Appendix J
TRAFFIC IMPACT STUDY

DTS • PROVIDENT
Intelligent Land Use

TRAFFIC IMPACT STUDY

BREWSTER YARDS

160 & 132 Pugsley Road
Town of Southeast, Putnam County, New York

Prepared by
DTS Provident Design Engineering, LLP
One North Broadway
White Plains, New York 10601

November 22, 2021
DTS Provident Project No. 21-076

TABLE OF CONTENTS

LIST OF APPENDICES

SECTION 1 – EXECUTIVE SUMMARY

1.0 PROJECT DESCRIPTION

The Applicant proposes to construct a commercial recreation complex (Proposed Project) for baseball and other sports consisting of five full-size baseball fields, four Little League baseball fields, one multi-sports field, a recreation building, and accessory facilities (i.e., food concession stands and pro shop). The Proposed Project is located along Pugsley Road and Fields Corner Road in the Town of Southeast, Putnam County, New York (see Figure No. 1 in Appendix A). The Site comprises two parcels of land separated by land owned by the Town of Southeast (formerly Zimmer Road).

DTS Provident Design Engineering, LLP (DTS Provident), has been retained to analyze the potential for any traffic impacts associated with the Proposed Project and to identify roadway improvements, if required, to mitigate any potential adverse environmental impacts. This Traffic Impact Study (Study) uses standard Traffic Engineering methodology and has been prepared to document the findings and conclusions of the analysis undertaken to measure the traffic impacts, if any, associated with the Proposed Project. For the purposes of this Study, it is anticipated that the Proposed Project will be completed and occupied by the Year 2023.

1.1 FINDINGS

Based on field observations and detailed analysis undertaken in preparation of this Study, the following findings are presented:

- The Proposed Project is provided good regional and local vehicular access via New York State Route 312, which ultimately connects to Interstate Route 84 to the east and US Route 6 to the west.
- The Proposed Project and associated parking areas will be accessed from two STOP-controlled access driveways, one along Pugsley Road and one along Zimmer Road. The Proposed Project will also seek to discourage drivers leaving the Site from making right-turns towards Fields Corner Road by installing No-Right-Turn traffic signs at their driveway approaches to Pugsley Road.
- Based upon Trip Generation rates obtained from an analysis of a similar type and size facility located in Connecticut, it is anticipated that the Proposed Project will generate approximately 46 entering vehicles and 6 exiting vehicles during the Peak Weekday AM Hour, 239 entering vehicles and 45 exiting vehicles during the Peak Weekday PM Hour, and 265 entering vehicles and 218 exiting vehicles during the Peak Saturday Hour.

- Table No. 1.1 below summarizes the results of the capacity analyses conducted for each intersection included in this Study. Average delay, expressed in seconds per vehicle, is listed below each Level of Service (LOS).

TABLE NO. 1.1
LEVEL OF SERVICE SUMMARY TABLE
2023 NO-BUILD VS. 2023 BUILD/BUILD WITH IMPROVEMENTS

	PEAK AM HOUR			PEAK PM HOUR			PEAK SAT HOUR		
	2023 NO-BUILD	2023 BUILD	2023 BUILD W/ IMPV.	2023 NO-BUILD	2023 BUILD	2023 BUILD W/ IMPV.	2023 NO-BUILD	2023 BUILD	2023 BUILD W/ IMPV.
INTERSECTION	LOS DELAY	LOS DELAY	LOS DELAY	LOS DELAY	LOS DELAY	LOS DELAY	LOS DELAY	LOS DELAY	LOS DELAY
US Rt. 6 & NY Rt. 312	C 28.0	C 29.0	-	D 41.1	D 52.3	D 46.7	D 41.8	E 57.1	D 46.9
NY Rt. 312 & Pugsley Rd. (Alternative A)	A 8.0	A 8.1	-	B 10.2	B 15.6	B 11.2	A 5.1	B 12.8	B 11.4
NY Rt. 312 & Pugsley Rd. (Alternative B)	A 4.8	A 6.2	-	A 7.1	B 10.4	-	A 2.5	B 11.6	-
NY Rt. 312 & I-84 EB Ramps/Independent Way	D 42.2	D 42.4	-	D 50.1	D 51.6	-	D 53.4	E 62.9	D 56.2
NY Rt. 312 & I-84 WB Ramps	C 20.4	C 21.5	-	D 54.2	E 76.6	D 42.9	D 36.8	E 57.9	C 33.6
Fair St. & Fields Corner Rd.	c 18.5	c 18.5	-	b 14.2	b 14.3	-	b 12.4	b 12.3	-

NOTES

- Unsignalized intersection Level of Service represented by lowercase letters.
- Signalized intersection Level of Service represented by UPPERCASE letters.
- Delays are provided for the most critical side street approach for unsignalized intersections.
- Delay is presented in Seconds per Vehicle.
- "Build w/ Impv." represents the Build with Improvements condition. This condition displays the Levels of Service results with the infrastructure improvements recommended herein for the respective intersections/time periods. A "-" indicates no improvements are recommended for the particular intersection during the respective time period.
- At the intersection of NY Rt. 312 & Pugsley Rd., Alternative A and Alternative B represent the two intersection geometry layouts as studied in the FEIS for the Northeast Interstate Logistics Center project and described in Section 3.2 below.

As can be seen in the Table 1.1 above, with the improvements recommended herein, all intersections will see only minor increases in average delay. Based on the foregoing, the

Proposed Project will have no significant traffic impacts on the adjacent roadway network with the recommended improvements.

1.2 RECOMMENDATIONS

Based upon the upon the traffic analysis, the following roadway improvements are recommended in association with the Proposed Project:

- Intersection of US Route 6 & New York State Route 312
  - Traffic signal timing adjustments during the Peak Weekday PM Hour and Peak Saturday Hour
- Intersection of New York State Route 312 & Pugsley Road (Alternative A)
  - Traffic signal timing adjustments during the Peak Weekday PM Hour and Peak Saturday Hour
- New York State Route 312 & Interstate Route 84 Eastbound Ramps/Independent Way
  - Traffic signal timing adjustments during the Peak Saturday Hour
- New York State Route 312 & Interstate Route 84 Westbound Ramps
  - Traffic signal timing adjustments during the Peak Weekday PM Hour and Peak Saturday Hour

1.3 CONCLUSIONS

It is the considered professional opinion of DTS Provident Design Engineering, LLP that the Proposed Project will not have a significant traffic impact on the adjacent roadway network. With the implementation of the improvements identified above, the Proposed Project will be adequately mitigated and no additional adverse environmental impacts with respect to traffic are anticipated.

Respectfully submitted,
DTS Provident DESIGN ENGINEERING, LLP

Carlito Holt, P.E., P.T.O.E.
Partner

SECTION 2 – TRAFFIC CONDITIONS AND PROJECTIONS

2.0 DESCRIPTION OF EXISTING ROADWAY NETWORK

The following are brief descriptions of the roadways located in the vicinity of the site:

Interstate Route 84 - I-84 is an Interstate highway that runs in an east-west direction from Pennsylvania to Massachusetts. In the vicinity of the Proposed Project, I-84 consists of two lanes per direction with a posted speed limit of 65 mph and is under the jurisdiction of the New York State Department of Transportation (NYSDOT).

US Route 6 (Carmel Avenue) – US Route 6 traverses in an east-west direction and runs from California to Massachusetts. In the vicinity of the Proposed Project, US Route 6 consists of one travel lane in each direction with turning lanes provided at some intersections and has a posted speed limit of 55 mph. US Route 6 is under the jurisdiction of the NYSDOT.

New York State Route 312 – New York State Route 312 is an east-west roadway which connects US Route 6 in the west to New York State Route 22 in the east. It generally provides one travel lane in each direction with turning lanes provided at some intersections and has a posted speed limit of 45 mph. New York State Route 312 is under the jurisdiction of the NYSDOT.

Pugsley Road – Pugsley Road is a narrow road which provides access to the Site from New York State Route 312. The majority of the road is paved until just south of the intersections with Zimmer Road and Barrett Road. There are no pavement markings on the existing road and the pavement is in poor condition. North of Barrett Road, the dirt road portion of Pugsley Road changes name to Fields Corner Road, which continues as a relatively narrow dirt road of varying widths to the Patterson Town line, where it changes name to Fields Lane and continues primarily as a dirt road until it intersects Fair Street. Pugsley Road and Fields Corner Road are seasonally maintained roads and are closed annually from December 1 to April 1.

As part of the Northeast Interstate Logistics Center project recently approved by the Town of Southeast, Pugsley Road will be reconstructed and upgraded to provide proper lane widths, grades and turning radii from New York State Route 312 in the south to Barret Road in the north, as well as allow for all-season vehicular access up to Barrett Road. Fields Corner Road will remain a seasonal road that is closed north of Barrett Road annually from December to April. The Proposed Project will also seek to discourage drivers leaving the Site from making right-turns towards Fields Corner Road by installing No-Right-Turn traffic signs at their driveway approaches to Pugsley Road.

Barret Road – Barret Road is currently an unimproved Right-of-Way under the jurisdiction of the Town of Southeast. As part of the proposed Northeast Interstate Logistics Center project, Barret Road will be reconstructed to provide proper lane widths, grades and turning radii and will become a private roadway.

Zimmer Road – Zimmer Road is an unimproved Right-of-Way in the Town of Southeast that bifurcates the Proposed Project. Zimmer Road is used occasionally by the Putnam County Highway Department to access County-owned land next to Interstate Route 84. Improvements to a portion of Zimmer Road by the Proposed Project will not hinder continued access to the County's parcel.

2.1 2021 EXISTING TRAFFIC VOLUMES

The following study locations were identified for the Study based upon the adopted Scoping Document:

1. US Route 6 and New York State Route 312
2. New York State Route 312 and Pugsley Road
3. New York State Route 312 and Interstate Route 84 Eastbound Ramps/Independent Way
4. New York State Route 312 and Interstate Route 84 Westbound Ramps
5. Fair Street and Fields Corner Road

Due to the COVID-19 pandemic, current traffic patterns are not representative of typical conditions. Therefore, in coordination with the Town's Traffic Consultant, DTS Provident utilized traffic volumes contained in the Final Environmental Impact Statement (FEIS) prepared by JMC for the Commercial Campus at Fields Corner project (aka Northeast Interstate Logistics Center) and as adopted by the Town in 2020, which is located on the opposite side of Pugsley Road from the Proposed Project. For this particular Study, the 2017/18 Existing Traffic Volumes developed in JMC's FEIS were utilized as a base. These volumes were grown by 1.0 percent per year for four years to obtain representative 2021 Existing Traffic Volumes.

For traffic volume verification purposes, DTS Provident conducted Automatic Traffic Recorder (ATR) counts for one week from Tuesday, October 12, 2021 to Monday, October 18, 2021. The ATR was located along New York State Route 312, approximately 400 feet west of Pugsley Road. The results of the ATR counts indicated that the 2021 traffic volumes were approximately 15% lower in the Peak Weekday AM Hour, 17% lower in the Peak Weekday PM Hour and 16% lower in the Peak Saturday Hour when compared to the 2017/18 Existing Traffic Volumes contained in JMC's FEIS. Therefore, utilization of the 2017/18 Existing Traffic Volumes as a base for this Study provides a conservative analysis.

Based on the traffic volumes for this Study, the following Peak Roadway Hours were determined:

- Peak Weekday AM Roadway Hour: 7:30 – 8:30 AM
- Peak Weekday PM Roadway Hour: 5:00 – 6:00 PM
- Peak Saturday Roadway Hour: 12:15 – 1:15 PM

The 2021 Existing Traffic Volumes are illustrated on Figure No. 2 in Appendix A.

These Peak Hours represent the time periods when traffic impacts would be at their greatest. The combination of existing background traffic and Proposed Project-generated traffic would be highest during these time periods. Any potential traffic impacts from the Proposed Project would be incrementally less throughout the rest of the day.

2.2 2023 NO-BUILD TRAFFIC VOLUMES

DTS Provident utilized traffic volumes contained in the Commercial Campus at Fields Corner FEIS to form a base for the 2023 No-Build Traffic Volumes. The Commercial Campus at Fields Corner FEIS utilized a build year of 2023, the same year as the anticipated Build year for the Proposed Project. Therefore, the 2023 Build Traffic Volumes from the Commercial Campus at Fields Corner FEIS were used to establish the base 2023 No-Build Traffic Volumes for this Study. The 2023 Build Traffic Volumes from the Commercial Campus at Fields Corner FEIS included the following background traffic growth and adjacent development traffic volumes:

- Background traffic volumes were grown by 1.0 percent per year to obtain representative 2023 background traffic volumes
- Traffic volumes associated with the Commercial Campus at Fields Corner development project
- Traffic volumes associated with the Barrett Hill development project
- Traffic volumes associated with the Prospect Hill Office Park development project

2.3 ADJACENT DEVELOPMENTS

Based on discussions with the Town's Traffic Consultant, it was determined that traffic volumes generated by the following developments should be included in the 2023 No-Build Traffic Volumes in addition to the general background traffic growth:

- Ace Endico Expansion development project
- Terravest Senior Housing development project

DTS Provident also coordinated with the Town of Patterson's Planning Department to determine if there were any proposed development projects within the Town that would need to be included in the 2023 No-Build Traffic Volumes. The Town's Planning Department identified one potential development project, a proposed 100,000 square-foot warehouse project along New York State Route 22. However, based on the location of the proposed warehouse development project and its relation to surrounding regional access highways, as well as the amount of traffic the project would generate, it was determined that the proposed warehouse development project would not significantly increase the background traffic volumes in the area beyond the general background growth rate. Therefore, it was assumed that traffic volumes associated with the proposed warehouse development project in the Town of Patterson will be captured in the general background traffic volume growth noted above.

The 2023 Build Traffic Volumes from the Commercial Campus at Fields Corner FEIS, which included general background traffic volume growth and traffic volumes associated with several proposed adjacent developments, as noted above, was combined with traffic from the additional proposed adjacent developments identified by the Town's Traffic Consultant to form the 2023 No-Build Traffic Volumes. The 2023 No-Build Traffic Volumes are illustrated on Figure No. 3 in Appendix A.

2.4 ARRIVAL/DEPARTURE

Based on a review of the existing traffic volumes, potential destinations, and the existing roadway network, as well as a review of the arrival and departure patterns developed for the Commercial Campus at Fields Corner FEIS, DTS Provident developed arrival and departure patterns for the Proposed Project. The arrival and departure distributions for the Proposed Project are illustrated on Figures No. 4 and 5 in Appendix A. As noted previously, the Proposed Project will also seek to discourage drivers leaving the Site from making right-turns towards Fields Corner Road by installing No-Right-Turn traffic signs at their driveway approaches to Pugsley Road. However, in order to determine any impacts to the intersection of Fair Street and Fields Corner Road from the Proposed Project's Site-generated traffic, DTS Provident assumed 1% of the traffic volumes exiting the Site would head towards Fair Street via Fields Corner Road.

2.5 SITE-GENERATED TRAFFIC VOLUMES

The ability of any roadway network to accommodate anticipated traffic volumes is measured by comparing Peak Hour Traffic Volumes to roadway capacities. Thus, it is essential to determine the hourly traffic volumes to be generated by the Proposed Project and add them to the No-Build Traffic Volumes to determine the Build Traffic Volumes.

DTS Provident consulted the Institute of Transportation Engineers (ITE) Trip Generation Manual to estimate Site-generated traffic volumes attributable to the Proposed Project. Due to the unique makeup of the Proposed Project, standard traffic engineering procedures using the Manual's existing land uses to determine trip generation are not suitable. According to the Manual, "When practical, the user is encouraged to supplement the data in the Manual with local data that have been collected at similar sites".

Therefore, the Site-generated traffic volumes attributable to the Proposed Project were determined based upon a survey of a similar facility utilizing StreetLight Data. This facility is the Connecticut Sportsplex located in North Branford, CT. Similar to the Proposed Project, the Connecticut Sportsplex facility contains a comparable mix of recreational fields and an indoor facility as the Proposed Project. DTS Provident surveyed the traffic volumes for both the summer months and non-summer months at the Connecticut Sportsplex and used the highest hour of trip generation to provide a conservative analysis. Based upon data obtained from this facility, the following Table No. 2.1 summarizes the trip generation anticipated for the Proposed Project:

TABLE NO. 2.1
TRIP GENERATION TABLE

Peak Weekday AM Hour		Peak Weekday PM Hour		Peak Saturday Hour	
Enter	**Exit**	**Enter**	**Exit**	**Enter**	**Exit**
46	6	239	45	265	218

NOTES

(1) Trip Generation based upon actual count data obtained from a survey of the Connecticut Sportsplex located in North Branford, CT.

The estimated traffic volumes listed in the Trip Generation table above were assigned to the roadway network with the Arrival and Departure Distributions to form the Site-generated Traffic Volumes, which are illustrated on Figure No. 6 in Appendix A.

2.6 2023 BUILD TRAFFIC VOLUMES

The Site-generated Traffic Volumes were combined with the 2023 No-Build Traffic Volumes to form the 2023 Build Traffic Volumes, which are illustrated on Figure No. 7 in Appendix A.

SECTION 3 – TRAFFIC ANALYSIS

3.0 DESCRIPTION OF ANALYSIS

Capacity analyses were conducted at the key intersections to identify the traffic impact associated with the Proposed. The following is a brief description of the procedure utilized in the preparation of this analysis for all the study locations listed:

- Capacity analysis is a method by which traffic volumes are compared to calculated roadway and intersection capacities to evaluate future traffic conditions. The methodology utilized is described in the 2010 Highway Capacity Manual published by the Transportation Research Board. In general, the term "Level of Service" is used to provide a qualitative evaluation based on certain quantitative calculations related to empirical values. The definitions of Level of Service as contained in the 2010 Highway Capacity Manual appear in Appendix B of this Report.
- In general, Level of Service "A" represents the best traffic operating condition. Levels of Service for signalized and unsignalized intersections are defined in terms of average delay. Delay is used as a measure of driver discomfort, frustration, efficiency, etc.

Capacity analyses were performed for the key locations with the 2021 Existing, 2023 No-Build and 2023 Build Traffic Volumes utilizing Highway Capacity Software (Synchro) developed for the Federal Highway Administration (FHWA). Where the analysis showed a significant impact due to the addition of Proposed Project's traffic volumes to the roadway system, an improvement was recommended and implemented within the analysis resulting in the 2023 Build with Improvements analysis. The capacity analyses worksheets are contained in Appendix D of this Report.

3.1 LOCATION NO. 1 – US ROUTE 6 & NEW YORK STATE ROUTE 312

Existing Conditions

US Route 6 forms the northbound and southbound approaches to this four-way intersection with New York State Route 312. The northbound US Route 6 approach consists of one exclusive 11-foot left-turn lane, one exclusive 12-foot through lane and one exclusive 13-foot right-turn lane, while the southbound approach consists of one exclusive 11-foot left-turn lane and one shared 12-foot through/right-turn lane. The eastbound New York State Route 312 approach consists of one shared 12-foot left-turn/through/right-turn lane, while the westbound approach consists of one shared left-turn/through lane and one exclusive right-turn lane, with both lanes measuring 11 feet in width. The intersection is controlled by a three-phase traffic signal which includes a protected lag phase for the southbound New York State Route 312 approach. Pedestrian facilities (i.e., sidewalks, crosswalks, curb ramps) do not exist at the intersection.

Capacity Analysis and Level of Service Results

Capacity analyses were conducted with the 2021 Existing, 2023 No-Build and 2023 Build (Proposed Project) Traffic Volumes for the Peak Weekday AM, Peak Weekday PM and Peak Saturday Hours. The results are presented in Table No. C–1 in Appendix C.

As shown in Table No. C–1, for the Existing condition, the overall intersection operates at a Level of Service "C" during all Peak Hours. For the No-Build condition, the overall intersection will operate at a Level of Service "C" during the Peak Weekday AM Hour, and a Level of Service "D" during the Peak Weekday PM and Peak Saturday Hours. For the Build condition, the Level of Service grade does not change during the Peak Weekday AM and PM Hours but will increase to a Level of Service "E" during the Peak Saturday Hour.

To reduce the delay attributable to the addition of the Proposed Project's Site-generated traffic volumes during the Peak Weekday PM and Peak Saturday Hours, it is recommended that the traffic signal timings be adjusted. Capacity analyses performed with the 2023 Build traffic volumes and the traffic signal timing modifications indicate the overall intersection will continue to operate at a Level of Service "D" during the Peak Weekday PM and Peak Saturday Hours and the overall intersection delay will increase no more than a nominal six seconds above the No-Build condition, as shown in Table No. C–1. Therefore, the Proposed Project's traffic impacts will be satisfactorily mitigated with the recommended improvement.

3.2 LOCATION NO. 2 – NEW YORK STATE ROUTE 312 & PUGSLEY ROAD

Existing Conditions

Pugsley Road forms the southbound approach to this T-intersection with New York State Route 312 and consists of one shared left-turn/right-turn lane and one receiving lane, with a combined total width of 18 feet. The eastbound New York State Route 312 approach consists of one shared 12-foot left-turn/through lane, while the westbound approach consists of one shared 12-foot through/right-turn lane. The intersection is controlled by a Stop sign on the Pugsley Road approach. Pedestrian facilities (i.e., sidewalks, crosswalks, curb ramps) do not exist at the intersection.

Proposed Conditions

As part of the Northeast Interstate Logistics Center project, this intersection will be upgraded with additional through lanes, turn lanes and a traffic signal to accommodate traffic volumes associated with that project. The Commercial Campus at Fields Corner FEIS presented two options for improvements to the intersection identified as Alternative A and Alternative B. The NYSDOT will ultimately decide on which improvement option will be constructed, which is unknown at this time. Therefore, this Study analyzes both improvement Alternatives.

Under Alternative A, the southbound Pugsley Road approach would consist of two exclusive left-turn lanes and one exclusive right-turn lane. The eastbound New York State Route 312 approach would consist of one exclusive left-turn lane and two exclusive through lanes while the westbound approach would consist of one exclusive through lane and one exclusive right-turn lane. The intersection would be controlled by a two-phase traffic signal.

Under Alternative B, the southbound Pugsley Road approach would consist of one exclusive left-turn lane and one shared left-turn/right-turn lane. The eastbound New York State Route 312 approach would consist of one exclusive left-turn lane and two exclusive through lanes while the westbound approach would consist of one exclusive through lane and one shared through/right-turn lane. The intersection would be controlled by a three-phase traffic signal which includes a protected lead phase for the eastbound New York State Route 312 approach.

Capacity Analysis and Level of Service Results

Capacity analyses were conducted with the 2021 Existing, 2023 No-Build and 2023 Build (Proposed Project) Traffic Volumes for the Peak Weekday AM, Peak Weekday PM and Peak Saturday Hours. The results are presented in Table No. C–2 in Appendix C.

As shown in Table No. C–2, for the Existing condition, the overall intersection operates at a Level of Service "A" during all Peak Hours; however, the southbound Pugsley Road

approach operates at a Level of Service "F" during all Peak Hours under the current Stop traffic control. For the Alternative A No-Build condition, the overall intersection will operate at a Level of Service "A" during the Peak Weekday AM and Peak Saturday Hours, and a Level of Service "B" during the Peak Weekday PM Hour. For the Alternative A Build condition, the Level of Service grade does not change during the Peak Weekday AM and PM Hours but will increase to a Level of Service "B" during the Peak Saturday Hour. Although the overall intersection delay is acceptable during all Peak Hours, the eastbound New York State Route 312 left-turn movement will operate at an unsatisfactory Level of Service during the Peak Weekday PM and Peak Saturday Hours.

To reduce the delay attributable to the addition of the Proposed Project's Site-generated traffic volumes during the Peak Weekday PM and Peak Saturday Hours, it is recommended that the traffic signal timings be adjusted. Capacity analyses performed with the 2023 Build traffic volumes and the traffic signal timing modifications indicate the overall intersection will continue to operate at a Level of Service "B" during the Peak Weekday PM and Peak Saturday Hours and the overall intersection delay will increase no more than a nominal six seconds above the No-Build condition, as shown in Table No. C–2. In addition, the eastbound New York State Route 312 left-turn movement will operate at an acceptable Level of Service. Therefore, the Proposed Project's traffic impacts will be satisfactorily mitigated with the recommended improvement for Alternative A.

Also shown in Table No. C–2, for the Alternative B No-Build condition, the overall intersection will operate at a Level of Service "A" during all Peak Hours. For the Alternative B Build condition, the Level of Service grade does not change during the Peak Weekday AM Hour but will increase to a Level of Service "B" during the Peak Weekday PM and Peak Saturday Hours. No improvements are recommended for Alternative B as all movements will continue to operate satisfactorily during all Peak Hours.

3.3 LOCATION NO. 3 – NEW YORK STATE ROUTE 312 & INTERSTATE ROUTE 84 EASTBOUND RAMPS/INDEPENDENT WAY

Existing Conditions

New York State Route 312 forms the eastbound and westbound approaches to this four-way intersection with the Interstate Route 84 Eastbound Ramps and Independent Way. The eastbound New York State Route 312 approach consists of two exclusive left-turn lanes, one exclusive through lane and one exclusive right-turn lane, while the westbound approach consists of two exclusive left-turn lanes, one exclusive through lane and one shared through/right-turn lane. All lanes along New York State Route 312 measure 12 feet in width. The northbound Independent Way approach consists of one exclusive left-turn lane, one shared left-turn/through lane, one exclusive through lane and one exclusive right-turn lane, with all lanes measuring 12 feet in width, while the southbound Interstate Route 84 Ramp approach consists of one exclusive 11-foot left-turn lane, one exclusive 12-foot through lane and one exclusive 12-foot right-turn lane. The intersection is controlled by a four-phase traffic signal which includes a protected lead phase for the eastbound and westbound New York State Route 312 left-turn movements and split phasing for the northbound and southbound movements. Pedestrian facilities (i.e., sidewalks, crosswalks, curb ramps) do not exist at the intersection.

Capacity Analysis and Level of Service Results

Capacity analyses were conducted with the 2021 Existing, 2023 No-Build and 2023 Build (Proposed Project) Traffic Volumes for the Peak Weekday AM, Peak Weekday PM and Peak Saturday Hours. The results are presented in Table No. C–3 in Appendix C.

As shown in Table No. C–3, for the Existing condition, the overall intersection operates at a Level of Service "D" during all Peak Hours. For the No-Build condition, the overall intersection will continue to operate at a Level of Service "D" during all Peak Hours. For the Build condition, the Level of Service grade does not change during the Peak Weekday AM and PM Hours but will increase to a Level of Service "E" during the Peak Saturday Hour.

To reduce the delay attributable to the addition of the Proposed Project's Site-generated traffic volumes during the Peak Saturday Hour, it is recommended that the traffic signal timings be adjusted. Capacity analyses performed with the 2023 Build traffic volumes and the traffic signal timing modifications indicate the overall intersection will operate at a Level of Service "E" during the Peak Saturday Hour and the overall intersection delay will increase no more than a nominal three seconds above the No-Build condition, as shown in Table No. C–3. Therefore, the Proposed Project's traffic impacts will be satisfactorily mitigated with the recommended improvement.

3.4 LOCATION NO. 4 – NEW YORK STATE ROUTE 312 & INTERSTATE ROUTE 84 WESTBOUND RAMPS

Existing Conditions

New York State Route 312 forms the eastbound and westbound approaches to this T-intersection with the Interstate Route 84 Westbound Ramps. The eastbound New York State Route 312 approach consists of one exclusive left-turn lane and one exclusive through lane, with both lanes measuring 12 feet in width, while the westbound approach consists of one exclusive 11-foot through lane and one exclusive 12-foot right-turn lane. The southbound Interstate Route 84 Ramp approach consists of one exclusive left-turn lane and one exclusive right-turn lane, with both lanes measuring 13 feet in width. The intersection is controlled by a three-phase traffic signal which includes a protected lead phase for the eastbound New York State Route 312 approach. Pedestrian facilities (i.e., sidewalks, crosswalks, curb ramps) do not exist at the intersection.

Capacity Analysis and Level of Service Results

Capacity analyses were conducted with the 2021 Existing, 2023 No-Build and 2023 Build (Proposed Project) Traffic Volumes for the Peak Weekday AM, Peak Weekday PM and Peak Saturday Hours. The results are presented in Table No. C–4 in Appendix C.

As shown in Table No. C–4, for the Existing condition, the overall intersection operates at a Level of Service "B" during the Peak Weekday AM Hour and a Level of Service "C" during the Peak Weekday PM and Peak Saturday Hours. For the No-Build condition, the overall intersection will increase to a Level of Service "C" during the Peak Weekday AM Hour and a Level of Service "D" during the Peak Weekday PM and Peak Saturday Hours. For the Build condition, the overall intersection will remain a Level of Service "C" during the Peak Weekday AM Hour but increase to a Level of Service "E" during the Peak Weekday PM and Peak Saturday Hours.

To reduce the delay attributable to the addition of the Proposed Project's Site-generated traffic volumes during the Peak Weekday PM and Peak Saturday Hours, it is recommended that the traffic signal timings be adjusted. Capacity analyses performed with the 2023 Build traffic volumes and the traffic signal timing modifications indicate the overall intersection will operate at a Level of Service "D" during the Peak Weekday PM Hour and a Level of Service "C" during the Peak Saturday Hour, as shown in Table No. C–4. Therefore, the Proposed Project's traffic impacts will be satisfactorily mitigated with the recommended improvement.

3.5 LOCATION NO. 5 – FAIR STREET & FIELDS CORNER ROAD

Existing Conditions

Fields Corner Road forms the northbound approach to this T-intersection with Fair Street and consists of one shared left-turn/right-turn lane and one receiving lane, with a combined total width of 24 feet. The eastbound Fair Street approach consists of one shared through/right-turn lane, while the westbound approach consists of one shared left-turn/through lane. Both lanes along Fair Street measure 11 feet in width. The intersection is controlled by a Stop sign on the Fields Corner Road approach. Pedestrian facilities (i.e., sidewalks, crosswalks, curb ramps) do not exist at the intersection.

As noted previously, the Proposed Project will seek to discourage drivers leaving the Site from making right-turns towards Fields Corner Road by installing No-Right-Turn traffic signs at their driveway approaches to Pugsley Road. However, in order to determine any impacts to the intersection of Fair Street and Fields Corner Road from the Proposed Project's Site-generated traffic, DTS Provident assumed a small percentage of the traffic volumes exiting the Site would head towards Fair Street via Fields Corner Road.

Capacity Analysis and Level of Service Results

Capacity analyses were conducted with the 2021 Existing, 2023 No-Build and 2023 Build (Proposed Project) Traffic Volumes for the Peak Weekday AM, Peak Weekday PM and Peak Saturday Hours. The results are presented in Table No. C–5 in Appendix C.

As shown in Table No. C–5, for the Existing condition, the overall intersection operates at a Level of Service "A" during all Peak Hours while the critical northbound Fields Corner Road approach operates at a Level of Service "C" during the Peak Weekday AM Hour and a Level of Service "B" during the Peak Weekday PM and Peak Saturday Hours. For the No-Build and Build conditions, the overall intersection will continue to operate at a Level of Service "A" during all Peak Hours and the critical northbound Fields Corner Road approach will continue to operate at a Level of Service "C" during the Peak Weekday AM Hour and a Level of Service "B" during the Peak Weekday PM and Peak Saturday Hours. Therefore, no improvements are recommended for this intersection as all movements will continue to operate satisfactorily during all Peak Hours.

SECTION 4 – ACCIDENT DATA

4.0 ACCIDENT ANALYSIS

Accident data was requested and obtained from the NYSDOT for the segment of New York State Route 312 from its intersection with US Route 6 to its intersection with the Interstate 84 Westbound Ramps, including the intersections contained in this Study, as well as Pugsley Road/Fields Corner Road from its intersection with New York State Route 312 to its intersection with Fair Street. The data received is for the latest available three-year period from April 2018 to March 2021. Copies of the accident data is contained in Appendix E.

At the intersection of US Route 6 and New York State Route 312, there were 15 accidents reported during the three-year period. At the intersection of New York State Route 312 and Pugsley Road, there were four accidents reported during the three-year period. At the intersection of New York State Route 312 and the Interstate Route 84 Eastbound Ramps/Independent Way, there were 37 accidents reported during the three-year period. At the intersection of New York State Route 312 and the Interstate Route 84 Westbound Ramps, there were two accidents reported during the three-year period.

Along the segment of New York State Route 312 between US Route 6 and Pugsley Road, there were 27 accidents reported during the three-year period. Along the segment of New York State Route 312 between Pugsley Road and the Interstate Route 84 Eastbound Ramps/Independent Way, there were 12 accidents reported during the three-year period. Along the segment of New York State Route 312 between the Interstate Route 84 Eastbound Ramps/Independent Way and the Interstate Route 84 Westbound Ramps, there were 13 accidents reported during the three-year period.

The recommended improvements identified herein, combined with the roadway improvements being implemented by adjacent developments and NYSDOT, will provide an overall safety benefit to the study intersections and New York State Route 312 corridor.

SECTION 5 – PARKING ANALYSIS

5.0 PARKING ANALYSIS

The Town Zoning regulations do not appear to have a comparable parking ratio for the recreation building use so the Applicant has applied a parking multiplier from the ITE's Parking Generation Manual. Based upon the ITE's Parking Generation Manual and the Town's Zoning Code, the following parking ratios are required for each associated use:

- Recreation in Building - 1 parking space per 250 square feet[1]
- Athletic Field Seating - 1 space per 5 spectator seats[2]

Based on the foregoing, the total number of parking spaces required for the Proposed Project would be 336 parking spaces. The Applicant's plan proposes a total of 449 parking spaces exceeding the parking requirement and based on the Applicant's expected peak parking need.

[1] Source: ITE Parking Generation Manual, 5th Edition – Land Use 495 (Recreational Community Center)
[2] Source: Town of Southeast Zoning Regulations (§138-67.G)

SECTION 6 – CIRCULATION

6.0 PASSENGER VEHICLE ACCESS

As noted previously, the Proposed Project and associated parking areas will be accessed from two STOP-controlled access driveways, one along Pugsley Road and one along Zimmer Road. The driveways and internal roadways will generally measure 24 feet in width to allow for two-way vehicular traffic flow.

6.1 EMERGENCY AND DELIVERY VEHICLE ACCESS

Buses, emergency vehicles and delivery vehicles will utilize the same travel ways as noted above for Passenger Vehicle Access. Turning path diagrams for the buses and emergency vehicles anticipated on the Site are illustrated on Figures No. F-1, F-2 and F-3 contained in Appendix F.

6.2 PEDESTRIAN ACCESS

Pedestrian facilities, such as sidewalks, crosswalks and curb ramps, will be provided throughout the Site linking the parking areas with the recreation facility areas. For pedestrians that may need to cross Zimmer Road from the main parking area to the baseball field on the south side of the Proposed Project, a marked and signed pedestrian crosswalk will be installed in conjunction with the Proposed Project.

SECTION 7 – PUBLIC TRANSPORTATION

7.0 TRANSIT ANALYSIS

The Putnam Area Rapid Transit (PART) system currently runs a weekly bus route, Route No. 3, along New York State Route 312 and Fair Street. This route runs hourly on Monday through Friday, starting at 8:00 AM to 5:00 PM. Requests can be made to PART to determine if potential usage will warrant a service route change. Procedures for changes to a PART service route are outlined in the PART System's Policy & Procedures Manual. Once the Proposed Project is operational, the Applicant may solicit PART to determine if the Proposed Project meets the requirements to be added as a regular or on-call stop along this route.

SECTION 8 – CONSTRUCTION TRAFFIC

8.0 CONSTRUCTION RELATED IMPACTS

The vast majority of construction employees will arrive and depart the Proposed Project's Site out of phase with the Peak Weekday AM and Peak Weekday PM Hours. Construction truck traffic is anticipated to access the Site mainly from nearby Interstate Route 84. Access to and from Interstate Route 84 is within 1.5 miles of the Site via New York State Route 312. This access route is in a commercial area and therefore significant impacts to surrounding residential neighborhoods and local roads will be minimal. In addition, no construction traffic will be allowed to utilize Fields Corner Road to Fair Street.

SECTION 9 – CONCLUSIONS

9.0 CONCLUSIONS

Based upon the information obtained from this study, it is the considered professional opinion of DTS Provident Design Engineering, LLP that the Proposed Project and associated mitigation will adequately offset any significant impacts with respect to traffic. The nominal increase in traffic will not result in any noticeable change to traffic operations and safety in the area. The Site Plan provides for safe and efficient vehicular and pedestrian circulation.

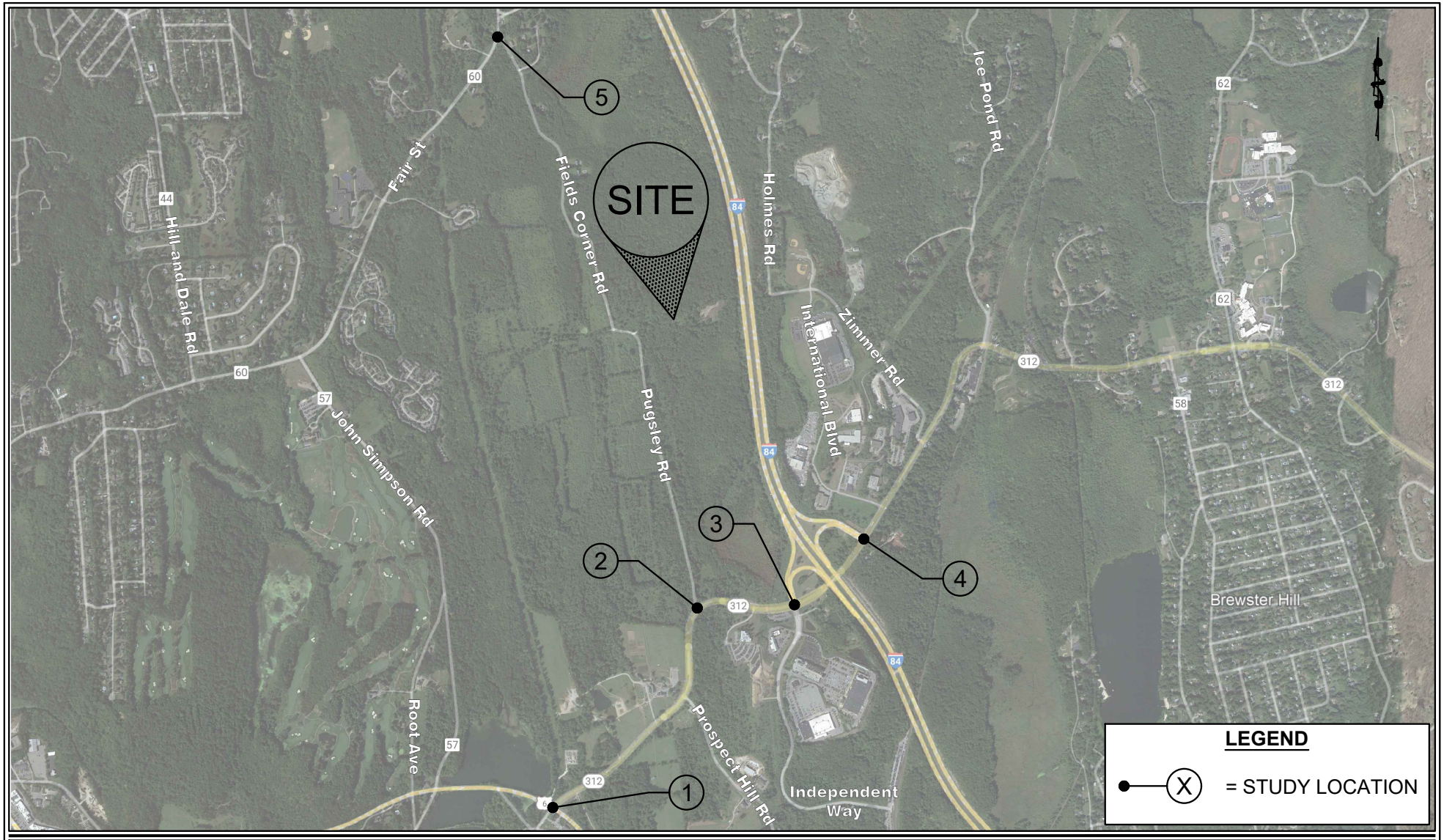
Q:\PROJECTS-21\21-076 Proswing Traffic Study - Brewster\Reports\Traffic Impact Study\Traffic Impact Study_2021-11-22_REV1.docx

APPENDICES

APPENDIX A

FIGURES

Q:\PROJECTS-21\21-076 Proswing Traffic Study - Brewster\AutoCAD\Traffic\TrafficFigures_8.5x11 Landscape_Site Location Map.dwg



DTS • PROVIDENT
Intelligent Land Use

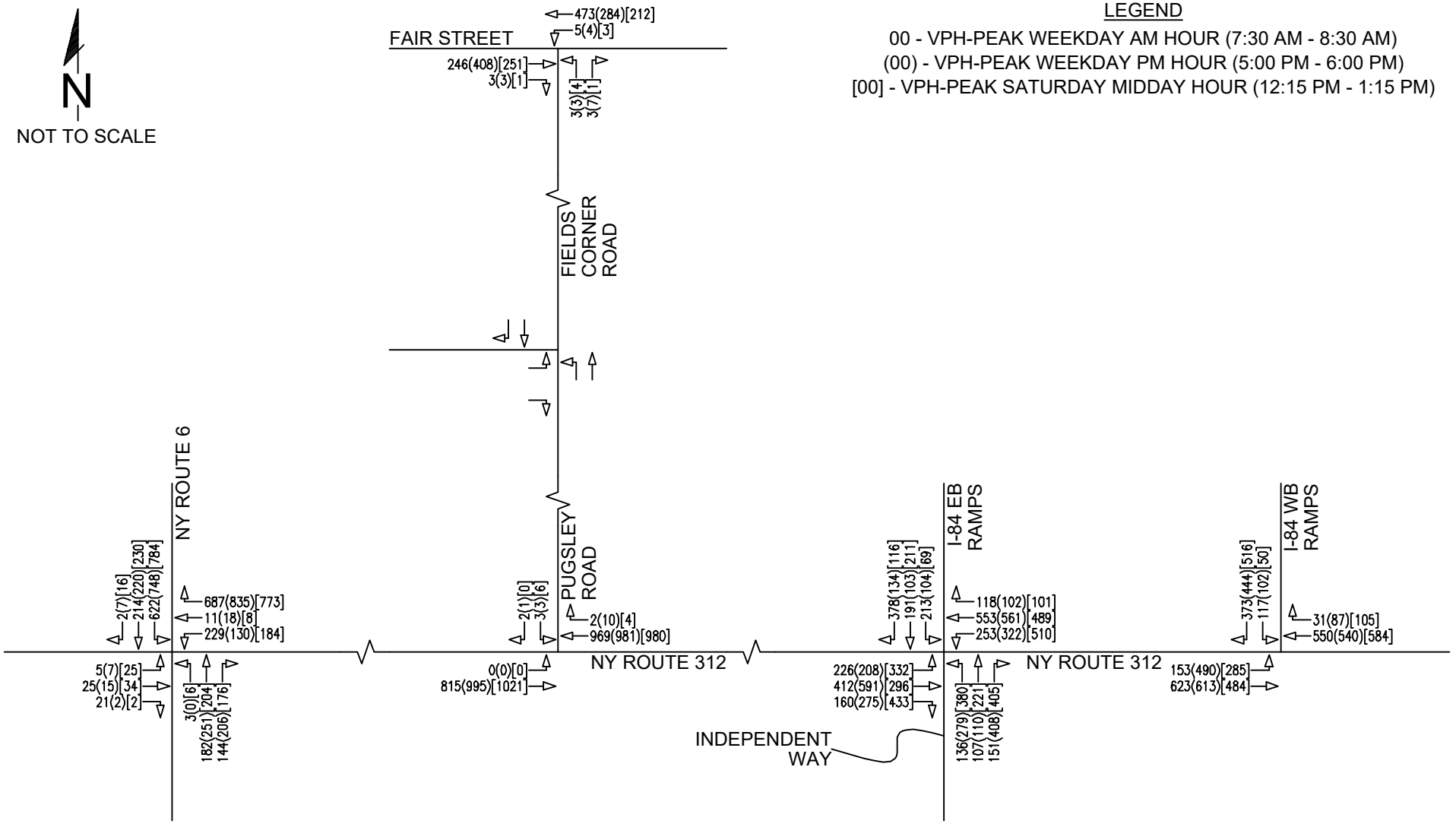
DTS Provident Design Engineering, LLP
One North Broadway
White Plains, NY 10601
P: 914.428.0010
F: 914.428.0017

Site & Study Location Map
Brewster Yards
Town of Southeast, Putnam County, New York

Project No. 21-076
Not To Scale
November 2021

Figure No. 01

Q:\PROJECTS-21\21-076 Proswing Traffic Study - Brewster\AutoCAD\Traffic\TrafficFigures_8.5x11 Landscape.dwg



DTS • PROVIDENT
Intelligent Land Use

DTS Provident Design Engineering, LLP
One North Broadway
White Plains, NY 10601
P: 914.428.0010
F: 914.428.0017

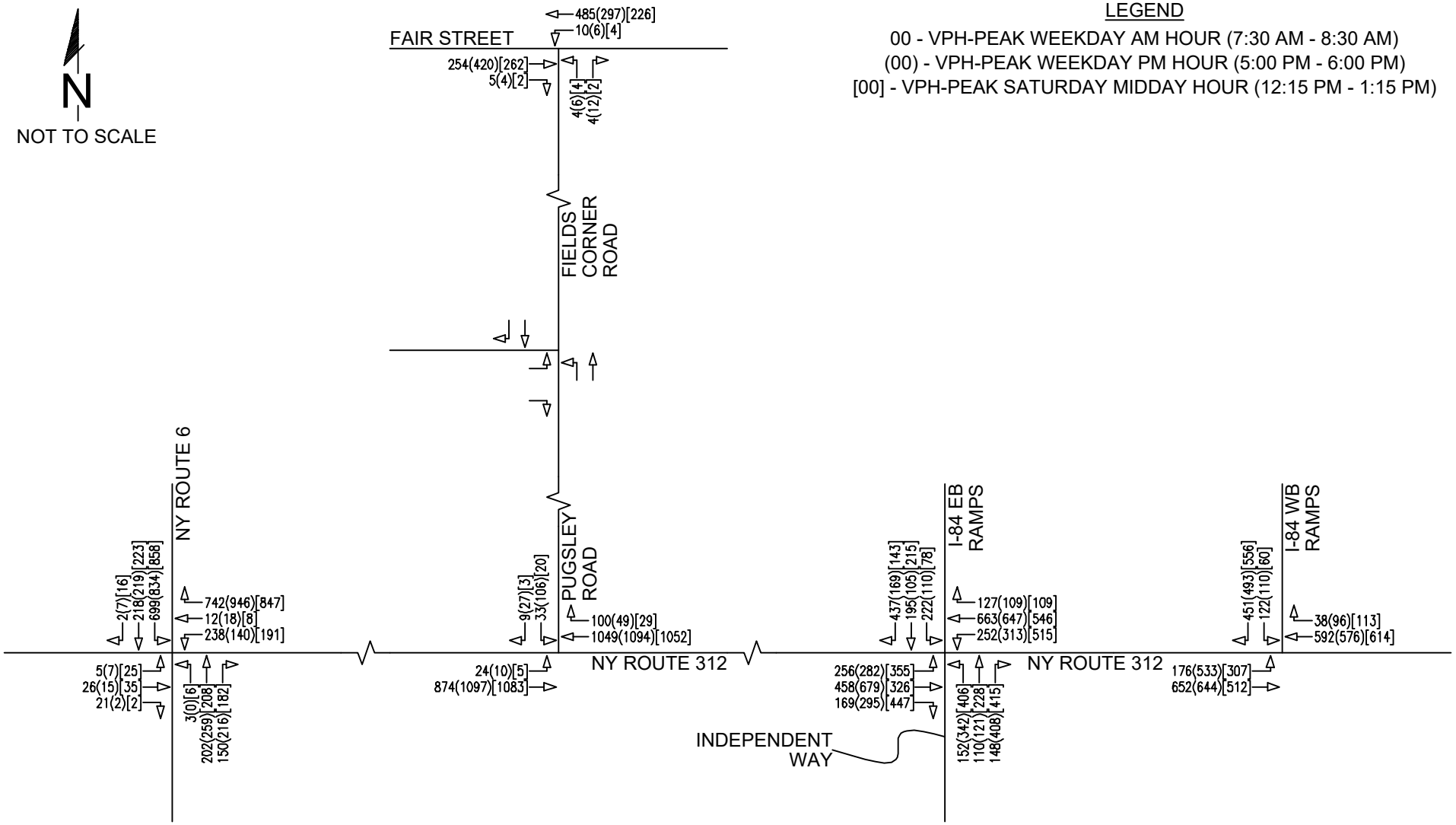
2021 Existing Traffic Volumes

Brewster Yards
Town of Southeast, Putnam County, New York

Project No. 21-076
Not To Scale
November 2021

Figure No. 02

Q:\PROJECTS-21\21-076 Proswing Traffic Study - Brewster\AutoCAD\Traffic\TrafficFigures_8.5x11 Landscape.dwg



DTS • PROVIDENT
Intelligent Land Use

DTS Provident Design Engineering, LLP
One North Broadway
White Plains, NY 10601
P: 914.428.0010
F: 914.428.0017

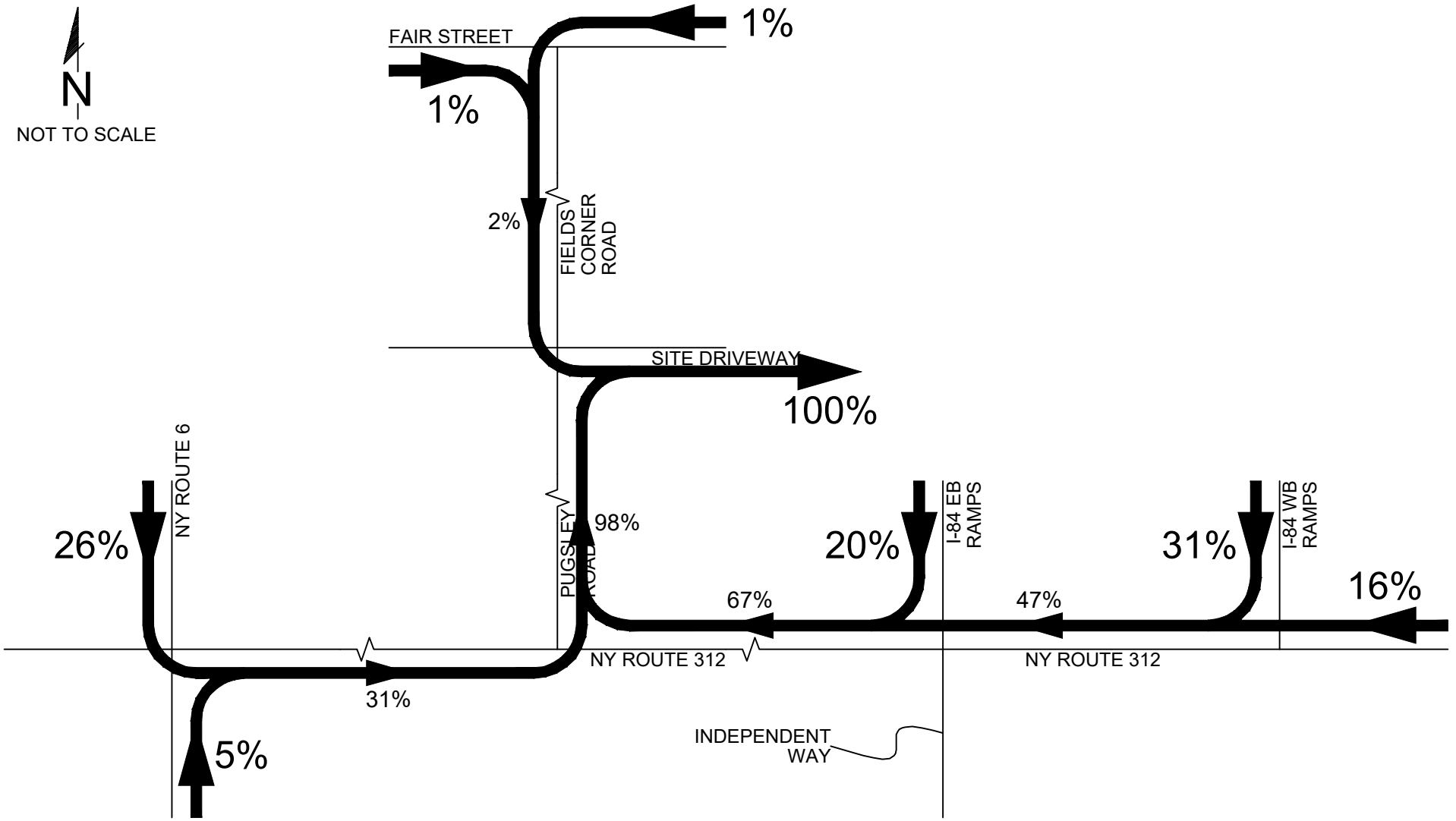
2023 No-Build Traffic Volumes

Brewster Yards
Town of Southeast, Putnam County, New York

Project No. 21-076
Not To Scale
November 2021

Figure No. 03

Q:\PROJECTS-21\21-076 Proswing Traffic Study - Brewster\AutoCAD\Traffic\TrafficFigures_8.5x11 Landscape.dwg



DTS • PROVIDENT
Intelligent Land Use

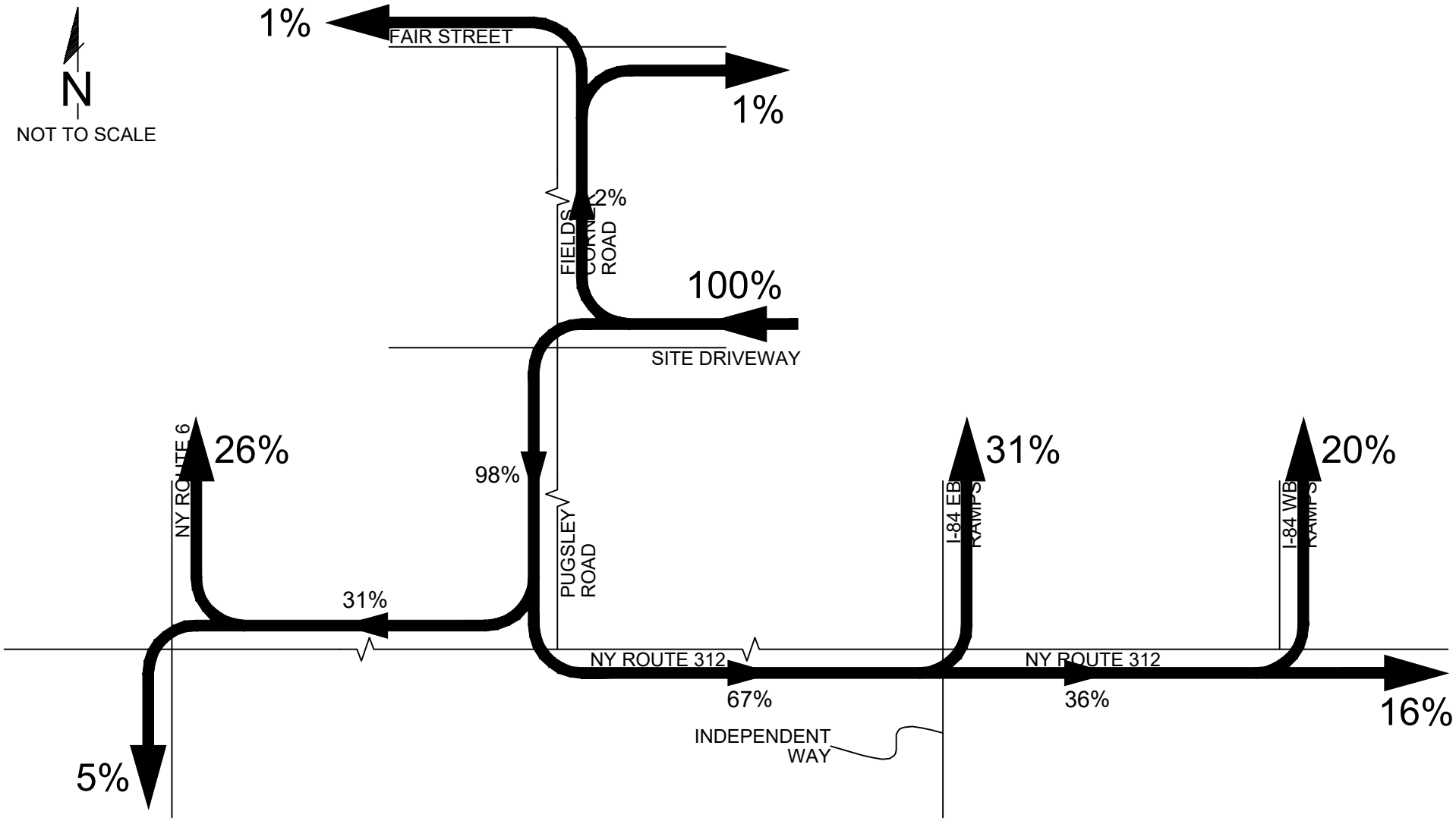
DTS Provident Design Engineering, LLP
One North Broadway
White Plains, NY 10601
P: 914.428.0010
F: 914.428.0017

Arrival Distribution
Brewster Yards
Town of Southeast, Putnam County, New York

Project No. 21-076
Not To Scale
November 2021

Figure No. 04

Q:\PROJECTS-21\21-076 Proswing Traffic Study - Brewster\AutoCAD\Traffic\TrafficFigures_8.5x11 Landscape.dwg



DTS • PROVIDENT
Intelligent Land Use

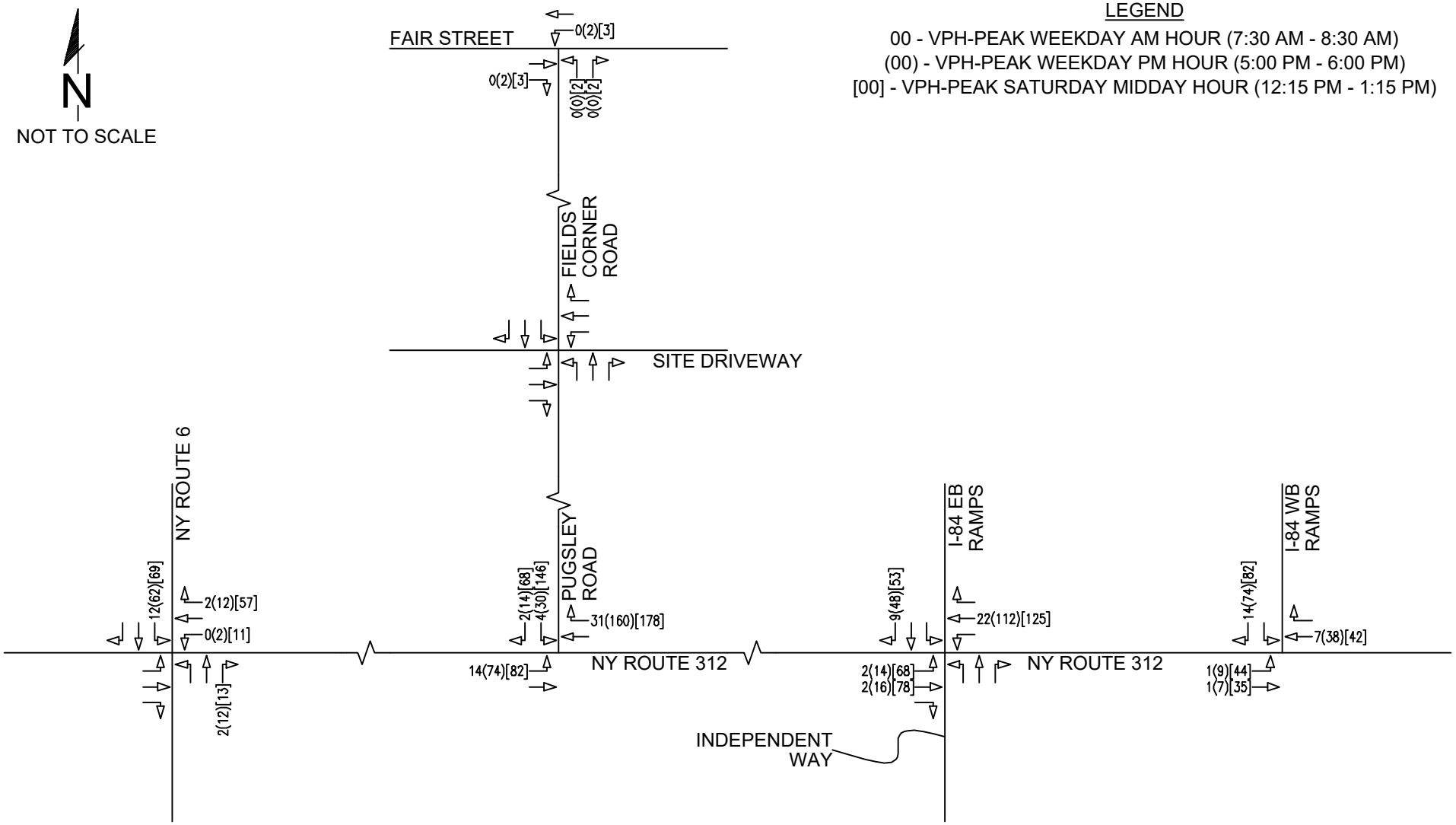
DTS Provident Design Engineering, LLP
One North Broadway
White Plains, NY 10601
P: 914.428.0010
F: 914.428.0017

Departure Distribution
Brewster Yards
Town of Southeast, Putnam County, New York

Project No. 21-076
Not To Scale
November 2021

Figure No. 05

Q:\PROJECTS-21\21-076 Proswing Traffic Study - Brewster\AutoCAD\Traffic\TrafficFigures_8.5x11 Landscape.dwg



DTS • PROVIDENT
Intelligent Land Use

DTS Provident Design Engineering, LLP
One North Broadway
White Plains, NY 10601
P: 914.428.0010
F: 914.428.0017

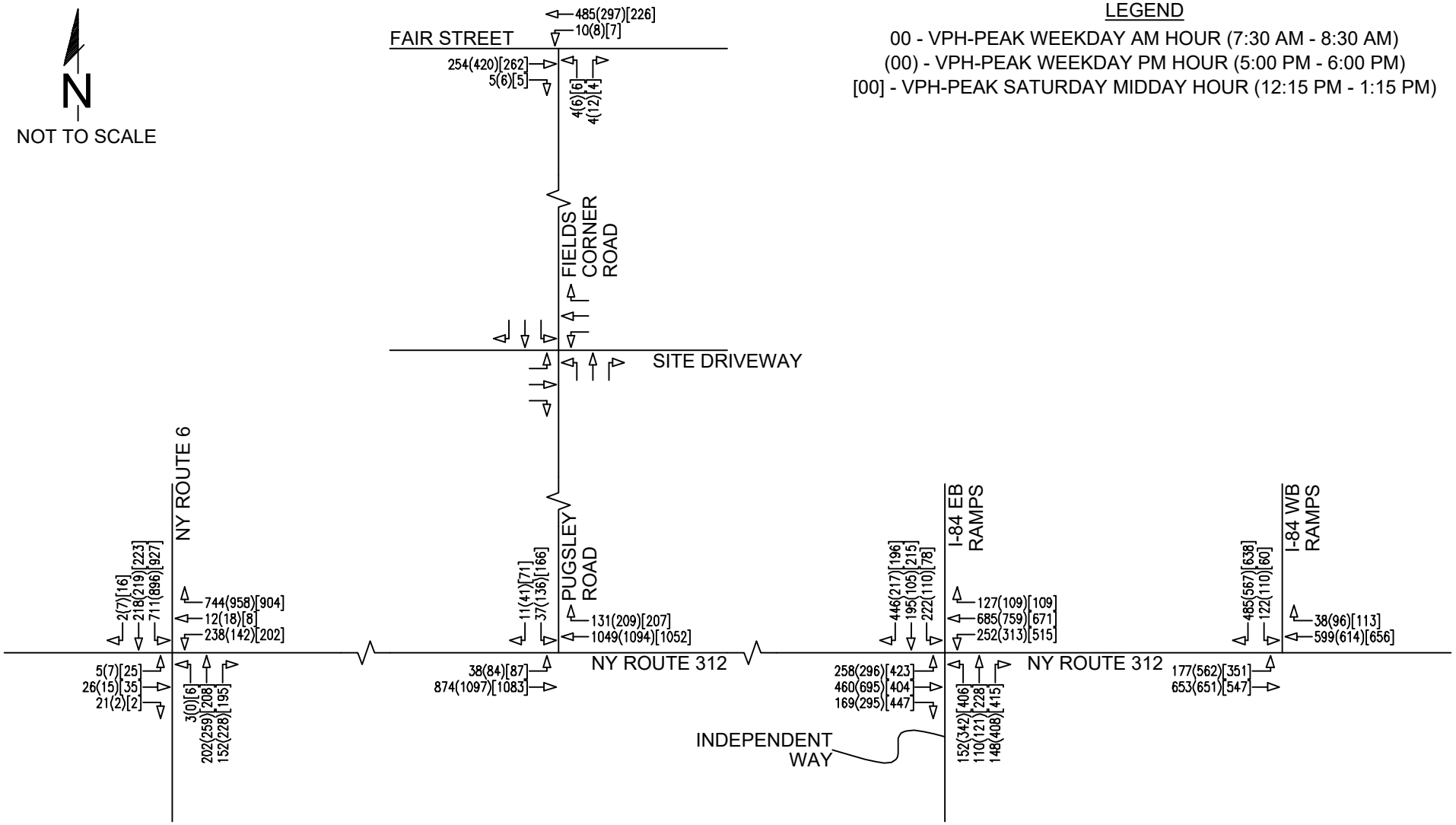
Site-Generated Traffic Volumes

Brewster Yards
Town of Southeast, Putnam County, New York

Project No. 21-076
Not To Scale
November 2021

Figure No. 06

Q:\PROJECTS-21\21-076 Proswing Traffic Study - Brewster\AutoCAD\Traffic\TrafficFigures_8.5x11 Landscape.dwg



DTS • PROVIDENT
Intelligent Land Use

DTS Provident Design Engineering, LLP
One North Broadway
White Plains, NY 10601
P: 914.428.0010
F: 914.428.0017

2023 Build Traffic Volumes

Brewster Yards
Town of Southeast, Putnam County, New York

Project No. 21-076
Not To Scale
November 2021

Figure No. 07

APPENDIX B

LEVEL OF SERVICE STANDARDS

1. LEVEL OF SERVICE

CONCEPT

The Highway Capacity Manual, published by the Transportation Research Board of the U.S. Government, established a system by which highway facilities are examined for their adequacy to handle traffic volumes. The terminology "Level of Service" is used to provide a "qualitative" evaluation based on certain "quantitative" calculations which are related to empirical values.

