

# A Feasibility Study for the Syracuse Community Trail (SCT)

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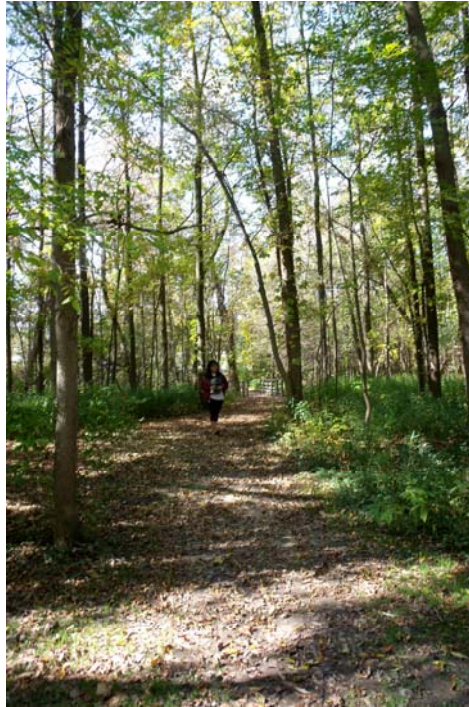
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# **1 Introduction**

The City of Syracuse currently has plans for a connective corridor which would connect the University area with downtown Syracuse and the area immediately west of downtown. A route to expand this connection further, connecting the University area to the Town of DeWitt, would greatly increase the benefits to the larger community. This feasibility study examines the potential for such a route -- the Syracuse Community Trail (SCT). Depending on the wishes of community residents, an alternative name for the trail is the Syracuse-DeWitt Community Trail.

The proposed route, from west to east, would begin on-road at East Genesee Street (near downtown Syracuse), and pass through the University area. A new dedicated off-road multi-use trail would then generally follow the I-481 corridor and Butternut Creek to the Old Erie Canal State Park in DeWitt. While on-road sections currently exist, a great deal of effort will be needed to obtain recreational easements from property owners to develop an off-road multi-use trail, complete linkages for the trail at road and canal/creek crossings, and to develop trail signage and safety mechanisms.

This report outlines the issues and needs for this proposed trail, beginning with an assessment of areas proposed for on-road and off-road trail development, followed by recommendations for trail development and promotion. This report was completed as a class project by the Ecotourism and Nature Tourism class at SUNY ESF.

## ***1.1 Issues and concerns***

Issues and concerns were identified during the assessment portion of this project with input from local residents. The issues are as follows:

1. Visitor safety (proximity of rail road to trail, I-481 overpass, lighting, trail width, security, difficulty, cell phone service).
2. Funding to develop the trail.
3. Long-term maintenance and litter removal.
4. Leadership for trail development and maintenance.
5. Accessibility for physically challenged individuals.
6. Liability protection for land owners through conservation easements.
7. Obtaining landowner permission and conservation easements.
8. Protecting the Ram's Gulch population of the Hart's tongue fern.
9. Ensuring the protection of fragile habitats (e.g., wetlands) and wildlife.
10. Accessing the trail (parking, access trails, local communities and businesses, parks, emergency vehicles, etc...).
11. Providing visitor facilities (rest rooms, water fountains, benches, bike racks, parking).
12. Developing the trail using best management practices (near rivers, rail road, etc...).
  - Trail hardening and drainage.
  - Trail difficulty and safety.
  - Creating a trail that is attractive and useful.
13. Potential for regional connectivity with other trails.

14. Identifying trail limits to keep people out of quarries, off private property, and on the proposed easement lands.
15. Promoting the development and existence of the trail.

## **1.2 Vision**

A vision statement was developed by the students to reflect their vision for the trail in the future. The vision statement is as follows:

We envision the Syracuse Community Trail (SCT) within 15 years to be:

1. An enjoyable trail experience for a variety of users (including bicyclists, hikers, and skiers) that can be used throughout the year.
2. A safe and sustainable alternative for commuting in the Syracuse area.
3. An experience that provides educational opportunities for trail users, increasing their awareness of Syracuse's history and natural resources.
4. A facility that improves the health and well-being of Central NY residents.
5. A facility that connects trail users with local businesses, parks, and attractions.

## **1.3 Goals of the proposed SCT**

1. To construct and ensure a safe, enjoyable trail experience for a variety of users.
2. To promote a sustainable and accessible alternative for commuting in the Syracuse area.
3. To create educational opportunities focused on Syracuse's history and natural resources.
4. To provide a facility that offers Central NY residents an opportunity to improve their health and well being.
5. To establish connections between trail users and local businesses, parks, and attractions.

## **1.4 Theme**

A theme was developed to guide all educational efforts along the trail after the trail has been completed. The theme is:

*The Syracuse Community Trail is a sustainable, multi-use trail that engages its visitors with natural and historic resources, creating community connections and providing recreational opportunities.*

## **2 Assessment of Proposed Trail Sections**

The SCT has the potential to unite different areas within the greater Syracuse area as both a recreational trail and a path for commuters traveling between Syracuse and adjacent communities such as DeWitt. In some areas, a clear path has been designated for the SCT (such as a feeder canal towpath) and yet others will depend on discussions with multiple stakeholders to ascertain the potential for recreational easements, property transfers, and/or development of infrastructure to support such a trail.

This section describes the proposed trail route for the Syracuse Community Trail, and provides a detailed assessment of the trail with respect to such components as natural habitat and resources, historic resources, soil types, topography, safety considerations, existing infrastructure, and property ownership. A general route with potential alternatives was determined by the class with assistance from Brian Solomon (Figure 1). This proposed trail was broken down into the following segments to simplify the assessment process:

- East Genesee Street to SUNY ESF / Syracuse University
- SUNY ESF / Syracuse University to Jamesville Avenue
- Comstock Avenue / Jamesville Avenue
- Jamesville Avenue to Jamesville Road
- Jamesville Road to the Old Erie Canal State Park, DeWitt

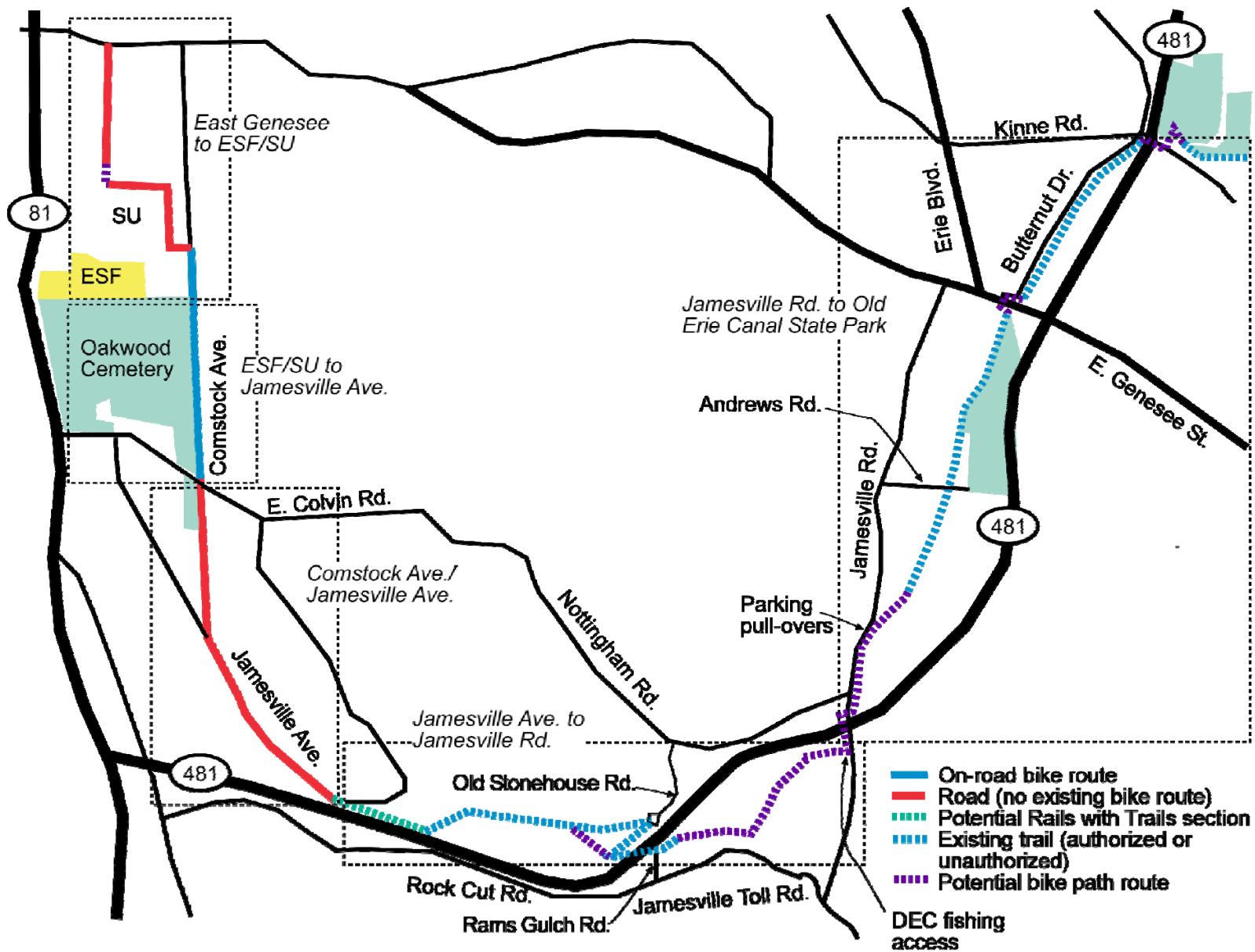


Figure 1. Proposed route for the SCT (trail sections are shown in the rectangles).

## ***2.1 East Genesee Street to SUNY ESF / Syracuse University***

### **Description of Route**

This section of trail follows the connective corridor bike path along University Avenue from East Genesee St. to the ESF and SU campuses.

### **Natural habitat and resources**

There are no natural habitat and resource areas located along this section. There are only landscaped areas that are maintained by the city of Syracuse and by Syracuse University.

### **Historic resources and sites**

Located along the route is Syracuse University. The university is home to many different historic buildings such as Hendricks's Chapel, the Crouse Women's College and The Hall of Languages. The route also provides access, though not direct, to the Erie Canal Museum.

### **Soil types**

The route through this area is being placed along roads. These surfaces are made up of impervious pavements.

### **Topography**

The topography along this section ranges from flat to slightly hilly. The route is planned to be on areas with slopes that meet American Disabilities Act (ADA) standards. The exception to this would be if the SCT were placed adjacent to Route 81 in Oakwood Cemetery. Then there would be a large climb up to the campus area. If this were to happen the route would no longer meet ADA specifications.

### **Safety Considerations**

Since most of this portion of the route will be on streets, vehicle traffic is the largest concern. There would be interaction between cyclists with both motor vehicles and pedestrians. Other concerns include interacting with urban residents and potential crime along the cycletrack stretching along University Avenue.

### **Existing Infrastructure**

This portion of the SCT is located on paved surfaces. However, there is currently no existing bike infrastructure in the area. The City of Syracuse is currently building cycletracks along the Connective Corridor. These improvements will stretch from Waverly Avenue to East Genesee Street along University Avenue. These improvements are scheduled to be complete in spring of 2012. Lastly, there are bicycle racks throughout the Syracuse University campus that will allow users of the route to lock and store their bicycles.

### **Property ownership and management**

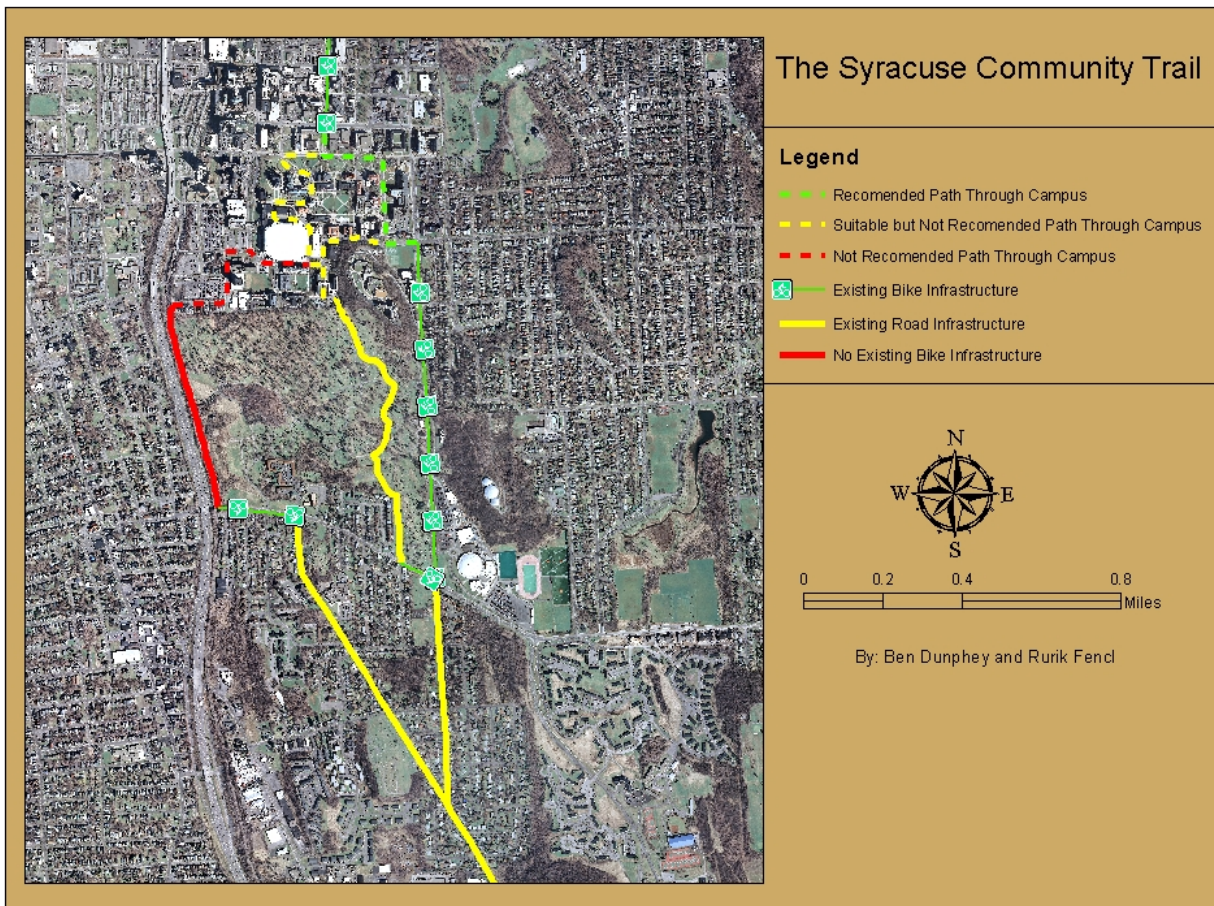
The land on this portion of the route is owned by Syracuse University and the City of Syracuse. The Syracuse University Physical Plant and the City of Syracuse Department of Public Works manage the property.



## 2.2 SUNY ESF / Syracuse University to Jamesville Avenue

### Description of Route

Three routes were assessed for this portion of the trail: one utilizing the existing bike lane on Comstock Avenue, one utilizing the road network of the Cemetery, and one that follows the train tracks on the western edge of the property (Figure 2).



**Figure 2.** Map showing potential routes through and near Oakwood Cemetery. (Source of aerial photo: Google Earth).

### **Natural habitat and resources**

Oakwood cemetery is known for its landscape architecture, which is a man-made natural habitat. A variety of tree species also exists including many different oak, maple, ash, pine, spruce and fir.

### **Historic resources and sites**

Oakwood cemetery is home to many historic monuments and tombs of locally famous families, such as the Comstocks, Colvins, as well as many families that are a part of Syracuse University's

history. Lastly, Oakwood Cemetery is registered with the National Registration of Historic Places due in part to its Civil War Monument.

### **Soil types**

Each of the three routes that we assessed has different soil types. The bike lane is on Comstock Avenue, and paved, so soil type does not apply to that route. Along the Oakwood Cemetery road network, the soil is a Camillus Silt Loam and has a frequency of zero flooding. The soil along the railroad track is a mix of Camillus Silt Loam as well as a Palmyra Gravelly Loam, both of which have a frequency of zero flooding.

### **Topography**

The cemetery area contains lots of small and steep hills. The Comstock Avenue route has a gentle uphill slope when travelling northward, and goes along the base of a glacial drumlin. The Oakwood Cemetery network route utilizes roads that are relatively flat because the roads are following the contours of the hills. The train track route is flat except for at each end of the cemetery; the tracks lie below most of the level of the property and the path would need to be brought down to the level of the tracks for it to be flat.

### **Safety Considerations**

The biggest safety concern for this portion of the path is along the train track route that is the least used area of Oakwood Cemetery. There is questionable activity that takes place in the area with little lighting. As a result of the illegal activities taking place here, it is not a popular place to visit by the average person.

The road network route has very rough roads with lots of potholes, as well as a lack of lighting. The benefit to the road network is that there is emergency vehicle access along the whole route. The Comstock Avenue route is well lit, and goes past SU property with emergency call boxes nearby. There are cross walks at intersections, and a traffic signal at the busiest intersection. There is an established bike lane already, but it is in rough condition with crumbling edges near the curb.

### **Existing Infrastructure**

The route that follows the train tracks currently has no infrastructure and it cuts through the woods. The route that follows the road network has roads of varying quality, from dirt to paved, but there is no other infrastructure. The Comstock Avenue route has a bike lane on both sides of the road, street lamps at regular intervals, as well as well-marked intersections. The bike lane's curbside edges are crumbly and in rough condition. There is a crosswalk near the Comstock Avenue entrance to Oakwood Cemetery across from the Islamic Society building.

### **Property ownership and management**

The Oakwood Cemetery Association owns and manages the Cemetery. The city of Syracuse owns and manages Comstock Avenue.

## ***2.3 Comstock Ave./Jamesville Ave.***

### **Description of Route**

This section of the trail begins at the intersection of Comstock Ave. and Colvin St., and follows Comstock to Jamesville Ave. to Skytop Road.

### **Natural habitat and resources**

There is a limited amount of natural resources on this portion as it only passes through residential neighborhoods. Common trees in the area, however, include several varieties of oak, ash, and maple with a mix of softwoods including pine, spruce and cedars.

### **Historic resources and sites**

Both of the routes on this portion of the road end at Oakwood Cemetery, which is a historic cemetery known for its landscape architecture; otherwise there are no other notable historic resources.

### **Soil types**

For this portion of the trail, the route is all on paved roads.

### **Topography**

There are gentle rolling hills at the base of the glacial drumlins, and the roads follow these from Jamesville Avenue up until Comstock Avenue where they split. From there, Comstock Avenue remains a very gentle slope all the way to Colvin Street. Jamesville Avenue remains flat up until the last bend where it drops at a moderate slope to intersect with Colvin Street.

### **Safety Considerations**

Both Jamesville Avenue and Comstock Avenue have rough shoulders and numerous stop signs that would need to be followed by trail users. Both streets' intersections with Colvin Street are risky areas. Jamesville Avenue, for example, is dangerous because there is no light, crosswalk or traffic signal. Comstock Avenue is risky because of the volume and speed of traffic that passes the intersection. The intersection of Comstock Avenue and Colvin Street is made safer by the fact that it has a crosswalk, traffic signal, and street lamps.

### **Existing Infrastructure**

Given the residential character of this portion, there are no structural facilities such as bathrooms. A parking lot exists on the SU campus that could potentially be utilized if the users could get past the car gate. There is no existing bike infrastructure along this portion, but there is a community park at the southwest corner of Comstock Avenue and Colvin Street. Comfort Tyler Park has roadside parking available, a baseball diamond, tennis courts, basketball courts, and is very close in proximity to the Syracuse campus.

### **Property ownership and management**

The roads on this section are all owned and maintained by the City of Syracuse, while private parties own the residential property.

## ***2.4 Jamesville Ave. to Jamesville Rd.***

### **Description of Route**

From the west, this section of trail would begin at the end of Jamesville Avenue where it meets Skytop Road. The first 0.2 miles would run adjacent to a rail line where a rails-with-trails component may be considered. Proceeding east, the trail route would move north a few hundred feet, away from the rail line, and through a hardwood forest area at the base of the Onondaga Escarpment. The proposed trail would then proceed east through a more open area impacted by former quarrying activities, before running adjacent to a wetland area. Another short forested section and open section would be followed by the trail passing under I-481 between Old Stonehouse Road (on the north side of I-481) and Rams Gulch Road (on the south side of I-481). The trail would then proceed through another forested area above Rams Gulch until running along a utility road to Jamesville Road.

This section of trail provides exposure to a more diverse natural landscape than some of the other sections of proposed trail. This assessment will help determine which routes provide the safest and most enjoyable experience for visitors on this section of the SCT trail. Some rough trails currently exist through portions of this proposed trail section, known to be used by mountain bikers and hikers to some extent.

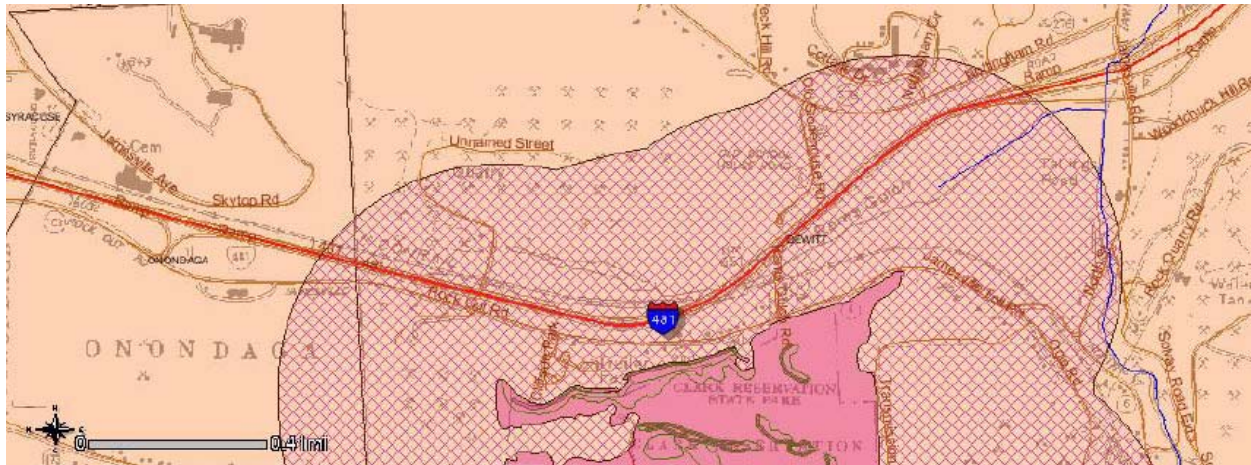
### **Natural Habitat and Resources**

A portion of this section of proposed trail would be located within northern hardwood forests, primarily dominated by sugar maple and red oak; with a small portion consisting of white cedar. These types of forests prefer acidic, moderate to well-drained soils that occur below the elevation of 2500 feet. The estimated age of the forest is between 40 to 60 years, with low levels of underbrush. Some indications of invasive plants such as buckthorn were present. This type of forest harbors a wide variety of wildlife including white-tailed deer (Forestguild.org).

