



Capital District Transportation Committee (CDTC)/ Capital District Regional Planning Commission (CDRPC) Technical Assistance Program

DRAFT TECHNICAL MEMORANDUM

Town of Clifton Park

Western Clifton Park Development & Conservation Transportation Trends Analysis (2005-2020)

November 2020

Background

The primary purpose of the Western Clifton Park Development & Conservation Transportation Trends Analysis (2005-2020) was to update the transportation components of the Western Clifton Park Land Conservation Plan and & Draft Generic Environmental Impact Statement (GEIS), Town of Clifton Park (2005), hereafter referred to "the GEIS". Data was collected to update the tables and figures found in Section H, Traffic, of the GEIS. This effort is not intended to be a complete replacement of Section H, Traffic, but rather an update of its key components using available data and resources.

The figures below are an update, or provide a basis of comparison, to key components of Section H, Traffic, of the GEIS. Below each figure is a narrative of the key findings from the analysis. The headings are ordered in the same manner as the section headings from Section H, Traffic. In all tables and figures, data shown in peach color are data or assumptions from the GEIS document.

Daily Traffic Volumes

Updated Table III-H-1: Daily Traffic Volumes							
					Per Year		
				Percent	Percent		
		GEIS	Current	Change	Change		
Road		AADT	AADT	(2005-	(2005-	Current AADT	
Authority	Roadway	(2005)*	(2016)**	2016)	2016)	Limits	
New York State	NY 146	16,000	16,761	4.8%	0.4%	Blue Barns Rd to NY 146A	
New York State	NY 146A	8,000	9,974	24.7%	2.2%	NY 146 to Tanner Rd	
New York State	NY 914V/Glenridge Road	9,500	9,869	3.9%	0.4%	Schenectady Co. Line to NY 146	
Saratoga County	Blue Barns Road (County Route 110)	8,700	7,491	-13.9%	-1.3%	NY 146 to Ashdown Rd	
Saratoga County	Grooms Road (County Route 91)	6,000	6,242	4.0%	0.4%	Riverview Rd to Droms Rd	

Updated Table III-H-1: Daily Traffic Volumes							
Road Authority	Roadway	GEIS AADT (2005)*	Current AADT (2016)**	Percent Change (2005- 2016)	Per Year Percent Change (2005- 2016)	Current AADT Limits	
Saratoga County	Main Street/Longkill Road (County Route 82)	4,500	3,853	-14.4%	-1.3%	NY 146A to Carlton Rd	
Saratoga County	Schauber Road (County Route 80)	4,000	3,307	-17.3%	-1.6%	NY 146A to Hubbs Rd	
Clifton Park	Local Town Roads	< 2,500					
Clifton Park	Ashdown Road	n/a	5,845			Blue Barns Rd to Old Schauber Rd	
Clifton Park	Miller Road	n/a	1,014			Clifton Park Center Rd to NY 146	
Clifton Park	Riverview Road	n/a	937			Grooms Rd to Town of Halfmoon Line	
Clifton Park	Waite Road	n/a	449			Miller Rd to NY 146A	
Clifton Park	Bradt Rd, Hubbs Rd, MacElroy Rd, Nott Rd, Sugar Hill Rd, Van Vranken Rd	n/a	unknown			n/a	

^{*}Source: Western Clifton Park Land Conservation Plan & Draft Generic Environmental Impact Statement (2005)

Updated Table III-H-1 compares 2005 daily traffic volumes from the Western Clifton Park Land Conservation Plan & GEIS with the latest available average annual daily traffic (AADT) estimates from NYSDOT. NY 146 and NY 914V experienced modest growth, 0.4%/year. This is consistent with observed slow growth in regional travel, which was approximately 0.3% to 0.8% per year, during the same time. NY 146A experienced faster growth, at 2.2% per year. Most Saratoga County-owned roadways experienced slight declines in daily traffic. For local Clifton Park roadways, there were no AADT data available for 2005; current volumes are provided for reference.

Operational Analysis

Updated Table III-H-2: Study Area Intersections & Traffic Control						
	Traffic Control					
Intersection	2005	Current				
Schauber Road (CR80) and Hubbs Road	Stop Sign	Stop Sign				
Schauber Road (CR80) and Ashdown Road	Stop Sign	Stop Sign				
Schauber Road (CR80) and NYS Route 146A	Stop Sign	Stop Sign				
Ashdown Road and NYS Route 146A	Traffic Signal	Traffic Signal				

¹ Based on regional Vehicle Miles Traveled (VMT) estimates provided by NYSDOT for 2007-2019

^{**} Source: NYSDOT Traffic Data Viewer accessed via https://gis.dot.ny.gov/html5viewer/?viewer=tdv on 8/4/2020, latest forecast year available (2016)

Updated Table III-H-2: Study Area Intersections & Traffic Control						
	Traffic Control					
Intersection	2005	Current				
Longkill Road (CR82) and Ushers Road	Stop Sign	Traffic Signal				
Main Street (CR82), Hatlee Road and MacElroy Road	Stop Sign	All-Way Stop Sign				
Main Street (CR82) and NYS Route 146A	Stop Sign	Stop Sign				
MacElroy Road and NYS Route 146A	Stop Sign	Stop Sign				
NYS Route 146A and Kinns Road (CR109)	Stop Sign	Stop Sign				
NYS Route 146/NYS Route 146A/Vischer Ferry Road	Traffic Signal	Roundabout				
NYS Route 146, Tanner Road and Miller Road ²	Stop Sign	Stop Sign				
NYS Route 146 and Waite Road	Stop Sign	Stop Sign				
NYS Route 146 and Nott Road	Stop Sign	Stop Sign				
NYS Route 146, Glenridge Road and Blue Barns Road	Traffic Signal	Traffic Signal				
NYS Route 914 (Glenridge Road) and Bradt Road	Stop Sign	Stop Sign				
Blue Barns Road (CR110), Bradt Road and Ashdown Road	Traffic Signal	Traffic Signal				
NYS Route 146 and Riverview Road (CR91)	Traffic Signal	Traffic Signal				
Riverview Road and Grooms Road (CR91)	Stop Sign	Stop Sign				
Grooms Road (CR91) and Droms Road	Stop Sign	Stop Sign				
Grooms Road (CR91), Miller Road and Sugar Hill Road	Stop Sign	Stop Sign				
Grooms Road (CR91) and Vischer Ferry Road (CR90) ³	4-Way Stop Sign	All-Way Stop Sign				
Riverview Road and Sugar Hill Road	Stop Sign	Stop Sign				
Vischer Ferry Road (CR90) and Crescent Road (CR92)	Stop Sign	Stop Sign				
Crescent Road (CR92) and Riverview Road	Yield Sign	Stop Sign				