Intersection Capacity, Delay and resultant Levels of Service are dependent upon a number of factors, including the following:

- Area Type
- Intersection geometrics
- Traffic volumes
- Parking conditions
- Pedestrian activity
- Vehicle Mix
- Bus Stop location and activity
- Peak Hour Factor
- Traffic Signal operation, if applicable

Ramp and weaving area Densities and resultant Levels of Service are dependent upon a number of factors, including the following:

- Number of lanes
- Configuration of weaving area
- Length of acceleration/deceleration lanes
- Vehicle speeds
- Traffic volumes
- Vehicle Mix
- Peak Hour Factor

FACTORS

SIGNALIZED INTERSECTIONS

Level of Service for Signalized Intersections is defined in terms of Delay, which is a measure of driver discomfort, frustration, fuel consumption, and loss of travel time. Specifically, Level of Service criteria are stated in terms of the Average Control Delay per vehicle for the peak 15-minute period within the hour analyzed.

Delay is a complex measure and is dependent upon a number of variables, including:

- Cycle length
- Ratio of Green time to Cycle length (G/C)

- Ratio of Volume to Capacity (V/C) for lane group or approach
- Traffic signal progression

UNSIGNALIZED INTERSECTIONS

Level of Service for Unsignalized Intersections is also defined in terms of Delay. The amount of Delay is based upon the availability of "gaps" in the mainline traffic stream and the acceptance of these gaps by motorists waiting on the side street to enter the main street traffic flow.

RAMP AND RAMP JUNCTIONS

Level of Service for ramp freeway junctions and the ramp proper are defined in terms of Density (passenger cars per mile per lane). Density is related to the traffic flow in the area of influence.

WEAVING AREAS

Level of Service for weaving areas is defined in terms of Density (passenger cars per mile per lane). Density is based on the ratio of weaving vehicles to non-weaving vehicles and on vehicle speeds in the weaving area of influence

CRITERIA

The criteria for the various Level of Service designations are as follows:

	SIGNALIZED	UNSIGNALIZED
LEVEL OF SERVICE	**Average Control Delay per Vehicle (Seconds)**	**Average Control Delay per Vehicle (Seconds)**
A	10.0 or less	10.0 or less
B	10.1 to 20.0	10.1 to 15.0
C	20.1 to 35.0	15.1 to 25.0
D	35.1 to 55.0	25.1 to 35.0
E	55.1 to 80.0	35.1 to 50.0
F	80.1 or greater	50.1 or greater

Level of Service	Ramp-Freeway Junction	Ramp Proper	Weaving Areas	
	Maximum Density pc/mi/ln	Density Range pc/mi/ln	Maximum Density pc/mi/ln	
			Freeway Weaving Area	Multi-lane + C-D Weaving Area
A	≤10	≤11	≤10	≤12
B	>10 - 20	>11 – 18	>10 - 20	>12 - 24
C	>20 - 28	>18 – 26	> 20 - 28	>24 - 32
D	>28 - 35	>26 – 35	>28 - 35	>32 - 36
E	>35	>35 – 45	>35 - 43	>36 - 40
F	Demand exceeds capacity	>45	>43	>40

DESCRIPTION

The following is a brief description of each of the six Level of Service designations as defined by the Highway Capacity Manual:

SIGNALIZED INTERSECTIONS

LEVEL OF SERVICE A

Average Control Delay - 10.0 secs. or less

Describes operations with very low delay. Occurs when progression is extremely favorable and most vehicles arrive during the Green Phase and do not stop at all. Short cycle lengths may also contribute to low delay.

LEVEL OF SERVICE B

Average Control Delay - 10.1 to 20.0 secs.

Generally occurs with good progression and/or short cycle lengths. More vehicles stop than for Level of Service A, causing higher levels of average delay.

LEVEL OF SERVICE C

Average Control Delay - 20.1 to 35.0 secs.

Higher delays may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this Level of Service. The number of vehicles stopping is significant, although many still pass through the intersection without stopping.

LEVEL OF SERVICE D

Average Control Delay - 35.1 to 55.0 secs.

The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high Volume/Capacity (V/C) Ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.

LEVEL OF SERVICE E

Average Control Delay - 55.1 to 80.0 secs.

The limit of acceptable delay.

Higher delay values generally indicate poor progression, long cycle lengths, and high V/C Ratios. Individual cycle failures are frequent occurrences.

LEVEL OF SERVICE F

Average Control Delay - in excess of 80.0 secs.

Unacceptable to most drivers.

Occurs with oversaturation, i.e., arrival flow rates exceed the capacity of the intersection. May also occur at high V/C Ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors.

UNSIGNALIZED INTERSECTIONS

LEVEL OF SERVICE A
Average Control Delay - 10.0 secs. or less
Operations with little or no delay to minor turning movements.

LEVEL OF SERVICE B
Average Control Delay - 10.1 to 15.0 secs.
Operations with short delays on minor turning movements.

LEVEL OF SERVICE C
Average Control Delay - 15.1 to 25.0 secs.
Operations with average delays on minor turning movements.

LEVEL OF SERVICE D
Average Control Delay - 25.1 to 35.0 secs.
Operations with some delays on minor turning movements.

LEVEL OF SERVICE E
Average Control Delay - 35.1 to 50.0 secs.
Operations with long delays on minor turning movements.

LEVEL OF SERVICE F
Average Control Delay - In excess of 50.0 secs.
Operations where demand exceeds capacity. Very long delays with queuing may be experienced on the minor street approach.

RAMPS AND RAMP JUNCTIONS

LEVEL OF SERVICE A

Maximum Density - 10 pc/mi/ln

Unrestricted operations with no noticeable turbulence in the ramp influence area.

LEVEL OF SERVICE B

Maximum Density - 20 pc/mi/ln

Minimal levels of turbulence exist and speeds of vehicles in the influence area begin to decline.

LEVEL OF SERVICE C

Maximum Density - 28 pc/mi/ln

Level of turbulence becomes noticeable as average speed within the influence area declines. Driving conditions are still relatively comfortable at this level.

LEVEL OF SERVICE D

Maximum Density - 35 pc/mi/ln

.

Turbulence levels become intrusive. Queues may form on some high volume on-ramps but freeway operation remains stable.

LEVEL OF SERVICE E

Maximum Density - >35 pc/mi/ln

.

Conditions approaching and reaching capacity. Speeds are reduced and turbulence of merging/diverging vehicles becomes intrusive to all vehicles in the influence area. Flow levels approach capacity limits and minor changes in demand can cause ramp and freeway queues to occur.

LEVEL OF SERVICE F

Maximum Density – Demand flow exceeds limits

Unstable, or breakdown, operation. Approaching demand flows exceed the discharge capacity of the downstream freeway or ramp. Queues are visibly formed on the freeway and on-ramps and will continue to grow as long as the approaching demand exceeds the discharge capacity.

APPENDIX C

LEVEL OF SERVICE TABLES

Job No.: 21-076
Project: Brewster Yards
Location: Town of Southeast, Putnam County, NY

DTS • PROVIDENT
Intelligent Land Use

TABLE NO. C-1
PEAK HOUR LEVEL OF SERVICE SUMMARY TABLE
US Route 6 & NY Route 312

APPROACH		PEAK AM HOUR (7:30 - 8:30 AM)			PEAK PM HOUR (5:15 - 6:15 PM)				PEAK SAT HOUR (1:30 - 2:30 PM)			
		2021 EXISTING	2023 NO-BUILD	2023 BUILD	2021 EXISTING	2023 NO-BUILD	2023 BUILD	2023 BUILD W/ IMPV	2021 EXISTING	2023 NO-BUILD	2023 BUILD	2023 BUILD W/ IMPV
		LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)
US ROUTE 6												
NB	L	C 34.3	C 34.7	C 34.7	A 0.0	A 0.0	A 0.0	A 0.0	C 31.8	C 32.2	C 32.8	D 43.0
	T	D 44.6	D 48.9	D 48.9	D 43.7	D 44.1	D 44.3	E 69.4	D 44.8	D 45.4	D 46.2	E 71.1
	R	A 9.1	A 8.9	A 8.9	A 7.3	A 7.2	A 7.2	A 9.1	A 8.3	A 8.3	A 8.4	B 10.8
	OVERALL	***C 29.0***	***C 31.9***	***C 31.7***	***C 27.3***	***C 27.3***	***C 26.9***	***D 41.2***	***C 28.0***	***C 28.2***	***C 28.0***	***D 42.0***
SB	L	C 31.7	D 45.1	D 48.0	D 40.4	E 75.1	F 106.0	E 74.0	D 51.8	F 85.8	F 127.0	F 84.7
	TR	A 10.0	B 10.3	B 10.3	A 6.5	A 6.8	A 6.9	A 5.3	A 8.2	A 8.4	A 8.9	A 8.0
	OVERALL	***C 26.1***	***D 36.8***	***D 39.1***	***C 32.5***	***E 60.5***	***F 86.0***	***E 60.1***	***D 41.4***	***E 68.9***	***F 102.7***	***E 69.0***
NY ROUTE 312												
EB	***OVERALL***	***B 18.7***	***B 19.3***	***B 19.3***	***C 31.0***	***C 31.1***	***C 31.0***	***C 31.0***	***C 32.3***	***C 32.2***	***C 31.8***	***D 39.3***
WB	LT	D 49.7	E 55.8	E 55.8	D 48.9	D 50.2	D 50.2	E 63.1	D 52.9	D 53.4	D 54.1	E 64.4
	R	A 4.8	A 6.6	A 6.7	B 14.2	C 25.0	C 26.6	C 31.5	A 7.9	B 10.9	B 13.7	B 17.0
	OVERALL	***B 16.4***	***B 19.0***	***B 19.0***	***B 19.4***	***C 28.6***	***C 30.0***	***D 36.0***	***B 16.8***	***B 19.0***	***C 21.4***	***C 25.9***
INTERSECTION		**C 22.2**	**C 28.0**	**C 29.0**	**C 26.2**	**D 41.1**	**D 52.3**	**D 46.7**	**C 29.3**	**D 41.8**	**E 57.1**	**D 46.9**

Job No.: 21-076
Project: Brewster Yards
Location: Town of Southeast, Putnam County, NY

DTS • PROVIDENT
Intelligent Land Use

TABLE NO. C-2
PEAK HOUR LEVEL OF SERVICE SUMMARY TABLE
NY ROUTE 312 & PUGSLEY ROAD

APPROACH		PEAK AM HOUR (7:30 - 8:30 AM)					PEAK PM HOUR (5:15 - 6:15 PM)						PEAK SAT HOUR (1:30 - 2:30 PM)					
		2021 EXISTING	2023 NO-BUILD ALT. A	2023 BUILD ALT. A	2023 NO-BUILD ALT. B	2023 BUILD ALT. B	2021 EXISTING	2023 NO-BUILD ALT. A	2023 BUILD ALT. A	2023 BUILD W/IMPV ALT. A	2023 NO-BUILD ALT. B	2023 BUILD ALT. B	2021 EXISTING	2023 NO-BUILD ALT. A	2023 BUILD ALT. A	2023 BUILD W/IMPV ALT. A	2023 NO-BUILD ALT. B	2023 BUILD ALT. B
		LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)
PUGSLEY ROAD																		
SB	LR/L	f 57.3	E 77.0	E 77.3	C 32.4	C 32.2	f 60.9	D 35.9	D 36.7	D 46.8	C 29.0	C 28.9	f 65.2	C 33.3	C 30.7	C 33.9	B 19.0	C 21.7
	R	N/A	C 34.2	C 32.3	N/A	N/A	N/A	B 14.4	B 13.0	B 16.3	N/A	N/A	N/A	C 24.0	B 11.0	B 11.9	N/A	N/A
	OVERALL	***f 57.3***	***E 68.0***	***E 66.8***	***C 32.4***	***C 32.2***	***f 60.9***	***C 31.5***	***C 31.2***	***D 39.7***	***C 29.0***	***C 28.9***	***f 65.2***	***C 32.1***	***C 24.8***	***C 27.3***	***B 19.0***	***C 21.7***
NY ROUTE 312																		
EB	L	N/A	A 2.5	A 3.5	A 2.4	A 3.2	N/A	A 4.9	F 129.3	D 42.6	A 3.2	A 9.4	N/A	A 2.6	D 45.2	C 30.0	A 1.8	A 6.7
	LT/T	a 0.0	A 2.1	A 2.2	A 2.3	A 2.8	a 0.0	A 4.2	A 4.9	A 3.7	A 4.9	A 5.3	a 0.0	A 2.8	A 5.7	A 4.8	A 1.5	A 6.0
	OVERALL	***a 0.0***	***A 2.2***	***A 2.2***	***A 2.3***	***A 2.8***	***a 0.0***	***A 4.2***	***B 13.8***	***A 6.5***	***A 4.9***	***A 5.6***	***a 0.0***	***A 2.8***	***A 8.6***	***A 6.7***	***A 1.5***	***A 6.1***
WB	TR/T	a 0.0	B 11.2	B 11.4	A 5.7	A 7.7	a 0.0	B 14.1	B 18.0	B 13.7	A 6.7	B 12.3	a 0.0	A 7.0	B 17.3	B 15.2	A 3.2	B 14.8
	R	N/A	A 0.1	A 0.1	N/A	N/A	N/A	A 0.0	A 0.2	A 0.2	N/A	N/A	N/A	A 0.0	A 0.2	A 0.2	N/A	N/A
	OVERALL	***a 0.0***	***B 10.3***	***B 10.2***	***A 5.7***	***A 7.7***	***a 0.0***	***B 13.5***	***B 15.1***	***B 11.5***	***A 6.7***	***B 12.3***	***a 0.0***	***A 6.8***	***B 14.5***	***B 12.8***	***A 3.2***	***B 14.8***
INTERSECTION		**a 0.2**	**A 8.0**	**A 8.1**	**A 4.8**	**A 6.2**	**a 0.1**	**B 10.2**	**B 15.6**	**B 11.2**	**A 7.1**	**B 10.4**	**a 0.2**	**A 5.1**	**B 12.8**	**B 11.4**	**A 2.5**	**B 11.6**

DTS • PROVIDENT
Intelligent Land Use

TABLE NO. C-3
PEAK HOUR LEVEL OF SERVICE SUMMARY TABLE
NY ROUTE 312 & I-84 EASTBOUND RAMPS/INDEPENDENT WAY

APPROACH		PEAK AM HOUR (7:30 - 8:30 AM)			PEAK PM HOUR (5:15 - 6:15 PM)			PEAK SAT HOUR (1:30 - 2:30 PM)			
		2021 EXISTING	2023 NO-BUILD	2023 BUILD	2021 EXISTING	2023 NO-BUILD	2023 BUILD	2021 EXISTING	2023 NO-BUILD	2023 BUILD	2023 BUILD W/ IMPV
		LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)
I-84 EASTBOUND RAMPS/INDEPENDENT WAY											
NB	L	E 71.3	E 71.3	E 71.3	E 68.3	E 69.8	E 69.8	E 58.1	E 60.9	E 66.2	E 69.3
	T	E 63.6	E 63.6	E 63.6	E 57.4	E 55.8	E 55.8	D 51.2	D 54.1	E 58.8	E 61.5
	R	A 5.6	A 6.7	A 6.8	B 16.8	B 16.5	B 16.6	A 4.4	A 6.1	A 8.3	A 7.5
	OVERALL	***D 42.9***	***D 44.7***	***D 44.7***	***D 38.5***	***D 40.1***	***D 40.2***	***C 33.7***	***D 36.4***	***D 40.3***	***D 41.7***
SB	L	E 75.8	E 76.4	E 76.4	E 74.2	E 74.1	E 74.1	D 48.8	D 51.7	D 54.8	E 55.8
	T	E 60.8	E 59.8	E 59.8	E 67.7	E 66.2	E 66.2	E 63.7	E 67.8	E 73.9	E 77.5
	R	B 19.3	C 26.9	C 27.9	B 16.3	C 22.6	C 27.7	B 12.5	B 19.0	C 25.4	C 23.8
	OVERALL	***D 44.8***	***D 47.2***	***D 47.6***	***D 49.5***	***D 49.3***	***D 48.9***	***D 46.1***	***D 48.9***	***D 51.4***	***D 52.6***
NY ROUTE 312											
EB	L	E 63.3	E 63.7	E 63.9	E 65.8	E 66.4	E 66.5	E 60.7	E 65.4	F 90.3	E 75.1
	T	D 36.4	D 40.3	D 40.4	D 51.1	F 92.8	F 101.0	E 59.6	E 61.7	E 64.7	E 72.1
	R	A 2.9	A 2.8	A 2.8	A 2.9	A 4.0	A 4.2	B 15.5	B 16.0	B 15.1	B 17.8
	OVERALL	***D 37.3***	***D 39.9***	***D 40.1***	***D 41.6***	***E 66.1***	***E 70.9***	***D 42.0***	***D 44.7***	***E 55.8***	***D 54.0***
WB	L	E 58.0	E 57.3	E 57.0	E 58.9	E 58.3	E 56.1	F 86.8	F 108.1	F 143.1	F 88.4
	TR	C 29.6	C 33.3	C 33.7	C 26.1	C 32.1	C 34.1	D 49.4	E 55.5	E 59.0	E 60.1
	OVERALL	***D 37.4***	***D 39.1***	***D 39.2***	***D 36.8***	***D 39.8***	***D 39.9***	***E 66.7***	***E 78.6***	***F 92.4***	***E 71.3***
INTERSECTION		**D 40.1**	**D 42.2**	**D 42.4**	**D 40.2**	**D 50.1**	**D 51.6**	**D 47.7**	**D 53.4**	**E 62.9**	**E 56.2**

Job No.: 21-076
Project: Brewster Yards
Location: Town of Southeast, Putnam County, NY

DTS • PROVIDENT
Intelligent Land Use

TABLE NO. C-4
PEAK HOUR LEVEL OF SERVICE SUMMARY TABLE
NY ROUTE 312 & I-84 WESTBOUND RAMPS

APPROACH		PEAK AM HOUR (7:30 - 8:30 AM)			PEAK PM HOUR (5:15 - 6:15 PM)				PEAK SAT HOUR (1:30 - 2:30 PM)			
		2021 EXISTING	2023 NO-BUILD	2023 BUILD	2021 EXISTING	2023 NO-BUILD	2023 BUILD	2023 BUILD W/ IMPV	2021 EXISTING	2023 NO-BUILD	2023 BUILD	2023 BUILD W/ IMPV
		LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)
I-84 WESTBOUND RAMPS												
SB	L	C 32.5	C 32.6	C 32.6	C 32.3	C 32.6	C 32.6	D 53.1	C 25.1	C 25.6	C 25.6	D 51.9
	R	C 21.9	C 32.9	D 36.5	C 32.3	D 48.3	F 95.6	C 34.5	C 34.4	D 46.9	F 94.0	D 45.8
	OVERALL	***C 24.4***	***C 32.8***	***D 35.7***	***C 32.3***	***D 45.4***	***F 85.4***	***D 37.5***	***C 33.6***	***D 44.8***	***F 88.1***	***D 46.3***
NY ROUTE 312												
EB	L	A 6.3	A 8.6	A 8.8	E 65.6	F 156.6	F 210.1	F 107.5	B 18.7	C 22.6	C 33.0	C 26.6
	T	A 5.3	A 6.1	A 6.1	A 6.1	A 7.2	A 7.3	A 6.5	A 5.6	A 6.0	A 6.3	A 4.2
	OVERALL	***A 5.5***	***A 6.6***	***A 6.7***	***C 32.5***	***E 76.2***	***F 101.3***	***D 53.3***	***B 10.4***	***B 12.2***	***B 16.8***	***B 13.0***
WB	T	C 24.8	C 28.8	C 29.6	C 23.0	C 26.1	C 29.6	C 34.7	D 52.4	E 68.0	F 91.5	D 53.7
	R	A 1.5	A 1.4	A 1.4	A 2.2	A 3.1	A 3.3	A 2.7	A 1.6	A 2.2	A 3.0	A 2.0
	OVERALL	***C 23.5***	***C 27.1***	***C 27.9***	***C 20.1***	***C 22.8***	***C 26.1***	***C 30.4***	***D 44.6***	***E 57.8***	***E 78.5***	***D 46.1***
INTERSECTION		**B 16.2**	**C 20.4**	**C 21.5**	**C 29.1**	**D 54.2**	**E 76.6**	**D 42.9**	**C 28.6**	**D 36.8**	**E 57.9**	**C 33.6**

Job No.: 21-076
Project: Brewster Yards
Location: Town of Southeast, Putnam County, NY

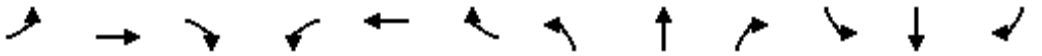
DTS • PROVIDENT
Intelligent Land Use

TABLE NO. C-5
PEAK HOUR LEVEL OF SERVICE SUMMARY TABLE
FAIR STREET & FIELDS CORNER ROAD

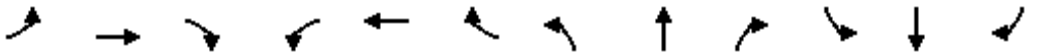
APPROACH		PEAK AM HOUR (7:30 - 8:30 AM)			PEAK PM HOUR (5:15 - 6:15 PM)			PEAK SAT HOUR (1:30 - 2:30 PM)		
		2021 EXISTING	**2023 NO-BUILD**	**2023 BUILD**	**2021 EXISTING**	**2023 NO-BUILD**	**2023 BUILD**	**2021 EXISTING**	**2023 NO-BUILD**	**2023 BUILD**
		LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)
FIELDS CORNER ROAD										
NB	***OVERALL***	***c 17.5***	***c 18.5***	***c 18.5***	***b 13.5***	***b 14.2***	***b 14.3***	***b 12.4***	***b 12.4***	***b 12.3***
FAIR STREET										
EB	***OVERALL***	***a 0.0***	***a 0.0***	***a 0.0***	***a 0.0***	***a 0.0***	***a 0.0***	***a 0.0***	***a 0.0***	***a 0.0***
WB	L	a 8.7	a 8.8	a 8.8	a 8.3	a 8.3	a 8.3	a 7.8	a 7.8	a 7.9
	OVERALL	***a 0.1***	***a 0.2***	***a 0.2***	***a 0.1***	***a 0.2***	***a 0.2***	***a 0.1***	***a 0.1***	***a 0.2***
INTERSECTION		**a 0.2**	**a 0.3**	**a 0.3**	**a 0.2**	**a 0.4**	**a 0.4**	**a 0.2**	**a 0.2**	**a 0.3**

APPENDIX D

CAPACITY ANALYSIS



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	25	21	229	11	687	3	182	144	622	214	2
Future Volume (vph)	5	25	21	229	11	687	3	182	144	622	214	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	12	13	11	12	12
Grade (%)		-2%			-2%			-2%			2%	
Storage Length (ft)	0		0	180		0	105		260	390		0
Storage Lanes	0		0	1		1	1		1	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.944				0.850			0.850		0.999	
Flt Protected		0.995			0.954		0.950			0.950		
Satd. Flow (prot)	0	1549	0	0	1735	1546	1762	1761	1479	1661	1725	0
Flt Permitted		0.968			0.696		0.611			0.548		
Satd. Flow (perm)	0	1507	0	0	1266	1546	1133	1761	1479	958	1725	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		23				523			158		1	
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		395			1214			1103			839	
Travel Time (s)		9.0			18.4			13.7			10.4	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	40%	26%	0%	2%	2%	2%	0%	9%	14%	4%	9%	0%
Adj. Flow (vph)	5	27	23	252	12	755	3	200	158	684	235	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	55	0	0	264	755	3	200	158	684	237	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.03	1.03	1.03	1.03	0.99	0.95	1.06	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	2	2	2	2	
Detector Template	Left	NYSDOT		Left	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	20	83		20	83	83	83	83	83	83	83	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Size(ft)	20	40		20	40	40	40	40	40	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		43			43	43	43	43	43	43	43	
Detector 2 Size(ft)		40			40	40	40	40	40	40	40	
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	

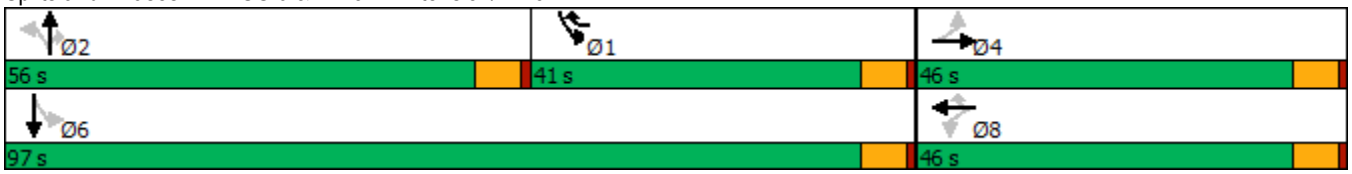


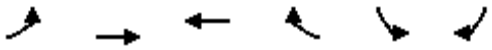
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2		2	6		
Detector Phase	4	4		8	8	1	2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	15.0	
Minimum Split (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	21.0	
Total Split (s)	46.0	46.0		46.0	46.0	41.0	56.0	56.0	56.0	41.0	97.0	
Total Split (%)	32.2%	32.2%		32.2%	32.2%	28.7%	39.2%	39.2%	39.2%	28.7%	67.8%	
Maximum Green (s)	40.0	40.0		40.0	40.0	35.0	50.0	50.0	50.0	35.0	91.0	
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0			6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag						Lag	Lead	Lead	Lead	Lag		
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	
Recall Mode	None	None		None	None	None	None	None	None	None	Min	
Act Effct Green (s)		23.7			23.7	60.1	16.7	16.7	16.7	53.1	53.1	
Actuated g/C Ratio		0.27			0.27	0.67	0.19	0.19	0.19	0.59	0.59	
v/c Ratio		0.13			0.79	0.62	0.01	0.61	0.39	0.85	0.23	
Control Delay		18.7			49.7	4.8	34.3	44.6	9.1	31.7	10.0	
Queue Delay		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		18.7			49.7	4.8	34.3	44.6	9.1	31.7	10.0	
LOS		B			D	A	C	D	A	C	B	
Approach Delay		18.7			16.4			29.0			26.1	
Approach LOS		B			B			C			C	
Queue Length 50th (ft)		15			148	43	2	111	0	240	56	
Queue Length 95th (ft)		47			263	146	10	207	55	#583	125	
Internal Link Dist (ft)		315			1134			1023			759	
Turn Bay Length (ft)							105		260	390		
Base Capacity (vph)		721			596	1210	666	1036	935	931	1612	
Starvation Cap Reductn		0			0	0	0	0	0	0	0	
Spillback Cap Reductn		0			0	0	0	0	0	0	0	
Storage Cap Reductn		0			0	0	0	0	0	0	0	
Reduced v/c Ratio		0.08			0.44	0.62	0.00	0.19	0.17	0.73	0.15	

Intersection Summary			
Area Type:	Other		
Cycle Length: 143			
Actuated Cycle Length: 89.4			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 22.2		Intersection LOS: C	
Intersection Capacity Utilization 79.0%		ICU Level of Service D	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

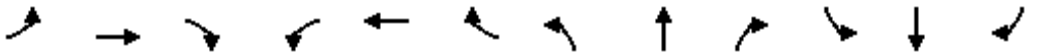
Splits and Phases: 2: US 6 & NY 312 Extension/NY 312



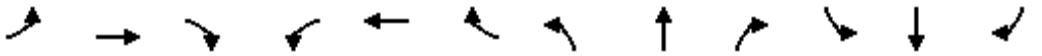


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	815	969	2	3	2
Future Volume (vph)	0	815	969	2	3	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	9	9
Grade (%)		2%	-2%		-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.955	
Flt Protected					0.968	
Satd. Flow (prot)	0	1775	1776	0	1309	0
Flt Permitted					0.968	
Satd. Flow (perm)	0	1775	1776	0	1309	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		1316	530		1252	
Travel Time (s)		19.9	8.0		28.5	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles (%)	0%	6%	8%	50%	33%	0%
Adj. Flow (vph)	0	1006	1196	2	4	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1006	1198	0	6	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		9	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	0.99	0.99	1.13	1.13
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	61.1%	ICU Level of Service	B
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	226	412	160	253	553	118	136	107	151	213	191	378
Future Volume (vph)	226	412	160	253	553	118	136	107	151	213	191	378
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	12	12
Grade (%)		1%			-1%			-2%			0%	
Storage Length (ft)	200		250	300		300	0		0	0		200
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.97	1.00	1.00	0.97	0.95	0.95	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.850		0.974				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.983		0.950		
Satd. Flow (prot)	3287	1750	1575	3320	3226	0	1580	3250	1496	1646	1827	1583
Flt Permitted	0.950			0.950			0.950	0.983		0.950		
Satd. Flow (perm)	3287	1750	1575	3320	3226	0	1580	3250	1496	1646	1827	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			180		18				163			225
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		595			1417			424			345	
Travel Time (s)		9.0			21.5			9.6			7.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	6%	8%	2%	6%	9%	12%	5%	6%	9%	6%	4%	2%
Adj. Flow (vph)	254	463	180	284	621	133	153	120	170	239	215	425
Shared Lane Traffic (%)							42%					
Lane Group Flow (vph)	254	463	180	284	754	0	89	184	170	239	215	425
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	0	0	2	0		2	2	2	2	2	2
Detector Template	NYSDOT			NYSDOT			NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	83	0	0	83	0		83	83	83	83	83	83
Trailing Detector (ft)	-5	0	0	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Position(ft)	-5	0	-5	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Size(ft)	40	6	40	40	6		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43			43			43	43	43	43	43	43
Detector 2 Size(ft)	40			40			40	40	40	40	40	40
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2	3	1	6		3	3	1	4	4	5
Permitted Phases			2						3			4
Detector Phase	5	2	3	1	6		3	3	1	4	4	5
Switch Phase												
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0		5.0	5.0	3.0	5.0	5.0	3.0
Minimum Split (s)	9.0	16.0	11.0	9.0	16.0		11.0	11.0	9.0	11.0	11.0	9.0
Total Split (s)	26.0	36.0	34.0	26.0	36.0		34.0	34.0	26.0	34.0	34.0	26.0
Total Split (%)	20.0%	27.7%	26.2%	20.0%	27.7%		26.2%	26.2%	20.0%	26.2%	26.2%	20.0%
Maximum Green (s)	20.0	30.0	28.0	20.0	30.0		28.0	28.0	20.0	28.0	28.0	20.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Max	None	None	C-Max		None	None	None	None	None	None
Act Effct Green (s)	15.1	55.4	73.9	15.5	55.8		12.5	12.5	28.0	22.6	22.6	43.7
Actuated g/C Ratio	0.12	0.43	0.57	0.12	0.43		0.10	0.10	0.22	0.17	0.17	0.34
v/c Ratio	0.66	0.62	0.18	0.72	0.54		0.59	0.59	0.38	0.84	0.68	0.62
Control Delay	63.3	36.4	2.9	58.0	29.6		71.3	63.6	5.6	75.8	60.8	19.3
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.3	36.4	2.9	58.0	29.6		71.3	63.6	5.6	75.8	60.8	19.3
LOS	E	D	A	E	C		E	E	A	E	E	B
Approach Delay		37.3			37.4			42.9			44.8	
Approach LOS		D			D			D			D	
Queue Length 50th (ft)	107	301	0	112	228		80	83	3	196	170	138
Queue Length 95th (ft)	145	#541	37	m164	340		136	118	30	277	243	215
Internal Link Dist (ft)		515			1337			344			265	
Turn Bay Length (ft)	200		250	300								200
Base Capacity (vph)	505	746	1140	510	1396		340	700	496	354	393	732
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.62	0.16	0.56	0.54		0.26	0.26	0.34	0.68	0.55	0.58

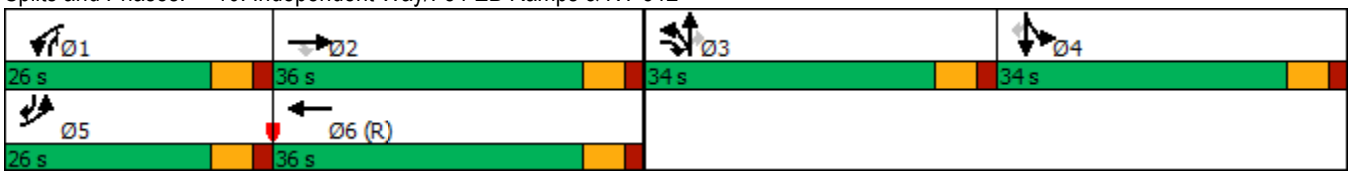
Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Green, Master Intersection			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 40.1		Intersection LOS: D	
Intersection Capacity Utilization 65.3%		ICU Level of Service C	
Analysis Period (min) 15			

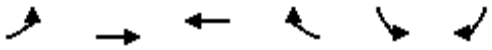
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

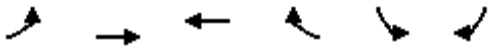
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: Independent Way/I-84 EB Ramps & NY 312





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	153	623	550	31	117	373
Future Volume (vph)	153	623	550	31	117	373
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	13	13
Grade (%)		-1%	2%		0%	
Storage Length (ft)	325			250	125	0
Storage Lanes	1			1	1	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1728	1854	1765	1454	1760	1652
Flt Permitted	0.269				0.950	
Satd. Flow (perm)	489	1854	1765	1454	1760	1652
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				36		60
Link Speed (mph)		45	45		30	
Link Distance (ft)		1417	528		436	
Travel Time (s)		21.5	8.0		9.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	5%	3%	3%	10%	6%	1%
Adj. Flow (vph)	176	716	632	36	134	429
Shared Lane Traffic (%)						
Lane Group Flow (vph)	176	716	632	36	134	429
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.06	1.01	0.96	0.96
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	0	0	0	2	2
Detector Template	NYSDOT				NYSDOTNYSDOT	
Leading Detector (ft)	83	0	0	0	83	83
Trailing Detector (ft)	-5	0	0	0	-5	-5
Detector 1 Position(ft)	-5	0	0	0	-5	-5
Detector 1 Size(ft)	40	6	6	20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43				43	43
Detector 2 Size(ft)	40				40	40
Detector 2 Type	Cl+Ex				Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0				0.0	0.0



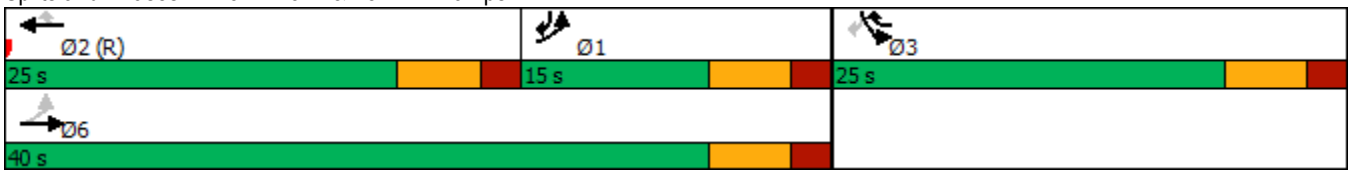
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	pm+pt	NA	NA	pm+ov	Prot	pm+ov
Protected Phases	1	6	2	3	3	1
Permitted Phases	6			2		3
Detector Phase	1	6	2	3	3	1
Switch Phase						
Minimum Initial (s)	3.0	10.0	10.0	3.0	3.0	3.0
Minimum Split (s)	9.0	16.0	16.0	9.0	9.0	9.0
Total Split (s)	15.0	40.0	25.0	25.0	25.0	15.0
Total Split (%)	23.1%	61.5%	38.5%	38.5%	38.5%	23.1%
Maximum Green (s)	9.0	34.0	19.0	19.0	19.0	9.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lag		Lead			Lag
Lead-Lag Optimize?	Yes		Yes			Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Max	C-Max	None	None	None
Act Effct Green (s)	45.9	47.1	30.9	44.0	9.4	22.1
Actuated g/C Ratio	0.71	0.72	0.48	0.68	0.14	0.34
v/c Ratio	0.34	0.53	0.76	0.04	0.53	0.71
Control Delay	6.3	5.3	24.8	1.5	32.5	21.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.3	5.3	24.8	1.5	32.5	21.9
LOS	A	A	C	A	C	C
Approach Delay		5.5	23.5		24.4	
Approach LOS		A	C		C	
Queue Length 50th (ft)	15	66	208	0	50	116
Queue Length 95th (ft)	60	225	#410	6	88	173
Internal Link Dist (ft)		1337	448		356	
Turn Bay Length (ft)	325			250	125	
Base Capacity (vph)	516	1342	837	993	514	602
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.53	0.76	0.04	0.26	0.71

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 16.2		Intersection LOS: B	
Intersection Capacity Utilization 62.0%		ICU Level of Service B	
Analysis Period (min) 15			

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

Queue shown is maximum after two cycles.

Splits and Phases: 13: NY 312 & I-84 WB Ramps



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	246	3	5	473	3	3
Future Volume (vph)	246	3	5	473	3	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Grade (%)	3%			-7%	4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.998				0.932	
Flt Protected				0.999	0.976	
Satd. Flow (prot)	1515	0	0	1749	1129	0
Flt Permitted				0.999	0.976	
Satd. Flow (perm)	1515	0	0	1749	1129	0
Link Speed (mph)	40			40	30	
Link Distance (ft)	339			334	611	
Travel Time (s)	5.8			5.7	13.9	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Heavy Vehicles (%)	19%	33%	60%	8%	33%	67%
Adj. Flow (vph)	324	4	7	622	4	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	328	0	0	629	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.00	1.00	1.03	1.03
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	38.9%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	815	969	2	3	2
Future Vol, veh/h	0	815	969	2	3	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	2	-2	-	-2	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	0	6	8	50	33	0
Mvmt Flow	0	1006	1196	2	4	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1198	0	-	0	2203	1197
Stage 1	-	-	-	-	1197	-
Stage 2	-	-	-	-	1006	-
Critical Hdwy	4.1	-	-	-	6.33	6
Critical Hdwy Stg 1	-	-	-	-	5.33	-
Critical Hdwy Stg 2	-	-	-	-	5.33	-
Follow-up Hdwy	2.2	-	-	-	3.797	3.3
Pot Cap-1 Maneuver	590	-	-	-	51	244
Stage 1	-	-	-	-	284	-
Stage 2	-	-	-	-	347	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	590	-	-	-	51	244
Mov Cap-2 Maneuver	-	-	-	-	51	-
Stage 1	-	-	-	-	284	-
Stage 2	-	-	-	-	347	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	57.3
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	590	-	-	-	75
HCM Lane V/C Ratio	-	-	-	-	0.082
HCM Control Delay (s)	0	-	-	-	57.3
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Intersection	
Int Delay, s/veh	0.2

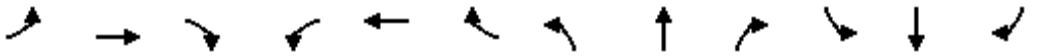
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	246	3	5	473	3	3
Future Vol, veh/h	246	3	5	473	3	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	3	-	-	-7	4	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	19	33	60	8	33	67
Mvmt Flow	324	4	7	622	4	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	328	0	962	326
Stage 1	-	-	-	-	326	-
Stage 2	-	-	-	-	636	-
Critical Hdwy	-	-	4.7	-	7.53	7.27
Critical Hdwy Stg 1	-	-	-	-	6.53	-
Critical Hdwy Stg 2	-	-	-	-	6.53	-
Follow-up Hdwy	-	-	2.74	-	3.797	3.903
Pot Cap-1 Maneuver	-	-	968	-	202	567
Stage 1	-	-	-	-	620	-
Stage 2	-	-	-	-	411	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	968	-	200	567
Mov Cap-2 Maneuver	-	-	-	-	200	-
Stage 1	-	-	-	-	620	-
Stage 2	-	-	-	-	406	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	17.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	296	-	-	968	-
HCM Lane V/C Ratio	0.027	-	-	0.007	-
HCM Control Delay (s)	17.5	-	-	8.7	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	26	21	238	12	742	3	202	150	699	218	2
Future Volume (vph)	5	26	21	238	12	742	3	202	150	699	218	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	12	13	11	12	12
Grade (%)		-2%			-2%			-2%			2%	
Storage Length (ft)	0		0	180		0	105		260	390		0
Storage Lanes	0		0	1		1	1		1	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.946				0.850			0.850		0.999	
Flt Protected		0.996			0.955		0.950			0.950		
Satd. Flow (prot)	0	1549	0	0	1737	1546	1762	1761	1479	1661	1725	0
Flt Permitted		0.969			0.695		0.608			0.488		
Satd. Flow (perm)	0	1507	0	0	1264	1546	1128	1761	1479	853	1725	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		23				481			165		1	
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		395			1214			1103			839	
Travel Time (s)		9.0			18.4			13.7			10.4	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	40%	26%	0%	2%	2%	2%	0%	9%	14%	4%	9%	0%
Adj. Flow (vph)	5	29	23	262	13	815	3	222	165	768	240	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	57	0	0	275	815	3	222	165	768	242	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.03	1.03	1.03	1.03	0.99	0.95	1.06	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	2	2	2	2	
Detector Template	Left	NYSDOT		Left	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	20	83		20	83	83	83	83	83	83	83	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Size(ft)	20	40		20	40	40	40	40	40	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		43			43	43	43	43	43	43	43	
Detector 2 Size(ft)		40			40	40	40	40	40	40	40	
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	

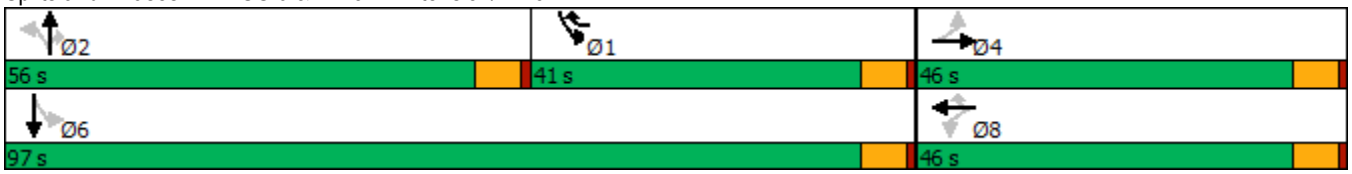


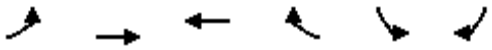
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2		2	6		
Detector Phase	4	4		8	8	1	2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	15.0	
Minimum Split (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	21.0	
Total Split (s)	46.0	46.0		46.0	46.0	41.0	56.0	56.0	56.0	41.0	97.0	
Total Split (%)	32.2%	32.2%		32.2%	32.2%	28.7%	39.2%	39.2%	39.2%	28.7%	67.8%	
Maximum Green (s)	40.0	40.0		40.0	40.0	35.0	50.0	50.0	50.0	35.0	91.0	
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0			6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag						Lag	Lead	Lead	Lead	Lag		
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	
Recall Mode	None	None		None	None	None	None	None	None	None	Min	
Act Effct Green (s)		25.7			25.7	67.5	18.4	18.4	18.4	60.1	60.1	
Actuated g/C Ratio		0.26			0.26	0.69	0.19	0.19	0.19	0.61	0.61	
v/c Ratio		0.14			0.83	0.67	0.01	0.67	0.40	0.94	0.23	
Control Delay		19.3			55.8	6.6	34.7	48.9	8.9	45.1	10.3	
Queue Delay		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		19.3			55.8	6.6	34.7	48.9	8.9	45.1	10.3	
LOS		B			E	A	C	D	A	D	B	
Approach Delay		19.3			19.0			31.9			36.8	
Approach LOS		B			B			C			D	
Queue Length 50th (ft)		16			160	78	2	128	0	313	61	
Queue Length 95th (ft)		49			281	241	10	234	56	#692	133	
Internal Link Dist (ft)		315			1134			1023			759	
Turn Bay Length (ft)							105		260	390		
Base Capacity (vph)		639			524	1213	585	913	847	816	1577	
Starvation Cap Reductn		0			0	0	0	0	0	0	0	
Spillback Cap Reductn		0			0	0	0	0	0	0	0	
Storage Cap Reductn		0			0	0	0	0	0	0	0	
Reduced v/c Ratio		0.09			0.52	0.67	0.01	0.24	0.19	0.94	0.15	

Intersection Summary			
Area Type:	Other		
Cycle Length: 143			
Actuated Cycle Length: 98.1			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay: 28.0		Intersection LOS: C	
Intersection Capacity Utilization 84.8%		ICU Level of Service E	
Analysis Period (min) 15			

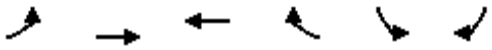
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US 6 & NY 312 Extension/NY 312





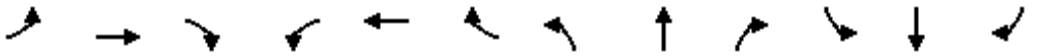
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	24	874	1049	100	33	9
Future Volume (vph)	24	874	1049	100	33	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	14
Grade (%)		2%	-2%		-2%	
Storage Length (ft)	100			0	95	80
Storage Lanes	1			1	1	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1718	3372	1777	1539	3461	1740
Flt Permitted	0.157				0.950	
Satd. Flow (perm)	284	3372	1777	1539	3461	1740
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						11
Link Speed (mph)		45	45		30	
Link Distance (ft)		1316	530		1252	
Travel Time (s)		19.9	8.0		28.5	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles (%)	4%	6%	8%	6%	9%	0%
Adj. Flow (vph)	30	1079	1295	123	41	11
Shared Lane Traffic (%)						
Lane Group Flow (vph)	30	1079	1295	123	41	11
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		28	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	0.99	0.99	0.91	0.91
Turning Speed (mph)	15			9	15	9
Number of Detectors	0	0	0	0	2	2
Detector Template					NYSDOT	NYSDOT
Leading Detector (ft)	0	0	0	0	83	83
Trailing Detector (ft)	0	0	0	0	-5	-5
Detector 1 Position(ft)	0	0	0	0	-5	-5
Detector 1 Size(ft)	20	6	6	20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)					43	43
Detector 2 Size(ft)					40	40
Detector 2 Type					Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)					0.0	0.0



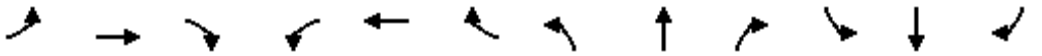
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	Perm	NA	NA	pm+ov	Prot	Perm
Protected Phases		6	2	3	3	
Permitted Phases	6			2		3
Detector Phase	6	6	2	3	3	3
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	140.0	140.0	140.0	20.0	20.0	20.0
Total Split (%)	87.5%	87.5%	87.5%	12.5%	12.5%	12.5%
Maximum Green (s)	134.0	134.0	134.0	14.0	14.0	14.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max	None	None	None
Act Effct Green (s)	140.6	140.6	140.6	160.0	7.4	7.4
Actuated g/C Ratio	0.88	0.88	0.88	1.00	0.05	0.05
v/c Ratio	0.12	0.36	0.83	0.08	0.25	0.12
Control Delay	2.5	2.1	10.6	0.1	77.0	34.2
Queue Delay	0.0	0.0	0.6	0.0	0.0	0.0
Total Delay	2.5	2.1	11.2	0.1	77.0	34.2
LOS	A	A	B	A	E	C
Approach Delay		2.2	10.3		68.0	
Approach LOS		A	B		E	
Queue Length 50th (ft)	3	77	446	0	21	0
Queue Length 95th (ft)	8	88	480	0	39	19
Internal Link Dist (ft)		1236	450		1172	
Turn Bay Length (ft)	100				95	80
Base Capacity (vph)	249	2962	1561	1536	302	162
Starvation Cap Reductn	0	0	68	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.36	0.87	0.08	0.14	0.07

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 8.0		Intersection LOS: A	
Intersection Capacity Utilization 69.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 6: NY 312 & Pugsley Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	256	458	169	252	663	127	152	110	148	222	195	437
Future Volume (vph)	256	458	169	252	663	127	152	110	148	222	195	437
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	12	12
Grade (%)		1%			-1%			-2%			0%	
Storage Length (ft)	200		250	300		300	0		0	0		200
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.97	1.00	1.00	0.97	0.95	0.95	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.850		0.976				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.982		0.950		
Satd. Flow (prot)	3287	1750	1575	3320	3234	0	1580	3247	1496	1646	1827	1583
Flt Permitted	0.950			0.950			0.950	0.982		0.950		
Satd. Flow (perm)	3287	1750	1575	3320	3234	0	1580	3247	1496	1646	1827	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			190		16				145			196
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		595			1417			424			345	
Travel Time (s)		9.0			21.5			9.6			7.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	6%	8%	2%	6%	9%	12%	5%	6%	9%	6%	4%	2%
Adj. Flow (vph)	288	515	190	283	745	143	171	124	166	249	219	491
Shared Lane Traffic (%)							44%					
Lane Group Flow (vph)	288	515	190	283	888	0	96	199	166	249	219	491
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	0	0	2	0		2	2	2	2	2	2
Detector Template	NYSDOT			NYSDOT			NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	83	0	0	83	0		83	83	83	83	83	83
Trailing Detector (ft)	-5	0	0	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Position(ft)	-5	0	-5	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Size(ft)	40	6	40	40	6		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43			43			43	43	43	43	43	43
Detector 2 Size(ft)	40			40			40	40	40	40	40	40
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2	3	1	6		3	3	1	4	4	5
Permitted Phases			2						3			4
Detector Phase	5	2	3	1	6		3	3	1	4	4	5
Switch Phase												
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0		5.0	5.0	3.0	5.0	5.0	3.0
Minimum Split (s)	9.0	16.0	11.0	9.0	16.0		11.0	11.0	9.0	11.0	11.0	9.0
Total Split (s)	26.0	36.0	34.0	26.0	36.0		34.0	34.0	26.0	34.0	34.0	26.0
Total Split (%)	20.0%	27.7%	26.2%	20.0%	27.7%		26.2%	26.2%	20.0%	26.2%	26.2%	20.0%
Maximum Green (s)	20.0	30.0	28.0	20.0	30.0		28.0	28.0	20.0	28.0	28.0	20.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Max	None	None	C-Max		None	None	None	None	None	None
Act Effct Green (s)	16.3	54.2	73.3	15.5	53.5		13.1	13.1	28.6	23.2	23.2	45.5
Actuated g/C Ratio	0.13	0.42	0.56	0.12	0.41		0.10	0.10	0.22	0.18	0.18	0.35
v/c Ratio	0.70	0.71	0.20	0.71	0.66		0.61	0.61	0.38	0.85	0.67	0.72
Control Delay	63.7	40.3	2.8	57.3	33.3		71.3	63.6	6.7	76.4	59.8	26.9
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.7	40.3	2.8	57.3	33.3		71.3	63.6	6.7	76.4	59.8	26.9
LOS	E	D	A	E	C		E	E	A	E	E	C
Approach Delay		39.9			39.1			44.7			47.2	
Approach LOS		D			D			D			D	
Queue Length 50th (ft)	121	355	0	113	315		86	90	9	203	173	219
Queue Length 95th (ft)	163	#645	38	m145	#472		143	125	34	290	248	312
Internal Link Dist (ft)		515			1337			344			265	
Turn Bay Length (ft)	200		250	300								200
Base Capacity (vph)	505	729	1129	510	1339		340	699	488	354	393	720
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.71	0.17	0.55	0.66		0.28	0.28	0.34	0.70	0.56	0.68

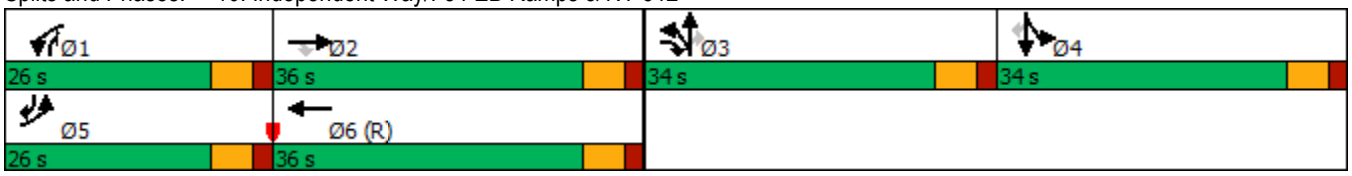
Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Green, Master Intersection			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 42.2		Intersection LOS: D	
Intersection Capacity Utilization 69.4%		ICU Level of Service C	
Analysis Period (min) 15			

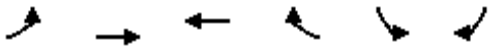
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

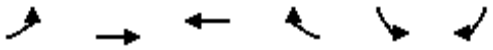
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: Independent Way/I-84 EB Ramps & NY 312





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	176	652	592	38	122	451
Future Volume (vph)	176	652	592	38	122	451
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	13	13
Grade (%)		-1%	2%		0%	
Storage Length (ft)	325			250	125	0
Storage Lanes	1			1	1	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1728	1854	1765	1454	1760	1652
Flt Permitted	0.228				0.950	
Satd. Flow (perm)	415	1854	1765	1454	1760	1652
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				44		48
Link Speed (mph)		45	45		30	
Link Distance (ft)		1417	528		436	
Travel Time (s)		21.5	8.0		9.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	5%	3%	3%	10%	6%	1%
Adj. Flow (vph)	202	749	680	44	140	518
Shared Lane Traffic (%)						
Lane Group Flow (vph)	202	749	680	44	140	518
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.06	1.01	0.96	0.96
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	0	0	0	2	2
Detector Template	NYSDOT				NYSDOTNYSDOT	
Leading Detector (ft)	83	0	0	0	83	83
Trailing Detector (ft)	-5	0	0	0	-5	-5
Detector 1 Position(ft)	-5	0	0	0	-5	-5
Detector 1 Size(ft)	40	6	6	20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43				43	43
Detector 2 Size(ft)	40				40	40
Detector 2 Type	Cl+Ex				Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0				0.0	0.0



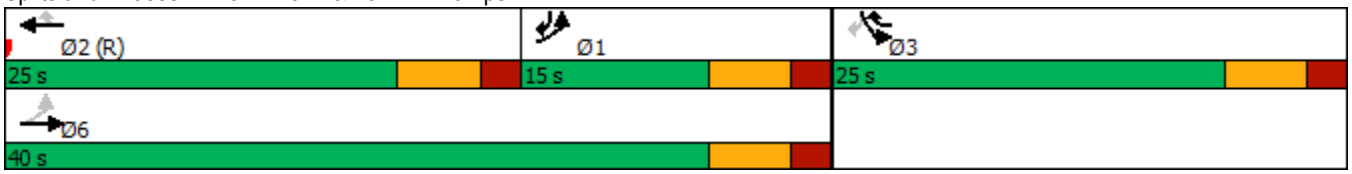
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	pm+pt	NA	NA	pm+ov	Prot	pm+ov
Protected Phases	1	6	2	3	3	1
Permitted Phases	6			2		3
Detector Phase	1	6	2	3	3	1
Switch Phase						
Minimum Initial (s)	3.0	10.0	10.0	3.0	3.0	3.0
Minimum Split (s)	9.0	16.0	16.0	9.0	9.0	9.0
Total Split (s)	15.0	40.0	25.0	25.0	25.0	15.0
Total Split (%)	23.1%	61.5%	38.5%	38.5%	38.5%	23.1%
Maximum Green (s)	9.0	34.0	19.0	19.0	19.0	9.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lag		Lead			Lag
Lead-Lag Optimize?	Yes		Yes			Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Max	C-Max	None	None	None
Act Effct Green (s)	45.7	46.9	30.7	44.0	9.6	22.3
Actuated g/C Ratio	0.70	0.72	0.47	0.68	0.15	0.34
v/c Ratio	0.43	0.56	0.82	0.04	0.54	0.86
Control Delay	8.6	6.1	28.8	1.4	32.6	32.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.6	6.1	28.8	1.4	32.6	32.9
LOS	A	A	C	A	C	C
Approach Delay		6.6	27.1		32.8	
Approach LOS		A	C		C	
Queue Length 50th (ft)	17	69	235	0	52	161
Queue Length 95th (ft)	71	245	#458	7	91	230
Internal Link Dist (ft)		1337	448		356	
Turn Bay Length (ft)	325			250	125	
Base Capacity (vph)	473	1337	833	995	514	599
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.56	0.82	0.04	0.27	0.86

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 20.4		Intersection LOS: C	
Intersection Capacity Utilization 69.1%		ICU Level of Service C	
Analysis Period (min) 15			

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

Queue shown is maximum after two cycles.

