



North High Street Planning Analysis

October 2020



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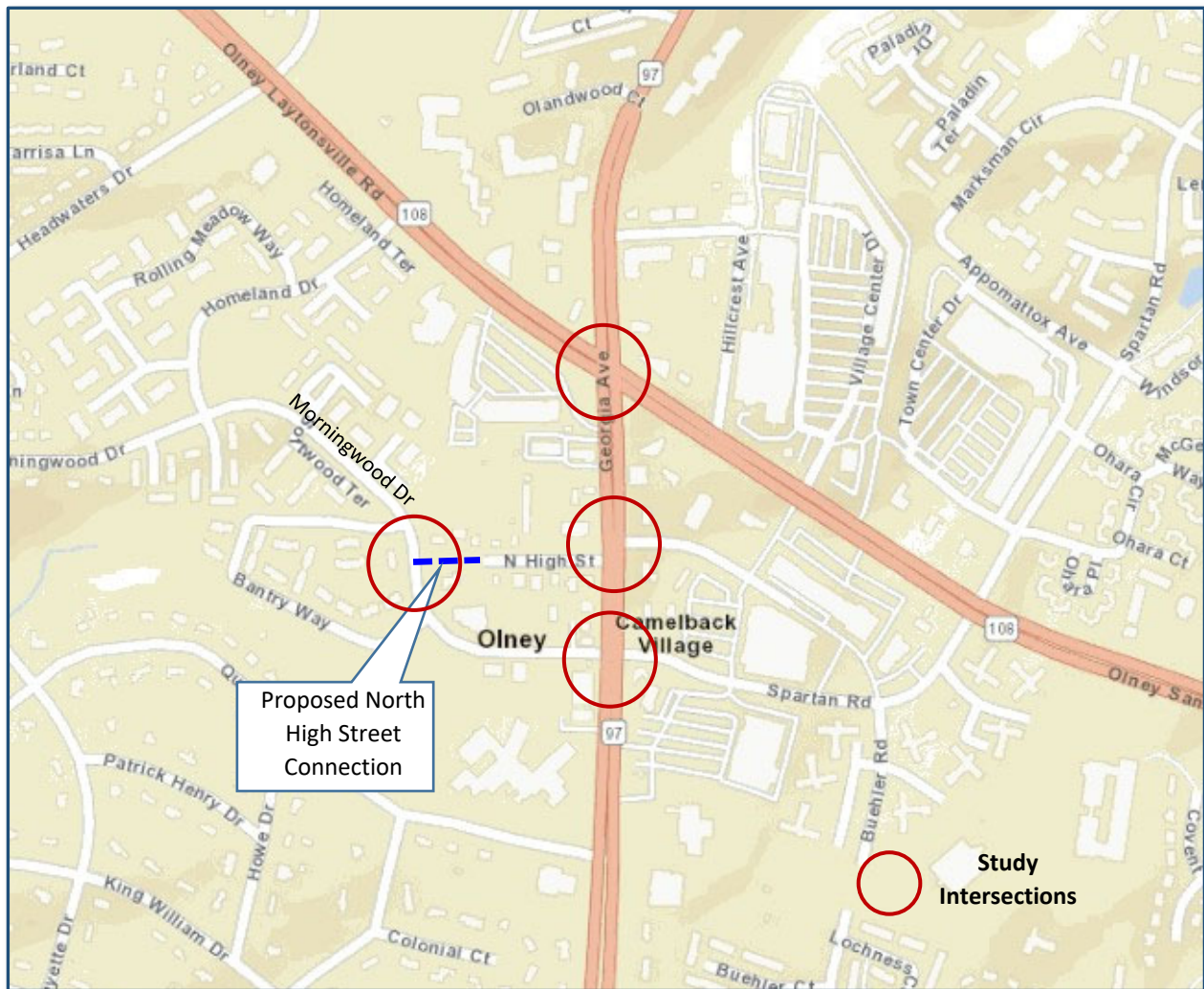


1 Introduction

The Montgomery County Department of Transportation (MCDOT) requested Gannett Fleming, Inc. to evaluate the feasibility of connecting North High Street with Morningwood Drive in Olney. This connection was a recommendation in the Transportation Plan in the 2005 Olney Master Plan. The master plan chapter described North High Street as an essential connection for providing vehicular and pedestrian connectivity between the Olney Town Center and the adjoining residential community. Also, the Greater Olney Civic Association (GOCA) asked MCDOT to study an alternative route for people to get in and out of the Olney Town Center businesses safely from and to Georgia Ave (MD 97) and/or MD 108.

This study conducts a traffic analysis for the adjacent roadways and intersections, especially along the Georgia Avenue corridor, to determine the impacts/benefits of providing this connection with traffic data collected from field observations/counts, MCDOT, and MDOT State Highway Administration (SHA).

Figure 1: North High Street Study Area

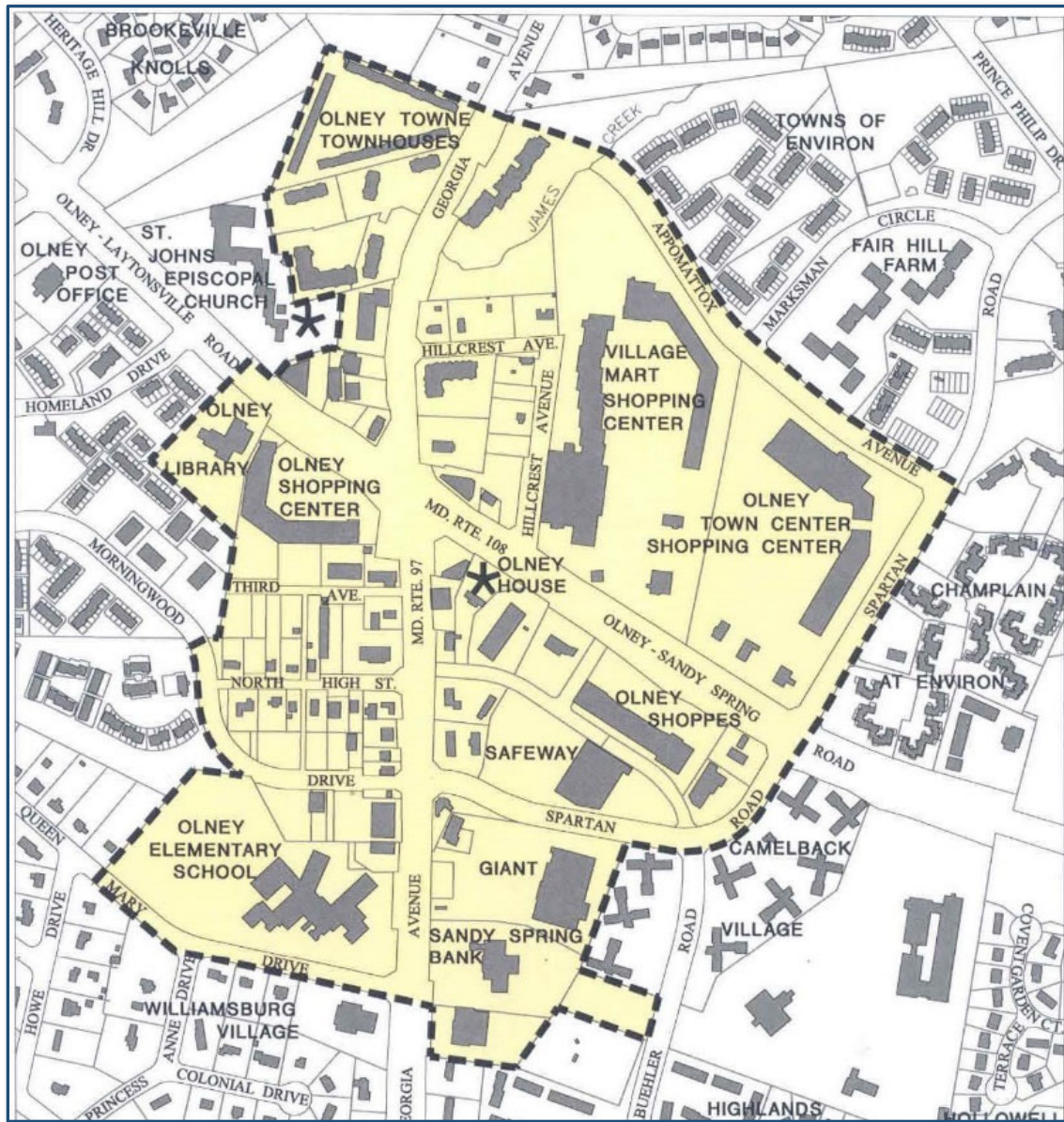




2 Study Area

The Olney area is located in northeastern Montgomery County, Maryland, and North High Street and the MD 97 corridors are located in the Olney Town Center boundary. The Olney Town Center, as identified in the 2005 Olney Master Plan, is a commercial area around the intersection of MD 97 and MD 108. The analysis network for this study includes three intersections along Georgia Avenue (MD 97): MD 97 and MD 108, MD 97 and North High Street/Buehler Road, and MD 97 and Morningwood Drive/Spartan Road. Figure 1 and Figure 2 present the location of the study area and Olney Town Center boundary, respectively.

Figure 2: Olney Town Center Boundary



Source: 2005 Olney Master Plan, MNCPPC, 2005



3 Existing Condition

MD 97 (Georgia Avenue) is a divided four-lane road that traverses the Olney Town Center area in the north-south direction, and is classified as Major Highway within this area in the Olney Master Plan. The speed limit along the MD 97 corridor is posted at 30 mph in both directions. There are numerous business accesses along both sides of the MD 97 corridor. MD 108 (Olney Road) is also classified as Major Highway within this area, traversing the Olney Town Center in the east-west direction. The posted speed limit along MD 108 is also 30 mph.

Morningwood Drive is classified as a Primary Residential Road, traversing the southwest quadrant of the southern Olney area, and provides an access toward MD 97 to the residential community. Much of the section between MD 97 and North High Street is commercial in nature. 30-mph speed limit signs are posted along Morningwood Drive in both directions.

Spartan Road is a Business District Road in the southeast quadrant of the Olney Town Center area, connecting MD 97 and MD 108. Buehler Road is a local two-lane road, traversing the southeast Town Center and connecting MD 97 and Spartan Road. Spartan and Buehler Roads provide access to the commercial community on the east side of MD 97.

Approximately 600-feet in length, North High Street is a currently an access road for businesses west of MD 97, including the McDonald’s restaurant, an auto/tire shop, dental office, gas station, and several residential houses at the west end. A stairway for pedestrians is placed between North High Street and Morningwood Drive, with North High Street level elevated above Morningwood Drive level (see Figure 3).

Figure 3: Stairway between North High Street and Morningwood Drive Looking East



The existing corridor and intersection conditions were field reviewed on February 19, 2020 (see the photos in **Appendix A**).



The intersection of MD 97 and MD 108 is the center of the Olney Town Center area. In the morning peak period, the southbound queues on MD 97 were observed to back up beyond Hillcrest Avenue. The eastbound queues on MD 108 backed up beyond the Olney Shopping Center entrance. In the afternoon peak period, the northbound queues on the MD 97 occasionally extended beyond Buehler Road.

North High Street and Buehler Road form an offset four-leg Stop-controlled intersection on the corridor. A left turn out from North High Street to MD 97 north is challenging due to the heavy southbound traffic on MD 97, especially in the morning peak period, but is being made with cooperative yielding by the southbound traffic when queues from Morningwood Drive are backing up. Since the North High Street approach has a relatively wider width of approximately 35 feet, most of left turning vehicles are waiting separately from the right turning vehicles, forming two lanes. Left turns out from Buehler Road are not allowed with a Right Turn Only sign, and left turns from southbound MD 97 to Buehler are also prohibited via signing and the lack of a left turn lane.

The intersection of MD 97 and Morningwood Drive/Spartan Road is the source of some traffic queueing for MD 97 corridor traffic, particularly in the afternoon peak period. The northbound queues were observed to extend back to King William Drive, and occasionally beyond. The southbound queues mostly back up beyond North High Street in the morning peak period. It was seen that in the morning, traffic entering and exiting the Dunkin restaurant interfered with the outside lane of traffic on the southbound approach on MD 97.

Pedestrian activities were seen at each of the study intersections during the field survey. Public bus and school bus traffic were seen along MD 97, MD 108, and Spartan Road in the peak periods.

4 Traffic Analysis

Turning movement counts were collected on January 9, 2020 at the intersections of MD 97 at North High Street/Buehler Road and Morningwood Drive at the steps for North High Street (**Appendix B**). For the other study intersections, their turning movement counts were obtained from the MDOT SHA I-TMS website. The count data show that the weekday morning and afternoon peak periods in this area generally occur between 8:00 and 9:00 AM; and between 4:15 and 5:15 PM.

Traffic signal timing data for the signalized intersections of MD 97/MD 108 and MD 97/Morningwood Drive/Spartan Road were obtained for analysis from MCDOT (**Appendix C**). The analysis volumes based on the counts for the study intersections have been assigned to the network, as presented in Figure 4 and Figure 5. Pedestrian and bicycle volumes are also shown in Figure 6 and Figure 7. The raw peak hour volume data diagrams are presented in Appendix D.

Figure 4: Existing Peak Hour Traffic Volumes - AM

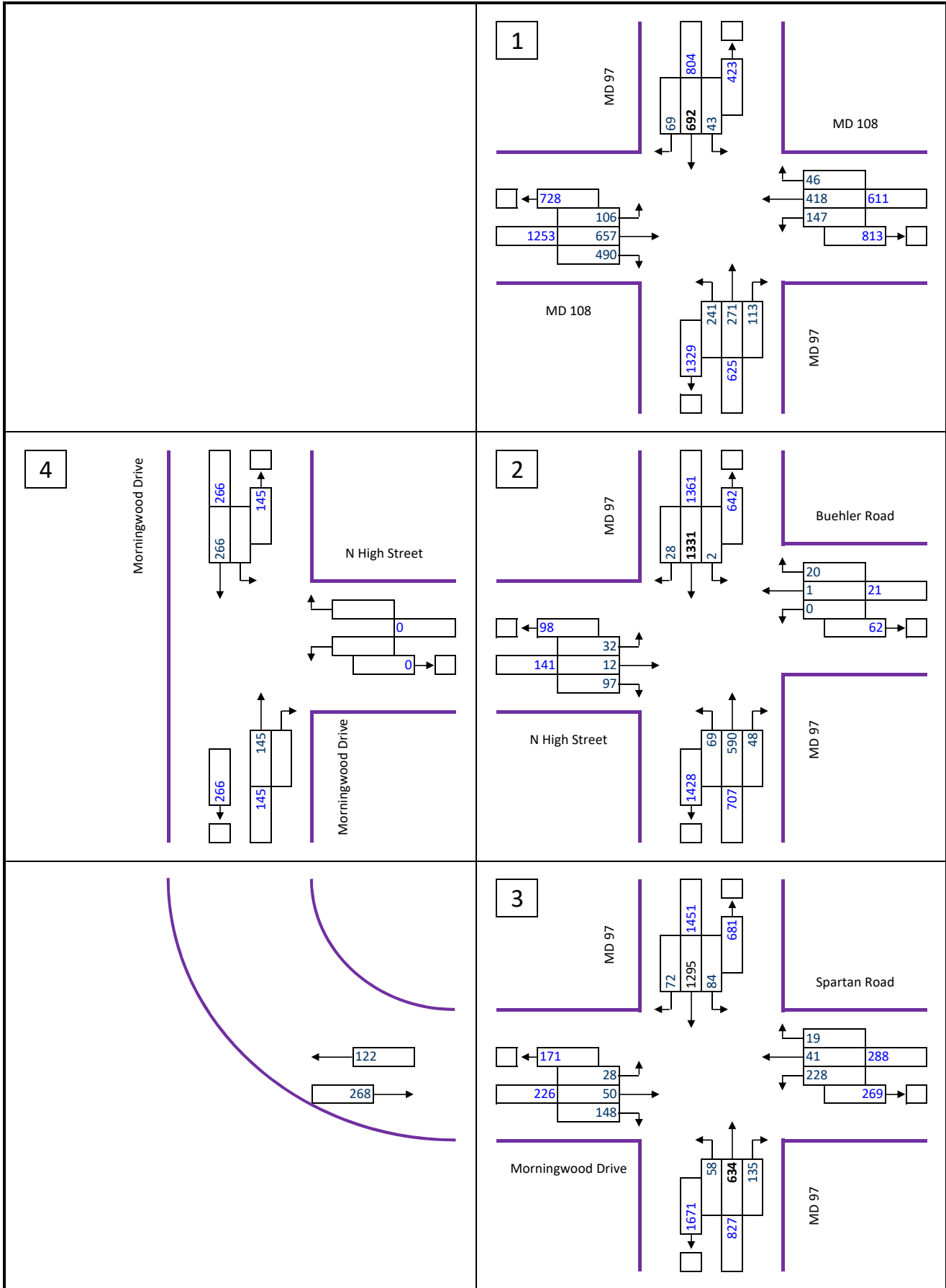


Figure 5: Existing Peak Hour Traffic Volumes - PM

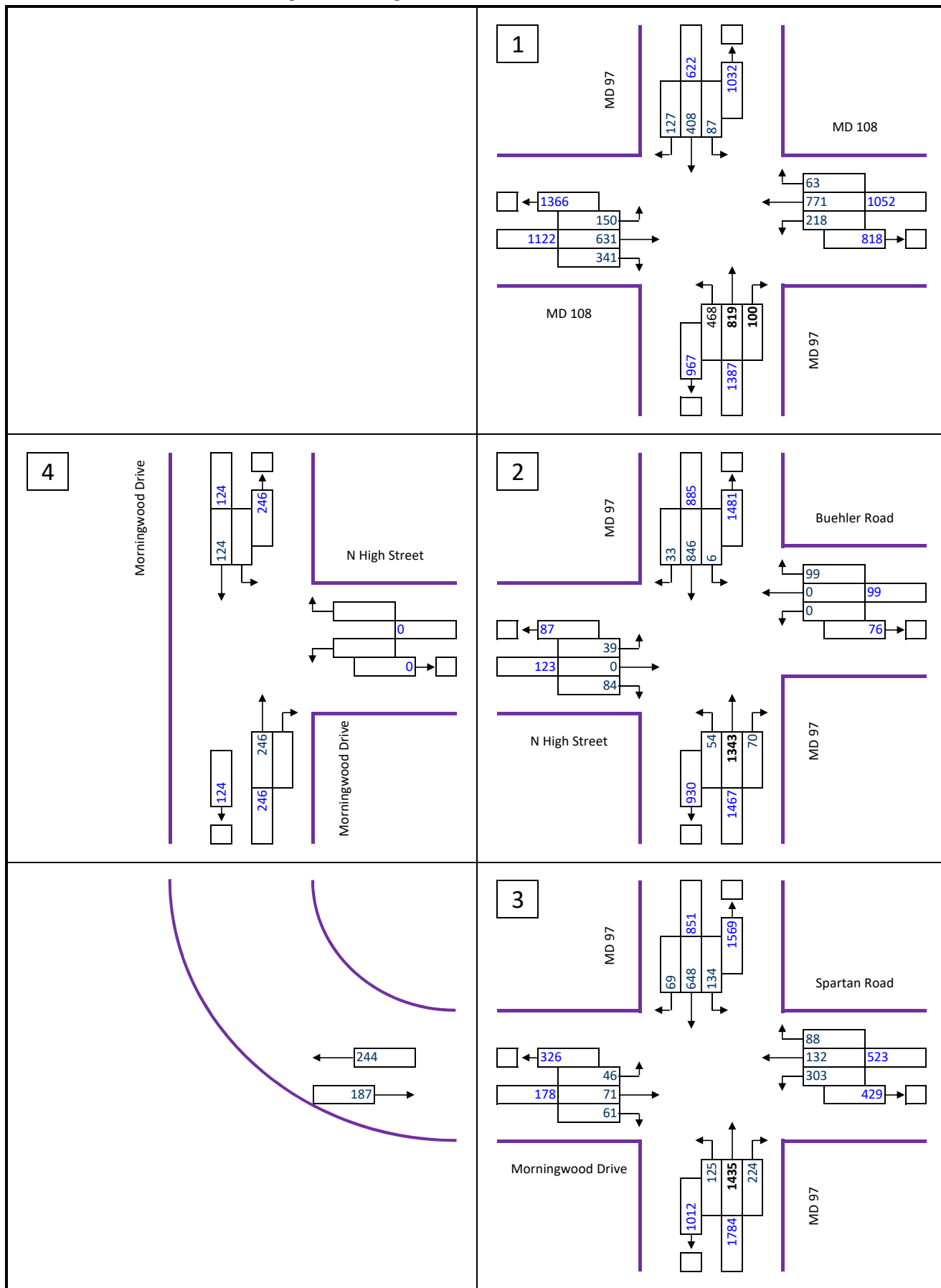


Figure 6: Existing Pedestrian and Bicycle Volumes - AM (8-9 AM)

Pedestrian
Bicycle

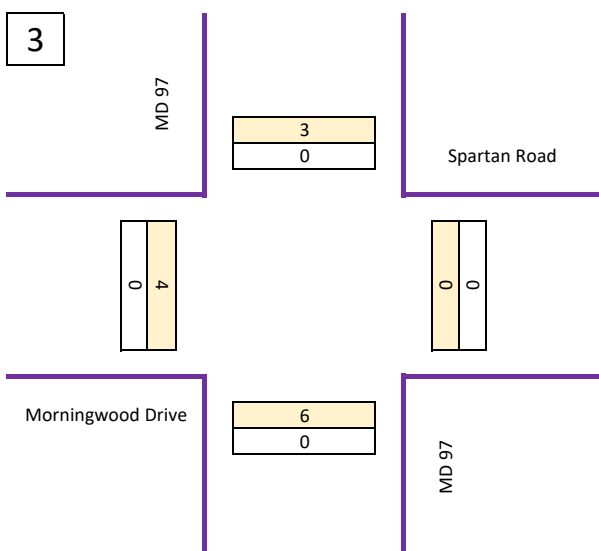
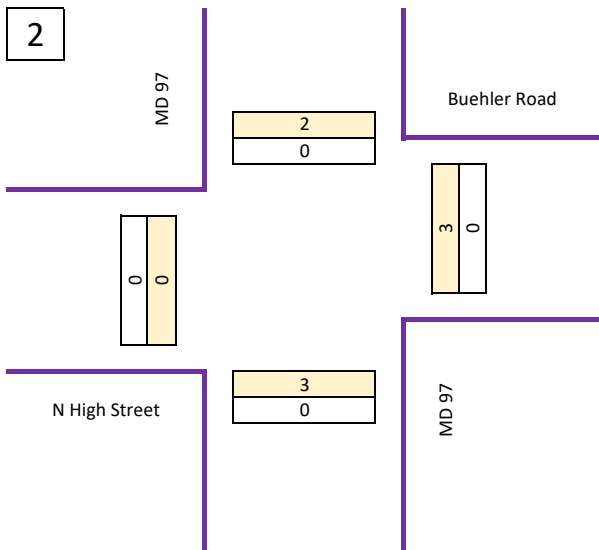
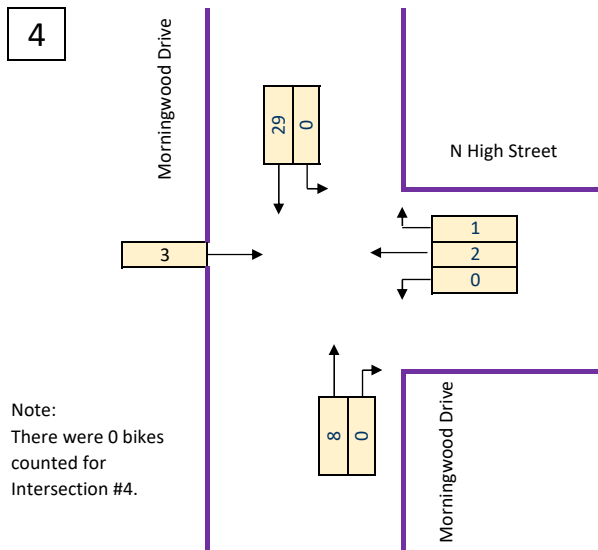
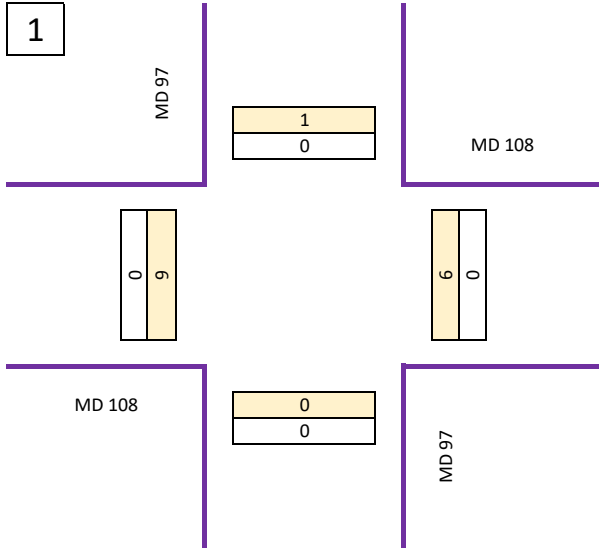
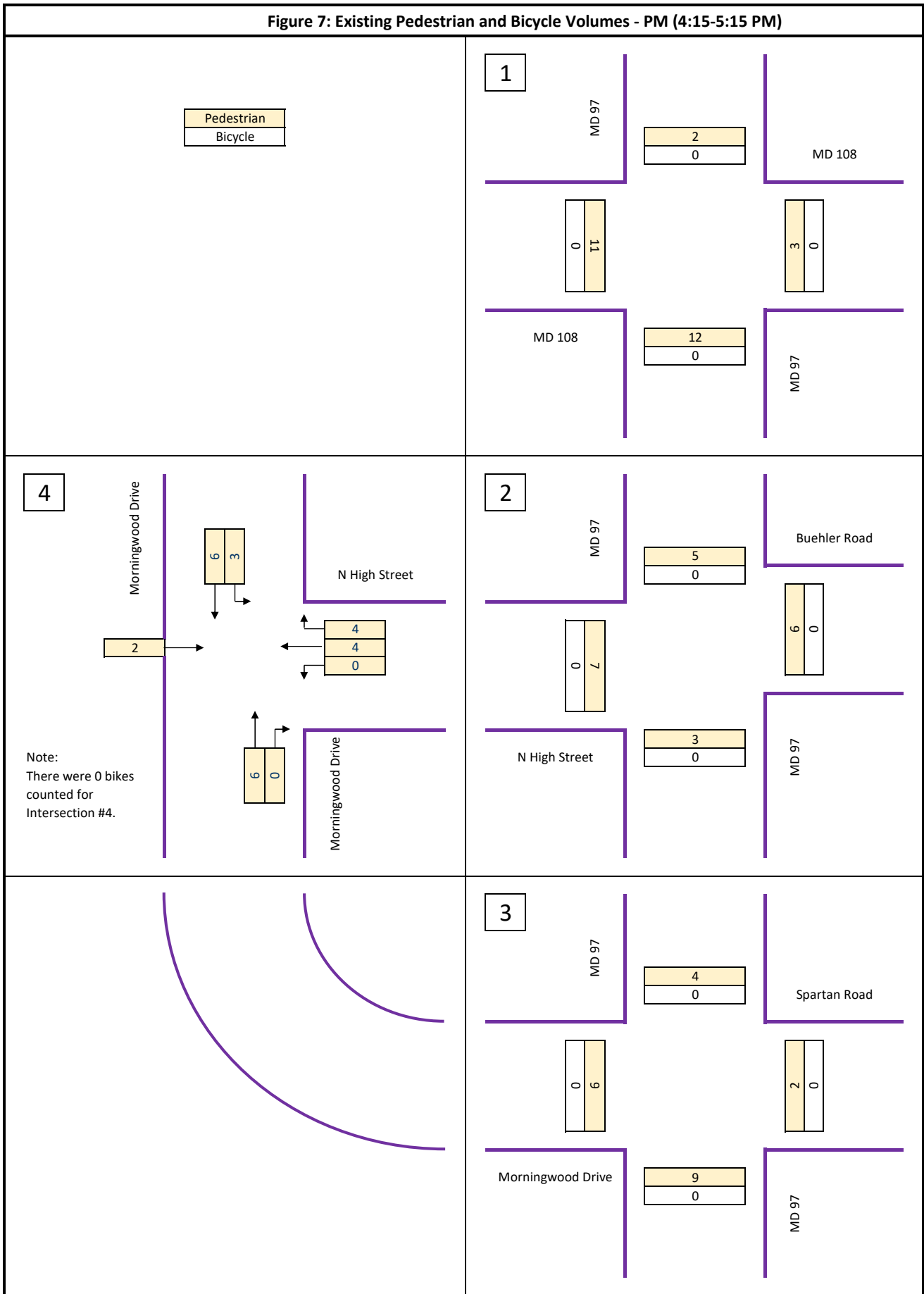


Figure 7: Existing Pedestrian and Bicycle Volumes - PM (4:15-5:15 PM)





4.1 Existing Traffic Condition

The current traffic condition was analyzed with the existing peak hour volumes by the Synchro-HCM method to determine levels of service (LOS) and average vehicle delay based on Highway Capacity Manual (HCM) methodologies. The analysis model shows that the current traffic condition operates acceptably along the MD 97 corridor. Table 1 indicates that the intersections operate at an overall LOS of D or better during both the morning and afternoon weekday peak hours, which satisfy the LATR/LATIP guidelines for intersection operations. The Morningwood Drive and Spartan Road approaches showed LOS F and LOS E, respectively, in the peak period models.

Also, this study calibrated the AM and PM Synchro/SimTraffic model with travel time measurements in the field. The calibrated models were used to evaluate the existing traffic and North High Street connection condition. Details of the model calibration are provided in Appendix E. Queue results at each intersection by the SimTraffic simulation are summarized in Table 2. The queue lengths simulated generally match queue observations at the field. Synchro and SimTraffic reports are provided in Appendix F.

Table 1: LOS Analysis Summary – Existing

Intersections	Approach	Existing			
		AM		PM	
		LOS	Delay	LOS	Delay
MD 97 & MD 108	Overall	D	48.7	D	52.2
	EB	D	44.1	D	47.2
	WB	D	37.9	D	51.0
	NB	D	54.4	D	54.1
	SB	E	59.4	E	59.2
MD 97 & N High Street/ Beuhler Road	Overall	-	-	-	-
	EB	D	25.4	B	12.8
	WB	B	10.6	B	12.5
	NB	A	1.3	A	0.4
	SB	A	0.0	A	0.1
MD 97 & Morningwood Drive/ Spartan Road	Overall	C	33.2	D	49.7
	EB	F	80.8	F	80.9
	WB	E	67.4	E	79.9
	NB	C	21.2	D	44.7
	SB	C	25.8	D	35.3



Table 2: Queue Analysis Summary by SimTraffic Simulation – Existing

Intersections	Dir.	Mvmt.	Storage (ft)	Existing AM		Existing PM	
				Max. Queue (ft)	Avg. Queue (ft)	Max. Queue (ft)	Avg. Queue (ft)
MD 97 & MD 108	EB	L	170	245	83	245	130
	EB	T	820	396	224	471	244
	EB	R	340	380	183	191	56
	WB	L	390	204	82	397	134
	WB	T	720	212	116	457	292
	WB	TR	720	209	108	428	275
	NB	L	380	196	116	345	219
	NB	T	510	134	54	413	239
	NB	TR	510	168	60	434	265
	SB	L	125	175	75	175	98
MD 97 & N High Street/Beuhler Road	EB	LT	50	100	52	88	41
	EB	R	440	258	79	152	55
	WB	LTR	440	36	18	142	58
	NB	L	95	93	32	52	17
	NB	T	260	52	2	33	1
	NB	TR	260	4		16	1
	SB	LT	510	184	48	148	22
	SB	TR	510	207	58	129	20
MD 97 & Morningwood Drive/Spartan Road	EB	L	75	124	41	124	58
	EB	TR	850	340	156	268	132
	WB	L	960	210	139	637	357
	WB	TR	240	122	48	300	218
	NB	L	155	152	38	280	142
	NB	T	1400	298	156	1545	1136
	NB	TR	1400	277	153	1457	1098
	SB	L	75	125	59	125	103
	SB	T	260	312	259	282	231
SB	TR	260	312	281	286	239	

Note: Shading highlights queues that exceed their storage.



4.2 Diversion Traffic with North High Street Connection

When North High Street is connected to Morningwood Drive, this study forecasted local traffic diversions using the following assumptions:

1. 10% of traffic to/from MD 97 south at Morningwood Drive will divert to North High Street.
2. 25% of traffic to/from MD 97 north at Morningwood Drive will divert to North High Street.
3. Two-thirds of the above diverted volumes will travel to/from the north at Morningwood Drive at North High Street, and one-third to/from the south at Morningwood Drive.
4. 5% of current traffic to MD 97 north at the Morningwood/MD 97 intersection are traveling to the North High Street/McDonald's business area, and are then going back to their origin. This traffic will access using the connected North High Street from/to Morningwood Drive north.

Based on the above assumptions (which are based on a review of the local network but not an Origin-Destination Study), an average of 50 vehicles in each of the peak hour periods are estimated to use the new connection. These traffic diversions result in minor reductions in turning traffic volumes at the MD 97/Morningwood Drive intersection. These assumptions would not change the MD 97/MD 108 intersection volumes. Figure 8 and Figure 9 show the peak hour vehicular traffic volumes when Morningwood Drive traffic is diverted to the North High Street. Details of traffic diversions for each assumption are provided in Appendix D.

4.3 Analysis Results with Traffic Diversion

Table 3 shows the LOS and delay results of the intersections by the Synchro-HCM model for this diversion condition. The model results indicate that with the traffic diversion, the delay impacts on the MD 97 study intersections would be minimal. The average delays on the eastbound North High Street approach at MD 97 and the individual approaches of the MD 97/Morningwood Drive/Spartan Road intersection would change by less than 1.5 seconds with no degradation in LOS compared to the Existing condition.

Also as presented in Table 4, no significant queue changes from the SimTraffic model were simulated with the diversion condition. The change pattern in queue lengths is similar to the delay change pattern. The eastbound maximum queue on the Morningwood Drive approach was simulated to reduce from 340 feet to 276 feet in the morning peak period, while the eastbound maximum queue on the North High Street approach was simulated to slightly increase from 258 feet to 276 feet in the same period. Northbound queues on MD 97 approaching the Morningwood signal increase slightly due to the added traffic staying on MD 97 to access North High Street with the diversion of traffic. Additional analysis would be needed to resolve the existing operational issues at the MD 97/Morningwood Drive intersection pertaining to long northbound queues in the evening peak which are not related to connecting North High Street to MD 97. The Synchro and SimTraffic outputs are provided in Appendix F.

At the new intersection of Morningwood Drive and North High Street, the intersection approaches are forecast to operate at LOS B or better with minimal traffic queues.

Figure 8: AM Peak Hour Traffic Volumes with North High Street Connection

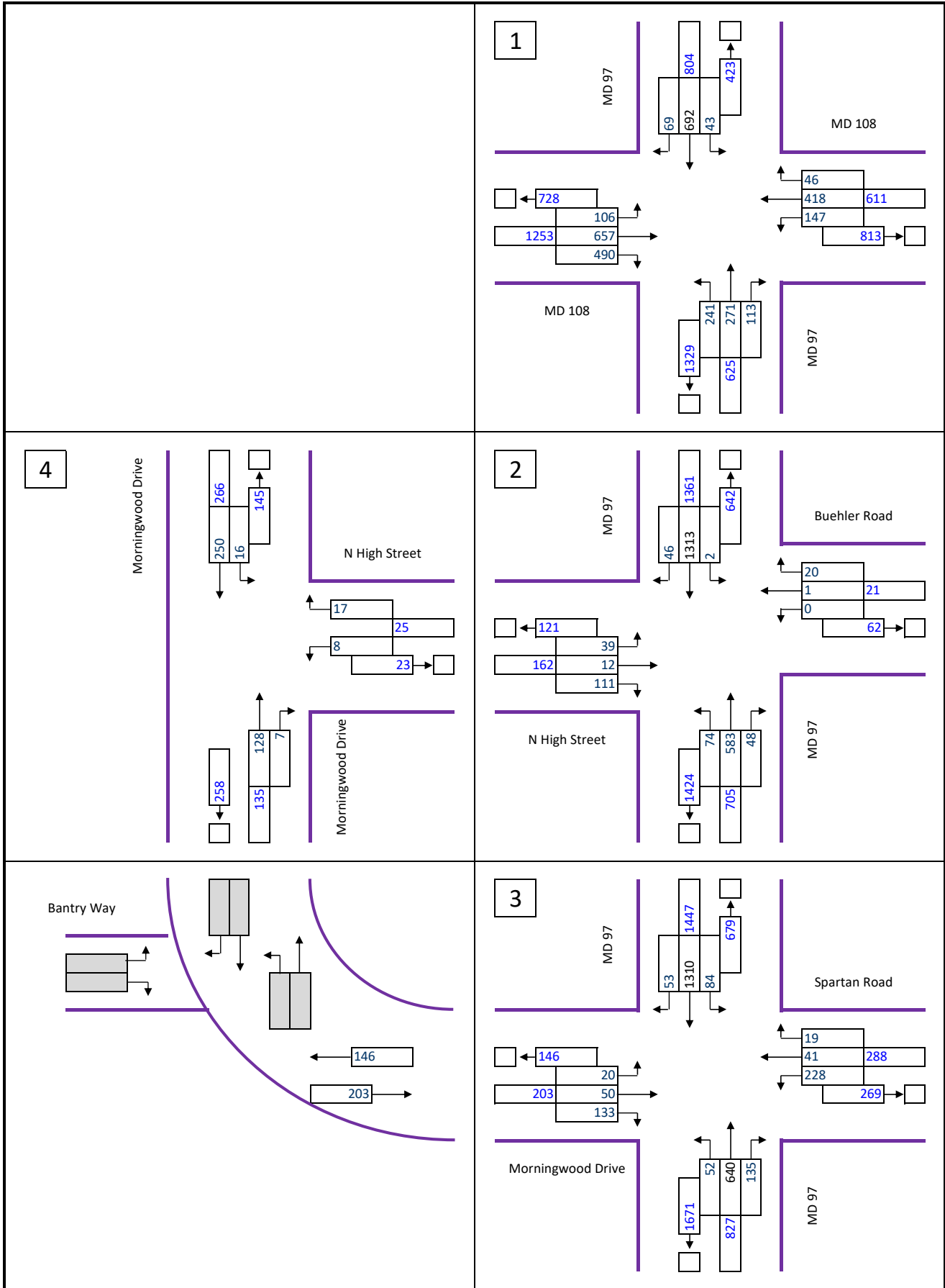


Figure 9: PM Peak Hour Traffic Volumes with North High Street Connection

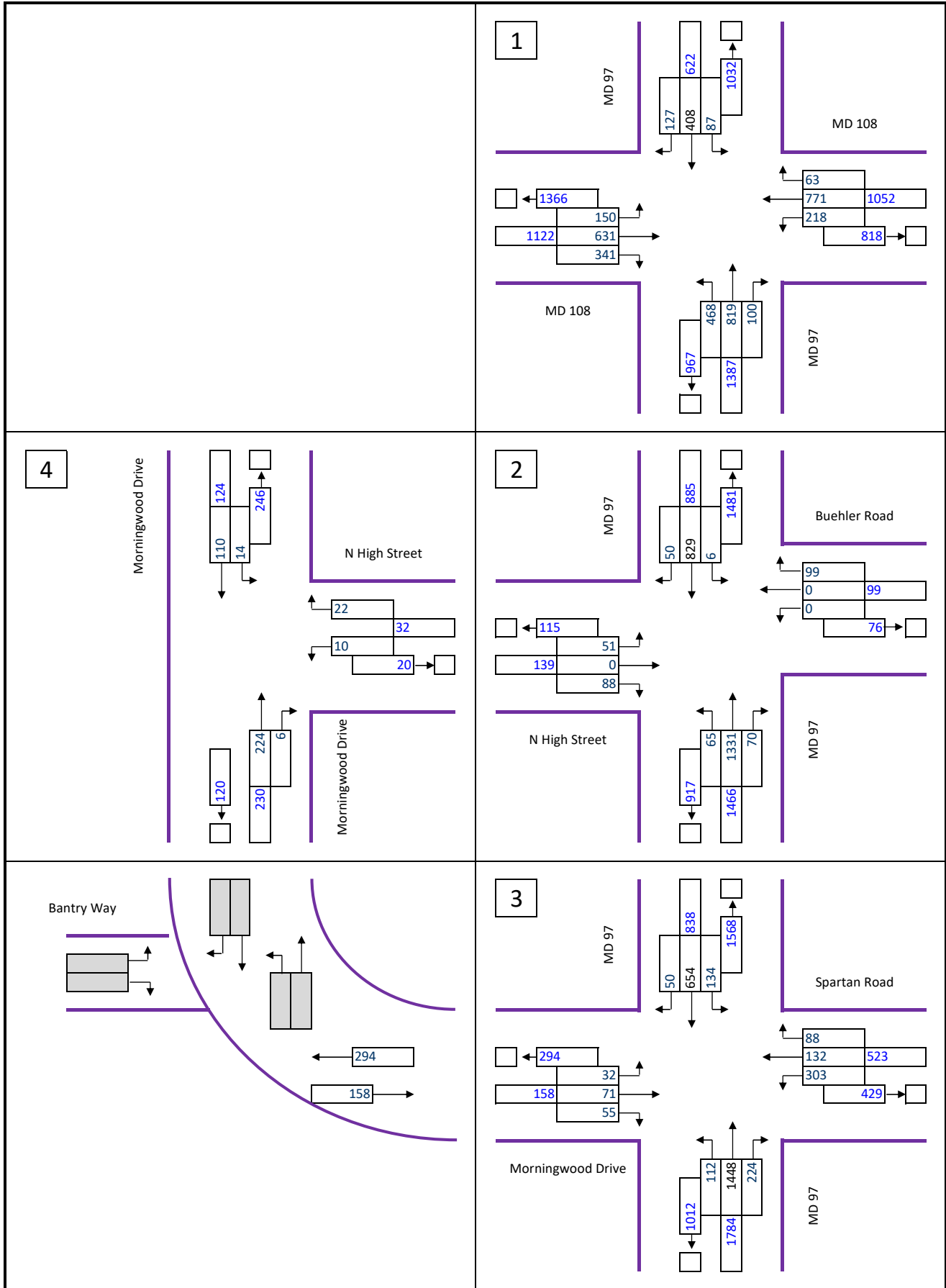




Table 3: LOS Analysis Summary – Diversion Scenario

Intersections	Approach	Existing with Diversion			
		AM		PM	
		LOS	Delay	LOS	Delay
MD 97 & MD 108 Signalized	Overall	D	48.8	D	52.1
	EB	D	44.1	D	47.2
	WB	D	37.9	D	51.0
	NB	D	54.6	D	53.8
	SB	E	59.4	E	59.2
MD 97 & N High Street/ Beuhler Road Unsignalized	Overall	-	-	-	-
	EB	D	26.7	B	13.5
	WB	B	10.6	B	12.6
	NB	A	1.4	A	0.4
	SB	A	0.0	A	0.1
MD 97 & Morningwood Drive/ Spartan Road Signalized	Overall	C	32.0	D	49.9
	EB	E	79.6	F	80.8
	WB	E	67.4	E	79.0
	NB	C	20.8	D	45.7
	SB	C	24.7	C	34.9
Morningwood Drive & N High Street Unsignalized	Overall	-	-	-	-
	EB	-	-	-	-
	WB	A	10.0	B	10.3
	NB	A	0.0	A	0.0
	SB	A	0.5	A	1.0



Table 4: Queue Analysis Summary by SimTraffic Simulation – Diversion Scenario

Intersections	Dir.	Mvmt.	Storage (ft)	Existing AM with Diversion		Existing PM with Diversion	
				Max. Queue (ft)	Avg. Queue (ft)	Max. Queue (ft)	Avg. Queue (ft)
MD 97 & MD 108	EB	L	170	245	73	245	130
	EB	T	820	402	212	368	225
	EB	R	340	383	186	243	69
	WB	L	390	157	59	364	136
	WB	T	720	226	126	489	294
	WB	TR	720	220	116	449	284
	NB	L	380	194	111	384	230
	NB	T	510	131	51	427	230
	NB	TR	510	189	67	436	256
	SB	L	125	175	63	175	99
SB	T	940	565	324	308	195	
SB	R	265	232	50			
MD 97 & N High Street/Beuhler Road	EB	LT	50	99	67	98	48
	EB	R	440	276	129	166	59
	WB	LTR	440	35	17	179	64
	NB	L	95	109	40	78	22
	NB	T	260	75	5	37	2
	NB	TR	260	6		43	3
	SB	LT	510	241	45	111	21
	SB	TR	510	223	47	112	20
MD 97 & Morningwood Drive/Spartan Road	EB	L	75	122	25	124	39
	EB	TR	850	276	132	240	113
	WB	L	960	200	140	586	345
	WB	TR	240	143	50	296	213
	NB	L	155	165	40	279	120
	NB	T	1400	293	170	1538	1209
	NB	TR	1400	302	150	1544	1182
	SB	L	75	125	53	125	107
	SB	T	260	301	250	283	239
SB	TR	260	322	272	288	245	
Morningwood Drive & N High Street	WB	LR	630	39	16	45	18
	SB	LT	620	40	3	40	3



5 Design Challenges for North High Street Connection

Potential design issues with the North High Street connection to Morningwood Drive were noted in the field survey. Morningwood Drive has relatively sharp horizontal curves north and south of the proposed North High Street connection, which can cause a sight distance concern. Figure 10 and Figure 11 show the roadway alignment north and south of the connection where the distance issue should be reviewed in design.

