



Memorandum

TO: Michael Aregano, Supervisor, Town of Cicero
Kate Fiorello, Town Engineer, Town of Cicero

FROM: Michael Alexander

DATE: April 22, 2024 (Presented to Policy Committee on 10/29/24)

RE: Brewerton Trail Technical Assessment
Technical Memorandum #1: Utility Corridor Owner Outreach and Existing Conditions

The Town of Cicero (Cicero) prepared a Local Waterfront Redevelopment Program (LWRP) for the hamlet of Brewerton and submitted the draft document to the New York State Department of State (NYS DOS) for their approval in 2023. Cicero seeks to link Brewerton’s outer neighborhoods and rural areas to the Oneida River at Riverfront Park (Figure 1), to its business district, to Micron, and to the Town of Hastings’ riverfront. The Syracuse Metropolitan Transportation Council (SMTC) agreed to help assess and prioritize trail routes, bicycle facilities, and pedestrian facilities as envisioned in the LWRP.

The Oneida River divides the hamlet of Brewerton. Brewerton also spans across two towns: Cicero and Hastings. The New York State Department of Transportation (NYSDOT) will soon replace the Route 11 Bridge over the Oneida River that connects Cicero to Hastings. Cicero initiated a Route 11 streetscape project to add sidewalks and other bicycle and pedestrian facilities within its business district. Recently, the state announced a \$4.5M grant award (NY Forward) to invest in projects on both sides of the river. Cicero is currently updating its comprehensive plan and zoning ordinance, and Hastings has initiated its own LWRP process.

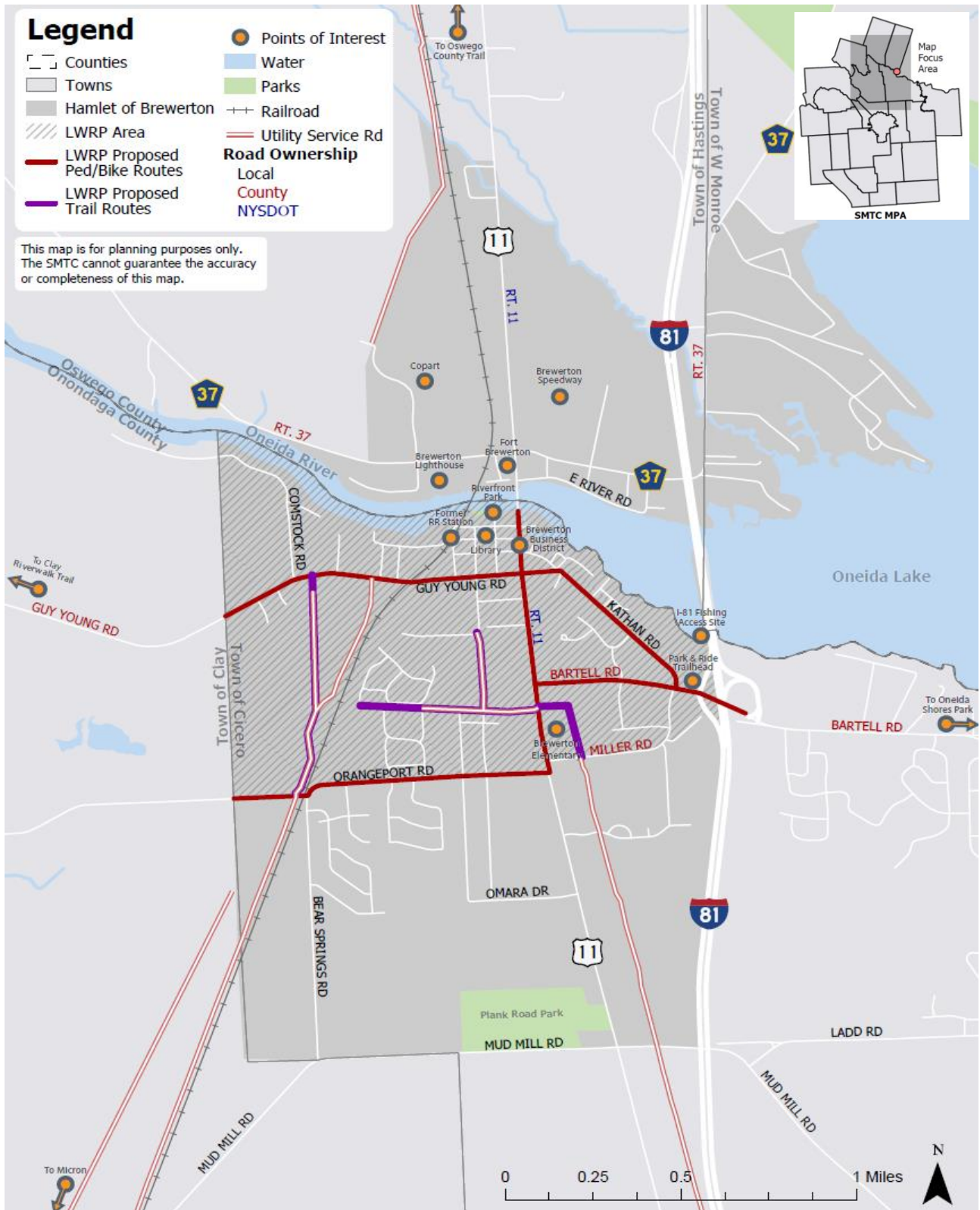


Figure 1 – Riverfront Park looking west towards CSX Railroad Bridge, Hamlet of Brewerton, Cicero, NY.

Technical Memo #1 (TM #1) documents National Grid’s policies and procedures to apply for, finance, and develop a trail along their property. TM #1 also summarizes: existing and envisioned roadway, bicycle, pedestrian, and transit facilities; facility user needs; general ownership and right-of-way information; a high-level overview of environmental and archaeological resources; and a summary of crash data.

Outreach Summary – National Grid and Micron

The LWRP envisions developing trails along property owned by National Grid (Figure 2). The linear parcels owned by National Grid extend from Brewerton (Guy Young Road) south to the future Micron facility. SMTC’s first step was to confirm that National Grid allows communities to develop trails along its property.



On October 3, 2023, SMTC held a video call with a representative from National Grid’s Real Estate Department to inquire about policies and procedures for developing trails. On October 27, 2023, SMTC received a list of considerations that a community should weigh before obtaining a Right of Entry Agreement from National Grid (Attachment A); Standards and Requirements for Recreational Trail Proposal (Attachment B); and an application (Attachment C). The top three takeaways include:

- National Grid has its own trail design standards (e.g., no paving, no light poles, etc.).
- National Grid charges a fee to review design plans (the fee may not apply to municipalities).
- Average trail cost can exceed \$1M per mile.

Cicero-Micron Monthly Meetings

Cicero’s town engineer invited SMTC to attend a conference call with representatives from Cicero, Micron, and Onondaga County. She asked SMTC to field questions about opportunities to extend a trail from Brewerton to Micron’s future chip fabrication facility. During the conference call on 11/14/23, representatives from Cicero and Micron agreed to wait to discuss the trail concepts until the spring / summer of 2024. In March 2024, Cicero contacted the Town of Clay supervisor to inquire about his interest in attending future discussions on this topic. A trail from Brewerton to Micron would cross the Town of Clay. The Clay supervisor expressed interest in attending future meetings (yet to be set).