Splits and Phases: 13: NY 312 & I-84 WB Ramps



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	254	5	10	485	4	4
Future Volume (vph)	254	5	10	485	4	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Grade (%)	3%			-7%	4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.997				0.932	
Flt Protected				0.999	0.976	
Satd. Flow (prot)	1512	0	0	1742	1129	0
Flt Permitted				0.999	0.976	
Satd. Flow (perm)	1512	0	0	1742	1129	0
Link Speed (mph)	40			40	30	
Link Distance (ft)	339			334	611	
Travel Time (s)	5.8			5.7	13.9	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Heavy Vehicles (%)	19%	33%	60%	8%	33%	67%
Adj. Flow (vph)	334	7	13	638	5	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	341	0	0	651	10	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.00	1.00	1.03	1.03
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	43.5%	ICU Level of Service	A
Analysis Period (min)	15		

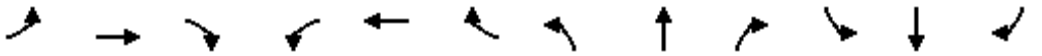
Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	254	5	10	485	4	4
Future Vol, veh/h	254	5	10	485	4	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	3	-	-	-7	4	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	19	33	60	8	33	67
Mvmt Flow	334	7	13	638	5	5

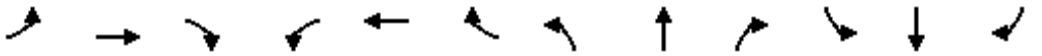
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	341	0	1002	338
Stage 1	-	-	-	-	338	-
Stage 2	-	-	-	-	664	-
Critical Hdwy	-	-	4.7	-	7.53	7.27
Critical Hdwy Stg 1	-	-	-	-	6.53	-
Critical Hdwy Stg 2	-	-	-	-	6.53	-
Follow-up Hdwy	-	-	2.74	-	3.797	3.903
Pot Cap-1 Maneuver	-	-	956	-	189	557
Stage 1	-	-	-	-	611	-
Stage 2	-	-	-	-	395	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	956	-	185	557
Mov Cap-2 Maneuver	-	-	-	-	185	-
Stage 1	-	-	-	-	611	-
Stage 2	-	-	-	-	387	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	18.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	278	-	-	956	-
HCM Lane V/C Ratio	0.038	-	-	0.014	-
HCM Control Delay (s)	18.5	-	-	8.8	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	26	21	238	12	742	3	202	150	699	218	2
Future Volume (vph)	5	26	21	238	12	742	3	202	150	699	218	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	12	13	11	12	12
Grade (%)		-2%			-2%			-2%			2%	
Storage Length (ft)	0		0	180		0	105		260	390		0
Storage Lanes	0		0	1		1	1		1	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.946				0.850			0.850		0.999	
Flt Protected		0.996			0.955		0.950			0.950		
Satd. Flow (prot)	0	1549	0	0	1737	1546	1762	1761	1479	1661	1725	0
Flt Permitted		0.969			0.695		0.608			0.488		
Satd. Flow (perm)	0	1507	0	0	1264	1546	1128	1761	1479	853	1725	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		23				481			165		1	
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		395			1214			1103			839	
Travel Time (s)		9.0			18.4			13.7			10.4	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	40%	26%	0%	2%	2%	2%	0%	9%	14%	4%	9%	0%
Adj. Flow (vph)	5	29	23	262	13	815	3	222	165	768	240	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	57	0	0	275	815	3	222	165	768	242	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.03	1.03	1.03	1.03	0.99	0.95	1.06	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	2	2	2	2	
Detector Template	Left	NYSDOT		Left	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	20	83		20	83	83	83	83	83	83	83	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Size(ft)	20	40		20	40	40	40	40	40	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		43			43	43	43	43	43	43	43	
Detector 2 Size(ft)		40			40	40	40	40	40	40	40	
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	

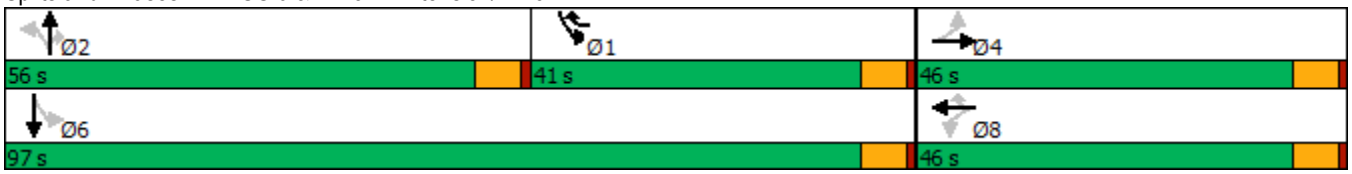


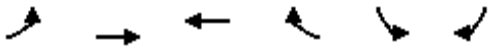
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2		2	6		
Detector Phase	4	4		8	8	1	2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	15.0	
Minimum Split (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	21.0	
Total Split (s)	46.0	46.0		46.0	46.0	41.0	56.0	56.0	56.0	41.0	97.0	
Total Split (%)	32.2%	32.2%		32.2%	32.2%	28.7%	39.2%	39.2%	39.2%	28.7%	67.8%	
Maximum Green (s)	40.0	40.0		40.0	40.0	35.0	50.0	50.0	50.0	35.0	91.0	
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0			6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag						Lag	Lead	Lead	Lead	Lag		
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	
Recall Mode	None	None		None	None	None	None	None	None	None	Min	
Act Effct Green (s)		25.7			25.7	67.5	18.4	18.4	18.4	60.1	60.1	
Actuated g/C Ratio		0.26			0.26	0.69	0.19	0.19	0.19	0.61	0.61	
v/c Ratio		0.14			0.83	0.67	0.01	0.67	0.40	0.94	0.23	
Control Delay		19.3			55.8	6.6	34.7	48.9	8.9	45.1	10.3	
Queue Delay		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		19.3			55.8	6.6	34.7	48.9	8.9	45.1	10.3	
LOS		B			E	A	C	D	A	D	B	
Approach Delay		19.3			19.0			31.9			36.8	
Approach LOS		B			B			C			D	
Queue Length 50th (ft)		16			160	78	2	128	0	313	61	
Queue Length 95th (ft)		49			281	241	10	234	56	#692	133	
Internal Link Dist (ft)		315			1134			1023			759	
Turn Bay Length (ft)							105		260	390		
Base Capacity (vph)		639			524	1213	585	913	847	816	1577	
Starvation Cap Reductn		0			0	0	0	0	0	0	0	
Spillback Cap Reductn		0			0	0	0	0	0	0	0	
Storage Cap Reductn		0			0	0	0	0	0	0	0	
Reduced v/c Ratio		0.09			0.52	0.67	0.01	0.24	0.19	0.94	0.15	

Intersection Summary			
Area Type:	Other		
Cycle Length: 143			
Actuated Cycle Length: 98.1			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay: 28.0		Intersection LOS: C	
Intersection Capacity Utilization 84.8%		ICU Level of Service E	
Analysis Period (min) 15			

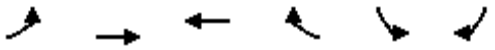
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US 6 & NY 312 Extension/NY 312





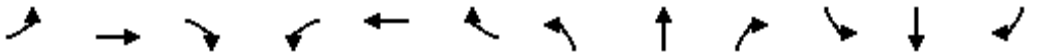
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	24	874	1049	100	33	9
Future Volume (vph)	24	874	1049	100	33	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	14
Grade (%)		2%	-2%		-2%	
Storage Length (ft)	100			0	0	110
Storage Lanes	1			0	2	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	0.95
Frt			0.987		0.968	
Flt Protected	0.950				0.962	
Satd. Flow (prot)	1718	3372	3337	0	3453	0
Flt Permitted	0.140				0.962	
Satd. Flow (perm)	253	3372	3337	0	3453	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			25		11	
Link Speed (mph)		45	45		30	
Link Distance (ft)		1316	530		1252	
Travel Time (s)		19.9	8.0		28.5	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles (%)	4%	6%	8%	6%	9%	0%
Adj. Flow (vph)	30	1079	1295	123	41	11
Shared Lane Traffic (%)						
Lane Group Flow (vph)	30	1079	1418	0	52	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		28	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	0.99	0.99	0.91	0.91
Turning Speed (mph)	15			9	15	9
Number of Detectors	0	0	0		2	
Detector Template					NYSDOT	
Leading Detector (ft)	0	0	0		83	
Trailing Detector (ft)	0	0	0		-5	
Detector 1 Position(ft)	0	0	0		-5	
Detector 1 Size(ft)	20	6	6		40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Detector 2 Position(ft)					43	
Detector 2 Size(ft)					40	
Detector 2 Type					Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)					0.0	



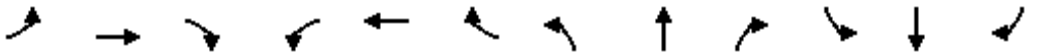
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	1	6	2		3	
Permitted Phases	6					
Detector Phase	1	6	2		3	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	
Minimum Split (s)	11.0	11.0	11.0		11.0	
Total Split (s)	11.0	69.0	58.0		11.0	
Total Split (%)	13.8%	86.3%	72.5%		13.8%	
Maximum Green (s)	5.0	63.0	52.0		5.0	
Yellow Time (s)	4.0	4.0	4.0		4.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	6.0	6.0	6.0		6.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	C-Max	C-Max		None	
Act Effct Green (s)	67.4	69.8	65.4		5.0	
Actuated g/C Ratio	0.84	0.87	0.82		0.06	
v/c Ratio	0.10	0.37	0.52		0.23	
Control Delay	2.4	2.3	5.7		32.4	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	2.4	2.3	5.7		32.4	
LOS	A	A	A		C	
Approach Delay		2.3	5.7		32.4	
Approach LOS		A	A		C	
Queue Length 50th (ft)	2	63	96		10	
Queue Length 95th (ft)	6	72	211		24	
Internal Link Dist (ft)		1236	450		1172	
Turn Bay Length (ft)	100					
Base Capacity (vph)	304	2942	2732		226	
Starvation Cap Reductn	0	0	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.10	0.37	0.52		0.23	

Intersection Summary	
Area Type:	Other
Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay: 4.8	Intersection LOS: A
Intersection Capacity Utilization 46.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 6: NY 312 & Pugsley Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	256	458	169	252	663	127	152	110	148	222	195	437
Future Volume (vph)	256	458	169	252	663	127	152	110	148	222	195	437
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	12	12
Grade (%)		1%			-1%			-2%			0%	
Storage Length (ft)	200		250	300		300	0		0	0		200
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.97	1.00	1.00	0.97	0.95	0.95	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.850		0.976				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.982		0.950		
Satd. Flow (prot)	3287	1750	1575	3320	3234	0	1580	3247	1496	1646	1827	1583
Flt Permitted	0.950			0.950			0.950	0.982		0.950		
Satd. Flow (perm)	3287	1750	1575	3320	3234	0	1580	3247	1496	1646	1827	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			190		16				145			196
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		595			1417			424			345	
Travel Time (s)		9.0			21.5			9.6			7.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	6%	8%	2%	6%	9%	12%	5%	6%	9%	6%	4%	2%
Adj. Flow (vph)	288	515	190	283	745	143	171	124	166	249	219	491
Shared Lane Traffic (%)							44%					
Lane Group Flow (vph)	288	515	190	283	888	0	96	199	166	249	219	491
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	0	0	2	0		2	2	2	2	2	2
Detector Template	NYSDOT			NYSDOT			NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	83	0	0	83	0		83	83	83	83	83	83
Trailing Detector (ft)	-5	0	0	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Position(ft)	-5	0	-5	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Size(ft)	40	6	40	40	6		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43			43			43	43	43	43	43	43
Detector 2 Size(ft)	40			40			40	40	40	40	40	40
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2	3	1	6		3	3	1	4	4	5
Permitted Phases			2						3			4
Detector Phase	5	2	3	1	6		3	3	1	4	4	5
Switch Phase												
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0		5.0	5.0	3.0	5.0	5.0	3.0
Minimum Split (s)	9.0	16.0	11.0	9.0	16.0		11.0	11.0	9.0	11.0	11.0	9.0
Total Split (s)	26.0	36.0	34.0	26.0	36.0		34.0	34.0	26.0	34.0	34.0	26.0
Total Split (%)	20.0%	27.7%	26.2%	20.0%	27.7%		26.2%	26.2%	20.0%	26.2%	26.2%	20.0%
Maximum Green (s)	20.0	30.0	28.0	20.0	30.0		28.0	28.0	20.0	28.0	28.0	20.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Max	None	None	C-Max		None	None	None	None	None	None
Act Effct Green (s)	16.3	54.2	73.3	15.5	53.5		13.1	13.1	28.6	23.2	23.2	45.5
Actuated g/C Ratio	0.13	0.42	0.56	0.12	0.41		0.10	0.10	0.22	0.18	0.18	0.35
v/c Ratio	0.70	0.71	0.20	0.71	0.66		0.61	0.61	0.38	0.85	0.67	0.72
Control Delay	63.7	40.3	2.8	57.3	33.3		71.3	63.6	6.7	76.4	59.8	26.9
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.7	40.3	2.8	57.3	33.3		71.3	63.6	6.7	76.4	59.8	26.9
LOS	E	D	A	E	C		E	E	A	E	E	C
Approach Delay		39.9			39.1			44.7			47.2	
Approach LOS		D			D			D			D	
Queue Length 50th (ft)	121	355	0	113	315		86	90	9	203	173	219
Queue Length 95th (ft)	163	#645	38	m145	#472		143	125	34	290	248	312
Internal Link Dist (ft)		515			1337			344			265	
Turn Bay Length (ft)	200		250	300								200
Base Capacity (vph)	505	729	1129	510	1339		340	699	488	354	393	720
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.71	0.17	0.55	0.66		0.28	0.28	0.34	0.70	0.56	0.68

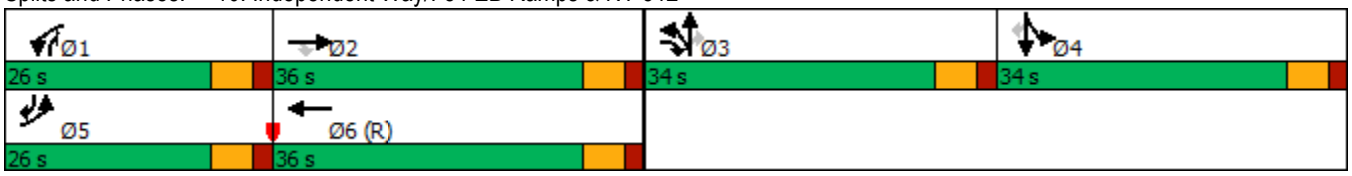
Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Green, Master Intersection			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 42.2		Intersection LOS: D	
Intersection Capacity Utilization 69.4%		ICU Level of Service C	
Analysis Period (min) 15			

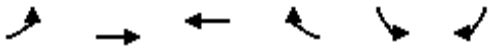
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

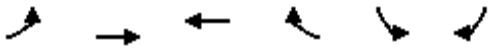
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: Independent Way/I-84 EB Ramps & NY 312





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	176	652	592	38	122	451
Future Volume (vph)	176	652	592	38	122	451
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	13	13
Grade (%)		-1%	2%		0%	
Storage Length (ft)	325			250	125	0
Storage Lanes	1			1	1	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1728	1854	1765	1454	1760	1652
Flt Permitted	0.228				0.950	
Satd. Flow (perm)	415	1854	1765	1454	1760	1652
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				44		48
Link Speed (mph)		45	45		30	
Link Distance (ft)		1417	528		436	
Travel Time (s)		21.5	8.0		9.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	5%	3%	3%	10%	6%	1%
Adj. Flow (vph)	202	749	680	44	140	518
Shared Lane Traffic (%)						
Lane Group Flow (vph)	202	749	680	44	140	518
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.06	1.01	0.96	0.96
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	0	0	0	2	2
Detector Template	NYSDOT				NYSDOTNYSDOT	
Leading Detector (ft)	83	0	0	0	83	83
Trailing Detector (ft)	-5	0	0	0	-5	-5
Detector 1 Position(ft)	-5	0	0	0	-5	-5
Detector 1 Size(ft)	40	6	6	20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43				43	43
Detector 2 Size(ft)	40				40	40
Detector 2 Type	Cl+Ex				Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0				0.0	0.0



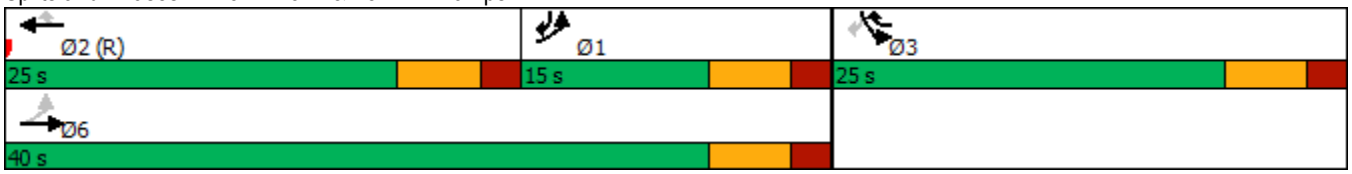
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	pm+pt	NA	NA	pm+ov	Prot	pm+ov
Protected Phases	1	6	2	3	3	1
Permitted Phases	6			2		3
Detector Phase	1	6	2	3	3	1
Switch Phase						
Minimum Initial (s)	3.0	10.0	10.0	3.0	3.0	3.0
Minimum Split (s)	9.0	16.0	16.0	9.0	9.0	9.0
Total Split (s)	15.0	40.0	25.0	25.0	25.0	15.0
Total Split (%)	23.1%	61.5%	38.5%	38.5%	38.5%	23.1%
Maximum Green (s)	9.0	34.0	19.0	19.0	19.0	9.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lag		Lead			Lag
Lead-Lag Optimize?	Yes		Yes			Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Max	C-Max	None	None	None
Act Effct Green (s)	45.7	46.9	30.7	44.0	9.6	22.3
Actuated g/C Ratio	0.70	0.72	0.47	0.68	0.15	0.34
v/c Ratio	0.43	0.56	0.82	0.04	0.54	0.86
Control Delay	8.6	6.1	28.8	1.4	32.6	32.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.6	6.1	28.8	1.4	32.6	32.9
LOS	A	A	C	A	C	C
Approach Delay		6.6	27.1		32.8	
Approach LOS		A	C		C	
Queue Length 50th (ft)	17	69	235	0	52	161
Queue Length 95th (ft)	71	245	#458	7	91	230
Internal Link Dist (ft)		1337	448		356	
Turn Bay Length (ft)	325			250	125	
Base Capacity (vph)	473	1337	833	995	514	599
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.56	0.82	0.04	0.27	0.86

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 20.4		Intersection LOS: C	
Intersection Capacity Utilization 69.1%		ICU Level of Service C	
Analysis Period (min) 15			

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

Queue shown is maximum after two cycles.

Splits and Phases: 13: NY 312 & I-84 WB Ramps



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	254	5	10	485	4	4
Future Volume (vph)	254	5	10	485	4	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Grade (%)	3%			-7%	4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.997				0.932	
Flt Protected				0.999	0.976	
Satd. Flow (prot)	1512	0	0	1742	1129	0
Flt Permitted				0.999	0.976	
Satd. Flow (perm)	1512	0	0	1742	1129	0
Link Speed (mph)	40			40	30	
Link Distance (ft)	339			334	611	
Travel Time (s)	5.8			5.7	13.9	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Heavy Vehicles (%)	19%	33%	60%	8%	33%	67%
Adj. Flow (vph)	334	7	13	638	5	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	341	0	0	651	10	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.00	1.00	1.03	1.03
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	43.5%	ICU Level of Service	A
Analysis Period (min)	15		

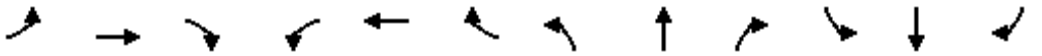
Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	254	5	10	485	4	4
Future Vol, veh/h	254	5	10	485	4	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	3	-	-	-7	4	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	19	33	60	8	33	67
Mvmt Flow	334	7	13	638	5	5

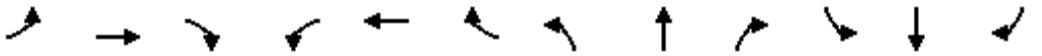
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	341	0	1002	338
Stage 1	-	-	-	-	338	-
Stage 2	-	-	-	-	664	-
Critical Hdwy	-	-	4.7	-	7.53	7.27
Critical Hdwy Stg 1	-	-	-	-	6.53	-
Critical Hdwy Stg 2	-	-	-	-	6.53	-
Follow-up Hdwy	-	-	2.74	-	3.797	3.903
Pot Cap-1 Maneuver	-	-	956	-	189	557
Stage 1	-	-	-	-	611	-
Stage 2	-	-	-	-	395	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	956	-	185	557
Mov Cap-2 Maneuver	-	-	-	-	185	-
Stage 1	-	-	-	-	611	-
Stage 2	-	-	-	-	387	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	18.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	278	-	-	956	-
HCM Lane V/C Ratio	0.038	-	-	0.014	-
HCM Control Delay (s)	18.5	-	-	8.8	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	26	21	238	12	744	3	202	152	711	218	2
Future Volume (vph)	5	26	21	238	12	744	3	202	152	711	218	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	12	13	11	12	12
Grade (%)		-2%			-2%			-2%			2%	
Storage Length (ft)	0		0	180		0	105		260	390		0
Storage Lanes	0		0	1		1	1		1	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.946				0.850			0.850		0.999	
Flt Protected		0.996			0.955		0.950			0.950		
Satd. Flow (prot)	0	1549	0	0	1737	1546	1762	1761	1479	1661	1725	0
Flt Permitted		0.969			0.695		0.608			0.488		
Satd. Flow (perm)	0	1507	0	0	1264	1546	1128	1761	1479	853	1725	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		23				481			167		1	
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		395			1214			1103			839	
Travel Time (s)		9.0			18.4			13.7			10.4	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	40%	26%	0%	2%	2%	2%	0%	9%	14%	4%	9%	0%
Adj. Flow (vph)	5	29	23	262	13	818	3	222	167	781	240	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	57	0	0	275	818	3	222	167	781	242	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.03	1.03	1.03	1.03	0.99	0.95	1.06	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	2	2	2	2	
Detector Template	Left	NYSDOT		Left	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	20	83		20	83	83	83	83	83	83	83	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Size(ft)	20	40		20	40	40	40	40	40	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		43			43	43	43	43	43	43	43	
Detector 2 Size(ft)		40			40	40	40	40	40	40	40	
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	

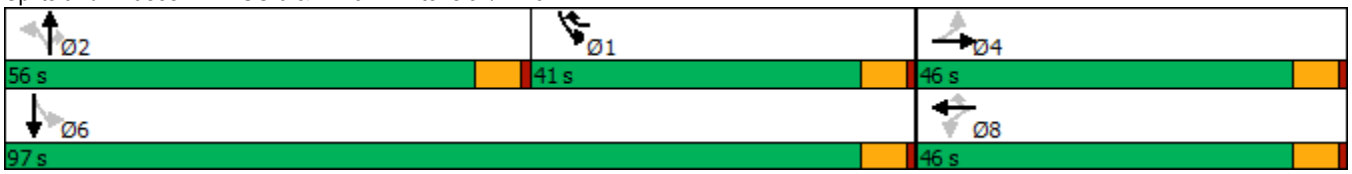


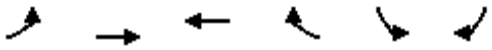
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2		2	6		
Detector Phase	4	4		8	8	1	2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	15.0	
Minimum Split (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	21.0	
Total Split (s)	46.0	46.0		46.0	46.0	41.0	56.0	56.0	56.0	41.0	97.0	
Total Split (%)	32.2%	32.2%		32.2%	32.2%	28.7%	39.2%	39.2%	39.2%	28.7%	67.8%	
Maximum Green (s)	40.0	40.0		40.0	40.0	35.0	50.0	50.0	50.0	35.0	91.0	
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0			6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag						Lag	Lead	Lead	Lead	Lag		
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	
Recall Mode	None	None		None	None	None	None	None	None	None	Min	
Act Effct Green (s)		25.7			25.7	67.5	18.4	18.4	18.4	60.1	60.1	
Actuated g/C Ratio		0.26			0.26	0.69	0.19	0.19	0.19	0.61	0.61	
v/c Ratio		0.14			0.83	0.67	0.01	0.67	0.40	0.96	0.23	
Control Delay		19.3			55.8	6.7	34.7	48.9	8.9	48.0	10.3	
Queue Delay		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		19.3			55.8	6.7	34.7	48.9	8.9	48.0	10.3	
LOS		B			E	A	C	D	A	D	B	
Approach Delay		19.3			19.0			31.7			39.1	
Approach LOS		B			B			C			D	
Queue Length 50th (ft)		16			160	79	2	128	0	323	61	
Queue Length 95th (ft)		49			281	244	10	234	56	#716	133	
Internal Link Dist (ft)		315			1134			1023			759	
Turn Bay Length (ft)							105		260	390		
Base Capacity (vph)		639			524	1213	585	913	847	816	1577	
Starvation Cap Reductn		0			0	0	0	0	0	0	0	
Spillback Cap Reductn		0			0	0	0	0	0	0	0	
Storage Cap Reductn		0			0	0	0	0	0	0	0	
Reduced v/c Ratio		0.09			0.52	0.67	0.01	0.24	0.20	0.96	0.15	

Intersection Summary			
Area Type:	Other		
Cycle Length: 143			
Actuated Cycle Length: 98.1			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 29.0		Intersection LOS: C	
Intersection Capacity Utilization 85.5%		ICU Level of Service E	
Analysis Period (min) 15			

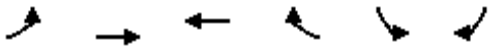
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US 6 & NY 312 Extension/NY 312





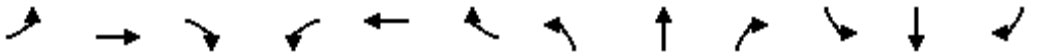
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	38	874	1049	131	37	11
Future Volume (vph)	38	874	1049	131	37	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	14
Grade (%)		2%	-2%		-2%	
Storage Length (ft)	100			0	95	80
Storage Lanes	1			1	1	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1718	3372	1777	1539	3461	1740
Flt Permitted	0.155				0.950	
Satd. Flow (perm)	280	3372	1777	1539	3461	1740
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						14
Link Speed (mph)		45	45		30	
Link Distance (ft)		1316	530		1252	
Travel Time (s)		19.9	8.0		28.5	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles (%)	4%	6%	8%	6%	9%	0%
Adj. Flow (vph)	47	1079	1295	162	46	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	47	1079	1295	162	46	14
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		28	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	0.99	0.99	0.91	0.91
Turning Speed (mph)	15			9	15	9
Number of Detectors	0	0	0	0	2	2
Detector Template					NYSDOT	NYSDOT
Leading Detector (ft)	0	0	0	0	83	83
Trailing Detector (ft)	0	0	0	0	-5	-5
Detector 1 Position(ft)	0	0	0	0	-5	-5
Detector 1 Size(ft)	20	6	6	20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)					43	43
Detector 2 Size(ft)					40	40
Detector 2 Type					Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)					0.0	0.0



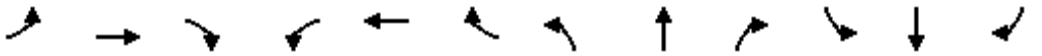
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	Perm	NA	NA	pm+ov	Prot	Perm
Protected Phases		6	2	3	3	
Permitted Phases	6			2		3
Detector Phase	6	6	2	3	3	3
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	140.0	140.0	140.0	20.0	20.0	20.0
Total Split (%)	87.5%	87.5%	87.5%	12.5%	12.5%	12.5%
Maximum Green (s)	134.0	134.0	134.0	14.0	14.0	14.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max	None	None	None
Act Effct Green (s)	140.3	140.3	140.3	160.0	7.7	7.7
Actuated g/C Ratio	0.88	0.88	0.88	1.00	0.05	0.05
v/c Ratio	0.19	0.36	0.83	0.11	0.28	0.15
Control Delay	3.5	2.2	10.8	0.1	77.3	32.3
Queue Delay	0.0	0.0	0.6	0.0	0.0	0.0
Total Delay	3.5	2.2	11.4	0.1	77.3	32.3
LOS	A	A	B	A	E	C
Approach Delay		2.2	10.2		66.8	
Approach LOS		A	B		E	
Queue Length 50th (ft)	5	78	452	0	24	0
Queue Length 95th (ft)	12	90	490	0	42	21
Internal Link Dist (ft)		1236	450		1172	
Turn Bay Length (ft)	100				95	80
Base Capacity (vph)	245	2957	1558	1535	302	165
Starvation Cap Reductn	0	0	67	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.36	0.87	0.11	0.15	0.08

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 8.1		Intersection LOS: A	
Intersection Capacity Utilization 69.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 6: NY 312 & Pugsley Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	258	460	169	252	685	127	152	110	148	222	195	446
Future Volume (vph)	258	460	169	252	685	127	152	110	148	222	195	446
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	12	12
Grade (%)		1%			-1%			-2%			0%	
Storage Length (ft)	200		250	300		300	0		0	0		200
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.97	1.00	1.00	0.97	0.95	0.95	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.850		0.977				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.982		0.950		
Satd. Flow (prot)	3287	1750	1575	3320	3238	0	1580	3247	1496	1646	1827	1583
Flt Permitted	0.950			0.950			0.950	0.982		0.950		
Satd. Flow (perm)	3287	1750	1575	3320	3238	0	1580	3247	1496	1646	1827	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			190		15				144			195
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		595			1417			424			345	
Travel Time (s)		9.0			21.5			9.6			7.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	6%	8%	2%	6%	9%	12%	5%	6%	9%	6%	4%	2%
Adj. Flow (vph)	290	517	190	283	770	143	171	124	166	249	219	501
Shared Lane Traffic (%)							44%					
Lane Group Flow (vph)	290	517	190	283	913	0	96	199	166	249	219	501
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	0	0	2	0		2	2	2	2	2	2
Detector Template	NYSDOT			NYSDOT			NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	83	0	0	83	0		83	83	83	83	83	83
Trailing Detector (ft)	-5	0	0	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Position(ft)	-5	0	-5	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Size(ft)	40	6	40	40	6		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43			43			43	43	43	43	43	43
Detector 2 Size(ft)	40			40			40	40	40	40	40	40
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2	3	1	6		3	3	1	4	4	5
Permitted Phases			2						3			4
Detector Phase	5	2	3	1	6		3	3	1	4	4	5
Switch Phase												
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0		5.0	5.0	3.0	5.0	5.0	3.0
Minimum Split (s)	9.0	16.0	11.0	9.0	16.0		11.0	11.0	9.0	11.0	11.0	9.0
Total Split (s)	26.0	36.0	34.0	26.0	36.0		34.0	34.0	26.0	34.0	34.0	26.0
Total Split (%)	20.0%	27.7%	26.2%	20.0%	27.7%		26.2%	26.2%	20.0%	26.2%	26.2%	20.0%
Maximum Green (s)	20.0	30.0	28.0	20.0	30.0		28.0	28.0	20.0	28.0	28.0	20.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Max	None	None	C-Max		None	None	None	None	None	None
Act Effct Green (s)	16.3	54.2	73.3	15.5	53.4		13.1	13.1	28.6	23.2	23.2	45.5
Actuated g/C Ratio	0.13	0.42	0.56	0.12	0.41		0.10	0.10	0.22	0.18	0.18	0.35
v/c Ratio	0.71	0.71	0.20	0.71	0.68		0.61	0.61	0.38	0.85	0.67	0.74
Control Delay	63.9	40.4	2.8	57.0	33.7		71.3	63.6	6.8	76.4	59.8	27.9
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.9	40.4	2.8	57.0	33.7		71.3	63.6	6.8	76.4	59.8	27.9
LOS	E	D	A	E	C		E	E	A	E	E	C
Approach Delay		40.1			39.2			44.7			47.6	
Approach LOS		D			D			D			D	
Queue Length 50th (ft)	122	357	0	113	328		86	90	9	203	173	229
Queue Length 95th (ft)	164	#649	38	m141	m#485		143	125	35	290	248	325
Internal Link Dist (ft)		515			1337			344			265	
Turn Bay Length (ft)	200		250	300								200
Base Capacity (vph)	505	729	1129	510	1339		340	699	488	354	393	720
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.71	0.17	0.55	0.68		0.28	0.28	0.34	0.70	0.56	0.70

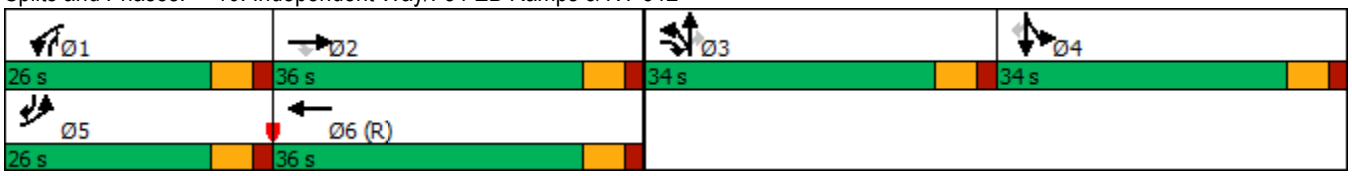
Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Green, Master Intersection			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 42.4		Intersection LOS: D	
Intersection Capacity Utilization 70.6%		ICU Level of Service C	
Analysis Period (min) 15			

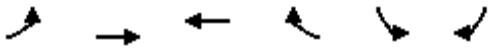
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

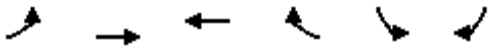
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: Independent Way/I-84 EB Ramps & NY 312





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	177	653	599	38	122	465
Future Volume (vph)	177	653	599	38	122	465
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	13	13
Grade (%)		-1%	2%		0%	
Storage Length (ft)	325			250	125	0
Storage Lanes	1			1	1	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1728	1854	1765	1454	1760	1652
Flt Permitted	0.221				0.950	
Satd. Flow (perm)	402	1854	1765	1454	1760	1652
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				44		46
Link Speed (mph)		45	45		30	
Link Distance (ft)		1417	528		436	
Travel Time (s)		21.5	8.0		9.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	5%	3%	3%	10%	6%	1%
Adj. Flow (vph)	203	751	689	44	140	534
Shared Lane Traffic (%)						
Lane Group Flow (vph)	203	751	689	44	140	534
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.06	1.01	0.96	0.96
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	0	0	0	2	2
Detector Template	NYSDOT				NYSDOTNYSDOT	
Leading Detector (ft)	83	0	0	0	83	83
Trailing Detector (ft)	-5	0	0	0	-5	-5
Detector 1 Position(ft)	-5	0	0	0	-5	-5
Detector 1 Size(ft)	40	6	6	20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43				43	43
Detector 2 Size(ft)	40				40	40
Detector 2 Type	Cl+Ex				Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0				0.0	0.0



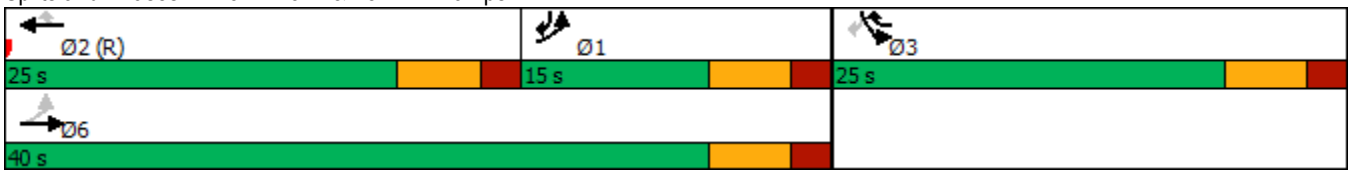
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	pm+pt	NA	NA	pm+ov	Prot	pm+ov
Protected Phases	1	6	2	3	3	1
Permitted Phases	6			2		3
Detector Phase	1	6	2	3	3	1
Switch Phase						
Minimum Initial (s)	3.0	10.0	10.0	3.0	3.0	3.0
Minimum Split (s)	9.0	16.0	16.0	9.0	9.0	9.0
Total Split (s)	15.0	40.0	25.0	25.0	25.0	15.0
Total Split (%)	23.1%	61.5%	38.5%	38.5%	38.5%	23.1%
Maximum Green (s)	9.0	34.0	19.0	19.0	19.0	9.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lag		Lead			Lag
Lead-Lag Optimize?	Yes		Yes			Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Max	C-Max	None	None	None
Act Effct Green (s)	45.7	46.9	30.7	44.0	9.6	22.3
Actuated g/C Ratio	0.70	0.72	0.47	0.68	0.15	0.34
v/c Ratio	0.44	0.56	0.83	0.04	0.54	0.89
Control Delay	8.8	6.1	29.6	1.4	32.6	36.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.8	6.1	29.6	1.4	32.6	36.5
LOS	A	A	C	A	C	D
Approach Delay		6.7	27.9		35.7	
Approach LOS		A	C		D	
Queue Length 50th (ft)	17	69	240	0	52	170
Queue Length 95th (ft)	72	245	#467	7	91	242
Internal Link Dist (ft)		1337	448		356	
Turn Bay Length (ft)	325			250	125	
Base Capacity (vph)	466	1337	833	995	514	597
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.56	0.83	0.04	0.27	0.89

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 21.5	Intersection LOS: C
Intersection Capacity Utilization 70.3%	ICU Level of Service C
Analysis Period (min) 15	

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

Queue shown is maximum after two cycles.

Splits and Phases: 13: NY 312 & I-84 WB Ramps



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	254	5	10	485	4	4
Future Volume (vph)	254	5	10	485	4	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Grade (%)	3%			-7%	4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.997				0.932	
Flt Protected				0.999	0.976	
Satd. Flow (prot)	1512	0	0	1742	1129	0
Flt Permitted				0.999	0.976	
Satd. Flow (perm)	1512	0	0	1742	1129	0
Link Speed (mph)	40			40	30	
Link Distance (ft)	339			334	611	
Travel Time (s)	5.8			5.7	13.9	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Heavy Vehicles (%)	19%	33%	60%	8%	33%	67%
Adj. Flow (vph)	334	7	13	638	5	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	341	0	0	651	10	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.00	1.00	1.03	1.03
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	43.5%	ICU Level of Service	A
Analysis Period (min)	15		

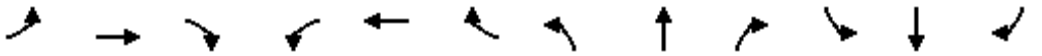
Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	254	5	10	485	4	4
Future Vol, veh/h	254	5	10	485	4	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	3	-	-	-7	4	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	19	33	60	8	33	67
Mvmt Flow	334	7	13	638	5	5

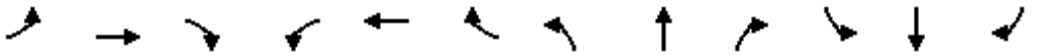
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	341	0	1002	338
Stage 1	-	-	-	-	338	-
Stage 2	-	-	-	-	664	-
Critical Hdwy	-	-	4.7	-	7.53	7.27
Critical Hdwy Stg 1	-	-	-	-	6.53	-
Critical Hdwy Stg 2	-	-	-	-	6.53	-
Follow-up Hdwy	-	-	2.74	-	3.797	3.903
Pot Cap-1 Maneuver	-	-	956	-	189	557
Stage 1	-	-	-	-	611	-
Stage 2	-	-	-	-	395	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	956	-	185	557
Mov Cap-2 Maneuver	-	-	-	-	185	-
Stage 1	-	-	-	-	611	-
Stage 2	-	-	-	-	387	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	18.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	278	-	-	956	-
HCM Lane V/C Ratio	0.038	-	-	0.014	-
HCM Control Delay (s)	18.5	-	-	8.8	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-



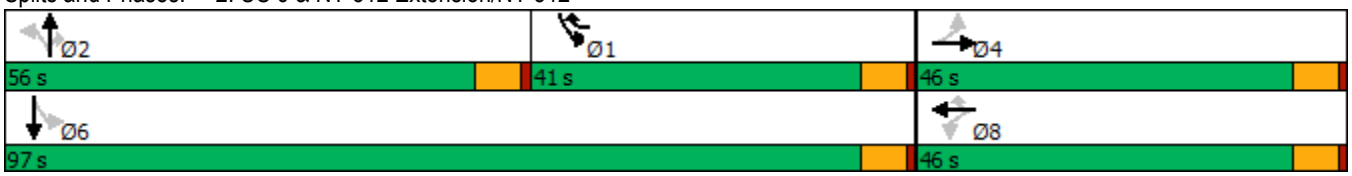
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	26	21	238	12	744	3	202	152	711	218	2
Future Volume (vph)	5	26	21	238	12	744	3	202	152	711	218	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	12	13	11	12	12
Grade (%)		-2%			-2%			-2%			2%	
Storage Length (ft)	0		0	180		0	105		260	390		0
Storage Lanes	0		0	1		1	1		1	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.946				0.850			0.850		0.999	
Flt Protected		0.996			0.955		0.950			0.950		
Satd. Flow (prot)	0	1549	0	0	1737	1546	1762	1761	1479	1661	1725	0
Flt Permitted		0.969			0.695		0.608			0.488		
Satd. Flow (perm)	0	1507	0	0	1264	1546	1128	1761	1479	853	1725	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		23				481			167		1	
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		395			1214			1103			839	
Travel Time (s)		9.0			18.4			13.7			10.4	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	40%	26%	0%	2%	2%	2%	0%	9%	14%	4%	9%	0%
Adj. Flow (vph)	5	29	23	262	13	818	3	222	167	781	240	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	57	0	0	275	818	3	222	167	781	242	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.03	1.03	1.03	1.03	0.99	0.95	1.06	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	2	2	2	2	
Detector Template	Left	NYSDOT		Left	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	20	83		20	83	83	83	83	83	83	83	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Size(ft)	20	40		20	40	40	40	40	40	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		43			43	43	43	43	43	43	43	
Detector 2 Size(ft)		40			40	40	40	40	40	40	40	
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	

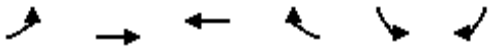


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2		2	6		
Detector Phase	4	4		8	8	1	2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	15.0	
Minimum Split (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	21.0	
Total Split (s)	46.0	46.0		46.0	46.0	41.0	56.0	56.0	56.0	41.0	97.0	
Total Split (%)	32.2%	32.2%		32.2%	32.2%	28.7%	39.2%	39.2%	39.2%	28.7%	67.8%	
Maximum Green (s)	40.0	40.0		40.0	40.0	35.0	50.0	50.0	50.0	35.0	91.0	
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0			6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag						Lag	Lead	Lead	Lead	Lag		
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	
Recall Mode	None	None		None	None	None	None	None	None	None	Min	
Act Effct Green (s)		25.7			25.7	67.5	18.4	18.4	18.4	60.1	60.1	
Actuated g/C Ratio		0.26			0.26	0.69	0.19	0.19	0.19	0.61	0.61	
v/c Ratio		0.14			0.83	0.67	0.01	0.67	0.40	0.96	0.23	
Control Delay		19.3			55.8	6.7	34.7	48.9	8.9	48.0	10.3	
Queue Delay		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		19.3			55.8	6.7	34.7	48.9	8.9	48.0	10.3	
LOS		B			E	A	C	D	A	D	B	
Approach Delay		19.3			19.0			31.7			39.1	
Approach LOS		B			B			C			D	
Queue Length 50th (ft)		16			160	79	2	128	0	323	61	
Queue Length 95th (ft)		49			281	244	10	234	56	#716	133	
Internal Link Dist (ft)		315			1134			1023			759	
Turn Bay Length (ft)							105		260	390		
Base Capacity (vph)		639			524	1213	585	913	847	816	1577	
Starvation Cap Reductn		0			0	0	0	0	0	0	0	
Spillback Cap Reductn		0			0	0	0	0	0	0	0	
Storage Cap Reductn		0			0	0	0	0	0	0	0	
Reduced v/c Ratio		0.09			0.52	0.67	0.01	0.24	0.20	0.96	0.15	

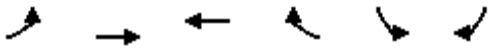
Intersection Summary			
Area Type:	Other		
Cycle Length: 143			
Actuated Cycle Length: 98.1			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 29.0		Intersection LOS: C	
Intersection Capacity Utilization 85.5%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 2: US 6 & NY 312 Extension/NY 312





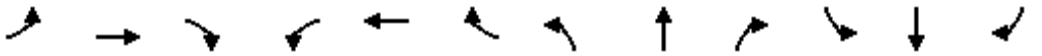
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	38	874	1049	131	37	11
Future Volume (vph)	38	874	1049	131	37	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	14
Grade (%)		2%	-2%		-2%	
Storage Length (ft)	100			0	0	110
Storage Lanes	1			0	2	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	0.95
Frt			0.983		0.965	
Flt Protected	0.950				0.963	
Satd. Flow (prot)	1718	3372	3325	0	3452	0
Flt Permitted	0.126				0.963	
Satd. Flow (perm)	228	3372	3325	0	3452	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			34		14	
Link Speed (mph)		45	45		30	
Link Distance (ft)		1316	530		1252	
Travel Time (s)		19.9	8.0		28.5	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles (%)	4%	6%	8%	6%	9%	0%
Adj. Flow (vph)	47	1079	1295	162	46	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	47	1079	1457	0	60	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		28	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	0.99	0.99	0.91	0.91
Turning Speed (mph)	15			9	15	9
Number of Detectors	0	0	0		2	
Detector Template					NYSDOT	
Leading Detector (ft)	0	0	0		83	
Trailing Detector (ft)	0	0	0		-5	
Detector 1 Position(ft)	0	0	0		-5	
Detector 1 Size(ft)	20	6	6		40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Detector 2 Position(ft)					43	
Detector 2 Size(ft)					40	
Detector 2 Type					Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)					0.0	



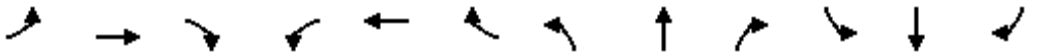
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	1	6	2		3	
Permitted Phases	6					
Detector Phase	1	6	2		3	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	
Minimum Split (s)	11.0	11.0	11.0		11.0	
Total Split (s)	11.0	69.0	58.0		11.0	
Total Split (%)	13.8%	86.3%	72.5%		13.8%	
Maximum Green (s)	5.0	63.0	52.0		5.0	
Yellow Time (s)	4.0	4.0	4.0		4.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	6.0	6.0	6.0		6.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	C-Max	C-Max		None	
Act Effct Green (s)	65.2	66.4	59.8		5.0	
Actuated g/C Ratio	0.82	0.83	0.75		0.06	
v/c Ratio	0.17	0.39	0.58		0.26	
Control Delay	3.2	2.8	7.7		32.2	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	3.2	2.8	7.7		32.2	
LOS	A	A	A		C	
Approach Delay		2.8	7.7		32.2	
Approach LOS		A	A		C	
Queue Length 50th (ft)	4	63	202		11	
Queue Length 95th (ft)	8	72	218		26	
Internal Link Dist (ft)		1236	450		1172	
Turn Bay Length (ft)	100					
Base Capacity (vph)	278	2798	2494		228	
Starvation Cap Reductn	0	0	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.17	0.39	0.58		0.26	

Intersection Summary	
Area Type:	Other
Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.58	
Intersection Signal Delay: 6.2	Intersection LOS: A
Intersection Capacity Utilization 47.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 6: NY 312 & Pugsley Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	258	460	169	252	685	127	152	110	148	222	195	446
Future Volume (vph)	258	460	169	252	685	127	152	110	148	222	195	446
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	12	12
Grade (%)		1%			-1%			-2%			0%	
Storage Length (ft)	200		250	300		300	0		0	0		200
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.97	1.00	1.00	0.97	0.95	0.95	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.850		0.977				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.982		0.950		
Satd. Flow (prot)	3287	1750	1575	3320	3238	0	1580	3247	1496	1646	1827	1583
Flt Permitted	0.950			0.950			0.950	0.982		0.950		
Satd. Flow (perm)	3287	1750	1575	3320	3238	0	1580	3247	1496	1646	1827	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			190		15				144			195
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		595			1417			424			345	
Travel Time (s)		9.0			21.5			9.6			7.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	6%	8%	2%	6%	9%	12%	5%	6%	9%	6%	4%	2%
Adj. Flow (vph)	290	517	190	283	770	143	171	124	166	249	219	501
Shared Lane Traffic (%)							44%					
Lane Group Flow (vph)	290	517	190	283	913	0	96	199	166	249	219	501
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	0	0	2	0		2	2	2	2	2	2
Detector Template	NYSDOT			NYSDOT			NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	83	0	0	83	0		83	83	83	83	83	83
Trailing Detector (ft)	-5	0	0	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Position(ft)	-5	0	-5	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Size(ft)	40	6	40	40	6		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43			43			43	43	43	43	43	43
Detector 2 Size(ft)	40			40			40	40	40	40	40	40
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2	3	1	6		3	3	1	4	4	5
Permitted Phases			2						3			4
Detector Phase	5	2	3	1	6		3	3	1	4	4	5
Switch Phase												
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0		5.0	5.0	3.0	5.0	5.0	3.0
Minimum Split (s)	9.0	16.0	11.0	9.0	16.0		11.0	11.0	9.0	11.0	11.0	9.0
Total Split (s)	26.0	36.0	34.0	26.0	36.0		34.0	34.0	26.0	34.0	34.0	26.0
Total Split (%)	20.0%	27.7%	26.2%	20.0%	27.7%		26.2%	26.2%	20.0%	26.2%	26.2%	20.0%
Maximum Green (s)	20.0	30.0	28.0	20.0	30.0		28.0	28.0	20.0	28.0	28.0	20.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Max	None	None	C-Max		None	None	None	None	None	None
Act Effct Green (s)	16.3	54.2	73.3	15.5	53.4		13.1	13.1	28.6	23.2	23.2	45.5
Actuated g/C Ratio	0.13	0.42	0.56	0.12	0.41		0.10	0.10	0.22	0.18	0.18	0.35
v/c Ratio	0.71	0.71	0.20	0.71	0.68		0.61	0.61	0.38	0.85	0.67	0.74
Control Delay	63.9	40.4	2.8	57.0	33.7		71.3	63.6	6.8	76.4	59.8	27.9
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.9	40.4	2.8	57.0	33.7		71.3	63.6	6.8	76.4	59.8	27.9
LOS	E	D	A	E	C		E	E	A	E	E	C
Approach Delay		40.1			39.2			44.7			47.6	
Approach LOS		D			D			D			D	
Queue Length 50th (ft)	122	357	0	113	328		86	90	9	203	173	229
Queue Length 95th (ft)	164	#649	38	m141	m#485		143	125	35	290	248	325
Internal Link Dist (ft)		515			1337			344			265	
Turn Bay Length (ft)	200		250	300								200
Base Capacity (vph)	505	729	1129	510	1339		340	699	488	354	393	720
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.71	0.17	0.55	0.68		0.28	0.28	0.34	0.70	0.56	0.70

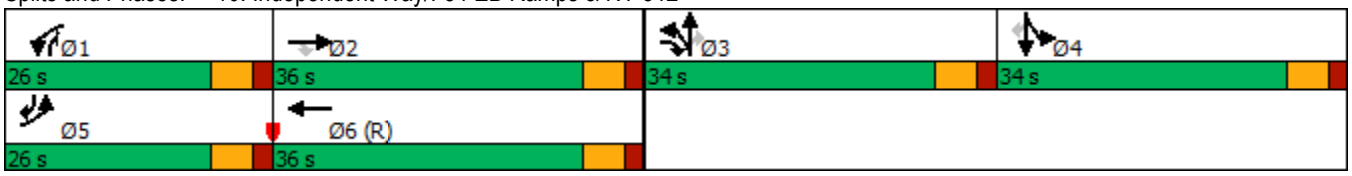
Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Green, Master Intersection			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 42.4		Intersection LOS: D	
Intersection Capacity Utilization 70.6%		ICU Level of Service C	
Analysis Period (min) 15			

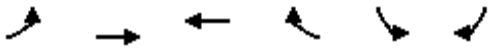
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

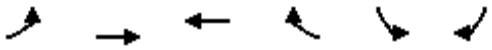
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: Independent Way/I-84 EB Ramps & NY 312





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	177	653	599	38	122	465
Future Volume (vph)	177	653	599	38	122	465
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	13	13
Grade (%)		-1%	2%		0%	
Storage Length (ft)	325			250	125	0
Storage Lanes	1			1	1	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1728	1854	1765	1454	1760	1652
Flt Permitted	0.221				0.950	
Satd. Flow (perm)	402	1854	1765	1454	1760	1652
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				44		46
Link Speed (mph)		45	45		30	
Link Distance (ft)		1417	528		436	
Travel Time (s)		21.5	8.0		9.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	5%	3%	3%	10%	6%	1%
Adj. Flow (vph)	203	751	689	44	140	534
Shared Lane Traffic (%)						
Lane Group Flow (vph)	203	751	689	44	140	534
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.06	1.01	0.96	0.96
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	0	0	0	2	2
Detector Template	NYSDOT				NYSDOTNYSDOT	
Leading Detector (ft)	83	0	0	0	83	83
Trailing Detector (ft)	-5	0	0	0	-5	-5
Detector 1 Position(ft)	-5	0	0	0	-5	-5
Detector 1 Size(ft)	40	6	6	20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43				43	43
Detector 2 Size(ft)	40				40	40
Detector 2 Type	Cl+Ex				Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0				0.0	0.0



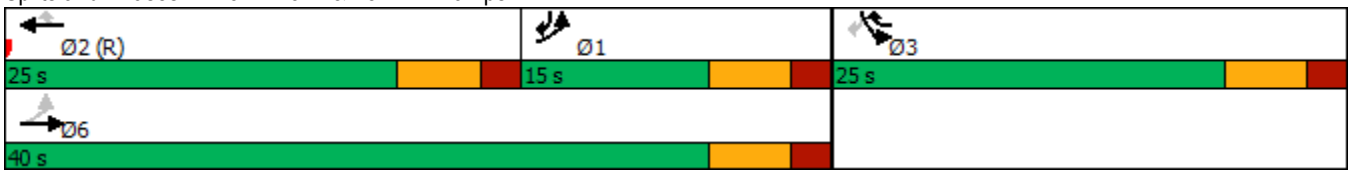
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	pm+pt	NA	NA	pm+ov	Prot	pm+ov
Protected Phases	1	6	2	3	3	1
Permitted Phases	6			2		3
Detector Phase	1	6	2	3	3	1
Switch Phase						
Minimum Initial (s)	3.0	10.0	10.0	3.0	3.0	3.0
Minimum Split (s)	9.0	16.0	16.0	9.0	9.0	9.0
Total Split (s)	15.0	40.0	25.0	25.0	25.0	15.0
Total Split (%)	23.1%	61.5%	38.5%	38.5%	38.5%	23.1%
Maximum Green (s)	9.0	34.0	19.0	19.0	19.0	9.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lag		Lead			Lag
Lead-Lag Optimize?	Yes		Yes			Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Max	C-Max	None	None	None
Act Effct Green (s)	45.7	46.9	30.7	44.0	9.6	22.3
Actuated g/C Ratio	0.70	0.72	0.47	0.68	0.15	0.34
v/c Ratio	0.44	0.56	0.83	0.04	0.54	0.89
Control Delay	8.8	6.1	29.6	1.4	32.6	36.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.8	6.1	29.6	1.4	32.6	36.5
LOS	A	A	C	A	C	D
Approach Delay		6.7	27.9		35.7	
Approach LOS		A	C		D	
Queue Length 50th (ft)	17	69	240	0	52	170
Queue Length 95th (ft)	72	245	#467	7	91	242
Internal Link Dist (ft)		1337	448		356	
Turn Bay Length (ft)	325			250	125	
Base Capacity (vph)	466	1337	833	995	514	597
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.56	0.83	0.04	0.27	0.89

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 21.5		Intersection LOS: C	
Intersection Capacity Utilization 70.3%		ICU Level of Service C	
Analysis Period (min) 15			

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

Queue shown is maximum after two cycles.

