	1133	213	213	76	76	76	76		860	860	860
Upstream Blk Time (%)					3							
Queuing Penalty (veh)					16							
Storage Bay Dist (ft)									235			
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 105: MD 97 & MD 185

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	L	T	TR	L	LT	T	TR	L	T	T
Maximum Queue (ft)	279	428	423	391	280	275	290	390	427	204	436	446
Average Queue (ft)	271	383	384	282	236	113	165	171	241	54	224	226
95th Queue (ft)	306	458	442	433	321	217	256	322	397	140	382	390
Link Distance (ft)		280	280	280				968	968		682	682
Upstream Blk Time (%)	12	45	59	18	3							
Queuing Penalty (veh)	0	300	387	117	0							
Storage Bay Dist (ft)	425				300	280	280			330		
Storage Blk Time (%)	12	45		18	3	0	0	1			2	
Queuing Penalty (veh)	51	189		69	11	0	1	3			1	

Intersection: 105: MD 97 & MD 185

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	T
Maximum Queue (ft)	507	305	225	381	371	200
Average Queue (ft)	239	168	102	229	218	164
95th Queue (ft)	415	325	222	365	344	240
Link Distance (ft)	682			253	253	
Upstream Blk Time (%)				10	8	
Queuing Penalty (veh)				47	37	
Storage Bay Dist (ft)		280	200			175
Storage Blk Time (%)	4	1	0	17	17	10
Queuing Penalty (veh)	15	3	1	15	51	31

Intersection: 106: MD 97 & Northgate Plaza

Movement	EB	NB	NB	SB	SB	SB	SB
Directions Served	R	UL	T	UL	T	T	TR
Maximum Queue (ft)	57	70	11	123	11	3	12
Average Queue (ft)	23	25	0	40	0	0	1
95th Queue (ft)	45	60	8	90	8	2	8
Link Distance (ft)	253		466		682	682	682
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		175		150			
Storage Blk Time (%)				0			
Queuing Penalty (veh)				0			

Intersection: 107: MD 97 & Aspen Hill Rd/Cemetery

Movement	EB	EB	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	LTR	L	L	T	T	TR	L	T	T	T
Maximum Queue (ft)	301	620	120	297	325	291	269	362	84	282	270	276
Average Queue (ft)	158	410	44	184	185	74	96	141	13	145	129	142
95th Queue (ft)	259	595	99	278	282	188	216	281	53	249	234	253
Link Distance (ft)	894	894	216			470	470	470		466	466	466
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)				250	250				190			
Storage Blk Time (%)				4	3	0				3		36
Queuing Penalty (veh)				18	14	0				0		37

Intersection: 107: MD 97 & Aspen Hill Rd/Cemetery

Movement	SB
Directions Served	R
Maximum Queue (ft)	95
Average Queue (ft)	29
95th Queue (ft)	99
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	70
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 108: MD 97 & Wendy Ln/Aspen Manor

Movement	EB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	R	R	UL	T	T	TR	L	T	T	TR
Maximum Queue (ft)	486	170	208	278	77	90	224	388	238	97
Average Queue (ft)	214	64	92	18	5	4	119	59	8	5
95th Queue (ft)	497	130	176	146	74	55	220	252	99	57
Link Distance (ft)	1228	342		651	651	651		470	470	470
Upstream Blk Time (%)								0	0	
Queuing Penalty (veh)								1	0	
Storage Bay Dist (ft)			200				150			
Storage Blk Time (%)			2	0			13	0		
Queuing Penalty (veh)			12	0			59	0		

Intersection: 109: MD 97 & Aspen Hill Apt

Movement	EB	EB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	LTR	L	T	T	TR	UL	T	T	TR
Maximum Queue (ft)	816	598	654	56	2	19	16	185	99	12	32
Average Queue (ft)	374	119	387	21	0	1	1	88	7	0	2
95th Queue (ft)	725	408	706	47	1	9	8	166	70	7	17
Link Distance (ft)	1188		887		352	352	352		651	651	651
Upstream Blk Time (%)	1										
Queuing Penalty (veh)	0										
Storage Bay Dist (ft)		500		125				175			
Storage Blk Time (%)	30							1			
Queuing Penalty (veh)	34							6			

Intersection: 110: MD 97 & Hewitt Ave.

Movement	WB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	R	T	T	TR	L	T	T	T
Maximum Queue (ft)	114	268	414	423	409	165	332	309	299
Average Queue (ft)	82	106	241	213	215	129	137	137	151
95th Queue (ft)	135	217	394	376	368	189	300	283	293
Link Distance (ft)		438	2204	2204	2204		352	352	352
Upstream Blk Time (%)							0	0	0
Queuing Penalty (veh)							0	0	0
Storage Bay Dist (ft)	90					140			
Storage Blk Time (%)	19	8				18	2		
Queuing Penalty (veh)	30	9				79	5		

Intersection: 201: MD 185 & Independence St

Movement	EB	EB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	LTR	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	125	418	212	258	348	333	320	56	76	124	146
Average Queue (ft)	103	152	163	106	177	174	184	12	21	42	56
95th Queue (ft)	149	357	238	202	304	293	307	42	62	96	118
Link Distance (ft)		872	179		2375	2375	2375		1338	1338	1338
Upstream Blk Time (%)			32								
Queuing Penalty (veh)			0								
Storage Bay Dist (ft)	100			250				270			
Storage Blk Time (%)	33	8		0	2						
Queuing Penalty (veh)	45	9		1	2						

Intersection: 202: MD 185 & Aspen Hill Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	NB
Directions Served	L	T	TR	L	T	TR	L	L	T	T	T	R
Maximum Queue (ft)	325	529	455	291	252	297	176	374	591	602	588	375
Average Queue (ft)	247	258	277	152	78	113	105	160	316	323	314	98
95th Queue (ft)	363	481	415	275	182	224	166	317	498	501	503	310
Link Distance (ft)		1838	1838		450	450			1338	1338	1338	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	300			410			350	350				350
Storage Blk Time (%)	13	1						0	8		9	0
Queuing Penalty (veh)	24	3						0	18		19	0

Intersection: 202: MD 185 & Aspen Hill Rd

Movement	SB	SB	SB	SB
Directions Served	L	T	T	TR
Maximum Queue (ft)	202	448	541	591
Average Queue (ft)	126	294	346	410
95th Queue (ft)	199	421	494	554
Link Distance (ft)	603	603	603	603
Upstream Blk Time (%)			0	0
Queuing Penalty (veh)			0	1
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 203: MD 185 & Home Depot Ent

Movement	EB	EB	NB	NB	NB	NB	SB	SB	SB	SB	SB	
Directions Served	L	R	L	T	T	T	T	T	T	T	R	
Maximum Queue (ft)	854	125	239	464	473	480	111	184	271	303	78	
Average Queue (ft)	578	104	145	115	118	109	32	61	135	153	14	
95th Queue (ft)	974	171	245	357	350	327	79	165	238	265	46	
Link Distance (ft)	1344			603	603	603	348	348	348	348	348	
Upstream Blk Time (%)									0	0		
Queuing Penalty (veh)									0	0		
Storage Bay Dist (ft)		100	215									
Storage Blk Time (%)	62	6	8	2								
Queuing Penalty (veh)	153	13	47	2								

Intersection: 1000: MD 185

Movement	EB	EB	EB	SB
Directions Served	T	T	T	R
Maximum Queue (ft)	410	402	256	236
Average Queue (ft)	130	135	34	8
95th Queue (ft)	365	367	142	124
Link Distance (ft)	348	348	348	481
Upstream Blk Time (%)	4	4	0	
Queuing Penalty (veh)	25	27	0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2000: HAWK & Aspen Hill Rd

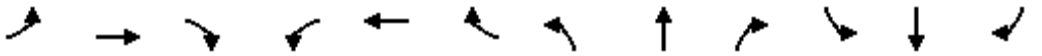
Movement	EB	EB	WB	WB
Directions Served	T	T	T	T
Maximum Queue (ft)	161	220	189	188
Average Queue (ft)	23	44	19	22
95th Queue (ft)	89	135	89	89
Link Distance (ft)	450	450	894	894
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3000: MD 97

Movement	NB	NB	NB	SB	SB	SB
Directions Served	T	T	T	T	TR	R
Maximum Queue (ft)	50	53	8	71	107	29
Average Queue (ft)	2	2	0	4	7	1
95th Queue (ft)	37	39	6	30	44	15
Link Distance (ft)	253	253	253	76	76	76
Upstream Blk Time (%)		0		0	0	0
Queuing Penalty (veh)		0		2	3	0
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 2384

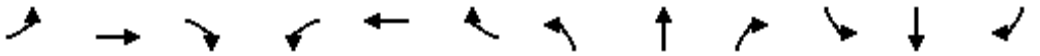


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	175	210	300	330	470	260	210	900	90	135	2165	155
Future Volume (vph)	175	210	300	330	470	260	210	900	90	135	2165	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1600	1900	1900	1750	1900
Total Lost time (s)	7.0	7.0	8.5	7.0	7.0	8.5	8.5	7.0	7.0	8.5	7.0	7.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	*1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	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	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1563	1763	3539	1583	3433	4282	1561	3433	5147	1561
Flt Permitted	0.19	1.00	1.00	0.61	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	358	3539	1563	1125	3539	1583	3433	4282	1561	3433	5147	1561
Peak-hour factor, PHF	0.90	0.90	0.90	0.86	0.86	0.86	0.94	0.94	0.94	0.97	0.97	0.97
Adj. Flow (vph)	194	233	333	384	547	302	223	957	96	139	2232	160
RTOR Reduction (vph)	0	0	88	0	0	77	0	0	54	0	0	90
Lane Group Flow (vph)	194	233	245	384	547	225	223	957	42	139	2232	70
Confl. Peds. (#/hr)			7	7			1		1	1		1
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	1	3 9	8	5	1	6		5	2	
Permitted Phases	4		4	8		8			6			2
Actuated Green, G (s)	38.9	20.9	34.6	53.7	40.2	52.8	13.7	79.6	79.6	12.6	78.5	78.5
Effective Green, g (s)	38.9	20.9	34.6	53.7	40.2	52.8	13.7	79.6	79.6	12.6	78.5	78.5
Actuated g/C Ratio	0.22	0.12	0.19	0.30	0.22	0.29	0.08	0.44	0.44	0.07	0.44	0.44
Clearance Time (s)	7.0	7.0	8.5		7.0	8.5	8.5	7.0	7.0	8.5	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	0.2	0.2	3.0	0.2	0.2
Lane Grp Cap (vph)	219	410	300	452	790	464	261	1893	690	240	2244	680
v/s Ratio Prot	c0.09	0.07	c0.06	c0.16	0.15	0.03	c0.06	0.22		0.04	c0.43	
v/s Ratio Perm	0.10		0.09	c0.10		0.11			0.03			0.04
v/c Ratio	0.89	0.57	0.82	0.85	0.69	0.48	0.85	0.51	0.06	0.58	0.99	0.10
Uniform Delay, d1	63.0	75.3	69.7	56.7	64.2	52.4	82.2	36.1	28.8	81.1	50.5	30.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	0.79	1.00	1.00	1.00	1.00
Incremental Delay, d2	31.8	1.8	15.6	13.9	2.6	0.8	22.5	0.9	0.2	3.4	17.8	0.3
Delay (s)	94.8	77.1	85.3	70.6	66.9	53.2	107.5	29.4	29.0	84.5	68.3	30.3
Level of Service	F	E	F	E	E	D	F	C	C	F	E	C
Approach Delay (s)		85.2			64.7			43.0			66.8	
Approach LOS		F			E			D			E	

Intersection Summary			
HCM 2000 Control Delay	63.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	34.0
Intersection Capacity Utilization	107.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

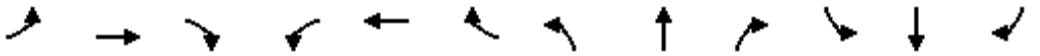
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	60	1140	30	0	2795
Future Volume (vph)	0	60	1140	30	0	2795
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0			6.0
Lane Util. Factor		1.00	0.91			0.91
Frpb, ped/bikes		1.00	1.00			1.00
Flpb, ped/bikes		1.00	1.00			1.00
Frt		0.86	1.00			1.00
Flt Protected		1.00	1.00			1.00
Satd. Flow (prot)		1611	5060			5085
Flt Permitted		1.00	1.00			1.00
Satd. Flow (perm)		1611	5060			5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	65	1239	33	0	3038
RTOR Reduction (vph)	0	6	1	0	0	0
Lane Group Flow (vph)	0	59	1271	0	0	3038
Confl. Peds. (#/hr)	5			5	5	
Turn Type		Perm	NA			NA
Protected Phases			2			6
Permitted Phases		6				
Actuated Green, G (s)		164.0	164.0			164.0
Effective Green, g (s)		164.0	164.0			164.0
Actuated g/C Ratio		0.91	0.91			0.91
Clearance Time (s)		6.0	6.0			6.0
Vehicle Extension (s)		3.0	3.0			3.0
Lane Grp Cap (vph)		1467	4610			4633
v/s Ratio Prot			0.25			c0.60
v/s Ratio Perm		0.04				
v/c Ratio		0.04	0.28			0.66
Uniform Delay, d1		0.7	0.9			1.8
Progression Factor		1.00	0.16			1.17
Incremental Delay, d2		0.1	0.1			0.3
Delay (s)		0.8	0.3			2.3
Level of Service		A	A			A
Approach Delay (s)	0.8		0.3			2.3
Approach LOS	A		A			A

