Downtown Hicksville **Complete Streets Project**

APPENDICES

JULY 2020


NYCB PLAZA
Town of Oyster Bay
Hicksville Parking Facility

CONTENTS

APPENDIX A: FUNDING SOURCES

Should the County decide to move forward with implementing any pedestrian safety improvements and bicycle facility upgrades under consideration, the programs below should be considered as potential funding sources:

Transportation Alternatives Program (TAP)

TAP is one of the largest federal sources for bicycle and pedestrian funding under MAP-21, the most recent federal transportation funding law. Transportation Alternatives is a combination of two core active transportation programs from SAFETEA-LU-Transportation Enhancements and Safe Routes to Schools (SRTS). While Transportation Alternatives projects are federally funded, the funds are administered by the New York Department of Transportation (NYSDOT) and the state's Metropolitan Planning Organizations (MPOs). Funding categories include:

- **Bicycle & Pedestrian Facilities**: Sidewalks, bike lane striping, wide paved shoulders, traffic calming, off road trails; bike and pedestrian bridges and underpasses; ADA compliance
- **Safe Routes for Non-Drivers**: Access and accommodation for children, older adults, and individuals with disabilities.
- Conversion of Railway Corridors for Trails: Planning, designing, constructing and reconstructing bike parking and bus racks, developing multi-use trails along a railroad R.O.W.
- Community improvement activities including vegetation management, historic preservation, archaeological activities related to transportation projects, and boulevard construction.

The federal TAP funds are administered through reimbursement of up to 80 percent of a project's cost with the project sponsor typically responsible for the remaining 20 percent. The project sponsor's matching share may include sponsor cash, donations of right-of-way integral to the project, in-kind contributions of labor or materials integral to the project, or other non-DOT state or federal funds. Funding in the greater New York City metropolitan area is administered through the New York Metropolitan Transportation Council (NYMTC), the region's MPO. The selection procedure is accomplished through an application rating process overseen by the NYMTC members.

Congestion Mitigation & Air Quality Program (CMAQ)

CMAQ is jointly administered by the Federal Highway Administration (FHWA) and the Federal Transit and the Administration (FTA). The CMAQ program was initiated to support surface transportation projects and other related efforts that contribute air quality improvements and provide congestion relief. All eligible projects must conform to established CMAQ guidance, which includes meeting three basic criteria: it must be a transportation project, it must generate an emissions reduction, and it must be located in or benefit a Federally-designated nonattainment or maintenance area.

Since 2013, the federal share for most CMAQ-eligible projects is 80 percent. All CMAQ projects will require a 20% local match, with the exception of carpool & vanpool projects, which are 100%

Federally-funded. Just like for TAP, funding in the greater New York City metropolitan area is administered through NYMTC. The selection procedure is accomplished through an application rating process overseen by the NYMTC members.

Safe Routes to School (SRTS) Program

The New York State SRTS program offers technical assistance to communities that are developing and implementing projects and programs. NYSDOT announced $26.5 for 64 projects on January 4, 2013 to implement infrastructure improvements and public education campaigns to encourage and enable safe walking and bicycling to school. All SRTS projects are required to comply with a variety of Federal and State requirements. A Technical Advisory Committee has continued to assist NYSDOT with the implementation of the statewide Safe Routes To School (SRTS) program in New York since 2003. It is comprised of representatives of the NYS Departments of Transportation, Health, Education, State Police and Governor's Traffic Safety Committee, as well as with the participation of the Metropolitan Planning Organizations (MPOs) across New York.

Consolidated Local Street and Highway Improvement Program (CHIPS)

CHIPS is a New York State-funded program administered through the NYSDOT to assist localities in financing the construction, reconstruction or improvement of local highways, bridges, highway-railroad crossings and other local facilities. CHIPS eligible projects include bike Lanes, bike paths, sidewalks, shared use paths, traffic calming, curb reconstruction and wide curb lanes within a highway right-of-way.

Recreational Trails Program

This program is a State administered Federal assistance program to provide funds for the construction of recreational trails and trail related facilities for both motorized and non-motorized recreational trail users. This is a Federal-aid (80/20) reimbursement program. This program is administered by the New York State Department of Parks, Recreation & Historic Preservation (OPRHP). Source of funds: Federal Highway Administration.

Pedestrian Safety Action Plan (PSAP)

The New York State Department of Transportation (NYSDOT) released its first-ever New York State Pedestrian Safety Action Plan (PSAP) in June of 2016. The five-year, multi-agency plan takes a three-pronged approach to improve pedestrian safety. It will be implemented cooperatively by NYSDOT focusing on engineering improvements, the State Department of Health producing public education and awareness campaigns, and the Governor's Traffic Safety Committee coordinating increased law enforcement. Funding for the plan's implementation is supported through the federal Highway Safety Improvement Program (HSIP) funding and State sources.

The PSAP calls for a systemic approach to address widespread pedestrian safety issues and minimize crash potential by implementing low-cost countermeasures throughout the roadway network, both local and state jurisdictions. NYSDOT has begun pedestrian safety improvements on state-owned roadways at approximately 2,000 uncontrolled crosswalks (no signals or stop signs) and 2,400 signalized intersections. The PSAP also includes

$40 million of federal HSIP funds to implement systemic pedestrian safety projects on local urban roads and streets. Projects funded pursuant to this call for pedestrian projects are eligible to receive up to 100% federal HSIP funding.

Pedestrian and Bicycle Funding Opportunities
U.S. Department of Transportation Transit, Highway, and Safety Funds

Revised August 9, 2018

This table indicates potential eligibility for pedestrian and bicycle projects under U.S. Department of Transportation surface transportation funding programs. Additional restrictions may apply. See notes and basic program requirements below, and see program guidance for detailed requirements. Project sponsors should fully integrate nonmotorized accommodation into surface transportation projects. Section 1404 of the Fixing America's Surface Transportation (FAST) Act modified 23 U.S.C. 109 to require federally-funded projects on the National Highway System to consider access for other modes of transportation, and provides greater design flexibility to do so.

Key: $ = Funds may be used for this activity (restrictions may apply). ~$ = Eligible, but not competitive unless part of a larger project. $* = See program-specific notes for restrictions.

Activity or Project Type	BUILD	INFRA	TIFIA	FTA	ATI	CMAQ	HSIP	NHPP	STBG	TA	RTP	SRTS	PLAN	NHTSA 402	NHTSA 405	FLTTP
Access enhancements to public transportation (includes benches, bus pads)	$	~$	$	$	$	$		$	$	$						$
ADA/504 Self Evaluation / Transition Plan									$	$	$		$			$
Bicycle plans				$					$	$		$	$			$
Bicycle helmets (project or training related)									$	$SRTS		$		$*		
Bicycle helmets (safety promotion)									$	$SRTS		$				
Bicycle lanes on road	$	~$	$	$	$	$	$	$	$	$		$				$
Bicycle parking	~$	~$	~$	$	$	$		$	$	$	$	$				$
Bike racks on transit	$	~$	$	$	$	$			$	$						$
Bicycle repair station (air pump, simple tools)	~$	~$	~$	$	$	$			$	$						$
Bicycle share (capital and equipment; not operations)	$	~$	$	$	$	$		$	$	$						$
Bicycle storage or service centers (example: at transit hubs)	~$	~$	~$	$	$	$			$	$						$
Bridges / overcrossings for pedestrians and/or bicyclists	$	~$	$	$	$	$*	$	$	$	$	$	$				$
Bus shelters and benches	$	~$	$	$	$	$		$	$	$						$
Coordinator positions (State or local)						$ 1 per State			$	$SRTS		$				
Crosswalks (new or retrofit)	$	~$	$	$	$	$*	$	$	$	$	$	$				$
Curb cuts and ramps	$	~$	$	$	$	$*	$	$	$	$	$	$				$
Counting equipment				$	$		$	$	$	$	$	$	$*			$
Data collection and monitoring for pedestrians and/or bicyclists				$	$		$	$	$	$	$	$	$*			$
Historic preservation (pedestrian and bicycle and transit facilities)	$	~$	$	$	$				$	$						$
Landscaping, streetscaping (pedestrian and/or bicycle route; transit access); related amenities (benches, water fountains); generally as part of a larger project	~$	~$	~$	$	$			$	$	$						$
Lighting (pedestrian and bicyclist scale associated with pedestrian/bicyclist project)	$	~$	$	$	$		$	$	$	$	$	$				$
Maps (for pedestrians and/or bicyclists)				$	$	$			$	$		$	$*			
Paved shoulders for pedestrian and/or bicyclist use	$	~$	$			$*	$	$	$	$		$				$

Key: $ = Funds may be used for this activity (restrictions may apply). ~$ = Eligible, but not competitive unless part of a larger project. $* = See program-specific notes for restrictions.																
	Pedestrian and Bicycle Funding Opportunities U.S. Department of Transportation Transit, Highway, and Safety Funds															
Activity or Project Type	BUILD	INFRA	TIFIA	FTA	ATI	CMAQ	HSIP	NHPP	STBG	TA	RTP	SRTS	PLAN	NHTSA 402	NHTSA 405	FLTTP
Pedestrian plans				$					$	$		$	$			$
Recreational trails	~$	~$	~$						$	$	$					$
Road Diets (pedestrian and bicycle portions)	$	~$	$				$	$	$	$						$
Road Safety Assessment for pedestrians and bicyclists							$		$	$			$			$
Safety education and awareness activities and programs to inform pedestrians, bicyclists, and motorists on ped/bike safety									$SRTS	$SRTS		$	$*	$*	$*	
Safety education positions									$SRTS	$SRTS		$		$*		
Safety enforcement (including police patrols)									$SRTS	$SRTS		$		$*	$*	
Safety program technical assessment (for peds/bicyclists)									$SRTS	$SRTS		$	$*	$		
Separated bicycle lanes	$	~$	$	$	$	$	$	$	$	$		$				$
Shared use paths / transportation trails	$	~$	$	$	$	$*	$	$	$	$	$	$				$
Sidewalks (new or retrofit)	$	~$	$	$	$	$	$	$	$	$	$	$				$
Signs / signals / signal improvements	$	~$	$	$	$	$	$	$	$	$		$				$
Signed pedestrian or bicycle routes	$	~$	$	$	$	$		$	$	$		$				$
Spot improvement programs	$	~$	$	$			$	$	$	$	$	$				$
Stormwater impacts related to pedestrian and bicycle projects	$	~$	$	$	$		$	$	$	$	$	$				$
Traffic calming	$	~$	$	$			$	$	$	$		$				$
Trail bridges	$	~$	$			$*	$	$	$	$	$	$				$
Trail construction and maintenance equipment									$RTP	$RTP	$					
Trail/highway intersections	$	~$	$			$*	$	$	$	$	$	$				$
Trailside and trailhead facilities (includes restrooms and water, but not general park amenities; see program guidance)	~$*	~$*	~$*						$*	$*	$*					$
Training						$	$		$	$	$	$	$*	$*		
Training for law enforcement on ped/bicyclist safety laws									$SRTS	$SRTS		$			$*	
Tunnels / undercrossings for pedestrians and/or bicyclists	$	~$	$	$	$	$*	$	$	$	$	$	$				$

Abbreviations

ADA/504: Americans with Disabilities Act of 1990 / Section 504 of the Rehabilitation Act of 1973
BUILD: Better Utilizing Investments to Leverage Development Transportation Discretionary Grants
INFRA: Infrastructure for Rebuilding America Discretionary Grant Program
TIFIA: Transportation Infrastructure Finance and Innovation Act (loans)
FTA: Federal Transit Administration Capital Funds
ATI: Associated Transit Improvement (1% set-aside of FTA)
CMAQ: Congestion Mitigation and Air Quality Improvement Program
HSIP: Highway Safety Improvement Program
NHPP: National Highway Performance Program
STBG: Surface Transportation Block Grant Program
TA: Transportation Alternatives Set-Aside (formerly Transportation Alternatives Program)
RTP: Recreational Trails Program
SRTS: Safe Routes to School Program / Activities
PLAN: Statewide Planning and Research (SPR) or Metropolitan Planning funds
NHTSA 402: State and Community Highway Safety Grant Program
NHTSA 405: National Priority Safety Programs (Nonmotorized safety)
FLTTP: Federal Lands and Tribal Transportation Programs (Federal Lands Access Program, Federal Lands Transportation Program, Tribal Transportation Program, Nationally Significant Federal Lands and Tribal Projects)

Program-specific notes: Federal-aid funding programs have specific requirements that projects must meet, and eligibility must be determined on a case-by-case basis.

- BUILD: Subject to annual appropriations. See https://www.transportation.gov/BUILDgrants for details.
- INFRA: See https://www.transportation.gov/buildamerica/infragrants for details. Focus on projects that generate national or regional economic, mobility, and safety benefits.
- TIFIA: Program offers assistance only in the form of secured loans, loan guarantees, or standby lines of credit, but can be combined with other grant sources, subject to total Federal assistance limitations.
- FTA/ATI: Project funded with FTA transit funds must provide access to transit. See Bicycles and Transit and the FTA Final Policy Statement on the Eligibility of Pedestrian and Bicycle Improvements under Federal Transit Law.
  - Bicycle infrastructure plans and projects funded with FTA funds must be within a 3 mile radius of a transit stop or station, or if further than 3 miles, must be within the distance that people could be expected to safely and conveniently bike to use the particular stop or station.
  - Pedestrian infrastructure plans and projects funded with FTA funds must be within a ½ mile radius of a transit stop or station, or if further than ½ mile, must be within the distance that people could be expected to safely and conveniently walk to use the particular stop or station.
  - FTA funds cannot be used to purchase bicycles for bike share systems.
  - FTA encourages grantees to use FHWA funds as a primary source for public right-of-way projects.
- CMAQ projects must demonstrate emissions reduction and benefit air quality. See the CMAQ guidance at www.fhwa.dot.gov/environment/air_quality/cmaq/ for a list of projects that may be eligible for CMAQ funds. Several activities may be eligible for CMAQ funds as part of a bicycle and pedestrian-related project, but not as a highway project. CMAQ funds may be used for shared use paths, but may not be used for trails that are primarily for recreational use.
- HSIP projects must be consistent with a State's Strategic Highway Safety Plan and (1) correct or improve a hazardous road location or feature, or (2) address a highway safety problem.
- NHPP projects must benefit National Highway System (NHS) corridors.
- STBG and TA Set-Aside: Activities marked "$SRTS" means eligible only as an SRTS project benefiting schools for kindergarten through 8th grade. Bicycle transportation nonconstruction projects related to safe bicycle use are eligible under STBG, but not under TA (23 U.S.C. 217(a)).
- RTP must benefit recreational trails, but for any recreational trail use. RTP projects are eligible under TA and STBG, but States may require a transportation purpose.
- SRTS: FY 2012 was the last year for SRTS funds, but SRTS funds are available until expended.
- Planning funds must be used for planning purposes, for example:
  - Maps: System maps and GIS;
  - Safety education and awareness: for transportation safety planning;
  - Safety program technical assessment: for transportation safety planning;
  - Training: bicycle and pedestrian system planning training.
- Federal Lands and Tribal Transportation Programs (FLTTP) projects must provide access to or within Federal or tribal lands:
  - Federal Lands Access Program (FLAP): Open to State and local entities for projects that provide access to or within Federal or tribal lands.
  - Federal Lands Transportation Program: For Federal agencies for projects that provide access within Federal lands.
  - Tribal Transportation Program: available for federally-recognized tribal governments for projects within tribal boundaries and public roads that access tribal lands.
- NHTSA 402 project activity must be included in the State's Highway Safety Plan. Contact the State Highway Safety Office for details: http://www.ghsa.org/html/about/shsos.html
- NHTSA 405 funds are subject to State eligibility, application, and award. Project activity must be included in the State's Highway Safety Plan. Contact the State Highway Safety Office for details: http://www.ghsa.org/html/about/shsos.html

Cross-cutting notes

- FHWA Bicycle and Pedestrian Guidance: http://www.fhwa.dot.gov/environment/bicycle_pedestrian/
- **Applicability of 23 U.S.C. 217(i) for Bicycle Projects:** 23 U.S.C. 217(i) requires that bicycle facilities "be principally for transportation, rather than recreation, purposes". However, sections 133(b)(6) and 133(h) list "recreational trails projects" as eligible activities under STBG. Therefore, the requirement in 23 U.S.C. 217(i) does not apply to recreational trails projects (including for bicycle use) using STBG funds. Section 217(i) continues to apply to bicycle facilities other than trail-related projects, and section 217(i) continues to apply to bicycle facilities using other Federal-aid Highway Program funds (NHPP, HSIP, CMAQ). The transportation requirement under section 217(i) is applicable only to bicycle projects; it does not apply to any other trail use or transportation mode.
- There may be occasional DOT or agency incentive grants for specific research or technical assistance purposes.
- Aspects of DOT initiatives may be eligible as individual projects. Activities above may benefit safe, comfortable, multimodal networks; environmental justice; and equity.

APPENDIX B: DETAILED TRAFFIC ANALYSIS

INTRODUCTION

The consultant team performed a detailed traffic engineering analysis of the project area. The analysis was conducted using Synchro**,** a macroscopic analysis and optimization software application that supports the *Highway Capacity Manual* (HCM) 6th Edition, 2010 and 2000 for signalized intersections, unsignalized intersections and roundabouts. The data set created using Synchro was also utilized for microsimulation of vehicular and pedestrian related traffic using Sim-Traffic. These tools helped the team analyze, visualize, and understand the performance of the highway system under various traffic scenarios. They also helped the team evaluate potential impacts due to changes in demand, geometry, and traffic control.

The following traffic scenarios were analyzed:

- **2019 Existing Condition**. This refers to analysis on the counts that were taken in March 2019.
- **2029 No-Build Condition**. This refers to analysis of the future condition without any of the recommendations from this project.
- **2029 Build Option 1** ("DRI" Alternative). This refers to analysis of the future condition with the street network and geometry changes from Option 1. This option was derived from the results of the DRI plan that preceded this study.
- **20219 Build Option 2.** This refers to analysis of the future condition with the street network and geometry changes from Option 2. This option was a response to the failures of Option 1, keeping as many priorities from the DRI plan as possible.
- **2029 Build Preferred Alternative**. This refers to the analysis of the preferred alternative. For all intents and purposes, the only change is the removal of one of the two southbound lanes on Jerusalem Ave, from John Street to Herzog Place. This section of Jerusalem Ave has traffic volumes that are low enough to be supported by a single lane of traffic. With the improvements to the alignment and traffic calming of narrowing the moving lane, the preferred alternative did not require a full traffic analysis, as it sufficiently meets the same conditions as the No-Build Analysis.

For each of these conditions, the roadway network was evaluated for the weekday AM, Midday and PM peak hours, in addition to the midday Saturday peak hour. The Synchro model formed the basis of future traffic operating conditions to determine potential traffic impacts of proposed Complete Streets strategies on the overall network and also to assess impacts on movements of travelers within the study area after the implementation of the Complete Streets improvements.

The following sections provide a description of the various analysis scenarios, including the basis for assumptions about future traffic demand on the key arterial roadways, and the results of the analyses conducted for this study. Level of Service (LOS) for signalized intersections is defined in terms of delay. Delay is a measure of driver discomfort, frustration, fuel consumption, and loss of travel time. Specifically, LOS criteria are stated in terms of the average stopped delay per vehicle for a 60 minute analysis period. The criteria and travel condition of the respective LOS are as follows:

2019 EXISTING CONDITION SCENARIO

The **2019 Existing Condition** is the base condition on which the Synchro model was constructed. The team conducted an extensive physical inventory of the roadway network through reviewing aerial photographs, reading prior studies, undertaking field visits, and holding discussions with agencies. The inventory collected information on roadway and intersection geometry, traffic control, signal phasing and timing, time-of-day restrictions, turn

restrictions, speed limits and other pertinent information. All of the information was field-checked for accuracy prior to being included in the analysis.

To determine existing traffic demand, the team collected the following data:

- Vehicle turning movement counts and 24-hour Automatic Traffic Recorder (ATR) counts on roadways within and adjacent to the study area. ATR data was collected for a seven-day, non-holiday period, including a weekend, in compliance with NYSDOT's *Traffic Monitoring Standards for Contractual Agreements*.
- Bus, truck, and pedestrian flows.
- Turning movement counts for the peak Weekday AM, midday, and PM periods, and the peak Saturday midday period. Traffic data collection locations are shown on Figure 1.

With this traffic data, the team prepared traffic flow maps that depict the weekday and weekend peak traffic flows for the 2019 Existing Condition. This information was entered into the model to retrieve existing condition results.

The team also captured spot speed data in both directions at screenline locations. Travel time runs were also conducted during a typical weekday and midday peak weekend period. Utilizing the speed data, the team calibrated the models and modified the inputs modified based on field observations. The final results were validated through field visits and observations of existing conditions. The calibrated, validated model quantified the performance of the roadway network in terms of LOS. The team determined the LOS at selected major intersections along with performance criteria for the network as a whole.

Table 1 presents the 2019 Existing Condition LOS and delays per vehicle for each of the major signalized intersections selected for analysis.

- While the corridor generally does not display significant capacity deficiencies, several signalized intersections are currently operating at less than desirable conditions.
- During the weekday AM peak hour, five intersections operate at LOS E or F, and during the weekday PM peak hour, seven intersections operate at LOS E or F. LOS D is generally considered "tolerable" by NYSDOT for heavily- developed areas in Long Island.
- During the weekday midday, one intersection operated at LOS E. During the Saturday midday peak, three intersections operated at LOS E or F. Most of these intersections are located along Old Country Road.
- The intersections of NY106, NY107, and Jerusalem Avenue at Old Country Road all operate at LOS E or F during most time periods examined. These longer than desirable delays occur at intersections because of their large size, long cycle length, complexity of signal phasing, and high demand at all intersection approaches. However, LOS at individual intersections does not necessarily provide a comprehensive evaluation of the ability of the system as a whole to process traffic.

Utilizing the input data and the network developed for the Synchro analyses, Table 2 provides modeling results for the 2019 Existing Condition for the overall network performance on all arterial roadways during the Weekday AM, midday, PM and Saturday midday peak periods. The table includes average travel speeds within the corridor and the average delay per vehicle for all vehicles travelling on the roadway network in the study area. The delay in seconds per vehicle ranges from 19 seconds during the Weekday midday peak hour to 32 seconds during the Weekday PM peak hour, and average travel speeds range from 9 mph to 13 mph.