Attachments A, B, and C provide Cicero officials with the summary of considerations, documents, procedures, and the application they need to continue trail discussions with National Grid and Micron. SMTC has completed its research into National Grid’s policies and procedures.

Property Owners

SMTC identified information about ownership for 11 properties. In addition to National Grid, the Town of Cicero may also have to coordinate with other property owners to develop the envisioned trail system. Table 1 summarizes the property ownership information and Figure 3 shows the location of each property.

Table 1 – Mailing addresses and ownership list for parcels along potential trail route

Fig. 3 Ref. #	Owner	Mailing Address	Tax Map # (Printkey)	Tax ID
1	LaFace Domenico	9610 Whitetail Path, Brewerton NY 13029	116.-01-19.1	11600000010190000000
2	LaFace Domenico	9610 Whitetail Path, Brewerton NY 13029	116.-01-22.0	11600000010220000000
3	Melvin Merle D	6834 Buckley Road, North Syracuse, NY 13212	116.-01-18.1	11600000010180000000
4	Town of Cicero	236 Brewerton Rd, Cicero, NY 13039	116.-01-19.3	11600000010190000000
5	National Grid Property Tax Dept D-G	300 Erie Blvd W, Syracuse, NY 13202	112.-13-20.0	11200000013020000000
6	National Grid Property Tax Dept D-G	300 Erie Blvd W, Syracuse, NY 13202	115.-01-01.0	11500000010010000000
7	National Grid Property Tax Dept D-G	300 Erie Blvd W, Syracuse, NY 13202	116.-01-07.0	11600000010070000000
8	National Grid Property Tax Dept D-G	300 Erie Blvd W, Syracuse, NY 13202	117.-01-06.0	11700000010060000000
9	National Grid Property Tax Dept D-G	300 Erie Blvd W, Syracuse, NY 13202	118.-01-21.0	11800000010210000000
10	Corscor, LLC	9583 Brewerton Road, Brewerton NY 13029	115.-01-39.0	11500000010390000000
11	Corscor, LLC	PO Box 587, Brewerton, NY 13029	116.-01-03.1	11600000010030000000
12	Walnut Hill Dev Corp	PO Box 587, Brewerton, NY 13029	116.-01-05.3	11600000010050000000
13	National Grid Property Tax Dept D-G	300 Erie Blvd W, Syracuse, NY 13202	109.-02-16.0	10900000020160000000
14	National Grid Property Tax Dept D-G	300 Erie Blvd W, Syracuse, NY 13202	109.-01-85.0	10900000010850000000

Source: GIS Parcel Files. Note: The Swiss Code for all properties is 312289.

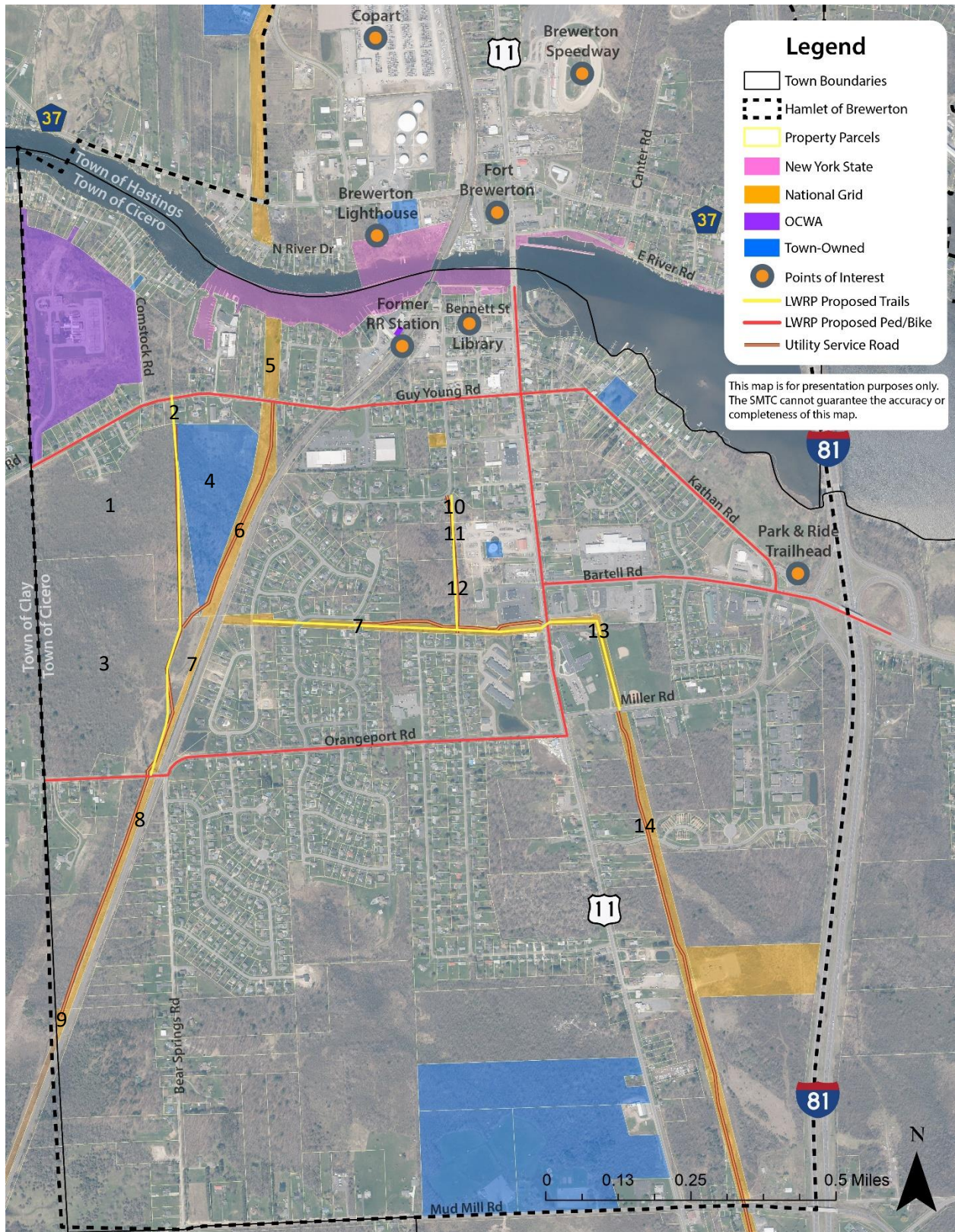


Figure 3 – Property Reference Map Along Envisioned Trail Routes

Notable Land Uses

As previously shown on Figure 2, Brewerton’s notable land uses in Cicero include: Riverfront Park, the Brewerton Business District, the Brewerton Library, Centro’s park & ride lot, the I-81 fishing access area, Brewerton Elementary School, and Plank Road Park. Brewerton’s notable land uses in Hastings (Oswego County) include: Fort Brewerton, the Brewerton Lighthouse at Lighthouse Park, and the Brewerton Speedway. Other notable land uses include: the Oswego Trail (to the north), the future site of Micron (to the south), Oneida Shores Park (to the east), and the Riverwalk Trail (to the west).