Intersection Summary			
HCM 2000 Control Delay	1.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



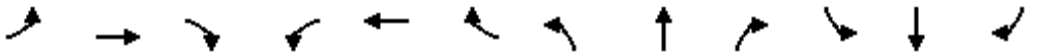
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	10	125	70	10	20	125	1130	20	20	2660	115
Future Volume (vph)	20	10	125	70	10	20	125	1130	20	20	2660	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0			7.0		5.0	6.0		5.0	6.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.89			0.97		1.00	1.00		1.00	0.99	
Flt Protected		0.99			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1647			1742		1770	5069		1770	5049	
Flt Permitted		0.94			0.48		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1562			870		1770	5069		1770	5049	
Peak-hour factor, PHF	0.79	0.79	0.79	0.58	0.58	0.58	0.92	0.92	0.92	0.98	0.98	0.98
Adj. Flow (vph)	25	13	158	121	17	34	136	1228	22	20	2714	117
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	196	0	0	172	0	136	1250	0	20	2831	0
Confl. Peds. (#/hr)	10					10	1		2	2		1
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4			8								
Actuated Green, G (s)		34.0			34.0		16.8	125.0		3.0	111.2	
Effective Green, g (s)		34.0			34.0		16.8	125.0		3.0	111.2	
Actuated g/C Ratio		0.19			0.19		0.09	0.69		0.02	0.62	
Clearance Time (s)		7.0			7.0		5.0	6.0		5.0	6.0	
Vehicle Extension (s)		4.0			3.5		3.0	0.2		3.0	0.2	
Lane Grp Cap (vph)		295			164		165	3520		29	3119	
v/s Ratio Prot							c0.08	0.25		0.01	c0.56	
v/s Ratio Perm		0.13			c0.20							
v/c Ratio		0.66			1.05		0.82	0.36		0.69	0.91	
Uniform Delay, d1		67.7			73.0		80.1	11.2		88.0	29.9	
Progression Factor		1.00			1.00		0.59	1.60		0.99	0.36	
Incremental Delay, d2		6.1			83.8		26.2	0.3		41.7	4.0	
Delay (s)		73.8			156.8		73.3	18.1		128.8	14.8	
Level of Service		E			F		E	B		F	B	
Approach Delay (s)		73.8			156.8			23.5			15.6	
Approach LOS		E			F			C			B	

Intersection Summary			
HCM 2000 Control Delay	25.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	99.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	10	150	20	5	65	20	1190	70	25	2710	120
Future Volume (vph)	20	10	150	20	5	65	20	1190	70	25	2710	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5		4.5	4.5	7.0	4.5		4.5	4.5	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected		0.97	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1804	1583		1792	1583	1770	5035		1770	5047	
Flt Permitted		0.82	1.00		0.78	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1536	1583		1460	1583	1770	5035		1770	5047	
Peak-hour factor, PHF	0.95	0.95	0.95	0.74	0.74	0.74	0.91	0.91	0.91	0.97	0.97	0.97
Adj. Flow (vph)	21	11	158	27	7	88	22	1308	77	26	2794	124
RTOR Reduction (vph)	0	0	46	0	0	78	0	2	0	0	2	0
Lane Group Flow (vph)	0	32	112	0	34	10	22	1383	0	26	2916	0
Confl. Peds. (#/hr)							14		12	12		14
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8						
Actuated Green, G (s)		21.0	21.0		21.0	21.0	4.4	140.4		5.1	138.6	
Effective Green, g (s)		21.0	21.0		21.0	21.0	4.4	140.4		5.1	138.6	
Actuated g/C Ratio		0.12	0.12		0.12	0.12	0.02	0.78		0.03	0.77	
Clearance Time (s)		4.5	4.5		4.5	4.5	7.0	4.5		4.5	4.5	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		179	184		170	184	43	3927		50	3886	
v/s Ratio Prot							0.01	0.27		c0.01	c0.58	
v/s Ratio Perm		0.02	c0.07		0.02	0.01						
v/c Ratio		0.18	0.61		0.20	0.06	0.51	0.35		0.52	0.75	
Uniform Delay, d1		71.7	75.6		71.9	70.7	86.7	6.0		86.2	11.3	
Progression Factor		1.00	1.00		1.00	1.00	1.01	0.10		1.28	0.63	
Incremental Delay, d2		0.5	5.6		0.6	0.1	9.0	0.2		4.0	0.6	
Delay (s)		72.2	81.2		72.5	70.8	96.8	0.8		114.3	7.7	
Level of Service		E	F		E	E	F	A		F	A	
Approach Delay (s)		79.7			71.3			2.3			8.7	
Approach LOS		E			E			A			A	

Intersection Summary			
HCM 2000 Control Delay	11.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



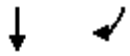
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	515	275	15	200	820	55	70	710	90	30	1200	0
Future Volume (vph)	515	275	15	200	820	55	70	710	90	30	1200	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1750	1900
Total Lost time (s)	7.5	7.5		7.0	7.0		8.5	7.0	7.0	8.5	7.0	
Lane Util. Factor	0.94	0.95		0.86	0.86		1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	4990	3507		1522	4748		1770	5085	1559	1770	4684	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	4990	3507		1522	4748		1770	5085	1559	1770	4684	
Peak-hour factor, PHF	0.96	0.96	0.96	0.92	0.92	0.92	0.88	0.88	0.88	0.97	0.97	0.97
Adj. Flow (vph)	536	286	16	217	891	60	80	807	102	31	1237	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	536	302	0	195	973	0	80	807	102	31	1237	0
Confl. Peds. (#/hr)	10		7	7		10	5		10	10		5
Turn Type	Split	NA		Split	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	3	3		4	4		1	6	4	5	2	
Permitted Phases									6			
Actuated Green, G (s)	28.4	28.4		44.3	44.3		12.3	65.3	109.6	7.0	65.0	
Effective Green, g (s)	28.4	28.4		44.3	44.3		12.3	65.3	109.6	7.0	65.0	
Actuated g/C Ratio	0.16	0.16		0.25	0.25		0.07	0.36	0.61	0.04	0.36	
Clearance Time (s)	7.5	7.5		7.0	7.0		8.5	7.0	7.0	8.5	7.0	
Vehicle Extension (s)	4.0	4.0		4.0	4.0		4.0	0.2	4.0	4.0	0.2	
Lane Grp Cap (vph)	787	553		374	1168		120	1844	949	68	1691	
v/s Ratio Prot	c0.11	0.09		0.13	c0.20		c0.05	0.16	0.03	0.02	c0.26	
v/s Ratio Perm									0.04			
v/c Ratio	0.68	0.55		0.52	0.83		0.67	0.44	0.11	0.46	0.73	
Uniform Delay, d1	71.5	69.9		58.7	64.3		81.8	43.4	14.7	84.6	49.9	
Progression Factor	1.20	1.21		1.00	1.00		1.26	0.78	1.09	1.27	0.69	
Incremental Delay, d2	2.6	1.4		1.7	5.5		13.8	0.7	0.1	4.8	2.1	
Delay (s)	88.5	85.9		60.4	69.8		117.1	34.4	16.1	112.3	36.4	
Level of Service	F	F		E	E		F	C	B	F	D	
Approach Delay (s)		87.5			68.2			39.2			38.2	
Approach LOS		F			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	56.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	33.0
Intersection Capacity Utilization	89.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

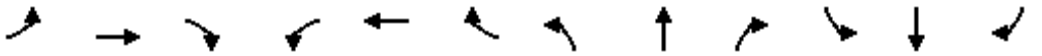
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (veh/h)	0	0	35	0	0	0	45	55	820	0	50	0
Future Volume (Veh/h)	0	0	35	0	0	0	45	55	820	0	50	0
Sign Control		Stop			Stop				Free			
Grade		0%			0%				0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	38	0	0	0	0	60	891	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type									None			
Median storage veh)												
Upstream signal (ft)									547			
pX, platoon unblocked	0.82	0.82	0.78	0.82	0.82	0.92	0.00	0.78			0.00	0.92
vC, conflicting volume	1878	2472	502	1529	2494	297	0	1483			0	891
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	683	1407	0	257	1433	0	0	646			0	595
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			0.0	4.1
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			0.0	2.2
p0 queue free %	100	100	96	100	100	100	0	92			0	100
cM capacity (veh/h)	258	104	849	496	100	1002	0	732			0	903

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	38	60	297	297	297	0	576	576	331
Volume Left	0	60	0	0	0	0	0	0	0
Volume Right	38	0	0	0	0	0	0	0	43
cSH	849	732	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.04	0.08	0.17	0.17	0.17	0.00	0.34	0.34	0.19
Queue Length 95th (ft)	4	7	0	0	0	0	0	0	0
Control Delay (s)	9.4	10.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	B							
Approach Delay (s)	9.4	0.7				0.0			
Approach LOS	A								

Intersection Summary				
Average Delay	0.4			
Intersection Capacity Utilization	45.4%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	1325	40
Future Volume (Veh/h)	1325	40
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	1440	43
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	None	
Median storage veh)		
Upstream signal (ft)	801	
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	10	225	10	10	10	375	885	20	10	1260	135
Future Volume (vph)	25	10	225	10	10	10	375	885	20	10	1260	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.5	6.0		8.0		6.0	7.0		6.0	7.0	7.0
Lane Util. Factor		1.00	1.00		1.00		0.97	0.91		1.00	0.91	1.00
Frpb, ped/bikes		1.00	0.98		1.00		1.00	1.00		1.00	1.00	0.96
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.95		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.97	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1799	1546		1750		3433	5054		1770	5085	1518
Flt Permitted		0.97	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1799	1546		1750		3433	5054		1770	5085	1518
Peak-hour factor, PHF	0.77	0.77	0.77	0.25	0.25	0.25	0.88	0.88	0.88	0.97	0.97	0.97
Adj. Flow (vph)	32	13	292	40	40	40	426	1006	23	10	1299	139
RTOR Reduction (vph)	0	0	51	0	10	0	0	1	0	0	0	71
Lane Group Flow (vph)	0	45	241	0	110	0	426	1028	0	10	1299	68
Confl. Peds. (#/hr)			29	29			10		21	29		10
Turn Type	Split	NA	pm+ov	Split	NA		Prot	NA		Prot	NA	Perm
Protected Phases	4	4	1	3	3		1	6		5	2	
Permitted Phases			4									2
Actuated Green, G (s)		24.5	53.9		9.0		29.4	114.9		3.1	88.6	88.6
Effective Green, g (s)		24.5	53.9		9.0		29.4	114.9		3.1	88.6	88.6
Actuated g/C Ratio		0.14	0.30		0.05		0.16	0.64		0.02	0.49	0.49
Clearance Time (s)		7.5	6.0		8.0		6.0	7.0		6.0	7.0	7.0
Vehicle Extension (s)		3.0	5.0		5.0		5.0	0.2		3.0	0.2	0.2
Lane Grp Cap (vph)		244	462		87		560	3226		30	2502	747
v/s Ratio Prot		0.03	c0.08		c0.06		c0.12	0.20		0.01	c0.26	
v/s Ratio Perm			0.07									0.05
v/c Ratio		0.18	0.52		1.26		0.76	0.32		0.33	0.52	0.09
Uniform Delay, d1		68.9	52.3		85.5		71.9	14.8		87.4	31.2	24.3
Progression Factor		1.00	1.00		1.00		1.13	1.12		1.21	0.27	0.03
Incremental Delay, d2		0.4	2.0		181.3		6.7	0.2		5.0	0.6	0.2
Delay (s)		69.3	54.4		266.8		88.4	16.8		111.0	9.1	0.9
Level of Service		E	D		F		F	B		F	A	A
Approach Delay (s)		56.3			266.8			37.7			9.0	
Approach LOS		E			F			D			A	