Summary of Intersection Capacity Analyses Results, 2019 Existing Condition

INTERSECTION	WEEKDAY AM PEAK HOUR		WEEKDAY MIDDAY PEAK HOUR		WEEKDAY PM PEAK HOUR		SATURDAY MIDDAY PEAK HOUR	
	LOS	DELAY (SEC)	LOS	DELAY (SEC)	LOS	DELAY (SEC)	LOS	DELAY (SEC)
NYS 107 & BETHPAGE RD	A	8.7	A	9.9	A	9.6	B	13.2
NYS 107 & NEVADA ST	C	23.7	C	29.9	C	32.1	F	101.1
NYS 107 & BROADWAY MALL EXIT	A	4.7	C	22.9	B	15.1	C	21.9
NYS 107 & BROADWAY MALL ENTR	A	5.6	A	9.4	A	6.4	B	10.6
NYS 106/107 & LENOX AVE	F	97.2	C	22.4	C	29.9	C	20.2
WYCKOFF ST & WEST JOHN ST	A	0.1	A	0.1	A	0.1	A	0.1
NYS 106 & WEST JOHN ST	D	38.6	D	35.2	F	96.4	C	32.8
NYS 107 & WEST JOHN ST	D	38.8	C	31.3	E	63.1	D	38.5
NYS 106 & WEST BARCLAY ST	A	0.4	A	0.5	A	0.7	A	0.4
NYS 107 & EAST BARCLAY ST	F	86.8	C	34.7	E	65.5	D	38.1
NYS 106 & NORTH STATION PLAZA	A	9.5	A	4.6	A	8.3	A	9.4
NYS 106 & SOUTH STATION PLAZA	A	6.8	A	3.2	B	14.5	A	4.3
NYS 107 & HERZOG PLACE	A	1.5	A	1.6	A	1.9	A	2.0
JERUSALEM AVE & HERZOG PL	B	18.2	B	15.4	B	19.4	B	13.8
DUFFY AVE & NELSON AVE	B	12.2	A	8.8	B	14.6	A	8.8
NYS 106 & DUFFY AVE	D	39.4	C	26.5	E	64.4	C	20.8
NYS 106 & WEST MARIE ST	B	11.0	A	7.1	C	23.4	A	6.4
JERUSALEM AVE & MARIE ST	C	26.6	A	9.8	B	20.0	A	9.6
NYS 107 & WEST MARIE ST	C	23.4	B	16.8	C	22.9	B	17.3
NYS 106 & OLD COUNTRY RD	E	66.5	D	54.9	F	97.5	E	60.6
JERUSALEM AVE & OLD COUNTRY RD	F	86.4	D	44.7	E	69.9	D	49.7
NYS 107 & WEST OLD COUNTRY RD	E	65.9	E	57.4	E	78.1	F	80.2

Summary of System Network Performance Criteria, 2019 Existing Condition

SCENARIO	WEEKDAY AM PEAK HOUR		WEEKDAY MIDDAY PEAK HOUR		WEEKDAY PM PEAK HOUR		SATURDAY MIDDAY PEAK HOUR	
	TOTAL DELAY (SEC/VEH)	AVERAGE SPEED	TOTAL DELAY (SEC/VEH)	AVERAGE SPEED	TOTAL DELAY (SEC/VEH)	AVERAGE SPEED	TOTAL DELAY (SEC/VEH)	AVERAGE SPEED
EXISTING (2019)	**27 sec**	**10 mph**	**19 sec**	**13 mph**	**32 sec**	**9 mph**	**26 sec**	**10 mph**

2029 No Build Condition

For the purpose of comparison, the year 2029 was chosen as the planning horizon year for the traffic analyses conducted. Projected traffic volumes that can be expected on the roadway network in the year 2029 were developed to determine the network's performance and ability to accommodate expected traffic demand for the year 2029. The 2019 base condition volumes were modified based on the following:

- An annual linear growth rate of 0.49% per year was applied to background traffic. This growth rate was developed based on information from the New York Metropolitan Transportation Council (NYMTC). NYMTC is the Metropolitan Planning Organization (MPO) for New York City, Long Island, and the lower Hudson Valley. NYMTC undertakes federally required transportation planning activities for the planning area's eligibility for federal funds.

- Information regarding planned and proposed developments within the study area was obtained from the Town of Oyster Bay's Planning Department. Traffic generation estimates for these developments were calculated utilizing the 10th Edition of the Institute of Transportation Engineers report *Trip Generation*, which provides trip making information for numerous land uses, and is the industry standard for analyses of this kind. The estimated traffic volumes were distributed on the roadway network based on prevailing roadway and traffic characteristics. Only developments that had pending applications or were approved for construction were considered.

- Completion of the LIRR Third Track project, which is expected to increase use of the Hicksville Station. The Third Track study further incorporated assumptions and impacts of the East Side Access project, an ongoing effort to bring LIRR service into Grand Central Station. Since both East Side Access and the Third Track project have completion dates within the planning horizon for this study, the conclusions should be reflected in the analyses of future conditions. To accommodate increased demand, the addition of a new parking garage on one of the at-grade parking lots currently serving the north side train station. This would result in a net increase of 884 spaces (374 existing to be replaced with a 1258-space garage, as per the Environmental Impact Statement for the Third Track project prepared by LIRR.

- Increased residential density in the study area resulting from the recommendations of the Hicksville Downtown Redevelopment Initiative, which recommends rezoning that encourages transit-oriented development (TOD). This would include density incentives for the development of residential units within the area. Based on information provided by the Town of Oyster Bay Planning Department, an estimated 494 additional residential units could be developed over the next 10 years as a result of this initiative. The traffic estimated to be generated by this initiative was distributed on the roadway network based on prevailing travel patterns in the study area.

Utilizing the projected 2029 No Build traffic volumes, the SYNCHRO and Sim Traffic analyses were repeated. The increases in traffic volumes associated with these various demand elements will have an impact on operations on the study area roadways. Table 3 presents the 2029 No Build Condition LOS and delays per vehicle for each of the major signalized intersections chosen for analysis in this study. the results demonstrate some deterioration in the performance measures for the study network. There are two (2) additional instances of intersections operating at

LOS E or F, one each during the weekday AM and PM peak hours. The three intersections of NY106, NY107 and Jerusalem Avenue at Old Country Road all provide LOS E or F during most time periods examined.

Table 4 presents the overall system operating conditions. Table 4 indicates that overall system delay increased slightly and that travel speed in the corridor is reduced. During the weekday AM peak hour, average speed decreases from 10 mph to 9 mph, and average delay per vehicle increases from 27 seconds per vehicle to 31 seconds per vehicle. Similarly, during the weekday PM peak hour, average speed decreases from 9 mph to 7 mph, and average delay per vehicle increased from 32 seconds per vehicle to 39 seconds per vehicle. Weekday midday peak hour speeds and delay were essentially unchanged. On Saturday, midday peak hour average speed was also unchanged, with an increase in delay from 26 seconds per vehicle to 29 seconds per vehicle.

Table 3
Summary of Intersection Capacity Analyses Results
Downtown Hicksville Complete Streets Project
2029 No Build Condition

INTERSECTION	WEEKDAY AM PEAK HOUR		WEEKDAY MIDDAY PEAK HOUR		WEEKDAY PM PEAK HOUR		SATURDAY MIDDAY PEAK HOUR	
	LOS	DELAY (SEC)	LOS	DELAY (SEC)	LOS	DELAY (SEC)	LOS	DELAY (SEC)
NYS 107 & BETHPAGE RD	A	4.9	A	5.6	A	8.6	B	17.8
NYS 107 & NEVADA ST	C	27.3	D	38.8	D	53.9	F	140.0
NYS 107 & BROADWAY MALL EXIT	B	11.6	C	23.1	C	33.0	C	27.5
NYS 107 & BROADWAY MALL ENTR	B	18.7	B	12.6	B	19.9	C	21.9
NYS 106/107 & LENOX AVE	F	109.2	C	22.1	D	47.7	C	27.6
WYCKOFF ST & WEST JOHN ST	A	0.1	A	0.1	A	0.1	A	0.1
NYS 106 & WEST JOHN ST	E	71.1	C	34.0	F	167.6	D	45.7
NYS 107 & WEST JOHN ST	D	52.1	C	30.9	E	64.1	E	55.9
NYS 106 & WEST BARCLAY ST	A	0.4	A	0.5	A	0.9	A	0.4
NYS 107 & EAST BARCLAY ST	F	105.4	C	34.2	F	80.7	D	44.6
NYS 106 & NORTH STATION PLAZA	A	9.0	A	3.2	B	11.5	A	7.7
NYS 106 & SOUTH STATION PLAZA	B	11.6	A	2.0	C	21.2	A	4.7
NYS 107 & HERZOG PLACE	A	0.7	A	1.0	A	1.6	A	0.8
JERUSALEM AVE & HERZOG PL	B	16.9	B	15.2	B	20.0	B	12.9
DUFFY AVE & NELSON AVE	B	13.0	A	8.9	B	17.0	A	9.0
NYS 106 & DUFFY AVE	D	54.0	C	23.1	E	70.9	B	17.1
NYS 106 & WEST MARIE ST	A	10.0	A	5.3	B	12.4	A	4.1
JERUSALEM AVE & MARIE ST	C	24.7	B	10.1	B	19.9	B	11.0
NYS 107 & WEST MARIE ST	B	19.9	B	16.3	C	22.2	B	14.7
NYS 106 & OLD COUNTRY RD	E	70.6	E	61.3	F	115.0	E	62.3
JERUSALEM AVE & OLD COUNTRY RD	E	61.1	C	35.0	E	57.4	D	45.8
NYS 107 & WEST OLD COUNTRY RD	E	76.9	D	46.5	E	74.8	E	56.4

Table 4
Summary of System Network Performance Criteria
Downtown Hicksville Complete Streets Project
2029 No Build Condition

SCENARIO	WEEKDAY AM PEAK HOUR		WEEKDAY MIDDAY PEAK HOUR		WEEKDAY PM PEAK HOUR		SATURDAY MIDDAY PEAK HOUR	
	TOTAL DELAY (SEC/VEH)	AVERAGE SPEED	TOTAL DELAY (SEC/VEH)	AVERAGE SPEED	TOTAL DELAY (SEC/VEH)	AVERAGE SPEED	TOTAL DELAY (SEC/VEH)	AVERAGE SPEED
NO BUILD (2029)	**31 sec**	**9 mph**	**19 sec**	**13 mph**	**39 sec**	**7 mph**	**29 sec**	**10 mph**

2029 Build Option 1 Condition

The 2029 Build Option 1 traffic analysis scenario was performed to determine the impact on network traffic performance that might occur after implementing of a set of Complete Streets and traffic-calming strategies. These strategies are depicted in Figure 1. These strategies would lead to additional parkland and community space, the reorientation and modification of roads, and new intersections with appropriate intersection control. East Barclay Street is extended through the new park, creating a continuous east/west connection to NY106/Newbridge Road. Signalization of new intersections would be required. Jerusalem Avenue is terminated south of South Station Plaza, with access maintained to commercial property located there.

The SYNCHRO model for this 2029 Build alternative included all of the demand parameters in the 2029 No Build Condition, with the roadway network modified to reflect the changes that resulted from public input obtained through the Downtown Redevelopment Initiative described. Thus, this analysis scenario includes the following:

- 2019 Existing Traffic Volumes
- Background traffic growth rate of 0.49% per year to account for normal growth (see Existing Condition, above)
- Estimated traffic generated by planned and proposed developments within the study area, as per Town of Oyster Bay (see Existing Condition, above)
- Estimated increase in traffic within the study area due to additional residential development as a result of the rezoning initiative (see Existing Condition, above)
- Roadway modifications based on public input obtained through the public information process of the Downtown Rezoning.

Tables 5 and 6 present the intersection capacity analyses and overall system operations results for the Build Option 1 Condition. Table 5 shows the results of the traffic analyses conducted to evaluate the impact of these community enhancements and traffic safety and complete streets measures indicate that the modifications would have significant detrimental impact on operating conditions in the study area.

A total of 35 instances of LOS E or F are shown to occur, notably 11 during the weekday AM and 13 during the weekday PM peak hour. Several major intersections would be unable to provide acceptable operating conditions, and queues resulting from long delays at the intersections would result in near-gridlock conditions. The new intersection of NY106 / Newbridge Road and Barclay Street cannot provide sufficient capacity to accommodate through traffic from the Broadway at Barclay Street intersection. In addition, closing Jerusalem Ave at Herzog Place results in northbound vehicles that formerly utilized Jerusalem Avenue to access NY107 / Broadway to use alternate routes, including via Herzog Place.

Making Herzog Place one-way with two eastbound lanes and redistributing some of the detoured traffic to several other parallel streets was tested, but the intersection of Jerusalem Avenue and Herzog Place still could not provide reasonable service. Furthermore, allowing left turns from Herzog Place onto Broadway northbound creates a conflict with the heavy pedestrian movement across NY107 / Broadway at Herzog Place, which contravenes the intent of Complete Street strategies.

In addition, overall system delays increase substantially, and average travel speeds deteriorate significantly. Table 6 indicates that during the weekday AM peak hour, average speed decreases from

9mph to 6mph, and average delay per vehicle increases from 31 seconds per vehicle to 51 seconds per vehicle, nearly a 70% increase in systemwide delay. Similarly, during the weekday PM peak hour, average speed decreased from 7mph to 5mph, and average delay per vehicle increased from 39 seconds per vehicle to 67 seconds per vehicle. Weekday midday peak hour speeds decreased from 13mph to 10mph, and delay increased from 19 seconds per vehicle to 29 seconds per vehicle. On Saturday, midday peak hour average speed decreased from 10mph to 7mph, with an increase in delay from 29 seconds per vehicle to 40 seconds per vehicle.

These results indicate a substantial deterioration in operation, which would likely result in gridlock.

Figure 1
Downtown Rezoning Initiative Option 1
Downtown Hicksville Complete Streets Project

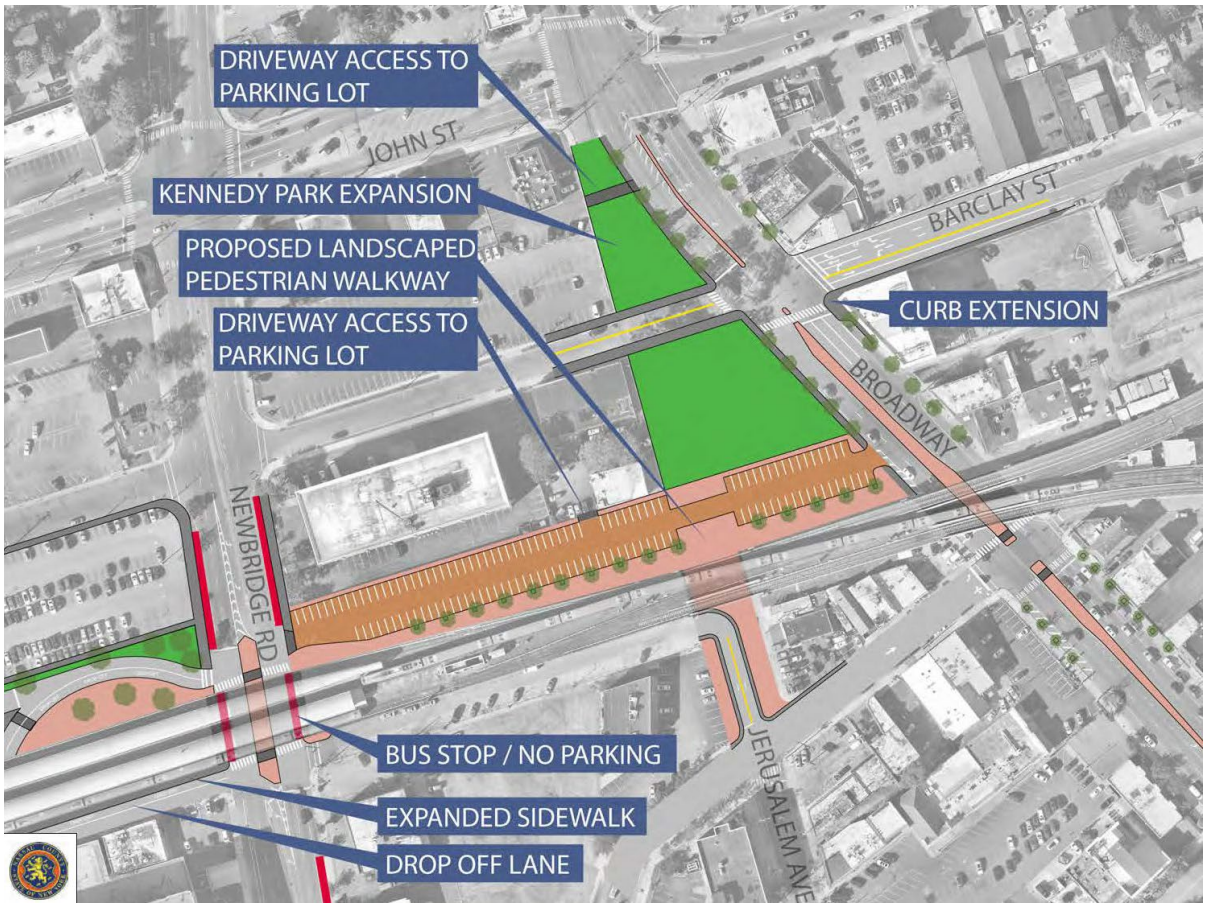

Table 5

Summary of Intersection Capacity Analyses Results

INTERSECTION NAME	WEEKDAY AM PEAK HOUR		WEEKDAY MIDDAY PEAK HOUR		WEEKDAY PM PEAK HOUR		SATURDAY MIDDAY PEAK HOUR	
	LOS	DELAY (SEC)	LOS	DELAY (SEC)	LOS	DELAY (SEC)	LOS	DELAY (SEC)
NYS 107 & BETHPAGE RD	A	4.9	B	11.7	B	12.8	C	28.7
NYS 107 & NEVADA ST	C	27.4	D	39.8	E	61.6	F	140.8
NYS 107 & BROADWAY MALL EXIT	B	11.4	C	25.8	D	37.3	D	37.8
NYS 107 & BROADWAY MALL ENTR	B	16.7	B	13.1	C	22.2	C	22.0
NYS 106/107 & LENOX AVE	F	98.8	C	23.1	E	56.9	C	22.8
WYCKOFF ST & WEST JOHN ST	A	0.1	A	0.1	A	0.1	A	0.1
NYS 106 & WEST JOHN ST	E	64.0	D	39.8	F	180.6	D	52.8
NYS 107 & WEST JOHN ST	E	57.0	C	26.6	E	63.4	D	36.0
NYS 106 & WEST BARCLAY ST	F	290.8	F	80.7	F	332.3	F	130.4
NYS 107 & EAST BARCLAY ST	E	64.8	C	25.8	E	77.5	D	41.1
NYS 106 & NORTH STATION PLAZA	D	35.6	A	5.1	D	37.4	C	34.4
NYS 106 & SOUTH STATION PLAZA	B	17.4	A	4.1	E	55.1	A	4.9
NYS 107 & HERZOG PLACE	F	158.4	F	87.6	F	196.3	F	92.7
JERUSALEM AVE & HERZOG PL	B	12.1	A	5.7	B	16.6	B	12.7
DUFFY AVE & NELSON AVE	B	12.4	A	8.1	B	13.5	A	8.5
NYS 106 & DUFFY AVE	D	52.0	C	25.1	F	81.4	B	19.3
NYS 106 & WEST MARIE ST	B	13.4	A	9.2	D	52.0	A	8.6
JERUSALEM AVE & MARIE ST	E	59.7	C	21.9	D	45.5	C	21.3
NYS 107 & WEST MARIE ST	F	341.2	F	137.6	F	218.9	F	302.8
NYS 106 & OLD COUNTRY RD	F	83.7	E	59.3	F	162.7	E	65.6
JERUSALEM AVE & OLD COUNTRY RD	F	95.0	D	44.9	E	64.8	D	52.2
NYS 107 & WEST OLD COUNTRY RD	F	100.0	E	70.0	F	136.5	F	106.9

Downtown Hicksville Complete Streets Project

2029 Build Option 1

Table 6
Summary of System Network Performance Criteria
Downtown Hicksville Complete Streets Project
2029 Build Option 1

SCENARIO	WEEKDAY AM PEAK HOUR		WEEKDAY MIDDAY PEAK HOUR		WEEKDAY PM PEAK HOUR		SATURDAY MIDDAY PEAK HOUR	
	TOTAL DELAY (SEC/VEH)	AVERAGE SPEED	TOTAL DELAY (SEC/VEH)	AVERAGE SPEED	TOTAL DELAY (SEC/VEH)	AVERAGE SPEED	TOTAL DELAY (SEC/VEH)	AVERAGE SPEED
OPTION 1 - DOWNTOWN REZONING INITIATIVE (2029)	**51 sec**	**6 mph**	**29 sec**	**10 mph**	**67 sec**	**5 mph**	**40 sec**	**7 mph**

2029 Build Option 2 Condition

Due to the unacceptable impact on traffic operating conditions that would result from the implementation of the DRI recommendations, a modified series of Complete Streets and public space enhancements was proposed. Instead of terminating Jerusalem Avenue at South Station Plaza by eliminating the southbound approach at John Street and removing the northbound roadway to provide additional park space, the alignment of both northbound and southbound Jerusalem Avenue was modified to form a more conventional intersection opposite East Barclay Street. Although it slightly decreases the amount of new parkland, this configuration would allow vehicles travelling northbound on Jerusalem Avenue to access NY107 / Broadway via the existing signalized intersection. Therefore, one-way operations on Herzog Place are no longer required, and the median on NY107 / Broadway remains closed to facilitate pedestrian flow. In addition, the need to signalize at the intersection of West Barclay Street at NY106/Newbridge Road is eliminated. Thus, this analysis reflects the following:

- 2019 Existing Traffic Volumes
- Background traffic growth rate of 0.49% per year to account for normal growth (see Existing Condition, above)
- Estimated traffic generated by planned and proposed developments within the study area, as per Town of Oyster Bay (see Existing Condition, above)
- Estimated increase in traffic within the study area due to additional residential development as a result of the rezoning initiative (see Existing Condition, above)
- Roadway modifications as shown in Figure 1.