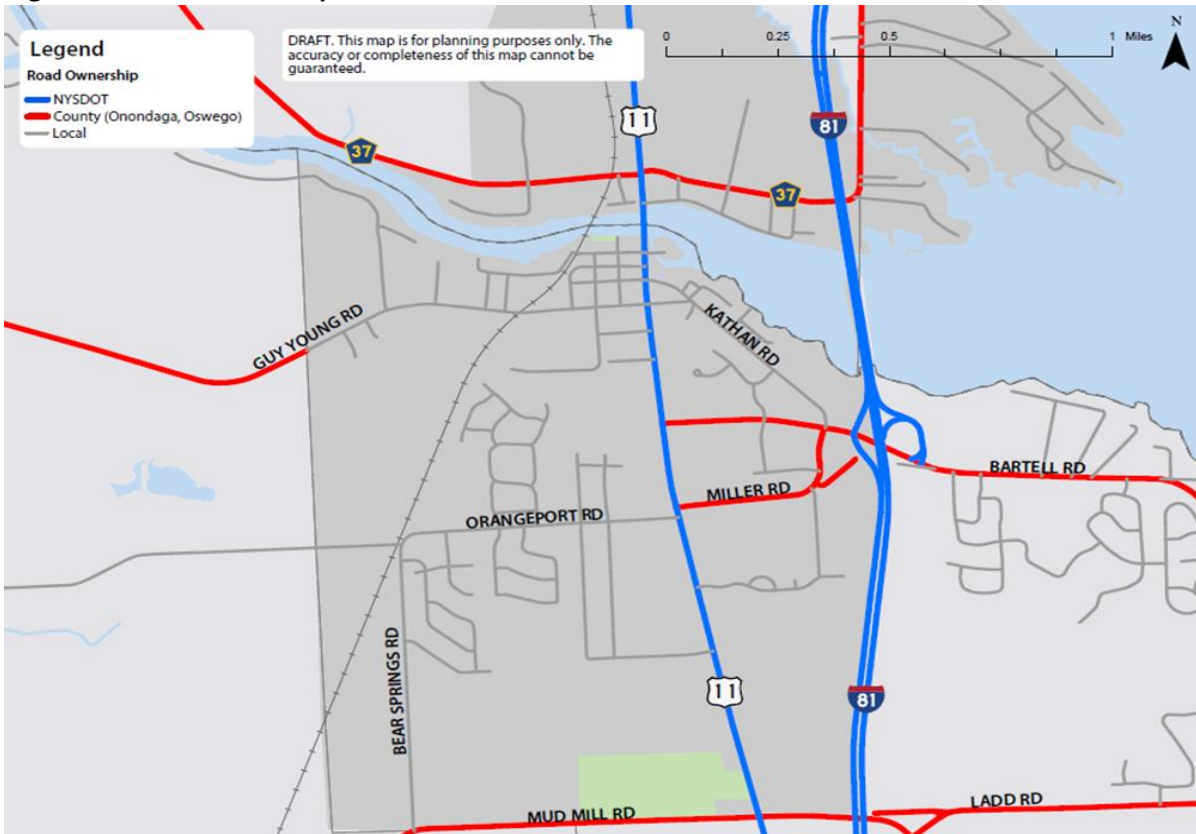
Inventory of Existing Conditions

The SMTC conducted a desktop inventory to document road ownership, functional classification, pavement condition rating, bridge ownership, bridge condition rating, available traffic volume data, rail crossings, and presence of bicycle or pedestrian facilities along the following road segments (Figure 2):

- Route 11 (Route 37 to Mud Mill Road)
- Guy Young Road (Clay to Route 11)
- Kathan Road (Route 11 to Bartell Road)
- Bartell Road (Route 11 to I-81)
- Orangeport Road (Clay to Route 11)
- Miller Road (Route 11 to Bartell Road)
- Bear Springs Road (Orangeport Road to Mud Mill Road)
- Mud Mill Road (Caughdenoy Road to Route 11)

As shown in Figure 4, NYSDOT owns Route 11 and I-81; Onondaga County owns Bartell Road, Miller Road, and Mud Mill Road; Oswego County owns Route 37. The remaining roads are owned by Cicero or Hastings.

Figure 4 – Road Ownership



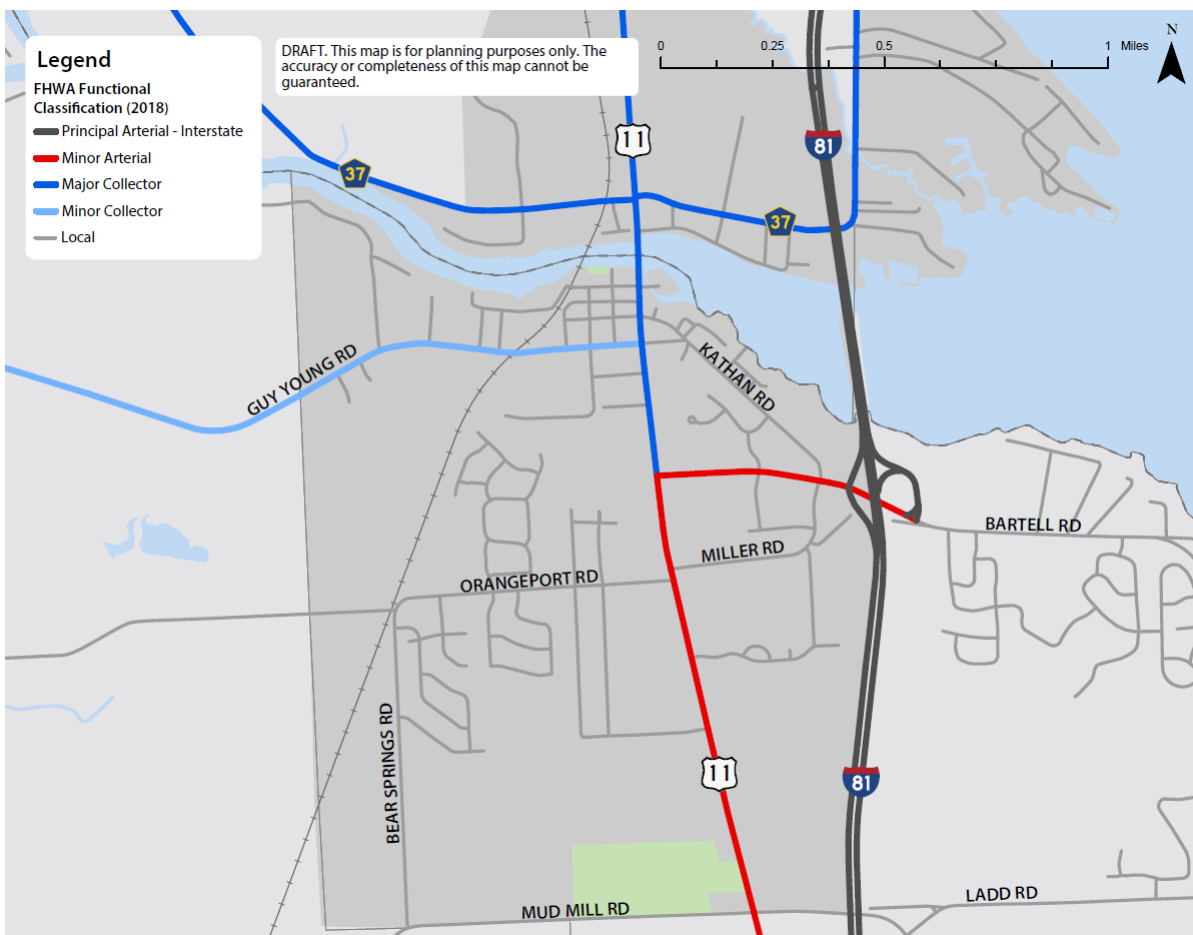
Functional Classification

Figure 5 shows functional classification. Functional classification categorizes roads according to their character and their role in the transportation network. Categories range from interstates designed for high-speed trips between cities - to local roads that provide access to individual properties. Roads are also classified as urban or rural based on an Urban Area Boundary. The Urban Area Boundary is based on population density per the U.S. Census.