Updated Table III-H-2 displays the traffic control employed at study area intersections from the Western Clifton Park Land Conservation Plan & GEIS. Locations where new or revised traffic control measures were installed since 2005 are shown in **bold typeface** on the table. Since 2005, a traffic signal was installed at Longkill Rd/CR 82 and Ushers Rd; a stop sign was installed at Crescent Rd/CR 92 and Riverview Rd; and an all-way stop was deployed at Main St/CR 82, Hatlee Rd, and MacElroy Rd. The most prominent new traffic control device in the study area is the construction of a roundabout at NY 146A, and Vischer Ferry Rd.

No new peak hour turning movement count data was collected for this Technical Assistance effort; likewise, operational analyses were not updated including:

- Table III-H-3 Western Clifton Park 2004 AM Operational Analyses: Signalized Intersections
- Table III-H-4 Western Clifton Park 2004 AM Operational Analyses: Stop-Controlled Intersections

² Intersection improvements included as part of TIP# SA326 (Post 2024)

³ A traffic signal is planned to be installed at this location by Saratoga County in 2021

- Table III-H-5 Western Clifton Park 2004 PM Operational Analyses: Signalized Intersections
- Table III-H-6 Western Clifton Park 2004 PM Operational Analyses: Stop-Controlled Intersections

Planned and Completed Transportation Improvements

Figure 1: Transportation Improvement Program (TIP) Projects in the Western Clifton Park GEIS Study Area

TIP	Sponsor	Project Type	Description					
Number	Oponiso :		2000					
Completed 2005-2020								
SA108	NYSDOT	Bridge Replacement	Balltown Road, from Riverview Road to Aqueduct Road: Corridor Improvements (including Rexford Bridge)					
SA109	NYSDOT	Roadway Reconstruction	Glenridge Road, from Maple Avenue to NY 146: Reconstruction					
SA238	Town of Clifton Park	Bicycle and Pedestrian Improvement	Erie Canal Towpath Community Connector					
SA304	NYSDOT	Safety Improvement	NY 146/NY 146A/Vischer Ferry Rd Intersection: Safety Improvements (Roundabout)					
SA323	Town of Clifton Park	Bicycle and Pedestrian Improvement	NY 146 and NY 146A Bicycle & Pedestrian and Bicycle Access Improvements					
		On the Cur	rent (2019-2024) TIP					
SA297	Saratoga County	Bridge Replacement	Ashdown Rd Bridge over the D&H RR: Bridge Replacement					
SA308	NYSDOT	Safety Improvement	Ashdown Rd Crossing of Pan Am Southern Railroad: Signal Upgrade and Pavement Repair					
SA309	NYSDOT	Safety Improvement	CR 110 (Blue Barns Rd) Crossing of Pan Am Southern Railroad: Signal Upgrade and Pavement Repair					
	On the Post-2024 TIP							
SA326	A326 Town of Traffic Operations Improvement		NY 146, Miller Rd, and Tanner Rd: Intersection Improvements; includes the installation of a multi-use trail on the north side of NY 146 from Tanner Rd to Vista Ct.					

There have been several major Transportation Improvement Program (TIP) projects completed in the study area since 2005, including the construction of the new Rexford Bridge and a roundabout at NY 146, NY 146A, and Vischer Ferry Rd. There are two safety improvement projects, one bridge replacement, and bicycle and pedestrian improvement funded on the current TIP. There is one project on the Post-2024 TIP (unfunded), intersection improvements at NY 146, Miller Rd, and Tanner Rd.

There is one other non-TIP funded intersection project in the study area, a new signal at Grooms Road (CR91) and Vischer Ferry Road (CR90). Installation of the new signal is being funded by Saratoga County and is scheduled for 2021.

Potential Impacts and Mitigation

Figure 2: Comp	igure 2: Comparison of Estimated Trip Generation with Actual Trip Generation										
		Tri	ips		Tri	ips	Retail	Tri	ps	AM	PM
	Dwelling Units ITE Land Use 210	AM	PM Peak Hour	Office (SF) ITE Land Use 710	AM Peak Hour	PM Peak Hour	(SF) ITE Land Use 820	AM Peak Hour	PM Peak Hour	Peak Hour Total Trips	Peak Hour Total Trips
Land Conservation Zoning Alternative*	2,500	1,825	2,301	714,446	1,279	1,353	124,360	287	1,077	3,391	4,731
Actual New Development (2005-2020)**	476	376	487	27,866	106	36	2,658	2	10	484	533
Difference: Estimated to Actual	-2,024	-1,449	-1,814	-686,580	-1,173	-1,317	-121,702	-285	-1,067	-2,907	-4,198
Actual as a Percent (%) of Estimated	19%	21%	21%	4%	8%	3%	2%	1%	1%	14%	11%

^{*}Source: Western Clifton Park Land Conservation and GEIS, 2005, Table III-H-9

Figure 2: Comparison of Estimated Trip Generation with Actual Trip Generation is intended to be compared with Table III-H-9 in the Western Clifton Park Land Conservation and GEIS (2005). GEIS Table III-H-9 summarizes the estimated build-out trip generation for the Land Conservation Zoning alternative. The estimated trip generation is compared with the trip generation from the actual new development that has occurred in the study area since 2005. New housing development data was provided by CDRPC; new commercial and retail data was provided by the Town of Clifton Park. Trip generation was calculated using the ITE Trip Generation Manual, 10th Edition. For comparison purposes, the same ITE Land Use Codes from the GEIS were utilized for this effort.