Tables 7 and 8 present the intersection capacity analyses and overall system operations results for the 2029 Build Recommended Alternative Condition. Table 7 shows the results of the traffic analyses conducted to evaluate the impact of these modified community enhancements and traffic safety and Complete Streets measures. The results indicate that the modifications would have only a slight impact on operating conditions. Performance parameters comparable to, and in some cases slightly better than, 2029 No Build Conditions would prevail. The number of instances of LOS E or F would be 15, reduced from 18 under the 2029 No Build Condition. During the weekday AM peak hour, 6 such instances are projected, the same as under No Build conditions. Similarly, during the weekday midday peak hour, the number of instances of LOS E or F remains as one. During the weekday PM peak hour, two fewer instances of LOS E or F are projected (5 vs 7). Finally, during the Saturday midday peak hour, 3 instances of LOS E or F are projected, compared to 4 under No Build conditions.

The effect on overall system delays and average travel speeds is also reduced under this scenario, with only slight impact anticipated when compared to the 2029 No Build Condition. Table 8 shows that, during the weekday AM and midday peak hours, delays and average travel speeds remain unchanged from the No Build Condition. During the weekday PM peak hour, delays increase by one (1) second per vehicle, and average travel speed remains unchanged, while during the Saturday midday peak hour, delay is unchanged, while average travel speed decreases by one (1) mph.

Therefore, when considering traffic engineering impacts, the community enhancements envisioned under the recommended alternative, as described above, will have a minor impact on operating conditions compared to 2029 No Build conditions.

Figure 2
2029 Build Option 2
Downtown Hicksville Complete Streets Project

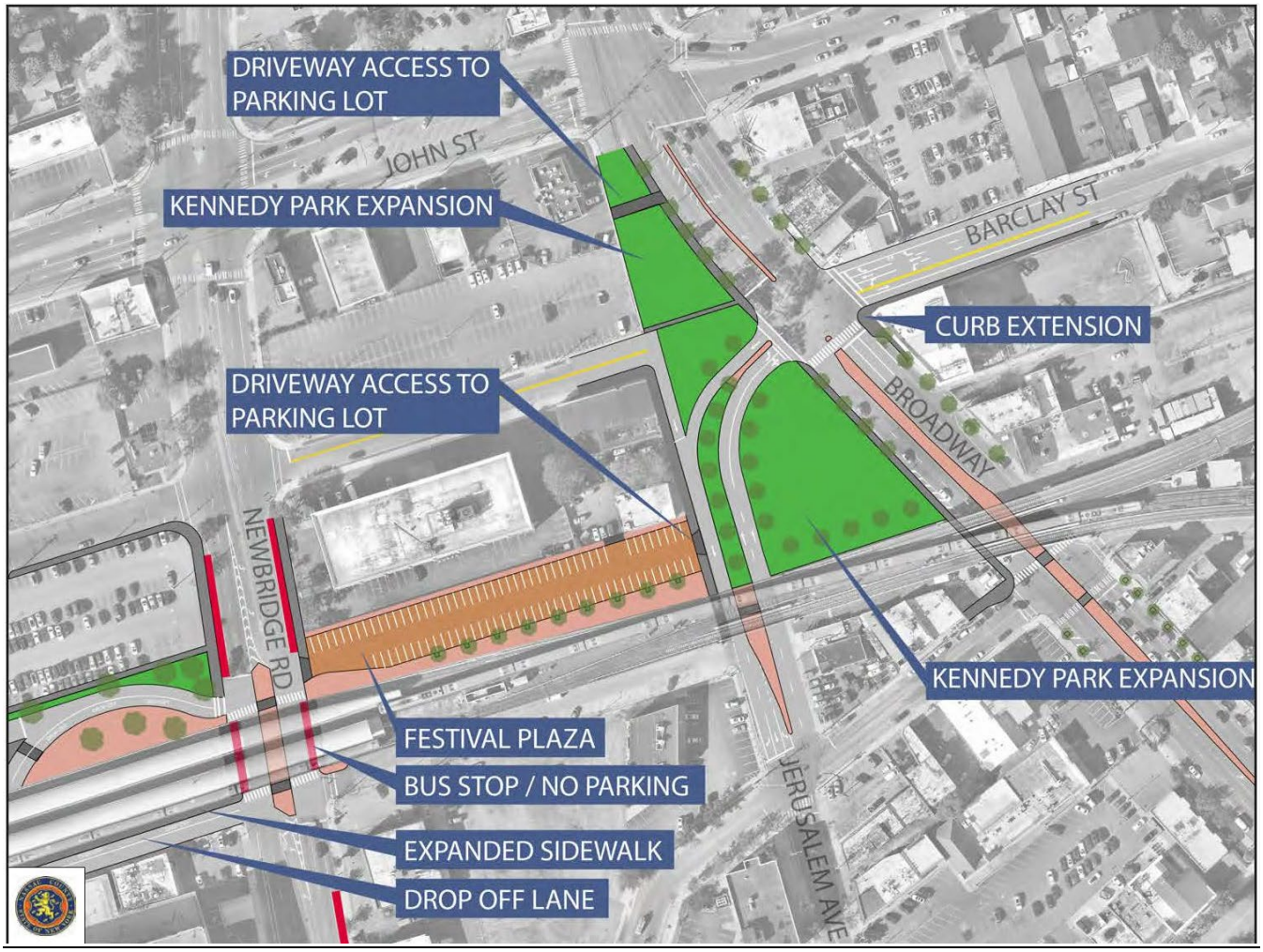

Table 7
Summary of Intersection Capacity Analyses Results
Downtown Hicksville Complete Streets Project
2029 Build Option 2

INTERSECTION NAME	WEEKDAY AM PEAK HOURWEEWEEKDAY AM PEAK HOUR		WEEKDAY MIDDAY PEAK HOUR		WEEKDAY PM PEAK HOURDA		SATURDAY MIDDAY PEAK HOURSATURSATURDAY MIDDAY PEAK HOUR	
	LOSS	DELAY (SEC)D	LOSL	DELAY (SEC)DELAY (SEC)	LOSLOS	DELAY (SEC)DELAY (SEC)	LOSLOS	DELAY (SEC)DELAY (SEC)
NYS 107 & BETHPAGE RD	A	4.9	A	5.6	A	8.6	B	17.8
NYS 107 & NEVADA ST	C	27.3	D	38.9	D	53.9	F	139.8
NYS 107 & BROADWAY MALL EXIT	B	11.6	C	22.8	C	33.0	C	26.9
NYS 107 & BROADWAY MALL ENTR	B	18.7	B	12.6	B	19.9	C	22.0
NYS 106/107 & LENOX AVE	F	109.2	C	21.9	D	47.7	C	22.8
WYCKOFF ST & WEST JOHN ST	A	0.1	A	0.1	A	0.1	A	0.1
NYS 106 & WEST JOHN ST	E	71.6	C	34.6	F	168.6	D	45.9
NYS 107 & WEST JOHN ST	D	50.2	C	25.2	D	48.0	D	40.8
NYS 106 & WEST BARCLAY ST	A	0.4	A	0.5	A	0.8	A	0.4
NYS 107 & EAST BARCLAY ST	F	95.0	C	30.0	F	104.2	D	51.7
NYS 106 & NORTH STATION PLAZA	A	9.0	A	3.3	B	11.5	A	7.7
NYS 106 & SOUTH STATION PLAZA	A	6.0	A	2.1	B	17.3	A	3.5
NYS 107 & HERZOG PLACE	A	1.0	A	1.2	A	8.0	A	1.5
JERUSALEM AVE & HERZOG PL	C	21.3	B	18.5	C	25.5	B	17.7
DUFFY AVE & NELSON AVE	B	13.9	A	9.2	C	20.3	A	9.4
NYS 106 & DUFFY AVE	E	59.5	C	24.2	E	67.5	B	18.6
NYS 106 & WEST MARIE ST	B	10.4	A	5.3	B	12.8	A	4.1
JERUSALEM AVE & MARIE ST	C	27.3	B	12.2	C	22.0	B	12.8
NYS 107 & WEST MARIE ST	B	19.4	B	15.6	C	22.3	B	14.3
NYS 106 &OLD COUNTRY RD	E	70.9	E	61.2	F	116.7	E	62.5
JERUSALEM AVE & OLD COUNTRY RD	E	58.3	C	33.6	D	51.7	D	43.8
NYS 107 & WEST OLD COUNTRY RD	E	76.9	D	46.8	E	74.7	E	56.7

Table 8
Summary of System Network Performance Criteria
Downtown Hicksville Complete Streets Project
2029 Build Option 2

SCENARIO	WEEKDAY AM PEAK HOUR		WEEKDAY MIDDAY PEAK HOUR		WEEKDAY PM PEAK HOUR		SATURDAY MIDDAY PEAK HOUR	
	TOTAL DELAY (SEC/VEH)	AVERAGE SPEED	TOTAL DELAY (SEC/VEH)	AVERAGE SPEED	TOTAL DELAY (SEC/VEH)	AVERAGE SPEED	TOTAL DELAY (SEC/VEH)	AVERAGE SPEED
RECOMMENDED ALTERNATIVE (2029)	**32 sec**	**9 mph**	**19 sec**	**13 mph**	**40 sec**	**7 mph**	**29 sec**	**9 mph**

2029 Preferred Alternative Condition

The Preferred Alternative is a third option, which took into account feedback we received from members of the community at our second public meeting. This option retains most of the existing configuration, but removes one of the southbound lanes on Jerusalem Ave. Removing that lane optimizes the alignment from Broadway onto Jerusalem and calms traffic as it enters Jerusalem Ave. The narrowed roadway will result in additional park space while slowing southbound traffic on Jerusalem Ave. All other lane configurations are maintained throughout the study area.

Volumes on Jerusalem Ave were low enough to operate with one lane without causing delays. For this reason, the No Build Traffic Analysis was used to assess potential impacts. Since only one minor change to lane configuration was proposed compared to the existing condition, the impacts are expected to be similar to those found in the No Build Traffic Analysis, so that analysis is provided below in the context of the Preferred Alternative.

The specific recommendations are as follows:

- Jerusalem Ave would be accessed from a new moving lane in what is now a shoulder against the curb north of John St. This would improve the alignment by removing the need to weave from the through lane on Broadway to get onto Jerusalem Ave.
- Align the single moving lane on Jerusalem Ave to the western edge of the roadway, This will allow for the expansion of the center median to provide a larger pedestrian refuge across this unsignalized crossing, as well as landscaping.
- Curbside bike lanes could also be implemented between Herzog Pl and the LIRR overpass, allowing cyclists to access bike parking from the south.
- Expand Kennedy Park all the way to the LIRR tracks, removing the parking lot that is currently between Jerusalem Ave and Broadway.

Figure 3
2029 Preferred Alternative
Downtown Hicksville Complete Streets Project

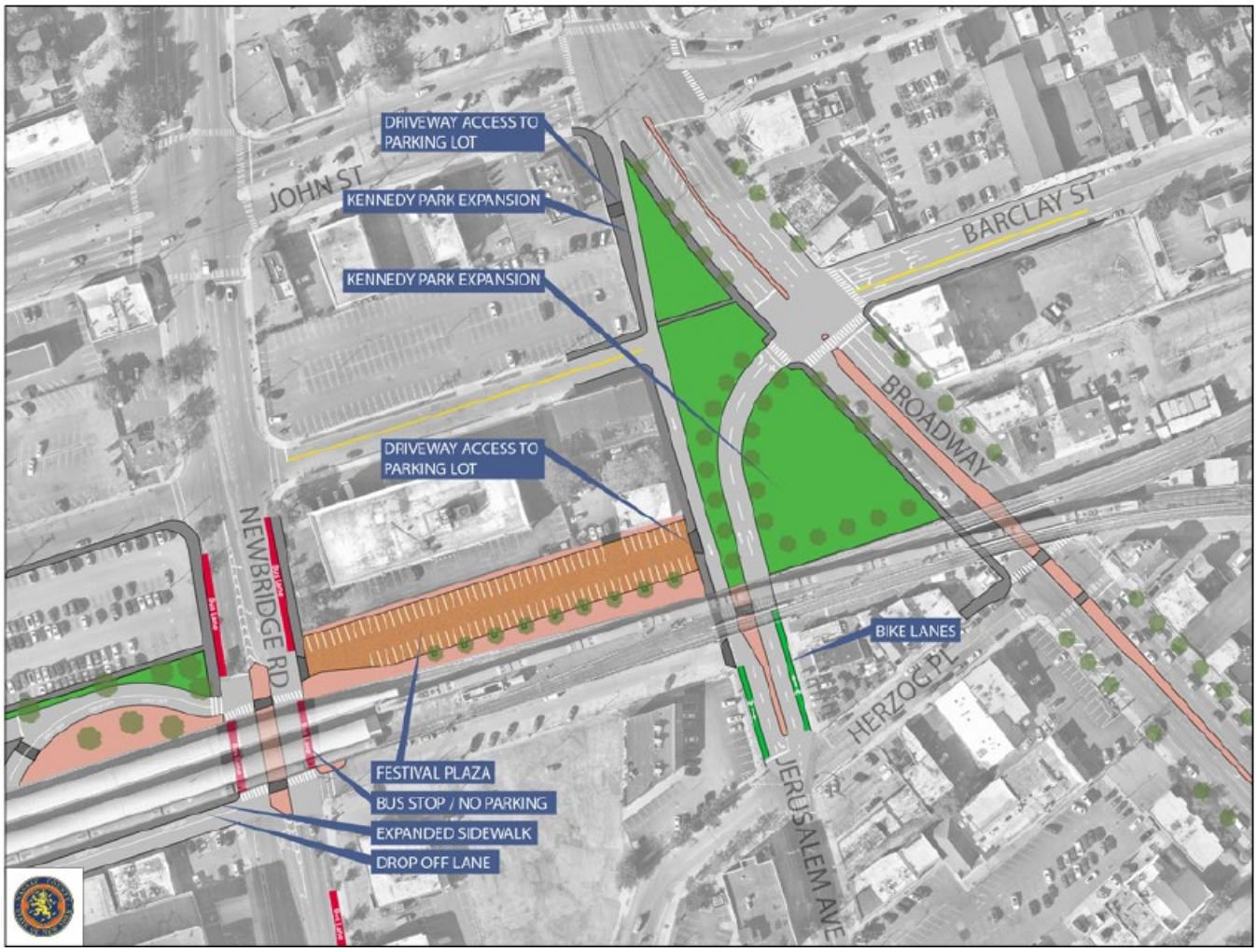

Figure 4
2029 Preferred Alternative Photosimulations (Day and Night Views)
Downtown Hicksville Complete Streets Project

Table 9
Summary of Intersection Capacity Analyses Results
Downtown Hicksville Complete Streets Project
2029 Preferred Alternative Condition

INTERSECTION	WEEKDAY AM PEAK HOUR		WEEKDAY MIDDAY PEAK HOUR		WEEKDAY PM PEAK HOUR		SATURDAY MIDDAY PEAK HOUR	
	LOS	DELAY (SEC)	LOS	DELAY (SEC)	LOS	DELAY (SEC)	LOS	DELAY (SEC)
NYS 107 & BETHPAGE RD	A	4.9	A	5.6	A	8.6	B	17.8
NYS 107 & NEVADA ST	C	27.3	D	38.8	D	53.9	F	140.0
NYS 107 & BROADWAY MALL EXIT	B	11.6	C	23.1	C	33.0	C	27.5
NYS 107 & BROADWAY MALL ENTR	B	18.7	B	12.6	B	19.9	C	21.9
NYS 106/107 & LENOX AVE	F	109.2	C	22.1	D	47.7	C	27.6
WYCKOFF ST & WEST JOHN ST	A	0.1	A	0.1	A	0.1	A	0.1
NYS 106 & WEST JOHN ST	E	71.1	C	34.0	F	167.6	D	45.7
NYS 107 & WEST JOHN ST	D	52.1	C	30.9	E	64.1	E	55.9
NYS 106 & WEST BARCLAY ST	A	0.4	A	0.5	A	0.9	A	0.4
NYS 107 & EAST BARCLAY ST	F	105.4	C	34.2	F	80.7	D	44.6
NYS 106 & NORTH STATION PLAZA	A	9.0	A	3.2	B	11.5	A	7.7
NYS 106 & SOUTH STATION PLAZA	B	11.6	A	2.0	C	21.2	A	4.7
NYS 107 & HERZOG PLACE	A	0.7	A	1.0	A	1.6	A	0.8
JERUSALEM AVE & HERZOG PL	B	16.9	B	15.2	B	20.0	B	12.9
DUFFY AVE & NELSON AVE	B	13.0	A	8.9	B	17.0	A	9.0
NYS 106 & DUFFY AVE	D	54.0	C	23.1	E	70.9	B	17.1
NYS 106 & WEST MARIE ST	A	10.0	A	5.3	B	12.4	A	4.1
JERUSALEM AVE & MARIE ST	C	24.7	B	10.1	B	19.9	B	11.0
NYS 107 & WEST MARIE ST	B	19.9	B	16.3	C	22.2	B	14.7
NYS 106 & OLD COUNTRY RD	E	70.6	E	61.3	F	115.0	E	62.3
JERUSALEM AVE & OLD COUNTRY RD	E	61.1	C	35.0	E	57.4	D	45.8
NYS 107 & WEST OLD COUNTRY RD	E	76.9	D	46.5	E	74.8	E	56.4

Table 10
Summary of System Network Performance Criteria
Downtown Hicksville Complete Streets Project
2029 Preferred Alternative Condition

SCENARIO	WEEKDAY AM PEAK HOUR		WEEKDAY MIDDAY PEAK HOUR		WEEKDAY PM PEAK HOUR		SATURDAY MIDDAY PEAK HOUR	
	TOTAL DELAY (SEC/VEH)	AVERAGE SPEED	TOTAL DELAY (SEC/VEH)	AVERAGE SPEED	TOTAL DELAY (SEC/VEH)	AVERAGE SPEED	TOTAL DELAY (SEC/VEH)	AVERAGE SPEED
NO BUILD (2029)	**31 sec**	**9 mph**	**19 sec**	**13 mph**	**39 sec**	**7 mph**	**29 sec**	**10 mph**

APPENDIX C: ADA CURB RAMP ASSESSMENT

NV5

NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS - ADA CURB RAMP ASSESSMENTS
EXISTING CURB RAMPS - 2019
EAST BARCLAY STREET, HICKSVILLE

Ramp No.	Village/ Hamlet	Legis. District	Main Street	Cross Street	Corner*/ Median*/ Midblock**	Ramp Direction*	Condition Rating***	Need New Ramp (Y/N)
1	Hicksville	17	East Barclay Street	LIRR Parking	SW Corner	E	3	Y
2	Hicksville	17	East Barclay Street	LIRR Parking	SE Corner	W	3	Y
3	Hicksville	17	East Barclay Street	Bay Ave	SW Corner	NE	3	Y
4	Hicksville	17	East Barclay Street	Bay Ave	SE Corner	NW	3	Y
5	Hicksville	17	East Barclay Street	Bay Ave	NE Corner	W	3	Y
6	Hicksville	17	East Barclay Street	Bay Ave	NW Corner	E	3	Y
7	Hicksville	17	East Barclay Street	Bay Ave	NW Corner	S	3	Y

***Condition Rating Legend (See NYSDOT ADA Materials):	
1	Not Applicable - No feature required
2	Not Accessible - Disabled person can not access
3	Partially Accessible - Not to standards, but accessible
4	Accessible - Additional improvements needed
5	Fully Accessible to Current standards

NV5

NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS - ADA CURB RAMP ASSESSMENTS
EXISTING CURB RAMPS - 2019
JERUSALEM AVENUE, HICKSVILLE

Ramp No.	Village/ Hamlet	Legis. District	Main Street	Cross Street	Corner*/ Median*/ Midblock**	Ramp Direction*	Condition Rating***	Need New Ramp (Y/N)
1	Hicksville	17	Jerusalem Ave	W. Old Country Rd	NE Corner	SW	3	Y
2	Hicksville	17	Jerusalem Ave	W. Old Country Rd	NW Corner	SE	3	Y
3	Hicksville	17	Jerusalem Ave	W Barclay Street	NW Corner	S	3	Y
4	Hicksville	17	Jerusalem Ave	W Barclay Street	SW Corner	N	3	Y
5	Hicksville	17	Jerusalem Ave	LIRR Station P. Lot Exit	NW Corner	S	4	Y
6	Hicksville	17	Jerusalem Ave	LIRR Station P. Lot Exit	SW Corner	NE	3	Y
7	Hicksville	17	Jerusalem Ave	LIRR Station P. Lot Entrance	NW Corner	S	4	Y
8	Hicksville	17	Jerusalem Ave	LIRR Station P. Lot Entrance	SW Corner	N	4	Y
9	Hicksville	17	Jerusalem Ave	LIRR Station P. Lot Entrance	NE Corner	SW	3	Y
10	Hicksville	17	Jerusalem Ave	20 Jerusalem Ave	NW Corner	S	4	Y
11	Hicksville	17	Jerusalem Ave	20 Jerusalem Ave	SW Corner	N	4	Y
12	Hicksville	17	Jerusalem Ave	Across from 20 Jerusalem Ave	SE Corner	N	3	Y
13	Hicksville	17	Jerusalem Ave	Across from 20 Jerusalem Ave	NE Corner	S	3	Y
14	Hicksville	17	Jerusalem Ave	W Marie Street	NW Corner	S	4	Y
15	Hicksville	17	Jerusalem Ave	W Marie Street	SW Corner	N	3	Y
16	Hicksville	17	Jerusalem Ave	W Marie Street	SE Corner	N	3	Y
17	Hicksville	17	Jerusalem Ave	W Marie Street	NE Corner	S	3	Y
18	Hicksville	17	Jerusalem Ave	W Nicholai Street	NW Corner	S	4	Y
19	Hicksville	17	Jerusalem Ave	W Nicholai Street	NW Corner	E	4	Y
20	Hicksville	17	Jerusalem Ave	W Nicholai Street	SW Corner	E	4	Y
21	Hicksville	17	Jerusalem Ave	W Nicholai Street	SW Corner	N	4	Y
22	Hicksville	17	Jerusalem Ave	W Nicholai Street	SE Corner	N	3	Y
23	Hicksville	17	Jerusalem Ave	W Nicholai Street	NE Corner	S	3	Y
24	Hicksville	17	Jerusalem Ave	W John Street	SW Corner	NE	4	Y
25	Hicksville	17	Jerusalem Ave	W Cherry Street	NW Corner	S	3	Y
26	Hicksville	17	Jerusalem Ave	W Cherry Street	SW Corner	N	4	Y
27	Hicksville	17	Jerusalem Ave	W Cherry Street	SE Corner	N	3	Y
28	Hicksville	17	Jerusalem Ave	W Cherry Street	NE Corner	S	2	Y
29	Hiksville	17	Jerusalem Ave	RT 107	NE Corner	S	3	Y
30	Hiksville	17	Jerusalem Ave	RT 107	NW Corner	E	3	Y
31	Hicksville	17	Jerusalem Ave	Trinity Lutheran Church	SE Corner	N	3	Y
32	Hicksville	17	Jerusalem Ave	Trinity Lutheran Church	NE Corner	S	3	Y
33	Hicksville	17	Jerusalem Ave	Herzog Pl	SE Corner	W	3	Y
34	Hicksville	17	Jerusalem Ave	Herzog Pl	SE Corner	N	2	Y
35	Hicksville	17	Jerusalem Ave	Herzog Pl	NE Corner	SW	3	Y
36	Hicksville	17	Jerusalem Ave	Herzig Pl	NE Corner	SE	2	Y
37	Hicksville	17	Jerusalem Ave	Nelson Ave	NW Corner	S	3	Y
38	Hicksville	17	Jerusalem Ave	Nelson Ave	SW Corner	NE	3	Y

