



Technical Memorandum

TO: Dan Kwasnowski, Director, Syracuse-Onondaga County Planning Agency

FROM: Aaron McKeon, Senior Transportation Planner, SMTC

DATE: March 16, 2021

RE: Town of Skaneateles Eastern Gateway Concept and Planned U.S. 20 Maintenance

CC: Janet Aaron, Supervisor, Town of Skaneateles
John Reichert, New York State Department of Transportation
Julie Baldwin, New York State Department of Transportation

Overview

The SMTC's involvement in the Town of Skaneateles' effort to re-envision its Eastern Gateway corridor was requested by the Syracuse-Onondaga County Planning Agency (SOCPA) in early 2020, as part of the SMTC's ongoing effort to support comprehensive planning at the municipal level.

In 2016, the Town of Skaneateles formed a committee to compile information on and recommend improvements to the portion of U.S. 20 between the Village of Skaneateles' eastern edge and Route 175 (known locally as Lee-Mulroy Road) a road segment approximately one mile in length. Because this segment of U.S. 20 is on the eastern side of the Village, it is referred to as the Eastern Gateway; the Eastern Gateway Committee (EGC) is the citizens' committee focused on developing ideas for improving this area.

The EGC proposed several improvements in its 2017 report to the Town Board, including:

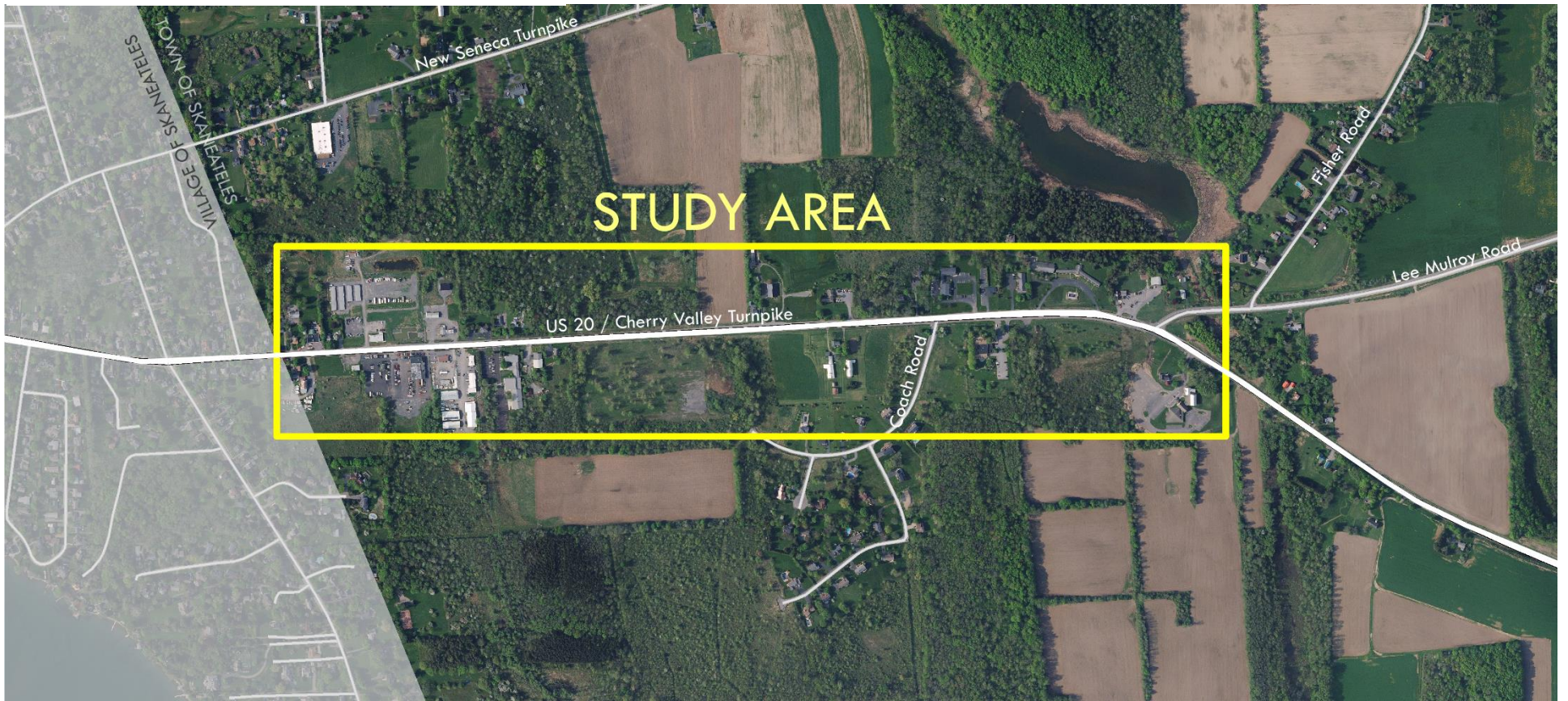
- Burying drainage and utilities,
- Creating clear driveway entrances on all commercial properties (rather than the existing large, paved areas between storefronts and the road),
- Adding sidewalks and decorative lighting to the Highway Commercial zone, and
- Creating design guidelines for this portion of the road.

The New York State Department of Transportation (NYSDOT) is developing plans to re-pave U.S. 20 through the Town and Village of Skaneateles, including the Eastern Gateway section, in the near future. Discussions between SOCPA, NYSDOT, the Town, and SMTC staff indicated that NYSDOT's project is unlikely to include sufficient funds for the kinds of improvements in which the Town is interested. But as the project is developed it may be possible for this project to advance the Town's long-term vision for this segment.

Context

The Eastern Gateway area is the one-mile portion of U.S. 20 east of the Village of Skaneateles, between the Village boundary on the west and Route 175 on the east (see Figure 1). The study area is a mix of residential, commercial, and agricultural uses.

FIGURE 1 – STUDY AREA



Proposed Projects

NYS DOT Paving Project

As of this writing, NYS DOT is designing a \$6.6 million paving project on U.S. 20, between the Cayuga County line and Route 175. This project is described in the State's 2019 Statewide Transportation Improvement Program (STIP) as: "mill & fill, pavement; address ADA deficient curb ramps; replace sidewalks, detectable warnings, crosswalks, signs, reference and culvert markers; fill sidewalk gaps; due to deterioration to bring to state of good repair."¹ Conversations with NYS DOT staff have indicated that the work items related to sidewalks and sidewalk gaps are intended primarily for the Village of Skaneateles and areas with known pedestrian demand.