The table's bottom line displays the percent of the total anticipated development magnitude or trip generation since 2005. An estimated 21% of the AM and PM peak hour trips associated with new housing units in the study area have been added to the roadways since 2005. Only a small portion of the anticipated commercial square footage (4%) and office square footage (2%) has been developed. Likewise, the total number of new trips from new commercial and office development added to the roadways during the AM and PM peak hours is very low. In total, 14% of the anticipated AM peak hour trips, and 11% of the PM peak hour trips, allotted for in the GEIS can be associated with new development in the study area since 2005.

A complete update of Table III-H-9 from the Western Clifton Park Land Conservation and GEIS and a full analysis of the new development data have been included as part of the package transmitted with this technical memorandum.

^{**}Developed using ITE Trip Generation Manual, 10th Edition, and data provided by CDRPC and the Town of Clifton Park

PM Peak Hour Traffic

Updated Table III-H-11: PM Peak Hour Traffic Demand (Summarized Sample)								
		Base Ye	ear (2004)	Most Recent Available PM Peak Hour Co (2014-2018)**				
								Peak
		Two-	Peak		Two-	Two-Way		Direction
Roadway	Limits	Way (vph)	Direction (vph)	Year	Way (vph)	Per Year % Change	Direction (vph)	Per Year % Change
NY 146	NY 146A to Miller Rd	1,490	750		1,623	0.6%		0.9%
NY 146	Miller Rd to Waite Rd	1,520	785	2018	1,698	0.8%	923	1.3%
NY 146	Waite Rd to Balltown Rd	1,455	820	2018	1,670		923	0.9%
NY 146A	NY 146 to Kinns Rd	855	500	2014	1,004	1.7%	575	1.5%
NY 146A	Ashdown Rd to Town Line	515	285	2015	512	-0.1%	305	0.6%
Waite Rd	NY 146A to NY 146	75	45	2015	47	-3.4%	24	-4.2%
Miller Rd	NY 146 to Waite Rd	95	50	2018	90	-0.4%	53	0.4%
Tanner Rd	NY 146 to NY 146A	85	60	2018	117	2.7%	90	3.6%
Blue Barns Rd	NY 146 to Ashdown Rd	795	500	2018	1,028	2.1%	660	2.3%
Riverview Rd	NY 146 to Grooms Rd	700	465	2018	1,200	5.1%	793	5.0%
Riverview Rd	Grooms Rd to Crescent Rd	140	80	2014	91	-3.5%	51	-3.6%

^{*}Source: Western Clifton Park Land Conservation Plan & Draft GEIS (2005)

Updated Table III-H-11 compares 'base year' (2004) PM peak hour traffic volumes from the Western Clifton Park Land Conservation Plan & GEIS with the most recent available PM peak hour counts. PM peak hour traffic data was collected from short count data available from NYSDOT, and recent local traffic impacts studies provided by the Town of Clifton Park. Roadways where no updated data were available are excluded from this summary table.

On NY 146, two-way peak hour traffic has grown 0.6% to 1.1% per year from 2004 to 2018. Traffic in the peak direction has grown 0.9% to 1.3% per year. On NY 146A, since 2004 traffic in the peak direction has grown from 0.6% to 1.5% per year. Peak direction traffic volumes have grown at a faster rate on Blue Barns Rd (2.3%/year), Tanner Rd (3.6%/year), and Riverview Rd near NY 146 (5.0%/year). Some local roadways show traffic declines; however, this data may be less reliable on roadways with very low traffic volumes.

Overall, the PM peak hour two-way and peak direction per year percent changes on most State and County owned roadways have experienced slow growth, which is consistent with observed slow growth in regional travel, which was approximately 0.3% to 0.8% per year, during the same time. PM peak hour traffic on some County and local roadways have grown at a faster rate than overall regional travel during the same period.

^{**}Sources: NYSDOT Traffic Data Viewer accessed via http://gis.dot.ny.gov/tdv on 8/4/20; Traffic Impact Evaluation, Sunshine Landscaping (2018); Traffic Analysis, Edison Club (2018)

The table above represents a summary of the PM peak hour traffic volume data collected and analyzed for this effort. A complete update of Table III-H-11 from the Western Clifton Park Land Conservation and GEIS, including the full analysis of PM peak hour traffic volumes, has been included as part of the package transmitted with this technical memorandum.

Transportation System Operations

In the 2005 GEIS, CDTC's capacity analysis procedures were used to identify the performance of the roadway system in the build-out condition and to determine the general sufficiency of the system to accommodate the estimated traffic increases. These procedures were based on the traffic engineering standards of the Highway Capacity Manual, published by the Transportation Research Board, but also considered local conditions.

The 2005 GEIS defined values for the maximum acceptable service flow volume and the maximum capacity for peak directional flow on arterials and collector roads. These values are shown in Table III-H-12, below. For comparison purposes, these traffic volume thresholds were considered applicable for this analysis.

Table III-H-12: CDTC Mid-Block Service Volume Thresholds								
Functional Classification:								
Arterial and Collector Roadways	Flow Volume	Maximum Capacity						
Single Lane (each direction)	1,000 vph	1,300 vph						
Two Lane (each direction)	2,800 vph	3,500 vph						

The maximum acceptable service flow was not defined in the 2005 GEIS; however, they are consistent with maintaining a traffic level-of-service D, making this a conservative PM peak hour analysis. Level-of-service is a term used to qualitatively describe the operating conditions of a roadway based on factors such as speed, travel time, maneuverability, delay, and safety. The level of service of a facility is designated with a letter, A to F, with A representing the best operating conditions and F the worst.

The latest available PM peak hour, peak direction, volumes from Updated Table III-H-11 were compared with the single lane maximum acceptable service flow volume in Table III-H-12 (1,000 vph). The comparison indicates that all study area roadways, where current PM peak hour volumes were available, currently operate within acceptable levels of service.

In general, CDTC's New Visions 2050, the region's long-range transportation plan, discourages the wholesale widening of roadways; rather focusing on corridor and access management, and implementation of Intelligent Transportation System (ITS) and Travel Demand Management (TDM) improvements. ITS improvements include signal improvements, signal coordination, and advanced traffic management improvements. TDM refers to efforts to reduce auto travel and congestion by improving transit access, bicycle and pedestrian access, providing opportunities for carpooling and telecommuting, and other strategies.