***Condition Rating Legend (See NYSDOT ADA Materials):	
1	Not Applicable - No feature required
2	Not Accessible - Disabled person can not access
3	Partially Accessible - Not to standards, but accessible
4	Accessible - Additional improvements needed
5	Fully Accessible to Current standards

NV5

NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS - ADA CURB RAMP ASSESSMENTS
EXISTING CURB RAMPS - 2019
WEST JOHN STREET, HICKSVILLE

Ramp No.	Village/ Hamlet	Legis. District	Main Street	Cross Street	Corner*/ Median*/ Midblock**	Ramp Direction*	Condition Rating***	Need New Ramp (Y/N)
1	Hicksville	17	West John Street	Wyckoff Street	NE Corner	S	3	Y
2	Hicksville	17	West John Street	Wyckoff Street	NE Corner	W	3	Y
3	Hicksville	17	West John Street	Wyckoff Street	NW Corner	E	2	Y
4	Hicksville	17	West John Street	Wyckoff Street	NW Corner	S	3	Y
5	Hicksville	17	West John Street	Strong Street	NE Corner	W	2	Y
6	Hicksville	17	West John Street	Strong Street	NW Corner	E	3	Y
7	Hicksville	17	West John Street	Marion Place	SW Corner	E	3	Y
8	Hicksville	17	West John Street	Marion Place	SW Corner	NE	3	Y
9	Hicksville	17	West John Street	Marion Place	SE Corner	W	2	Y
10	Hicksville	17	West John Street	Marion Place	SE Corner	NW	3	Y
11	Hicksville	17	West John Street	Wyckoff Street	SW Corner	NE	3	Y
12	Hicksville	17	West John Street	Wyckoff Street	SW Corner	E	2	Y
13	Hicksville	17	West John Street	Wyckoff Street	SE Corner	NW	3	Y
14	Hicksville	17	West John Street	Wyckoff Street	SE Corner	W	2	Y
15	Hicksville	17	West John Street	E/B West John Street	Center Median (Eastern Ramp)	S	3	Y
16	Hicksville	17	West John Street	W/B West John Street	Center Median (Eastern Ramp)	N	3	Y
17	Hicksville	17	West John Street	E/B West John Street	Center Median (Western Ramp)	S	3	Y
18	Hicksville	17	West John Street	W/B West John Street	Center Median (Western Ramp)	N	3	Y

*** Condition Rating Legend (See NYSDOT ADA Materials):	
1	Not Applicable - No feature required
2	Not Accessible - Disabled person can not access
3	Partially Accessible - Not to standards, but accessible
4	Accessible - Additional improvements needed
5	Fully Accessible to Current standards

NV5

NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS - ADA CURB RAMP ASSESSMENTS
EXISTING CURB RAMPS - 2019
WEST OLD COUNTRY ROAD / EAST OLD COUNTRY ROAD, HICKSVILLE

Ramp No.	Village/ Hamlet	Legis. District	Main Street	Cross Street	Corner*/ Median*/ Midblock**	Ramp Direction*	Condition Rating***	Need New Ramp (Y/N)
1	Hicksville	17	West Old Country Road	Shopping Center	NW Corner	SE	3	Y
2	Hicksville	17	West Old Country Road	Shopping Center	NE Corner	SW	3	Y
3	Hicksville	17	West Old Country Road	Nelson Ave	NW Corner	SE	3	Y
4	Hicksville	17	West Old Country Road	Nelson Ave	SE Corner	W	4	Y
5	Hicksville	17	West Old Country Road	Nelson Ave	SE Corner	S	3	Y
6	Hicksville	17	West Old Country Road	Across from Division Ave	Midblock	S	3	Y
7	Hicksville	17	West Old Country Road	Division Ave	NW Corner	SE	3	Y
8	Hicksville	17	West Old Country Road	Division Ave	NE Corner	SW	3	Y
9	Hicksville	17	West Old Country Road	Jerusalem Ave	NW Corner	SE	3	Y
10	Hicksville	17	West Old Country Road	Jerusalem Ave	NE Corner	SW	3	Y
11	Hicksville	17	West Old Country Road	Halsey Ave	SW Corner	NE	3	Y
12	Hicksville	17	West Old Country Road	Halsey Ave	SE Corner	NW	3	Y
13	Hicksville	17	West Old Country Road	Division Ave	SW Corner	NE	2	Y
14	Hicksville	17	West Old Country Road	Division Ave	NE Corner	W	3	Y
15	Hicksville	17	West Old Country Road	Jerusalem Ave	SW Corner	NE	3	Y
16	Hicksville	17	West Old Country Road	Jerusalem Ave	SE Corner	W	3	Y
17	Hicksville	17	West Old Country Road	Sterling Place	SW Corner	E	3	Y
18	Hicksville	17	West Old Country Road	Sterling Place	SE Corner	W	3	Y
19	Hicksville	17	West Old Country Road	Frevert Place	SW Corner	NE	3	Y
20	Hicksville	17	West Old Country Road	Frevert Place	SE Corner	NW	3	Y
21	Hicksville	17	East Old Country Road	Pep Boys	SW Corner	E	3	Y
22	Hicksville	17	East Old Country Road	Pep Boys	SE Corner	W	3	Y
23	Hicksville	17	East Old Country Road	Delco Plaza Entrance	SW Corner	NE	2	Y
24	Hicksville	17	East Old Country Road	Delco Plaza Entrance	SE Corner	W	3	Y
25	Hicksville	17	East Old Country Road	Delco Plaza Exit	SE Corner	W	2	Y
26	Hicksville	17	East Old Country Road	Railroad Ave	NE Corner	SW	3	Y
27	Hicksville	17	East Old Country Road	Railroad Ave	NW Corner	E	3	Y
28	Hicksville	17	East Old Country Road	Richard Street	NE Corner	SW	3	Y
29	Hicksville	17	East Old Country Road	Richard Street	NW Corner	E	3	Y

***Condition Rating Legend (See NYSDOT ADA Materials):	
1	Not Applicable - No feature required
2	Not Accessible - Disabled person can not access
3	Partially Accessible - Not to standards, but accessible
4	Accessible - Additional improvements needed
5	Fully Accessible to Current standards

APPENDIX D: DETAILED COST ESTIMATES

DOWNTOWN HICKSVILLE COMPLETE STREETS PROJECT
HICKSVILLE, NASSAU COUNTY, NY

ENGINEER'S CONCEPTUAL ESTIMATE OF PROBABLE CONSTRUCTION COSTS

DATE: MAY 12, 2020

LOCATION 1: BROADWAY (NY107) STREETSCAPE IMPROVEMENTS

ITEM #	DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	AMOUNT
1	CLEARING & GRUBBING	LS	$20,000.00	1	$20,000.00
2	UNCLASSIFIED EXCAVATION	CY	$120.00	1,870	$224,400.00
13A	CATCH BASINS	EA	$12,000.00	12	$144,000.00
26	CONCRETE CURB	LF	$32.00	6,300	$201,600.00
27 / 28	CEMENT CONCRETE SIDEWALK AND DRIVEWAY APRONS	SF	$15.00	45,475	$682,125.00
28IM	CEMENT CONCRETE PAVEMENT - COLORED & IMPRINTED MEDIANS	SF	$20.00	27,000	$540,000.00
111	REMOVAL AND REPLACEMENT OF PAVEMENTS	SY	$175.00	2,800	$490,000.00
121	DRYBOUND BASE COURSE	CY	$120.00	25	$3,000.00
361S	TREES	EA	$1,200.00	36	$43,200.00
442	EPOXY REFLECTORIZED PAVEMENT MARKINGS	LF	$3.50	5,500	$19,250.00
500SS	CONCRETE PAVERS	SF	$30.00	5,000	$150,000.00
5002SS	INSTALL DECORATIVE BENCH	EA	$4,000.00	14	$56,000.00
506SS	FURNISH & INSTALL BIKE RACK / HOOP	EA	$1,000.00	14	$14,000.00
507SS	FURNISH & INSTALL LITTER RECEPTACLE	EA	$1,200.00	28	$33,600.00
510SS	PARKING PAY STATIONS	EA	$9,000.00	25	$225,000.00
512SS	PEDESTRIAN LIGHT POLE & WIRING	EA	$12,000.00	75	$900,000.00
	SUBTOTAL				**$3,746,175.00**
1M	MOBILIZATION (4%)	LS		1	$149,900.00
102	WORK ZONE TRAFFIC CONTROL (8%)	LS		1	$299,700.00
	CONTINGENCY (30%)				**$1,123,900.00**
	TOTAL CONSTRUCTION COST				**$4,870,075.00**

ENGINEERING & DESIGN COSTS (10%)		**$487,100.00**
CONSTRUCTION ADMINISTRATION / INSPECTION (12%)		**$584,500.00**

ESTIMATED TOTAL PROJECT COST		**$5,941,675.00**

DOWNTOWN HICKSVILLE COMPLETE STREETS PROJECT
HICKSVILLE, NASSAU COUNTY, NY

ENGINEER'S CONCEPTUAL ESTIMATE OF PROBABLE CONSTRUCTION COSTS

DATE: MAY 12, 2020

LOCATION 2: BIKE ROUTES AND FACILITIES

ITEM #	DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	AMOUNT
442	EPOXY REFLECTORIZED PAVEMENT MARKINGS (INCLUDES REMOVAL)	LF	$3.50	14,000	$49,000.00
442C	EPOXY REFLECTORIZED PAVEMENT MARKINGS - BIKE SYMBOL	EA	$400.00	40	$16,000.00
450	FURNISH AND INSTALL POST MOUNTED SIGN	EA	$500.00	30	$15,000.00
506SS	FURNISH & INSTALL BIKE RACK	EA	$5,000.00	4	$20,000.00
	SUBTOTAL				**$100,000.00**
1M	MOBILIZATION (4%)	LS		1	$4,000.00
102	WORK ZONE TRAFFIC CONTROL (12%)	LS		1	$12,000.00
	CONTINGENCY (30%)				**$30,000.00**
	TOTAL				**$146,000.00**

ENGINEERING & DESIGN COSTS (15%)		**$21,900.00**
CONSTRUCTION ADMINISTRATION / INSPECTION (15%)		**$21,900.00**

ESTIMATED TOTAL PROJECT COST		**$189,800.00**

DOWNTOWN HICKSVILLE COMPLETE STREETS PROJECT
HICKSVILLE, NASSAU COUNTY, NY

ENGINEER'S CONCEPTUAL ESTIMATE OF PROBABLE CONSTRUCTION COSTS

DATE: MAY 12, 2020

LOCATION 3: DUFFY AVE & NEWBRIDGE RD

ITEM #	DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	AMOUNT
442	EPOXY REFLECTORIZED PAVEMENT MARKINGS (INCLUDES REMOVAL)	LF	$3.50	2,000	$7,000.00
442C	EPOXY REFLECTORIZED PAVEMENT MARKINGS - BIKE SYMBOL	EA	$400.00	20	$8,000.00
509SS	RECTANGULAR RAPID FLASHING BEACON (RRFB) (per crosswalk)	EA	$25,000.00	1	$25,000.00
512SS	PEDESTRIAN LIGHT POLE & WIRING	EA	$12,000.00	1	$12,000.00
	SUBTOTAL				**$52,000.00**
1M	MOBILIZATION (4%)	LS		1	$2,100.00
102	WORK ZONE TRAFFIC CONTROL (8%)	LS		1	$4,200.00
	CONTINGENCY (30%)				**$15,600.00**
	TOTAL				**$73,900.00**

ENGINEERING & DESIGN COSTS (15%)		**$11,100.00**
CONSTRUCTION ADMINISTRATION / INSPECTION (15%)		**$11,100.00**

ESTIMATED TOTAL PROJECT COST		**$96,100.00**

DOWNTOWN HICKSVILLE COMPLETE STREETS PROJECT
HICKSVILLE, NASSAU COUNTY, NY

ENGINEER'S CONCEPTUAL ESTIMATE OF PROBABLE CONSTRUCTION COSTS

DATE: MAY 12, 2020

LOCATION 4: DUFFY AVE MID-BLOCK CROSSING

ITEM #	DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	AMOUNT
411	TRAFFIC SIGNAL	EA	$200,000.00	1	$200,000.00
442	EPOXY REFLECTORIZED PAVEMENT MARKINGS (CROSSWALKS)	LF	$3.50	6,000	$21,000.00
	SUBTOTAL				**$221,000.00**
1M	MOBILIZATION (4%)	LS		1	$8,900.00
102	WORK ZONE TRAFFIC CONTROL (8%)	LS		1	$17,700.00
	CONTINGENCY (30%)				**$66,300.00**
	TOTAL				**$313,900.00**

ENGINEERING & DESIGN COSTS (15%)		**$47,100.00**
CONSTRUCTION ADMINISTRATION / INSPECTION (15%)		**$47,100.00**

ESTIMATED TOTAL PROJECT COST		**$408,100.00**

DOWNTOWN HICKSVILLE COMPLETE STREETS PROJECT
HICKSVILLE, NASSAU COUNTY, NY

ENGINEER'S CONCEPTUAL ESTIMATE OF PROBABLE CONSTRUCTION COSTS

DATE: MAY 12, 2020

LOCATION 5: JOHN STREET IMPROVEMENTS

ITEM #	DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	AMOUNT
1	CLEARING & GRUBBING	LS	$10,000.00	1	$10,000.00
2	UNCLASSIFIED EXCAVATION	CY	$120.00	400	$48,000.00
13A	CATCH BASINS	EA	$12,000.00	4	$48,000.00
26	CONCRETE CURB	LF	$32.00	3,200	$102,400.00
27 / 28	CEMENT CONCRETE SIDEWALK AND DRIVEWAY APRONS	SF	$15.00	38,400	$576,000.00
28IM	CEMENT CONCRETE PAVEMENT - COLORED & IMPRINTED MEDIANS	SF	$20.00	8,600	$172,000.00
111	REMOVAL AND REPLACEMENT OF PAVEMENTS	SY	$175.00	800	$140,000.00
121	DRYBOUND BASE COURSE	CY	$120.00	500	$60,000.00
361S	TREES	EA	$1,200.00	8	$9,600.00
442	EPOXY REFLECTORIZED PAVEMENT MARKINGS	LF	$3.50	4,200	$14,700.00
5002SS	INSTALL DECORATIVE BENCH	EA	$4,000.00	4	$16,000.00
506SS	FURNISH & INSTALL BIKE RACK	EA	$5,000.00	1	$5,000.00
507SS	FURNISH & INSTALL LITTER RECEPTACLE	EA	$1,200.00	4	$4,800.00
512SS	PEDESTRIAN LIGHT POLE & WIRING	EA	$12,000.00	8	$96,000.00
	SUBTOTAL				**$1,302,500.00**
1M	MOBILIZATION (4%)	LS		1	$52,100.00
102	WORK ZONE TRAFFIC CONTROL (8%)	LS		1	$104,200.00
	CONTINGENCY (30%)				**$390,800.00**
	TOTAL				**$1,849,600.00**

	ENGINEERING & DESIGN COSTS (10%)		**$185,000.00**
	CONSTRUCTION ADMINISTRATION / INSPECTION (10%)		**$185,000.00**

	ESTIMATED TOTAL PROJECT COST		**$2,219,600.00**

DOWNTOWN HICKSVILLE COMPLETE STREETS PROJECT
HICKSVILLE, NASSAU COUNTY, NY

ENGINEER'S CONCEPTUAL ESTIMATE OF PROBABLE CONSTRUCTION COSTS

DATE: MAY 12, 2020

LOCATION 6: TRAIN STATION CIRCULATION AND PEDESTRIAN SAFETY IMPROVEMENTS

ITEM #	DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	AMOUNT
1	CLEARING & GRUBBING	LS	$15,000.00	1	$15,000.00
2	UNCLASSIFIED EXCAVATION	CY	$120.00	5,200	$624,000.00
13A	CATCH BASINS	EA	$12,000.00	25	$300,000.00
26	CONCRETE CURB	LF	$32.00	5,800	$185,600.00
27 / 28	CEMENT CONCRETE SIDEWALK AND DRIVEWAY APRONS	SF	$15.00	12,000	$180,000.00
36D	ASPHALT CONCRETE TYPE 1A TOP & BINDER	TON	$150.00	4,300	$645,000.00
111	REMOVAL AND REPLACEMENT OF PAVEMENTS	SY	$175.00	600	$105,000.00
121	DRYBOUND BASE COURSE	CY	$120.00	2,600	$312,000.00
361S	TREES	EA	$1,200.00	56	$67,200.00
442	EPOXY REFLECTORIZED PAVEMENT MARKINGS	LF	$3.50	5,700	$19,950.00
500SS	CONCRETE PAVERS	SF	$30.00	5,000	$150,000.00
5002SS	INSTALL DECORATIVE BENCH	EA	$4,000.00	4	$16,000.00
507SS	FURNISH & INSTALL LITTER RECEPTACLE	EA	$1,200.00	6	$7,200.00
512SS	PEDESTRIAN LIGHT POLE & WIRING	EA	$15,000.00	20	$300,000.00
	SUBTOTAL				**$2,926,950.00**
1L	LIRR PROJECT COORDINATION COSTS (10%)	LS		1	$292,700.00
1M	MOBILIZATION (4%)	LS		1	$117,100.00
102	WORK ZONE TRAFFIC CONTROL (8%)	LS		1	$234,200.00
	CONTINGENCY (30%)				**$878,100.00**
	TOTAL				**$4,449,050.00**

ENGINEERING & DESIGN COSTS (8%)		**$356,000.00**
CONSTRUCTION ADMINISTRATION / INSPECTION (10%)		**$445,000.00**

ESTIMATED TOTAL PROJECT COST		**$5,250,050.00**

DOWNTOWN HICKSVILLE COMPLETE STREETS PROJECT
HICKSVILLE, NASSAU COUNTY, NY

ENGINEER'S CONCEPTUAL ESTIMATE OF PROBABLE CONSTRUCTION COSTS

DATE: MAY 12, 2020

LOCATION 7: BARCLAY TRIANGLE & PARK EXPANSION

ITEM #	DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	AMOUNT
1	CLEARING & GRUBBING	LS	$20,000.00	1	$20,000.00
2	UNCLASSIFIED EXCAVATION	CY	$120.00	300	$36,000.00
13A	CATCH BASINS	EA	$12,000.00	5	$60,000.00
26	CONCRETE CURB	LF	$32.00	2,800	$89,600.00
27 / 28	CEMENT CONCRETE SIDEWALK AND DRIVEWAY APRONS	SF	$15.00	6,800	$102,000.00
28IM	CEMENT CONCRETE PAVEMENT - COLORED & IMPRINTED MEDIANS	SF	$20.00	3,500	$70,000.00
36D	ASPHALT CONCRETE TYPE 1A TOP & BINDER	TON	$150.00	500	$75,000.00
111	REMOVAL AND REPLACEMENT OF PAVEMENTS	SY	$175.00	700	$122,500.00
361S	TREES	EA	$1,200.00	24	$28,800.00
442	EPOXY REFLECTORIZED PAVEMENT MARKINGS	LF	$3.50	4,800	$16,800.00
512SS	PEDESTRIAN LIGHT POLE & WIRING	EA	$12,000.00	14	$168,000.00
	SUBTOTAL				**$788,700.00**
1M	MOBILIZATION (4%)	LS		1	$31,600.00
102	WORK ZONE TRAFFIC CONTROL (10%)	LS		1	$78,900.00
	CONTINGENCY (30%)				**$236,700.00**
	TOTAL				**$1,135,900.00**

ENGINEERING & DESIGN COSTS (15%)		**$180,000.00**
CONSTRUCTION ADMINISTRATION / INSPECTION (15%)		**$180,000.00**
ESTIMATED TOTAL PROJECT COST (ROADWAY)		**$1,495,900.00**

600	**KENNEDY PARK RECONSTRUCTION**	**EA**	**$2,500,000**	**1**	**$2,500,000.00**
700	**FESTIVAL PLAZA**	**EA**	**$1,500,000**	**1**	**$1,500,000.00**
	ESTIMATED TOTAL PROJECT COST (PARK)				**$4,000,000.00**
	ESTIMATED TOTAL PROJECT COST (ROADWAY + PARK)				**$5,495,900.00**