With the current posted speed limit and design speed of 30 mph, the intersection sight distance per AASHTO sight distance guidance should be at least 331 feet for the left turn from North High Street to Morningwood Drive, and 290 feet for the right turn. Figure 12 shows sight triangles from an 'imaginary car' looking from an extended North High Street connecting to Morningwood Drive.

Looking left from North High Street, the required minimum sight line potentially cuts into the hillside and white picket fence shown on Figure 10. Looking right from North High Street, the needed sight line could cut through a wooded area and fence as well (Figure 11). Additionally, before the end of the sightline is the start of parking lane allowed along Morningwood Drive, creating another visual obstruction.

North High Street itself would have to be lowered eight to nine feet to tie into Morningwood Drive. This reconstruction and grade change would likely reach back to at least where the dark lines of 'modeled new road' on the figure begin to start lowering the profile. This construction would have effects to both the driveways / access to the two properties at the end of North High Street and possibly the next two driveways as well.

Roadway signing, pavement markings, sidewalks, lighting, parking, and roadway alignment and width related to the North High Street connection will be addressed in detail during the design phase of the project.



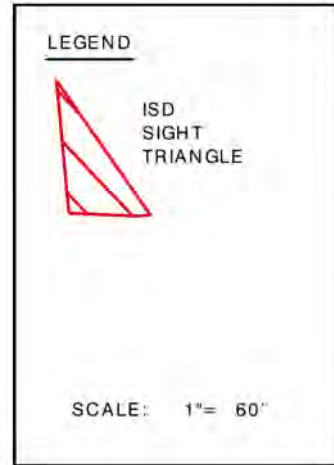
Figure 10: Morningwood Drive looking south from North High Street Steps



Figure 11: Morningwood Drive looking north from North High Street Steps



Figure 12 Sight Distance Analysis



PASSENGER VEHICLE ISD LEFT TURN TO MORNINGWOOD DR.

$ISD = 1.47V_{maj}t_g$
 $ISD = 331$ Intersection sight distance (length of leg of sight triangle along major road. (ft)
 $V_{major} = 30$ Design speed of major road (mph)
 $t_g = 7.5$ Time gap for minor road vehicle to enter major road (s)
 (Reference: AASHTO 2018 Table 9-6 pg.9-44)
 NEEDED ISD = 331'

PASSENGER VEHICLE ISD RIGHT TURN TO MORNINGWOOD DR.

$ISD = 1.47V_{maj}t_g$
 $ISD = 331$ Intersection sight distance (length of leg of sight triangle along major road. (ft)
 $V_{major} = 30$ Design speed of major road (mph)
 $t_g = 6.5$ Time gap for minor road vehicle to enter major road (s)
 (Reference: AASHTO 2018 Table 9-8 pg.9-47)
 NEEDED ISD = 290'



6 Crash Data Analysis

The Montgomery County Crash Reporting dataset provides general information about each reported crash and details of all traffic collisions occurring on roadways within Montgomery County, as collected via the Automated Crash Reporting System (ACRS) of the Maryland State Police, and reported by the Montgomery County Police, Gaithersburg Police, Rockville Police, or the Maryland-National Capital Park Police.

This study compiled the dataset for the latest five years (2015-2019) for the study segment along MD 97 from Morningwood Drive/Spartan Road to MD 108. Table 5 presents traffic crashes and severity trends over the latest 5 years. 57 crashes occurred during the latest five years in this section. The number of total crashes increased by 13% per year over the five years. On average, eleven reported crashes occurred every year in the corridor segment. Approximately 20% of the crashes resulted in injury crashes. Details of the crash data are provided in **Appendix G**.

Table 5: MD 97 Corridor Reported Traffic Crash Severities (2015-2019)

Year	2015	2016	2017	2018	2019	Total	Avg.	%	Increase Rate (per Yr.)
Fatal Crashes	-	-	-	-	-	-	-	-	-
Injury Crashes	2	3	3	2	1	11	2	19.3	-15.9%
Property Damage Crashes	6	11	10	7	12	46	9	80.7	18.9%
Total	8	14	13	9	13	57	11	100.0	12.9%

Based on the mile points where each crash was reported to occur, the 57 crashes were sorted by location. As shown in Table 6, most of the crashes occurred at the two signalized intersections along the corridor (88%). Approximately one-half occurred at MD 97/MD 108. The North High Street/Buehler Road intersection had a higher percentage (43%) of injury crashes than for the other two signalized intersections.

Table 6: MD 97 Corridor Reported Crashes by Location (2015-2019)

Intersections	Total Crashes	%	Injury Crashes	% of Total
At Georgia Ave. at Morningwood Dr./Spartan Rd.	21	36.8%	5	24%
At North High St./Buehler Rd.	7	12.3%	3	43%
At MD 108	29	50.9%	3	10%
Total	57	100.0%	11	100%

Note: Some of crash locations in this table can be different from Figure 12, because this table is based on the mile point, while Figure 12 crash locations were pointed based on the XY coordinate information in the data set.



As shown in Figure 13, the most frequent collision type in the study section was Rear End (40.4%), followed by Single Vehicle and Angle (15.8%) and Left Turn (12.3%). No pedestrians were reported to be involved in any of the crashes. One bicyclist-involved crash occurred at the North High Street intersection.

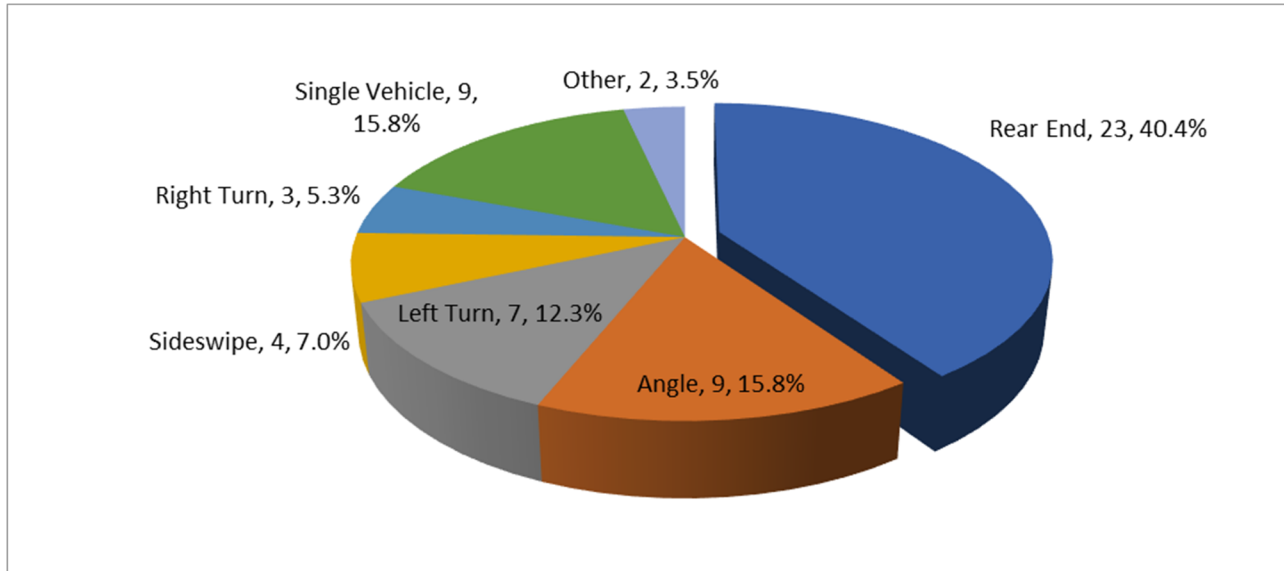


Figure 13: Study Section Reported Crashes by Collision Type (2015-2019)

Table 7 presents fixed objects struck in Single Vehicle collisions. One-third of the Single Vehicle collisions were Curb collisions.

Table 7: Fixed Objects in Single Vehicle Crashes (2015-2019)

	Curb	Light Support Pole	Sign Support Pole	Building	Tree Shrubbery	Other	Total
Crashes	3	1	1	1	1	2	9
%	33.3%	11.1%	11.1%	11.1%	11.1%	22.2%	100.0%

Table 8 shows temporal patterns for the corridor crashes. Approximately 56% of total crashes occurred between 3 PM and midnight. Wednesday had the highest number of crashes of the days of week. The winter and fall month periods had a higher number of crashes than for the other seasonal periods.



Table 8: Temporal Crash Patterns (2015-2019)

Time of Day	00-06	06-9	9-12	12-15	15-18	18-21	21-24	Total
Crashes	3	6	9	7	11	10	11	57
%	5%	11%	16%	12%	19%	18%	19%	100%
Day of Week	Sunday	Monday	Tuesday	Wed.	Thursday	Friday	Sat.	Total
Crashes	7	8	6	13	11	8	4	57
%	12%	14%	11%	23%	19%	14%	7%	100%
Month	Dec.-Feb.	March-May	June-August	Sep.-Nov.	-	-	-	Total
Crashes	17	12	11	17	-	-	-	57
%	30%	21%	19%	30%	-	-	-	100%

Table 8 provides crashes by weather, roadway surface, and light conditions. Dark Light and Wet surface accounted for 39% and 21%, respectively, of a total of the 5-year crashes. The percentage of Wet Surface crashes is very close to the Maryland Statewide average (21%), shown in a latest MDOT SHA crash report, and the percentage of Dark Light is relatively higher than for the Maryland Statewide average (31%).

Table 9: Crashes by Weather, Surface, and Light Condition (2015-2019)

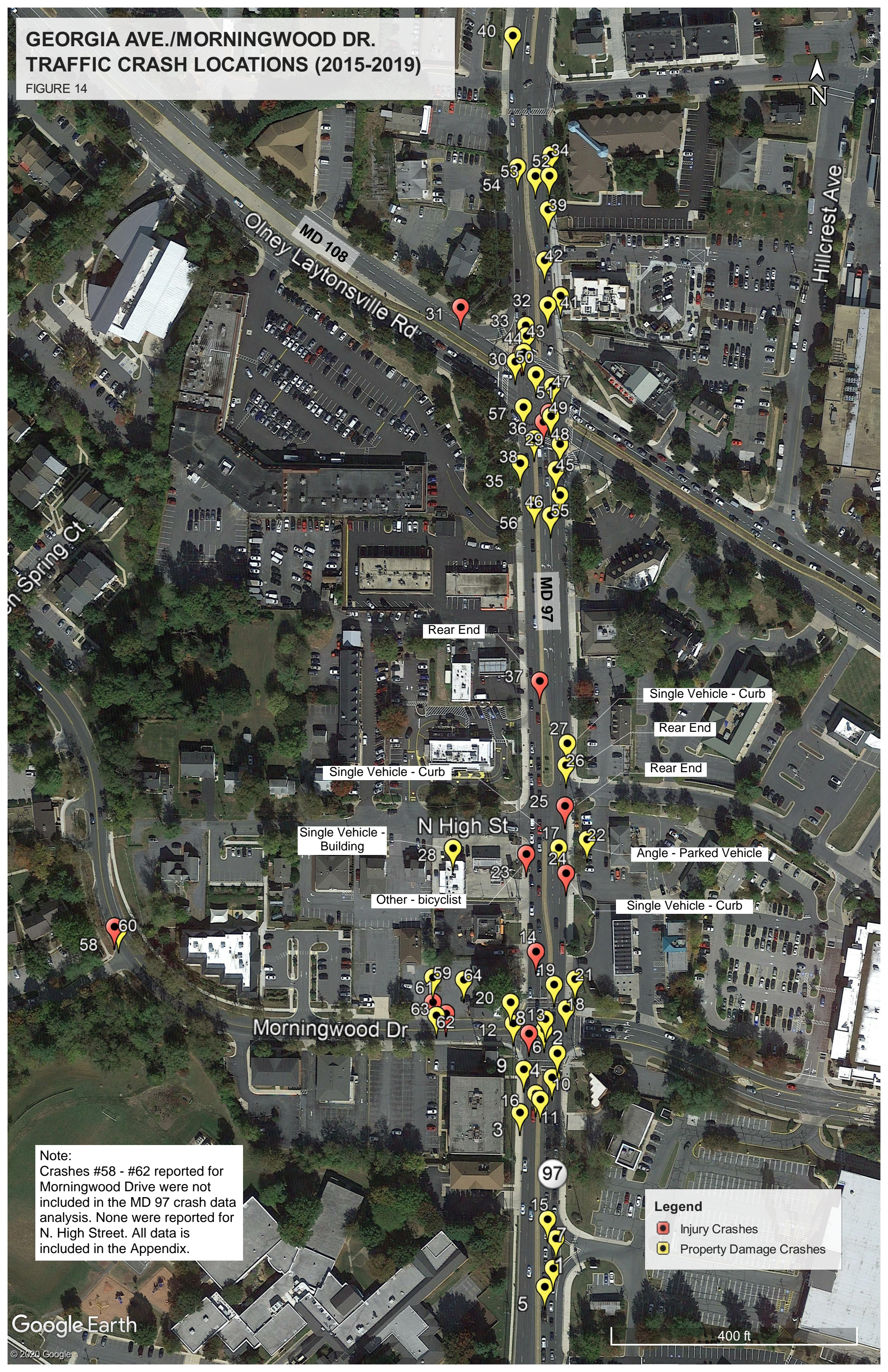
Weather	Clear	Cloudy	Raining	Foggy	N/A, Other	Total
Crashes	35	7	7	1	7	57
%	61.4%	12.3%	12.3%	1.8%	12.3%	100.0%
Surface	Dry	Wet	Snow	Ice	N/A	Total
Crashes	41	12	1	1	2	57
%	71.9%	21.1%	1.8%	1.8%	3.5%	100.0%
Light	Day Light	Dark Light	Dawn	Dusk	-	Total
Crashes	31	22	3	1	-	57
%	54.4%	38.6%	5.3%	1.8%	-	100.0%

Figure 14 presents the crash locations identified in the crash data, based on the latitude and longitude coordinate data. In cases where the location data appeared to map unrealistically, their mile points were considered to locate those on the map.

Nine of the crashes occurred in the vicinity of the MD 97/North High Street intersection, with four of those being injury crashes. As most of the crashes were Rear End collisions or collisions with fixed objects it does not appear that at this time that there are many crashes occurring due to turns being made to and from North High Street. Turning volumes at the intersection will increase with the connection to Morningwood Drive and left turns into and out of Buehler Road are currently prohibited.

GEORGIA AVE./MORNINGWOOD DR. TRAFFIC CRASH LOCATIONS (2015-2019)

FIGURE 14



Rear End

Single Vehicle - Curb

Rear End

Rear End

Single Vehicle - Curb

Single Vehicle - Building

N High St

Other - bicyclist

Angle - Parked Vehicle

Single Vehicle - Curb

Morningwood Dr

Legend

- Injury Crashes
- Property Damage Crashes

Note:
Crashes #58 - #62 reported for Morningwood Drive were not included in the MD 97 crash data analysis. None were reported for N. High Street. All data is included in the Appendix.



Appendices



Appendices



Appendix A

Photos

1. North High Street looking east



2. North High Street looking west



3. North High Street at MD 97 looking east



4. MD 97 at North High Street looking south



5. MD 97 at North High Street looking north



6. Morningwood Drive at MD 97 looking east



7. North High Street looking from Morningwood Drive



8. Morningwood Drive looking south



9. Morningwood Drive looking north



10. Morningwood Drive looking from North High Street



11. MD 97 at Morningwood Drive looking north



12. MD 97 at Buehler Road/North High Street looking north



13. MD 97 northbound queue near King William Drive from Spartan Road in the afternoon peak





Appendix B

Traffic Count Data

Start Date: 1/9/2020
 Start Time: 7:00:00 AM
 Site Code: MD 97 @ N. HIGHT ST TMC

Start Time	MD 97 (GEORGIA AVE) From North				BUEHLER RD From East				MD 97 (GEORGIA AVE) From South				N HIGH ST From West			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00:00 AM	0	319	13	1	1	0	3	0	11	93	2	0	5	0	15	0
7:15:00 AM	0	362	9	1	0	0	2	0	10	112	10	0	5	6	19	0
7:30:00 AM	0	337	7	0	0	0	1	2	7	135	6	0	5	0	17	0
7:45:00 AM	0	320	10	2	0	0	5	0	11	145	5	1	2	1	15	0
8:00:00 AM	0	295	10	1	0	1	5	1	15	146	6	2	6	2	20	0
8:15:00 AM	0	305	7	1	0	0	4	0	16	140	13	1	5	4	29	0
8:30:00 AM	1	346	9	0	0	0	6	2	16	138	15	0	7	3	18	0
8:45:00 AM	0	340	2	0	0	0	5	0	18	166	14	0	14	3	30	0
Total	1	2624	67	6	1	1	31	5	104	1075	71	4	49	19	163	0
8-9 AM	1	1286	28	2	0	1	20	3	65	590	48	3	32	12	97	0
4:00:00 PM	3	223	11	2	0	0	22	0	20	306	16	0	7	3	27	3
4:15:00 PM	0	208	8	1	0	0	22	0	15	326	22	1	10	0	18	2
4:30:00 PM	2	207	9	3	0	0	27	2	9	335	13	0	9	0	21	0
4:45:00 PM	0	194	9	1	0	0	21	3	16	321	14	0	10	0	22	3
5:00:00 PM	3	237	7	0	0	0	29	1	10	311	21	2	10	0	23	2
5:15:00 PM	2	218	7	0	0	0	16	0	13	302	9	2	10	0	15	1
5:30:00 PM	3	218	12	0	0	0	17	0	14	343	11	1	9	1	20	0
5:45:00 PM	1	202	6	0	0	0	16	1	12	326	8	2	12	0	31	1
Total	14	1707	69	7	0	0	170	7	109	2570	114	8	77	4	177	12
4:15-5:15 PM	5	846	33	5	0	0	99	6	50	1293	70	3	39	0	84	7

Start Date: 1/9/2020

Start Time: 7:00:00 AM

Site Code: MD 97 @ N. HIGHT ST TMC

Start Time	MD 97 (GEORGIA AVE) From North				BUEHLER RD From East				MD 97 (GEORGIA AVE) From South				N HIGH ST From West			
	U-TURN				U-TURN				U-TURN				U-TURN			
7:00:00 AM	0				0				2				0			
7:15:00 AM	0				0				0				0			
7:30:00 AM	0				0				4				0			
7:45:00 AM	0				0				1				0			
8:00:00 AM	0				0				1				0			
8:15:00 AM	1				0				0				0			
8:30:00 AM	0				0				0				0			
8:45:00 AM	0				0				3				0			
Total	1				0				11				0			
8-9 AM	1	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0
4:00:00 PM	0				0				1				0			
4:15:00 PM	0				0				1				0			
4:30:00 PM	0				0				1				0			
4:45:00 PM	0				0				1				0			
5:00:00 PM	1				0				1				0			
5:15:00 PM	1				0				1				0			
5:30:00 PM	0				0				1				0			
5:45:00 PM	0				0				0				0			
Total	2				0				7				0			
4:15-5:15 PM	1	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0

Start Date: 1/9/2020
 Start Time: 7:00:00 AM
 Site Code: MD 97 @ N. HIGHT ST TMC

Start Time	MD 97 (GEORGIA AVE) From North				BUEHLER RD From East				MD 97 (GEORGIA AVE) From South				N HIGH ST From West			
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
7:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-9 AM																
4:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15-5:15 PM																

NOTE: NO CYCLISTS OCCURRED DURING THE TIME OF THIS COUNT

Start Date: 1/9/2020

Start Time: 7:00:00 AM

Site Code: STEPS AT N.HIGH ST AND MORNINGWOOD

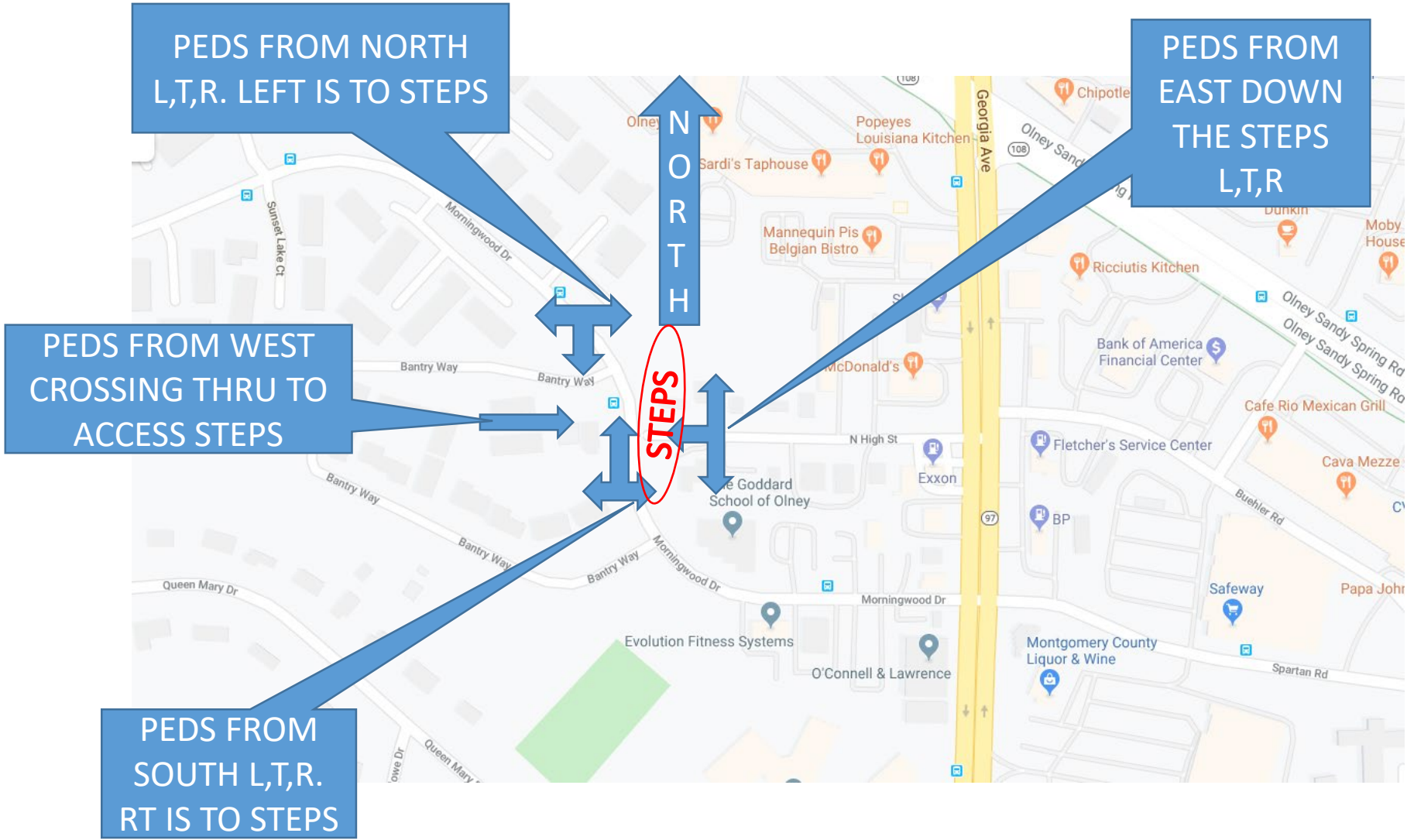
Start Time	MORNINGWOOD DR From North								MORNINGWOOD DR From South				PRIVATE DRIVE & SIDEWALK From West			
	Left	Thru	Right		Left	Thru	Right		Left	Thru			Left		Right	
7:00:00 AM		35	0						0	12			0		0	
7:15:00 AM		62	0						0	8			0		0	
7:30:00 AM		46	0						0	16			1		0	
7:45:00 AM		54	1						0	29			1		1	
8:00:00 AM		51	0						0	35			0		0	
8:15:00 AM		62	0						1	23			0		0	
8:30:00 AM		70	1						0	37			0		0	
8:45:00 AM		82	0						0	49			0		0	
		462	2						1	209			2		1	
4:00:00 PM		27	0						0	58			0		0	
4:15:00 PM		46	1						2	67			0		1	
4:30:00 PM		22	0						0	63			0		1	
4:45:00 PM		25	1						0	62			0		0	
5:00:00 PM		29	0						0	52			1		0	
5:15:00 PM		36	0						0	75			0		0	
5:30:00 PM		37	0						0	80			0		0	
5:45:00 PM		26	0						0	55			0		0	
		248	2						2	512			1		2	

Start Date: 1/9/2020

Start Time: 7:00:00 AM

Site Code: STEPS AT N.HIGH ST AND MORNINGWOOD

Start Time	MORNINGWOOD DR From North				STEPS From East				MORNINGWOOD DR From South				PRIVATE DRIVE & SIDEWALK From West			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00:00 AM	0	1	0	0	0	1	2	0	0	2	0	0	0	0	0	0
7:15:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
7:30:00 AM	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0	0
7:45:00 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0
8:00:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0
8:15:00 AM	0	2	0	0	0	1	0	0	0	1	0	0	0	0	0	0
8:30:00 AM	0	9	0	0	0	0	0	0	0	2	0	0	0	0	0	0
8:45:00 AM	0	18	0	0	0	0	1	0	0	5	0	0	0	1	0	0
	0	32	0	0	0	4	4	0	0	13	0	0	0	4	0	0
4:00:00 PM	3	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0
4:15:00 PM	1	0	0	0	0	3	0	0	0	2	0	0	0	0	0	0
4:30:00 PM	0	1	0	0	0	0	1	0	0	3	0	0	0	0	0	0
4:45:00 PM	1	0	0	0	0	1	3	0	0	1	0	0	0	2	0	0
5:00:00 PM	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15:00 PM	0	1	0	0	0	1	0	0	0	2	0	0	0	6	0	0
5:30:00 PM	1	3	0	0	0	0	1	0	0	2	1	0	0	2	0	0
5:45:00 PM	0	2	0	0	1	0	0	0	0	1	1	0	0	1	0	0
	7	12	0	0	1	6	5	0	0	11	2	0	0	12	0	0



Maryland Department of Transportation
State Highway Administration Data Services Engineering Division
Turning Movement Count Study - Field Sheet

Station ID: S2000150336

County: Montgomery

Comments:

Date: Thursday 10/24/2019

Town: none

Location: MD 97 at MD 108

Weather: Sunny

Interval 15 min

(dd):

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-19:00P	Start	End	Volume	LOS	V/C
		07:30	Montg	3490	B	0.69		18:00	Montg	4209	C	0.78

Hour Ending	MD 97					MD 97					MD 108					MD 108					Grand Total
	From North					From South					From East					From West					
	U.Turn	Left	Through	Right	TOTAL	U.Turn	Left	Throug	Right	TOTAL	U.Turn	Left	Throug	RIGHT	TOTAL	U.Turn	Left	Through	Right	TOTAL	
0:15	0	0	11	1	12	0	7	7	4	18	0	7	14	2	23	0	2	6	7	15	68
0:30	0	2	4	0	6	0	12	6	0	18	0	6	13	0	19	0	0	8	3	11	54
0:45	0	0	3	1	4	0	6	4	2	12	0	3	11	2	16	0	0	4	4	8	40
1:00	0	1	4	0	5	0	8	7	4	19	0	1	9	1	11	0	2	1	1	4	39
1:15	0	0	5	1	6	0	3	7	1	11	0	1	10	0	11	0	0	4	1	5	33
1:30	0	0	2	1	3	0	3	5	1	9	0	1	8	0	9	0	0	1	2	3	24
1:45	0	0	2	0	2	0	4	2	3	9	0	0	2	0	2	0	0	4	3	7	20
2:00	0	0	4	0	4	0	0	7	2	9	0	5	5	0	10	0	0	2	0	2	25
2:15	0	2	1	0	3	0	1	1	3	5	0	4	9	0	13	0	0	5	1	6	27
2:30	0	1	3	0	4	0	2	1	1	4	0	1	1	1	3	0	0	1	1	2	13
2:45	0	1	1	0	2	0	1	4	0	5	0	2	2	1	5	0	0	4	1	5	17
3:00	0	0	1	3	4	0	1	4	2	7	0	0	0	0	0	0	0	3	3	6	17
3:15	0	0	3	2	5	0	2	3	1	6	0	1	3	1	5	0	1	8	2	11	27
3:30	0	1	3	3	7	0	4	0	1	5	0	0	1	1	2	0	1	2	8	11	25
3:45	0	1	2	2	5	0	2	2	0	4	0	1	1	0	2	0	0	1	2	3	14
4:00	0	0	3	1	4	0	3	2	0	5	0	3	1	0	4	0	1	9	3	13	26
4:15	0	1	12	0	13	0	2	1	0	3	1	1	2	0	4	0	1	5	4	10	30
4:30	0	0	11	6	17	0	2	5	1	8	0	2	1	0	3	0	1	9	15	25	53
4:45	0	0	23	5	28	0	5	6	1	12	0	6	5	0	11	1	3	10	18	32	83
5:00	0	1	31	2	34	0	6	7	7	20	0	2	7	0	9	1	13	14	18	46	109

Station ID: S2000150336

County: Montgomery

Comments:

Date: Thursday 10/24/2019

Town: none

Location: MD 97 at MD 108

Weather: Sunny

Interval (dd): 15 min

PEAK HOURS	AM PERIOD 6:00AM-12:00PM					Start 07:30	End Montg	Volume 3490	LOS B	V/C 0.69	PM PERIOD 12:00PM-19:00P				
	Start 18:00	End Montg	Volume 4209	LOS C	V/C 0.78										

5:15	0	2	39	5	46	0	5	7	8	20	0	5	5	1	11	0	4	17	21	42	119
5:30	0	4	58	4	66	1	3	18	7	29	0	7	19	2	28	0	3	32	38	73	196
5:45	0	3	96	5	104	0	13	18	3	34	0	7	22	1	30	2	7	38	45	92	260
6:00	0	3	124	5	132	0	16	22	12	50	0	18	23	4	45	1	14	61	50	126	353
6:15	0	3	132	9	144	0	22	36	10	68	0	14	44	1	59	0	3	53	73	129	400
6:30	0	4	177	7	188	0	24	43	4	71	0	17	48	0	65	0	8	89	108	205	529
6:45	0	9	189	3	201	0	24	38	11	73	1	21	47	5	74	0	10	117	131	258	606
7:00	0	6	204	8	218	0	39	73	10	122	0	30	63	8	101	1	12	142	171	326	767
7:15	0	8	179	11	198	0	35	57	16	108	1	32	67	4	104	1	19	205	133	358	768
7:30	0	10	193	21	224	0	51	54	18	123	1	21	75	6	103	1	28	208	148	385	835
7:45	0	6	174	10	190	0	57	71	23	151	0	36	140	7	183	3	13	225	130	371	895
8:00	0	8	169	15	192	0	90	86	17	193	0	41	148	8	197	1	20	185	134	340	922
8:15	0	8	139	27	174	0	80	67	19	166	0	46	135	7	188	2	26	154	136	318	846
8:30	0	11	148	16	175	0	53	80	36	169	1	31	105	13	150	1	22	161	130	314	808
8:45	0	13	149	13	175	0	51	67	31	149	0	34	76	12	122	0	24	178	105	307	753
9:00	0	11	181	13	205	0	57	57	27	141	0	35	102	14	151	2	29	164	119	314	811
9:15	0	15	156	19	190	0	73	78	16	167	0	34	83	6	123	0	30	120	112	262	742
9:30	1	7	133	21	162	1	56	57	33	147	1	42	88	18	149	1	33	144	84	262	720
9:45	0	13	128	14	155	0	64	66	18	148	1	42	88	8	139	2	19	102	95	218	660
10:00	0	13	133	18	164	0	55	58	23	136	1	40	75	16	132	0	31	115	87	233	665
10:15	0	11	119	22	152	0	59	81	23	163	0	38	85	7	130	1	23	104	70	198	643
10:30	0	12	98	24	134	0	51	52	23	126	0	47	75	11	133	0	37	85	69	191	584
10:45	1	12	110	30	153	0	56	76	28	160	1	48	73	10	132	0	26	94	68	188	633
11:00	0	21	90	22	133	0	45	69	29	143	3	43	99	13	158	0	40	115	61	216	650
11:15	0	25	111	15	151	0	65	63	13	141	3	41	91	16	151	1	32	85	60	178	621
11:30	0	6	63	17	86	0	59	66	26	151	1	66	106	11	184	0	30	105	72	207	628

Station ID: S2000150336

County: Montgomery

Comments:

Date: Thursday 10/24/2019

Town: none

Location: MD 97 at MD 108

Weather: Sunny

Interval (dd): 15 min

PEAK HOURS	AM PERIOD 6:00AM-12:00PM				Start 07:30	End Montg	Volume 3490	LOS B	V/C 0.69	PM PERIOD 12:00PM-19:00P				Start 18:00	End Montg	Volume 4209	LOS C	V/C 0.78

11:45	0	20	90	22	132	0	91	78	34	203	0	49	84	14	147	0	22	94	55	171	653
12:00	0	15	82	35	132	0	63	72	49	184	1	68	103	11	183	1	40	104	63	208	707
12:15	0	23	91	31	145	0	77	93	42	212	2	72	115	19	208	0	33	74	62	169	734
12:30	0	17	85	35	137	0	64	80	46	190	0	63	123	11	197	1	44	110	70	225	749
12:45	0	17	73	51	141	0	73	122	31	226	7	30	100	19	156	1	24	94	37	156	679
13:00	0	15	83	20	118	0	97	122	36	255	5	55	123	16	199	0	38	102	56	196	768
13:15	0	19	103	24	146	0	87	127	36	250	1	62	118	17	198	0	29	90	60	179	773
13:30	0	16	81	21	118	0	74	120	38	232	4	57	95	20	176	1	36	106	46	189	715
13:45	0	16	79	17	112	0	97	109	26	232	1	62	105	12	180	0	30	106	53	189	713
14:00	0	19	87	16	122	0	68	104	49	221	2	66	100	14	182	2	36	121	53	212	737
14:15	1	18	88	15	122	0	80	116	50	246	2	55	118	10	185	0	26	107	67	200	753
14:30	0	20	86	25	131	0	65	92	34	191	4	52	117	23	196	2	30	127	68	227	745
14:45	0	26	67	24	117	0	90	128	32	250	1	45	145	23	214	2	22	140	69	233	814
15:00	0	26	79	30	135	0	88	107	32	227	0	67	160	18	245	0	33	120	66	219	826
15:15	0	22	94	19	135	1	108	148	25	282	0	50	171	21	242	0	30	122	66	218	877
15:30	0	20	94	35	149	0	112	192	26	330	1	59	182	17	259	1	36	147	89	273	1011
15:45	0	24	103	30	157	0	115	172	28	315	0	64	204	18	286	0	28	110	57	195	953
16:00	0	27	89	25	141	0	110	157	40	307	0	56	185	20	261	2	32	143	66	243	952
16:15	0	21	99	23	143	0	122	184	32	338	1	62	201	13	277	0	33	134	76	243	1001
16:30	0	20	111	27	158	0	126	202	18	346	1	55	193	15	264	0	44	158	78	280	1048
16:45	0	23	101	41	165	0	127	189	21	337	3	53	178	15	249	0	42	146	88	276	1027
17:00	0	19	93	24	136	0	124	172	13	309	1	51	206	14	272	2	44	162	87	295	1012
17:15	0	25	103	35	163	0	91	206	23	320	1	53	194	19	267	2	46	165	88	301	1051
17:30	0	26	123	34	183	1	114	188	22	325	0	46	183	19	248	1	48	175	67	291	1047
17:45	0	15	110	30	155	0	121	165	40	326	0	52	203	9	264	0	54	167	77	298	1043
18:00	0	23	99	31	153	1	133	172	47	353	2	53	203	12	270	0	45	147	72	264	1040

Station ID: S2000150336

County: Montgomery

Comments:

Date: Thursday 10/24/2019

Town: none

Location: MD 97 at MD 108

Weather: Sunny

Interval (dd): 15 min

PEAK HOURS	AM PERIOD 6:00AM-12:00PM					Start 07:30	End Montg	Volume 3490	LOS B	V/C 0.69	PM PERIOD 12:00PM-19:00P				
	Start 18:00	End Montg	Volume 4209	LOS C	V/C 0.78										

18:15	0	31	98	30	159	0	129	155	39	323	1	60	215	15	291	2	43	161	85	291	1064
18:30	0	20	79	30	129	1	141	182	37	361	1	57	211	13	282	2	52	167	73	294	1066
18:45	0	31	104	33	168	0	135	184	19	338	0	61	197	14	272	1	49	150	72	272	1050
19:00	0	29	92	32	153	0	119	159	24	302	0	59	200	21	280	1	38	130	85	254	989
19:15	0	43	109	34	186	0	112	130	19	261	0	70	202	15	287	0	51	116	62	229	963
19:30	0	24	68	33	125	0	100	144	24	268	0	68	163	13	244	3	41	95	57	196	833
19:45	0	13	49	20	82	0	108	121	24	253	3	56	197	15	271	0	42	113	50	205	811
20:00	0	10	53	22	85	0	90	110	16	216	3	57	133	14	207	4	28	112	43	187	695
20:15	0	26	55	31	112	0	80	99	17	196	5	60	130	8	203	1	34	73	49	157	668
20:30	0	11	59	14	84	0	51	89	18	158	6	53	109	3	171	0	27	72	32	131	544
20:45	0	5	27	21	53	0	78	59	26	163	0	39	127	13	179	0	19	54	35	108	503
21:00	0	4	25	17	46	0	53	52	19	124	3	39	85	8	135	0	28	42	57	127	432
21:15	0	4	39	19	62	1	54	61	13	129	1	49	71	5	126	0	16	57	34	107	424
21:30	0	11	34	18	63	0	42	43	18	103	0	40	74	4	118	0	16	68	39	123	407
21:45	0	7	32	7	46	0	43	65	14	122	1	31	77	7	116	0	18	61	47	126	410
22:00	0	5	28	4	37	0	39	51	6	96	1	30	50	7	88	0	7	44	39	90	311
22:15	0	2	19	4	25	0	29	34	13	76	2	17	40	2	61	0	3	38	50	91	253
22:30	0	4	20	3	27	0	24	62	10	96	0	22	31	5	58	0	5	44	36	85	266
22:45	0	7	12	3	22	0	23	32	5	60	0	18	25	1	44	0	0	25	28	53	179
23:00	0	3	10	3	16	0	19	26	10	55	0	21	25	1	47	0	4	26	19	49	167
23:15	0	2	4	6	12	0	20	19	5	44	0	18	27	1	46	0	1	17	25	43	145
23:30	0	0	6	1	7	0	14	12	5	31	0	8	21	2	31	0	3	8	13	24	93
23:45	0	3	9	1	13	0	17	16	3	36	1	13	14	0	28	0	1	11	12	24	101
0:00	0	0	6	0	6	0	12	16	3	31	0	2	14	3	19	0	1	8	5	14	70

Station ID: S2000150336

County: Montgomery

Comments:

Date: Friday 10/25/2019

Town: none

Location: MD 97 at MD 108

Weather: Sunny

Interval (dd): 15 min

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-19:00P	Start	End	Volume	LOS	V/C
		07:30	Montg	3490	B	0.69		18:00	Montg	4209	C	0.78

TOTAL:	3	1082	7051	1508	9644	7	5326	7079	1775	14187	84	3288	8434	827	12633	54	2020	8162	5330	15566	52030
AM Peak:	0	32	675	73	780	0	278	278	77	633	1	144	498	28	670	7	87	772	548	1407	3490
PM Peak:	0	105	380	124	609	2	538	693	142	1373	4	231	826	54	1111	5	189	625	302	1116	4209

Station ID: S2000150336

County: Montgomery

Comments:

Date: Friday 10/25/2019

Town: none

Location: MD 97 at MD 108

Weather: Sunny

Interval (dd): 15 min

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-19:00P	Start	End	Volume	LOS	V/C
		07:30	Montg	3490	B	0.69		18:00	Montg	4209	C	0.78

Hour Ending	MD 97 North Leg			MD 97 South Leg			MD 108 East Leg			MD 108 West Leg		
	School Children	Pedestrians	Bicycles	School Children	Pedestrians	Bicycles	School Children	Pedestrians	Bicycles	School Children	Pedestrians	Bicycles
	0:15	0	0	0	0	0	0	0	0	0	0	0
0:30	0	0	0	0	0	0	0	0	0	0	0	0
0:45	0	0	0	0	0	0	0	0	0	0	1	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0
1:15	0	0	0	0	0	0	0	0	0	0	0	0
1:30	0	0	0	0	0	0	0	0	0	0	0	0
1:45	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0
2:15	0	0	0	0	0	0	0	0	0	0	0	0
2:30	0	0	0	0	0	0	0	0	0	0	0	0
2:45	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0
3:15	0	0	0	0	0	0	0	0	0	0	0	0
3:30	0	0	0	0	0	0	0	0	0	0	0	0
3:45	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0	0	0
4:15	0	0	0	0	0	0	0	0	0	0	0	0
4:30	0	0	0	0	0	0	0	0	0	0	0	0
4:45	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	1	0	0	0	0	0	0	0	0	0	0
5:15	0	0	0	0	1	0	0	1	0	0	0	0
5:30	0	0	0	0	2	0	0	0	0	0	0	0
5:45	0	1	0	0	0	0	0	2	0	0	0	0
6:00	0	0	0	0	0	0	0	0	0	0	0	0
6:15	0	2	0	0	0	0	0	0	0	0	0	0
6:30	0	1	0	0	0	0	0	0	0	0	0	0
6:45	0	0	0	0	0	0	0	0	0	0	2	0
7:00	0	3	0	0	0	0	0	0	0	0	2	0

Station ID: S2000150336

County: Montgomery

Comments:

Date: Friday 10/25/2019

Town: none

Location: MD 97 at MD 108

Weather: Sunny

Interval (dd): 15 min

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-19:00P	Start	End	Volume	LOS	V/C
		07:30	Montg	3490	B	0.69		18:00	Montg	4209	C	0.78