Skaneateles Springs Hotel

In 2016, a developer purchased the Bird's Nest Motel property at 1601 U.S. 20, intending to demolish the existing motel and replace it with a 33-room hotel, including an 80-seat restaurant. As of this writing, the Bird's Nest Motel has not been demolished, but is not open for business. Plans for the new Skaneateles Springs Hotel are proceeding.

Office Space - 1321 East Genesee Street

In 2019, a proposal to convert the former Wirth's Automotive service station at 1321 East Genesee Street to an office and to upgrade the property's driveways and parking areas was reviewed both by the Town and County Planning Boards. The proposal includes reducing the property's curb cuts from three to one and includes a reserved area along the site's frontage for "future gateway improvements". The Town Planning Board's review noted that "between the street line and the setback line, there is at least 15 feet, providing room for a curb, grass, trees, and sidewalk."² The Town Planning Board recommended planting trees on the frontage. The County Planning Board's review noted the site's proximity to the Village and recommended that sidewalks be extended from the Village to this site.³



The existing structure and streetscape at 1321 U.S. 20

Local Planning

Skaneateles New York – Joint Comprehensive Plan 2015 (with October 31, 2016 revisions)

The 2015 joint Town-Village *Comprehensive Plan's* vision features walkability prominently – it is mentioned as a defining feature of the kind of smart growth that the *Plan* is encouraging. One of the plan's seven over-arching goals is to:

¹ See 2019 STIP, PIN 307625: <https://www.dot.ny.gov/programs/stip/draftstip/repository/R3-proposed.pdf>

² Town of Skaneateles Planning Board, Minutes of August 20, 2019 meeting. Available at: <https://www.townofskaneateles.com/assets/Uploads/p2.b.m.08.20.2019..pdf>

³ Onondaga County Planning Board, Minutes of August 7, 2019 meeting. Available at: <http://ongov.net/planning/documents/Minutes08-07-19.pdf>

“Encourage Village gateway enhancement and the extension of higher density, mixed use and walkable neighborhoods with a diversity of housing types to those areas immediately adjacent to the village in a way that is compatible with existing village development patterns.”

The first objective associated with this goal is to: “Create gateway areas that provide clear transitions from town to village.” Associated actions include preparing plans for these gateway areas and avoiding “large parking areas near and visually intrusive upon adjacent roads” – the plan refers to zoning requirements that require parking areas to be located to the rear or side of buildings.

The second objective associated with this gateway goal is to “Consider Village and adjacent Town neighborhoods as an interconnected system” to extend the village’s “traditional street network” into adjacent town areas.

One of the actions identified under this objective is to:

“Ensure adequate sidewalks and walking paths on at least one side (and ideally both sides) of all Town streets and roads that are adjacent to the Village (especially within one mile of schools) to connect Town residential areas with Village services and businesses.”

The *Comprehensive Plan* recommends creating incentives for developers who propose extending a village-like street pattern that “provides connectivity, promotes the efficient use of land and infrastructure, and reduces traffic congestion by providing alternate routes.”

These ideas are reinforced in another of the *Plan’s* goals, “Goal 6: Provide year-round recreational opportunities for the community”. One objective associated with this goal is to “Develop and implement a walkable environment”, including taking actions to “to establish continuous sidewalks or paths linking the Eastern Gateway with the Western Gateway”.

This goal also includes the objective of creating a bicycle-accessible community, including establishing bicycle lanes on major commuting roads.

Strategies for Sustainable Skaneateles

The *Strategies for Sustainable Skaneateles* plan prepared by the University of Notre Dame’s Urban Design Studio in 2010 includes an assortment of recommendations that are relevant to pedestrian planning in the village. *Strategies for Sustainable Skaneateles*, like the *Joint Comprehensive Plan*, is intended to promote development that is in keeping with the development pattern already found in the village. The plan says specifically that it: “proposes traditional architecture and urbanism as the best way for Skaneateles to accommodate existing and future growth pressures in a way that both preserves Skaneateles’ historic character and extends it in a sustainable and consistent manner.”

Ideas proposed in this plan include:

- Shuttle bus service between the Village of Skaneateles and the hamlets of Willow Glen, Mottville, and Skaneateles Falls, with stops at job centers (e.g., Welch-Allyn).
- A shuttle along U.S. 20, running between the village’s Eastern & Western Gateways. A seasonal shuttle route along East Lake Road and West Lake Road and through the village is also proposed.

- The Eastern and Western Gateways (the quarter-mile portions of U.S. 20 just outside of the village) are envisioned as boulevards, with added commercial development, visitor centers, and shuttle stops.

Issues and Ideas Relating to the Eastern Gateway Corridor

In 2017, landscape architect Randall Arendt prepared a brief document entitled *Issues and Ideas Relating to the Eastern Gateway Corridor* summarizing his meetings with local officials and ideas for improving this area. This document notes that “land uses in the Gateway corridor are now auto-oriented and intended not to compete with walkable businesses in the Village.” But it goes on to say that “it would be desirable to make these areas more pedestrian-friendly and walkable”, noting the strong potential for residential development in this corridor.

Streetscape improvements proposed in this document for the Highway Commercial (HC) zone within 2,000 feet of the Village boundary include:

- Add granite curbs,
- Reduce shoulder width (down from 11’ in some spots),
- Replace open ditches (described as “unattractive” and potentially unsafe) with 12’-wide grassy areas edged by curbing and containing sidewalks, utilities, and new trees,
- Add bike lanes,
- Reduce the speed limit to 35 M.P.H.,
- Bury or relocate overhead utilities, and
- Add street trees between sidewalks and curb lines.

The document points out that, east of this segment of U.S. 20, development falls off and “the need for sidewalks grows progressively less as one moves east of Chase Design [1400 U.S. 20]”, while a bike lane “might serve more people.”

The *Issues and Ideas* document recommends connecting properties in the HC zone to a “large new stormwater detention and treatment facility”, anticipating the need to reduce stormwater runoff as development in this area creates more impervious surfaces.