DOWNTOWN HICKSVILLE COMPLETE STREETS PROJECT
HICKSVILLE, NASSAU COUNTY, NY

ENGINEER'S CONCEPTUAL ESTIMATE OF PROBABLE CONSTRUCTION COSTS

DATE: MAY 12, 2020

LOCATION 8: UNDERLINE CONNECTION UNDER THE LIRR OVERPASS

ITEM #	DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	AMOUNT
1	CLEARING & GRUBBING	LS	$5,000.00	1	$5,000.00
2	UNCLASSIFIED EXCAVATION	CY	$120.00	300	$36,000.00
13A	CATCH BASINS	EA	$12,000.00	10	$120,000.00
26	CONCRETE CURB	LF	$32.00	2,500	$80,000.00
27 / 28	CEMENT CONCRETE SIDEWALK AND DRIVEWAY APRONS	SF	$15.00	14,400	$216,000.00
28IM	CEMENT CONCRETE PAVEMENT - COLORED & IMPRINTED MEDIANS	SF	$20.00	8,000	$160,000.00
111	REMOVAL AND REPLACEMENT OF PAVEMENTS	SY	$175.00	600	$105,000.00
121	DRYBOUND BASE COURSE	CY	$120.00	450	$54,000.00
442	EPOXY REFLECTORIZED PAVEMENT MARKINGS	LF	$3.50	2,600	$9,100.00
500SS	CONCRETE PAVERS	SF	$30.00	1,000	$30,000.00
506SS	FURNISH & INSTALL BIKE RACK	EA	$5,000.00	4	$20,000.00
507SS	FURNISH & INSTALL LITTER RECEPTACLE	EA	$1,200.00	6	$7,200.00
509SS	RECTANGULAR RAPID FLASHING BEACON (RRFB) (per crosswalk)	EA	$25,000.00	3	$75,000.00
512SS	DISTINCTIVE PEDESTRIAN LIGHTING MOUNTED & WIRING	EA	$600,000.00	1	$600,000.00
	SUBTOTAL				**$1,517,300.00**
1L	LIRR PROJECT COORDINATION COSTS (10%)	LS		1	$151,800.00
1M	MOBILIZATION (4%)	LS		1	$60,700.00
102	WORK ZONE TRAFFIC CONTROL (8%)	LS		1	$121,400.00
	CONTINGENCY (30%)				**$455,200.00**
	TOTAL				**$1,972,500.00**

ENGINEERING & DESIGN COSTS (12%)		**$236,700.00**
CONSTRUCTION ADMINISTRATION / INSPECTION (12%)		**$236,700.00**

ESTIMATED TOTAL PROJECT COST		**$2,445,900.00**

APPENDIX E: CRASH ANALYSIS

Summary of Intersection Crash Rates

Intersection	AADT[1]	Accidents (3-year total)[2]	Accidents Involving Pedestrians	Accidents Involving Cyclists	Intersection Accident Rate (crash/MEV)[3]	NYSDOT Average Accident Rate (crash/MEV)[4]	Higher than NYSDOT Average?
Wycoff St & W John St	17,160	10	2	1	0.53	0.12	Yes
Newbridge Rd (SR 106) & W John St	46,518	104	3	0	2.04	0.25	Yes
N Broadway (SR 107) & W John St	45,588	89	0	0	1.78	0.25	Yes
Newbridge Rd (SR 106) & W Barclay St	30,504	56	1	0	1.68	0.12	Yes
N Broadway (SR 107) & E Barclay St	40,598	8	0	0	0.18	0.25	No
Jerusalem Ave & Herzog Pl	16,024	33	2	0	1.88	0.25	Yes
Duffy Ave & Nelson Ave	8,199	6	2	0	0.67	0.18	Yes
Newbridge Rd (SR 106) & Duffy Ave	37,247	90	1	0	2.21	0.25	Yes
Newbridge Road (SR 106) & W Marie Street	28,056	10	0	0	0.33	0.25	Yes
Jerusalem Avenue & W Marie Street	15,545	15	0	0	0.88	0.52	Yes
N Broadway (SR 107) & W Marie Street	34,267	2	0	0	0.05	0.25	No
Newbridge Road (SR 106) & W Old Country Road	57,294	69	1	0	1.10	0.25	Yes
Jerusalem Avenue & W Old Country Road	47,098	28	0	0	0.54	0.25	Yes
N Broadway (SR 107) & W Old Country Road	63,392	40	0	0	0.58	0.25	Yes
Newbridge Road (SR 106) & James Street	29,124	36	2	0	1.13	0.16	Yes

Notes:

1. AADT – Average Annual Daily Traffic volume for intersecting streets, estimated based on ATR and TMC Data collected in March 2019.
2. Source: Nassau County Police Department crash summary data for the 3-year period from January 1, 2016 to January 31, 2019.
3. Crash Rate = (1,000,000 x No. of crashes) / (3 years x 365 days x AADT), expressed in terms of Crash per Million Entering Vehicles (crsh/MEV)
4. Based on 2016 NYSDOT Average Accident Rates for State Highways By Facility Type for Urban Functional Classes.

APPENDIX F: LOS SUMMARY TABLE

SYNCHRO LEVEL OF SERVICE SUMMARY FOR THE SIGNALIZED INTERSECTION AT
NYS 107 & BETHPAGE ROAD

Condition	Mvmnt.	AM Peak Hour					Midday Peak Hour					PM Peak Hour					Midday Saturday Peak Hour				
		Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS
2019 Existing Condition	NB-TR SB-L SB-T WB-R	9.2 67.5 0.2 0.3	0.60 0.76 0.40 0.25	A E A A	8.7	A	12.6 63.7 0.3 0.3	0.61 0.76 0.45 0.26	B E A A	9.9	A	9.8 63.0 0.4 0.3	0.67 0.83 0.54 0.24	A E A A	9.6	A	18.7 64.7 0.4 0.3	0.89 0.81 0.53 0.24	B E A A	13.2	B
2029 No Build **WITH DRI TRAFFIC**	NB-TR SB-L SB-T WB-R	1.4 68.1 0.3 0.4	0.68 0.77 0.48 0.27	A E A A	4.9	A	2.7 64.4 0.4 0.4	0.69 0.78 0.50 0.28	A E A A	5.6	A	7.6 65.6 0.6 0.3	0.82 0.86 0.62 0.26	A E A A	8.6	A	26.7 78.1 0.5 0.3	1.01 0.91 0.60 0.26	C E A A	17.8	B
2029 Build **WITH DRI RECOMMENDATIONS (OPTION 1)**	NB-TR SB-L SB-T WB-R	13.2 67.3 0.3 0.4	0.68 0.76 0.48 0.27	B E A A	10.0	A	17.1 63.5 0.4 0.4	0.70 0.77 0.50 0.28	B E A A	11.7	B	18.3 62.6 0.6 0.3	0.83 0.84 0.62 0.26	B E A A	12.8	B	51.2 64.0 0.5 0.3	1.05 0.81 0.60 0.26	D E A A	28.7	C
2029 Build **WITH COMPLETE STREETS RECOMMENDATIONS (OPTION 4)**	NB-TR SB-L SB-T WB-L	1.4 68.1 0.3 0.4	0.68 0.77 0.48 0.27	A E A A	4.9	A	2.8 64.4 0.4 0.4	0.69 0.78 0.50 0.28	A E A A	5.6	A	7.6 65.6 0.6 0.3	0.82 0.86 0.62 0.26	A E A A	8.6	A	26.7 78.1 0.5 0.3	1.01 0.91 0.60 0.26	C E A A	17.8	B

SYNCHRO LEVEL OF SERVICE SUMMARY FOR THE SIGNALIZED INTERSECTION AT
NYS 107 & NEVADA STREET

Condition	Mvmnt.	AM Peak Hour					Midday Peak Hour					PM Peak Hour					Midday Saturday Peak Hour				
		Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS
2019 Existing Condition	NB-L	81.2	0.48	F	23.7	C	79.0	0.63	E	29.9	C	70.0	0.59	E	32.1	C	68.8	0.72	E	101.1	F
	NB-T	18.8	0.76	B			16.7	0.70	B			15.2	0.76	B			18.7	0.74	B		
	NB-R	0.7	0.05	A			3.6	0.19	A			4.4	0.21	A			3.9	0.16	A		
	SB-L	65.3	0.42	E			63.0	0.62	E			64.9	0.56	E			65.4	0.87	E		
	SB-TR	18.0	0.63	B			31.5	0.93	C			36.1	0.95	D			151.0	1.26	F		
	EB-LTR	70.2	0.77	E			64.3	0.70	E			57.0	0.64	E			93.2	0.95	F		
	WB-L	71.9	0.67	E			83.2	0.79	F			105.5	0.96	F			231.9	1.36	F		
	WB-TR	33.4	0.33	C			41.7	0.46	D			46.8	0.44	D			44.7	0.47	D		
2029 No Build **WITH DRI TRAFFIC**	NB-L	77.8	0.49	E	27.3	C	68.6	0.69	E	38.8	D	77.6	0.62	E	53.9	D	63.1	0.80	E	140.0	F
	NB-T	22.0	0.92	C			19.4	0.80	B			27.4	0.95	C			30.8	0.87	C		
	NB-R	0.8	0.06	A			6.8	0.21	A			2.5	0.23	A			10.0	0.17	A		
	SB-L	64.1	0.53	E			65.0	0.70	E			70.8	0.76	E			79.7	0.86	E		
	SB-TR	22.5	0.76	C			47.5	1.02	D			69.6	1.08	E			205.8	1.39	F		
	EB-LTR	70.1	0.78	E			70.2	0.77	E			102.4	0.96	F			266.0	1.45	F		
	WB-L	70.5	0.68	E			83.1	0.80	F			128.2	1.05	F			296.0	1.52	F		
	WB-TR	44.6	0.40	D			43.1	0.51	D			51.0	0.63	D			53.8	0.67	D		
2029 Build **WITH DRI RECOMMENDATIONS (OPTION 1)**	NB-L	75.8	0.49	E	27.0	C	74.3	0.65	E	39.8	D	55.7	0.61	E	61.6	E	66.7	0.75	E	140.8	F
	NB-T	21.8	0.90	C			19.4	0.82	B			47.3	0.98	D			23.8	0.91	C		
	NB-R	0.8	0.06	A			4.1	0.21	A			9.9	0.23	A			4.7	0.18	A		
	SB-L	65.8	0.57	E			64.2	0.69	E			65.4	0.69	E			68.9	0.76	E		
	SB-TR	22.5	0.76	C			49.7	1.02	D			70.7	1.08	E			213.7	1.41	F		
	EB-LTR	70.2	0.78	E			72.1	0.78	E			102.4	0.96	F			266.0	1.45	F		
	WB-L	70.6	0.68	E			85.8	0.81	F			128.2	1.05	F			296.0	1.52	F		
	WB-TR	32.4	0.37	C			42.6	0.51	D			51.0	0.63	D			50.4	0.66	D		
2029 Build **WITH COMPLETE STREETS RECOMMENDATIONS (OPTION 4)**	NB-L	77.8	0.49	E	27.3	C	68.4	0.69	E	38.9	D	77.6	0.62	E	53.9	D	63.2	0.80	E	139.8	F
	NB-T	22.0	0.92	C			19.7	0.80	B			27.4	0.95	C			30.0	0.87	C		
	NB-R	0.8	0.06	A			6.8	0.21	A			2.5	0.23	A			9.9	0.17	A		
	SB-L	64.1	0.53	E			65.0	0.70	E			70.8	0.76	E			79.7	0.86	E		
	SB-TR	22.5	0.76	C			47.5	1.02	D			69.6	1.08	E			205.8	1.39	F		
	EB-LTR	70.1	0.78	E			70.2	0.77	E			102.4	0.96	F			266.0	1.45	F		
	WB-L	70.5	0.68	E			83.1	0.80	F			128.2	1.05	F			296.0	1.52	F		
	WB-TR	44.6	0.40	D			43.1	0.51	D			51.0	0.63	D			53.8	0.67	D		

SYNCHRO LEVEL OF SERVICE SUMMARY FOR THE SIGNALIZED INTERSECTION AT
NYS 107 & BROADWAY MALL EXIT

Condition	Mvmnt.	AM Peak Hour					Midday Peak Hour					PM Peak Hour					Midday Saturday Peak Hour				
		Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS
2019 Existing Condition	NB-T	2.4	0.50	A	4.7	A	23.4	0.59	C	22.9	C	15.7	0.70	B	15.1	B	24.2	0.54	C	21.9	C
	NB-R	2.0	0.00	A			15.5	0.07	B			6.3	0.05	A			15.3	0.06	B		
	SB-L	72.2	0.16	E			70.7	0.63	E			81.4	0.46	F			82.9	0.70	F		
	SB-T	1.1	0.41	A			8.6	0.42	A			3.1	0.71	A			2.6	0.53	A		
	EB-L	65.5	0.46	E			55.3	0.72	E			59.5	0.74	E			59.5	0.81	E		
	EB-T	70.9	0.45	E			59.6	0.69	E			65.7	0.72	E			64.9	0.78	E		
	EB-R	15.6	0.39	B			14.5	0.30	B			8.8	0.22	A			24.0	0.39	C		
2029 No Build **WITH DRI TRAFFIC**	NB-T	12.4	0.70	B	11.6	B	27.9	0.71	C	23.1	C	48.6	0.99	D	33.0	C	34.0	0.81	C	27.5	C
	NB-R	6.3	0.08	A			9.0	0.14	A			9.6	0.23	A			21.1	0.27	C		
	SB-L	83.6	0.72	F			85.4	0.75	F			62.0	0.85	E			74.8	0.91	E		
	SB-T	1.2	0.46	A			2.0	0.45	A			12.8	0.68	B			3.5	0.57	A		
	EB-L	65.3	0.47	E			56.1	0.74	E			59.9	0.76	E			61.6	0.84	E		
	EB-T	71.8	0.47	E			61.0	0.71	E			66.7	0.75	E			65.6	0.80	E		
	EB-R	16.9	0.41	B			15.8	0.31	B			9.7	0.22	A			25.2	0.40	C		
2029 Build **WITH DRI RECOMMENDATIONS (OPTION 1)**	NB-T	8.3	0.70	A	9.6	A	29.2	0.74	C	25.8	C	69.0	1.02	E	37.3	D	20.9	0.69	C	37.8	D
	NB-R	4.5	0.08	A			17.1	0.14	B			7.1	0.23	A			11.9	0.22	B		
	SB-L	81.5	0.68	F			71.5	0.76	E			79.5	0.80	E			339.9	1.65	F		
	SB-T	1.0	0.46	A			9.6	0.46	A			3.1	0.68	A			2.7	0.57	A		
	EB-L	65.3	0.47	E			53.9	0.72	D			59.9	0.76	E			61.6	0.84	E		
	EB-T	71.8	0.48	E			58.2	0.69	E			66.7	0.75	E			65.6	0.80	E		
	EB-R	16.9	0.41	B			15.1	0.30	B			9.6	0.22	A			25.1	0.40	C		
2029 Build **WITH COMPLETE STREETS RECOMMENDATIONS (OPTION 4)**	NB-T	12.4	0.70	B	11.6	B	27.3	0.71	C	22.8	C	48.5	0.99	D	33.0	C	32.1	0.81	C	26.9	C
	NB-R	6.3	0.08	A			15.3	0.14	B			9.5	0.23	A			19.8	0.27	B		
	SB-L	83.6	0.72	F			85.4	0.75	F			62.0	0.85	E			74.8	0.91	E		
	SB-T	1.2	0.46	A			2.0	0.45	A			12.8	0.68	B			3.5	0.57	A		
	EB-L	65.3	0.47	E			56.1	0.74	E			59.9	0.76	E			61.6	0.84	E		
	EB-T	71.8	0.48	E			61.0	0.71	E			66.7	0.75	E			65.6	0.80	E		
	EB-R	16.9	0.41	B			15.8	0.31	B			9.7	0.22	A			25.2	0.40	C		

SYNCHRO LEVEL OF SERVICE SUMMARY FOR THE SIGNALIZED INTERSECTION AT
NYS 107 & BROADWAY MALL ENTRANCE

Condition	Mvmnt.	AM Peak Hour					Midday Peak Hour					PM Peak Hour					Midday Saturday Peak Hour				
		Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS
2019 Existing Condition	NB-L	63.7	0.50	E	5.6	A	54.4	0.63	D	9.4	A	61.4	0.63	E	6.4	A	53.2	0.72	D	10.6	B
	NB-T	3.8	0.48	A			4.8	0.41	A			4.8	0.44	A			4.4	0.34	A		
	SB-TR	2.1	0.44	A			4.8	0.46	A			1.8	0.63	A			5.7	0.61	A		
	WB-L	65.1	0.30	E			65.5	0.45	E			65.6	0.34	E			68.9	0.49	E		
	WB-T	58.7	0.07	E			56.2	0.16	E			59.2	0.11	E			58.6	0.18	E		
	WB-R	-	-	-			15.1	0.32	B			1.9	0.17	A			0.9	0.09	A		
2029 No Build **WITH DRI TRAFFIC**	NB-L	59.1	0.52	E	18.7	B	54.0	0.65	D	12.6	B	56.8	0.65	E	19.9	B	60.0	0.83	E	21.9	C
	NB-T	23.8	0.62	C			7.7	0.48	A			15.6	0.64	B			15.2	0.50	B		
	SB-TR	4.1	0.59	A			5.4	0.53	A			14.1	0.86	B			14.1	0.86	B		
	WB-L	59.8	0.57	E			68.1	0.66	E			71.7	0.83	E			68.1	0.85	E		
	WB-T	44.1	0.04	D			49.3	0.13	D			42.1	0.06	D			38.6	0.09	D		
	WB-R	56.6	0.79	E			35.8	0.57	D			33.6	0.50	C			26.2	0.40	C		
2029 Build **WITH DRI RECOMMENDATIONS (OPTION 1)**	NB-L	69.9	0.52	E	23.7	C	54.8	0.65	D	13.1	B	58.1	0.66	E	22.2	C	66.9	0.88	E	22.0	C
	NB-T	33.7	0.61	C			7.3	0.49	A			24.6	0.66	C			13.8	0.51	B		
	SB-TR	5.3	0.59	A			6.8	0.53	A			11.9	0.86	B			12.9	0.83	B		
	WB-L	59.8	0.57	E			68.3	0.66	E			70.4	0.82	E			77.0	0.90	E		
	WB-T	44.2	0.04	D			49.3	0.13	D			41.7	0.06	D			41.3	0.10	D		
	WB-R	56.6	0.79	E			36.0	0.57	D			33.2	0.49	C			28.2	0.42	C		
2029 Build **WITH COMPLETE STREETS RECOMMENDATIONS (OPTION 4)**	NB-L	59.1	0.52	E	18.7	B	54.3	0.65	D	12.6	B	56.8	0.65	E	19.9	B	60.8	0.83	E	22.0	C
	NB-T	23.8	0.62	C			7.5	0.48	A			15.6	0.64	B			15.3	0.50	B		
	SB-TR	4.1	0.59	A			5.4	0.53	A			14.1	0.86	B			14.1	0.86	B		
	WB-L	59.8	0.57	E			68.1	0.66	E			71.7	0.83	E			68.1	0.85	E		
	WB-T	44.1	0.04	D			49.3	0.13	D			42.1	0.06	D			38.6	0.09	D		
	WB-R	56.6	0.79	E			36.0	0.57	D			33.6	0.50	C			26.2	0.40	C		

SYNCHRO LEVEL OF SERVICE SUMMARY FOR THE SIGNALIZED INTERSECTION AT
NYS 106, NYS 107 & LENOX AVENUE

Condition	Mvmnt.	AM Peak Hour					Midday Peak Hour					PM Peak Hour					Midday Saturday Peak Hour				
		Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS
2019 Existing Condition	NB-T SB-T EB-L WB-R	149.7 10.7 39.2 9.3	1.27 0.40 0.83 0.02	F B D A	97.2	F	21.8 3.1 47.5 -	0.52 0.46 0.83 -	C A D -	22.4	C	41.7 12.1 36.0 9.6	0.67 0.65 0.88 0.05	D B D A	29.9	C	16.2 6.5 45.8 9.3	0.48 0.59 0.83 0.05	B A D A	20.2	C
2029 No Build **WITH DRI TRAFFIC**	NB-T SB-T EB-L WB-R	132.2 4.4 144.6 9.5	1.24 0.40 1.23 0.02	F A F A	109.2	F	20.1 6.4 43.5 -	0.60 0.54 0.85 -	C A D -	22.1	C	59.6 33.9 49.1 9.7	0.89 0.88 0.96 0.05	E C D A	47.7	D	18.3 9.4 46.9 9.5	0.61 0.75 0.89 0.05	B A D A	22.8	C
2029 Build **WITH DRI RECOMMENDATIONS (OPTION 1)**	NB-T SB-T EB-L WB-R	236.4 15.5 33.9 9.4	1.46 0.49 0.87 0.02	F B C A	141.4	F	23.5 5.6 43.3 -	0.62 0.56 0.86 -	C A D -	23.4	C	53.2 20.1 94.2 9.6	0.78 0.80 1.15 0.05	D C F A	56.9	E	23.2 13.0 40.8 9.5	0.63 0.78 0.89 0.05	C B D A	24.3	C
2029 Build **WITH COMPLETE STREETS RECOMMENDATIONS (OPTION 4)**	NB-T SB-T EB-L WB-R	132.3 4.4 144.6 9.5	1.24 0.40 1.23 0.02	F A F A	109.2	F	20.1 6.4 43.0 -	0.60 0.54 0.85 -	C A D -	21.9	C	59.6 33.9 49.1 9.7	0.89 0.88 0.96 0.05	E C D A	47.7	D	18.4 9.4 46.9 9.4	0.61 0.76 0.88 0.05	B A D A	22.8	C

SYNCHRO LEVEL OF SERVICE SUMMARY FOR THE UNSIGNALIZED INTERSECTION AT
WYCKOFF STREET & WEST JOHN STREET

Condition	Mvmnt.	AM Peak Hour					Midday Peak Hour					PM Peak Hour					Midday Saturday Peak Hour				
		Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS
2019 Existing Condition	SB-R	10.4	0.03	B			9.6	0.02	A			9.2	0.02	A			9.0	0.02	A		
	EB-T	0.0	0.28	A			0.0	0.24	A			0.0	0.42	A			0.0	0.24	A		
	EB-R	0.0	0.17	A	0.1	A	0.0	0.15	A	0.1	A	0.0	0.24	A	0.1	A	0.0	0.14	A	0.1	A
	WB-T	0.0	0.35	A			0.0	0.25	A			0.0	0.32	A			0.0	0.25	A		
	WB-R	0.0	0.19	A			0.0	0.13	A			0.0	0.19	A			0.0	0.16	A		
2029 No Build **WITH DRI TRAFFIC**	SB-R	9.6	0.02	A			9.7	0.02	A			9.3	0.02	A			9.1	0.02	A		
	EB-T	0.0	0.34	A			0.0	0.27	A			0.0	0.54	A			0.0	0.28	A		
	EB-R	0.0	0.20	A	0.1	A	0.0	0.16	A	0.1	A	0.0	0.30	A	0.1	A	0.0	0.16	A	0.1	A
	WB-T	0.0	0.39	A			0.0	0.27	A			0.0	0.34	A			0.0	0.27	A		
	WB-R	0.0	0.21	A			0.0	0.14	A			0.0	0.20	A			0.0	0.17	A		
2029 Build **WITH DRI RECOMMENDATIONS (OPTION 1)**	SB-R	9.6	0.02	A			9.7	0.02	A			9.3	0.02	A			9.1	0.02	A		
	EB-T	0.0	0.34	A			0.0	0.27	A			0.0	0.54	A			0.0	0.28	A		
	EB-R	0.0	0.20	A	0.1	A	0.0	0.16	A	0.1	A	0.0	0.30	A	0.1	A	0.0	0.16	A	0.1	A
	WB-T	0.0	0.33	A			0.0	0.26	A			0.0	0.34	A			0.0	0.26	A		
	WB-R	0.0	0.19	A			0.0	0.14	A			0.0	0.19	A			0.0	0.17	A		
2029 Build **WITH COMPLETE STREETS RECOMMENDATIONS (OPTION 4)**	SB-R	9.6	0.02	A			9.7	0.02	A			9.3	0.02	A			9.1	0.02	A		
	EB-T	0.0	0.34	A			0.0	0.27	A			0.0	0.54	A			0.0	0.28	A		
	EB-R	0.0	0.20	A	0.1	A	0.0	0.16	A	0.1	A	0.0	0.30	A	0.1	A	0.0	0.16	A	0.1	A
	WB-T	0.0	0.39	A			0.0	0.27	A			0.0	0.34	A			0.0	0.27	A		
	WB-R	0.0	0.21	A			0.0	0.14	A			0.0	0.20	A			0.0	0.17	A		