Splits and Phases: 13: NY 312 & I-84 WB Ramps



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	254	5	10	485	4	4
Future Volume (vph)	254	5	10	485	4	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Grade (%)	3%			-7%	4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.997				0.932	
Flt Protected				0.999	0.976	
Satd. Flow (prot)	1512	0	0	1742	1129	0
Flt Permitted				0.999	0.976	
Satd. Flow (perm)	1512	0	0	1742	1129	0
Link Speed (mph)	40			40	30	
Link Distance (ft)	339			334	611	
Travel Time (s)	5.8			5.7	13.9	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Heavy Vehicles (%)	19%	33%	60%	8%	33%	67%
Adj. Flow (vph)	334	7	13	638	5	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	341	0	0	651	10	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.00	1.00	1.03	1.03
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	43.5%	ICU Level of Service	A
Analysis Period (min)	15		

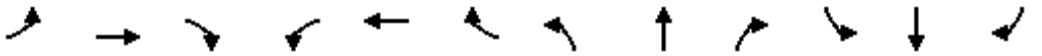
Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	254	5	10	485	4	4
Future Vol, veh/h	254	5	10	485	4	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	3	-	-	-7	4	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	19	33	60	8	33	67
Mvmt Flow	334	7	13	638	5	5

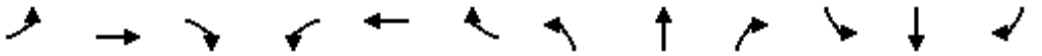
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	341	0	1002	338
Stage 1	-	-	-	-	338	-
Stage 2	-	-	-	-	664	-
Critical Hdwy	-	-	4.7	-	7.53	7.27
Critical Hdwy Stg 1	-	-	-	-	6.53	-
Critical Hdwy Stg 2	-	-	-	-	6.53	-
Follow-up Hdwy	-	-	2.74	-	3.797	3.903
Pot Cap-1 Maneuver	-	-	956	-	189	557
Stage 1	-	-	-	-	611	-
Stage 2	-	-	-	-	395	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	956	-	185	557
Mov Cap-2 Maneuver	-	-	-	-	185	-
Stage 1	-	-	-	-	611	-
Stage 2	-	-	-	-	387	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	18.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	278	-	-	956	-
HCM Lane V/C Ratio	0.038	-	-	0.014	-
HCM Control Delay (s)	18.5	-	-	8.8	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	15	2	130	18	835	0	251	206	748	220	7
Future Volume (vph)	7	15	2	130	18	835	0	251	206	748	220	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	12	13	11	12	12
Grade (%)		-2%			-2%			-2%			2%	
Storage Length (ft)	0		0	180		0	105		260	390		0
Storage Lanes	0		0	1		1	1		1	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.990				0.850			0.850		0.995	
Flt Protected		0.985			0.958					0.950		
Satd. Flow (prot)	0	1458	0	0	1742	1546	1855	1761	1479	1661	1722	0
Flt Permitted		0.897			0.734					0.438		
Satd. Flow (perm)	0	1328	0	0	1335	1546	1855	1761	1479	766	1722	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				393			226		2	
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		395			1214			1103			839	
Travel Time (s)		9.0			18.4			13.7			10.4	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	40%	26%	0%	2%	2%	2%	0%	9%	14%	4%	9%	0%
Adj. Flow (vph)	8	16	2	143	20	918	0	276	226	822	242	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	0	163	918	0	276	226	822	250	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.03	1.03	1.03	1.03	0.99	0.95	1.06	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	2	2	2	2	
Detector Template	Left	NYSDOT		Left	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	20	83		20	83	83	83	83	83	83	83	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Size(ft)	20	40		20	40	40	40	40	40	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		43			43	43	43	43	43	43	43	
Detector 2 Size(ft)		40			40	40	40	40	40	40	40	
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	

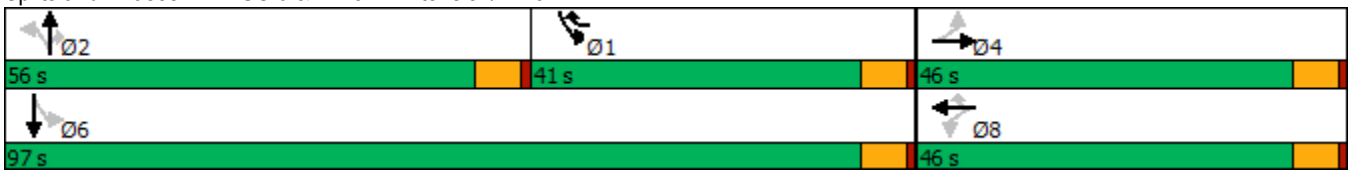


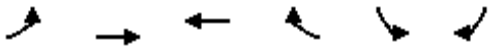
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2		2	6		
Detector Phase	4	4		8	8	1	2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	15.0	
Minimum Split (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	21.0	
Total Split (s)	46.0	46.0		46.0	46.0	41.0	56.0	56.0	56.0	41.0	97.0	
Total Split (%)	32.2%	32.2%		32.2%	32.2%	28.7%	39.2%	39.2%	39.2%	28.7%	67.8%	
Maximum Green (s)	40.0	40.0		40.0	40.0	35.0	50.0	50.0	50.0	35.0	91.0	
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0			6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag						Lag	Lead	Lead	Lead	Lag		
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	
Recall Mode	None	None		None	None	None	None	None	None	None	Min	
Act Effct Green (s)		16.6			16.6	58.2		20.0	20.0	61.6	61.6	
Actuated g/C Ratio		0.18			0.18	0.64		0.22	0.22	0.68	0.68	
v/c Ratio		0.11			0.67	0.81		0.71	0.45	0.94	0.21	
Control Delay		31.0			48.9	14.2		43.7	7.3	40.4	6.5	
Queue Delay		0.0			0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay		31.0			48.9	14.2		43.7	7.3	40.4	6.5	
LOS		C			D	B		D	A	D	A	
Approach Delay		31.0			19.4			27.3			32.5	
Approach LOS		C			B			C			C	
Queue Length 50th (ft)		11			86	190		144	0	273	45	
Queue Length 95th (ft)		37			170	527		252	57	#670	99	
Internal Link Dist (ft)		315			1134			1023			759	
Turn Bay Length (ft)									260	390		
Base Capacity (vph)		597			599	1135		988	929	873	1649	
Starvation Cap Reductn		0			0	0		0	0	0	0	
Spillback Cap Reductn		0			0	0		0	0	0	0	
Storage Cap Reductn		0			0	0		0	0	0	0	
Reduced v/c Ratio		0.04			0.27	0.81		0.28	0.24	0.94	0.15	

Intersection Summary			
Area Type:	Other		
Cycle Length: 143			
Actuated Cycle Length: 90.4			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay: 26.2		Intersection LOS: C	
Intersection Capacity Utilization 84.5%		ICU Level of Service E	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

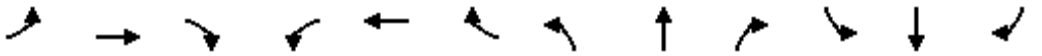
Splits and Phases: 2: US 6 & NY 312 Extension/NY 312



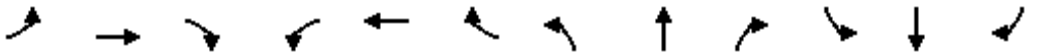


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	995	981	10	3	1
Future Volume (vph)	0	995	981	10	3	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	9	9
Grade (%)		2%	-2%		-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.999		0.966	
Flt Protected					0.964	
Satd. Flow (prot)	0	1844	1917	0	1608	0
Flt Permitted					0.964	
Satd. Flow (perm)	0	1844	1917	0	1608	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		1316	530		1252	
Travel Time (s)		19.9	8.0		28.5	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%
Adj. Flow (vph)	0	1157	1141	12	3	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1157	1153	0	4	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		9	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	0.99	0.99	1.13	1.13
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	208	591	275	322	561	102	279	110	408	104	103	134
Future Volume (vph)	208	591	275	322	561	102	279	110	408	104	103	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	12	12
Grade (%)		1%			-1%			-2%			0%	
Storage Length (ft)	200		250	300		300	0		0	0		200
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.97	1.00	1.00	0.97	0.95	0.95	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.850		0.977				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.973		0.950		
Satd. Flow (prot)	3287	1750	1575	3320	3238	0	1580	3223	1496	1646	1827	1583
Flt Permitted	0.950			0.950			0.950	0.973		0.950		
Satd. Flow (perm)	3287	1750	1575	3320	3238	0	1580	3223	1496	1646	1827	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			279		15				273			92
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		595			1417			424			345	
Travel Time (s)		9.0			21.5			9.6			7.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	6%	8%	2%	6%	9%	12%	5%	6%	9%	6%	4%	2%
Adj. Flow (vph)	234	664	309	362	630	115	313	124	458	117	116	151
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	234	664	309	362	745	0	156	281	458	117	116	151
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	0	0	2	0		2	2	2	2	2	2
Detector Template	NYSDOT			NYSDOT			NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	83	0	0	83	0		83	83	83	83	83	83
Trailing Detector (ft)	-5	0	0	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Position(ft)	-5	0	-5	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Size(ft)	40	6	40	40	6		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43			43			43	43	43	43	43	43
Detector 2 Size(ft)	40			40			40	40	40	40	40	40
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2	3	1	6		3	3	1	4	4	5
Permitted Phases			2						3			4
Detector Phase	5	2	3	1	6		3	3	1	4	4	5
Switch Phase												
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0		5.0	5.0	3.0	5.0	5.0	3.0
Minimum Split (s)	9.0	16.0	11.0	9.0	16.0		11.0	11.0	9.0	11.0	11.0	9.0
Total Split (s)	26.0	36.0	34.0	26.0	36.0		34.0	34.0	26.0	34.0	34.0	26.0
Total Split (%)	20.0%	27.7%	26.2%	20.0%	27.7%		26.2%	26.2%	20.0%	26.2%	26.2%	20.0%
Maximum Green (s)	20.0	30.0	28.0	20.0	30.0		28.0	28.0	20.0	28.0	28.0	20.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Max	None	None	C-Max		None	None	None	None	None	None
Act Effct Green (s)	13.7	55.7	80.2	18.1	60.1		18.5	18.5	36.6	13.7	13.7	33.4
Actuated g/C Ratio	0.11	0.43	0.62	0.14	0.46		0.14	0.14	0.28	0.11	0.11	0.26
v/c Ratio	0.68	0.89	0.29	0.79	0.50		0.70	0.61	0.74	0.68	0.60	0.32
Control Delay	65.8	51.1	2.9	58.9	26.1		68.3	57.4	16.8	74.2	67.7	16.3
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.8	51.1	2.9	58.9	26.1		68.3	57.4	16.8	74.2	67.7	16.3
LOS	E	D	A	E	C		E	E	B	E	E	B
Approach Delay		41.6			36.8			38.5			49.5	
Approach LOS		D			D			D			D	
Queue Length 50th (ft)	99	515	10	145	193		139	124	96	96	95	39
Queue Length 95th (ft)	137	#911	51	m202	m339		205	159	136	154	150	85
Internal Link Dist (ft)		515			1337			344			265	
Turn Bay Length (ft)	200		250	300								200
Base Capacity (vph)	505	750	1173	510	1504		340	694	635	354	393	547
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.89	0.26	0.71	0.50		0.46	0.40	0.72	0.33	0.30	0.28

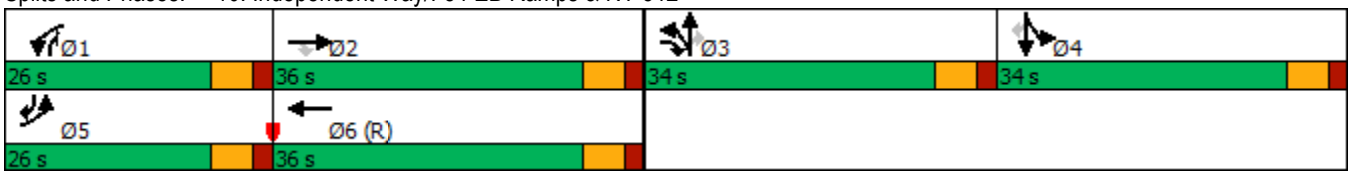
Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Green, Master Intersection			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 40.2		Intersection LOS: D	
Intersection Capacity Utilization 77.1%		ICU Level of Service D	
Analysis Period (min) 15			

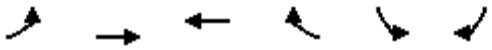
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

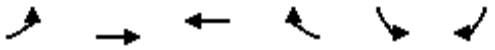
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: Independent Way/I-84 EB Ramps & NY 312





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	490	613	540	87	102	444
Future Volume (vph)	490	613	540	87	102	444
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	13	13
Grade (%)		-1%	2%		0%	
Storage Length (ft)	325			250	125	0
Storage Lanes	1			1	1	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1728	1854	1765	1454	1760	1652
Flt Permitted	0.283				0.950	
Satd. Flow (perm)	515	1854	1765	1454	1760	1652
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				55		64
Link Speed (mph)		45	45		30	
Link Distance (ft)		1417	528		436	
Travel Time (s)		21.5	8.0		9.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	5%	3%	3%	10%	6%	1%
Adj. Flow (vph)	563	705	621	100	117	510
Shared Lane Traffic (%)						
Lane Group Flow (vph)	563	705	621	100	117	510
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.06	1.01	0.96	0.96
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	0	0	0	2	2
Detector Template	NYSDOT				NYSDOTNYSDOT	
Leading Detector (ft)	83	0	0	0	83	83
Trailing Detector (ft)	-5	0	0	0	-5	-5
Detector 1 Position(ft)	-5	0	0	0	-5	-5
Detector 1 Size(ft)	40	6	6	20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43				43	43
Detector 2 Size(ft)	40				40	40
Detector 2 Type	Cl+Ex				Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0				0.0	0.0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	pm+pt	NA	NA	pm+ov	Prot	pm+ov
Protected Phases	1	6	2	3	3	1
Permitted Phases	6			2		3
Detector Phase	1	6	2	3	3	1
Switch Phase						
Minimum Initial (s)	3.0	10.0	10.0	3.0	3.0	3.0
Minimum Split (s)	9.0	16.0	16.0	9.0	9.0	9.0
Total Split (s)	15.0	40.0	25.0	25.0	25.0	15.0
Total Split (%)	23.1%	61.5%	38.5%	38.5%	38.5%	23.1%
Maximum Green (s)	9.0	34.0	19.0	19.0	19.0	9.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lag		Lead			Lag
Lead-Lag Optimize?	Yes		Yes			Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Max	C-Max	None	None	None
Act Effct Green (s)	46.4	47.6	31.4	44.0	8.8	21.6
Actuated g/C Ratio	0.71	0.73	0.48	0.68	0.14	0.33
v/c Ratio	1.05	0.52	0.73	0.10	0.49	0.86
Control Delay	65.6	6.1	23.0	2.2	32.3	32.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.6	6.1	23.0	2.2	32.3	32.3
LOS	E	A	C	A	C	C
Approach Delay		32.5	20.1		32.3	
Approach LOS		C	C		C	
Queue Length 50th (ft)	~166	109	199	5	44	154
Queue Length 95th (ft)	m#469	m276	#391	16	80	226
Internal Link Dist (ft)		1337	448		356	
Turn Bay Length (ft)	325			250	125	
Base Capacity (vph)	535	1357	852	1002	514	591
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.05	0.52	0.73	0.10	0.23	0.86

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay: 29.1	Intersection LOS: C
Intersection Capacity Utilization 76.2%	ICU Level of Service D
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.

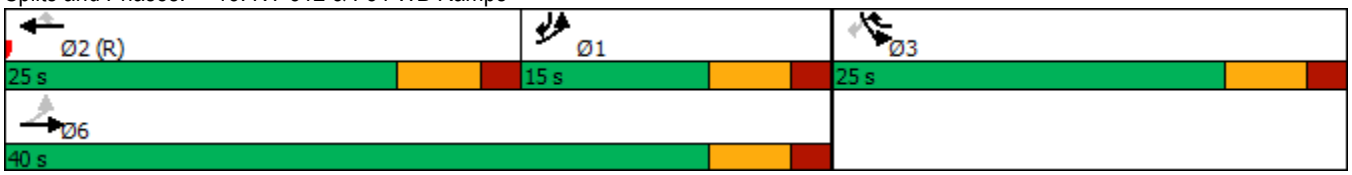
Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

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

Splits and Phases: 13: NY 312 & I-84 WB Ramps



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	408	3	4	284	3	7
Future Volume (vph)	408	3	4	284	3	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Grade (%)	3%			-7%	4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.999				0.902	
Flt Protected				0.999	0.987	
Satd. Flow (prot)	1772	0	0	1810	1505	0
Flt Permitted				0.999	0.987	
Satd. Flow (perm)	1772	0	0	1810	1505	0
Link Speed (mph)	40			40	30	
Link Distance (ft)	339			334	611	
Travel Time (s)	5.8			5.7	13.9	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	0%	0%	5%	0%	14%
Adj. Flow (vph)	464	3	5	323	3	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	467	0	0	328	11	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.00	1.00	1.03	1.03
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 31.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	995	981	10	3	1
Future Vol, veh/h	0	995	981	10	3	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	2	-2	-	-2	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	2	0	0	0	0
Mvmt Flow	0	1157	1141	12	3	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1153	0	-	0	2304	1147
Stage 1	-	-	-	-	1147	-
Stage 2	-	-	-	-	1157	-
Critical Hdwy	4.1	-	-	-	6	6
Critical Hdwy Stg 1	-	-	-	-	5	-
Critical Hdwy Stg 2	-	-	-	-	5	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	613	-	-	-	55	261
Stage 1	-	-	-	-	347	-
Stage 2	-	-	-	-	344	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	613	-	-	-	55	261
Mov Cap-2 Maneuver	-	-	-	-	55	-
Stage 1	-	-	-	-	347	-
Stage 2	-	-	-	-	344	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	60.9
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	613	-	-	-	69
HCM Lane V/C Ratio	-	-	-	-	0.067
HCM Control Delay (s)	0	-	-	-	60.9
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	0.2

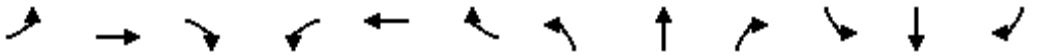
Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	408	3	4	284	3	7
Future Vol, veh/h	408	3	4	284	3	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	3	-	-	-7	4	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	0	0	5	0	14
Mvmt Flow	464	3	5	323	3	8

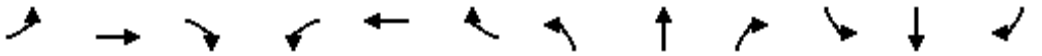
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	467	0	799	466
Stage 1	-	-	-	-	466	-
Stage 2	-	-	-	-	333	-
Critical Hdwy	-	-	4.1	-	7.2	6.74
Critical Hdwy Stg 1	-	-	-	-	6.2	-
Critical Hdwy Stg 2	-	-	-	-	6.2	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.426
Pot Cap-1 Maneuver	-	-	1105	-	299	544
Stage 1	-	-	-	-	573	-
Stage 2	-	-	-	-	679	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1105	-	297	544
Mov Cap-2 Maneuver	-	-	-	-	297	-
Stage 1	-	-	-	-	573	-
Stage 2	-	-	-	-	675	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	13.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	435	-	-	1105	-
HCM Lane V/C Ratio	0.026	-	-	0.004	-
HCM Control Delay (s)	13.5	-	-	8.3	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	15	2	140	18	946	0	259	216	834	219	7
Future Volume (vph)	7	15	2	140	18	946	0	259	216	834	219	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	12	13	11	12	12
Grade (%)		-2%			-2%			-2%			2%	
Storage Length (ft)	0		0	180		0	105		260	390		0
Storage Lanes	0		0	1		1	1		1	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.990				0.850			0.850		0.995	
Flt Protected		0.985			0.958					0.950		
Satd. Flow (prot)	0	1458	0	0	1742	1546	1855	1761	1479	1661	1722	0
Flt Permitted		0.898			0.732					0.424		
Satd. Flow (perm)	0	1330	0	0	1331	1546	1855	1761	1479	741	1722	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				380			237		2	
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		395			1214			1103			839	
Travel Time (s)		9.0			18.4			13.7			10.4	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	40%	26%	0%	2%	2%	2%	0%	9%	14%	4%	9%	0%
Adj. Flow (vph)	8	16	2	154	20	1040	0	285	237	916	241	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	0	174	1040	0	285	237	916	249	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.03	1.03	1.03	1.03	0.99	0.95	1.06	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	2	2	2	2	
Detector Template	Left	NYSDOT		Left	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	20	83		20	83	83	83	83	83	83	83	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Size(ft)	20	40		20	40	40	40	40	40	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		43			43	43	43	43	43	43	43	
Detector 2 Size(ft)		40			40	40	40	40	40	40	40	
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	



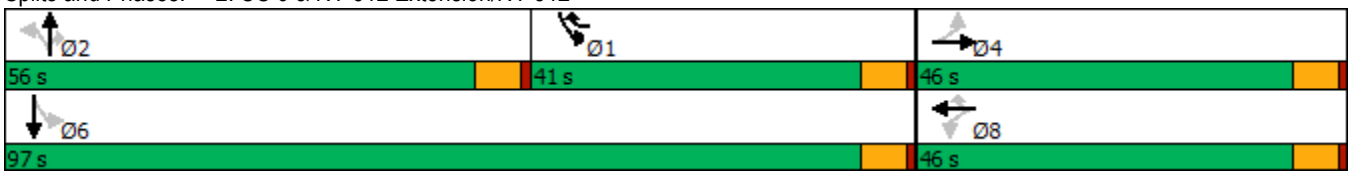
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2		2	6		
Detector Phase	4	4		8	8	1	2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	15.0	
Minimum Split (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	21.0	
Total Split (s)	46.0	46.0		46.0	46.0	41.0	56.0	56.0	56.0	41.0	97.0	
Total Split (%)	32.2%	32.2%		32.2%	32.2%	28.7%	39.2%	39.2%	39.2%	28.7%	67.8%	
Maximum Green (s)	40.0	40.0		40.0	40.0	35.0	50.0	50.0	50.0	35.0	91.0	
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0			6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag						Lag	Lead	Lead	Lead	Lag		
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	
Recall Mode	None	None		None	None	None	None	None	None	None	Min	
Act Effct Green (s)		17.7			17.7	59.4		21.0	21.0	62.7	62.7	
Actuated g/C Ratio		0.19			0.19	0.64		0.23	0.23	0.68	0.68	
v/c Ratio		0.10			0.69	0.92		0.71	0.46	1.07	0.21	
Control Delay		31.1			50.2	25.0		44.1	7.2	75.1	6.8	
Queue Delay		0.0			0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay		31.1			50.2	25.0		44.1	7.2	75.1	6.8	
LOS		C			D	C		D	A	E	A	
Approach Delay		31.1			28.6			27.3			60.5	
Approach LOS		C			C			C			E	
Queue Length 50th (ft)		11			94	322		152	0	~455	47	
Queue Length 95th (ft)		37			182	#877		266	59	#853	103	
Internal Link Dist (ft)		315			1134			1023			759	
Turn Bay Length (ft)									260	390		
Base Capacity (vph)		585			584	1127		966	918	855	1630	
Starvation Cap Reductn		0			0	0		0	0	0	0	
Spillback Cap Reductn		0			0	0		0	0	0	0	
Storage Cap Reductn		0			0	0		0	0	0	0	
Reduced v/c Ratio		0.04			0.30	0.92		0.30	0.26	1.07	0.15	

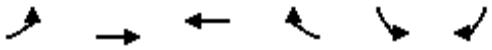
Intersection Summary			
Area Type:	Other		
Cycle Length: 143			
Actuated Cycle Length: 92.6			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.07			
Intersection Signal Delay: 41.1		Intersection LOS: D	
Intersection Capacity Utilization 91.4%		ICU Level of Service F	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

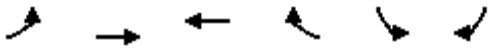
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US 6 & NY 312 Extension/NY 312





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	10	1097	1094	49	106	27
Future Volume (vph)	10	1097	1094	49	106	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	14
Grade (%)		2%	-2%		-2%	
Storage Length (ft)	100			0	95	80
Storage Lanes	1			1	1	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1787	3504	1919	1631	3735	1740
Flt Permitted	0.084				0.950	
Satd. Flow (perm)	158	3504	1919	1631	3735	1740
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						31
Link Speed (mph)		45	45		30	
Link Distance (ft)		1316	530		1252	
Travel Time (s)		19.9	8.0		28.5	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	0%	2%	0%	0%	1%	0%
Adj. Flow (vph)	12	1276	1272	57	123	31
Shared Lane Traffic (%)						
Lane Group Flow (vph)	12	1276	1272	57	123	31
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		28	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	0.99	0.99	0.91	0.91
Turning Speed (mph)	15			9	15	9
Number of Detectors	0	0	0	0	2	2
Detector Template					NYSDOT	NYSDOT
Leading Detector (ft)	0	0	0	0	83	83
Trailing Detector (ft)	0	0	0	0	-5	-5
Detector 1 Position(ft)	0	0	0	0	-5	-5
Detector 1 Size(ft)	20	6	6	20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)					43	43
Detector 2 Size(ft)					40	40
Detector 2 Type					Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)					0.0	0.0



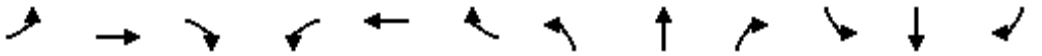
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	Perm	NA	NA	pm+ov	Prot	Perm
Protected Phases		6	2	3	3	
Permitted Phases	6			2		3
Detector Phase	6	6	2	3	3	3
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	65.0	65.0	65.0	15.0	15.0	15.0
Total Split (%)	81.3%	81.3%	81.3%	18.8%	18.8%	18.8%
Maximum Green (s)	59.0	59.0	59.0	9.0	9.0	9.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max	None	None	None
Act Effct Green (s)	63.7	63.7	63.7	80.0	7.9	7.9
Actuated g/C Ratio	0.80	0.80	0.80	1.00	0.10	0.10
v/c Ratio	0.10	0.46	0.83	0.03	0.34	0.16
Control Delay	4.9	4.2	14.1	0.0	35.9	14.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.9	4.2	14.1	0.0	35.9	14.4
LOS	A	A	B	A	D	B
Approach Delay		4.2	13.5		31.5	
Approach LOS		A	B		C	
Queue Length 50th (ft)	1	103	371	0	29	0
Queue Length 95th (ft)	6	133	#621	0	52	22
Internal Link Dist (ft)		1236	450		1172	
Turn Bay Length (ft)	100				95	80
Base Capacity (vph)	125	2791	1529	1568	420	223
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.46	0.83	0.04	0.29	0.14

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 10.2		Intersection LOS: B	
Intersection Capacity Utilization 71.7%		ICU Level of Service C	
Analysis Period (min) 15			

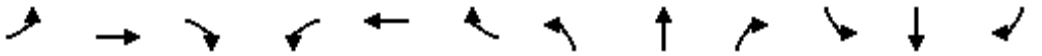
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: NY 312 & Pugsley Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	282	679	295	313	647	109	342	121	408	110	105	169
Future Volume (vph)	282	679	295	313	647	109	342	121	408	110	105	169
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	12	12
Grade (%)		1%			-1%			-2%			0%	
Storage Length (ft)	200		250	300		300	0		0	0		200
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.97	1.00	1.00	0.97	0.95	0.95	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.850		0.978				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.972		0.950		
Satd. Flow (prot)	3287	1750	1575	3320	3242	0	1580	3220	1496	1646	1827	1583
Flt Permitted	0.950			0.950			0.950	0.972		0.950		
Satd. Flow (perm)	3287	1750	1575	3320	3242	0	1580	3220	1496	1646	1827	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			260		14				257			76
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		595			1417			424			345	
Travel Time (s)		9.0			21.5			9.6			7.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	6%	8%	2%	6%	9%	12%	5%	6%	9%	6%	4%	2%
Adj. Flow (vph)	317	763	331	352	727	122	384	136	458	124	118	190
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	317	763	331	352	849	0	192	328	458	124	118	190
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	0	0	2	0		2	2	2	2	2	2
Detector Template	NYSDOT			NYSDOT			NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	83	0	0	83	0		83	83	83	83	83	83
Trailing Detector (ft)	-5	0	0	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Position(ft)	-5	0	-5	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Size(ft)	40	6	40	40	6		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43			43			43	43	43	43	43	43
Detector 2 Size(ft)	40			40			40	40	40	40	40	40
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2	3	1	6		3	3	1	4	4	5
Permitted Phases			2						3			4
Detector Phase	5	2	3	1	6		3	3	1	4	4	5
Switch Phase												
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0		5.0	5.0	3.0	5.0	5.0	3.0
Minimum Split (s)	9.0	16.0	11.0	9.0	16.0		11.0	11.0	9.0	11.0	11.0	9.0
Total Split (s)	26.0	36.0	34.0	26.0	36.0		34.0	34.0	26.0	34.0	34.0	26.0
Total Split (%)	20.0%	27.7%	26.2%	20.0%	27.7%		26.2%	26.2%	20.0%	26.2%	26.2%	20.0%
Maximum Green (s)	20.0	30.0	28.0	20.0	30.0		28.0	28.0	20.0	28.0	28.0	20.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Max	None	None	C-Max		None	None	None	None	None	None
Act Effct Green (s)	16.6	52.9	79.8	17.9	54.1		21.0	21.0	38.9	14.3	14.3	36.9
Actuated g/C Ratio	0.13	0.41	0.61	0.14	0.42		0.16	0.16	0.30	0.11	0.11	0.28
v/c Ratio	0.76	1.07	0.31	0.77	0.63		0.76	0.63	0.73	0.69	0.59	0.38
Control Delay	66.4	92.8	4.0	58.3	32.1		69.8	55.8	16.5	74.1	66.2	22.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.4	92.8	4.0	58.3	32.1		69.8	55.8	16.5	74.1	66.2	22.6
LOS	E	F	A	E	C		E	E	B	E	E	C
Approach Delay		66.1			39.8			40.1			49.3	
Approach LOS		E			D			D			D	
Queue Length 50th (ft)	134	~728	23	144	277		171	143	101	102	96	74
Queue Length 95th (ft)	178	#1116	72	m184	m385		247	182	138	160	152	126
Internal Link Dist (ft)		515			1337			344			265	
Turn Bay Length (ft)	200		250	300								200
Base Capacity (vph)	505	711	1138	510	1358		340	693	647	354	393	542
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.63	1.07	0.29	0.69	0.63		0.56	0.47	0.71	0.35	0.30	0.35

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Green, Master Intersection			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.07			
Intersection Signal Delay: 50.1		Intersection LOS: D	
Intersection Capacity Utilization 82.1%		ICU Level of Service E	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.

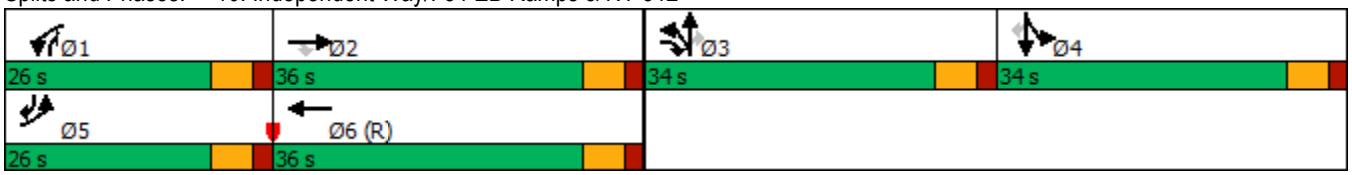
Queue shown is maximum after two cycles.

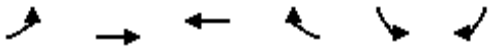
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

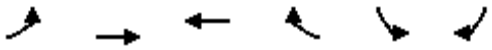
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: Independent Way/I-84 EB Ramps & NY 312





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	553	644	576	96	110	493
Future Volume (vph)	553	644	576	96	110	493
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	13	13
Grade (%)		-1%	2%		0%	
Storage Length (ft)	325			250	125	0
Storage Lanes	1			1	1	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1728	1854	1765	1454	1760	1652
Flt Permitted	0.247				0.950	
Satd. Flow (perm)	449	1854	1765	1454	1760	1652
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				29		52
Link Speed (mph)		45	45		30	
Link Distance (ft)		1417	528		436	
Travel Time (s)		21.5	8.0		9.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	5%	3%	3%	10%	6%	1%
Adj. Flow (vph)	636	740	662	110	126	567
Shared Lane Traffic (%)						
Lane Group Flow (vph)	636	740	662	110	126	567
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.06	1.01	0.96	0.96
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	0	0	0	2	2
Detector Template	NYSDOT				NYSDOT	NYSDOT
Leading Detector (ft)	83	0	0	0	83	83
Trailing Detector (ft)	-5	0	0	0	-5	-5
Detector 1 Position(ft)	-5	0	0	0	-5	-5
Detector 1 Size(ft)	40	6	6	20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43				43	43
Detector 2 Size(ft)	40				40	40
Detector 2 Type	Cl+Ex				Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0				0.0	0.0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	pm+pt	NA	NA	pm+ov	Prot	pm+ov
Protected Phases	1	6	2	3	3	1
Permitted Phases	6			2		3
Detector Phase	1	6	2	3	3	1
Switch Phase						
Minimum Initial (s)	3.0	10.0	10.0	3.0	3.0	3.0
Minimum Split (s)	9.0	16.0	16.0	9.0	9.0	9.0
Total Split (s)	15.0	40.0	25.0	25.0	25.0	15.0
Total Split (%)	23.1%	61.5%	38.5%	38.5%	38.5%	23.1%
Maximum Green (s)	9.0	34.0	19.0	19.0	19.0	9.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lag		Lead			Lag
Lead-Lag Optimize?	Yes		Yes			Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Max	C-Max	None	None	None
Act Effct Green (s)	46.1	47.3	31.1	44.0	9.1	21.9
Actuated g/C Ratio	0.71	0.73	0.48	0.68	0.14	0.34
v/c Ratio	1.28	0.55	0.78	0.11	0.51	0.96
Control Delay	156.6	7.2	26.1	3.1	32.6	48.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	156.6	7.2	26.1	3.1	32.6	48.3
LOS	F	A	C	A	C	D
Approach Delay		76.2	22.8		45.4	
Approach LOS		E	C		D	
Queue Length 50th (ft)	~354	186	221	9	47	187
Queue Length 95th (ft)	m#524	m272	#433	21	84	#274
Internal Link Dist (ft)		1337	448		356	
Turn Bay Length (ft)	325			250	125	
Base Capacity (vph)	495	1350	845	993	514	590
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.28	0.55	0.78	0.11	0.25	0.96

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.28	
Intersection Signal Delay: 54.2	Intersection LOS: D
Intersection Capacity Utilization 82.0%	ICU Level of Service E
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.

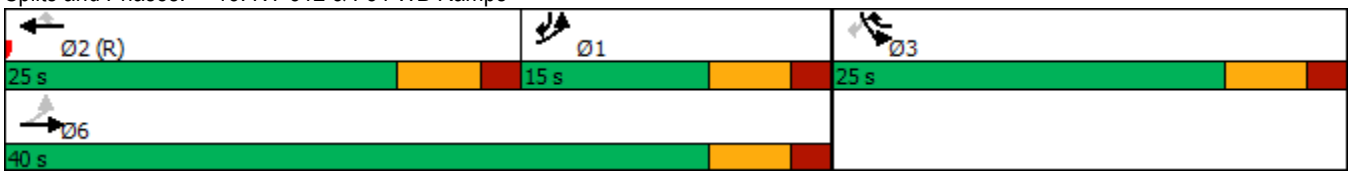
Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

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

Splits and Phases: 13: NY 312 & I-84 WB Ramps



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	420	4	6	297	6	12
Future Volume (vph)	420	4	6	297	6	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Grade (%)	3%			-7%	4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.999				0.910	
Flt Protected				0.999	0.984	
Satd. Flow (prot)	1772	0	0	1810	1525	0
Flt Permitted				0.999	0.984	
Satd. Flow (perm)	1772	0	0	1810	1525	0
Link Speed (mph)	40			40	30	
Link Distance (ft)	339			334	611	
Travel Time (s)	5.8			5.7	13.9	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	0%	0%	5%	0%	14%
Adj. Flow (vph)	477	5	7	338	7	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	482	0	0	345	21	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.00	1.00	1.03	1.03
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	32.3%	ICU Level of Service	A
Analysis Period (min)	15		

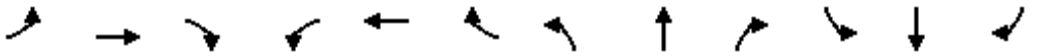
Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	420	4	6	297	6	12
Future Vol, veh/h	420	4	6	297	6	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	3	-	-	-7	4	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	0	0	5	0	14
Mvmt Flow	477	5	7	338	7	14

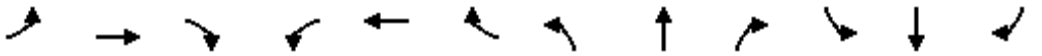
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	482	0	832	480
Stage 1	-	-	-	-	480	-
Stage 2	-	-	-	-	352	-
Critical Hdwy	-	-	4.1	-	7.2	6.74
Critical Hdwy Stg 1	-	-	-	-	6.2	-
Critical Hdwy Stg 2	-	-	-	-	6.2	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.426
Pot Cap-1 Maneuver	-	-	1091	-	284	533
Stage 1	-	-	-	-	563	-
Stage 2	-	-	-	-	662	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1091	-	282	533
Mov Cap-2 Maneuver	-	-	-	-	282	-
Stage 1	-	-	-	-	563	-
Stage 2	-	-	-	-	657	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	14.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	411	-	-	1091	-
HCM Lane V/C Ratio	0.05	-	-	0.006	-
HCM Control Delay (s)	14.2	-	-	8.3	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	15	2	140	18	946	0	259	216	834	219	7
Future Volume (vph)	7	15	2	140	18	946	0	259	216	834	219	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	12	13	11	12	12
Grade (%)		-2%			-2%			-2%			2%	
Storage Length (ft)	0		0	180		0	105		260	390		0
Storage Lanes	0		0	1		1	1		1	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.990				0.850			0.850		0.995	
Flt Protected		0.985			0.958					0.950		
Satd. Flow (prot)	0	1458	0	0	1742	1546	1855	1761	1479	1661	1722	0
Flt Permitted		0.898			0.732					0.424		
Satd. Flow (perm)	0	1330	0	0	1331	1546	1855	1761	1479	741	1722	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				380			237		2	
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		395			1214			1103			839	
Travel Time (s)		9.0			18.4			13.7			10.4	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	40%	26%	0%	2%	2%	2%	0%	9%	14%	4%	9%	0%
Adj. Flow (vph)	8	16	2	154	20	1040	0	285	237	916	241	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	0	174	1040	0	285	237	916	249	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.03	1.03	1.03	1.03	0.99	0.95	1.06	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	2	2	2	2	
Detector Template	Left	NYSDOT		Left	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	20	83		20	83	83	83	83	83	83	83	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Size(ft)	20	40		20	40	40	40	40	40	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		43			43	43	43	43	43	43	43	
Detector 2 Size(ft)		40			40	40	40	40	40	40	40	
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	



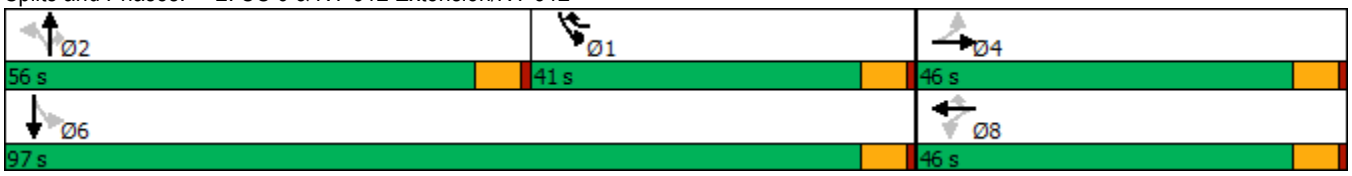
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2		2	6		
Detector Phase	4	4		8	8	1	2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	15.0	
Minimum Split (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	21.0	
Total Split (s)	46.0	46.0		46.0	46.0	41.0	56.0	56.0	56.0	41.0	97.0	
Total Split (%)	32.2%	32.2%		32.2%	32.2%	28.7%	39.2%	39.2%	39.2%	28.7%	67.8%	
Maximum Green (s)	40.0	40.0		40.0	40.0	35.0	50.0	50.0	50.0	35.0	91.0	
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0			6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag						Lag	Lead	Lead	Lead	Lag		
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	
Recall Mode	None	None		None	None	None	None	None	None	None	Min	
Act Effct Green (s)		17.7			17.7	59.4		21.0	21.0	62.7	62.7	
Actuated g/C Ratio		0.19			0.19	0.64		0.23	0.23	0.68	0.68	
v/c Ratio		0.10			0.69	0.92		0.71	0.46	1.07	0.21	
Control Delay		31.1			50.2	25.0		44.1	7.2	75.1	6.8	
Queue Delay		0.0			0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay		31.1			50.2	25.0		44.1	7.2	75.1	6.8	
LOS		C			D	C		D	A	E	A	
Approach Delay		31.1			28.6			27.3			60.5	
Approach LOS		C			C			C			E	
Queue Length 50th (ft)		11			94	322		152	0	~455	47	
Queue Length 95th (ft)		37			182	#877		266	59	#853	103	
Internal Link Dist (ft)		315			1134			1023			759	
Turn Bay Length (ft)									260	390		
Base Capacity (vph)		585			584	1127		966	918	855	1630	
Starvation Cap Reductn		0			0	0		0	0	0	0	
Spillback Cap Reductn		0			0	0		0	0	0	0	
Storage Cap Reductn		0			0	0		0	0	0	0	
Reduced v/c Ratio		0.04			0.30	0.92		0.30	0.26	1.07	0.15	

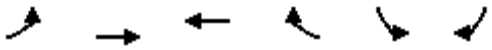
Intersection Summary			
Area Type:	Other		
Cycle Length: 143			
Actuated Cycle Length: 92.6			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.07			
Intersection Signal Delay: 41.1		Intersection LOS: D	
Intersection Capacity Utilization 91.4%		ICU Level of Service F	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

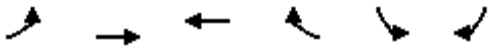
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US 6 & NY 312 Extension/NY 312





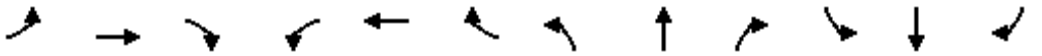
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	10	1097	1094	49	106	27
Future Volume (vph)	10	1097	1094	49	106	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	14
Grade (%)		2%	-2%		-2%	
Storage Length (ft)	100			0	0	110
Storage Lanes	1			0	2	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	0.95
Frt			0.994		0.970	
Flt Protected	0.950				0.962	
Satd. Flow (prot)	1787	3504	3624	0	3676	0
Flt Permitted	0.146				0.962	
Satd. Flow (perm)	275	3504	3624	0	3676	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			9		31	
Link Speed (mph)		45	45		30	
Link Distance (ft)		1316	530		1252	
Travel Time (s)		19.9	8.0		28.5	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	0%	2%	0%	0%	1%	0%
Adj. Flow (vph)	12	1276	1272	57	123	31
Shared Lane Traffic (%)						
Lane Group Flow (vph)	12	1276	1329	0	154	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		28	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	0.99	0.99	0.91	0.91
Turning Speed (mph)	15			9	15	9
Number of Detectors	0	0	0		2	
Detector Template					NYSDOT	
Leading Detector (ft)	0	0	0		83	
Trailing Detector (ft)	0	0	0		-5	
Detector 1 Position(ft)	0	0	0		-5	
Detector 1 Size(ft)	20	6	6		40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Detector 2 Position(ft)					43	
Detector 2 Size(ft)					40	
Detector 2 Type					Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)					0.0	



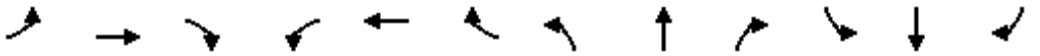
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	1	6	2		3	
Permitted Phases	6					
Detector Phase	1	6	2		3	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	
Minimum Split (s)	11.0	11.0	11.0		11.0	
Total Split (s)	11.0	62.0	51.0		18.0	
Total Split (%)	13.8%	77.5%	63.8%		22.5%	
Maximum Green (s)	5.0	56.0	45.0		12.0	
Yellow Time (s)	4.0	4.0	4.0		4.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	6.0	6.0	6.0		6.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	C-Max	C-Max		None	
Act Effct Green (s)	59.8	59.8	57.6		8.2	
Actuated g/C Ratio	0.75	0.75	0.72		0.10	
v/c Ratio	0.04	0.49	0.51		0.38	
Control Delay	3.2	4.9	6.7		29.0	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	3.2	4.9	6.7		29.0	
LOS	A	A	A		C	
Approach Delay		4.9	6.7		29.0	
Approach LOS		A	A		C	
Queue Length 50th (ft)	1	104	108		29	
Queue Length 95th (ft)	5	146	251		53	
Internal Link Dist (ft)		1236	450		1172	
Turn Bay Length (ft)	100					
Base Capacity (vph)	300	2620	2613		577	
Starvation Cap Reductn	0	0	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.04	0.49	0.51		0.27	

Intersection Summary	
Area Type:	Other
Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Green	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay: 7.1	Intersection LOS: A
Intersection Capacity Utilization 46.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 6: NY 312 & Pugsley Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	282	679	295	313	647	109	342	121	408	110	105	169
Future Volume (vph)	282	679	295	313	647	109	342	121	408	110	105	169
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	12	12
Grade (%)		1%			-1%			-2%			0%	
Storage Length (ft)	200		250	300		300	0		0	0		200
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.97	1.00	1.00	0.97	0.95	0.95	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.850		0.978				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.972		0.950		
Satd. Flow (prot)	3287	1750	1575	3320	3242	0	1580	3220	1496	1646	1827	1583
Flt Permitted	0.950			0.950			0.950	0.972		0.950		
Satd. Flow (perm)	3287	1750	1575	3320	3242	0	1580	3220	1496	1646	1827	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			260		14				257			76
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		595			1417			424			345	
Travel Time (s)		9.0			21.5			9.6			7.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	6%	8%	2%	6%	9%	12%	5%	6%	9%	6%	4%	2%
Adj. Flow (vph)	317	763	331	352	727	122	384	136	458	124	118	190
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	317	763	331	352	849	0	192	328	458	124	118	190
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	0	0	2	0		2	2	2	2	2	2
Detector Template	NYSDOT			NYSDOT			NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	83	0	0	83	0		83	83	83	83	83	83
Trailing Detector (ft)	-5	0	0	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Position(ft)	-5	0	-5	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Size(ft)	40	6	40	40	6		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43			43			43	43	43	43	43	43
Detector 2 Size(ft)	40			40			40	40	40	40	40	40
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2	3	1	6		3	3	1	4	4	5
Permitted Phases			2						3			4
Detector Phase	5	2	3	1	6		3	3	1	4	4	5
Switch Phase												
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0		5.0	5.0	3.0	5.0	5.0	3.0
Minimum Split (s)	9.0	16.0	11.0	9.0	16.0		11.0	11.0	9.0	11.0	11.0	9.0
Total Split (s)	26.0	36.0	34.0	26.0	36.0		34.0	34.0	26.0	34.0	34.0	26.0
Total Split (%)	20.0%	27.7%	26.2%	20.0%	27.7%		26.2%	26.2%	20.0%	26.2%	26.2%	20.0%
Maximum Green (s)	20.0	30.0	28.0	20.0	30.0		28.0	28.0	20.0	28.0	28.0	20.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Max	None	None	C-Max		None	None	None	None	None	None
Act Effct Green (s)	16.6	52.9	79.8	17.9	54.1		21.0	21.0	38.9	14.3	14.3	36.9
Actuated g/C Ratio	0.13	0.41	0.61	0.14	0.42		0.16	0.16	0.30	0.11	0.11	0.28
v/c Ratio	0.76	1.07	0.31	0.77	0.63		0.76	0.63	0.73	0.69	0.59	0.38
Control Delay	66.4	92.8	4.0	58.3	32.1		69.8	55.8	16.5	74.1	66.2	22.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.4	92.8	4.0	58.3	32.1		69.8	55.8	16.5	74.1	66.2	22.6
LOS	E	F	A	E	C		E	E	B	E	E	C
Approach Delay		66.1			39.8			40.1			49.3	
Approach LOS		E			D			D			D	
Queue Length 50th (ft)	134	~728	23	144	277		171	143	101	102	96	74
Queue Length 95th (ft)	178	#1116	72	m184	m385		247	182	138	160	152	126
Internal Link Dist (ft)		515			1337			344			265	
Turn Bay Length (ft)	200		250	300								200
Base Capacity (vph)	505	711	1138	510	1358		340	693	647	354	393	542
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.63	1.07	0.29	0.69	0.63		0.56	0.47	0.71	0.35	0.30	0.35

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Green, Master Intersection			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.07			
Intersection Signal Delay: 50.1		Intersection LOS: D	
Intersection Capacity Utilization 82.1%		ICU Level of Service E	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.

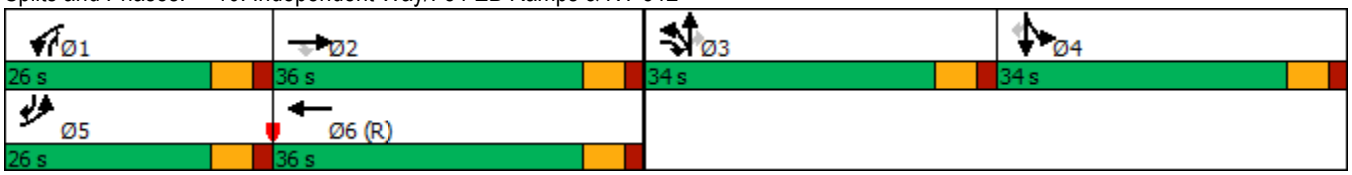
Queue shown is maximum after two cycles.

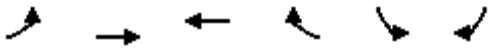
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

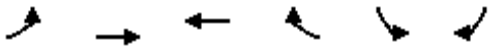
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: Independent Way/I-84 EB Ramps & NY 312





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	553	644	576	96	110	493
Future Volume (vph)	553	644	576	96	110	493
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	13	13
Grade (%)		-1%	2%		0%	
Storage Length (ft)	325			250	125	0
Storage Lanes	1			1	1	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1728	1854	1765	1454	1760	1652
Flt Permitted	0.247				0.950	
Satd. Flow (perm)	449	1854	1765	1454	1760	1652
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				29		52
Link Speed (mph)		45	45		30	
Link Distance (ft)		1417	528		436	
Travel Time (s)		21.5	8.0		9.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	5%	3%	3%	10%	6%	1%
Adj. Flow (vph)	636	740	662	110	126	567
Shared Lane Traffic (%)						
Lane Group Flow (vph)	636	740	662	110	126	567
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.06	1.01	0.96	0.96
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	0	0	0	2	2
Detector Template	NYSDOT				NYSDOT	NYSDOT
Leading Detector (ft)	83	0	0	0	83	83
Trailing Detector (ft)	-5	0	0	0	-5	-5
Detector 1 Position(ft)	-5	0	0	0	-5	-5
Detector 1 Size(ft)	40	6	6	20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43				43	43
Detector 2 Size(ft)	40				40	40
Detector 2 Type	Cl+Ex				Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0				0.0	0.0



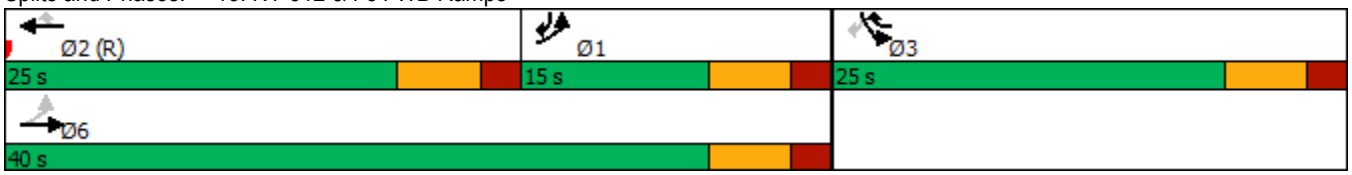
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	pm+pt	NA	NA	pm+ov	Prot	pm+ov
Protected Phases	1	6	2	3	3	1
Permitted Phases	6			2		3
Detector Phase	1	6	2	3	3	1
Switch Phase						
Minimum Initial (s)	3.0	10.0	10.0	3.0	3.0	3.0
Minimum Split (s)	9.0	16.0	16.0	9.0	9.0	9.0
Total Split (s)	15.0	40.0	25.0	25.0	25.0	15.0
Total Split (%)	23.1%	61.5%	38.5%	38.5%	38.5%	23.1%
Maximum Green (s)	9.0	34.0	19.0	19.0	19.0	9.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lag		Lead			Lag
Lead-Lag Optimize?	Yes		Yes			Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Max	C-Max	None	None	None
Act Effct Green (s)	46.1	47.3	31.1	44.0	9.1	21.9
Actuated g/C Ratio	0.71	0.73	0.48	0.68	0.14	0.34
v/c Ratio	1.28	0.55	0.78	0.11	0.51	0.96
Control Delay	156.6	7.2	26.1	3.1	32.6	48.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	156.6	7.2	26.1	3.1	32.6	48.3
LOS	F	A	C	A	C	D
Approach Delay		76.2	22.8		45.4	
Approach LOS		E	C		D	
Queue Length 50th (ft)	~354	186	221	9	47	187
Queue Length 95th (ft)	m#524	m272	#433	21	84	#274
Internal Link Dist (ft)		1337	448		356	
Turn Bay Length (ft)	325			250	125	
Base Capacity (vph)	495	1350	845	993	514	590
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.28	0.55	0.78	0.11	0.25	0.96

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.28	
Intersection Signal Delay: 54.2	Intersection LOS: D
Intersection Capacity Utilization 82.0%	ICU Level of Service E
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 13: NY 312 & I-84 WB Ramps



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	420	4	6	297	6	12
Future Volume (vph)	420	4	6	297	6	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Grade (%)	3%			-7%	4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.999				0.910	
Flt Protected				0.999	0.984	
Satd. Flow (prot)	1772	0	0	1810	1525	0
Flt Permitted				0.999	0.984	
Satd. Flow (perm)	1772	0	0	1810	1525	0
Link Speed (mph)	40			40	30	
Link Distance (ft)	339			334	611	
Travel Time (s)	5.8			5.7	13.9	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	0%	0%	5%	0%	14%
Adj. Flow (vph)	477	5	7	338	7	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	482	0	0	345	21	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.00	1.00	1.03	1.03
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.3%		ICU Level of Service A	
Analysis Period (min) 15			

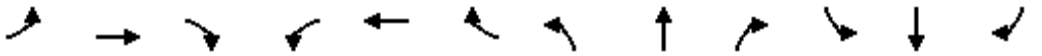
Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	420	4	6	297	6	12
Future Vol, veh/h	420	4	6	297	6	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	3	-	-	-7	4	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	0	0	5	0	14
Mvmt Flow	477	5	7	338	7	14

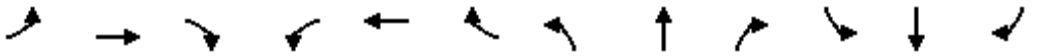
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	482	0	832	480
Stage 1	-	-	-	-	480	-
Stage 2	-	-	-	-	352	-
Critical Hdwy	-	-	4.1	-	7.2	6.74
Critical Hdwy Stg 1	-	-	-	-	6.2	-
Critical Hdwy Stg 2	-	-	-	-	6.2	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.426
Pot Cap-1 Maneuver	-	-	1091	-	284	533
Stage 1	-	-	-	-	563	-
Stage 2	-	-	-	-	662	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1091	-	282	533
Mov Cap-2 Maneuver	-	-	-	-	282	-
Stage 1	-	-	-	-	563	-
Stage 2	-	-	-	-	657	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	14.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	411	-	-	1091	-
HCM Lane V/C Ratio	0.05	-	-	0.006	-
HCM Control Delay (s)	14.2	-	-	8.3	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	15	2	142	18	958	0	259	228	896	219	7
Future Volume (vph)	7	15	2	142	18	958	0	259	228	896	219	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	12	13	11	12	12
Grade (%)		-2%			-2%			-2%			2%	
Storage Length (ft)	0		0	180		0	105		260	390		0
Storage Lanes	0		0	1		1	1		1	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.990				0.850			0.850		0.995	
Flt Protected		0.985			0.958					0.950		
Satd. Flow (prot)	0	1458	0	0	1742	1546	1855	1761	1479	1661	1722	0
Flt Permitted		0.898			0.732					0.423		
Satd. Flow (perm)	0	1330	0	0	1331	1546	1855	1761	1479	740	1722	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				380			251		2	
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		395			1214			1103			839	
Travel Time (s)		9.0			18.4			13.7			10.4	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	40%	26%	0%	2%	2%	2%	0%	9%	14%	4%	9%	0%
Adj. Flow (vph)	8	16	2	156	20	1053	0	285	251	985	241	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	0	176	1053	0	285	251	985	249	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.03	1.03	1.03	1.03	0.99	0.95	1.06	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	2	2	2	2	
Detector Template	Left	NYSDOT		Left	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	20	83		20	83	83	83	83	83	83	83	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Size(ft)	20	40		20	40	40	40	40	40	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		43			43	43	43	43	43	43	43	
Detector 2 Size(ft)		40			40	40	40	40	40	40	40	
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	



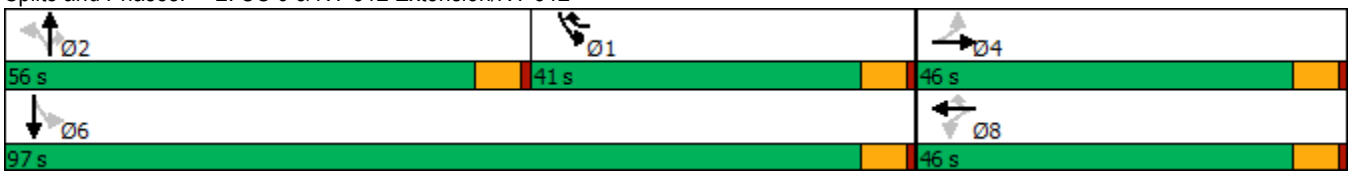
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2		2	6		
Detector Phase	4	4		8	8	1	2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	15.0	
Minimum Split (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	21.0	
Total Split (s)	46.0	46.0		46.0	46.0	41.0	56.0	56.0	56.0	41.0	97.0	
Total Split (%)	32.2%	32.2%		32.2%	32.2%	28.7%	39.2%	39.2%	39.2%	28.7%	67.8%	
Maximum Green (s)	40.0	40.0		40.0	40.0	35.0	50.0	50.0	50.0	35.0	91.0	
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0			6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag						Lag	Lead	Lead	Lead	Lag		
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	
Recall Mode	None	None		None	None	None	None	None	None	None	Min	
Act Effct Green (s)		17.9			17.9	59.6		21.0	21.0	62.7	62.7	
Actuated g/C Ratio		0.19			0.19	0.64		0.23	0.23	0.68	0.68	
v/c Ratio		0.10			0.69	0.93		0.71	0.47	1.15	0.21	
Control Delay		31.0			50.2	26.6		44.3	7.2	106.0	6.9	
Queue Delay		0.0			0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay		31.0			50.2	26.6		44.3	7.2	106.0	6.9	
LOS		C			D	C		D	A	F	A	
Approach Delay		31.0			30.0			26.9			86.0	
Approach LOS		C			C			C			F	
Queue Length 50th (ft)		11			95	338		153	0	~543	47	
Queue Length 95th (ft)		37			185	#898		266	60	#965	103	
Internal Link Dist (ft)		315			1134			1023			759	
Turn Bay Length (ft)									260	390		
Base Capacity (vph)		584			583	1128		964	923	853	1629	
Starvation Cap Reductn		0			0	0		0	0	0	0	
Spillback Cap Reductn		0			0	0		0	0	0	0	
Storage Cap Reductn		0			0	0		0	0	0	0	
Reduced v/c Ratio		0.04			0.30	0.93		0.30	0.27	1.15	0.15	

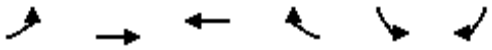
Intersection Summary			
Area Type:	Other		
Cycle Length: 143			
Actuated Cycle Length: 92.8			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.15			
Intersection Signal Delay: 52.3		Intersection LOS: D	
Intersection Capacity Utilization 93.8%		ICU Level of Service F	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

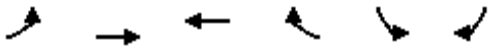
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US 6 & NY 312 Extension/NY 312





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	84	1097	1094	209	136	41
Future Volume (vph)	84	1097	1094	209	136	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	14
Grade (%)		2%	-2%		-2%	
Storage Length (ft)	100			0	95	80
Storage Lanes	1			1	1	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1787	3504	1919	1631	3735	1740
Flt Permitted	0.067				0.950	
Satd. Flow (perm)	126	3504	1919	1631	3735	1740
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						48
Link Speed (mph)		45	45		30	
Link Distance (ft)		1316	530		1252	
Travel Time (s)		19.9	8.0		28.5	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	0%	2%	0%	0%	1%	0%
Adj. Flow (vph)	98	1276	1272	243	158	48
Shared Lane Traffic (%)						
Lane Group Flow (vph)	98	1276	1272	243	158	48
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		28	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	0.99	0.99	0.91	0.91
Turning Speed (mph)	15			9	15	9
Number of Detectors	0	0	0	0	2	2
Detector Template					NYSDOT	NYSDOT
Leading Detector (ft)	0	0	0	0	83	83
Trailing Detector (ft)	0	0	0	0	-5	-5
Detector 1 Position(ft)	0	0	0	0	-5	-5
Detector 1 Size(ft)	20	6	6	20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)					43	43
Detector 2 Size(ft)					40	40
Detector 2 Type					Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)					0.0	0.0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	Perm	NA	NA	pm+ov	Prot	Perm
Protected Phases		6	2	3	3	
Permitted Phases	6			2		3
Detector Phase	6	6	2	3	3	3
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	65.0	65.0	65.0	15.0	15.0	15.0
Total Split (%)	81.3%	81.3%	81.3%	18.8%	18.8%	18.8%
Maximum Green (s)	59.0	59.0	59.0	9.0	9.0	9.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max	None	None	None
Act Effct Green (s)	59.7	59.7	59.7	80.0	8.3	8.3
Actuated g/C Ratio	0.75	0.75	0.75	1.00	0.10	0.10
v/c Ratio	1.05	0.49	0.89	0.15	0.41	0.22
Control Delay	129.3	4.9	18.0	0.2	36.7	13.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	129.3	4.9	18.0	0.2	36.7	13.0
LOS	F	A	B	A	D	B
Approach Delay		13.8	15.1		31.2	
Approach LOS		B	B		C	
Queue Length 50th (ft)	~54	108	388	0	38	0
Queue Length 95th (ft)	#93	133	#621	0	63	28
Internal Link Dist (ft)		1236	450		1172	
Turn Bay Length (ft)	100				95	80
Base Capacity (vph)	93	2616	1433	1572	420	238
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.05	0.49	0.89	0.15	0.38	0.20

Intersection Summary	
Area Type:	Other
Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay: 15.6	Intersection LOS: B
Intersection Capacity Utilization 81.4%	ICU Level of Service D
Analysis Period (min) 15	

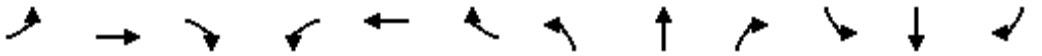
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

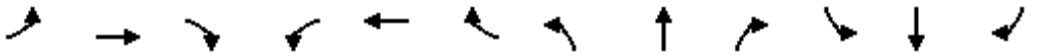
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: NY 312 & Pugsley Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	296	695	295	313	759	109	342	121	408	110	105	217
Future Volume (vph)	296	695	295	313	759	109	342	121	408	110	105	217
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	12	12
Grade (%)		1%			-1%			-2%			0%	
Storage Length (ft)	200		250	300		300	0		0	0		200
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.97	1.00	1.00	0.97	0.95	0.95	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.850		0.981				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.972		0.950		
Satd. Flow (prot)	3287	1750	1575	3320	3254	0	1580	3220	1496	1646	1827	1583
Flt Permitted	0.950			0.950			0.950	0.972		0.950		
Satd. Flow (perm)	3287	1750	1575	3320	3254	0	1580	3220	1496	1646	1827	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			254		11				256			76
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		595			1417			424			345	
Travel Time (s)		9.0			21.5			9.6			7.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	6%	8%	2%	6%	9%	12%	5%	6%	9%	6%	4%	2%
Adj. Flow (vph)	333	781	331	352	853	122	384	136	458	124	118	244
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	333	781	331	352	975	0	192	328	458	124	118	244
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	0	0	2	0		2	2	2	2	2	2
Detector Template	NYSDOT			NYSDOT			NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	83	0	0	83	0		83	83	83	83	83	83
Trailing Detector (ft)	-5	0	0	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Position(ft)	-5	0	-5	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Size(ft)	40	6	40	40	6		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43			43			43	43	43	43	43	43
Detector 2 Size(ft)	40			40			40	40	40	40	40	40
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2	3	1	6		3	3	1	4	4	5
Permitted Phases			2						3			4
Detector Phase	5	2	3	1	6		3	3	1	4	4	5
Switch Phase												
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0		5.0	5.0	3.0	5.0	5.0	3.0
Minimum Split (s)	9.0	16.0	11.0	9.0	16.0		11.0	11.0	9.0	11.0	11.0	9.0
Total Split (s)	26.0	36.0	34.0	26.0	36.0		34.0	34.0	26.0	34.0	34.0	26.0
Total Split (%)	20.0%	27.7%	26.2%	20.0%	27.7%		26.2%	26.2%	20.0%	26.2%	26.2%	20.0%
Maximum Green (s)	20.0	30.0	28.0	20.0	30.0		28.0	28.0	20.0	28.0	28.0	20.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Max	None	None	C-Max		None	None	None	None	None	None
Act Effct Green (s)	17.2	52.9	79.8	17.9	53.6		21.0	21.0	38.9	14.3	14.3	37.5
Actuated g/C Ratio	0.13	0.41	0.61	0.14	0.41		0.16	0.16	0.30	0.11	0.11	0.29
v/c Ratio	0.77	1.10	0.31	0.77	0.72		0.76	0.63	0.73	0.69	0.59	0.48
Control Delay	66.5	101.0	4.2	56.1	34.1		69.8	55.8	16.6	74.1	66.2	27.7
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.5	101.0	4.2	56.1	34.1		69.8	55.8	16.6	74.1	66.2	27.7
LOS	E	F	A	E	C		E	E	B	E	E	C
Approach Delay		70.9			39.9			40.2			48.9	
Approach LOS		E			D			D			D	
Queue Length 50th (ft)	141	~759	26	144	348		171	143	101	102	96	115
Queue Length 95th (ft)	187	#1148	76	m162	m#470		247	182	139	160	152	175
Internal Link Dist (ft)		515			1337			344			265	
Turn Bay Length (ft)	200		250	300								200
Base Capacity (vph)	505	711	1136	510	1347		340	693	646	354	393	542
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.66	1.10	0.29	0.69	0.72		0.56	0.47	0.71	0.35	0.30	0.45

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Green, Master Intersection			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.10			
Intersection Signal Delay: 51.6		Intersection LOS: D	
Intersection Capacity Utilization 82.9%		ICU Level of Service E	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.