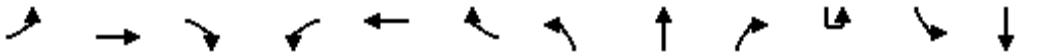
Intersection Summary			
HCM 2000 Control Delay	35.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	28.5
Intersection Capacity Utilization	73.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	65	5	25	20	5	20	45	25	1195	15	45	1395
Future Volume (vph)	65	5	25	20	5	20	45	25	1195	15	45	1395
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0			7.0			4.5	7.0		4.5	7.0
Lane Util. Factor		1.00			1.00			1.00	0.91		1.00	0.91
Frpb, ped/bikes		1.00			0.99			1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00			1.00			1.00	1.00		1.00	1.00
Frt		0.96			0.94			1.00	1.00		1.00	0.99
Flt Protected		0.97			0.98			0.95	1.00		0.95	1.00
Satd. Flow (prot)		1729			1700			1770	5074		1769	5052
Flt Permitted		0.76			0.84			0.12	1.00		0.18	1.00
Satd. Flow (perm)		1366			1465			217	5074		334	5052
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	71	5	27	22	5	22	49	27	1299	16	49	1516
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	103	0	0	49	0	0	76	1315	0	49	1576
Confl. Peds. (#/hr)	2		1	1		2		1		5	5	
Turn Type	Perm	NA		Perm	NA		Perm	pm+pt	NA		pm+pt	NA
Protected Phases		4			8			5	2		1	6
Permitted Phases	4			8			2	2			6	
Actuated Green, G (s)		13.8			13.8			59.0	54.1		56.4	52.8
Effective Green, g (s)		13.8			13.8			59.0	54.1		56.4	52.8
Actuated g/C Ratio		0.15			0.15			0.66	0.60		0.63	0.59
Clearance Time (s)		7.0			7.0			4.5	7.0		4.5	7.0
Vehicle Extension (s)		3.0			3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		209			224			226	3050		266	2963
v/s Ratio Prot								c0.02	0.26		0.01	c0.31
v/s Ratio Perm		c0.08			0.03			0.20			0.11	
v/c Ratio		0.49			0.22			0.34	0.43		0.18	0.53
Uniform Delay, d1		34.9			33.4			6.7	9.7		6.6	11.2
Progression Factor		1.00			1.00			1.00	1.00		1.09	0.94
Incremental Delay, d2		1.8			0.5			0.9	0.4		0.3	0.6
Delay (s)		36.7			33.9			7.5	10.1		7.5	11.1
Level of Service		D			C			A	B		A	B
Approach Delay (s)		36.7			33.9				10.0			11.0
Approach LOS		D			C				A			B

Intersection Summary			
HCM 2000 Control Delay	11.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	18.5
Intersection Capacity Utilization	56.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	55
Future Volume (vph)	55
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frpb, ped/bikes	
Flpb, ped/bikes	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	60
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Confl. Peds. (#/hr)	1
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	30	5	80	30	5	50	30	1195	20	5	20	1440
Future Volume (vph)	30	5	80	30	5	50	30	1195	20	5	20	1440
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0			7.0		4.5	7.0			4.5	7.0
Lane Util. Factor		1.00			1.00		1.00	0.91			1.00	0.91
Frpb, ped/bikes		0.99			0.99		1.00	1.00			1.00	1.00
Flpb, ped/bikes		1.00			1.00		1.00	1.00			1.00	1.00
Frt		0.91			0.92		1.00	1.00			1.00	1.00
Flt Protected		0.99			0.98		0.95	1.00			0.95	1.00
Satd. Flow (prot)		1649			1669		1769	5068			1768	5072
Flt Permitted		0.89			0.78		0.13	1.00			0.18	1.00
Satd. Flow (perm)		1481			1327		239	5068			335	5072
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	5	87	33	5	54	33	1299	22	5	22	1565
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	125	0	0	92	0	33	1321	0	0	27	1587
Confl. Peds. (#/hr)	4		1	1		4	5		12		12	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	pm+pt	NA
Protected Phases		4			8		5	2			1	6
Permitted Phases	4			8			2			6	6	
Actuated Green, G (s)		15.3			15.3		86.2	82.4			86.2	82.4
Effective Green, g (s)		15.3			15.3		86.2	82.4			86.2	82.4
Actuated g/C Ratio		0.13			0.13		0.72	0.69			0.72	0.69
Clearance Time (s)		7.0			7.0		4.5	7.0			4.5	7.0
Vehicle Extension (s)		3.0			3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		188			169		220	3480			286	3482
v/s Ratio Prot							c0.00	0.26			0.00	c0.31
v/s Ratio Perm		c0.08			0.07		0.10				0.06	
v/c Ratio		0.66			0.54		0.15	0.38			0.09	0.46
Uniform Delay, d1		49.9			49.1		5.4	8.0			5.0	8.6
Progression Factor		1.00			1.00		1.62	1.34			1.00	1.00
Incremental Delay, d2		8.6			3.6		0.3	0.3			0.1	0.4
Delay (s)		58.5			52.6		9.1	10.9			5.2	9.0
Level of Service		E			D		A	B			A	A
Approach Delay (s)		58.5			52.6			10.9				8.9
Approach LOS		E			D			B				A

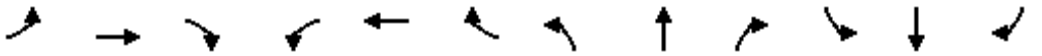
Intersection Summary			
HCM 2000 Control Delay	13.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	18.5
Intersection Capacity Utilization	50.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	20
Future Volume (vph)	20
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frpb, ped/bikes	
Flpb, ped/bikes	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	22
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Confl. Peds. (#/hr)	5
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

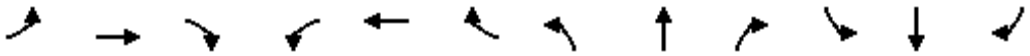
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	185	155	1090	110	90	1460
Future Volume (vph)	185	155	1090	110	90	1460
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	6.0		6.0	6.0
Lane Util. Factor	1.00	1.00	0.91		1.00	0.91
Frpb, ped/bikes	1.00	0.97	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1544	4994		1770	5085
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1544	4994		1770	5085
Peak-hour factor, PHF	0.90	0.90	0.87	0.87	0.92	0.92
Adj. Flow (vph)	206	172	1253	126	98	1587
RTOR Reduction (vph)	0	142	0	0	0	0
Lane Group Flow (vph)	206	30	1379	0	98	1587
Confl. Peds. (#/hr)	4	13		4	4	
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4				
Actuated Green, G (s)	21.1	21.1	59.3		11.1	81.4
Effective Green, g (s)	21.1	21.1	59.3		11.1	81.4
Actuated g/C Ratio	0.18	0.18	0.49		0.09	0.68
Clearance Time (s)	6.5	6.5	6.0		6.0	6.0
Vehicle Extension (s)	3.0	3.0	0.2		3.0	0.2
Lane Grp Cap (vph)	311	271	2467		163	3449
v/s Ratio Prot	c0.12		c0.28		0.06	c0.31
v/s Ratio Perm		0.02				
v/c Ratio	0.66	0.11	0.56		0.60	0.46
Uniform Delay, d1	46.1	41.6	21.2		52.3	9.0
Progression Factor	1.00	1.00	1.00		0.84	0.96
Incremental Delay, d2	5.2	0.2	0.9		5.6	0.4
Delay (s)	51.4	41.8	22.1		49.6	9.1
Level of Service	D	D	C		D	A
Approach Delay (s)	47.0		22.1			11.5
Approach LOS	D		C			B

Intersection Summary			
HCM 2000 Control Delay	19.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	24.5
Intersection Capacity Utilization	60.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



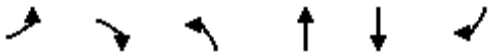
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	15	195	55	15	10	75	955	40	10	2250	120
Future Volume (vph)	90	15	195	55	15	10	75	955	40	10	2250	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0			7.0		5.5	6.0		5.5	6.0	
Lane Util. Factor	1.00	1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.86			0.98		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1764	1603			1766		1770	5047		1770	5047	
Flt Permitted	0.70	1.00			0.33		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1307	1603			602		1770	5047		1770	5047	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	16	212	60	16	11	82	1038	43	11	2446	130
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	98	228	0	0	87	0	82	1081	0	11	2576	0
Confl. Peds. (#/hr)	2					2			2	2		
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4			8								
Actuated Green, G (s)	29.6	29.6			29.6		13.5	118.4		3.5	108.4	
Effective Green, g (s)	29.6	29.6			29.6		13.5	118.4		3.5	108.4	
Actuated g/C Ratio	0.16	0.16			0.16		0.08	0.66		0.02	0.60	
Clearance Time (s)	7.0	7.0			7.0		5.5	6.0		5.5	6.0	
Vehicle Extension (s)	3.0	3.0			3.0		4.0	0.2		4.0	0.2	
Lane Grp Cap (vph)	214	263			98		132	3319		34	3039	
v/s Ratio Prot		0.14					c0.05	c0.21		0.01	c0.51	
v/s Ratio Perm	0.07				c0.14							
v/c Ratio	0.46	0.87			0.89		0.62	0.33		0.32	0.85	
Uniform Delay, d1	68.0	73.3			73.6		80.8	13.4		87.1	29.1	
Progression Factor	1.00	1.00			1.00		1.00	1.00		0.66	1.72	
Incremental Delay, d2	1.6	24.5			55.8		9.9	0.3		2.0	0.9	
Delay (s)	69.5	97.8			129.4		90.7	13.7		59.8	51.0	
Level of Service	E	F			F		F	B		E	D	
Approach Delay (s)		89.3			129.4			19.1			51.0	
Approach LOS		F			F			B			D	

Intersection Summary			
HCM 2000 Control Delay	46.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	24.5
Intersection Capacity Utilization	90.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	135	165	150	370	30	270	705	80	45	2065	360
Future Volume (vph)	210	135	165	150	370	30	270	705	80	45	2065	360
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	7.0		6.5	7.0		5.5	7.0	7.0	5.5	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.97	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.92		1.00	0.99		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1768	3208		1766	3493		3433	5085	1538	1770	4954	
Flt Permitted	0.22	1.00		0.39	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	417	3208		731	3493		3433	5085	1538	1770	4954	
Peak-hour factor, PHF	0.91	0.91	0.91	0.87	0.87	0.87	0.77	0.77	0.77	0.97	0.97	0.97
Adj. Flow (vph)	231	148	181	172	425	34	351	916	104	46	2129	371
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	231	329	0	172	459	0	351	916	104	46	2500	0
Confl. Peds. (#/hr)	11		7	7		11	5		7	7		5
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8					6			
Actuated Green, G (s)	46.9	30.4		46.5	30.2		24.8	99.1	99.1	8.2	82.5	
Effective Green, g (s)	46.9	30.4		46.5	30.2		24.8	99.1	99.1	8.2	82.5	
Actuated g/C Ratio	0.26	0.17		0.26	0.17		0.14	0.55	0.55	0.05	0.46	
Clearance Time (s)	6.5	7.0		6.5	7.0		5.5	7.0	7.0	5.5	7.0	
Vehicle Extension (s)	3.0	4.0		5.0	4.0		5.0	0.2	0.2	3.0	0.2	
Lane Grp Cap (vph)	232	541		282	586		472	2799	846	80	2270	
v/s Ratio Prot	c0.09	0.10		0.06	0.13		c0.10	0.18		0.03	c0.50	
v/s Ratio Perm	c0.17			0.10					0.07			
v/c Ratio	1.00	0.61		0.61	0.78		0.74	0.33	0.12	0.57	1.10	
Uniform Delay, d1	60.8	69.3		55.1	71.8		74.5	22.2	19.5	84.2	48.8	
Progression Factor	1.00	1.00		1.00	1.00		0.87	0.98	0.92	1.28	0.66	
Incremental Delay, d2	57.5	2.2		5.4	7.2		7.3	0.3	0.3	7.8	51.7	
Delay (s)	118.3	71.5		60.5	78.9		72.2	22.1	18.3	115.4	83.8	
Level of Service	F	E		E	E		E	C	B	F	F	
Approach Delay (s)		90.8			73.9			34.6			84.4	
Approach LOS		F			E			C			F	