Originally, quarries were not a naturally occurring habitat, but have become part of the landscape along the bulk of the proposed SCT. Due to the activities that occurred in the quarry, significant impacts on local habitat have transpired. Large amounts of impermeable surfaces have been created, affecting water drainage and plant growth.

A portion of this section of proposed trail would pass through a forested area above Rams Gulch, a unique natural ecosystem home to endangered plants and NYS designated wetlands. Some features include limestone outcrops, tulip trees, and an unnamed tributary to Butternut Creek, which cascades through falls down the gulch. The Hart's tongue fern is a federally-threatened species in New York State that has small and scattered populations found in Ram's Gulch. This fern only grows on lime-rich substances, generally on north facing slopes; this specialized habitat is one of the reasons for its endangerment. This bike trail, if implemented, should be placed outside Ram's Gulch in order to maintain a distance between visitors and the fern's habitat (USDA Plants). The puttyroot orchid (*Aplectrum hyemale*) and the yellow giant hyssop (*Agastache nepetoides*) are two other rare plants which are found near the proposed area. Documented populations have been found in Clark's reservation and in some of the surrounding area, however, these populations are so small researchers may have overlooked other communities of these plants elsewhere. Efforts to maintain a distance between the SCT and known populations of these threatened plants will be needed.

Butternut creek is stocked every year by the DEC with brown trout (CNY Fishing). Thus, placing a trail near the creek could potentially bring visitors in contact with fishermen, as well as impact the creek's water quality with excess litter and erosion from visitors.



**Figure 3.** The location of significant plant species within the study area (<http://www.dec.ny.gov/imsmaps/ERM/viewer.htm>).



**Figure 4.** NYS designated wetlands (green shading) and buffer zones (green hatched areas) within the study area (<http://www.dec.ny.gov/imsmaps/ERM/viewer.htm>).

### Historic Resources

#### *Rams Gulch Camp:*

A short term camp was operated in the vicinity of Rams Gulch by the Boy Scouts of America on 44 acres from 1919 to 1970. The State College of Forestry (prior to SUNY ESF) also used this area for field research.



**Figure 5.** Juniper Cabin in Ram's Gulch (1929; source: [www.cnyscouts.org/history/camp\\_rams\\_gulch\\_history.asp](http://www.cnyscouts.org/history/camp_rams_gulch_history.asp))

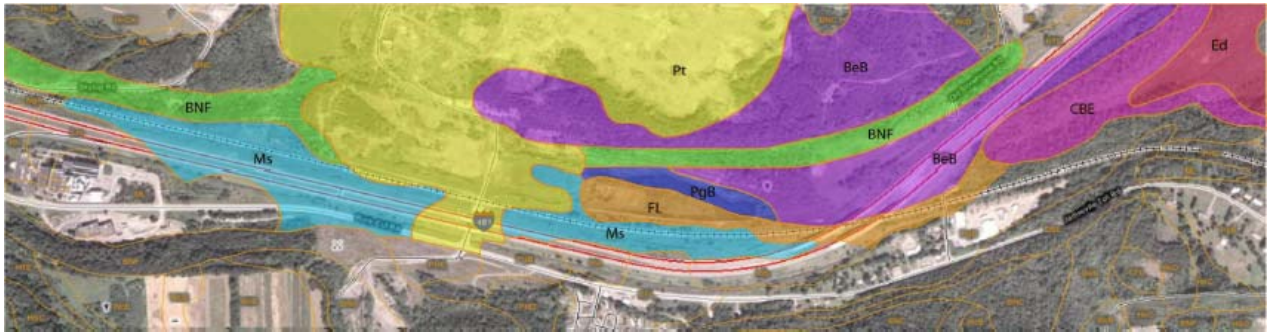
An old stone chimney, like the one pictured above, can be found adjacent to the proposed trail route.

*Roadway connections prior to I-481:*

Prior to the construction of I-481, Old Stonehouse Road and Rams Gulch Road were part of a single road (Nottingham Road); the proposed trail would essentially re-establish that historic connection.

**Soil Types**

Soil is classified depending on two different categories: soil material associated to particle size and drainage (NCRS). One type of soil found in the area is Loam, which is a gritty, moist soil composed of sand, silt, and clay in relatively even concentrations. Loam soils generally contain plenty of nutrients, have great infiltration and drainage, and are relatively easy to till. A second soil type is Silt Loam, which contains a higher concentration of silt than clay or sand and makes it a more nutrient soil with moderate drainage. Gravelly Loam, a third example of soil types in the area, contains a higher concentration of dense sand particles called gravel, which allow for drainage and have less nutrients than other loams. Channery contains similar characteristics of a silt loam, however, it is found on steep slopes and has more aeration. Fluvaquents, another example of soil type in the area, is found in frequently flooded areas with poor drainage. Lastly, Muck is a dense, moist soil that contains a large concentration of silt with high nutrient characteristics.



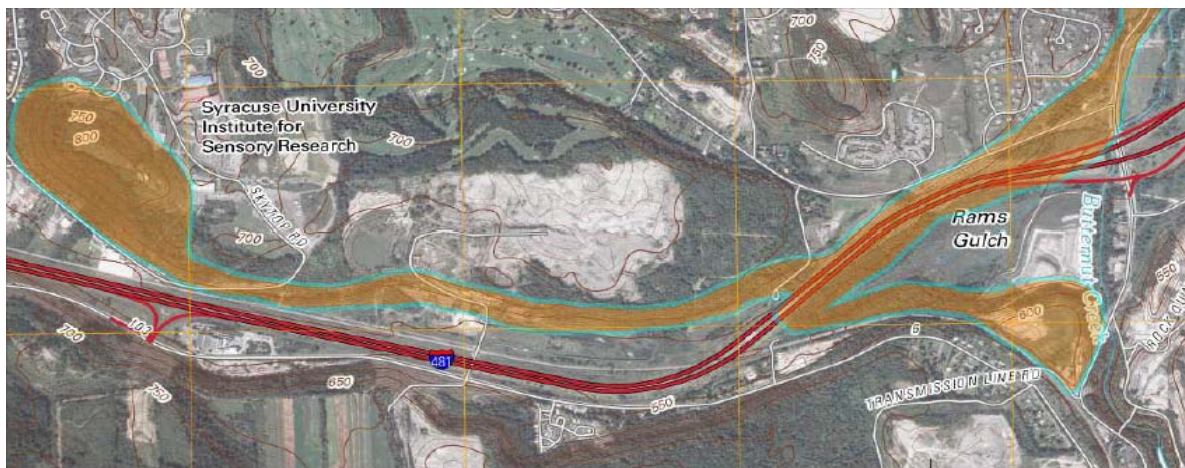
**Figure 6.** Soil profile boundaries located within the study area (soil descriptions are included in Table 1; <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>).

**Table 1.** Soil types in the study area.

Soil Type	Description of Soil	Color on map
Pt	Quarries: human made, impermeable, poor drainage	Yellow
Beb	Benson Silt Loam	Purple
BNF	Benson-Wassaic-Rock outcrop: dense rock such as limestone	Green
CBE	Camillus and Lairdsville channery	Pink
Ed	Edwars muck	Red
FL	Fluvaquents	Orange
Ms	Martisco & Warner soils	Light Blue
PgB	Palmyra gravelly loam	Dark Blue

## Topography

The drumlin and escarpment forms seen throughout Central New York heavily influence the topography in the general vicinity of the proposed trail route. From the southeast terminus of Jamesville Avenue, east to Old Stonehouse Road, the proposed trail route is situated north of and generally parallel to both I-481 and a rail line, in a relatively flat area at the base of the escarpment. As the proposed trail continues east, construction for I-481 and quarry operations have contributed to some moderate to steep grade changes north of I-481. The escarpment also continues east, directly on the north side of the interstate where it then veers north towards the next portion of the proposed trail. To the south of I-481 is Rams Gulch. This area has moderate slopes down to the bottom of the gulch that is basically flat and fairly wet as a result.



**Figure 7.** Topography contour lines within the study area.

## Safety Considerations

Different safety considerations must be met in order to provide the users of the SCT a positive experience. Examples include: lighting, security, wildlife, topography, and emergency access to different parts of the trail. Currently, there is no lighting on the proposed trail section other than natural light. Security is an issue that must be dealt with due to the seclusion of the SCT. As of now, there are no security resources such as bike racks, emergency phones, or security patrols that could cause a major concern amongst trail users.

Emergency access is also of potential concern for the SCT. Emergency access to the trail will need to be established at both ends – to the west at Jamesville Avenue and to the east at Jamesville Road. At approximately mid-way, the trail can be accessed north of I-481 at Old Stonehouse Road and south of I-481 at Rams Gulch Road. The SCT's proximity to the railway is another safety concern, especially considering the "Rails with Trails" idea. Although the terrain would offer a safe passage, any potential crossings of the railway would require careful planning. Making sure that the users had enough clearance between them and possible locomotives utilizing the railway is of utmost importance for both the railway operators and trail patrons.

Another safety concern is the passage of the proposed route under I-481, which would expose users to falling debris. Litter from the highway is found on the trail; safety precautions will be needed to protect trail users from falling debris.



Finally, a portion of the trail in this section is steep. A less, steep, alternative route should be considered, and signage indicating difficulty levels will be needed.

### **Existing Infrastructure**

Currently, there is an existing informal trail that appears to be in use to some extent, presumably for mountain biking, hiking, running, etc. However, it would require development (e.g., widening, grading, compaction, stone dusting, etc.) to be in proper condition to be publicized as a safe multi-use trail. This trail can be the foundation for the proposed SCT, but the infrastructure needs improvements if trail use is to be increased.

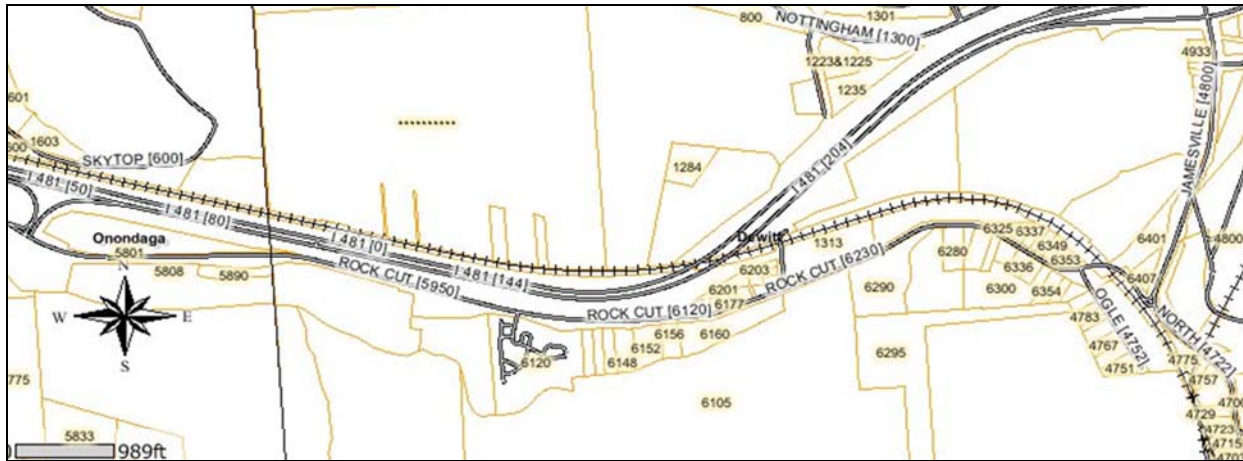
There are no buildings immediately adjacent to the proposed trail route. A cement foundation of a previous structure is located along the trail section where quarrying activities historically occurred. This structure is likely to be considered unsafe in its current condition for any formal usage, and should only be used as shelter in emergency situations.

To the east of Rams Gulch, a utility road exists that appears to be used in some limited capacity by Hanson Aggregates. This road has a strong foundation of crushed gravel, which could possibly be used, with some improvement, as a trail bed.

Currently, there are no user facilities such as restrooms, bike stations, emergency services, or interpretative signage along the proposed trail route. The DEC fishing access parking area (to the east of Ram's Gulch) is the only existing public parking area.

### **Property Ownership**

Several entities have been identified as land owners along the proposed trail route. Syracuse University owns the land located just east of Jamesville Avenue at Skytop Road (between the rail line and Skytop Road), the Onondaga County Industrial Development Agency (OCIDA) owns the rail corridor, VIP Architectural Associates owns a parcel just west of the end of Old Stonehouse Road, and the New York State Highway Authority owns rights-of-way in the vicinity of I-481. Hanson Aggregates New York Incorporated owns the majority of the remaining parcels through which this proposed section of trail would be sited, as well as the majority of surrounding area in the vicinity of this section of proposed trail, including abandoned quarries, Rams Gulch, and forested areas in between..



**Figure 8.** Tax parcels in the study area (Syracuse-Onondaga County G.I.S. on the web; <http://www.maphost.com/syracuse-onondaga/>).

### Summary

The details presented in this section, pertaining to the natural landscapes and historic resources for this section of trail, provide the basis for assessing the potential for a multi-use trail that offers visitors a natural experience, which was one of the main goals as originally stated. This assessment will be used in the next step of the planning process for the SCT in providing information for the recommendations that will be made for the actual design and construction of the trail.

## **2.5 Jamesville Road to the Old Erie Canal State Park**

### **Description of Route**

This section of trail would generally follow the old Butternut Canal Feeder towpath for approximately two miles – from Jamesville Road north to E. Genesee Street, and north of E. Genesee Street to Kinne Road. An on-road section would be necessary from where the trail meets Jamesville Road north of the Hanson Aggregates property containing Rams Gulch, west to where the feeder canal towpath could be accessed. At E. Genesee Street, a pedestrian crossing would be necessary at the northern end of Ambergate Road.

### **Natural Habitat and Resources**

The portion of the SCT from Jamesville Road to the Erie Canal State Park offers a wide variety of wildlife, natural and invasive flora, and diverse ecosystems. It is essential to retain these natural elements when designing the trail in order to provide a sense of the outdoors to its users.

A number of different trees exist in the area including American sycamore (*Platanus occidentalis*), black willow (*Salix nigra*) and white ash (*Fraxinus americana*). Some examples of shrubs in the area include dogwood (*Cornus sericea*) and the highly invasive shrub, buckthorn (*Rhamnus carthartica*). Other invasive species that must be considered while building and maintaining the trail include phragmites (*Phragmites sp.*), Amur honeysuckle (*Lonicera maackii*), Japanese barberry (*Berberis thunbergii*), pale swallow-wort (*Cynanchum rossicum*), and purple loosestrife (*Lythrum salicaria*).

Butternut Creek, which runs along Jamesville Road and I-481 at different sections, serves as a source of biodiversity for the area. Many different organisms depend on it for their survival and well-being. Crayfish (*Cambaridae camburus*), brown trout (*Salmo trutta*), and salamanders (*Ambystoma sp.*) are all examples of aquatic wildlife in the area. Fishing is common and serves as a natural resource for DeWitt and Onondaga County residents. Wetlands help to filter and store water. They also help to keep the biological community diverse and healthy. The areas surrounding this section of the SCT consist of wetlands. Economically, they serve as areas for recreation, water filtration and flood control (to name a few). Thus, when considering the natural habitats and resources for the SCT it is essential to include wetlands because their benefit goes well beyond the scope of DeWitt.

This area supports a diversity of wildlife and has been identified by the Onondaga Audubon Society as one of “Three Special Birding Areas in DeWitt” in their 2002 publication, *City Cemeteries to Boreal Bogs: Where to Go Birding in Central New York*.

### **Historic Resources and Sites**

This section of trail runs along Butternut Creek and the Erie Canal, and through certain commercial centers in the town of DeWitt. The area has a rich history due in part to the Erie Canal and how essential it was for transportation and the exchange of goods when it was first built in the early nineteenth century. The SCT ends at the Old Erie Canal State Park towpath, a 36-mile trail that stretches from DeWitt to Rome, NY, and passes through different landscapes including farms and forests. It is also interesting to note that there is an aqueduct at the Old Erie Canal State Park that provided water use for inhabitants in Onondaga County.

The trail would be routed along the towpath for the old Butternut Creek feeder canal, one of several historic feeder canals to the Erie Canal in Central New York. According to *the Natural, Statistical and Civil History of the State of New York* (James Macauley, 1829), "...the feeder at Orville...is two miles in length, and conducts the waters of Butternut Creek, a fine stream, into the canal. Boats ascend as far as the north Seneca turnpike". The Village of Orville was the prior name for what became the Town of DeWitt.

### **Soil Types**

On this portion of the site the land terrain varies greatly. There are uplands, floodplains and wetlands. Where the trail is being proposed, there are wetlands and floodplains east of it and uplands to the west. Building a trail in a wetland is not only against the law, but is also very difficult because wet soils do not allow for solid construction. Wet soils naturally result in flooding which causes potholes and other various problems that would make using the trail overly challenging and possibly dangerous. A variety of soil types exist in Onondaga County, but the eastern portion of the proposed trail is Wayland silt loam that is a wetland soil. This means it is naturally prone to flooding, erosion and ponding. Therefore, it would be best not to build on these sites and would then benefit the wetlands and their diversity. To the west, however, the majority of soils are better well-drained soils (such as Cazenovia silt loam) that are better for constructing the SCT.

### **Topography**

The topography varies along all segments of the trail. The part of the trail that needs development is relatively flat. It has some changes in elevation, but stays relatively even. The areas directly west of the proposed trail have a fairly steep slope. It is important to consider how the users will get from Jamesville Road to the trail. Having a path with steep slopes would make it more difficult for children and people with disabilities to navigate so it is important to keep the trail on a more flat terrain. Along Butternut Drive, the slopes, like the proposed trail area, are also relatively flat. Overall, the portions west of the proposed trail are very steep and areas on (and east of the trail) are reasonably flat.

### **Safety Considerations**

The safety and well-being of the users should be of the highest importance when assessing the feasibility of the SCT. The section from Nottingham Road to the Old Erie Canal State Park is an interesting challenge in that it provides a plethora of different situations that will need to be addressed.

First, there are certain streets that are potentially dangerous to bike on or along. For example, the intersection at Jamesville Road and Nottingham Road does not have a stoplight or any clear way of allowing access for non-motorized recreationists. As the trail leaves the road and enters the more natural areas along Butternut Creek, safety will be easy to manage as there are no motorized vehicles on this section of trail and the trail is wide enough for two lanes of pedestrian/bicyclist traffic. The natural areas of the trail cease at East Genesee Street, which is a major traffic zone and possibly the most dangerous section for all users. There is high-speed traffic and no clear way to cross the four lanes in order to access Butternut Drive, where the SCT will resume. Butternut Drive has a steep incline that is too narrow for both bicyclists and vehicles. As Butternut Drive meets Kinne Road, the overpass above I-481 is too narrow and is

not set up for bicycle crossings. A sidewalk is in place on the opposite side of the overpass but there is no stoplight and crossing will be difficult in this high-traffic area. Once across the overpass and on Butternut Drive again, the remainder of the trail to the Old Erie Canal State Park is relatively safe.

As residents and recreationalists living in Syracuse, New York, it is essential to prepare for inclement weather and criminal situations. For example, there are no bike racks, call boxes or light posts along the areas where the SCT is proposed. Safety is essential to ensure future use, but without these tools it may be difficult to have a positive experience. Other issues such as vandalism and theft are possible, but, with better security features, can be minimized.

### **Existing Facilities**

Some roads on the proposed trail route have wide road shoulders (e.g., Jamesville Road and the northern portion of Butternut Drive). These two areas have the potential for the trail to be alongside the main roads. Another existing facility that could be utilized is the small bridge that goes over the Feeder Canal, off of Jamesville Road. Right now, the bridge is not in great condition and can only be used for walking because of the cracks and unevenness in the paving.

Heading further north along the route, there are more facilities that could be utilized for the future trail. Where the feeder canal towpath meets Andrews Road, a large turnaround is currently used by the community for parking to access the towpath for dog walking, birdwatching, and/or fishing in Butternut Creek.

Crossing East Genesee Street, there are a few shops, restaurants, grocery stores and other businesses within a reasonable distance from the proposed trail. All these businesses have parking areas that could potentially have bike racks added to them.

The only restroom in this section of the trail is at Ryder Park. This is past the end of the trail and there are no other places where public restrooms can be found.

Lastly, the Erie Canal State Park has parking facilities and a paved trail. The park also has interpretive and directional signage to help to orient and educate visitors. Both the parking lot and the trail are maintained by the South Shore Trailblazers.

### **Property Ownership and Current Managers**

This portion of the proposed trail runs through several different properties. Each are maintained and owned by different individuals or entities. Conservation easements will be needed from most of these property owners in order to build the trail.

The majority of the feeder canal towpath is State-owned, under the jurisdiction of the Canal Corporation. In addition, there is a National Grid right-of-way adjacent to much of the towpath. The trail may also have the potential to run through private commercial properties, which means that more easements most likely will be needed. This includes companies such as the Tobin Construction Company and the Butternut Creek Golf Course. Both properties can provide easy access to the main portion of the trail. Additionally, some easements might be necessary from private residents in the area since some properties will be right along the trail and they will need to grant permission to develop the trail on their land.

Approval will be needed from New York State, Onondaga County, and the Town of DeWitt since the trail is anticipated to run on, along or near some public roads. The Town of DeWitt Highway Department maintains local roads within the town borders that include Ambergate Road, Butternut Drive and Kinne Road. The trail also has the possibility of crossing East Genesee Street and going near I-481, which are both owned by New York State and are maintained by the Department of Transportation. Jamesville Road is owned by Onondaga County and is maintained by the Onondaga County Department of Transportation. Although each entity maintains its own set of roads, heavy snowfall will cause other municipalities to take ownership of the roads. For example, the town of DeWitt will plow snow from Jamesville Road, which is a county road, from East Genesee Street to Nottingham Road.

### **Summary**

In conclusion, the Syracuse Community Trail will offer diverse activities and unique scenery of the greater Syracuse Area. It is a multidimensional project that will require the cooperation of different municipalities, individuals and businesses in order to complete all sections, including Jamesville Road to the Erie Canal Tow Path. Once developed, the SCT will offer a wide range of natural features, cultural resources and recreational opportunities for its users. Overall, the SCT has great potential but many obstacles need to be considered in order for the trail to be completed.

## 2.6 Recommended Trail Route

Following the assessment, the most suitable trail route was identified by the students. The map of the proposed route is shown in Figure 9. The following pages discuss different sections of this route, as well as recommendations for marketing, promotion, education, and management.