7:15	0	2	0	0	1	0	0	0	0	0	0	0	0
7:30	0	2	0	0	0	0	0	1	0	0	0	0	0
7:45	0	1	0	0	1	0	0	0	0	0	0	1	0
8:00	0	0	0	0	0	0	0	0	0	0	0	1	0
8:15	0	0	0	0	0	0	0	0	0	0	0	1	0
8:30	0	0	0	0	0	0	0	0	0	0	0	1	0
8:45	0	1	0	0	0	0	0	0	0	0	0	3	0
9:00	0	0	0	0	0	0	0	6	0	0	0	1	0
9:15	0	0	0	0	0	0	0	0	0	0	0	1	0
9:30	0	1	0	0	0	0	0	0	0	0	0	0	0
9:45	0	0	0	0	0	0	0	0	0	0	0	1	0
10:00	0	1	0	0	0	0	0	0	0	0	0	2	0
10:15	0	0	0	0	0	0	0	0	0	0	0	4	0
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	6	0	0	1	0	0	0	2	0
11:00	0	1	0	0	2	0	0	2	0	0	0	2	0
11:15	0	1	0	0	0	0	0	1	0	0	0	3	0
11:30	0	1	0	0	3	0	0	0	0	0	0	2	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00	0	1	0	0	0	0	0	0	0	0	0	2	0
12:15	0	3	0	0	2	0	0	0	0	0	0	1	0
12:30	0	2	0	0	2	0	0	0	0	0	0	0	0
12:45	0	1	0	0	0	0	0	5	0	0	0	4	0
13:00	0	2	0	0	0	0	0	0	0	0	0	3	0
13:15	0	2	0	0	5	0	0	1	0	0	0	4	0
13:30	0	2	0	0	0	0	0	0	0	0	0	1	0
13:45	0	2	0	0	2	0	0	0	0	0	0	2	0
14:00	0	0	0	0	4	0	0	3	0	0	0	3	0
14:15	0	5	0	0	1	0	0	1	0	0	0	8	0
14:30	0	1	0	0	1	0	0	0	0	0	0	0	0
14:45	0	1	0	0	0	0	0	0	0	0	0	2	0
15:00	0	2	0	0	0	0	0	0	0	0	0	4	0

Station ID: S2000150336

County: Montgomery

Comments:

Date: Friday 10/25/2019

Town: none

Location: MD 97 at MD 108

Weather: Sunny

Interval (dd): 15 min

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-19:00P	Start	End	Volume	LOS	V/C
		07:30	Montg	3490	B	0.69		18:00	Montg	4209	C	0.78

15:15	0	7	0	0	0	0	0	0	0	0	1	0
15:30	0	2	0	0	0	0	0	0	0	0	2	0
15:45	0	7	0	0	2	0	0	0	0	0	4	0
16:00	0	0	0	0	3	0	0	0	0	0	0	0
16:15	0	4	0	0	7	0	0	0	0	0	12	0
16:30	0	0	0	0	2	0	0	0	0	0	3	0
16:45	0	1	0	0	1	0	0	2	0	0	3	0
17:00	0	0	0	0	6	0	0	0	0	0	4	0
17:15	0	1	0	0	3	0	0	1	0	0	1	0
17:30	0	1	0	0	5	0	0	1	0	0	3	0
17:45	0	3	0	0	0	0	0	0	0	0	6	0
18:00	0	1	0	0	2	0	0	0	0	0	2	0
18:15	0	1	0	0	4	0	0	0	0	0	1	0
18:30	0	3	0	0	1	0	0	0	0	0	3	0
18:45	0	4	0	0	0	0	0	0	0	0	3	0
19:00	0	0	0	0	0	0	0	0	0	0	2	0
19:15	0	0	0	0	0	0	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0	0	0	0
19:45	0	1	0	0	0	0	0	0	0	0	4	0
20:00	0	0	0	0	0	0	0	0	0	0	1	0
20:15	0	2	0	0	0	0	0	0	0	0	5	0
20:30	0	1	0	0	0	0	0	0	0	0	2	0
20:45	0	1	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0
21:15	0	2	0	0	0	0	0	0	0	0	0	0
21:30	0	0	0	0	0	0	0	0	0	0	0	0
21:45	0	0	0	0	0	0	0	0	0	0	2	0
22:00	0	0	0	0	0	0	0	0	0	0	2	0
22:15	0	0	0	0	0	0	0	0	0	0	0	0
22:30	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	2	0	0	1	0	0	1	0	0	1	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0

Station ID: S2000150336

County: Montgomery

Comments:

Date: Friday 10/25/2019

Town: none

Location: MD 97 at MD 108

Weather: Sunny

Interval (dd): 15 min

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-19:00P	Start	End	Volume	LOS	V/C
		07:30	Montg	3490	B	0.69		18:00	Montg	4209	C	0.78

23:15	0	1	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	1	0
23:45	0	0	0	0	0	0	0	1	0	0	0	0	0
0:00	0	4	0	0	0	0	0	0	0	0	0	2	0

Total:	0	92	0	0	70	0	0	30	0	0	0	134	0
---------------	---	----	---	---	----	---	---	----	---	---	---	-----	---

AM Pe	0	3	0	0	1	0	0	1	0	0	0	3	0
--------------	---	---	---	---	---	---	---	---	---	---	---	---	---

PM Pe	0	9	0	0	7	0	0	0	0	0	0	9	0
--------------	---	---	---	---	---	---	---	---	---	---	---	---	---

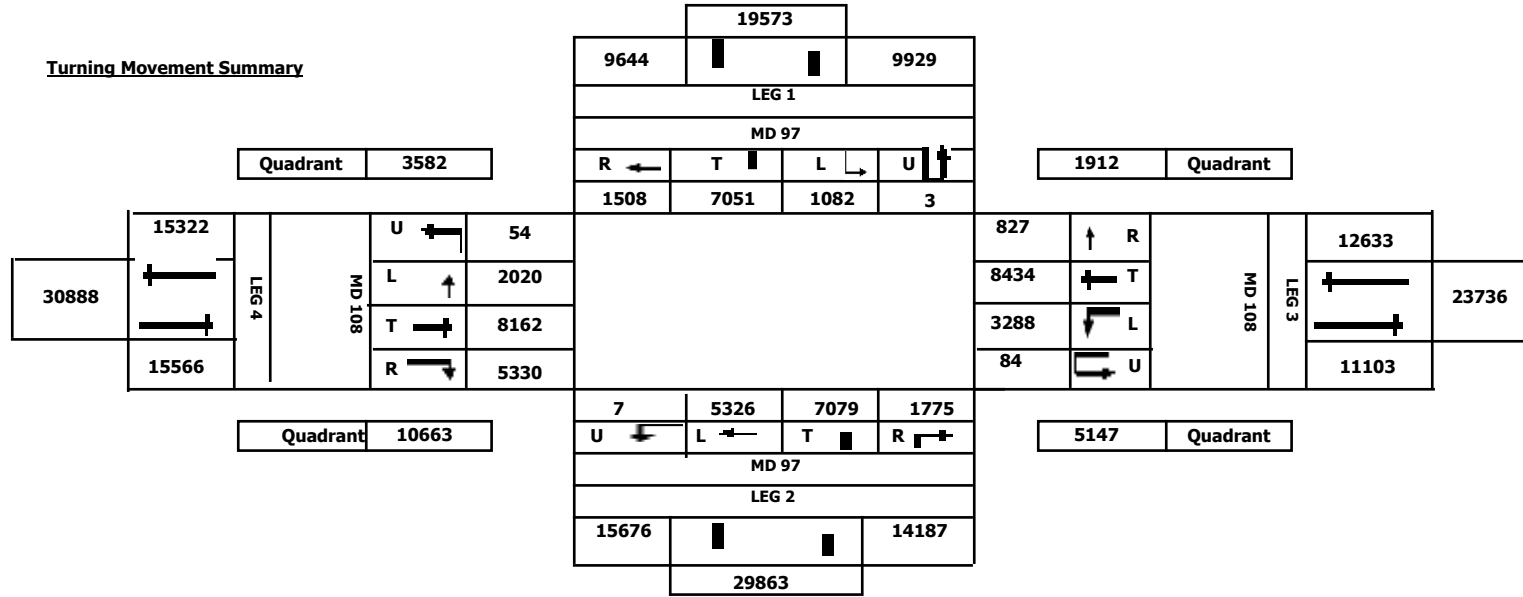
Station ID: S2000150336
Date: Friday 10/25/2019
Location: MD 97 at MD 108
Interval (dd): 15 min

County: Montgomery
Town: none
Weather: Sunny

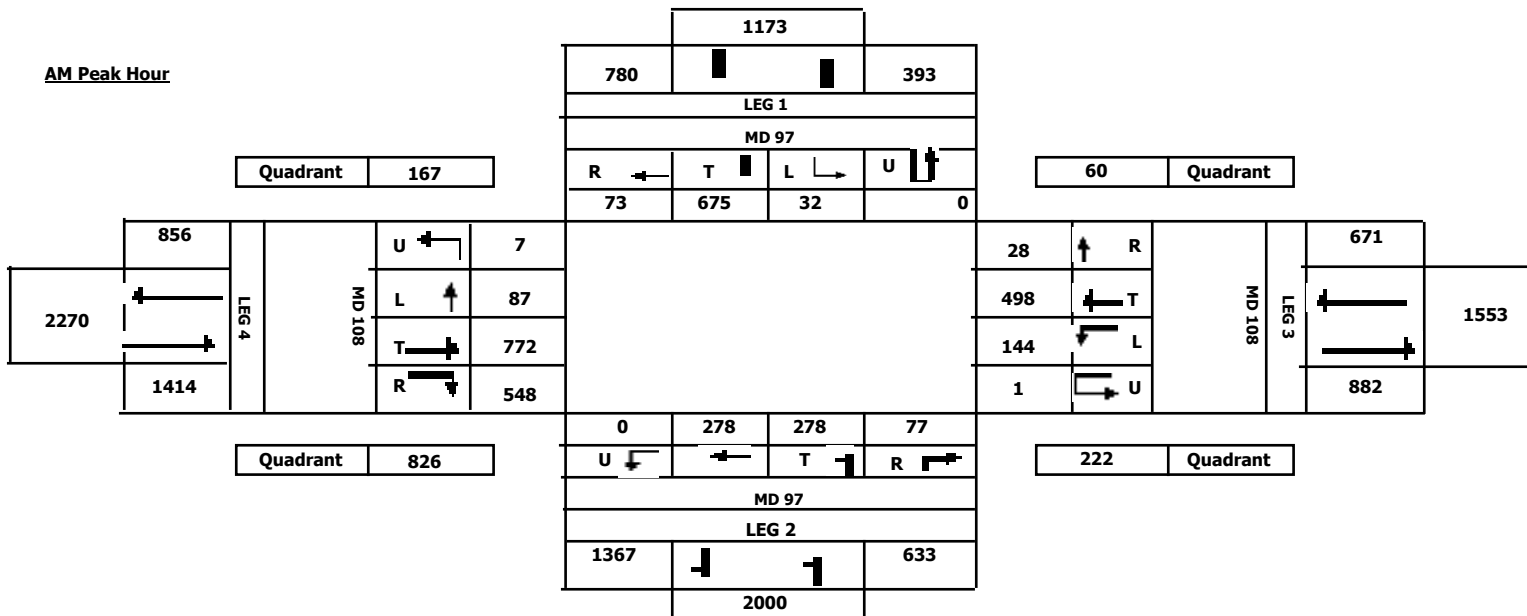
Comments:

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-19:00P	Start	End	Volume	LOS	V/C
				07:30	Montg	3490		B	0.69		18:00	Montg

Turning Movement Summary



AM Peak Hour

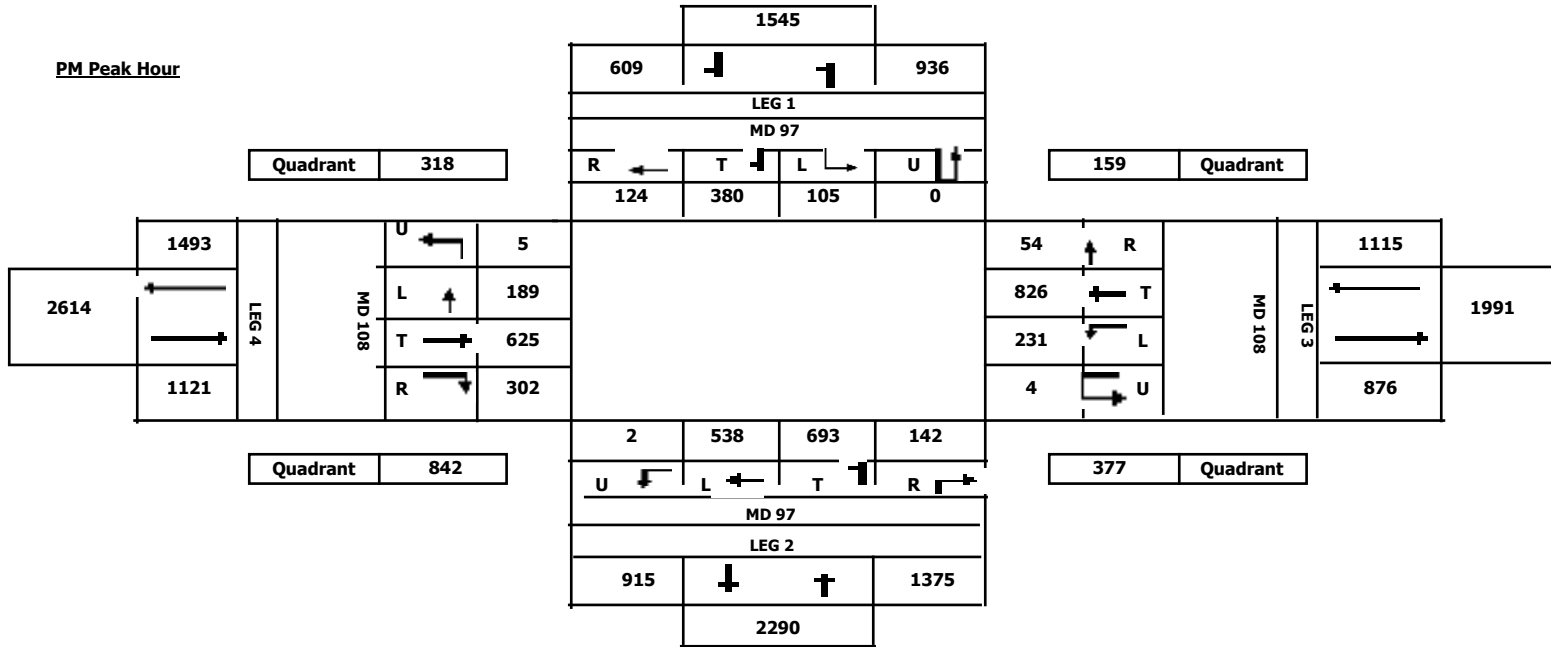


Station ID: S2000150336
Date: Friday 10/25/2019
Location: MD 97 at MD 108
Interval (dd): 15 min

County: Montgomery
Town: none
Weather: Sunny

Comments:

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-19:00P	Start	End	Volume	LOS	V/C
		07:30	Montg	3490	B	0.69		18:00	Montg	4209	C	0.78



Maryland Department of Transportation
State Highway Administration Data Services Engineering Division
Turning Movement Count Study - Field Sheet

Station ID: S1993150033

County: Montgomery

Comments: LOS AM:C PM:D

Date: Tuesday 02/28/2012

Town: none

Location: MD 97 at Morningwood Dr/Spartan

Weather: Sunny

Interval 15 min

(dd):

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-19:00P	Start	End	Volume	LOS	V/C
		07:45	Montg	3011	C	0.88		16:45	Montg	3450	D	0.73

Hour Ending	MD 97					MD 97					Spartan Rd					Morningwood Dr					Grand Total
	From North					From South					From East					From West					
	U.Turn	Left	Through	Right	TOTAL	U.Turn	Left	Thru	Right	TOTAL	U.Turn	Left	Thru	RIGHT	TOTAL	U.Turn	Left	Through	Right	TOTAL	
6:15	0	2	200	3	205	0	1	60	12	73	0	14	1	0	15	0	2	5	14	21	314
6:30	0	7	271	2	280	0	4	59	13	76	0	32	6	4	42	0	3	7	33	43	441
6:45	1	13	358	10	382	0	8	91	9	108	0	46	3	2	51	0	2	11	34	47	588
7:00	1	12	369	8	390	1	6	90	27	124	0	48	5	4	57	0	3	7	43	53	624
7:15	1	13	412	11	437	0	5	99	16	120	0	56	5	4	65	0	3	11	30	44	666
7:30	0	13	381	6	400	0	7	118	28	153	0	62	7	3	72	0	6	9	38	53	678
7:45	0	24	379	10	413	0	11	131	32	174	0	63	8	6	77	0	8	19	40	67	731
8:00	1	27	399	9	436	0	10	166	52	228	0	63	4	9	76	0	11	13	35	59	799
8:15	0	22	373	12	407	2	18	161	36	217	0	64	16	4	84	0	9	18	40	67	775
8:30	0	18	355	15	388	1	13	149	28	191	0	58	8	3	69	0	7	14	41	62	710
8:45	1	20	296	24	341	0	14	154	36	204	0	58	10	3	71	0	6	14	34	54	670
9:00	0	24	271	21	316	0	13	145	35	193	0	48	7	9	64	0	6	4	33	43	616
9:15	1	20	239	13	273	2	23	162	29	216	0	57	8	5	70	0	7	7	47	61	620
9:30	1	16	199	16	232	0	18	150	28	196	0	50	19	3	72	0	8	12	31	51	551
9:45	0	14	161	11	186	0	11	148	25	184	0	42	13	4	59	0	5	11	38	54	483
10:00	0	22	178	7	207	0	13	148	33	194	0	37	11	4	52	0	8	9	22	39	492
10:15	2	17	164	8	191	1	10	135	32	178	0	43	13	9	65	0	9	6	18	33	467
10:30	0	26	138	7	171	1	9	145	40	195	0	38	10	6	54	0	6	8	14	28	448
10:45	0	22	160	6	188	0	12	130	34	176	0	41	10	14	65	0	2	4	11	17	446
11:00	0	21	166	7	194	1	11	149	33	194	0	36	7	9	52	0	4	6	12	22	462

Station ID: S1993150033

County: Montgomery

Comments: LOS AM:C PM:D

Date: Tuesday 02/28/2012

Town: none

Location: MD 97 at Morningwood Dr/Spartan

Weather: Sunny

Interval (dd): 15 min

PEAK HOURS	AM PERIOD 6:00AM-12:00PM					Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-19:00P				
	07:45	Montg	3011	C	0.88						16:45	Montg	3450	D	0.73

11:15	1	25	161	6	193	2	9	163	38	212	0	43	10	9	62	0	6	8	10	24	491
11:30	0	25	169	11	205	1	14	187	49	251	0	48	9	13	70	0	8	7	10	25	551
11:45	0	32	158	17	207	1	11	179	51	242	0	77	6	21	104	0	8	10	9	27	580
12:00	0	27	175	10	212	4	13	184	49	250	0	60	18	14	92	0	9	11	13	33	587
12:15	0	42	192	11	245	2	17	177	48	244	0	71	14	17	102	0	8	9	17	34	625
12:30	1	32	159	10	202	1	14	197	39	251	0	57	11	17	85	0	7	12	18	37	575
12:45	1	32	149	8	190	0	16	190	37	243	0	60	18	13	91	0	7	12	12	31	555
13:00	0	47	146	10	203	0	14	183	53	250	0	59	12	11	82	0	5	16	13	34	569
13:15	0	37	160	15	212	1	12	185	46	244	0	50	13	10	73	0	12	10	14	36	565
13:30	0	38	169	12	219	3	16	183	43	245	0	44	20	15	79	0	7	10	9	26	569
13:45	0	30	167	16	213	0	19	222	47	288	0	54	15	18	87	0	6	6	13	25	613
14:00	0	34	134	13	181	0	14	206	47	267	0	81	10	21	112	0	4	9	12	25	585
14:15	0	36	159	18	213	0	23	199	38	260	0	77	14	14	105	0	9	13	10	32	610
14:30	1	48	143	15	207	0	15	204	54	273	0	64	19	17	100	0	7	12	7	26	606
14:45	0	35	142	10	187	0	27	225	45	297	0	57	16	14	87	0	12	11	11	34	605
15:00	0	27	157	19	203	1	17	265	43	326	0	55	13	16	84	0	8	11	8	27	640
15:15	0	31	177	16	224	2	22	279	46	349	0	58	10	9	77	0	7	11	10	28	678
15:30	1	39	166	11	217	0	32	290	47	369	0	76	25	16	117	0	7	13	14	34	737
15:45	2	33	146	13	194	0	32	321	60	413	0	82	16	13	111	0	5	12	18	35	753
16:00	0	37	148	12	197	1	30	319	46	396	0	70	18	17	105	0	10	11	15	36	734
16:15	0	35	137	18	190	1	23	343	53	420	0	61	23	14	98	0	9	12	14	35	743
16:30	1	32	143	21	197	0	28	371	60	459	0	78	28	31	137	0	12	20	12	44	837
16:45	2	33	158	18	211	1	39	390	55	485	0	69	31	18	118	0	12	16	19	47	861
17:00	0	31	152	17	200	1	31	378	61	471	0	76	38	11	125	0	9	19	16	44	840
17:15	0	38	195	13	246	0	27	387	48	462	0	80	35	28	143	0	13	16	14	43	894
17:30	1	26	174	17	218	0	24	371	47	442	0	82	37	29	148	0	18	19	15	52	860

Station ID: S1993150033

County: Montgomery

Comments: LOS AM:C PM:D

Date: Tuesday 02/28/2012

Town: none

Location: MD 97 at Morningwood Dr/Spartan

Weather: Sunny

Interval (dd): 15 min

PEAK HOURS	AM PERIOD 6:00AM-12:00PM					PM PERIOD 12:00PM-19:00P				
	Start	End	Volume	LOS	V/C	Start	End	Volume	LOS	V/C
	07:45	Montg	3011	C	0.88	16:45	Montg	3450	D	0.73

17:45	0	27	180	21	228	0	28	350	48	426	0	74	37	19	130	0	11	13	18	42	826
18:00	0	31	164	16	211	0	29	361	59	449	0	65	28	14	107	0	13	24	18	55	822
18:15	2	38	179	14	233	1	24	323	54	402	0	83	37	18	138	0	15	12	13	40	813
18:30	1	32	159	17	209	0	34	327	71	432	0	70	29	16	115	0	11	20	9	40	796
18:45	1	39	151	20	211	0	27	313	62	402	0	71	26	11	108	0	14	10	6	30	751
19:00	1	40	179	13	233	0	33	292	53	378	0	59	24	20	103	0	10	17	11	38	752
TOTAL:	25	1442	10617	664	12748	32	931	11154	2175	14292	0	3067	831	629	4527	0	414	607	1016	2037	33604
AM Peak:	1	91	1506	46	1643	3	52	607	148	807	0	248	36	22	306	0	35	64	156	255	3011
PM Peak:	3	128	679	65	872	2	121	1526	211	1858	0	307	141	86	534	0	52	70	64	186	3450

Station ID: S1993150033

County: Montgomery

Comments: LOS AM:C PM:D

Date: Tuesday 02/28/2012

Town: none

Location: MD 97 at Morningwood Dr/Spartan

Weather: Sunny

Interval (dd): 15 min

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-19:00P	Start	End	Volume	LOS	V/C
		07:45	Montg	3011	C	0.88		16:45	Montg	3450	D	0.73

Hour Ending	MD 97 North Leg			MD 97 South Leg			Spartan Rd East Leg			Morningwood Dr West Leg		
	School Children	Pedestrians	Bicycles	School Children	Pedestrians	Bicycles	School Children	Pedestrians	Bicycles	School Children	Pedestrians	Bicycles
6:15	0	0	0	0	0	0	0	0	0	0	2	0
6:30	0	0	0	0	0	0	0	0	0	0	0	0
6:45	0	2	0	0	0	0	0	0	0	0	2	0
7:00	0	0	0	0	1	0	0	0	0	0	1	0
7:15	0	0	0	0	2	0	0	0	0	0	0	0
7:30	0	2	0	0	1	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0	0	0	0	0
8:00	0	2	0	0	0	0	0	0	0	0	2	0
8:15	0	0	0	0	3	0	0	0	0	0	1	0
8:30	0	0	0	0	0	0	0	0	0	0	1	0
8:45	0	2	0	0	2	0	0	0	0	0	1	0
9:00	0	1	0	0	1	0	0	0	0	0	1	0
9:15	0	0	0	0	1	0	0	0	0	0	2	0
9:30	0	2	0	0	0	0	0	0	0	0	2	0
9:45	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	1	0	0	0	0	0	0	0	0	1	0
10:15	0	1	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	0	1	0
10:45	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	2	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	1	0
11:30	0	2	0	0	0	0	0	0	0	0	0	0
11:45	0	2	0	0	0	0	0	0	0	0	0	0
12:00	0	1	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	2	0
12:30	0	2	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	1	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0

Station ID: S1993150033

County: Montgomery

Comments: LOS AM:C PM:D

Date: Tuesday 02/28/2012

Town: none

Location: MD 97 at Morningwood Dr/Spartan

Weather: Sunny

Interval (dd): 15 min

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-19:00P	Start	End	Volume	LOS	V/C
		07:45	Montg	3011	C	0.88		16:45	Montg	3450	D	0.73

13:15	0	1	0	0	0	0	0	3	0	0	1	0
13:30	0	0	0	0	4	0	0	0	0	0	0	0
13:45	0	1	0	0	0	0	0	0	0	0	0	0
14:00	0	1	0	0	0	0	0	0	0	0	0	0
14:15	0	1	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0	1	0
14:45	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	1	0	0	0	0	0	0	0	0	1	0
15:15	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
15:45	0	2	0	0	1	0	0	0	0	0	2	0
16:00	0	0	0	0	0	0	0	0	0	0	1	0
16:15	0	2	0	0	2	0	0	2	0	0	2	0
16:30	0	2	0	0	0	0	0	0	0	0	1	0
16:45	0	2	0	0	3	0	0	0	0	0	2	0
17:00	0	0	0	0	3	0	0	1	0	0	3	0
17:15	0	0	0	0	3	0	0	1	0	0	3	0
17:30	0	2	0	0	4	0	0	3	0	0	0	0
17:45	0	1	0	0	5	0	0	3	0	0	3	0
18:00	0	0	0	0	2	0	0	1	0	0	1	0
18:15	0	3	0	0	1	0	0	3	0	0	3	0
18:30	0	0	0	0	4	0	0	0	0	0	0	0
18:45	0	0	0	0	2	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	1	0	0	2	0
Total:	0	41	0	0	45	0	0	18	0	0	47	0
AM Pe	0	2	0	0	3	0	0	0	0	0	4	0
PM Pe	0	4	0	0	13	0	0	5	0	0	8	0

Station ID: S1993150033

County: Montgomery

Comments: LOS AM:C PM:D

Date: Tuesday 02/28/2012

Town: none

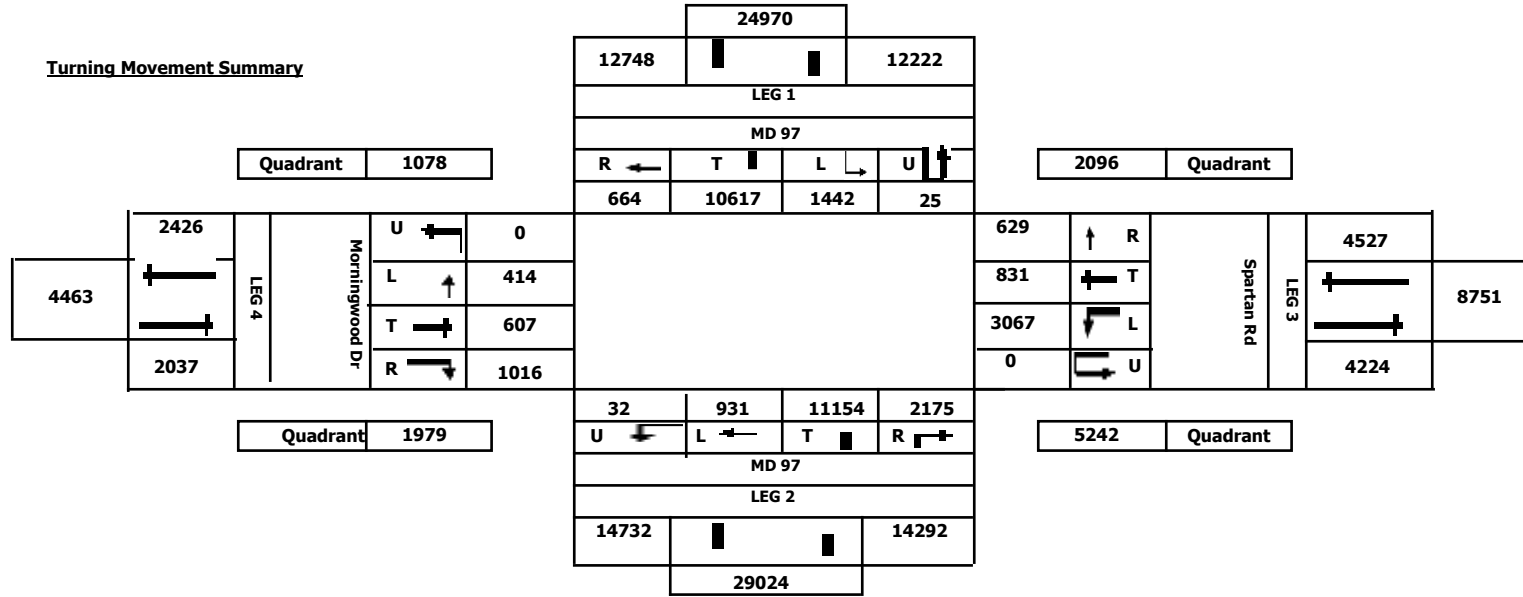
Location: MD 97 at Morningwood Dr/Spartan

Weather: Sunny

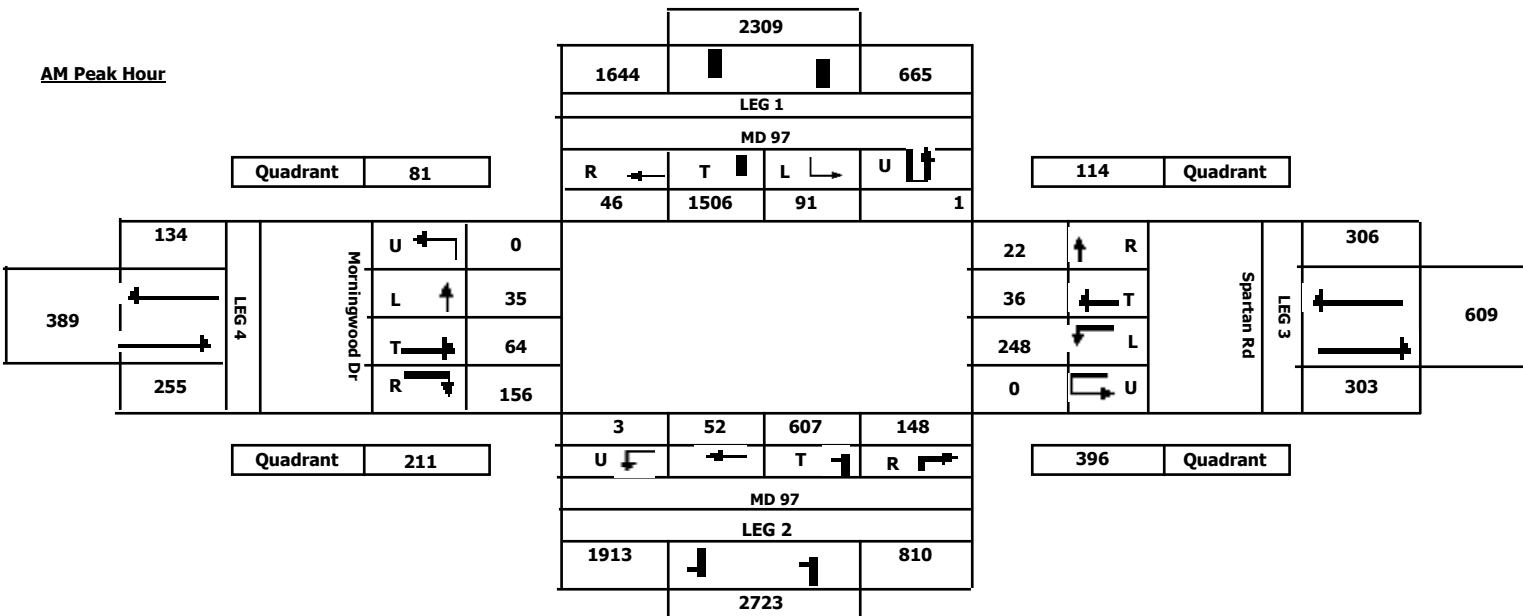
Interval 15 min
(dd):

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-19:00P	Start	End	Volume	LOS	V/C
		07:45	Montg	3011	C	0.88		16:45	Montg	3450	D	0.73

Turning Movement Summary



AM Peak Hour



Station ID: S1993150033

County: Montgomery

Comments: LOS AM:C PM:D

Date: Tuesday 02/28/2012

Town: none

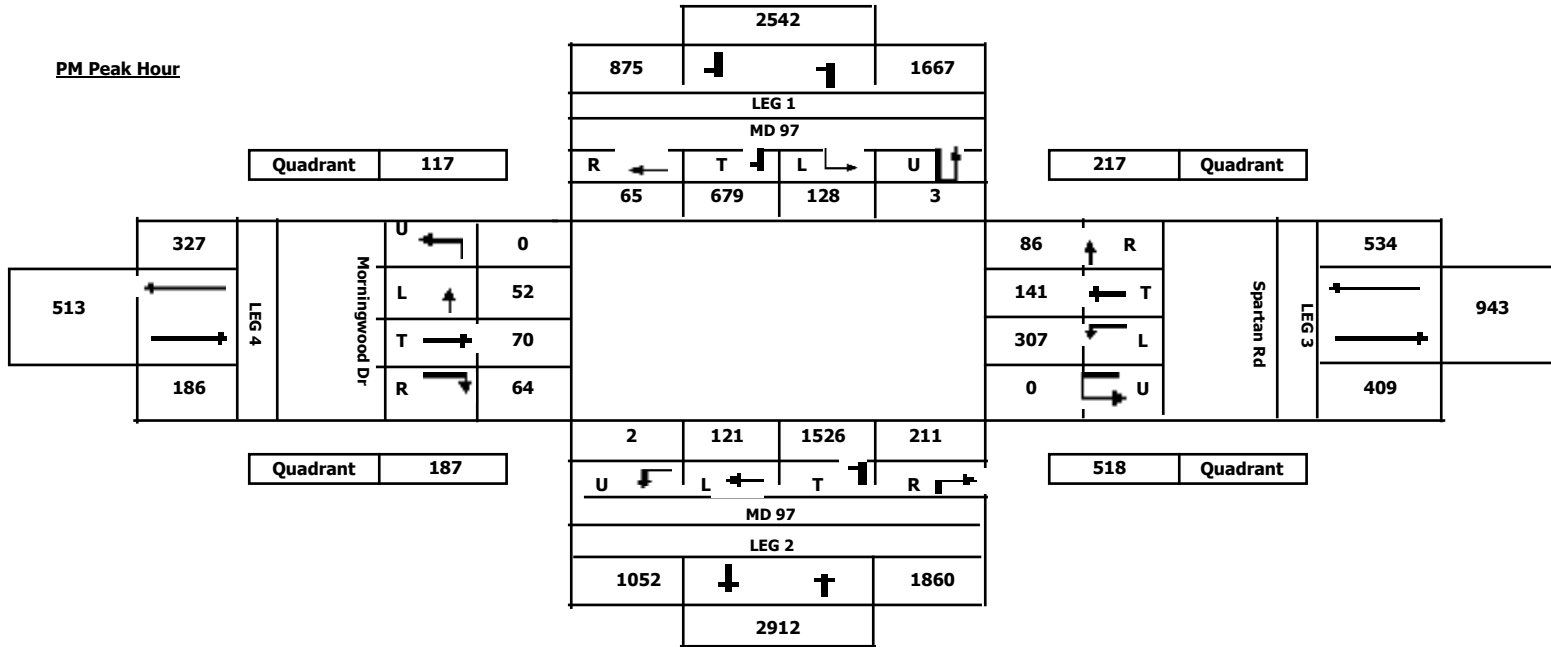
Location: MD 97 at Morningwood Dr/Spartan

Weather: Sunny

Interval (dd): 15 min

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	LOS	V/C	PM PERIOD 12:00PM-19:00P	Start	End	Volume	LOS	V/C
				07:45	Montg	3011		C	0.88		16:45	Montg

PM Peak Hour



**Maryland Department of Transportation
State Highway Administration
Highway Information Services Division**

Classified Count Detail Report

Station ID : B2743
Location : MD97-.50 MI S OF MD108
Date : 05/22/2018 to 05/23/2018

County : Montgomery
Compiled By : General User

5/22/2018 Direction: Northbound

Beginning Hour	Single-Unit Trucks				Single-Trailer Trucks				Multi-Trailer Trucks				Total	
	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 12		Class 13
	Motorcycles	Passenger Cars	Light Trucks	Buses	2 Axle 6 Tire	3 Axle	>=4 Axle	<=4 Axle	5 Axle	>=6 Axle	<=5 Axle	6 Axle		>=7 Axle
0:00	1	90	3	0	1	1	0	0	0	0	0	0	0	96
1:00	0	53	1	1	2	0	0	0	1	0	0	0	0	58
2:00	0	27	3	0	1	0	0	1	0	0	0	0	0	32
3:00	0	22	2	3	1	0	0	1	1	0	0	0	0	30
4:00	0	52	11	3	3	1	0	0	1	0	0	0	0	71
5:00	0	149	13	8	6	0	0	0	1	0	0	0	0	177
6:00	1	272	64	5	26	3	1	3	0	0	0	0	0	375
7:00	0	592	98	4	19	3	2	2	1	0	0	0	0	721
8:00	0	759	100	11	25	6	4	5	2	1	0	0	0	913
9:00	3	655	80	3	19	2	3	6	2	0	0	0	0	773
10:00	0	619	92	5	30	10	2	4	2	0	0	0	0	764
11:00	1	681	108	6	31	6	7	3	0	0	0	0	0	843
12:00	1	785	112	4	30	4	4	8	0	0	0	0	0	948
13:00	0	777	112	6	27	6	3	10	1	0	0	0	0	942
14:00	1	961	155	6	27	1	2	9	1	1	0	0	0	1164
15:00	9	1210	176	5	31	7	1	5	2	0	0	0	0	1446
16:00	12	1088	133	10	35	6	1	9	0	0	0	0	0	1294
17:00	4	1232	127	3	14	2	0	4	1	0	0	0	0	1387
18:00	0	1301	99	4	14	2	0	8	1	0	0	0	0	1429
19:00	1	968	64	5	14	0	0	7	2	0	0	0	0	1061
20:00	0	737	67	3	9	0	0	3	0	0	0	0	0	819
21:00	0	482	36	4	0	0	0	2	2	0	0	0	0	526
22:00	0	293	16	2	1	0	0	0	1	0	0	0	0	313
23:00	0	183	13	3	1	0	0	0	0	0	0	0	0	200
Total:	34	13988	1685	104	367	60	30	90	22	2	0	0	0	16,382
Percentage:	0.21%	85.39%	10.29%	0.63%	2.24%	0.37%	0.18%	0.55%	0.13%	0.01%	0.00%	0.00%	0.00%	
Total Class 1-3 :	15,707	Percent Class 1-3:	95.88%	Total Class 4:	104	Percent Class 4:	0.63%	Total Class 5-13:	571	Percent Class 5-13:	3.49%			

**Maryland Department of Transportation
State Highway Administration
Highway Information Services Division**

Classified Count Detail Report

Station ID : B2743
Location : MD97-.50 MI S OF MD108
Date : 05/22/2018 to 05/23/2018

County : Montgomery
Compiled By : General User

5/22/2018 Direction: Southbound

Beginning Hour	Single-Unit Trucks				Single-Trailer Trucks				Multi-Trailer Trucks				Total	
	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 12		Class 13
	Motorcycles	Passenger Cars	Light Trucks	Buses	2 Axle 6 Tire	3 Axle	>=4 Axle	<=4 Axle	5 Axle	>=6 Axle	<=5 Axle	6 Axle		>=7 Axle
0:00	0	21	5	3	1	1	0	0	1	0	0	0	0	32
1:00	0	8	1	1	0	0	0	0	0	0	0	0	0	10
2:00	0	2	3	0	4	0	0	1	1	0	0	0	0	11
3:00	0	8	9	0	2	0	0	1	0	0	0	0	0	20
4:00	0	63	23	2	8	2	0	1	1	0	0	0	0	100
5:00	0	360	88	4	11	1	0	0	0	0	0	0	0	464
6:00	8	923	195	5	55	4	0	14	1	0	0	0	0	1205
7:00	16	922	148	7	39	3	2	5	3	0	0	0	0	1145
8:00	1	1168	136	3	61	5	8	12	4	0	0	0	0	1398
9:00	3	1140	160	6	30	7	5	5	3	0	0	0	0	1359
10:00	0	772	137	8	22	4	6	4	3	0	0	0	0	956
11:00	0	757	119	3	23	9	2	9	2	0	0	0	0	924
12:00	1	797	119	9	25	11	5	3	0	0	0	0	0	970
13:00	0	723	106	3	24	6	2	5	0	0	0	0	0	869
14:00	1	746	97	3	18	2	2	3	2	0	0	0	0	874
15:00	2	897	90	5	28	2	0	0	2	0	0	0	0	1026
16:00	0	877	100	4	23	0	0	3	2	0	0	0	0	1009
17:00	2	863	91	5	11	0	1	0	0	0	0	0	0	973
18:00	2	779	86	4	17	2	0	0	0	0	0	0	0	890
19:00	1	633	66	6	15	0	0	0	0	0	0	0	0	721
20:00	0	494	60	4	8	0	0	1	2	0	0	0	0	569
21:00	0	445	25	3	2	0	0	0	1	0	0	0	0	476
22:00	0	203	16	2	0	0	0	0	1	0	0	0	0	222
23:00	0	83	6	1	2	0	0	0	0	0	0	0	0	92
Total:	37	13684	1886	91	429	59	33	67	29	0	0	0	0	16,315
Percentage:	0.23%	83.87%	11.56%	0.56%	2.63%	0.36%	0.20%	0.41%	0.18%	0.00%	0.00%	0.00%	0.00%	
Total Class 1-3 :	15,607	Percent Class 1-3:	95.66%	Total Class 4:	91	Percent Class 4:	0.56%	Total Class 5-13:	617	Percent Class 5-13:	3.78%			

**Maryland Department of Transportation
State Highway Administration
Highway Information Services Division**

Classified Count Detail Report

Station ID : B2743
Location : MD97-.50 MI S OF MD108
Date : 05/22/2018 to 05/23/2018

County : Montgomery
Compiled By : General User

5/22/2018 * Summary *****

Beginning Hour	Single-Unit Trucks				Single-Trailer Trucks					Multi-Trailer Trucks				Total
	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 12	Class 13	
	Motorcycles	Passenger Cars	Light Trucks	Buses	2 Axle 6 Tire	3 Axle	>=4 Axle	<=4 Axle	5 Axle	>=6 Axle	<=5 Axle	6 Axle	>=7 Axle	
0:00	1	111	8	3	2	2	0	0	1	0	0	0	0	128
1:00	0	61	2	2	2	0	0	0	1	0	0	0	0	68
2:00	0	29	6	0	5	0	0	2	1	0	0	0	0	43
3:00	0	30	11	3	3	0	0	2	1	0	0	0	0	50
4:00	0	115	34	5	11	3	0	1	2	0	0	0	0	171
5:00	0	509	101	12	17	1	0	0	1	0	0	0	0	641
6:00	9	1195	259	10	81	7	1	17	1	0	0	0	0	1580
7:00	16	1514	246	11	58	6	4	7	4	0	0	0	0	1866
8:00	1	1927	236	14	86	11	12	17	6	1	0	0	0	2311
9:00	6	1795	240	9	49	9	8	11	5	0	0	0	0	2132
10:00	0	1391	229	13	52	14	8	8	5	0	0	0	0	1720
11:00	1	1438	227	9	54	15	9	12	2	0	0	0	0	1767
12:00	2	1582	231	13	55	15	9	11	0	0	0	0	0	1918
13:00	0	1500	218	9	51	12	5	15	1	0	0	0	0	1811
14:00	2	1707	252	9	45	3	4	12	3	1	0	0	0	2038
15:00	11	2107	266	10	59	9	1	5	4	0	0	0	0	2472
16:00	12	1965	233	14	58	6	1	12	2	0	0	0	0	2303
17:00	6	2095	218	8	25	2	1	4	1	0	0	0	0	2360
18:00	2	2080	185	8	31	4	0	8	1	0	0	0	0	2319
19:00	2	1601	130	11	29	0	0	7	2	0	0	0	0	1782
20:00	0	1231	127	7	17	0	0	4	2	0	0	0	0	1388
21:00	0	927	61	7	2	0	0	2	3	0	0	0	0	1002
22:00	0	496	32	4	1	0	0	0	2	0	0	0	0	535
23:00	0	266	19	4	3	0	0	0	0	0	0	0	0	292
Total:	71	27,672.00	3,571.00	195.00	796.00	119.00	63.00	157.00	51.00	2.00	0.00	0.00	0.00	32,697
Percentage:	0.22%	84.63%	10.92%	0.60%	2.43%	0.36%	0.19%	0.48%	0.16%	0.01%	0.00%	0.00%	0.00%	
Total Class 1-3 :	31,314	Percent Class 1-3:	95.77%	Total Class 4:	195	Percent Class 4:	0.60%	Total Class 5-13:	1,188	Percent Class 5-13:	3.63%			