Intersection Summary			
HCM 2000 Control Delay	70.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	26.0
Intersection Capacity Utilization	106.5%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	50	125	190	755	2345	195
Future Volume (vph)	50	125	190	755	2345	195
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	7.0	7.0	4.5	4.5	4.5
Lane Util. Factor	1.00	1.00	1.00	0.91	0.86	1.00
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1575	1770	5085	6408	1547
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1770	1575	1770	5085	6408	1547
Peak-hour factor, PHF	0.78	0.78	0.88	0.88	0.94	0.94
Adj. Flow (vph)	64	160	216	858	2495	207
RTOR Reduction (vph)	0	1	0	0	0	17
Lane Group Flow (vph)	64	159	216	858	2495	190
Confl. Peds. (#/hr)		3	3			3
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	4	5	5	2	6	4
Permitted Phases		4				6
Actuated Green, G (s)	17.0	49.7	32.7	154.0	114.3	131.3
Effective Green, g (s)	17.0	49.7	32.7	154.0	114.3	131.3
Actuated g/C Ratio	0.09	0.28	0.18	0.86	0.63	0.73
Clearance Time (s)	4.5	7.0	7.0	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	167	434	321	4350	4069	1167
v/s Ratio Prot	c0.04	0.07	c0.12	0.17	c0.39	0.02
v/s Ratio Perm		0.03				0.11
v/c Ratio	0.38	0.37	0.67	0.20	0.61	0.16
Uniform Delay, d1	76.6	52.5	68.7	2.3	19.6	7.5
Progression Factor	1.00	1.00	1.32	0.90	0.94	0.78
Incremental Delay, d2	1.5	0.5	5.0	0.1	0.5	0.0
Delay (s)	78.0	53.0	95.2	2.1	18.9	5.9
Level of Service	E	D	F	A	B	A
Approach Delay (s)	60.1			20.8	17.9	
Approach LOS	E			C	B	

Intersection Summary			
HCM 2000 Control Delay	21.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	64.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection Sign configuration not allowed in HCM analysis.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑		
Traffic Volume (vph)	260	0	0	550	0	0
Future Volume (vph)	260	0	0	550	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0			6.0		
Lane Util. Factor	0.95			0.95		
Frt	1.00			1.00		
Flt Protected	1.00			1.00		
Satd. Flow (prot)	3539			3539		
Flt Permitted	1.00			1.00		
Satd. Flow (perm)	3539			3539		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	283	0	0	598	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	283	0	0	598	0	0
Turn Type	NA			NA		
Protected Phases	2			6		
Permitted Phases						
Actuated Green, G (s)	11.9			11.9		
Effective Green, g (s)	11.9			11.9		
Actuated g/C Ratio	0.49			0.49		
Clearance Time (s)	6.0			6.0		
Vehicle Extension (s)	3.0			3.0		
Lane Grp Cap (vph)	1725			1725		
v/s Ratio Prot	0.08			c0.17		
v/s Ratio Perm						
v/c Ratio	0.16			0.35		
Uniform Delay, d1	3.5			3.9		
Progression Factor	1.00			1.00		
Incremental Delay, d2	0.0			0.1		
Delay (s)	3.5			4.0		
Level of Service	A			A		
Approach Delay (s)	3.5			4.0	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM 2000 Control Delay	3.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	24.4	Sum of lost time (s)	10.5
Intersection Capacity Utilization	20.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Traffic Volume (veh/h)	0	1280	1230	1650	0	0
Future Volume (Veh/h)	0	1280	1230	1650	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	1391	1337	1793	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		400	153			
pX, platoon unblocked	0.67				0.73	0.67
vC, conflicting volume	3130				1685	668
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3193				98	0
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	64				646	730

Direction, Lane #	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	348	348	348	348	891	1043	1195
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	598	1195
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.20	0.20	0.20	0.20	0.52	0.61	0.70
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS							
Approach Delay (s)	0.0				0.0		
Approach LOS							

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		

Arterial Level of Service: NB MD 97

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Hewitt Ave.	110	26.5	69.0	0.4	22
Aspen Hill Apt	109	14.9	23.3	0.1	12
Aspen Manor	108	11.5	25.5	0.1	20
Cemetery	107	14.7	25.7	0.1	15
	106	1.8	12.1	0.1	31
MD 185	105	34.3	48.9	0.2	11
	3000	2.6	9.5	0.1	29
7-11	104	2.5	5.4	0.0	19
Postgate Terr	103	11.3	25.4	0.2	25
Crystal Springs Apt	102	5.9	22.2	0.2	34
Bel Pre Rd	101	26.3	39.6	0.2	16
Total		152.2	306.5	1.7	20

Arterial Level of Service: SB MD 97

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Bel Pre Rd	101	132.9	217.9	1.1	19
Crystal Springs Apt	102	17.6	31.7	0.2	20
Heathfield Rd	103	34.6	50.9	0.2	15
Home Depot Ent.	104	21.1	35.2	0.2	18
	3000	4.3	6.6	0.0	16
MD 185	105	43.1	48.9	0.1	6
Northgate Plaza	106	4.2	20.0	0.2	27
Aspen Hill Rd	107	8.8	19.6	0.1	19
Wendy Ln	108	11.2	22.1	0.1	17
Ralph Rd	109	10.1	24.9	0.1	20
Hewitt Ave.	110	17.4	25.7	0.1	11
Total		305.4	503.6	2.4	17

Arterial Level of Service: NB MD 185

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Independence St	201	12.8	48.9	0.5	34
Aspen Hill Rd	202	22.2	42.4	0.3	23
Home Depot Ent	203	4.3	14.5	0.1	33
	1000	1.8	8.4	0.1	34
MD 97	105	75.4	81.0	0.1	4
Total		116.4	195.2	1.0	19

Arterial Level of Service: SB MD 185

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
MD 97	105	74.9	89.8	0.2	8
	1000	7.4	14.0	0.1	22
Home Depot Ent	203	7.0	14.1	0.1	20
Aspen Hill Rd	202	41.1	51.6	0.1	9
Independence St	201	59.5	81.6	0.3	12
Total		189.9	251.1	0.8	11

Intersection: 23: Bend

Movement	WB	WB
Directions Served	T	
Maximum Queue (ft)	345	330
Average Queue (ft)	153	69
95th Queue (ft)	377	253
Link Distance (ft)	350	350
Upstream Blk Time (%)	0	0
Queuing Penalty (veh)	1	0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 101: MD 97 & Bel Pre Rd

Movement	EB	EB	EB	EB	B23	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	R	T	L	T	T	R	L	L	T
Maximum Queue (ft)	204	425	290	267	245	305	515	500	175	246	250	275
Average Queue (ft)	150	156	130	163	17	220	258	267	148	121	119	84
95th Queue (ft)	230	349	264	262	123	346	447	457	222	216	223	202
Link Distance (ft)		350			2205		2732	2732				788
Upstream Blk Time (%)		4										
Queuing Penalty (veh)		0										
Storage Bay Dist (ft)	180		265	265		280			150	455	455	
Storage Blk Time (%)	14	0	1	1		8	4	30	2			
Queuing Penalty (veh)	75	2	2	4		20	14	79	6			

Intersection: 101: MD 97 & Bel Pre Rd

Movement	NB	NB	NB	SB	SB	SB	SB	SB	SB
Directions Served	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	271	290	142	100	584	1346	1380	1409	66
Average Queue (ft)	105	117	12	36	272	905	933	957	46
95th Queue (ft)	221	236	86	86	708	1424	1443	1467	86
Link Distance (ft)	788	788				5847	5847	5847	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)			200	560	560				40
Storage Blk Time (%)		2	0		0	36		55	1
Queuing Penalty (veh)		2	0		0	49		86	4

Intersection: 102: MD 97 & Crystal Springs Apt

Movement	WB	NB	NB	NB	SB	SB	SB
Directions Served	R	T	T	TR	T	T	T
Maximum Queue (ft)	46	204	226	241	782	730	656
Average Queue (ft)	16	22	25	32	141	156	122
95th Queue (ft)	43	114	127	145	536	558	470
Link Distance (ft)	234	1035	1035	1035	788	788	788
Upstream Blk Time (%)					0	0	0
Queuing Penalty (veh)					1	0	0
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 103: MD 97 & Heathfield Rd/Postgate Terr

Movement	EB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LTR	LTR	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	350	259	226	257	258	272	132	727	780	704
Average Queue (ft)	170	101	110	61	63	87	22	374	411	401
95th Queue (ft)	288	196	196	177	180	217	87	661	702	664
Link Distance (ft)	2375	1855		868	868	868		1035	1035	1035
Upstream Blk Time (%)									0	
Queuing Penalty (veh)									0	
Storage Bay Dist (ft)			350				350			
Storage Blk Time (%)								8		
Queuing Penalty (veh)								2		

Intersection: 104: MD 97 & Home Depot Ent./7-11

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	LT	R	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	99	162	85	92	68	104	84	118	111	765	776	608
Average Queue (ft)	32	61	27	34	19	16	19	44	31	144	234	131
95th Queue (ft)	74	116	67	68	51	63	62	106	91	503	665	439
Link Distance (ft)	1151	1151	213	213	75	75	75	75		868	868	868
Upstream Blk Time (%)					0	1	0	3			0	0
Queuing Penalty (veh)					1	3	1	10			0	0
Storage Bay Dist (ft)									235			
Storage Blk Time (%)									0	1		
Queuing Penalty (veh)									0	0		

Intersection: 105: MD 97 & MD 185

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	L	T	TR	L	LT	T	TR	L	T	T
Maximum Queue (ft)	219	234	247	267	246	268	305	596	565	190	269	255
Average Queue (ft)	135	145	163	141	133	90	231	321	357	83	118	117
95th Queue (ft)	199	211	237	219	208	218	347	498	506	164	220	216
Link Distance (ft)		261	261	261				968	968		682	682
Upstream Blk Time (%)	0	0	0	0	0							
Queuing Penalty (veh)	0	0	0	1	0							
Storage Bay Dist (ft)	425				300	280	280			330		
Storage Blk Time (%)	0	0		0	0	0	1	11			0	
Queuing Penalty (veh)	0	0		1	0	0	3	50			0	

Intersection: 105: MD 97 & MD 185

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	T
Maximum Queue (ft)	256	92	224	396	373	200
Average Queue (ft)	125	22	46	313	271	180
95th Queue (ft)	225	70	150	453	381	237
Link Distance (ft)	682			260	260	
Upstream Blk Time (%)				13	10	
Queuing Penalty (veh)				80	63	
Storage Bay Dist (ft)		280	200			175
Storage Blk Time (%)	0		0	23	22	13
Queuing Penalty (veh)	0		0	7	90	51

Intersection: 106: MD 97 & Northgate Plaza

Movement	EB	NB	SB	SB	SB	SB
Directions Served	R	UL	UL	T	T	TR
Maximum Queue (ft)	47	120	75	3	4	4
Average Queue (ft)	18	43	18	0	0	0
95th Queue (ft)	42	101	51	2	3	3
Link Distance (ft)	253			682	682	682
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		175	150			
Storage Blk Time (%)		0				
Queuing Penalty (veh)		0				

Intersection: 107: MD 97 & Aspen Hill Rd/Cemetery

Movement	EB	EB	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	LTR	L	L	T	T	TR	L	T	T	T
Maximum Queue (ft)	81	164	216	278	314	357	304	267	54	166	190	199
Average Queue (ft)	21	52	55	169	183	109	79	90	10	74	81	92
95th Queue (ft)	62	112	197	268	297	284	217	221	35	140	149	173
Link Distance (ft)	880	880	216			470	470	470		469	469	469
Upstream Blk Time (%)			8			0						
Queuing Penalty (veh)			0			1						
Storage Bay Dist (ft)				250	250				190			
Storage Blk Time (%)				2	3	1				0		16
Queuing Penalty (veh)				6	10	5				0		22

Intersection: 107: MD 97 & Aspen Hill Rd/Cemetery

Movement	SB
Directions Served	R
Maximum Queue (ft)	95
Average Queue (ft)	31
95th Queue (ft)	91
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	70
Storage Blk Time (%)	0
Queuing Penalty (veh)	1

Intersection: 108: MD 97 & Wendy Ln/Aspen Manor

Movement	EB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LTR	LTR	UL	T	T	TR	L	T	T	TR
Maximum Queue (ft)	143	77	192	402	218	244	92	247	270	272
Average Queue (ft)	58	27	36	127	62	72	14	88	108	122
95th Queue (ft)	114	65	112	312	175	190	40	221	249	260
Link Distance (ft)	1228	342		650	650	650		470	470	470
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)			200				150			
Storage Blk Time (%)			0	4				4		
Queuing Penalty (veh)			0	3				2		

Intersection: 109: MD 97 & Ralph Rd/Aspen Hill Apt

Movement	EB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LTR	LTR	L	T	T	TR	UL	T	T	TR
Maximum Queue (ft)	206	186	129	379	372	311	134	259	298	317
Average Queue (ft)	88	64	25	201	121	103	18	90	103	115
95th Queue (ft)	159	133	94	386	281	235	74	223	246	258
Link Distance (ft)	1189	370		364	364	364		650	650	650
Upstream Blk Time (%)				1	0	0				
Queuing Penalty (veh)				6	1	0				
Storage Bay Dist (ft)			125				175			
Storage Blk Time (%)				11				2		
Queuing Penalty (veh)				3				0		

Intersection: 110: MD 97 & Hewitt Ave.