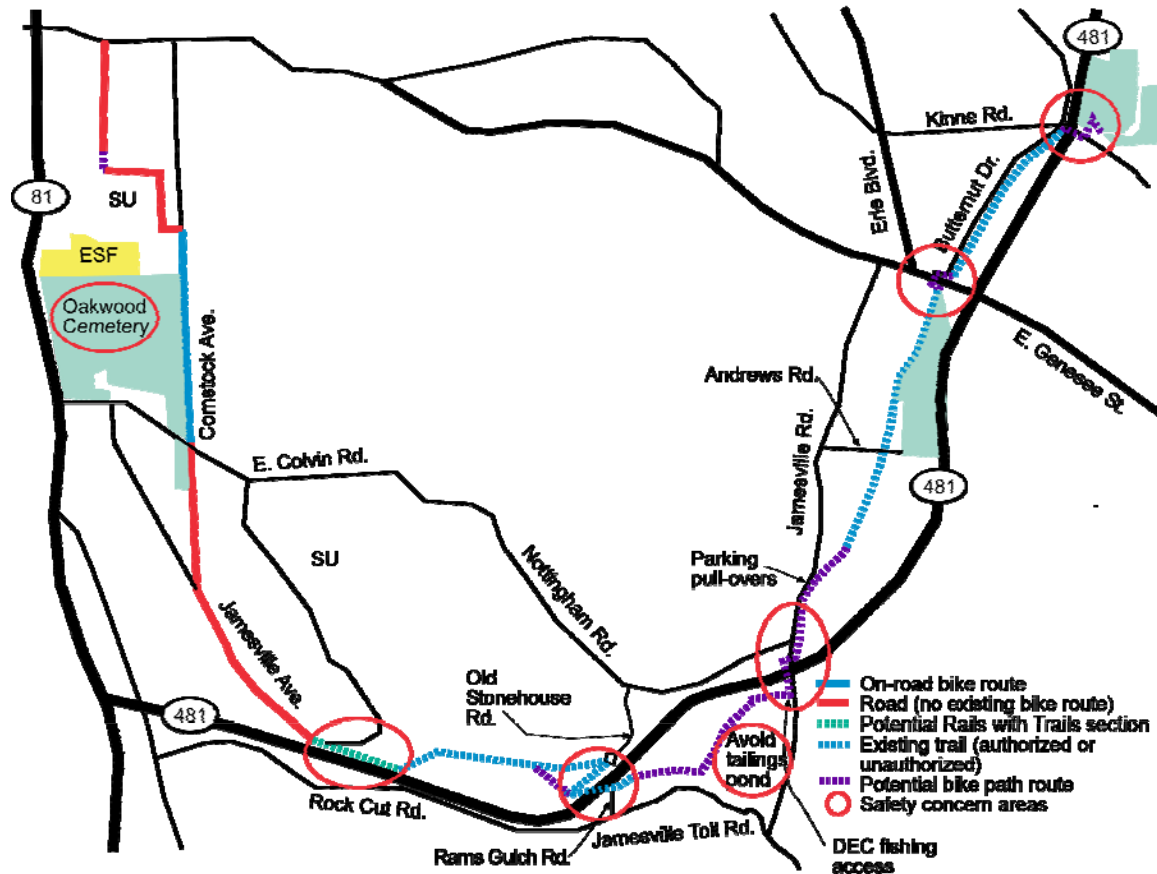


Figure 9. Proposed SCT trail route.

### 2.6.1 E. Genevieve Street to Oakwood Cemetery Trail Section

It is recommended that the path follow the route shown in Figure 10. It follows the existing road networks with maximum bike infrastructure already in place and connects with the Connective Corridor run jointly by the city of Syracuse and Syracuse University.

A bike specific path should be installed between the sidewalks connecting Waverly Avenue and University Place to create a better flow of traffic. This should line up with the cycletrack on University Avenue to concentrate the traffic and remove any conflicts with pedestrians or vehicles.

Bike lanes need to be installed in a few locations in order to have infrastructure coverage: University Place, College Place, Comstock Avenue south of Colvin Avenue, and on Jamesville Avenue.

In the future, the SCT should go through Oakwood Cemetery. This is possible but will require the trail to be built from scratch and an easement will need to be acquired from the Cemetery. It is also recommended that the route be built upon the existing road network of the cemetery for two reasons: the first is because the current network is in fairly poor condition, and the second is that Oakwood has more of an incentive to join with the trail. A map of the proposed route through Oakwood Cemetery is shown in Figure 11.

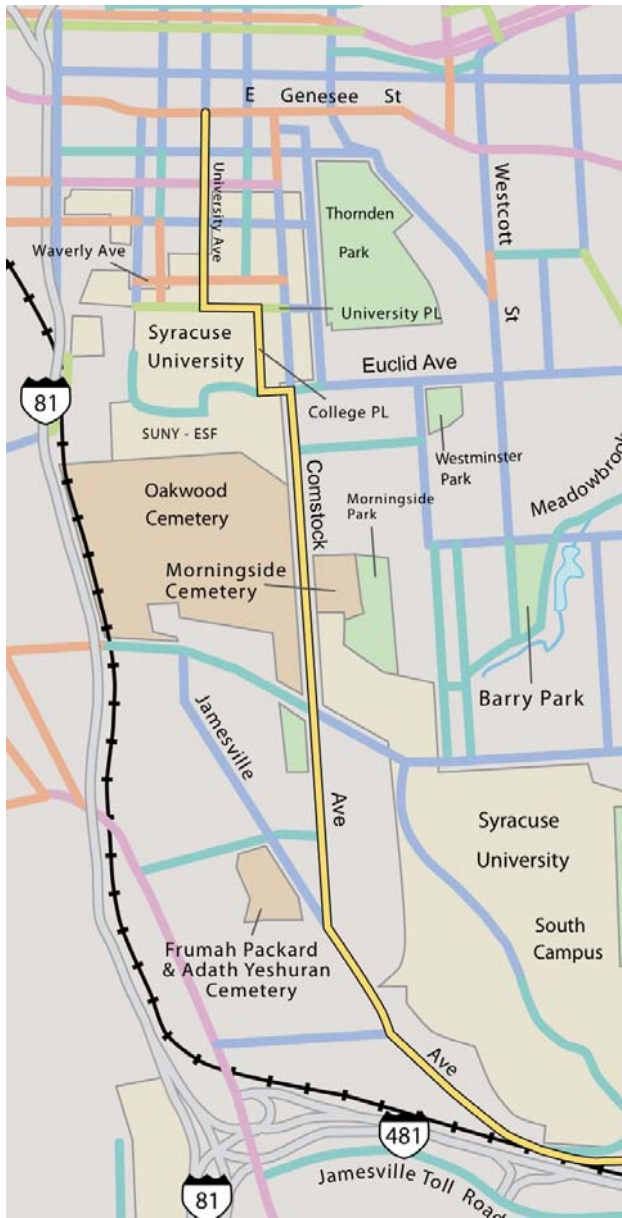


Figure 10. Map of the western section of the trail.



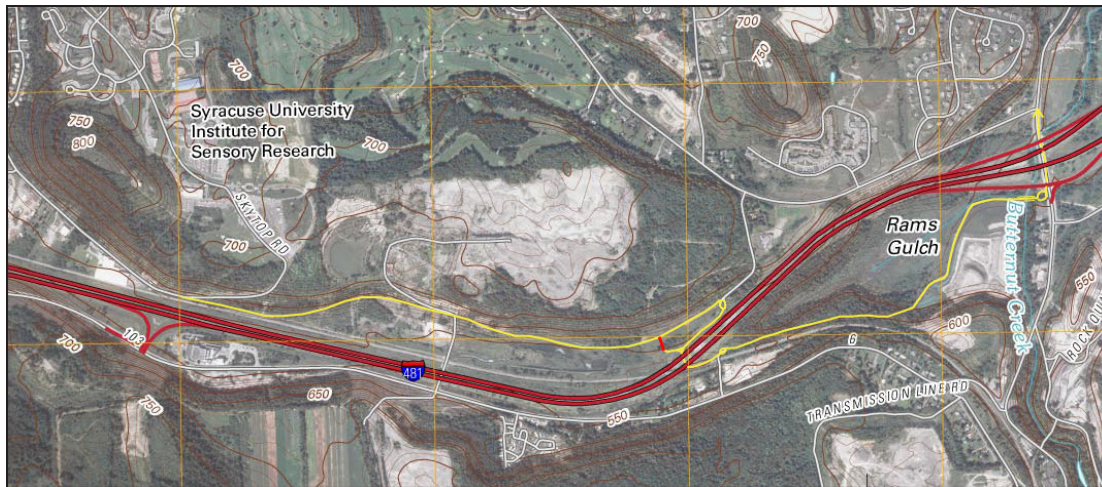


**Figure 11.** Different routes through and around Oakwood Cemetery. Green represents existing bike infrastructure, Yellow represents current vehicle infrastructure, and Red represents a lack of existing infrastructure. A proposed future route along the road network in the cemetery is the yellow route. (Source of map: Google Earth).

**2.6.2 Jamesville Avenue to Jamesville Road Trail Section**

The second trail section, from Jamesville Avenue to Jamesville Road, will start at the end of Jamesville Avenue where it turns into Skytop Road. The trail will proceed east next to the Onondaga-county owned rail line for about one-tenth mile where it will then gradually move a few hundred feet north from the rail line and proceed through a forested area for another one-tenth mile. The next mile of trail proceeds generally east through a mixture of open land, disturbed during historic quarrying activities (e.g., from access roads, staging areas, etc), and another short section of hardwood forest. At Old Stonehouse Road, the trail then proceeds west approximately two-tenths of a mile via a switchback at a lower elevation closer to I-481, then east again, passing under I-481, where it meets the end of Rams Gulch Road. The trail will then continue east along the topography of the upper rim of the Rams Gulch area (generally along the existing informal trail) through another hardwood forest for just under half a mile. The route will then veer northeast where it will descend a slight grade and meet up with an access road, which seems to be in limited use by Hanson Aggregates. The trail would follow this access road north and east for approximately four-tenths mile until it approaches Jamesville Road near I-481.

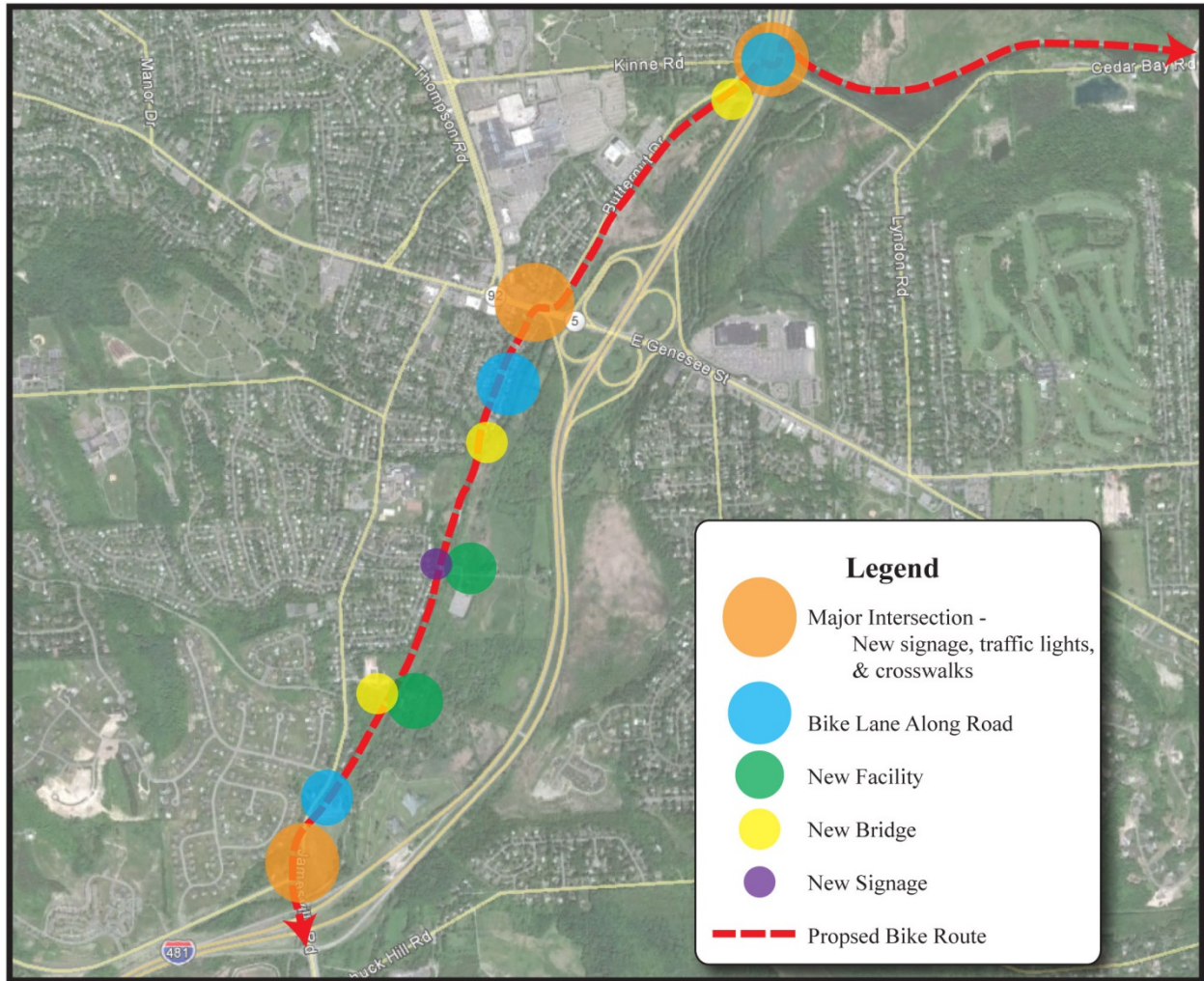
A conduit (e.g., bridge) would then be necessary to span the trail over Butternut Creek to connect to Jamesville Road near the NYS DEC fishing access parking area, thus concluding the middle portion of the Trail.



**Figure 12.** Proposed Jamesville Ave. to Jamesville Rd. trail segment. The short, red trail section is a steep section of trail suitable only for experienced mountain bikers. It is recommended that this section of trail not be included in the final trail. (Source of map: Google Earth.)

### 2.6.3 Jamesville Road to the Old Erie Canal State Park

This portion of the SCT begins at the intersection of I-481 and Jamesville Road. At this point the trail will run north along Jamesville Road as a bicycle lane. At the Nottingham Road and Jamesville Road intersection, the bike lane will cross to the east side of Jamesville Road and continue northward. The bike lane along the road will end at a small pull-over parking area currently found on the east side of Jamesville Road and eventually connect, through the woods, to the State-owned canal towpath that runs adjacent to the feeder canal. Because the existing trail along the feeder canal is on the east side of the canal, a bridge will be needed to cross the canal (there is already a bridge in place at the Tobin Construction Company that needs to be replaced or updated). The second bridge will need to be constructed near East Genesee St. The trail will then cross E. Genesee St., where a pedestrian crossing will be needed. Once E. Genesee St. has been crossed, the trail continues east onto Butternut Drive and the once again crosses the feeder canal. After this crossing, the existing trail continues north, back along the State-owned feeder canal towpath. The trail continues along the towpath until just south of Kinne Road, where the last bridge will need to be constructed to connect to Butternut Drive to the west side of the canal, onto a bike lane proposed for Butternut Drive and then a small section of Kinne Road. After crossing over I-481, the trail would make a left turn onto another portion of Butternut Drive where the Old Erie Canal State Park is located. Lastly, the trail continues into the state park and ends where the Erie Canal towpath trail begins (See Figure 13).



**Figure 13.** Facilities and crosswalks needed for the Butternut Creek section of trail (source of aerial map: Google Earth.)

## ***2.7 Recommendations for Design and Construction of the SCT***

### **Recommendations for technical assistance with planning**

There are several land planning agencies in Onondaga County that can provide assistance to the development of the trail prior to its construction. It is recommended to reach out to the Syracuse Onondaga Planning agency as the base organization for the planning process. The main goal of this agency is to create a more sustainable Syracuse. Other than the SOPA, organizations such as Parks and Trails New York, the Syracuse Metropolitan Transportation Council, and the Office of Parks, Recreation, and Historic Preservation could be integral to the planning and construction of the SCT. Additionally, larger scale planning agencies such as the CNY Regional Planning and Development Board can help provide support and experience with connecting the trail with other trails throughout the region.

### **Technical assistance with trail construction**

When finding volunteers to provide assistance in the actual building of the trail, it is recommended that local high schools and universities get involved. SUNY-ESF, Syracuse University, OCC, Nottingham High School, and CBA High School are all within ten miles of the trail and it's possible that many of these schools would be willing to volunteer their time in order to help develop the trail. Additionally, the Rescue Mission on Gifford Street has a "Willing to Work" program already in place, where men and women work for the mission in exchange for room and board. It may be beneficial to contact the mission and see if they would be willing to extend their program to incorporate trail development. Finally, the YMCA would be a great resource to contact for volunteer work. They have a Health and Wellness program for people of all ages, and a volunteer catalog that is updated frequently.

### **Materials for trail surface**

In order to comply with the American Disabilities Act, it is important for the SCT to have a firm and stable surface. For financial reasons and because of the maintenance required for asphalt in the long term, asphalt may not be an option in the early stages of the SCT. It is therefore recommended that the trail be made of a coarse gravel covered with a fine stone dust. In the future, depending on funding, asphalt surfacing could be considered, especially if an expansion of trail users to include rollerbladers and road bicyclists is desired. In terms of trail width, it is recommended the trail be no less than eight feet wide. Optimally, however, the trail should be ten feet wide to allow for emergency vehicle use and two distinct lanes of pedestrian/bicyclist traffic going both directions.

### **Signage Recommendations**

A variety of signs will be needed for the SCT, including:

- ***Safety signs.*** They must be simple yet noticeable. They should be placed just off the trail in areas where there is a higher risk of injury to the users, including the rails with trails portion, near the steep slope with rough terrain, under I-481, and along the quarry pond access road. Signage should also be considered for any sites where environmental safety issues can be a concern like flooded conditions at the bottom of Rams Gulch.
- ***Difficulty-rating signs.*** This type of sign is especially important where the trail splits (e.g., near the I-481 overpass between Jamesville Ave. and Rams Gulch). The users need

a sign that tells them only highly skilled bicyclists should go down the hill and that there is an easier route in the other direction.

- **Directional signs.** Directional signs are needed at all intersections to prevent visitors from straying off the SCT by accident. Also, directional signage pointing to stores, nearby parks, and other attractions is needed.
- **Traffic signs.** Stop signs and hazard signs will be needed at all intersections of the SCT and roads. There should also be signage to make bikers aware of the vehicular areas that they will encounter in the Ram's Gulch area.
- **Trail rules signs.** A listing of basic rules guiding the use of the trail and trail closure times (i.e., closed dusk to dawn) should be posted at all main access points of the trail. Permitted activities and behaviors should be included.

### **Recommendations for vegetative management**

The vegetation along the Jamesville Ave. to Jamesville Rd. section varies from open field to hardwood forests. In order for the construction of this section of trail to be possible, vegetation removal and continued maintenance will be needed. Trail construction involving the removal of some hardwood trees will be needed in the wooded section of the trail; it is recommended that SUNY ESF Woodsmen's team and FORCES group be asked to remove the vegetation without disrupting much of the surrounding area. For the smaller brush, mechanical removal with bush hogs is recommended; this device will also enable widening of the trail to eight feet. Grass mowing should take place regularly to maintain an optimal boundary between the trail and fields. Also, due to the nature of the trail being located in hardwoods it is necessary to consider the risk of falling trees across the trail or on users. To minimize this risk we recommend that there should be an initial survey conducted of all trees that are within falling distance of the trail. Establishing a system that will rank and annually monitor these “risk trees” is recommended in order to maximize public safety. This sort of survey and monitoring system can be established by a local natural-resources manager and then taught to an organization member for annual monitoring.

### **Conservation Easements**

Portions of the trail cut through several privately-owned properties. Specifically, Hanson Aggregates owns a large proportion of parcels along the trail. Conservation easements are recommended for property owners and should be tailored to satisfy both the SCT and the property owners. The New York Office of the Land Trust Alliance has both human and written resources that can help with obtaining the easements required for the SCT. Providing the landowners some sort of incentive will increase the chances for the easements.

### **Trail amenities**

Few public amenities (with the exception of those in the University Area or in Ryder Park) currently exist along the proposed trail route; new facilities should be added as follows:

- A solar-powered rest room or other sustainable type of bathroom facility should be considered for the DEC fishing access site. A sustainable rest room is suggested to prevent the addition of waste to local sewage systems.
- Picnic tables should be added at various locations along the trail so that users may have a place to eat and enjoy the natural area. Picnic areas could include bike racks, garbage

cans, recycling cans, and (if feasible) water fountains. If garbage cans are not wanted, "carry in/carry out" signs should be placed at picnic areas.

- A designated fishing spot north of the current DEC fishing access site is needed due to the SCT's proximity with Butternut Creek (See Figure 14).

### Andrews Street turn-around area

Constructing a parking lot where the trail crosses Andrews Street (Figure 14) would allow for easier automobile access to the trail. Bike racks will be needed in this area in case users want to ride their bikes to the soccer games.



**Figure 14.** Recommended facility enhancements (map source: Google Earth).

### **3 Marketing, Promoting and Interpreting the SCT**

#### ***3.1 Marketing Assessment***

At various points along the proposed bike path there are many existing attractions that have created interest, or could generate interest for the trail. A state park and a historical attraction were evaluated based on the following criteria: gender, age, group composition, where visitors are coming from and their length of stay, levels of education, and their recreational needs and interests. The student population of Syracuse University and SUNY ESF was also evaluated. This information was used to develop a market plan for the Syracuse Community Trail (SCT).

#### **Resident population**

The overall population of the City of Syracuse is 145,170 residents and approximately 50% of these are 18 to 49 years of age. The Town of Dewitt has a population of 25,838 residents, with 40% between the ages of 18 to 49 (2010 US Census data). These figures indicate that a large population of individuals could potentially be interested in the SCT because of their college age.

#### **Clark Reservation State Park**

This state park boasts a beautiful meromictic lake, dramatic limestone cliffs, numerous fossils, and rare and endangered plant species. It encompasses 377 acres and averages 50,000 visitors per year. Fishing and hiking are popular activities. There are also many programs offered at the nature center run by a non-for-profit group called the Council of Park Friends.

Clark Reservation is unique because its northern border is within viewing distance for almost a mile of the SCT. It would be extremely beneficial to create a connecting trail from the park to the bike path. Hikers, birders, anglers and outdoor enthusiasts could enjoy the path and travel to other natural areas.