**Maryland Department of Transportation
State Highway Administration
Highway Information Services Division**

Classified Count Detail Report

Station ID : B2743
Location : MD97-.50 MI S OF MD108
Date : 05/22/2018 to 05/23/2018

County : Montgomery
Compiled By : General User

5/23/2018 Direction: Northbound

Beginning Hour	Single-Unit Trucks				Single-Trailer Trucks				Multi-Trailer Trucks				Total	
	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 12		Class 13
	Motorcycles	Passenger Cars	Light Trucks	Buses	2 Axle 6 Tire	3 Axle	>=4 Axle	<=4 Axle	5 Axle	>=6 Axle	<=5 Axle	6 Axle		>=7 Axle
0:00	0	73	4	0	1	0	0	0	1	0	0	0	0	79
1:00	1	47	3	1	1	1	0	0	1	0	0	0	0	55
2:00	2	19	1	0	3	0	0	0	0	0	0	0	0	25
3:00	0	11	2	0	1	0	0	0	1	0	0	0	0	15
4:00	0	48	8	4	3	1	0	1	3	0	0	0	0	68
5:00	0	126	23	4	10	0	0	0	1	0	0	0	0	164
6:00	5	278	72	3	32	1	0	2	1	0	0	0	0	394
7:00	1	523	98	8	21	4	0	7	1	0	0	0	1	664
8:00	3	743	111	17	31	1	4	8	5	1	0	0	0	924
9:00	2	667	95	5	29	5	5	6	2	0	0	0	0	816
10:00	2	659	87	7	17	2	5	11	2	0	0	0	0	792
11:00	1	725	102	2	32	5	4	7	3	0	0	0	0	881
12:00	4	831	127	4	31	1	2	7	2	0	0	0	0	1009
13:00	4	828	108	7	22	3	6	7	2	0	0	0	0	987
14:00	4	939	132	7	23	2	0	17	0	0	0	0	0	1124
15:00	7	1203	165	4	45	5	2	7	1	1	0	0	0	1440
16:00	15	1146	169	11	37	8	2	8	2	0	0	0	0	1398
17:00	6	1315	102	4	24	2	0	14	1	0	0	0	0	1468
18:00	10	1304	130	7	22	1	0	16	4	0	0	0	0	1494
19:00	8	1079	90	3	13	3	0	11	1	0	0	0	1	1209
20:00	6	825	67	5	9	0	0	7	2	0	0	0	0	921
21:00	3	562	27	2	2	1	0	1	1	0	0	0	0	599
22:00	0	394	23	4	2	1	0	2	1	0	0	0	0	427
23:00	1	191	18	2	3	0	0	0	1	0	0	0	0	216
Total:	85	14536	1764	111	414	47	30	139	39	2	0	0	2	17,169
Percentage:	0.50%	84.66%	10.27%	0.65%	2.41%	0.27%	0.17%	0.81%	0.23%	0.01%	0.00%	0.00%	0.01%	
Total Class 1-3 :	16,385	Percent Class 1-3:	95.43%	Total Class 4:	111	Percent Class 4:	0.65%	Total Class 5-13:	673	Percent Class 5-13:	3.92%			

**Maryland Department of Transportation
State Highway Administration
Highway Information Services Division**

Classified Count Detail Report

Station ID : B2743
Location : MD97-.50 MI S OF MD108
Date : 05/22/2018 to 05/23/2018

County : Montgomery
Compiled By : General User

5/23/2018 Direction: Southbound

Beginning Hour	Single-Unit Trucks				Single-Trailer Trucks					Multi-Trailer Trucks				Total
	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 12	Class 13	
	Motorcycles	Passenger Cars	Light Trucks	Buses	2 Axle 6 Tire	3 Axle	>=4 Axle	<=4 Axle	5 Axle	>=6 Axle	<=5 Axle	6 Axle	>=7 Axle	
0:00	0	11	1	0	0	0	0	0	1	0	0	0	0	13
1:00	2	5	3	1	1	2	0	0	0	0	0	0	0	14
2:00	0	3	2	0	1	1	0	0	1	0	0	0	0	8
3:00	1	6	2	0	2	1	0	0	0	0	0	0	0	12
4:00	1	40	13	1	4	1	0	2	2	0	0	0	0	64
5:00	8	304	86	5	15	2	0	1	2	0	0	0	0	423
6:00	5	966	205	6	57	7	1	16	2	0	0	0	0	1265
7:00	10	1270	187	4	57	4	2	16	3	0	0	0	0	1553
8:00	3	1221	149	4	65	7	0	10	3	0	0	0	0	1462
9:00	3	1038	144	5	36	5	1	13	3	0	0	0	0	1248
10:00	3	737	112	5	32	5	0	11	0	0	0	0	0	905
11:00	2	764	89	5	27	2	3	8	6	0	0	0	0	906
12:00	2	869	114	3	24	4	3	5	2	0	0	0	0	1026
13:00	3	797	80	7	10	2	2	4	2	0	0	0	0	907
14:00	1	773	87	8	16	1	2	4	1	0	0	0	0	893
15:00	1	852	74	6	40	6	1	8	0	0	0	0	0	988
16:00	1	925	82	3	29	2	0	5	2	0	0	0	0	1049
17:00	2	955	90	4	26	3	0	2	1	0	0	0	0	1083
18:00	0	955	93	3	17	2	0	4	1	0	0	0	0	1075
19:00	7	782	58	4	17	1	0	1	0	0	0	0	0	870
20:00	6	586	58	2	9	2	0	2	2	0	0	0	0	667
21:00	2	407	29	4	6	0	0	0	2	0	0	0	0	450
22:00	5	197	9	2	4	2	0	0	2	0	0	0	0	221
23:00	0	74	4	2	1	0	0	0	2	0	0	0	0	83
Total:	68	14537	1771	84	496	62	15	112	40	0	0	0	0	17,185
Percentage:	0.40%	84.59%	10.31%	0.49%	2.89%	0.36%	0.09%	0.65%	0.23%	0.00%	0.00%	0.00%	0.00%	
Total Class 1-3 :	16,376	Percent Class 1-3:	95.29%	Total Class 4:	84	Percent Class 4:	0.49%	Total Class 5-13:	725	Percent Class 5-13:	4.22%			

**Maryland Department of Transportation
State Highway Administration
Highway Information Services Division**

Classified Count Detail Report

Station ID : B2743
Location : MD97-.50 MI S OF MD108
Date : 05/22/2018 to 05/23/2018

County : Montgomery
Compiled By : General User

5/23/2018 * Summary *****

Beginning Hour	Single-Unit Trucks				Single-Trailer Trucks					Multi-Trailer Trucks				Total
	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 12	Class 13	
	Motorcycles	Passenger Cars	Light Trucks	Buses	2 Axle 6 Tire	3 Axle	>=4 Axle	<=4 Axle	5 Axle	>=6 Axle	<=5 Axle	6 Axle	>=7 Axle	
0:00	0	84	5	0	1	0	0	0	2	0	0	0	0	92
1:00	3	52	6	2	2	3	0	0	1	0	0	0	0	69
2:00	2	22	3	0	4	1	0	0	1	0	0	0	0	33
3:00	1	17	4	0	3	1	0	0	1	0	0	0	0	27
4:00	1	88	21	5	7	2	0	3	5	0	0	0	0	132
5:00	8	430	109	9	25	2	0	1	3	0	0	0	0	587
6:00	10	1244	277	9	89	8	1	18	3	0	0	0	0	1659
7:00	11	1793	285	12	78	8	2	23	4	0	0	0	1	2217
8:00	6	1964	260	21	96	8	4	18	8	1	0	0	0	2386
9:00	5	1705	239	10	65	10	6	19	5	0	0	0	0	2064
10:00	5	1396	199	12	49	7	5	22	2	0	0	0	0	1697
11:00	3	1489	191	7	59	7	7	15	9	0	0	0	0	1787
12:00	6	1700	241	7	55	5	5	12	4	0	0	0	0	2035
13:00	7	1625	188	14	32	5	8	11	4	0	0	0	0	1894
14:00	5	1712	219	15	39	3	2	21	1	0	0	0	0	2017
15:00	8	2055	239	10	85	11	3	15	1	1	0	0	0	2428
16:00	16	2071	251	14	66	10	2	13	4	0	0	0	0	2447
17:00	8	2270	192	8	50	5	0	16	2	0	0	0	0	2551
18:00	10	2259	223	10	39	3	0	20	5	0	0	0	0	2569
19:00	15	1861	148	7	30	4	0	12	1	0	0	0	1	2079
20:00	12	1411	125	7	18	2	0	9	4	0	0	0	0	1588
21:00	5	969	56	6	8	1	0	1	3	0	0	0	0	1049
22:00	5	591	32	6	6	3	0	2	3	0	0	0	0	648
23:00	1	265	22	4	4	0	0	0	3	0	0	0	0	299
Total:	153	29,073.00	3,535.00	195.00	910.00	109.00	45.00	251.00	79.00	2.00	0.00	0.00	2.00	34,354
Percentage:	0.45%	84.63%	10.29%	0.57%	2.65%	0.32%	0.13%	0.73%	0.23%	0.01%	0.00%	0.00%	0.01%	
Total Class 1-3 :	32,761	Percent Class 1-3:	95.36%	Total Class 4:	195	Percent Class 4:	0.57%	Total Class 5-13:	1,398	Percent Class 5-13:	4.07%			

**Maryland Department of Transportation
State Highway Administration
Highway Information Services Division**

Classified Count Detail Report

Station ID : B2743
Location : MD97-.50 MI S OF MD108
Date : 05/22/2018 to 05/23/2018

County : Montgomery
Compiled By : General User

5/23/2018 * Summary of Total Report *****

Beginning Hour	Single-Unit Trucks				Single-Trailer Trucks					Multi-Trailer Trucks				Total
	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 12	Class 13	
	Motorcycles	Passenger Cars	Light Trucks	Buses	2 Axle 6 Tire	3 Axle	>=4 Axle	<=4 Axle	5 Axle	>=6 Axle	<=5 Axle	6 Axle	>=7 Axle	
0:00	1	195	13	3	3	2	0	0	3	0	0	0	0	220
1:00	3	113	8	4	4	3	0	0	2	0	0	0	0	137
2:00	2	51	9	0	9	1	0	2	2	0	0	0	0	76
3:00	1	47	15	3	6	1	0	2	2	0	0	0	0	77
4:00	1	203	55	10	18	5	0	4	7	0	0	0	0	303
5:00	8	939	210	21	42	3	0	1	4	0	0	0	0	1228
6:00	19	2439	536	19	170	15	2	35	4	0	0	0	0	3239
7:00	27	3307	531	23	136	14	6	30	8	0	0	0	1	4083
8:00	7	3891	496	35	182	19	16	35	14	2	0	0	0	4697
9:00	11	3500	479	19	114	19	14	30	10	0	0	0	0	4196
10:00	5	2787	428	25	101	21	13	30	7	0	0	0	0	3417
11:00	4	2927	418	16	113	22	16	27	11	0	0	0	0	3554
12:00	8	3282	472	20	110	20	14	23	4	0	0	0	0	3953
13:00	7	3125	406	23	83	17	13	26	5	0	0	0	0	3705
14:00	7	3419	471	24	84	6	6	33	4	1	0	0	0	4055
15:00	19	4162	505	20	144	20	4	20	5	1	0	0	0	4900
16:00	28	4036	484	28	124	16	3	25	6	0	0	0	0	4750
17:00	14	4365	410	16	75	7	1	20	3	0	0	0	0	4911
18:00	12	4339	408	18	70	7	0	28	6	0	0	0	0	4888
19:00	17	3462	278	18	59	4	0	19	3	0	0	0	1	3861
20:00	12	2642	252	14	35	2	0	13	6	0	0	0	0	2976
21:00	5	1896	117	13	10	1	0	3	6	0	0	0	0	2051
22:00	5	1087	64	10	7	3	0	2	5	0	0	0	0	1183
23:00	1	531	41	8	7	0	0	0	3	0	0	0	0	591
Total:	224	56745	7106	390	1706	228	108	408	130	4	0	0	2	67,051
Percentage:	0.33%	84.63%	10.60%	0.58%	2.54%	0.34%	0.16%	0.61%	0.19%	0.01%	0.00%	0.00%	0.00%	
Total Class 1-3 :	64075	Percent Class 1-3:	95.56%	Total Class 4:	390.00	Percent Class 4:	0.58%	Total Class 5-13:	2586	Percent Class 5-13:	3.86%			



Maryland Department of Transportation
 State Highway Administration
 Highway Information Services Division

Volume Count Detail Report

Location ID : S2012150853
 Location : MORNINGWOOD DR - .10 MI WEST OF MD 97
 Date Range: 05/22/2018 to 05/23/2018

Date: 5/20/2018 Direction: Eastbound

Beginning Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Daily Avg	Weekday Avg	Weekend Avg
0:00	0	0	8	8	0	0	0	8	8	0
1:00	0	0	6	9	0	0	0	8	8	0
2:00	0	0	9	2	0	0	0	6	6	0
3:00	0	0	6	2	0	0	0	4	4	0
4:00	0	0	17	15	0	0	0	16	16	0
5:00	0	0	60	53	0	0	0	57	57	0
6:00	0	0	159	161	0	0	0	160	160	0
7:00	0	0	275	276	0	0	0	276	276	0
8:00	0	0	264	272	0	0	0	268	268	0
9:00	0	0	145	176	0	0	0	161	161	0
10:00	0	0	112	90	0	0	0	101	101	0
11:00	0	0	170	149	0	0	0	160	160	0
12:00	0	0	130	134	0	0	0	132	132	0
13:00	0	0	114	126	0	0	0	120	120	0
14:00	0	0	99	156	0	0	0	128	128	0
15:00	0	0	141	132	0	0	0	137	137	0
16:00	0	0	187	186	0	0	0	187	187	0
17:00	0	0	216	197	0	0	0	207	207	0
18:00	0	0	195	149	0	0	0	172	172	0
19:00	0	0	137	164	0	0	0	151	151	0
20:00	0	0	112	104	0	0	0	108	108	0
21:00	0	0	65	80	0	0	0	73	73	0
22:00	0	0	32	44	0	0	0	38	38	0
23:00	0	0	30	33	0	0	0	32	32	0
Total :	0	0	2,689	2,718	0	0	0	2,704	2,704	0

AMPeak Period HR.	7:00	7:00
6AM to 12PM CT.	275	276
PMPeak Period HR.	17:00	17:00
12PM to 6PM CT.	216	197



Maryland Department of Transportation
 State Highway Administration
 Highway Information Services Division

Volume Count Detail Report

Location ID : S2012150853
 Location : MORNINGWOOD DR - .10 MI WEST OF MD 97
 Date Range: 05/22/2018 to 05/23/2018

Date: 5/20/2018 Direction: Westbound

Beginning Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Daily Avg	Weekday Avg	Weekend Avg
0:00	0	0	26	23	0	0	0	25	25	0
1:00	0	0	10	13	0	0	0	12	12	0
2:00	0	0	8	2	0	0	0	5	5	0
3:00	0	0	5	4	0	0	0	5	5	0
4:00	0	0	7	8	0	0	0	8	8	0
5:00	0	0	18	3	0	0	0	11	11	0
6:00	0	0	58	50	0	0	0	54	54	0
7:00	0	0	114	88	0	0	0	101	101	0
8:00	0	0	139	105	0	0	0	122	122	0
9:00	0	0	174	121	0	0	0	148	148	0
10:00	0	0	135	148	0	0	0	142	142	0
11:00	0	0	137	118	0	0	0	128	128	0
12:00	0	0	171	145	0	0	0	158	158	0
13:00	0	0	156	171	0	0	0	164	164	0
14:00	0	0	139	195	0	0	0	167	167	0
15:00	0	0	252	225	0	0	0	239	239	0
16:00	0	0	222	266	0	0	0	244	244	0
17:00	0	0	293	284	0	0	0	289	289	0
18:00	0	0	215	253	0	0	0	234	234	0
19:00	0	0	181	236	0	0	0	209	209	0
20:00	0	0	132	171	0	0	0	152	152	0
21:00	0	0	118	131	0	0	0	125	125	0
22:00	0	0	64	81	0	0	0	73	73	0
23:00	0	0	44	50	0	0	0	47	47	0
Total :	0	0	2,818	2,891	0	0	0	2,855	2,855	0

AMPeak Period HR.	9:00	10:00
6AM to 12PM CT.	174	148
PMPeak Period HR.	17:00	17:00
12PM to 6PM CT.	293	284



Maryland Department of Transportation
 State Highway Administration
 Highway Information Services Division

Volume Count Detail Report

Location ID : S2012150853
 Location : MORNINGWOOD DR - .10 MI WEST OF MD 97
 Date Range: 05/22/2018 to 05/23/2018

Date: 5/20/2018 *** Summary of Total Report ***

Beginning Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Daily Avg	Weekday Avg	Weekend Avg
0:00	0	0	34	31	0	0	0	33	33	0
1:00	0	0	16	22	0	0	0	19	19	0
2:00	0	0	17	4	0	0	0	11	11	0
3:00	0	0	11	6	0	0	0	9	9	0
4:00	0	0	24	23	0	0	0	24	24	0
5:00	0	0	78	56	0	0	0	67	67	0
6:00	0	0	217	211	0	0	0	214	214	0
7:00	0	0	389	364	0	0	0	377	377	0
8:00	0	0	403	377	0	0	0	390	390	0
9:00	0	0	319	297	0	0	0	308	308	0
10:00	0	0	247	238	0	0	0	243	243	0
11:00	0	0	307	267	0	0	0	287	287	0
12:00	0	0	301	279	0	0	0	290	290	0
13:00	0	0	270	297	0	0	0	284	284	0
14:00	0	0	238	351	0	0	0	295	295	0
15:00	0	0	393	357	0	0	0	375	375	0
16:00	0	0	409	452	0	0	0	431	431	0
17:00	0	0	509	481	0	0	0	495	495	0
18:00	0	0	410	402	0	0	0	406	406	0
19:00	0	0	318	400	0	0	0	359	359	0
20:00	0	0	244	275	0	0	0	260	260	0
21:00	0	0	183	211	0	0	0	197	197	0
22:00	0	0	96	125	0	0	0	111	111	0
23:00	0	0	74	83	0	0	0	79	79	0
Total:	0	0	5,507	5,609	0	0	0	5,558	5,558	0

AMPeak Period HR.:	8:00	8:00
6AM to 12PM CT.:	403	377

PMPeak Period HR.	17:00	17:00
12PM to 6PM CT.	509	481



Appendix C

Signal Timing Plan Data

INT.#	Cabinet Type	System	INTERSECTION NAME:													TS.#				
358	ASC3 TS2	TSS	Georgia Ave. (MD 97) & Olney-Laytonsville Rd / Olney-Sandy Spring Rd. (MD 108)													E.3				
S-Cabinet		Hubbette: KB																		
2-1 CONTROLLER TIMING DATA			EBLT Olney-Laytonsville Rd. (MD 108)	WB Olney-Sandy Spring Rd (MD 108)	NBLT Georgia Ave. (MD 97)	SB Georgia Ave. (MD 97)	WBLT Olney-Sandy Spring Rd. (MD 108)	EB Olney-Laytonsville Rd. (MD 108)	SBLT Georgia Ave. (MD 97)	NB Georgia Ave. (MD 97)										
TIMING PLAN 1																				
PHASE			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
MINIMUM GREEN			3	7	5	5	3	7	5	5										
BICYCLE MINIMUM GREEN																				
CONDITIONAL SERVICE MINIMUM GREEN																				
DELAYED GREEN																				
WALK			0	7	0	7	0	7	0	7										
WALK 2																				
WALK MAX																				
PEDESTRIAN CLEARANCE			0	22	0	24	0	22	0	24										
PEDESTRIAN CLEARANCE 2																				
PEDESTRIAN CLEARANCE MAX																				
PEDESTRIAN CARRY OVER																				
VEHICLE EXTENSION			3.0	0.0	5.0	5.0	3.0	0.0	5.0	5.0										
VEHICLE EXTENSION 2																				
MAX1			10	40	30	40	20	40	15	40										
MAX2			15	50	60	80	40	50	15	80										
MAX3									20											
DYNAMIC MAX																				
DYNAMIC MAX STEP																				
YELLOW CHANGE			3.5	4.5	3.5	4.0	3.5	4.5	3.5	4.0										
RED CLEARANCE			3.0	3.0	4.5	3.0	3.0	3.0	4.0	3.0										
RED MAX																				
RED REVERT			5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
ACTUATIONS BEFORE GAP REDUCTION																				
SECONDS PER ACTIONS ADDED TO INITIAL																				
MAXIMUM ADDED INITIAL GREEN																				
TIME BEFORE GAP REDUCTION																				
CARS WAITING BEFORE GAP REDUCTION																				
STEP TO REDUCE																				
TIME TO REDUCE TO MINIMUM																				
MINIMUM GAP																				

*max 1
max 2
@ 09/24*

* TIMING PURPOSES ONLY

TOD (Late) Flash 24 Hour Color

Spec. Action Plan

Spec. Action Plan

Submitted by / Date: TF 11/14/18

Checked by / Date

KHammad 11/14/18

Approved by / Date

KHammad 11/14/18

In Service by / Date/Time

*766 768 773
785 774 782*

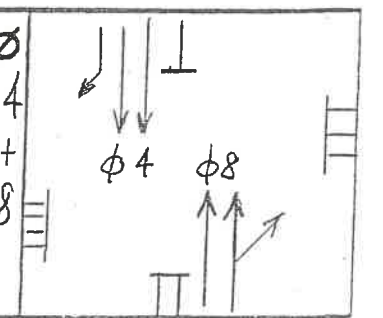
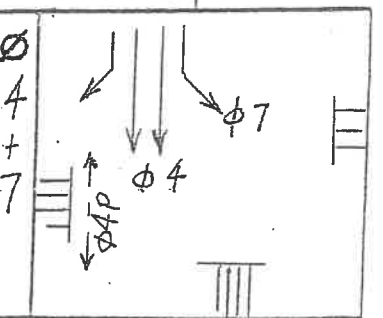
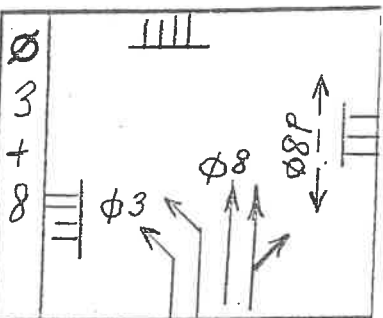
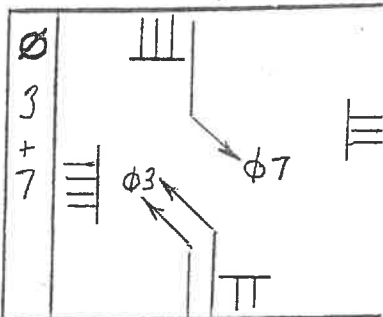
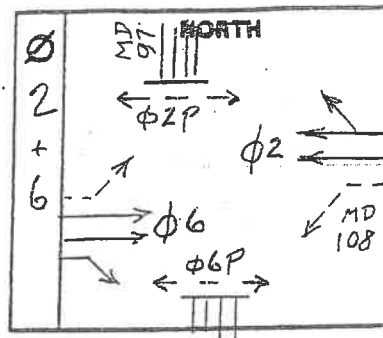
SEQUENCE OF OPERATION SHEET
TRAFFIC OPERATIONS SECTION
DIVISION OF TRAFFIC ENGINEERING
MONTGOMERY COUNTY, MARYLAND

1 OF 2
 NO. 358-E

INTERSECTION: Georgia Ave (MD 97) & Olney - Sandy Spring Rd. (MD 108) PHASING

SIGNAL NO.	SIGNAL HEAD INDICATIONS				
	4, 5, 8, 9	10, 11, 13, 14		1-3, 6, 7	16-23
TOTAL:	12, 15 / 6	4		5	8
LEGEND	(R)	(R)	(R)	←(R)	(R)
○ OPTICALLY LIMITED	(Y)	(Y) (Y)	(Y) (Y)	←(Y)	(Y) (Y)
R - RED	(G)	(G) (G)	(G) (G)	←(G)	(G) (G)
Y - YELLOW					
G - GREEN					
← ARROW					
F - FLASHING					
	12"	12"	12"	12"	12" 8"

16" PEDESTRIAN COUNTDOWN SIGNAL HEAD "LED" TYPE
 APS Push Buttons



SIGNAL NO.	SEQUENCE OF OPERATION													FLASH	
	INTERVAL														
1	←R	←R	←R	←R	←G	←Y	←R	←G	←Y	←R	←R	←R	←R	←R	←R
2	←R	←R	←R	←R	←G	←Y	←R	←G	←Y	←R	←R	←R	←R	←R	←R
3	←R	←R	←R	←R	←G	←Y	←R	←G	←Y	←R	←R	←R	←R	←R	←R
4	R	R	R	R	R	R	R	R	G	G	G	R	R	R	R
5	R	R	R	R	R	R	R	R	G	G	G	R	R	R	R
6	←R	←R	←R	←R	←G	←Y	←R	←R	←R	←R	←G	←Y	←R	←R	←R
7	←R	←R	←R	←R	←G	←Y	←R	←R	←R	←R	←G	←Y	←R	←R	←R
8	R	R	R	R	R	R	R	R	R	R	G	G	G	R	R
9	R	R	R	R	R	R	R	R	R	R	G	G	G	R	R
10	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R
11	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R
12	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R
13	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R
14	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R
15	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R
16	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	W	W	W	W
17	DW	DW	DW	DW	DW	DW	DW	W	W	W	DW	DW	DW	DW	DW
18	DW	DW	DW	DW	DW	DW	DW	W	W	W	DW	DW	DW	DW	DW
19	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	W	W	W	W	W
20	W	DWF	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW
21	W	DWF	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW
22	W	DWF	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW
23	W	DWF	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW
24															
PHASE	2+6	ALL RED	3+7	ALL RED	3+8	ALL RED	4+7	ALL RED							F

NOTES: E FOR CDP, LED, APS - SHA RECONSTRUCTION

SUBMITTED: CR 10/2/09 CHECKED: KHamud 10/2/09 APPROVED: KHamud 10/2/09
 IN SERVICE BY: 762/777 DATE: 6/7/2010 TIME: _____

INT.#	Cabinet Type	System	INTERSECTION NAME:	TS.#
131	S	TSS	Georgia Ave-Morningwood Dr.-Spartan Rd.	F.0

S-Cabinet

2-1 CONTROLLER TIMING DATA	NBLT GEORGIA AVE	SB GEORGIA AVE	EB MORNINGWOOD DR	WB SPARTAN RD	SBLT GEORGIA AVE	NB GEORGIA AVE											
TIMING PLAN	1																
PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
MINIMUM GREEN	3	7	5	5	3	7											
BICYCLE MINIMUM GREEN																	
CONDITIONAL SERVICE MINIMUM GREEN																	
DELAYED GREEN																	
WALK		7	7	7		7											
WALK 2																	
WALK MAX																	
PEDESTRIAN CLEARANCE		10	14	14		10											
PEDESTRIAN CLEARANCE 2																	
PEDESTRIAN CLEARANCE MAX																	
PEDESTRIAN CARRY OVER																	
VEHICLE EXTENSION	3.0		3.0	3.0	3.0												
VEHICLE EXTENSION 2																	
MAX1	10	70	20	25	20	70											
MAX2	20	60	40	60	30	60											
MAX3																	
DYNAMIC MAX																	
DYNAMIC MAX STEP																	
YELLOW CHANGE	3.5	4.5	3.5	4.0	3.5	4.5											
RED CLEARANCE	2.5	2.0	2.5	2.0	2.5	2.0											
RED MAX																	
RED REVERT	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
ACTUATIONS BEFORE GAP REDUCTION																	
SECONDS PER ACTIONS ADDED TO INITIAL																	
MAXIMUM ADDED INITIAL GREEN																	
TIME BEFORE GAP REDUCTION																	
CARS WAITING BEFORE GAP REDUCTION																	
STEP TO REDUCE																	
TIME TO REDUCE TO MINIMUM																	
MINIMUM GAP																	

* TIMING PURPOSES ONLY

TOD (Late) Flash 00:30 - 05:30 7 Days

Spec. Action Plan AP 30 puts phase 1 on MAX RECALL 08:45-09:45 M-F

Spec. Action Plan

Submitted by / Date: GBURLEY 1-7-2014

Checked by / Date

Khammad 10/30/14

Approved by / Date

Khammad 10/30/14

In Service by / Date/Time

CRIS, S.L. SHA

3/11/16 @ 1330

MD 97
 RUNS IN A
 NORTH-SOUTH
 DIRECTION

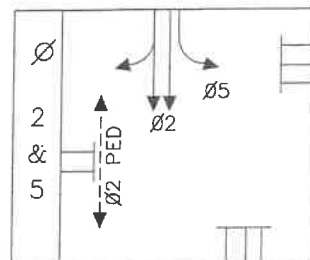
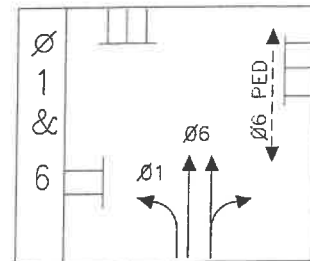
SEQUENCE OF OPERATION SHEET

TRAFFIC OPERATIONS SECTION
 DIVISION OF TRAFFIC ENGINEERING
 MONTGOMERY COUNTY, MARYLAND

NO. 131 F
 SHT. 2 OF 2
 PHASING

INTERSECTION: GEORGIA AVE (MD 97) & MORNINGWOOD DR / SPARTAN RD

SIGNAL NO.	SIGNAL HEAD INDICATIONS				
		7,8,10,11	1,2,4,5	3,6,9,12	13-20
TOTAL:		4	4	4	8
LEGEND					
R RED					
Y YELLOW					
G GREEN					
← ARROW					
F FLASHING					
	12"	12"	12"	12"	8"/12"



SIGNAL NO.	SEQUENCE OF OPERATION																		FLASH
	INTERVAL																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
1	G	Y	G	R	R	R													Y
2	G	Y	G	R	R	R													Y
3	G	G	G	R	R	R													Y
4	R	R	R	G	Y	G													Y
5	R	R	R	G	Y	G													Y
6	R	R	R	G	G	G													Y
7	R	R	R	R	R	R													R
8	R	R	R	R	R	R													R
9	R	R	R	R	R	R													R
10	R	R	R	R	R	R													R
11	R	R	R	R	R	R													R
12	R	R	R	R	R	R													R
13	W	W	W	DW	DW	DW													DARK
14	W	W	W	DW	DW	DW													DARK
15	DW	DW	DW	W	W	W													DARK
16	DW	DW	DW	W	W	W													DARK
17	DW	DW	DW	DW	DW	DW													DARK
18	DW	DW	DW	DW	DW	DW													DARK
19	DW	DW	DW	DW	DW	DW													DARK
20	DW	DW	DW	DW	DW	DW													DARK
PHASE	1 & 6	ALL RED	2 & 5	ALL RED															

NOTES: F: ADD CPS, APS & CHANGE SIGNALS TO LEDS, CHANGE CABINET TO S CABINET

SUBMITTED: GBURLEY 1-7-2014

CHECKED: *K Hamid 10/30/14*

APPROVED: *K Hamid 10/30/14*

IN SERVICE BY: *CR/JS/SHA*

DATE: *3/11/16*

TIME: *1330*

MD 97
 RUNS IN A
 NORTH-SOUTH
 DIRECTION

SEQUENCE OF OPERATION SHEET

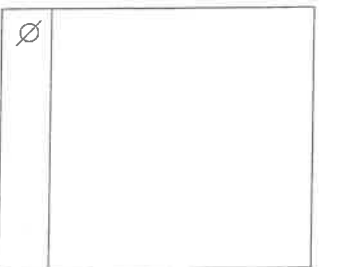
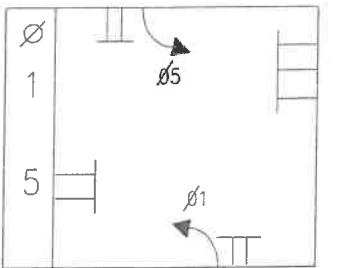
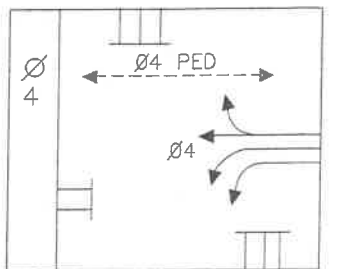
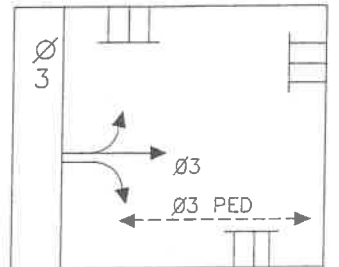
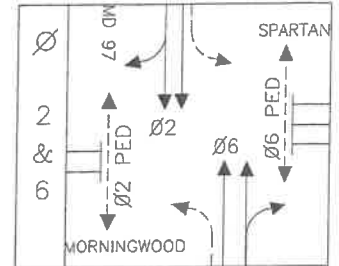
TRAFFIC OPERATIONS SECTION
 DIVISION OF TRAFFIC ENGINEERING
 MONTGOMERY COUNTY, MARYLAND

NO. 131 F
 SHT. 1 OF 2

PHASING
 NORTH

INTERSECTION: GEORGIA AVE (MD 97) & MORNINGWOOD DR / SPARTAN RD

SIGNAL NO.	SIGNAL HEAD INDICATIONS					
		7,8,10,11	1,2,4,5	3,6,9,12	13-20	
TOTAL:		4	4	4	8	
LEGEND	 12"	 12"	 12"	 12"	 8"/12"	 12" 16"



SIGNAL NO.	SEQUENCE OF OPERATION																	FLASH	
	INTERVAL																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		18
1	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	
2	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	
3	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	
4	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	
5	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	
6	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	
7	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	
8	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	
9	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	
10	R	R	R	R	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	
11	R	R	R	R	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	
12	R	R	R	R	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	
13	W	FDW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK	
14	W	FDW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK	
15	W	FDW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK	
16	W	FDW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK	
17	DW	DW	DW	DW	DW	DW	DW	DW	DW	W	FDW	DW	DW	DW	DW	DW	DW	DARK	
18	DW	DW	DW	DW	DW	DW	DW	DW	DW	W	FDW	DW	DW	DW	DW	DW	DW	DARK	
19	DW	DW	DW	DW	W	FDW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK	
20	DW	DW	DW	DW	W	FDW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK	
PHASE	2 & 6	ALL RED	3					ALL RED	4				ALL RED	1 & 5	ALL RED				

NOTES: F: ADD CPS, APS & CHANGE SIGNALS TO LEDS & UPGRADE VIDEO DETECTION
 INSTALL MSHA "S" CABINET WITH BATTERY BACKUP

SUBMITTED: GBURLEY 1-7-2014 CHECKED: K Hamid 10/30/14 APPROVED: K Hamid 10/30/14
 IN SERVICE BY: CR/S.L./SHP DATE: 3/11/16 TIME: 1330

SIG#0358 Hub-KB

PHASE IN USE/PED

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
IN USE	X	X	X	X	X	X	X	X								
EXCLUSIVE PED																

PLAN 1

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MIN GRN	3	7	5	5	3	7	5	5	0	0	0	0	0	0	0	0
BK MGRN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS MGRN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DLY GRN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WALK	0	7	0	7	0	7	0	7	0	0	0	0	0	0	0	0
WALK2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WLK MAX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PED CLR	0	22	0	24	0	22	0	24	0	0	0	0	0	0	0	0
PD CLR2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PC MAX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PED CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VEH EXT	3.0	0.0	5.0	5.0	3.0	0.0	5.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
VH EXT2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX1	10	40	30	40	20	40	15	40	0	0	0	0	0	0	0	0
MAX2	25	50	60	80	40	50	20	80	0	0	0	0	0	0	0	0
MAX3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM MAX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM STP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOW	3.5	4.5	3.5	4.0	3.5	4.5	3.5	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
RED CLR	3.0	3.0	4.5	3.0	3.0	3.0	4.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RED MAX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RED RVT	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ACT B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SEC/ACT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX INT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TIME B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CARS WT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDUC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTREDUC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MIN GAP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

PLAN 1

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
LOCK DET	X		X	X	X		X	X								
VE RCALL																
PD RCALL		X				X										
MX RCALL		X				X										
SF RCALL																
NO REST																
AI CALC																

COORDINATOR OPTIONS

MANUAL PATTERN	AUTO	ECPI COORD	X
SYSTEM SOURCE	SYS	SYSTEM FORMAT	STD
SPLITS IN	SECONDS	OFFSET IN	SECONDS
TRANSITION	SMOOTH	MAX SELECT	MAX2
DWELL/ADD TIME	255	FORCE OFF	FIXED
DLY COORD WK-LZ		CAL USE PED TM	X
OFFSET REF	LAG	PED RESERVE	
PED RECALL	X	FO ADD INI GRN	
LOCAL ZERO OVRD		MULTISYNC	
RE-SYNC COUNT	1		

COORDINATOR PATTERN 1

USE SPLIT PATTERN	1	TIMING PLAN	1
CYCLE	150	SEQUENCE	1
OFFSET VAL	125	ACTION PLAN	0
ACTUATED COORD		FORCE OFF	NONE
ACT WALK REST		VEH PERM 1	1
PHASE RESERVICE		VEH PERM 2	0
MAX SELECT	NONE	VEH PERM 2 - DISP	0
STD (COS)	111	XART PTRN.	0
DWELL/ADD TIME	0		

RING CONFIG

RING	1	2	3	4	RING	1	2	3	4	RING	1	2	3	4
SPLT EXT	0	0	0	0	SPLIT DEMAND PTRN.	0	0			RING DISP	0	0	0	0

SPLIT PREF PHASES

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PREF 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PREF 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PHASE MODES

Phase	1	2	3	4	5	6	7	8
COORD		X				X		
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

PHASE MODES

Phase	9	10	11	12	13	14	15	16
COORD								
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

SF OUT

PHASE	1	2	3	4	5	6	7	8
SF OUT								

COORDINATOR PATTERN 2

USE SPLIT PATTERN	2	ACTUATED COORD	
CYCLE	120	ACT WALK REST	
OFFSET VAL	77	PHASE RESERVICE	

COORDINATOR PATTERN 2

MAX SELECT	NONE	FORCE OFF	NONE
STD (COS)	121	VEH PERM 1	1
DWELL/ADD TIME	0	VEH PERM 2	0
TIMING PLAN	1	VEH PERM 2 - DISP	0
SEQUENCE	1	XART PTRN.	0
ACTION PLAN	0		

RING CONFIG

RING	1	2	3	4	RING	1	2	3	4	RING	1	2	3	4
SPLT EXT	0	0	0	0	SPLIT DEMAND PTRN.	0	0			RING DISP		0	0	0

SPLIT PREF PHASES

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PREF 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PREF 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PHASE MODES

Phase	1	2	3	4	5	6	7	8
COORD		X				X		
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

PHASE MODES

Phase	9	10	11	12	13	14	15	16
COORD								
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

SF OUT

PHASE	1	2	3	4	5	6	7	8
SF OUT								

COORDINATOR PATTERN 3

USE SPLIT PATTERN	3	TIMING PLAN	1
CYCLE	165	SEQUENCE	1
OFFSET VAL	130	ACTION PLAN	0
ACTUATED COORD		FORCE OFF	NONE
ACT WALK REST		VEH PERM 1	1
PHASE RESERVICE		VEH PERM 2	0
MAX SELECT	NONE	VEH PERM 2 - DISP	0
STD (COS)	131	XART PTRN.	0
DWELL/ADD TIME	0		

RING CONFIG

RING	1	2	3	4	RING	1	2	3	4	RING	1	2	3	4
SPLT EXT	0	0	0	0	SPLIT DEMAND PTRN.	0	0			RING DISP		0	0	0

SPLIT PREF PHASES

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PREF 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PREF 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PHASE MODES

Phase	1	2	3	4	5	6	7	8
COORD		X				X		
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

PHASE MODES

Phase	9	10	11	12	13	14	15	16
COORD								
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

SF OUT

PHASE	1	2	3	4	5	6	7	8
SF OUT								

COORDINATOR PATTERN 4

USE SPLIT PATTERN	4	TIMING PLAN	1
CYCLE	120	SEQUENCE	1
OFFSET VAL	77	ACTION PLAN	0
ACTUATED COORD		FORCE OFF	NONE
ACT WALK REST		VEH PERM 1	1
PHASE RESERVICE		VEH PERM 2	0
MAX SELECT	NONE	VEH PERM 2 - DISP	0
STD (COS)	141	XART PTRN.	0
DWELL/ADD TIME	0		

RING CONFIG

RING	1	2	3	4	RING	1	2	3	4	RING	1	2	3	4
SPLT EXT	0	0	0	0	SPLIT DEMAND PTRN.	0	0			RING DISP		0	0	0

SPLIT PREF PHASES

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PREF 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PREF 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PHASE MODES

Phase	1	2	3	4	5	6	7	8
COORD		X				X		
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

PHASE MODES

Phase	9	10	11	12	13	14	15	16
COORD								
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

SF OUT

PHASE	1	2	3	4	5	6	7	8
SF OUT								

Split 1

PHASE	1	2	3	4	5	6	7	8
SPLIT	21	53	30	46	21	53	30	46
COORD		X				X		
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

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Split 1								
PHASE	9	10	11	12	13	14	15	16
SPLIT	0	0	0	0	0	0	0	0
COORD								
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

Split 2								
PHASE	1	2	3	4	5	6	7	8
SPLIT	20	38	24	38	20	38	24	38
COORD		X				X		
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

Split 2								
PHASE	9	10	11	12	13	14	15	16
SPLIT	0	0	0	0	0	0	0	0
COORD								
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

Split 3								
PHASE	1	2	3	4	5	6	7	8
SPLIT	30	50	40	45	30	50	25	60
COORD		X				X		
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

Split 3								
PHASE	9	10	11	12	13	14	15	16
SPLIT	0	0	0	0	0	0	0	0
COORD								
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

Split 4								
PHASE	1	2	3	4	5	6	7	8
SPLIT	20	38	24	38	20	38	24	38
COORD		X				X		
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

Split 4								
PHASE	9	10	11	12	13	14	15	16
SPLIT	0	0	0	0	0	0	0	0
COORD								
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

ACTION PLAN 1			
PATTERN	1	FLASH	
TIMING PLAN	1	VEH DET DIAG PLN	0
VEH DET PLAN	0	DIMMING ENABLE	
		SYS OVERRIDE	
		SEQUENCE	1
		DET LOG	0
		RED REST	
		PED DET DIAG PLN	0
		PRIORITY RETURN	

NextEdit

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ACTION PLAN 1

PED PR RETURN		QUEUE DELAY		PMT COND DELAY	
---------------	--	-------------	--	----------------	--

PHASE TABLE

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PED RCL																
WALK 2																
VEX 2																
VEH RCL																
MAX RCL																
MAX 2																
MAX 3																
CS INH																
OMIT																
SPC FCT																
AUX FCT																

LP TABLE

LP Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15
LP 16-30
LP 31-45
LP 46-60
LP 61-75
LP 76-90
LP 91-100