Movement	WB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	R	T	T	TR	L	T	T	T
Maximum Queue (ft)	114	284	409	387	261	164	355	381	380
Average Queue (ft)	98	128	232	192	148	87	153	183	198
95th Queue (ft)	130	275	360	325	249	167	321	352	363
Link Distance (ft)		438	2204	2204	2204		364	364	364
Upstream Blk Time (%)							0	1	1
Queuing Penalty (veh)							1	3	4
Storage Bay Dist (ft)	90					140			
Storage Blk Time (%)	24	2				2	9		
Queuing Penalty (veh)	37	3				10	9		

Intersection: 201: MD 185 & Independence St

Movement	EB	EB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	LTR	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	125	518	172	177	252	194	178	239	687	756	715
Average Queue (ft)	82	307	73	75	111	70	61	10	564	594	611
95th Queue (ft)	152	527	147	148	223	165	138	91	674	714	717
Link Distance (ft)		872	167		2375	2375	2375		1317	1317	1317
Upstream Blk Time (%)			1								
Queuing Penalty (veh)			0								
Storage Bay Dist (ft)	100			250				270			
Storage Blk Time (%)	9	54			0				25		
Queuing Penalty (veh)	18	48			0				3		

Intersection: 202: MD 185 & Aspen Hill Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	NB
Directions Served	L	T	TR	L	T	TR	L	L	T	T	T	R
Maximum Queue (ft)	311	412	392	251	327	356	233	242	257	225	244	102
Average Queue (ft)	177	105	224	105	192	216	108	121	116	93	86	21
95th Queue (ft)	304	296	353	212	308	323	203	219	245	206	197	66
Link Distance (ft)		1834	1834		450	450			1317	1317	1317	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	300			410			350	350				350
Storage Blk Time (%)	5	0										
Queuing Penalty (veh)	4	0										

Intersection: 202: MD 185 & Aspen Hill Rd

Movement	SB	SB	SB	SB
Directions Served	L	T	T	TR
Maximum Queue (ft)	114	584	609	625
Average Queue (ft)	40	353	409	435
95th Queue (ft)	96	583	640	654
Link Distance (ft)	606	606	606	606
Upstream Blk Time (%)		0	0	1
Queuing Penalty (veh)		0	3	9
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 203: MD 185 & Home Depot Ent

Movement	EB	EB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	L	R	L	T	T	T	T	T	T	T	R
Maximum Queue (ft)	253	125	239	359	136	112	88	352	492	530	470
Average Queue (ft)	80	83	192	76	28	27	8	111	262	310	141
95th Queue (ft)	191	143	266	270	95	77	46	291	495	593	421
Link Distance (ft)	589			606	606	606	355	355	355	355	355
Upstream Blk Time (%)								0	3	8	3
Queuing Penalty (veh)								0	16	41	14
Storage Bay Dist (ft)		100	215								
Storage Blk Time (%)	3	12	14								
Queuing Penalty (veh)	3	7	37								

Intersection: 1000: MD 185

Movement	WB	WB	SB	SB
Directions Served	T	T	R	R
Maximum Queue (ft)	40	92	561	331
Average Queue (ft)	2	4	98	41
95th Queue (ft)	20	37	380	196
Link Distance (ft)	261	261	474	474
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2000: HAWK & Aspen Hill Rd

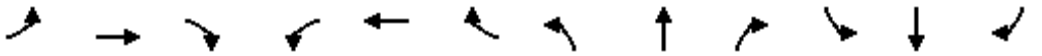
Movement	EB	EB	WB	WB
Directions Served	T	T	T	T
Maximum Queue (ft)	43	97	185	216
Average Queue (ft)	4	18	22	28
95th Queue (ft)	24	62	103	117
Link Distance (ft)	450	450	880	880
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3000: MD 97

Movement	SB	SB	SB
Directions Served	T	TR	R
Maximum Queue (ft)	171	168	116
Average Queue (ft)	51	56	29
95th Queue (ft)	162	155	87
Link Distance (ft)	75	75	75
Upstream Blk Time (%)	6	3	0
Queuing Penalty (veh)	58	34	4
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 1132

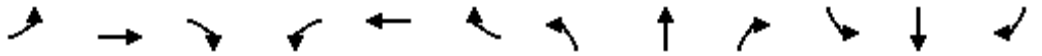


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	405	255	150	230	190	260	1960	210	255	1230	125
Future Volume (vph)	220	405	255	150	230	190	260	1960	210	255	1230	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1600	1900	1900	1750	1900
Total Lost time (s)	9.0	7.0	8.5	9.0	7.0	8.5	8.5	7.0	7.0	8.5	7.0	7.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	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	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1565	1767	3539	1583	3433	4282	1583	3433	4684	1583
Flt Permitted	0.24	1.00	1.00	0.49	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	449	3539	1565	919	3539	1583	3433	4282	1583	3433	4684	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.97	0.97	0.97	0.96	0.96	0.96
Adj. Flow (vph)	242	445	280	165	253	209	268	2021	216	266	1281	130
RTOR Reduction (vph)	0	0	89	0	0	102	0	0	118	0	0	72
Lane Group Flow (vph)	242	445	191	165	253	107	268	2021	98	266	1281	58
Confl. Peds. (#/hr)			5	5								
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	1	3 9	8	5	1	6		5	2	
Permitted Phases	4		4	8		8			6			2
Actuated Green, G (s)	42.1	29.1	47.8	31.1	24.6	41.4	18.7	81.6	81.6	16.8	79.7	79.7
Effective Green, g (s)	42.1	29.1	47.8	31.1	24.6	41.4	18.7	81.6	81.6	16.8	79.7	79.7
Actuated g/C Ratio	0.23	0.16	0.27	0.17	0.14	0.23	0.10	0.45	0.45	0.09	0.44	0.44
Clearance Time (s)	9.0	7.0	8.5		7.0	8.5	8.5	7.0	7.0	8.5	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	0.2	0.2	3.0	0.2	0.2
Lane Grp Cap (vph)	292	572	415	236	483	364	356	1941	717	320	2073	700
v/s Ratio Prot	c0.12	c0.13	0.05	c0.06	0.07	0.03	c0.08	c0.47		0.08	0.27	
v/s Ratio Perm	0.08		0.07	c0.06		0.04			0.06			0.04
v/c Ratio	0.83	0.78	0.46	0.70	0.52	0.29	0.75	1.04	0.14	0.83	0.62	0.08
Uniform Delay, d1	61.7	72.4	55.3	67.9	72.3	57.2	78.4	49.2	28.7	80.2	38.5	29.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.12	0.95	2.35	1.00	1.00	1.00
Incremental Delay, d2	17.3	6.6	0.8	8.7	1.0	0.4	7.6	30.7	0.3	16.6	1.4	0.2
Delay (s)	79.0	79.0	56.1	76.7	73.3	57.7	95.4	77.5	67.7	96.8	39.9	29.2
Level of Service	E	E	E	E	E	E	F	E	E	F	D	C
Approach Delay (s)		72.4			69.0			78.6			48.1	
Approach LOS		E			E			E			D	

Intersection Summary			
HCM 2000 Control Delay	67.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	36.0
Intersection Capacity Utilization	100.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

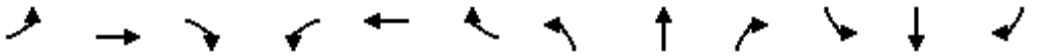
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	90	2340	55	0	1635
Future Volume (vph)	0	90	2340	55	0	1635
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0			6.0
Lane Util. Factor		1.00	0.91			0.91
Frpb, ped/bikes		1.00	1.00			1.00
Flpb, ped/bikes		1.00	1.00			1.00
Frt		0.86	1.00			1.00
Flt Protected		1.00	1.00			1.00
Satd. Flow (prot)		1611	5060			5085
Flt Permitted		1.00	1.00			1.00
Satd. Flow (perm)		1611	5060			5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	98	2543	60	0	1777
RTOR Reduction (vph)	0	9	0	0	0	0
Lane Group Flow (vph)	0	89	2603	0	0	1777
Confl. Peds. (#/hr)	5			9	9	
Turn Type		Perm	NA			NA
Protected Phases			2			6
Permitted Phases		6				
Actuated Green, G (s)		164.0	164.0			164.0
Effective Green, g (s)		164.0	164.0			164.0
Actuated g/C Ratio		0.91	0.91			0.91
Clearance Time (s)		6.0	6.0			6.0
Vehicle Extension (s)		3.0	3.0			3.0
Lane Grp Cap (vph)		1467	4610			4633
v/s Ratio Prot			c0.51			0.35
v/s Ratio Perm		0.06				
v/c Ratio		0.06	0.56			0.38
Uniform Delay, d1		0.8	1.5			1.1
Progression Factor		1.00	0.08			0.40
Incremental Delay, d2		0.1	0.4			0.2
Delay (s)		0.8	0.5			0.6
Level of Service		A	A			A
Approach Delay (s)	0.8		0.5			0.6
Approach LOS	A		A			A

Intersection Summary			
HCM 2000 Control Delay	0.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



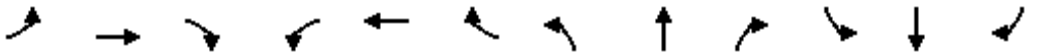
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	10	80	35	10	25	115	2335	40	35	1550	50
Future Volume (vph)	35	10	80	35	10	25	115	2335	40	35	1550	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0			7.0		5.0	6.0		5.0	6.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes		0.99			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.91			0.95		1.00	1.00		1.00	1.00	
Flt Protected		0.99			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1658			1712		1770	5065		1770	5057	
Flt Permitted		0.86			0.61		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1449			1071		1770	5065		1770	5057	
Peak-hour factor, PHF	0.78	0.78	0.78	0.78	0.78	0.78	0.96	0.96	0.96	0.97	0.97	0.97
Adj. Flow (vph)	45	13	103	45	13	32	120	2432	42	36	1598	52
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	161	0	0	90	0	120	2474	0	36	1650	0
Confl. Peds. (#/hr)	10		1	1		10	2		14	14		2
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4			8								
Actuated Green, G (s)		25.6			25.6		17.5	128.5		7.9	118.9	
Effective Green, g (s)		25.6			25.6		17.5	128.5		7.9	118.9	
Actuated g/C Ratio		0.14			0.14		0.10	0.71		0.04	0.66	
Clearance Time (s)		7.0			7.0		5.0	6.0		5.0	6.0	
Vehicle Extension (s)		4.0			3.5		3.0	0.2		3.0	0.2	
Lane Grp Cap (vph)		206			152		172	3615		77	3340	
v/s Ratio Prot							c0.07	c0.49		0.02	0.33	
v/s Ratio Perm		c0.11			0.08							
v/c Ratio		0.78			0.59		0.70	0.68		0.47	0.49	
Uniform Delay, d1		74.5			72.3		78.7	14.4		84.0	15.4	
Progression Factor		1.00			1.00		1.02	0.49		1.06	0.39	
Incremental Delay, d2		18.2			6.4		9.3	0.8		4.2	0.5	
Delay (s)		92.7			78.7		89.7	7.9		93.4	6.5	
Level of Service		F			E		F	A		F	A	
Approach Delay (s)		92.7			78.7			11.7			8.4	
Approach LOS		F			E			B			A	

Intersection Summary			
HCM 2000 Control Delay	14.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	77.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	5	175	15	5	50	85	2405	35	20	1545	100
Future Volume (vph)	35	5	175	15	5	50	85	2405	35	20	1545	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5		4.5	4.5	7.0	4.5		4.5	4.5	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected		0.96	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1785	1583		1795	1583	1770	5072		1770	5032	
Flt Permitted		0.74	1.00		0.79	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1371	1583		1467	1583	1770	5072		1770	5032	
Peak-hour factor, PHF	0.88	0.88	0.88	0.81	0.81	0.81	0.93	0.93	0.93	0.96	0.96	0.96
Adj. Flow (vph)	40	6	199	19	6	62	91	2586	38	21	1609	104
RTOR Reduction (vph)	0	0	181	0	0	56	0	0	0	0	2	0
Lane Group Flow (vph)	0	46	18	0	25	6	91	2624	0	21	1711	0
Confl. Peds. (#/hr)							2		23	23		2
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8						
Actuated Green, G (s)		16.3	16.3		16.3	16.3	14.6	145.1		5.1	133.1	
Effective Green, g (s)		16.3	16.3		16.3	16.3	14.6	145.1		5.1	133.1	
Actuated g/C Ratio		0.09	0.09		0.09	0.09	0.08	0.81		0.03	0.74	
Clearance Time (s)		4.5	4.5		4.5	4.5	7.0	4.5		4.5	4.5	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		124	143		132	143	143	4088		50	3720	
v/s Ratio Prot							c0.05	c0.52		0.01	0.34	
v/s Ratio Perm		c0.03	0.01		0.02	0.00						
v/c Ratio		0.37	0.13		0.19	0.04	0.64	0.64		0.42	0.46	
Uniform Delay, d1		77.0	75.3		75.7	74.7	80.1	7.0		86.0	9.3	
Progression Factor		1.00	1.00		1.00	1.00	0.88	0.74		0.89	0.51	
Incremental Delay, d2		1.9	0.4		0.7	0.1	3.8	0.3		5.0	0.4	
Delay (s)		78.9	75.7		76.4	74.8	74.8	5.5		81.9	5.0	
Level of Service		E	E		E	E	E	A		F	A	
Approach Delay (s)		76.3			75.3			7.9			6.0	
Approach LOS		E			E			A			A	

