

LAKE GEORGE ROUTE 9 GATEWAY PLAN



GATEWAY TO THE QUEEN OF AMERICAN LAKES

WINTER 2010



Acknowledgements

The *Lake George Route 9 Gateway Plan* is the end product of nearly half a year of work by many individuals who worked cooperatively to create a new and forward thinking vision for the Route 9 Corridor. The following people contributed many hours of their personal time to the creation of the plan. Their energy, ideas, and dedication are what made this plan possible.

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Special Thanks

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This plan was made possible by funding from the Adirondack/Glens Falls Transportation Council



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Introduction

In the spring of 1791, Thomas Jefferson penned “Lake George is without comparison, the most beautiful water I ever saw.” Often referred to as the Queen of American Lakes, Lake George still possesses the same qualities that inspired Thomas Jefferson those many years ago. As stewards of this resource, the Town of Lake George continues to seek ways to improve upon its environs, for both residents and visitors alike. The *Lake George Route 9 Gateway Plan* is an extension of this effort, offering a new and forward thinking vision for critical piece of its existing infrastructure.

As a primary gateway to Lake George, the Route 9 corridor is often the first point of access to the region for both residents and tourists. However, it is widely recognized that the aesthetic qualities of the corridor are not in harmony with the region’s picturesque environs. Multiple wide lanes, cluttered signage, and a lack of pedestrian and landscape features makes for an unsafe and unappealing pedestrian and vehicular experience. In addition, Route 9’s current condition does not physically or aesthetically complement the many businesses that line the corridor, which are vital to the greater community’s economic success.



Looking north near the Route 9L intersection

Acknowledging the importance of the Gateway, the Town of Lake George appointed a committee of volunteers who were tasked with identifying existing issues and opportunities regarding pedestrian safety, access, and streetscape amenities. Early in the planning process, the Lake George Route 9 Gateway Plan Committee adopted a “complete streets” vision for the corridor. The complete streets concept has become an increasingly popular and commonly excepted roadway design philosophy throughout the transportation engineering and planning community over the last decade. According to the NYS Department of Transportation, the positive benefits from complete streets are numerous, “including bolstering economic growth and sustainability, encouraging healthier lifestyles, addressing air quality concerns, as well as other varied transportation related issues.” In addition to these benefits, simple pedestrian improvements such as sidewalks can reduce pedestrian accidents by as much as 88 percent.¹

This vision of a complete street includes access and accommodations for everyone – pedestrians, bicyclists, transit riders, and drivers – and takes into account the needs of people with disabilities, the elderly, and children. In addition, a complete street includes “green” design elements such as alternative stormwater management features or landscaping with native plants that can help offset carbon emissions and shade roadways reducing heat



Looking north near the Lake George Forum

¹ The Federal Highway Administration, *Desktop Reference for Crash Reduction Factors*, FHWA-SA-07-015

island effects. It's important to note, a complete street in a rural area will look quite different from a complete street in a highly urban area, "but both are designed to balance safety and convenience for everyone using the road."²

For the purposes of the Town of Lake George Route 9 Gateway Plan, a complete street incorporates the following features and/or characteristics:

- **Pedestrian Access, Safety & Mobility:** includes such features as sidewalks, crosswalks, bike access, landscape buffers between vehicle traffic and pedestrians, and signage. Together, these features make for a safe and pleasant experience for pedestrians.
- **Access Management:** includes orderly and well planned points of access throughout the corridor, reduced number of curb cuts, increased interconnection between adjacent land uses, and designated turning lanes. Access management, when implemented, will help to reduce the number of potential conflicts between motorist and pedestrians. For more information, the Adirondack/Glens Falls Transportation Council recently prepared an access management guidebook that is specifically "tailored to the needs of [its] planning and programming area," which includes all Warren and Washington County communities and the Town of Moreau (please visit <http://www.agftc.org>).
- **Traffic Calming Techniques:** include curb "bump-outs," the narrowing of roadways, pedestrian islands, signage, speed reductions, and textured surface crosswalks. Together, these features are conducive to safe and alert driving.