Functional classification determines if a road may receive federal transportation funding. Principal arterials, minor arterials, and major collectors are federal-aid eligible. Minor collectors and local roads (urban and rural) are not federal-aid eligible.

Route 11 north of Bartell Road is classified as a Major Collector. South of Bartell Road, Route 11 is a Minor Arterial. Bartell Road is a Minor Arterial between Route 11 and I-81. Minor Arterials are designed to provide a high level of mobility and deliver traffic from collector roads to principal arterials. Bartell Road from Route 11 provides access to I-81 via Exit 31. Guy Young Road is a Minor Collector, and all other roads are classified as local. As indicated, these roadways are not federal-aid eligible. None of the study area road segments are identified as primary freight or primary commuter corridors and, therefore, were not examined in the SMTC's *Congestion Management Process – Status Update*.

Figure 5 – Functional Classification



Traffic Volumes

The average annual daily traffic, or AADT, is the total daily traffic averaged over a full year and is expressed in vehicles per day (vpd). AADT is typically estimated for a road segment based on a sample count taken over a few days. Current AADT estimates are shown on Table 2. AADT is typically not available for local streets.

The highest AADT in the study area is on Route 11 north of Bartell Road, with 10,758 vpd. South of Bartell Road, Route 11 has an AADT of 7,764 vpd.

Bartell Road has an AADT of 9,525 vpd between Route 11 and the I-81 SB ramp.

As shown on Table 2, traffic volumes are considerably lower on the other roads with fewer than 4,000 vehicles per day.

Table 2 – Traffic Volumes (AADT)

Road Name <i>To/From (Station Number, Year of Count)</i>	AADT
Route 11	
<i>North of Bartell Road (330048, 2022)</i>	10,758
<i>South of Bartell Road (330923, 2021)</i>	7,764
Guy Young Road	
<i>Bauer Street to Oak Street (337055, 2019)</i>	2,293
Orangeport Road	
<i>Town Line to Bear Springs Road (337054, 2020)</i>	1,280
<i>Bear Springs Road to Route 11 (335461, 2015)</i>	3,944
Miller Road	
<i>Route 11 to Bartell Road (331253, 2019)</i>	1,478
Bartell Road	
<i>Route 11 to I-81 SB Ramp (331281, 2021)</i>	9,525
<i>I-81 SB Ramp to I-81 NB Ramp (336013, 2019)</i>	7,467

Bridge and Pavement Ratings

The SMTC publishes a Bridge and Pavement Condition Management System (BPCMS) every year as a part of the Unified Planning Work Program (UPWP). The most recent BPCMS is from 2023 and includes condition information on several roads and bridges within the study area.

Pavement Ratings: Pavement ratings are conducted for all federal-aid eligible roads. The ratings are based on cracking, faulting (concrete) or rutting (asphalt), and International Roughness Index (IRI) or the Present Serviceability Rating (PSR). Pavements are rated Good, Fair, or Poor based on the values of these individual metrics. Pavement in Good condition suggests that no major investment is needed. Pavement in Poor condition suggests major reconstruction investment is needed in the near term.

Route 11 was rated ‘Fair’. As noted in a subsequent section, three blocks of Route 11 within the Brewerton Business District are scheduled for streetscape improvements to be constructed in 2024. Route 37 (west of Route 11) and Bartell Road were rated ‘Good.’ Route 37 (east of Route 11) was rated as ‘poor’.

Bridge Rating: The NYSDOT defines a bridge as a structure that is erected over a depression or an obstruction (such as water) and that has a track or passageway for carrying public traffic. Classification is based on the National Bridge Inventory (NBI) condition ratings for the deck, superstructure, substructure, and culvert with each rated on a scale of 0-9. If greater than or equal to 7, the bridge is classified as “Good.” If less than or equal to 4, it is classified as “Poor.” Bridges rated below 7 but above 4 are classified as “Fair.” A sizeable portion of capital funds are spent on bridges with NHS bridges receiving priority.

The Route 11 bridge is owned by NYSDOT and was rated as being in ‘Fair’ condition. As noted in a subsequent section, this bridge is scheduled for replacement. NYSDOT also owns the bridges associated with Bartell Road and Mud Mill Road over I-81. These bridges were rated ‘Good.’ None of these bridges are an NHS bridge.

Roadway Measurements

SMTC used GIS parcel files and ortho imagery to take approximate measurements. SMTC estimates that the right-of-way (ROW) along Route 11 is around 71 feet at Bartell Road. The ROW narrows to around 65 feet at the Brewerton Business District. Travel lanes are 12 to 13 feet. Ten-foot-wide shoulders exist along Route 11 north of Guy Young Road, which transitions to on-street parking lanes in the business district. See Attachment D.

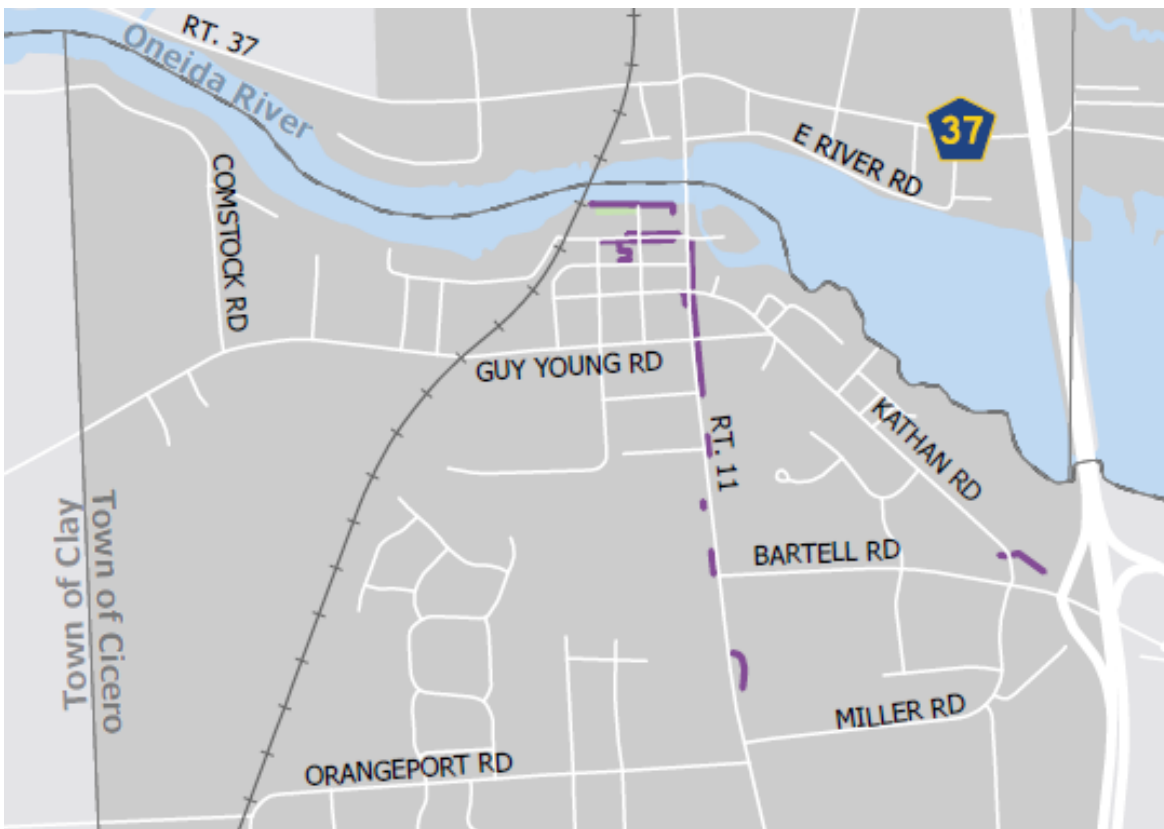
In general, Kathan Road has 11-foot-wide travel lanes and three-foot-wide shoulders with a ROW of 52 feet. Orangeport Road has 12-foot-wide travel lanes and a 50-foot-wide ROW. Bartell Road has 12-foot-wide travel lanes and nine-foot-wide shoulders within a 114-foot-wide ROW.