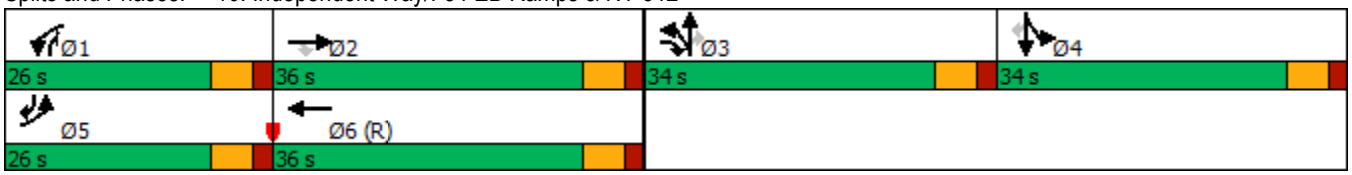
Queue shown is maximum after two cycles.

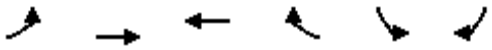
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

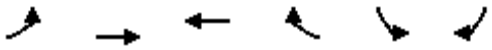
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: Independent Way/I-84 EB Ramps & NY 312





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	562	651	614	96	110	567
Future Volume (vph)	562	651	614	96	110	567
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	13	13
Grade (%)		-1%	2%		0%	
Storage Length (ft)	325			250	125	0
Storage Lanes	1			1	1	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1728	1854	1765	1454	1760	1652
Flt Permitted	0.213				0.950	
Satd. Flow (perm)	387	1854	1765	1454	1760	1652
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				22		42
Link Speed (mph)		45	45		30	
Link Distance (ft)		1417	528		436	
Travel Time (s)		21.5	8.0		9.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	5%	3%	3%	10%	6%	1%
Adj. Flow (vph)	646	748	706	110	126	652
Shared Lane Traffic (%)						
Lane Group Flow (vph)	646	748	706	110	126	652
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.06	1.01	0.96	0.96
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	0	0	0	2	2
Detector Template	NYSDOT				NYSDOTNYSDOT	
Leading Detector (ft)	83	0	0	0	83	83
Trailing Detector (ft)	-5	0	0	0	-5	-5
Detector 1 Position(ft)	-5	0	0	0	-5	-5
Detector 1 Size(ft)	40	6	6	20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43				43	43
Detector 2 Size(ft)	40				40	40
Detector 2 Type	Cl+Ex				Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0				0.0	0.0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	pm+pt	NA	NA	pm+ov	Prot	pm+ov
Protected Phases	1	6	2	3	3	1
Permitted Phases	6			2		3
Detector Phase	1	6	2	3	3	1
Switch Phase						
Minimum Initial (s)	3.0	10.0	10.0	3.0	3.0	3.0
Minimum Split (s)	9.0	16.0	16.0	9.0	9.0	9.0
Total Split (s)	15.0	40.0	25.0	25.0	25.0	15.0
Total Split (%)	23.1%	61.5%	38.5%	38.5%	38.5%	23.1%
Maximum Green (s)	9.0	34.0	19.0	19.0	19.0	9.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lag		Lead			Lag
Lead-Lag Optimize?	Yes		Yes			Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Max	C-Max	None	None	None
Act Effct Green (s)	46.1	47.3	31.1	44.0	9.1	21.9
Actuated g/C Ratio	0.71	0.73	0.48	0.68	0.14	0.34
v/c Ratio	1.40	0.55	0.84	0.11	0.51	1.12
Control Delay	210.1	7.3	29.6	3.3	32.6	95.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	210.1	7.3	29.6	3.3	32.6	95.6
LOS	F	A	C	A	C	F
Approach Delay		101.3	26.1		85.4	
Approach LOS		F	C		F	
Queue Length 50th (ft)	~534	191	246	10	47	~251
Queue Length 95th (ft)	m#568	m272	#473	22	84	#393
Internal Link Dist (ft)		1337	448		356	
Turn Bay Length (ft)	325			250	125	
Base Capacity (vph)	460	1350	845	991	514	583
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.40	0.55	0.84	0.11	0.25	1.12

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.40	
Intersection Signal Delay: 76.6	Intersection LOS: E
Intersection Capacity Utilization 84.5%	ICU Level of Service E
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.

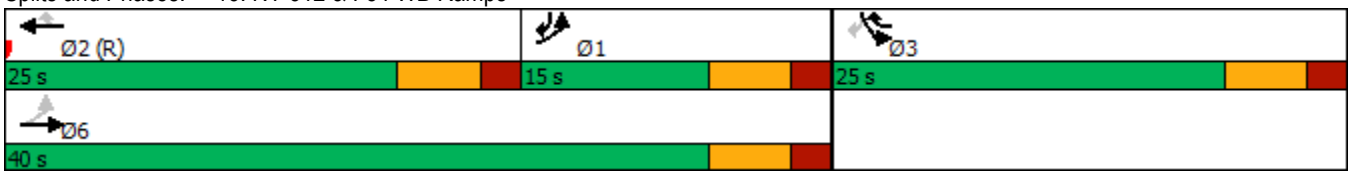
Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

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

Splits and Phases: 13: NY 312 & I-84 WB Ramps



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	420	6	8	297	6	12
Future Volume (vph)	420	6	8	297	6	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Grade (%)	3%			-7%	4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.998				0.910	
Flt Protected				0.999	0.984	
Satd. Flow (prot)	1771	0	0	1811	1525	0
Flt Permitted				0.999	0.984	
Satd. Flow (perm)	1771	0	0	1811	1525	0
Link Speed (mph)	40			40	30	
Link Distance (ft)	339			334	611	
Travel Time (s)	5.8			5.7	13.9	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	0%	0%	5%	0%	14%
Adj. Flow (vph)	477	7	9	338	7	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	484	0	0	347	21	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.00	1.00	1.03	1.03
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.5%		ICU Level of Service A	
Analysis Period (min) 15			

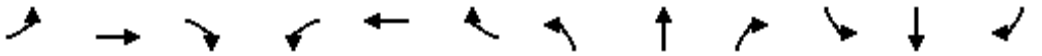
Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	420	6	8	297	6	12
Future Vol, veh/h	420	6	8	297	6	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	3	-	-	-7	4	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	0	0	5	0	14
Mvmt Flow	477	7	9	338	7	14

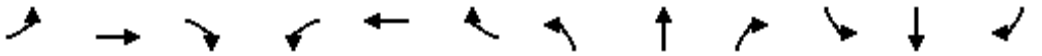
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	484	0	837	481
Stage 1	-	-	-	-	481	-
Stage 2	-	-	-	-	356	-
Critical Hdwy	-	-	4.1	-	7.2	6.74
Critical Hdwy Stg 1	-	-	-	-	6.2	-
Critical Hdwy Stg 2	-	-	-	-	6.2	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.426
Pot Cap-1 Maneuver	-	-	1089	-	282	532
Stage 1	-	-	-	-	562	-
Stage 2	-	-	-	-	659	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1089	-	279	532
Mov Cap-2 Maneuver	-	-	-	-	279	-
Stage 1	-	-	-	-	562	-
Stage 2	-	-	-	-	652	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	14.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	409	-	-	1089	-
HCM Lane V/C Ratio	0.05	-	-	0.008	-
HCM Control Delay (s)	14.3	-	-	8.3	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	15	2	142	18	958	0	259	228	896	219	7
Future Volume (vph)	7	15	2	142	18	958	0	259	228	896	219	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	12	13	11	12	12
Grade (%)		-2%			-2%			-2%			2%	
Storage Length (ft)	0		0	180		0	105		260	390		0
Storage Lanes	0		0	1		1	1		1	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.990				0.850			0.850		0.995	
Flt Protected		0.985			0.958					0.950		
Satd. Flow (prot)	0	1458	0	0	1742	1546	1855	1761	1479	1661	1722	0
Flt Permitted		0.898			0.732					0.423		
Satd. Flow (perm)	0	1330	0	0	1331	1546	1855	1761	1479	740	1722	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				380			251		2	
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		395			1214			1103			839	
Travel Time (s)		9.0			18.4			13.7			10.4	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	40%	26%	0%	2%	2%	2%	0%	9%	14%	4%	9%	0%
Adj. Flow (vph)	8	16	2	156	20	1053	0	285	251	985	241	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	0	176	1053	0	285	251	985	249	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.03	1.03	1.03	1.03	0.99	0.95	1.06	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	2	2	2	2	
Detector Template	Left	NYSDOT		Left	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	20	83		20	83	83	83	83	83	83	83	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Size(ft)	20	40		20	40	40	40	40	40	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		43			43	43	43	43	43	43	43	
Detector 2 Size(ft)		40			40	40	40	40	40	40	40	
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	



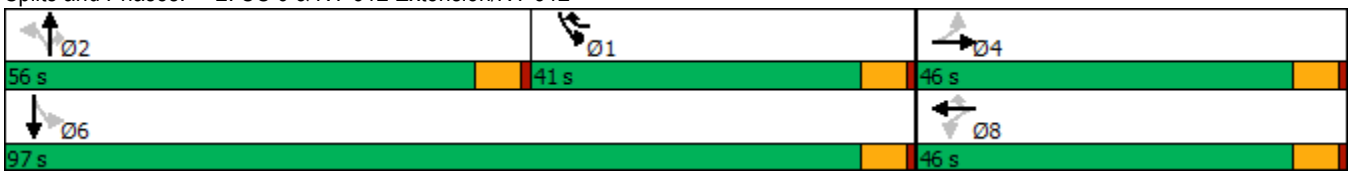
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2		2	6		
Detector Phase	4	4		8	8	1	2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	15.0	
Minimum Split (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	21.0	
Total Split (s)	46.0	46.0		46.0	46.0	41.0	56.0	56.0	56.0	41.0	97.0	
Total Split (%)	32.2%	32.2%		32.2%	32.2%	28.7%	39.2%	39.2%	39.2%	28.7%	67.8%	
Maximum Green (s)	40.0	40.0		40.0	40.0	35.0	50.0	50.0	50.0	35.0	91.0	
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0			6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag						Lag	Lead	Lead	Lead	Lag		
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	
Recall Mode	None	None		None	None	None	None	None	None	None	Min	
Act Effct Green (s)		17.9			17.9	59.6		21.0	21.0	62.7	62.7	
Actuated g/C Ratio		0.19			0.19	0.64		0.23	0.23	0.68	0.68	
v/c Ratio		0.10			0.69	0.93		0.71	0.47	1.15	0.21	
Control Delay		31.0			50.2	26.6		44.3	7.2	106.0	6.9	
Queue Delay		0.0			0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay		31.0			50.2	26.6		44.3	7.2	106.0	6.9	
LOS		C			D	C		D	A	F	A	
Approach Delay		31.0			30.0			26.9			86.0	
Approach LOS		C			C			C			F	
Queue Length 50th (ft)		11			95	338		153	0	~543	47	
Queue Length 95th (ft)		37			185	#898		266	60	#965	103	
Internal Link Dist (ft)		315			1134			1023			759	
Turn Bay Length (ft)									260	390		
Base Capacity (vph)		584			583	1128		964	923	853	1629	
Starvation Cap Reductn		0			0	0		0	0	0	0	
Spillback Cap Reductn		0			0	0		0	0	0	0	
Storage Cap Reductn		0			0	0		0	0	0	0	
Reduced v/c Ratio		0.04			0.30	0.93		0.30	0.27	1.15	0.15	

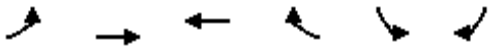
Intersection Summary			
Area Type:	Other		
Cycle Length: 143			
Actuated Cycle Length: 92.8			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.15			
Intersection Signal Delay: 52.3		Intersection LOS: D	
Intersection Capacity Utilization 93.8%		ICU Level of Service F	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

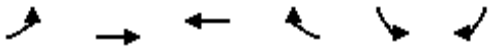
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US 6 & NY 312 Extension/NY 312





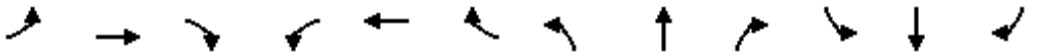
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	84	1097	1094	209	136	41
Future Volume (vph)	84	1097	1094	209	136	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	14
Grade (%)		2%	-2%		-2%	
Storage Length (ft)	100			0	0	110
Storage Lanes	1			0	2	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	0.95
Frt			0.976		0.965	
Flt Protected	0.950				0.963	
Satd. Flow (prot)	1787	3504	3559	0	3662	0
Flt Permitted	0.094				0.963	
Satd. Flow (perm)	177	3504	3559	0	3662	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			45		44	
Link Speed (mph)		45	45		30	
Link Distance (ft)		1316	530		1252	
Travel Time (s)		19.9	8.0		28.5	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	0%	2%	0%	0%	1%	0%
Adj. Flow (vph)	98	1276	1272	243	158	48
Shared Lane Traffic (%)						
Lane Group Flow (vph)	98	1276	1515	0	206	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		28	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	0.99	0.99	0.91	0.91
Turning Speed (mph)	15			9	15	9
Number of Detectors	0	0	0		2	
Detector Template					NYSDOT	
Leading Detector (ft)	0	0	0		83	
Trailing Detector (ft)	0	0	0		-5	
Detector 1 Position(ft)	0	0	0		-5	
Detector 1 Size(ft)	20	6	6		40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Detector 2 Position(ft)					43	
Detector 2 Size(ft)					40	
Detector 2 Type					Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)					0.0	



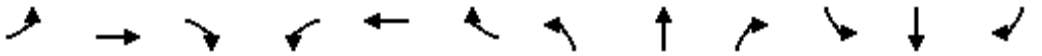
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	1	6	2		3	
Permitted Phases	6					
Detector Phase	1	6	2		3	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	
Minimum Split (s)	11.0	11.0	11.0		11.0	
Total Split (s)	11.0	62.0	51.0		18.0	
Total Split (%)	13.8%	77.5%	63.8%		22.5%	
Maximum Green (s)	5.0	56.0	45.0		12.0	
Yellow Time (s)	4.0	4.0	4.0		4.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	6.0	6.0	6.0		6.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	C-Max	C-Max		None	
Act Effct Green (s)	59.0	59.0	50.2		9.0	
Actuated g/C Ratio	0.74	0.74	0.63		0.11	
v/c Ratio	0.42	0.49	0.67		0.46	
Control Delay	9.4	5.3	12.3		28.9	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	9.4	5.3	12.3		28.9	
LOS	A	A	B		C	
Approach Delay		5.6	12.3		28.9	
Approach LOS		A	B		C	
Queue Length 50th (ft)	11	110	242		39	
Queue Length 95th (ft)	25	156	319		64	
Internal Link Dist (ft)		1236	450		1172	
Turn Bay Length (ft)	100					
Base Capacity (vph)	231	2584	2250		586	
Starvation Cap Reductn	0	0	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.42	0.49	0.67		0.35	

Intersection Summary	
Area Type:	Other
Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 10.4	Intersection LOS: B
Intersection Capacity Utilization 61.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 6: NY 312 & Pugsley Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	296	695	295	313	759	109	342	121	408	110	105	217
Future Volume (vph)	296	695	295	313	759	109	342	121	408	110	105	217
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	12	12
Grade (%)		1%			-1%			-2%			0%	
Storage Length (ft)	200		250	300		300	0		0	0		200
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.97	1.00	1.00	0.97	0.95	0.95	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.850		0.981				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.972		0.950		
Satd. Flow (prot)	3287	1750	1575	3320	3254	0	1580	3220	1496	1646	1827	1583
Flt Permitted	0.950			0.950			0.950	0.972		0.950		
Satd. Flow (perm)	3287	1750	1575	3320	3254	0	1580	3220	1496	1646	1827	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			254		11				256			76
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		595			1417			424			345	
Travel Time (s)		9.0			21.5			9.6			7.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	6%	8%	2%	6%	9%	12%	5%	6%	9%	6%	4%	2%
Adj. Flow (vph)	333	781	331	352	853	122	384	136	458	124	118	244
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	333	781	331	352	975	0	192	328	458	124	118	244
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	0	0	2	0		2	2	2	2	2	2
Detector Template	NYSDOT			NYSDOT			NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	83	0	0	83	0		83	83	83	83	83	83
Trailing Detector (ft)	-5	0	0	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Position(ft)	-5	0	-5	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Size(ft)	40	6	40	40	6		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43			43			43	43	43	43	43	43
Detector 2 Size(ft)	40			40			40	40	40	40	40	40
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2	3	1	6		3	3	1	4	4	5
Permitted Phases			2						3			4
Detector Phase	5	2	3	1	6		3	3	1	4	4	5
Switch Phase												
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0		5.0	5.0	3.0	5.0	5.0	3.0
Minimum Split (s)	9.0	16.0	11.0	9.0	16.0		11.0	11.0	9.0	11.0	11.0	9.0
Total Split (s)	26.0	36.0	34.0	26.0	36.0		34.0	34.0	26.0	34.0	34.0	26.0
Total Split (%)	20.0%	27.7%	26.2%	20.0%	27.7%		26.2%	26.2%	20.0%	26.2%	26.2%	20.0%
Maximum Green (s)	20.0	30.0	28.0	20.0	30.0		28.0	28.0	20.0	28.0	28.0	20.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Max	None	None	C-Max		None	None	None	None	None	None
Act Effct Green (s)	17.2	52.9	79.8	17.9	53.6		21.0	21.0	38.9	14.3	14.3	37.5
Actuated g/C Ratio	0.13	0.41	0.61	0.14	0.41		0.16	0.16	0.30	0.11	0.11	0.29
v/c Ratio	0.77	1.10	0.31	0.77	0.72		0.76	0.63	0.73	0.69	0.59	0.48
Control Delay	66.5	101.0	4.2	56.1	34.1		69.8	55.8	16.6	74.1	66.2	27.7
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.5	101.0	4.2	56.1	34.1		69.8	55.8	16.6	74.1	66.2	27.7
LOS	E	F	A	E	C		E	E	B	E	E	C
Approach Delay		70.9			39.9			40.2			48.9	
Approach LOS		E			D			D			D	
Queue Length 50th (ft)	141	~759	26	144	348		171	143	101	102	96	115
Queue Length 95th (ft)	187	#1148	76	m162	m#470		247	182	139	160	152	175
Internal Link Dist (ft)		515			1337			344			265	
Turn Bay Length (ft)	200		250	300								200
Base Capacity (vph)	505	711	1136	510	1347		340	693	646	354	393	542
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.66	1.10	0.29	0.69	0.72		0.56	0.47	0.71	0.35	0.30	0.45

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Green, Master Intersection			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.10			
Intersection Signal Delay: 51.6		Intersection LOS: D	
Intersection Capacity Utilization 82.9%		ICU Level of Service E	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.

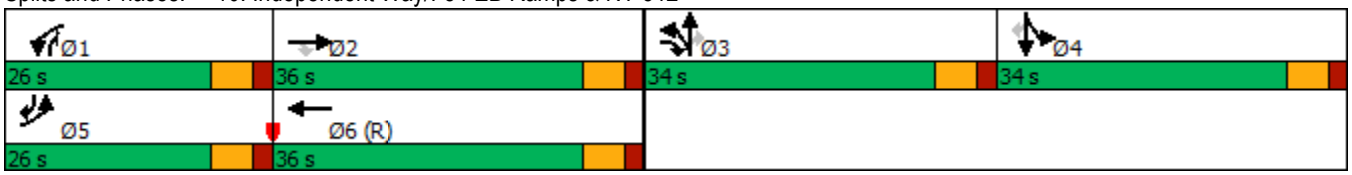
Queue shown is maximum after two cycles.

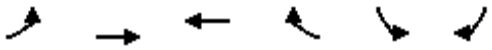
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

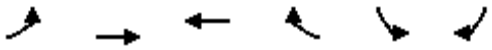
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: Independent Way/I-84 EB Ramps & NY 312





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	562	651	614	96	110	567
Future Volume (vph)	562	651	614	96	110	567
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	13	13
Grade (%)		-1%	2%		0%	
Storage Length (ft)	325			250	125	0
Storage Lanes	1			1	1	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1728	1854	1765	1454	1760	1652
Flt Permitted	0.213				0.950	
Satd. Flow (perm)	387	1854	1765	1454	1760	1652
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				22		42
Link Speed (mph)		45	45		30	
Link Distance (ft)		1417	528		436	
Travel Time (s)		21.5	8.0		9.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	5%	3%	3%	10%	6%	1%
Adj. Flow (vph)	646	748	706	110	126	652
Shared Lane Traffic (%)						
Lane Group Flow (vph)	646	748	706	110	126	652
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.06	1.01	0.96	0.96
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	0	0	0	2	2
Detector Template	NYSDOT				NYSDOTNYSDOT	
Leading Detector (ft)	83	0	0	0	83	83
Trailing Detector (ft)	-5	0	0	0	-5	-5
Detector 1 Position(ft)	-5	0	0	0	-5	-5
Detector 1 Size(ft)	40	6	6	20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43				43	43
Detector 2 Size(ft)	40				40	40
Detector 2 Type	Cl+Ex				Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0				0.0	0.0



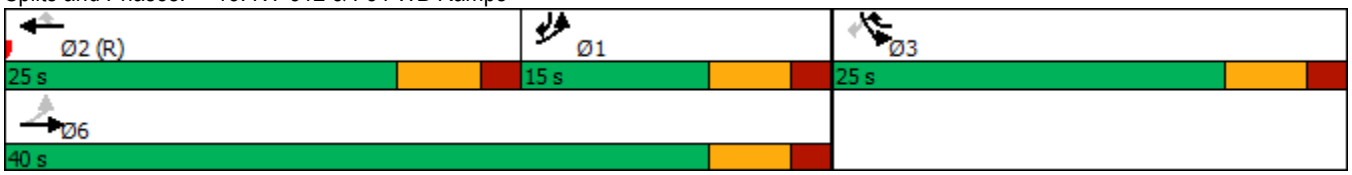
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	pm+pt	NA	NA	pm+ov	Prot	pm+ov
Protected Phases	1	6	2	3	3	1
Permitted Phases	6			2		3
Detector Phase	1	6	2	3	3	1
Switch Phase						
Minimum Initial (s)	3.0	10.0	10.0	3.0	3.0	3.0
Minimum Split (s)	9.0	16.0	16.0	9.0	9.0	9.0
Total Split (s)	15.0	40.0	25.0	25.0	25.0	15.0
Total Split (%)	23.1%	61.5%	38.5%	38.5%	38.5%	23.1%
Maximum Green (s)	9.0	34.0	19.0	19.0	19.0	9.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lag		Lead			Lag
Lead-Lag Optimize?	Yes		Yes			Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Max	C-Max	None	None	None
Act Effct Green (s)	46.1	47.3	31.1	44.0	9.1	21.9
Actuated g/C Ratio	0.71	0.73	0.48	0.68	0.14	0.34
v/c Ratio	1.40	0.55	0.84	0.11	0.51	1.12
Control Delay	210.1	7.3	29.6	3.3	32.6	95.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	210.1	7.3	29.6	3.3	32.6	95.6
LOS	F	A	C	A	C	F
Approach Delay		101.3	26.1		85.4	
Approach LOS		F	C		F	
Queue Length 50th (ft)	~534	191	246	10	47	~251
Queue Length 95th (ft)	m#568	m272	#473	22	84	#393
Internal Link Dist (ft)		1337	448		356	
Turn Bay Length (ft)	325			250	125	
Base Capacity (vph)	460	1350	845	991	514	583
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.40	0.55	0.84	0.11	0.25	1.12

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.40	
Intersection Signal Delay: 76.6	Intersection LOS: E
Intersection Capacity Utilization 84.5%	ICU Level of Service E
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 13: NY 312 & I-84 WB Ramps



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	420	6	8	297	6	12
Future Volume (vph)	420	6	8	297	6	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Grade (%)	3%			-7%	4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.998				0.910	
Flt Protected				0.999	0.984	
Satd. Flow (prot)	1771	0	0	1811	1525	0
Flt Permitted				0.999	0.984	
Satd. Flow (perm)	1771	0	0	1811	1525	0
Link Speed (mph)	40			40	30	
Link Distance (ft)	339			334	611	
Travel Time (s)	5.8			5.7	13.9	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	0%	0%	5%	0%	14%
Adj. Flow (vph)	477	7	9	338	7	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	484	0	0	347	21	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.00	1.00	1.03	1.03
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.5%		ICU Level of Service A	
Analysis Period (min) 15			

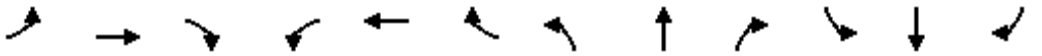
Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	420	6	8	297	6	12
Future Vol, veh/h	420	6	8	297	6	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	3	-	-	-7	4	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	0	0	5	0	14
Mvmt Flow	477	7	9	338	7	14

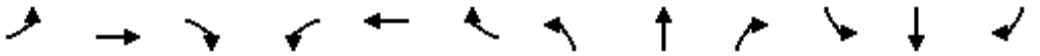
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	484	0	837	481
Stage 1	-	-	-	-	481	-
Stage 2	-	-	-	-	356	-
Critical Hdwy	-	-	4.1	-	7.2	6.74
Critical Hdwy Stg 1	-	-	-	-	6.2	-
Critical Hdwy Stg 2	-	-	-	-	6.2	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.426
Pot Cap-1 Maneuver	-	-	1089	-	282	532
Stage 1	-	-	-	-	562	-
Stage 2	-	-	-	-	659	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1089	-	279	532
Mov Cap-2 Maneuver	-	-	-	-	279	-
Stage 1	-	-	-	-	562	-
Stage 2	-	-	-	-	652	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	14.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	409	-	-	1089	-
HCM Lane V/C Ratio	0.05	-	-	0.008	-
HCM Control Delay (s)	14.3	-	-	8.3	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	15	2	142	18	958	0	259	228	896	219	7
Future Volume (vph)	7	15	2	142	18	958	0	259	228	896	219	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	12	13	11	12	12
Grade (%)		-2%			-2%			-2%			2%	
Storage Length (ft)	0		0	180		0	105		260	390		0
Storage Lanes	0		0	1		1	1		1	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.990				0.850			0.850		0.995	
Flt Protected		0.985			0.958					0.950		
Satd. Flow (prot)	0	1458	0	0	1742	1546	1855	1761	1479	1661	1722	0
Flt Permitted		0.886			0.732					0.379		
Satd. Flow (perm)	0	1312	0	0	1331	1546	1855	1761	1479	663	1722	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				132			251		4	
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		395			1214			1103			839	
Travel Time (s)		9.0			18.4			13.7			10.4	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	40%	26%	0%	2%	2%	2%	0%	9%	14%	4%	9%	0%
Adj. Flow (vph)	8	16	2	156	20	1053	0	285	251	985	241	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	0	176	1053	0	285	251	985	249	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.03	1.03	1.03	1.03	0.99	0.95	1.06	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	2	2	2	2	
Detector Template	Left	NYSDOT		Left	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	20	83		20	83	83	83	83	83	83	83	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Size(ft)	20	40		20	40	40	40	40	40	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		43			43	43	43	43	43	43	43	
Detector 2 Size(ft)		40			40	40	40	40	40	40	40	
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	



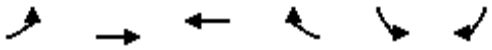
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2		2	6		
Detector Phase	4	4		8	8	1	2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	15.0	
Minimum Split (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	21.0	
Total Split (s)	22.0	22.0		22.0	22.0	46.0	22.0	22.0	22.0	46.0	68.0	
Total Split (%)	24.4%	24.4%		24.4%	24.4%	51.1%	24.4%	24.4%	24.4%	51.1%	75.6%	
Maximum Green (s)	16.0	16.0		16.0	16.0	40.0	16.0	16.0	16.0	40.0	62.0	
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0			6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag						Lag	Lead	Lead	Lead	Lag		
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	
Recall Mode	None	None		None	None	None	None	None	None	None	Min	
Act Effct Green (s)		14.6			14.6	60.7		15.8	15.8	61.9	61.9	
Actuated g/C Ratio		0.16			0.16	0.69		0.18	0.18	0.70	0.70	
v/c Ratio		0.12			0.80	0.96		0.90	0.53	1.08	0.21	
Control Delay		31.0			63.1	31.5		69.4	9.1	74.0	5.3	
Queue Delay		0.0			0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay		31.0			63.1	31.5		69.4	9.1	74.0	5.3	
LOS		C			E	C		E	A	E	A	
Approach Delay		31.0			36.0			41.2			60.1	
Approach LOS		C			D			D			E	
Queue Length 50th (ft)		12			96	425		161	0	~540	44	
Queue Length 95th (ft)		34			#197	#814		#309	64	#780	72	
Internal Link Dist (ft)		315			1134			1023			759	
Turn Bay Length (ft)									260	390		
Base Capacity (vph)		239			240	1101		319	473	915	1209	
Starvation Cap Reductn		0			0	0		0	0	0	0	
Spillback Cap Reductn		0			0	0		0	0	0	0	
Storage Cap Reductn		0			0	0		0	0	0	0	
Reduced v/c Ratio		0.11			0.73	0.96		0.89	0.53	1.08	0.21	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 88.5			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay: 46.7		Intersection LOS: D	
Intersection Capacity Utilization 93.8%		ICU Level of Service F	
Analysis Period (min) 15			

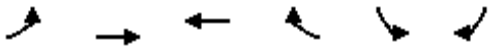
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US 6 & NY 312 Extension/NY 312



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	84	1097	1094	209	136	41
Future Volume (vph)	84	1097	1094	209	136	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	14
Grade (%)		2%	-2%		-2%	
Storage Length (ft)	100			0	95	80
Storage Lanes	1			1	1	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1787	3504	1919	1631	3735	1740
Flt Permitted	0.092				0.950	
Satd. Flow (perm)	173	3504	1919	1631	3735	1740
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						48
Link Speed (mph)		45	45		30	
Link Distance (ft)		1316	530		1252	
Travel Time (s)		19.9	8.0		28.5	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	0%	2%	0%	0%	1%	0%
Adj. Flow (vph)	98	1276	1272	243	158	48
Shared Lane Traffic (%)						
Lane Group Flow (vph)	98	1276	1272	243	158	48
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		28	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	0.99	0.99	0.91	0.91
Turning Speed (mph)	15			9	15	9
Number of Detectors	0	0	0	0	2	2
Detector Template					NYSDOT	NYSDOT
Leading Detector (ft)	0	0	0	0	83	83
Trailing Detector (ft)	0	0	0	0	-5	-5
Detector 1 Position(ft)	0	0	0	0	-5	-5
Detector 1 Size(ft)	20	6	6	20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)					43	43
Detector 2 Size(ft)					40	40
Detector 2 Type					Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)					0.0	0.0



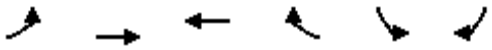
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	Perm	NA	NA	pm+ov	Prot	Perm
Protected Phases		6	2	3	3	
Permitted Phases	6			2		3
Detector Phase	6	6	2	3	3	3
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	64.0	64.0	64.0	11.0	11.0	11.0
Total Split (%)	85.3%	85.3%	85.3%	14.7%	14.7%	14.7%
Maximum Green (s)	58.0	58.0	58.0	5.0	5.0	5.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	C-Max	None	None	None
Act Effct Green (s)	58.0	58.0	58.0	75.0	5.0	5.0
Actuated g/C Ratio	0.77	0.77	0.77	1.00	0.07	0.07
v/c Ratio	0.74	0.47	0.86	0.15	0.63	0.30
Control Delay	42.6	3.7	13.7	0.2	46.8	16.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.6	3.7	13.7	0.2	46.8	16.3
LOS	D	A	B	A	D	B
Approach Delay		6.5	11.5		39.7	
Approach LOS		A	B		D	
Queue Length 50th (ft)	17	81	289	0	37	0
Queue Length 95th (ft)	#49	98	447	0	#68	28
Internal Link Dist (ft)		1236	450		1172	
Turn Bay Length (ft)	100				95	80
Base Capacity (vph)	133	2709	1484	1631	249	160
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.47	0.86	0.15	0.63	0.30

Intersection Summary	
Area Type:	Other
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 11.2	Intersection LOS: B
Intersection Capacity Utilization 81.4%	ICU Level of Service D
Analysis Period (min) 15	

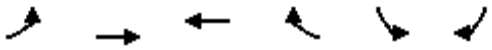
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: NY 312 & Pugsley Rd



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	562	651	614	96	110	567
Future Volume (vph)	562	651	614	96	110	567
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	13	13
Grade (%)		-1%	2%		0%	
Storage Length (ft)	325			250	125	0
Storage Lanes	1			1	1	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1728	1854	1765	1454	1760	1652
Flt Permitted	0.190				0.950	
Satd. Flow (perm)	346	1854	1765	1454	1760	1652
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				77		134
Link Speed (mph)		45	45		30	
Link Distance (ft)		1417	528		436	
Travel Time (s)		21.5	8.0		9.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	5%	3%	3%	10%	6%	1%
Adj. Flow (vph)	646	748	706	110	126	652
Shared Lane Traffic (%)						
Lane Group Flow (vph)	646	748	706	110	126	652
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.06	1.01	0.96	0.96
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	0	0	0	2	2
Detector Template	NYSDOT				NYSDOTNYSDOT	
Leading Detector (ft)	83	0	0	0	83	83
Trailing Detector (ft)	-5	0	0	0	-5	-5
Detector 1 Position(ft)	-5	0	0	0	-5	-5
Detector 1 Size(ft)	40	6	6	20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43				43	43
Detector 2 Size(ft)	40				40	40
Detector 2 Type	Cl+Ex				Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0				0.0	0.0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	pm+pt	NA	NA	pm+ov	Prot	pm+ov
Protected Phases	1	6	2	3	3	1
Permitted Phases	6			2		3
Detector Phase	1	6	2	3	3	1
Switch Phase						
Minimum Initial (s)	3.0	10.0	10.0	3.0	3.0	3.0
Minimum Split (s)	9.0	16.0	16.0	9.0	9.0	9.0
Total Split (s)	26.0	72.0	46.0	18.0	18.0	26.0
Total Split (%)	28.9%	80.0%	51.1%	20.0%	20.0%	28.9%
Maximum Green (s)	20.0	66.0	40.0	12.0	12.0	20.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lag		Lead			Lag
Lead-Lag Optimize?	Yes		Yes			Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Max	C-Max	None	None	None
Act Effct Green (s)	68.0	68.0	42.0	58.0	10.0	36.0
Actuated g/C Ratio	0.76	0.76	0.47	0.64	0.11	0.40
v/c Ratio	1.14	0.53	0.86	0.11	0.64	0.88
Control Delay	107.5	6.5	34.7	2.7	53.1	34.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	107.5	6.5	34.7	2.7	53.1	34.5
LOS	F	A	C	A	D	C
Approach Delay		53.3	30.4		37.5	
Approach LOS		D	C		D	
Queue Length 50th (ft)	~323	147	350	6	69	271
Queue Length 95th (ft)	#507	219	#552	22	120	#444
Internal Link Dist (ft)		1337	448		356	
Turn Bay Length (ft)	325			250	125	
Base Capacity (vph)	568	1400	823	939	234	741
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.14	0.53	0.86	0.12	0.54	0.88

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.14	
Intersection Signal Delay: 42.9	Intersection LOS: D
Intersection Capacity Utilization 84.5%	ICU Level of Service E
Analysis Period (min) 15	

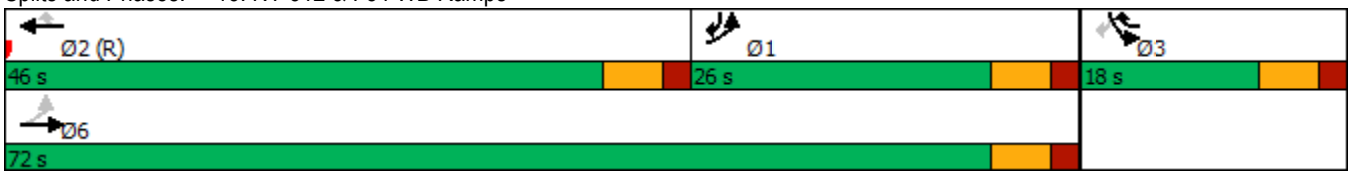
~ Volume exceeds capacity, queue is theoretically infinite.

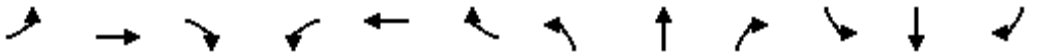
Queue shown is maximum after two cycles.

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

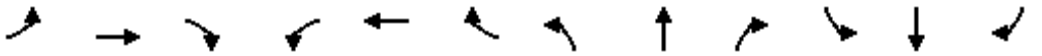
Queue shown is maximum after two cycles.

Splits and Phases: 13: NY 312 & I-84 WB Ramps





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	34	2	184	8	773	6	204	176	784	230	16
Future Volume (vph)	25	34	2	184	8	773	6	204	176	784	230	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	12	13	11	12	12
Grade (%)		-2%			-2%			-2%			2%	
Storage Length (ft)	0		0	180		0	105		260	390		0
Storage Lanes	0		0	1		1	1		1	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996				0.850			0.850		0.990	
Flt Protected		0.980			0.954		0.950			0.950		
Satd. Flow (prot)	0	1431	0	0	1735	1546	1762	1761	1479	1661	1718	0
Flt Permitted		0.821			0.687		0.593			0.501		
Satd. Flow (perm)	0	1198	0	0	1249	1546	1100	1761	1479	876	1718	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1				478			193		5	
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		395			1214			1103			839	
Travel Time (s)		9.0			18.4			13.7			10.4	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	40%	26%	0%	2%	2%	2%	0%	9%	14%	4%	9%	0%
Adj. Flow (vph)	27	37	2	202	9	849	7	224	193	862	253	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	66	0	0	211	849	7	224	193	862	271	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.03	1.03	1.03	1.03	0.99	0.95	1.06	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	2	2	2	2	
Detector Template	Left	NYSDOT		Left	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	20	83		20	83	83	83	83	83	83	83	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Size(ft)	20	40		20	40	40	40	40	40	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		43			43	43	43	43	43	43	43	
Detector 2 Size(ft)		40			40	40	40	40	40	40	40	
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	

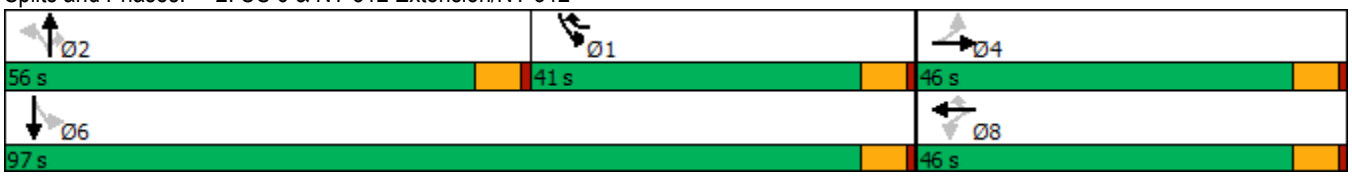


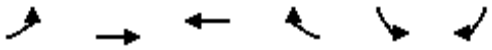
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2		2	6		
Detector Phase	4	4		8	8	1	2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	15.0	
Minimum Split (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	21.0	
Total Split (s)	46.0	46.0		46.0	46.0	41.0	56.0	56.0	56.0	41.0	97.0	
Total Split (%)	32.2%	32.2%		32.2%	32.2%	28.7%	39.2%	39.2%	39.2%	28.7%	67.8%	
Maximum Green (s)	40.0	40.0		40.0	40.0	35.0	50.0	50.0	50.0	35.0	91.0	
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0			6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag						Lag	Lead	Lead	Lead	Lag		
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	
Recall Mode	None	None		None	None	None	None	None	None	None	Min	
Act Effct Green (s)		20.4			20.4	62.0	17.8	17.8	17.8	59.5	59.5	
Actuated g/C Ratio		0.22			0.22	0.67	0.19	0.19	0.19	0.65	0.65	
v/c Ratio		0.25			0.77	0.71	0.03	0.66	0.44	0.99	0.24	
Control Delay		32.3			52.9	7.9	31.8	44.8	8.3	51.8	8.2	
Queue Delay		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		32.3			52.9	7.9	31.8	44.8	8.3	51.8	8.2	
LOS		C			D	A	C	D	A	D	A	
Approach Delay		32.3			16.8			28.0			41.4	
Approach LOS		C			B			C			D	
Queue Length 50th (ft)		31			114	90	3	120	0	325	57	
Queue Length 95th (ft)		73			215	297	16	219	57	#746	125	
Internal Link Dist (ft)		315			1134			1023			759	
Turn Bay Length (ft)							105		260	390		
Base Capacity (vph)		529			551	1197	607	972	903	869	1632	
Starvation Cap Reductn		0			0	0	0	0	0	0	0	
Spillback Cap Reductn		0			0	0	0	0	0	0	0	
Storage Cap Reductn		0			0	0	0	0	0	0	0	
Reduced v/c Ratio		0.12			0.38	0.71	0.01	0.23	0.21	0.99	0.17	

Intersection Summary			
Area Type:	Other		
Cycle Length: 143			
Actuated Cycle Length: 92.1			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay: 29.3		Intersection LOS: C	
Intersection Capacity Utilization 86.5%		ICU Level of Service E	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

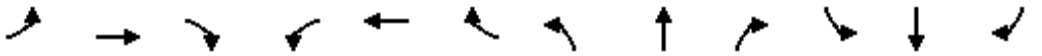
Splits and Phases: 2: US 6 & NY 312 Extension/NY 312



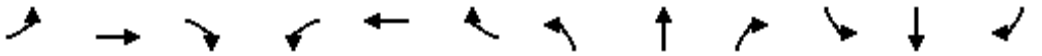


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1021	980	4	6	0
Future Volume (vph)	0	1021	980	4	6	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	9	9
Grade (%)		2%	-2%		-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.999			
Flt Protected					0.950	
Satd. Flow (prot)	0	1844	1896	0	1402	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	1844	1896	0	1402	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		1316	530		1252	
Travel Time (s)		19.9	8.0		28.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	2%	1%	25%	17%	0%
Adj. Flow (vph)	0	1064	1021	4	6	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1064	1025	0	6	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		9	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	0.99	0.99	1.13	1.13
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	63.7%	ICU Level of Service	B
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	332	296	433	510	489	101	380	221	405	69	211	116
Future Volume (vph)	332	296	433	510	489	101	380	221	405	69	211	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	12	12
Grade (%)		1%			-1%			-2%			0%	
Storage Length (ft)	200		250	300		300	0		0	0		200
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.97	1.00	1.00	0.97	0.95	0.95	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.850		0.974				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.978		0.950		
Satd. Flow (prot)	3287	1750	1575	3320	3227	0	1580	3236	1496	1646	1827	1583
Flt Permitted	0.950			0.950			0.950	0.978		0.950		
Satd. Flow (perm)	3287	1750	1575	3320	3227	0	1580	3236	1496	1646	1827	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			172		15				436			82
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		595			1417			424			345	
Travel Time (s)		9.0			21.5			9.6			7.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	6%	8%	2%	6%	9%	12%	5%	6%	9%	6%	4%	2%
Adj. Flow (vph)	373	333	487	573	549	113	427	248	455	78	237	130
Shared Lane Traffic (%)							48%					
Lane Group Flow (vph)	373	333	487	573	662	0	222	453	455	78	237	130
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	0	0	2	0		2	2	2	2	2	2
Detector Template	NYSDOT			NYSDOT			NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	83	0	0	83	0		83	83	83	83	83	83
Trailing Detector (ft)	-5	0	0	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Position(ft)	-5	0	-5	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Size(ft)	40	6	40	40	6		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43			43			43	43	43	43	43	43
Detector 2 Size(ft)	40			40			40	40	40	40	40	40
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0



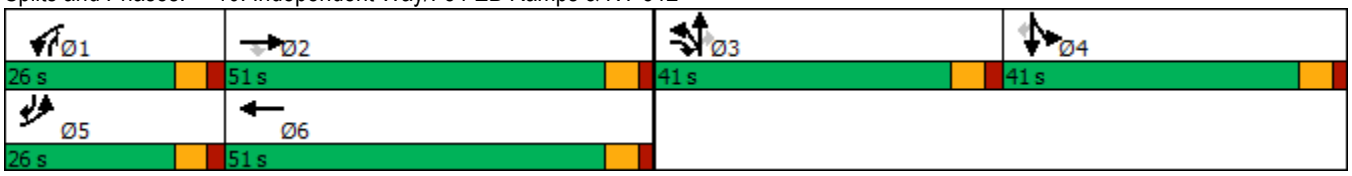
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2	3	1	6		3	3	1	4	4	5
Permitted Phases			2						3			4
Detector Phase	5	2	3	1	6		3	3	1	4	4	5
Switch Phase												
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0		5.0	5.0	3.0	5.0	5.0	3.0
Minimum Split (s)	9.0	16.0	11.0	9.0	16.0		11.0	11.0	9.0	11.0	11.0	9.0
Total Split (s)	26.0	51.0	41.0	26.0	51.0		41.0	41.0	26.0	41.0	41.0	26.0
Total Split (%)	16.4%	32.1%	25.8%	16.4%	32.1%		25.8%	25.8%	16.4%	25.8%	25.8%	16.4%
Maximum Green (s)	20.0	45.0	35.0	20.0	45.0		35.0	35.0	20.0	35.0	35.0	20.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	None	None	Min		None	None	None	None	None	None
Act Effct Green (s)	18.4	28.4	59.2	20.8	30.9		24.6	24.6	45.4	21.0	21.0	45.6
Actuated g/C Ratio	0.15	0.24	0.49	0.17	0.26		0.21	0.21	0.38	0.18	0.18	0.38
v/c Ratio	0.74	0.80	0.56	0.99	0.79		0.69	0.68	0.54	0.27	0.74	0.20
Control Delay	60.7	59.6	15.5	86.8	49.4		58.1	51.2	4.4	48.8	63.7	12.5
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.7	59.6	15.5	86.8	49.4		58.1	51.2	4.4	48.8	63.7	12.5
LOS	E	E	B	F	D		E	D	A	D	E	B
Approach Delay		42.0			66.7			33.7			46.1	
Approach LOS		D			E			C			D	
Queue Length 50th (ft)	139	238	156	~239	247		173	176	5	52	173	23
Queue Length 95th (ft)	#275	410	286	#500	381		325	289	44	116	313	78
Internal Link Dist (ft)		515			1337			344			265	
Turn Bay Length (ft)	200		250	300								200
Base Capacity (vph)	571	684	1004	576	1270		480	984	837	500	555	684
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.49	0.49	0.99	0.52		0.46	0.46	0.54	0.16	0.43	0.19

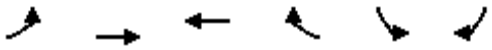
Intersection Summary			
Area Type:	Other		
Cycle Length: 159			
Actuated Cycle Length: 119.7			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay: 47.7		Intersection LOS: D	
Intersection Capacity Utilization 72.7%		ICU Level of Service C	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

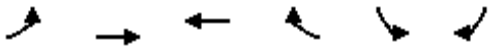
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: Independent Way/I-84 EB Ramps & NY 312





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	285	484	584	105	50	516
Future Volume (vph)	285	484	584	105	50	516
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	13	13
Grade (%)		-1%	2%		0%	
Storage Length (ft)	325			250	125	0
Storage Lanes	1			1	1	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1728	1854	1765	1454	1760	1652
Flt Permitted	0.152				0.950	
Satd. Flow (perm)	276	1854	1765	1454	1760	1652
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				117		40
Link Speed (mph)		45	45		30	
Link Distance (ft)		1417	528		436	
Travel Time (s)		21.5	8.0		9.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	5%	3%	3%	10%	6%	1%
Adj. Flow (vph)	328	556	671	121	57	593
Shared Lane Traffic (%)						
Lane Group Flow (vph)	328	556	671	121	57	593
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.06	1.01	0.96	0.96
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	0	0	0	2	2
Detector Template	NYSDOT				NYSDOT	NYSDOT
Leading Detector (ft)	83	0	0	0	83	83
Trailing Detector (ft)	-5	0	0	0	-5	-5
Detector 1 Position(ft)	-5	0	0	0	-5	-5
Detector 1 Size(ft)	40	6	6	20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43				43	43
Detector 2 Size(ft)	40				40	40
Detector 2 Type	Cl+Ex				Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0				0.0	0.0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	pm+pt	NA	NA	pm+ov	Prot	pm+ov
Protected Phases	1	6	2	3	3	1
Permitted Phases	6			2		3
Detector Phase	1	6	2	3	3	1
Switch Phase						
Minimum Initial (s)	3.0	10.0	10.0	3.0	3.0	3.0
Minimum Split (s)	9.0	16.0	16.0	9.0	9.0	9.0
Total Split (s)	16.0	42.0	26.0	31.0	31.0	16.0
Total Split (%)	21.9%	57.5%	35.6%	42.5%	42.5%	21.9%
Maximum Green (s)	10.0	36.0	20.0	25.0	25.0	10.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead		Lag			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	Min	None	None	None
Act Effct Green (s)	36.4	37.9	20.2	32.6	6.3	19.8
Actuated g/C Ratio	0.70	0.73	0.39	0.62	0.12	0.38
v/c Ratio	0.69	0.41	0.98	0.13	0.27	0.91
Control Delay	18.7	5.6	52.4	1.6	25.1	34.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.7	5.6	52.4	1.6	25.1	34.4
LOS	B	A	D	A	C	C
Approach Delay		10.4	44.6		33.6	
Approach LOS		B	D		C	
Queue Length 50th (ft)	46	67	~223	1	17	154
Queue Length 95th (ft)	#152	127	#413	14	43	#303
Internal Link Dist (ft)		1337	448		356	
Turn Bay Length (ft)	325			250	125	
Base Capacity (vph)	473	1346	683	1380	852	652
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.41	0.98	0.09	0.07	0.91

Intersection Summary			
Area Type:	Other		
Cycle Length: 73			
Actuated Cycle Length: 52.2			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 28.6		Intersection LOS: C	
Intersection Capacity Utilization 72.7%		ICU Level of Service C	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: NY 312 & I-84 WB Ramps

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	251	1	3	212	4	1
Future Volume (vph)	251	1	3	212	4	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Grade (%)	3%			-7%	4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.977	
Flt Protected				0.999	0.960	
Satd. Flow (prot)	1774	0	0	1810	1746	0
Flt Permitted				0.999	0.960	
Satd. Flow (perm)	1774	0	0	1810	1746	0
Link Speed (mph)	40			40	30	
Link Distance (ft)	339			334	611	
Travel Time (s)	5.8			5.7	13.9	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	0%	0%	5%	0%	0%
Adj. Flow (vph)	285	1	3	241	5	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	286	0	0	244	6	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.00	1.00	1.03	1.03
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	23.6%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1021	980	4	6	0
Future Vol, veh/h	0	1021	980	4	6	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	2	-2	-	-2	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	2	1	25	17	0
Mvmt Flow	0	1064	1021	4	6	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1025	0	-	0	2087	1023
Stage 1	-	-	-	-	1023	-
Stage 2	-	-	-	-	1064	-
Critical Hdwy	4.1	-	-	-	6.17	6
Critical Hdwy Stg 1	-	-	-	-	5.17	-
Critical Hdwy Stg 2	-	-	-	-	5.17	-
Follow-up Hdwy	2.2	-	-	-	3.653	3.3
Pot Cap-1 Maneuver	685	-	-	-	66	306
Stage 1	-	-	-	-	365	-
Stage 2	-	-	-	-	350	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	685	-	-	-	66	306
Mov Cap-2 Maneuver	-	-	-	-	66	-
Stage 1	-	-	-	-	365	-
Stage 2	-	-	-	-	350	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	65.2
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	685	-	-	-	66
HCM Lane V/C Ratio	-	-	-	-	0.095
HCM Control Delay (s)	0	-	-	-	65.2
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Intersection	
Int Delay, s/veh	0.2

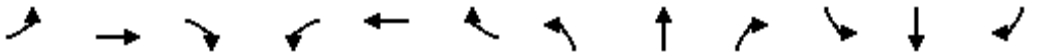
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	251	1	3	212	4	1
Future Vol, veh/h	251	1	3	212	4	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	3	-	-	-7	4	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	0	0	5	0	0
Mvmt Flow	285	1	3	241	5	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	286	0	533	286
Stage 1	-	-	-	-	286	-
Stage 2	-	-	-	-	247	-
Critical Hdwy	-	-	4.1	-	7.2	6.6
Critical Hdwy Stg 1	-	-	-	-	6.2	-
Critical Hdwy Stg 2	-	-	-	-	6.2	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1288	-	454	734
Stage 1	-	-	-	-	720	-
Stage 2	-	-	-	-	756	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1288	-	453	734
Mov Cap-2 Maneuver	-	-	-	-	453	-
Stage 1	-	-	-	-	720	-
Stage 2	-	-	-	-	754	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	12.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	491	-	-	1288	-
HCM Lane V/C Ratio	0.012	-	-	0.003	-
HCM Control Delay (s)	12.4	-	-	7.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	35	2	191	8	847	6	208	182	858	223	16
Future Volume (vph)	25	35	2	191	8	847	6	208	182	858	223	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	12	13	11	12	12
Grade (%)		-2%			-2%			-2%			2%	
Storage Length (ft)	0		0	180		0	105		260	390		0
Storage Lanes	0		0	1		1	1		1	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996				0.850			0.850		0.990	
Flt Protected		0.980			0.954		0.950			0.950		
Satd. Flow (prot)	0	1431	0	0	1735	1546	1762	1761	1479	1661	1718	0
Flt Permitted		0.822			0.686		0.597			0.491		
Satd. Flow (perm)	0	1201	0	0	1248	1546	1107	1761	1479	858	1718	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1				469			200		5	
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		395			1214			1103			839	
Travel Time (s)		9.0			18.4			13.7			10.4	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	40%	26%	0%	2%	2%	2%	0%	9%	14%	4%	9%	0%
Adj. Flow (vph)	27	38	2	210	9	931	7	229	200	943	245	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	67	0	0	219	931	7	229	200	943	263	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.03	1.03	1.03	1.03	0.99	0.95	1.06	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	2	2	2	2	
Detector Template	Left	NYSDOT		Left	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	20	83		20	83	83	83	83	83	83	83	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Size(ft)	20	40		20	40	40	40	40	40	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		43			43	43	43	43	43	43	43	
Detector 2 Size(ft)		40			40	40	40	40	40	40	40	
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	



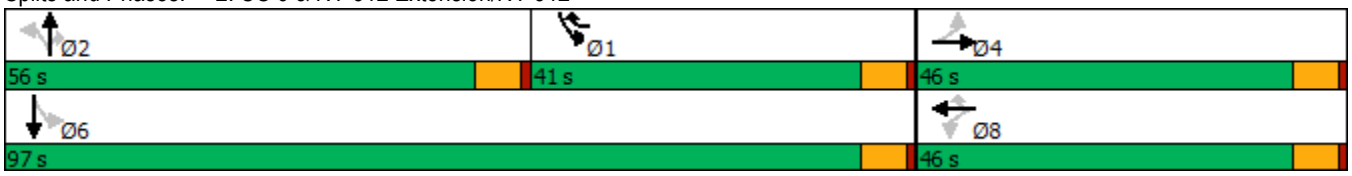
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2		2	6		
Detector Phase	4	4		8	8	1	2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	15.0	
Minimum Split (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	21.0	
Total Split (s)	46.0	46.0		46.0	46.0	41.0	56.0	56.0	56.0	41.0	97.0	
Total Split (%)	32.2%	32.2%		32.2%	32.2%	28.7%	39.2%	39.2%	39.2%	28.7%	67.8%	
Maximum Green (s)	40.0	40.0		40.0	40.0	35.0	50.0	50.0	50.0	35.0	91.0	
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0			6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag						Lag	Lead	Lead	Lead	Lag		
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	
Recall Mode	None	None		None	None	None	None	None	None	None	Min	
Act Effct Green (s)		21.2			21.2	62.9	18.3	18.3	18.3	60.0	60.0	
Actuated g/C Ratio		0.23			0.23	0.67	0.20	0.20	0.20	0.64	0.64	
v/c Ratio		0.25			0.77	0.78	0.03	0.66	0.44	1.10	0.24	
Control Delay		32.2			53.4	10.9	32.2	45.4	8.3	85.8	8.4	
Queue Delay		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		32.2			53.4	10.9	32.2	45.4	8.3	85.8	8.4	
LOS		C			D	B	C	D	A	F	A	
Approach Delay		32.2			19.0			28.2			68.9	
Approach LOS		C			B			C			E	
Queue Length 50th (ft)		32			120	145	3	124	0	~488	57	
Queue Length 95th (ft)		75			225	438	16	226	58	#900	125	
Internal Link Dist (ft)		315			1134			1023			759	
Turn Bay Length (ft)							105		260	390		
Base Capacity (vph)		523			543	1194	602	959	896	857	1618	
Starvation Cap Reductn		0			0	0	0	0	0	0	0	
Spillback Cap Reductn		0			0	0	0	0	0	0	0	
Storage Cap Reductn		0			0	0	0	0	0	0	0	
Reduced v/c Ratio		0.13			0.40	0.78	0.01	0.24	0.22	1.10	0.16	