Clark Reservation appeals to all ages and sexes. Small groups (one to two) of both adults and children are the most common visitors. Parents bring their children to enjoy the playground and various recreation programs offered at the nature center. Small groups of adults also enjoy the nature programs and frequent the hiking and nature trails. Large school groups consisting of one to two adults and 20-30 children are common to the nature center and trails. Education levels of visitors vary. Field trips to sections of the canal are often augmented by trips to the museum. Ages vary and this destination is popular with both sexes. Most visitors make a day trip to Clark Reservation and stay within the city of Syracuse at one of the many hotels.

#### **Old Erie Canal State Park**

This historic park runs along 36 miles of the original 363 miles of the Erie Canal. Visitors can walk or bike the trail that extends east of Syracuse from Verona to Rome, New York. Limestone aqueducts and canal ways are easily viewable from the trail that makes up most of the original towpath. Horseback riding and snowmobiling are also allowed on the path. There is an Erie Canal Museum located in Syracuse that is a great destination for history enthusiasts and families.

#### **SUNY ESF and Syracuse University**

Both of these schools are located at the beginning of the SCT. Syracuse University enrolls 20,407 students and ESF enrolls 2718. Many student organizations such as SUOC (Syracuse

University Outing Club) frequently plan trips based on outdoor activities such as biking, hiking, and camping. SUNY ESF has many outdoor-based clubs including Primitive Pursuits and Troutbums. Many of ESF's clubs volunteer to clean up local parks and take frequent trips to hike, fish, and camp.

Ages range from 17 to late 20's but all students are welcome to join. Both sexes are equally interested in the SCT. Student organizations can plan trips of 10-50 students. Students bicycle for transportation or recreation in groups of one to three. Students would only have to travel a few blocks to the beginning of the bike path.

**Table 2.** Market groups with existing, potential, and growing interest

Groups	Existing	Growth	Potential
Local residents	X	X	
Syracuse University	X	X	
SUNY ESF	X	X	
Nature Enthusiasts			X
Bicyclists	X	X	

**Marketing Position**

The City of Syracuse in central New York State is the proposed site for a path connecting the University Hill area of Syracuse to the Old Erie Canal State Park in the town of DeWitt. Roughly following I-481, this path transports visitors from the heart of the city and ends at the beginning of a complex trail system. Clark Reservation and the Old Erie Canal State Parks provide hiking and biking trails, guided tours, and bird watching. Both students and city residents need only a bicycle to travel to these forested state parks, while more rural residents can bicycle safely to a thriving part of the city. This path will encourage students to travel throughout the greater Syracuse area, which can inspire more local involvement and patronage.

**Summary**

The City of Syracuse is incorporating more roadways for bicycle use as part of a plan to become more environmentally friendly. Syracuse University and SUNY ESF provide a large existing and potential market at one end of the SCT. Students at both SU and ESF are active and interested in the outdoors. Many local residents that enjoy biking, bird watching, hiking, and other outdoor activities have the opportunity to do so using the SCT. Local residents provide a large existing market with great potential. Travel between the universities, Clark Reservation, and the Erie Canal State Park would be enjoyable and accessible to both students and residents.



### **3.2 Promotions Assessment**

Promotional efforts should focus on a variety of visitors, particularly residents from Onondaga County and Central New York since these residents will be able to access the trail year-round. Market groups such as students, families, runners, cyclists, and heritage tourists were used in this assessment.

#### **Onondaga County & Syracuse Promotion**

The Syracuse Convention & Visitors Bureau (SCVB) is Onondaga County's official and accredited destination marketing organization. The SCVB website ([www.visitsyracuse.org](http://www.visitsyracuse.org)) includes local cultural, historical and recreational attractions. In addition, the site offers people and businesses opportunities to post events on the "Event Calendar" page. Although the site offers links to outdoor and cultural opportunities, the information provided is limited to a brief description about the places. The SCVB website might be useful in posting events related to the SCT.

#### **Promoting to University Students**

University students are an important target market due to the close proximity of Syracuse University and SUNY-ESF to the SCT. Student centers such as Syracuse University's Schine and Goldstein can serve as promotional venues for the trail. Schine Student Center serves over 450 recognized student organizations as well as the academic and administrative departments on main campus. Goldstein Student Center caters to the approximately 2,500 students who live on south campus. Both student centers are considered to be prime facilities to engage students in activities.

#### **Promoting to Heritage Tourists**

Heritage tourists have several venues that provide them with visiting information regarding the Erie Canal Corridor. Since the trail will serve as an extension to the Erie Canal Corridor, it will be beneficial to look at current promotional groups including the Erie Canal Museum, Parks & Trails New York, the Erie Canalway National Heritage Corridor, and the *Cycling Along the Canals of New York State Guidebook*.

Parks & Trails New York ([www.ptny.org](http://www.ptny.org)) is one of the state's leading advocates for parks and trails. Its members receive benefits such as discounts to museums, bed & breakfasts, outdoor shops, and guide books. In addition, the organization also hosts the annual Cycling the Erie Canal Tour. Cycling the Erie Canal Tour is an annual 400-mile bike tour from Buffalo to Albany along the Erie Canal National Heritage Corridor. The bike tour follows the towpath to Camillus Erie Canal Park and makes stops at the Erie Canal Museum and Old Erie Canal State Park. Parks & Trails' webpage, "Cycling the Erie Canal", provides information about the ride, a look at brochures, and a place to sign up for the tour. It may be beneficial to keep Parks & Trails New York informed about the SCT's progress as it could be included in the tour.

The Erie Canalway National Heritage Corridor website ([www.eriecanalway.gov](http://www.eriecanalway.gov)) is a unified venue for information about Erie Canal corridor sites on every government level. The website exists to increase the reach and effectiveness of existing tourism and marketing efforts. The "Plan Your Visit" webpage has an interactive map of the corridor within Syracuse. Upon clicking on target locations a list of activities and resources is provided. The Erie Canalway

National Heritage Corridor would be a good venue to promote the trail since Syracuse is the heart of the Erie Canalway National Heritage Corridor.

### **Promoting to Cyclists**

The Onondaga Cycling Club is a non-profit organization based in Central New York that organizes cycling events throughout the year. They offer specific suggestions for bike routes and even provide the maps for the routes on their website ([www.onondagacyclingclub.org](http://www.onondagacyclingclub.org)). The organization publishes an online newsletter, called the *Spike-n Word*, for members. In addition, the organization has an active electronic mailing list (i.e. a “listserv”) and details on how to join the listserv are included on the website.

The Mello Velo Bicycle Shop (<http://mellovelobicycles.com>) is a bicycle shop and a café located in the Westcott neighborhood of Syracuse, New York. The shop caters to all levels of experience and activities. Mello Velo’s purpose is to build a Syracuse bicycle culture by educating and inspiring customers. The café offers reading material for cyclist enthusiasts, including bicycle magazines and trail guidebooks. In addition, Mello Velo has its own racing team, Team Mello Velo, with the idea that cycling clubs should be fun. Mello Velo can provide awareness about the SCT trail to its customers and organize rides using the trail.

### **Promoting to Families**

Events and parks are good venues to promote the SCT to families. Well-attended events such as the Westcott Cultural Fair, attended by 8,000 people annually, offers booth spots to not-for-profit associations to promote their cause; the SCT can have a booth to raise awareness. The Annual Canal Day in DeWitt, dedicated to the history of the Erie Canal, is another event that can help promote the SCT. Parks near the trail such as Ryder’s Park, Clark’s Reservation and Old Erie Canal State park should also be considered since the SCT can provide non-vehicle access to these parks.

### **Promoting to Runners**

The trail currently attracts a number of trail runners, walkers, and joggers. Trail runners tend to search for new and interesting trails to run. Sites such as Serious Running ([seriousrunning.com](http://seriousrunning.com)) and Run the Planet ([runtheplanet.com](http://runtheplanet.com)) offer runners trail recommendations, including trails within Onondaga County. Signage and trailheads will be necessary to attract more people in this market group.

### **Summary**

A number of opportunities exist to promote the trail using current venues. These venues are good in that they provide promotional access to desired target markets. It would be beneficial to collaborate with these venues to strengthen tourism of the SCT. In addition, promotional materials such as brochures, networking sites, blogs, and bumper stickers should be created to enhance the visibility of the trail and provide market groups with additional information about the SCT.

### ***3.3 Assessment of Interpretation along the SCT***

#### **Introduction**

Interpretation plays a key role in any form of outdoor recreation. The primary focus of environmental interpretation is to relate the tangible world of a recreational resource to the universal concepts that the resource represents, whereby forging an emotional connection between resource and visitor. Interpretive opportunities are created to inspire the visitor to learn more on his or her own by helping the visitor take a more vested interest in the resource and look to protect and conserve it. The visitor group that the SCT markets to is very diverse and there is a huge opportunity for interpretation along the proposed multi-use trail. The planned route that the SCT covers passes along numerous cultural, environmental, and historic resources that, if interpretive material is provided along the duration, it would serve as a catalyst for a better appreciation for the user and community.

#### **Current Visitors**

A large number of visitors currently use the SCT. Most of the trail is partially developed and is accessible to the general public for different uses. The proposed route is separated from the city atmosphere and runs along natural areas that are aesthetically pleasing to runners, one of the many different groups to utilize the trail. Upon assessing the motivations of this particular user group, it is evident that they are seeking more than just the motivation to become physically fit, but also to escape the daily routine of city life and experience nature through its tranquility. By knowing these expectations, the proposed route should be developed to meet these expectations, or redirect these expectations if they do not meet the goals and visions of our trail.

Another particular visitor group that utilizes (at least) part of the proposed SCT land is students both from ESF and SU. It provides a local area that students could use to escape city and school life. In addition, they may be motivated more toward exploration of the natural area. This group, like the runner group, would benefit from the construction of a formalized trail.

Similar to the runner group, there were a number of bicyclists seen on the trail while the initial assessment of the SCT was performed. Mostly mountain bicyclists were seen on the trail, however, there is a potential for expanding this user group to include road bicyclists, depending on the soil hardening procedures that will fit within the budget of this endeavor. Regardless of type of bicyclists, the overall motivations for both groups are similar: physical fitness and nature connectivity. In addition, many bicyclists may be drawn toward the current land usage for the excitement and thrill received by riding in nature and away from the familiar city atmosphere. By implementing the SCT, these motivations would be augmented by the formation of a developed path.

Finally, there were also many dog walkers along the current land where the multi-use trail has been proposed. Motivations are focused more on natural experience and tranquility with nature in an area that is removed from the urban land. However, problems may exist with this group. Some dog walkers may not want to clean up the dog waste along the trail. They feel they are in a natural area so they do not have to clean it up. When the SCT is constructed, it would be important to facilitate the clean-up of such waste by the owners through signage or dog waste pick-up stations when the trail is constructed. Another option would be to redirect such visitors

to different locations such as local dog walk areas. Leash restrictions may be necessary as well to avoid accidents between bicycle riders and free-ranging dogs.

### **Visitor Potential**

There is a huge potential for future visitors when the Syracuse Community Trail is constructed. One of the potential markets of visitors could be the diverse visitor population at the Old Erie Canal State Park. Since the Syracuse Community Trail terminates at the state park, if proper measures are taken to advertise to the visitors at the park about the connecting trail to other areas around Central New York, then the trail would have an additional set of users. In particular, the trail segment near the state park is adjacent to some old feeder canals that once were part of the Erie Canal. These feeder canals still use some of the old masonry that was constructed years ago. A similar visitor group that would be interested in visiting the Old Erie Canal State Park would also be interested in viewing some of the accessories that were needed in the construction of the canal. With proper interpretation here, the visitor market would increase significantly.

In addition to the past user groups, many school groups may choose to utilize the developed Syracuse Community Trail in the future. The proposed route of the trail passes a number of cultural, historic, and natural wonders that would provide an educational opportunity to schools interested in teaching and inspiring youth by showing them actual events and displays rather than teaching out of textbooks. Using the environment as a classroom is interdisciplinary, and programs like this help improve a student's performance in a range of subjects. Motivations for this particular group would primarily be education, however by using the environment and natural events as a background for education, the youth have motivation to learn more and explore the world around them.

Another potential visitor group that would use the developed multi-use trail includes the general public within the communities adjacent to the proposed route. These include the City of Syracuse and the Townships of Jamesville, DeWitt, and parts Fayetteville. By having an actual developed trail that runs along a natural section of Central New York and around different cultural and historic elements in the area, many families may be drawn to the trail. The motivations driving this group of visitors mostly include spending time with family or friends. However, secondary motivations would also include escapement of normal routine, healthy exercise, exploration, and simply excitement.

### **Current Interpretation**

Presently, there is very little interpretation that is in place over the length of the proposed SCT. Oakwood Cemetery, however, is a good example of properly executed interpretation. One particular form that is seen is the interpretive poster just outside the Civil War memorial. The information present is engaging and interesting to the visitor and provides details regarding Civil War. There is also a sponsor who provides a website for the cemetery regarding its history with prominent families buried and includes past and present pictures of the grounds. In addition, there are tours of the cemetery done by the Historical Oakwood Cemetery Preservation Association (HOCPA). These tours are offered from late spring to late summer on Sundays and cover a wide variety of themes. Some of the themes that they discuss involve local flora and fauna, notable citizens buried, children buried in Oakwood cemetery, monuments and mausoleums, painters and sculptures, birding tours, tours of buried soldiers, and also graves associated with crime and other mysteries (Greenhagen, 2011).

In addition to the interpretation provided at the head of the trail by the Oakwood Cemetery, the Old Erie Canal State Historic Park provides a degree of interpretation as well. Interpretive information is provided along the canal with signage discussing historical aspects of the canal and some of the mechanics behind the usage of the canal. Little information is given regarding the feeder canals that once attached to the main canal. However, the state park no longer offers programming in this area due to budgetary cuts. They do provide a website for visitors, but it does not have interpretive elements to it; it is primarily used for promotional reasons (NYS Office of Parks, Recreation, and Historic Preservation, 2011).

### **Potential Interpretation**

The SCT also passes by interesting geological history. Along the southern portion of the route, the trail passes along an escarpment primarily of limestone with a secondary rock type of dolostone (USGS, 2011). This escarpment is part of the Helderberg Group that continues into western Albany. This was formed 385 to 400 million years ago during the Devonian period when central New York was underwater and contains many different fossils of extinct marine life (McKerrow, 1982). Just to the south, within a few miles, is a completely different escarpment, also from the lower Devonian, but part of the Oriskany formation (USGS, 2011). The geology in this area is primarily sandstone with a secondary rock type of limestone. Within either of the geologic areas, there were many different organisms that once lived and are now fossilized in the rock, including the dominate brachiopods which build reefs in shallow water (McKerrow, 1982). This resource presents a great opportunity for interpreting the history of an area, once home to coral ecosystems and now to human beings.

Another large potential for interpretation is to educate local user groups about fragile habitats and species that exist near the proposed trail area. Within the general area of the trail, there are a number of different endangered species that exist and interpretation could be provided to educate the public about the threats to these species without giving away their specific location. For example, the Hart's Tongue Fern, Indiana Bat, Puttyroot, and Yellow Giant-Hyssop populations are located within the vicinity of Ram's Gulch and Clark Reservation and have been listed as endangered or threatened species. It is important to provide interpretation of these species in order to raise awareness that endangered species are present within Central New York's own backyard,

Also near Ram's Gulch there was an old Boy Scout Camp that once existed for local community scouting troops to use throughout the year. This camp was first established in 1919 and existed until it was sold in 1970 due to the need for a supplementary highway connecting I-80 with I-90 (Harlow, 1980). However, parts of the old cabins that were built by individual troops still remain, particularly the old masonry work of the chimney systems. This area contains thousands of memories and experiences that scouts have had in the secluded woods around the city of Syracuse. Interpretation could be provided here representing the cultural history of the Boy Scouts.

The area surrounding the proposed trail route is home to invasive species. Japanese Knotweed and *Phragmites* were spotted in many locations along the trail. Japanese Knotweed has been introduced into the local ecosystem and is suffocating many of the local species. Much of the spread of invasive species is due to ignorance and individuals simply not knowing that the plant

that they are releasing into the wild, or trying to grow, is invasive. It is important to explain why invasive species are problems in general and how they negatively affect an ecosystem. Only these two species were seen during an assessment of the area, but interpretation should be provided for any other invasive species that is present along the trail.

A large potential for interpretation exists regarding the number of fragile habitats along the trail, and particularly the wetlands, which make up much of the land surrounding the proposed SCT. Wetlands have a significant impact on the ecosystem as a whole, whether it is through flood control or reservoirs for biodiversity. Through interpretation, information could be given to the public about the threats that wetlands are facing. This would serve to provide inspiration and connectivity to this resource and aid in the conservation and preservation of this habitat.

Finally, there is a significant amount of historical interpretation that could be provided to the diverse groups who may use the proposed SCT. The last third of the trail ending in DeWitt is adjacent to one of the many feeder canals that once served the Erie Canal before it was moved. Much of the old masonry work still exists along this last section of the trail and provides a unique opportunity to connect visitors to the history behind their community. There is a huge potential for interpretation in the form of nature walks in this section or at least signage throughout it describing the historic implications of this feeder canal as well as the implications that the Erie Canal had had over the course of American history.

### **Summary**

The SCT passes along a rich assortment of local resources including many different natural, cultural, and historical elements that are pertinent to the preservation of community. Although many user groups use this trail presently for recreational enjoyment, a multi-use trail will target a much larger audience. These user groups would benefit from the existing environmental interpretation that is present on the proposed route already, including that done in the Oakwood Cemetery and the Old Erie Canal State Park. The potential for interpretation includes the geological history along the trail, the presence of fragile habitats and animals, cultural commodities from the cemetery and the old Boy Scout camp at Ram's Gulch, and the history of the feeder canal that the proposed route is positioned along. Overall, there are a number of different potential interpretive efforts that could be implemented along the multi-use trail that serves as a mechanism for community connection while providing a recreational opportunity.

### ***3.4 Recommendations for Marketing, Promotions, and Interpretation***

#### **Promoting the SCT**

Promoting the SCT is important to the trail's success; community utilization can only be achieved by awareness of the trail. Advertisements for the trail and its websites should be placed in magazines, newspapers, and brochures. On the internet, advertisements should also be placed on *www.syracuse.com*. Signs promoting trail events could be located at malls, bus stops, parks, and community centers.

#### **Creating a website for the SCT**

Prior to construction of the trail, an interactive website should be created to help local residents learn about it. The website should inform users of events, attractions, businesses, bus stops, connecting trails along the proposed trail, and how to get involved as a volunteer. It could be interactive in that it provides links to community resources. Following trail completion, the website could be used to educate, attract, and inform all varieties of user groups about the natural, cultural, and historical resources available. The website should include various field identification guides or a species list to alert the user what types of wildlife they may see. In addition, an interpretive map should be included where the user could select different parts of the trail and learn more about them prior to their visit.

#### **Establishing an online presence**

Social networking accounts, including a Facebook page, Twitter, and a Blogger account, will be needed to keep people up-to-date about the progress of the construction and any events related to the trail. YouTube and Flickr can be used to upload videos and photos online for sharing. If budget allows, consider buying ad space on Facebook to reach a broader audience. Ask organizations involved with the trail to post the trail's link on their sites to increase trail awareness. In addition, people and organizations involved with the trail can be encouraged to follow the trail's social network pages and invite their friends and families to the pages.

#### **Engage the local media**

Encourage local media, including television, newspaper, radio and internet sources, to cover stories on the trail's construction progress to help reach a wider audience. Creating press releases will make it easier for these sources to cover the trail's story. Contact local media such as the Dewitt Times, the Daily Orange, the Syracuse Eagle, the Syracuse Post Standard, WAER FM 88.3 (NPR), WXXE FM 90.5, WCNY TV 24 (PBS), WSYR TV 9 (ABC), WSYT TV 68 (Fox), and WTVH TV 5 (CBS).

#### **Create a brochure and map for trail users**

A brochure is the simplest form of interpretation that should be produced prior to trail construction. Information regarding the timeline of the construction process and the expected date of completion should be included in the brochure, along with a map of the proposed trail and facilities, a list of recreational opportunities and benefits of the trail, opportunities to volunteer to help with trail development, and contact information including web links. Once the trail is complete, the brochure should provide an up-to-date and detailed map of the trail including access points, facilities, attractions, and services.

### **Use local resources to promote the SCT and distribute the brochure**

Connections with local businesses, institutions, and organizations should be established to aid with promoting the trail both before and after trail completion. Collaboration with bicycle shops, universities, fair organizers, local cycling and running clubs and other organizations that cater to the desired market groups is recommended. Syracuse University and SUNY-ESF can place pamphlets in the student center's magazine racks or student lounges and can target student runners and hikers through club listserves. Offering volunteer opportunities to the SU and ESF campuses can also help promote the trail to students. Local sport clubs such as the Onondaga Cycling Club and Syracuse Charger Track Club can send information about the trail to members via their listserv. Local bicycle shops such as Mello Velo and Syracuse Bicycle can leave out copies of print materials for cycling enthusiasts to read. Booths can be secured at local street fairs such as the Westcott Cultural Street Fair to promote the trail to a more general public. In addition, flyers can be distributed to residents that live within walking distance of the trail and be placed in the kiosks/visitor centers' of nearby parks.

### **Organize a kick-off event to celebrate the opening of the trail to the public**

Hosting races and other events (scavenger hunts) can help increase public awareness and use of the SCT. Ask local businesses and organizations to become sponsors of the event. Sports clubs, including the Onondaga Cycling Club and Syracuse Charger Track Club, can help organize races. Universities can provide attendees with nature walks and scavenger hunts. Have a number of activities planned for the kick-off event to entice attendees to use the trail in multiple ways.

### **Encourage local organizations to use the trail for their events**

Organizations that host local health and awareness walks, races, or rides should be identified and encouraged to use the trail. Creating an annual run or bike ride along the trail could help with the continued success of this trail. Events can be created to encourage healthy living and environmental awareness (e.g., an Earth Day event). Information about events should be posted at trail access areas to inform trail users about local attractions and events in the area.

### **Promoting connections with other transportation corridors**

These promotions could be as simple as bus stop signs or road signs showing the connections between other bike routes and bus routes. The connective corridor bus route has signs that specifically say "Connective Corridor Stop." More signs like these could be placed where those stops intersect with the SCT.

With regard to road connections, street name signs and SCT directional signs may be sufficient for orienting SCT users to their surroundings. Recurring interpretive maps throughout the SCT at the more significant intersections would be informative but expensive. Thus, having trailhead kiosks with maps placed at both ends of the trail, combined with clear directional signage at significant intersections, would be less expensive and equally effective as recurring interpretive signs. Similar signage should be used to promote connections with trail routes such as the towpath trail in Old Erie Canal State Park and the Town of Dewitt trail currently connecting the park to Wegman's.



