

September 22, 2009



TRANSIT DEVELOPMENT PLAN FINAL PLAN

Submitted by:

Nelson | Nygaard
consulting associates

In association with:
RLS & Associates



This document was printed on recycled paper

Table of Contents

	Page
Executive Summary.....	ES-1
Principles and System Development.....	ES-1
Recommendations.....	ES-3
Chapter 1. Introduction	1-1
Chapter 2. System Overview.....	2-1
Fixed-Route System	2-1
Chapter 3. Community Profile.....	3-1
Demographic Analysis	3-1
Employment.....	3-4
Chapter 4. Stakeholder and Public Input	4-1
Stakeholder Interviews.....	4-1
Existing GGFT Transit Riders	4-3
Non-Riders Living in Glens Falls Service Area.....	4-5
Meeting with GGFT Bus Drivers	4-6
Chapter 5. Service Evaluation.....	5-1
Route 2: Bay Road, ACC, and Quaker Road	5-2
Route 3: East Loop.....	5-7
Route 4: Fort Edward and Hudson Falls	5-11
Route 5: South Glens Falls	5-16
Route 6: West Loop	5-21
Route 7: West Glens Falls	5-26
Route 11/12: Upper Glen Street, Aviation Road.....	5-30
Route 19: Warren County Municipal Center.....	5-36
Seasonal Trolley Routes.....	5-41
Freedom and Mobility Express (FAME)	5-54
Chapter 6. Service Improvement Options	6-1
Chapter 7. Recommendations and Implementation	7-1
Overview.....	7-1
Scenario Analysis	7-15
Appendix A. Results from the On-Board Passenger Survey	
Appendix B. Results from Non-Rider Survey and Public Outreach Efforts	
Appendix C. Sample Operations Schedules for Proposed Recommendations	
Appendix D. Select Examples of Transit Agency Passenger Schedules	

Table of Figures

	Page
Figure ES-1	Short-Term Implementation Recommendations..... ES-4
Figure 2-1	A/GFTC Region and GGFT Service Area 2-3
Figure 2-2	Overview of GGFT Fixed Route Service 2-4
Figure 2-3	GGFT System Map..... 2-6
Figure 2-4	City of Glens Falls GGFT Routes 2-7
Figure 3-1	Population Change by Town and City..... 3-1
Figure 3-2	Geographic and Demographic Characteristics..... 3-2
Figure 3-3	Population Density per Square Mile by Block Group..... 3-3
Figure 3-4	Location of Workers per Block Group 3-5
Figure 3-5	Major Employers in the Glens Falls Region 3-6
Figure 3-6	List of Large Private Employers in GGFT Service Area 3-7
Figure 3-7	Activity Centers in the GGFT Service Area 3-9
Figure 3-8	Composite Distribution of Persons with High Propensity Transit Use Characteristics..... 3-12
Figure 3-9	Residential Location of Persons with High Propensity Transit Use Characteristics 3-13
Figure 3-10	Youth (5-17) as a Percent of Total Population 3-14
Figure 3-11	Older Adults (65+) as a Percent of Total Population 3-15
Figure 3-12	Persons with Disabilities as a Percent of Total Population..... 3-16
Figure 3-13	Persons with Low Income as a Percent of Total Population..... 3-17
Figure 4-1	List of Interviewed Stakeholders 4-1
Figure 4-2	Primary Travel Patterns by Percent of Total Trips Surveyed..... 4-4
Figure 5-1	GGFT System Productivity 5-2
Figure 5-2	Route 2..... 5-3
Figure 5-3	Route 2 Service Statistics..... 5-3
Figure 5-4	Route 2: Changes in Annual Ridership 2006-2007 5-4
Figure 5-5	Ridership by Month..... 5-4
Figure 5-6	Route 2 - Ridership by Time of Day 5-5
Figure 5-7	Route 2 Productivity 5-5
Figure 5-8	Route 3 Map..... 5-7
Figure 5-9	Route 3 Service Statistics..... 5-8
Figure 5-10	Route 3 Changes in Annual Ridership 2006-2008 5-8
Figure 5-11	Route 3: Ridership by Month (2006-2008) 5-9
Figure 5-12	Route 3 – Weekday Ridership by Time of Day 5-9
Figure 5-13	Route 3 Productivity 5-10
Figure 5-14	Route 4 Map..... 5-12
Figure 5-15	Route 4 Service Statistics..... 5-12
Figure 5-16	Route 4: Changes in Annual Ridership 2006-2007 5-13
Figure 5-17	Route 4: Ridership by Month (2006-2008) 5-13
Figure 5-18	Route 4 – Weekday Ridership by Time of Day 5-14
Figure 5-19	Route 4 – Saturday Ridership by Time of Day 5-14
Figure 5-20	Route 4 Productivity 5-15
Figure 5-21	Route 5 Map..... 5-17