Regional Trip Distribution from CDTC STEP Model

CDTC maintains a travel demand model for the four-county MPO region, which is called the STEP Model (Systematic Transportation Planning and Evaluation Model). The STEP Model is based on population, housing, and employment data and estimated traffic volumes based on demand. These estimated volumes are compared against actual traffic counts to validate the model. Each trip in the model simulation chooses a path based on the best travel time available, and as congestion increases, trips divert to alternate routes if the alternate route travel time is less. The model simulates the PM peak hour, the typical peak hour for the Capital Region. CDTC STEP Model utilizes Visum software developed by the PTV Group. The model includes 1,000 traffic analysis zones that cover the entire four counties of Albany, Rensselaer, Saratoga, and Schenectady. The network includes all federal aid highways in the four counties, as well as selected streets not on the federal aid system. The network consists of over 12,000 directional links and over 4,700 nodes.

CDTC developed a sub-area model for the Western Clifton Park GEIS study area using CDTC's STEP model. PM peak hour traffic volume data collected for this effort was used as the basis for calibration of the sub-area model. CDTC used the STEP model to help better understand the travel patterns of the users of the following roadway segments:

- NY 146 westbound between Nott Rd and Blue Barns Rd (shown on Figure 3)
- NY 146 eastbound between Blue Barns Rd and Nott Rd (shown on Figure 4)
- NY 146A westbound between Waite Rd and Ashdown Rd (shown on Figure 5)
- NY 146A eastbound between Ashdown Rd and Waite Rd (shown on Figure 6)
- NY 146A westbound between Tanner Rd and Main St (shown on Figure 7)
- NY 146A eastbound between Main St and Tanner Rd (shown on Figure 8)
- Grooms Rd

It is important to note the volumes shown are estimated modeled volumes, not actual traffic volumes; they are provided to get a sense of the order-of-magnitude of the traffic volumes, not for precise traffic planning. CDTC's STEP model is a macroscopic regional travel demand model, and does not include every local street; it is likely traffic will use all available streets to some extent.

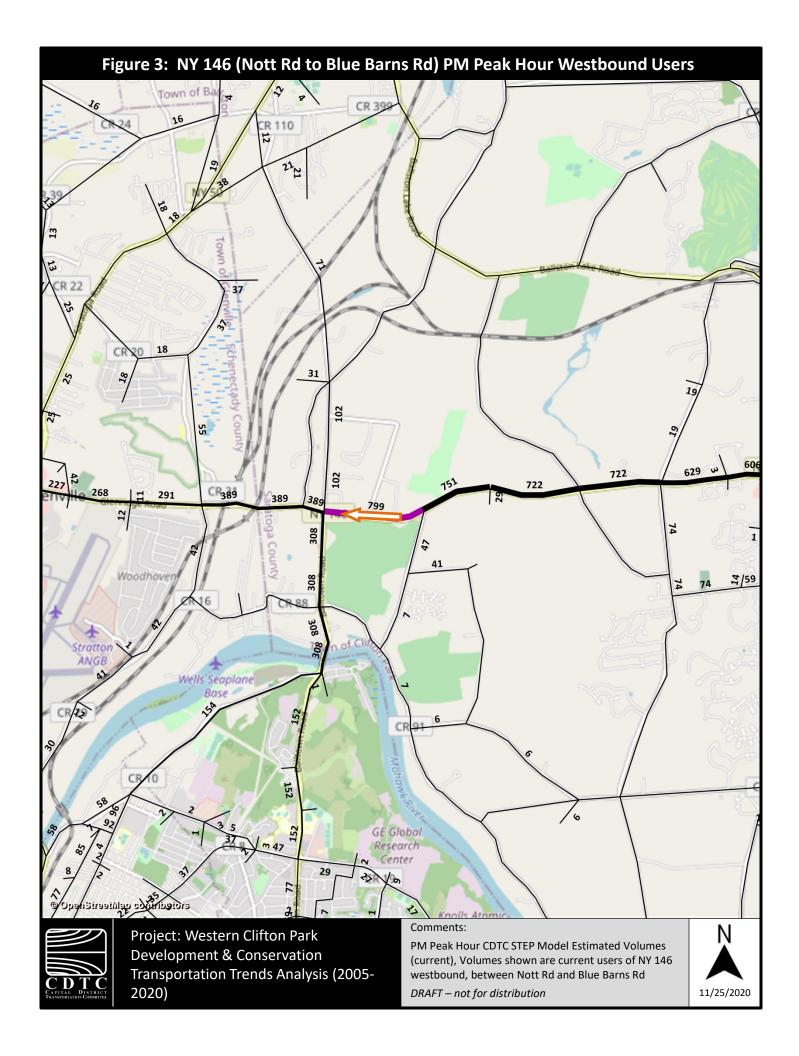


Figure 3 shows PM Peak Hour estimated volumes for only westbound traffic using NY 146, between Nott Rd and Blue Barns Rd. This gives a sense of where PM peak hour traffic using the roadway in the westbound direction is coming from and going to. Approximately 55% of NY 146 westbound PM peak hour traffic comes from other parts of Clifton Park, mostly in the eastern portion of the Town; 40% comes from the Town of Halfmoon and other points east of the Town, and the remaining +/- 5% from points south of the Town.

After passing through NY 146 westbound, approximately 50% of the traffic is destined for the Town of Glenville and other points west of the study area. Approximately 35% of the NY 146 westbound traffic is destined for the Town of Niskayuna via the Rexford Bridge and other points south of the study area, and the remaining +/- 15% is destined to points north of NY 146.