### **Create trailhead kiosks**

Trailhead kiosks are an important first contact between a trail and visitors. Kiosks serve to direct and educate the users regarding the specific resources available and management practices employed; all types of visitors could use this type of interpretation. Interpretive information that could be contained on these kiosks include a map of the trail with possible exits to local neighborhoods, types of habitat that users will ride through, and interpretive information regarding the cultural, natural, and historic resources along the trail. It is recommended that these kiosks be made of either rot-resistant wood such as cedar or heavier aluminum to prevent vandalism. It is important that the information contained on the kiosk be protected from the elements as well by using waterproof paper and ink or completely enclosing the information in hardened plastic. It is recommended that two trailhead kiosks be constructed. These kiosks should be located at the beginning of the trail, near the Syracuse University's Connective Corridor, as well as at the end of the trail, by the Old Erie Canal State Park.

### **Interpretation of habitats along the SCT**

It is recommended that interpretive panels be placed in each habitat type along the Jamesville Ave. to Old Erie Canal State Park section of trail. This would include the hardwood forest and a wetland area. A display near Ram's Gulch should be installed to educate visitors on the Heart's Tongue Fern, which is one of the threatened species of the area. If the funding is available, a brochure containing the species of flora and fauna you could see along the trail as well as information about the Boy Scout Camp should be provided at the trail access points. This information could also be provided on a trail website. If funding is available, it is also recommended that a trail log and nature guides be implemented.

Interpretive signage should play an important role in the SCT. It is recommended that approximately three interpretive signs be constructed along the trail's length. These signs must be durable and resist vandalism, or be easily and cheaply replaced if destroyed. They would focus directly on the resources where they were posted. For example, a sign by Ram's Gulch may focus on the geology of the escarpment, endangered species around Clark's Reservation, and the cultural history of structures such as the old Boy Scout camp. Another sign could be placed near Oakwood cemetery and a third sign could be placed by the feeder canals leading to the old Erie Canal. Contrary to the information available at the trailhead kiosks, the information on these signs would be more detailed and specific to one location along the trail.

### **Develop guided tour programs**

Often the most successful ways to connect resources with the public is through a guided tour. Guided tours may specifically focus on family user groups. A professional or volunteer interpreter could lead tours of the area for visitors on major holidays where periods of use are heavy. There could also be some scheduled programs during the winter for guests who want to snow-shoe or cross-country ski. Guides could take the visitors on the trail and try to connect them to the resources on a personal level. This could be accomplished at zero cost by working with the Interpretation Program at SUNY ESF as students could be recruited to lead tours in order to gain experience. Tours should be promoted through the SCT website.

## **4 Local and Regional Connections**

### ***4.1 Transportation Connection Assessment***

#### **Introduction**

A number of different transportation corridors exist within Syracuse with proximity to the proposed SCT. The trail would be connected to a number of roads for vehicle access and parking areas. The SCT would also be directly connected to several city streets with bike lanes and would be near other or meet other multiuse trails which will be discussed in further detail in the proceeding sections. Many of the city streets have sidewalks for pedestrians and the multiuse trails are also pedestrian friendly. A variety of Centro bus routes provide transportation to both ends of the SCT: Syracuse University and the Old Erie Canal State Park. There is a commuter railroad stop (and bus station) on the North side of Syracuse. The Erie Canal is no longer open to boating on the part near the SCT but there is boating access to Onondaga Lake and the Inner Harbor. There are a number of communities near the proposed trail that could become users of the trail in the future.

#### **Road Corridors**

The SCT would run parallel to or become one the following roads: Comstock Avenue, I-81, I-481, Jamesville Avenue, Rock Cut Road, Old Stonehouse Road, Nottingham Road, Jamesville Road, Andrews Road, East Genesee Street, Butternut Drive, and Kinne Road. I-81 and I-481 are both major highways and the others roads are smaller city roads. The city roads have various traffic levels; for example, East Genesee is generally very busy (especially during rush hour) whereas Old Stonehouse Road and Andrews Road are not as frequently trafficked (See Table 3).

#### **Existing Parking**

These are located on the map by black dots; the number of parking spaces at each location is specified next to each dot. There are four parking spaces at the DEC Fishing Access point off Jamesville Road, right off I-481. There are about ten spaces on the gravel pull-off area farther up Jamesville Rd. There are 47 parking spaces near the end of the Canalway Trail on Butternut Drive. There are just over 100 parking spaces at the DeWitt Town Hall next to the park. There are 20 spaces at the parking area off Kinne Road. In total, there are approximately 180 existing parking spaces along the SCT. Though there is some available parking, there are places along the proposed trail where parking could be added for easier access. For example, along Andrews Road where the National Grid property lies, there is a turn-around lot that could be easily paved into a parking lot for the fishing and hiking close by.

#### **Bike Corridors**

The Canalway Trail of the Erie Canal State Park Bike Corridor extends east to Rome but ends abruptly at the Old Erie Canal State Historic Park. The Onondaga Creekwalk connects Onondaga Lake and Inner Harbor to downtown Syracuse (Syracuse City Website, 2011). Green Lakes State Park has bike trails and one of the entrances is seven miles from the eastern end of the SCT (NYS Office of Parks, Recreation, and Historic Preservation). The map below shows the Syracuse and DeWitt bike lanes that are close to or a part of the SCT (Syracuse Metropolitan Transportation Council, 2011).

**Table 3.** Road ratings from Syracuse Metropolitan Transportation Council’s Greater Syracuse Metropolitan Area Bike Map (Free 2011 Edition).

<b>Street name</b>	<b>Bike Rating by SMTC*</b>
Comstock Ave	Average to Excellent
Jamesville Ave	Good, Average through South Campus
Rock Cut Rd	Good
Old Stonehouse Rd	Not rated
Nottingham Rd	Average
Jamesville Rd	Poor under I-481, the rest is Average
Andrews Rd	Not rated
East Genesee St	Poor
Butternut Drive	Fair
Kinne Rd	Fair

\*The range in ratings for each road means that parts of the road near the trail are rated differently. Smaller local roads weren’t rated.

### **Pedestrian Corridors**

Pedestrian corridors share the same roads as the Road Corridors and most of the Bike Corridors are multiuse trails that can also be used by pedestrians. Connections to these corridors have been listed above. (Pedestrian access will be important from nearby communities as well, but will be discussed in a later section.) East Genesee is the busiest and most dangerous road the SCT would cross and fortunately it has sidewalks on both sides of the street at the crossing location. Unfortunately, however, there is no traffic light at this location but there is a traffic light one block west.

### **Bus Corridors**

There are several Centro bus lines that directly connect to different parts of the SCT. The Connective Corridor line connects downtown Syracuse to SU’s and ESF’s main campuses and also to SU’s South campus via Comstock Avenue, one of the ends of the SCT. There is also a Centro bus line that goes from downtown Syracuse to SU and then to Shoppingtown Mall, which is near the DeWitt Town Hall. Other Centro bus lines that go down Comstock Avenue are route numbers 443 and 543 (Connective Corridor), 44, 144, 244, and 344. Other Centro bus lines that go by the SCT crossing on East Genesee St are: 330,430, 530, 176, and 692 (Shoppingtown Express). Another bus route that may be important to the SCT is route 40 that goes between SU, the William F. Walsh Regional Transportation Center (this will be discussed further in the following section), and Carousel Mall. Many of the Centro routes are free for students near campus and the Connective Corridor bus is free for all users (Centro, 2011).

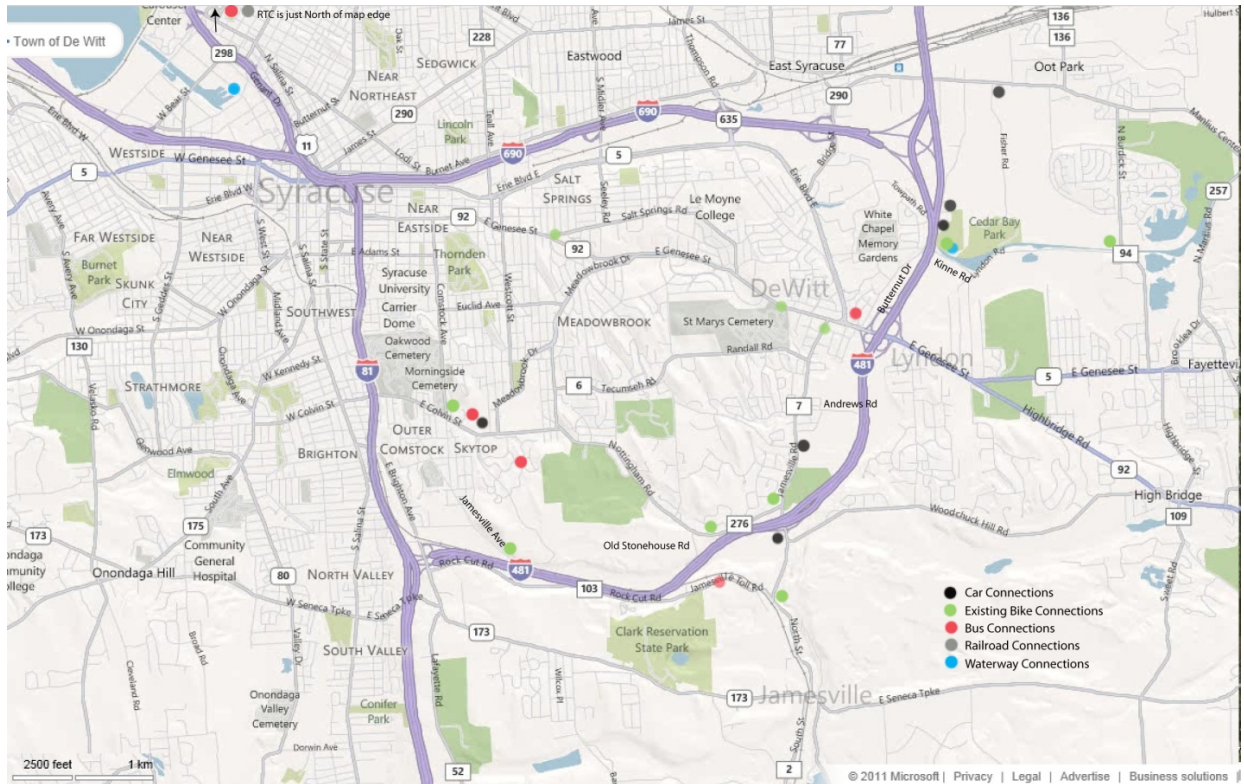
### **Railroad Corridors**

The part of the SCT along the Southern edge of the escarpment, near I-481, is a possible place for a rail-with-trail section. However, the only stop for a commuter train in Syracuse is at the William F. Walsh Regional Transportation Center (RTC) or at the NYS Fairgrounds. The RTC is four miles from the Comstock end of the SCT. The train station at the RTC is one mile from the Onondaga Creekwalk. Three commuter train lines stop at the RTC: the Empire Service, Lake

Shore Limited, and the Maple Leaf. There is also a commuter train stop at the NYS Fairgrounds but this is only open during the Fair in late summer (Amtrak, 2011).

### Water Corridors

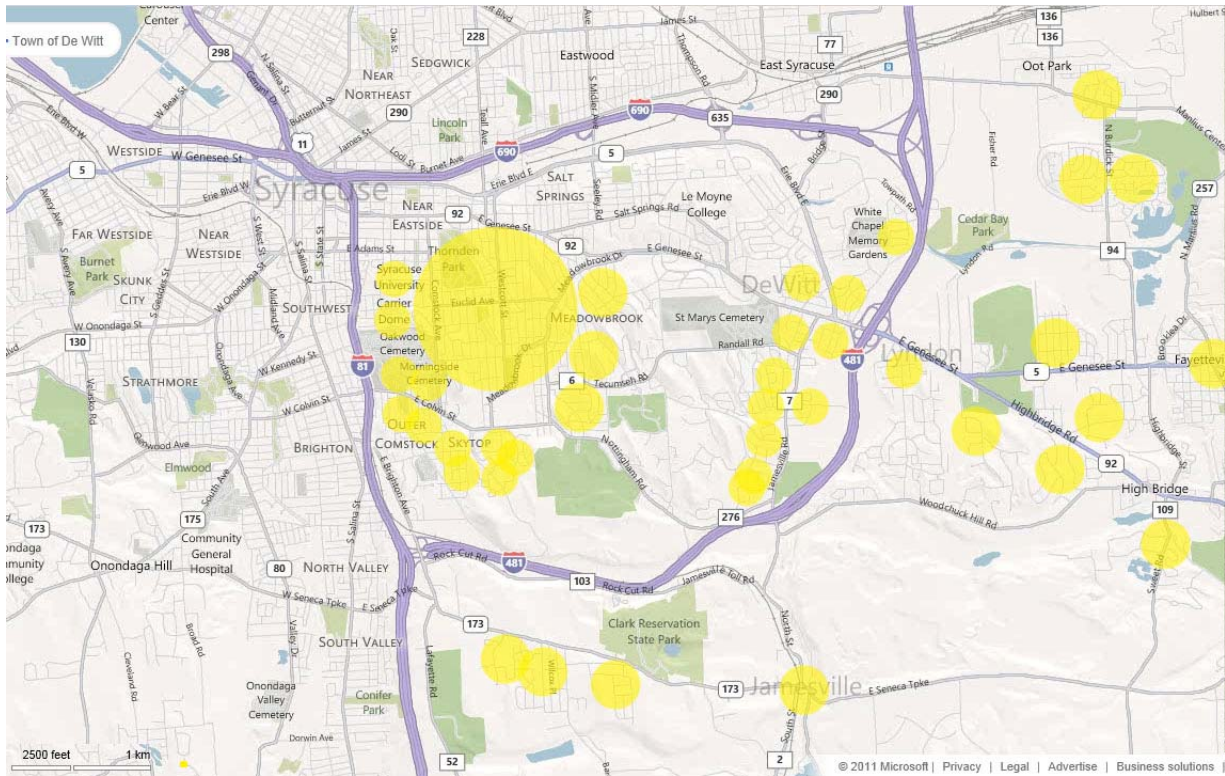
The SCT is proposed to run along part of the Erie Canal Towpath and end at the Old Erie Canal State Park on Butternut Drive in DeWitt. Unfortunately, the modern Erie Canal no longer functions as a waterway connection to the East side of Syracuse and DeWitt (New York State Canal Corporation, 2011). There is boat access to the Inner Harbor area in Syracuse and at the Onondaga Lake Park Marina in Liverpool. The Inner Harbor is adjacent to the Onondaga Creekwalk.



**Figure 15.** Transportation Connections Map (source: Microsoft)

### Nearby Communities

Several communities exist that could be benefited by the SCT. The following is a list of these communities, which are also shown on Figure 16. The communities are: the SU/ESF campus neighborhoods, students living on SU’s South Campus, the East side of Syracuse, Jamesville, East Syracuse, DeWitt, and Fayetteville. With a single bus trip on the Connective Corridor, people from Downtown, West, and South Syracuse neighborhoods could also have access to the SCT.



**Figure 16.** Community map (map source: Microsoft).

### Summary

Currently, several connections to bus, bike, car, and pedestrian corridors exist that would be easily accessible from the SCT. The waterway and railroad corridors both come to Syracuse but are several miles from the proposed SCT. There are connections between these corridors and the SCT but they involve bus, bike, car, and/or pedestrian routes that could be confusing to a visitor. If these connections were more clearly identified for visitors upon arrival, however, it would make the SCT more accessible and easier to use.

## **4.2 Business Assessment**

The creation of the SCT should have a positive effect on the nearby businesses. The trail users can all be thought of as potential customers for the businesses nearby. As it stands right now, a little over 15 (counting Shoppingtown Mall as one) businesses are within one mile of the trail itself, varying from pizzerias to massage centers. The addition of a bicycle trail should only increase the business for these shops. As the trail grows in popularity, consequently, so should the businesses around it.

### **Restaurants**

A majority of the businesses nearby the trail fell under the category of “restaurant”. They should definitely expect an increase in business. These restaurants include, but are not limited to several varieties: one Chinese restaurant, one Indian restaurant, a pizzeria, two steak houses, two diners, at least two taverns, and two grocery stores.

One of the biggest destinations will be Shoppingtown Mall, one third of a mile away from the trail. Shoppingtown mall has around 80 stores on its premises, varying from driving schools to pet stores. In addition, the DeWitt Town Library is located there. The mall should be a huge destination for people on the bike path. Due to its proximity and amount of stores, one should expect a large number of SCT users to patron the mall. This will lead to an increase in revenue for the mall, which may lead to more stores within the mall. Since the creation of Carousel Mall, Shoppingtown Mall has been gradually losing business to this five-story giant. Many stores within Shoppingtown mall have had to close their doors because of a loss of business, so increased traffic from the bike path should only help to revitalize Shoppingtown Mall.

### **Bicycle Shops**

Although most of the Bicycle shops in the Syracuse area are not very close to the SCT, they should certainly expect to see an increased amount of revenue and customers. If the trail becomes popular, there will be an increased amount of people riding their bicycles. That means bicycles will be used more often, so maintenance needs will also increase. Purchases of bicycles would probably increase as well. Users first trying out the trail may find their old bicycles are inadequate and may want to purchase a better and more trail-friendly bicycle. Four different bicycle shops with relative proximity (maximum of eight miles) to the SCT exist: 1) Syracuse Bicycle (2540 Erie Boulevard East), 2) Mello Velo Bicycle Shop (556 Westcott Street), 3) Advance Cyclery (118 Seeley Road) and 4) Sports Authority Sporting Goods (1 Carousel Center).

### **Grocery Stores**

At least three grocery stores including Wegman's, K-Mart and Tops are within close proximity to the trail. Because of this, users can utilize the trail to run errands like grocery shopping. This especially will come in handy for a lot of the college students that are near the area, as a majority of them lack access to a vehicle. Users can also stop in just to get a snack or drink after working up an appetite or thirst. Also, in the town of DeWitt there is a trail off the SCT that goes directly to Wegman's and would make transportation back and forth very easy.

### Other Businesses

Other nearby businesses includes Barnes and Noble Bookstore, K-Mart, Back and Touch Wellness Center and John D's Service Center. These stores have the potential to have a slight increase in business. Barnes and Noble would be useful in providing a quiet place for any weary users to relax and browse their selection of books, or perhaps grab some energetic coffee from the Starbucks within. K-mart's wide array of supplies would come in handy if any user had errands to run. After a long day of riding around on a bicycle, users can go and get a rejuvenating massage at the Back and Touch Wellness Center. With an automotive shop close to the trail, users do not need to worry about finding somebody to give them a ride back to their house from dropping their car off at the shop. They can simply drop off their car and then ride back on their bicycle.

**Table 4.** List of Bicycle & Automotive Repair Shops near the SCT

<b>Name</b>	<b>Goods/Service</b>	<b>Distance from trail (miles)</b>	<b>Summary</b>	<b>Contact information</b>
Mello Velo Bicycles	Bicycle repair and sales	1.75	Melo Velo Bike shop is one part bike repair services and one part café. Their goal is to provide a friendly, locally owned bicycle shop for nearby residents to enjoy.	(315) 307-3104
Advance Cyclery	Bicycle repair and sales	3.00	Advance Cyclery has been around since 1972. They offer a variety of services and good for bicycles.	(315) 449-2453
Syracuse Bicycle	Bicycle repair and sales	2.75	Syracuse Bicycle offers over 20 brands of bicycles for sale. In addition to basic maintenance, they offer instructional services varying from triathlon training to spinning classes.	(315) 446-6816
Epic Outdoor Adventures	Extreme sports equipment	3.3	A sports equipment shop that sells equipment for many extreme sports. The staff is extremely friendly and positive. They offer instruction and services for many extreme sports.	(315) 632-4250
John D's Service Center	Auto-shop	.2	An auto-garage that has been in business since the mid-1980's.	(315) 422-8311

**Table 5.** List of Restaurants near the SCT.

<b>Name</b>	<b>Goods/Service</b>	<b>Distance from trail (miles)</b>	<b>Summary</b>	<b>Contact information</b>
Ruston's Diner	Diner	0.5	A diner off Jamesville Toll Road.	(315) 469-1200
IHOP	Diner	<0.1	A chain-restaurant that specializes in breakfast foods.	(315) 446-0915
Chili's	Restaurant	0.1	A chain-restaurant that serves a variety of entrees.	(315) 445-2200
Johnny's Pizza	Pizzeria	1	Pizzeria.	(315) 446-8728
Danzer's German and American Cuisine	Ethnic-restaurant	0.4	A popular local restaurant.	(315) 422-0089
Carvel Ice Cream and Bakery	Ice cream parlor and bakery	0.25	A chain ice cream parlor and bakery. Well known for its ice cream cakes.	(315) 446-6047
Mario and Salvo's Pizzeria	Pizzeria	0.25	A pizzeria.	(315) 446-8479
Golden City Chinese	Chinese food	0.25	A Chinese fast food restaurant.	(315) 445-0888
Denny's	Diner	1	A diner known for breakfast specials.	315-445-2780
KFC	Fast Food	1	A fast food chain that serves fried chicken.	(315) 446-9333
Scotch and Sirloin	Restaurant	0.7	Steak house restaurant.	(315) 446-1771
Chipotle	Restaurant	0.7	A popular Mexican restaurant known for its burritos.	(315) 446-3530



**Table 6.** List of Grocery Stores near the SCT

<b>Name</b>	<b>Goods/ Service</b>	<b>Distance from trail (miles)</b>	<b>Summary</b>	<b>Contact information</b>
Organic Annie's Wholefoods	Organic grocer	0.8	A small grocery store that sells organic foods.	315-491-0629
TOPS	Grocery store	0.1	A grocery store with over 125 locations across New York.	(315) 446-6421
Wegmans	Grocery Store	0.6	A popular grocery store chain within New York that is known for its vast variety of grocery items and hot foods.	(315) 446-4280

**Table 7.** Miscellaneous Stores and Services close to the SCT

<b>Name</b>	<b>Goods/ Service</b>	<b>Distance from trail (miles)</b>	<b>Summary</b>	<b>Contact information</b>
Shoppingtown Mall	Mall	0.2	A small mall that has close to 80 stores. Some most notable stores include DICKS, Fun Junction Arcade and Laser Tag, and Regal Cinemas.	(315) 446-9159
Barnes and Noble	Book store	0.75	A large bookstore with a Starbucks inside.	(315) 449-2948
K-mart	Department Store	0.75	A basic department store.	(315) 445-1904
Back and Touch Wellness Center	Masseuse	<0.1	Offers chiropractic services, massages, and acupuncture treatments.	(315) 218-3069

**Summary**

The creation of the SCT should give local businesses a much needed increase in both customers and revenue. From this assessment, one can see that the businesses affected by the creation of this trail will not be limited to bicycle shops but rather it will have a positive impact on a broad variety of businesses.

### ***4.3 Nearby Events, Attractions, and Trails***

There are many regional connections within Onondaga County that could benefit the SCT and its users. The regional connections include different events, attractions, and trails. To help narrow down the results, a focus was placed more on annual events within Onondaga County. With the SCT in place, it will help people get from one place to another safely whether they are on foot or on bike.