² www.completestreets.org

- **Corridor Beautification:** may include themed lighting, landscaping, gateway treatments, orderly and/or themed signage, and planted medians. These features help to create a sense place and improve the aesthetic quality of the corridor.
- **Sustainable/Green Streets:** include stormwater designs that focus on infiltration (e.g., raingardens, disconnected curbs, bioretention basins, pervious surfaces, etc.). These features help to reduce pollutants that may be conveyed by stormwater runoff. Street trees act as carbon sinks and help to preserve road surfaces by shading them from the summer sun.

Study Area

The study area consists of the Route 9 corridor, from its intersection with Route 9N near Exit 21 of the Adirondack Northway (I-87), north to the Village of Lake George's municipal boundary. The Committee also acknowledged nearby land uses and resources including access to Lake George's waterfront, the Lake George Battlegrounds, Warren County Bikeway, Prospect Mountain Veterans Memorial Highway, and the new Westbrook Conservation Park. The goal was to identify ways to improve the connectivity between these resources, and to make for an improved pedestrian experience.

Route 9, within the ± 0.9 mile corridor, consists of four travel lanes, a center turning lane, and paved shoulders totaling ± 72 feet in width. Several roadways intersect with Route 9 within the study area; two of these intersections are signalized, Route 9L and Route 9N. According to NYS Department of Transportation (NYSDOT) Annual Average Daily Traffic (AADT) data there are approximately 11,000 daily trips throughout the corridor. It is important to note that AADT figures represent the total volume of vehicle traffic of a roadway for a year divided by 365 days. Given the seasonal nature of the Lake George region's tourism, it is assumed that a majority of the 'daily traffic' occurs during the summer months, which would coincide with peak pedestrian traffic.

Land uses along the corridor are primarily commercial in nature, and include restaurants, hotels, retail stores, entertainment and recreational establishments. Access to these businesses range from well defined driveways to completely paved road frontages. Where entrances are not well defined, conflicts between vehicle and pedestrian traffic may occur. An overview of the study area (next page) illustrates the existing conditions.

Near Exit 21 and Route 9N Intersection



Near the Lake George Forum



Near Valero Gas Station



Near Route 9L Intersection

9L Intersection



To Exit 21

West Brook Rd.