Existing Sidewalk and Crosswalk Locations

Pedestrian amenities like crosswalks, pedestrian signals/buttons, countdown timers, curb ramps, and detectable warnings only exist at one intersection in the study area: Route 11 and Bartell Road. No other intersections have pedestrian amenities.

As shown in Figure 6, sidewalks exist along portions of Route 11, mostly on the eastern side. Most of these sidewalks are four feet wide. Ten-foot-wide sidewalks exist along two blocks in the business district. Bennett Street has new sidewalks and ornamental lights along both sides of the roadway. SMTC staff observed remnants of a sidewalk in front of Riverside Cemetery on Kathan Road.

Figure 6 – Existing Sidewalk Locations



Other sidewalks are linked to apartment buildings or businesses and do not connect into a greater sidewalk network. A walkway connects the park-and-ride (at the corner of Kathan Road and Bartell Road) with a public fishing access point under I-81. The CNY Land Trust Riverwalk Trail exists (in Clay) about 1.5 miles west of Route 11 on Guy Young Road. The Oswego County Trail crosses Route 11 (in Hastings) about 2.8 miles north of the intersection of Route 11 and Guy Young Road.

New York State (NYS) Bike Route 11

Bicycle facilities do not exist in the study area. NYS Bike Route 11 exists as a signed route only along Route 11 through the study area. No other signed state-designated bicycle routes exist within the study area. According to the NYSDOT's bicycle website:

"State Bicycle Route 11 is a signed on-road bicycle route that extends 320 miles from the Pennsylvania state line near Binghamton to Rouses Point on the Quebec border."

The Route 11 Streetscape Project (discussed below) will incorporate shared lane markings (i.e., "sharrows") between Bennett Street and Guy Young Road within Brewerton's Business District.

St. Lawrence CSX Transportation Rail Line

The St. Lawrence CSX Transportation (CSXT) rail line cuts northeasterly through the western side of the hamlet. CSXT is a Class I regional carrier with up to six movements a day (in 2015). It serves as the gateway to Canada and Montreal. The line once ran passenger service 60+ years ago. A passenger station existed in Brewerton on Oak Street. Four at-grade crossings exist in the immediate area: Mud Mill Road, Orangeport Road, Guy Young Road, and County Route 37 (in Hastings). Bennett Street passes under the rail line with a posted 12'0" clearance. See Figure 7.



Figure 7 – CSX railroad crossing at Guy Young Road looking east towards hamlet of Brewerton.

Travel Demographic Overview

SMTC reviewed the 2023 American Community Survey (five-year estimates) to determine travel characteristics and related demographics within four U.S. Census tracts that surround the hamlet of Brewerton: Town of Hastings, 207.07; Town of West Monroe, 207.04; Town of Clay, 113; Town of Cicero, 102. (Brewerton spans across U.S. Census tract 207.07 and 102). Takeaways include the following:

- Mean travel times to work range from 18.3 to 23.4 minutes across the four tracts.
- Approximately 5% of households in Cicero (Tract 102) do not have access to a vehicle.
- Approximately 5% of residents in Cicero (Tract 102) walk, bike, or commute to work.
- Approximately 5% to 12% of residents across the four tracts work from home.
- Most residents across the four tracts work in Onondaga County.

Transit Ridership and Facilities

As shown on Figure 8 (on the following page) Centro operates Routes 288, 388, and 388X that run between the Centro Hub in downtown Syracuse and the Village of Central Square in Oswego County. All three routes stop at the park-and-ride lot located at Kathan Road and Bartell Road. Routes 288 and 388 also stop at the intersection of Route 11 and Washington Street. The park-and-ride location has a bus shelter and has the highest factored daily boarding and alightings in the study area, which put it in the top 25% of all stops within Centro's system.

Historic, Archaeological, and Environmental Resources

STMC noted resources based on a desktop assessment using GIS, internet-based searches and on observations (Figure 9).

Historic Resources

SMTC observed the following resources that may (based on professional judgement only) have historic significance: two truss bridges over the Oneida River (Route 11 and CSXT); Brewerton Lighthouse (Hastings); Fort Brewerton



Figure 9 – Historic Fort Brewerton (1759), Town of Hastings

(Hastings); Barge Canal Office building Est. 1902 (Cicero); and a cobblestone church (Cicero). Town officials also noted that Native American resources have been recovered in the area. Local officials want to celebrate its historic resources with wayfinding and other signage.

SMTC staff observed five historical markers (erected in 1932) that exist near the Route 11 bridge. As shown on Figure 10, five of the six historical markers observed by staff exist on the bridge's western side and commemorate events that occurred as far back as 1615. The clustering of these markers suggests that Brewerton has been a location of activity for a very long time.



Figure 8 – Centro Bus Routes

These markers commemorate the following:

Location: 43° 14.53' N, 76° 8.458'
"Fort Brewerton Original earthworks of fort erected by British in 1759"

Location: 43° 14.517' N, 76° 8.457'
"A few rods south Oliver Stevens 1st settler in Brewerton erected a blockhouse 1794"

Location: 43° 14.488' N, 76° 8.451'
"First settler near this spot Oliver Stevens made first settlement in Brewerton and Oswego County, 1789"

Location: 43° 14.474' N, 76° 8.45'
"Near this spot Samuel de Champlain on October 8, 1615 crossed the river and discovered Oneida Lake."

Location: 43° 14.366' N, 76° 8.444'
"Site of Indian Village Techiroguen visited by Le Moyne 1654 and by La Salle 1673"

SMTC staff also observed a sixth marker (erected in 1939) at the southeast corner of the Route 11 and Miller Road:

Location: 43° 13.759' N, 76° 8.27'
"Here stood schoolhouse; District No. 1, built 1824. First district school in Town of Cicero."

Floodplains/Wetlands

As shown in Figure 11, the shoreline along the Oneida River is designated as a floodplain. Areas immediately northwest, southwest, and southeast of the study area have known wetlands. Some areas, including near Ladd Road and Bartell Road (east of I-81) are designated as both wetlands and floodplains.