SYNCHRO LEVEL OF SERVICE SUMMARY FOR THE SIGNALIZED INTERSECTION AT
NYS 106 & WEST JOHN STREET

Condition	Mvmnt.	AM Peak Hour					Midday Peak Hour					PM Peak Hour					Midday Saturday Peak Hour				
		Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS
2019 Existing Condition	NB-L	66.6	0.78	E	38.6	D	41.2	0.65	D	35.2	D	79.6	0.92	E	96.4	F	67.4	0.78	E	32.8	C
	NB-TR	23.1	0.61	C			23.1	0.55	C			47.5	0.83	D			21.4	0.62	C		
	SB-L	13.5	0.20	B			20.4	0.55	C			52.8	0.79	D			29.3	0.70	C		
	SB-TR	37.8	0.89	D			34.2	0.78	C			171.3	1.30	F			35.9	0.87	D		
	EB-L	109.5	1.05	F			48.2	0.71	D			168.8	1.24	F			42.1	0.59	D		
	EB-T	49.6	0.49	D			54.5	0.61	D			56.7	0.81	E			51.6	0.49	D		
	EB-R	9.1	0.40	A			10.3	0.40	B			21.2	0.49	C			9.4	0.43	A		
	WB-L	18.2	0.53	B			40.3	0.57	D			49.7	0.78	D			16.3	0.42	B		
	WB-TR	40.0	0.86	D			51.4	0.74	D			47.1	0.86	D			34.3	0.75	C		
2029 No Build **WITH DRI TRAFFIC**	NB-L	156.4	1.15	F	71.1	E	55.4	0.74	E	34.0	C	239.7	1.39	F	167.6	F	67.4	0.77	E	45.7	D
	NB-TR	39.9	0.72	D			20.6	0.60	C			88.0	1.02	F			30.8	0.80	C		
	SB-L	16.2	0.29	B			24.4	0.63	C			92.4	0.95	F			53.7	0.78	D		
	SB-TR	94.3	1.12	F			30.2	0.84	C			235.7	1.45	F			57.6	1.01	E		
	EB-L	170.2	1.24	F			85.6	0.95	F			482.6	1.99	F			60.2	0.81	E		
	EB-T	47.8	0.49	D			53.4	0.62	D			58.4	0.84	E			51.7	0.51	D		
	EB-R	23.7	0.52	C			9.7	0.41	A			27.0	0.56	C			10.8	0.47	B		
	WB-L	17.5	0.60	B			27.3	0.74	C			55.6	0.85	E			24.6	0.51	C		
	WB-TR	49.4	0.94	D			36.3	0.75	D			54.4	0.91	D			39.7	0.76	D		
2029 Build **WITH DRI RECOMMENDATIONS (OPTION 1)**	NB-L	73.3	0.75	E	64.0	E	72.6	0.72	E	39.8	D	118.1	0.94	F	180.6	F	67.9	0.79	E	52.8	D
	NB-TR	11.9	0.69	B			12.4	0.69	B			72.8	1.06	E			24.6	0.90	C		
	SB-L	14.7	0.25	B			31.7	0.66	C			91.0	0.89	F			67.9	0.82	E		
	SB-TR	86.4	1.04	F			49.6	0.93	D			264.4	1.51	F			88.4	1.05	F		
	EB-L	272.0	1.49	F			58.1	0.82	E			578.2	2.21	F			43.9	0.69	D		
	EB-T	51.8	0.56	D			53.7	0.62	D			61.7	0.87	E			49.1	0.48	D		
	EB-R	10.0	0.48	A			9.8	0.41	A			69.1	0.57	E			8.7	0.44	A		
	WB-L	23.7	0.70	C			41.8	0.64	D			107.2	0.93	F			11.7	0.45	B		
	WB-TR	37.3	0.85	D			51.3	0.75	D			45.2	0.89	D			28.0	0.76	C		
2029 Build **WITH COMPLETE STREETS RECOMMENDATIONS (OPTION 4)**	NB-L	156.0	1.15	F	71.6	E	54.6	0.74	D	34.6	C	239.2	1.39	F	168.6	F	66.9	0.77	E	45.9	D
	NB-TR	41.1	0.72	D			21.3	0.60	C			91.1	1.02	F			31.2	0.80	C		
	SB-L	16.2	0.29	B			24.4	0.63	C			103.0	0.95	F			53.7	0.78	D		
	SB-TR	94.3	1.12	F			30.2	0.84	C			235.7	1.45	F			57.6	1.01	E		
	EB-L	170.2	1.24	F			85.6	0.95	F			482.6	1.99	F			60.2	0.81	E		
	EB-T	47.8	0.49	D			53.4	0.62	D			58.6	0.84	E			51.7	0.51	D		
	EB-R	23.7	0.52	C			9.7	0.41	A			27.0	0.56	C			10.8	0.47	B		
	WB-L	18.4	0.60	B			30.2	0.74	C			55.6	0.85	E			25.2	0.51	C		
	WB-TR	50.8	0.94	D			39.0	0.75	D			54.6	0.91	D			40.5	0.76	D		

SYNCHRO LEVEL OF SERVICE SUMMARY FOR THE SIGNALIZED INTERSECTION AT
NYS 107 & WEST JOHN STREET

Condition	Mvmnt.	AM Peak Hour					Midday Peak Hour					PM Peak Hour					Midday Saturday Peak Hour				
		Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS
2019 Existing Condition	NB-L	43.1	0.61	D	38.8	D	79.6	0.94	E	31.3	C	128.2	1.17	F	63.1	E	119.0	1.10	F	38.5	D
	NB-TR	11.6	0.58	B			11.7	0.58	B			5.8	0.57	A			9.8	0.51	A		
	SB-L	91.9	0.17	F			93.5	0.61	F			78.5	0.44	E			92.8	0.61	F		
	SB-TR	49.6	0.87	D			21.4	0.64	C			79.5	0.94	E			24.4	0.76	C		
	EB-L	30.0	0.25	C			26.9	0.45	C			27.7	0.54	C			32.6	0.30	C		
	EB-T	41.1	0.24	D			23.9	0.21	C			22.8	0.39	C			31.6	0.30	C		
	EB-R	54.4	0.59	D			53.0	0.87	D			126.8	1.18	F			55.9	0.86	E		
	WB-LTR	67.8	0.87	E			49.6	0.56	D			60.8	0.80	E			50.0	0.51	D		
2029 No Build **WITH DRI TRAFFIC**	NB-L	39.3	0.64	D	52.1	D	79.3	0.95	E	30.9	C	136.0	1.20	F	64.1	E	99.6	1.07	F	55.9	E
	NB-TR	12.1	0.67	B			13.8	0.65	B			7.6	0.67	A			9.9	0.62	A		
	SB-L	104.9	0.40	F			104.6	0.64	F			93.6	0.46	F			104.3	0.67	F		
	SB-TR	107.3	1.03	F			20.3	0.74	C			69.2	1.10	E			82.6	0.94	F		
	EB-L	32.5	0.39	C			27.9	0.48	C			29.0	0.62	C			36.2	0.32	D		
	EB-T	24.9	0.28	C			22.9	0.23	C			22.9	0.44	C			34.3	0.31	C		
	EB-R	36.6	0.63	D			47.3	0.87	D			151.5	1.25	F			61.0	0.87	E		
	WB-LTR	67.9	0.90	E			47.8	0.55	D			68.3	0.88	E			50.0	0.53	D		
2029 Build **WITH DRI RECOMMENDATIONS (OPTION 1)**	NB-L	37.6	0.51	D	57.0	E	68.7	0.93	E	26.6	C	129.8	1.20	F	63.4	E	126.4	1.15	F	36.0	D
	NB-TR	60.7	0.61	E			12.0	0.63	B			45.7	0.64	D			17.1	0.60	B		
	SB-L	93.7	0.17	F			95.6	0.52	F			80.3	0.46	F			95.0	0.48	F		
	SB-TR	61.8	0.97	E			18.6	0.69	B			77.3	1.01	E			17.5	0.80	B		
	EB-L	37.5	0.30	D			38.3	0.57	D			29.8	0.65	C			40.7	0.43	D		
	EB-T	42.8	0.27	D			27.3	0.25	C			21.4	0.44	C			39.1	0.40	D		
	EB-R	14.3	0.42	B			10.9	0.64	B			33.2	0.91	C			19.3	0.69	B		
	WB-LTR	77.0	0.94	E			60.7	0.75	E			75.0	0.92	E			63.7	0.73	E		
2029 Build **WITH COMPLETE STREETS RECOMMENDATIONS (OPTION 4)**	NB-L	33.9	0.58	C	50.2	D	64.5	0.87	E	25.2	C	106.5	1.13	F	48.0	D	87.7	1.03	F	40.8	D
	NB-TR	12.7	0.67	B			11.3	0.64	B			6.9	0.66	A			7.5	0.58	A		
	SB-L	104.4	0.40	F			92.8	0.47	F			93.6	0.46	F			89.5	0.51	F		
	SB-TR	108.3	1.00	F			17.0	0.69	B			68.5	1.02	E			52.8	0.82	D		
	EB-L	32.6	0.39	C			37.5	0.61	D			30.9	0.65	C			40.5	0.43	D		
	EB-T	24.9	0.28	C			26.0	0.26	C			23.6	0.44	C			37.1	0.40	D		
	EB-R	6.3	0.43	A			8.9	0.64	A			28.8	0.89	C			15.4	0.65	B		
	WB-LTR	67.3	0.89	E			60.7	0.75	E			76.5	0.92	E			63.7	0.73	E		

SYNCHRO LEVEL OF SERVICE SUMMARY FOR THE UNSIGNALIZED INTERSECTION AT
NYS 106 & WEST BARCLAY STREET

Condition	Mvmnt.	AM Peak Hour					Midday Peak Hour					PM Peak Hour					Midday Saturday Peak Hour				
		Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS
2019 Existing Condition	NB-T	0.0	0.41	A	0.4	A	0.0	0.35	A	0.5	A	0.0	0.44	A	0.7	A	0.0	0.41	A	0.4	A
	NB-R	0.0	0.23	A			0.0	0.20	A			0.0	0.24	A			0.0	0.22	A		
	SB-T	0.0	0.42	A			0.0	0.43	A			0.0	0.66	A			0.0	0.50	A		
	SB-R	0.0	0.32	A			0.0	0.25	A			0.0	0.40	A			0.0	0.34	A		
	EB-R	10.5	0.10	B			10.1	0.09	B			11.9	0.23	B			10.8	0.12	B		
	WB-R	10.3	0.02	B			11.0	0.06	B			11.2	0.07	B			10.7	0.01	B		
2029 No Build **WITH DRI TRAFFIC**	NB-T	0.0	0.45	A	0.4	A	0.0	0.39	A	0.5	A	0.0	0.51	A	0.9	A	0.0	0.48	A	0.4	A
	NB-R	0.0	0.25	A			0.0	0.22	A			0.0	0.28	A			0.0	0.25	A		
	SB-T	0.0	0.54	A			0.0	0.47	A			0.0	0.74	A			0.0	0.57	A		
	SB-R	0.0	0.54	A			0.0	0.28	A			0.0	0.50	A			0.0	0.39	A		
	EB-R	11.3	0.13	B			10.5	0.11	B			12.9	0.31	B			12.0	0.15	B		
	WB-R	10.4	0.02	B			11.3	0.07	B			11.5	0.08	B			11.0	0.01	B		
2029 Build **WITH DRI RECOMMENDATIONS (OPTION 1)**	NB-L	33.8	0.49	C	290.8	F	12.5	0.25	B	80.7	F	80.0	0.84	E	332.3	F	25.5	0.38	C	130.4	F
	NB-TR	43.0	0.86	D			27.1	0.76	C			97.2	1.02	F			50.0	0.93	D		
	SB-L	59.1	0.80	E			59.3	0.86	E			56.0	0.84	E			71.5	0.84	E		
	SB-TR	88.0	1.13	F			23.3	0.79	C			289.5	1.59	F			72.6	1.02	E		
	EB-LTR	38.0	0.44	D			27.7	0.34	C			159.5	1.23	F			29.5	0.39	C		
	WB-LTR	884.7	2.90	F			287.6	1.55	F			878.0	2.88	F			414.3	1.84	F		
2029 Build **WITH COMPLETE STREETS RECOMMENDATIONS (OPTION 4)**	NB-T	0.0	0.45	A	0.4	A	0.0	0.39	A	0.5	A	0.0	0.51	A	0.8	A	0.0	0.48	A	0.4	A
	NB-R	0.0	0.25	A			0.0	0.22	A			0.0	0.27	A			0.0	0.25	A		
	SB-T	0.0	0.54	A			0.0	0.47	A			0.0	0.74	A			0.0	0.57	A		
	SB-R	0.0	0.54	A			0.0	0.28	A			0.0	0.50	A			0.0	0.39	A		
	EB-R	11.3	0.13	B			10.5	0.11	B			12.9	0.31	B			12.0	0.15	B		
	WB-R	10.2	0.02	B			11.0	0.06	B			11.1	0.06	B			10.9	0.00	B		

SYNCHRO LEVEL OF SERVICE SUMMARY FOR THE SIGNALIZED INTERSECTION AT
NYS 107 & EAST BARCLAY STREET

Condition	Mvmnt.	AM Peak Hour					Midday Peak Hour					PM Peak Hour					Midday Saturday Peak Hour				
		Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS
2019 Existing Condition	NB-TR	36.2	0.75	D	86.8	F	23.7	0.53	C	34.7	C	41.7	0.82	D	65.5	E	28.7	0.57	C	38.1	D
	SB-L	9.3	0.23	A			12.7	0.28	B			17.9	0.58	B			13.5	0.32	B		
	SB-T	20.2	0.65	C			16.5	0.49	B			71.1	0.85	E			18.0	0.66	B		
	EB-L	134.5	1.14	F			64.3	0.73	E			85.1	0.93	F			73.6	0.84	E		
	EB-LTR	193.3	1.30	F			72.0	0.83	E			105.7	1.02	F			74.3	0.86	E		
	WB-L	165.9	1.23	F			71.2	0.83	E			82.7	0.98	F			66.8	0.84	E		
	WB-R	43.8	0.27	D			49.7	0.43	D			37.2	0.21	D			43.9	0.34	D		
2029 No Build **WITH DRI TRAFFIC**	NB-TR	101.8	1.05	F	105.4	F	26.6	0.61	C	34.2	C	75.5	0.94	E	80.7	F	32.7	0.69	C	44.6	D
	SB-L	13.5	0.34	B			11.6	0.37	B			18.4	0.61	B			17.5	0.45	B		
	SB-T	73.7	0.86	E			12.7	0.57	B			68.0	0.97	E			30.8	0.79	C		
	EB-L	94.8	1.02	F			62.0	0.72	E			78.6	0.91	E			77.6	0.89	E		
	EB-LTR	145.5	1.19	F			72.2	0.85	E			108.2	1.05	F			78.1	0.90	E		
	WB-L	151.5	1.20	F			71.0	0.84	E			119.7	1.11	F			75.5	0.90	E		
	WB-R	41.3	0.27	D			48.9	0.43	D			39.6	0.24	D			45.7	0.36	D		
2029 Build **WITH DRI RECOMMENDATIONS (OPTION 1)**	NB-L	7.8	0.18	A	64.8	E	5.2	0.11	A	25.8	C	10.4	0.16	B	77.5	E	7.2	0.08	A	41.1	D
	NB-TR	107.7	1.18	F			33.8	0.85	C			105.8	1.17	F			67.7	0.90	E		
	SB-L	21.8	0.27	C			25.0	0.42	C			30.1	0.47	C			31.4	0.42	C		
	SB-TR	3.9	0.63	A			8.6	0.64	A			62.1	1.00	E			9.8	0.74	A		
	EB-LTR	43.2	0.61	D			47.8	0.58	D			58.4	0.74	E			55.7	0.59	E		
	WB-L	47.6	0.52	D			44.8	0.44	D			46.4	0.65	D			45.0	0.44	D		
	WB-TR	46.5	0.54	D			42.6	0.40	D			38.1	0.40	D			43.2	0.39	D		
2029 Build **WITH COMPLETE STREETS RECOMMENDATIONS (OPTION 4)**	NB-TR	101.7	1.05	F	95.0	F	26.6	0.61	C	30.0	C	75.9	0.94	E	104.2	F	32.8	0.69	C	51.7	D
	SB-L	18.5	0.34	B			14.5	0.37	B			34.6	0.61	C			21.4	0.45	C		
	SB-T	85.7	1.01	F			19.5	0.70	B			138.7	1.24	F			75.6	0.93	E		
	SB-R	18.1	0.71	B			4.6	0.65	A			104.8	1.19	F			9.8	0.77	A		
	EB-L	94.8	1.02	F			62.0	0.72	E			78.6	0.91	E			77.5	0.89	E		
	EB-LTR	145.5	1.19	F			72.2	0.85	E			108.2	1.05	F			78.1	0.90	E		
	WB-L	151.5	1.20	F			71.0	0.84	E			120.6	1.11	F			75.5	0.90	E		
	WB-T	42.4	0.35	D			43.8	0.25	D			37.8	0.15	D			40.3	0.12	D		
	WB-R	39.1	0.15	D			46.0	0.32	D			38.7	0.19	D			44.7	0.32	D		

SYNCHRO LEVEL OF SERVICE SUMMARY FOR THE SIGNALIZED INTERSECTION AT
NYS 106 & NORTH STATION PLAZA

Condition	Mvmnt.	AM Peak Hour					Midday Peak Hour					PM Peak Hour					Midday Saturday Peak Hour				
		Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS
2019 Existing Condition	NB-TR SB-L SB-T EB-R	2.0 3.8 2.9 153.7	0.49 0.21 0.41 0.63	A A A F	9.5	A	1.4 4.0 3.8 71.3	0.34 0.13 0.38 0.50	A A A E	4.6	A	1.6 2.8 4.2 151.8	0.45 0.38 0.61 0.63	A A A F	8.3	A	1.3 2.9 2.8 160.9	0.39 0.16 0.46 0.63	A A A F	9.4	A
2029 No Build **WITH DRI TRAFFIC**	NB-TR SB-L SB-T EB-R	2.1 3.0 2.6 150.0	0.53 0.26 0.46 0.66	A A A F	9.0	A	1.0 1.7 1.6 69.8	0.37 0.16 0.42 0.51	A A A E	3.2	A	2.3 4.2 10.3 148.2	0.51 0.49 0.69 0.66	A A B F	11.5	B	1.1 1.8 2.1 147.4	0.46 0.22 0.53 0.66	A A A F	7.7	A
2029 Build **WITH DRI RECOMMENDATIONS (OPTION 1)**	NB-TR SB-L SB-T EB-R	2.7 9.1 57.6 160.4	0.55 0.28 0.55 0.62	A A E F	35.6	D	1.8 3.5 4.7 71.7	0.40 0.17 0.45 0.51	A A A E	5.1	A	3.2 11.2 55.7 150.6	0.52 0.51 0.76 0.63	A B E F	37.4	D	1.9 4.9 53.0 145.5	0.47 0.22 0.57 0.63	A A D F	34.4	C
2029 Build **WITH COMPLETE STREETS RECOMMENDATIONS (OPTION 4)**	NB-TR SB-L SB-T EB-R	2.2 0.4 2.6 150.0	0.53 0.14 0.46 0.66	A A A F	9.0	A	1.1 0.4 1.8 69.8	0.39 0.12 0.43 0.51	A A A E	3.3	A	2.4 1.4 10.3 148.2	0.51 0.26 0.69 0.66	A A B F	11.5	B	1.2 0.3 2.1 147.4	0.46 0.13 0.53 0.66	A A A F	7.7	A

SYNCHRO LEVEL OF SERVICE SUMMARY FOR THE SIGNALIZED INTERSECTION AT
NYS 106 & SOUTH STATION PLAZA

Condition	Mvmnt.	AM Peak Hour					Midday Peak Hour					PM Peak Hour					Midday Saturday Peak Hour				
		Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS
2019 Existing Condition	NB-L NB-T SB-TR WB-R	33.7 2.3 3.7 57.8	0.74 0.44 0.48 0.39	C A A E	6.8	A	4.5 2.9 2.1 49.8	0.25 0.34 0.41 0.24	A A A D	3.2	A	115.1 4.3 12.3 32.7	0.96 0.43 0.66 0.16	F A B C	14.5	B	20.3 2.7 3.4 45.2	0.56 0.39 0.52 0.16	C A A D	4.3	A
2029 No Build **WITH DRI TRAFFIC**	NB-L NB-T SB-TR WB-R	93.3 2.6 3.6 71.1	0.91 0.48 0.53 0.40	F A A E	11.6	B	2.8 1.1 1.3 61.4	0.31 0.37 0.46 0.24	A A A E	2.0	A	251.2 5.2 12.8 49.1	1.46 0.49 0.74 0.17	F A B D	21.2	C	38.4 1.8 3.1 59.6	0.77 0.46 0.59 0.16	D A A E	4.7	A
2029 Build **WITH DRI RECOMMENDATIONS (OPTION 1)**	NB-L NB-T SB-TR WB-R	176.6 2.7 5.4 57.6	1.28 0.50 0.62 0.38	F A A E	17.4	B	6.9 2.9 2.1 66.8	0.35 0.39 0.48 0.44	A A A E	4.1	A	505.0 5.3 52.0 57.1	1.99 0.49 0.81 0.29	F A D E	55.1	E	37.6 2.9 3.8 52.8	0.68 0.47 0.64 0.16	D A A D	4.9	A
2029 Build **WITH COMPLETE STREETS RECOMMENDATIONS (OPTION 4)**	NB-L NB-T SB-TR WB-R	20.6 2.7 3.6 62.5	0.92 0.48 0.53 0.40	C A A E	6.0	A	1.0 1.2 1.4 61.5	0.22 0.38 0.47 0.24	A A A E	2.1	A	15.7 5.0 25.1 45.5	0.49 0.49 0.74 0.17	B A C D	17.3	B	14.3 1.6 3.1 59.9	0.77 0.46 0.59 0.16	B A A E	3.5	A