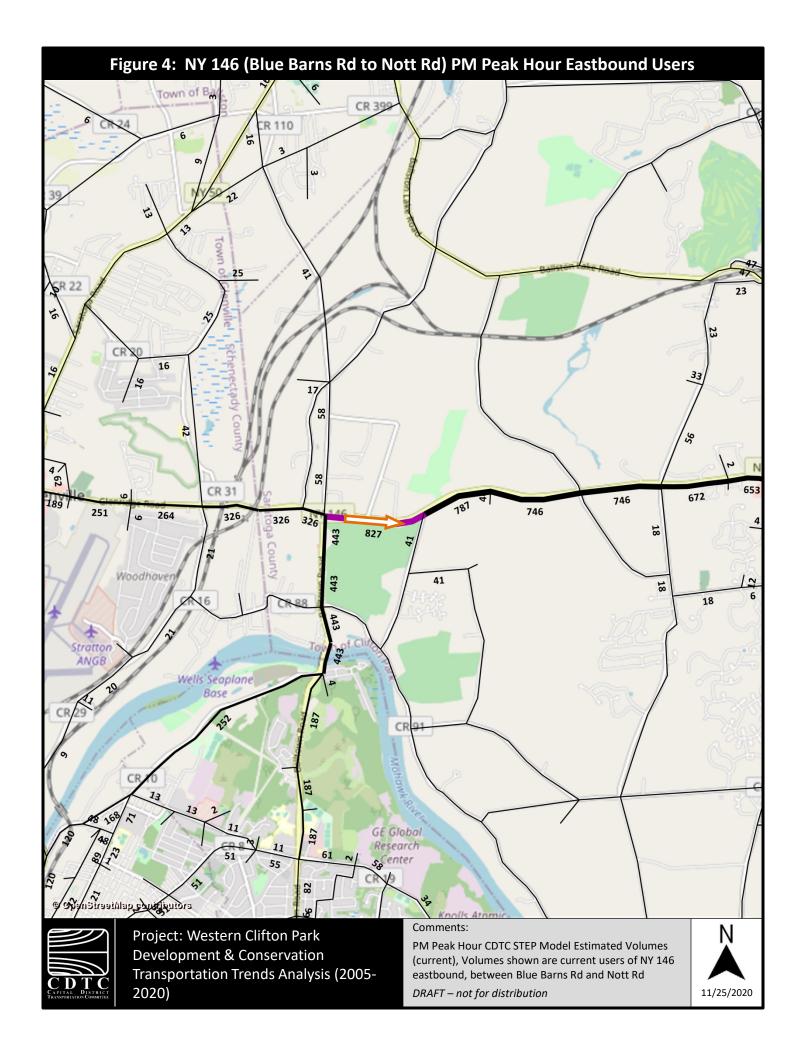


Figure 4 shows PM Peak Hour estimated volumes for only eastbound traffic using NY 146, between Blue Barns Rd and Nott Rd. This gives a sense of where PM peak hour traffic using the roadway in the eastbound direction is coming from and going to. Approximately 50% of NY 146 eastbound PM peak hour traffic comes from the Town of Niskayuna and points south of the study area; 40% comes from the Town of Glenville and other points west of the Town, and the remaining +/- 10% from points north of NY 146 or near the roadway segment.

After passing through NY 146 eastbound, approximately 55% of the traffic is destined for other parts of the Town of Clifton Park, mostly in the eastern portion of the Town. Approximately 30% of the NY 146 eastbound traffic is destined for the Town of Halfmoon and other points east of the study area, 10% is destined for I-87 southbound, and the remaining +/- 5% is destined for points north of the study area.



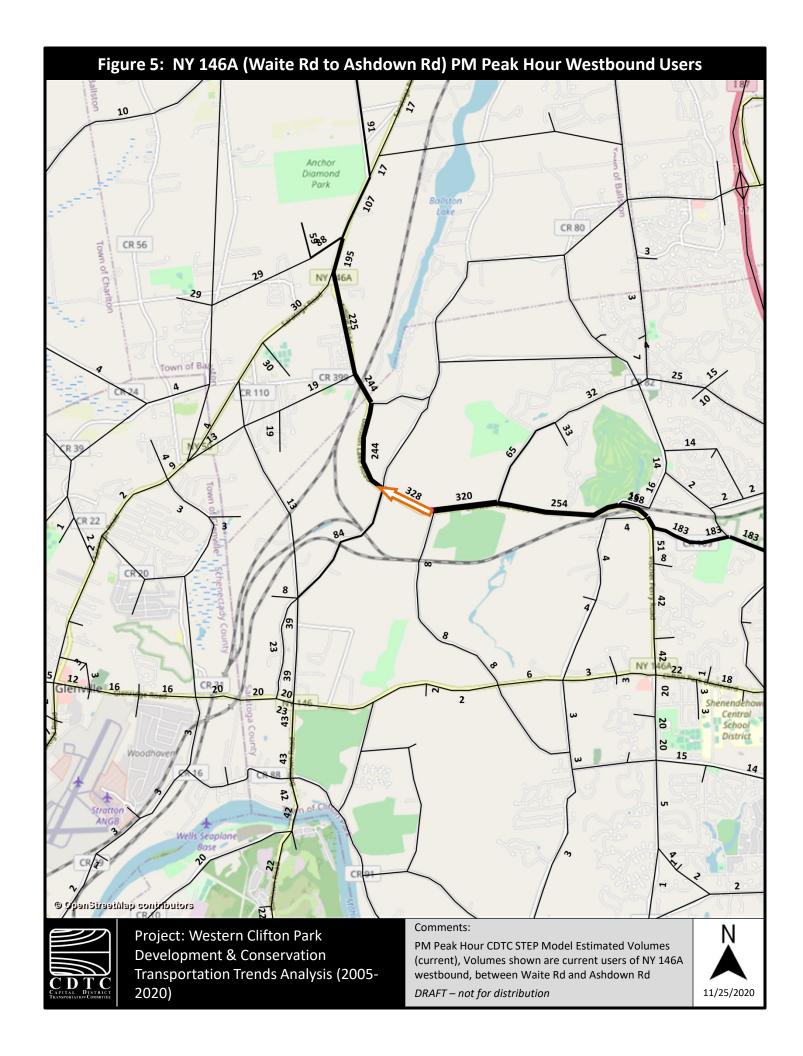


Figure 5 shows PM Peak Hour estimated volumes for only westbound traffic using NY 146A, between Waite Rd and Ashdown Rd. This gives a sense of where PM peak hour traffic using the roadway in the westbound direction is coming from and going to. Approximately 80% of NY 146A westbound PM peak hour traffic comes from other parts of Clifton Park, mostly in the eastern portion of the Town; 10% comes from the Town of Halfmoon and other points east of the Town, and the remaining +/- 10% from I-87 and points south of the Town.