Near A&W

Near Westbrook Road Intersection



Near Exit 21 and Route 9N Intersection

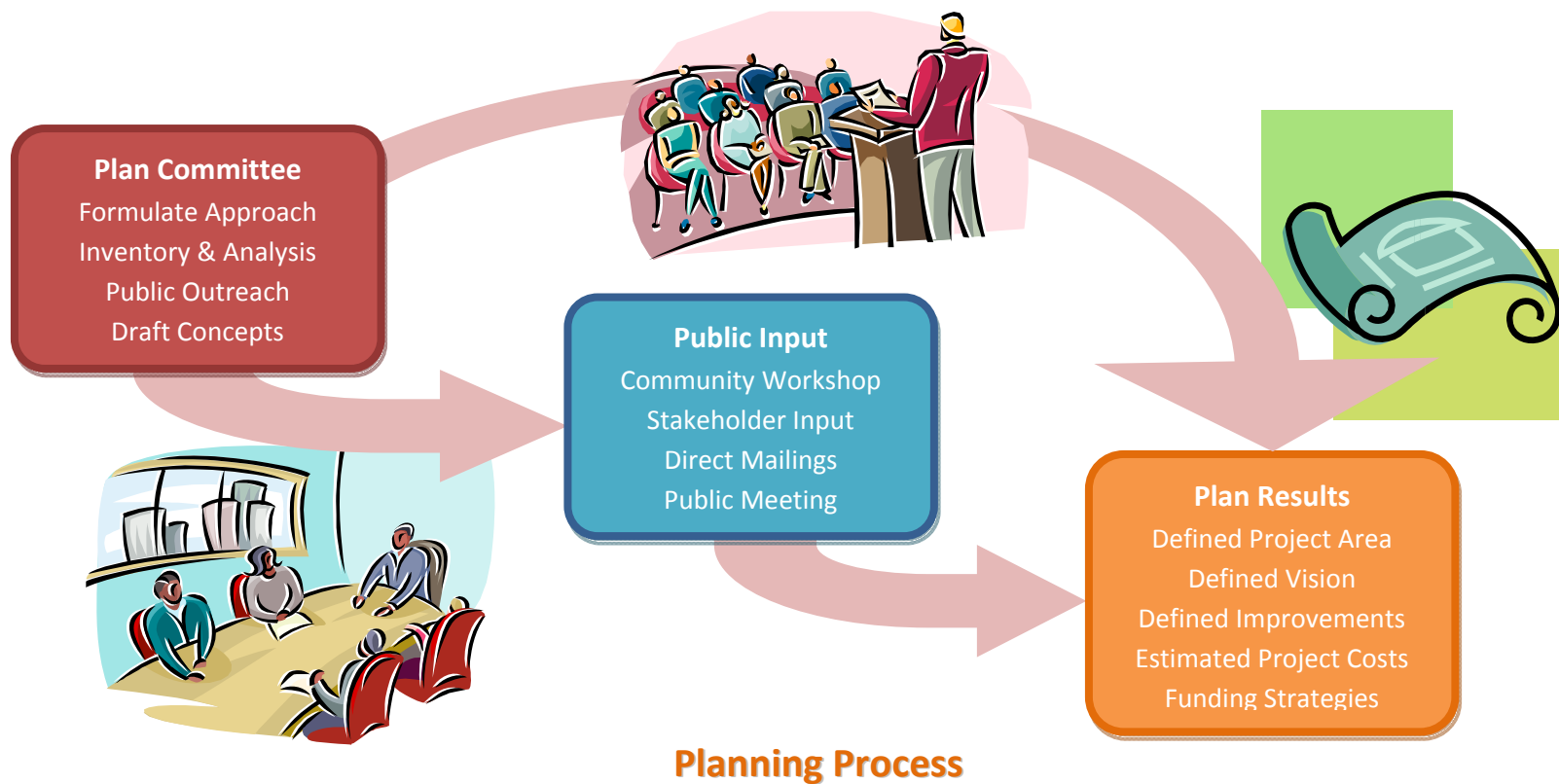


Near Route 9L Intersection



Planning Process

The Town of Lake George Route 9 Gateway planning process began in February 2010. Recognizing the need to improve Route 9, the Town appointed a committee of local residents and tasked it with drafting a concept plan that would address pedestrian access and safety throughout the corridor.



Lake George Route 9 Gateway Plan Committee

The Lake George Route 9 Gateway Plan Committee met regularly while developing this plan. The Committee consisted of seven residents that represented a broad spectrum of the community. The Committee gathered and examined information from many sources. In addition to holding public meetings, the Committee reached out to local businesses, Town officials, and NYSDOT representatives.

Inventory & Analysis

The first step in the planning process was to conduct an inventory and analysis of Route 9's existing conditions and adjoining land uses. Using information and data from such sources as Geographic Information System (software), NYSDOT, as well as local business owners and residents; the committee examined issues and began to identify opportunities for improvement.

Public Participation

Providing opportunities for Lake George residents to take part in the planning process was a high priority for the Committee. Planning information was regularly posted on the Town's website. Residents were encouraged to contact the committee with their ideas, questions, comments, and concerns. Two public meetings were held where adjacent land owners were directly invited to attend. Additional public comments were also solicited through the Town's website.

Concept Plan

Once the Committee reviewed the corridor's existing conditions, it prepared a preliminary Concept Plan that was then presented to the public. After receiving public input and feedback, the Concept Plan was refined and finalized. **The Concept Plan (see attached) represents the future vision of the Route 9 Gateway.**

Concept Plan

The overall design philosophy for the Lake George Route 9 Gateway Plan is centered on the idea that the corridor should accommodate all users. This includes pedestrians, bicyclists, motorists, transit riders, representing people of all ages and abilities, including children, older adults, and people with disabilities. While traditional roadway designs used a classification system based on increasing volumes and speed (i.e., residential, collector, minor, and major arterial, etc.), a more “complete street” integrates various design elements to control access and speed, thereby making for a more safe and efficient experience for all users. This integrated design approach helps to reduce vehicle miles traveled and promotes pedestrian mobility. Finally, a complete street design offers more opportunities to improve the aesthetic quality of the roadway and its environs.