ACTION PLAN 2

PATTERN	2	SYS OVERRIDE		PED PR RETURN	
TIMING PLAN	1	SEQUENCE	1	QUEUE DELAY	
VEH DET PLAN	0	DET LOG	0	PMT COND DELAY	
FLASH		RED REST			
VEH DET DIAG PLN	0	PED DET DIAG PLN	0		
DIMMING ENABLE		PRIORITY RETURN			

PHASE TABLE

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PED RCL																
WALK 2																
VEX 2																
VEH RCL																
MAX RCL																
MAX 2																
MAX 3																
CS INH																
OMIT																
SPC FCT																

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PHASE TABLE

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
AUX FCT																

LP TABLE

LP Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15
LP 16-30
LP 31-45
LP 46-60
LP 61-75
LP 76-90
LP 91-100

ACTION PLAN 3

PATTERN	3	SYS OVERRIDE		PED PR RETURN	
TIMING PLAN	1	SEQUENCE	1	QUEUE DELAY	
VEH DET PLAN	0	DET LOG	0	PMT COND DELAY	
FLASH		RED REST			
VEH DET DIAG PLN	0	PED DET DIAG PLN	0		
DIMMING ENABLE		PRIORITY RETURN			

PHASE TABLE

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PED RCL																
WALK 2																
VEX 2																
VEH RCL																
MAX RCL																
MAX 2																
MAX 3																
CS INH																
OMIT																
SPC FCT																
AUX FCT																

LP TABLE

LP Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15
LP 16-30
LP 31-45
LP 46-60
LP 61-75
LP 76-90
LP 91-100

ACTION PLAN 4

PATTERN	4	SYS OVERRIDE		PED PR RETURN	
TIMING PLAN	1	SEQUENCE	1	QUEUE DELAY	
VEH DET PLAN	0	DET LOG	0	PMT COND DELAY	
FLASH		RED REST			
VEH DET DIAG PLN	0	PED DET DIAG PLN	0		
DIMMING ENABLE		PRIORITY RETURN			

PHASE TABLE

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PED RCL																
WALK 2																
VEX 2																
VEH RCL																
MAX RCL																
MAX 2																
MAX 3																
CS INH																
OMIT																
SPC FCT																
AUX FCT																

LP TABLE

LP Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15
LP 16-30
LP 31-45
LP 46-60
LP 61-75
LP 76-90
LP 91-100

Day Plan 1

EVENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
ACTION PLAN	4	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	6	10	15	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 1

EVENT	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
ACTION PLAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 2

EVENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
ACTION PLAN	4	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 2

EVENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
START TIME - HH	0	6	10	15	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 2

EVENT	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
ACTION PLAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 3

EVENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
ACTION PLAN	4	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	6	10	15	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 3

EVENT	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
ACTION PLAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 4

EVENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
ACTION PLAN	4	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	6	10	15	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 4

EVENT	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
ACTION PLAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 5

EVENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
ACTION PLAN	4	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	6	10	15	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 5

EVENT	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
ACTION PLAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 6

EVENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
ACTION PLAN	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 6

EVENT	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
ACTION PLAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 7

EVENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
ACTION PLAN	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 7

EVENT	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
ACTION PLAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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PHASE IN USE/PED

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
IN USE	X	X	X	X	X	X										
EXCLUSIVE PED																

PLAN 1

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MIN GRN	3	7	5	5	3	7	0	0	0	0	0	0	0	0	0	0
BK MGRN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS MGRN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DLY GRN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WALK	0	7	7	7	0	7	0	0	0	0	0	0	0	0	0	0
WALK2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WLK MAX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PED CLR	0	10	14	14	0	10	0	0	0	0	0	0	0	0	0	0
PD CLR2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PC MAX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PED CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VEH EXT	3.0	0.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
VH EXT2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX1	10	70	20	25	20	70	0	0	0	0	0	0	0	0	0	0
MAX2	20	60	40	60	30	60	0	0	0	0	0	0	0	0	0	0
MAX3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM MAX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM STP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOW	3.5	4.5	3.5	4.0	3.5	4.5	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
RED CLR	2.5	2.0	2.5	2.0	2.5	2.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
RED MAX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RED RVT	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
ACT B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SEC/ACT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX INT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TIME B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CARS WT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDUC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTREDUC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MIN GAP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

PLAN 1

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
LOCK DET																
VE RCALL																
PD RCALL		X				X										
MX RCALL		X				X										
SF RCALL																
NO REST																
AI CALC																

COORDINATOR OPTIONS

MANUAL PATTERN	AUTO	ECPI COORD	X
SYSTEM SOURCE	SYS	SYSTEM FORMAT	STD
SPLITS IN	SECONDS	OFFSET IN	SECONDS
TRANSITION	SMOOTH	MAX SELECT	MAX2
DWELL/ADD TIME	255	FORCE OFF	FIXED
DLY COORD WK-LZ		CAL USE PED TM	X
OFFSET REF	LAG	PED RESERVE	
PED RECALL	X	FO ADD INI GRN	
LOCAL ZERO OVRD		MULTISYNC	
RE-SYNC COUNT	1		

COORDINATOR PATTERN 1

USE SPLIT PATTERN	1	TIMING PLAN	1
CYCLE	150	SEQUENCE	1
OFFSET VAL	51	ACTION PLAN	0
ACTUATED COORD		VEH PERM 1	1
ACT WALK REST		VEH PERM 2	0
PHASE RESERVICE		VEH PERM 2 - DISP	0
STD (COS)	111	XART PTRN.	0

RING CONFIG

RING	1	2	3	4	RING	1	2	3	4	RING	1	2	3	4
SPLT EXT	0	0	0	0	SPLIT DEMAND PTRN.	0	0			RING DISP		0	0	0

SPLIT PREF PHASES

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PREF 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PREF 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PHASE MODES

Phase	1	2	3	4	5	6	7	8
COORD		X				X		
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

PHASE MODES

Phase	9	10	11	12	13	14	15	16
COORD								
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

SF OUT

PHASE	1	2	3	4	5	6	7	8
SF OUT								

COORDINATOR PATTERN 2

USE SPLIT PATTERN	2	PHASE RESERVICE	
CYCLE	120	STD (COS)	121
OFFSET VAL	42	TIMING PLAN	1
ACTUATED COORD		SEQUENCE	1
ACT WALK REST		ACTION PLAN	0

COORDINATOR PATTERN 2

VEH PERM 1	1	VEH PERM 2 - DISP	0
VEH PERM 2	0	XART PTRN.	0

RING CONFIG

RING	1	2	3	4	RING	1	2	3	4	RING	1	2	3	4
SPLT EXT	0	0	0	0	SPLIT DEMAND PTRN.	0	0			RING DISP		0	0	0

SPLIT PREF PHASES

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PREF 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PREF 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PHASE MODES

Phase	1	2	3	4	5	6	7	8
COORD		X				X		
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

PHASE MODES

Phase	9	10	11	12	13	14	15	16
COORD								
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

SF OUT

PHASE	1	2	3	4	5	6	7	8
SF OUT								

COORDINATOR PATTERN 3

USE SPLIT PATTERN	3	TIMING PLAN	1
CYCLE	165	SEQUENCE	1
OFFSET VAL	8	ACTION PLAN	0
ACTUATED COORD		VEH PERM 1	1
ACT WALK REST		VEH PERM 2	0
PHASE RESERVICE		VEH PERM 2 - DISP	0
STD (COS)	131	XART PTRN.	0

RING CONFIG

RING	1	2	3	4	RING	1	2	3	4	RING	1	2	3	4
SPLT EXT	0	0	0	0	SPLIT DEMAND PTRN.	0	0			RING DISP		0	0	0

SPLIT PREF PHASES

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PREF 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PREF 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PHASE MODES

Phase	1	2	3	4	5	6	7	8
COORD		X				X		
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

PHASE MODES								
Phase	9	10	11	12	13	14	15	16
COORD								
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

SF OUT								
PHASE	1	2	3	4	5	6	7	8
SF OUT								

COORDINATOR PATTERN 4	
USE SPLIT PATTERN	4
CYCLE	120
OFFSET VAL	72
ACTUATED COORD	
ACT WALK REST	
PHASE RESERVICE	
STD (COS)	141
TIMING PLAN	1
SEQUENCE	1
ACTION PLAN	0
VEH PERM 1	1
VEH PERM 2	0
VEH PERM 2 - DISP	0
XART PTRN.	0

RING CONFIG														
RING	1	2	3	4	RING	1	2	3	4	RING	1	2	3	4
SPLT EXT	0	0	0	0	SPLIT DEMAND PTRN.	0	0			RING DISP		0	0	0

SPLIT PREF PHASES																
PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PREF 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PREF 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PHASE MODES								
Phase	1	2	3	4	5	6	7	8
COORD		X				X		
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

PHASE MODES								
Phase	9	10	11	12	13	14	15	16
COORD								
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

SF OUT								
PHASE	1	2	3	4	5	6	7	8
SF OUT								

Split 1								
PHASE	1	2	3	4	5	6	7	8
SPLIT	18	75	27	30	18	75	0	0
COORD		X				X		
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

Split 1								
PHASE	9	10	11	12	13	14	15	16
SPLIT	0	0	0	0	0	0	0	0
COORD								
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

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Split 2

PHASE	1	2	3	4	5	6	7	8
SPLIT	21	45	24	30	21	45	0	0
COORD		X				X		
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

Split 2

PHASE	9	10	11	12	13	14	15	16
SPLIT	0	0	0	0	0	0	0	0
COORD								
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

Split 3

PHASE	1	2	3	4	5	6	7	8
SPLIT	25	85	27	28	21	89	0	0
COORD		X				X		
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

Split 3

PHASE	9	10	11	12	13	14	15	16
SPLIT	0	0	0	0	0	0	0	0
COORD								
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

Split 4

PHASE	1	2	3	4	5	6	7	8
SPLIT	21	43	27	29	21	43	0	0
COORD		X				X		
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

Split 4

PHASE	9	10	11	12	13	14	15	16
SPLIT	0	0	0	0	0	0	0	0
COORD								
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

ACTION PLAN 1

PATTERN	1	DIMMING ENABLE		PED DET DIAG PLN	0
TIMING PLAN	1	SYS OVERRIDE			
VEH DET PLAN	0	SEQUENCE	1		
FLASH		DET LOG	0		
VEH DET DIAG PLN	0	RED REST			

PHASE TABLE

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PED RCL																

PHASE TABLE

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
WALK 2																
VEX 2																
VEH RCL																
MAX RCL																
MAX 2																
MAX 3																
CS INH																
OMIT																
SPC FCT																
AUX FCT																

LP TABLE

LP Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15
LP 16-30
LP 31-45
LP 46-60
LP 61-75
LP 76-90
LP 91-100

ACTION PLAN 2

PATTERN	2	DIMMING ENABLE		PED DET DIAG PLN	0
TIMING PLAN	1	SYS OVERRIDE			
VEH DET PLAN	0	SEQUENCE	1		
FLASH		DET LOG	0		
VEH DET DIAG PLN	0	RED REST			

PHASE TABLE

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PED RCL																
WALK 2																
VEX 2																
VEH RCL																
MAX RCL																
MAX 2																
MAX 3																
CS INH																
OMIT																
SPC FCT																
AUX FCT																

LP TABLE

LP Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15

LP TABLE

LP Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 16-30
LP 31-45
LP 46-60
LP 61-75
LP 76-90
LP 91-100

ACTION PLAN 3

PATTERN	3	DIMMING ENABLE		PED DET DIAG PLN	0
TIMING PLAN	1	SYS OVERRIDE			
VEH DET PLAN	0	SEQUENCE	1		
FLASH		DET LOG	0		
VEH DET DIAG PLN	0	RED REST			

PHASE TABLE

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PED RCL																
WALK 2																
VEX 2																
VEH RCL																
MAX RCL																
MAX 2																
MAX 3																
CS INH																
OMIT																
SPC FCT																
AUX FCT																

LP TABLE

LP Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15
LP 16-30
LP 31-45
LP 46-60
LP 61-75
LP 76-90
LP 91-100

ACTION PLAN 4

PATTERN	4	DIMMING ENABLE		PED DET DIAG PLN	0
TIMING PLAN	1	SYS OVERRIDE			
VEH DET PLAN	0	SEQUENCE	1		
FLASH		DET LOG	0		
VEH DET DIAG PLN	0	RED REST			

PHASE TABLE

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PED RCL																
WALK 2																
VEX 2																
VEH RCL																
MAX RCL																
MAX 2																
MAX 3																
CS INH																
OMIT																
SPC FCT																
AUX FCT																

LP TABLE

LP Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15
LP 16-30
LP 31-45
LP 46-60
LP 61-75
LP 76-90
LP 91-100

ACTION PLAN 30

PATTERN	1	DIMMING ENABLE		PED DET DIAG PLN	0
TIMING PLAN	1	SYS OVERRIDE			
VEH DET PLAN	0	SEQUENCE	1		
FLASH		DET LOG	0		
VEH DET DIAG PLN	0	RED REST			

PHASE TABLE

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PED RCL																
WALK 2																
VEX 2																
VEH RCL																
MAX RCL	X															
MAX 2																
MAX 3																
CS INH																
OMIT																
SPC FCT																
AUX FCT																

LP TABLE

LP Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15
LP 16-30
LP 31-45
LP 46-60
LP 61-75
LP 76-90
LP 91-100

ACTION PLAN 100

PATTERN	FLSH	DIMMING ENABLE		PED DET DIAG PLN	0
TIMING PLAN	1	SYS OVERRIDE			
VEH DET PLAN	0	SEQUENCE	1		
FLASH	X	DET LOG	0		
VEH DET DIAG PLN	0	RED REST			

PHASE TABLE

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PED RCL																
WALK 2																
VEX 2																
VEH RCL																
MAX RCL																
MAX 2																
MAX 3																
CS INH																
OMIT																
SPC FCT																
AUX FCT																

LP TABLE

LP Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15
LP 16-30
LP 31-45
LP 46-60
LP 61-75
LP 76-90
LP 91-100

Day Plan 1

EVENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
ACTION PLAN	4	100	4	1	30	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	5	6	8	9	10	15	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	30	30	0	45	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 1

EVENT	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
ACTION PLAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 2

EVENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
ACTION PLAN	4	100	4	1	30	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	5	6	8	9	10	15	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	30	30	0	45	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 2

EVENT	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
ACTION PLAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 3

EVENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
ACTION PLAN	4	100	4	1	30	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	5	6	8	9	10	15	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	30	30	0	45	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 3

EVENT	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
ACTION PLAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 4

EVENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
ACTION PLAN	4	100	4	1	30	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	5	6	8	9	10	15	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	30	30	0	45	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 4

EVENT	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
ACTION PLAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 5

EVENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
ACTION PLAN	4	100	4	1	30	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	5	6	8	9	10	15	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 5

EVENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
START TIME - MM	0	30	30	0	45	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 5

EVENT	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
ACTION PLAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 6

EVENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
ACTION PLAN	4	100	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	30	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 6

EVENT	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
ACTION PLAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 7

EVENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
ACTION PLAN	4	100	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	30	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 7

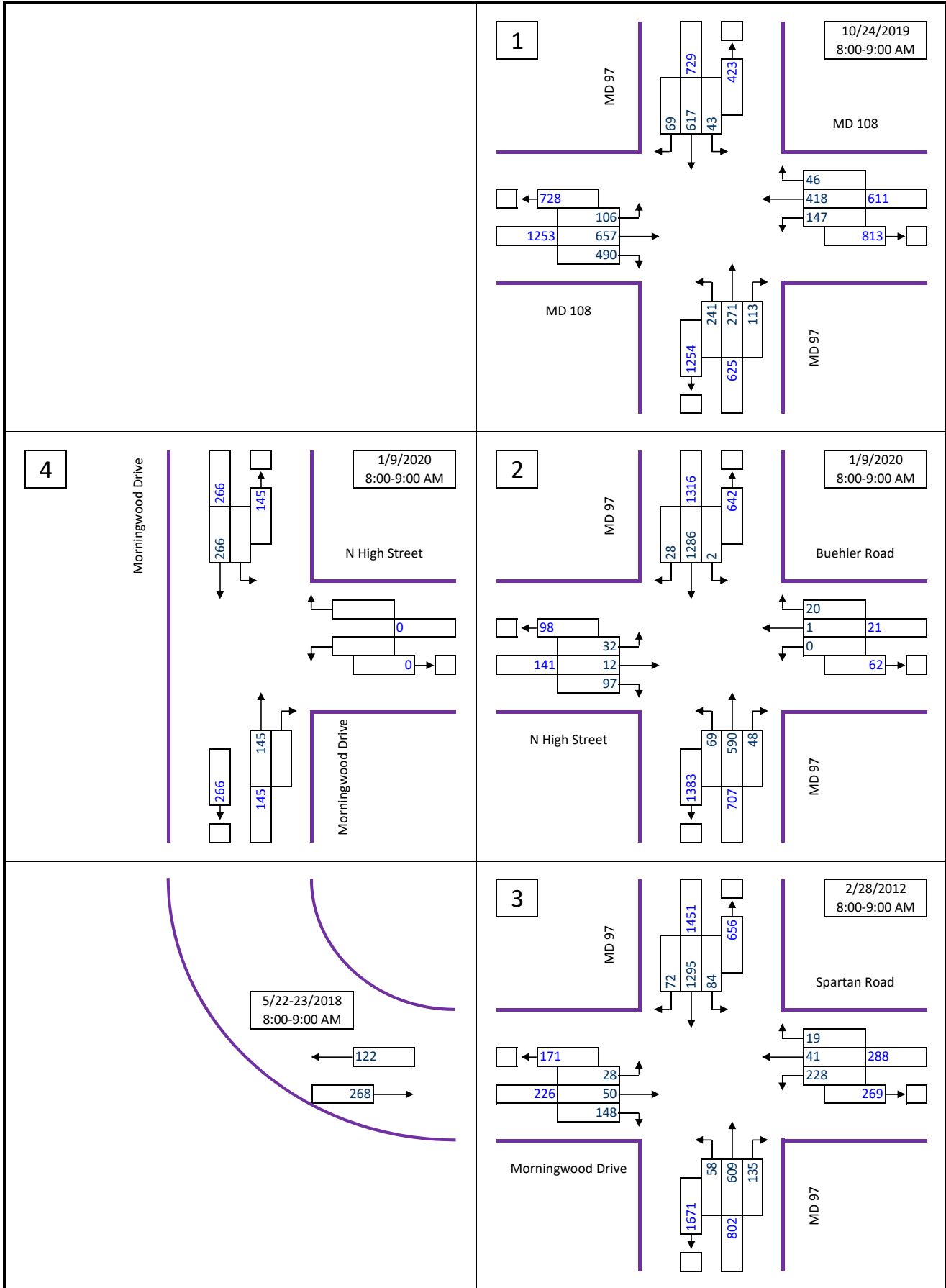
EVENT	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
ACTION PLAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



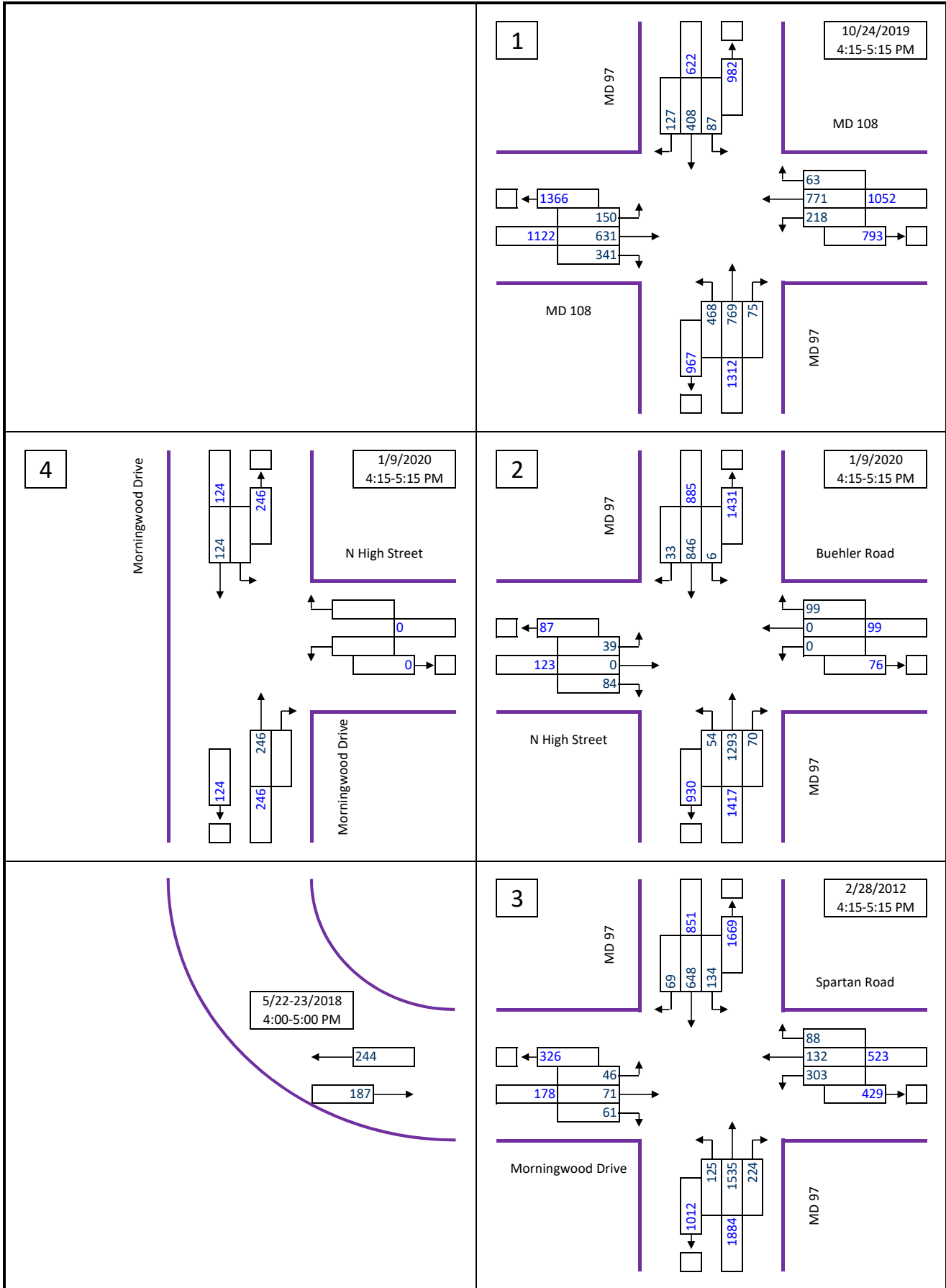
Appendix D

Existing and Diversion Traffic Volume Diagrams

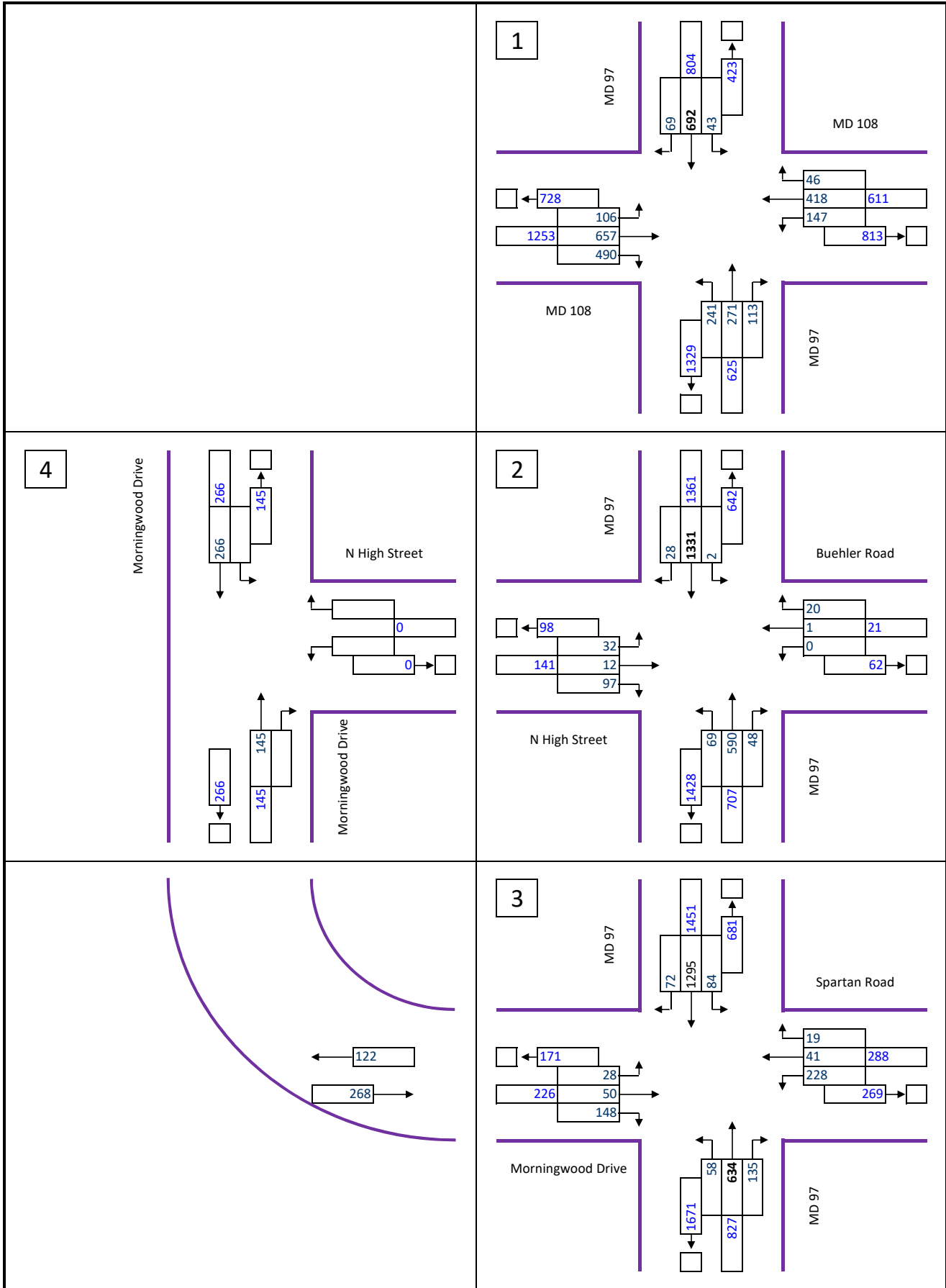
D-1: Existing Peak Hour Traffic Volumes - AM Raw



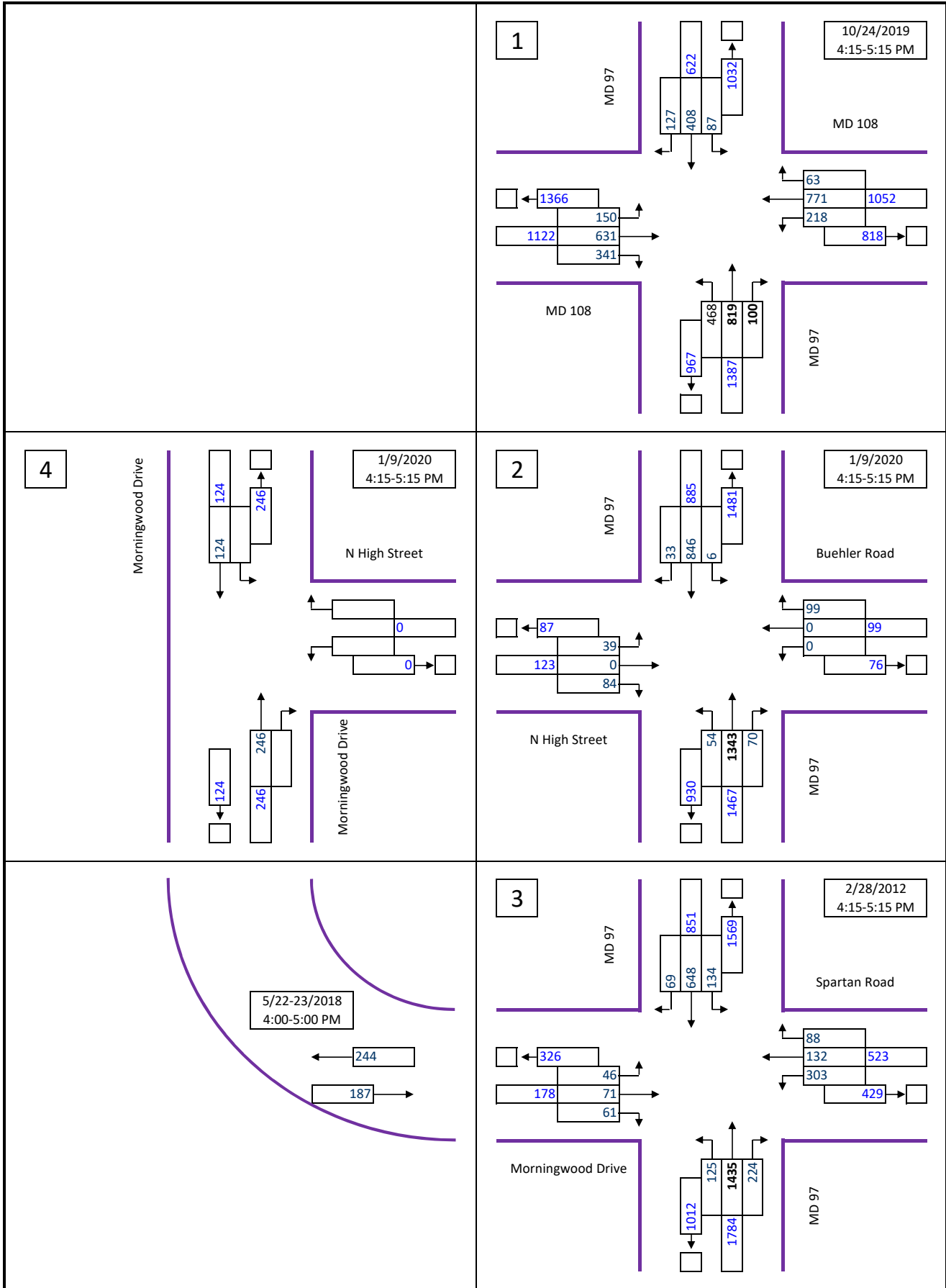
D-2: Existing Peak Hour Traffic Volumes - PM Raw



D-3: Existing Peak Hour Traffic Volumes - AM Adjusted



D-4: Existing Peak Hour Traffic Volumes - PM Adjusted



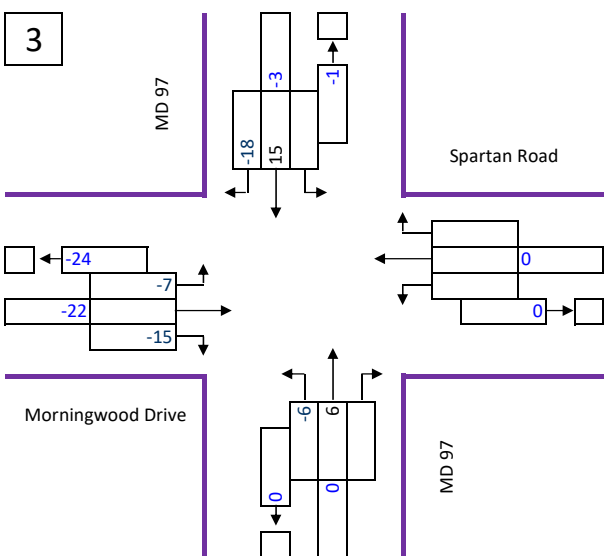
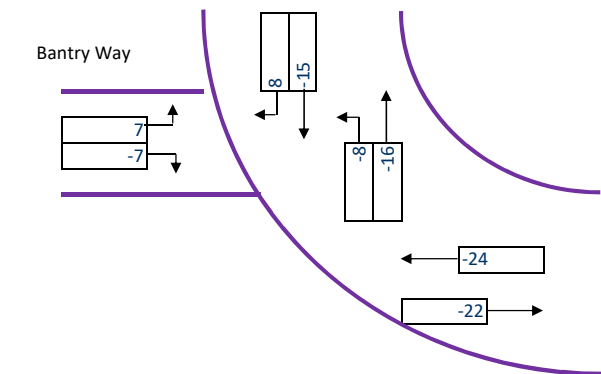
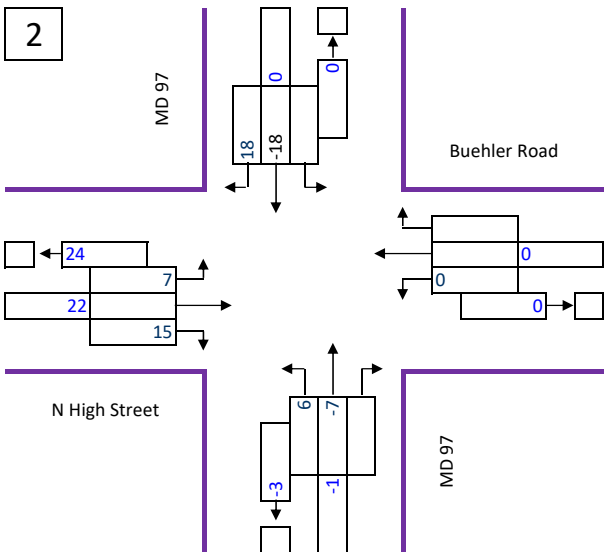
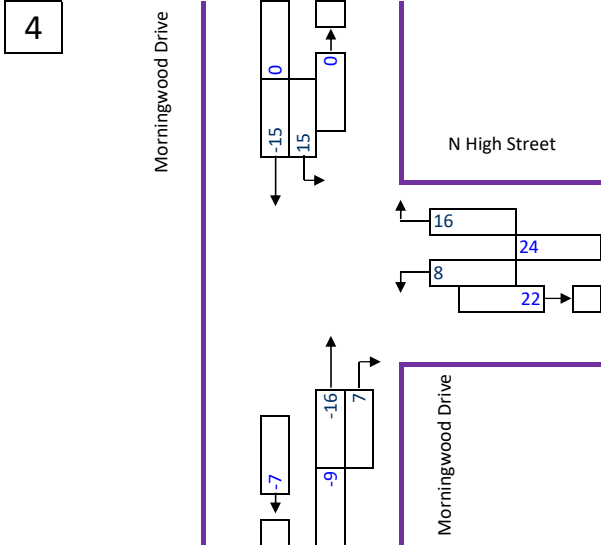
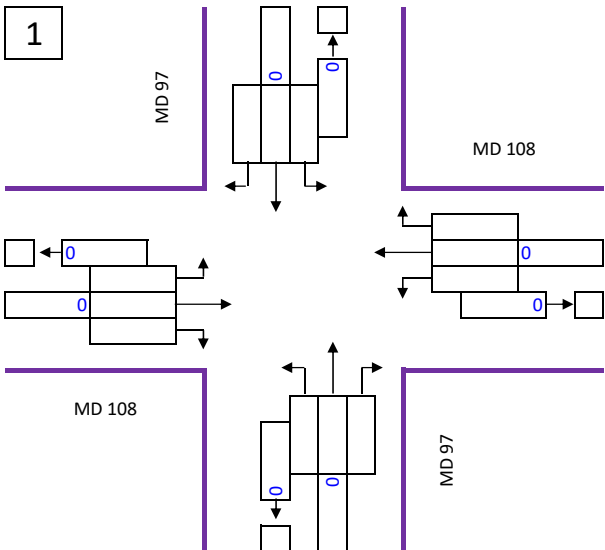
D-5: Diversion Traffic - AM with Assumptions 1, 2, and 3

Diversion Assumptions, 1, 2, and 3

25% of traffic to/from MD 97 north at Morningwood Dr

10% of traffic to/from MD 97 south at Morningwood Dr

2/3 of the above diverted volumes will travel to/from the north at Morningwood Drive at North High Street, and 1/3 to/from the south at Morningwood Drive.

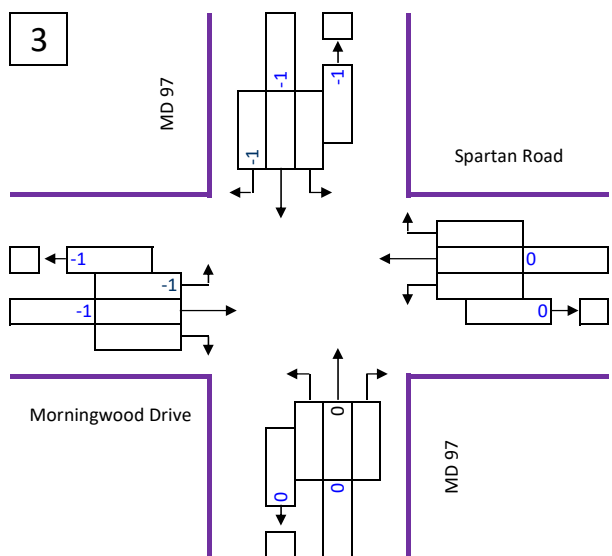
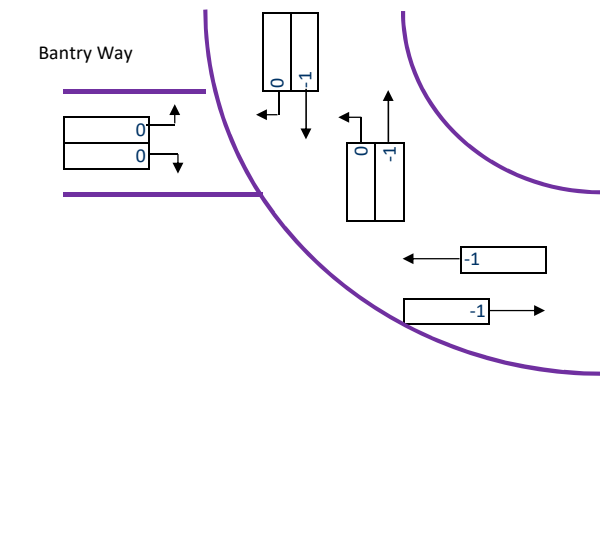
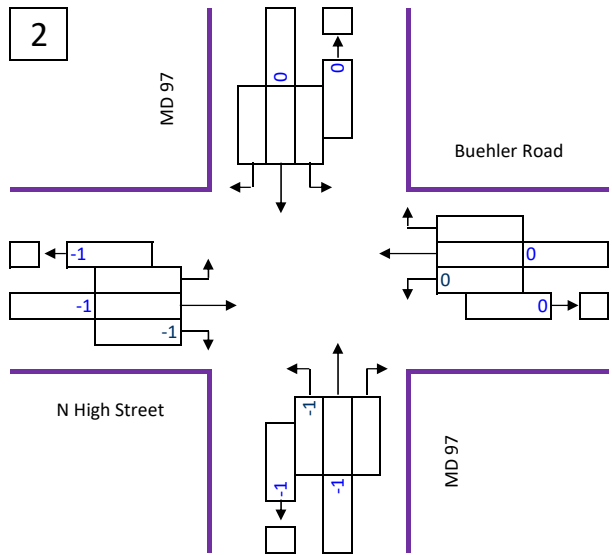
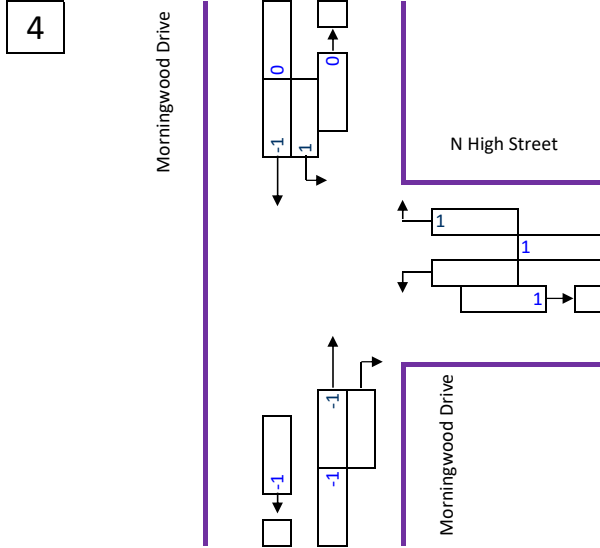
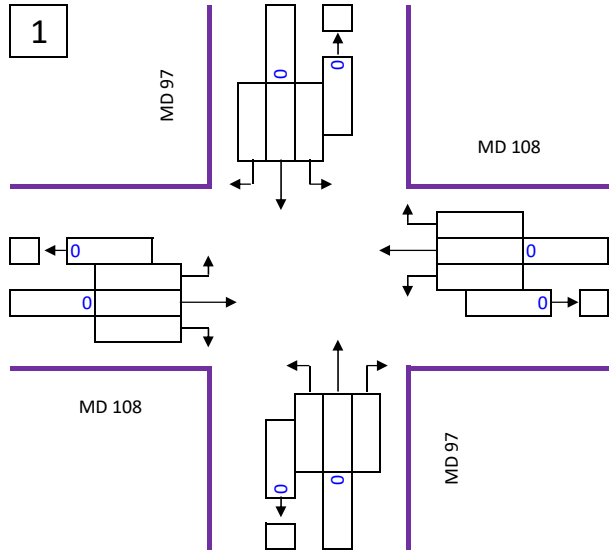


D-6: Diversion Traffic - AM with Assumption 4

Diversion Assumption 4

For traffic between Morningwood North and McDonald Mall,

5% of traffic to MD 97 north at Morningwood/MD 97 go to the McDonald mall, and go back to the origin.



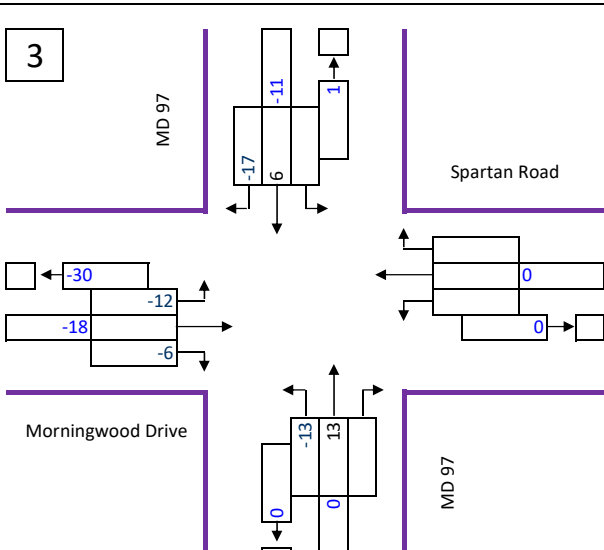
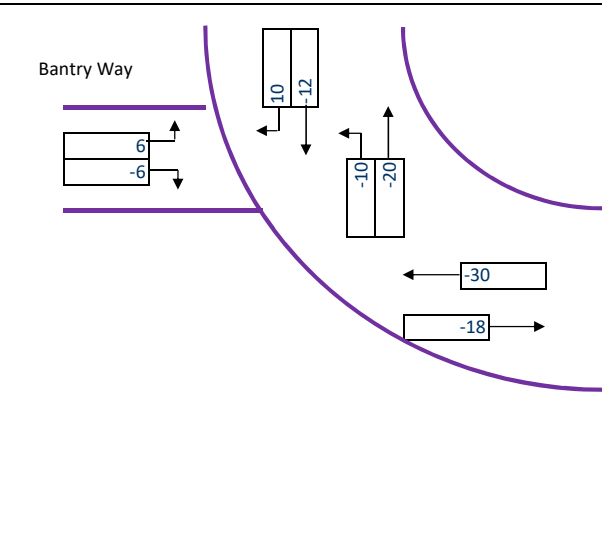
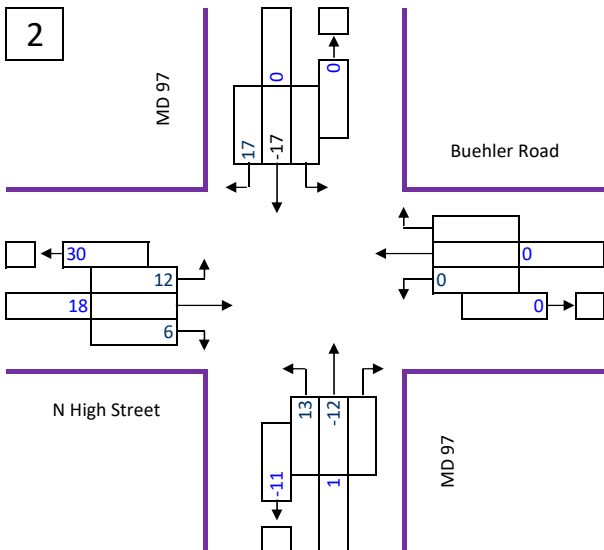
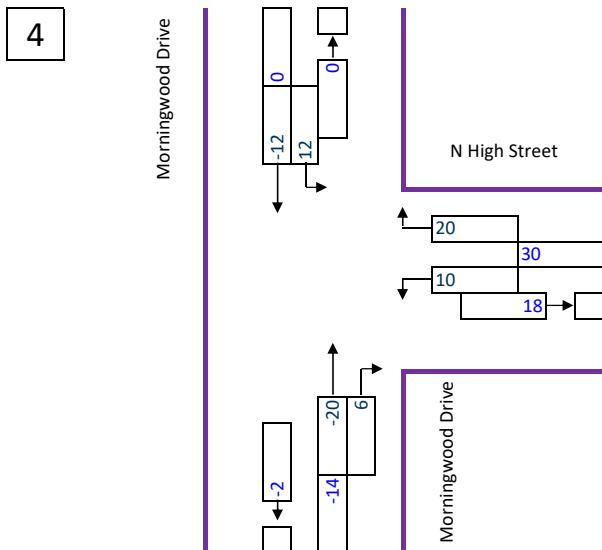
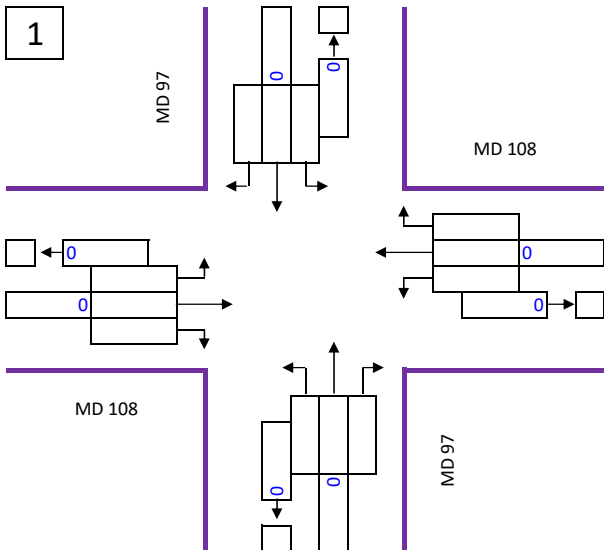
D-7: Diversion Traffic - PM with Assumptions 1, 2, and 3

Diversion Assumptions, 1, 2, and 3

25% of traffic to/from MD 97 north at Morningwood Dr

10% of traffic to/from MD 97 south at Morningwood Dr

2/3 of the above diverted volumes will travel to/from the north at Morningwood Drive at North High Street, and 1/3 to/from the south at Morningwood Drive.