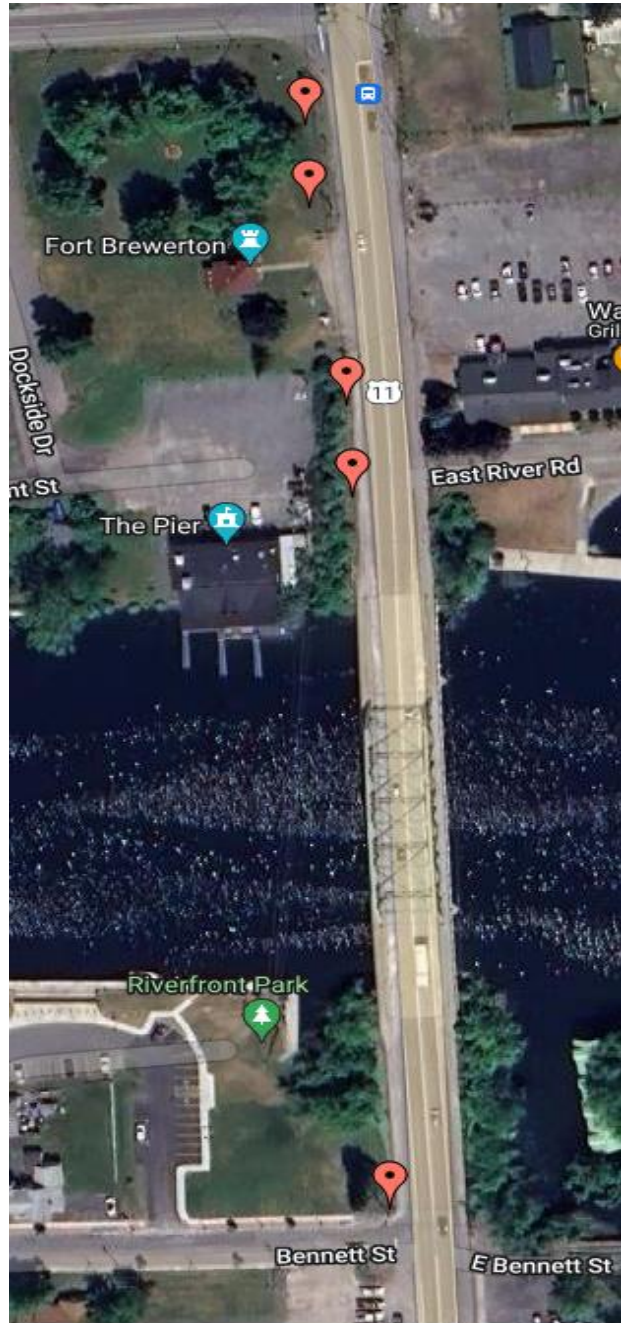


Figure 10 – Locations of Historic Markers on west side of Route 11 bridge Source: HMdb.org



Figure 11 – Known “Mapped” Wetlands

Vehicle and Traffic Restrictions

According to Chapter 198 of the Cicero Town Code, Kathon Road is signed “NO THRU TRAFFIC” between Route 11 and Washington Street (Article II, Section 198-4). Trucks weighing 9 tons or greater are also restricted within this section (Article XII, Section 198-19). Parking is prohibited on Jerome Street and Mud Mill Road (Article III, Section 198-7). SMTC observed a sign on Miller Road: “Weight limit 5 tons”. According to Chapter 181, sidewalks should be concrete, and maintenance is the responsibility of the property owner. The posted speed limit along Route 11 is 35 miles per hour (MPH) within the Brewerton Business District; 40 MPH north of Route 37, 40 MPH south of St. Elmos Drive; and 25 MPH from 7:00 a.m. to 6:00 p.m. on school days near the Brewerton Elementary School. Other posted speed limits include:

- County Route 37 – 40 MPH west of Route 11 (30 MPH east of Route 11)
- Mud Mill Road - 45 MPH
- Orangeport Road - 40 MPH
- Bartell Road & Bear Springs Road – 35 MPH
- All other local roads are 30 MPH.

Recent and Current Capital Improvement Projects

Brewerton is investing in its riverfront assets on both sides of the Oneida River. Figure 12 shows the location of two previous projects and two current projects the were/are listed on SMTC Transportation Improvement Program (TIP). In addition, NYS recently announced that Brewerton (Hastings and Cicero) is the recipient of a \$4.5M NY Forward grant for additional projects along both sides of the river.



Figure 12 – Capital Improvement Projects (Recent and Current)

Route 11 Bridge over Oneida River (PIN 304365)

The Route 11 bridge over the Oneida River (Figure 13) is a three-span steel truss structure that is listed on the National Register of Historic Places. It was built in 1932 and reconstructed in 1968. The Route 11 bridge project is currently out for bid.

The existing bridge is 377.5-feet long from abutment-to-abutment and has an out-to-out width of 56.75-feet. The proposed replacement bridge would be another three-span structure located on the same alignment and footprint as the existing structure. It would be 413.5-feet long from abutment-to-abutment and have an out-to-out width of at least 57.25-feet. The new roadway would consist of two 12-foot lanes with 8-foot shoulders, and maintain sidewalks (five-feet in width).



Figure 13 – Brewerton Route 11 Truss Bridge over Oneida River (looking east)

The Town of Cicero was allocated federal funds to develop Riverfront Park (Figure 14) and invest in streetscape improvements along Route 11. Riverfront Park improvements (PIN 375495) include a new entrance and parking lot, concrete sidewalks, public spaces, improved ADA access, new plantings, benches, lighting, and signage.

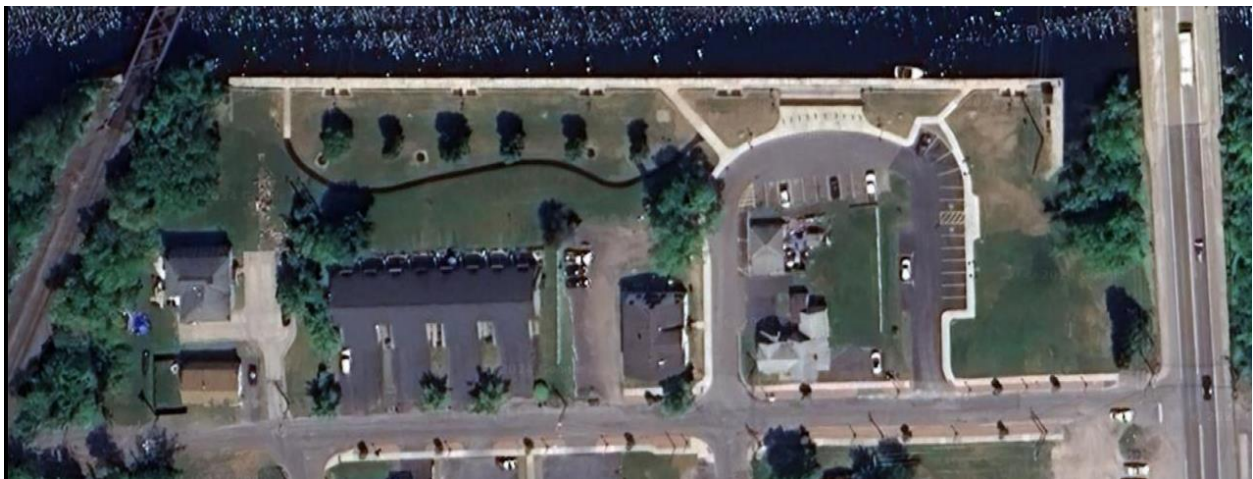


Figure 14 – Aerial View of Riverside Park (Source Google)

Streetscape Plans - Downtown Brewerton (PIN 395077)

NYS DOT completed final streetscape plans for Route 11 between Guy Young Road and Bennett Street in August 2023. Construction for the Route 11 streetscape project is scheduled to start summer 2024 and be completed by autumn 2024.