The Lake George Route 9 Gateway Plan’s vision for the corridor is illustrated in the **Concept Plan**, which is included within the Plan as an attached figure. Key elements of the Concept Plan are identified below:

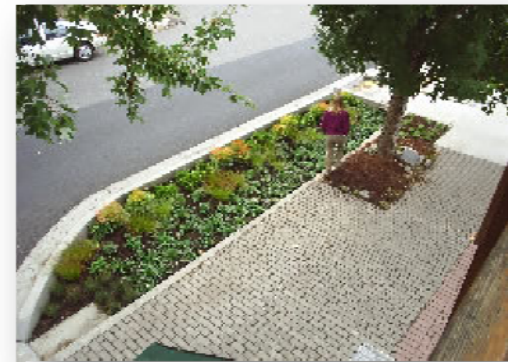
- **Sidewalks:** There are currently no sidewalks along Route 9. The Concept Plan calls for sidewalks on both sides of the corridor. Sidewalks should be (at a minimum) five to six feet in width. Where possible, sidewalks should have a landscaped area that separates pedestrians from the road. Where sidewalks would significantly hinder access and/or parking for an existing land use, at-grade sidewalks should be used. Sidewalks along the west-side of Route 9, from the Route 9N to Route 9L intersections, should “meander,” creating the feel of a multi-use trail. The meandering multi-use trail concept is intended to provide



Example of a “meandering” path

an attractive and cost-effective alternative to sidewalks. Sidewalks should also be extended along Route 9L, improving safe access to the Lake George Elementary School. This section of sidewalk could also be extended to Beach Road, thereby improving access to the waterfront. The use of alternative pavement materials (i.e., permeable pavement) should be explored.

- **Medians:** Route 9's width is conducive to high speeds, unsafe crossings, and is aesthetically unattractive. Medians should be placed throughout the corridor to reduce traffic speeds and add to the corridor's visual quality. The placement of each median, as represented on the enclosed Concept Plan, takes into consideration access to nearby land uses. Medians should incorporate native tree species that can handle harsh conditions. Where possible, medians should incorporate disconnected curbs and raingardens/ bioretention basins. This design would allow stormwater to enter the median area and directly infiltrate the ground. Snow removal should also be taken into consideration for median locations and design.
- **Landscaping:** Currently there are no landscape features within the Route 9 corridor. In order to improve the visual quality of the corridor, a mix of native trees and shrubs should be planted wherever possible. This includes buffer strips between the road and sidewalk, medians, and gateway areas (i.e., 9N and 9L Intersections and the area near the Lake George Battleground State Campground).



Example raingarden

- **Signage:** Signage throughout the corridor is haphazardly placed, unsightly, and distracting. Signage should be consolidated and organized based on the intended audience.³ Signage should also highlight key sites and destinations, including the Lake George waterfront, the Lake George Battlegrounds and State Campground, Warren County Bikeway, Prospect Mountain Veterans Memorial Highway, and the new Westbrook Conservation Park. The Concept Plan calls for three types of signs: pedestrian, bicycle, and vehicular wayfinding and interpretive signage. A different theme should be used for each signage type, allowing travelers and visitors to identify the unique attributes of Lake George region by offering public education and pedestrian access opportunities.



Existing Conditions and
Example signage

- **Gateways:** The Committee identified three ‘gateway’ areas: the Route 9N intersection, the Route 9L intersection, and the area near the Lake George Battleground State Campground. These areas were selected as key focal points within the corridor. Both the Route 9N and 9L intersections are major access points; while the area near the Lake George Battleground State Campground’s is a high pedestrian area. All ‘gateways’ should include a concentration of streetscape and landscape amenities. The Concept Plan calls for the planting of evergreen trees on the opposite side of the road from the Campground. The Committee envisions that as these trees mature they will balance the evergreen canopy of the Campground, making for a dramatic “gateway” experience.