#### **Events**

Each year numerous events occur with a range of activities. Among these events are running races, bicycle races, concerts, games, fairs and festivals. Table 8 (below) lists the running and bike races, along with some non-competitive bike rides and walks. In these types of events, the user is more physically involved. Table 9 shows events that are not physical in nature, such as concerts and festivals.

With such an abundance of events happening near the proposed bike path, users can use this route as an alternative choice for transportation. One issue with the SCT is the lack of bike racks or places to store bicycles while attending the different events. This trail could also be used as a connection to the many races within the area. It also serves as another place for a race or group ride, walk, or run. There are already many annual races in the area that could utilize the trail if needed.

#### **Attractions**

Some of the events seen in Tables 8 and 9 occur at some of the attractions listed in Table 10. Many of the attractions are parks. Focus was put on to places closer to the SCT as was done for the events. The farthest place documented was the New York State Fairgrounds. Although the New York State fairgrounds are far, they hold many well known events each year and should be noted. People can use the proposed SCT to get to a bus station that could transport them to the State Fairgrounds.

Onondaga County has a variety of both state and county parks including Green Lakes State Park, Old Erie Canal State Park, Ryder Park and Chittenango Landing, all of which are accessible by the proposed SCT. The trail ends at the Old Erie Canal State Park, which is rich in history and offers several miles of trails adjacent to the Erie Canal. Green Lakes State Park, located in Manlius, lies east of the SCT and offers beautiful scenery amongst meromictic lakes. Ryder Park is a 12-acre park in the town of DeWitt very close to the Old Erie Canal State Park. It offers a variety of recreational activities including a playground, a butterfly house, a canoe launch in to Butternut Creek, and areas for picnicking and grilling. Lastly, Chittenango Landing located in Chittenango, NY, is a boat museum that tells the rich history of the Erie Canal through the building of wooden boats that were popular during the Erie Canal's apex. Chittenango Landing is accessible by the Erie Canal east of DeWitt.

All of these attractions can benefit the SCT because they surround the trail and can offer people alternative methods to accessing the myriad of attractions in Onondaga County. One important issue, however, is that there are no places to lock bicycles at most of these attractions. Another issue is making trail-users aware of these attractions along trail so they know where to exit the trail to reach their various destinations.

**Summary**

The SCT has plenty of nearby events and attractions. There are also some trails located nearby. There are several pros and cons about having these events, attractions, and trails however. The lack of bicycle racks is one of the major issues. When planning the SCT, it is essential to include bicycle racks for visitor safety. Another challenge is getting people from the trail to these events and attractions, and informing the various users of the different events. Additionally, the SCT needs help to gain awareness of it and the nearby attractions and trails. This trail has the potential to be an excellent resource as a connection to local events and attractions within the Syracuse and DeWitt communities.

**Table 8. Events (athletic).**

<b>Event</b>	<b>Location</b>	<b>Type</b>	<b>Distance to SCT (miles)</b>	<b>Website and/or Contact Info</b>	<b>Description</b>
Cycle de Cuse - Swinburne Memorial Ride	Burnet Park, Syracuse	Bike	2.5	Bikesyracuse@aol.com  <a href="http://www.bikesyracuse.com/bikeathon.html">http://www.bikesyracuse.com/bikeathon.html</a>	Many bicyclists come out for this memorial ride riding along one to three routes. Afterwards bicyclists enjoy free food and drink as they socialize with others.
Tipperary Hill Shamrock Run	Burnet Park, Syracuse	Run	2.5	info@tipphillrun.com  <a href="http://www.tipphillrun.com/index.html">http://www.tipphillrun.com/index.html</a>	Runners come out to enjoy a short run. A shorter fun run is offered for children as well.
Empire State Marathon and half marathon	Alliance Bank Stadium, Syracuse	Run	3.04	Phone: (315) 403-8268 E-mail: info@EmpireStateMarathon.com  <a href="http://empirestatemarathon.com/">http://empirestatemarathon.com/</a>	People come out to test themselves as they enjoy this half marathon/ marathon run.
33rd Annual Dunn Tire Mountain Goat Run	Clinton Square, Syracuse	Run	1.35	E-mail: goatrun@twcny.rr.com  <a href="http://mountaingoatrun.com/">http://mountaingoatrun.com/</a>	People come together to run this event for several years now to get a good workout. After the race, runners enjoy music and free food and beverages.
Making Strides Against Breast Cancer	Clinton Square, Syracuse	Walk	1.35	Betsy Guilfoil Phone: (315) 433-5633 E-mail: betsy.guilfoil@cancer.org  <a href="http://main.acsevents.org/site/TR?pg=entry&amp;fr_id=36026">http://main.acsevents.org/site/TR?pg=entry&amp;fr_id=36026</a>	People come together in support for people who have or survived breast cancer. People enjoy walking for this great cause and socializing with others at this event.
Rescue Mission's "Walk A Mile in THEIR Shoes"	Rescue Mission Recreation Center, 122 Dickerson Street, Syracuse	Walk	1.36	Gina Stokes Phone: (315) 701-3891  <a href="http://www.rmsyr.org/Corporate/Events/Walk_a_Mile_in_My_Shoes/Main_Page.htm">http://www.rmsyr.org/Corporate/Events/Walk_a_Mile_in_My_Shoes/Main_Page.htm</a>	The Rescue mission helps create awareness and brings people together to show the homeless that they care. People enjoy socializing as they walk for this great cause.
They Can't Stop Me! 5k Run & Walk	Erie Canal, Dewitt	Run/walk	0	Phone: (315) 329-6336 Email: info@theycantstopme.org  <a href="http://www.theycantstopme.org/events/2011-theycant-stop-me-5k-walkrun/">http://www.theycantstopme.org/events/2011-theycant-stop-me-5k-walkrun/</a>	People come together in memory of Jerry Barsha. People enjoy running and then socialize after the race while enjoying the music playing and free food and beverages.

**Table 8 (continued). Events (athletic).**

<b>Event</b>	<b>Location</b>	<b>Type</b>	<b>Distance to SCT (miles)</b>	<b>Website and/or Contact Info</b>	<b>Description</b>
Cycling the Erie Canal	Erie Canal, New York State	Bike	0	(607) 423-2769  <a href="http://www.ptny.org/hudson/sontour/index.shtml">http://www.ptny.org/hudson/sontour/index.shtml</a>	People of all ages from around the country come to this event to enjoy this historic trail's scenery as they ride on this bike tour across New York State.
3rd Annual Charity for Children Run	Green Lakes State Park, Fayetteville	Run	4	Charity For Children: Nina M. Albino Phone: (315) 234-1443  <a href="http://www.charityforchildren.net/Events/Run_Walk/Walk_Run_2011.html">http://www.charityforchildren.net/Events/Run_Walk/Walk_Run_2011.html</a>	People gather to raise money for children at this event. After this fun run, people socialize and hang out with fellow runners while enjoying free food and beverages while listening to music.
32 <sup>nd</sup> Annual Green Lakes Sprint Triathlon	Green Lakes State Park, Fayetteville	Triathlon	4	Cheryl Pusztai at Phone: (315) 474-6851 ext. 321 E-mail: <a href="mailto:cpusztai@syracuseymca.org">cpusztai@syracuseymca.org</a>  <a href="http://www.ymcaofgreatersyracuse.org/Downtown/ymca_triathlon.aspx">http://www.ymcaofgreatersyracuse.org/Downtown/ymca_triathlon.aspx</a>	People come out to enjoy a competitive triathlon racing in swimming, biking, and running.
Green Lakes Endurance Runs	Green Lakes State Park, Fayetteville	Run	4	E-mail: <a href="mailto:admin@gleruns.org">admin@gleruns.org</a>  <a href="http://gleruns.org">http://gleruns.org</a>	Runners enjoy the scenic views as they run.
Ready to Run 5k Run & Walk	Green Lakes State Park, Fayetteville	Run/walk	4	Cheryl Pusztai at Phone: (315) 474-6851 ext. 321 E-mail: <a href="mailto:cpusztai@syracuseymca.org">cpusztai@syracuseymca.org</a> or  <a href="http://www.ymcaofgreatersyracuse.org/Downtown/ymca_triathlon.aspx">http://www.ymcaofgreatersyracuse.org/Downtown/ymca_triathlon.aspx</a>	People come out to enjoy a competitive run.
Seven @ Seven	Green Lakes State Park, Fayetteville	Run	4	Cheryl Pusztai at Phone: (315) 474-6851 ext. 321 E-mail: <a href="mailto:cpusztai@syracuseymca.org">cpusztai@syracuseymca.org</a> or  <a href="http://www.ymcaofgreatersyracuse.org/Downtown/ymca_triathlon.aspx">http://www.ymcaofgreatersyracuse.org/Downtown/ymca_triathlon.aspx</a>	People come out to enjoy a competitive run.

**Table 8 (continued).** Events (athletic).

Event	Location	Type	Distance to SCT (miles)	Website and/or Contact Info	Description
Trek Women's Syracuse Bicycle Breast Cancer Awareness Ride	Green Lakes State Park, Fayetteville	Bike	4	Phone: (315) 446-6816  <a href="http://syracusebicycle.com/event/trekwomen-breast-cancer-awareness-ride/">http://syracusebicycle.com/event/trekwomen-breast-cancer-awareness-ride/</a>	People come out to enjoy this bike ride in support of those who have been affected by breast cancer.
Inner Harbor 5k	Inner Harbor and Leavenworth Park, Syracuse		2.5	Michael Gilbert Phone: (315) 382-0541 E-mail: <a href="mailto:mgilbert@iacaf.org">mgilbert@iacaf.org</a> <a href="mailto:docgilbert@hotmail.com">docgilbert@hotmail.com</a>  <a href="http://www.innerwealth.org/inner-harbor-5k.php">http://www.innerwealth.org/inner-harbor-5k.php</a>	Families come together for this outdoor run.
Ride for the Rescue	Inner Harbor, Syracuse	Bike	2.5	Gina Stokes Phone: (315) 701-3891  <a href="http://www.ridefortherescue.org/faf/home/default.asp?ievent=453092">http://www.ridefortherescue.org/faf/home/default.asp?ievent=453092</a>	Bicyclists enjoy a free breakfast before taking off on this ten-mile bike ride. After the race lunch is provided for all the participants, where bicyclists are able to relax and socialize.
2011 Tour de Syracuse	(Upper) Onondaga Park, Syracuse	Bike	1.8	<a href="http://tourdesyracuse.com/">http://tourdesyracuse.com/</a>	This event attracts bicycle racers across the northeast where they will enjoy competing in 1-3 races in the 2-day duration of this event.
Parks Run	Onondaga Park, Syracuse	Run	1.8	E-mail: <a href="mailto:strathmore.neighborhood@yahoo.com">strathmore.neighborhood@yahoo.com</a>  <a href="http://www.strathmoreparksrun.com/">http://www.strathmoreparksrun.com/</a>	People gather and enjoy this scenic run/walk through some of Syracuse's historic Strathmore neighborhood.
Eastwood Park to Park Autumn Run	Sunnycrest Park, Syracuse	Run	1.7	<a href="mailto:eastwoodrun@gmail.com">eastwoodrun@gmail.com</a>  <a href="http://www.eastwoodneighbor.com/">http://www.eastwoodneighbor.com/</a>	Runners enjoy the beautiful fall colors of Eastwood as they complete this run.
Paige's Butterfly Run	Erie Boulevard between N. West St. and S. Franklin St., Syracuse	Run/walk/crawl	1.6	<a href="mailto:paigesrun@twcny.rr.com">paigesrun@twcny.rr.com</a>  <a href="http://www.paigesbutterflyrun.org/">http://www.paigesbutterflyrun.org/</a>	Runners come together to run in support for those who are fighting, have survived or have died from cancer. Before and after the race runners socialize with each other.

**Table 8 (continued).** Events (athletic).

Event	Location	Type	Distance to SCT (miles)	Website and/or Contact Info	Description
Valley in the City Run & Walk	Meachem Field, Syracuse	Run/walk	1.2	gmurdock_77@msn.com  <a href="http://www.goracego.com/search/event.aspx?event=a1c21a4d-ec2d-4ed6-b47c-93880f24187a.aspx">http://www.goracego.com/search/event.aspx?event=a1c21a4d-ec2d-4ed6-b47c-93880f24187a.aspx</a>	People come together to run through different parks of Syracuse.
Carol M. Baldwin A Run for their Life	Syracuse University, Syracuse	Run/walk	0	<a href="http://www.cmbarunfortheirlife.com/">http://www.cmbarunfortheirlife.com/</a>	This race helps bring people together to help raise money. There is a very positive atmosphere with music and food and refreshments for the attendants.
Syracuse Festival of Races	Syracuse University, Syracuse	Run/walk	0	Phone: (315) 446-6285 E-mail: <a href="mailto:daveoja@festivalofraces.com">daveoja@festivalofraces.com</a>  <a href="http://www.festivalofraces.com/">http://www.festivalofraces.com/</a>	This race brings people together from all over New York State to come partake in a healthy and fun race. After finishing the race there is music, free food and refreshments for the racers.
Sunrisers	Thornden Park, Syracuse	Exercise		Dale Avers  <a href="mailto:daleavers@gmail.com">daleavers@gmail.com</a>	Syracuse Parks and Recreation offers free exercise classes in Thornden Park every Tuesday and Thursday morning. Users enjoy doing fitness exercises using elastic bands and body weights, finishing the workout with a mile walk through the park.
Syracuse April Fools Alley Cat Race	Thornden Park, Syracuse	Bike	0.1	Nathan Rader  <a href="mailto:poplugh@gmail.com">poplugh@gmail.com</a>  Mello Velo Bicycles: 315-307-3104  <a href="http://mellovelobicycles.com/blog/2011/03/syracuse-april-fools-alley-cat-race/">http://mellovelobicycles.com/blog/2011/03/syracuse-april-fools-alley-cat-race/</a>	People come to enjoy this unique race that has no set course. Bicyclists race through the area to hit all the checkpoints, gaining points along the way. This is a fun competition for bicyclists to enjoy.
Zombie Bike Ride	Westcott St., Syracuse			<a href="http://mellovelobicycles.com/blog/2011/10/thursday-night-zombie-bike-ride/">http://mellovelobicycles.com/blog/2011/10/thursday-night-zombie-bike-ride/</a>	This event helps get people into the Halloween spirit where people dress up as zombies and bike through the city at night.

**Table 9.** Events (other) with potential links to the SCT.

<b>Event</b>	<b>Location</b>	<b>Type</b>	<b>Distance to SCT (miles)</b>	<b>Website and/or Contact Info</b>	<b>Description</b>
New York State Fair	New York State Fairgrounds, Syracuse	Fair	4.75	Phone: (800) 475-FAIR or (315) 487-7711 E-mail: newyorkstatefair@agriculture.ny.gov  <a href="http://nysfair.org">http://nysfair.org</a>	People from all over New York come to enjoy concerts, activities, animals, and more.
Dewitt Canal Day Festival	Cedar Bay Park and Dewitt Town Hall, Syracuse	Festival	0	Town of DeWitt Phone: (315) 446-3428  <a href="http://www.townofdewitt.com">www.townofdewitt.com</a>	People come together to celebrate the history of the Erie Canal.
Syracuse Winterfest	Center of Downtown, Syracuse	Festival	1.3	Bill Cooper Phone: (315) 676-2496 or Cell: (315) 243-2500 Email: wacooper@twcny.rr.com  <a href="http://www.syracusewinterfest.com/">http://www.syracusewinterfest.com/</a>	People come down town to enjoy a large variety of events and performances in downtown Syracuse.
Relay for Life	Carrier Dome, Syracuse	Fund-raiser	0.3	Erin Shuff E-mail: erin.shuff@cancer.org  <a href="http://relay.acsevents.org/site/TR/RelayForLife/RFLFY12EA?fr_id=40253&amp;pg=entry">http://relay.acsevents.org/site/TR/RelayForLife/RFLFY12EA?fr_id=40253&amp;pg=entry</a>	This fundraiser has a variety of moods, ranging from fun and exciting, to laid back, and to solemn, depending on the activity and the set mood by the music and lighting.



**Table 10.** Attractions on or with potential connections to the SCT.

Attraction	Location	Type	Distance to SCT (miles)	Website and/or Contact Info	Description
Oakwood Cemetery	940 Comstock Avenue, Syracuse	Cemetery	0	(315) 475-2194  <a href="http://nyruralcemetery.blogspot.com/2008/11/oakwood-cemetery-syracuse-new-york.html">http://nyruralcemetery.blogspot.com/2008/11/oakwood-cemetery-syracuse-new-york.html</a>	This old and historic cemetery almost doubles as a park as people enjoy leisurely strolls through this cemetery.
Butternut Creek	Syracuse	Creek	0	<a href="http://www.trails.com/catalog_trail.aspx?trailid=XFA057-142">http://www.trails.com/catalog_trail.aspx?trailid=XFA057-142</a>	People often come to fish along this creek, mainly catching fish such as brown trout, brook trout and carp.
New York State Fairgrounds	581 State Fair Blvd., Syracuse	Fairgrounds	4.75	Phone: (800) 475-FAIR or (315) 487-7711 E-mail: <a href="mailto:newyorkstatefair@agriculture.ny.gov">newyorkstatefair@agriculture.ny.gov</a>  <a href="http://nysfair.org">http://nysfair.org</a>	Many events occur here throughout the year and are enjoyed by a variety of different users.
Butternut Creek Golf Course	5050 Jamesville Rd Jamesville	Golf	0	Phone: (315) 251-1100  <a href="http://www.golflink.com/golf-courses/course.aspx?course=1710656">http://www.golflink.com/golf-courses/course.aspx?course=1710656</a>	This is a public golf course.
Drumlins Country Club	800 Nottingham Road, Syracuse	Golf	0.3	Phone: (315) 446-4555  <a href="http://www.drumlins.com">http://www.drumlins.com</a>	Mainly known for golf, swimming and tennis are also common activities.
Clark Reservation State Park	6105 East Seneca Turnpike, Jamesville	Park	0.2	Phone: (315) 492-1590  <a href="http://nysparks.state.ny.us/parks/126/details.aspx">http://nysparks.state.ny.us/parks/126/details.aspx</a>	People spend the day here to enjoy activities such as hiking and fishing. Families can also spend time in the pavilion, allowing children also to play in the playground.
Comfort Tyler Park	East Colvin St, Comstock Ave and Vincent St., Syracuse	Park	0	Syracuse Dept. of Parks, Recreation & Youth Programs (315) 473-4330  <a href="http://www.syracuse.ny.us/Parks/comfortTylerPark.html">http://www.syracuse.ny.us/Parks/comfortTylerPark.html</a>	Younger children have fun enjoying the playground setting. All kids and sports teams can have fun playing on the athletic fields and courts.

**Table 10** (continued). Attractions on or with potential connections to the SCT.

Attraction	Location	Type	Distance to SCT (miles)	Website and/or Contact Info	Description
Green Lakes State Park	900 Green Lakes Road, Fayetteville	Park	4	Phone: (315) 637-6111  <a href="http://nysparks.state.ny.us/parks/172/details.aspx">http://nysparks.state.ny.us/parks/172/details.aspx</a>	People come here to enjoy a wide variety of activities such as biking, boating, camping, fishing, cross country skiing, or walking along the nature trails. Children also have fun playing in the playground.
Old Erie Canal State Historic Park	Town Isle Road, Syracuse	Park	0	Phone: (315) 637-6111  <a href="http://nysparks.state.ny.us/parks/17/details.aspx">http://nysparks.state.ny.us/parks/17/details.aspx</a>	People enjoy walking along the historic Erie canal. People take part in and enjoy activities such as hiking, picnicking, biking, walking, running, horseback riding, canoeing, fishing, and snowmobiling in this park.
Ryder Park	Butternut Dr., Syracuse	Park	1.3	Phone: (315) 446-3910 <a href="http://www.townofdwitt.com/RyderRecreationandNatureArea.aspx">http://www.townofdwitt.com/RyderRecreationandNatureArea.aspx</a>	People enjoy biking, running and walking along the trails, spending time at the butterfly house, fishing, picnicking, and more. Younger children also enjoy the playground.
Thornden Park	Ostrom Avenue, Madison Street, and South Beech Street, Syracuse	Park	0.1	Miranda Hine PO Box 6604 Syracuse, NY 13217 miranda@twcny.rr.com  <a href="http://www.thorndenpark.org/">http://www.thorndenpark.org/</a>	People go to Thornden Park to go to events such as Shakespeare in the Park, walk along the trails, and to explore all the places within the park.
Chittenango Landing	7010 Lakeport Rd., Chittenango, NY	Canal Museum	11.9	<a href="http://www.chittenangolandingscanalboatmuseum.com">http://www.chittenangolandingscanalboatmuseum.com</a>	Visitors of all ages come to learn about historic boat making of the Erie Canal.
Fiddlers Green Park	Solvay Rd., Jamesville, NY	Park		<a href="http://www.fiddlersgreenpark.org/index.html">http://www.fiddlersgreenpark.org/index.html</a>	Visitors come to hike the nature trails along Butternut Creek.

**Table 11.** Travel routes with potential connections to the SCT.

Trail	Location	Type	Distance to SCT(miles )	Website and/or Contact Info	Description
Butternut Creek	Syracuse	Walk, Hiking		<a href="http://www.trails.com/tcatalog_trail.aspx?trailid=XFA057-142">http://www.trails.com/tcatalog_trail.aspx?trailid=XFA057-142</a>	Butternut Creek is mainly known for its access to fishing. Trails through the woods along this creek are also used for walking and hiking purposes.
Centro Bus	Various	Bus	1.35	Centro Phone: (315) 442-3400 <a href="http://www.centro.org/images/systems%20map_3_2010.pdf">http://www.centro.org/images/systems%20map_3_2010.pdf</a>	Centro buses can provide transportation to and from the SCT.
Cycle de 'Cuse Route	Syracuse	Bike	2.5	<a href="http://classic.mapmyride.com/ride/united-states/ny/syracuse/149127369299878421">http://classic.mapmyride.com/ride/united-states/ny/syracuse/149127369299878421</a>	Although this route is used for the Cycle de 'Cuse bike race, people enjoy using it for their own recreational means.
Great Trail Run	Green Lakes State Park, Syracuse	Run		<a href="http://www.runtheplanet.com/runningroutes/route.asp?r=159245">http://www.runtheplanet.com/runningroutes/route.asp?r=159245</a>	This trail run loops around two lakes. Users use this trail to be near the water and to enjoy the nice scenic views there.
Old Erie Canal State Historic Park Trail	Old Erie Canal State Historic Park, DeWitt, NY		36	Park Office at 315-687-7821  <a href="http://www.runtheplanet.com/runningroutes/route.asp?r=88634">http://www.runtheplanet.com/runningroutes/route.asp?r=88634</a> <a href="http://www.nycanal.com/recreation/hikebikemain.html">http://www.nycanal.com/recreation/hikebikemain.html</a>	There are many access points along this 35-mile long trail that stretches from DeWitt to Rome, New York. Users come here to walk along this historic path and to enjoy the scenic views.