Planning Board Review

The Town of Skaneateles’ review of proposed development along this corridor has repeatedly taken the idea of an improved Eastern Gateway into account. As noted above, the proposal for an improvement to the property at 1321 U.S. 20 was discussed by the Planning Board in 2019 and its street frontage was reserved for an Eastern Gateway project, with specifics of the project to be determined in the future. Similarly, the review of the Skaneateles Springs Hotel, the review of a minor addition to a commercial property, and a modification to an industrial/commercial site all took into consideration how site modifications would and would not advance the Town’s goals for an improved Eastern Gateway.

Zoning

There are two zoning districts in the study area: a Highway Commercial (HC) zone in the western section, closest to the village, and an Industrial/Research/Office (IRO) district farther east (see Figure 2, Study Area Zoning).

Highway Commercial (HC)

There are only three HC districts in the Town of Skaneateles and the Eastern Gateway is the largest of the three. The Town's Zoning Code defines the function of HC districts as being "to allow those commercial uses that are automobile-dependent and that would therefore not be compatible with a village or hamlet mixed-use commercial area."

Uses permitted in HC zones (under the Town's special use permitting process) include apartment buildings, retail, restaurants, lodging, offices, and light industry.



Existing conditions in the study area's Highway Commercial district

Industrial/Research/Office District (IRO)

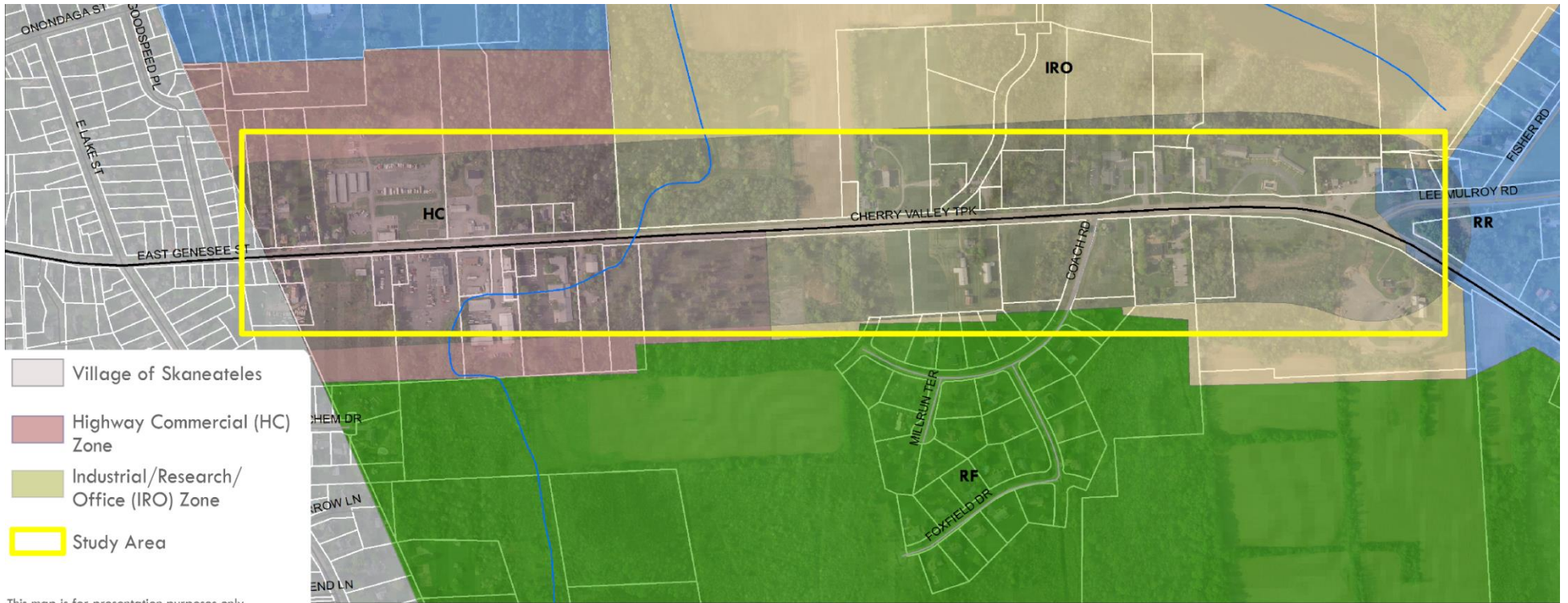
There are three relatively large IRO districts in the Town, with the area in the Eastern Gateway being the smallest of the three. The Town's Zoning Code describes the function of IRO districts as being "to allow areas for light manufacturing, office and research facilities on large tracts of land. Such areas may also include housing and limited commercial development intended to support the primary uses."

IRO zones allow a wide variety of uses, either by right or under a use permit. Of the uses listed in the Town's zoning code, which include everything from single-family homes to religious institutions to light industry, only open pit mining, lakeshore recreation, and riding academies are explicitly prohibited in IRO zones.



Existing conditions in the study area's Industrial/Research/Office district

FIGURE 2 – STUDY AREA ZONING



- Village of Skaneateles
- Highway Commercial (HC) Zone
- Industrial/Research/Office (IRO) Zone
- Study Area

This map is for presentation purposes only. The SMTC does not guarantee the accuracy or completeness of this map.



Other Environmental Factors

Topography

U.S. 20 runs east-west through the study area, with a slight rise in elevation (40 to 50 feet) approximately 3,700 feet east of the village.

Shotwell Brook flows south toward Skaneateles Lake through this area, crossing under U.S. 20 via a culvert 1,900 feet east of the village.