Table of Figures

	Page
Figure 5-22	Route 5 Service Statistics 5-17
Figure 5-23	Route 5 Changes in Annual Ridership 2006-2008 5-18
Figure 5-24	Route 5 - Ridership by Month (2006 – 2008) 5-18
Figure 5-25	Route 5: Weekday Ridership by Time of Day 5-19
Figure 5-26	Route 5: Saturday Ridership by Time of Day 5-19
Figure 5-27	Route 5 Weekday and Saturday Service Productivity 5-20
Figure 5-28	Route 6 Map 5-22
Figure 5-29	Service Statistics 5-23
Figure 5-30	Route 6 Changes in Annual Ridership 2006-2008 5-23
Figure 5-31	Route 6: Ridership by Month (2006-2008) 5-24
Figure 5-32	Route 6 Ridership by Time of Day 5-24
Figure 5-33	Route 6 Productivity..... 5-25
Figure 5-34	Route 7 Map 5-26
Figure 5-35	Route 5 Service Statistics 5-27
Figure 5-36	Route 6 Changes in Annual Ridership 2006-2008 5-27
Figure 5-37	Route 7 - Ridership by Month (2006 – 2008) 5-28
Figure 5-38	Route 7 Weekday Ridership by Time of Day 5-28
Figure 5-39	Route 7 Productivity..... 5-29
Figure 5-40	Route Map 5-31
Figure 5-41	Route 11/12 Service Statistics 5-31
Figure 5-42	Route 11/12: Changes in Annual Ridership 2006-2007 5-31
Figure 5-43	Route 11/12: Ridership by Month (2006-2008) 5-32
Figure 5-44	Route 11/12 – Weekday Ridership by Time of Day 5-33
Figure 5-45	Route 11/12 – Saturday Ridership by Time of Day 5-33
Figure 5-46	Route 11/12: Weekday and Saturday Productivity* 5-34
Figure 5-47	Route 11/12: Evening Service Productivity 5-35
Figure 5-48	Route 19 Map 5-37
Figure 5-49	Route 19 Service Statistics 5-38
Figure 5-50	Route 19: Changes in Annual Ridership 2006-2007 5-38
Figure 5-51	Route 19: Ridership by Month (2006-2008) 5-39
Figure 5-52	Route 19 – Ridership by Time of Day 5-39
Figure 5-53	Productivity Statistics: Route 19 Weekday Service 5-40
Figure 5-54	Route Map 5-43
Figure 5-55	Lake George Trolley Route Service Statistics 5-44
Figure 5-56	Lake George Trolley Routes: Seasonal Ridership Memorial Day to Labor Day 2008 5-45
Figure 5-57	Lake George/Glens Falls Trolley Weekday Ridership by Time of Day - Southbound 5-46
Figure 5-58	Glens Falls – Lake George Trolley Weekday Ridership by Time of Day - Northbound 5-46
Figure 5-59	Lake George/Glens Falls Trolley Weekend Ridership by Time of Day – Southbound 5-47
Figure 5-60	Glens Falls / Lake George Trolley Weekend Ridership by Time of Day – Northbound 5-47
Figure 5-61	South RV A Trolley Weekday Ridership by Time of Day 5-48
Figure 5-62	South RV A Trolley Weekend Ridership by Time of Day 5-49
Figure 5-63	South RV B Trolley Weekday Ridership by Time of Day 5-49