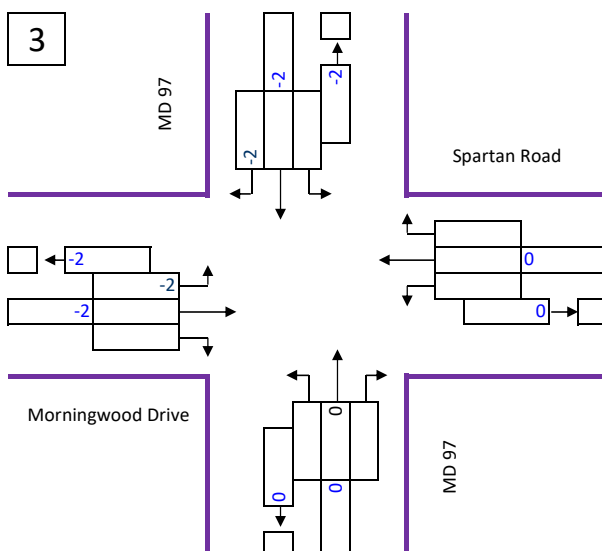
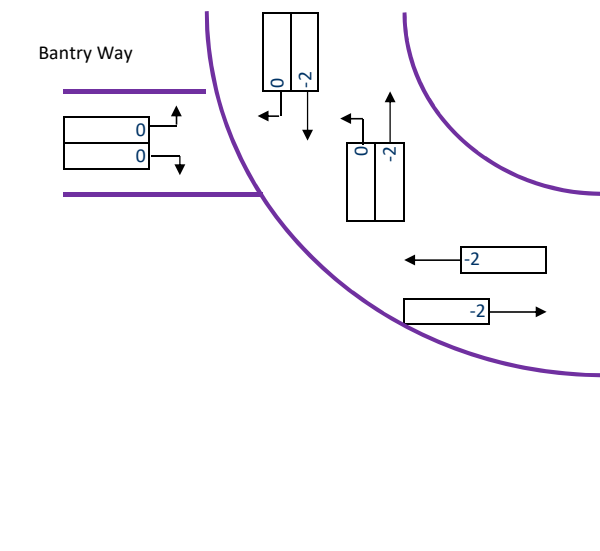
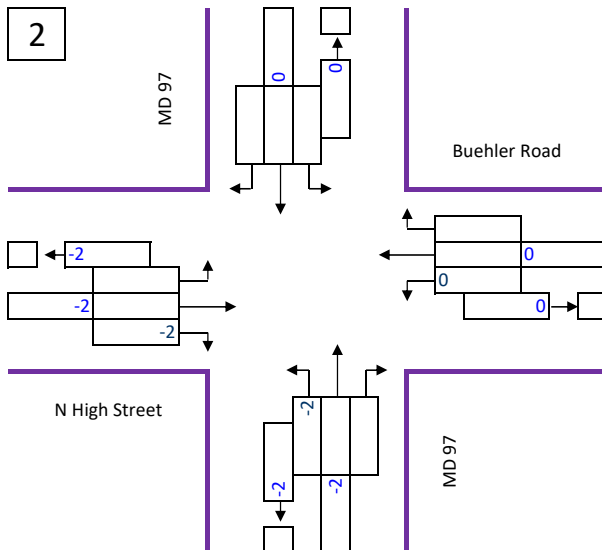
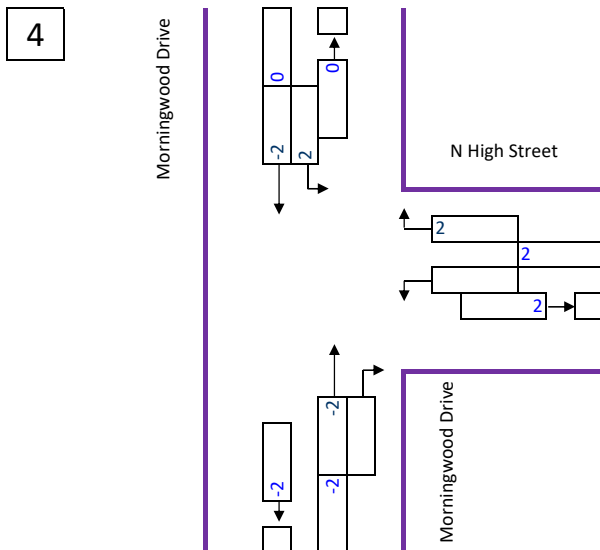
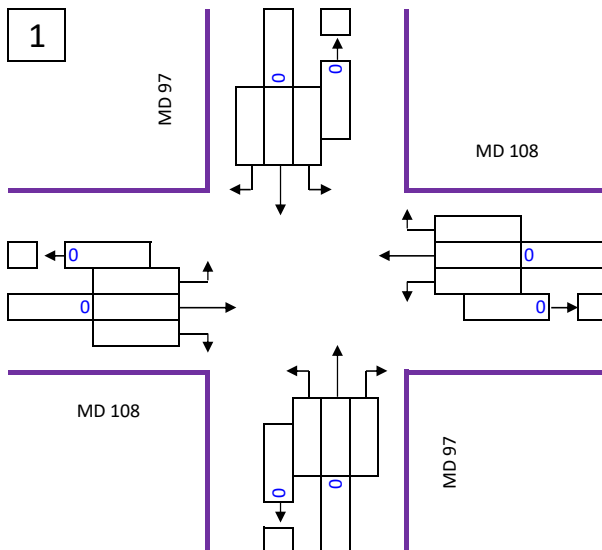


D-8: Diversion Traffic - PM with Assumption 4

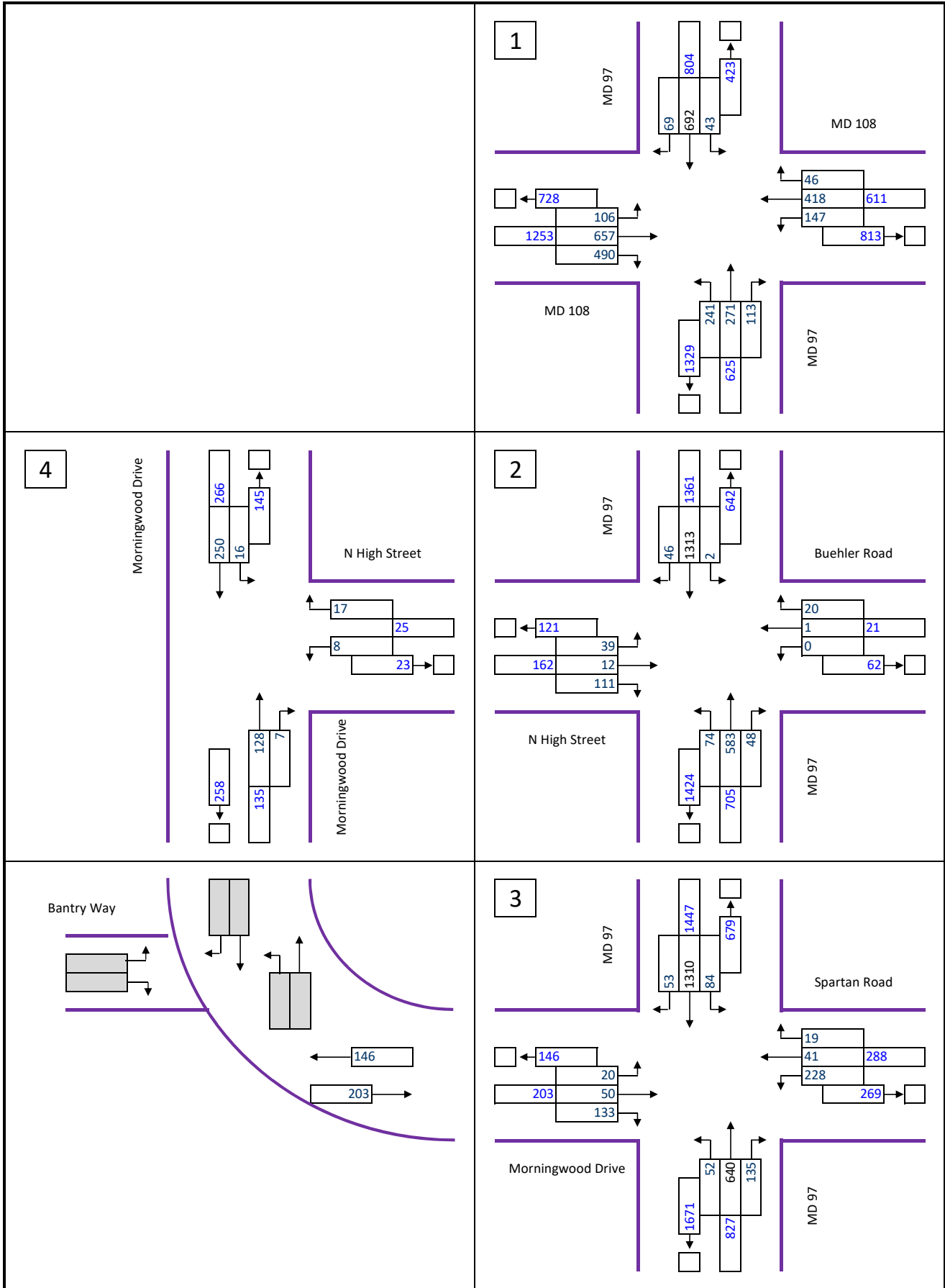
Diversion Assumption 4

For traffic between Morningwood North and McDonald Mall,

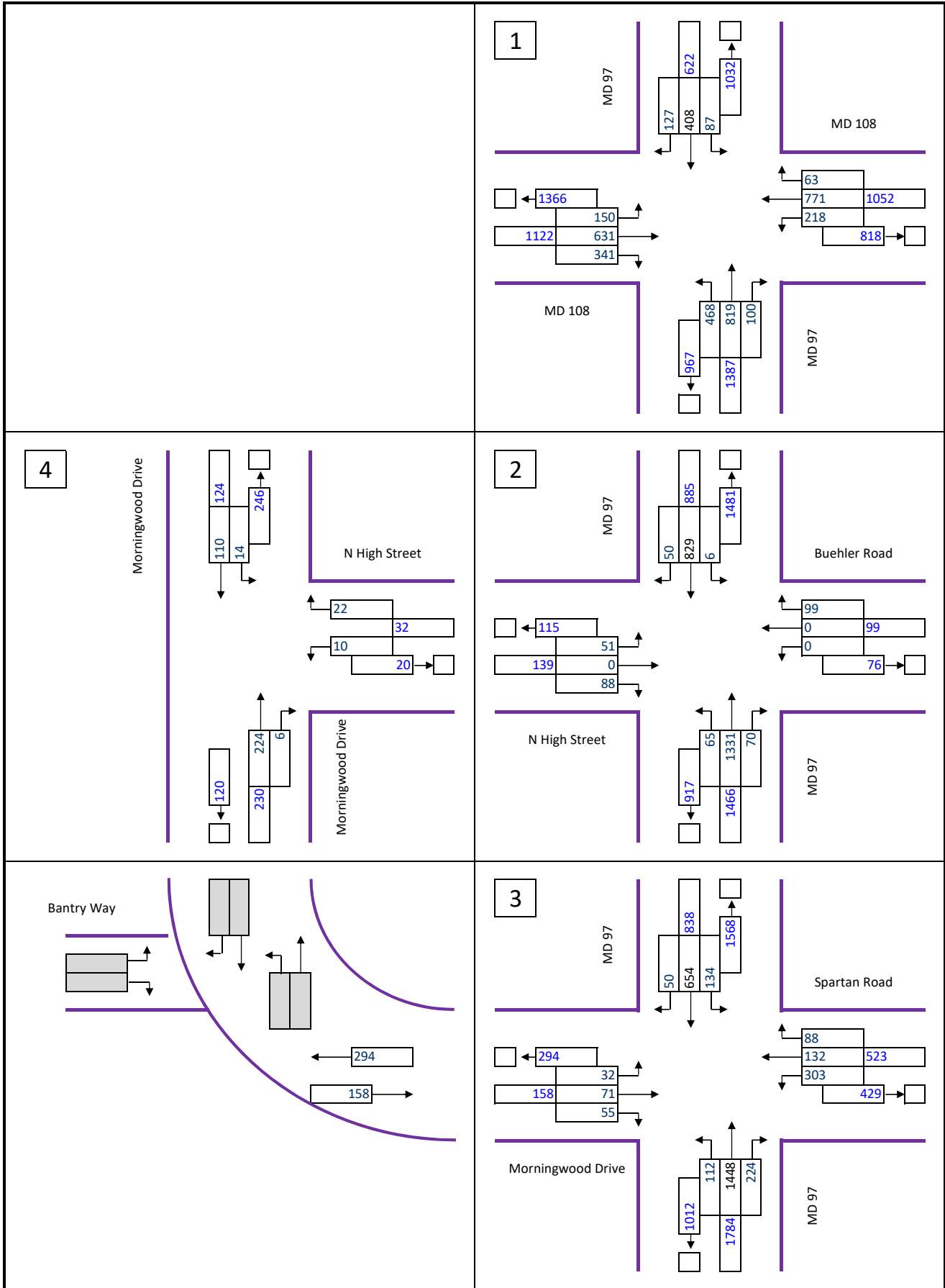
5% of traffic to MD 97 north at Morningwood/MD 97 go to the McDonald mall, and go back to the origin.



D9: AM Peak Hour Traffic Volumes with North High Street Connection



D10: AM Peak Hour Traffic Volumes with North High Street Connection





Appendix E

SimTraffic Model Calibration

Simulation Model Calibration - MD 97

Field-Measured Data (Raw)

Simulation Model Results

Field Data (Raw) Vs. Model Results

AM Peak

Arterial Sections		Distance (miles)
MD 97 NB	Queen Mary Dr - MD 108	0.34
MD 97 SB	Olandwood Ct - Queen Mary Dr	0.53

AM Peak	
Travel Time (Sec)	Speed (mph)
85.00	14.4
171.25	11.1

AM Peak	
Travel Time (Sec)	Speed (mph)
82.7	14.8
160.9	11.9

AM Peak	
Travel Time (Sec)	Speed (mph)
-3%	3%
-6%	6%

PM Peak

Arterial Sections		Distance (miles)
MD 97 NB	Queen Mary Dr - MD 108	0.34
MD 97 SB	Olandwood Ct - Queen Mary Dr	0.53

PM Peak	
Travel Time (Sec)	Speed (mph)
154.40	7.9
164.25	11.6

PM Peak	
Travel Time (Sec)	Speed (mph)
155.7	7.9
153.8	12.4

PM Peak	
Travel Time (Sec)	Speed (mph)
1%	-1%
-6%	7%

Corridor Travel Time Measurement - MD 97

Date: 2/19/2020, Wednesday

Time: PM

MD 97 NB	Run 1				Run 2				Run 3				Run 4				Run 5				Avg.
Start	4:16 PM				4:31 PM				4:42 PM				5:23 PM				5:51 PM				
Intersections	Stopped	Started	Crossed	Stopped Time	Stopped	Started	Crossed	Stopped Time	Stopped	Started	Crossed	Stopped Time	Stopped	Started	Crossed	Stopped Time	Stopped	Started	Crossed	Stopped Time	
Queen Mary Dr			4:16:45 PM	00:00.0			4:31:32 AM		4:56:32 PM	4:57:32 PM	4:57:53 PM	01:00.0			5:23:37 PM				5:51:31 PM		
Spartan Rd			4:17:12 PM		4:31:44 AM						4:58:15 PM		5:23:54 PM	5:24:37 PM	5:24:50 PM	00:43.0	5:51:38 PM	5:51:52 PM	5:52:56 PM		
MD 108	4:17:38 PM	4:19:23 PM	4:19:33 PM				4:33:40 AM	00:00.0	4:59:45 PM	5:00:32 PM	5:00:39 PM	00:47.0	5:25:05 PM	5:25:20 PM	5:25:35 PM	00:15.0			5:53:22 PM		
Total			02:48.0				02:08.0				04:07.0				01:58.0				01:51.0		02:34.4
MD 97 SB	Run 1				Run 2				Run 3				Run 4				Run 5				
Start	4:38 PM				5:01 PM				5:29 PM				5:48 PM								
Intersections	Stopped	Started	Crossed	Stopped Time	Stopped	Started	Crossed	Stopped Time	Stopped	Started	Crossed	Stopped Time	Stopped	Started	Crossed	Stopped Time	Stopped	Started	Crossed	Stopped Time	
Olandwood Ct			4:38:22 PM				5:01:40 PM								5:47:47 PM						
MD 108	4:38:30 PM	4:38:49 PM	4:38:52 PM	00:19.0	5:01:51 PM	5:03:34 PM	5:03:39 PM	01:43.0	5:29:36 PM	5:31:47 PM	5:31:52 PM	02:11.0			5:48:05 PM	00:00.0					00:00.0
Morningwood Dr							5:04:02 PM		5:32:24 PM	5:33:03 PM	5:33:13 PM	00:39.0	5:48:32 PM								
Queen Mary Dr			4:40:40 PM	00:00.0			5:04:22 PM				5:33:29 PM				5:49:51 PM						
Total			02:18.0				02:42.0				03:53.0				02:04.0				00:00.0		02:44.2



Appendix F

Synchro/SimTraffic Analysis Reports

HCM Signalized Intersection Capacity Analysis
1: MD 97 & MD 108





















North High Street Connection Study
Existing AM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	657	490	147	418	46	241	271	113	43	692	69
Future Volume (vph)	106	657	490	147	418	46	241	271	113	43	692	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	7.5	7.5	6.5	7.5		8.0	7.0		7.5	7.0	7.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.97	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1703	3406	1524	1703	3355		3303	3255		1703	3406	1524
Flt Permitted	0.39	1.00	1.00	0.23	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	699	3406	1524	406	3355		3303	3255		1703	3406	1524
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.89	0.89	0.89
Adj. Flow (vph)	115	714	533	160	454	50	262	295	123	48	778	78
RTOR Reduction (vph)	0	0	261	0	5	0	0	28	0	0	0	57
Lane Group Flow (vph)	115	714	272	160	499	0	262	390	0	48	778	21
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Prot	NA		Prot	NA	Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6		6	2								4
Actuated Green, G (s)	60.6	49.3	49.3	63.6	50.8		18.7	47.9		11.5	40.2	40.2
Effective Green, g (s)	60.6	49.3	49.3	63.6	50.8		18.7	47.9		11.5	40.2	40.2
Actuated g/C Ratio	0.40	0.33	0.33	0.42	0.34		0.12	0.32		0.08	0.27	0.27
Clearance Time (s)	6.5	7.5	7.5	6.5	7.5		8.0	7.0		7.5	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		5.0	5.0		5.0	5.0	5.0
Lane Grp Cap (vph)	358	1119	500	282	1136		411	1039		130	912	408
v/s Ratio Prot	0.02	c0.21		c0.05	0.15		c0.08	c0.12		0.03	c0.23	
v/s Ratio Perm	0.11		0.18	0.19								0.01
v/c Ratio	0.32	0.64	0.54	0.57	0.44		0.64	0.38		0.37	0.85	0.05
Uniform Delay, d1	28.8	42.8	41.2	29.3	38.5		62.4	39.5		65.8	52.1	40.7
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.39	0.78		1.00	1.00	1.00
Incremental Delay, d2	0.5	2.8	4.2	2.6	1.2		4.2	0.4		3.7	8.5	0.1
Delay (s)	29.3	45.6	45.4	31.9	39.8		91.2	31.3		69.5	60.6	40.9
Level of Service	C	D	D	C	D		F	C		E	E	D
Approach Delay (s)		44.1			37.9			54.4			59.4	
Approach LOS		D			D			D			E	
Intersection Summary												
HCM 2000 Control Delay			48.7				HCM 2000 Level of Service				D	
HCM 2000 Volume to Capacity ratio			0.71									
Actuated Cycle Length (s)			150.0				Sum of lost time (s)			29.0		
Intersection Capacity Utilization			76.5%				ICU Level of Service			D		
Analysis Period (min)			15									

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
2: MD 97 & N High Street/Beuhler Road

North High Street Connection Study
Existing AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	12	97	0	1	20	69	590	48	2	1331	28
Future Volume (Veh/h)	32	12	97	0	1	20	69	590	48	2	1331	28
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)	35	13	105	0	1	22	75	641	52	2	1447	30
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
								None			None	
Median storage veh												
Upstream signal (ft)												
								336			691	
pX, platoon unblocked	0.85	0.85	0.79	0.85	0.85	0.87	0.79			0.87		
vC, conflicting volume	1959	2309	738	1656	2298	346	1477			693		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1072	1481	128	717	1468	0	1066			333		
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 %	73	86	85	100	99	98	85			100		
cM capacity (veh/h)	128	90	708	182	92	938	511			1058		
Direction, Lane #												
	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2				
Volume Total	48	105	23	75	427	266	726	754				
Volume Left	35	0	0	75	0	0	2	0				
Volume Right	0	105	22	0	0	52	0	30				
cSH	115	708	670	511	1700	1700	1058	1700				
Volume to Capacity	0.42	0.15	0.03	0.15	0.25	0.16	0.00	0.44				
Queue Length 95th (ft)	44	13	3	13	0	0	0	0				
Control Delay (s)	56.9	11.0	10.6	13.2	0.0	0.0	0.1	0.0				
Lane LOS	F	B	B	B			A					
Approach Delay (s)	25.4		10.6	1.3			0.0					
Approach LOS	D		B									
Intersection Summary												
Average Delay			2.1									
Intersection Capacity Utilization			73.1%		ICU Level of Service					D		
Analysis Period (min)			15									

HCM Signalized Intersection Capacity Analysis
3: MD 97 & Morningwood Drive/Spartan Road

North High Street Connection Study
Existing AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	50	148	228	41	19	58	634	135	84	1295	72
Future Volume (vph)	28	50	148	228	41	19	58	634	135	84	1295	72
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1700	1700	1700
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.5		6.0	6.5	
Lane Util. Factor	1.00	1.00		0.97	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.89		1.00	0.95		1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1654		3433	1775		1770	3338		1583	3029	
Flt Permitted	0.95	1.00		0.95	1.00		0.08	1.00		0.26	1.00	
Satd. Flow (perm)	1770	1654		3433	1775		145	3338		427	3029	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	31	56	166	256	46	21	65	712	152	94	1455	81
RTOR Reduction (vph)	0	73	0	0	12	0	0	10	0	0	2	0
Lane Group Flow (vph)	31	149	0	256	55	0	65	854	0	94	1534	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	6%	2%	2%	6%	2%
Turn Type	Split	NA		Split	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	3		4	4		1	6		5	2	
Permitted Phases							6			2		
Actuated Green, G (s)	17.2	17.2		16.6	16.6		89.4	82.7		94.0	85.0	
Effective Green, g (s)	17.2	17.2		16.6	16.6		89.4	82.7		94.0	85.0	
Actuated g/C Ratio	0.11	0.11		0.11	0.11		0.60	0.55		0.63	0.57	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.5		6.0	6.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	202	189		379	196		159	1840		336	1716	
v/s Ratio Prot	0.02	c0.09		c0.07	0.03		c0.02	0.26		0.02	c0.51	
v/s Ratio Perm							0.23			0.16		
v/c Ratio	0.15	0.79		0.68	0.28		0.41	0.46		0.28	0.89	
Uniform Delay, d1	59.8	64.6		64.1	61.2		20.9	20.3		12.5	28.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.81	0.73	
Incremental Delay, d2	0.4	19.0		4.7	0.8		1.7	0.8		0.3	5.8	
Delay (s)	60.2	83.6		68.8	62.0		22.6	21.1		10.4	26.8	
Level of Service	E	F		E	E		C	C		B	C	
Approach Delay (s)		80.8			67.4			21.2			25.8	
Approach LOS		F			E			C			C	

Intersection Summary		
HCM 2000 Control Delay	33.2	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	0.82	C
Actuated Cycle Length (s)	150.0	Sum of lost time (s)
Intersection Capacity Utilization	84.6%	24.5
Analysis Period (min)	15	ICU Level of Service
		E
c Critical Lane Group		

HCM Signalized Intersection Capacity Analysis
1: MD 97 & MD 108





















North High Street Connection Study
Existing PM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	631	341	218	771	63	468	819	100	87	408	127
Future Volume (vph)	150	631	341	218	771	63	468	819	100	87	408	127
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	7.5	7.5	6.5	7.5		8.0	7.0		7.5	7.0	7.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.97	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1736	3471	1553	1736	3432		3367	3415		1736	3471	1553
Flt Permitted	0.16	1.00	1.00	0.24	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	290	3471	1553	442	3432		3367	3415		1736	3471	1553
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	153	644	348	222	787	64	478	836	102	89	416	130
RTOR Reduction (vph)	0	0	230	0	3	0	0	5	0	0	0	101
Lane Group Flow (vph)	153	644	118	222	848	0	478	933	0	89	416	29
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Prot	NA		Prot	NA	Perm
Protected Phases	1	6		5	2		3	8		7		4
Permitted Phases	6		6	2								4
Actuated Green, G (s)	66.5	50.9	50.9	72.1	53.7		29.4	52.3		14.9	37.3	37.3
Effective Green, g (s)	66.5	50.9	50.9	72.1	53.7		29.4	52.3		14.9	37.3	37.3
Actuated g/C Ratio	0.40	0.31	0.31	0.44	0.33		0.18	0.32		0.09	0.23	0.23
Clearance Time (s)	6.5	7.5	7.5	6.5	7.5		8.0	7.0		7.5	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		5.0	5.0		5.0	5.0	5.0
Lane Grp Cap (vph)	253	1070	479	337	1116		599	1082		156	784	351
v/s Ratio Prot	0.06	0.19		c0.07	c0.25		c0.14	c0.27		0.05	0.12	
v/s Ratio Perm	0.19		0.08	0.21								0.02
v/c Ratio	0.60	0.60	0.25	0.66	0.76		0.80	0.86		0.57	0.53	0.08
Uniform Delay, d1	35.1	48.4	42.7	32.0	49.9		65.0	53.0		72.0	56.2	50.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.21	0.66		1.00	1.00	1.00
Incremental Delay, d2	4.0	2.5	1.2	4.6	4.9		4.6	4.4		7.8	1.3	0.2
Delay (s)	39.1	51.0	43.9	36.6	54.7		83.2	39.3		79.8	57.4	50.6
Level of Service	D	D	D	D	D		F	D		E	E	D
Approach Delay (s)		47.2			51.0			54.1			59.2	
Approach LOS		D			D			D			E	
Intersection Summary												
HCM 2000 Control Delay			52.2			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			0.84									
Actuated Cycle Length (s)			165.0			Sum of lost time (s)				29.0		
Intersection Capacity Utilization			86.0%			ICU Level of Service				E		
Analysis Period (min)			15									

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
2: MD 97 & N High Street/Beuhler Road

North High Street Connection Study
Existing PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	0	84	0	0	99	54	1343	70	6	846	33
Future Volume (Veh/h)	39	0	84	0	0	99	54	1343	70	6	846	33
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	40	0	87	0	0	102	56	1385	72	6	872	34
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
								None			None	
Median storage veh												
Upstream signal (ft)												
								336			691	
pX, platoon unblocked	0.58	0.58	0.91	0.58	0.58	0.54	0.91			0.54		
vC, conflicting volume	1808	2470	453	2068	2451	728	906			1457		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	230	1368	191	677	1336	0	691			117		
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 %	87	100	88	100	100	82	93			99		
cM capacity (veh/h)	319	78	742	164	82	580	816			786		
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2				
Volume Total	40	87	102	56	923	534	442	470				
Volume Left	40	0	0	56	0	0	6	0				
Volume Right	0	87	102	0	0	72	0	34				
cSH	319	742	580	816	1700	1700	786	1700				
Volume to Capacity	0.13	0.12	0.18	0.07	0.54	0.31	0.01	0.28				
Queue Length 95th (ft)	11	10	16	6	0	0	1	0				
Control Delay (s)	17.9	10.5	12.5	9.7	0.0	0.0	0.2	0.0				
Lane LOS	C	B	B	A			A					
Approach Delay (s)	12.8		12.5	0.4			0.1					
Approach LOS	B		B									
Intersection Summary												
Average Delay			1.3									
Intersection Capacity Utilization			60.4%	ICU Level of Service	B							
Analysis Period (min)			15									

HCM Signalized Intersection Capacity Analysis
3: MD 97 & Morningwood Drive/Spartan Road

North High Street Connection Study
Existing PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖↗	↗		↖	↖↗		↖	↖↗	
Traffic Volume (vph)	46	71	61	303	132	88	125	1435	224	134	648	69
Future Volume (vph)	46	71	61	303	132	88	125	1435	224	134	648	69
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.5		6.0	6.5	
Lane Util. Factor	1.00	1.00		0.97	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.93		1.00	0.94		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1733		3433	1751		1770	3410		1770	3427	
Flt Permitted	0.95	1.00		0.95	1.00		0.32	1.00		0.04	1.00	
Satd. Flow (perm)	1770	1733		3433	1751		592	3410		82	3427	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	48	74	64	316	138	92	130	1495	233	140	675	72
RTOR Reduction (vph)	0	20	0	0	15	0	0	7	0	0	4	0
Lane Group Flow (vph)	48	118	0	316	215	0	130	1721	0	140	743	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	4%	2%	2%	4%	2%
Turn Type	Split	NA		Split	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	3		4	4		1	6		5	2	
Permitted Phases							6			2		
Actuated Green, G (s)	16.0	16.0		23.6	23.6		98.7	88.5		103.1	90.7	
Effective Green, g (s)	16.0	16.0		23.6	23.6		98.7	88.5		103.1	90.7	
Actuated g/C Ratio	0.10	0.10		0.14	0.14		0.60	0.54		0.62	0.55	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.5		6.0	6.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	171	168		491	250		426	1829		178	1883	
v/s Ratio Prot	0.03	c0.07		0.09	c0.12		0.02	c0.50		c0.06	0.22	
v/s Ratio Perm							0.16			0.43		
v/c Ratio	0.28	0.70		0.64	0.86		0.31	0.94		0.79	0.39	
Uniform Delay, d1	69.2	72.2		66.7	69.1		14.9	35.8		50.4	21.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.85	1.40	
Incremental Delay, d2	0.9	12.5		2.9	24.9		0.4	11.1		18.3	0.6	
Delay (s)	70.1	84.7		69.6	94.0		15.3	46.9		61.1	30.4	
Level of Service	E	F		E	F		B	D		E	C	
Approach Delay (s)		80.9			79.9			44.7			35.3	
Approach LOS		F			E			D			D	

Intersection Summary

HCM 2000 Control Delay	49.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	165.0	Sum of lost time (s)	24.5
Intersection Capacity Utilization	91.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis
1: MD 97 & MD 108





















North High Street Connection Study
Existing AM with Diversion

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	657	490	147	418	46	241	271	113	43	692	69
Future Volume (vph)	106	657	490	147	418	46	241	271	113	43	692	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	7.5	7.5	6.5	7.5		8.0	7.0		7.5	7.0	7.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.97	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1703	3406	1524	1703	3355		3303	3255		1703	3406	1524
Flt Permitted	0.39	1.00	1.00	0.23	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	699	3406	1524	406	3355		3303	3255		1703	3406	1524
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.89	0.89	0.89
Adj. Flow (vph)	115	714	533	160	454	50	262	295	123	48	778	78
RTOR Reduction (vph)	0	0	261	0	5	0	0	28	0	0	0	57
Lane Group Flow (vph)	115	714	272	160	499	0	262	390	0	48	778	21
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Prot	NA		Prot	NA	Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6		6	2								4
Actuated Green, G (s)	60.6	49.3	49.3	63.6	50.8		18.7	47.9		11.5	40.2	40.2
Effective Green, g (s)	60.6	49.3	49.3	63.6	50.8		18.7	47.9		11.5	40.2	40.2
Actuated g/C Ratio	0.40	0.33	0.33	0.42	0.34		0.12	0.32		0.08	0.27	0.27
Clearance Time (s)	6.5	7.5	7.5	6.5	7.5		8.0	7.0		7.5	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		5.0	5.0		5.0	5.0	5.0
Lane Grp Cap (vph)	358	1119	500	282	1136		411	1039		130	912	408
v/s Ratio Prot	0.02	c0.21		c0.05	0.15		c0.08	c0.12		0.03	c0.23	
v/s Ratio Perm	0.11		0.18	0.19								0.01
v/c Ratio	0.32	0.64	0.54	0.57	0.44		0.64	0.38		0.37	0.85	0.05
Uniform Delay, d1	28.8	42.8	41.2	29.3	38.5		62.4	39.5		65.8	52.1	40.7
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.40	0.78		1.00	1.00	1.00
Incremental Delay, d2	0.5	2.8	4.2	2.6	1.2		4.2	0.4		3.7	8.5	0.1
Delay (s)	29.3	45.6	45.4	31.9	39.8		91.8	31.3		69.5	60.6	40.9
Level of Service	C	D	D	C	D		F	C		E	E	D
Approach Delay (s)		44.1			37.9			54.6			59.4	
Approach LOS		D			D			D			E	
Intersection Summary												
HCM 2000 Control Delay			48.8				HCM 2000 Level of Service				D	
HCM 2000 Volume to Capacity ratio			0.71									
Actuated Cycle Length (s)			150.0				Sum of lost time (s)			29.0		
Intersection Capacity Utilization			76.5%				ICU Level of Service			D		
Analysis Period (min)			15									

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
2: MD 97 & N High Street/Beuhler Road

North High Street Connection Study
Existing AM with Diversion

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	12	111	0	1	20	74	583	48	2	1313	46
Future Volume (Veh/h)	39	12	111	0	1	20	74	583	48	2	1313	46
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)	42	13	121	0	1	22	80	634	52	2	1427	50
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	0.85	0.85	0.79	0.85	0.85	0.87	0.79			0.87		
vC, conflicting volume	1956	2302	738	1665	2301	343	1477			686		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1069	1475	128	729	1474	0	1066			326		
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 %	67	86	83	100	99	98	84			100		
cM capacity (veh/h)	128	90	708	172	90	938	511			1065		
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2				
Volume Total	55	121	23	80	423	263	716	764				
Volume Left	42	0	0	80	0	0	2	0				
Volume Right	0	121	22	0	0	52	0	50				
cSH	116	708	666	511	1700	1700	1065	1700				
Volume to Capacity	0.47	0.17	0.03	0.16	0.25	0.15	0.00	0.45				
Queue Length 95th (ft)	53	15	3	14	0	0	0	0				
Control Delay (s)	61.1	11.1	10.6	13.3	0.0	0.0	0.1	0.0				
Lane LOS	F	B	B	B			A					
Approach Delay (s)	26.7		10.6	1.4			0.0					
Approach LOS	D		B									
Intersection Summary												
Average Delay			2.5									
Intersection Capacity Utilization			77.6%		ICU Level of Service					D		
Analysis Period (min)			15									

HCM Signalized Intersection Capacity Analysis
 3: MD 97 & Morningwood Drive/Spartan Road

North High Street Connection Study
 Existing AM with Diversion












Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	50	133	228	41	19	52	640	135	84	1310	53
Future Volume (vph)	20	50	133	228	41	19	52	640	135	84	1310	53
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1700	1700	1700
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.5		6.0	6.5	
Lane Util. Factor	1.00	1.00		0.97	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.89		1.00	0.95		1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1660		3433	1775		1770	3338		1583	3034	
Flt Permitted	0.95	1.00		0.95	1.00		0.08	1.00		0.25	1.00	
Satd. Flow (perm)	1770	1660		3433	1775		151	3338		424	3034	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	22	56	149	256	46	21	58	719	152	94	1472	60
RTOR Reduction (vph)	0	66	0	0	12	0	0	10	0	0	2	0
Lane Group Flow (vph)	22	139	0	256	55	0	58	861	0	94	1530	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	6%	2%	2%	6%	2%
Turn Type	Split	NA		Split	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	3		4	4		1	6		5	2	
Permitted Phases							6			2		
Actuated Green, G (s)	16.6	16.6		16.6	16.6		89.8	83.4		94.8	85.9	
Effective Green, g (s)	16.6	16.6		16.6	16.6		89.8	83.4		94.8	85.9	
Actuated g/C Ratio	0.11	0.11		0.11	0.11		0.60	0.56		0.63	0.57	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.5		6.0	6.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	195	183		379	196		159	1855		336	1737	
v/s Ratio Prot	0.01	c0.08		c0.07	0.03		0.02	0.26		c0.02	c0.50	
v/s Ratio Perm							0.20			0.16		
v/c Ratio	0.11	0.76		0.68	0.28		0.36	0.46		0.28	0.88	
Uniform Delay, d1	60.1	64.8		64.1	61.2		20.1	19.9		12.2	27.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.81	0.74	
Incremental Delay, d2	0.3	16.9		4.7	0.8		1.4	0.8		0.3	5.2	
Delay (s)	60.3	81.6		68.8	62.0		21.5	20.8		10.2	25.6	
Level of Service	E	F		E	E		C	C		B	C	
Approach Delay (s)		79.6			67.4			20.8			24.7	
Approach LOS		E			E			C			C	

Intersection Summary		
HCM 2000 Control Delay	32.0	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	0.81	C
Actuated Cycle Length (s)	150.0	Sum of lost time (s)
Intersection Capacity Utilization	83.4%	24.5
Analysis Period (min)	15	ICU Level of Service
		E
c Critical Lane Group		

HCM Unsignalized Intersection Capacity Analysis
7: Morningwood Drive & N High Street

North High Street Connection Study
Existing AM with Diversion

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	8	17	128	7	16	250
Future Volume (Veh/h)	8	17	128	7	16	250
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)	9	18	139	8	17	272
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	928					
pX, platoon unblocked						
vC, conflicting volume	449	143			147	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	449	143			147	
tC, single (s)	6.5	6.3			4.2	
tC, 2 stage (s)						
tF (s)	3.6	3.4			2.3	
p0 queue free %	98	98			99	
cM capacity (veh/h)	553	894			1411	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	27	147	289			
Volume Left	9	0	17			
Volume Right	18	8	0			
cSH	742	1700	1411			
Volume to Capacity	0.04	0.09	0.01			
Queue Length 95th (ft)	3	0	1			
Control Delay (s)	10.0	0.0	0.5			
Lane LOS	B		A			
Approach Delay (s)	10.0	0.0	0.5			
Approach LOS	B					
Intersection Summary						
Average Delay	0.9					
Intersection Capacity Utilization	34.5%		ICU Level of Service		A	
Analysis Period (min)	15					

HCM Signalized Intersection Capacity Analysis
1: MD 97 & MD 108




















North High Street Connection Study
Existing PM with Diversion

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	631	341	218	771	63	468	819	100	87	408	127
Future Volume (vph)	150	631	341	218	771	63	468	819	100	87	408	127
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	7.5	7.5	6.5	7.5		8.0	7.0		7.5	7.0	7.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.97	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1736	3471	1553	1736	3432		3367	3415		1736	3471	1553
Flt Permitted	0.16	1.00	1.00	0.24	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	290	3471	1553	442	3432		3367	3415		1736	3471	1553
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	153	644	348	222	787	64	478	836	102	89	416	130
RTOR Reduction (vph)	0	0	230	0	3	0	0	5	0	0	0	101
Lane Group Flow (vph)	153	644	118	222	848	0	478	933	0	89	416	29
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Prot	NA		Prot	NA	Perm
Protected Phases	1	6		5	2		3	8		7		4
Permitted Phases	6		6	2								4
Actuated Green, G (s)	66.5	50.9	50.9	72.1	53.7		29.4	52.3		14.9	37.3	37.3
Effective Green, g (s)	66.5	50.9	50.9	72.1	53.7		29.4	52.3		14.9	37.3	37.3
Actuated g/C Ratio	0.40	0.31	0.31	0.44	0.33		0.18	0.32		0.09	0.23	0.23
Clearance Time (s)	6.5	7.5	7.5	6.5	7.5		8.0	7.0		7.5	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		5.0	5.0		5.0	5.0	5.0
Lane Grp Cap (vph)	253	1070	479	337	1116		599	1082		156	784	351
v/s Ratio Prot	0.06	0.19		c0.07	c0.25		c0.14	c0.27		0.05	0.12	
v/s Ratio Perm	0.19		0.08	0.21								0.02
v/c Ratio	0.60	0.60	0.25	0.66	0.76		0.80	0.86		0.57	0.53	0.08
Uniform Delay, d1	35.1	48.4	42.7	32.0	49.9		65.0	53.0		72.0	56.2	50.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.21	0.65		1.00	1.00	1.00
Incremental Delay, d2	4.0	2.5	1.2	4.6	4.9		4.6	4.4		7.8	1.3	0.2
Delay (s)	39.1	51.0	43.9	36.6	54.7		83.2	38.8		79.8	57.4	50.6
Level of Service	D	D	D	D	D		F	D		E	E	D
Approach Delay (s)		47.2			51.0			53.8			59.2	
Approach LOS		D			D			D			E	
Intersection Summary												
HCM 2000 Control Delay			52.1				HCM 2000 Level of Service				D	
HCM 2000 Volume to Capacity ratio			0.84									
Actuated Cycle Length (s)			165.0				Sum of lost time (s)			29.0		
Intersection Capacity Utilization			86.0%				ICU Level of Service			E		
Analysis Period (min)			15									

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
2: MD 97 & N High Street/Beuhler Road