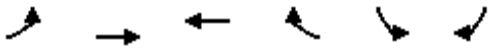
Intersection Summary			
Area Type:	Other		
Cycle Length: 143			
Actuated Cycle Length: 93.4			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.10			
Intersection Signal Delay: 41.8		Intersection LOS: D	
Intersection Capacity Utilization 91.2%		ICU Level of Service F	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

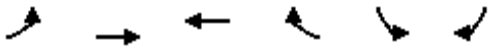
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US 6 & NY 312 Extension/NY 312





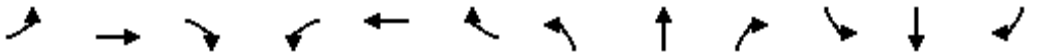
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	5	1083	1052	29	20	3
Future Volume (vph)	5	1083	1052	29	20	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	14
Grade (%)		2%	-2%		-2%	
Storage Length (ft)	100			0	95	80
Storage Lanes	1			1	1	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1787	3504	1900	1431	3144	1740
Flt Permitted	0.172				0.950	
Satd. Flow (perm)	324	3504	1900	1431	3144	1740
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						3
Link Speed (mph)		45	45		30	
Link Distance (ft)		1316	530		1252	
Travel Time (s)		19.9	8.0		28.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	2%	1%	14%	20%	0%
Adj. Flow (vph)	5	1128	1096	30	21	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	5	1128	1096	30	21	3
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		28	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	0.99	0.99	0.91	0.91
Turning Speed (mph)	15			9	15	9
Number of Detectors	0	0	0	0	2	2
Detector Template					NYSDOT	NYSDOT
Leading Detector (ft)	0	0	0	0	83	83
Trailing Detector (ft)	0	0	0	0	-5	-5
Detector 1 Position(ft)	0	0	0	0	-5	-5
Detector 1 Size(ft)	20	6	6	20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)					43	43
Detector 2 Size(ft)					40	40
Detector 2 Type					Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)					0.0	0.0



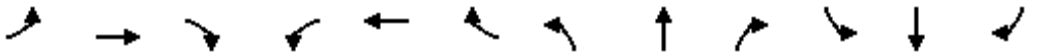
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	Perm	NA	NA	pm+ov	Prot	Perm
Protected Phases		6	2	3	3	
Permitted Phases	6			2		3
Detector Phase	6	6	2	3	3	3
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	65.0	65.0	65.0	15.0	15.0	15.0
Total Split (%)	81.3%	81.3%	81.3%	18.8%	18.8%	18.8%
Maximum Green (s)	59.0	59.0	59.0	9.0	9.0	9.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	Min	Min	None	None	None
Act Effct Green (s)	50.7	50.7	50.7	59.5	6.9	6.9
Actuated g/C Ratio	0.85	0.85	0.85	1.00	0.12	0.12
v/c Ratio	0.02	0.38	0.68	0.02	0.06	0.01
Control Delay	2.6	2.8	7.0	0.0	33.3	24.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	2.6	2.8	7.0	0.0	33.3	24.0
LOS	A	A	A	A	C	C
Approach Delay		2.8	6.8		32.1	
Approach LOS		A	A		C	
Queue Length 50th (ft)	0	73	217	0	4	0
Queue Length 95th (ft)	3	104	386	0	15	8
Internal Link Dist (ft)		1236	450		1172	
Turn Bay Length (ft)	100				95	80
Base Capacity (vph)	285	3089	1675	1391	546	304
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.37	0.65	0.02	0.04	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 59.5			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 5.1		Intersection LOS: A	
Intersection Capacity Utilization 69.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 6: NY 312 & Pugsley Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	355	326	447	515	546	109	406	228	415	78	215	143
Future Volume (vph)	355	326	447	515	546	109	406	228	415	78	215	143
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	12	12
Grade (%)		1%			-1%			-2%			0%	
Storage Length (ft)	200		250	300		300	0		0	0		200
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.97	1.00	1.00	0.97	0.95	0.95	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.850		0.975				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.977		0.950		
Satd. Flow (prot)	3287	1750	1575	3320	3231	0	1580	3233	1496	1646	1827	1583
Flt Permitted	0.950			0.950			0.950	0.977		0.950		
Satd. Flow (perm)	3287	1750	1575	3320	3231	0	1580	3233	1496	1646	1827	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			166		15				399			64
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		595			1417			424			345	
Travel Time (s)		9.0			21.5			9.6			7.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	6%	8%	2%	6%	9%	12%	5%	6%	9%	6%	4%	2%
Adj. Flow (vph)	399	366	502	579	613	122	456	256	466	88	242	161
Shared Lane Traffic (%)							49%					
Lane Group Flow (vph)	399	366	502	579	735	0	233	479	466	88	242	161
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	0	0	2	0		2	2	2	2	2	2
Detector Template	NYSDOT			NYSDOT			NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	83	0	0	83	0		83	83	83	83	83	83
Trailing Detector (ft)	-5	0	0	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Position(ft)	-5	0	-5	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Size(ft)	40	6	40	40	6		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43			43			43	43	43	43	43	43
Detector 2 Size(ft)	40			40			40	40	40	40	40	40
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0



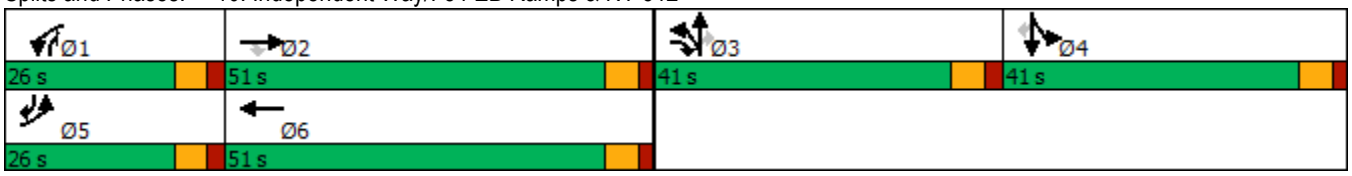
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2	3	1	6		3	3	1	4	4	5
Permitted Phases			2						3			4
Detector Phase	5	2	3	1	6		3	3	1	4	4	5
Switch Phase												
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0		5.0	5.0	3.0	5.0	5.0	3.0
Minimum Split (s)	9.0	16.0	11.0	9.0	16.0		11.0	11.0	9.0	11.0	11.0	9.0
Total Split (s)	26.0	51.0	41.0	26.0	51.0		41.0	41.0	26.0	41.0	41.0	26.0
Total Split (%)	16.4%	32.1%	25.8%	16.4%	32.1%		25.8%	25.8%	16.4%	25.8%	25.8%	16.4%
Maximum Green (s)	20.0	45.0	35.0	20.0	45.0		35.0	35.0	20.0	35.0	35.0	20.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	None	None	Min		None	None	None	None	None	None
Act Effct Green (s)	19.8	32.3	65.2	20.7	33.3		26.7	26.7	47.4	22.1	22.1	48.1
Actuated g/C Ratio	0.16	0.25	0.51	0.16	0.26		0.21	0.21	0.37	0.17	0.17	0.38
v/c Ratio	0.78	0.82	0.56	1.07	0.86		0.70	0.71	0.58	0.31	0.76	0.25
Control Delay	65.4	61.7	16.0	108.1	55.5		60.9	54.1	6.1	51.7	67.8	19.0
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.4	61.7	16.0	108.1	55.5		60.9	54.1	6.1	51.7	67.8	19.0
LOS	E	E	B	F	E		E	D	A	D	E	B
Approach Delay		44.7			78.6			36.4			48.9	
Approach LOS		D			E			D			D	
Queue Length 50th (ft)	164	281	175	~280	297		195	201	19	64	192	52
Queue Length 95th (ft)	#313	460	310	#518	435		347	312	69	129	323	123
Internal Link Dist (ft)		515			1337			344			265	
Turn Bay Length (ft)	200		250	300								200
Base Capacity (vph)	538	644	997	543	1199		452	926	809	471	523	652
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.57	0.50	1.07	0.61		0.52	0.52	0.58	0.19	0.46	0.25

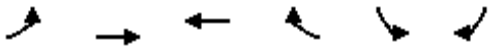
Intersection Summary			
Area Type:	Other		
Cycle Length: 159			
Actuated Cycle Length: 126.7			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.07			
Intersection Signal Delay: 53.4		Intersection LOS: D	
Intersection Capacity Utilization 75.2%		ICU Level of Service D	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

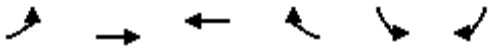
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: Independent Way/I-84 EB Ramps & NY 312





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	307	512	614	113	60	556
Future Volume (vph)	307	512	614	113	60	556
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	13	13
Grade (%)		-1%	2%		0%	
Storage Length (ft)	325			250	125	0
Storage Lanes	1			1	1	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1728	1854	1765	1454	1760	1652
Flt Permitted	0.152				0.950	
Satd. Flow (perm)	276	1854	1765	1454	1760	1652
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				97		33
Link Speed (mph)		45	45		30	
Link Distance (ft)		1417	528		436	
Travel Time (s)		21.5	8.0		9.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	5%	3%	3%	10%	6%	1%
Adj. Flow (vph)	353	589	706	130	69	639
Shared Lane Traffic (%)						
Lane Group Flow (vph)	353	589	706	130	69	639
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.06	1.01	0.96	0.96
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	0	0	0	2	2
Detector Template	NYSDOT				NYSDOTNYSDOT	
Leading Detector (ft)	83	0	0	0	83	83
Trailing Detector (ft)	-5	0	0	0	-5	-5
Detector 1 Position(ft)	-5	0	0	0	-5	-5
Detector 1 Size(ft)	40	6	6	20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43				43	43
Detector 2 Size(ft)	40				40	40
Detector 2 Type	Cl+Ex				Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0				0.0	0.0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	pm+pt	NA	NA	pm+ov	Prot	pm+ov
Protected Phases	1	6	2	3	3	1
Permitted Phases	6			2		3
Detector Phase	1	6	2	3	3	1
Switch Phase						
Minimum Initial (s)	3.0	10.0	10.0	3.0	3.0	3.0
Minimum Split (s)	9.0	16.0	16.0	9.0	9.0	9.0
Total Split (s)	16.0	42.0	26.0	31.0	31.0	16.0
Total Split (%)	21.9%	57.5%	35.6%	42.5%	42.5%	21.9%
Maximum Green (s)	10.0	36.0	20.0	25.0	25.0	10.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead		Lag			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	Min	None	None	None
Act Effct Green (s)	36.5	38.0	20.3	33.0	6.7	20.2
Actuated g/C Ratio	0.69	0.72	0.39	0.63	0.13	0.38
v/c Ratio	0.75	0.44	1.04	0.14	0.31	0.98
Control Delay	22.6	6.0	68.0	2.2	25.6	46.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.6	6.0	68.0	2.2	25.6	46.9
LOS	C	A	E	A	C	D
Approach Delay		12.2	57.8		44.8	
Approach LOS		B	E		D	
Queue Length 50th (ft)	56	76	~269	4	21	177
Queue Length 95th (ft)	#178	144	#448	18	49	#343
Internal Link Dist (ft)		1337	448		356	
Turn Bay Length (ft)	325			250	125	
Base Capacity (vph)	470	1337	679	1371	846	654
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.44	1.04	0.09	0.08	0.98

Intersection Summary			
Area Type:	Other		
Cycle Length: 73			
Actuated Cycle Length: 52.6			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay: 36.8		Intersection LOS: D	
Intersection Capacity Utilization 76.7%		ICU Level of Service D	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: NY 312 & I-84 WB Ramps

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	262	2	4	226	4	2
Future Volume (vph)	262	2	4	226	4	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Grade (%)	3%			-7%	4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.999				0.961	
Flt Protected				0.999	0.966	
Satd. Flow (prot)	1772	0	0	1810	1729	0
Flt Permitted				0.999	0.966	
Satd. Flow (perm)	1772	0	0	1810	1729	0
Link Speed (mph)	40			40	30	
Link Distance (ft)	339			334	611	
Travel Time (s)	5.8			5.7	13.9	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	0%	0%	5%	0%	0%
Adj. Flow (vph)	298	2	5	257	5	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	300	0	0	262	7	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.00	1.00	1.03	1.03
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	25.1%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0.2

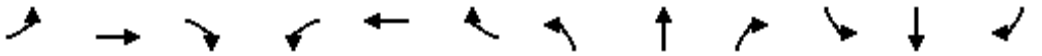
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	262	2	4	226	4	2
Future Vol, veh/h	262	2	4	226	4	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	3	-	-	-7	4	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	0	0	5	0	0
Mvmt Flow	298	2	5	257	5	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	300	0	566	299
Stage 1	-	-	-	-	299	-
Stage 2	-	-	-	-	267	-
Critical Hdwy	-	-	4.1	-	7.2	6.6
Critical Hdwy Stg 1	-	-	-	-	6.2	-
Critical Hdwy Stg 2	-	-	-	-	6.2	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1273	-	431	721
Stage 1	-	-	-	-	708	-
Stage 2	-	-	-	-	737	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1273	-	429	721
Mov Cap-2 Maneuver	-	-	-	-	429	-
Stage 1	-	-	-	-	708	-
Stage 2	-	-	-	-	733	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	12.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	496	-	-	1273	-
HCM Lane V/C Ratio	0.014	-	-	0.004	-
HCM Control Delay (s)	12.4	-	-	7.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	35	2	191	8	847	6	208	182	858	223	16
Future Volume (vph)	25	35	2	191	8	847	6	208	182	858	223	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	12	13	11	12	12
Grade (%)		-2%			-2%			-2%			2%	
Storage Length (ft)	0		0	180		0	105		260	390		0
Storage Lanes	0		0	1		1	1		1	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996				0.850			0.850		0.990	
Flt Protected		0.980			0.954		0.950			0.950		
Satd. Flow (prot)	0	1431	0	0	1735	1546	1762	1761	1479	1661	1718	0
Flt Permitted		0.822			0.686		0.597			0.491		
Satd. Flow (perm)	0	1201	0	0	1248	1546	1107	1761	1479	858	1718	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1				469			200		5	
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		395			1214			1103			839	
Travel Time (s)		9.0			18.4			13.7			10.4	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	40%	26%	0%	2%	2%	2%	0%	9%	14%	4%	9%	0%
Adj. Flow (vph)	27	38	2	210	9	931	7	229	200	943	245	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	67	0	0	219	931	7	229	200	943	263	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.03	1.03	1.03	1.03	0.99	0.95	1.06	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	2	2	2	2	
Detector Template	Left	NYSDOT		Left	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	20	83		20	83	83	83	83	83	83	83	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Size(ft)	20	40		20	40	40	40	40	40	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		43			43	43	43	43	43	43	43	
Detector 2 Size(ft)		40			40	40	40	40	40	40	40	
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	



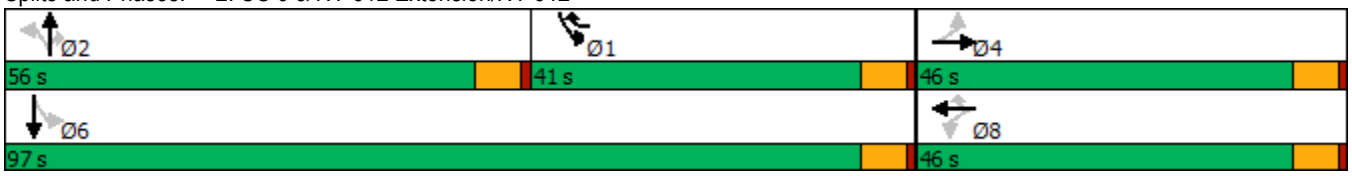
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2		2	6		
Detector Phase	4	4		8	8	1	2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	15.0	
Minimum Split (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	21.0	
Total Split (s)	46.0	46.0		46.0	46.0	41.0	56.0	56.0	56.0	41.0	97.0	
Total Split (%)	32.2%	32.2%		32.2%	32.2%	28.7%	39.2%	39.2%	39.2%	28.7%	67.8%	
Maximum Green (s)	40.0	40.0		40.0	40.0	35.0	50.0	50.0	50.0	35.0	91.0	
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0			6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag						Lag	Lead	Lead	Lead	Lag		
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	
Recall Mode	None	None		None	None	None	None	None	None	None	Min	
Act Effct Green (s)		21.2			21.2	62.9	18.3	18.3	18.3	60.0	60.0	
Actuated g/C Ratio		0.23			0.23	0.67	0.20	0.20	0.20	0.64	0.64	
v/c Ratio		0.25			0.77	0.78	0.03	0.66	0.44	1.10	0.24	
Control Delay		32.2			53.4	10.9	32.2	45.4	8.3	85.8	8.4	
Queue Delay		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		32.2			53.4	10.9	32.2	45.4	8.3	85.8	8.4	
LOS		C			D	B	C	D	A	F	A	
Approach Delay		32.2			19.0			28.2			68.9	
Approach LOS		C			B			C			E	
Queue Length 50th (ft)		32			120	145	3	124	0	~488	57	
Queue Length 95th (ft)		75			225	438	16	226	58	#900	125	
Internal Link Dist (ft)		315			1134			1023			759	
Turn Bay Length (ft)							105		260	390		
Base Capacity (vph)		523			543	1194	602	959	896	857	1618	
Starvation Cap Reductn		0			0	0	0	0	0	0	0	
Spillback Cap Reductn		0			0	0	0	0	0	0	0	
Storage Cap Reductn		0			0	0	0	0	0	0	0	
Reduced v/c Ratio		0.13			0.40	0.78	0.01	0.24	0.22	1.10	0.16	

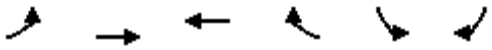
Intersection Summary			
Area Type:	Other		
Cycle Length: 143			
Actuated Cycle Length: 93.4			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.10			
Intersection Signal Delay: 41.8		Intersection LOS: D	
Intersection Capacity Utilization 91.2%		ICU Level of Service F	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

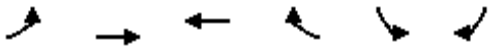
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US 6 & NY 312 Extension/NY 312





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	5	1083	1052	29	20	3
Future Volume (vph)	5	1083	1052	29	20	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	14
Grade (%)		2%	-2%		-2%	
Storage Length (ft)	100			0	0	110
Storage Lanes	1			0	2	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	0.95
Frt			0.996		0.981	
Flt Protected	0.950				0.958	
Satd. Flow (prot)	1787	3504	3583	0	3176	0
Flt Permitted	0.187				0.958	
Satd. Flow (perm)	352	3504	3583	0	3176	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			6		3	
Link Speed (mph)		45	45		30	
Link Distance (ft)		1316	530		1252	
Travel Time (s)		19.9	8.0		28.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	2%	1%	14%	20%	0%
Adj. Flow (vph)	5	1128	1096	30	21	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	5	1128	1126	0	24	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		28	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	0.99	0.99	0.91	0.91
Turning Speed (mph)	15			9	15	9
Number of Detectors	0	0	0		2	
Detector Template					NYSDOT	
Leading Detector (ft)	0	0	0		83	
Trailing Detector (ft)	0	0	0		-5	
Detector 1 Position(ft)	0	0	0		-5	
Detector 1 Size(ft)	20	6	6		40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Detector 2 Position(ft)					43	
Detector 2 Size(ft)					40	
Detector 2 Type					Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)					0.0	

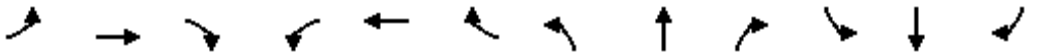


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	1	6	2		3	
Permitted Phases	6					
Detector Phase	1	6	2		3	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	
Minimum Split (s)	11.0	11.0	11.0		11.0	
Total Split (s)	11.0	65.0	54.0		15.0	
Total Split (%)	13.8%	81.3%	67.5%		18.8%	
Maximum Green (s)	5.0	59.0	48.0		9.0	
Yellow Time (s)	4.0	4.0	4.0		4.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	6.0	6.0	6.0		6.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	Min	Min		None	
Act Effct Green (s)	31.7	37.5	36.2		6.4	
Actuated g/C Ratio	0.80	0.94	0.91		0.16	
v/c Ratio	0.01	0.34	0.35		0.05	
Control Delay	1.8	1.5	3.2		19.0	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	1.8	1.5	3.2		19.0	
LOS	A	A	A		B	
Approach Delay		1.5	3.2		19.0	
Approach LOS		A	A		B	
Queue Length 50th (ft)	0	0	0		1	
Queue Length 95th (ft)	3	106	195		13	
Internal Link Dist (ft)		1236	450		1172	
Turn Bay Length (ft)	100					
Base Capacity (vph)	476	3434	3392		781	
Starvation Cap Reductn	0	0	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.01	0.33	0.33		0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 39.8			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.35			
Intersection Signal Delay: 2.5		Intersection LOS: A	
Intersection Capacity Utilization 44.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: NY 312 & Pugsley Rd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	355	326	447	515	546	109	406	228	415	78	215	143
Future Volume (vph)	355	326	447	515	546	109	406	228	415	78	215	143
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	12	12
Grade (%)		1%			-1%			-2%			0%	
Storage Length (ft)	200		250	300		300	0		0	0		200
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.97	1.00	1.00	0.97	0.95	0.95	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.850		0.975				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.977		0.950		
Satd. Flow (prot)	3287	1750	1575	3320	3231	0	1580	3233	1496	1646	1827	1583
Flt Permitted	0.950			0.950			0.950	0.977		0.950		
Satd. Flow (perm)	3287	1750	1575	3320	3231	0	1580	3233	1496	1646	1827	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			166		15				399			64
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		595			1417			424			345	
Travel Time (s)		9.0			21.5			9.6			7.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	6%	8%	2%	6%	9%	12%	5%	6%	9%	6%	4%	2%
Adj. Flow (vph)	399	366	502	579	613	122	456	256	466	88	242	161
Shared Lane Traffic (%)							49%					
Lane Group Flow (vph)	399	366	502	579	735	0	233	479	466	88	242	161
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	0	0	2	0		2	2	2	2	2	2
Detector Template	NYSDOT			NYSDOT			NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	83	0	0	83	0		83	83	83	83	83	83
Trailing Detector (ft)	-5	0	0	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Position(ft)	-5	0	-5	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Size(ft)	40	6	40	40	6		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43			43			43	43	43	43	43	43
Detector 2 Size(ft)	40			40			40	40	40	40	40	40
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0



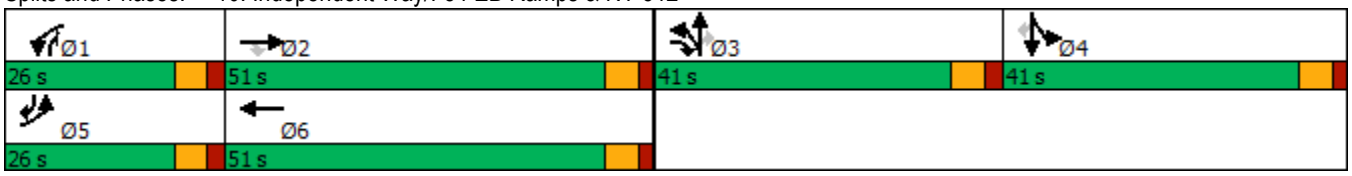
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2	3	1	6		3	3	1	4	4	5
Permitted Phases			2						3			4
Detector Phase	5	2	3	1	6		3	3	1	4	4	5
Switch Phase												
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0		5.0	5.0	3.0	5.0	5.0	3.0
Minimum Split (s)	9.0	16.0	11.0	9.0	16.0		11.0	11.0	9.0	11.0	11.0	9.0
Total Split (s)	26.0	51.0	41.0	26.0	51.0		41.0	41.0	26.0	41.0	41.0	26.0
Total Split (%)	16.4%	32.1%	25.8%	16.4%	32.1%		25.8%	25.8%	16.4%	25.8%	25.8%	16.4%
Maximum Green (s)	20.0	45.0	35.0	20.0	45.0		35.0	35.0	20.0	35.0	35.0	20.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	None	None	Min		None	None	None	None	None	None
Act Effct Green (s)	19.8	32.3	65.2	20.7	33.3		26.7	26.7	47.4	22.1	22.1	48.1
Actuated g/C Ratio	0.16	0.25	0.51	0.16	0.26		0.21	0.21	0.37	0.17	0.17	0.38
v/c Ratio	0.78	0.82	0.56	1.07	0.86		0.70	0.71	0.58	0.31	0.76	0.25
Control Delay	65.4	61.7	16.0	108.1	55.5		60.9	54.1	6.1	51.7	67.8	19.0
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.4	61.7	16.0	108.1	55.5		60.9	54.1	6.1	51.7	67.8	19.0
LOS	E	E	B	F	E		E	D	A	D	E	B
Approach Delay		44.7			78.6			36.4			48.9	
Approach LOS		D			E			D			D	
Queue Length 50th (ft)	164	281	175	~280	297		195	201	19	64	192	52
Queue Length 95th (ft)	#313	460	310	#518	435		347	312	69	129	323	123
Internal Link Dist (ft)		515			1337			344			265	
Turn Bay Length (ft)	200		250	300								200
Base Capacity (vph)	538	644	997	543	1199		452	926	809	471	523	652
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.57	0.50	1.07	0.61		0.52	0.52	0.58	0.19	0.46	0.25

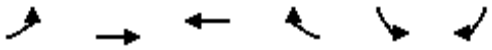
Intersection Summary			
Area Type:	Other		
Cycle Length: 159			
Actuated Cycle Length: 126.7			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.07			
Intersection Signal Delay: 53.4		Intersection LOS: D	
Intersection Capacity Utilization 75.2%		ICU Level of Service D	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

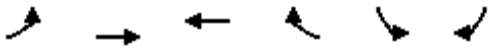
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: Independent Way/I-84 EB Ramps & NY 312





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	307	512	614	113	60	556
Future Volume (vph)	307	512	614	113	60	556
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	13	13
Grade (%)		-1%	2%		0%	
Storage Length (ft)	325			250	125	0
Storage Lanes	1			1	1	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1728	1854	1765	1454	1760	1652
Flt Permitted	0.152				0.950	
Satd. Flow (perm)	276	1854	1765	1454	1760	1652
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				97		33
Link Speed (mph)		45	45		30	
Link Distance (ft)		1417	528		436	
Travel Time (s)		21.5	8.0		9.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	5%	3%	3%	10%	6%	1%
Adj. Flow (vph)	353	589	706	130	69	639
Shared Lane Traffic (%)						
Lane Group Flow (vph)	353	589	706	130	69	639
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.06	1.01	0.96	0.96
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	0	0	0	2	2
Detector Template	NYSDOT				NYSDOTNYSDOT	
Leading Detector (ft)	83	0	0	0	83	83
Trailing Detector (ft)	-5	0	0	0	-5	-5
Detector 1 Position(ft)	-5	0	0	0	-5	-5
Detector 1 Size(ft)	40	6	6	20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43				43	43
Detector 2 Size(ft)	40				40	40
Detector 2 Type	Cl+Ex				Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0				0.0	0.0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	pm+pt	NA	NA	pm+ov	Prot	pm+ov
Protected Phases	1	6	2	3	3	1
Permitted Phases	6			2		3
Detector Phase	1	6	2	3	3	1
Switch Phase						
Minimum Initial (s)	3.0	10.0	10.0	3.0	3.0	3.0
Minimum Split (s)	9.0	16.0	16.0	9.0	9.0	9.0
Total Split (s)	16.0	42.0	26.0	31.0	31.0	16.0
Total Split (%)	21.9%	57.5%	35.6%	42.5%	42.5%	21.9%
Maximum Green (s)	10.0	36.0	20.0	25.0	25.0	10.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead		Lag			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	Min	None	None	None
Act Effct Green (s)	36.5	38.0	20.3	33.0	6.7	20.2
Actuated g/C Ratio	0.69	0.72	0.39	0.63	0.13	0.38
v/c Ratio	0.75	0.44	1.04	0.14	0.31	0.98
Control Delay	22.6	6.0	68.0	2.2	25.6	46.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.6	6.0	68.0	2.2	25.6	46.9
LOS	C	A	E	A	C	D
Approach Delay		12.2	57.8		44.8	
Approach LOS		B	E		D	
Queue Length 50th (ft)	56	76	~269	4	21	177
Queue Length 95th (ft)	#178	144	#448	18	49	#343
Internal Link Dist (ft)		1337	448		356	
Turn Bay Length (ft)	325			250	125	
Base Capacity (vph)	470	1337	679	1371	846	654
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.44	1.04	0.09	0.08	0.98

Intersection Summary

Area Type: Other
Cycle Length: 73
Actuated Cycle Length: 52.6
Natural Cycle: 80
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.04
Intersection Signal Delay: 36.8 Intersection LOS: D
Intersection Capacity Utilization 76.7% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: NY 312 & I-84 WB Ramps

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	262	2	4	226	4	2
Future Volume (vph)	262	2	4	226	4	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Grade (%)	3%			-7%	4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.999				0.961	
Flt Protected				0.999	0.966	
Satd. Flow (prot)	1772	0	0	1810	1729	0
Flt Permitted				0.999	0.966	
Satd. Flow (perm)	1772	0	0	1810	1729	0
Link Speed (mph)	40			40	30	
Link Distance (ft)	339			334	611	
Travel Time (s)	5.8			5.7	13.9	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	0%	0%	5%	0%	0%
Adj. Flow (vph)	298	2	5	257	5	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	300	0	0	262	7	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.00	1.00	1.03	1.03
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 25.1%		ICU Level of Service A	
Analysis Period (min) 15			

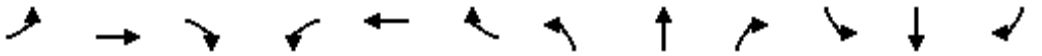
Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	262	2	4	226	4	2
Future Vol, veh/h	262	2	4	226	4	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	3	-	-	-7	4	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	0	0	5	0	0
Mvmt Flow	298	2	5	257	5	2

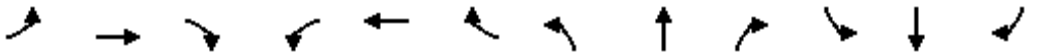
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	300	0	566	299
Stage 1	-	-	-	-	299	-
Stage 2	-	-	-	-	267	-
Critical Hdwy	-	-	4.1	-	7.2	6.6
Critical Hdwy Stg 1	-	-	-	-	6.2	-
Critical Hdwy Stg 2	-	-	-	-	6.2	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1273	-	431	721
Stage 1	-	-	-	-	708	-
Stage 2	-	-	-	-	737	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1273	-	429	721
Mov Cap-2 Maneuver	-	-	-	-	429	-
Stage 1	-	-	-	-	708	-
Stage 2	-	-	-	-	733	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	12.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	496	-	-	1273	-
HCM Lane V/C Ratio	0.014	-	-	0.004	-
HCM Control Delay (s)	12.4	-	-	7.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	35	2	202	8	904	6	208	195	927	223	16
Future Volume (vph)	25	35	2	202	8	904	6	208	195	927	223	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	12	13	11	12	12
Grade (%)		-2%			-2%			-2%			2%	
Storage Length (ft)	0		0	180		0	105		260	390		0
Storage Lanes	0		0	1		1	1		1	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996				0.850			0.850		0.990	
Flt Protected		0.980			0.954		0.950			0.950		
Satd. Flow (prot)	0	1431	0	0	1735	1546	1762	1761	1479	1661	1718	0
Flt Permitted		0.821			0.686		0.597			0.488		
Satd. Flow (perm)	0	1199	0	0	1248	1546	1107	1761	1479	853	1718	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1				469			214		5	
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		395			1214			1103			839	
Travel Time (s)		9.0			18.4			13.7			10.4	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	40%	26%	0%	2%	2%	2%	0%	9%	14%	4%	9%	0%
Adj. Flow (vph)	27	38	2	222	9	993	7	229	214	1019	245	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	67	0	0	231	993	7	229	214	1019	263	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.03	1.03	1.03	1.03	0.99	0.95	1.06	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	2	2	2	2	
Detector Template	Left	NYSDOT		Left	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	20	83		20	83	83	83	83	83	83	83	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Size(ft)	20	40		20	40	40	40	40	40	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		43			43	43	43	43	43	43	43	
Detector 2 Size(ft)		40			40	40	40	40	40	40	40	
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	



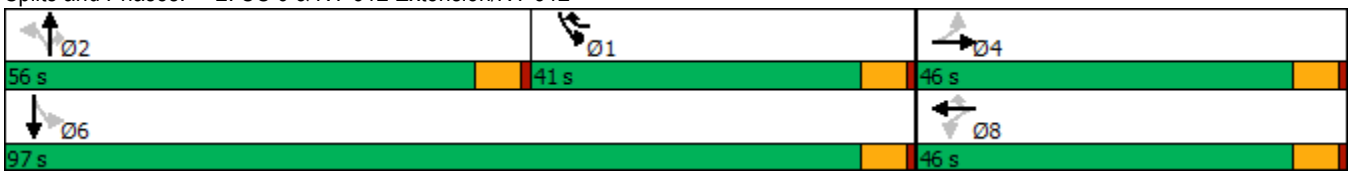
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2		2	6		
Detector Phase	4	4		8	8	1	2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	15.0	
Minimum Split (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	21.0	
Total Split (s)	46.0	46.0		46.0	46.0	41.0	56.0	56.0	56.0	41.0	97.0	
Total Split (%)	32.2%	32.2%		32.2%	32.2%	28.7%	39.2%	39.2%	39.2%	28.7%	67.8%	
Maximum Green (s)	40.0	40.0		40.0	40.0	35.0	50.0	50.0	50.0	35.0	91.0	
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0			6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag						Lag	Lead	Lead	Lead	Lag		
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	
Recall Mode	None	None		None	None	None	None	None	None	None	Min	
Act Effct Green (s)		22.2			22.2	64.0	18.5	18.5	18.5	60.2	60.2	
Actuated g/C Ratio		0.23			0.23	0.68	0.20	0.20	0.20	0.64	0.64	
v/c Ratio		0.24			0.79	0.83	0.03	0.67	0.47	1.20	0.24	
Control Delay		31.8			54.1	13.7	32.8	46.2	8.4	127.0	8.9	
Queue Delay		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		31.8			54.1	13.7	32.8	46.2	8.4	127.0	8.9	
LOS		C			D	B	C	D	A	F	A	
Approach Delay		31.8			21.4			28.0			102.7	
Approach LOS		C			C			C			F	
Queue Length 50th (ft)		32			128	192	3	126	0	~599	59	
Queue Length 95th (ft)		74			238	568	16	230	60	#1052	130	
Internal Link Dist (ft)		315			1134			1023			759	
Turn Bay Length (ft)							105		260	390		
Base Capacity (vph)		516			536	1196	595	946	894	846	1604	
Starvation Cap Reductn		0			0	0	0	0	0	0	0	
Spillback Cap Reductn		0			0	0	0	0	0	0	0	
Storage Cap Reductn		0			0	0	0	0	0	0	0	
Reduced v/c Ratio		0.13			0.43	0.83	0.01	0.24	0.24	1.20	0.16	

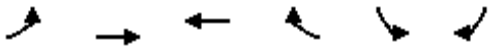
Intersection Summary			
Area Type:	Other		
Cycle Length: 143			
Actuated Cycle Length: 94.7			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.20			
Intersection Signal Delay: 57.1		Intersection LOS: E	
Intersection Capacity Utilization 95.6%		ICU Level of Service F	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

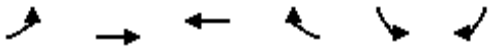
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US 6 & NY 312 Extension/NY 312





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	87	1083	1052	207	166	71
Future Volume (vph)	87	1083	1052	207	166	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	14
Grade (%)		2%	-2%		-2%	
Storage Length (ft)	100			0	95	80
Storage Lanes	1			1	1	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1787	3504	1900	1431	3144	1740
Flt Permitted	0.100				0.950	
Satd. Flow (perm)	188	3504	1900	1431	3144	1740
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						74
Link Speed (mph)		45	45		30	
Link Distance (ft)		1316	530		1252	
Travel Time (s)		19.9	8.0		28.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	2%	1%	14%	20%	0%
Adj. Flow (vph)	91	1128	1096	216	173	74
Shared Lane Traffic (%)						
Lane Group Flow (vph)	91	1128	1096	216	173	74
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		28	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	0.99	0.99	0.91	0.91
Turning Speed (mph)	15			9	15	9
Number of Detectors	0	0	0	0	2	2
Detector Template					NYSDOT	NYSDOT
Leading Detector (ft)	0	0	0	0	83	83
Trailing Detector (ft)	0	0	0	0	-5	-5
Detector 1 Position(ft)	0	0	0	0	-5	-5
Detector 1 Size(ft)	20	6	6	20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)					43	43
Detector 2 Size(ft)					40	40
Detector 2 Type					Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)					0.0	0.0



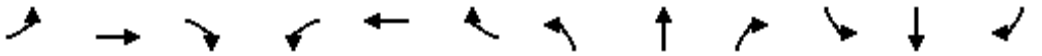
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	Perm	NA	NA	pm+ov	Prot	Perm
Protected Phases		6	2	3	3	
Permitted Phases	6			2		3
Detector Phase	6	6	2	3	3	3
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	65.0	65.0	65.0	15.0	15.0	15.0
Total Split (%)	81.3%	81.3%	81.3%	18.8%	18.8%	18.8%
Maximum Green (s)	59.0	59.0	59.0	9.0	9.0	9.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	Min	Min	None	None	None
Act Effct Green (s)	40.0	40.0	40.0	60.8	8.3	8.3
Actuated g/C Ratio	0.66	0.66	0.66	1.00	0.14	0.14
v/c Ratio	0.74	0.49	0.88	0.15	0.41	0.25
Control Delay	45.2	5.7	17.3	0.2	30.7	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.2	5.7	17.3	0.2	30.7	11.0
LOS	D	A	B	A	C	B
Approach Delay		8.6	14.5		24.8	
Approach LOS		A	B		C	
Queue Length 50th (ft)	18	88	264	0	29	0
Queue Length 95th (ft)	#113	120	446	0	73	37
Internal Link Dist (ft)		1236	450		1172	
Turn Bay Length (ft)	100				95	80
Base Capacity (vph)	172	3209	1740	1356	486	331
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.35	0.63	0.16	0.36	0.22

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 60.8			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 12.8		Intersection LOS: B	
Intersection Capacity Utilization 79.9%		ICU Level of Service D	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: NY 312 & Pugsley Rd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	423	404	447	515	671	109	406	228	415	78	215	196
Future Volume (vph)	423	404	447	515	671	109	406	228	415	78	215	196
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	12	12
Grade (%)		1%			-1%			-2%			0%	
Storage Length (ft)	200		250	300		300	0		0	0		200
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.97	1.00	1.00	0.97	0.95	0.95	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.850		0.979				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.977		0.950		
Satd. Flow (prot)	3287	1750	1575	3320	3246	0	1580	3233	1496	1646	1827	1583
Flt Permitted	0.950			0.950			0.950	0.977		0.950		
Satd. Flow (perm)	3287	1750	1575	3320	3246	0	1580	3233	1496	1646	1827	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			166		11				360			62
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		595			1417			424			345	
Travel Time (s)		9.0			21.5			9.6			7.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	6%	8%	2%	6%	9%	12%	5%	6%	9%	6%	4%	2%
Adj. Flow (vph)	475	454	502	579	754	122	456	256	466	88	242	220
Shared Lane Traffic (%)							49%					
Lane Group Flow (vph)	475	454	502	579	876	0	233	479	466	88	242	220
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	0	0	2	0		2	2	2	2	2	2
Detector Template	NYSDOT			NYSDOT			NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	83	0	0	83	0		83	83	83	83	83	83
Trailing Detector (ft)	-5	0	0	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Position(ft)	-5	0	-5	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Size(ft)	40	6	40	40	6		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43			43			43	43	43	43	43	43
Detector 2 Size(ft)	40			40			40	40	40	40	40	40
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0



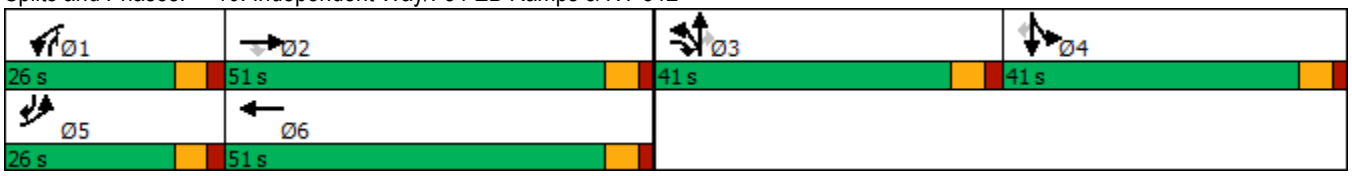
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2	3	1	6		3	3	1	4	4	5
Permitted Phases			2						3			4
Detector Phase	5	2	3	1	6		3	3	1	4	4	5
Switch Phase												
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0		5.0	5.0	3.0	5.0	5.0	3.0
Minimum Split (s)	9.0	16.0	11.0	9.0	16.0		11.0	11.0	9.0	11.0	11.0	9.0
Total Split (s)	26.0	51.0	41.0	26.0	51.0		41.0	41.0	26.0	41.0	41.0	26.0
Total Split (%)	16.4%	32.1%	25.8%	16.4%	32.1%		25.8%	25.8%	16.4%	25.8%	25.8%	16.4%
Maximum Green (s)	20.0	45.0	35.0	20.0	45.0		35.0	35.0	20.0	35.0	35.0	20.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	None	None	Min		None	None	None	None	None	None
Act Effct Green (s)	20.4	40.5	74.2	20.4	40.5		27.6	27.6	48.0	22.9	22.9	49.5
Actuated g/C Ratio	0.15	0.30	0.55	0.15	0.30		0.20	0.20	0.35	0.17	0.17	0.36
v/c Ratio	0.96	0.87	0.54	1.16	0.90		0.73	0.73	0.61	0.32	0.79	0.36
Control Delay	90.3	64.7	15.1	143.1	59.0		66.2	58.8	8.3	54.8	73.9	25.4
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	90.3	64.7	15.1	143.1	59.0		66.2	58.8	8.3	54.8	73.9	25.4
LOS	F	E	B	F	E		E	E	A	D	E	C
Approach Delay		55.8			92.4			40.3			51.4	
Approach LOS		E			F			D			D	
Queue Length 50th (ft)	~236	382	179	~335	388		220	227	40	72	216	106
Queue Length 95th (ft)	#402	#646	310	#518	#576		347	312	94	129	323	184
Internal Link Dist (ft)		515			1337			344			265	
Turn Bay Length (ft)	200		250	300								200
Base Capacity (vph)	493	591	1019	498	1104		415	849	760	432	480	615
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.96	0.77	0.49	1.16	0.79		0.56	0.56	0.61	0.20	0.50	0.36

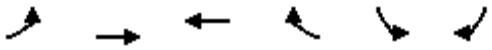
Intersection Summary			
Area Type:	Other		
Cycle Length: 159			
Actuated Cycle Length: 135.9			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.16			
Intersection Signal Delay: 62.9		Intersection LOS: E	
Intersection Capacity Utilization 79.3%		ICU Level of Service D	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

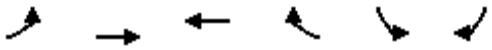
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: Independent Way/I-84 EB Ramps & NY 312





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	351	547	656	113	60	638
Future Volume (vph)	351	547	656	113	60	638
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	13	13
Grade (%)		-1%	2%		0%	
Storage Length (ft)	325			250	125	0
Storage Lanes	1			1	1	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1728	1854	1765	1454	1760	1652
Flt Permitted	0.152				0.950	
Satd. Flow (perm)	276	1854	1765	1454	1760	1652
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				68		26
Link Speed (mph)		45	45		30	
Link Distance (ft)		1417	528		436	
Travel Time (s)		21.5	8.0		9.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	5%	3%	3%	10%	6%	1%
Adj. Flow (vph)	403	629	754	130	69	733
Shared Lane Traffic (%)						
Lane Group Flow (vph)	403	629	754	130	69	733
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.06	1.01	0.96	0.96
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	0	0	0	2	2
Detector Template	NYSDOT				NYSDOTNYSDOT	
Leading Detector (ft)	83	0	0	0	83	83
Trailing Detector (ft)	-5	0	0	0	-5	-5
Detector 1 Position(ft)	-5	0	0	0	-5	-5
Detector 1 Size(ft)	40	6	6	20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43				43	43
Detector 2 Size(ft)	40				40	40
Detector 2 Type	Cl+Ex				Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0				0.0	0.0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	pm+pt	NA	NA	pm+ov	Prot	pm+ov
Protected Phases	1	6	2	3	3	1
Permitted Phases	6			2		3
Detector Phase	1	6	2	3	3	1
Switch Phase						
Minimum Initial (s)	3.0	10.0	10.0	3.0	3.0	3.0
Minimum Split (s)	9.0	16.0	16.0	9.0	9.0	9.0
Total Split (s)	16.0	42.0	26.0	31.0	31.0	16.0
Total Split (%)	21.9%	57.5%	35.6%	42.5%	42.5%	21.9%
Maximum Green (s)	10.0	36.0	20.0	25.0	25.0	10.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead		Lag			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	Min	None	None	None
Act Effct Green (s)	36.5	38.0	20.3	33.0	6.7	20.2
Actuated g/C Ratio	0.69	0.72	0.39	0.63	0.13	0.38
v/c Ratio	0.86	0.47	1.11	0.14	0.31	1.13
Control Delay	33.0	6.3	91.5	3.0	25.6	94.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.0	6.3	91.5	3.0	25.6	94.0
LOS	C	A	F	A	C	F
Approach Delay		16.8	78.5		88.1	
Approach LOS		B	E		F	
Queue Length 50th (ft)	76	84	~303	7	21	~265
Queue Length 95th (ft)	#224	159	#486	22	49	#425
Internal Link Dist (ft)		1337	448		356	
Turn Bay Length (ft)	325			250	125	
Base Capacity (vph)	470	1337	679	1369	846	650
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.86	0.47	1.11	0.09	0.08	1.13

Intersection Summary			
Area Type:	Other		
Cycle Length: 73			
Actuated Cycle Length: 52.6			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.13			
Intersection Signal Delay: 57.9		Intersection LOS: E	
Intersection Capacity Utilization 84.0%		ICU Level of Service E	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: NY 312 & I-84 WB Ramps

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	262	5	7	226	6	4
Future Volume (vph)	262	5	7	226	6	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Grade (%)	3%			-7%	4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.997				0.944	
Flt Protected				0.998	0.972	
Satd. Flow (prot)	1769	0	0	1809	1709	0
Flt Permitted				0.998	0.972	
Satd. Flow (perm)	1769	0	0	1809	1709	0
Link Speed (mph)	40			40	30	
Link Distance (ft)	339			334	611	
Travel Time (s)	5.8			5.7	13.9	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	0%	0%	5%	0%	0%
Adj. Flow (vph)	298	6	8	257	7	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	304	0	0	265	12	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.00	1.00	1.03	1.03
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	27.5%	ICU Level of Service	A
Analysis Period (min)	15		

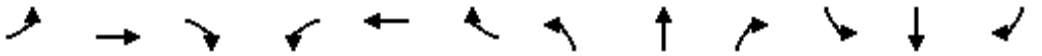
Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	262	5	7	226	6	4
Future Vol, veh/h	262	5	7	226	6	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	3	-	-	-7	4	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	0	0	5	0	0
Mvmt Flow	298	6	8	257	7	5

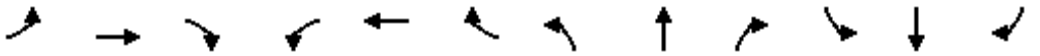
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	304	0	574	301
Stage 1	-	-	-	-	301	-
Stage 2	-	-	-	-	273	-
Critical Hdwy	-	-	4.1	-	7.2	6.6
Critical Hdwy Stg 1	-	-	-	-	6.2	-
Critical Hdwy Stg 2	-	-	-	-	6.2	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1268	-	426	719
Stage 1	-	-	-	-	706	-
Stage 2	-	-	-	-	732	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1268	-	423	719
Mov Cap-2 Maneuver	-	-	-	-	423	-
Stage 1	-	-	-	-	706	-
Stage 2	-	-	-	-	727	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	12.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	506	-	-	1268	-
HCM Lane V/C Ratio	0.022	-	-	0.006	-
HCM Control Delay (s)	12.3	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	35	2	202	8	904	6	208	195	927	223	16
Future Volume (vph)	25	35	2	202	8	904	6	208	195	927	223	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	12	13	11	12	12
Grade (%)		-2%			-2%			-2%			2%	
Storage Length (ft)	0		0	180		0	105		260	390		0
Storage Lanes	0		0	1		1	1		1	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996				0.850			0.850		0.990	
Flt Protected		0.980			0.954		0.950			0.950		
Satd. Flow (prot)	0	1431	0	0	1735	1546	1762	1761	1479	1661	1718	0
Flt Permitted		0.821			0.686		0.597			0.488		
Satd. Flow (perm)	0	1199	0	0	1248	1546	1107	1761	1479	853	1718	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1				469			214		5	
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		395			1214			1103			839	
Travel Time (s)		9.0			18.4			13.7			10.4	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	40%	26%	0%	2%	2%	2%	0%	9%	14%	4%	9%	0%
Adj. Flow (vph)	27	38	2	222	9	993	7	229	214	1019	245	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	67	0	0	231	993	7	229	214	1019	263	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.03	1.03	1.03	1.03	0.99	0.95	1.06	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	2	2	2	2	
Detector Template	Left	NYSDOT		Left	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	20	83		20	83	83	83	83	83	83	83	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Size(ft)	20	40		20	40	40	40	40	40	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		43			43	43	43	43	43	43	43	
Detector 2 Size(ft)		40			40	40	40	40	40	40	40	
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	



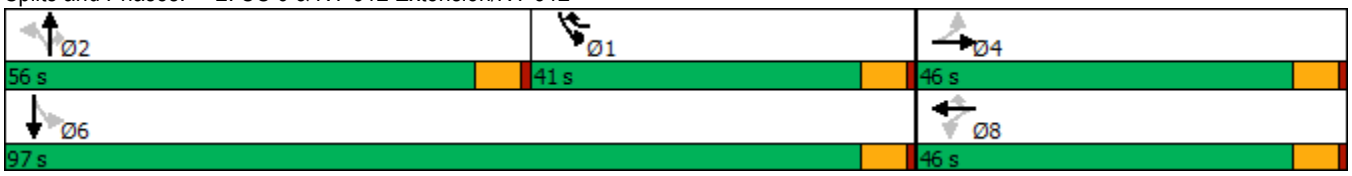
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2		2	6		
Detector Phase	4	4		8	8	1	2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	15.0	
Minimum Split (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	21.0	
Total Split (s)	46.0	46.0		46.0	46.0	41.0	56.0	56.0	56.0	41.0	97.0	
Total Split (%)	32.2%	32.2%		32.2%	32.2%	28.7%	39.2%	39.2%	39.2%	28.7%	67.8%	
Maximum Green (s)	40.0	40.0		40.0	40.0	35.0	50.0	50.0	50.0	35.0	91.0	
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0			6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag						Lag	Lead	Lead	Lead	Lag		
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	
Recall Mode	None	None		None	None	None	None	None	None	None	Min	
Act Effct Green (s)		22.2			22.2	64.0	18.5	18.5	18.5	60.2	60.2	
Actuated g/C Ratio		0.23			0.23	0.68	0.20	0.20	0.20	0.64	0.64	
v/c Ratio		0.24			0.79	0.83	0.03	0.67	0.47	1.20	0.24	
Control Delay		31.8			54.1	13.7	32.8	46.2	8.4	127.0	8.9	
Queue Delay		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		31.8			54.1	13.7	32.8	46.2	8.4	127.0	8.9	
LOS		C			D	B	C	D	A	F	A	
Approach Delay		31.8			21.4			28.0			102.7	
Approach LOS		C			C			C			F	
Queue Length 50th (ft)		32			128	192	3	126	0	~599	59	
Queue Length 95th (ft)		74			238	568	16	230	60	#1052	130	
Internal Link Dist (ft)		315			1134			1023			759	
Turn Bay Length (ft)							105		260	390		
Base Capacity (vph)		516			536	1196	595	946	894	846	1604	
Starvation Cap Reductn		0			0	0	0	0	0	0	0	
Spillback Cap Reductn		0			0	0	0	0	0	0	0	
Storage Cap Reductn		0			0	0	0	0	0	0	0	
Reduced v/c Ratio		0.13			0.43	0.83	0.01	0.24	0.24	1.20	0.16	

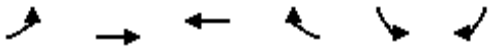
Intersection Summary			
Area Type:	Other		
Cycle Length: 143			
Actuated Cycle Length: 94.7			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.20			
Intersection Signal Delay: 57.1		Intersection LOS: E	
Intersection Capacity Utilization 95.6%		ICU Level of Service F	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

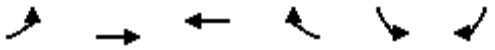
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US 6 & NY 312 Extension/NY 312





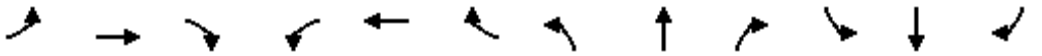
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	87	1083	1052	207	166	71
Future Volume (vph)	87	1083	1052	207	166	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	14
Grade (%)		2%	-2%		-2%	
Storage Length (ft)	100			0	0	110
Storage Lanes	1			0	2	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	0.95
Frt			0.975		0.955	
Flt Protected	0.950				0.966	
Satd. Flow (prot)	1787	3504	3447	0	3213	0
Flt Permitted	0.114				0.966	
Satd. Flow (perm)	214	3504	3447	0	3213	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			51		71	
Link Speed (mph)		45	45		30	
Link Distance (ft)		1316	530		1252	
Travel Time (s)		19.9	8.0		28.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	2%	1%	14%	20%	0%
Adj. Flow (vph)	91	1128	1096	216	173	74
Shared Lane Traffic (%)						
Lane Group Flow (vph)	91	1128	1312	0	247	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		28	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	0.99	0.99	0.91	0.91
Turning Speed (mph)	15			9	15	9
Number of Detectors	0	0	0		2	
Detector Template					NYSDOT	
Leading Detector (ft)	0	0	0		83	
Trailing Detector (ft)	0	0	0		-5	
Detector 1 Position(ft)	0	0	0		-5	
Detector 1 Size(ft)	20	6	6		40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	
Detector 2 Position(ft)					43	
Detector 2 Size(ft)					40	
Detector 2 Type					Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)					0.0	



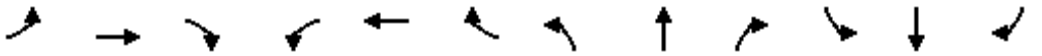
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	1	6	2		3	
Permitted Phases	6					
Detector Phase	1	6	2		3	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	
Minimum Split (s)	11.0	11.0	11.0		11.0	
Total Split (s)	11.0	65.0	54.0		15.0	
Total Split (%)	13.8%	81.3%	67.5%		18.8%	
Maximum Green (s)	5.0	59.0	48.0		9.0	
Yellow Time (s)	4.0	4.0	4.0		4.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	6.0	6.0	6.0		6.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	Min	Min		None	
Act Effct Green (s)	37.3	37.3	29.0		8.1	
Actuated g/C Ratio	0.65	0.65	0.50		0.14	
v/c Ratio	0.33	0.50	0.75		0.48	
Control Delay	6.7	6.0	14.8		21.7	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	6.7	6.0	14.8		21.7	
LOS	A	A	B		C	
Approach Delay		6.1	14.8		21.7	
Approach LOS		A	B		C	
Queue Length 50th (ft)	10	89	189		29	
Queue Length 95th (ft)	21	124	262		69	
Internal Link Dist (ft)		1236	450		1172	
Turn Bay Length (ft)	100					
Base Capacity (vph)	278	3338	2849		576	
Starvation Cap Reductn	0	0	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.33	0.34	0.46		0.43	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 57.8			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 11.6		Intersection LOS: B	
Intersection Capacity Utilization 62.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 6: NY 312 & Pugsley Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	423	404	447	515	671	109	406	228	415	78	215	196
Future Volume (vph)	423	404	447	515	671	109	406	228	415	78	215	196
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	12	12
Grade (%)		1%			-1%			-2%			0%	
Storage Length (ft)	200		250	300		300	0		0	0		200
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.97	1.00	1.00	0.97	0.95	0.95	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.850		0.979				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.977		0.950		
Satd. Flow (prot)	3287	1750	1575	3320	3246	0	1580	3233	1496	1646	1827	1583
Flt Permitted	0.950			0.950			0.950	0.977		0.950		
Satd. Flow (perm)	3287	1750	1575	3320	3246	0	1580	3233	1496	1646	1827	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			166		11				360			62
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		595			1417			424			345	
Travel Time (s)		9.0			21.5			9.6			7.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	6%	8%	2%	6%	9%	12%	5%	6%	9%	6%	4%	2%
Adj. Flow (vph)	475	454	502	579	754	122	456	256	466	88	242	220
Shared Lane Traffic (%)							49%					
Lane Group Flow (vph)	475	454	502	579	876	0	233	479	466	88	242	220
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	0	0	2	0		2	2	2	2	2	2
Detector Template	NYSDOT			NYSDOT			NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	83	0	0	83	0		83	83	83	83	83	83
Trailing Detector (ft)	-5	0	0	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Position(ft)	-5	0	-5	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Size(ft)	40	6	40	40	6		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43			43			43	43	43	43	43	43
Detector 2 Size(ft)	40			40			40	40	40	40	40	40
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0



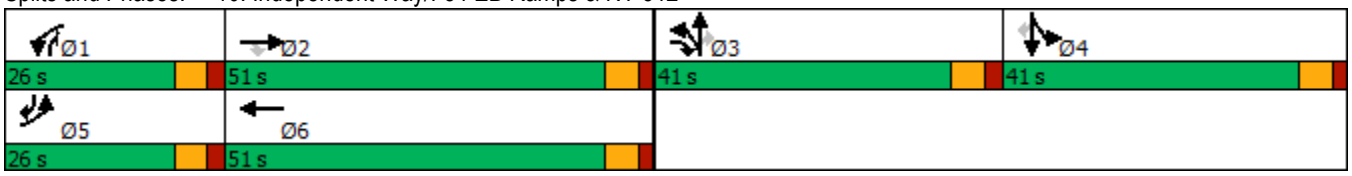
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2	3	1	6		3	3	1	4	4	5
Permitted Phases			2						3			4
Detector Phase	5	2	3	1	6		3	3	1	4	4	5
Switch Phase												
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0		5.0	5.0	3.0	5.0	5.0	3.0
Minimum Split (s)	9.0	16.0	11.0	9.0	16.0		11.0	11.0	9.0	11.0	11.0	9.0
Total Split (s)	26.0	51.0	41.0	26.0	51.0		41.0	41.0	26.0	41.0	41.0	26.0
Total Split (%)	16.4%	32.1%	25.8%	16.4%	32.1%		25.8%	25.8%	16.4%	25.8%	25.8%	16.4%
Maximum Green (s)	20.0	45.0	35.0	20.0	45.0		35.0	35.0	20.0	35.0	35.0	20.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	None	None	Min		None	None	None	None	None	None
Act Effct Green (s)	20.4	40.5	74.2	20.4	40.5		27.6	27.6	48.0	22.9	22.9	49.5
Actuated g/C Ratio	0.15	0.30	0.55	0.15	0.30		0.20	0.20	0.35	0.17	0.17	0.36
v/c Ratio	0.96	0.87	0.54	1.16	0.90		0.73	0.73	0.61	0.32	0.79	0.36
Control Delay	90.3	64.7	15.1	143.1	59.0		66.2	58.8	8.3	54.8	73.9	25.4
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	90.3	64.7	15.1	143.1	59.0		66.2	58.8	8.3	54.8	73.9	25.4
LOS	F	E	B	F	E		E	E	A	D	E	C
Approach Delay		55.8			92.4			40.3			51.4	
Approach LOS		E			F			D			D	
Queue Length 50th (ft)	~236	382	179	~335	388		220	227	40	72	216	106
Queue Length 95th (ft)	#402	#646	310	#518	#576		347	312	94	129	323	184
Internal Link Dist (ft)		515			1337			344			265	
Turn Bay Length (ft)	200		250	300								200
Base Capacity (vph)	493	591	1019	498	1104		415	849	760	432	480	615
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.96	0.77	0.49	1.16	0.79		0.56	0.56	0.61	0.20	0.50	0.36