Intersection Summary			
HCM 2000 Control Delay	11.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	71.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1250	685	45	290	400	90	40	1185	415	85	885	0
Future Volume (vph)	1250	685	45	290	400	90	40	1185	415	85	885	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1750	1900
Total Lost time (s)	7.0	7.0		7.0	7.0		8.5	7.0	7.0	8.5	7.0	
Lane Util. Factor	0.94	0.95		0.86	0.86		1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	0.99		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	4990	3497		1522	4638		1770	5085	1536	1770	4684	
Flt Permitted	0.95	1.00		0.95	0.99		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	4990	3497		1522	4638		1770	5085	1536	1770	4684	
Peak-hour factor, PHF	0.93	0.93	0.93	0.91	0.91	0.91	0.96	0.96	0.96	0.94	0.94	0.94
Adj. Flow (vph)	1344	737	48	319	440	99	42	1234	432	90	941	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	1344	785	0	214	644	0	42	1234	432	90	941	0
Confl. Peds. (#/hr)	11		26	26		11	8		28	28		8
Turn Type	Split	NA		Split	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	3	3		4	4		1	6	4	5	2	
Permitted Phases									6			
Actuated Green, G (s)	50.0	50.0		34.2	34.2		7.7	49.1	83.3	12.2	58.6	
Effective Green, g (s)	50.0	50.0		34.2	34.2		7.7	49.1	83.3	12.2	58.6	
Actuated g/C Ratio	0.28	0.28		0.19	0.19		0.04	0.27	0.46	0.07	0.33	
Clearance Time (s)	7.0	7.0		7.0	7.0		8.5	7.0	7.0	8.5	7.0	
Vehicle Extension (s)	4.0	4.0		4.0	4.0		4.0	0.2	4.0	4.0	0.2	
Lane Grp Cap (vph)	1386	971		289	881		75	1387	710	119	1524	
v/s Ratio Prot	c0.27	0.22		c0.14	0.14		0.02	c0.24	0.12	c0.05	c0.20	
v/s Ratio Perm									0.17			
v/c Ratio	0.97	0.81		0.74	0.73		0.56	0.89	0.61	0.76	0.62	
Uniform Delay, d1	64.3	60.5		68.7	68.6		84.5	62.8	36.2	82.4	51.2	
Progression Factor	0.91	0.91		1.00	1.00		1.23	0.85	1.23	1.09	1.26	
Incremental Delay, d2	16.2	4.8		10.4	3.4		10.1	8.1	1.6	23.1	1.7	
Delay (s)	75.0	59.8		79.1	71.9		114.1	61.7	46.0	113.1	66.5	
Level of Service	E	E		E	E		F	E	D	F	E	
Approach Delay (s)		69.4			73.7			59.0			70.5	
Approach LOS		E			E			E			E	

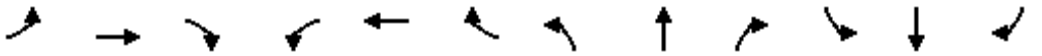
Intersection Summary			
HCM 2000 Control Delay	67.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	31.5
Intersection Capacity Utilization	98.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (veh/h)	0	0	50	0	0	0	15	45	1570	0	70	0
Future Volume (Veh/h)	0	0	50	0	0	0	15	45	1570	0	70	0
Sign Control		Stop			Stop				Free			
Grade		0%			0%				0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	54	0	0	0	0	49	1707	0	0	0
Pedestrians		8										
Lane Width (ft)		12.0										
Walking Speed (ft/s)		3.5										
Percent Blockage		1										
Right turn flare (veh)												
Median type									None			
Median storage veh)												
Upstream signal (ft)									547			
pX, platoon unblocked	0.90	0.90	0.85	0.90	0.90	0.83	0.00	0.85			0.00	0.83
vC, conflicting volume	1882	3020	439	2247	3063	569	0	1258			0	1707
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	459	1716	0	862	1765	0	0	669			0	1127
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			0.0	4.1
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			0.0	2.2
p0 queue free %	100	100	94	100	100	100	0	94			0	100
cM capacity (veh/h)	412	75	911	200	70	898	0	770			0	510

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	54	49	569	569	569	0	465	465	320
Volume Left	0	49	0	0	0	0	0	0	0
Volume Right	54	0	0	0	0	0	0	0	87
cSH	911	770	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.06	0.06	0.33	0.33	0.33	0.00	0.27	0.27	0.19
Queue Length 95th (ft)	5	5	0	0	0	0	0	0	0
Control Delay (s)	9.2	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	A							
Approach Delay (s)	9.2	0.3				0.0			
Approach LOS	A								

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	40.9%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	1070	80
Future Volume (Veh/h)	1070	80
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	1163	87
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	None	
Median storage veh)		
Upstream signal (ft)	801	
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	10	570	15	15	10	350	1480	20	10	1025	100
Future Volume (vph)	140	10	570	15	15	10	350	1480	20	10	1025	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.5	6.0		8.0		6.0	7.0		6.0	7.0	7.0
Lane Util. Factor		1.00	1.00		1.00		0.97	0.91		1.00	0.91	1.00
Frpb, ped/bikes		1.00	0.98		1.00		1.00	1.00		1.00	1.00	0.96
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.97		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.96	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1779	1546		1765		3433	5067		1770	5085	1518
Flt Permitted		0.96	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1779	1546		1765		3433	5067		1770	5085	1518
Peak-hour factor, PHF	0.96	0.96	0.96	0.57	0.57	0.57	0.96	0.96	0.96	0.94	0.94	0.94
Adj. Flow (vph)	146	10	594	26	26	18	365	1542	21	11	1090	106
RTOR Reduction (vph)	0	0	61	0	7	0	0	1	0	0	0	61
Lane Group Flow (vph)	0	156	533	0	63	0	365	1562	0	11	1090	45
Confl. Peds. (#/hr)			29	29			10		21	29		10
Turn Type	Split	NA	pm+ov	Split	NA		Prot	NA		Prot	NA	Perm
Protected Phases	4	4	1	3	3		1	6		5	2	
Permitted Phases			4									2
Actuated Green, G (s)		29.2	64.9		9.9		35.7	109.2		3.2	76.7	76.7
Effective Green, g (s)		29.2	64.9		9.9		35.7	109.2		3.2	76.7	76.7
Actuated g/C Ratio		0.16	0.36		0.06		0.20	0.61		0.02	0.43	0.43
Clearance Time (s)		7.5	6.0		8.0		6.0	7.0		6.0	7.0	7.0
Vehicle Extension (s)		3.0	5.0		5.0		5.0	0.2		3.0	0.2	0.2
Lane Grp Cap (vph)		288	557		97		680	3073		31	2166	646
v/s Ratio Prot		0.09	c0.19		c0.04		0.11	c0.31		0.01	0.21	
v/s Ratio Perm			0.16									0.03
v/c Ratio		0.54	0.96		0.65		0.54	0.51		0.35	0.50	0.07
Uniform Delay, d1		69.3	56.2		83.4		64.7	20.1		87.4	37.7	30.6
Progression Factor		1.00	1.00		1.00		1.24	1.46		1.17	0.53	0.90
Incremental Delay, d2		2.1	28.0		19.3		1.0	0.4		5.6	0.7	0.2
Delay (s)		71.3	84.2		102.7		81.5	29.8		107.6	20.6	27.5
Level of Service		E	F		F		F	C		F	C	C
Approach Delay (s)		81.5			102.7			39.6			22.0	
Approach LOS		F			F			D			C	

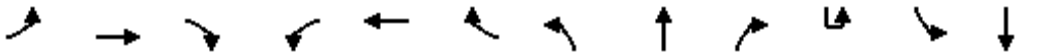
Intersection Summary			
HCM 2000 Control Delay	43.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	28.5
Intersection Capacity Utilization	78.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	120	10	10	50	5	85	105	35	1645	35	170	1360
Future Volume (vph)	120	10	10	50	5	85	105	35	1645	35	170	1360
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0			7.0			4.5	7.0		4.5	7.0
Lane Util. Factor		1.00			1.00			1.00	0.91		1.00	0.91
Frpb, ped/bikes		1.00			0.99			1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00			1.00			1.00	1.00		1.00	1.00
Frt		0.99			0.92			1.00	1.00		1.00	0.99
Flt Protected		0.96			0.98			0.95	1.00		0.95	1.00
Satd. Flow (prot)		1758			1657			1769	5065		1770	5029
Flt Permitted		0.66			0.85			0.11	1.00		0.09	1.00
Satd. Flow (perm)		1210			1429			206	5065		165	5029
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	11	11	54	5	92	114	38	1788	38	185	1478
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	152	0	0	151	0	0	152	1826	0	185	1565
Confl. Peds. (#/hr)	9		7	7		9		10		8	8	
Turn Type	Perm	NA		Perm	NA		Perm	pm+pt	NA		pm+pt	NA
Protected Phases		4			8			5	2		1	6
Permitted Phases	4			8			2	2			6	
Actuated Green, G (s)		18.3			18.3			50.8	42.8		55.6	45.2
Effective Green, g (s)		18.3			18.3			50.8	42.8		55.6	45.2
Actuated g/C Ratio		0.20			0.20			0.56	0.48		0.62	0.50
Clearance Time (s)		7.0			7.0			4.5	7.0		4.5	7.0
Vehicle Extension (s)		3.0			3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		246			290			255	2408		287	2525
v/s Ratio Prot								0.05	c0.36		c0.07	0.31
v/s Ratio Perm		c0.13			0.11			0.28			0.32	
v/c Ratio		0.62			0.52			0.60	0.76		0.64	0.62
Uniform Delay, d1		32.7			31.9			10.9	19.4		15.9	16.2
Progression Factor		1.00			1.00			1.00	1.00		1.90	1.66
Incremental Delay, d2		4.6			1.7			3.7	2.3		3.8	0.9
Delay (s)		37.2			33.6			14.7	21.7		34.0	27.7
Level of Service		D			C			B	C		C	C
Approach Delay (s)		37.2			33.6				21.1			28.3
Approach LOS		D			C				C			C

Intersection Summary			
HCM 2000 Control Delay	25.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	18.5
Intersection Capacity Utilization	74.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	80
Future Volume (vph)	80
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frpb, ped/bikes	
Flpb, ped/bikes	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	87
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Confl. Peds. (#/hr)	10
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	20	5	115	15	5	45	45	1745	40	10	40	1425
Future Volume (vph)	20	5	115	15	5	45	45	1745	40	10	40	1425
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0			7.0		4.5	7.0			4.5	7.0
Lane Util. Factor		1.00			1.00		1.00	0.91			1.00	0.91
Frpb, ped/bikes		0.99			0.98		1.00	1.00			1.00	1.00
Flpb, ped/bikes		1.00			1.00		1.00	1.00			1.00	1.00
Frt		0.89			0.91		1.00	1.00			1.00	0.99
Flt Protected		0.99			0.99		0.95	1.00			0.95	1.00
Satd. Flow (prot)		1623			1642		1769	5051			1770	5052
Flt Permitted		0.94			0.87		0.12	1.00			0.08	1.00
Satd. Flow (perm)		1537			1441		227	5051			142	5052
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	5	125	16	5	49	49	1897	43	11	43	1549
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	152	0	0	70	0	49	1940	0	0	54	1603
Confl. Peds. (#/hr)	5		1	1		5	7		41		41	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	pm+pt	NA
Protected Phases		4			8		5	2			1	6
Permitted Phases	4			8			2			6	6	
Actuated Green, G (s)		17.0			17.0		84.5	79.2			84.5	79.2
Effective Green, g (s)		17.0			17.0		84.5	79.2			84.5	79.2
Actuated g/C Ratio		0.14			0.14		0.70	0.66			0.70	0.66
Clearance Time (s)		7.0			7.0		4.5	7.0			4.5	7.0
Vehicle Extension (s)		3.0			3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		217			204		227	3333			171	3334
v/s Ratio Prot							0.01	c0.38			c0.01	0.32
v/s Ratio Perm		c0.10			0.05		0.14				0.21	
v/c Ratio		0.70			0.34		0.22	0.58			0.32	0.48
Uniform Delay, d1		49.1			46.5		6.2	11.3			7.7	10.2
Progression Factor		1.00			1.00		0.50	0.23			1.00	1.00
Incremental Delay, d2		9.8			1.0		0.3	0.4			1.1	0.5
Delay (s)		58.8			47.5		3.4	3.0			8.7	10.7
Level of Service		E			D		A	A			A	B
Approach Delay (s)		58.8			47.5			3.0				10.6
Approach LOS		E			D			A				B