Route 11 will consist of two 14' wide shared lanes (i.e., vehicle/bicycle) with shared lane pavement markings (i.e., sharrows) and granite curbs. Some blocks will include two 8-foot parking lanes. Snow storage varies from zero to ten feet. The new sidewalks will also vary in width from 4.5-feet to 5-feet. Other improvements include ornamental pedestrian lights and tree plantings (Hedge Maple Trees).

Red and white brick crosswalks within two white reflectorized transverse lines (Figure 15) will cross Route 11 at the following locations:

- northwest corner of Guy Young Road to northeast corner of Washington Street
 - signalized intersection
- southwest corner of Baldwin Street to southeast corner of Kathan Road
 - unsignalized intersection
 - includes two Rectangular Rapid Flashing Beacons (RRFBs)
 - with 8-foot flush-mounted bump outs (red and white brick pavers)
- southeast corner of Library Street across to the Barge Canal Office building (Est. 1902)
 - unsignalized intersection
 - includes two Rectangular Rapid Flashing Beacons (RRFBs)
 - with 8-foot flush-mounted bump outs (red and white brick pavers)

NYS DOT will also install similar crosswalks across Baldwin Street, Kathan Road, and Library Street.

Oneida River Lighthouse Park – Town of Hastings (PIN 395037)



Figure 16 – Lighthouse Park

In 2006, the Town of Hastings sponsored the Oneida River Lighthouse Park project. It included the rehabilitation of an historic lighthouse and a park (Figure 16). The project was funded with STP-Enhancement funds as a transportation enhancement program (TEP) project. Construction was completed in 2009.

This lighthouse is one of only three along the NYS canal system. This lighthouse was built in 1915 and has been in continual use since its construction to guide watercraft from Oneida Lake into the channel of the Oneida River.

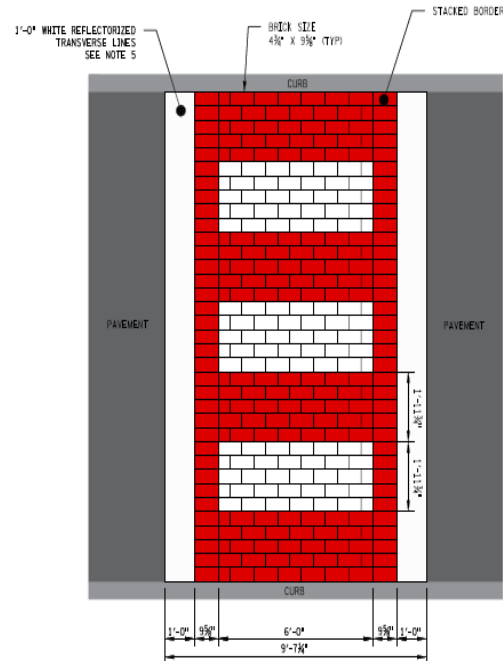


Figure 15 - Crosswalk detail for Route 11 Streetscape Improvements (PMD-01, Sheet 59 of 66, C&S Companies, December 5, 2023)

Crash Summary

The SMTC gathered and analyzed data from NYSDOT’s Accident Location Information System (ALIS) and Crash Location and Engineering Analysis Repository (CLEAR) databases to identify trends in crashes at intersections and along corridors of interest in the study area. Crash data were collected for the most recent five-year period (January 1, 2018, to December 31, 2022).

Intersection crashes

Intersection crashes were defined using two methods. If stop bars were present at the intersection, crashes that occurred within the stop bars were defined as ‘intersection crashes.’ If stop bars were not present at the intersection, intersection crashes were defined as any crashes that occurred within 33 feet (10 meters) of the center of the intersection. Table 3 lists all intersections studied in this analysis.

Table 3 - Intersection crashes in study area

Intersection of Interest	Total crashes	Motor vehicles only	With bicycles	With pedestrians	Other collisions*
Rt 11 / Rt 37 (Signalized)	16	14	0	0	2
Rt 11 / Baldwin	0	0	0	0	0
Rt 11 / Guy Young (Signalized)	15	15	0	0	0
Rt 11 / Bartel (Signalized)	29	27	0	1	1
Rt 11 / Miller	2	2	0	0	0
Rt 11 / Orangeport	7	6	0	0	1
Rt 11 / Mud Mill (Signalized)	6	5	0	0	1
Orangeport / Bear Springs Rd	1	0	0	0	1
Bartell / Kathan	22	19	0	0	3

*Other collisions may include crashes with animals, a ditch, or a fixed object such as a signpost.

The intersection of Route 11 and Bartell Road had the greatest number of crashes with 29 over the five-year period. It also included the one pedestrian crash that occurred at an intersection (of those reviewed). Other intersections with significant crashes were: Bartell Road/Kathan Road/Miller Road (22 crashes); Route 11/County Route 37 (16 crashes); and Route 11/Guy Young Road/East Washington Street (15 crashes). Intersection crash rates were not calculated due to lack of entering volume data.

CLEAR identifies the collision type for crashes between two vehicles. For example, collision types include head-on, rear-end, right-angle, overtaking, left-turn, right-turn, etc. The most frequent collision types are identified in Table 4 for signalized intersections and for unsignalized intersections with more than 10 crashes.

Table 4 - Most frequent collision types for selected intersections

Intersection	Collision type (number of events)
Route 11/Route 37 (Signalized)	Rear End: 10; Other: 3
Route 11/Guy Young Road (Signalized)	Rear End: 10
Route 11/Bartell Road (Signalized)	Rear End: 12; Right Angle: 8
Route 11/Mud Mill Road (Signalized)	Rear End: 3
Bartell Road/Kathan Road	Right Angle: 10; Rear End: 5

Rear-end collisions were the most common collision type at the signalized intersections. Of the signalized intersections, Route 11/Bartell Road experienced the most rear-end and right-angle collisions. At the unsignalized intersection of Bartell Road/Kathan Road, right-angle collisions were most common, followed by rear-end collisions.

Non-intersection crashes (i.e., road segment crashes)

Road segments are split between signalized intersections, other major intersections, or significant changes in road character. Road segment crashes do not include intersection crashes previously analyzed. Road segments with the highest number of crashes and their associated crash rates are shown in Table 5.

Table 5 - Road segments in study area with highest number of non-intersection crashes

Road Segment	Town	Total non-intersection crashes¹	Segment length (mile)	AADT²	Crash Rate³
Bartell Road (Route 11 to I-81 Bridge)	Cicero	33	0.53	9525	3.58
Route 11 (Guy Young Road to Route 37)	Cicero / Hastings	25	0.36	10758	3.54
Route 11 (Bartell Road to Mud Mill Road)	Cicero	19	1.10	7764	1.22

¹Source: NYSDOT ALIS and CLEAR databases

²Source: NYSDOT Tube Counts, Traffic Data Viewer

³Per million vehicle miles traveled

Intersection and non-intersection crashes are illustrated in Figure 17. As shown on Figure 17 and in Table 5, Bartell Road and Route 11 (between Guy Young Road to Route 37) experience the most amount of non-intersection crashes and both result in the highest crash rates.