³ Such signage should be in addition to the signage that is required by the Manual of Uniform Traffic Control Devices and/or the Adirondack Park variances.

- **Lighting and Utilities:** The Route 9 Corridor is currently lit with cobra style streetlights. Period style lighting should be installed throughout the corridor to improve on the current aesthetics. It is also noted that existing lighting is mounted on utility poles that carry a tangled web of service lines. It is recommended that these utilities be buried. The burying of utilities will not only improve the visual quality of the corridor, but it will help protect such infrastructure from inclement weather that the region is known for. Any burying of utilities should be coordinated with any other infrastructure improvements, including the proposed new waterline from the Town Boundary to Birch Avenue.



9L Intersection Existing conditions



9L intersection proposed concept

- **Crosswalks:** The Concept Plan call for several crosswalks and/or improvements to existing crosswalks. This includes crosswalks for the Route 9N and 9L intersections. These crosswalks should include a “pedestrian island” in the middle of each crosswalk, which is intended to provide a safe haven for those using the crosswalk. Given the level of pedestrian traffic near the Lake George Battleground State Campground, the Concept Plan calls for a mid-



Proposed mid-block crosswalk and HAWK signal

landscaped buffers, etc.), to further improve Lake George water quality. Additional stormwater improvements should be explored during the design phase including the use of pervious surfaces.

- **Transit:** Transit services are an efficient and effective alternative to the automobile. Such services help reduce our overall auto dependency and the number of vehicle miles we may travel. Busing services within the Route 9 corridor are provided by Greater Glens Falls Transit. The Concept Plan calls for expansion of these services. To promote ridership, existing stops should be well defined and accommodations such as benches should be added. The Concept Plan also calls for additional northbound stops between the Route 9L intersection and the Village of Lake George. Finally, opportunities for enhanced transit connections to a planned park and ride facility near Exit 21 (and/or the Route 9N intersection) should also be explored.
- **Snowmobile Access:** Snowmobiling is an important winter pastime throughout the Lake George and Adirondack regions. Given the importance of snowmobiling, the Concept Plan recommends that snowmobile access be maintained with the vicinity of Fort George Road and Prospect Mountain Veterans Memorial Highway. This may include a dedicated snowmobile crossing and appropriate signage.

Lake George Route 9
Gateway Plan



*Future vision
for the Route
9L intersection*



*Future vision for
the Lake George
Battleground
Gateway*

*Includes proposed
mid-block crosswalk
and HAWK signal*

Funding & Cost Estimate

There are several potential funding sources that may be used to implement the Lake George Route 9 Gateway Plan. However, no one source will likely fund the project in its entirety. As such, it is important to explore and leverage all funding sources. Given the variety of funding sources and strategies, it is important to continually examine priorities, possible alternatives, and implantation strategies to champion the Lake George Route 9.

Funding Strategy

The overall 2010 project cost estimate for the Lake George Route 9 Gateway is approximately \$5.3 million. A copy of the preliminary cost estimate is included as an Attachment.

Costs are summarized as follows:

• Site Preparation	\$261,500
• Demolition	\$256,000
• Site Work	\$1,511,500
• Landscaping	\$394,350
• Utilities	\$1,450,000
• Contingency (20%)	\$774,670
• Survey, Engineering & Construction Phase	<u>\$697,203</u>
Project Total	\$5,345,223

This estimate includes repaving of the entire corridor, installation of curbs, sidewalks, center island medians, stormwater collection improvements, street lighting and landscaping, crosswalks/crossings, gateway features and undergrounding of existing utilities. Recognizing that the costs are significant, we examined methods to divide the project into phases.

There are a variety of options to consider. The project could be implemented in phases as follows: **Phase 1**, Utilities, **Phase 2**, Roadway Improvements, and **Phase 3**, Sidewalks, Lighting & Landscaping. The estimated cost for each of these phases is as follows:

Phase 1 Utilities	\$1,519,380
Phase 2 Roadway Improvements	\$2,004,105
Phase 3 Sidewalks, Lighting & Landscaping	\$2,191,233

However, it is important to note that there is a slight increase in costs when breaking the project into phases, which is attributable to redundant mobilization and/or restoration activities.