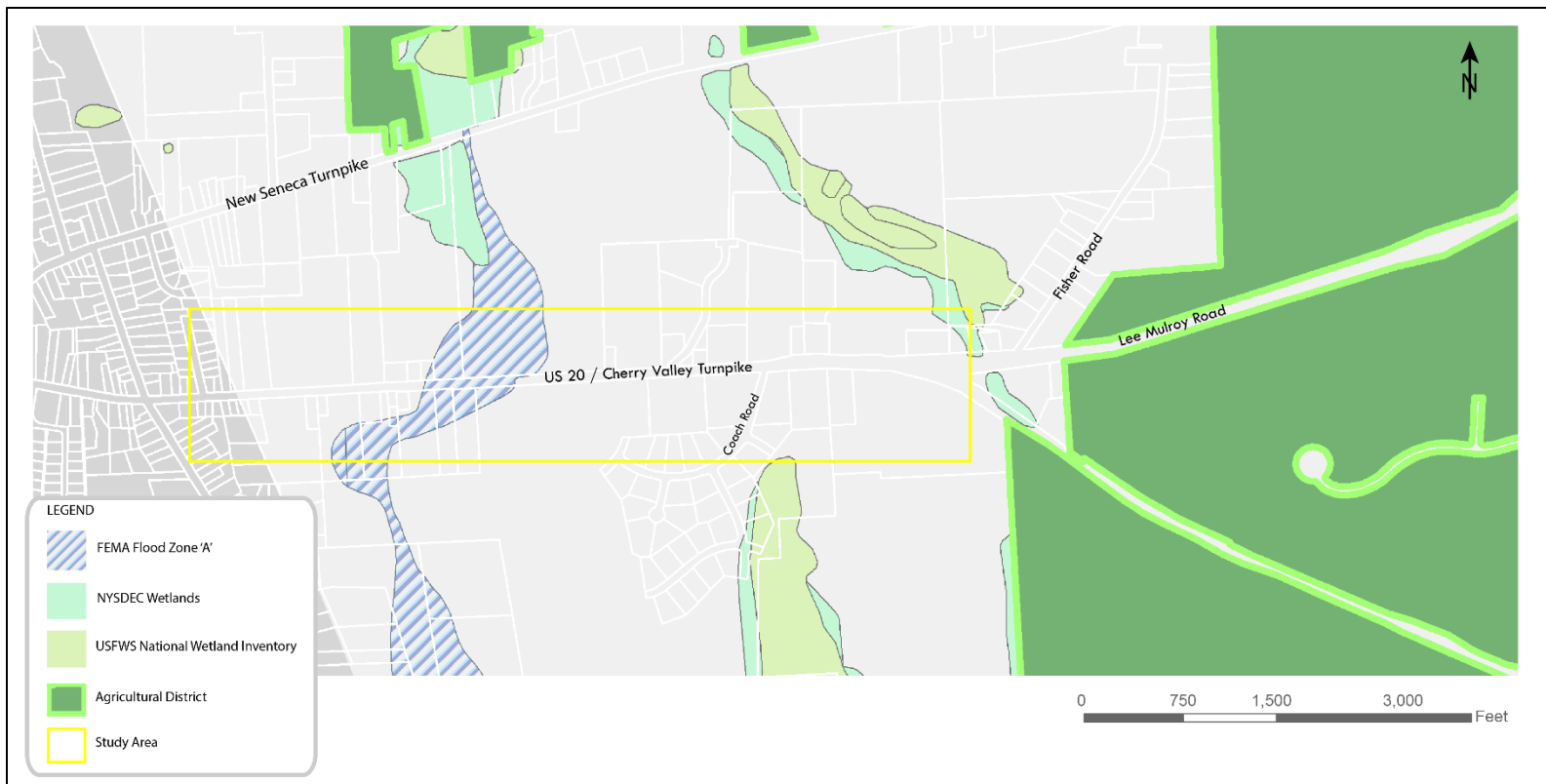
Agricultural Districts

The farmland adjacent to U.S. 20 in the study corridor is not within any agricultural districts, but the farmland east of Fisher Road and east of the U.S. 20 / Route 175 intersection, along both U.S. 20 and Route 175, is within Onondaga County Agricultural District 2. Agricultural Districts are designed to support agriculture and preserve farmland through a combination of landowner incentives and protections that discourage the conversion of farmland to non-agricultural uses.

Floodplain

A 700-foot-wide section of FEMA flood zone 'A' is centered on Shotwell Brook (see Figure 3, Floodplain and Wetlands). FEMA defines 'A' zones as "areas subject to inundation by the 1-percent-annual-chance flood event generally determined using approximate methodologies", with no base flood elevation available.

FIGURE 3 – WETLANDS, FLOOD ZONES, AND AGRICULTURAL DISTRICTS



Wetlands

The New York State Department of Conservation’s (NYSED) wetland inventory identifies a wetland area adjacent to the U.S. 20 / Route 175 intersection. The US Fish and Wildlife Service’s (USFWS) National Wetland Inventory (NWI) also identifies wetlands in this area, north of Route 175.

Study Area Character

The Eastern Gateway area is sparsely developed, with a small cluster of homes and businesses just east of the Village boundary giving way to agricultural uses and businesses on large lots closer to Route 175 (see Figure 4, Existing Uses). A small residential subdivision (29 homes) is accessed from Coach Road, on the south side of U.S. 20, about three-fourths of a mile east of the Village line.

Pedestrian Demand

Currently, pedestrian destinations are scarce in the Eastern Gateway area, but this is likely to change over the next 10 years. There is a pizzeria on the south side of the road, with a Byrne Dairy gas station and convenience store opposite it. There is also a fast-food restaurant, the Skan-Ellus Drive-In, at the Route 175 / U.S. 20 intersection. As the name suggests, this is a drive-in, and most of its customers likely drive, rather than walk, to it. Otherwise, uses tend to be non-retail commercial, such as power equipment and auto repair, or specialized services such as a dentist’s office, a dance studio, and the offices for a home health care service. The dominant land use east of the U.S. 20 / Route 175 intersection is agriculture, meaning that walkable destinations are virtually non-existent east of this intersection.