Bike and Pedestrian Crashes

Figure 18 identifies bike and pedestrian crash locations as well as all crashes that involve serious injury. During the five-year review period, five pedestrian crashes occurred as well as three bike crashes.

Fatal and Serious Injury Crashes

Four crashes resulted in a serious injury (Figure 18), with one involving a bicyclist. No fatal crashes occurred during the five-year review period.



Figure 17 – Crashes at intersections and along road segments
 (January 1, 2018, to December 31, 2022)

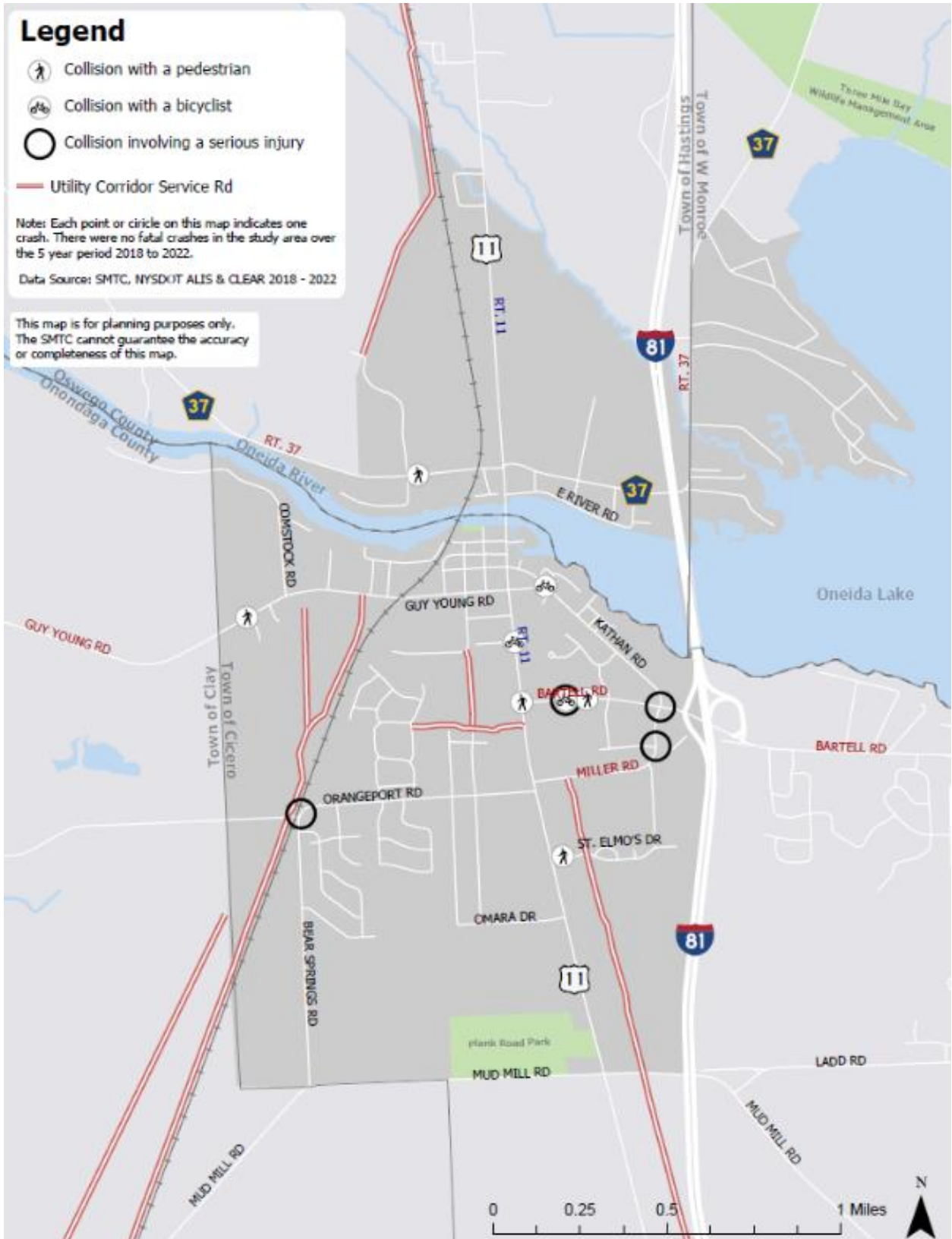


Figure 18 – Bicycle, pedestrian, and serious injury crashes
 (January 1, 2018, to December 31, 2022)

Summary

After conducting outreach to National Grid, and reviewing ongoing and recent projects, plans and studies, and available existing condition data for transportation facilities in the Hamlet of Brewerton (including crash data, historic and environmental resource considerations, etc.), the SMTC offers the following conclusions:

- National Grid allows municipalities to apply for consideration to install a community trail along their property within certain restrictions and design parameters. The estimated cost per mile of a trail along National Grid property is \$1M. SMTC suggests that the Town continue its trail discussions with National Grid, Micron, and the Town of Clay. SMTC also identified 4-5 property owners and their mailing addresses (in addition to National Grid) that may be impacted by an off-road trail system. SMTC suggests that the Town reach out to these property owners to determine their willingness to consider a trail along their property.
- Route 11 is a significant north-south connection between the Town of Cicero and Oswego County and is owned by the NYSDOT. Except for two blocks along the east side of Route 11 within the Brewerton Business District, sidewalks and pedestrian facilities are sporadic and scarce. Despite being designated as NY Bike Route 11, there are no bicycle facilities along Route 11.
- Bartell Road is a significant east-west connection between Route 11 and I-81 and is owned by Onondaga County Department of Transportation (OCDOT). Bartell Road has businesses and shopping plazas. No bicycle or sidewalk facilities exist along the roadway. Bartell Road has wide shoulders.
- The highest AADT in the study area is on Route 11 north of Bartell Road (10,758 vpd). South of Bartell Road, Route 11 has an AADT of 7,764 vpd. Bartell Road has an AADT of 9,525 vpd between Route 11 and I-81.
- Brewerton has a rich history that goes back several hundred years. It is celebrated with several commemorative markers that exist along Route 11 near the Route 11 Bridge over the Oneida River.
- Multiple plans, studies, and projects have been recently completed or are underway. Significant investment into Brewerton's waterfront and Business District has been realized. A streetscape project for the Business district will occur in the summer of 2024. The riverfront will also realize \$4.5 million in new investment on both sides of the Oneida River. The Route 11 Bridge will also be replaced.
- During the five-year review period, five pedestrian crashes occurred as well as three bike crashes. Four crashes resulted in a serious injury, with one involving a bicyclist. No fatal crashes occurred.
- Bartell Road and Route 11 (between Guy Young Road to Route 37) experience the most amount of non-intersection crashes and both result in the highest crash rates.
- The intersection of Route 11 and Bartell Road had the greatest number of crashes with 29. Bartell Road/Kathan Road/Miller Road had 22 crashes. Route 11/County Route 37 had 16 crashes. Route 11/Guy Young Road/East Washington Street had 15 crashes.