After passing through NY 146A westbound, approximately 75% of the traffic is destined for the Town of Ballston and other points north/northwest of the study area. Approximately 15% of the NY 146A westbound traffic is destined for the Town of Glenville and points west of the study area, and the remaining +/-10% is destined for the Town of Niskayuna via the Rexford Bridge and other points south of the study area.



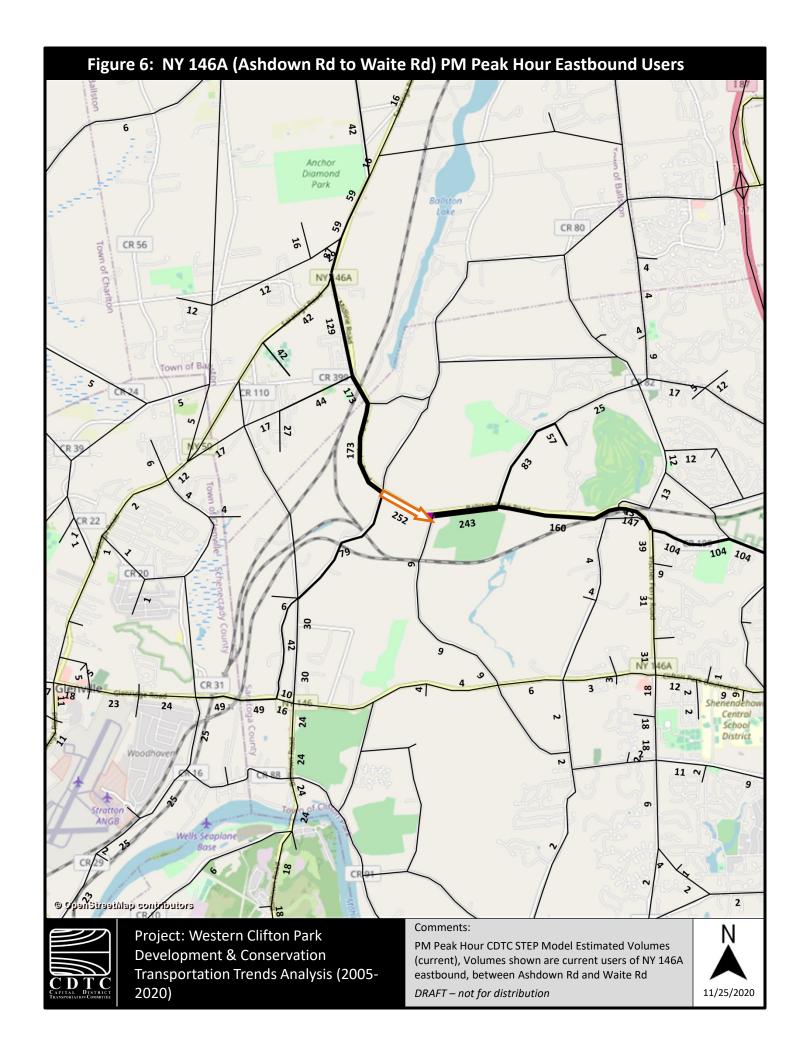


Figure 6 shows PM Peak Hour estimated volumes for only eastbound traffic using NY 146A, between Ashdown Rd and Waite Rd. This gives a sense of where PM peak hour traffic using the roadway in the eastbound direction is coming from and going to. Approximately 70% of NY 146A eastbound PM peak hour traffic comes from the Town of Ballston and points north/northwest of the study area; 20% comes from the Town of Glenville and other points west of the Town, and the remaining +/- 10% from points south of the study area.

After passing through NY 146A eastbound, approximately 75% of the traffic is destined for other parts of the Town of Clifton Park, mostly in the eastern portion of the Town. Approximately 15% of the NY 146A eastbound traffic is destined for the Town of Halfmoon and other points east of the study area, and the remaining +/- 10% is destined to I-87 southbound, and points south of the study area.