SYNCHRO LEVEL OF SERVICE SUMMARY FOR THE SIGNALIZED INTERSECTION AT
NYS 107 & HERZOG PLACE

Condition	Mvmnt.	AM Peak Hour					Midday Peak Hour					PM Peak Hour					Midday Saturday Peak Hour				
		Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS
2019 Existing Condition	NB-TR SB-TR EB-R WB-R	1.8 1.3 0.5 -	0.40 0.43 0.09 -	A A A -	1.5	A	2.0 1.3 0.8 1.2	0.36 0.40 0.14 0.08	A A A A	1.6	A	1.1 2.6 1.6 1.0	0.40 0.51 0.22 0.04	A A A A	1.9	A	2.1 1.9 0.9 0.5	0.35 0.42 0.15 0.03	A A A A	2.0	A
2029 No Build **WITH DRI TRAFFIC**	NB-TR SB-TR EB-R WB-R	0.9 0.4 1.2 -	0.45 0.47 0.14 -	A A A -	0.7	A	1.2 0.8 2.4 1.0	0.40 0.44 0.25 0.07	A A A A	1.0	A	0.7 1.5 19.8 1.0	0.46 0.58 0.47 0.04	A A B A	1.6	A	0.7 0.7 5.8 0.5	0.42 0.48 0.28 0.03	A A A A	0.8	A
2029 Build **WITH DRI RECOMMENDATIONS (OPTION 1)**	NB-TR SB-TL EB-L EB-LTR WB-LTR	75.7 23.3 275.6 262.6 -	1.03 0.93 1.52 1.49 -	E C F F -	135.4	F	48.8 55.0 102.5 101.3 1.5	0.91 1.03 0.87 0.85 0.09	D D F F A	64.4	E	78.9 223.8 273.8 298.1 1.0	0.95 1.44 1.51 1.51 0.03	E F F F A	200.8	F	65.7 63.9 110.6 110.7 0.5	0.94 1.04 0.97 0.98 0.04	E E F F A	76.4	E
2029 Build **WITH COMPLETE STREETS RECOMMENDATIONS (OPTION 4)**	NB-TR SB-TR EB-R WB-R	0.9 1.1 1.4 -	0.45 0.52 0.15 -	A A A -	1.0	A	1.2 1.2 2.8 1.0	0.40 0.51 0.27 0.07	A A A A	1.2	A	0.7 12.6 24.3 1.0	0.46 0.69 0.48 0.04	A B C A	8.0	A	0.8 1.7 8.0 0.5	0.42 0.56 0.29 0.03	A A A A	1.5	A

SYNCHRO LEVEL OF SERVICE SUMMARY FOR THE SIGNALIZED INTERSECTION AT JERUSALEM AVENUE & HERZOG PLACE

Condition	Mvmnt.	AM Peak Hour					Midday Peak Hour					PM Peak Hour					Midday Saturday Peak Hour				
		Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS
2019 Existing Condition	NB-L	8.2	0.15	A	18.2	B	5.4	0.03	A	15.4	B	11.0	0.22	B	19.4	B	6.3	0.10	A	13.8	B
	NB-TR	13.2	0.75	B			5.1	0.32	A			11.1	0.42	B			6.5	0.34	A		
	SB-L	11.6	0.15	B			6.1	0.06	A			11.1	0.12	B			6.7	0.07	A		
	SB-TR	7.5	0.27	A			5.5	0.19	A			11.8	0.43	B			6.1	0.19	A		
	EB-LTR	45.9	0.80	D			40.5	0.68	D			47.0	0.85	D			39.5	0.67	D		
	WB-LTR	36.1	0.69	D			39.8	0.65	D			28.7	0.60	C			31.3	0.44	C		
2029 No Build **WITH DRI TRAFFIC**	NB-L	2.2	0.17	A	16.9	B	3.5	0.03	A	15.2	B	14.0	0.28	B	20.0	B	3.5	0.12	A	12.9	B
	NB-TR	7.5	0.81	A			4.0	0.35	A			13.2	0.49	B			4.4	0.39	A		
	SB-L	12.6	0.20	B			6.5	0.07	A			13.2	0.15	B			7.1	0.08	A		
	SB-TR	7.3	0.29	A			5.8	0.21	A			13.9	0.49	B			6.6	0.22	A		
	EB-LTR	55.4	0.87	E			41.7	0.70	D			43.4	0.84	D			40.1	0.69	D		
	WB-LTR	38.5	0.73	D			39.5	0.66	D			26.6	0.59	C			30.9	0.45	C		
2029 Build **WITH DRI RECOMMENDATIONS (OPTION 1)**	NB-L	6.8	0.09	A	12.7	B	2.9	0.01	A	5.7	A	7.9	0.07	A	16.6	B	4.5	0.02	A	12.7	B
	NB-TR	4.2	0.58	A			1.9	0.44	A			4.1	0.44	A			1.8	0.29	A		
	N/A	-	-	-			-	-	-			-	-	-			-	-	-		
	N/A	-	-	-			-	-	-			-	-	-			-	-	-		
	EB-LTR	35.9	0.68	D			24.0	0.46	C			35.9	0.73	D			34.6	0.57	C		
	N/A	-	-	-			-	-	-			-	-	-			-	-	-		
2029 Build **WITH COMPLETE STREETS RECOMMENDATIONS (OPTION 4)**	NB-L	2.1	0.14	A	21.3	C	6.4	0.03	A	18.5	B	13.2	0.20	B	25.5	C	4.8	0.10	A	17.7	B
	NB-TR	9.8	0.86	A			7.8	0.40	A			15.1	0.55	B			6.6	0.43	A		
	SB-L	15.3	0.26	B			10.2	0.08	B			15.3	0.18	B			9.5	0.09	A		
	SB-TR	5.5	0.21	A			7.4	0.15	A			13.8	0.34	B			7.6	0.13	A		
	EB-LTR	47.0	0.81	D			27.6	0.55	C			39.8	0.82	D			34.5	0.65	C		
	SW-LTR	54.1	0.90	D			39.5	0.78	D			44.1	0.88	D			38.2	0.74	D		

SYNCHRO LEVEL OF SERVICE SUMMARY FOR THE UNSIGNALIZED INTERSECTION AT DUFFY AVENUE & NELSON AVENUE

Condition	Mvmnt.	AM Peak Hour					Midday Peak Hour					PM Peak Hour					Midday Saturday Peak Hour				
		Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS
2019 Existing Condition	NB-TL SB-TR EB-LR WB-LR	12.2 12.7 11.4 -	0.43 0.53 0.34 -	B B B -	12.2	B	8.5 8.3 9.3 -	0.11 0.21 0.29 -	A A A -	8.8	A	10.9 11.8 17.6 -	0.26 0.42 0.67 -	B B C -	14.6	B	8.7 8.4 9.3 -	0.16 0.19 0.28 -	A A A -	8.8	A
2029 No Build **WITH DRI TRAFFIC**	NB-TL SB-TR EB-LR WB-LR	12.9 13.7 11.9 -	0.46 0.56 0.37 -	B B B -	13.0	B	8.5 8.4 9.4 -	0.11 0.22 0.30 -	A A A -	8.9	A	11.4 12.7 21.4 -	0.28 0.46 0.74 -	B B C -	17.0	C	8.8 8.5 9.5 -	0.17 0.30 0.21 -	A A A -	9.0	A
2029 Build **WITH DRI RECOMMENDATIONS (OPTION 1)**	NB-TL SB-TR EB-LR WB-LR	12.8 9.2 13.3 -	0.47 0.18 0.51 -	B A B -	12.4	B	8.2 7.4 8.3 -	0.10 0.06 0.23 -	A A A -	8.1	A	10.2 8.6 15.1 -	0.25 0.10 0.64 -	B A B -	13.5	B	8.6 7.6 8.7 -	0.17 0.07 0.25 -	A A A -	8.5	A
2029 Build **WITH COMPLETE STREETS RECOMMENDATIONS (OPTION 4)**	NB-TL SB-TR EB-LR WB-LR	13.2 15.2 12.2 -	0.47 0.62 0.38 -	B B B -	13.9	B	8.6 9.0 9.6 -	0.11 0.29 0.30 -	A A A -	9.2	A	11.9 17.1 25.5 -	0.29 0.62 0.79 -	B B C -	20.3	C	9.0 9.2 9.8 -	0.17 0.29 0.31 -	A A A -	9.4	A

SYNCHRO LEVEL OF SERVICE SUMMARY FOR THE SIGNALIZED INTERSECTION AT
NYS 106 & DUFFY AVENUE

Condition	Mvmnt.	AM Peak Hour					Midday Peak Hour					PM Peak Hour					Midday Saturday Peak Hour				
		Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS
2019 Existing Condition	NB-L	26.0	0.70	C			16.3	0.32	B			26.2	0.41	C			11.4	0.15	B		
	NB-TR	42.7	0.83	D			29.4	0.58	C			46.8	0.80	D			23.4	0.55	C		
	SB-L	26.8	0.48	C			14.4	0.29	B			32.5	0.66	C			7.4	0.30	A		
	SB-T	37.1	0.63	D			22.2	0.53	C			88.9	1.12	F			12.3	0.57	B		
	SB-R	36.0	0.90	D	39.4	D	6.5	0.22	A	26.5	C	9.3	0.35	A	64.4	E	5.1	0.14	A	20.8	C
	EB-L	31.3	0.41	C			33.2	0.47	C			50.2	0.90	D			37.9	0.35	D		
	EB-T	27.3	0.12	C			29.7	0.17	C			27.4	0.36	C			35.6	0.13	D		
	EB-R	1.6	0.13	A			7.3	0.23	A			53.1	0.27	D			7.2	0.14	A		
	WB-LTR	60.4	0.85	E			66.6	0.78	E			143.2	0.90	F			69.5	0.76	E		
2029 No Build **WITH DRI TRAFFIC**	NB-L	43.2	0.84	D			10.3	0.33	B			27.8	0.49	C			6.8	0.18	A		
	NB-TR	61.2	0.95	E			22.2	0.57	C			34.3	0.78	C			17.9	0.59	B		
	SB-L	56.2	0.58	E			11.3	0.29	B			23.0	0.59	C			6.8	0.34	A		
	SB-T	45.6	0.81	D			16.5	0.52	B			77.4	1.03	E			7.3	0.60	A		
	SB-R	65.1	0.99	E	54.0	D	1.9	0.23	A	23.1	C	7.7	0.40	A	70.9	E	0.6	0.15	A	17.1	B
	EB-L	28.0	0.40	C			49.0	0.68	D			246.4	1.44	F			52.2	0.56	D		
	EB-T	25.0	0.12	C			36.4	0.22	D			36.8	0.48	D			42.1	0.16	D		
	EB-R	1.8	0.13	A			8.3	0.27	A			22.2	0.36	C			10.7	0.18	B		
	WB-LTR	60.7	0.87	E			66.1	0.79	E			71.8	0.88	E			69.6	0.77	E		
2029 Build **WITH DRI RECOMMENDATIONS (OPTION 1)**	NB-L	20.1	0.72	C			14.7	0.43	B			22.9	0.43	C			9.6	0.21	A		
	NB-TR	89.0	0.97	F			27.7	0.63	C			53.3	0.89	D			22.4	0.62	C		
	SB-L	46.8	0.58	D			12.1	0.35	B			38.1	0.63	D			6.0	0.38	A		
	SB-T	29.3	0.65	C			23.7	0.60	C			122.2	1.21	F			13.5	0.67	B		
	SB-R	27.5	0.86	C	52.0	D	8.3	0.22	A	25.1	C	9.7	0.35	A	81.4	F	4.5	0.14	A	19.3	B
	EB-L	43.8	0.48	D			39.1	0.49	D			64.0	0.94	E			41.2	0.36	D		
	EB-T	38.0	0.18	D			34.1	0.16	C			34.3	0.45	C			38.0	0.11	D		
	EB-R	3.0	0.18	A			12.9	0.28	B			94.3	0.34	F			9.6	0.17	A		
	WB-LTR	67.6	0.80	E			56.0	0.61	E			148.2	0.76	F			67.4	0.63	E		
2029 Build **WITH COMPLETE STREETS RECOMMENDATIONS (OPTION 4)**	NB-L	49.4	0.87	D			11.6	0.34	B			31.2	0.53	C			7.5	0.19	A		
	NB-TR	72.8	0.98	E			24.3	0.60	C			38.7	0.83	D			19.9	0.61	B		
	SB-L	55.6	0.59	E			12.3	0.30	B			32.5	0.67	C			8.5	0.36	A		
	SB-T	52.9	0.85	D			17.7	0.54	B			77.6	1.08	E			8.0	0.62	A		
	SB-R	62.6	1.01	E	59.5	E	2.0	0.24	A	24.2	C	8.4	0.41	A	67.5	E	0.6	0.15	A	18.6	B
	EB-L	26.5	0.38	C			44.5	0.64	D			194.8	1.32	F			50.3	0.56	D		
	EB-T	24.0	0.12	C			34.5	0.21	C			33.7	0.44	C			40.0	0.15	D		
	EB-R	1.7	0.13	A			7.7	0.26	A			20.6	0.33	C			10.1	0.17	B		
	WB-LTR	61.0	0.89	E			66.6	0.81	E			76.7	0.92	E			70.0	0.79	E		

SYNCHRO LEVEL OF SERVICE SUMMARY FOR THE SIGNALIZED INTERSECTION AT
NYS 106 & WEST MARIE STREET

Condition	Mvmnt.	AM Peak Hour					Midday Peak Hour					PM Peak Hour					Midday Saturday Peak Hour				
		Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS
2019 Existing Condition	NB-L	3.2	0.14	A	11.0	B	2.8	0.09	A	7.1	A	5.1	0.14	A	23.4	C	2.8	0.08	A	6.4	A
	NB-T	5.6	0.48	A			3.3	0.31	A			5.2	0.32	A			3.3	0.36	A		
	SB-LTR	15.5	0.35	B			7.4	0.39	A			30.1	0.68	C			6.7	0.50	A		
	EB-LTR	6.4	0.19	A			11.2	0.27	B			8.7	0.20	A			7.0	0.21	A		
	WB-L	66.2	0.40	E			64.2	0.34	E			77.3	0.69	E			63.9	0.28	E		
	WB-T	55.7	0.06	E			56.0	0.11	E			52.3	0.10	D			57.9	0.06	E		
	WB-R	23.5	0.41	C			1.6	0.15	A			12.1	0.26	B			13.9	0.31	B		
2029 No Build **WITH DRI TRAFFIC**	NB-L	3.5	0.17	A	10.0	A	3.0	0.10	A	5.3	A	7.0	0.20	A	12.4	B	3.2	0.11	A	4.1	A
	NB-T	6.9	0.53	A			3.5	0.35	A			6.2	0.38	A			3.8	0.42	A		
	SB-LTR	10.1	0.40	B			3.4	0.43	A			11.5	0.78	B			2.0	0.57	A		
	EB-LTR	7.1	0.21	A			12.8	0.29	B			8.9	0.20	A			8.2	0.23	A		
	WB-L	67.0	0.42	E			64.9	0.37	E			74.3	0.68	E			64.7	0.31	E		
	WB-T	55.4	0.07	E			56.0	0.12	E			50.3	0.10	D			57.6	0.06	E		
	WB-R	25.0	0.43	C			2.1	0.17	A			12.3	0.26	B			15.4	0.33	B		
2029 Build **WITH DRI RECOMMENDATIONS (OPTION 1)**	NB-L	4.8	0.19	A	13.4	B	3.6	0.12	A	9.2	A	8.2	0.24	A	52.0	D	3.9	0.13	A	8.6	A
	NB-T	8.8	0.54	A			4.7	0.38	A			6.8	0.39	A			4.9	0.44	A		
	SB-LTR	12.8	0.47	B			7.7	0.48	A			74.8	0.87	E			9.1	0.64	A		
	EB-LTR	6.0	0.18	A			25.3	0.43	C			9.1	0.18	A			7.3	0.20	A		
	WB-L	68.8	0.57	E			68.1	0.48	E			96.0	0.89	F			67.1	0.42	E		
	WB-T	50.9	0.05	D			53.4	0.10	D			50.7	0.09	D			55.3	0.05	E		
	WB-R	34.3	0.53	C			15.5	0.34	B			12.4	0.36	B			15.5	0.32	B		
2029 Build **WITH COMPLETE STREETS RECOMMENDATIONS (OPTION 4)**	NB-L	3.5	0.17	A	10.4	B	3.0	0.10	A	5.3	A	7.2	0.20	A	12.8	B	3.2	0.11	A	4.1	A
	NB-T	7.1	0.53	A			3.5	0.35	A			6.2	0.38	A			3.8	0.42	A		
	SB-TR	10.7	0.41	B			3.4	0.43	A			12.2	0.79	B			2.0	0.57	A		
	EB-LTR	7.1	0.21	A			12.8	0.29	B			8.9	0.20	A			8.2	0.23	A		
	WB-L	67.0	0.42	E			64.9	0.37	E			74.3	0.68	E			64.7	0.31	E		
	WB-T	55.4	0.07	E			56.0	0.12	E			50.3	0.10	D			57.6	0.06	E		
	WB-R	25.0	0.43	C			2.1	0.17	A			12.3	0.26	B			15.4	0.33	B		

SYNCHRO LEVEL OF SERVICE SUMMARY FOR THE SIGNALIZED INTERSECTION AT JERUSALEM AVENUE & WEST MARIE STREET

Condition	Mvmnt.	AM Peak Hour					Midday Peak Hour					PM Peak Hour					Midday Saturday Peak Hour				
		Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS
2019 Existing Condition	NB-LTR	36.8	0.83	D	26.6	C	6.1	0.32	A	9.8	A	16.9	0.50	B	20.0	C	6.2	0.40	A	9.6	A
	SB-LTR	9.3	0.51	A			8.1	0.43	A			17.8	0.82	B			7.5	0.43	A		
	EB-LTR	19.4	0.32	B			16.7	0.21	B			28.7	0.65	C			17.0	0.21	B		
	WB-LTR	27.1	0.58	C			19.5	0.30	B			22.3	0.44	C			20.4	0.33	C		
2029 No Build **WITH DRI TRAFFIC**	NB-LTR	32.0	0.88	C	24.7	C	5.9	0.35	A	10.1	B	8.4	0.53	A	19.9	B	7.5	0.45	A	11.0	B
	SB-LTR	9.3	0.55	A			8.7	0.46	A			19.9	0.87	B			9.8	0.49	A		
	EB-LTR	21.0	0.35	C			17.1	0.22	B			34.9	0.74	C			17.6	0.23	B		
	WB-LTR	29.8	0.63	C			20.1	0.32	C			25.1	0.49	C			21.1	0.35	C		
2029 Build **WITH DRI RECOMMENDATIONS (OPTION 1)**	NB-LTR	77.4	1.08	E	59.7	E	10.0	0.49	A	21.9	C	24.6	0.70	C	45.5	D	12.5	0.57	B	21.3	C
	SB-LTR	17.9	0.09	B			15.5	0.11	B			13.8	0.10	B			17.3	0.06	B		
	EB-LTR	14.8	0.26	B			16.4	0.29	B			20.5	0.52	C			13.4	0.19	B		
	WB-LTR	47.7	0.94	D			35.9	0.84	D			78.1	1.06	E			34.2	0.82	C		
2029 Build **WITH COMPLETE STREETS RECOMMENDATIONS (OPTION 4)**	NB-LTR	30.9	0.87	C	27.3	C	6.1	0.35	A	12.2	B	7.6	0.52	A	22.0	C	7.7	0.46	A	12.8	B
	SB-LTR	7.1	0.42	A			5.8	0.36	A			10.5	0.65	B			6.0	0.35	A		
	EB-LTR	21.0	0.35	C			16.5	0.21	B			34.9	0.74	C			16.9	0.23	B		
	WB-LTR	41.6	0.82	D			27.1	0.57	C			48.2	0.89	D			27.7	0.60	C		