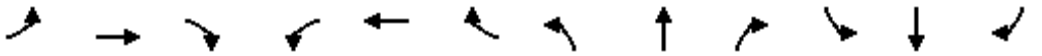
Intersection Summary			
HCM 2000 Control Delay	9.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	18.5
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	50
Future Volume (vph)	50
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frpb, ped/bikes	
Flpb, ped/bikes	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	54
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Confl. Peds. (#/hr)	7
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

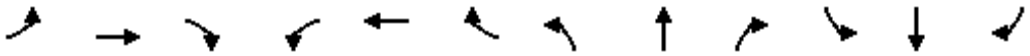
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	105	155	1675	185	220	1335
Future Volume (vph)	105	155	1675	185	220	1335
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	6.0		6.0	6.0
Lane Util. Factor	1.00	1.00	0.91		1.00	0.91
Frpb, ped/bikes	1.00	0.98	0.99		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1548	4947		1770	5085
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1548	4947		1770	5085
Peak-hour factor, PHF	0.94	0.94	0.96	0.96	0.96	0.96
Adj. Flow (vph)	112	165	1745	193	229	1391
RTOR Reduction (vph)	0	142	0	0	0	0
Lane Group Flow (vph)	112	23	1938	0	229	1391
Confl. Peds. (#/hr)	9	10		16	16	
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4				
Actuated Green, G (s)	16.4	16.4	51.9		23.2	86.1
Effective Green, g (s)	16.4	16.4	51.9		23.2	86.1
Actuated g/C Ratio	0.14	0.14	0.43		0.19	0.72
Clearance Time (s)	6.5	6.5	6.0		6.0	6.0
Vehicle Extension (s)	3.0	3.0	0.2		3.0	0.2
Lane Grp Cap (vph)	241	211	2139		342	3648
v/s Ratio Prot	c0.06		c0.39		c0.13	c0.27
v/s Ratio Perm		0.01				
v/c Ratio	0.46	0.11	0.91		0.67	0.38
Uniform Delay, d1	47.8	45.4	31.8		44.8	6.6
Progression Factor	1.00	1.00	1.00		1.14	0.95
Incremental Delay, d2	1.4	0.2	7.0		4.4	0.3
Delay (s)	49.2	45.6	38.7		55.7	6.5
Level of Service	D	D	D		E	A
Approach Delay (s)	47.0		38.7			13.5
Approach LOS	D		D			B

Intersection Summary			
HCM 2000 Control Delay	28.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	24.5
Intersection Capacity Utilization	76.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



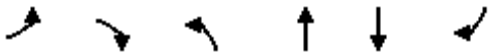
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	20	115	110	35	30	95	1755	95	20	1100	175
Future Volume (vph)	125	20	115	110	35	30	95	1755	95	20	1100	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0			7.0		5.5	6.0		5.5	6.0	
Lane Util. Factor	1.00	1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.97	1.00			1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.87			0.98		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1722	1625			1746		1770	5023		1770	4907	
Flt Permitted	0.63	1.00			0.60		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1148	1625			1080		1770	5023		1770	4907	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	136	22	125	120	38	33	103	1908	103	22	1196	190
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	136	147	0	0	191	0	103	2011	0	22	1386	0
Confl. Peds. (#/hr)	25					25	10		8	8		10
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4			8								
Actuated Green, G (s)	34.6	34.6			34.6		16.7	111.4		5.5	100.2	
Effective Green, g (s)	34.6	34.6			34.6		16.7	111.4		5.5	100.2	
Actuated g/C Ratio	0.19	0.19			0.19		0.09	0.62		0.03	0.56	
Clearance Time (s)	7.0	7.0			7.0		5.5	6.0		5.5	6.0	
Vehicle Extension (s)	4.0	4.0			3.0		4.0	0.2		4.0	0.2	
Lane Grp Cap (vph)	220	312			207		164	3108		54	2731	
v/s Ratio Prot		0.09					c0.06	c0.40		0.01	0.28	
v/s Ratio Perm	0.12				c0.18							
v/c Ratio	0.62	0.47			0.92		0.63	0.65		0.41	0.51	
Uniform Delay, d1	66.6	64.6			71.4		78.7	21.8		85.7	24.7	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.02	0.56	
Incremental Delay, d2	5.8	1.5			41.4		8.3	1.1		5.3	0.5	
Delay (s)	72.5	66.1			112.7		86.9	22.9		93.0	14.5	
Level of Service	E	E			F		F	C		F	B	
Approach Delay (s)		69.2			112.7			26.0			15.7	
Approach LOS		E			F			C			B	

Intersection Summary			
HCM 2000 Control Delay	29.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	24.5
Intersection Capacity Utilization	86.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	370	370	155	195	245	90	225	1470	215	135	945	260
Future Volume (vph)	370	370	155	195	245	90	225	1470	215	135	945	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	7.0		6.5	7.0		5.5	7.0	7.0	5.5	7.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.97	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.95	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.96		1.00	0.96		1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1767	3348		1765	3372		3433	5085	1511	1770	4892	
Flt Permitted	0.24	1.00		0.30	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	440	3348		551	3372		3433	5085	1511	1770	4892	
Peak-hour factor, PHF	0.96	0.96	0.96	0.87	0.87	0.87	0.97	0.97	0.97	0.96	0.96	0.96
Adj. Flow (vph)	385	385	161	224	282	103	232	1515	222	141	984	271
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	385	546	0	224	385	0	232	1515	222	141	1255	0
Confl. Peds. (#/hr)	11		16	16		11	6		14	14		6
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases	4			8					6			
Actuated Green, G (s)	66.9	38.3		49.9	27.8		18.2	75.0	75.0	18.6	75.4	
Effective Green, g (s)	66.9	38.3		49.9	27.8		18.2	75.0	75.0	18.6	75.4	
Actuated g/C Ratio	0.37	0.21		0.28	0.15		0.10	0.42	0.42	0.10	0.42	
Clearance Time (s)	6.5	7.0		6.5	7.0		5.5	7.0	7.0	5.5	7.0	
Vehicle Extension (s)	3.0	4.0		5.0	4.0		5.0	0.2	0.2	3.0	0.2	
Lane Grp Cap (vph)	403	712		301	520		347	2118	629	182	2049	
v/s Ratio Prot	c0.17	0.16		0.09	0.11		0.07	c0.30		c0.08	0.26	
v/s Ratio Perm	c0.18			0.11					0.15			
v/c Ratio	0.96	0.77		0.74	0.74		0.67	0.72	0.35	0.77	0.61	
Uniform Delay, d1	47.1	66.6		54.2	72.7		78.0	43.6	35.9	78.7	40.9	
Progression Factor	1.00	1.00		1.00	1.00		1.35	0.67	0.69	0.84	0.94	
Incremental Delay, d2	33.2	5.3		11.4	6.0		5.0	1.6	1.2	17.7	1.3	
Delay (s)	80.2	71.9		65.6	78.6		110.2	30.9	26.1	84.2	39.5	
Level of Service	F	E		E	E		F	C	C	F	D	
Approach Delay (s)		75.3			73.8			39.7			44.1	
Approach LOS		E			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	51.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	26.0
Intersection Capacity Utilization	94.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	210	245	160	1770	1095	110
Future Volume (vph)	210	245	160	1770	1095	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	7.0	7.0	4.5	4.5	4.5
Lane Util. Factor	1.00	1.00	1.00	0.91	0.86	1.00
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1568	1770	5085	6408	1551
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1770	1568	1770	5085	6408	1551
Peak-hour factor, PHF	0.79	0.79	0.97	0.97	0.98	0.98
Adj. Flow (vph)	266	310	165	1825	1117	112
RTOR Reduction (vph)	0	10	0	0	0	24
Lane Group Flow (vph)	266	300	165	1825	1117	88
Confl. Peds. (#/hr)		3	3			3
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	4	5	5	2	6	4
Permitted Phases		4				6
Actuated Green, G (s)	32.8	54.9	22.1	138.2	109.1	141.9
Effective Green, g (s)	32.8	54.9	22.1	138.2	109.1	141.9
Actuated g/C Ratio	0.18	0.30	0.12	0.77	0.61	0.79
Clearance Time (s)	4.5	7.0	7.0	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	322	478	217	3904	3883	1261
v/s Ratio Prot	c0.15	0.08	c0.09	c0.36	0.17	0.01
v/s Ratio Perm		0.11				0.04
v/c Ratio	0.83	0.63	0.76	0.47	0.29	0.07
Uniform Delay, d1	70.9	53.8	76.4	7.6	16.9	4.3
Progression Factor	1.00	1.00	1.00	0.70	1.31	4.21
Incremental Delay, d2	15.7	2.6	9.7	0.3	0.2	0.0
Delay (s)	86.6	56.4	85.8	5.5	22.2	18.0
Level of Service	F	E	F	A	C	B
Approach Delay (s)	70.3			12.2	21.9	
Approach LOS	E			B	C	

Intersection Summary			
HCM 2000 Control Delay	24.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection Sign configuration not allowed in HCM analysis.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑		
Traffic Volume (vph)	720	0	0	530	0	0
Future Volume (vph)	720	0	0	530	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0			6.0		
Lane Util. Factor	0.95			0.95		
Frt	1.00			1.00		
Flt Protected	1.00			1.00		
Satd. Flow (prot)	3539			3539		
Flt Permitted	1.00			1.00		
Satd. Flow (perm)	3539			3539		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	783	0	0	576	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	783	0	0	576	0	0
Turn Type	NA			NA		
Protected Phases	2			6		
Permitted Phases						
Actuated Green, G (s)	14.7			14.7		
Effective Green, g (s)	14.7			14.7		
Actuated g/C Ratio	0.54			0.54		
Clearance Time (s)	6.0			6.0		
Vehicle Extension (s)	3.0			3.0		
Lane Grp Cap (vph)	1912			1912		
v/s Ratio Prot	c0.22			0.16		
v/s Ratio Perm						
v/c Ratio	0.41			0.30		
Uniform Delay, d1	3.7			3.4		
Progression Factor	1.00			1.00		
Incremental Delay, d2	0.1			0.1		
Delay (s)	3.8			3.5		
Level of Service	A			A		
Approach Delay (s)	3.8			3.5	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM 2000 Control Delay	3.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	27.2	Sum of lost time (s)	10.5
Intersection Capacity Utilization	24.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Traffic Volume (veh/h)	0	2525	970	765	0	0
Future Volume (Veh/h)	0	2525	970	765	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	2745	1054	832	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		400	153			
pX, platoon unblocked	0.87				0.85	0.87
vC, conflicting volume	1886				1740	527
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1713				26	144
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	317				836	760

Direction, Lane #	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	686	686	686	686	703	629	555
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	277	555
cSH	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.40	0.40	0.40	0.40	0.41	0.37	0.33
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS							
Approach Delay (s)	0.0				0.0		
Approach LOS							

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	39.9%	ICU Level of Service	A
Analysis Period (min)	15		

Arterial Level of Service: NB MD 97

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Hewitt Ave.	110	46.1	88.6	0.4	17
Aspen Hill Apt	109	5.4	13.9	0.1	21
Aspen Manor	108	25.5	39.6	0.1	13
Cemetery	107	27.9	39.1	0.1	10
	106	3.8	14.1	0.1	26
MD 185	105	58.1	72.6	0.2	8
	3000	4.6	11.2	0.1	24
7-11	104	8.2	11.3	0.0	9
Postgate Terr	103	11.9	26.1	0.2	24
Crystal Spring Apt	102	7.1	23.5	0.2	32
Bel Pre Rd	101	52.3	65.4	0.2	10
Total		250.9	405.4	1.7	15

Arterial Level of Service: SB MD 97

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Bel Pre Rd	101	37.7	91.5	0.7	27
Crystal Spring Apt	102	7.7	21.7	0.2	29
Heathfield Rd	103	12.2	28.8	0.2	26
Home Depot Ent.	104	16.8	30.8	0.2	21
	3000	3.0	5.3	0.0	20
MD 185	105	53.4	59.2	0.1	5
Northgate Plaza	106	5.0	20.7	0.2	26
Aspen Hill Rd	107	16.9	27.6	0.1	14
Wendy Ln	108	34.1	44.9	0.1	8
Ralph Rd	109	9.9	24.9	0.1	20
Hewitt Ave.	110	10.0	18.2	0.1	16
Total		206.7	373.8	1.9	19