\*Note: Trails in parks were excluded from this table with the exception of the Old Erie Canal State Park Historic Trail.

#### ***4.4 Emergency Services and Visitor Safety Assessment***

The SCT, in its current state, has potential risks for users. A lack of proper lighting and water, proximity to railroad tracks, the potential for debris falling from I-481, the steepness of the hills, and absence of features such as payphones needed to be considered. In order to ensure the safe usage and to avoid any legal trouble that may occur, it is necessary to take certain steps to plan for maximum safety.

##### **Potential Risks to Visitors**

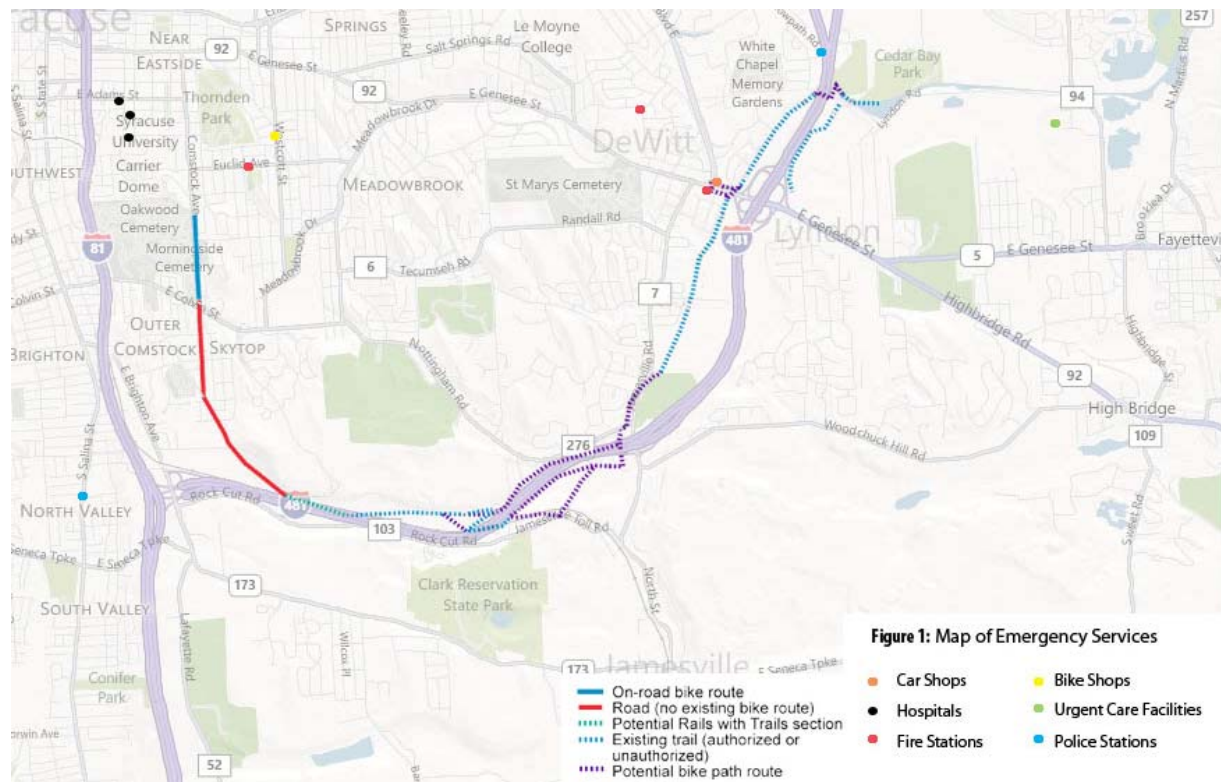
The first safety concern occurs along the road shoulder where there is no bike lane and along railroad tracks. These areas include the section along Jamesville Avenue, along Jamesville Road, along Butternut Drive, and the small section that goes along the I-481 overpass in DeWitt. These areas present a potential hazard because there are little to no road shoulders, putting the visitors at the risk of being hit by oncoming traffic. The trail along the tracks is a risk because if the visitors are too close to the tracks debris could fly from a train passing by. A similar risk remains for the section of the trail below the I-481 overpass, where debris from cars and trucks going by could harm visitors passing below.

There are also many portions of the trail that contain random debris such as metal scraps and glass bottles. These sections could potentially put visitors at risk of injuring themselves or damaging their bicycle.

Steep sections of the trail are another hazard that need assessment (for example, the portion of the trail below Old Stonehouse Road). Steep trail sections could potentially cause accidents, especially for inexperienced riders. Another problem in these steep areas is that if there were an accident, it would be difficult for an emergency vehicle to reach the visitor. While an emergency team would be able to reach a visitor by foot, this may not allow for a quick response in case of a serious emergency.

There are also risks associated with secluded portions of the trail. If a visitor does not have a mobile phone with them and an accident occurs, they would have no way of calling for help and could be stranded for a long period of time. These secluded areas also have no source of lighting that could be dangerous for cyclists because they would not be able to see the ground or other visitors going by. Seclusion also proposes the risk factor of crime including muggings or trail vandalism.

Lastly, seasonal weather events such as snowstorms, rainstorms, or extreme heat events pose potential risks to visitors. Intense summer heat could result in hyperthermia, heat stroke, or dehydration and currently there are no sources of drinking water or cooling stations on the trail. Rainstorms could make the trail muddy or slippery especially in steep areas. Rain would also disrupt the vision of cyclists while riding. Snow and ice storms would also make the trails slippery and even unusable if there was a large amount of snowfall. During the winter there is also the possibility of visitors experiencing hypothermia in extreme cold events.



**Figure 17.** Emergency Services Available Within Five Miles of Points Along SCT.

### Summary

While there are many risk factors involved with this trail use, there are a lot of available emergency services along the entire route of the trail. A car repair shop and a bicycle shop are located in DeWitt along the eastern portion of the trail, while Mello Velo bike shop is located close to Syracuse University. They can be used in the case of an accident on the trail. Ambulance services and hospitals are within very close distances to parts of the trail and would be available in response to an emergency injury that may occur on the trail. There are also nearby fire departments and police stations that would be available to respond to an accident on the trail. Patrolling the trail by local police would allow for response to any criminal or suspicious behavior that may put visitors in danger (see Table 12).

Many emergency services are available for the SCT and it is necessary to take certain measures to reduce accidents from occurring. Safety along the trail must be a top priority to ensure an enjoyable experience for the visitors, residents, and wildlife that will be on or near the trail. The available emergency services are all within reasonable distances to aid in case of emergency. There are, however, other risks that are currently unattended, including lack of lighting, secluded areas, weather conditions, and dangerously steep portions of the trail. The establishment of safety measures as well as regular maintenance and upkeep are essential to reduce the risks to visitors along the trail.

**Table 12.** Emergency Services for the SCT in Syracuse-Dewitt Area.

<b>Emergency Service</b>	<b>Name of Establishment</b>	<b>City/Town</b>	<b>Address/phone number</b>	<b>Distance from Trail (miles) *</b>
Car Service Stations	Erie Car Care Center Inc.	DeWitt	3876 Erie Blvd. 315-445-4065	0.1
Bicycle Repair Shops	Mello Velo Bicycle Shop	Syracuse	556 Westcott St 315-307-3104	1.1
	Syracuse Bicycle	Syracuse	2540 Erie Blvd East 315-446-6816	3.5
Fire Departments	Fire Station Non-Emergency	Syracuse	Euclid 315-849-5167	1
	Dewitt Fire Department	DeWitt	4500 East Genessee St. 315-446-3195	1.0
	Liverpool Fire Dept.	Syracuse	310 Sycamore Ter. 315-457-6347	1.2
Urgent Care facilities	Northeast Medical Urgent Care	Fayetteville	4000 Medical Center Dr. 315-637-7800	2.5
Hospitals	Upstate Medical University Hospital	Syracuse	(all located on Irving Ave.) 315-464-5611	1
	Crouse Hospital	Syracuse	315-470-7111	1
	VA Medical Center	Syracuse	315-425-4400	1
	St. Joseph's Hospital	Syracuse	301 Prospect Ave. 1-888-785-6371	3.5
Police Stations	Dewitt Police Department	DeWitt	5400 Butternut Dr. 315-449-3640	0.5
	Syracuse Community Police Center	Syracuse	4141 S. Salina St. 315-492-3080	1.5
Ambulance Services	All hospitals and the Dewitt Police Dept. service ambulances within the bike route area	Syracuse  Dewitt	(See hospitals for address information) For emergency ambulance: 911	

\*It should be noted that if the emergency service was greater than 5 miles from the nearest section of the trail, it was excluded from the table. (Distances from Google Inc. 2011).

## ***4.5 Transportation and Safety Recommendations for the SCT***

### **General safety recommendations for the SCT**

Various safety features will be necessary along the SCT in order to provide a safe and comfortable experience for its users. Visitors should be warned of any potential hazards (e.g., steep sections of trail) on trail signage. Some safety considerations are:

- Where Butternut Creek and Andrews Road intersect, it is recommended that both a stop sign and a sign indicating pedestrian and bicycle traffic be installed to notify drivers of the potential crossing hazards.
- Lighting is another safety feature necessary for the SCT. It is recommended either that "trail closed from dusk to dawn" signs be installed at main access points, or that light posts be installed every twenty-five feet so users feel comfortable in the evening and early morning hours. In order to maximize sustainability, solar panel light posts should be used.
- For those users who may want to ride their bicycles and then walk along the trail, it is recommended that bike racks be installed near main access points and at attractions on the trail so they may have a safe place to lock their bicycles.
- It is important to have a means to notify emergency services if necessary. While recreating, many people do not carry cell phones, but may need them in case of an emergency. It is recommended that call boxes be installed at various points along the trail including the Andrews Road parking lot, the picnic area along the feeder canal, and at the Erie Canal State Park.

### **Rails-with-Trails Segment near Jamesville Ave.**

With this section of trail being along the county-owned rail line, we recommend a “rails with trails” segment be created. The segment would be about a third of a mile long before heading into a section of hardwood forest. Permission would be needed from the county to designate this section of trail as a rails-with-trails segment. The issue of liability will need to be addressed. The most probable scenario is that the county will not be willing to be liable for anything that occurs to visitors on the trail. Thus, responsibility will fall on the management agency responsible for the trail.

Safety of the visitors along the railroad is another concern in the construction of this portion of the trail. It is recommended that a grade separation barrier be implemented to keep visitors a safe distance away from the tracks. This separation is already partially in place with the tracks being on an elevated surface. This grade difference would need to be enhanced slightly more to make it acceptable. Fencing separating the railroad tracks from the trail is also recommended.

### **Safety under the I-481 Overpass**

A safety concern is the potential for falling debris on the area of trail that passes under I-481 between Jamesville Ave. and Jamesville Rd. Along with inconveniences such as noise and air pollution, the highway poses a safety concern in regards to falling debris. To prevent any of the debris from causing harm to visitors, the construction of two barriers is recommended. The first is a chain link fence along I-481 that will ideally prevent debris from falling on the trail. The second barrier should be a vegetative one along the portion of trail passing under I-481. This second barrier would help decrease some of the noise pollution and improve the scenery by

blocking the view of the overpass abutments. Due to this section of trail being adjacent to railroad tracks, a fence separating the two is recommended as well. "Stay on the trail" signs are recommended in this trail section.

### **Butternut Creek Crossing Near DEC Fishing Access**

A bridge crossing is needed over Butternut Creek near the DEC fishing access site. A sturdy bridge needs to be in place with safe railings on both sides that is eight to ten feet wide and approximately 75 feet in length. The design of this bridge could be a project completed by students in the Engineering program at Syracuse University.

### **Bike Path and Crossing at the Intersection of Nottingham Road and Jamesville Road**

The bike path currently comes out onto Jamesville Road near the DEC fishing access site. A two-lane bike path will be needed on the west side of Jamesville Road from the fishing access site to the Nottingham Road intersection. A pedestrian crossing will be needed at the traffic light at this intersection to help bicyclists and pedestrians safely cross Jamesville Road. It is also recommended that a two-lane bike path be installed along the eastern side of Jamesville Road from Nottingham Rd. north to the small parking lots on Jamesville Road where the trail enters the woods. Directional signage should be placed along this section of trail to ensure the safe crossing of pedestrians.

### **Pedestrian crossing on East Genesee Street**

The recommended trail follows along Ambergate Road in a northeastern direction as it approaches East Genesee Street. Currently, Ambergate Road is a dead end. The various flora at the end of the street will need to be removed in order to allow the construction of a short trail leading to East Genesee Street. This is possibly the most dangerous section of the SCT to cross as there are no basic safety features such as traffic lights, speed signs or pedestrian crosswalks. It is recommended that a traffic light be installed as a means to allow for safe crossing. The speed limit at this point along East Genesee Street is 40 miles per hour. It is recommended that the speed limit be set at 25 miles per hour in an effort to reduce collisions between SCT users and drivers. Lastly, there is no clear pedestrian crosswalk (or bike lane) while crossing East Genesee Street at Ambergate Road. It is therefore suggested that a crosswalk be installed to notify drivers of the potential crossing by pedestrians and various SCT users.

### **Crossing Kinne Road**

Currently there is a sidewalk on Kinne Road on the 481 overpass. It is recommended that a single bike lane be installed on the overpass to allow SCT users safe access across the overpass from Butternut Drive. It is also suggested that proper signage be installed on Kinne Road to notify drivers of the oncoming pedestrian and bicycle traffic. It is also recommended that a traffic light be installed on both sides of the 481 overpass bridge to allow safe crossing for the SCT users. Lastly, it is recommended that a bike lane be installed along Butternut Drive just before Kinne Rd. in an effort to further protect those using the SCT.

### **Hazard tree assessment**

Because sections of this trail traverse wooded areas, an in-depth assessment of the risks posed to users from hazard trees will be needed before the trail is opened, and on a regular basis thereafter. Trained arborists and/or foresters are recommended for this risk assessment.



## **5 Staff, Maintenance, and Operations**

### ***5.1 Volunteers and Training***

Volunteers are usually connected to not-for-profit organizations, which in turn dedicate their time to preserve an important resource and educate people about it. The envisioned (SCT) will have unique natural and historical resources of Onondaga County as its background, and therefore will need the help of volunteers to maintain the trail as well as provide awareness to preserve those unique resources. The following assessment report includes information on three volunteer groups around the U.S. that are associated with multi-use trails and determines their responsibilities towards the trails in terms of maintenance, programs, and development. The search resulted in groups from Wisconsin, North Carolina, and New York.

#### **Friends of the Ahnapee**

The Friends of the Ahnapee organization is associated with the Ahnapee State Trail in Wisconsin. A rail-trail of 46 miles, the Ahnapee State Trail is owned by the state's Department of Natural Resources and encompasses both Door and Kewaunee Counties. Along with the State and County government, the Friends of the Ahnapee manage the entire length of the trail. Volunteers are made of local residents, local business owners, and members of the government agencies involved. They assist with planning improvements of the trail, monitoring trail conditions, undertaking maintenance (trash pick-up and trimming), conducting events, and soliciting funds to support the trail.

#### **Triangle Rails-to-Trails Conservancy – Friends of the American Tobacco Trail**

The Triangle Rails-to-Trails Conservancy is a successful not-for-profit dedicated to preserving North Carolina's railroads. They believe rail transportation should resume its use and be the main transportation system in the country. While this doesn't happen they preserve the railroads by transforming them into multi-use trails for recreational purposes and as a mean to educate people on the importance of rail transportation.

One of these trails is the American Tobacco Trail, a rail-trail of 22 miles that runs through the Durham, Wake, and Chatham Counties. To oversee the trail, the Triangle Rails-to-Trails Conservancy designated the Friends of the American Tobacco Trail. Their responsibilities include building connecting trails and information shelters, installing port potties, improving trail surface and drainage, grading parking areas, and maintaining the trail by moving dirt, rocks, and tree debris, picking-up trash, and trimming the bordered vegetation.

#### **Friends of Webster Trails**

The Friends of Webster Trails is an organization associated with 18 trails within the city of Webster, NY. They partner with the Parks & Recreation Department to assure the construction of trails and provide recreational opportunities to locals and potential visitors.

Boy and Eagle Scout Troops make up for a very helpful and dependable group of volunteers. Along with the remaining volunteers, the Friends of Webster Trails have responsibilities towards planning and constructing the trails, maintaining the trails (trash pick-up and trimming), promoting the trails, and educating local residents and potential visitors. The maintenance

programs are carried-out weekly over the summer, with dates times, and locations being announced on their website.

### **Summary**

The funding for not-for-profit organizations comes primarily from membership dues, donations, and events' fees. However, the money obtained by such means is not enough when bigger projects need to be executed so the dependency on grants can be a drawback for the volunteer groups.

The varied groups and trails researched in this assessment indicate that it will likely be feasible to obtain assistance from volunteers to help maintain the (SCT), and to keep volunteers permanently engaged in maintaining the trail. Events are a fun and easy way to assure funds, promote the trails, promote awareness, and promote hands-on programs to construct, clean, and improve the trails. The main responsibilities that volunteers have are constructing the trails, cleaning (trash pick-up and trimming), and monitoring and improving trail conditions. Volunteer recognition events will be needed to maintain volunteer involvement in the long term.

## ***5.2 Local Organizations and Agencies***

The purpose of this assessment is to determine which types of organizations are present in the Syracuse area that would be suitable for providing technical assistance for the proposed SCT. The trail has the potential to link the citizens of Syracuse to the surrounding local organizations. All of the organizations listed are not-for-profits (NFP). Listings of government and local agencies that could be potential partners with the SCT are also part of this assessment.

### **Not-for-profit Organizations**

One of the organizations with the greatest potential for collaboration is the Rescue Mission, located at 155 Gifford Street. They are a religious organization that provides room and board for the homeless in the Syracuse area. The Syracuse chapter actually has a program in place called “Willing to Work,” in which poverty stricken men and women have the opportunity to gain work experience doing various jobs in exchange for room and board at the Mission. Many of the jobs are around the center; however it is possible to set up opportunities in the surrounding area.

Another NFP that could collaborate with the SCT is the YMCA. The YMCA is a religious organization located on 200 Towne Drive. They offer an extensive range of programs to community members of all ages. Children ages three to 14 can partake in the YMCA’s summer camp, which places a strong emphasis on team building and character development activities. They also provide a whole health and wellness program for teens, men, women, and older adults. Lastly, the YMCA website has a catalog for volunteer opportunities in the area that is updated regularly.

The Citizens Campaign for the Environment (CCE) is a well-known grassroots organization in the Syracuse area. Their mission statement is to “Build widespread citizen awareness and advocacy for the protection of our natural environment and public health.” They were created by a group of concerned citizens who believe that citizen engagement is the only way to improve our local environment. The CCE engages in extensive education, research, lobbying and public outreach in both New York and Connecticut. Two of their primary focuses are on public health and open space preservation.

The Syracuse United Neighbors (SUN) is another grassroots organization dedicated to improving the lives of families living in the neighborhoods on the south, southwest and west sides of Syracuse. SUN is a member of the National People’s Action (NPA) organizing network, a group of neighborhoods from over 30 states that work on changing national laws and policies that have a direct effect on local communities. Two of SUN’s main primary focuses are to promote crime free neighborhoods and equal access to quality public goods for all.

There are several clubs and organizations devoted specifically to trails and transportation. Onondaga Cycling Club is a NFP that organizes cycling events throughout CNY. This group is a large proponent of commuting to work and school as an alternative to driving in automobiles. Parks & Trails New York is the leading statewide advocate for trail development. They strive to improve the health, economy, and quality of life throughout Syracuse by the use and enjoyment of green space. They work with hundreds of community organizations to create and promote a growing network of parks and more than 1,500 miles of greenways, bike paths, and trails throughout New York State. Lastly, the Syracuse Metropolitan Transportation Council is the

State-designated Metropolitan Planning Organization (MPO), responsible for administering the transportation planning process all throughout Onondaga County.

### **Agencies**

One of the strongest governmental partners for the SCT is the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP). On their website, OPRHP has a map of all the trails in New York State. There is also a link to the left called Technical Assistance, which provides a list of documents and links to other websites to trail and planning organizations in planning, designing, developing and maintaining trails. One of their main goals is to establish corridors throughout the state that links communities together while promoting health and recreation.

One responsibility of the New York State Department of Environmental Conservation (DEC) is to maintain wetlands and ensure they are pollutant free. Wetlands include marshes, bogs and swamps and provide protection for groundwater, erosion control, habitat for wildlife and offer nutrient cycling which helps to break down unwanted chemicals. The SCT, which includes portions of Butternut Creek, contains wetlands and should therefore be monitored by the DEC.

New York State has two planning agencies that can be helpful in implementing the SCT. Both the CNY Regional Planning and Development Board and Syracuse Onondaga Planning Agency are groups that work to provide community development and transportation corridors. The CNY RPDB is a public agency established in 1966 and focuses strongly on promoting economic development in a community, while at the same time preserving its cultural and natural values. Though SOPA was established by Onondaga County, its initiatives are similar to the RPDB's. Both agencies could be extremely helpful in supplying technical and logistical assistance for the SCT.

The SCT would run right through the town of DeWitt, so enlisting the local government on the paths implementation is necessary. The town of DeWitt has its own departments for Development and Operations, Recreation, and Sustainability. On the website, the town has its own section for Green Initiatives. One of the biggest campaigns going on currently is the "Town of DeWitt Facilities Go Green!" due to the town's recent sustainability initiatives.

### **Summary**

Plenty of opportunities exist to work with the local organizations in Syracuse on the implementation of SCT including the DEC, CNY RPDB and OPRHP. Reaching out to government agencies to collaborate on the planning process is essential. There are also several advantages of contacting volunteers for technical support from the diverse list of public interests groups. The table below summarizes the organizations previously listed, with information on the groups themselves and how to contact them.