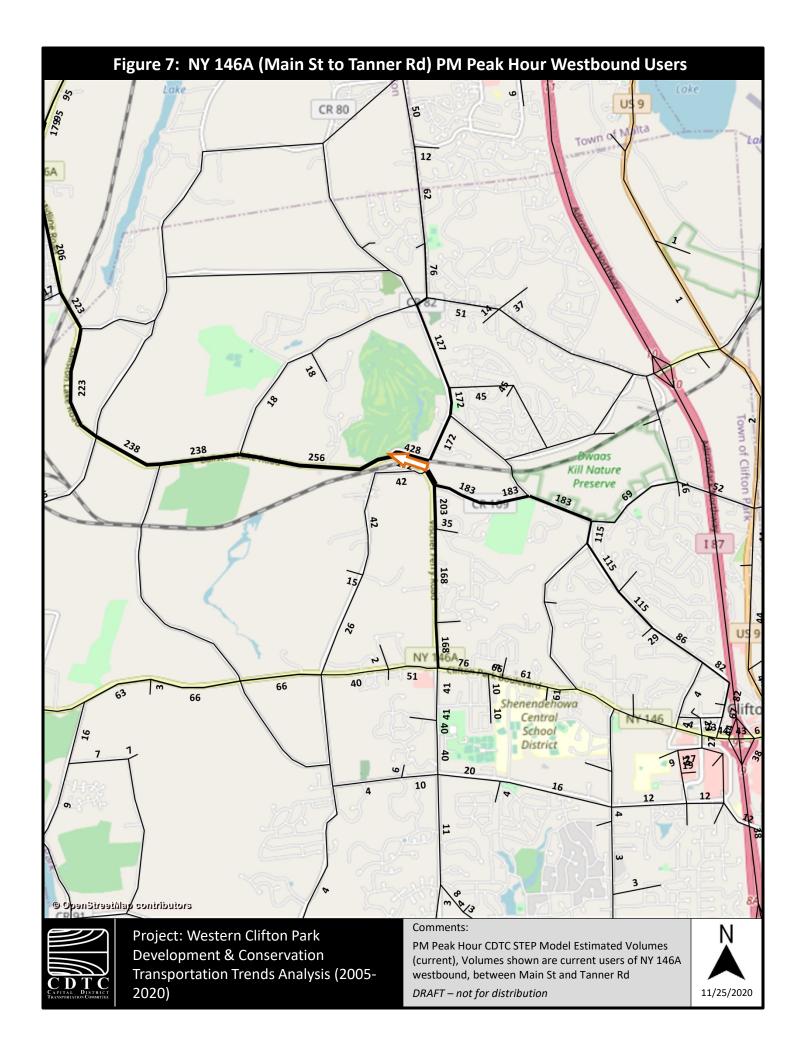


Figure 7 shows PM Peak Hour estimated volumes for only westbound traffic using NY 146A, between Main St and Tanner Rd. This gives a sense of where PM peak hour traffic using the roadway in the westbound direction is coming from and going to. Approximately 80% of NY 146A westbound PM peak hour traffic comes from other parts of Clifton Park, mostly in the eastern portion of the Town; 10% comes from the Town of Halfmoon and other points east of the Town, and the remaining +/- 10% from I-87 and points south of the Town.

After passing through NY 146A westbound, approximately 65% of the traffic is destined for the Town of Ballston and other points north/northwest of the study area. Approximately 30% of the NY 146A westbound traffic is destined for the other locations in the Town of Clifton Park, mostly in the northwest portion of the Town, and the remaining +/-5% is destined for the Town of Glenville and other points west of the study area.



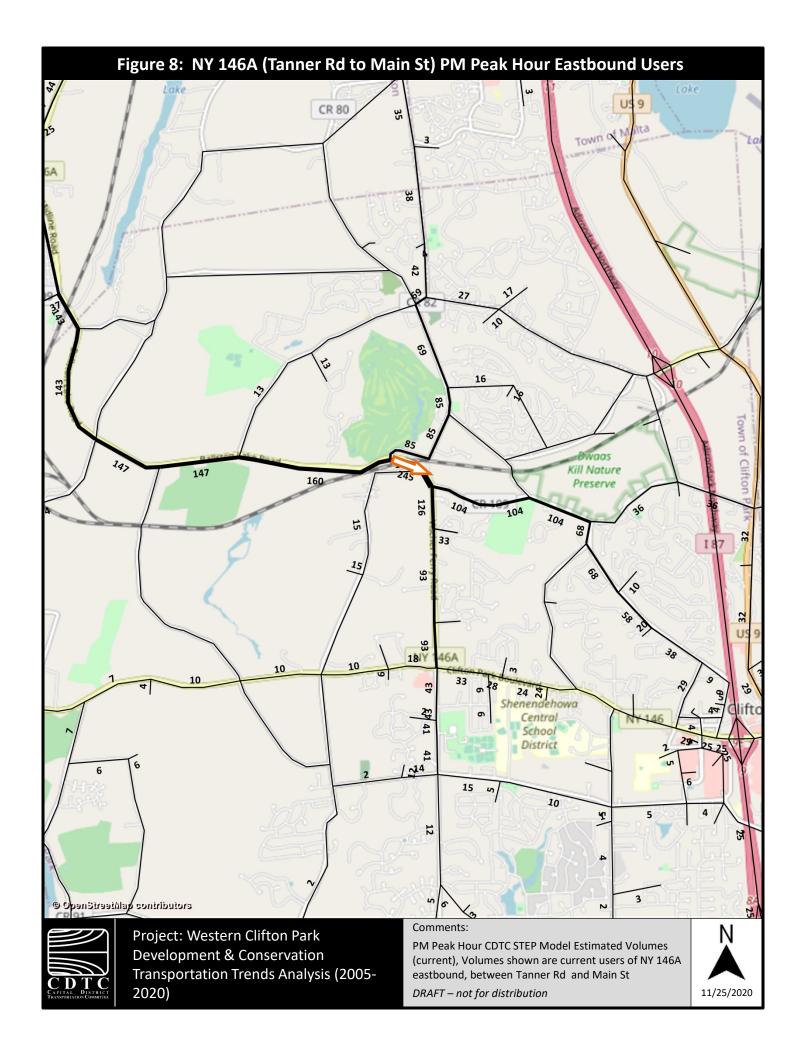


Figure 8 shows PM Peak Hour estimated volumes for only eastbound traffic using NY 146A, between Main St and Tanner Rd. This gives a sense of where PM peak hour traffic using the roadway in the eastbound direction is coming from and going to. Approximately 75% of NY 146A eastbound PM peak hour traffic comes from the Town of Ballston and points north/northwest of the study area, and the remaining +/- 25% comes from other locations in the Town of Clifton Park, mostly in the northwest portion of the Town.

After passing through NY 146A eastbound, approximately 75% of the traffic is destined for other parts of the Town of Clifton Park, mostly in the eastern portion of the Town. Approximately 15% of the NY 146A eastbound traffic is destined for the Town of Halfmoon and other points east of the study area, and the remaining +/- 10% is destined to I-87 southbound, and points south of the study area.