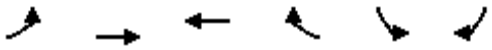
Intersection Summary			
Area Type:	Other		
Cycle Length: 159			
Actuated Cycle Length: 135.9			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.16			
Intersection Signal Delay: 62.9		Intersection LOS: E	
Intersection Capacity Utilization 79.3%		ICU Level of Service D	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

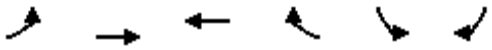
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: Independent Way/I-84 EB Ramps & NY 312





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	351	547	656	113	60	638
Future Volume (vph)	351	547	656	113	60	638
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	13	13
Grade (%)		-1%	2%		0%	
Storage Length (ft)	325			250	125	0
Storage Lanes	1			1	1	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1728	1854	1765	1454	1760	1652
Flt Permitted	0.152				0.950	
Satd. Flow (perm)	276	1854	1765	1454	1760	1652
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				68		26
Link Speed (mph)		45	45		30	
Link Distance (ft)		1417	528		436	
Travel Time (s)		21.5	8.0		9.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	5%	3%	3%	10%	6%	1%
Adj. Flow (vph)	403	629	754	130	69	733
Shared Lane Traffic (%)						
Lane Group Flow (vph)	403	629	754	130	69	733
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.06	1.01	0.96	0.96
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	0	0	0	2	2
Detector Template	NYSDOT				NYSDOTNYSDOT	
Leading Detector (ft)	83	0	0	0	83	83
Trailing Detector (ft)	-5	0	0	0	-5	-5
Detector 1 Position(ft)	-5	0	0	0	-5	-5
Detector 1 Size(ft)	40	6	6	20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43				43	43
Detector 2 Size(ft)	40				40	40
Detector 2 Type	Cl+Ex				Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0				0.0	0.0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	pm+pt	NA	NA	pm+ov	Prot	pm+ov
Protected Phases	1	6	2	3	3	1
Permitted Phases	6			2		3
Detector Phase	1	6	2	3	3	1
Switch Phase						
Minimum Initial (s)	3.0	10.0	10.0	3.0	3.0	3.0
Minimum Split (s)	9.0	16.0	16.0	9.0	9.0	9.0
Total Split (s)	16.0	42.0	26.0	31.0	31.0	16.0
Total Split (%)	21.9%	57.5%	35.6%	42.5%	42.5%	21.9%
Maximum Green (s)	10.0	36.0	20.0	25.0	25.0	10.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead		Lag			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	Min	None	None	None
Act Effct Green (s)	36.5	38.0	20.3	33.0	6.7	20.2
Actuated g/C Ratio	0.69	0.72	0.39	0.63	0.13	0.38
v/c Ratio	0.86	0.47	1.11	0.14	0.31	1.13
Control Delay	33.0	6.3	91.5	3.0	25.6	94.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.0	6.3	91.5	3.0	25.6	94.0
LOS	C	A	F	A	C	F
Approach Delay		16.8	78.5		88.1	
Approach LOS		B	E		F	
Queue Length 50th (ft)	76	84	~303	7	21	~265
Queue Length 95th (ft)	#224	159	#486	22	49	#425
Internal Link Dist (ft)		1337	448		356	
Turn Bay Length (ft)	325			250	125	
Base Capacity (vph)	470	1337	679	1369	846	650
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.86	0.47	1.11	0.09	0.08	1.13

Intersection Summary			
Area Type:	Other		
Cycle Length: 73			
Actuated Cycle Length: 52.6			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.13			
Intersection Signal Delay: 57.9		Intersection LOS: E	
Intersection Capacity Utilization 84.0%		ICU Level of Service E	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: NY 312 & I-84 WB Ramps

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	262	5	7	226	6	4
Future Volume (vph)	262	5	7	226	6	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	12	12
Grade (%)	3%			-7%	4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.997				0.944	
Flt Protected				0.998	0.972	
Satd. Flow (prot)	1769	0	0	1809	1709	0
Flt Permitted				0.998	0.972	
Satd. Flow (perm)	1769	0	0	1809	1709	0
Link Speed (mph)	40			40	30	
Link Distance (ft)	339			334	611	
Travel Time (s)	5.8			5.7	13.9	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	0%	0%	5%	0%	0%
Adj. Flow (vph)	298	6	8	257	7	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	304	0	0	265	12	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.00	1.00	1.03	1.03
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	27.5%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0.3

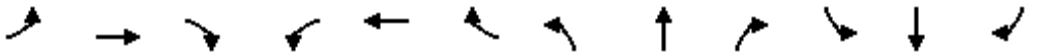
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	262	5	7	226	6	4
Future Vol, veh/h	262	5	7	226	6	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	3	-	-	-7	4	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	0	0	5	0	0
Mvmt Flow	298	6	8	257	7	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	304	0	574	301
Stage 1	-	-	-	-	301	-
Stage 2	-	-	-	-	273	-
Critical Hdwy	-	-	4.1	-	7.2	6.6
Critical Hdwy Stg 1	-	-	-	-	6.2	-
Critical Hdwy Stg 2	-	-	-	-	6.2	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1268	-	426	719
Stage 1	-	-	-	-	706	-
Stage 2	-	-	-	-	732	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1268	-	423	719
Mov Cap-2 Maneuver	-	-	-	-	423	-
Stage 1	-	-	-	-	706	-
Stage 2	-	-	-	-	727	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	12.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	506	-	-	1268	-
HCM Lane V/C Ratio	0.022	-	-	0.006	-
HCM Control Delay (s)	12.3	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	35	2	202	8	904	6	208	195	927	223	16
Future Volume (vph)	25	35	2	202	8	904	6	208	195	927	223	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	11	11	11	11	12	13	11	12	12
Grade (%)		-2%			-2%			-2%			2%	
Storage Length (ft)	0		0	180		0	105		260	390		0
Storage Lanes	0		0	1		1	1		1	1		0
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996				0.850			0.850		0.990	
Flt Protected		0.980			0.954		0.950			0.950		
Satd. Flow (prot)	0	1431	0	0	1735	1546	1762	1761	1479	1661	1718	0
Flt Permitted		0.755			0.733		0.593			0.414		
Satd. Flow (perm)	0	1103	0	0	1333	1546	1100	1761	1479	724	1718	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1				162			214		6	
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		395			1214			1103			839	
Travel Time (s)		9.0			18.4			13.7			10.4	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	40%	26%	0%	2%	2%	2%	0%	9%	14%	4%	9%	0%
Adj. Flow (vph)	27	38	2	222	9	993	7	229	214	1019	245	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	67	0	0	231	993	7	229	214	1019	263	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.03	1.03	1.03	1.03	0.99	0.95	1.06	1.01	1.01
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	2	2	2	2	2	2	
Detector Template	Left	NYSDOT		Left	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	20	83		20	83	83	83	83	83	83	83	
Trailing Detector (ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Position(ft)	0	-5		0	-5	-5	-5	-5	-5	-5	-5	
Detector 1 Size(ft)	20	40		20	40	40	40	40	40	40	40	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		43			43	43	43	43	43	43	43	
Detector 2 Size(ft)		40			40	40	40	40	40	40	40	
Detector 2 Type		Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	



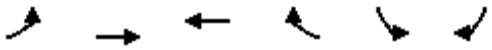
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2		2	6		
Detector Phase	4	4		8	8	1	2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	15.0	
Minimum Split (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	21.0	
Total Split (s)	37.0	37.0		37.0	37.0	58.0	25.0	25.0	25.0	58.0	83.0	
Total Split (%)	30.8%	30.8%		30.8%	30.8%	48.3%	20.8%	20.8%	20.8%	48.3%	69.2%	
Maximum Green (s)	31.0	31.0		31.0	31.0	52.0	19.0	19.0	19.0	52.0	77.0	
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0			6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag						Lag	Lead	Lead	Lead	Lag		
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	
Recall Mode	None	None		None	None	None	None	None	None	None	Min	
Act Effct Green (s)		23.8			23.8	82.1	17.6	17.6	17.6	75.9	75.9	
Actuated g/C Ratio		0.21			0.21	0.73	0.16	0.16	0.16	0.68	0.68	
v/c Ratio		0.29			0.82	0.84	0.04	0.83	0.52	1.10	0.23	
Control Delay		39.3			64.4	17.0	43.0	71.1	10.8	84.7	8.0	
Queue Delay		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		39.3			64.4	17.0	43.0	71.1	10.8	84.7	8.0	
LOS		D			E	B	D	E	B	F	A	
Approach Delay		39.3			25.9			42.0			69.0	
Approach LOS		D			C			D			E	
Queue Length 50th (ft)		40			161	385	4	162	0	~733	65	
Queue Length 95th (ft)		82			254	643	19	#306	70	#1077	118	
Internal Link Dist (ft)		315			1134			1023			759	
Turn Bay Length (ft)							105		260	390		
Base Capacity (vph)		308			371	1178	188	300	430	929	1192	
Starvation Cap Reductn		0			0	0	0	0	0	0	0	
Spillback Cap Reductn		0			0	0	0	0	0	0	0	
Storage Cap Reductn		0			0	0	0	0	0	0	0	
Reduced v/c Ratio		0.22			0.62	0.84	0.04	0.76	0.50	1.10	0.22	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 111.8			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.10			
Intersection Signal Delay: 46.9		Intersection LOS: D	
Intersection Capacity Utilization 95.6%		ICU Level of Service F	
Analysis Period (min) 15			

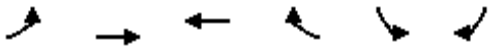
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: US 6 & NY 312 Extension/NY 312



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	87	1083	1052	207	166	71
Future Volume (vph)	87	1083	1052	207	166	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	14
Grade (%)		2%	-2%		-2%	
Storage Length (ft)	100			0	95	80
Storage Lanes	1			1	1	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1787	3504	1900	1431	3144	1740
Flt Permitted	0.114				0.950	
Satd. Flow (perm)	214	3504	1900	1431	3144	1740
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						74
Link Speed (mph)		45	45		30	
Link Distance (ft)		1316	530		1252	
Travel Time (s)		19.9	8.0		28.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	2%	1%	14%	20%	0%
Adj. Flow (vph)	91	1128	1096	216	173	74
Shared Lane Traffic (%)						
Lane Group Flow (vph)	91	1128	1096	216	173	74
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		28	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	0.99	0.99	0.91	0.91
Turning Speed (mph)	15			9	15	9
Number of Detectors	0	0	0	0	2	2
Detector Template					NYSDOT	NYSDOT
Leading Detector (ft)	0	0	0	0	83	83
Trailing Detector (ft)	0	0	0	0	-5	-5
Detector 1 Position(ft)	0	0	0	0	-5	-5
Detector 1 Size(ft)	20	6	6	20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)					43	43
Detector 2 Size(ft)					40	40
Detector 2 Type					Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)					0.0	0.0

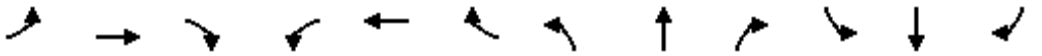


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	Perm	NA	NA	pm+ov	Prot	Perm
Protected Phases		6	2	3	3	
Permitted Phases	6			2		3
Detector Phase	6	6	2	3	3	3
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0
Total Split (s)	49.0	49.0	49.0	11.0	11.0	11.0
Total Split (%)	81.7%	81.7%	81.7%	18.3%	18.3%	18.3%
Maximum Green (s)	43.0	43.0	43.0	5.0	5.0	5.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	Min	Min	None	None	None
Act Effct Green (s)	35.2	35.2	35.2	52.5	5.1	5.1
Actuated g/C Ratio	0.67	0.67	0.67	1.00	0.10	0.10
v/c Ratio	0.64	0.48	0.86	0.15	0.57	0.32
Control Delay	30.0	4.8	15.2	0.2	33.9	11.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.0	4.8	15.2	0.2	33.9	11.9
LOS	C	A	B	A	C	B
Approach Delay		6.7	12.8		27.3	
Approach LOS		A	B		C	
Queue Length 50th (ft)	12	66	199	0	26	0
Queue Length 95th (ft)	#90	94	#376	0	#70	33
Internal Link Dist (ft)		1236	450		1172	
Turn Bay Length (ft)	100				95	80
Base Capacity (vph)	178	2914	1580	1431	304	234
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.39	0.69	0.15	0.57	0.32

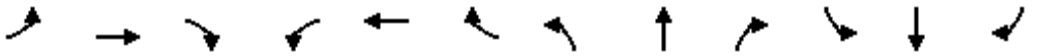
Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 52.5
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 11.4 Intersection LOS: B
Intersection Capacity Utilization 79.9% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: NY 312 & Pugsley Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	423	404	447	515	671	109	406	228	415	78	215	196
Future Volume (vph)	423	404	447	515	671	109	406	228	415	78	215	196
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	12	12
Grade (%)		1%			-1%			-2%			0%	
Storage Length (ft)	200		250	300		300	0		0	0		200
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	50			50			50			50		
Lane Util. Factor	0.97	1.00	1.00	0.97	0.95	0.95	0.91	0.91	1.00	1.00	1.00	1.00
Frt			0.850		0.979				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.977		0.950		
Satd. Flow (prot)	3287	1750	1575	3320	3246	0	1580	3233	1496	1646	1827	1583
Flt Permitted	0.950			0.950			0.950	0.977		0.950		
Satd. Flow (perm)	3287	1750	1575	3320	3246	0	1580	3233	1496	1646	1827	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			155		11				358			62
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		595			1417			424			345	
Travel Time (s)		9.0			21.5			9.6			7.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	6%	8%	2%	6%	9%	12%	5%	6%	9%	6%	4%	2%
Adj. Flow (vph)	475	454	502	579	754	122	456	256	466	88	242	220
Shared Lane Traffic (%)							49%					
Lane Group Flow (vph)	475	454	502	579	876	0	233	479	466	88	242	220
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	0	0	2	0		2	2	2	2	2	2
Detector Template	NYSDOT			NYSDOT			NYSDOT	NYSDOT	NYSDOT	NYSDOT	NYSDOT	
Leading Detector (ft)	83	0	0	83	0		83	83	83	83	83	83
Trailing Detector (ft)	-5	0	0	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Position(ft)	-5	0	-5	-5	0		-5	-5	-5	-5	-5	-5
Detector 1 Size(ft)	40	6	40	40	6		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43			43			43	43	43	43	43	43
Detector 2 Size(ft)	40			40			40	40	40	40	40	40
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0

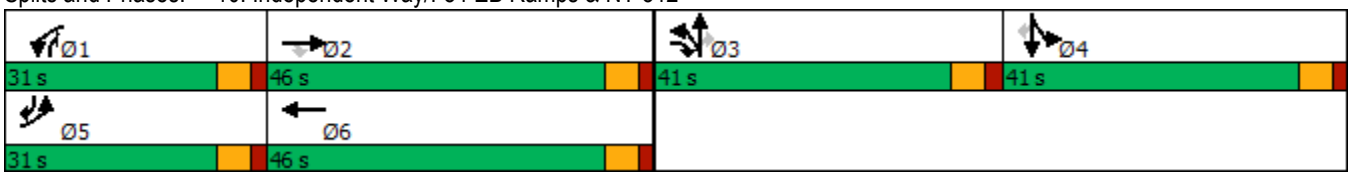


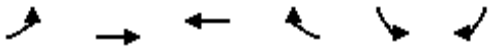
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2	3	1	6		3	3	1	4	4	5
Permitted Phases			2						3			4
Detector Phase	5	2	3	1	6		3	3	1	4	4	5
Switch Phase												
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0		5.0	5.0	3.0	5.0	5.0	3.0
Minimum Split (s)	9.0	16.0	11.0	9.0	16.0		11.0	11.0	9.0	11.0	11.0	9.0
Total Split (s)	31.0	46.0	41.0	31.0	46.0		41.0	41.0	31.0	41.0	41.0	31.0
Total Split (%)	19.5%	28.9%	25.8%	19.5%	28.9%		25.8%	25.8%	19.5%	25.8%	25.8%	19.5%
Maximum Green (s)	25.0	40.0	35.0	25.0	40.0		35.0	35.0	25.0	35.0	35.0	25.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	None	None	Min		None	None	None	None	None	None
Act Effct Green (s)	23.4	40.3	74.1	25.2	42.2		27.8	27.8	53.0	23.1	23.1	52.5
Actuated g/C Ratio	0.17	0.29	0.53	0.18	0.30		0.20	0.20	0.38	0.16	0.16	0.37
v/c Ratio	0.87	0.90	0.56	0.97	0.89		0.75	0.75	0.59	0.33	0.81	0.35
Control Delay	75.1	72.1	17.8	88.4	60.1		69.3	61.5	7.5	55.8	77.5	23.8
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.1	72.1	17.8	88.4	60.1		69.3	61.5	7.5	55.8	77.5	23.8
LOS	E	E	B	F	E		E	E	A	E	E	C
Approach Delay		54.0			71.3			41.7			52.6	
Approach LOS		D			E			D			D	
Queue Length 50th (ft)	218	404	204	275	410		221	228	37	72	216	100
Queue Length 95th (ft)	#345	#705	344	#460	#635		347	312	83	129	323	174
Internal Link Dist (ft)		515			1337			344			265	
Turn Bay Length (ft)	200		250	300								200
Base Capacity (vph)	589	502	979	595	981		396	811	786	413	458	650
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.90	0.51	0.97	0.89		0.59	0.59	0.59	0.21	0.53	0.34

Intersection Summary			
Area Type:	Other		
Cycle Length: 159			
Actuated Cycle Length: 140.6			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay: 56.2		Intersection LOS: E	
Intersection Capacity Utilization 79.3%		ICU Level of Service D	
Analysis Period (min) 15			

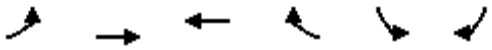
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: Independent Way/I-84 EB Ramps & NY 312





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	351	547	656	113	60	638
Future Volume (vph)	351	547	656	113	60	638
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	13	13
Grade (%)		-1%	2%		0%	
Storage Length (ft)	325			250	125	0
Storage Lanes	1			1	1	1
Taper Length (ft)	50				50	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1728	1854	1765	1454	1760	1652
Flt Permitted	0.089				0.950	
Satd. Flow (perm)	162	1854	1765	1454	1760	1652
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				130		109
Link Speed (mph)		45	45		30	
Link Distance (ft)		1417	528		436	
Travel Time (s)		21.5	8.0		9.9	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	5%	3%	3%	10%	6%	1%
Adj. Flow (vph)	403	629	754	130	69	733
Shared Lane Traffic (%)						
Lane Group Flow (vph)	403	629	754	130	69	733
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.06	1.01	0.96	0.96
Turning Speed (mph)	15			9	15	9
Number of Detectors	2	0	0	0	2	2
Detector Template	NYSDOT				NYSDOTNYSDOT	
Leading Detector (ft)	83	0	0	0	83	83
Trailing Detector (ft)	-5	0	0	0	-5	-5
Detector 1 Position(ft)	-5	0	0	0	-5	-5
Detector 1 Size(ft)	40	6	6	20	40	40
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	43				43	43
Detector 2 Size(ft)	40				40	40
Detector 2 Type	Cl+Ex				Cl+Ex	Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)	0.0				0.0	0.0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Turn Type	pm+pt	NA	NA	pm+ov	Prot	pm+ov
Protected Phases	1	6	2	3	3	1
Permitted Phases	6			2		3
Detector Phase	1	6	2	3	3	1
Switch Phase						
Minimum Initial (s)	3.0	10.0	10.0	3.0	3.0	3.0
Minimum Split (s)	9.0	16.0	16.0	9.0	9.0	9.0
Total Split (s)	31.0	76.0	45.0	14.0	14.0	31.0
Total Split (%)	34.4%	84.4%	50.0%	15.6%	15.6%	34.4%
Maximum Green (s)	25.0	70.0	39.0	8.0	8.0	25.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead		Lag			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	Min	None	None	None
Act Effct Green (s)	70.0	70.0	39.0	52.0	7.0	38.0
Actuated g/C Ratio	0.79	0.79	0.44	0.58	0.08	0.43
v/c Ratio	0.71	0.43	0.98	0.14	0.50	0.96
Control Delay	26.6	4.2	53.7	2.0	51.9	45.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.6	4.2	53.7	2.0	51.9	45.8
LOS	C	A	D	A	D	D
Approach Delay		13.0	46.1		46.3	
Approach LOS		B	D		D	
Queue Length 50th (ft)	149	93	412	0	38	343
Queue Length 95th (ft)	242	129	#625	20	77	#555
Internal Link Dist (ft)		1337	448		356	
Turn Bay Length (ft)	325			250	125	
Base Capacity (vph)	567	1458	772	918	158	767
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.43	0.98	0.14	0.44	0.96

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 89			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 33.6		Intersection LOS: C	
Intersection Capacity Utilization 84.0%		ICU Level of Service E	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: NY 312 & I-84 WB Ramps

APPENDIX E

ACCIDENT DATA

Case Num	Case Year	County	Comp Muni	Muni Type	Comp Ref Marker	At Intersection	Comp X	Comp Y	Accd Date	Accd Time	Severity	Num Of Injuries
38739062	2020	PUTNAM	Southeast	3		N	614577.7514	4586699.2466	12/03/2020	09:05am	PROPERTY DAMAGE	0
38241206	2019	PUTNAM	Southeast	3		Y	614448.8200	4586693.3300	12/20/2019	04:54pm	PROPERTY DAMAGE AND INJURY	1
37640737	2018	PUTNAM	Southeast	3		N	614545.9579	4586654.1288	12/03/2018	10:30am	PROPERTY DAMAGE	0
38421695	2020	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	05/16/2020	01:20pm	PROPERTY DAMAGE	0
38612858	2020	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	10/27/2020	08:35am	PROPERTY DAMAGE	0
38096844	2019	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	09/22/2019	12:50pm	PROPERTY DAMAGE	0
37699803	2019	PUTNAM	Southeast	3	312 84011000	Y	613521.4700	4585796.8800	01/19/2019	04:39pm	NON-REPORTABLE	0
38223530	2019	PUTNAM	Southeast	3	312 84011013	N	614901.8128	4587033.0482	12/08/2019	08:20pm	PROPERTY DAMAGE	0
37939004	2019	PUTNAM	Southeast	3	312 84011000	N	613592.5875	4585854.1413	06/19/2019	09:07am	NON-REPORTABLE	0
37292787	2018	PUTNAM	Southeast	3	312 84011011	N	614732.9664	4586809.0374	05/07/2018	11:00am	NON-REPORTABLE	0
38071671	2019	PUTNAM	Southeast	3	312 84011002	N	613817.4796	4586010.6517	09/07/2019	11:42am	PROPERTY DAMAGE	0
38514369	2020	PUTNAM	Southeast	3	312 84011010	N	614551.8887	4586707.4672	08/10/2020	02:15pm	PROPERTY DAMAGE	0
38759877	2021	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	01/25/2021	06:15am	PROPERTY DAMAGE AND INJURY	1
38644677	2020	PUTNAM	Southeast	3	312 84011001	N	613644.8022	4585885.5587	11/21/2020	08:35pm	PROPERTY DAMAGE	0
37619438	2018	PUTNAM	Southeast	3		Y	614573.9686	4586713.2614	12/01/2018	12:30pm	PROPERTY DAMAGE	0
38742467	2020	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	12/09/2020	11:57am	PROPERTY DAMAGE	0
37956942	2019	PUTNAM	Southeast	3	84I84031069	N	614704.2672	4586856.2200	06/28/2019	04:23pm	PROPERTY DAMAGE	0
37236255	2018	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	04/15/2018	01:00pm	PROPERTY DAMAGE	0
38134963	2019	PUTNAM	Southeast	3	84I84031070	Y	614765.3400	4586841.3800	10/07/2019	09:41am	NON-REPORTABLE	0
37362647	2018	PUTNAM	Southeast	3	312 84011011	N	614666.8107	4586757.8144	06/26/2018	10:20am	PROPERTY DAMAGE AND INJURY	1
37886466	2019	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	05/13/2019	02:55pm	PROPERTY DAMAGE AND INJURY	1
38265208	2020	PUTNAM	Southeast	3	312 84011013	N	614901.8128	4587033.0482	01/08/2020	04:00pm	PROPERTY DAMAGE	0
38213586	2018	PUTNAM	Southeast	3	84I84031070	Y	614765.3400	4586841.3800	11/15/2018	05:00pm	PROPERTY DAMAGE	0
38328671	2020	PUTNAM	Southeast	3	312 84011010	N	614528.5376	4586701.9048	02/11/2020	04:05pm	PROPERTY DAMAGE	0
38233017	2019	PUTNAM	Southeast	3	312 84011006	N	614114.7560	4586485.0320	12/17/2019	08:48am	PROPERTY DAMAGE	0
38234419	2019	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	12/17/2019	09:50am	PROPERTY DAMAGE	0
37664590	2018	PUTNAM	Southeast	3	312 84011010	Y	614589.2771	4586719.5207	12/27/2018	03:16pm	PROPERTY DAMAGE	0
38155391	2019	PUTNAM	Southeast	3	312 84011012	N	614815.7729	4586899.9119	10/30/2019	09:25am	PROPERTY DAMAGE	0
38377106	2020	PUTNAM	Southeast	3	312 84011010	Y	614572.7864	4586713.6150	03/21/2020	03:30pm	PROPERTY DAMAGE	0
37733022	2019	PUTNAM	Southeast	3	312 84011002	N	613794.1512	4585986.6385	02/07/2019	07:30am	PROPERTY DAMAGE	0
38294063	2020	PUTNAM	Southeast	3	312 84011010	Y	614572.5512	4586713.5333	01/18/2020	02:35pm	PROPERTY DAMAGE	0
38122929	2019	PUTNAM	Southeast	3	84I84031070	N	614758.5410	4586849.4555	10/16/2019	06:35am	PROPERTY DAMAGE	0
38360972	2020	PUTNAM	Southeast	3	312 84011000	Y	613521.4700	4585796.8800	03/03/2020	01:42pm	PROPERTY DAMAGE	0
37920537	2019	PUTNAM	Southeast	3		Y	614874.5205	4587003.7261	06/10/2019	04:31pm	NON-REPORTABLE	0
37642553	2018	PUTNAM	Southeast	3	312 84011005	N	614105.9636	4586328.6468	12/06/2018	05:34pm	PROPERTY DAMAGE	0
38197624	2019	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	11/05/2019	06:11pm	PROPERTY DAMAGE	0
37859773	2019	PUTNAM	Southeast	3	312 84011010	Y	614572.7864	4586713.6150	04/16/2019	09:15pm	PROPERTY DAMAGE	0
38134961	2019	PUTNAM	Southeast	3	312 84011001	N	613664.0414	4585896.6112	10/21/2019	02:40pm	PROPERTY DAMAGE	0
37301625	2018	PUTNAM	Southeast	3		Y	614448.8200	4586693.3300	05/24/2018	06:05pm	PROPERTY DAMAGE	0
37937378	2019	PUTNAM	Southeast	3	84I84031070	Y	614743.9164	4586819.6991	06/15/2019	02:35pm	PROPERTY DAMAGE	0
37614841	2018	PUTNAM	Southeast	3	312 84011011	N	614667.7893	4586758.3707	11/28/2018	07:05pm	PROPERTY DAMAGE	0
38253618	2019	PUTNAM	Southeast	3	312 84011000	N	613592.5875	4585854.1413	12/13/2019	06:13pm	PROPERTY DAMAGE AND INJURY	3
37428607	2018	PUTNAM	Southeast	3	312 84011007	Y	614144.8275	4586677.2010	08/04/2018	08:45am	PROPERTY DAMAGE AND INJURY	1
38096908	2019	PUTNAM	Southeast	3	312 84011012	N	614753.0541	4586828.9466	09/17/2019	09:28pm	NON-REPORTABLE	0
38628591	2020	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	11/08/2020	09:02pm	PROPERTY DAMAGE AND INJURY	2
38106320	2019	PUTNAM	Southeast	3		Y	614399.1181	4586699.9838	09/25/2019	05:00pm	PROPERTY DAMAGE	0
38322284	2020	PUTNAM	Southeast	3	312 84011001	N	613650.9485	4585889.0896	02/09/2020	04:00pm	PROPERTY DAMAGE	0
37333013	2018	PUTNAM	Southeast	3	312 84011000	Y	613521.4700	4585796.8800	06/14/2018	01:32pm	PROPERTY DAMAGE	0
38718183	2021	PUTNAM	Southeast	3	312 84011011	N	614718.1563	4586795.7533	02/08/2021	01:50pm	NON-REPORTABLE	0
37874885	2019	PUTNAM	Southeast	3	312 84011001	N	613664.0414	4585896.6112	04/29/2019	08:25am	PROPERTY DAMAGE	0
38714549	2021	PUTNAM	Southeast	3	84I84031070	Y	614765.3400	4586841.3800	02/11/2021	03:35pm	PROPERTY DAMAGE	0
38516612	2020	PUTNAM	Southeast	3	84I84031070	Y	614765.3400	4586841.3800	07/26/2020	04:45pm	PROPERTY DAMAGE	0
38051437	2019	PUTNAM	Southeast	3	312 84011004	N	614036.2344	4586230.8821	08/28/2019	08:00am	PROPERTY DAMAGE	0
37841581	2019	PUTNAM	Southeast	3	312 84011010	N	614555.8970	4586708.4220	04/10/2019	07:50pm	PROPERTY DAMAGE	0
38358292	2020	PUTNAM	Southeast	3	312 84011001	N	613644.8022	4585885.5587	03/03/2020	05:38pm	PROPERTY DAMAGE	0
38139916	2019	PUTNAM	Southeast	3	312 84011005	N	614083.3719	4586281.7397	10/17/2019	01:30pm	PROPERTY DAMAGE	0
38096846	2019	PUTNAM	Southeast	3	312 84011011	N	614706.4359	4586785.2404	09/16/2019	05:25pm	PROPERTY DAMAGE	0
37993513	2019	PUTNAM	Southeast	3	312 84011010	N	614551.6633	4586707.4135	07/22/2019	03:45pm	PROPERTY DAMAGE	0
38148425	2019	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	10/17/2019	05:20am	PROPERTY DAMAGE	0

Case Num	Num Serious Injuries	Num Of Fatalities	Num Of Vehicles	Accd Type	Collision Type	Traffic Control
38739062		0	2	COLLISION WITH MOTOR VEHICLE	RIGHT TURN (AGAINST OTHER CAR)	TRAFFIC SIGNAL
38241206	0	0	2	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	STOP SIGN
37640737		0	1	COLLISION WITH OTHER FIXED OBJECT	OTHER	NONE
38421695		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
38612858		0	2	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	TRAFFIC SIGNAL
38096844		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
37699803		0	2	COLLISION WITH MOTOR VEHICLE	OVERTAKING	TRAFFIC SIGNAL
38223530		0	2	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	TRAFFIC SIGNAL
37939004		0	2	COLLISION WITH MOTOR VEHICLE	SIDESWIPE	NONE
37292787		0	2	COLLISION WITH MOTOR VEHICLE	OTHER	TRAFFIC SIGNAL
38071671		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	NO PASSING ZONE
38514369		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
38759877	1	0	2	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	TRAFFIC SIGNAL
38644677		0	1	COLLISION WITH ANIMAL	OTHER	NO PASSING ZONE
37619438		0	2	COLLISION WITH MOTOR VEHICLE	OVERTAKING	TRAFFIC SIGNAL
38742467		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
37956942		0	1	OVERTURNED	OTHER	NONE
37236255		0	2	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	TRAFFIC SIGNAL
38134963		0	3	COLLISION WITH MOTOR VEHICLE	OTHER	TRAFFIC SIGNAL
37362647	1	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
37886466	0	0	2	COLLISION WITH MOTOR VEHICLE	LEFT TURN (AGAINST OTHER CAR)	TRAFFIC SIGNAL
38265208		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
38213586		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	NONE
38328671		0	2	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	STOP SIGN
38233017		0	2	COLLISION WITH MOTOR VEHICLE	SIDESWIPE	NO PASSING ZONE
38234419		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
37664590		0	2	COLLISION WITH MOTOR VEHICLE	UNKNOWN	TRAFFIC SIGNAL
38155391		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
38377106		0	2	COLLISION WITH MOTOR VEHICLE	HEAD ON	TRAFFIC SIGNAL
37733022		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	NO PASSING ZONE
38294063		0	2	COLLISION WITH MOTOR VEHICLE	SIDESWIPE	TRAFFIC SIGNAL
38122929		0	2	COLLISION WITH MOTOR VEHICLE	OVERTAKING	NONE
38360972		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
37920537		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
37642553		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	NONE
38197624		0	1	COLLISION WITH ANIMAL	OTHER	NONE
37859773		0	2	COLLISION WITH MOTOR VEHICLE	LEFT TURN (AGAINST OTHER CAR)	TRAFFIC SIGNAL
38134961		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
37301625		0	3	COLLISION WITH MOTOR VEHICLE	OTHER	TRAFFIC SIGNAL
37937378		0	2	COLLISION WITH MOTOR VEHICLE	OVERTAKING	NONE
37614841		0	1	COLLISION WITH DEER	OTHER	NONE
38253618	0	0	4	COLLISION WITH MOTOR VEHICLE	OTHER	NONE
37428607	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	NO PASSING ZONE
38096908		0	2	COLLISION WITH MOTOR VEHICLE	OVERTAKING	MAINTENANCE WORK AREA
38628591	0	0	2	COLLISION WITH MOTOR VEHICLE	HEAD ON	TRAFFIC SIGNAL
38106320		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	NO PASSING ZONE
38322284		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
37333013		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
38718183		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	NO PASSING ZONE
37874885		0	1	COLLISION WITH DEER	OTHER	NO PASSING ZONE
38714549		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
38516612		0	2	COLLISION WITH MOTOR VEHICLE	OVERTAKING	NO PASSING ZONE
38051437		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	NO PASSING ZONE
37841581		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
38358292		0	2	COLLISION WITH MOTOR VEHICLE	HEAD ON	NONE
38139916		0	1	COLLISION WITH OTHER FIXED OBJECT	OTHER	UTILITY WORK AREA
38096846		0	2	COLLISION WITH MOTOR VEHICLE	OVERTAKING	TRAFFIC SIGNAL
37993513		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
38148425		0	2	COLLISION WITH MOTOR VEHICLE	OVERTAKING	TRAFFIC SIGNAL

Case Num	Light Condition	Weather	Road Surf Cond	Ped Loc	Ped Action	Veh Type Veh 1
38739062	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38241206	DARK-ROAD UNLIGHTED	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37640737	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	OTHER
38421695	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38612858	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38096844	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37699803	DUSK	CLOUDY	DRY	NOT APPLICABLE	NOT APPLICABLE	OTHER
38223530	DARK-ROAD UNLIGHTED	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37939004	DAYLIGHT	CLOUDY	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37292787	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38071671	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38514369	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38759877	DARK-ROAD LIGHTED	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38644677	DARK-ROAD UNLIGHTED	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37619438	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38742467	DAYLIGHT	CLOUDY	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37956942	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37236255	DAYLIGHT	CLOUDY	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38134963	DAYLIGHT	CLOUDY	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37362647	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37886466	DAYLIGHT	RAIN	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38265208	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38213586	DARK-ROAD UNLIGHTED	SNOW	SNOW/ICE	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38328671	DAYLIGHT	CLOUDY	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38233017	DAYLIGHT	SLEET/HAIL/FREEZING RAIN	SNOW/ICE	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38234419	DAYLIGHT	SLEET/HAIL/FREEZING RAIN	SNOW/ICE	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37664590	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38155391	DAYLIGHT	CLEAR	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38377106	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37733022	DAYLIGHT	CLOUDY	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38294063	DAYLIGHT	SNOW	SNOW/ICE	NOT APPLICABLE	NOT APPLICABLE	OTHER
38122929	DARK-ROAD UNLIGHTED	CLOUDY	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38360972	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37920537	DAYLIGHT	RAIN	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37642553	DARK-ROAD UNLIGHTED	CLOUDY	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38197624	DARK-ROAD UNLIGHTED	CLOUDY	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37859773	DARK-ROAD UNLIGHTED	CLOUDY	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38134961	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37301625	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37937378	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37614841	DARK-ROAD UNLIGHTED	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	OTHER
38253618	DARK-ROAD UNLIGHTED	RAIN	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37428607	DAYLIGHT	RAIN	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38096908	DARK-ROAD LIGHTED	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38628591	DARK-ROAD LIGHTED	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38106320	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38322284	DAYLIGHT	CLOUDY	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37333013	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38718183	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37874885	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38714549	DAYLIGHT	CLOUDY	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38516612	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38051437	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37841581	DUSK	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38358292	DAYLIGHT	RAIN	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38139916	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38096846	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37993513	DAYLIGHT	CLOUDY	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38148425	DARK-ROAD LIGHTED	CLEAR	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP

Case Num	Veh Type Veh 2	Dir Of Travel Veh 1	Dir Of Travel Veh 2	Apparent Factor Veh 1	Apparent Factor Veh 2	Driver Age Veh 1
38739062	CAR/VAN/PICKUP	SOUTH	SOUTH	TURNING IMPROPER	NOT APPLICABLE	68
38241206	CAR/VAN/PICKUP	NORTH	EAST	FAILURE TO YIELD RIGHT OF WAY	NOT APPLICABLE	68
37640737		NORTH		TURNING IMPROPER		25
38421695	OTHER	SOUTH-EAST	SOUTH-EAST	NOT APPLICABLE	FOLLOWING TOO CLOSELY	58
38612858	CAR/VAN/PICKUP	NORTH	SOUTH	TURNING IMPROPER	NOT APPLICABLE	36
38096844	CAR/VAN/PICKUP	NORTH	NORTH	NOT APPLICABLE	FOLLOWING TOO CLOSELY	56
37699803	CAR/VAN/PICKUP	SOUTH	SOUTH	FOLLOWING TOO CLOSELY	NOT APPLICABLE	
38223530	CAR/VAN/PICKUP	SOUTH	WEST	NOT APPLICABLE	FAILURE TO YIELD RIGHT OF WAY	22
37939004	CAR/VAN/PICKUP	WEST	WEST	OTHER (VEHICLE)	NOT APPLICABLE	44
37292787	CAR/VAN/PICKUP	EAST	EAST	BACKING UNSAFELY	PASSING OR LANE USAGE IMPROPERLY	63
38071671	CAR/VAN/PICKUP	NORTH	NORTH	NOT APPLICABLE	FOLLOWING TOO CLOSELY	54
38514369	CAR/VAN/PICKUP	NORTH	NORTH	DRIVER INATTENTION	NOT APPLICABLE	77
38759877	CAR/VAN/PICKUP	WEST	NORTH	FAILURE TO YIELD RIGHT OF WAY	NOT APPLICABLE	40
38644677		SOUTH		ANIMAL'S ACTION		66
37619438	CAR/VAN/PICKUP	SOUTH	SOUTH	UNSAFE LANE CHANGE	NOT APPLICABLE	65
38742467	CAR/VAN/PICKUP	WEST	WEST	FOLLOWING TOO CLOSELY	NOT APPLICABLE	26
37956942		EAST		UNSAFE SPEED		48
37236255	CAR/VAN/PICKUP	NORTH	SOUTH	TRAFFIC CONTROL DEVICES DISREGARDED	NOT APPLICABLE	86
38134963	CAR/VAN/PICKUP	NORTH	NORTH	FOLLOWING TOO CLOSELY	NOT APPLICABLE	55
37362647	CAR/VAN/PICKUP	EAST	EAST	FOLLOWING TOO CLOSELY	NOT APPLICABLE	41
37886466	CAR/VAN/PICKUP	SOUTH	NORTH-WEST	TRAFFIC CONTROL DEVICES DISREGARDED	NOT APPLICABLE	57
38265208	CAR/VAN/PICKUP	NORTH-EAST	NORTH-EAST	NOT APPLICABLE	FOLLOWING TOO CLOSELY	64
38213586	CAR/VAN/PICKUP	EAST	EAST	PAVEMENT SLIPPERY	NOT APPLICABLE	48
38328671	CAR/VAN/PICKUP	EAST	NORTH	NOT APPLICABLE	FAILURE TO YIELD RIGHT OF WAY	48
38233017	CAR/VAN/PICKUP	SOUTH	NORTH	UNSAFE SPEED	NOT APPLICABLE	21
38234419	CAR/VAN/PICKUP	EAST	EAST	FOLLOWING TOO CLOSELY	NOT APPLICABLE	48
37664590	CAR/VAN/PICKUP	SOUTH-WEST	SOUTH	TRAFFIC CONTROL DEVICES DISREGARDED	NOT APPLICABLE	19
38155391	CAR/VAN/PICKUP	WEST	WEST	FOLLOWING TOO CLOSELY	NOT APPLICABLE	23
38377106	CAR/VAN/PICKUP	NORTH	SOUTH	TRAFFIC CONTROL DEVICES DISREGARDED	DRIVER INEXPERIENCE	18
37733022	CAR/VAN/PICKUP	EAST	EAST	NOT APPLICABLE	FOLLOWING TOO CLOSELY	59
38294063	CAR/VAN/PICKUP	NORTH	SOUTH	UNSAFE SPEED	NOT APPLICABLE	
38122929	TRUCK	WEST	WEST	NOT APPLICABLE	UNSAFE LANE CHANGE	47
38360972	CAR/VAN/PICKUP	NORTH-EAST	NORTH-EAST	FOLLOWING TOO CLOSELY	NOT APPLICABLE	78
37920537	CAR/VAN/PICKUP	EAST	EAST	UNSAFE SPEED	NOT APPLICABLE	45
37642553	CAR/VAN/PICKUP	EAST	EAST	FOLLOWING TOO CLOSELY	NOT APPLICABLE	26
38197624		WEST		ANIMAL'S ACTION		60
37859773	CAR/VAN/PICKUP	NORTH-EAST	WEST	TRAFFIC CONTROL DEVICES DISREGARDED	NOT APPLICABLE	33
38134961	CAR/VAN/PICKUP	WEST	WEST	NOT APPLICABLE	FOLLOWING TOO CLOSELY	28
37301625	CAR/VAN/PICKUP	EAST	EAST	FOLLOWING TOO CLOSELY	NOT APPLICABLE	27
37937378	CAR/VAN/PICKUP	WEST	WEST	FAILURE TO YIELD RIGHT OF WAY	NOT APPLICABLE	34
37614841		NORTH		ANIMAL'S ACTION		35
38253618	CAR/VAN/PICKUP	EAST	EAST	UNSAFE SPEED	NOT APPLICABLE	60
37428607	CAR/VAN/PICKUP	WEST	WEST	FOLLOWING TOO CLOSELY	NOT APPLICABLE	24
38096908	CAR/VAN/PICKUP	SOUTH-WEST	SOUTH-WEST	PASSING OR LANE USAGE IMPROPERLY	NOT APPLICABLE	69
38628591	CAR/VAN/PICKUP	WEST	EAST	TRAFFIC CONTROL DEVICES DISREGARDED	NOT APPLICABLE	40
38106320	CAR/VAN/PICKUP	NORTH	NORTH	FOLLOWING TOO CLOSELY	NOT APPLICABLE	26
38322284	CAR/VAN/PICKUP	WEST	WEST	FOLLOWING TOO CLOSELY	NOT APPLICABLE	57
37333013	CAR/VAN/PICKUP	WEST	WEST	FOLLOWING TOO CLOSELY	NOT APPLICABLE	70
38718183	CAR/VAN/PICKUP	WEST	WEST	DRIVER INATTENTION	NOT APPLICABLE	27
37874885		WEST		ANIMAL'S ACTION		35
38714549	CAR/VAN/PICKUP	SOUTH	SOUTH	OUTSIDE CAR DISTRACTION	NOT APPLICABLE	63
38516612	CAR/VAN/PICKUP	NORTH	NORTH	PASSING OR LANE USAGE IMPROPERLY	NOT APPLICABLE	34
38051437	TRUCK	NORTH	NORTH	FOLLOWING TOO CLOSELY	OTHER (VEHICLE)	28
37841581	CAR/VAN/PICKUP	EAST	EAST	NOT APPLICABLE	FOLLOWING TOO CLOSELY	51
38358292	CAR/VAN/PICKUP	NORTH	SOUTH	FAILURE TO KEEP RIGHT	NOT APPLICABLE	44
38139916		WEST		NOT APPLICABLE		59
38096846	CAR/VAN/PICKUP	SOUTH-WEST	SOUTH-WEST	FAILURE TO YIELD RIGHT OF WAY	NOT APPLICABLE	61
37993513	CAR/VAN/PICKUP	EAST	EAST	DRIVER INATTENTION	NOT APPLICABLE	17
38148425	TRUCK	NORTH-WEST	NORTH-WEST	FAILURE TO YIELD RIGHT OF WAY	NOT APPLICABLE	75

Case Num	Driver Age Veh 2	PRE_ACCD_ACTN_VEH1	PRE_ACCD_ACTN_VEH2	Day_Of_Week	On Street	Closest Cross Street	Parking Lot Ind
38739062	56	MAKING RIGHT TURN	MAKING LEFT TURN	Thu	INDEPENDENT WAY	[Route] 312	N
38241206	50	MAKING LEFT TURN	GOING STRAIGHT AHEAD	Fri	[Route] 312		N
37640737		MAKING RIGHT TURN		Mon	PARKING LOT		N
38421695		STOPPED IN TRAFFIC	SLOWED OR STOPPING	Sat	[Route] 312	INDEPENDENT WAY	N
38612858	61	MAKING U TURN	GOING STRAIGHT AHEAD	Tue	ROUTE 312	INDEPENDENT WAY	N
38096844	45	STOPPED IN TRAFFIC	STARTING IN TRAFFIC	Sun	INDEPENDENT WAY	[Route] 312	N
37699803	27	GOING STRAIGHT AHEAD	GOING STRAIGHT AHEAD	Sat	ROUTE 312	[Route] 6	N
38223530	33	GOING STRAIGHT AHEAD	MAKING LEFT TURN	Sun	ROUTE 312	Ramp	N
37939004		BACKING	PARKED	Wed	[Route] 312	Route 6	N
37292787	67	STOPPED IN TRAFFIC	MAKING LEFT TURN	Mon	ROUTE 312	Ramp	N
38071671	19	SLOWED OR STOPPING	GOING STRAIGHT AHEAD	Sat	[Route] 312	Unnamed Street	N
38514369	49	STARTING IN TRAFFIC	STOPPED IN TRAFFIC	Mon	ROUTE 312	Parking Lot	N
38759877	40	GOING STRAIGHT AHEAD	MAKING LEFT TURN	Mon	[Route] 312	INDEPENDENT WAY	N
38644677		GOING STRAIGHT AHEAD		Sat	ROUTE 312	ROUTE 6	N
37619438	60	CHANGING LANES	GOING STRAIGHT AHEAD	Sat	INDEPENDENT WAY	Ramp	N
38742467	28	SLOWED OR STOPPING	STOPPED IN TRAFFIC	Wed	[Route] 312	INDEPENDENT WAY	N
37956942		MERGING		Fri	I 84	Route 312	N
37236255	20	MAKING RIGHT TURN	MAKING LEFT TURN	Sun	INDEPENDENT WAY	[Route] 312	N
38134963	78	GOING STRAIGHT AHEAD	STOPPED IN TRAFFIC	Mon	[Route] 312	[Route] 84	N
37362647	78	SLOWED OR STOPPING	STOPPED IN TRAFFIC	Tue	ROUTE 312	Ramp	N
37886466	47	GOING STRAIGHT AHEAD	MAKING LEFT TURN	Mon	[Route] 312	INDEPENDENT WAY	N
38265208	43	STOPPED IN TRAFFIC	GOING STRAIGHT AHEAD	Wed	ROUTE 312	Ramp	N
38213586	56	GOING STRAIGHT AHEAD	STOPPED IN TRAFFIC	Thu	[Route] 312	I 84	N
38328671	35	GOING STRAIGHT AHEAD	MAKING LEFT TURN	Tue	[Route] 312	Parking Lot	N
38233017	53	GOING STRAIGHT AHEAD	GOING STRAIGHT AHEAD	Tue	ROUTE 312	Prospect Hill Rd	N
38234419	44	STARTING IN TRAFFIC	STOPPED IN TRAFFIC	Tue	[Route] 312	INDEPENDENT WAY	N
37664590	35	MAKING LEFT TURN	GOING STRAIGHT AHEAD	Thu	ROUTE 312	Ramp	N
38155391	75	SLOWED OR STOPPING	SLOWED OR STOPPING	Wed	ROUTE 312	Ramp	N
38377106	34	MAKING LEFT TURN	GOING STRAIGHT AHEAD	Sat	ROUTE 312	Ramp	N
37733022	18	STOPPED IN TRAFFIC	GOING STRAIGHT AHEAD	Thu	ROUTE 312	Unnamed Street	N
38294063	40	MAKING RIGHT TURN	STOPPED IN TRAFFIC	Sat	ROUTE 312	Ramp	N
38122929	36	GOING STRAIGHT AHEAD	CHANGING LANES	Wed	I 84	Route 312	N
38360972	70	MAKING RIGHT TURN	MAKING RIGHT TURN	Tue	[Route] 312	[Route] 6	N
37920537	35	GOING STRAIGHT AHEAD	STOPPED IN TRAFFIC	Mon	RAMP	Route 312	N
37642553	35	GOING STRAIGHT AHEAD	STARTING IN TRAFFIC	Thu	ROUTE 312	PROSPECT HILL RD	N
38197624		GOING STRAIGHT AHEAD		Tue	INDEPENDENT WAY	[Route] 312	N
37859773	70	MAKING LEFT TURN	GOING STRAIGHT AHEAD	Tue	ROUTE 312	Ramp	N
38134961	30	STOPPED IN TRAFFIC	SLOWED OR STOPPING	Mon	ROUTE 312	Route 6	N
37301625	42	SLOWED OR STOPPING	STOPPED IN TRAFFIC	Thu	[Route] 312		N
37937378	59	MERGING	GOING STRAIGHT AHEAD	Sat	ROUTE 312	[Route] 84	N
37614841		GOING STRAIGHT AHEAD		Wed	ROUTE 312	Ramp	N
38253618	60	GOING STRAIGHT AHEAD	STOPPED IN TRAFFIC	Fri	[Route] 312	[Route] 6	N
37428607	58	GOING STRAIGHT AHEAD	MAKING RIGHT TURN	Sat	ROUTE 312	Pugsley Rd	N
38096908	32	OVERTAKING	STARTING IN TRAFFIC	Tue	STATE HWY 312	I 84	N
38628591	48	GOING STRAIGHT AHEAD	MAKING LEFT TURN	Sun	[Route] 312	INDEPENDENT WAY	N
38106320	45	GOING STRAIGHT AHEAD	SLOWED OR STOPPING	Wed	ROUTE 312	Connecting Road	N
38322284	43	SLOWED OR STOPPING	STOPPED IN TRAFFIC	Sun	ROUTE 312	Route 6	N
37333013	68	GOING STRAIGHT AHEAD	STOPPED IN TRAFFIC	Thu	ROUTE 312	[Route] 6	N
38718183	33	GOING STRAIGHT AHEAD	STOPPED IN TRAFFIC	Mon	ROUTE 312	Ramp	N
37874885		GOING STRAIGHT AHEAD		Mon	ROUTE 312	Route 6	N
38714549	66	MAKING RIGHT TURN	STOPPED IN TRAFFIC	Thu	[Route] 84	[Route] 312	N
38516612	29	CHANGING LANES	GOING STRAIGHT AHEAD	Sun	[Route] 312	[Route] 84	N
38051437	48	GOING STRAIGHT AHEAD	SLOWED OR STOPPING	Wed	[Route] 312	Unnamed Street	N
37841581	61	STOPPED IN TRAFFIC	SLOWED OR STOPPING	Wed	ROUTE 312	Parking Lot	N
38358292	22	GOING STRAIGHT AHEAD	GOING STRAIGHT AHEAD	Tue	[Route] 312	Route 6	N
38139916		GOING STRAIGHT AHEAD		Thu	ROUTE 312	Prospect Hill Rd	N
38096846	55	MAKING RIGHT TURN	GOING STRAIGHT AHEAD	Mon	ROUTE 312	Ramp	N
37993513	21	GOING STRAIGHT AHEAD	STOPPED IN TRAFFIC	Mon	ROUTE 312	Parking Lot	N
38148425	25	MAKING LEFT TURN	MAKING LEFT TURN	Thu	[Route] 312	INDEPENDENT WAY	N

Case Num	Case Year	County	Comp Muni	Muni Type	Comp Ref Marker	At Intersection	Comp X	Comp Y	Accd Date	Accd Time	Severity	Num Of Injuries
37454443	2018	PUTNAM	Southeast	3	312 84011010	Y	614566.8055	4586711.5380	08/28/2018	12:15pm	PROPERTY DAMAGE	0
38102444	2019	PUTNAM	Southeast	3	84I84031070	Y	614765.3400	4586841.3800	09/30/2019	02:30pm	PROPERTY DAMAGE	0
37301622	2018	PUTNAM	Southeast	3	312 84011000	Y	613521.4700	4585796.8800	05/24/2018	04:30pm	PROPERTY DAMAGE	0
37313782	2018	PUTNAM	Southeast	3	312 84011010	Y	614572.7864	4586713.6150	06/01/2018	07:30am	PROPERTY DAMAGE	0
38538676	2020	PUTNAM	Southeast	3	312 84011013	Y	614881.2461	4586997.8475	08/30/2020	09:06pm	PROPERTY DAMAGE AND INJURY	1
38734226	2021	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	01/10/2021	01:45pm	PROPERTY DAMAGE	0
38812972	2021	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	01/16/2021	12:55pm	PROPERTY DAMAGE	0
38193609	2019	PUTNAM	Southeast	3	312 84011000	Y	613521.4700	4585796.8800	11/15/2019	04:34pm	PROPERTY DAMAGE	0
38377845	2020	PUTNAM	Southeast	3	312 84011010	Y	614573.0963	4586713.7226	03/18/2020	03:29pm	PROPERTY DAMAGE AND INJURY	1
37394290	2018	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	07/19/2018	08:30am	PROPERTY DAMAGE	0
38563207	2020	PUTNAM	Southeast	3	312 84011012	Y	614770.6003	4586846.9428	09/21/2020	07:30pm	PROPERTY DAMAGE	0
38576877	2020	PUTNAM	Southeast	3	84I84031070	Y	614765.3400	4586841.3800	10/03/2020	02:00pm	PROPERTY DAMAGE	0
38500264	2020	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	08/04/2020	05:05pm	PROPERTY DAMAGE	0
38256125	2019	PUTNAM	Southeast	3	312 84011010	Y	614566.8055	4586711.5380	12/31/2019	03:17pm	PROPERTY DAMAGE AND INJURY	1
37902566	2019	PUTNAM	Southeast	3	84I84031070	Y	614765.3400	4586841.3800	05/22/2019	09:03pm	NON-REPORTABLE	0
37398069	2018	PUTNAM	Southeast	3		Y	614879.2440	4587000.3404	07/24/2018	05:09pm	PROPERTY DAMAGE	0
38745411	2020	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	12/13/2020	04:32pm	PROPERTY DAMAGE	0
37721478	2019	PUTNAM	Southeast	3	312 84011000	N	613533.9429	4585808.0637	01/26/2019	12:35pm	PROPERTY DAMAGE	0
38704187	2020	PUTNAM	Southeast	3	312 84011005	Y	614094.3400	4586300.5000	11/23/2020	10:50am	PROPERTY DAMAGE AND INJURY	1
37326386	2018	PUTNAM	Southeast	3	6 84041100	Y	613521.5327	4585796.8403	06/11/2018	10:55am	PROPERTY DAMAGE	0
38081163	2019	PUTNAM	Southeast	3		Y	613520.8299	4585796.1490	09/14/2019	08:25pm	PROPERTY DAMAGE	0
37904542	2019	PUTNAM	Southeast	3	312 84011000	Y	613521.4700	4585796.8800	05/22/2019	01:10pm	PROPERTY DAMAGE AND INJURY	1
38371654	2020	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	03/15/2020	06:05pm	PROPERTY DAMAGE	0
37522565	2018	PUTNAM	Southeast	3		N	614596.2905	4586689.5649	09/29/2018	09:05am	PROPERTY DAMAGE AND INJURY	1
37595606	2018	PUTNAM	Southeast	3	84I84031070	N	614734.6330	4586878.2222	10/19/2018	08:43pm	PROPERTY DAMAGE	0
38286523	2020	PUTNAM	Southeast	3	312 84011012	N	614782.6483	4586859.6838	01/15/2020	03:20pm	PROPERTY DAMAGE AND INJURY	1
38091773	2019	PUTNAM	Southeast	3	312 84011006	N	614116.2777	4586449.0901	09/23/2019	11:30am	PROPERTY DAMAGE AND INJURY	1
38345112	2020	PUTNAM	Southeast	3	312 84011010	Y	614566.8055	4586711.5380	02/14/2020	01:20pm	PROPERTY DAMAGE	0
37868808	2019	PUTNAM	Southeast	3	312 84011010	Y	614566.8055	4586711.5380	04/18/2019	07:45am	PROPERTY DAMAGE	0
37269123	2018	PUTNAM	Southeast	3	312 84011000	N	613555.5102	4585827.4019	04/30/2018	02:50pm	PROPERTY DAMAGE	0
38388628	2020	PUTNAM	Southeast	3		N	614604.0000	4586663.0000	04/06/2020	04:35pm	PROPERTY DAMAGE	0
37476006	2018	PUTNAM	Southeast	3	312 84011010	N	614498.4426	4586697.1592	09/11/2018	07:30pm	PROPERTY DAMAGE AND INJURY	1
38739957	2020	PUTNAM	Southeast	3	6 84041100	N	613508.3770	4585804.6795	12/03/2020	02:40pm	PROPERTY DAMAGE	0
38485925	2020	PUTNAM	Southeast	3	84I84031070	Y	614765.3400	4586841.3800	07/22/2020	05:20pm	PROPERTY DAMAGE AND INJURY	1
37686843	2019	PUTNAM	Southeast	3	312 84011011	N	614642.3886	4586744.1017	01/11/2019	06:15pm	PROPERTY DAMAGE	0
38749038	2020	PUTNAM	Southeast	3	312 84011010	N	614516.6961	4586699.8793	12/15/2020	05:25pm	PROPERTY DAMAGE	0
38412563	2020	PUTNAM	Southeast	3		Y	614604.6162	4586663.1588	05/07/2020	12:00pm	PROPERTY DAMAGE	0
37405020	2018	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	07/27/2018	09:30pm	PROPERTY DAMAGE	0
37762558	2019	PUTNAM	Southeast	3	312 84011005	Y	614094.3400	4586300.5000	02/26/2019	03:40pm	NON-REPORTABLE	0
38714627	2021	PUTNAM	Southeast	3	312 84011010	Y	614573.7800	4586713.9600	02/10/2021	07:00pm	PROPERTY DAMAGE	0
38554902	2020	PUTNAM	Southeast	3	84I84031070	Y	614765.3400	4586841.3800	09/15/2020	07:45am	NON-REPORTABLE	0
37563122	2018	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	10/30/2018	04:20pm	PROPERTY DAMAGE	0
37624954	2018	PUTNAM	Southeast	3	312 84011012	N	614831.1640	4586918.9784	11/27/2018	07:05pm	PROPERTY DAMAGE	0
38634310	2020	PUTNAM	Southeast	3		Y	614888.4471	4587010.7642	11/05/2020	09:29am	PROPERTY DAMAGE	0
38751104	2021	PUTNAM	Southeast	3		Y	614881.5122	4586998.7146	02/22/2021	05:18pm	NON-REPORTABLE	0
37768743	2019	PUTNAM	Southeast	3	312 84011007	N	614159.9510	4586692.0587	02/25/2019	01:35am	NON-REPORTABLE	0
37664709	2018	PUTNAM	Southeast	3	312 84011000	Y	613521.4700	4585796.8800	12/27/2018	02:01pm	NON-REPORTABLE	0
37658885	2018	PUTNAM	Southeast	3	312 84011010	Y	614458.0017	4586693.9754	12/14/2018	03:30pm	PROPERTY DAMAGE	0
37780586	2019	PUTNAM	Southeast	3	84I84031070	Y	614765.3400	4586841.3800	03/04/2019	05:45pm	PROPERTY DAMAGE	0
37906539	2019	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	05/24/2019	11:05am	PROPERTY DAMAGE	0
38126856	2019	PUTNAM	Southeast	3	312 84011000	N	613521.4700	4585796.8800	10/15/2019	04:01pm	NON-REPORTABLE	0
37528424	2018	PUTNAM	Southeast	3	312 84011010	N	614517.9858	4586700.0878	10/01/2018	11:50am	PROPERTY DAMAGE	0
37805595	2019	PUTNAM	Southeast	3	312 84011010	Y	614572.7864	4586713.6150	03/22/2019	08:43pm	PROPERTY DAMAGE	0
37839179	2019	PUTNAM	Southeast	3	312 84011001	N	613644.8022	4585885.5587	04/11/2019	10:38am	INJURY	1
37696718	2019	PUTNAM	Southeast	3	312 84011010	Y	614566.8055	4586711.5380	01/16/2019	07:50am	PROPERTY DAMAGE	0
38584652	2020	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	10/08/2020	05:40pm	PROPERTY DAMAGE	0
38385419	2020	PUTNAM	Southeast	3	312 84011005	N	614115.7041	4586365.8636	04/04/2020	04:04pm	PROPERTY DAMAGE	0
37741137	2019	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	02/11/2019	06:40am	PROPERTY DAMAGE AND INJURY	1
38191507	2019	PUTNAM	Southeast	3		Y	614399.1181	4586699.9838	11/20/2019	06:15pm	PROPERTY DAMAGE	0