North High Street Connection Study
Existing PM with Diversion

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	0	88	0	0	99	65	1331	70	6	829	50
Future Volume (Veh/h)	51	0	88	0	0	99	65	1331	70	6	829	50
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	53	0	91	0	0	102	67	1372	72	6	855	52
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
								None				None
Median storage veh												
Upstream signal (ft)												
								336				691
pX, platoon unblocked	0.58	0.58	0.91	0.58	0.58	0.53	0.91				0.53	
vC, conflicting volume	1815	2471	454	2072	2461	722	907				1444	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	212	1352	191	660	1335	0	692				59	
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 %	83	100	88	100	100	82	92				99	
cM capacity (veh/h)	320	78	741	164	80	574	815				816	
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2				
Volume Total	53	91	102	67	915	529	434	480				
Volume Left	53	0	0	67	0	0	6	0				
Volume Right	0	91	102	0	0	72	0	52				
cSH	320	741	574	815	1700	1700	816	1700				
Volume to Capacity	0.17	0.12	0.18	0.08	0.54	0.31	0.01	0.28				
Queue Length 95th (ft)	15	10	16	7	0	0	1	0				
Control Delay (s)	18.5	10.5	12.6	9.8	0.0	0.0	0.2	0.0				
Lane LOS	C	B	B	A			A					
Approach Delay (s)	13.5		12.6	0.4			0.1					
Approach LOS	B		B									
Intersection Summary												
Average Delay			1.5									
Intersection Capacity Utilization			70.2%		ICU Level of Service					C		
Analysis Period (min)			15									

HCM Signalized Intersection Capacity Analysis
3: MD 97 & Morningwood Drive/Spartan Road

North High Street Connection Study
Existing PM with Diversion












Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖↗	↗		↖	↕↗		↖	↕↗	
Traffic Volume (vph)	32	71	55	303	132	88	112	1448	224	134	654	50
Future Volume (vph)	32	71	55	303	132	88	112	1448	224	134	654	50
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.5		6.0	6.5	
Lane Util. Factor	1.00	1.00		0.97	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.93		1.00	0.94		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1741		3433	1751		1770	3410		1770	3439	
Flt Permitted	0.95	1.00		0.95	1.00		0.33	1.00		0.04	1.00	
Satd. Flow (perm)	1770	1741		3433	1751		610	3410		82	3439	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	33	74	57	316	138	92	117	1508	233	140	681	52
RTOR Reduction (vph)	0	17	0	0	15	0	0	7	0	0	3	0
Lane Group Flow (vph)	33	114	0	316	215	0	117	1734	0	140	730	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	4%	2%	2%	4%	2%
Turn Type	Split	NA		Split	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	3		4	4		1	6		5	2	
Permitted Phases							6			2		
Actuated Green, G (s)	15.7	15.7		23.8	23.8		98.3	88.6		103.7	91.3	
Effective Green, g (s)	15.7	15.7		23.8	23.8		98.3	88.6		103.7	91.3	
Actuated g/C Ratio	0.10	0.10		0.14	0.14		0.60	0.54		0.63	0.55	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.5		6.0	6.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	168	165		495	252		431	1831		178	1902	
v/s Ratio Prot	0.02	c0.07		0.09	c0.12		0.02	c0.51		c0.06	0.21	
v/s Ratio Perm							0.15			c0.44		
v/c Ratio	0.20	0.69		0.64	0.85		0.27	0.95		0.79	0.38	
Uniform Delay, d1	68.8	72.3		66.5	68.9		14.9	36.0		50.8	20.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.85	1.40	
Incremental Delay, d2	0.6	11.4		2.7	23.5		0.3	11.8		18.3	0.5	
Delay (s)	69.4	83.7		69.2	92.4		15.2	47.8		61.3	29.8	
Level of Service	E	F		E	F		B	D		E	C	
Approach Delay (s)		80.8			79.0			45.7			34.9	
Approach LOS		F			E			D			C	

Intersection Summary

HCM 2000 Control Delay	49.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	165.0	Sum of lost time (s)	24.5
Intersection Capacity Utilization	91.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis
7: Morningwood Drive & N High Street

North High Street Connection Study
Existing PM with Diversion

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	10	22	224	6	14	110
Future Volume (Veh/h)	10	22	224	6	14	110
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)	11	24	243	7	15	120
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)	928					
pX, platoon unblocked						
vC, conflicting volume	396	246			250	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	396	246			250	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	98	97			99	
cM capacity (veh/h)	598	787			1304	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	35	250	135			
Volume Left	11	0	15			
Volume Right	24	7	0			
cSH	716	1700	1304			
Volume to Capacity	0.05	0.15	0.01			
Queue Length 95th (ft)	4	0	1			
Control Delay (s)	10.3	0.0	1.0			
Lane LOS	B		A			
Approach Delay (s)	10.3	0.0	1.0			
Approach LOS	B					
Intersection Summary						
Average Delay			1.2			
Intersection Capacity Utilization			27.5%	ICU Level of Service	A	
Analysis Period (min)			15			

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:50	6:50	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	4246	4336	4224	4300	4223	4265
Vehs Exited	4271	4330	4237	4312	4194	4268
Starting Vehs	193	180	157	168	148	166
Ending Vehs	168	186	144	156	177	166
Denied Entry Before	2	0	1	1	2	0
Denied Entry After	0	2	0	0	4	1
Travel Distance (mi)	2459	2507	2445	2488	2435	2467
Travel Time (hr)	162.5	167.3	156.2	164.4	162.3	162.5
Total Delay (hr)	74.2	77.1	68.4	75.0	74.8	73.9
Total Stops	4487	4616	4300	4591	4464	4489
Fuel Used (gal)	98.3	100.9	97.0	100.4	97.8	98.9

Interval #0 Information Seeding

Start Time	6:50
End Time	7:00
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	4246	4336	4224	4300	4223	4265
Vehs Exited	4271	4330	4237	4312	4194	4268
Starting Vehs	193	180	157	168	148	166
Ending Vehs	168	186	144	156	177	166
Denied Entry Before	2	0	1	1	2	0
Denied Entry After	0	2	0	0	4	1
Travel Distance (mi)	2459	2507	2445	2488	2435	2467
Travel Time (hr)	162.5	167.3	156.2	164.4	162.3	162.5
Total Delay (hr)	74.2	77.1	68.4	75.0	74.8	73.9
Total Stops	4487	4616	4300	4591	4464	4489
Fuel Used (gal)	98.3	100.9	97.0	100.4	97.8	98.9

1: MD 97 & MD 108 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.3	2.8
Total Delay (hr)	0.9	8.2	3.5	1.9	4.2	0.3	5.7	2.1	0.1	1.2	12.7	0.1
Total Del/Veh (s)	32.9	43.1	25.8	43.1	35.9	20.7	82.0	25.1	4.5	92.6	63.5	7.5
Stop Delay (hr)	0.8	7.1	3.3	1.8	3.7	0.3	5.4	1.8	0.0	1.1	11.1	0.1
Stop Del/Veh (s)	29.1	37.2	24.0	40.3	31.7	19.9	78.7	22.3	1.3	86.7	55.9	3.0
Total Stops	96	522	365	143	277	38	244	108	5	68	669	12
Stop/Veh	0.97	0.76	0.75	0.91	0.66	0.69	0.98	0.37	0.05	1.48	0.93	0.17
Travel Dist (mi)	7.8	55.2	40.1	23.3	64.4	8.5	28.9	33.4	11.1	7.9	124.8	11.1
Travel Time (hr)	1.2	10.1	5.5	2.8	6.4	0.7	6.8	3.2	0.5	1.5	17.4	0.6
Avg Speed (mph)	6	5	7	8	10	13	4	10	21	5	7	20
Vehicles Entered	98	684	485	154	420	55	239	291	108	44	698	68
Vehicles Exited	99	682	484	155	420	55	240	293	108	43	699	68
Hourly Exit Rate	99	682	484	155	420	55	240	293	108	43	699	68
Input Volume	106	657	490	147	418	46	241	289	113	43	692	69
% of Volume	93	104	99	105	100	120	100	101	96	100	101	99
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

1: MD 97 & MD 108 Performance by movement

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.2
Total Delay (hr)	40.9
Total Del/Veh (s)	43.4
Stop Delay (hr)	36.5
Stop Del/Veh (s)	38.8
Total Stops	2547
Stop/Veh	0.75
Travel Dist (mi)	416.6
Travel Time (hr)	56.7
Avg Speed (mph)	7
Vehicles Entered	3344
Vehicles Exited	3346
Hourly Exit Rate	3346
Input Volume	3311
% of Volume	101
Denied Entry Before	0
Denied Entry After	0

2: MD 97 & N High Street/Beuhler Road Performance by movement

Movement	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	3.9	4.1	0.2		0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay (hr)	1.1	0.6	1.0	0.0	0.0	0.7	0.3	0.0	0.0	2.8	0.1	6.7
Total Del/Veh (s)	148.5	170.3	39.5		5.0	38.3	2.1	1.5	7.8	7.6	8.2	10.8
Stop Delay (hr)	1.1	0.6	1.0	0.0	0.0	0.6	0.0	0.0	0.0	1.3	0.0	4.7
Stop Del/Veh (s)	146.9	168.2	38.7		4.8	35.8	0.1	0.1	3.6	3.4	5.4	7.5
Total Stops	29	12	100	0	23	54	1	0	1	196	6	422
Stop/Veh	1.07	1.00	1.05		1.00	0.84	0.00	0.00	0.50	0.15	0.21	0.19
Travel Dist (mi)	2.2	1.0	7.9	0.0	1.9	4.1	38.8	3.2	0.2	174.5	3.8	237.6
Travel Time (hr)	1.2	0.6	1.4	0.0	0.1	0.9	1.7	0.2	0.0	10.0	0.2	16.4
Avg Speed (mph)	2	2	6	15	16	5	23	19	16	17	15	15
Vehicles Entered	27	11	94	0	23	64	592	48	2	1335	29	2225
Vehicles Exited	26	12	93	0	23	64	592	48	2	1334	29	2223
Hourly Exit Rate	26	12	93	0	23	64	592	48	2	1334	29	2223
Input Volume	32	12	97	1	20	69	592	48	2	1331	28	2232
% of Volume	81	100	96	0	115	93	100	100	100	100	104	100
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

3: MD 97 & Morningwood Drive/Spartan Road Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.4	3.7	3.5	0.0	0.0	0.0	0.2	0.3	0.8
Total Delay (hr)	0.6	1.2	2.1	3.9	0.6	0.1	0.5	3.1	0.5	0.7	8.0	0.4
Total Del/Veh (s)	76.2	83.4	51.1	59.8	58.6	29.2	32.4	17.3	12.0	29.1	22.2	19.4
Stop Delay (hr)	0.6	1.1	1.9	3.6	0.6	0.1	0.4	2.4	0.4	0.6	6.4	0.3
Stop Del/Veh (s)	72.0	77.6	48.2	55.8	54.3	27.2	29.3	13.6	9.6	25.1	17.8	15.8
Total Stops	33	52	137	217	34	15	48	278	62	99	507	28
Stop/Veh	1.18	0.98	0.94	0.93	0.87	0.88	0.91	0.43	0.45	1.11	0.39	0.36
Travel Dist (mi)	4.7	9.1	24.6	41.2	6.8	3.1	7.2	87.3	18.7	5.6	81.8	4.8
Travel Time (hr)	0.8	1.5	3.0	5.4	0.9	0.3	0.7	6.0	1.2	1.0	11.3	0.7
Avg Speed (mph)	6	6	8	8	8	12	10	14	16	6	7	7
Vehicles Entered	28	53	143	225	37	17	52	633	136	88	1288	77
Vehicles Exited	28	53	144	226	38	17	53	633	136	88	1288	77
Hourly Exit Rate	28	53	144	226	38	17	53	633	136	88	1288	77
Input Volume	28	50	148	228	41	19	58	634	135	84	1296	72
% of Volume	100	106	97	99	93	89	91	100	101	105	99	107
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

3: MD 97 & Morningwood Drive/Spartan Road Performance by movement

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.3
Total Delay (hr)	21.7
Total Del/Veh (s)	27.7
Stop Delay (hr)	18.6
Stop Del/Veh (s)	23.8
Total Stops	1510
Stop/Veh	0.54
Travel Dist (mi)	294.9
Travel Time (hr)	32.7
Avg Speed (mph)	9
Vehicles Entered	2777
Vehicles Exited	2781
Hourly Exit Rate	2781
Input Volume	2793
% of Volume	100
Denied Entry Before	0
Denied Entry After	0

Total Network Performance

Denied Delay (hr)	0.7
Denied Del/Veh (s)	0.6
Total Delay (hr)	73.2
Total Del/Veh (s)	59.5
Stop Delay (hr)	60.0
Stop Del/Veh (s)	48.7
Total Stops	4489
Stop/Veh	1.01
Travel Dist (mi)	2466.7
Travel Time (hr)	162.5
Avg Speed (mph)	15
Vehicles Entered	4265
Vehicles Exited	4268
Hourly Exit Rate	4268
Input Volume	20852
% of Volume	20
Denied Entry Before	0
Denied Entry After	1

Arterial Level of Service: NB MD 97

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	4	0.5	17.3	0.1	30
Spartan Road	3	17.3	33.9	0.1	15
Beuhler Road	2	2.2	10.1	0.1	23
MD 108	1	25.0	38.7	0.1	12
Total		44.9	100.0	0.5	17

Arterial Level of Service: SB MD 97

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
MD 108	1	63.5	87.4	0.2	8
N High Street	2	5.6	23.7	0.1	20
Morningwood Drive	3	21.8	30.7	0.1	8
	4	1.8	19.1	0.1	26
Total		92.8	160.9	0.5	12

Intersection: 1: MD 97 & MD 108

Movement	EB	EB	EB	EB	B9	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	T	L	T	TR	L	L	T	TR
Maximum Queue (ft)	245	362	330	380	34	204	212	209	196	183	134	168
Average Queue (ft)	83	223	207	183	1	82	116	108	98	116	54	60
95th Queue (ft)	224	324	303	337	20	182	191	182	170	170	109	124
Link Distance (ft)		338	338	338	475		715	715			509	509
Upstream Blk Time (%)		0	0	2								
Queuing Penalty (veh)		0	0	0								
Storage Bay Dist (ft)	170					390			380	380		
Storage Blk Time (%)	0	21										
Queuing Penalty (veh)	0	22										

Intersection: 1: MD 97 & MD 108

Movement	SB	SB	SB	SB
Directions Served	L	T	T	R
Maximum Queue (ft)	175	502	467	290
Average Queue (ft)	75	340	311	58
95th Queue (ft)	188	496	461	248
Link Distance (ft)		938	938	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	125			265
Storage Blk Time (%)	0	53	17	0
Queuing Penalty (veh)	1	23	11	0

Intersection: 2: MD 97 & N High Street/Beuhler Road

Movement	EB	EB	WB	NB	NB	NB	SB	SB
Directions Served	LT	R	LTR	L	T	TR	LT	TR
Maximum Queue (ft)	100	258	36	93	52	4	184	207
Average Queue (ft)	52	79	18	32	2	0	48	58
95th Queue (ft)	104	193	43	76	26	3	143	161
Link Distance (ft)		444	442		258	258	509	509
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	50			95				
Storage Blk Time (%)	39	21		2	0			
Queuing Penalty (veh)	38	9		5	0			

Intersection: 3: MD 97 & Morningwood Drive/Spartan Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	L	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	124	340	182	210	122	152	298	277	125	312	312
Average Queue (ft)	41	156	91	139	48	38	156	153	59	259	281
95th Queue (ft)	108	290	180	200	102	102	255	248	127	299	325
Link Distance (ft)		846		962			670	670		258	258
Upstream Blk Time (%)										13	20
Queuing Penalty (veh)										89	142
Storage Bay Dist (ft)	75		240		240	155			75		
Storage Blk Time (%)	2	43		0			9		3	37	
Queuing Penalty (veh)	4	12		0			5		17	31	

Intersection: 10: Bend

Movement	NW
Directions Served	T
Maximum Queue (ft)	11
Average Queue (ft)	0
95th Queue (ft)	8
Link Distance (ft)	475
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 411

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:50	6:50	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	5535	5599	5351	5418	5393	5459
Vehs Exited	5447	5541	5328	5415	5358	5418
Starting Vehs	201	207	221	213	223	211
Ending Vehs	289	265	244	216	258	255
Denied Entry Before	2	0	1	0	0	0
Travel Distance (mi)	3044	3078	2945	3003	2985	3011
Travel Time (hr)	284.3	284.4	251.5	235.0	267.2	264.5
Total Delay (hr)	176.9	175.9	147.8	128.9	161.8	158.2
Total Stops	8173	7872	7454	6635	7804	7587
Fuel Used (gal)	143.5	145.3	133.2	130.0	138.3	138.1

Interval #0 Information Seeding

Start Time	6:50
End Time	7:00
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	5535	5599	5351	5418	5393	5459
Vehs Exited	5447	5541	5328	5415	5358	5418
Starting Vehs	201	207	221	213	223	211
Ending Vehs	289	265	244	216	258	255
Denied Entry Before	2	0	1	0	0	0
Travel Distance (mi)	3044	3078	2945	3003	2985	3011
Travel Time (hr)	284.3	284.4	251.5	235.0	267.2	264.5
Total Delay (hr)	176.9	175.9	147.8	128.9	161.8	158.2
Total Stops	8173	7872	7454	6635	7804	7587
Fuel Used (gal)	143.5	145.3	133.2	130.0	138.3	138.1

1: MD 97 & MD 108 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.3	3.2
Total Delay (hr)	2.2	9.3	1.0	2.8	12.0	0.9	11.9	10.0	0.8	2.1	6.0	0.1
Total Del/Veh (s)	53.5	51.2	10.5	45.8	54.5	47.1	90.2	40.1	30.0	83.3	54.6	3.2
Stop Delay (hr)	2.0	8.2	1.0	2.6	10.2	0.8	11.1	8.2	0.6	1.9	5.4	0.0
Stop Del/Veh (s)	49.3	45.2	10.7	41.5	46.1	42.6	84.0	32.5	22.8	78.8	49.0	0.0
Total Stops	157	518	236	201	642	54	452	501	49	103	321	0
Stop/Veh	1.07	0.79	0.70	0.91	0.81	0.83	0.95	0.55	0.52	1.16	0.81	0.00
Travel Dist (mi)	11.5	51.6	27.6	33.2	118.1	9.6	55.4	100.5	9.6	15.6	70.3	20.6
Travel Time (hr)	2.7	11.1	2.3	4.1	16.0	1.3	14.1	13.5	1.1	2.7	8.4	0.9
Avg Speed (mph)	4	5	12	8	7	8	4	7	8	6	8	25
Vehicles Entered	147	638	333	220	768	62	460	893	95	86	393	126
Vehicles Exited	143	638	333	214	771	63	463	896	94	87	394	126
Hourly Exit Rate	143	638	333	214	771	63	463	896	94	87	394	126
Input Volume	150	631	341	218	771	63	468	913	100	87	408	127
% of Volume	95	101	98	98	100	100	99	98	94	100	97	99
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0

1: MD 97 & MD 108 Performance by movement

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.2
Total Delay (hr)	59.2
Total Del/Veh (s)	49.5
Stop Delay (hr)	52.0
Stop Del/Veh (s)	43.4
Total Stops	3234
Stop/Veh	0.75
Travel Dist (mi)	523.6
Travel Time (hr)	78.2
Avg Speed (mph)	7
Vehicles Entered	4221
Vehicles Exited	4222
Hourly Exit Rate	4222
Input Volume	4277
% of Volume	99
Denied Entry Before	0

2: MD 97 & N High Street/Beuhler Road Performance by movement

Movement	EBL	EBR	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	3.9	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay (hr)	1.0	0.6	0.8	0.2	1.9	0.1	0.0	1.3	0.0	5.9
Total Del/Veh (s)	97.8	24.5	29.9	15.4	4.9	3.4	16.5	5.2	4.3	7.9
Stop Delay (hr)	1.0	0.5	0.8	0.2	0.0	0.0	0.0	0.5	0.0	3.0
Stop Del/Veh (s)	96.1	23.7	29.4	10.6	0.0	0.1	14.5	2.1	2.5	4.0
Total Stops	36	83	94	36	10	0	3	92	5	359
Stop/Veh	1.00	1.02	0.99	0.65	0.01	0.00	0.50	0.10	0.15	0.13
Travel Dist (mi)	2.9	6.8	7.8	3.6	93.2	4.7	0.7	114.3	4.5	238.5
Travel Time (hr)	1.1	0.9	1.2	0.4	5.2	0.3	0.1	5.7	0.2	15.1
Avg Speed (mph)	3	8	7	9	18	16	12	20	18	16
Vehicles Entered	35	81	94	55	1420	70	5	903	33	2696
Vehicles Exited	35	80	93	54	1413	70	5	900	34	2684
Hourly Exit Rate	35	80	93	54	1413	70	5	900	34	2684
Input Volume	39	84	99	54	1445	70	6	928	33	2758
% of Volume	90	95	94	100	98	100	83	97	103	97
Denied Entry Before	0	0	0	0	0	0	0	0	0	0

3: MD 97 & Morningwood Drive/Spartan Road Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.5	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	5.5	7.2	6.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	1.0	1.8	1.0	8.8	4.8	2.8	2.5	29.5	4.3	2.8	5.8	0.5
Total Del/Veh (s)	74.8	91.8	60.8	99.5	128.9	106.9	66.3	74.2	69.2	80.9	29.1	27.8
Stop Delay (hr)	0.9	1.7	1.0	8.1	4.4	2.6	1.9	21.5	3.2	2.7	5.0	0.5
Stop Del/Veh (s)	71.2	86.5	58.5	91.7	118.5	99.6	50.9	54.1	50.9	76.9	24.8	24.7
Total Stops	51	67	60	359	152	106	167	1204	177	151	399	42
Stop/Veh	1.11	0.94	0.97	1.13	1.13	1.13	1.23	0.84	0.79	1.21	0.55	0.59
Travel Dist (mi)	7.7	12.2	10.5	55.1	23.2	16.4	18.1	190.1	29.6	7.8	42.8	4.4
Travel Time (hr)	1.2	2.2	1.4	11.2	5.8	3.6	3.2	35.9	5.4	3.1	7.3	0.8
Avg Speed (mph)	6	5	7	5	4	5	6	5	5	2	6	6
Vehicles Entered	45	71	61	305	128	90	134	1409	219	120	711	70
Vehicles Exited	43	68	59	298	129	91	133	1410	218	122	717	70
Hourly Exit Rate	43	68	59	298	129	91	133	1410	218	122	717	70
Input Volume	46	71	61	303	132	88	125	1435	224	134	727	69
% of Volume	93	96	97	98	98	103	106	98	97	91	99	101
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0

3: MD 97 & Morningwood Drive/Spartan Road Performance by movement

Movement	All
Denied Delay (hr)	0.9
Denied Del/Veh (s)	0.9
Total Delay (hr)	65.7
Total Del/Veh (s)	68.9
Stop Delay (hr)	53.4
Stop Del/Veh (s)	56.1
Total Stops	2935
Stop/Veh	0.86
Travel Dist (mi)	417.7
Travel Time (hr)	81.2
Avg Speed (mph)	5
Vehicles Entered	3363
Vehicles Exited	3358
Hourly Exit Rate	3358
Input Volume	3415
% of Volume	98
Denied Entry Before	0

Total Network Performance

Denied Delay (hr)	3.7
Denied Del/Veh (s)	2.4
Total Delay (hr)	154.6
Total Del/Veh (s)	98.1
Stop Delay (hr)	121.8
Stop Del/Veh (s)	77.3
Total Stops	7587
Stop/Veh	1.34
Travel Dist (mi)	3011.1
Travel Time (hr)	264.5
Avg Speed (mph)	12
Vehicles Entered	5459
Vehicles Exited	5418
Hourly Exit Rate	5418
Input Volume	25742
% of Volume	21
Denied Entry Before	0

Arterial Level of Service: NB MD 97

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	4	37.9	59.3	0.1	10
Spartan Road	3	74.2	90.2	0.1	6
Beuhler Road	2	5.3	13.3	0.1	17
MD 108	1	38.6	52.2	0.1	9
Total		155.9	215.0	0.5	8

Arterial Level of Service: SB MD 97

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
MD 108	1	54.6	76.3	0.2	9
N High Street	2	5.0	20.8	0.1	23
Morningwood Drive	3	30.4	37.7	0.1	6
	4	2.0	19.0	0.1	26
Total		92.0	153.9	0.5	12

Intersection: 1: MD 97 & MD 108

Movement	EB	EB	EB	EB	B9	B9	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	R	T	T	L	T	TR	L	L	T
Maximum Queue (ft)	245	410	365	191	61	10	397	457	428	317	345	413
Average Queue (ft)	130	241	216	56	3	0	134	292	275	198	219	239
95th Queue (ft)	263	372	334	131	25	7	266	427	411	300	320	366
Link Distance (ft)		338	338	338	475	475		715	715			508
Upstream Blk Time (%)		3	1									0
Queuing Penalty (veh)		0	0									0
Storage Bay Dist (ft)	170						390			380	380	
Storage Blk Time (%)	2	24						2		0	0	0
Queuing Penalty (veh)	6	35						5		0	0	2

Intersection: 1: MD 97 & MD 108

Movement	NB	SB	SB	SB
Directions Served	TR	L	T	T
Maximum Queue (ft)	434	175	343	291
Average Queue (ft)	265	98	189	156
95th Queue (ft)	385	183	297	252
Link Distance (ft)	508		937	937
Upstream Blk Time (%)	0			
Queuing Penalty (veh)	0			
Storage Bay Dist (ft)		125		
Storage Blk Time (%)		6	29	0
Queuing Penalty (veh)		12	25	0

Intersection: 2: MD 97 & N High Street/Beuhler Road

Movement	EB	EB	WB	NB	NB	NB	SB	SB
Directions Served	LT	R	LTR	L	T	TR	LT	TR
Maximum Queue (ft)	88	152	142	52	33	16	148	129
Average Queue (ft)	41	55	58	17	1	1	22	20
95th Queue (ft)	85	126	108	42	15	9	88	79
Link Distance (ft)		444	438		254	254	508	508
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	50			95				
Storage Blk Time (%)	25	13			0			
Queuing Penalty (veh)	21	5			0			

Intersection: 3: MD 97 & Morningwood Drive/Spartan Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	B4	B4	SB	SB
Directions Served	L	TR	L	L	TR	L	T	TR	T	T	L	T
Maximum Queue (ft)	124	268	281	637	300	280	765	758	780	699	125	282
Average Queue (ft)	58	132	141	357	218	142	706	697	430	401	103	231
95th Queue (ft)	130	254	242	841	333	328	828	824	947	917	148	308
Link Distance (ft)		846		962			657	657	735	735		254
Upstream Blk Time (%)				8			38	33	14	8		9
Queuing Penalty (veh)				0			0	0	0	0		42
Storage Bay Dist (ft)	75		240		240	155						75
Storage Blk Time (%)	8	41	1	3	23	0	46				43	33
Queuing Penalty (veh)	11	19	2	12	69	1	58				139	44

Intersection: 3: MD 97 & Morningwood Drive/Spartan Road

Movement	SB
Directions Served	TR
Maximum Queue (ft)	286
Average Queue (ft)	239
95th Queue (ft)	311
Link Distance (ft)	254
Upstream Blk Time (%)	10
Queuing Penalty (veh)	47
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 9: Bend

Movement	WB
Directions Served	T
Maximum Queue (ft)	55
Average Queue (ft)	2
95th Queue (ft)	39
Link Distance (ft)	338
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 556

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:50	6:50	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	4292	4317	4390	4160	4247	4280
Vehs Exited	4318	4306	4403	4192	4241	4291
Starting Vehs	181	186	166	194	157	175
Ending Vehs	155	197	153	162	163	165
Denied Entry Before	0	0	1	1	0	0
Denied Entry After	0	0	1	8	0	2
Travel Distance (mi)	2461	2468	2521	2387	2420	2451
Travel Time (hr)	161.0	162.3	171.5	161.9	156.6	162.7
Total Delay (hr)	72.7	73.8	80.8	76.2	69.3	74.5
Total Stops	4494	4516	4745	4180	4181	4426
Fuel Used (gal)	98.5	99.0	102.3	97.1	96.2	98.6

Interval #0 Information Seeding

Start Time	6:50
End Time	7:00
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	4292	4317	4390	4160	4247	4280
Vehs Exited	4318	4306	4403	4192	4241	4291
Starting Vehs	181	186	166	194	157	175
Ending Vehs	155	197	153	162	163	165
Denied Entry Before	0	0	1	1	0	0
Denied Entry After	0	0	1	8	0	2
Travel Distance (mi)	2461	2468	2521	2387	2420	2451
Travel Time (hr)	161.0	162.3	171.5	161.9	156.6	162.7
Total Delay (hr)	72.7	73.8	80.8	76.2	69.3	74.5
Total Stops	4494	4516	4745	4180	4181	4426
Fuel Used (gal)	98.5	99.0	102.3	97.1	96.2	98.6

1: MD 97 & MD 108 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.3	2.9
Total Delay (hr)	0.9	7.8	3.6	1.4	4.5	0.4	5.4	2.1	0.1	1.0	12.4	0.2
Total Del/Veh (s)	31.2	42.3	25.9	34.3	37.4	26.3	78.9	25.4	4.4	90.7	63.1	10.8
Stop Delay (hr)	0.8	6.7	3.3	1.3	3.9	0.3	5.2	1.9	0.0	1.0	10.9	0.1
Stop Del/Veh (s)	27.7	36.7	23.9	31.9	32.9	25.1	75.9	22.6	1.3	85.0	55.7	6.2
Total Stops	96	488	375	123	295	35	234	114	10	59	651	15
Stop/Veh	0.88	0.74	0.75	0.87	0.69	0.71	0.96	0.39	0.09	1.44	0.92	0.24
Travel Dist (mi)	8.5	53.1	41.3	21.1	65.4	7.6	28.4	33.7	11.7	7.3	122.2	10.3
Travel Time (hr)	1.3	9.6	5.7	2.1	6.7	0.7	6.5	3.3	0.6	1.4	17.0	0.6
Avg Speed (mph)	7	6	7	10	10	11	4	10	21	6	7	18
Vehicles Entered	107	657	500	139	426	49	235	293	114	40	681	63
Vehicles Exited	108	658	498	140	426	49	236	291	113	40	687	63
Hourly Exit Rate	108	658	498	140	426	49	236	291	113	40	687	63
Input Volume	106	657	490	147	418	46	241	289	113	43	692	69
% of Volume	102	100	102	95	102	107	98	101	100	93	99	91
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

1: MD 97 & MD 108 Performance by movement

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.2
Total Delay (hr)	39.7
Total Del/Veh (s)	42.6
Stop Delay (hr)	35.5
Stop Del/Veh (s)	38.1
Total Stops	2495
Stop/Veh	0.74
Travel Dist (mi)	410.6
Travel Time (hr)	55.3
Avg Speed (mph)	7
Vehicles Entered	3304
Vehicles Exited	3309
Hourly Exit Rate	3309
Input Volume	3311
% of Volume	100
Denied Entry Before	0
Denied Entry After	0

2: MD 97 & N High Street/Beuhler Road Performance by movement

Movement	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.3	0.1	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
Denied Del/Veh (s)	30.0	30.9	28.3	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0	2.1
Total Delay (hr)	2.1	0.9	2.1	0.0	0.1	0.8	0.3	0.0	0.0	2.7	0.1	9.1
Total Del/Veh (s)	207.7	225.5	65.8	75.7	9.7	36.5	2.0	1.4	5.4	7.4	6.3	14.5
Stop Delay (hr)	2.1	0.9	2.0	0.0	0.1	0.8	0.0	0.0	0.0	1.2	0.0	7.1
Stop Del/Veh (s)	206.8	224.5	65.3	73.7	9.4	34.1	0.1	0.1	2.1	3.2	3.4	11.3
Total Stops	34	12	117	1	21	70	2	0	0	182	9	448
Stop/Veh	0.92	0.86	1.04	1.00	1.00	0.86	0.00	0.00	0.00	0.14	0.19	0.20
Travel Dist (mi)	2.4	0.9	7.7	0.1	1.7	5.0	38.4	2.9	0.3	170.7	6.3	236.3
Travel Time (hr)	2.5	1.0	3.3	0.0	0.1	1.0	1.7	0.1	0.0	9.7	0.4	20.0
Avg Speed (mph)	1	1	3	3	13	5	23	19	17	18	16	13
Vehicles Entered	35	13	110	1	21	79	587	43	2	1311	47	2249
Vehicles Exited	34	13	110	1	21	80	587	43	2	1309	47	2247
Hourly Exit Rate	34	13	110	1	21	80	587	43	2	1309	47	2247
Input Volume	39	12	111	1	20	74	584	48	2	1313	46	2250
% of Volume	87	108	99	100	105	108	101	90	100	100	102	100
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	1	1	0	0	0	0	0	0	0	0	2

3: MD 97 & Morningwood Drive/Spartan Road Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.4	3.7	3.5	0.0	0.0	0.0	0.4	0.2	0.4
Total Delay (hr)	0.4	1.0	1.6	3.7	0.6	0.1	0.5	3.0	0.5	0.6	7.5	0.3
Total Del/Veh (s)	70.3	35.4	45.5	57.2	53.4	20.3	33.9	16.7	12.5	27.3	20.5	17.3
Stop Delay (hr)	0.4	0.9	1.5	3.5	0.6	0.1	0.5	2.3	0.4	0.5	6.0	0.2
Stop Del/Veh (s)	66.6	32.8	43.2	53.1	49.3	18.3	30.8	13.0	10.0	23.4	16.3	14.4
Total Stops	21	47	115	213	32	19	50	276	64	87	500	20
Stop/Veh	1.11	0.45	0.93	0.91	0.76	0.86	0.93	0.43	0.46	1.09	0.38	0.36
Travel Dist (mi)	3.3	13.4	20.9	41.3	7.4	3.9	7.3	87.9	19.0	5.0	83.0	3.4
Travel Time (hr)	0.5	1.5	2.4	5.2	0.9	0.3	0.8	6.0	1.2	0.8	10.8	0.4
Avg Speed (mph)	7	9	9	8	8	15	9	15	15	6	8	8
Vehicles Entered	19	102	122	225	40	22	53	639	139	78	1310	54
Vehicles Exited	19	104	122	227	41	22	53	639	138	79	1309	55
Hourly Exit Rate	19	104	122	227	41	22	53	639	138	79	1309	55
Input Volume	20	105	133	228	41	19	52	640	135	84	1310	53
% of Volume	95	99	92	100	100	116	102	100	102	94	100	104
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

3: MD 97 & Morningwood Drive/Spartan Road Performance by movement

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.2
Total Delay (hr)	19.8
Total Del/Veh (s)	25.1
Stop Delay (hr)	16.8
Stop Del/Veh (s)	21.3
Total Stops	1444
Stop/Veh	0.51
Travel Dist (mi)	295.9
Travel Time (hr)	30.8
Avg Speed (mph)	10
Vehicles Entered	2803
Vehicles Exited	2808
Hourly Exit Rate	2808
Input Volume	2820
% of Volume	100
Denied Entry Before	0
Denied Entry After	0

7: Morningwood Drive & N High Street Performance by movement

Movement	WBL	WBT	WBR	NBT	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.1
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	7.4	0.6	3.3	1.2	1.1	2.5	0.4	0.9
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stop Del/Veh (s)	5.9	0.3	3.0	0.3	0.3	0.5	0.0	0.3
Total Stops	5	0	17	0	0	2	0	24
Stop/Veh	0.83	0.00	1.00	0.00	0.00	0.13	0.00	0.04
Travel Dist (mi)	0.7	7.6	2.2	23.3	1.3	1.8	28.2	65.2
Travel Time (hr)	0.0	0.4	0.1	0.9	0.1	0.1	1.0	2.6
Avg Speed (mph)	16	20	17	25	23	23	29	25
Vehicles Entered	6	106	17	145	8	15	238	535
Vehicles Exited	5	106	17	144	8	15	238	533
Hourly Exit Rate	5	106	17	144	8	15	238	533
Input Volume	8	96	17	144	7	16	250	538
% of Volume	62	110	100	100	114	94	95	99
Denied Entry Before	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0

Total Network Performance

Denied Delay (hr)	1.9
Denied Del/Veh (s)	1.6
Total Delay (hr)	72.7
Total Del/Veh (s)	58.7
Stop Delay (hr)	59.6
Stop Del/Veh (s)	48.2
Total Stops	4426
Stop/Veh	0.99
Travel Dist (mi)	2451.2
Travel Time (hr)	162.7
Avg Speed (mph)	15
Vehicles Entered	4280
Vehicles Exited	4291
Hourly Exit Rate	4291
Input Volume	20914
% of Volume	21
Denied Entry Before	0
Denied Entry After	2

Arterial Level of Service: NB MD 97

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	4	0.5	17.4	0.1	30
Spartan Road	3	16.7	33.2	0.1	15
Beuhler Road	2	2.1	10.1	0.1	23
MD 108	1	25.7	39.5	0.1	12
Total		45.0	100.2	0.5	17

Arterial Level of Service: SB MD 97

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
MD 108	1	63.1	86.8	0.2	8
N High Street	2	5.7	23.6	0.1	20
Morningwood Drive	3	20.2	29.0	0.1	8
	4	1.8	19.1	0.1	26
Total		90.8	158.5	0.5	12

Intersection: 1: MD 97 & MD 108

Movement	EB	EB	EB	EB	B9	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	T	L	T	TR	L	L	T	TR
Maximum Queue (ft)	245	368	341	383	34	157	226	220	172	194	131	189
Average Queue (ft)	73	210	191	186	2	59	126	116	92	111	51	67
95th Queue (ft)	201	326	296	344	28	124	204	198	151	166	102	139
Link Distance (ft)		338	338	338	475		715	715			509	509
Upstream Blk Time (%)		1	0	2								
Queuing Penalty (veh)		0	0	0								
Storage Bay Dist (ft)	170					390			380	380		
Storage Blk Time (%)	0	18										
Queuing Penalty (veh)	0	19										

Intersection: 1: MD 97 & MD 108

Movement	SB	SB	SB	SB
Directions Served	L	T	T	R
Maximum Queue (ft)	175	565	525	232
Average Queue (ft)	63	324	302	50
95th Queue (ft)	165	506	486	230
Link Distance (ft)		938	938	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	125			265
Storage Blk Time (%)	0	52	16	0
Queuing Penalty (veh)	1	22	11	0

Intersection: 2: MD 97 & N High Street/Beuhler Road

Movement	EB	EB	WB	NB	NB	NB	SB	SB
Directions Served	LT	R	LTR	L	T	TR	LT	TR
Maximum Queue (ft)	99	276	35	109	75	6	241	223
Average Queue (ft)	67	129	17	40	5	0	45	47
95th Queue (ft)	113	309	43	88	56	4	155	161
Link Distance (ft)		632	442		257	257	509	509
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	50			95				
Storage Blk Time (%)	63	25		2	0			
Queuing Penalty (veh)	70	13		5	0			

Intersection: 3: MD 97 & Morningwood Drive/Spartan Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	L	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	122	276	172	200	143	165	293	302	125	301	322
Average Queue (ft)	25	132	93	140	50	40	170	150	53	250	272
95th Queue (ft)	80	233	181	196	109	107	279	261	120	312	343
Link Distance (ft)		830		962			670	670		257	257
Upstream Blk Time (%)										11	17
Queuing Penalty (veh)										77	120
Storage Bay Dist (ft)	75		240		240	155			75		
Storage Blk Time (%)	0	36					11		2	35	
Queuing Penalty (veh)	1	7					5		16	30	

Intersection: 7: Morningwood Drive & N High Street

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	39	40
Average Queue (ft)	16	3
95th Queue (ft)	41	19
Link Distance (ft)	632	623
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 399

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:50	6:50	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	5440	5394	5535	5530	5329	5447
Vehs Exited	5411	5363	5474	5493	5245	5398
Starting Vehs	232	252	221	216	190	220
Ending Vehs	261	283	282	253	274	268
Denied Entry Before	1	3	0	1	1	0
Travel Distance (mi)	2973	2958	3010	3020	2896	2972
Travel Time (hr)	277.6	281.3	289.9	273.8	242.1	272.9
Total Delay (hr)	172.5	176.8	183.8	167.1	139.8	168.0
Total Stops	8202	8033	7914	7778	7212	7828
Fuel Used (gal)	140.7	141.4	144.0	140.6	130.2	139.4

Interval #0 Information Seeding

Start Time	6:50
End Time	7:00
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	5440	5394	5535	5530	5329	5447
Vehs Exited	5411	5363	5474	5493	5245	5398
Starting Vehs	232	252	221	216	190	220
Ending Vehs	261	283	282	253	274	268
Denied Entry Before	1	3	0	1	1	0
Travel Distance (mi)	2973	2958	3010	3020	2896	2972
Travel Time (hr)	277.6	281.3	289.9	273.8	242.1	272.9
Total Delay (hr)	172.5	176.8	183.8	167.1	139.8	168.0
Total Stops	8202	8033	7914	7778	7212	7828
Fuel Used (gal)	140.7	141.4	144.0	140.6	130.2	139.4

1: MD 97 & MD 108 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.3	3.2
Total Delay (hr)	2.1	8.8	1.2	2.6	12.2	0.8	12.6	9.9	0.6	2.1	6.3	0.1
Total Del/Veh (s)	51.9	49.9	12.5	44.6	55.7	46.0	92.6	39.4	24.8	82.0	54.6	3.2
Stop Delay (hr)	2.0	7.8	1.3	2.4	10.4	0.7	11.7	8.1	0.4	1.9	5.7	0.0
Stop Del/Veh (s)	47.7	44.1	12.6	40.4	47.3	41.3	86.1	32.1	18.0	77.3	48.8	0.0
Total Stops	153	493	254	190	648	56	471	487	38	106	337	0
Stop/Veh	1.03	0.78	0.71	0.89	0.82	0.86	0.97	0.54	0.44	1.18	0.81	0.00
Travel Dist (mi)	11.6	49.8	29.4	32.0	117.2	9.8	56.8	100.0	8.8	15.5	73.7	20.9
Travel Time (hr)	2.6	10.5	2.7	3.8	16.1	1.2	14.7	13.3	0.9	2.7	8.8	1.0
Avg Speed (mph)	4	5	11	8	7	8	4	7	10	6	8	25
Vehicles Entered	148	616	355	212	761	64	471	894	86	86	412	128
Vehicles Exited	144	617	355	207	768	63	472	896	86	88	414	127
Hourly Exit Rate	144	617	355	207	768	63	472	896	86	88	414	127
Input Volume	150	631	341	218	771	63	468	913	100	87	408	127
% of Volume	96	98	104	95	100	100	101	98	86	101	101	100
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0

1: MD 97 & MD 108 Performance by movement

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.2
Total Delay (hr)	59.4
Total Del/Veh (s)	49.4
Stop Delay (hr)	52.2
Stop Del/Veh (s)	43.5
Total Stops	3233
Stop/Veh	0.75
Travel Dist (mi)	525.6
Travel Time (hr)	78.4
Avg Speed (mph)	7
Vehicles Entered	4233
Vehicles Exited	4237
Hourly Exit Rate	4237
Input Volume	4277
% of Volume	99
Denied Entry Before	0

2: MD 97 & N High Street/Beuhler Road Performance by movement

Movement	EBL	EBR	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	3.6	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay (hr)	1.4	0.5	0.9	0.3	1.9	0.1	0.0	1.4	0.0	6.6
Total Del/Veh (s)	106.4	24.0	32.1	18.1	5.0	3.7	16.5	5.5	3.0	8.7
Stop Delay (hr)	1.3	0.5	0.9	0.2	0.0	0.0	0.0	0.6	0.0	3.7
Stop Del/Veh (s)	104.8	23.4	31.6	13.5	0.1	0.2	13.6	2.3	1.3	4.8
Total Stops	47	82	105	41	10	1	4	100	4	394
Stop/Veh	1.02	1.05	0.99	0.64	0.01	0.01	0.67	0.11	0.07	0.14
Travel Dist (mi)	2.9	5.4	8.7	4.2	92.3	4.6	0.7	115.7	7.1	241.8
Travel Time (hr)	1.5	0.8	1.4	0.5	5.1	0.3	0.1	5.9	0.4	15.9
Avg Speed (mph)	2	7	6	8	18	16	13	20	19	15
Vehicles Entered	45	78	105	64	1410	68	5	918	53	2746
Vehicles Exited	43	78	103	64	1403	68	5	916	54	2734
Hourly Exit Rate	43	78	103	64	1403	68	5	916	54	2734
Input Volume	51	88	99	65	1433	70	6	911	50	2773
% of Volume	84	89	104	98	98	97	83	101	108	99
Denied Entry Before	0	0	0	0	0	0	0	0	0	0