The proposed Skaneateles Springs Hotel, to be located adjacent to Skan-Ellus Drive-In, will create an origin and destination point for visitors to the area. Unlike the Bird’s Nest Motel, which it will replace, the hotel will include a large restaurant, potentially attracting traffic from the village, and creating a venue for events such as weddings. In the Village of Skaneateles, Mirbeau Inn and Spa and its associated properties are known generators of pedestrian activity and form a western “anchor” for pedestrian infrastructure (there are two uncontrolled mid-block crosswalks within 700 feet of the Inn and its affiliated properties). Skaneateles Springs Hotel may ultimately play a similar role in the Eastern Gateway Area, forming a logical terminus for a pedestrian connection to the village. The Town Planning Board, in its 2019 review of the

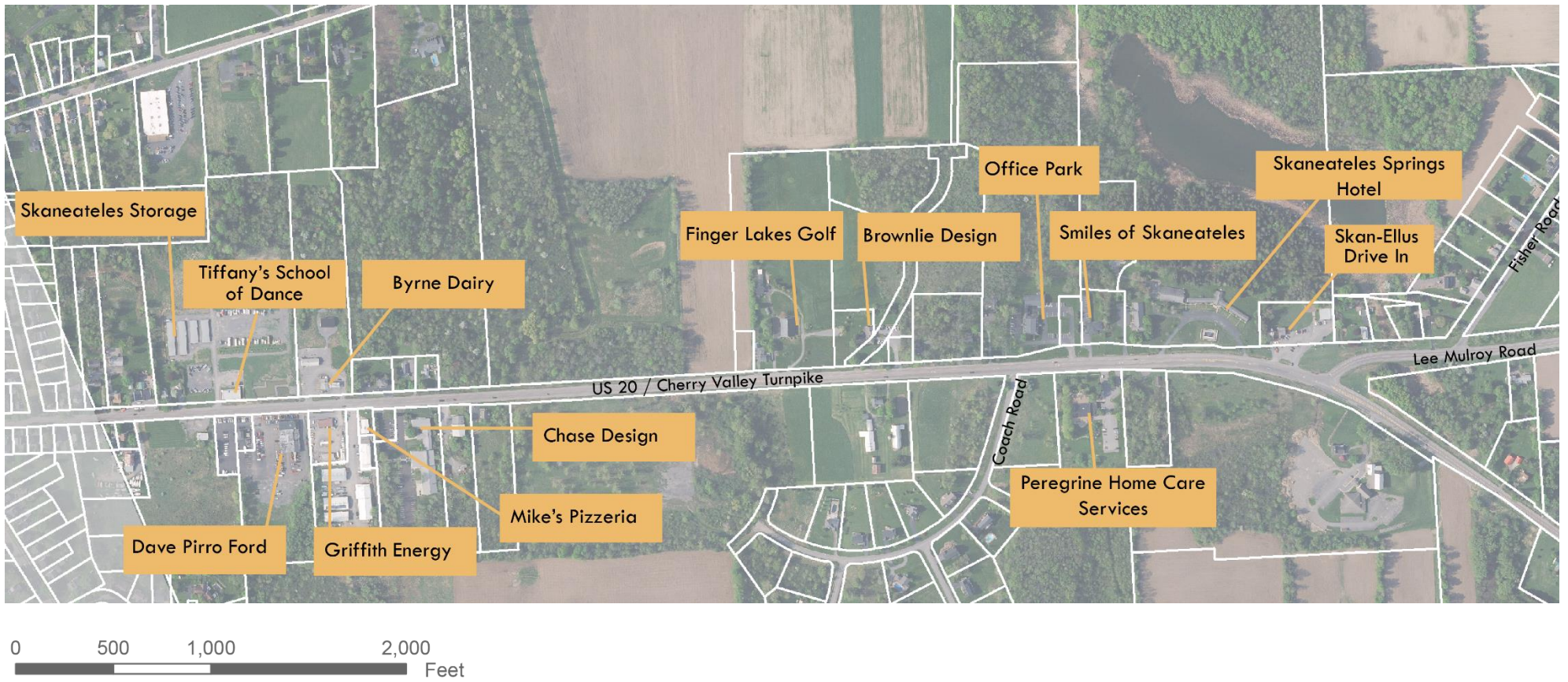
proposed site plan, noted that “A walkway was included on the plan to connect to the neighboring properties and eventually to the eastern gateway.”⁴



Skan-Ellus Drive In

⁴ Town of Skaneateles Planning Board, Minutes of September 17, 2019 meeting. Available at: <https://www.townofskaneateles.com/assets/Uploads/p.b.m.09.17.2019.pdf>

FIGURE 4 – STUDY AREA LAND USE



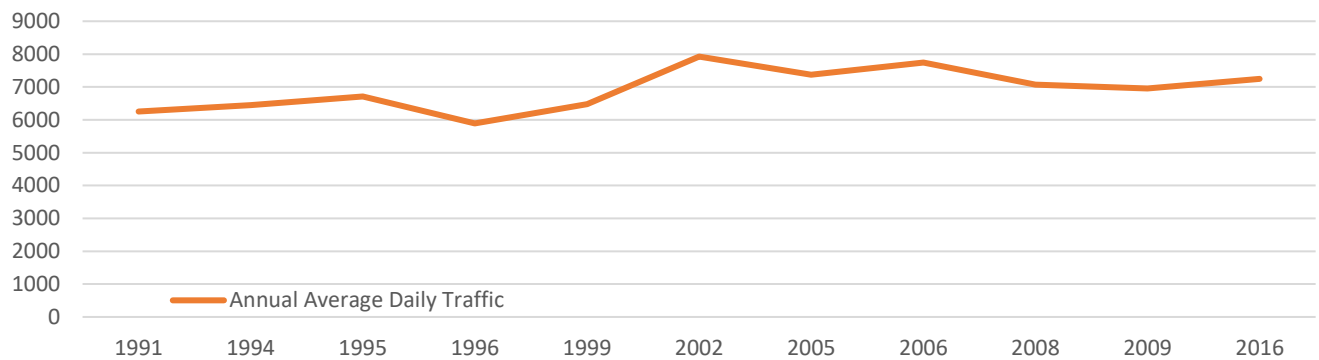
Roadway Characteristics

Volumes

In the study area, U.S. 20 is primarily a two-lane, east-west facility. U.S. 20 is owned by New York State and classified as a Principal Arterial, indicating its importance as a regional connector. It is also part of the National Highway System (NHS). The NHS “consists of the highway routes and connections to transportation facilities that shall serve major population centers, international border crossings, ports, airports, public transportation facilities, and other intermodal transportation facilities and other major travel destinations; meet national defense requirements; and serve interstate and interregional travel and commerce.”⁵ Roads on the NHS are prioritized for receipt of federal transportation funding.

U.S. 20 in this area sees approximately 7,000 vehicles daily. Daily traffic volumes have been at or near this level for the past 20 years, but prior to 2000, volumes tended to be slightly lower. Over the past 25 years, the average daily volume has increased by about 1,000 vehicles.