Phase 1 Utility improvements would include modifications to existing stormwater facilities, utilities in preparation for signals/lighting, and undergrounding overhead facilities. Utility work could be completed as a component of a municipal project (i.e., water line installation) and/or funded as a component of an environmental improvement project. This component cost could be reduced by elimination of the undergrounding of existing overhead utilities (\$250,000).

Phase 2 Roadway Improvements could be completed by NYSDOT as a component of their capital program/construction and maintenance efforts. **Phase 3 Sidewalks, Lighting & Landscaping** could be

implemented as transportation enhancement project or further divided into a sidewalk or landscaping project. Funding for Phase 3 could come from a variety of funding sources.

Given the estimated cost, it is recommended that project identify fundable components. Such components should reflect current funding priorities. Below are the suggested project components (additional information on potential funding sources is included below):

Component	Potential Funding Sources
Highway Resurfacing	It is anticipated that the NYSDOT will undertake most of this component. In addition to highway resurfacing, it may be possible to have the NYSDOT take on additional improvements (e.g., crosswalks, traffic signals, etc.).
Sidewalks & Crosswalks	Traditional funding sources include the following: <ul style="list-style-type: none"><li data-bbox="863 980 1713 1105">• SAFETEA-LU Funding. This program includes the Safe Routes to School, Transportation Enhancement, and Statewide Transportation Improvement Programs.<li data-bbox="863 1117 1713 1242">• Scenic Byway Funding. This program provides merit-based funding for byway-related projects each year, including safety related and access projects.<li data-bbox="863 1253 1713 1383">• Local Metropolitan Planning Organization (i.e., Adirondack / Glens Falls Transportation Council) Spot Improvement funding.

- NYS Environmental Facilities Corporation (EFC) Green Innovation Grant Program. This program funds a variety projects that are related to water quality improvements.

Landscaping & Stormwater

Funding sources for landscaping and stormwater include:

- NYSDEC Urban and Community Forestry Grants. This program is designed to encourage communities to actively enhance tree cover along their streets and in their parks.
- NYSDEC Water Quality Improvement Project (WQIP) Program. A competitive, reimbursement grant program that helps communities improve water quality.
- NYS Environmental Facilities Corporation (EFC) Green Innovation Grant Program. This program funds a variety projects that are related to water quality improvements.

Signage

Funding from wayfinding and interpretive signage may come from the following:

- NYSDOS New York State Coastal Resources Interpretive Program. The Town of Lake George’s proximity to a “designated inland waterway” makes it eligible for such funding.
- Scenic Byway Funding. This program provides merit-based funding for byway-related projects each year, including interpretive and marketing projects.

Engineering & Design

Funding for engineering and design may come from the following:

- NYS Environmental Facilities Corporation (EFC) Green Innovation Grant Program. This program funds a variety of projects that are related to water quality improvements.
 - Town Budget. Given the limited amount of funding for engineering and design work, the Town may choose to fund this component directly.
 - Federal or State Appropriations. Appropriations are essentially discretionary grants provided by State and U.S. Congressional representatives.
-

Potential Funding Sources

- **Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)**

Funding: Applicable elements include the Surface Transportation Program, Safe Routes to School, and the Transportation Enhancement Program.

Funding Amounts: Past minimum project amount has been raised to \$200,000 and maximum federal participation has been raised to \$2.5 million.

Funding Cycle: Congressional reauthorization of funding has not occurred since 2007-2008. However, a statewide solicitation is expected in calendar year 2011.

Website: <https://www.nysdot.gov/programs/tep>

- **Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) Make the Connection Program:** The Make the Connection program is a dedicated bicycle and pedestrian improvement program that is administered by the Adirondack/Glens Falls Transportation Council.

Funding Amounts: Total program funding is set at \$200,000. A grant match of 20 percent is required.

Funding Cycle: Annually Awarded.

Website: http://www.agftc.org/whats_new.asp

- **Federal Highway Administration National Scenic Byways Program:** The Federal Highway Administration provides merit-based funding for byway-related projects each year. This includes monies for planning, safety improvements, Byway facilities, recreation access, resource protection, interpretive information, and marketing projects. As part of the Lakes to Locks Passage, a designated New York State Byway, the Town of Lake George is well positioned for such funding.