3: MD 97 & Morningwood Drive/Spartan Road Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	1.0	0.1	0.1	1.6	4.4	4.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.7	1.6	0.8	8.3	4.7	2.6	2.1	32.5	4.3	3.2	6.0	0.4
Total Del/Veh (s)	69.9	75.2	45.8	94.3	127.8	103.2	69.8	80.6	74.4	84.4	29.4	26.8
Stop Delay (hr)	0.6	1.5	0.7	7.6	4.3	2.4	1.6	24.0	3.2	3.0	5.1	0.3
Stop Del/Veh (s)	66.2	70.3	43.6	87.0	117.9	96.5	52.9	59.4	55.3	80.1	25.0	23.6
Total Stops	34	69	54	360	152	101	136	1284	178	165	406	29
Stop/Veh	1.00	0.91	0.92	1.14	1.16	1.13	1.25	0.88	0.86	1.20	0.55	0.55
Travel Dist (mi)	5.1	11.2	8.5	55.6	23.1	15.6	14.3	191.6	27.4	8.5	43.6	3.3
Travel Time (hr)	0.9	2.0	1.1	10.4	5.6	3.2	2.6	38.9	5.4	3.6	7.5	0.5
Avg Speed (mph)	6	6	8	5	4	5	5	5	5	2	6	6
Vehicles Entered	34	75	59	306	127	86	107	1419	204	132	722	52
Vehicles Exited	33	73	56	301	123	86	106	1424	203	133	728	53
Hourly Exit Rate	33	73	56	301	123	86	106	1424	203	133	728	53
Input Volume	32	72	55	303	132	88	112	1448	224	134	733	50
% of Volume	103	101	102	99	93	98	95	98	91	99	99	106
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0

3: MD 97 & Morningwood Drive/Spartan Road Performance by movement

Movement	All
Denied Delay (hr)	0.4
Denied Del/Veh (s)	0.4
Total Delay (hr)	67.0
Total Del/Veh (s)	71.0
Stop Delay (hr)	54.4
Stop Del/Veh (s)	57.7
Total Stops	2968
Stop/Veh	0.87
Travel Dist (mi)	407.9
Travel Time (hr)	81.7
Avg Speed (mph)	5
Vehicles Entered	3323
Vehicles Exited	3319
Hourly Exit Rate	3319
Input Volume	3383
% of Volume	98
Denied Entry Before	0

7: Morningwood Drive & N High Street Performance by movement

Movement	WBL	WBT	WBR	NBT	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0
Total Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2
Total Del/Veh (s)	6.6	0.4	3.5	1.7	2.0	2.6	0.2	1.4
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Stop Del/Veh (s)	5.1	0.2	3.2	0.2	0.2	0.8	0.0	0.4
Total Stops	10	0	23	0	0	3	0	36
Stop/Veh	0.91	0.00	1.00	0.00	0.00	0.27	0.00	0.07
Travel Dist (mi)	1.4	5.9	3.0	43.5	0.6	1.3	13.8	69.4
Travel Time (hr)	0.1	0.3	0.2	1.7	0.0	0.1	0.5	2.8
Avg Speed (mph)	16	20	17	25	23	23	29	24
Vehicles Entered	11	84	23	282	3	11	116	530
Vehicles Exited	10	84	23	283	3	11	116	530
Hourly Exit Rate	10	84	23	283	3	11	116	530
Input Volume	10	83	22	291	6	14	110	536
% of Volume	100	101	105	97	50	79	105	99
Denied Entry Before	0	0	0	0	0	0	0	0

Total Network Performance

Denied Delay (hr)	7.7
Denied Del/Veh (s)	5.0
Total Delay (hr)	160.3
Total Del/Veh (s)	101.8
Stop Delay (hr)	126.7
Stop Del/Veh (s)	80.5
Total Stops	7828
Stop/Veh	1.38
Travel Dist (mi)	2971.6
Travel Time (hr)	272.9
Avg Speed (mph)	11
Vehicles Entered	5447
Vehicles Exited	5398
Hourly Exit Rate	5398
Input Volume	25590
% of Volume	21
Denied Entry Before	0

Arterial Level of Service: NB MD 97

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	4	45.7	76.2	0.1	8
Spartan Road	3	80.6	96.6	0.1	5
Beuhler Road	2	5.3	13.3	0.1	17
MD 108	1	37.5	50.9	0.1	9
Total		169.0	236.9	0.5	8

Arterial Level of Service: SB MD 97

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
MD 108	1	54.6	76.3	0.2	9
N High Street	2	5.2	21.0	0.1	22
Morningwood Drive	3	30.6	37.9	0.1	6
	4	2.1	19.1	0.1	26
Total		92.5	154.4	0.5	12

Intersection: 1: MD 97 & MD 108

Movement	EB	EB	EB	EB	B9	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	T	L	T	TR	L	L	T	TR
Maximum Queue (ft)	245	362	335	243	6	364	489	449	336	384	427	436
Average Queue (ft)	130	225	207	69	0	136	294	284	204	230	230	256
95th Queue (ft)	261	331	301	159	4	287	438	419	309	345	365	389
Link Distance (ft)		338	338	338	475		715	715			508	508
Upstream Blk Time (%)		1	0	0							0	0
Queuing Penalty (veh)		0	0	0							0	1
Storage Bay Dist (ft)	170					390			380	380		
Storage Blk Time (%)	2	21					3		0	1	1	
Queuing Penalty (veh)	7	32					6		0	2	3	

Intersection: 1: MD 97 & MD 108

Movement	SB	SB	SB
Directions Served	L	T	T
Maximum Queue (ft)	175	308	257
Average Queue (ft)	99	195	163
95th Queue (ft)	193	280	241
Link Distance (ft)		937	937
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	125		
Storage Blk Time (%)	6	33	0
Queuing Penalty (veh)	12	29	0

Intersection: 2: MD 97 & N High Street/Beuhler Road

Movement	EB	EB	WB	NB	NB	NB	SB	SB
Directions Served	LT	R	LTR	L	T	TR	LT	TR
Maximum Queue (ft)	98	166	179	78	37	43	111	112
Average Queue (ft)	48	59	64	22	2	3	21	20
95th Queue (ft)	96	144	127	54	34	32	78	76
Link Distance (ft)		632	438		253	253	508	508
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	50			95				
Storage Blk Time (%)	34	10		0	0			
Queuing Penalty (veh)	30	5		1	0			

Intersection: 3: MD 97 & Morningwood Drive/Spartan Road

Movement	EB	EB	WB	WB	WB	NB	NB	NB	B4	B4	SB	SB
Directions Served	L	TR	L	L	TR	L	T	TR	T	T	L	T
Maximum Queue (ft)	124	240	289	586	296	279	762	767	776	777	125	283
Average Queue (ft)	39	113	149	345	213	120	724	719	485	463	107	239
95th Queue (ft)	98	205	252	807	330	307	796	809	948	936	149	307
Link Distance (ft)		830		962			657	657	735	735		253
Upstream Blk Time (%)				3			44	40	21	14		10
Queuing Penalty (veh)				0			0	0	0	0		47
Storage Bay Dist (ft)	75		240		240	155						75
Storage Blk Time (%)	5	34	0	6	23	0	47				48	32
Queuing Penalty (veh)	6	11	1	22	69	2	53				157	43

Intersection: 3: MD 97 & Morningwood Drive/Spartan Road

Movement	SB
Directions Served	TR
Maximum Queue (ft)	288
Average Queue (ft)	245
95th Queue (ft)	307
Link Distance (ft)	253
Upstream Blk Time (%)	11
Queuing Penalty (veh)	52
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Morningwood Drive & N High Street

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	45	40
Average Queue (ft)	18	3
95th Queue (ft)	42	19
Link Distance (ft)	632	623
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 9: Bend

Movement	WB
Directions Served	T
Maximum Queue (ft)	11
Average Queue (ft)	0
95th Queue (ft)	8
Link Distance (ft)	338
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 592



Appendix G
MD 97/Morningwood Drive
Crash Data (2015-2019)

Georgia Ave (MD 97) Crash Data - Milipoints from 11.7 to 11.89 - 1/1/2015 to 12/31/2019

Report Number	Local Case Number	ACRS Report Type	Crash Date/Time	Hit/Run	Route Type	Mile Point	Mile Point Direction	Lane Direction	Lane Number	Lane Type	Number of Lanes	Direction	Distance	Distance Unit	Road Grade	Non-Traffic	Road Name	Cross-Street Type	Cross-Street Name	Related Non-Motorist	At Fault	Collision Type	Weather	Surface Condition	Light	Traffic Control	Driver Substance Abuse	Non-Motorist Substance Abuse	First Harmful Event	Second Harmful Event	Fixed Object Struck	Junction	Intersection Type	Intersection Area	Road Alignment	Road Condition	Road Division	Latitude	Longitude	
1	MCP2784001L	15023653	Property Damage Crash	5/17/2015 16:37	No	Maryland (State)	11.7	North	North	2		2	North	200	FEET	LEVEL	No	GEORGIA AVE	County	SPARTAN RD		DRIVER	SAME DIR REAR END	CLEAR	DRY	DAYLIGHT	TRAFFIC SIGNAL	NONE DETECTED		OTHER VEHICLE	N/A	N/A	NON INTERSECTION	N/A	THRU ROADWAY	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE	39.14926	-77.06676167
2	MCP9366000Z	170524687	Injury Crash	8/13/2017 22:48	No	Maryland (State)	11.7	North	North	2		2	North	0	FEET	LEVEL	No	GEORGIA AVE	County	SPARTAN RD		DRIVER	HEAD ON LEFT TURN	CLEAR	DRY	DARK LIGHTS ON	TRAFFIC SIGNAL	NONE DETECTED		OTHER VEHICLE	N/A	N/A	INTERSECTION	TWO-WAY INTERSECTION	INTERSECTION	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, UNPROTECTED	39.15042833	-77.06679333
3	MCP1564003V	190033547	Property Damage Crash	7/15/2019 8:56	No	Maryland (State)	11.7	North	South	2		2	South	60	FEET	LEVEL	No	GEORGIA AVE	County	MORNINGWOOD DR		DRIVER	SAME DIR REAR END	CLEAR	DRY	DAYLIGHT	NO CONTROLS	NONE DETECTED		OTHER VEHICLE	N/A	N/A	COMMERCIAL DRIVEWAY	N/A	OTHER	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE MEDIAN	39.14995	-77.06695167
4	MCP27990058	190040898	Property Damage Crash	8/26/2019 19:33	No	Maryland (State)	11.7	North	South	1		2	North	0	FEET	LEVEL	No	GEORGIA AVE	County	SPARTAN RD		DRIVER	SINGLE VEHICLE	CLEAR	DRY	DAYLIGHT	NO CONTROLS	NONE DETECTED		FIXED OBJECT	N/A	OTHER	INTERSECTION	TWO-WAY INTERSECTION	N/A	STRAIGHT	NO DEFECTS	TWO-WAY, NOT DIVIDED	39.15021557	-77.06562859
5	MCP26350046	170539228	Property Damage Crash	10/27/2017 17:50	No	Maryland (State)	11.7	North	North	1		2	South	250	FEET	LEVEL	No	GEORGIA AVE	County	SPARTAN RD		DRIVER	SAME DIR REAR END	CLEAR	DRY	DAYLIGHT	N/A	N/A		OTHER VEHICLE	N/A	N/A	INTERSECTION RELATED	TWO-WAY INTERSECTION	N/A	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE	39.14917833	-77.06681
6	MCP30400020	180017653	Property Damage Crash	4/11/2018 16:00	No	Maryland (State)	11.7	North	South	2		3	North	0	FEET	LEVEL	No	GEORGIA AVE	County	SPARTAN RD		DRIVER	SAME DIR REAR END	CLEAR	DRY	DAYLIGHT	TRAFFIC SIGNAL	N/A		OTHER VEHICLE	N/A	N/A	INTERSECTION	TWO-WAY INTERSECTION	N/A	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE	39.15036427	-77.06680655
7	MCP2799003C	170536072	Property Damage Crash	10/11/2017 16:32	No	Maryland (State)	11.7	North	North	2		2	South	50	FEET	LEVEL	No	GEORGIA AVE	County	SPARTAN RD		DRIVER	STRAIGHT MOVEMENT ANGLE	CLEAR	DRY	DAYLIGHT	NO CONTROLS	NONE DETECTED, UNKNOWN		OTHER VEHICLE	N/A	N/A	COMMERCIAL DRIVEWAY	T-INTERSECTION		STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE MEDIAN	39.14922167	-77.06652
8	MCP2965001F	17004311	Injury Crash	1/25/2017 11:28	No	Maryland (State)	11.7	North	South	2		2	North	20	FEET	LEVEL	No	GEORGIA AVE	County	MORNINGWOOD DR		DRIVER	SAME DIR REAR END	CLEAR	DRY	DAYLIGHT	NO CONTROLS	NONE DETECTED		OTHER VEHICLE	N/A	N/A	N/A	N/A	N/A	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE	39.15030083	-77.06689909
9	MCP0833000F	16046089	Injury Crash	9/8/2016 22:05	No	Maryland (State)	11.7	North	South	1		2	North	0	FEET	LEVEL	No	GEORGIA AVE	County	MORNINGWOOD DR		DRIVER	HEAD ON LEFT TURN	CLEAR	DRY	DARK LIGHTS ON	TRAFFIC SIGNAL	NONE DETECTED		OTHER VEHICLE	N/A	N/A	INTERSECTION	TWO-WAY INTERSECTION	INTERSECTION	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, UNPROTECTED	39.15035333	-77.06718833
10	MCP27990026	17002947	Property Damage Crash	1/17/2017 17:43	No	Maryland (State)	11.7	North	North	1		2	South	10	FEET	LEVEL	No	GEORGIA AVE	County	SPARTAN RD		DRIVER	SAME DIR REAR END	RAINING	WET	DARK LIGHTS ON	NO CONTROLS	NONE DETECTED		OTHER VEHICLE	OTHER VEHICLE	N/A	NON INTERSECTION	N/A		STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE	39.09520667	-76.93014333
11	MCP2420001B	16004798	Property Damage Crash	1/29/2016 19:05	No	Maryland (State)	11.7	North	North	2		3	South	40	FEET	GRADE DOWNHILL	No	GEORGIA AVE	County	MORNINGWOOD DR		DRIVER	OTHER	CLOUDY	SNOW	DARK LIGHTS ON	N/A	NONE DETECTED		OTHER VEHICLE	OTHER VEHICLE	N/A	NON INTERSECTION	N/A	OTHER	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE	39.15000833	-77.066835
12	MCP9366001B	190006621	Property Damage Crash	2/11/2019 5:03	No	Maryland (State)	11.7	North	South	2		2	North	0	FEET	LEVEL	No	GEORGIA AVE	County	MORNINGWOOD DR		DRIVER	STRAIGHT MOVEMENT ANGLE	RAINING	WET	DARK LIGHTS ON	FLASHING TRAFFIC SIGNAL	NONE DETECTED		OTHER VEHICLE	N/A	N/A	INTERSECTION	TWO-WAY INTERSECTION	INTERSECTION	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE	39.15118667	-77.06903667
13	MCP20870007	16052407	Property Damage Crash	10/12/2016 6:41	No	Maryland (State)	11.7	North	South	2		4	North	0	FEET	LEVEL	No	GEORGIA AVE	County	MORNINGWOOD DR		DRIVER	DIRECTION RIGHT TURN	CLEAR	DRY	DAWN	TRAFFIC SIGNAL	NONE DETECTED		OTHER VEHICLE	N/A	N/A	INTERSECTION	TWO-WAY INTERSECTION	INTERSECTION	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE	39.15031833	-77.06681333
14	MCP2799000X	15017795	Injury Crash	4/16/2015 16:45	No	Maryland (State)	11.7	North	South	2		2	North	10	FEET	LEVEL	No	GEORGIA AVE	County	MORNINGWOOD DR		DRIVER	SAME DIR REAR END	CLEAR	DRY	DAYLIGHT	TRAFFIC SIGNAL	N/A, NONE DETECTED		OTHER VEHICLE	OTHER VEHICLE	N/A	INTERSECTION RELATED	TWO-WAY INTERSECTION		STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE	39.15066333	-77.06706
15	MCP2466001Q	16063075	Property Damage Crash	12/8/2016 18:21	No	Maryland (State)	11.7	North	North	2		2	South	300	FEET	LEVEL	No	GEORGIA AVE	County	SPARTAN RD		DRIVER	SAME DIR REAR END	CLEAR	DRY	DARK LIGHTS ON	TRAFFIC SIGNAL	NONE DETECTED		OTHER VEHICLE	N/A	N/A	INTERSECTION RELATED	TWO-WAY INTERSECTION		STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE	39.14928167	-77.06605333
16	MCP2849000Z	15007590	Property Damage Crash	2/15/2015 9:58	No	Maryland (State)	11.7	North	North	2		2	North	0	FEET	GRADE DOWNHILL	No	GEORGIA AVE	County	SPARTAN RD		UNKNOWN	SAME DIR REAR END	CLEAR	ICE	DAYLIGHT	TRAFFIC SIGNAL	NONE DETECTED, UNKNOWN		OTHER VEHICLE	N/A	N/A	INTERSECTION RELATED	TWO-WAY INTERSECTION	N/A	STRAIGHT	FOREIGN MATERIAL	TWO-WAY DIVIDED, POSITIVE	39.15003333	-77.06686167
17	MCP3055000R	170540865	Property Damage Crash	11/4/2017 6:00	No	Maryland (State)	11.7	North	North	1		2	North	0	FEET	LEVEL	No	GEORGIA AVE	County	SPARTAN RD		DRIVER	SINGLE VEHICLE	CLEAR	DRY	DAWN	TRAFFIC SIGNAL	N/A		FIXED OBJECT	FIXED OBJECT	CURB	INTERSECTION	TWO-WAY INTERSECTION	INTERSECTION	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE	39.15112333	-77.06673
18	MCP2776001X	170515948	Property Damage Crash	6/27/2017 5:30	No	Maryland (State)	11.7	North	South	1		2	North	0	FEET	HILL UPHILL	No	GEORGIA AVE	County	MORNINGWOOD DR		DRIVER	VEHICLE MEETS RIGHT TURN	CLEAR	DRY	DAWN	TRAFFIC SIGNAL	NONE DETECTED		OTHER VEHICLE	N/A	N/A	INTERSECTION	TWO-WAY INTERSECTION	N/A	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE	39.15041	-77.06668833
19	MCP2263000L	15046302	Property Damage Crash	9/13/2015 10:41	No	Maryland (State)	11.7	North	North	1		2	North	0	FEET	LEVEL	No	GEORGIA AVE	County	SPARTAN RD		DRIVER	SINGLE VEHICLE	CLEAR	DRY	DAYLIGHT	TRAFFIC SIGNAL	NONE DETECTED		FIXED OBJECT	N/A	OTHER	INTERSECTION	TWO-WAY INTERSECTION	INTERSECTION	N/A	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE	39.15238167	-77.061225
20	MCP24200011	15049411	Property Damage Crash	9/29/2015 17:55	No	Maryland (State)	11.7	North	South	2		2	North	0	FEET	LEVEL	No	GEORGIA AVE	County	MORNINGWOOD DR		DRIVER	STRAIGHT MOVEMENT ANGLE	RAINING	WET	DUSK	NO CONTROLS	N/A, NONE DETECTED		OTHER VEHICLE	N/A	N/A	INTERSECTION	TWO-WAY INTERSECTION	INTERSECTION	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE	39.15043833	-77.067005
21	MCP93220006	15022974	Property Damage Crash	5/13/2015 23:58	Yes	Maryland (State)	11.7	North	South	2		2	North	0	FEET	LEVEL	No	GEORGIA AVE	County	MORNINGWOOD DR		DRIVER	SAME DIR REAR END	CLEAR	DRY	DARK LIGHTS ON	TRAFFIC SIGNAL	ALCOHOL PRESENT, N/A		OTHER VEHICLE	N/A	N/A	INTERSECTION	TWO-WAY INTERSECTION	N/A	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE	39.31895167	-77.20123333
22	HA2388000V	19003045	Property Damage Crash	11/15/2019 14:26	No	Maryland (State)	11.72	North	Unknown	0	N/A	0	North	0	FEET	LEVEL	No	GEORGIA AVE	Unknown	ENT TO BUSINESS		DRIVER	STRAIGHT MOVEMENT ANGLE	CLEAR	DRY	DAYLIGHT	N/A	NONE DETECTED		PARKED VEHICLE	N/A	N/A	COMMERCIAL DRIVEWAY	N/A	N/A	STRAIGHT	NO DEFECTS	N/A	39.15116	-77.06656833
23	MCP15640036	180050860	Injury Crash	10/11/2018 9:41	No	Maryland (State)	11.76	North	South	0	OTHER	2	South	50	FEET	LEVEL	No	GEORGIA AVE	County	NORTH HIGH ST	BICYCLIST	DRIVER	OTHER	CLOUDY	DRY	DAYLIGHT	NO CONTROLS	NONE DETECTED	NONE DETECTED	BICYCLE	N/A	N/A	COMMERCIAL DRIVEWAY	OTHER	OTHER	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE	39.151095	-77.067115
24	MCP2339001Q	16034488	Injury Crash	7/7/2016 21:17	No	Maryland (State)	11.76	North	South	1		4	South	20	FEET	LEVEL	No	GEORGIA AVE	County	NORTH HIGH ST		DRIVER	SINGLE VEHICLE	CLEAR	DRY	DARK LIGHTS ON	NO CONTROLS	NONE DETECTED		FIXED OBJECT	FIXED OBJECT	CURB	N/A	TWO-WAY INTERSECTION	INTERSECTION	STRAIGHT	NO DEFECTS	TWO-WAY, NOT DIVIDED	39.15101	-77.06668833
25	MCP21920032	180062061	Injury Crash	12/12/2018 13:57	Yes	Maryland (State)	11.76	North	North	1		2	South	10	FEET	LEVEL	No	GEORGIA AVE	County	NORTH HIGH ST		DRIVER	SAME DIR REAR END	CLOUDY	DRY	DAYLIGHT	N/A	NONE DETECTED, UNKNOWN		OTHER VEHICLE	OTHER VEHICLE	N/A	INTERSECTION RELATED	TWO-WAY INTERSECTION	N/A	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE MEDIAN	39.15130833	-77.066545
26	MCP26980013	15034948	Property Damage Crash	7/16/2015 12:11	Yes	Maryland (State)	11.77	North	North	2		2	South	50	FEET	LEVEL	No	GEORGIA AVE	Unknown	ENT TO BUSINESS		DRIVER	SAME DIR REAR END	CLEAR	DRY	DAYLIGHT	NO CONTROLS	NONE DETECTED, UNKNOWN		OTHER VEHICLE	N/A	N/A	NON INTERSECTION	N/A	N/A	STRAIGHT	NO DEFECTS	TWO-WAY, NOT DIVIDED	39.15429833	-77.06267333
27	MCP2635005M	190030234	Property Damage Crash	6/24/2019 22:57	No	Maryland (State)	11.77	North	North	2		2	North	0	FEET	LEVEL	No	GEORGIA AVE	Unknown	ENT TO BUSINESS		DRIVER	SINGLE VEHICLE	CLEAR	DRY	DARK LIGHTS ON	NO CONTROLS	N/A		FIXED OBJECT	N/A	CURB	INTERSECTION	T-INTERSECTION	N/A	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE MEDIAN	39.14937167	-77.06646333
28	MCP2339001S	16037537	Property Damage Crash	7/24/2016 19:13	No	Maryland (State)	11.77	North	Unknown	0	OTHER	0	North	0	FEET	LEVEL	No	GEORGIA AVE	Unknown	ENT TO BUSINESS		DRIVER	SINGLE VEHICLE	CLEAR	DRY	DAYLIGHT	NO CONTROLS	NONE DETECTED		FIXED OBJECT	N/A	BUILDING	OTHER	OTHER	STRAIGHT	NO DEFECTS	OTHER	39.151083	-77.067301	

Report Number	Local Case Number	ACRS Report Type	Crash Date/Time	Hit/Run	Route Type	Mile Point	Mile Point Direction	Lane Direction	Lane Number	Lane Type	Number of Lanes	Direction	Distance	Distance Unit	Road Grade	Non-Traffic	Road Name	Cross-Street Type	Cross-Street Name	Related Non-Motorist	At Fault	Collision Type	Weather	Surface Condition	Light	Traffic Control	Driver Substance Abuse	Non-Motorist Substance Abuse	First Harmful Event	Second Harmful Event	Fixed Object Struck	Junction	Intersection Type	Intersection Area	Road Alignment	Road Condition	Road Division	Latitude	Longitude	
29	MCP31780015	190047918	Property Damage Crash	10/6/2019 8:05	No	Maryland (State)	11.89	North	North	3		4	North	0 FEET	LEVEL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	STRAIGHT MOVEMENT ANGLE	CLOUDY	DRY	DAYLIGHT	TRAFFIC SIGNAL	N/A, NONE DETECTED		OTHER VEHICLE	N/A	N/A	INTERSECTION	TWO-WAY INTERSECTION	N/A	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE MEDIUM	39.15282107	-77.06636884	
30	MCP3179000Y	190051013	Property Damage Crash	10/23/2019 21:58	No	Maryland (State)	11.89	North	South	2		3	South	0 FEET	LEVEL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	HEAD ON LEFT TURN	CLEAR	DRY	DARK LIGHTS ON	TRAFFIC SIGNAL	NONE DETECTED		OTHER VEHICLE	N/A	N/A	N/A	TWO-WAY INTERSECTION	INTERSECTION	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE MEDIUM	39.15331749	-77.06693077	
31	MCP30400048	190056119	Injury Crash	11/20/2019 19:45	No	Maryland (State)	11.89	North	West	3		3	North	0 FEET	LEVEL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	SAME DIR REAR END	CLEAR	DRY	DARK LIGHTS ON	TRAFFIC SIGNAL	N/A		OTHER VEHICLE	N/A	N/A	INTERSECTION RELATED	TWO-WAY INTERSECTION	N/A	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE MEDIUM	39.15372833	-77.06784167	
32	MCP1500001W	190062780	Property Damage Crash	12/30/2019 17:36	No	Maryland (State)	11.89	North	North	1		2	North	100 FEET	GRADE DOWNHILL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	DIRECTION SAME DIR	CLOUDY	WET	DARK LIGHTS ON	NO CONTROLS	NONE DETECTED		OTHER VEHICLE	FIXED OBJECT	CURB	COMMERCIAL DRIVEWAY	N/A	OTHER	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, UNPROTECTED	39.1535272	-77.0667928	
33	MCP3138000X	180059950	Property Damage Crash	11/30/2018 18:07	Yes	Maryland (State)	11.89	North	South	2		4	North	0 FEET	LEVEL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	SINGLE VEHICLE REND LEFT TURN	CLEAR	N/A	UNKNOWN LIGHTING	TRAFFIC SIGNAL	N/A, UNKNOWN		OTHER VEHICLE	N/A	N/A	INTERSECTION	TWO-WAY INTERSECTION	INTERSECTION	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE MEDIUM	39.1534368	-77.0669189	
34	MCP05390038	170535995	Property Damage Crash	10/11/2017 10:41	Yes	Maryland (State)	11.89	North	North	1		4	South	20 FEET	LEVEL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	DIRECTION SAME DIR	CLOUDY	DRY	DAYLIGHT	TRAFFIC SIGNAL	NONE DETECTED		OTHER VEHICLE	N/A	N/A	INTERSECTION RELATED	TWO-WAY INTERSECTION	INTERSECTION	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE MEDIUM	39.15419333	-77.066775	
35	MCP2420002S	170545655	Property Damage Crash	11/29/2017 18:45	No	Maryland (State)	11.89	North	South	2		2	South	30 FEET	LEVEL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	DIRECTION SAME DIR	N/A	DRY	DARK LIGHTS ON	NO CONTROLS	NONE DETECTED		OTHER VEHICLE	N/A	N/A	OTHER	OTHER	N/A	STRAIGHT	NO DEFECTS	N/A	39.15282667	-77.06695	
36	MCP1400000B	15050527	Injury Crash	5/13/2015 23:58	Yes	Maryland (State)	11.89	North	North	2		2	North	0 FEET	LEVEL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	SAME DIR REAR END	CLEAR	DRY	DARK LIGHTS ON	TRAFFIC SIGNAL	ALCOHOL CONTRIBUTED, NONE DETECTED		OTHER VEHICLE	N/A	N/A	INTERSECTION	TWO-WAY INTERSECTION	N/A	STRAIGHT	NO DEFECTS	N/A	39.15301002	-77.06681728	
37	MCP2929001J	16030818	Injury Crash	6/18/2016 10:13	No	Maryland (State)	11.89	North	South	2		2	South	500 FEET	LEVEL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	SAME DIR REAR END	CLEAR	DRY	DAYLIGHT	NO CONTROLS	NONE DETECTED		OTHER VEHICLE	N/A	N/A	COMMERCIAL DRIVEWAY	TWO-WAY INTERSECTION	N/A	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE MEDIUM	39.15186188	-77.06683874	
38	MCP2737001G	16002901	Property Damage Crash	1/15/2016 22:28	Yes	Maryland (State)	11.89	North	South	0 LEFT TURN LANE		3	North	0 FEET	LEVEL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	SINGLE VEHICLE	RAINING	WET	DARK LIGHTS ON	TRAFFIC SIGNAL	ALCOHOL PRESENT		FIXED OBJECT	N/A	LIGHT SUPPORT POLE	INTERSECTION	TWO-WAY INTERSECTION	INTERSECTION	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE MEDIUM	39.152935	-77.06687	
39	MCP2617005T	180037017	Property Damage Crash	7/26/2018 13:45	No	Maryland (State)	11.89	North	North	2		2	North	60 FEET	GRADE DOWNHILL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	STRAIGHT MOVEMENT ANGLE	CLEAR	DRY	DAYLIGHT	NO CONTROLS	NONE DETECTED		OTHER VEHICLE	N/A	N/A	INTERSECTION RELATED	TWO-WAY INTERSECTION	N/A	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE MEDIUM	39.15395	-77.06679	
40	MCP1119006V	190008317	Property Damage Crash	2/21/2019 13:23	No	Maryland (State)	11.89	North	North	1		2	North	0 FEET	LEVEL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	SAME DIR REAR END	N/A	WET	DAYLIGHT	N/A	NONE DETECTED, UNKNOWN		OTHER VEHICLE	N/A	N/A	INTERSECTION RELATED	TWO-WAY INTERSECTION	N/A	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, UNPROTECTED	39.15473667	-77.06725667	
41	MCP21620027	170508765	Property Damage Crash	5/19/2017 19:48	No	Maryland (State)	11.89	North	North	1		2	North	0 FEET	LEVEL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	STRAIGHT MOVEMENT ANGLE	RAINING	WET	DAYLIGHT	TRAFFIC SIGNAL	N/A		OTHER VEHICLE	N/A	N/A	INTERSECTION	TWO-WAY INTERSECTION	INTERSECTION	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE MEDIUM	39.15356833	-77.06672	
42	MCP2965000V	16005848	Property Damage Crash	2/4/2016 14:26	Yes	Maryland (State)	11.89	North	North	1		2	North	100 FEET	LEVEL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	DIRECTION SAME DIR	CLOUDY	DRY	DAYLIGHT	N/A	NONE DETECTED, UNKNOWN		OTHER VEHICLE	N/A	N/A	N/A	N/A	N/A	STRAIGHT	NO DEFECTS	TWO-WAY, NOT DIVIDED	39.15372552	-77.06681058	
43	MCP9322000R	180005955	Property Damage Crash	2/3/2018 22:30	Yes	Maryland (State)	11.89	North	South	2		2	North	0 FEET	LEVEL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	SAME DIR REAR END	CLEAR	DRY	DARK LIGHTS ON	TRAFFIC SIGNAL	ALCOHOL PRESENT, NONE DETECTED		OTHER VEHICLE	N/A	N/A	INTERSECTION	TWO-WAY INTERSECTION	N/A	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE MEDIUM	39.15339065	-77.06691384	
44	MCP1400000N	170504248	Injury Crash	4/25/2017 23:36	No	Maryland (State)	11.89	North	West	1		4	North	0 FEET	LEVEL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	STRAIGHT MOVEMENT ANGLE	RAINING	WET	DARK LIGHTS ON	TRAFFIC SIGNAL	ALCOHOL PRESENT, NONE DETECTED		OTHER VEHICLE	FIXED OBJECT	N/A	INTERSECTION RELATED	TWO-WAY INTERSECTION	N/A	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE MEDIUM	39.15331473	-77.06694201	
45	MCP1119006X	190009294	Property Damage Crash	2/27/2019 9:29	No	Maryland (State)	11.89	North	South	0 LEFT TURN LANE		1	North	20 FEET	HILL UPHILL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	SAME DIR REAR END	CLEAR	DRY	DAYLIGHT	N/A	CONTRIBUTED, NONE DETECTED		OTHER VEHICLE	OTHER VEHICLE	N/A	INTERSECTION RELATED	TWO-WAY INTERSECTION	N/A	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, UNPROTECTED	39.15267333	-77.06634833	
46	MCP2830004J	190018978	Property Damage Crash	4/23/2019 10:30	No	Maryland (State)	11.89	North	North	2		3	South	100 FEET	LEVEL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	SAME DIR REAR END	CLEAR	DRY	DAYLIGHT	TRAFFIC SIGNAL	N/A		OTHER VEHICLE	N/A	N/A	INTERSECTION RELATED	TWO-WAY INTERSECTION	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, UNPROTECTED	39.15272167	-77.06646667		
47	MCP27650024	16017743	Property Damage Crash	4/11/2016 13:30	Yes	Maryland (State)	11.89	North	North	2		3	South	30 FEET	LEVEL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	SAME DIR REAR END	CLEAR	DRY	DAYLIGHT	TRAFFIC SIGNAL	N/A, UNKNOWN		OTHER VEHICLE	N/A	N/A	INTERSECTION RELATED	TWO-WAY INTERSECTION	N/A	STRAIGHT	UNKNOWN	UNKNOWN	39.1531681	-77.06676632	
48	MCP2799002Q	170504588	Property Damage Crash	5/9/2017 19:36	Yes	Maryland (State)	11.89	North	North	0 LEFT TURN LANE		4	South	5 FEET	LEVEL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	SAME DIR REAR END	CLEAR	DRY	DAYLIGHT	N/A	NONE DETECTED		OTHER VEHICLE	N/A	N/A	N/A	TWO-WAY INTERSECTION	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE MEDIUM	39.15303498	-77.06677437		
49	MCP2799001K	16022497	Injury Crash	5/6/2016 17:31	No	Maryland (State)	11.89	North	West	0 LEFT TURN LANE		4	South	20 FEET	LEVEL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	SAME DIR BOTH LEFT TURN	RAINING	WET	DAYLIGHT	TRAFFIC SIGNAL	NONE DETECTED		OTHER VEHICLE	OTHER VEHICLE	N/A	INTERSECTION RELATED	TWO-WAY INTERSECTION	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE MEDIUM	39.15305162	-77.0667851		
50	MCP2849002J	170505702	Property Damage Crash	5/3/2017 16:15	No	Maryland (State)	11.89	North	North	0 LEFT TURN LANE		4	North	0 FEET	LEVEL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	DIRECTION LEFT TURN	CLEAR	DRY	DAYLIGHT	TRAFFIC SIGNAL	NONE DETECTED		OTHER VEHICLE	N/A	N/A	INTERSECTION	TWO-WAY INTERSECTION	N/A	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE MEDIUM	39.15327625	-77.06697822	
51	MCP2965001C	16066270	Property Damage Crash	12/25/2016 6:51	No	Maryland (State)	11.89	North	East	2		2	North	0 FEET	LEVEL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	SINGLE VEHICLE	N/A	N/A	DARK NO LIGHTS	TRAFFIC SIGNAL	NONE DETECTED		FIXED OBJECT	N/A	SIGN SUPPORT POLE	INTERSECTION	TWO-WAY INTERSECTION	INTERSECTION	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE MEDIUM	39.153219	-77.06686	
52	MCP3040001T	180009501	Property Damage Crash	2/23/2018 21:00	Yes	Maryland (State)	11.89	North	North	3		4	North	0 FEET	LEVEL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	STRAIGHT MOVEMENT ANGLE	FOGGY	WET	DARK LIGHTS ON	TRAFFIC SIGNAL	N/A, UNKNOWN		OTHER VEHICLE	N/A	N/A	INTERSECTION	TWO-WAY INTERSECTION	N/A	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE MEDIUM	39.1541	-77.06678333	
53	MCP2991002F	180003276	Property Damage Crash	1/20/2018 11:30	No	Maryland (State)	11.89	North	North	1		2	North	0.3 FEET	LEVEL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	SAME DIR REAR END	N/A	DRY	DAYLIGHT	NO CONTROLS	NONE DETECTED		OTHER VEHICLE	OTHER VEHICLE	N/A	N/A	N/A	N/A	N/A	STRAIGHT	NO DEFECTS	TWO-WAY, NOT DIVIDED	39.15409833	-77.06686333
54	MCP1123002J	190005456	Property Damage Crash	2/4/2019 8:51	No	Maryland (State)	11.89	North	South	2		3	North	150 MILE	LEVEL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	SAME DIR REAR END	OTHER	WET	DAYLIGHT	TRAFFIC SIGNAL	NONE DETECTED		OTHER VEHICLE	N/A	N/A	NON INTERSECTION	N/A	N/A	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE MEDIUM	39.15413833	-77.066965	
55	MCP2466001H	16049584	Property Damage Crash	9/26/2016 19:58	No	Maryland (State)	11.89	North	North	1		2	North	0 FEET	LEVEL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	HEAD ON LEFT TURN	N/A	DRY	DARK LIGHTS ON	TRAFFIC SIGNAL	NONE DETECTED		OTHER VEHICLE	N/A	N/A	INTERSECTION	TWO-WAY INTERSECTION	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE MEDIUM	39.15266833	-77.06634667		
56	MCP3018002W	180044559	Property Damage Crash	9/6/2018 17:46	Yes	Maryland (State)	11.89	North	South	1		2	South	50 FEET	LEVEL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	DIRECTION SAME DIR	CLEAR	DRY	DAYLIGHT	NO CONTROLS	NONE DETECTED		OTHER VEHICLE	N/A	N/A	INTERSECTION RELATED	TWO-WAY INTERSECTION	N/A	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE MEDIUM	39.15264136	-77.06686892	
57	MCP2737001S	16030379	Property Damage Crash	6/16/2016 2:30	No	Maryland (State)	11.89	North	South	2		2	North	0 FEET	LEVEL	No	GEORGIA AVE	Maryland (State)	OLNEY SANDY SPRING RD		DRIVER	SINGLE VEHICLE	N/A	WET	DARK LIGHTS ON	TRAFFIC SIGNAL	ALCOHOL PRESENT		FIXED OBJECT	FIXED OBJECT	TREE SHRUBBERY	INTERSECTION	TWO-WAY INTERSECTION	INTERSECTION	STRAIGHT	NO DEFECTS	TWO-WAY DIVIDED, POSITIVE MEDIUM	39.153075	-77.06693167	

Nearby Morningwood Drive Crash Data - 1/1/2015 to 12/31/2019

Report Number	Local Case Number	ACRS Report Type	Crash Date/Time	Hit/ Run	Route Type	Mile Point	Mile Point Direction	Lane Direction	Lane Number	Number of Lanes	Direction	Distance	Distance Unit	Road Grade	Non-Traffic	Road Name	Cross-Street Type	Cross-Street Name	Related Non-Motorist	At Fault	Collision Type	Weather	Surface Condition	Light	Traffic Control	Driver Substance Abuse	First Harmful Event	Second Harmful Event	Fixed Object Struck	Junction	Intersection Type	Intersection Area	Road Alignment	Road Condition	Road Division	Location	
58	MCP15640013	15066929	Injury Crash	12/30/2015 13:26	No	County	1.49	East	North	1	2	West	0	MILE	LEVEL	No	MORNINGWOOD DR	Unknown	BANTRY WAY		DRIVER	OTHER	CLOUDY	DRY	DAYLIGHT	NO CONTROLS	NONE DETECTED	OTHER VEHICLE	N/A	N/A	INTERSECTION RELATED	T-INTERSECTION	INTERSECTION RELATED	STRAIGHT	NO DEFECTS	TWO-WAY, NOT DIVIDED	(39.15077333, -77.06926667)
59	MCP27990030	170518154	Property Damage Crash	7/9/2017 16:34	No	County	1.49	East	West	1	2	East	50	FEET	LEVEL	No	MORNINGWOOD DR	Unknown	BANTRY WAY		DRIVER	SAME DIR REAR END	CLEAR	DRY	DAYLIGHT	N/A	NONE DETECTED	OTHER VEHICLE	N/A	N/A	N/A	N/A		STRAIGHT	NO DEFECTS	TWO-WAY, NOT DIVIDED	(39.15054833, -77.06744833)
60	MCP2723003G	180011042	Property Damage Crash	3/4/2018 13:30	No	County	1.49	East	West	1	1	East	100	FEET	LEVEL	No	MORNINGWOOD DR	Unknown	BANTRY WAY		DRIVER	SINGLE VEHICLE	CLEAR	DRY	DAYLIGHT	NO CONTROLS	N/A	OVERTURN	N/A	CURB	INTERSECTION RELATED	T-INTERSECTION		CURVE LEFT	NO DEFECTS	TWO-WAY, NOT DIVIDED	(39.15075833, -77.06924333)
61	MCP9113000W	15045980	Injury Crash	9/11/2015 15:58	No	County	1.63	East	West	1	1	West	186	FEET	HILL UPHILL	No	MORNINGWOOD DR	Maryland (State)	GEORGIA AVE	PEDESTRIAN	NONMOTORIST	OTHER	CLEAR	DRY	DAYLIGHT	NO CONTROLS	NONE DETECTED	PEDESTRIAN	PEDESTRIAN	N/A	NON INTERSECTION	N/A	N/A	STRAIGHT	NO DEFECTS	TWO-WAY, NOT DIVIDED	(39.15043833, -77.06744833)
62	MCP2992000H	16010815	Property Damage Crash	3/4/2016 13:28	No	County	1.63	East	South	1	2	East	30	FEET	LEVEL	No	MORNINGWOOD DR	Maryland (State)	GEORGIA AVE		DRIVER	STRAIGHT MOVEMENT ANGLE	CLEAR	DRY	DAYLIGHT	NO CONTROLS	NONE DETECTED	OTHER VEHICLE	N/A	N/A	NON INTERSECTION	N/A	N/A	STRAIGHT	NO DEFECTS	TWO-WAY, NOT DIVIDED	(39.15023333, -77.06589667)
63	MCP2723002J	170512635	Injury Crash	6/9/2017 8:21	No	County	1.63	East	East	1	1	West	100	FEET	LEVEL	No	MORNINGWOOD DR	Maryland (State)	GEORGIA AVE		DRIVER	STRAIGHT MOVEMENT ANGLE	CLEAR	DRY	DAYLIGHT	NO CONTROLS	N/A	OTHER VEHICLE	N/A	N/A	INTERSECTION RELATED	T-INTERSECTION		STRAIGHT	NO DEFECTS	TWO-WAY, NOT DIVIDED	(39.15038833, -77.06737333)
64	MCP1564002B	170513031	Property Damage Crash	6/11/2017 7:29	No	County	1.63	East	East	1	2	West	15	FEET	LEVEL	No	MORNINGWOOD DR	Maryland (State)	GEORGIA AVE		DRIVER	SAME DIR REAR END	CLEAR	DRY	DAYLIGHT	TRAFFIC SIGNAL	ALCOHOL PRESENT, NONE DETECTED	OTHER VEHICLE	N/A	N/A	INTERSECTION RELATED	FOUR-WAY INTERSECTION	INTERSECTION RELATED	STRAIGHT	NO DEFECTS	TWO-WAY, NOT DIVIDED	(39.15053833, -77.06727167)