Table of Figures

	Page
Figure 5-64	South RV B Trolley Weekend Ridership by Time of Day..... 5-50
Figure 5-65	North Lake George Trolley Weekday Ridership by Time of Day 5-50
Figure 5-66	North Lake George Trolley Weekend Ridership by Time of Day 5-51
Figure 5-67	Lake George Trolleys Productivity by Service Day, 2008..... 5-52
Figure 5-68	FAME Paratransit Origin and Destination Locations 5-56
Figure 6-1	GGFT Conceptual Service Improvements 6-6
Figure 6-2	Possible Improvements to Routes 3 and 6..... 6-7
Figure 6-3	Greater Glens Falls Transit – DRAFT of Possible Ideas for Service Improvements..... 6-8
Figure 6-4	Initial and Final Proposals for Service Improvements 6-11
Figure 7-1	Sample Weekday Schedule for Route 2 7-3
Figure 7-2	Immediate-Term Implementation Recommendations..... 7-5
Figure 7-3	Sample Weekday Schedule for Route 4: Hudson Falls/Fort Edward..... 7-7
Figure 7-4	Sample Weekday Schedule for Route 5: South Glens Falls 7-8
Figure 7-5	Sample Weekday Schedule for Route 7: West Glens Falls..... 7-9
Figure 7-6	Recommended Improvements – Overall System..... 7-11
Figure 7-7	Recommended Improvements - City of Glens Falls 7-12
Figure 7-8	Longer Term Route by Route Recommendations 7-13
Figure 7-9	Scenario Analysis Recommendations with Base Case Implemented..... 7-15
Figure 7-10	Scenario Analysis Recommendations with Base Case Implemented..... 7-16

Executive Summary

The Adirondack/Glens Falls Transportation Council (A/GFTC) and Greater Glens Falls Transit (GGFT) retained Nelson\Nygaard Consulting Associates to create a transit development plan (TDP). The objective of the TDP was to develop a five-year plan for service and system improvements.

The TDP was prepared according to a work program with several major tasks, including developing a community profile of the service area's demographic, socio-economic and land use characteristics. Nelson\Nygaard also worked with GGFT and A/GFTC to understand the perspectives, experiences and needs of existing passengers as well as residents not currently using GGFT services. We also interviewed community leaders and public officials with a stake in transit services to ascertain their view on the need for service changes and improvements. This research was conducted using a combination of on-board surveys, intercept and mail-back surveys and telephone interviews.

Building on this data and in conjunction with GGFT system statistics, Nelson\Nygaard evaluated each route individually to assess route strengths and weaknesses and identify potential improvements that would strengthen not only the individual routes but also the system as a whole. Our review of the individual services and overall system led us to develop a series of service improvement concepts, which were subsequently used to shape and define proposals for service improvements. These concepts are to:

- Improve service efficiency through elimination of unproductive routes and route segments and reducing competition between routes.
- Simplify the service and make it easier to use by creating consistent, evenly spaced schedules, straightening route alignments, and making information about the routes, schedules and services easier to understand.
- Strengthen the existing trunk and feeder network by improving service along key corridors, creating links between regional centers, and where possible, interlining service between feeder and trunk routes to create direct, one-seat rides for passengers.
- Improve operations by alleviating schedule pressure on select services.

These concepts were translated into specific service improvements, which were subsequently presented and discussed with GGFT and A/GFTC staff. Based on this input, Nelson\Nygaard prepared maps and created informational materials and brought these ideas to members of the public, further refining and defining the potential service recommendations. As a final step to assess project feasibility, we drafted service schedules. By trying to schedule our recommendations, we were able to investigate operational challenges, assess financial impacts and make a final determination of suitability and feasibility. Through this process, we were ultimately able to identify a set of service and system improvements and develop a plan for implementation.

Principles and System Development

TDP recommendations are based on strengthening the organization of transit routes into a series of trunk and feeder routes and creating simple, easy to use services. The benefit of this approach will be to provide direct, understandable and efficient transit services that provide a high level of service on the region's key commercial corridors and access to these routes from residential areas. In the most densely developed parts of the service area, passengers will be able to walk to the trunk corridors. In less intensely developed areas, residents may use feeder

services to travel to/from the trunk routes. This approach will ensure that each route in the system has a clearly defined role within the service network and is designed to serve a specific market. The service guidelines that support moving towards this approach are outlined in the following text.