Arterial Level of Service: NB MD 185

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Independence St	201	25.0	61.1	0.5	27
Aspen Hill Rd	202	42.1	63.0	0.3	16
Home Depot Ent	203	13.0	23.7	0.1	20
	1000	8.8	15.2	0.1	19
MD 97	105	51.8	57.5	0.1	5
Total		140.7	220.5	1.0	17

Arterial Level of Service: SB MD 185

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
MD 97	105	77.1	90.9	0.2	8
	1000	5.1	12.0	0.1	26
Home Depot Ent	203	11.4	18.3	0.1	16
Aspen Hill Rd	202	32.3	42.5	0.1	11
Independence St	201	8.9	30.9	0.3	32
Total		134.7	194.6	0.8	14

Intersection: 24: Bend

Movement	WB	WB
Directions Served	T	
Maximum Queue (ft)	255	188
Average Queue (ft)	25	10
95th Queue (ft)	128	82
Link Distance (ft)	350	350
Upstream Blk Time (%)	0	0
Queuing Penalty (veh)	0	0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 101: MD 97 & Bel Pre Rd

Movement	EB	EB	EB	EB	B24	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	R	T	L	T	T	R	L	L	T
Maximum Queue (ft)	205	437	290	277	345	221	232	256	195	209	366	574
Average Queue (ft)	178	247	205	108	28	89	104	103	108	112	128	383
95th Queue (ft)	239	429	321	214	171	180	172	193	182	181	270	571
Link Distance (ft)		350			2203		2698	2698				788
Upstream Blk Time (%)		5										
Queuing Penalty (veh)		0										
Storage Bay Dist (ft)	180		265	265		280			150	455	455	
Storage Blk Time (%)	16	11	1	0		0		2	4		0	5
Queuing Penalty (veh)	106	73	6	1		0		4	5		0	13

Intersection: 101: MD 97 & Bel Pre Rd

Movement	NB	NB	NB	SB	SB	SB	SB	SB	SB
Directions Served	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	595	630	225	210	204	343	348	356	65
Average Queue (ft)	410	434	141	109	113	189	200	196	32
95th Queue (ft)	600	625	308	192	196	311	321	329	82
Link Distance (ft)	788	788				3557	3557	3557	
Upstream Blk Time (%)	0	0							
Queuing Penalty (veh)	0	2							
Storage Bay Dist (ft)			200	560	560				40
Storage Blk Time (%)		39	0					31	0
Queuing Penalty (veh)		82	1					39	1

Intersection: 102: MD 97 & Crystal Spring Apt

Movement	WB	NB	NB	NB	SB	SB	SB
Directions Served	R	T	T	TR	T	T	T
Maximum Queue (ft)	144	260	296	316	330	339	235
Average Queue (ft)	54	33	34	39	29	36	29
95th Queue (ft)	111	162	171	186	175	192	136
Link Distance (ft)	234	1036	1036	1036	788	788	788
Upstream Blk Time (%)					0	0	
Queuing Penalty (veh)					0	0	
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 103: MD 97 & Heathfield Rd/Postgate Terr

Movement	EB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LTR	LTR	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	229	146	236	332	367	379	144	330	338	318
Average Queue (ft)	112	58	112	114	138	170	39	86	100	90
95th Queue (ft)	201	122	193	244	286	321	101	222	235	220
Link Distance (ft)	346	247		860	860	860		1036	1036	1036
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)			350				350			
Storage Blk Time (%)				0				1		
Queuing Penalty (veh)				0				0		

Intersection: 104: MD 97 & Home Depot Ent./7-11

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	LT	R	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	106	206	64	87	202	206	212	224	74	286	305	276
Average Queue (ft)	40	83	22	32	88	155	174	189	17	143	184	133
95th Queue (ft)	87	161	57	67	175	242	246	252	52	257	297	251
Link Distance (ft)	1151	1151	213	213	76	76	76	76		860	860	860
Upstream Blk Time (%)					18	15	17	18				
Queuing Penalty (veh)					111	98	107	117				
Storage Bay Dist (ft)									235			
Storage Blk Time (%)										2		
Queuing Penalty (veh)										0		

Intersection: 105: MD 97 & MD 185

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	L	T	TR	L	LT	T	TR	L	T	T
Maximum Queue (ft)	279	411	428	414	280	228	292	460	452	333	522	585
Average Queue (ft)	258	347	371	311	255	110	168	199	265	61	274	287
95th Queue (ft)	319	455	455	450	315	208	262	365	421	180	435	470
Link Distance (ft)		280	280	280				968	968		682	682
Upstream Blk Time (%)	3	14	25	7	2							0
Queuing Penalty (veh)	0	90	164	48	0							0
Storage Bay Dist (ft)	425				300	280	280			330		
Storage Blk Time (%)	3	14		7	2	0	0	1		0	5	
Queuing Penalty (veh)	13	57		28	8	0	0	4		0	2	

Intersection: 105: MD 97 & MD 185

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	T
Maximum Queue (ft)	643	305	225	391	379	200
Average Queue (ft)	333	253	118	279	253	175
95th Queue (ft)	566	379	225	424	377	236
Link Distance (ft)	682			253	253	
Upstream Blk Time (%)	0			14	10	
Queuing Penalty (veh)	1			70	48	
Storage Bay Dist (ft)		280	200			175
Storage Blk Time (%)	13	12	3	24	23	13
Queuing Penalty (veh)	54	46	8	20	69	38

Intersection: 106: MD 97 & Northgate Plaza

Movement	EB	NB	NB	NB	SB	SB	SB	SB
Directions Served	R	UL	T	T	UL	T	T	TR
Maximum Queue (ft)	58	119	4	27	116	42	3	34
Average Queue (ft)	21	33	0	1	46	1	0	3
95th Queue (ft)	47	87	3	20	102	31	2	20
Link Distance (ft)	253		463	463		682	682	682
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		175			150			
Storage Blk Time (%)					0			
Queuing Penalty (veh)					1			

Intersection: 107: MD 97 & Aspen Hill Rd/Cemetery

Movement	EB	EB	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	LTR	L	L	T	T	TR	L	T	T	T
Maximum Queue (ft)	355	531	134	285	370	440	467	460	77	252	269	290
Average Queue (ft)	127	259	44	135	153	194	214	254	10	116	121	136
95th Queue (ft)	251	476	107	227	277	374	405	436	46	194	207	229
Link Distance (ft)	880	880	216			470	470	470		463	463	463
Upstream Blk Time (%)		0	0			0	0	0				
Queuing Penalty (veh)		0	0			1	1	3				
Storage Bay Dist (ft)				250	250				190			
Storage Blk Time (%)				0	1	6				1		25
Queuing Penalty (veh)				1	6	22				0		25

Intersection: 107: MD 97 & Aspen Hill Rd/Cemetery

Movement	SB
Directions Served	R
Maximum Queue (ft)	95
Average Queue (ft)	38
95th Queue (ft)	106
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	70
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 108: MD 97 & Wendy Ln/Aspen Manor

Movement	EB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LTR	LTR	UL	T	T	TR	L	T	T	TR
Maximum Queue (ft)	160	146	225	533	497	503	225	428	446	454
Average Queue (ft)	71	71	104	232	218	251	128	254	271	292
95th Queue (ft)	132	128	231	461	429	459	260	406	418	434
Link Distance (ft)	1228	342		650	650	650		470	470	470
Upstream Blk Time (%)				0				0	0	0
Queuing Penalty (veh)				0				0	0	1
Storage Bay Dist (ft)			200				150			
Storage Blk Time (%)			0	13			1	17		
Queuing Penalty (veh)			0	19			5	28		

Intersection: 109: MD 97 & Ralph Rd/Aspen Hill Apt

Movement	EB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LTR	LTR	L	T	T	TR	UL	T	T	TR
Maximum Queue (ft)	271	140	86	179	219	115	99	252	262	255
Average Queue (ft)	112	59	23	27	19	27	31	73	85	94
95th Queue (ft)	199	116	60	106	104	78	74	193	214	220
Link Distance (ft)	1189	370		364	364	364		650	650	650
Upstream Blk Time (%)					0					
Queuing Penalty (veh)					0					
Storage Bay Dist (ft)			125				175			
Storage Blk Time (%)				0				1		
Queuing Penalty (veh)				0				1		

Intersection: 110: MD 97 & Hewitt Ave.

Movement	WB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	R	T	T	TR	L	T	T	T
Maximum Queue (ft)	114	177	627	611	620	165	360	356	318
Average Queue (ft)	68	71	386	367	381	145	162	125	121
95th Queue (ft)	118	145	579	563	564	188	343	280	245
Link Distance (ft)		438	2204	2204	2204		364	364	364
Upstream Blk Time (%)							1	0	0
Queuing Penalty (veh)							3	0	0
Storage Bay Dist (ft)	90					140			
Storage Blk Time (%)	8	4				34	1		
Queuing Penalty (veh)	12	5				151	3		

Intersection: 201: MD 185 & Independence St

Movement	EB	EB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	LTR	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	125	358	208	274	435	429	437	64	139	177	200
Average Queue (ft)	103	175	148	115	226	224	242	11	52	89	118
95th Queue (ft)	151	325	223	228	405	402	419	41	122	169	200
Link Distance (ft)		872	179		2375	2375	2375		1338	1338	1338
Upstream Blk Time (%)			15								
Queuing Penalty (veh)			0								
Storage Bay Dist (ft)	100			250				270			
Storage Blk Time (%)	25	23		0	8						
Queuing Penalty (veh)	34	29		2	8						

Intersection: 202: MD 185 & Aspen Hill Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	NB
Directions Served	L	T	TR	L	T	TR	L	L	T	T	T	R
Maximum Queue (ft)	325	550	526	295	256	288	191	340	382	413	425	327
Average Queue (ft)	261	285	304	158	159	192	100	138	221	230	223	108
95th Queue (ft)	371	531	471	259	240	276	166	250	347	362	369	242
Link Distance (ft)		1838	1838		450	450			1338	1338	1338	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	300			410			350	350				350
Storage Blk Time (%)	14	3							1		2	0
Queuing Penalty (veh)	26	13							2		3	1

Intersection: 202: MD 185 & Aspen Hill Rd

Movement	SB	SB	SB	SB
Directions Served	L	T	T	TR
Maximum Queue (ft)	267	371	473	538
Average Queue (ft)	100	239	275	364
95th Queue (ft)	212	373	414	520
Link Distance (ft)	606	606	606	606
Upstream Blk Time (%)				0
Queuing Penalty (veh)				0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 203: MD 185 & Home Depot Ent

Movement	EB	EB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	L	R	L	T	T	T	T	T	T	T	R
Maximum Queue (ft)	621	125	238	348	290	334	192	279	357	379	297
Average Queue (ft)	510	97	150	114	120	128	41	85	151	169	35
95th Queue (ft)	760	174	245	268	254	286	109	220	269	294	145
Link Distance (ft)	589			606	606	606	343	343	343	343	343
Upstream Blk Time (%)	42								0	0	0
Queuing Penalty (veh)	0								1	1	0
Storage Bay Dist (ft)		100	215								
Storage Blk Time (%)	67	1	4	1							
Queuing Penalty (veh)	166	3	23	1							

Intersection: 1000: MD 185

Movement	EB	EB	EB	SB
Directions Served	T	T	T	R
Maximum Queue (ft)	316	327	361	369
Average Queue (ft)	82	95	69	35
95th Queue (ft)	282	292	255	265
Link Distance (ft)	343	343	343	481
Upstream Blk Time (%)	1	1	1	
Queuing Penalty (veh)	5	7	4	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2000: HAWK & Aspen Hill Rd

Movement	EB	EB	WB	WB
Directions Served	T	T	T	T
Maximum Queue (ft)	153	200	192	202
Average Queue (ft)	23	51	30	29
95th Queue (ft)	94	149	108	106
Link Distance (ft)	450	450	880	880
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3000: MD 97

Movement	NB	NB	NB	NB	SB	SB	SB
Directions Served	T	T	T	T	T	TR	R
Maximum Queue (ft)	21	80	105	134	150	167	70
Average Queue (ft)	1	13	25	51	26	27	3
95th Queue (ft)	22	53	79	119	103	110	30
Link Distance (ft)		253	253	253	76	76	76
Upstream Blk Time (%)					3	2	0
Queuing Penalty (veh)					16	11	0
Storage Bay Dist (ft)	100						
Storage Blk Time (%)	0	0					
Queuing Penalty (veh)	2	0					

Network Summary

Network wide Queuing Penalty: 2185