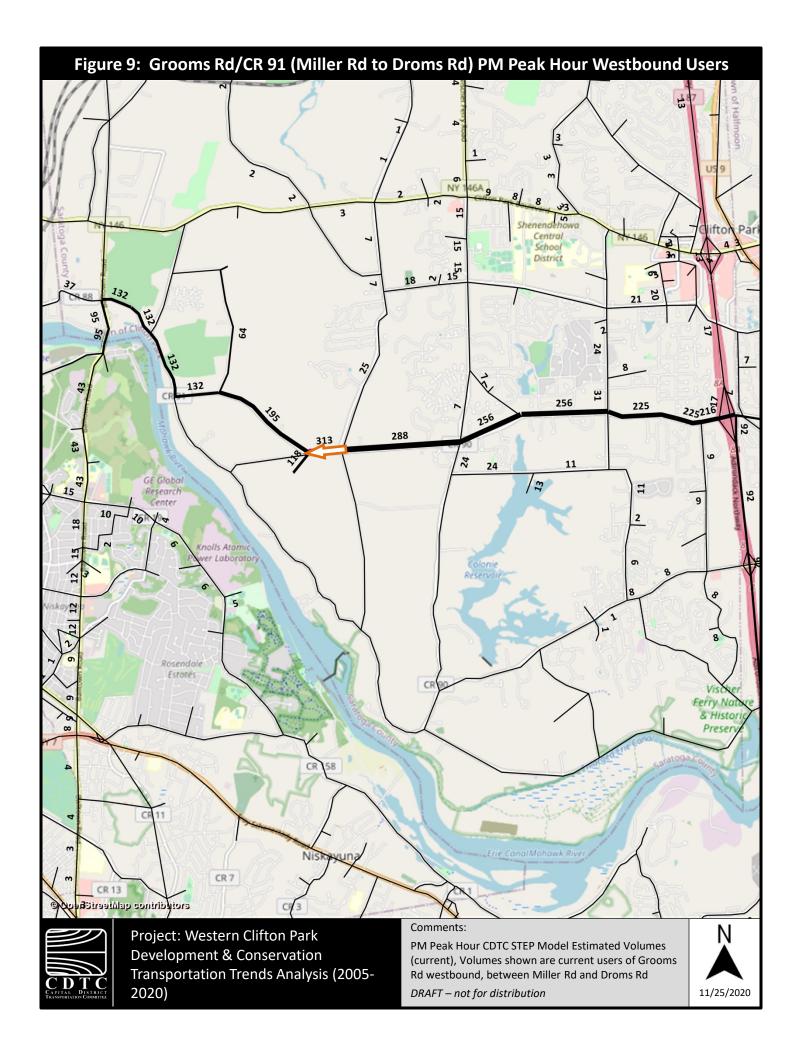
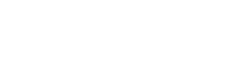


Figure 9 shows PM Peak Hour estimated volumes for only westbound traffic using Grooms Rd/CR 91, between Miller Rd and Droms Rd. This gives a sense of where PM peak hour traffic using the roadway in the westbound direction is coming from and going to. Approximately 35% of Grooms Rd westbound PM peak hour traffic comes from the Town of Halfmoon and points east of the study area, 35% from I-87, and the remaining +/- 30% from other locations in the Town of Clifton Park.

After passing through Grooms Rd/CR 91 westbound, approximately 30% of the traffic is destined for the Town of Niskayuna via the Rexford Bridge and other points south of the study area. Approximately 65% of the Grooms Rd westbound traffic is local traffic destined for the other locations in the Town of Clifton Park, mostly around the subject roadway, and the remaining +/-5% is destined for the Town of Glenville and other points west of the study area.



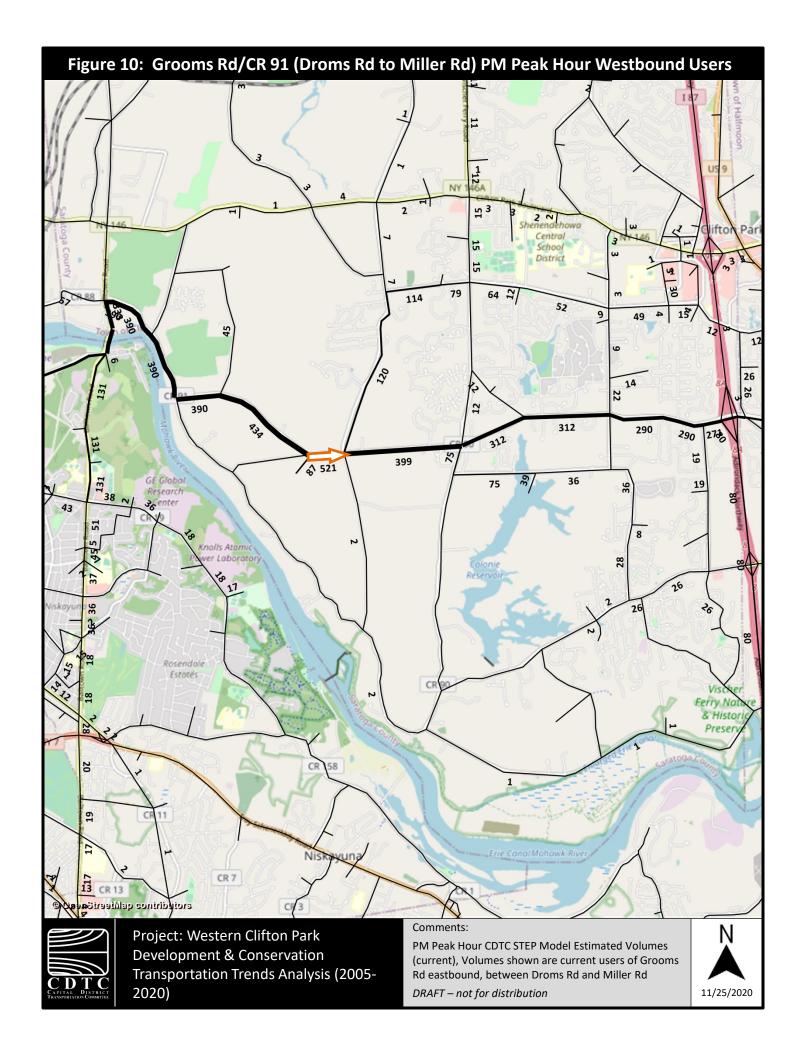


Figure 10 shows PM Peak Hour estimated volumes for only eastbound traffic using Grooms Rd/CR 91, between Droms Rd and Miller. This gives a sense of where PM peak hour traffic using the roadway in the eastbound direction is coming from and going to. Approximately 65% of Grooms Rd eastbound PM peak hour traffic comes from the Town of Niskayuna, via the Rexford Bridge, and points south of the study area. Approximately 10% comes from the Town of Glenville and points west of the study area, and the remaining +/- 25% comes from other locations in the Town of Clifton Park, mostly local traffic from around the subject roadway.

After passing through Grooms Rd eastbound, approximately 35% of the traffic is destined for the Town of Halfmoon and other points east of the study area. Approximately 15% of the traffic is destined to I-87 southbound and points south of the study area, and the remaining 50% is destined for other locations in the Town of Clifton Park, mostly in the eastern portion of the Town.