Funding Amounts: Funding may range from \$2,000 for small, localized projects, to \$800,000 for more regional or statewide projects. A grant match of 20 percent is required.

Funding Cycle: Annually Awarded.

Website: <http://www.bywaysonline.org/>

- **NYS Department of Environmental Conservation (DEC) Water Quality Improvement Program (WQIP)**
Funding: Funding available for projects that will help reduce polluted runoff, improve water quality and restore habitat in New York State waters.

Funding Amounts: Successful applicants can be reimbursed for up to 75% or 85% of the total cost of the project.

Funding Cycle: Funded through the NYS Clean Water/Clean Air Bond Act

Website: <http://www.dec.ny.gov/pubs/4774.html>

- **NYS Environmental Facility Corporation (EFC) Green Innovation Grant Program:** This program is a highly competitive grant program that uses funding from the US Environmental Protection Agency and is administered under the Clean Water State Revolving Fund. The Green Innovation Grant Program 2010 (GIGP 2010) will provide seed money for projects which spur green innovation, build green capacity, and facilitate technology transfer throughout the State. Eligible projects will improve water quality and demonstrate sustainable wastewater infrastructure in communities across the State.

Funding Amounts: The design grant maximum is \$50,000 per project, and a grant match of 50 percent is required. The construction grant maximum is \$750,000 per project, and a grant match of 10 percent is required.

Funding Cycle: Annually awarded.

Website: <http://www.nysefc.org/home/index.asp?page=1046>

- **NYS Department of Environmental Conservation Urban and Community Forestry Grants Funding:** The State Urban and Community Forestry Program seeks to encourage and assist municipalities as they develop and implement sustainable local urban forestry programs. Grants are designed to encourage communities to actively enhance tree cover along their streets and in their parks, to properly care for and maintain their community trees, to develop tree inventories and management plans, and to inform their residents of the value and benefits of urban trees.

Funding Amounts: Communities may request from \$2,500 to \$75,000. A grant match of 50 percent is required.

Funding Cycle: Annually Awarded.

Website: <http://www.dec.ny.gov/lands/5285.html>

- **NYS Department of State (DOS) New York State Coastal Resources Interpretive Program:** The Department of State solicits grant applications from local governments for matching grants from the New York State Environmental Protection Fund's Local Waterfront Revitalization Program. These monies may be used for a variety of projects and planning activities.


Funding Amounts: Funding limits vary. A grant match of 50 percent is required.

Funding Cycle: Annually Awarded.

Website: http://www.nyswaterfronts.com/grantopps_EPF.asp

- **NYS Department of State (DOS) Lake George Watershed Coalition:** Funded by the NYSDOS, the Lake George Watershed Coalition consist of municipalities, non-governmental organizations, county and state agencies, and citizens that seek to coordinate Lake George Watershed preservation efforts. While the Coalition does not have a specific funding program, it may provide valuable assistance in obtaining funds.

Website: <http://www.lakegeorge2000.org/>

- **Warren County Soil & Water Conservation District:** The Warren County Soil & Water Conservation District has already spearheaded numerous stormwater management related projects throughout the Route 9 Corridor (as indicated by the  symbol on the **Concept Plan**). According to its website, "The District's mission is to implement projects and programs to improve and protect the lakes, streams, and other natural resources of Warren County. Working with municipalities and land owners, the District puts conservation on the land, with cost effective projects benefiting the residents and visitors of this beautiful county."