SYNCHRO LEVEL OF SERVICE SUMMARY FOR THE SIGNALIZED INTERSECTION AT
NYS 107 & WEST MARIE STREET

Condition	Mvmnt.	AM Peak Hour					Midday Peak Hour					PM Peak Hour					Midday Saturday Peak Hour				
		Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS
2019 Existing Condition	NB-L	11.2	0.23	B	23.4	C	9.5	0.08	A	16.8	B	12.1	0.16	B	22.9	C	8.1	0.10	A	17.3	B
	NB-TR	11.7	0.48	B			11.0	0.47	B			12.6	0.52	B			8.5	0.43	A		
	SB-L	14.6	0.25	B			9.2	0.28	A			19.4	0.49	B			9.4	0.29	A		
	SB-TR	14.2	0.44	B			7.8	0.44	A			11.8	0.57	B			8.1	0.48	A		
	EB-LTR	51.8	0.57	D			38.5	0.38	D			67.6	0.83	E			69.2	0.77	E		
	WB-LTR	76.3	0.90	E			62.0	0.80	E			94.0	0.92	F			83.4	0.85	F		
2029 No Build **WITH DRI TRAFFIC**	NB-L	16.0	0.29	B	19.9	B	10.5	0.09	B	16.3	B	16.1	0.22	B	22.2	C	9.3	0.14	A	14.7	B
	NB-TR	15.6	0.56	B			12.4	0.50	B			15.4	0.61	B			9.8	0.52	A		
	SB-L	9.7	0.35	A			8.6	0.34	A			36.2	0.74	D			7.0	0.42	A		
	SB-TR	6.4	0.51	A			5.1	0.47	A			8.5	0.66	A			2.4	0.56	A		
	EB-LTR	46.0	0.52	D			38.9	0.46	D			65.1	0.83	E			70.6	0.79	E		
	WB-LTR	63.8	0.85	E			62.9	0.84	E			91.1	0.92	F			83.8	0.86	F		
2029 Build **WITH DRI RECOMMENDATIONS (OPTION 1)**	NB-L	42.0	0.65	D	280.9	F	25.8	0.31	C	83.7	F	66.1	0.60	E	86.5	F	55.6	0.53	E	140.9	F
	NB-TR	14.5	0.56	B			21.2	0.60	C			20.9	0.66	C			17.8	0.60	B		
	SB-L	1.5	0.22	A			5.8	0.48	A			27.7	0.87	C			16.3	0.58	B		
	SB-TR	4.5	0.76	A			4.9	0.81	A			97.0	1.16	F			13.1	0.87	B		
	EB-LTR	1613.1	4.51	F			437.7	1.88	F			253.2	1.45	F			697.0	2.47	F		
	WB-LTR	123.8	0.90	F			36.9	0.58	D			49.5	0.60	D			41.3	0.40	D		
2029 Build **WITH COMPLETE STREETS RECOMMENDATIONS (OPTION 4)**	NB-L	17.9	0.34	B	19.4	B	10.9	0.11	B	15.6	B	22.7	0.32	C	22.3	C	10.4	0.17	B	14.3	B
	NB-TR	15.6	0.56	B			12.4	0.50	B			15.4	0.61	B			9.8	0.52	A		
	SB-L	9.1	0.35	A			7.4	0.34	A			33.1	0.74	C			6.6	0.42	A		
	SB-TR	6.1	0.56	A			4.4	0.52	A			10.4	0.75	B			2.6	0.62	A		
	EB-LTR	46.0	0.52	D			38.9	0.46	D			65.1	0.83	E			70.6	0.79	E		
	WB-LTR	63.8	0.85	E			62.9	0.84	E			91.1	0.92	F			83.8	0.86	F		

SYNCHRO LEVEL OF SERVICE SUMMARY FOR THE SIGNALIZED INTERSECTION AT
NYS 106 & WEST OLD COUNTRY ROAD

Condition	Mvmnt.	AM Peak Hour					Midday Peak Hour					PM Peak Hour					Midday Saturday Peak Hour				
		Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS
2019 Existing Condition	NB-L	87.6	0.62	F	66.5	E	87.8	0.65	F	54.9	D	88.9	0.69	F	97.5	F	89.6	0.71	F	60.6	E
	NB-T	76.2	0.96	E			72.8	0.81	E			49.2	0.49	D			66.3	0.76	E		
	NB-R	33.0	0.47	C			49.5	0.61	D			33.4	0.48	C			41.8	0.51	D		
	SB-L	98.2	0.82	F			136.4	1.04	F			124.8	0.99	F			165.0	1.15	F		
	SB-T	45.9	0.49	D			62.7	0.70	E			126.4	1.15	F			66.6	0.82	E		
	SB-R	28.4	0.30	C			39.4	0.44	D			28.2	0.31	C			40.9	0.60	D		
	EB-L	84.6	0.73	F			83.9	0.77	F			85.3	0.79	F			83.5	0.82	F		
	EB-T	62.8	0.86	E			40.9	0.64	D			90.6	1.03	F			45.3	0.65	D		
	EB-R	26.6	0.08	C			18.7	0.16	B			27.8	0.20	C			21.6	0.17	C		
	WB-L	105.3	0.90	F			103.6	0.74	F			190.2	1.24	F			110.4	0.80	F		
	WB-T	76.0	1.07	E			25.2	0.72	C			90.8	1.11	F			27.5	0.67	C		
	WB-R	17.6	0.35	B			13.9	0.17	B			14.6	0.14	B			17.3	0.15	B		
2029 No Build **WITH DRI TRAFFIC**	NB-L	91.6	0.67	F	70.6	E	91.4	0.70	F	61.3	E	263.5	1.35	F	115.0	F	91.0	0.74	F	62.3	E
	NB-T	97.8	1.05	F			72.2	0.83	E			52.3	0.58	D			67.1	0.82	E		
	NB-R	33.3	0.49	C			46.6	0.60	D			36.8	0.53	D			39.7	0.51	D		
	SB-L	148.7	1.05	F			114.7	0.97	F			154.4	1.11	F			136.7	1.07	F		
	SB-T	51.5	0.61	D			57.8	0.68	E			136.8	1.19	F			62.7	0.82	E		
	SB-R	34.4	0.37	C			34.0	0.44	C			28.8	0.38	C			35.9	0.61	D		
	EB-L	111.3	0.92	F			77.3	0.72	E			180.4	1.21	F			75.3	0.79	E		
	EB-T	62.1	0.88	E			49.1	0.76	D			83.2	1.01	F			54.2	0.78	D		
	EB-R	24.8	0.08	C			23.5	0.27	C			32.2	0.28	C			25.4	0.25	C		
	WB-L	60.4	0.91	E			75.6	0.73	E			259.4	1.46	F			87.7	0.83	F		
	WB-T	72.0	1.05	E			66.5	0.92	E			96.1	1.08	F			54.8	0.91	D		
	WB-R	27.3	0.37	C			22.0	0.19	C			21.0	0.14	C			22.4	0.17	C		
2029 Build **WITH DRI RECOMMENDATIONS (OPTION 1)**	NB-L	87.5	0.64	F	83.7	F	88.9	0.68	F	59.3	E	90.2	0.72	F	162.7	F	91.0	0.74	F	65.6	E
	NB-T	88.5	1.05	F			68.7	0.81	E			51.3	0.57	D			59.4	0.73	E		
	NB-R	33.2	0.49	C			44.3	0.58	D			34.2	0.51	C			36.2	0.48	D		
	SB-L	102.1	0.86	F			151.9	1.11	F			138.9	1.06	F			187.2	1.22	F		
	SB-T	52.1	0.71	D			63.8	0.79	E			308.2	1.60	F			70.7	0.92	E		
	SB-R	28.5	0.33	C			35.5	0.46	D			29.3	0.38	C			37.3	0.63	D		
	EB-L	85.6	0.76	F			85.8	0.82	F			59.9	0.86	E			89.2	0.90	F		
	EB-T	75.8	0.96	E			47.6	0.74	D			109.8	1.10	F			55.5	0.80	E		
	EB-R	26.4	0.09	C			22.9	0.26	C			28.7	0.27	C			26.0	0.25	C		
	WB-L	105.0	0.94	F			106.7	0.75	F			216.9	1.32	F			111.2	0.85	F		
	WB-T	134.0	1.20	F			38.8	0.88	D			149.0	1.25	F			41.3	0.88	D		
	WB-R	17.8	0.39	B			16.1	0.19	B			14.8	0.15	B			20.2	0.18	C		
2029 Build **WITH COMPLETE STREETS RECOMMENDATIONS (OPTION 4)**	NB-L	91.6	0.67	F	70.9	E	91.4	0.70	F	61.2	E	263.5	1.35	F	116.7	F	91.0	0.74	F	62.5	E
	NB-T	97.8	1.05	F			72.2	0.83	E			52.3	0.58	D			67.1	0.82	E		
	NB-R	33.3	0.49	C			46.6	0.60	D			36.8	0.53	D			39.7	0.51	D		
	SB-L	148.7	1.05	F			114.7	0.97	F			154.4	1.11	F			136.7	1.07	F		
	SB-T	51.8	0.62	D			58.2	0.69	E			143.0	1.20	F			62.7	0.82	E		
	SB-R	34.3	0.37	C			34.0	0.44	C			28.8	0.38	C			35.9	0.61	D		
	EB-L	111.3	0.92	F			77.3	0.72	E			180.4	1.21	F			75.3	0.79	E		
	EB-T	62.1	0.88	E			49.1	0.76	D			83.2	1.01	F			54.2	0.78	D		
	EB-R	24.8	0.08	C			23.5	0.27	C			32.2	0.28	C			25.4	0.25	C		
	WB-L	61.6	0.91	E			75.9	0.73	E			259.7	1.46	F			90.0	0.83	F		
	WB-T	73.0	1.05	E			65.8	0.92	E			97.0	1.08	F			54.6	0.91	D		
	WB-R	27.4	0.37	C			22.1	0.19	C			21.0	0.14	C			22.7	0.17	C		

SYNCHRO LEVEL OF SERVICE SUMMARY FOR THE SIGNALIZED INTERSECTION AT JERUSALEM AVENUE & WEST OLD COUNTRY ROAD

Condition	Mvmnt.	AM Peak Hour					Midday Peak Hour					PM Peak Hour					Midday Saturday Peak Hour				
		Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS
2019 Existing Condition	NB-L	205.5	1.33	F	86.4	F	107.8	1.01	F	44.7	D	154.7	1.17	F	69.9	E	141.6	1.14	F	49.7	D
	NB-TR	151.3	1.20	F			54.4	0.62	D			63.0	0.78	E			62.5	0.77	E		
	SB-L	66.3	0.72	E			55.9	0.38	E			80.1	0.93	F			54.8	0.43	D		
	SB-TR	65.4	0.62	E			85.2	0.79	F			100.5	1.03	F			81.0	0.78	F		
	EB-L	50.7	0.69	D			15.5	0.39	B			35.4	0.44	D			18.1	0.28	B		
	EB-T	48.2	0.83	D			23.3	0.59	C			56.3	0.91	E			30.8	0.67	C		
	EB-R	13.1	0.14	B			8.3	0.16	A			14.3	0.20	B			11.7	0.22	B		
	WB-L	38.8	0.74	D			24.4	0.41	C			69.5	0.95	E			30.1	0.60	C		
	WB-T	63.2	0.83	E			40.4	0.52	D			58.9	0.80	E			39.1	0.50	D		
	WB-R	12.2	0.09	B			2.8	0.04	A			0.1	0.03	A			10.9	0.07	B		
2029 No Build **WITH DRI TRAFFIC**	NB-L	95.6	1.05	F	61.1	E	67.1	0.86	E	35.0	D	124.2	1.08	F	57.4	E	84.5	0.96	F	45.8	D
	NB-TR	74.9	0.98	E			44.7	0.52	D			65.4	0.82	E			50.1	0.65	D		
	SB-L	94.9	0.94	F			43.5	0.40	D			61.0	0.89	E			42.9	0.43	D		
	SB-TR	66.1	0.75	E			74.0	0.81	E			99.3	1.06	F			72.9	0.83	E		
	EB-L	95.1	1.01	F			21.6	0.50	C			46.7	0.67	D			18.6	0.38	B		
	EB-T	63.2	1.00	E			21.6	0.71	C			49.2	1.03	D			31.7	0.83	C		
	EB-R	19.8	0.14	B			6.7	0.18	A			9.5	0.21	A			10.5	0.24	B		
	WB-L	111.3	1.03	F			35.7	0.54	D			137.7	1.12	F			63.4	0.77	E		
	WB-T	29.3	0.98	C			25.8	0.62	C			18.5	0.92	B			45.6	0.60	D		
	WB-R	0.1	0.10	A			0.2	0.05	A			0.0	0.03	A			4.8	0.08	A		
2029 Build **WITH DRI RECOMMENDATIONS (OPTION 1)**	NB-L	189.9	1.29	F	95.0	F	117.6	1.05	F	44.9	D	163.9	1.20	F	64.8	E	158.0	1.19	F	52.2	D
	NB-TR	190.7	1.30	F			61.8	0.74	E			72.1	0.88	E			65.1	0.82	E		
	SB-L	63.7	0.74	E			38.7	0.46	D			73.2	0.85	E			37.8	0.48	D		
	SB-TR	49.5	0.54	D			56.4	0.77	E			51.0	0.85	D			53.7	0.76	D		
	EB-L	62.6	0.78	E			21.8	0.46	C			40.7	0.53	D			23.6	0.34	C		
	EB-T	55.7	0.91	E			29.4	0.66	C			60.8	0.97	E			41.6	0.77	D		
	EB-R	13.8	0.16	B			9.8	0.18	A			14.4	0.21	B			13.7	0.24	B		
	WB-L	40.3	0.82	D			25.6	0.48	C			57.8	0.93	E			17.6	0.69	B		
	WB-T	64.3	0.91	E			43.2	0.58	D			60.5	0.87	E			42.6	0.56	D		
	WB-R	12.2	0.09	B			9.6	0.07	A			0.0	0.03	A			11.5	0.08	B		
2029 Build **WITH COMPLETE STREETS RECOMMENDATIONS (OPTION 4)**	NB-L	72.0	0.96	E	58.3	E	65.4	0.84	E	33.6	C	123.4	1.08	F	51.7	D	81.6	0.94	F	43.8	D
	NB-TR	74.9	0.98	E			47.2	0.55	D			69.3	0.86	E			56.2	0.73	E		
	SB-L	94.2	0.94	F			46.5	0.44	D			71.4	0.91	E			52.1	0.52	D		
	SB-TR	56.3	0.62	E			73.7	0.78	E			69.9	0.90	E			73.2	0.78	E		
	EB-L	95.1	1.01	F			19.1	0.48	B			44.9	0.65	D			16.0	0.35	B		
	EB-T	63.2	1.00	E			20.1	0.68	C			49.2	1.03	D			29.1	0.79	C		
	EB-R	19.8	0.14	B			6.1	0.17	A			9.5	0.21	A			9.7	0.23	A		
	WB-L	111.3	1.03	F			31.4	0.51	C			112.5	1.03	F			51.3	0.68	D		
	WB-T	29.3	0.98	C			24.5	0.60	C			17.7	0.91	B			42.2	0.57	D		
	WB-R	0.1	0.10	A			0.2	0.05	A			0.0	0.03	A			4.7	0.08	A		

SYNCHRO LEVEL OF SERVICE SUMMARY FOR THE SIGNALIZED INTERSECTION AT
NYS 107 & WEST OLD COUNTRY ROAD

Condition	Mvmnt.	AM Peak Hour					Midday Peak Hour					PM Peak Hour					Midday Saturday Peak Hour				
		Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS
2019 Existing Condition	NB-L	192.3	1.27	F	65.9	E	144.1	1.16	F	57.4	E	134.1	1.11	F	78.1	E	232.7	1.38	F	80.2	F
	NB-T	113.5	1.08	F			76.0	0.90	E			130.2	1.13	F			113.4	1.08	F		
	NB-R	36.9	0.12	D			39.9	0.28	D			39.8	0.26	D			43.5	0.39	D		
	SB-L	106.6	1.00	F			176.2	1.23	F			108.1	1.01	F			94.0	0.95	F		
	SB-T	91.6	0.99	F			67.4	0.79	E			174.2	1.25	F			147.8	1.18	F		
	SB-R	38.0	0.22	D			41.2	0.29	D			40.3	0.28	D			42.3	0.32	D		
	EB-L	33.0	0.77	C			15.2	0.38	B			28.9	0.64	C			13.4	0.38	B		
	EB-T	33.6	0.70	C			31.8	0.53	C			29.4	0.71	C			30.8	0.57	C		
	EB-R	18.4	0.38	B			31.0	0.45	C			19.0	0.47	B			25.3	0.38	C		
	WB-L	29.4	0.62	C			23.3	0.51	C			31.1	0.64	C			22.8	0.49	C		
	WB-T	42.5	0.77	D			31.2	0.47	C			41.9	0.79	D			31.1	0.48	C		
	WB-R	17.3	0.21	B			15.7	0.19	B			16.3	0.21	B			15.1	0.16	B		
2029 No Build **WITH DRI TRAFFIC**	NB-L	123.0	1.08	F	76.9	E	55.0	0.85	D	46.5	D	106.6	1.01	F	74.8	E	102.0	1.01	F	56.4	E
	NB-T	83.7	0.99	F			68.8	0.87	E			79.2	0.98	E			58.2	0.86	E		
	NB-R	30.9	0.11	C			35.2	0.26	D			33.6	0.23	C			30.9	0.30	C		
	SB-L	115.8	1.04	F			72.8	0.89	E			105.9	1.01	F			82.1	0.91	F		
	SB-T	97.0	1.03	F			59.7	0.74	E			99.7	1.07	F			78.0	0.99	E		
	SB-R	33.3	0.21	C			35.8	0.26	D			35.2	0.25	D			32.3	0.26	C		
	EB-L	110.7	1.08	F			29.8	0.57	C			96.0	1.00	F			53.8	0.72	D		
	EB-T	59.1	0.88	E			32.1	0.76	C			63.1	0.94	E			37.1	0.91	D		
	EB-R	17.5	0.43	B			12.5	0.52	B			22.7	0.56	C			13.3	0.47	B		
	WB-L	77.0	0.86	E			50.2	0.76	D			125.9	1.05	F			94.0	0.94	F		
	WB-T	79.0	1.01	E			47.6	0.67	D			75.9	1.02	E			54.0	0.76	D		
	WB-R	23.8	0.27	C			19.4	0.23	B			20.7	0.28	C			24.8	0.26	C		
2029 Build **WITH DRI RECOMMENDATIONS (OPTION 1)**	NB-L	220.0	1.34	F	100.0	F	233.0	1.38	F	70.0	E	153.4	1.17	F	136.5	F	266.7	1.47	F	106.9	F
	NB-T	167.9	1.24	F			92.2	0.99	F			196.7	1.31	F			187.2	1.29	F		
	NB-R	36.6	0.13	D			39.8	0.29	D			39.6	0.28	D			43.6	0.41	D		
	SB-L	131.6	1.09	F			221.3	1.35	F			150.7	1.16	F			145.7	1.14	F		
	SB-T	200.7	1.32	F			77.4	0.91	E			367.5	1.73	F			194.7	1.31	F		
	SB-R	36.9	0.22	D			41.1	0.30	D			40.4	29.00	D			42.4	0.33	D		
	EB-L	80.7	1.02	F			16.6	0.45	B			45.4	0.73	D			13.5	0.44	B		
	EB-T	35.8	0.75	D			34.0	0.59	C			32.3	0.75	C			31.7	0.63	C		
	EB-R	18.6	0.40	B			30.8	0.48	C			21.4	0.50	C			23.7	0.41	C		
	WB-L	38.5	0.71	D			26.6	0.59	C			38.2	0.70	D			25.9	0.57	C		
	WB-T	49.5	0.86	D			33.0	0.53	C			46.2	0.86	D			32.5	0.53	C		
	WB-R	18.7	0.24	B			16.3	0.22	B			17.1	0.25	B			15.9	0.21	B		
2029 Build **WITH COMPLETE STREETS RECOMMENDATIONS (OPTION 4)**	NB-L	123.0	1.08	F	76.9	E	55.0	0.85	D	46.8	D	106.6	1.01	F	74.7	E	102.0	1.01	F	56.7	E
	NB-T	83.7	0.99	F			68.8	0.87	E			79.2	0.98	E			58.2	0.86	E		
	NB-R	30.9	0.11	C			35.2	0.26	D			33.6	0.23	C			30.9	0.30	C		
	SB-L	115.8	1.04	F			72.8	0.89	E			105.9	1.01	F			82.1	0.91	F		
	SB-T	97.0	1.03	F			59.7	0.74	E			99.7	1.07	F			78.0	0.99	E		
	SB-R	33.3	0.21	C			35.8	0.26	D			35.2	0.25	D			32.3	0.26	C		
	EB-L	110.7	1.08	F			30.2	0.57	C			94.9	1.00	F			51.8	0.72	D		
	EB-T	59.0	0.88	E			33.5	0.76	C			63.0	0.94	E			39.0	0.91	D		
	EB-R	17.4	0.43	B			13.4	0.52	B			22.8	0.56	C			14.6	0.47	B		
	WB-L	77.0	0.86	E			50.2	0.76	D			125.9	1.05	F			94.0	0.94	F		
	WB-T	79.0	1.01	E			47.6	0.67	D			75.9	1.02	E			54.0	0.76	D		
	WB-R	23.8	0.27	C			19.4	0.23	B			20.7	0.28	C			24.8	0.26	C		

SYNCHRO LEVEL OF SERVICE SUMMARY FOR THE PROPOSED SIGNALIZED INTERSECTION AT JOHN STREET & MARION PLACE

Condition	Mvmnt.	AM Peak Hour					Midday Peak Hour					PM Peak Hour					Midday Saturday Peak Hour				
		Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS
2029 Build **WITH DRI RECOMMENDATIONS (OPTION 1)**	NB-L	40.3	0.17	D	3.3	A	41.1	0.23	D	4.1	A	41.7	0.31	D	5.7	A	41.1	0.23	D	4.1	A
	NB-R	15.7	0.23	B			16.0	0.19	B			30.8	0.38	C			15.4	0.21	B		
	EB-T	2.3	0.26	A			2.8	0.23	A			4.5	0.50	A			2.8	0.24	A		
	WB-T	2.4	0.27	A			2.8	0.24	A			3.3	0.31	A			2.8	0.24	A		

SYNCHRO LEVEL OF SERVICE SUMMARY FOR THE UNSIGNALIZED INTERSECTION AT
WEST BARCLAY & WYCKOFF STREET

Condition	Mvmnt.	AM Peak Hour					Midday Peak Hour					PM Peak Hour					Midday Saturday Peak Hour				
		Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS	Mvmnt. Delay (sec/veh)	Mvmnt. V/C Ratio	Mvmnt. LOS	Inter. Delay (sec/veh)	Inter. LOS
2029 Build **WITH DRI RECOMMENDATIONS (OPTION 1)**	NB-L	15.6	0.18	C	6.3	A	9.8	0.08	A	5.0	A	12.7	0.24	B	5.2	A	9.5	0.06	A	4.9	A
	NB-R	15.6	0.18	C			9.8	0.08	A			12.7	0.24	B			9.5	0.06	A		
	SB-L	27.0	0.11	D			11.0	0.01	B			16.0	0.07	C			11.3	0.03	B		
	SB-T	21.0	0.11	C			10.2	0.02	B			13.6	0.07	B			10.5	0.03	B		
	SB-R	15.0	0.08	B			9.3	0.02	A			11.2	0.06	B			9.6	0.02	A		
	EB-T	0.0	0.06	A			0.0	0.03	A			0.0	0.11	A			0.0	0.03	A		
	EB-R	0.0	0.06	A			0.0	0.03	A			0.0	0.11	A			0.0	0.03	A		
	WB-L	1.9	0.20	A			0.4	0.05	A			0.6	0.07	A			0.4	0.06	A		
	WB-T	5.0	0.20	A			3.8	0.05	A			3.1	0.07	A			4.4	0.06	A		