FIGURE 5 – TRAFFIC VOLUME TRENDS ON US 20 IN THE EASTERN GATEWAY AREA



Speeds

The speed limit on this segment of U.S. 20 transitions from 30 M.P.H. in the village, to 45 M.P.H. for the quarter mile east of the village, to 55 M.P.H., which is the speed limit on U.S. 20 as far as east as LaFayette.

Vehicle speeds (both eastbound and westbound) reflect the road’s character and uncongested conditions. The 85th percentile speed, which is often used to set speed limits, was recorded as 54 M.P.H. in 2009; speed measurements were taken near the location at which the speed limit transitions from 45 M.P.H. to 55 M.P.H.

Vehicle Class

According to data from NYSDOT, heavy vehicles make up between five and seven percent of total traffic, on average. This is in line with other rural principal arterials around the county.⁶

⁵ Federal Register, 23 USC §103(b)(1)

⁶ For more information see *Vehicle Volume Distributions by Classification* a 1997 research paper developed by Washington State Transportation Center. Available at: https://depts.washington.edu/trac/bulldisk/pdf/VVD_CLASS.pdf.

Crash History

A review of information provided through the Accident Location Information Service (ALIS) for the five-year period including from 2015 to 2019 shows 54 crashes in the study area, resulting in a crash rate 1.5 times higher than the statewide average for similar facilities. No fatal crashes were reported, but there were 13 injury crashes, including two that resulted in serious injuries.

No bicycle or pedestrian collisions were reported in the most recent five-year period.

Roadway Dimensions

The SMTC did not conduct any property line surveys as part of this analysis. Measurements are a combination of fieldwork and online measurements using Pictometry Connect online software, which has been demonstrated to provide reliable measurements in this area.⁷

The paved width of U.S. 20 in this area widens from just under 40 feet close to the village boundary to 47 feet in the eastern end of this segment. There are two 12-foot lanes for through traffic and the paved shoulder widths increase from approximately eight feet on the eastern end of the segment to 11- and 12-foot widths closer to Route 175. Additionally, there is a 12-foot center turn lane that extends for roughly 1,800 feet between the commercial property at 1515 U.S. 20 to the driveway at the former Bird's Nest Motel. This center turn lane becomes a left-hand turn lane for eastbound traffic roughly 420 feet west of Route 175.

Bicycle Suitability

According to the SMTC's Bike Suitability ratings map, U.S. 20 in this area is rated as having "average" bicycling suitability.

Existing Streetscape

Issues

U.S. 20's streetscape in this segment is fairly typical of automobile-oriented development in a rural commercial district. There are no curbs and the wide shoulders are intended to serve multiple functions: it is a pedestrian route, a bicycle facility, and the breakdown lane. Driveway entrances are wide and, in some cases, poorly defined. Street lighting is provided by cobra-head lamps on 15-foot poles. In general, this streetscape is functional and designed to ensure safety for both drivers and non-motorized movement, but it is not attractive, particularly when compared to the sidewalks, curbs, mature street trees, and wide furnishing zones in the Village of Skaneateles adjacent to the Eastern Gateway area.

Buildings in the eastern gateway vary in style and form from parcel to parcel. Setbacks vary widely. Dave Pirro Ford is roughly 34 feet from the edge of pavement, while the industrial buildings further east are 56 to 57 feet from the edge of pavement. Some buildings are oriented toward the road, while others have parking lots and entrances at right angles to U.S. 20. Most, but not all, lots have a paved parking area between the road and the lot's main building. As a result, the streetscape is irregular, which stands out in sharp contrast to the much more repetitive and regular pattern of single-family homes with consistent 50-foot setbacks in the village to the west.

⁷ Pictometry's online service provides aerial photography from May 2020 for the study area. Measurements made in Pictometry's online tool for this area were compared with measurements taken in the field using a measuring wheel. Discrepancies were either minor or non-existent.

Local Planning

As mentioned, the EGC's proposal envisions a transformed roadway cross-section, with enclosed drainage, street trees, sidewalks, curbs, and a furniture zone. In the long-term, the Town is interested in undergrounding utilities (see Figure 6). The Town Planning Board currently requests that applicants proposing projects in this corridor consider the Eastern Gateway concept, including elements such as pedestrian connections to the road and street trees.

FIGURE 6 – PROPOSED EASTERN GATEWAY STREETScape



Source: June 22, 2020 EGC presentation to the Skaneateles Town Board

SMTC Streetscape Upgrade Cost Estimate

In spring of 2020, SOCPA requested the SMTC's input on a cost estimate for upgrading the streetscape in the Eastern Gateway area. SMTC staff reviewed the EGC's concepts for this area, reviewed cost estimates (primarily utilizing NYSDOT data), as well as other similar gateway areas in New York State. Based on this data, SMTC staff developed a streetscape concept for the study area, including linear distances for specific treatment concepts, and developed a rough cost estimate for this concept.

The cost estimate was on the order of \$6 million for the proposed upgrades, a large proportion of which (\$1.87 million) was anticipated to come from the costs to enclose the existing open drainage on one side of the road for the length of the study area. Research indicated that catch basins, costing roughly \$750 each, would need to be installed at 150-foot intervals, meaning that catch basins alone would cost nearly \$28,000. See Table 1 for more details on estimated costs for various streetscape improvements.

It should be noted that the cost estimate included a 40 percent contingency, a relatively high contingency percentage. This reflects the high degree of uncertainty inherent in this estimate. The SMTC was unable to determine with any degree of certainty what an enclosed drainage system would be likely to cost.

Additionally, elements such as the floodplain and the presence of a sensitive water body (Skaneateles Lake) may complicate construction in this area.

Within the Eastern Gateway area there are two distinct development patterns, roughly demarcated by the change in zoning from HC to IRO. For the purposes of the cost estimate, it was assumed that the greatest investment in streetscape improvements would be made in the approximately one quarter-mile long segment of U.S. 20 east of the Village. This is the area shown in Figure 6 and it contains the greatest concentration of existing commercial development.

Curbs, sidewalks, street trees, and ornamental lighting in this area are suitable to the existing development pattern in this area and would be poorly suited to the undeveloped agricultural area to the east. In this area, a 10' stone dust trail is envisioned on one side of U.S. 20, with tree plantings separating the trail from the roadway.