Case Num	Num Serious Injuries	Num Of Fatalities	Num Of Vehicles	Accd Type	Collision Type	Traffic Control
37454443		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	NO PASSING ZONE
38102444		0	2	COLLISION WITH MOTOR VEHICLE	OVERTAKING	TRAFFIC SIGNAL
37301622		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	NO PASSING ZONE
37313782		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
38538676	0	0	2	COLLISION WITH MOTOR VEHICLE	LEFT TURN (AGAINST OTHER CAR)	TRAFFIC SIGNAL
38734226		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
38812972		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
38193609		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
38377845	0	0	2	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	TRAFFIC SIGNAL
37394290		0	2	COLLISION WITH MOTOR VEHICLE	OVERTAKING	TRAFFIC SIGNAL
38563207		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
38576877		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	NO PASSING ZONE
38500264		0	2	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	FLASHING LIGHT
38256125	0	0	4	COLLISION WITH MOTOR VEHICLE	OTHER	TRAFFIC SIGNAL
37902566		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
37398069		0	2	COLLISION WITH MOTOR VEHICLE	OVERTAKING	TRAFFIC SIGNAL
38745411		0	2	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	TRAFFIC SIGNAL
37721478		0	2	COLLISION WITH MOTOR VEHICLE	HEAD ON	NO PASSING ZONE
38704187	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	NO PASSING ZONE
37326386		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
38081163		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
37904542	0	0	2	COLLISION WITH MOTOR VEHICLE	SIDESWIPE	TRAFFIC SIGNAL
38371654		0	2	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	TRAFFIC SIGNAL
37522565	0	0	2	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	STOP SIGN
37595606		0	2	COLLISION WITH MOTOR VEHICLE	OVERTAKING	NONE
38286523	0	0	2	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	STOP SIGN
38091773	0	0	1	COLLISION WITH GUIDE RAIL	OTHER	NO PASSING ZONE
38345112		0	2	COLLISION WITH MOTOR VEHICLE	OVERTAKING	TRAFFIC SIGNAL
37868808		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	NONE
37269123		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
38388628		0	2	COLLISION WITH MOTOR VEHICLE	RIGHT TURN (WITH OTHER CAR)	NONE
37476006	0	0	3	COLLISION WITH MOTOR VEHICLE	OTHER	OTHER
38739957		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	NONE
38485925	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
37686843		0	2	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	NO PASSING ZONE
38749038		0	2	COLLISION WITH MOTOR VEHICLE	RIGHT TURN (AGAINST OTHER CAR)	TRAFFIC SIGNAL
38412563		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	NONE
37405020		0	2	COLLISION WITH MOTOR VEHICLE	LEFT TURN (WITH OTHER CAR)	TRAFFIC SIGNAL
37762558		0	2	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	STOP SIGN
38714627		0	2	COLLISION WITH MOTOR VEHICLE	LEFT TURN (WITH OTHER CAR)	TRAFFIC SIGNAL
38554902		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
37563122		0	2	COLLISION WITH MOTOR VEHICLE	OVERTAKING	TRAFFIC SIGNAL
37624954		0	1	COLLISION WITH DEER	OTHER	NO PASSING ZONE
38634310		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
38751104		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
37768743		0	1	COLLISION WITH OTHER	OTHER	NO PASSING ZONE
37664709		0	3	COLLISION WITH MOTOR VEHICLE	OTHER	TRAFFIC SIGNAL
37658885		0	2	COLLISION WITH MOTOR VEHICLE	LEFT TURN (AGAINST OTHER CAR)	NO PASSING ZONE
37780586		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
37906539		0	2	COLLISION WITH MOTOR VEHICLE	OVERTAKING	TRAFFIC SIGNAL
38126856		0	2	COLLISION WITH MOTOR VEHICLE	SIDESWIPE	NONE
37528424		0	2	COLLISION WITH MOTOR VEHICLE	OVERTAKING	NONE
37805595		0	2	COLLISION WITH MOTOR VEHICLE	LEFT TURN (AGAINST OTHER CAR)	TRAFFIC SIGNAL
37839179	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	NONE
37696718		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
38584652		0	2	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	TRAFFIC SIGNAL
38385419		0	1	COLLISION WITH GUIDE RAIL	OTHER	NO PASSING ZONE
37741137	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
38191507		0	2	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	STOP SIGN

Case Num	Light Condition	Weather	Road Surf Cond	Ped Loc	Ped Action	Veh Type Veh 1
37454443	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38102444	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37301622	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37313782	DAYLIGHT	RAIN	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38538676	DARK-ROAD UNLIGHTED	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38734226	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38812972	DAYLIGHT	CLOUDY	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38193609	DUSK	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38377845	DAYLIGHT	CLOUDY	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37394290	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38563207	DARK-ROAD LIGHTED	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38576877	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38500264	DAYLIGHT	RAIN	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38256125	DAYLIGHT	CLOUDY	WET	NOT APPLICABLE	NOT APPLICABLE	OTHER
37902566	DARK-ROAD UNLIGHTED	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37398069	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38745411	DUSK	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37721478	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	OTHER
38704187	DAYLIGHT	RAIN	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37326386	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38081163	DARK-ROAD UNLIGHTED	RAIN	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37904542	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38371654	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37522565	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37595606	DARK-ROAD UNLIGHTED	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	OTHER
38286523	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38091773	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38345112	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37868808	DAYLIGHT	CLOUDY	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37269123	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38388628	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37476006	DARK-ROAD UNLIGHTED	CLOUDY	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38739957	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38485925	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37686843	DARK-ROAD UNLIGHTED	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38749038	DARK-ROAD LIGHTED	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38412563	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37405020	DARK-ROAD UNLIGHTED	RAIN	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37762558	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38714627	DARK-ROAD LIGHTED	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38554902	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37563122	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37624954	DARK-ROAD UNLIGHTED	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38634310	DAYLIGHT	OTHER	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38751104	DAYLIGHT	SNOW	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37768743	DARK-ROAD LIGHTED	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37664709	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37658885	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37780586	DUSK	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37906539	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38126856	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	TRUCK
37528424	DAYLIGHT	CLOUDY	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37805595	DARK-ROAD LIGHTED	SLEET/HAIL/FREEZING RAIN	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37839179	DAYLIGHT	CLOUDY	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37696718	DAYLIGHT	CLOUDY	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38584652	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38385419	DAYLIGHT	CLOUDY	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37741137	DAWN	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38191507	DARK-ROAD UNLIGHTED	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP

Case Num	Veh Type Veh 2	Dir Of Travel Veh 1	Dir Of Travel Veh 2	Apparent Factor Veh 1	Apparent Factor Veh 2	Driver Age Veh 1
37454443	CAR/VAN/PICKUP	EAST	WEST	FOLLOWING TOO CLOSELY	REACTION TO OTHER UNINVOLVED VEHICL	43
38102444	TRUCK	EAST	EAST	PASSING OR LANE USAGE IMPROPERLY	NOT APPLICABLE	76
37301622	CAR/VAN/PICKUP	EAST	EAST	FOLLOWING TOO CLOSELY	NOT APPLICABLE	70
37313782	CAR/VAN/PICKUP	WEST	WEST	FOLLOWING TOO CLOSELY	NOT APPLICABLE	36
38538676	CAR/VAN/PICKUP	WEST	SOUTH	FAILURE TO YIELD RIGHT OF WAY	NOT APPLICABLE	40
38734226	CAR/VAN/PICKUP	EAST	EAST	NOT APPLICABLE	DRIVER INATTENTION	51
38812972	TRUCK	NORTH	NORTH	PASSING OR LANE USAGE IMPROPERLY	UNSAFE SPEED	77
38193609	CAR/VAN/PICKUP	NORTH-WEST	NORTH-WEST	FOLLOWING TOO CLOSELY	NOT APPLICABLE	35
38377845	CAR/VAN/PICKUP	WEST	NORTH	TRAFFIC CONTROL DEVICES DISREGARDED	NOT APPLICABLE	41
37394290	CAR/VAN/PICKUP	EAST	EAST	PASSING OR LANE USAGE IMPROPERLY	NOT APPLICABLE	58
38563207	CAR/VAN/PICKUP	SOUTH-WEST	SOUTH-WEST	FOLLOWING TOO CLOSELY	NOT APPLICABLE	27
38576877	CAR/VAN/PICKUP	WEST	WEST	FOLLOWING TOO CLOSELY	NOT APPLICABLE	17
38500264	CAR/VAN/PICKUP	NORTH	WEST	TRAF CNTRL DEV IMPROPER/NON-WRKING	TRAF CNTRL DEV IMPROPER/NON-WRKING	26
38256125	CAR/VAN/PICKUP	EAST	EAST	FOLLOWING TOO CLOSELY	FOLLOWING TOO CLOSELY	
37902566	CAR/VAN/PICKUP	NORTH	NORTH	FOLLOWING TOO CLOSELY	NOT APPLICABLE	44
37398069	CAR/VAN/PICKUP	SOUTH	SOUTH	PASSING OR LANE USAGE IMPROPERLY	NOT APPLICABLE	24
38745411	CAR/VAN/PICKUP	EAST	NORTH-EAST	TRAFFIC CONTROL DEVICES DISREGARDED	UNKNOWN	27
37721478	CAR/VAN/PICKUP	SOUTH	NORTH	FAILURE TO YIELD RIGHT OF WAY	NOT APPLICABLE	
38704187	CAR/VAN/PICKUP	EAST	EAST	FOLLOWING TOO CLOSELY	NOT APPLICABLE	77
37326386	CAR/VAN/PICKUP	EAST	EAST	FOLLOWING TOO CLOSELY	NOT APPLICABLE	41
38081163	CAR/VAN/PICKUP	SOUTH	SOUTH	FOLLOWING TOO CLOSELY	NOT APPLICABLE	19
37904542	TRUCK	NORTH-WEST	NORTH-EAST	UNSAFE SPEED	NOT APPLICABLE	60
38371654	CAR/VAN/PICKUP	EAST	NORTH	TRAFFIC CONTROL DEVICES DISREGARDED	NOT APPLICABLE	74
37522565	CAR/VAN/PICKUP	NORTH-WEST	SOUTH-WEST	FAILURE TO YIELD RIGHT OF WAY	NOT APPLICABLE	17
37595606	CAR/VAN/PICKUP	WEST	WEST	NOT APPLICABLE	UNSAFE LANE CHANGE	30
38286523	CAR/VAN/PICKUP	EAST	NORTH	NOT APPLICABLE	FAILURE TO YIELD RIGHT OF WAY	19
38091773		WEST		ILLNESS		66
38345112	TRUCK	WEST	WEST	NOT APPLICABLE	REACTION TO OTHER UNINVOLVED VEHICL	59
37868808	CAR/VAN/PICKUP	WEST	WEST	NOT APPLICABLE	FOLLOWING TOO CLOSELY	54
37269123	CAR/VAN/PICKUP	WEST	WEST	ALCOHOL INVOLVEMENT	NOT APPLICABLE	30
38388628	CAR/VAN/PICKUP	NORTH-EAST	EAST	TURNING IMPROPER	NOT APPLICABLE	81
37476006	TRUCK	WEST	EAST	PASSING OR LANE USAGE IMPROPERLY	NOT APPLICABLE	86
38739957	CAR/VAN/PICKUP	UNKNOWN	UNKNOWN	BACKING UNSAFELY	NOT APPLICABLE	56
38485925	CAR/VAN/PICKUP	NORTH-EAST	NORTH-EAST	NOT APPLICABLE	FOLLOWING TOO CLOSELY	67
37686843	CAR/VAN/PICKUP	NORTH	EAST	TURNING IMPROPER	NOT APPLICABLE	62
38749038	CAR/VAN/PICKUP	NORTH	EAST	FAILURE TO YIELD RIGHT OF WAY	NOT APPLICABLE	66
38412563	OTHER	WEST	WEST	NOT APPLICABLE	BACKING UNSAFELY	
37405020	CAR/VAN/PICKUP	SOUTH-WEST	SOUTH-EAST	TRAFFIC CONTROL DEVICES DISREGARDED	NOT APPLICABLE	44
37762558	OTHER	WEST	SOUTH	NOT APPLICABLE	FOLLOWING TOO CLOSELY	38
38714627	OTHER	SOUTH	SOUTH	NOT APPLICABLE	FAILURE TO YIELD RIGHT OF WAY	65
38554902	CAR/VAN/PICKUP	WEST	WEST	NOT APPLICABLE	FOLLOWING TOO CLOSELY	46
37563122	CAR/VAN/PICKUP	EAST	EAST	PASSING OR LANE USAGE IMPROPERLY	NOT APPLICABLE	62
37624954		NORTH		ANIMAL'S ACTION		41
38634310	CAR/VAN/PICKUP	EAST	EAST	UNSAFE SPEED	NOT APPLICABLE	57
38751104	CAR/VAN/PICKUP	EAST	EAST	NOT APPLICABLE	UNSAFE SPEED	30
37768743		EAST		OBSTRUCTION/DEBRIS		38
37664709	CAR/VAN/PICKUP	NORTH	WEST	FAILURE TO YIELD RIGHT OF WAY	NOT APPLICABLE	18
37658885	CAR/VAN/PICKUP	WEST	EAST	FAILURE TO YIELD RIGHT OF WAY	NOT APPLICABLE	29
37780586	CAR/VAN/PICKUP	EAST	EAST	NOT APPLICABLE	FOLLOWING TOO CLOSELY	57
37906539	CAR/VAN/PICKUP	EAST	EAST	UNKNOWN	UNKNOWN	17
38126856	CAR/VAN/PICKUP	SOUTH	NORTH	TURNING IMPROPER	NOT APPLICABLE	67
37528424	TRUCK	WEST	WEST	FAILURE TO YIELD RIGHT OF WAY	NOT APPLICABLE	51
37805595	CAR/VAN/PICKUP	NORTH-EAST	SOUTH-EAST	FAILURE TO YIELD RIGHT OF WAY	NOT APPLICABLE	21
37839179	CAR/VAN/PICKUP	WEST	NORTH-WEST	OTHER (VEHICLE)	NOT APPLICABLE	88
37696718	CAR/VAN/PICKUP	SOUTH-WEST	SOUTH-WEST	NOT APPLICABLE	TRAFFIC CONTROL DEVICES DISREGARDED	48
38584652	CAR/VAN/PICKUP	EAST	NORTH-WEST	TRAFFIC CONTROL DEVICES DISREGARDED	NOT APPLICABLE	74
38385419		EAST		DRIVER INATTENTION		31
37741137	CAR/VAN/PICKUP	NORTH-EAST	NORTH-EAST	UNSAFE SPEED	NOT APPLICABLE	21
38191507	CAR/VAN/PICKUP	WEST	NORTH	FAILURE TO YIELD RIGHT OF WAY	NOT APPLICABLE	23

Case Num	Driver Age Veh 2	PRE_ACCD_ACTN_VEH1	PRE_ACCD_ACTN_VEH2	Day_Of_Week	On Street	Closest Cross Street	Parking Lot Ind
37454443	62	STARTING IN TRAFFIC	STARTING IN TRAFFIC	Tue	ROUTE 312	Ramp	N
38102444	65	MAKING RIGHT TURN	MAKING RIGHT TURN	Mon	[Route] 312	[Route] 84	N
37301622	32	GOING STRAIGHT AHEAD	STOPPED IN TRAFFIC	Thu	ROUTE 312	[Route] 6	N
37313782	27	SLOWED OR STOPPING	STOPPED IN TRAFFIC	Fri	ROUTE 312	Ramp	N
38538676	31	MAKING LEFT TURN	GOING STRAIGHT AHEAD	Sun	ROUTE 312	Ramp	N
38734226	52	STOPPED IN TRAFFIC	GOING STRAIGHT AHEAD	Sun	[Route] 312	INDEPENDENT WAY	N
38812972	57	STOPPED IN TRAFFIC	GOING STRAIGHT AHEAD	Sat	[Route] 312	INDEPENDENT WAY	N
38193609	63	GOING STRAIGHT AHEAD	GOING STRAIGHT AHEAD	Fri	[Route] 6	[Route] 312	N
38377845	38	GOING STRAIGHT AHEAD	GOING STRAIGHT AHEAD	Wed	ROUTE 312	Ramp	N
37394290	70	OVERTAKING	STARTING IN TRAFFIC	Thu	[Route] 312	INDEPENDENT WAY	N
38563207	40	GOING STRAIGHT AHEAD	STOPPED IN TRAFFIC	Mon	ROUTE 312	I 84	N
38576877	23	SLOWED OR STOPPING	SLOWED OR STOPPING	Sat	[Route] 312	[Route] 84	N
38500264	23	GOING STRAIGHT AHEAD	MAKING LEFT TURN	Tue	[Route] 312	INDEPENDENT WAY	N
38256125	21	GOING STRAIGHT AHEAD	STARTING IN TRAFFIC	Tue	ROUTE 312	Ramp	N
37902566	36	STARTING IN TRAFFIC	STOPPED IN TRAFFIC	Wed	[Route] 312	[Route] 84	N
37398069	65	MAKING RIGHT TURN ON RED	MAKING RIGHT TURN	Tue	RAMP	Route 312	N
38745411	59	GOING STRAIGHT AHEAD	MAKING LEFT TURN	Sun	[Route] 312	INDEPENDENT WAY	N
37721478	58	MAKING LEFT TURN	GOING STRAIGHT AHEAD	Sat	ROUTE 312	Route 6	N
38704187	52	GOING STRAIGHT AHEAD	MAKING RIGHT TURN	Mon	[Route] 312	PROSPECT HILL RD	N
37326386	43	GOING STRAIGHT AHEAD	STOPPED IN TRAFFIC	Mon	ROUTE 6	Route 312	N
38081163	26	SLOWED OR STOPPING	MAKING LEFT TURN	Sat	ROUTE 312	Route 6	N
37904542	46	GOING STRAIGHT AHEAD	MAKING LEFT TURN	Wed	ROUTE 6	ROUTE 312	N
38371654	55	GOING STRAIGHT AHEAD	MAKING LEFT TURN	Sun	[Route] 312	INDEPENDENT WAY	N
37522565	58	MAKING LEFT TURN	GOING STRAIGHT AHEAD	Sat	INDEPENDENT WAY	Unnamed Street	N
37595606	20	POLICE PURSUIT	CHANGING LANES	Fri	I 84	Ramp	N
38286523	51	GOING STRAIGHT AHEAD	MAKING LEFT TURN	Wed	[Route] 312	I 84	N
38091773		GOING STRAIGHT AHEAD		Mon	[Route] 312	PROSPECT HILL RD	N
38345112	55	MAKING LEFT TURN	MAKING RIGHT TURN	Fri	ROUTE 312	Ramp	N
37868808	31	GOING STRAIGHT AHEAD	GOING STRAIGHT AHEAD	Thu	ROUTE 312	Ramp	N
37269123	62	SLOWED OR STOPPING	STOPPED IN TRAFFIC	Mon	ROUTE 312	[Route] 6	N
38388628		ENTERING PARKED POSITION	PARKED	Mon			N
37476006	59	OVERTAKING	STARTING IN TRAFFIC	Tue	[Route] 312	Parking Lot	N
38739957		BACKING	PARKED	Thu	[Route] 6	Driveway	N
38485925	26	STOPPED IN TRAFFIC	SLOWED OR STOPPING	Wed	[Route] 312	[Route] 84	N
37686843	54	MAKING U TURN	GOING STRAIGHT AHEAD	Fri	[Route] 312	INDEPENDENT WAY	N
38749038	20	MAKING RIGHT TURN	MAKING LEFT TURN	Tue	ROUTE 312	Parking Lot	N
38412563		PARKED	BACKING	Thu	INDEPENDENT WAY	Unnamed Street	N
37405020	35	MAKING U TURN	MAKING RIGHT TURN	Fri	INDEPENDENT WAY	[Route] 312	N
37762558		MAKING LEFT TURN	GOING STRAIGHT AHEAD	Tue	[Route] 312	PROSPECT HILL RD	N
38714627		MAKING LEFT TURN	MAKING RIGHT TURN	Wed	INDEPENDENT WAY	[Route] 312	N
38554902	23	GOING STRAIGHT AHEAD	GOING STRAIGHT AHEAD	Tue	[Route] 312	[Route] 84	N
37563122	30	CHANGING LANES	GOING STRAIGHT AHEAD	Tue	[Route] 312	INDEPENDENT WAY	N
37624954		GOING STRAIGHT AHEAD		Tue	ROUTE 312	Ramp	N
38634310	24	GOING STRAIGHT AHEAD	STOPPED IN TRAFFIC	Thu	RAMP	Route 312	N
38751104	44	SLOWED OR STOPPING	SLOWED OR STOPPING	Mon	RAMP	Route 312	N
37768743		AVOIDING OBJECT IN ROADWAY		Mon	ROUTE 312	Pugsley Rd	N
37664709	57	MAKING LEFT TURN	GOING STRAIGHT AHEAD	Thu	[Route] 6	[Route] 312	N
37658885	28	MAKING LEFT TURN	GOING STRAIGHT AHEAD	Fri	ROUTE 312	Parking Lot	N
37780586	60	STOPPED IN TRAFFIC	SLOWED OR STOPPING	Mon	I 84	[Route] 312	N
37906539	60	MAKING LEFT TURN	GOING STRAIGHT AHEAD	Fri	[Route] 312	INDEPENDENT WAY	N
38126856	44	GOING STRAIGHT AHEAD	GOING STRAIGHT AHEAD	Tue	[Route] 312	Route 6	N
37528424	64	MERGING	GOING STRAIGHT AHEAD	Mon	ROUTE 312	Parking Lot	N
37805595	64	MAKING RIGHT TURN	MAKING LEFT TURN	Fri	ROUTE 312	Ramp	N
37839179	34	GOING STRAIGHT AHEAD	ENTERING PARKED POSITION	Thu	[Route] 312	Route 6	N
37696718	59	STOPPED IN TRAFFIC	STARTING IN TRAFFIC	Wed	ROUTE 312	Ramp	N
38584652	48	GOING STRAIGHT AHEAD	MAKING LEFT TURN	Thu	[Route] 312	INDEPENDENT WAY	N
38385419		GOING STRAIGHT AHEAD		Sat	ROUTE 312	Prospect Hill Rd	N
37741137	33	SLOWED OR STOPPING	STOPPED IN TRAFFIC	Mon	[Route] 312	INDEPENDENT WAY	N
38191507	51	MAKING LEFT TURN	GOING STRAIGHT AHEAD	Wed	ROUTE 312	Connecting Road	N

Case Num	Case Year	County	Comp Muni	Muni Type	Comp Ref Marker	At Intersection	Comp X	Comp Y	Accd Date	Accd Time	Severity	Num Of Injuries
38445244	2020	PUTNAM	Southeast	3	312 84011005	N	614086.7721	4586287.2718	06/17/2020	09:30pm	PROPERTY DAMAGE	0
37608497	2018	PUTNAM	Southeast	3	312 84011010	Y	614573.7800	4586713.9600	11/20/2018	07:05pm	PROPERTY DAMAGE	0
38128803	2019	PUTNAM	Southeast	3	312 84011010	Y	614566.8055	4586711.5380	10/15/2019	01:00pm	NON-REPORTABLE	0
38425969	2020	PUTNAM	Southeast	3	312 84011007	Y	614144.1700	4586676.5200	05/27/2020	10:25am	PROPERTY DAMAGE AND INJURY	1
38715186	2021	PUTNAM	Southeast	3	312 84011000	Y	613521.4700	4585796.8800	02/08/2021	02:00pm	PROPERTY DAMAGE	0
37364933	2018	PUTNAM	Southeast	3	312 84011010	N	614513.5145	4586699.3648	06/28/2018	08:45am	PROPERTY DAMAGE	0
37540212	2018	PUTNAM	Southeast	3	312 84011010	N	614563.8253	4586710.5030	10/16/2018	01:35pm	PROPERTY DAMAGE	0
37522566	2018	PUTNAM	Southeast	3	312 84011010	Y	614566.8055	4586711.5380	10/06/2018	06:53am	NON-REPORTABLE	0
38450136	2020	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	06/21/2020	01:10pm	PROPERTY DAMAGE	0
37632460	2018	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	12/09/2018	01:35pm	NON-REPORTABLE	0
38583167	2020	PUTNAM	Southeast	3		N	614573.0000	4586713.0000	09/24/2020	08:15am	PROPERTY DAMAGE	0
38302713	2020	PUTNAM	Southeast	3		Y	614448.8200	4586693.3300	01/28/2020	02:59pm	PROPERTY DAMAGE	0
38610038	2020	PUTNAM	Southeast	3	312 84011013	Y	614881.2461	4586997.8475	10/23/2020	08:00pm	PROPERTY DAMAGE	0
37922643	2019	PUTNAM	Southeast	3	84I84031070	Y	614765.3400	4586841.3800	06/10/2019	06:27pm	NON-REPORTABLE	0
38197687	2019	PUTNAM	Southeast	3	312 84011009	N	614411.8382	4586685.8916	11/25/2019	05:35pm	PROPERTY DAMAGE	0
38738418	2021	PUTNAM	Southeast	3	312 84011001	N	613671.9208	4585901.1378	02/20/2021	07:30am	PROPERTY DAMAGE	0
37468829	2018	PUTNAM	Southeast	3		N	614858.0000	4587013.0000	09/05/2018	04:39pm	PROPERTY DAMAGE	0
37476976	2018	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	09/10/2018	12:45pm	PROPERTY DAMAGE	0
37526440	2018	PUTNAM	Southeast	3	312 84011011	Y	614742.6142	4586818.3813	10/11/2018	05:00pm	PROPERTY DAMAGE	0
38792764	2021	PUTNAM	Southeast	3	84I84031070	Y	614765.3400	4586841.3800	03/23/2021	05:25pm	NON-REPORTABLE	0
37794076	2019	PUTNAM	Southeast	3	312 84011007	N	614112.9518	4586608.0695	03/03/2019	09:30pm	PROPERTY DAMAGE	0
38345149	2020	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	02/12/2020	01:47pm	PROPERTY DAMAGE	0
38057603	2019	PUTNAM	Southeast	3	312 84011000	Y	613521.4700	4585796.8800	08/23/2019	06:15am	PROPERTY DAMAGE	0
37599705	2018	PUTNAM	Southeast	3		N	614568.5957	4586732.0392	11/02/2018	12:00am	PROPERTY DAMAGE	0
37582065	2018	PUTNAM	Southeast	3	312 84011012	N	614815.7729	4586899.9119	11/07/2018	06:28pm	PROPERTY DAMAGE	0
38385417	2020	PUTNAM	Southeast	3	312 84011011	N	614663.9068	4586756.1639	03/25/2020	03:29pm	PROPERTY DAMAGE	0
38197671	2019	PUTNAM	Southeast	3	312 84011009	N	614411.8382	4586685.8916	11/25/2019	05:00pm	PROPERTY DAMAGE	0
37375259	2018	PUTNAM	Southeast	3	312 84011007	Y	614144.1700	4586676.5200	07/06/2018	05:27pm	NON-REPORTABLE	0
38795103	2021	PUTNAM	Southeast	3		Y	614881.5122	4586998.7146	03/28/2021	11:33am	PROPERTY DAMAGE AND INJURY	3
37958692	2019	PUTNAM	Southeast	3		Y	614399.1181	4586699.9838	06/30/2019	04:15pm	PROPERTY DAMAGE	0
38199237	2019	PUTNAM	Southeast	3	312 84011002	N	613794.1512	4585986.6385	11/26/2019	02:35pm	PROPERTY DAMAGE AND INJURY	1
37410233	2018	PUTNAM	Southeast	3	312 84011005	N	614078.3599	4586274.5791	07/30/2018	12:11pm	NON-REPORTABLE	0
37764421	2019	PUTNAM	Southeast	3		Y	614448.8200	4586693.3300	02/04/2019	03:25pm	PROPERTY DAMAGE	0
37797980	2019	PUTNAM	Southeast	3	84I84031070	Y	614765.3400	4586841.3800	03/10/2019	07:51pm	PROPERTY DAMAGE	0
37909196	2019	PUTNAM	Southeast	3		Y	614448.8200	4586693.3300	05/28/2019	04:42pm	PROPERTY DAMAGE	0
37366850	2018	PUTNAM	Southeast	3		Y	614604.6162	4586663.1588	07/06/2018	05:15pm	PROPERTY DAMAGE	0
38584691	2020	PUTNAM	Southeast	3	312 84011004	N	613990.1539	4586190.9734	09/30/2020	01:55pm	PROPERTY DAMAGE	0
37475996	2018	PUTNAM	Southeast	3	312 84011007	Y	614144.1700	4586676.5200	08/31/2018	04:56pm	PROPERTY DAMAGE	0
38403292	2020	PUTNAM	Southeast	3	312 84011000	Y	613521.4700	4585796.8800	04/28/2020	01:15pm	PROPERTY DAMAGE	0
38351413	2020	PUTNAM	Southeast	3	312 84011010	Y	614587.0800	4586718.6200	02/06/2020	07:40pm	PROPERTY DAMAGE	0
38763250	2021	PUTNAM	Southeast	3	312 84011011	N	614655.7080	4586751.5037	02/25/2021	08:11am	PROPERTY DAMAGE AND INJURY	1
37229050	2018	PUTNAM	Southeast	3	312 84011000	Y	613521.4700	4585796.8800	04/05/2018	08:50am	PROPERTY DAMAGE	0
38465413	2020	PUTNAM	Southeast	3	312 84011010	Y	614464.9592	4586694.5166	07/01/2020	11:20am	PROPERTY DAMAGE	0
37795052	2019	PUTNAM	Southeast	3	84I84031070	Y	614749.1785	4586860.5918	02/26/2019	12:00am	PROPERTY DAMAGE	0
37996937	2019	PUTNAM	Southeast	3	312 84011000	Y	613521.4700	4585796.8800	07/26/2019	02:00pm	PROPERTY DAMAGE	0
38185457	2019	PUTNAM	Southeast	3	84I84031070	Y	614765.3400	4586841.3800	11/21/2019	07:35am	PROPERTY DAMAGE	0
37538504	2018	PUTNAM	Southeast	3		N	614870.3372	4587006.5810	10/20/2018	10:08am	PROPERTY DAMAGE AND INJURY	1
37639779	2018	PUTNAM	Southeast	3	312 84011001	N	613664.0414	4585896.6112	12/07/2018	05:34pm	PROPERTY DAMAGE	0
38149396	2019	PUTNAM	Southeast	3	84I84031070	Y	614744.6378	4586806.4783	10/27/2019	05:13am	FATAL	0
38634261	2020	PUTNAM	Southeast	3	312 84011003	N	613936.8377	4586142.1636	11/11/2020	04:44am	PROPERTY DAMAGE	0

Case Num	Num Serious Injuries	Num Of Fatalities	Num Of Vehicles	Accd Type	Collision Type	Traffic Control
38445244		0	1	COLLISION WITH ANIMAL	OTHER	NO PASSING ZONE
37608497		0	2	COLLISION WITH MOTOR VEHICLE	OVERTAKING	TRAFFIC SIGNAL
38128803		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
38425969	1	0	1	COLL. W/EARTH ELE./ROCK CUT/DITCH	OTHER	NO PASSING ZONE
38715186		0	1	COLLISION WITH FENCE	OTHER	NO PASSING ZONE
37364933		0	2	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	STOP SIGN
37540212		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
37522566		0	1	COLLISION WITH GUIDERAIL - END	OTHER	NO PASSING ZONE
38450136		0	2	COLLISION WITH MOTOR VEHICLE	RIGHT TURN (AGAINST OTHER CAR)	TRAFFIC SIGNAL
37632460		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
38583167		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
38302713		0	2	COLLISION WITH MOTOR VEHICLE	OTHER	NONE
38610038		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
37922643		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
38197687		0	3	COLLISION WITH MOTOR VEHICLE	OTHER	STOP SIGN
38738418		0	1	COLLISION WITH SNOW EMBANKMENT	OTHER	NO PASSING ZONE
37468829		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
37476976		0	2	COLLISION WITH MOTOR VEHICLE	OVERTAKING	TRAFFIC SIGNAL
37526440		0	2	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	TRAFFIC SIGNAL
38792764		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
37794076		0	1	COLL. W/EARTH ELE./ROCK CUT/DITCH	OTHER	NO PASSING ZONE
38345149		0	2	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	OTHER
38057603		0	2	COLLISION WITH MOTOR VEHICLE	LEFT TURN (AGAINST OTHER CAR)	TRAFFIC SIGNAL
37599705		0	2	COLLISION WITH MOTOR VEHICLE	RIGHT TURN (AGAINST OTHER CAR)	UNKNOWN
37582065		0	3	COLLISION WITH MOTOR VEHICLE	OTHER	NO PASSING ZONE
38385417		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
38197671		0	2	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	STOP SIGN
37375259		0	2	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	NONE
38795103	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
37958692		0	2	COLLISION WITH MOTOR VEHICLE	OVERTAKING	NO PASSING ZONE
38199237	0	0	3	COLLISION WITH MOTOR VEHICLE	OTHER	NO PASSING ZONE
37410233		0	1	COLL. W/EARTH ELE./ROCK CUT/DITCH	OTHER	NONE
37764421		0	2	COLLISION WITH MOTOR VEHICLE	SIDESWIPE	NONE
37797980		0	2	COLLISION WITH MOTOR VEHICLE	RIGHT TURN (WITH OTHER CAR)	TRAFFIC SIGNAL
37909196		0	2	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	NONE
37366850		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	NONE
38584691		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	NO PASSING ZONE
37475996		0	2	COLLISION WITH MOTOR VEHICLE	SIDESWIPE	NO PASSING ZONE
38403292		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
38351413		0	2	COLLISION WITH MOTOR VEHICLE	OVERTAKING	NONE
38763250	0	0	2	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	STOP SIGN
37229050		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
38465413		0	1	COLLISION WITH GUIDE RAIL	OTHER	NO PASSING ZONE
37795052		0	1	OTHER NON-COLLISION	OTHER	UNKNOWN
37996937		0	2	COLLISION WITH MOTOR VEHICLE	RIGHT TURN (WITH OTHER CAR)	TRAFFIC SIGNAL
38185457		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
37538504	0	0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
37639779		0	2	COLLISION WITH MOTOR VEHICLE	REAR END	TRAFFIC SIGNAL
38149396	0	1	1	COLLISION WITH PEDESTRIAN	OTHER	NONE
38634261		0	1	COLLISION WITH FENCE	OTHER	NO PASSING ZONE

Case Num	Light Condition	Weather	Road Surf Cond	Ped Loc	Ped Action	Veh Type Veh 1
38445244	DARK-ROAD UNLIGHTED	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37608497	DARK-ROAD UNLIGHTED	CLOUDY	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38128803	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38425969	DAYLIGHT	CLOUDY	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38715186	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37364933	DAYLIGHT	RAIN	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37540212	DAYLIGHT	CLOUDY	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37522566	DAWN	CLOUDY	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38450136	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37632460	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38583167	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38302713	DAYLIGHT	CLOUDY	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38610038	DARK-ROAD LIGHTED	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37922643	DAYLIGHT	RAIN	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38197687	DARK-ROAD UNLIGHTED	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38738418	DAYLIGHT	CLOUDY	SNOW/ICE	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37468829	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37476976	DAYLIGHT	RAIN	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37526440	DAYLIGHT	RAIN	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38792764	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37794076	DARK-ROAD UNLIGHTED	SNOW	SNOW/ICE	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38345149	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38057603	DAWN	RAIN	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37599705	UNKNOWN	UNKNOWN	UNKNOWN	NOT APPLICABLE	NOT APPLICABLE	OTHER
37582065	DARK-ROAD UNLIGHTED	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38385417	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38197671	DARK-ROAD UNLIGHTED	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37375259	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38795103	DAYLIGHT	RAIN	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37958692	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38199237	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37410233	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37764421	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37797980	DARK-ROAD UNLIGHTED	CLOUDY	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37909196	DAYLIGHT	RAIN	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37366850	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	OTHER
38584691	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37475996	DAYLIGHT	RAIN	WET	NOT APPLICABLE	NOT APPLICABLE	TRUCK
38403292	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38351413	DARK-ROAD UNLIGHTED	RAIN	WET	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38763250	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	OTHER
37229050	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38465413	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37795052	UNKNOWN	UNKNOWN	UNKNOWN	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37996937	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38185457	DAYLIGHT	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37538504	DAYLIGHT	CLOUDY	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
37639779	DARK-ROAD UNLIGHTED	CLOUDY	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP
38149396	DARK-ROAD UNLIGHTED	RAIN	WET	PED/BICYCLIST AT INTERSECTION	CROSSING/ NO SIGNAL OR CROSSWALK	TRUCK
38634261	DARK-ROAD UNLIGHTED	CLEAR	DRY	NOT APPLICABLE	NOT APPLICABLE	CAR/VAN/PICKUP

Case Num	Veh Type Veh 2	Dir Of Travel Veh 1	Dir Of Travel Veh 2	Apparent Factor Veh 1	Apparent Factor Veh 2	Driver Age Veh 1
38445244		SOUTH-WEST		ANIMAL'S ACTION		41
37608497	CAR/VAN/PICKUP	WEST	WEST	REACTION TO OTHER UNINVOLVED VEHICL	NOT APPLICABLE	32
38128803	CAR/VAN/PICKUP	NORTH	NORTH	DRIVER INATTENTION	NOT APPLICABLE	46
38425969		SOUTH-WEST		LOST CONSCIOUSNESS		81
38715186		SOUTH-WEST		TIRE FAILURE/INADEQUATE		20
37364933	CAR/VAN/PICKUP	NORTH-WEST	EAST	FAILURE TO YIELD RIGHT OF WAY	NOT APPLICABLE	81
37540212	CAR/VAN/PICKUP	EAST	EAST	FOLLOWING TOO CLOSELY	NOT APPLICABLE	56
37522566		EAST		CELL PHONE (HAND HELD)		18
38450136	CAR/VAN/PICKUP	NORTH	NORTH-WEST	NOT APPLICABLE	FAILURE TO YIELD RIGHT OF WAY	67
37632460	CAR/VAN/PICKUP	NORTH	NORTH	NOT APPLICABLE	FOLLOWING TOO CLOSELY	53
38583167	CAR/VAN/PICKUP	SOUTH	SOUTH	FOLLOWING TOO CLOSELY	NOT APPLICABLE	40
38302713	CAR/VAN/PICKUP	NORTH	EAST	BACKING UNSAFELY	NOT APPLICABLE	24
38610038	CAR/VAN/PICKUP	WEST	WEST	FOLLOWING TOO CLOSELY	NOT APPLICABLE	31
37922643	CAR/VAN/PICKUP	EAST	EAST	FOLLOWING TOO CLOSELY	NOT APPLICABLE	35
38197687	CAR/VAN/PICKUP	EAST	NORTH	NOT APPLICABLE	FAILURE TO YIELD RIGHT OF WAY	30
38738418		SOUTH		UNSAFE SPEED		32
37468829	CAR/VAN/PICKUP	WEST	WEST	NOT APPLICABLE	FOLLOWING TOO CLOSELY	61
37476976	CAR/VAN/PICKUP	WEST	WEST	TURNING IMPROPER	TURNING IMPROPER	41
37526440	CAR/VAN/PICKUP	WEST	EAST	TRAFFIC CONTROL DEVICES DISREGARDED	NOT APPLICABLE	51
38792764	CAR/VAN/PICKUP	EAST	EAST	NOT APPLICABLE	FOLLOWING TOO CLOSELY	63
37794076		SOUTH-WEST		DRIVER INEXPERIENCE		47
38345149	CAR/VAN/PICKUP	EAST	EAST	PASSING OR LANE USAGE IMPROPERLY	NOT APPLICABLE	74
38057603	CAR/VAN/PICKUP	WEST	NORTH-EAST	TRAFFIC CONTROL DEVICES DISREGARDED	UNKNOWN	54
37599705	OTHER	UNKNOWN	UNKNOWN	NOT ENTERED	NOT ENTERED	
37582065	CAR/VAN/PICKUP	NORTH	NORTH	FOLLOWING TOO CLOSELY	NOT APPLICABLE	39
38385417	CAR/VAN/PICKUP	SOUTH	SOUTH	FOLLOWING TOO CLOSELY	REACTION TO OTHER UNINVOLVED VEHICL	51
38197671	CAR/VAN/PICKUP	EAST	NORTH	NOT APPLICABLE	FAILURE TO YIELD RIGHT OF WAY	38
37375259	CAR/VAN/PICKUP	NORTH	NORTH-EAST	FOLLOWING TOO CLOSELY	NOT APPLICABLE	33
38795103	CAR/VAN/PICKUP	EAST	EAST	NOT APPLICABLE	FOLLOWING TOO CLOSELY	68
37958692	CAR/VAN/PICKUP	SOUTH	SOUTH	NOT APPLICABLE	DRIVER INATTENTION	42
38199237	CAR/VAN/PICKUP	EAST	EAST	NOT APPLICABLE	NOT APPLICABLE	49
37410233		NORTH		UNSAFE SPEED		17
37764421	CAR/VAN/PICKUP	WEST	EAST	DRIVER INATTENTION	NOT APPLICABLE	37
37797980	CAR/VAN/PICKUP	EAST	EAST	LANE MARKING IMPROPER/INADEQUATE	LANE MARKING IMPROPER/INADEQUATE	33
37909196	CAR/VAN/PICKUP	NORTH-EAST	NORTH-WEST	ILLNESS	NOT APPLICABLE	73
37366850	CAR/VAN/PICKUP	EAST	EAST	UNKNOWN	NOT APPLICABLE	
38584691	CAR/VAN/PICKUP	EAST	EAST	FOLLOWING TOO CLOSELY	NOT APPLICABLE	31
37475996	CAR/VAN/PICKUP	NORTH-EAST	SOUTH-WEST	PAVEMENT SLIPPERY	NOT APPLICABLE	54
38403292	CAR/VAN/PICKUP	WEST	WEST	DRIVER INATTENTION	NOT APPLICABLE	72
38351413	CAR/VAN/PICKUP	EAST	EAST	NOT APPLICABLE	PASSING OR LANE USAGE IMPROPERLY	70
38763250	CAR/VAN/PICKUP	NORTH	EAST	FAILURE TO YIELD RIGHT OF WAY	NOT APPLICABLE	43
37229050	CAR/VAN/PICKUP	WEST	WEST	NOT APPLICABLE	FOLLOWING TOO CLOSELY	50
38465413		NORTH		TURNING IMPROPER		69
37795052		UNKNOWN		NOT ENTERED		50
37996937	CAR/VAN/PICKUP	SOUTH-EAST	EAST	VIEW OBSTRUCTED/LIMITED	NOT APPLICABLE	53
38185457	CAR/VAN/PICKUP	SOUTH	SOUTH	NOT APPLICABLE	FOLLOWING TOO CLOSELY	62
37538504	CAR/VAN/PICKUP	EAST	EAST	FOLLOWING TOO CLOSELY	NOT APPLICABLE	18
37639779	CAR/VAN/PICKUP	WEST	WEST	FOLLOWING TOO CLOSELY	NOT APPLICABLE	63
38149396	PEDESTRIAN	EAST	NOT APPLICABLE	NOT APPLICABLE	PEDESTRIAN'S ERROR/CONFUSION	34
38634261		EAST		UNSAFE SPEED		30

Case Num	Driver Age Veh 2	PRE_ACCD_ACTN_VEH1	PRE_ACCD_ACTN_VEH2	Day_Of_Week	On Street	Closest Cross Street	Parking Lot Ind
38445244		GOING STRAIGHT AHEAD		Wed	[Route] 312	PROSPECT HILL RD	N
37608497	35	MAKING LEFT TURN	MAKING LEFT TURN	Tue	[Route] 312	INDEPENDENT WAY	N
38128803	17	GOING STRAIGHT AHEAD	STOPPED IN TRAFFIC	Tue	ROUTE 312	Ramp	N
38425969		GOING STRAIGHT AHEAD		Wed	[Route] 312	PUGSLEY RD	N
38715186		GOING STRAIGHT AHEAD		Mon	[Route] 312	[Route] 6	N
37364933	23	MAKING LEFT TURN	GOING STRAIGHT AHEAD	Thu	[Route] 312	Parking Lot	N
37540212	30	SLOWED OR STOPPING	STOPPED IN TRAFFIC	Tue	ROUTE 312	Ramp	N
37522566		GOING STRAIGHT AHEAD		Sat	ROUTE 312	Ramp	N
38450136	26	GOING STRAIGHT AHEAD	MAKING RIGHT TURN	Sun	[Route] 312	INDEPENDENT WAY	N
37632460	50	MAKING RIGHT TURN	GOING STRAIGHT AHEAD	Sun	INDEPENDENT WAY	[Route] 312	N
38583167	33	MAKING RIGHT TURN	MAKING RIGHT TURN	Thu			N
38302713	58	BACKING	STOPPED IN TRAFFIC	Tue	[Route] 312		N
38610038	36	GOING STRAIGHT AHEAD	GOING STRAIGHT AHEAD	Fri	ROUTE 312	Ramp	N
37922643	58	GOING STRAIGHT AHEAD	SLOWED OR STOPPING	Mon	[Route] 84	[Route] 312	N
38197687	48	GOING STRAIGHT AHEAD	MAKING LEFT TURN	Mon	ROUTE 312	Driveway	N
38738418		GOING STRAIGHT AHEAD		Sat	ROUTE 312	Unnamed Street	N
37468829	29	STOPPED IN TRAFFIC	GOING STRAIGHT AHEAD	Wed			N
37476976	44	MAKING LEFT TURN	MAKING LEFT TURN	Mon	[Route] 312	INDEPENDENT WAY	N
37526440	80	GOING STRAIGHT AHEAD	MAKING LEFT TURN	Thu	STATE HWY 312	Route 312	N
38792764	22	STOPPED IN TRAFFIC	GOING STRAIGHT AHEAD	Tue	[Route] 84	[Route] 312	N
37794076		GOING STRAIGHT AHEAD		Sun	[Route] 312	PUGSLEY RD	N
38345149	59	MAKING LEFT TURN	GOING STRAIGHT AHEAD	Wed	[Route] 312	INDEPENDENT WAY	N
38057603	62	GOING STRAIGHT AHEAD	MAKING LEFT TURN	Fri	ROUTE 312	[Route] 6	N
37599705	32	UNKNOWN	UNKNOWN	Fri	RAMP	I 84	N
37582065	43	GOING STRAIGHT AHEAD	STARTING IN TRAFFIC	Wed	ROUTE 312	Ramp	N
38385417	48	MAKING LEFT TURN	SLOWED OR STOPPING	Wed	ROUTE 312	Ramp	N
38197671	45	GOING STRAIGHT AHEAD	MAKING LEFT TURN	Mon	ROUTE 312	Driveway	N
37375259	37	GOING STRAIGHT AHEAD	MAKING RIGHT TURN	Fri	[Route] 312	PUGSLEY RD	N
38795103	53	SLOWED OR STOPPING	STARTING IN TRAFFIC	Sun	RAMP	Route 312	N
37958692	63	GOING STRAIGHT AHEAD	MERGING	Sun	ROUTE 312	Connecting Road	N
38199237	22	SLOWED OR STOPPING	SLOWED OR STOPPING	Tue	ROUTE 312	Unnamed Street	N
37410233		GOING STRAIGHT AHEAD		Mon	[Route] 312	PROSPECT HILL RD	N
37764421		ENTERING PARKED POSITION	PARKED	Mon	[Route] 312		N
37797980	28	MAKING RIGHT TURN	GOING STRAIGHT AHEAD	Sun	[Route] 312	[Route] 84	N
37909196		MAKING RIGHT TURN	PARKED	Tue	[Route] 312		N
37366850	47	MAKING LEFT TURN	MAKING LEFT TURN	Fri	INDEPENDENT WAY	Unnamed Street	N
38584691	21	GOING STRAIGHT AHEAD	SLOWED OR STOPPING	Wed	[Route] 312	Unnamed Street	N
37475996	27	GOING STRAIGHT AHEAD	GOING STRAIGHT AHEAD	Fri	[Route] 312	PUGSLEY RD	N
38403292	68	MAKING RIGHT TURN	MAKING RIGHT TURN	Tue	ROUTE 312	[Route] 6	N
38351413	34	GOING STRAIGHT AHEAD	GOING STRAIGHT AHEAD	Thu	[Route] 312	INDEPENDENT WAY	N
38763250	62	SLOWED OR STOPPING	GOING STRAIGHT AHEAD	Thu	[Route] 312	INDEPENDENT WAY	N
37229050	23	MAKING RIGHT TURN	GOING STRAIGHT AHEAD	Thu	ROUTE 312	[Route] 6	N
38465413		MAKING U TURN		Wed	ROUTE 312	Parking Lot	N
37795052		GOING STRAIGHT AHEAD		Tue	I 84	Ramp	N
37996937	19	MAKING RIGHT TURN	GOING STRAIGHT AHEAD	Fri	ROUTE 6	ROUTE 312	N
38185457	27	MAKING RIGHT TURN	GOING STRAIGHT AHEAD	Thu	I 84	[Route] 312	N
37538504	62	GOING STRAIGHT AHEAD	SLOWED OR STOPPING	Sat	RAMP	Route 312	N
37639779	67	GOING STRAIGHT AHEAD	MAKING RIGHT TURN	Fri	ROUTE 312	Route 6	N
38149396	32	GOING STRAIGHT AHEAD	NOT APPLICABLE	Sun	I 84	Route 312	N
38634261		GOING STRAIGHT AHEAD		Wed	ROUTE 312	Unnamed Street	N

APPENDIX F

TURNING MOVEMENT DIAGRAMS

Firetruck	
Overall Length	47.130ft
Overall Width	8.000ft
Overall Body Height	10.432ft
Min Body Ground Clearance	0.862ft
Track Width	8.000ft
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	38.300ft

DTS • PROVIDENT
Intelligent Land Use

DTS Provident Design Engineering, LLP
One North Broadway
White Plains, NY 10601
P: 914.428.0010
F: 914.428.0017

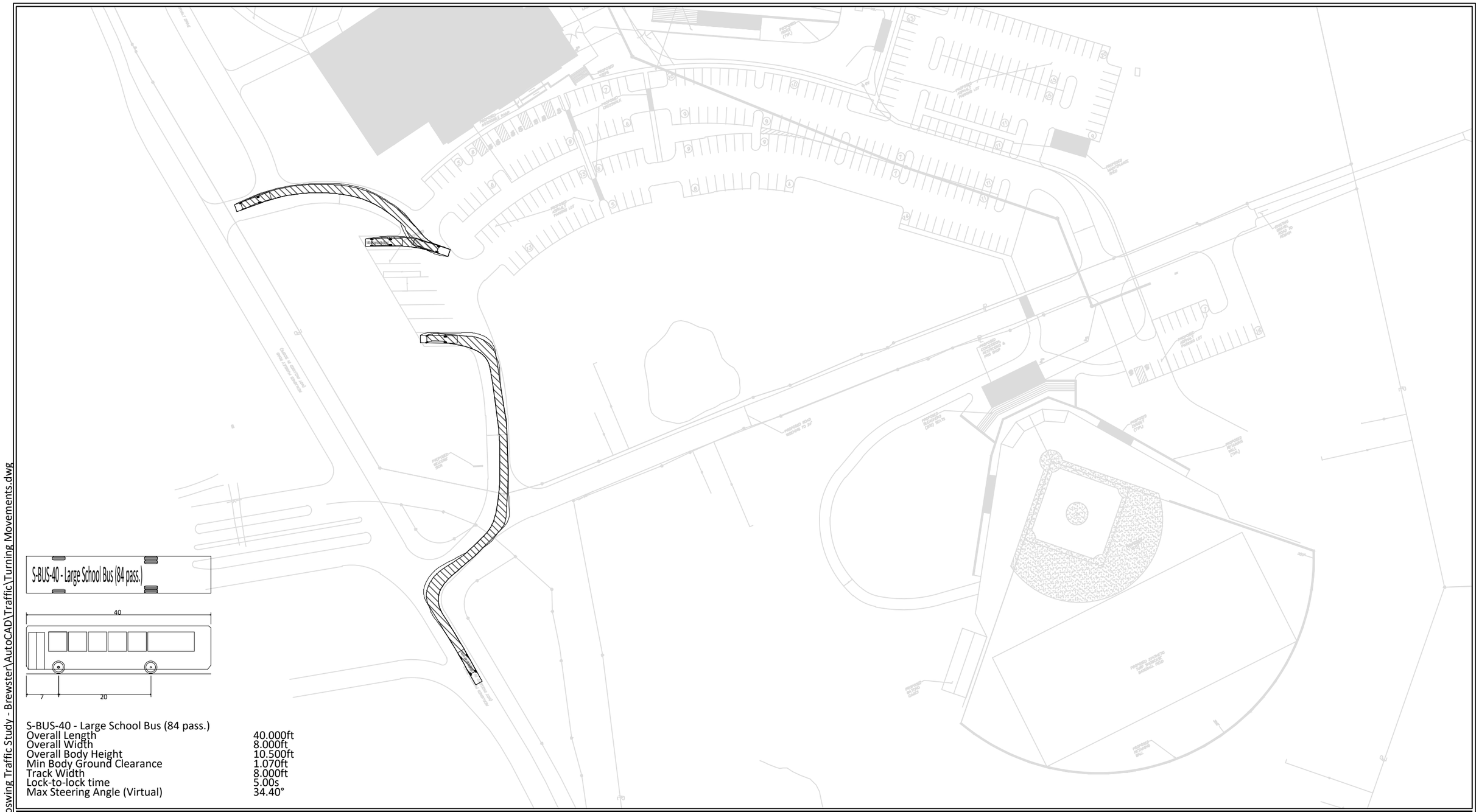
Vehicle Turning Analysis - Firetruck

Brewster Yards
Town of Southeast, Putnam County, New York

Project No. 21-076
Scale: 1" = 100'
December 2021

Figure No. F-1

Q:\PROJECTS-21\21-076 Proswing Traffic Study - Brewster\AutoCAD\Traffic\Turning Movements.dwg



S-BUS-40 - Large School Bus (84 pass.)

Overall Length	40.000ft
Overall Width	8.000ft
Overall Body Height	10.500ft
Min Body Ground Clearance	1.070ft
Track Width	8.000ft
Lock-to-lock time	5.00s
Max Steering Angle (Virtual)	34.40°

DTS • PROVIDENT
Intelligent Land Use

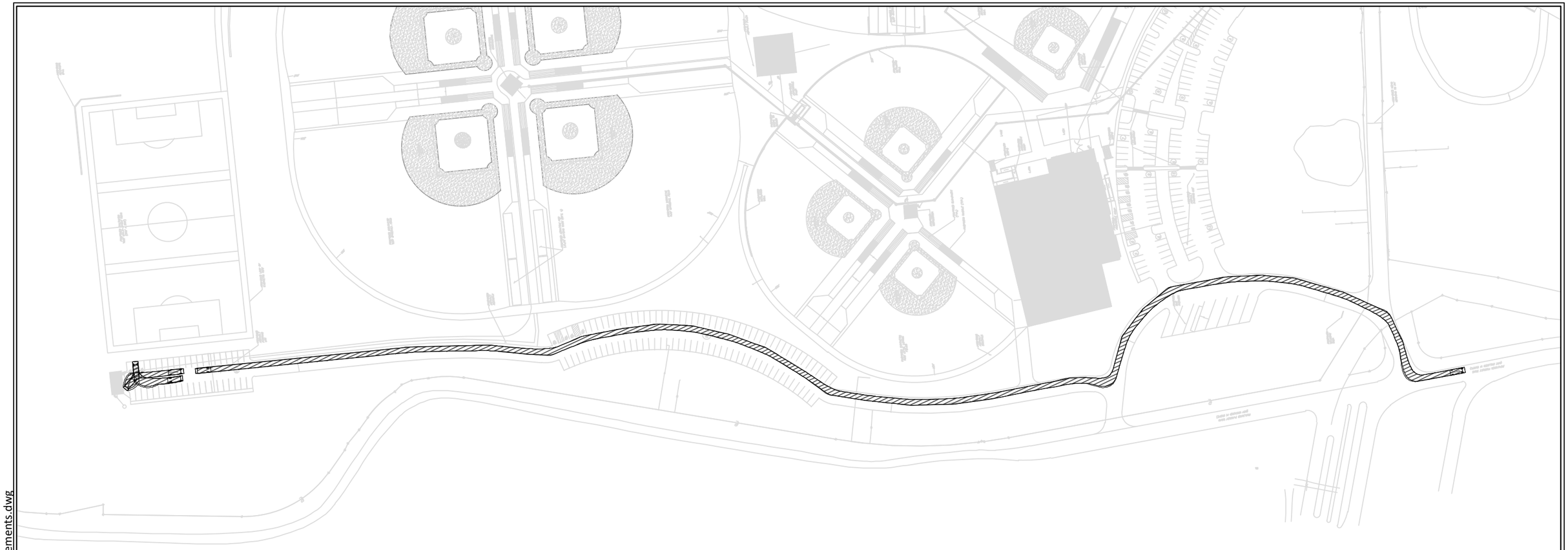
DTS Provident Design Engineering, LLP
One North Broadway
White Plains, NY 10601
P: 914.428.0010
F: 914.428.0017

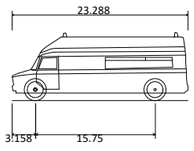
Vehicle Turning Analysis - Bus
Brewster Yards
Town of Southeast, Putnam County, New York

Project No. 21-076
Scale: 1" = 100'
December 2021

Figure No. F-2

Q:\PROJECTS-21\21-076 Proswing Traffic Study - Brewster\AutoCAD\Traffic\Turning Movements.dwg





Horton 453 Type I Ford E-Series Ambulance	
Overall Length	23.288ft
Overall Width	8.021ft
Overall Body Height	9.000ft
Min Body Ground Clearance	1.075ft
Track Width	8.021ft
Lock-to-lock time	5.00s
Curb to Curb Turning Radius	27.400ft

DTS • PROVIDENT
Intelligent Land Use

DTS Provident Design Engineering, LLP
One North Broadway
White Plains, NY 10601
P: 914.428.0010
F: 914.428.0017

Vehicle Turning Analysis - Ambulance
Brewster Yards
Town of Southeast, Putnam County, New York

Project No. 21-076
Scale: 1" = 150'
December 2021

Figure No. F-3

Q:\PROJECTS-21\21-076 Proswing Traffic Study - Brewster\AutoCAD\Traffic\Turning Movements.dwg