**Table 13.** List of Organizations.

Organization	Mission Statement	Contact Information
Rescue Mission	“To provide biblically-based services that meet the spiritual and practical needs of the poor.”	155 Gifford Street, Syracuse, NY 13202 Phone: (315) 472-6251 Fax: (315) 476-3615
YMCA	“The YMCA of Greater Syracuse is a diverse organization of men, women and children joined by a shared commitment to strengthening the community by nurturing the potential of kids, promoting healthy living and fostering social responsibility.”	200 Towne Drive Fayetteville NY 13066 Phone: (315) 637-2025 Fax: (315) 637-0403
The Citizens Campaign for the Environment	“Citizens Campaign for the Environment (CCE) works to build widespread citizen awareness and advocacy for the protection of our natural environment and public health.”	466 Westcott Street, 2nd Floor, Syracuse, NY 13210 Phone: (315) 472-1339 Fax: (315) 472-1179
Syracuse United Neighbors	“Syracuse United Neighbors is a grassroots community organization, established in 1977 and dedicated to improving the lives of families living in the neighborhoods on the south, southwest and near-west sides of Syracuse, N.Y.”	1540 S. Salina St. Syracuse, NY 13205 Phone: (315) 476-7475 Fax: (315) 476-4523
Onondaga Cycling Club	“The Onondaga Cycling Club is a Central New York non-profit which organizes cycling events.”	Onondaga Cycling Club, Inc P.O. Box 6307, Teall Station Syracuse, New York 13217
Parks & Trails New York	“Parks & Trails New York is New York’s leading statewide advocate for parks and trails, dedicated since 1985 to improving our health, economy, and quality of life through the use and enjoyment of green space.”	Robin Dropkin, Executive Director: rdropkin@ptny.org

**Table 14.** Local, state and federal agencies

Organization	Mission Statement	Contact Information
Syracuse Metropolitan Transportation Council	"State-designated Metropolitan Planning Organization, responsible for administering the continuous and comprehensive transportation planning process in Onondaga County"	126 North Salina Street, 100 Clinton Square, Suite 100 Syracuse, New York 13202 Phone: (315) 422-5716 Fax: (315) 422-7753
NYS Department of Environmental Conservation	"To conserve, improve and protect New York's natural resources and environment and to prevent, abate and control water, land and air pollution, in order to enhance the health, safety and welfare of the people of the state and their overall economic and social well-being."	New York State Department of Environmental Conservation 625 Broadway Albany, New York 12233-0001 Phone: (518) 402-8044
New York State Parks Recreation & Historic Preservation	"State Parks is charged with coordinating and developing a statewide plan for trails."	6105 E Seneca Turnpike Jamesville, NY 13078 Phone: (315) 492-1756
CNY Regional Planning and Development Board	"The Central New York Regional Planning and Development Board (CNY RPDB) is a public agency that was established in 1966 by Cayuga, Cortland, Madison, Onondaga, and Oswego Counties under the provisions of Article 12B of the New York State General Municipal Law."	100 Clinton Square, Suite 200, 126 North Salina St., Syracuse, NY 13202  Phone: (315) 422-8276 Fax: (315) 422-9051
Syracuse Onondaga Planning Agency	"Our mission is to provide and promote effective planning by the County and its City, towns and villages."	John H. Mulroy: Civic Center 421 Montgomery St. - 11th Floor, Syracuse, NY 13202  Phone: (315) 435-2611 Fax: (315) 435-2439
Town of DeWitt		James F. Conlon, Director of Planning and Development 5400 Butternut Drive East Syracuse, NY 13057 Phone: (315) 446-3910 ext. 3 Fax: (315) 449-0620

### **5.3 Maintenance and Management**

When planning the creation of a new multi-use trail, the day-to-day maintenance and management can often be overlooked. However, the successful operation of the trail will rely on routine maintenance and quality management. Maintenance of our facilities will ensure quality operation of the trail and promote visitor enjoyment, safety, and increased usage. Proper management will ensure that we provide the most effective maintenance with the most efficient allocation of resources.

#### **Management**

One of our biggest challenges will be to find an agency or organization willing to adopt the management responsibilities of this trail upon its completion. Trail managers are responsible for the completion of maintenance tasks, user safety, and management of the natural resources. Below are three potential management options for the trail.

**Local Resources.** Local government should be considered for the management of this trail. Local government agencies may have the resources and funding needed to take over the management of this trail. The Syracuse Metropolitan Transportation Council (SMTC) is an agency responsible for administering the continuous and comprehensive transportation throughout Onondaga County. The SMTC promotes commuting by bicycle in the Syracuse area. Although this agency currently works exclusively on bicycle transportation on Syracuse roads, they should be considered for the management of this trail because of the parallel goals of their program and the SCT. The trail could be an effective extension of SMTC by bringing bicycle commuters from surrounding areas to the streets of Syracuse.

**State Resources.** The New York State Office of Parks Recreation and Historical Preservation (OPRHP) is a state agency well known for managing New York State Parks. This agency has an extensive reach of operations that also includes 1,350 miles of trail. OPRHP should be considered for the management of this trail because of their existing resources and partnerships with other agencies and councils that would be able to coordinate efforts to develop and maintain our trail. Their management structure is in place and well tested and they could be a great resource to the SCT.

**Trail Authority.** A trail authority is a board of individuals highly associated with the trail and the surrounding community that manages the trail, often times in cooperation with local municipalities, non-profit groups, and volunteer “friend” groups. Using a trail authority ensures the trail users can have a direct hand in management. This management option requires strong public participation, and requires a source of funding to implement their management plans. Funding could come from grants, donations, a government agency, or a combination of sources.

#### **Maintenance**

In order to provide safe and enjoyable recreational transportation we must ensure our trail is maintained to the best of our ability. Routine maintenance will ensure the trail is not degraded over time and will protect the investment of resources that go into making this trail. Maintenance must not only consider short-term projects that need to be attended to now, but also consider the long-term goals of the trail. Managers must consider a management plan that is right for them, and re-evaluate their goals at increments of time they find most useful to their trail. Using an in-

depth maintenance plan will help managers allocate funds as well as keep a log of projects and when they were completed. Monitoring and evaluation are important in management planning because some maintenance projects cannot be planned for – instances like vandals or storms may create problems that need to be taken care of on an as needed basis.

The American Trails Association advocates the following management tasks as a minimum guideline for multi-use trail managers.

**Table 15. Maintenance Tasks and Operations**

<b>Activity</b>	<b>Frequency</b>	<b>Description</b>
Mowing	3-4 times annually	Maintain a 4-foot minimum wide edge on each side of the trail
Pruning / Removal of trees and Limbs	Annually	Prune woody vegetation and remove unhealthy or dead trees and limbs.
Signage	Annually	Maintain directional and informational signs
Access Control	Permanent Signs - periodically as required	Replace damaged access control devices
Trail Surface (on local roads)	Periodically as required	Maintain the roadway surface and remove accumulated debris.
Trail Surface (off-road)	Periodically as required	Repair surface damage and erosion.
Drainage Structures	Minimum - Annually	Clean inlets, keep swales clear of debris.
Litter Pick Up	Weekly or as required	Trailside litter clean-up
Trash Collection	Weekly	Remove trash from receptacles and access areas
Bridges	Annually	Inspection by a Professional Engineer every two years to ensure structural integrity.
Snow grooming to enable cross-country skiing	Daily or as needed during winter	Snow mobile with groomer attachment needed.
Graffiti Control	As needed	Repaint surfaces as needed.

Adopted from Feasibility Study for the Various Rails-to-trails Projects within the County of Cumberland, New Jersey, June 2010

This level of management is estimated to cost \$5,000 to \$7,000 per mile of trail. Additional management tasks such as restrooms, security patrols, and snow removal would cost additional money for maintenance and operations. Annual maintenance costs can be reduced during construction by implementing facilities that meet your management. Spending money on more durable and functional materials could save you money by requiring less upkeep and management in the future.

### **Summary**

In order to ensure the lasting success of the SCT, we must establish the proper management of the trail. The management group must have the means to facilitate a routine maintenance plan that will preserve the quality of the trail for years to come. If done correctly, visitors will experience enjoyment, safety and an overall positive recreational experience.



## 5.4 Grant Assessment

The SCT will require significant fiscal backing for planning, creation, and maintenance. As a not-for-profit venture the SCT must seek funds through donation, rather than profit generation. Applying for grants provides an opportunity to receive funding as a NFP and/or community affiliate. The SCT will need to receive different grants for each of its wide range of development projects. Applying for different funding opportunities will improve the chances of the SCT's success. Below is a summary of potential grants that the SCT can apply for based on the varying needs of the trail.

**Table 16.** Potential funding sources

Organization	Title of Grant	Funding uses	Web Link
Bikes Belong	Facilities and/or Advocacy Grant	Trail Construction/ Advocacy	<a href="http://www.bikesbelong.org/grants/apply-for-a-grant/how-to-apply-for-a-bikes-belong-grant/">http://www.bikesbelong.org/grants/apply-for-a-grant/how-to-apply-for-a-bikes-belong-grant/</a>
NYDEC	Technical Assistance Grant	Educational Materials/ Marketing	<a href="http://www.dec.ny.gov/regulations/2590.html">http://www.dec.ny.gov/regulations/2590.html</a>
National Endowment for the Humanities	Brownfield Opportunity Area Grant	Staffing	<a href="http://www.nycommunities-waterfronts.com/GrantOpportunities/BrownfieldOpportunityAreas/HowToStart.aspx">http://www.nycommunities-waterfronts.com/GrantOpportunities/BrownfieldOpportunityAreas/HowToStart.aspx</a>
NYS Office of Parks, Recreation, & Historic Preservation	America's Historical and Cultural Organization Grant	Historical/Cultural Interpretation	<a href="http://www.neh.gov/grants/guidelines/AHCO_ImplementationGuidelines.html">http://www.neh.gov/grants/guidelines/AHCO_ImplementationGuidelines.html</a>
NYS Office of Parks, Recreation, & Historic Preservation	Consolidated Funding Application (CFA)	General Funding Opportunity to improve NYS public lands (this applies for hundreds of grants)	<a href="http://nysparks.state.ny.us/grants/">http://nysparks.state.ny.us/grants/</a>
Federal Department of Health and Human Services	Healthy People 2010 Community Implementation Grants Program	General Funding Opportunity to support healthy activities	<a href="http://www.health.gov/healthypeople/Implementation/">http://www.health.gov/healthypeople/Implementation/</a>
The U. S. Department of Commerce, Economic Development Administration (EDA)	Economic Development Grants for Public Works and Development of Facilities	Trail Building	<a href="http://12.46.245.173/pls/portal30/CATALOG.PROGRAM_TEXT_RPT.SHOW?p_arg_names=prog_nbr&amp;p_arg_values=11.300">http://12.46.245.173/pls/portal30/CATALOG.PROGRAM_TEXT_RPT.SHOW?p_arg_names=prog_nbr&amp;p_arg_values=11.300</a>

**Table 16 (continued).** Potential funding sources

<b>Organization</b>	<b>Title of Grant</b>	<b>Funding uses</b>	<b>Web Link</b>
National Park Service	Land and Water Conservation Fund (LWCF) Grants	General funding for outdoor recreation	<a href="http://www.nps.gov/nrcr/programs/lwcf/">http://www.nps.gov/nrcr/programs/lwcf/</a>
Oracle	Oracle Corporate Giving Program	Education	<a href="http://www.oracle.com/corporate/giving/community/index.html?giving.html">http://www.oracle.com/corporate/giving/community/index.html?giving.html</a>
American Hiking Society	Volunteer Vacations	Volunteers to build trail	<a href="http://www.americanhiking.org/volVacFAQ.aspx#9">http://www.americanhiking.org/volVacFAQ.aspx#9</a>
Federal Highway Administration	National Scenic Byways Program	Planning, safety and facility improvements, cultural and historic resource protection, and tourism info	<a href="http://www.byways.org/grants/index.html">http://www.byways.org/grants/index.html</a>
Federal Highway and Federal Transit Administrations	Congestion Mitigation and Air Quality (CMAQ) Improvement Program	General funding to promote clean air	<a href="http://www.fhwa.dot.gov/environment/cmaqpgs/index.htm">http://www.fhwa.dot.gov/environment/cmaqpgs/index.htm</a>

**Summary**

There are numerous opportunities to receive grant funding for the SCT, as the table begins to show. With the advent of bike infrastructure and the push for alternative transportation, many people and organizations are interested in supporting new modes of connectivity. The three organizations that will be most beneficial to the SCT in offering grants are the Rails-to-Trails conservancy, New York State, and Bikes Belong. This list looks relatively short because each of these three funding sources offers a single application for a diversity of grants. One application can apply to hundreds of opportunities that will suite the various needs of the trail. Because the SCT is so multifaceted, from trail construction to programming and interpretation, it is more easily marketed to a wide range of grants.

## **5.5 Monitoring and Evaluation**

For this assessment, three popular bike paths were observed throughout the United States and evaluated for their techniques on trail monitoring. Visitor numbers, visitor safety, and the well being of the natural resource base adjacent to the path were the three main criteria assessed for each path.

### **Ashuwillticook Rail Trail**

The first path is located in Berkshire, New York and is called the Ashuwillticook Rail Trail. The Berkshire Bike Path Council (BBPC) is a volunteer advocacy organization dedicated to improving bicycling accommodations in Berkshire County. Every year the BBPC performs three trail counts. The first one is in May, the second in July, and a final one in September. Local groups of volunteers are set at different points throughout the trail and each keeps track of the amount of one-way trips that passes them. Besides the quantity of users, volunteers keep note of certain demographics including age, mode of transportation, helmet use, stroller use, and wheelchair use. With this information one can then see what the most popular use on the trail is and even adapt it to better fit certain users. Also, since volunteers do the project a few times a year the cost of monitoring for this particular path is relatively low. The actual time of the monitoring can be key in order to properly evaluate when it is getting the most use. The BBPC realized this and made sure to stay away from holidays such as July 4<sup>th</sup> and Labor Day because those dates might not be representative of the true mean. Since the bike path is small they should not have used a station counting system

### **Pinellas Trail**

The Pinellas trail, located in Florida, uses a different approach for monitoring and evaluation. The trail is 35 miles long so monitoring can be difficult. To achieve this this task a voluntary group of Auxiliary Rangers has been put together. More than 25 volunteers make up this group all of whom are 18 years or older. These volunteers are required to under-go background checks, extensive training on trail history, public relations, trail riding, first aid, and nutrition. The majority of the volunteers patrol by bike and use cell phones to communicate. They also survey visitors about their experience and help them in any way they can. The rangers are always on the trail making sure that it is safe and if anyone does need help they are usually close by. Also to ensure that people do not get hurt they provide visitors with trail information, directions, and bicycle safety tips. Having such a big volunteer force makes monitoring visitor numbers simple and relatively easy. The data, therefore, is accurate since the rangers are there year-round.

### **East Bay Trail**

Located in California, the East Bay Trail uses a similar approach as the Pinellas. They have an organization called the Bicycle Trails Council of East Bay (BTCEB). The work of BTCEB is essential in keeping trails open for mountain biking. A big difference between other trail groups and the BTCEB is that that later requires a membership fee. Most monitoring is done online at the BTCEB website. Users and members are allowed to fill out surveys as well as follow a blog on the site. This is a good way to get feedback about the trail even though the people using the site cannot be 100% trusted. Of the three bike paths observed, the East Bay Trail is the most highly involved in the well-being of the natural resources surrounding the trail. Members that help build and maintain the trail also collect native plant seeds, grow plants in nurseries, check water quality, do planting along shoreline, and monitor the health of wildlife populations.

**Summary**

Altogether each of these trails seems to have a strong aspect of monitoring in one of the following ways: visitor numbers, visitor safety, and the well-being of the natural resource base adjacent to the path. Monitoring is the most effective when the volunteers and work are spread evenly between the different aspects of monitoring. This will make the evaluation process useful and will help the bike path most significantly.

## ***5.6 Recommendations for Operations and Management***

### **Recommendations for trail management**

Several alternatives exist for identifying the entity responsible for managing the SCT. First, a park management agency such as the New York State Office of Parks Recreation and Historical Preservation (OPRHP) could be selected. OPRHP should be considered because of its statewide resources and partnerships with other agencies, and its ability to coordinate efforts to develop and maintain the trail. Second, a trail authority focused on the SCT and other trails throughout Central NY could be created. This trail authority could be either a part of a regional or county planning board in the central New York area, or could be created as a not-for-profit organization.

If the management agency responsible for the SCT is not an organization, it is recommended that a "Friends Group" is established to provide volunteer assistance with trail maintenance and promotions. Members of the Friends Group should be composed of individuals from the several stakeholders involved in the SCT. This Group shall be responsible for managing the volunteers and organizing the programs and events in which volunteers will be essential.

### **Keeping a trail maintenance log**

It is highly recommended to use a trail maintenance log to keep a record of changes made to the trail over time. The log will be used to inventory physical features on or adjacent to the trail, and should keep track of the location and condition of resources, and any improvements needed or made to the resources. This inventory will enable proper planning and prioritizing of funds for within the SCT's maintenance budget.

### **Annual volunteer training program**

A weekend workshop is a great way to train volunteers for their respective duties within the SCT. The Friends Group could organize this event with assistance from ESF and SU, OPRHP, Boy Scouts, and other not-for-profit organizations involved with Onondaga County resources. Training should be focused on three major topics: development (clearing and construction), maintenance (trash removal, trimming and weed removal, and risk assessment), and interpretation.

- **Development Training:** Divide the volunteers according to their skills into clearing and construction groups. Instructions should focus on how to use the necessary tools in order to maximize the work and assure the safety of the volunteers.
- **Maintenance Training:** Instructions should be provided concerning trash removal (recycling), weed management (distinguishing native from invasive species, which ones are appropriate to remove, and how to remove them), and risk assessment (monitoring the trail and identifying areas of risk for users).
- **Interpretation Training:** Instructions on educating trail users during special events will be needed. Experts in the field of interpretation could be brought in from local nature centers and colleges for these trainings.

**Maintenance of the SCT**

Maintenance of the trail will need to be done regularly by groups of volunteers regarding the following needs: weekly trash removal, monthly trimming and weed removal, monthly risk assessment, and necessary repairs. Trash removal should be done every Saturday by groups of four to seven volunteers. The monthly trimming and weed removal should be done at the beginning of each month by groups of five to ten volunteers. The monthly risk assessment should be done once a month (or after high wind events) by groups of two to five volunteers in each section of the SCT; sections of trail that may pose a risk to users should be identified and risks should be removed as soon as possible. High risk areas should be posted with hazard signs until risk situations are corrected. Volunteers with the necessary skills should make repairs as needed.

**Volunteer appreciation programs**

A seasonal ending event should be held around Labor Day to acknowledge the efforts of the volunteers throughout the season, offering gift cards from local business to volunteers that have shown commitment to the SCT. Refreshments and food for both events should be offered by local businesses. An end-of-the-season ride or walk on the trail should also be held to give volunteers a fund experience on the trail.

## ***5.7 Recommendations for Evaluation and Monitoring of the SCT***

### **Obtaining visitor input**

In order to achieve the goal of providing a safe and enjoyable experience for the SCT users, their opinions need to be heard. One way this can be done is by providing visitors with a survey about their time spent on the SCT. The survey should contain questions regarding the appearance, safety, and overall experience of the trail. Also, open-ended questions should be included so that the visitors can explain their feelings and opinions as well as give recommendations on improvements of the trail. The survey could be located at the trailhead kiosks, as well as at any other stop stations along the trail. At every location the surveys are offered, there should be a drop off box for finished surveys. Having information on how trail users feel will help keep the SCT safe and enjoyable for all. This method is relatively cost-efficient because the only expense is the production of the survey; surveys should be collected by volunteers. Another option is to conduct in-person surveys; a graduate student at SUNY ESF could conduct this type of survey as part of their graduate research.

### **Use of electronic counting devices**

In order to keep track of the number of visitors that use the SCT, electronic counting devices can be installed on the trail. These devices come in a wide range of styles including infrared beams, thermal imaging, computer vision, pressure-sensitive mats, hand held counters, and Wi-Fi devices. If possible, it would be best to place several counting devices along the trail to track where use is concentrated. Information about the number of visitors using the trail can be used for grant and funding applications. It is important to note that trail counters can be expensive and are often subject to theft and vandalism. In lieu of trail counters, volunteers can be stationed at main access points along the trail to monitor trail use at random times during weekends and weekdays.

## ***5.8 Recommendations for Fundraising***

### **Find a grant writer to educate students**

Grant writing is time consuming and typically requires a paid and experienced writer. A potential solution for these barriers is finding a grant writer that would voluntarily educate SUNY ESF or SU students on grant writing. From this experience, students could gain independent course credit while writing grants for the SCT and use their experience to improve their resume. Another option is working with the state's or city's resources to find funding. Regardless of how grants are attained, they are imperative for the success of the SCT.

### **Apply to numerous grant sources**

Many grants aim to fund a diversity of projects like the SCT and do so by providing a general mission that they work to support. The following is a list of general grant funding opportunities as well as those that are specifically targeted to certain aspects of the trail. Listed is the name of the organization, the name of the grant, and the website to apply, respectively.

#### General Funding Opportunities

Numerous funding opportunities exist and are included below:

- Bikes Belong: Facilities and/or Advocacy Grant, <http://www.bikesbelong.org/grants/apply-for-a-grant/how-to-apply-for-a-bikes-belong-grant/>
- Federal Department of Health and Human Services: Healthy People 2010 Community Implementation Grants Program, <http://www.health.gov/healthypeople/Implementation/>
- Federal Highway Administration: National Scenic Byways Program, <http://www.byways.org/grants/index.html>
- Federal Highway and Federal Transit Administrations: Congestion Mitigation and Air Quality (CMAQ) Improvement Program, <http://www.fhwa.dot.gov/environment/cmaqpgs/index.htm>
- National Park Service: Land and Water Conservation Fund (LWCF) Grants, <http://www.nps.gov/ncrc/programs/lwcf/>
- NYS Department of Parks, Recreation, & Historic Preservation: Consolidated Funding Application (CFA), <http://nysparks.state.ny.us/grants/>

#### Historical/Cultural Interpretation and Education

- NYS Department of Parks, Recreation, & Historic Preservation: America's Historical and Cultural Organization Grant, [http://www.neh.gov/grants/guidelines/AHCO\\_ImplementationGuidelines.html](http://www.neh.gov/grants/guidelines/AHCO_ImplementationGuidelines.html)
- Oracle: Oracle Corporate Giving Program, <http://www.oracle.com/corporate/giving/community/index.html?giving.html>

#### Marketing

- NYDEC: Technical Assistance Grant, <http://www.dec.ny.gov/regulations/2590.html>



### Staffing

- National Endowment for the Humanities: Brownfield Opportunity Area Grant,  
<http://www.nycommunities-waterfronts.com/GrantOpportunities/BrownfieldOpportunityAreas/HowToStart.aspx>

### Volunteers for Trail Construction

- American Hiking Society: Volunteer Vacations,  
<http://www.americanhiking.org/volVacFAQ.aspx#9>

### Trail Construction

- The U. S. Department of Commerce, Economic Development Administration (EDA):  
Economic Development Grants for Public Works and Development of Facilities,  
[http://12.46.245.173/pls/portal30/CATALOG.PROGRAM\\_TEXT\\_RPT.SHOW?p\\_arg\\_name\\_s=prog\\_nbr&p\\_arg\\_values=11.300](http://12.46.245.173/pls/portal30/CATALOG.PROGRAM_TEXT_RPT.SHOW?p_arg_name_s=prog_nbr&p_arg_values=11.300)

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