Streetscape – Issues and Opportunities

The catalyst for the SMTC's involvement in what is, essentially, the Town of Skaneateles' internal effort to develop a plan for the study area, was NYSDOT's announced maintenance activity on U.S. 20. Discussions between the Town, NYSDOT, and SMTC staff increasingly suggest that, while NYSDOT does not generally object to the Town's ideas for this portion of the highway, a maintenance project presents very few opportunities for achieving the vision the Town has laid out.

Additionally, this roadway segment may present some challenges to developing a more "urbanized" and pedestrian-friendly streetscape. The fact that it is an NHS facility constrains design options and the lack of an existing stormwater drainage system makes adding curbs and sidewalks more complicated than it would be in an area with existing drainage. On the other hand, options are available to resolve these issues. As a segment of a major roadway adjacent to a well-known tourist destination, the Eastern Gateway area has a lot of potential to capitalize on private investment in the future.

NHS Design Requirements

NHS arterials with volumes over 2,000 AADT are bound by certain design parameters, including lane and shoulder widths specified in the NYSDOT Highway Design Manual (HDM). According to the HDM, 12-foot travel lanes are required on this portion of U.S. 20. However, shoulders are only required to be eight feet wide, creating opportunities to tighten up this portion of the streetscape. Shoulder widths should be reduced to eight feet wherever they currently exceed this width.

TABLE 1 - SMTc STREETSCAPE UPGRADE COST ESTIMATE

Item	Unit	Cost Per Unit	Total Units	Total	Description	Unit Cost Source
Sidewalk & Concrete Curb	Linear Foot	\$195	2,640	\$514,800	5-foot wide sidewalk on both sides of U.S. 20 within ¼-mile of the Village w/pre-cast concrete curb	NYSDOT Quick Cost Estimator
Street Trees	Each	\$620	313	\$194,000	Trees on both sides of 20; 30' spacing in HC district; 40' spacing in IRO district	NYSDOT Bid History (weighted avg. of awarded contracts); Item #611.0111
Decorative lights (9')	Each	\$12,600	52	\$655,200	Decorative lampposts on both sides of US20 for 1/4 mile east of village (50' spacing); includes foundations, conduit, pullboxes, etc.	NYSDOT Preliminary Cost Estimate Workbook
Overhead lights (30')	Each	\$7,500	23	\$172,500	30' cobra-head lights @ 300' intervals, both sides of US20 in IRO district (number may be less if existing lights remain); includes foundations, conduits, pullboxes, etc.	NYSDOT Preliminary Cost Estimate Workbook
Covered drainage	Linear Foot	\$332	5,550	\$1,870,350	Replace open drains w/covered drainage - assume this is only necessary on the north side in the project limits - assume need to add a catch basin (\$750/ea) every 150'	Review of similar projects in other cities
Multi-use trail	Linear Foot	\$30	3,800	\$114,000	Add a 10' stone dust trail to one side of US20 in IRO district	<i>Costs for Pedestrian and Bicyclist Infrastructure Improvements</i> (adjusted)
Bike lane	Linear Foot	\$3	10,560	\$31,680	5' bike lanes on both sides of US20 for the one-mile length of the study area	NYSDOT Quick Estimator Reference – Upstate
Subtotal				\$3.36 M		
Contingency (40%)				\$1.34 M	<i>A 40% contingency cost reflects the level of uncertainty in a planning-level estimate, particularly given the limited data available on culvert construction.</i>	
TOTAL				\$4.7 M		

Drainage and Green Infrastructure

Currently, stormwater in the study area runs off the roadway into neighboring lawns and drainage ditches. Open trench, vegetated ditches are present on both sides of the road intermittently throughout the study area. Near Shotwell Brook, surface runoff drains into the brook, which is a tributary to Skaneateles Lake.

The Town's preferred streetscape would include curbs and sidewalks, which requires ensuring that stormwater that washes off the roadway between raised curbs has somewhere to go. Stormwater runoff from roads carries pollutants such as sediments, heavy metals, bacteria, and hydrocarbons, all of which must be prevented from entering nearby Skaneateles Lake, the City of Syracuse's primary source of water.

In the short-term, developing stormwater drainage options for this area is likely to be outside of the scope of NYSDOT's proposed paving project. In the long-term, the Town should consider developing a green infrastructure approach to stormwater management in cooperation with both NYSDOT, the New York State Department of Environmental Conservation, and the New York State Environmental Facilities Corporation (EFC). Exploring green infrastructure solutions creates a wide variety of opportunities for improving aesthetics, upgrading pedestrian amenities, and ensuring that the highway's stormwater runoff does not adversely impact Skaneateles Lake.

Green Infrastructure and Complete Streets

Green infrastructure can be incorporated into decorative plantings as well as into paved surfaces by way of porous pavement and on-site retention. In Lake George, a one mile stretch of Beach Road that was converted to porous pavement in 2013 continues to provide on-site stormwater retention.



Curb cuts can be designed to direct stormwater runoff into vegetated areas

Other options may include:

- Creating a vegetated buffer between new sidewalks and the roadway,
- Designing street tree pits with on-site stormwater capture, and
- Designing sidewalks with grated curb cuts, to allow stormwater to flow under the sidewalk to vegetated areas on the roadside.

Case Study: Town of Lake George Gateway

Like U.S. 20 in Skaneateles, U.S. 9 is a portion of the NHS administered by NYSDOT that serves as the main street through a resort community – in this case, Lake George. In 2010, the Town of Lake George developed a plan to upgrade the U.S. 9 streetscape in the nearly one-mile gateway area south of the Village of Lake George. Like the study area, this portion of U.S. 9 was characterized by wide shoulders, a lack of sidewalks and other pedestrian amenities, a lack of visual cohesion, and a strictly utilitarian design. The *Lake George Route 9 Gateway Plan* prepared in 2010 describes the streetscape at that time as follows: “Multiple wide lanes, cluttered signage, and a lack of pedestrian and landscape features makes for an

unsafe and unappealing pedestrian and vehicular experience.”⁸ Like the EGC’s concept, this plan envisions a complete street that includes access for pedestrians and bicyclists, as well as the elderly and children. It also includes green infrastructure elements, such as tree trenches, rain gardens, and on-site stormwater retention.