Website: <http://www.warrenswcd.org/>

ATTACHMENTS:

CONCEPT PLAN COST ESTIMATE

LAKE GEORGE ROUTE 9 CONCEPT PLAN



Engineers
Environmental Professionals
Land Surveyors
Landscape Architects
Planners

Capital District Office

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North Country Office (518) 812-0513
Connecticut Office (860) 440-2690

Town of Lake George
ROUTE 9 GATEWAY PLAN

Description	Units	Unit Cost	Qty	Cost
Site Preparation				
Mobilization	LS	\$150,000.00	1	\$150,000.00
Installation of Erosion & Sediment Control (E&SC)	LS	\$25,000.00	1	\$25,000.00
Maintenance of E&SC	WK	\$2,000.00	12	\$24,000.00
Maintenance and Protection of Traffic	WK	\$5,000.00	12	\$60,000.00
Tree Protection	LS	\$2,500.00	1	\$2,500.00
Demolition				
Topsoil Stripping & Removal	SF	\$0.50	80,000	\$40,000.00
Tree/Shrub Removal	LS	\$10,000.00	1	\$10,000.00
Sidewalk Removal	SF	\$2.50	15,000	\$37,500.00
Curb Removal	LF	\$3.00	10,000	\$30,000.00
Saw Cut Asphalt Pavement	LF	\$2.00	13,000	\$26,000.00
Asphalt Pavement Removal ¹	SY	\$5.00	2,500	\$12,500.00
Mill Asphalt Pavement ²	SY	\$2.50	40,000	\$100,000.00
Site Work				
Type II Subbase	CY	\$42.00	4,500	\$189,000.00
Asphalt Sidewalk	SF	\$3.50	14,000	\$49,000.00
Concrete Sidewalk	SF	\$5.50	45,000	\$247,500.00
Granite Curbing	LF	\$40.00	5,000	\$200,000.00
Asphalt Binder Course	TONS	\$85.00	1,000	\$85,000.00
Asphalt Pavement Overlay	SF	\$1.50	350,000	\$525,000.00
Stamped Concrete	SF	\$25.00	5,800	\$145,000.00
Stripped Crosswalk	EA	\$250.00	14	\$3,500.00
Pavement Striping	LF	\$0.50	35,000.00	\$17,500.00
Site Restoration	LS	\$50,000.00	1.00	\$50,000.00
Landscaping				
Flowering Trees	EA	\$250.00	44	\$11,000.00
Deciduous Trees	EA	\$350.00	181	\$63,350.00
Evergreen Trees	EA	\$250.00	25	\$6,250.00
Shrubs	EA	\$75.00	50	\$3,750.00
Topsoil, Seed & Mulch	SF	\$2.50	100,000	\$250,000.00
Signage	LS	\$10,000.00	1	\$10,000.00
Entrance Sign/Water Feature	LS	\$50,000.00	1	\$50,000.00
Utilities				
Underground Electric ³	LS	\$250,000.00	1	\$250,000.00
Intersection Signal/Lighting ⁴	EA	\$75,000.00	4	\$300,000.00
Lights Poles and Fixtures	EA	\$6,000.00	100	\$600,000.00
Storm Sewer Improvements ⁵	LS	\$300,000.00	1	\$300,000.00
Construction Subtotal				
\$3,873,350.00				
20% Contingency				
\$774,670.00				
Construction Total				
\$4,648,020.00				
Survey, Engineering & Construction Phase Services				
\$697,203.00				
TOTAL				
\$5,345,223.00				

Last updated 10/1/10

2011 Costs⁶ \$5,510,000.00
2012 Costs⁶ \$5,680,000.00
2013 Costs⁶ \$5,850,000.00
2014 Costs⁶ \$6,030,000.00
2015 Costs⁶ \$6,210,000.00

Notes:

1. Asphalt demolition includes only removal of asphalt required to trench and install new utilities within route 9 right of way.
2. Asphalt milling includes grinding and removal of top course of asphalt for entire road within the work area following installation of utilities and installation of subbase and binder over all utility trenches.
3. Underground Electric includes installation of conduit, wire, and pull boxes needed for new lights & traffic signals for complete length of roadwork and include excavation & backfill. Price may vary significantly based upon layout, conduit & wire.
4. Intersection signal/lighting includes light poles, fixtures, traffic signals and pedestrian actuated cross walk signals.
5. Storm sewer improvements costs based on re-use of approximately 50% of existing piping & catch basins as well as relocation & adjustment to additional catchbasins. Cost includes excavation & backfill. Price may vary significantly based upon condition of existing system, layout, pipe size & material.
6. Future costs based upon annual inflation of 3.0%.