In 2016 and 2017, this concept became reality, including the construction of curbs, sidewalks, ornamental lighting, and vegetated medians. Funding for this approximately \$7 million improvement came from a variety of sources, including the Town, the EFC, New York State, and federal transportation funding. The Town of Lake George worked with NYSDOT and the Adirondack-Glens Falls Transportation Council to plan, design, and find funding for this project.



Figure 7: The U.S. 9 gateway to Lake George before (left) and after (right) streetscape improvements. (Imagery from Google Street View)

Potential Funding Sources

- Federal highway funding: The kinds of improvements proposed for this facility qualify for funding under the Statewide Transportation Improvement Program (STIP). Municipalities can submit proposals for inclusion in the STIP through the SMTC’s TIP Process (see the [SMTC’s Transportation Improvement Program Guidebook](#), available on the SMTC’s website). Municipalities are responsible for providing a 20 percent match for the cost of federally-funded projects.
- Transportation Alternatives Program (TAP): Periodically, NYSDOT makes funds available for exactly the kind of improvements the Town of Skaneateles is interested in. A 20 percent match

⁸ *Lake George Route 9 Gateway Plan*, Town of Lake George, 2010. Available at: <https://lakegeorgetown.org/assessment-rolls/planning-zoning/plans-and-reports/1616-2010-lake-george-gateway-corridor-plan/file.html>.

is required on the part of the municipality. TAP funding is likely to become available within the next year; the Town should begin preparing background documentation now, demonstrating the project's public benefit, community support for the proposed improvements, NYSDOT's history of support for these improvements, and a more detailed budget than has been prepared to date. Additionally, these materials need to be reviewed by a Professional Engineer. More information on TAP and future solicitation rounds can be found on the NYSDOT website at: <https://www.dot.ny.gov/divisions/operating/opdm/local-programs-bureau/tap-cmag/>

- New York State Department of Environmental Conservation (DEC) Water Quality Improvement Project (WQIP) Program: The WQIP program funds projects that protect a drinking water source – in this case, Skaneateles Lake. Past projects have included stormwater systems – this may be a possible funding source for drainage and/or green infrastructure improvements. WQIP reimburses municipalities for project costs, with the local match proportion varying by project type. More information is available on the DEC's website: [Water Quality Improvement Project \(WQIP\) Program - NYS Dept. of Environmental Conservation](#)
- Green Innovation Grant Program: The EFC's Green Innovation Grant Program provides funding for green stormwater infrastructure projects. The Town may be interested in incorporating green infrastructure elements in this area, including on-site bioretention, stormwater street trees, and permeable pavements. The study area could become a showcase for green infrastructure elements integrated into a gateway area. More information is available at: <https://www.efc.ny.gov/GIGP>
- Local Waterfront Revitalization Program (LWRP): The New York State Department of State's LWRP program can fund a wide range of planning activities in corridors that are adjacent to designated inland waterways, such as Skaneateles Lake. Funding for outreach and project planning can be obtained through this program, which requires a local match. More information is available at: [Department of State, Office of Planning and Development \(ny.gov\)](#)
- Private Investment: The Town Planning Board should continue to make developers and property owners aware of the plan for this corridor. As individual development proposals are reviewed, they should be held to a specific streetscape design standard compatible with the Town's vision. Preferably, this would be articulated in a master document adopted and endorsed by the Town. Rather than have allowing each developer to add streetscape elements in pieces along the corridor, the Town should consider developing a fee structure based on street frontage; proceeds from this fee would be set aside to fund the Town's local match portion, as required by many grant and loan programs.

The Town should consider utilizing multiple funding sources to accomplish its goals for the study area. A recently completed streetscape project in Watertown, New York cost a total of \$6.7 million, with funds coming from TAP, the Consolidated Highway Improvement Program (CHIPs), the STIP, and other sources.

Recommendations

- 1.) Develop a master plan for this roadway section that combines all the elements of the Town's vision for the Eastern Gateway, including aesthetics, stormwater drainage, mobility, and safety. The elements of this vision are currently embodied in verbal descriptions and various reports to the Town Board. Both public highway projects and individual private development proposals along the corridor can more easily support a vision – particularly in the IRO zone – if it has been

clearly articulated in a plan adopted by the Town that specifies elements such as suitable tree species, tree planting locations, the proposed location for a multi-use trail, and suitable locations for crosswalks. In the HC zone, the Town should establish specifications such as sidewalk width and preferred location, as well as width of a furnishing zone, and locations of crosswalks, if desired.

- 2.) Consider working with the EFC to develop innovative green infrastructure elements for this corridor. A roadway segment that would simultaneously benefit from stormwater disposal solutions, aesthetic improvements, and an upgrade in walkability would seem to be the ideal candidate for the EFC's Green Innovation Grant program, and/or other EFC financial and technical assistance. The study area's location in the Skaneateles Lake watershed would seem to further improve the chances of getting low-cost support from the EFC.
- 3.) Continue working with NYSDOT. The currently proposed U.S. 20 paving project is a poor fit for the reinvention of the Eastern Gateway Corridor as a complete street. However, on similar projects, NYSDOT has been willing to accommodate municipalities' requests for upgraded roadway designs, if the municipality is able to provide funding. The "betterments process" allows municipalities to request that the State include additional work beyond what would normally be part of a project, provided that the municipality funds this work. The Town should consider pursuing loans and grants to fund at least the first phase of a streetscape improvement and request that NYSDOT include it in the proposed paving project as a betterment.

Conclusion

The Town of Skaneateles has been developing a vision for the one-mile segment of U.S. 20 over the past five years. The upcoming NYSDOT paving project that would affect this segment of the road is insufficiently funded to include the kind of streetscape improvements that the Town has in mind; using the budget developed by the SMTC as a starting point, these streetscape improvements would roughly double the project's cost. The Town has several alternative options for financing some portion of its streetscape vision as a betterment that would be included in NYSDOT's project. The lack of stormwater drainage facilities may work in the Town's favor, since funding for green infrastructure projects that also include pedestrian infrastructure is available through both the DEC and the EFC. The Town should continue to coordinate with SOCPA on an LWRP proposal for this area.