- Trunk routes should be designed to transport passengers along the service area's most developed corridors and to/from the region's most important destinations.
 - Trunk routes will have a higher level of service and longer span of service and be located along the system's strongest transit corridors.
 - Weekday service levels for trunk routes should be, at a minimum, 30 minute peak/60 minute off-peak (during the mid-day) service level. Ideally service levels will be 30 minutes throughout the day. Service levels should be consistent throughout the day with even spacing of trips.
 - Evening and Saturday service levels may be lower as compared to weekdays, but should be based on a 30 minute peak/60 minute off-peak schedule, also adding service to create a 30 minute schedule through the day. Schedules should be based on easily understandable, evenly spaced trips.
 - Routes 11/12 and 4 are designed as trunk routes, although the service levels on Route 11/12 are higher and more consistent than on Route 4.
- Collector/distributor routes should be designed to transport people from primarily residential areas and areas with a lower density of services, employment and activity centers.
 - Collector distributor routes will have a lower level and span of service as compared with trunk routes.
 - Fully implemented collector/distributor routes will provide a minimum level of service of hourly service during the peak periods and 120 minute service during the off-peak. As resources become available, frequencies may increase to hourly service throughout the day.
 - Saturday service levels on collector/distributor routes may be lower as compared to weekdays, but should be based on consistent, evenly spaced service schedules.
 - Examples of collector/distributor routes in the GGFT system are:
 - Route 2 Bay College
 - Route 5 South Glens Falls
 - Route 7 West Glens Falls
 - Route 19 Warren County Municipal Center/Factory Outlet Malls/Lake George Village
- Vehicles should remain in revenue service as long as possible to increase geographic coverage and minimize unproductive vehicle time.

Recommendations

Specific projects that will work towards implementation of these concepts are listed in Table ES-1. These projects involve eliminating unproductive services in some parts of the system and re-investing these resources to the most productive aspects of the system. Estimated costs associated with each recommendation are noted, however, the plan is largely revenue neutral with proposed service reductions used to support recommended service improvements.

In terms of project implementation, the TDP has identified a series of projects that may be implemented fairly quickly and without significant disruption to the existing service schedule or agency operations. We recommend that GGFT move forward with these projects in the immediate term:

- Add mid-day service on Route 2 and create a consistent, evenly spaced service schedule.
- Expanded service on GGFT Route 19 with both increased frequency and expanded geographic coverage.
- Maintain existing evening services on Routes 11/12, 4/5 and 2.
- Adjust schedule to put deadhead vehicles in service.

A second set of projects are recommended for implementation over the next several months. These projects are slightly more complicated to implement and will require a slightly longer lead time. Challenges include, among other things, implementing several changes concurrently, as some routes will need to be eliminated in order to redeploy resources to more productive parts of the system. After the initial recommendations are implemented, the TDP recommends that GGFT begin work on the following projects:

- Eliminate Route 3 East Loop
- Eliminate Route 6 West Loop
- Increase service on Route 4 Hudson Falls
- Streamline schedule on Routes 5 South Glens Falls and schedule three trips per day to Lamplighter Acres
- Add three trips on Route 7 West Glens Falls, reverse service direction and streamline schedule to even out trip spacing
- Develop color GGFT system map, update agency schedules and improve marketing materials.

After these identified system improvements are achieved, the TDP recommends that GGFT evaluate the changes to ascertain improvements in customer satisfaction and agency productivity. Assuming ridership and productivity data show continued support for the improvements, GGFT may fill in the existing services as outlined in the principles and system development section until the recommended service levels are achieved, i.e. trunk routes operate at half-hourly headways on weekdays and Saturday and feeder routes operate on hourly headways on weekdays and Saturdays.

Figure ES-1 Short-Term Implementation Recommendations

	Description of Existing Service	Proposed Changes	Justification	Estimated Annual Service Hour Requirements *
Route 2 Bay-College	Service along Bay Street to Bay Road to Queensbury. Major markets: <ul style="list-style-type: none"> • Adirondack Community College • the Cedars (assisted living) • Queensbury Town Hall and Queensbury Senior Center 	Add mid-day trip to provide hourly service all day.	Ridership is fairly strong during mid-day, with more than 7 riders per trip. Mid-day trip will create consistent service throughout day, making route easier to understand and use. Anticipated ridership is between 7-10 riders per trip.	Requires 130 VRH
Route 3 East Loop	Neighborhood service in eastern section of City of Glens Falls. Major markets: <ul style="list-style-type: none"> • Jackson Heights and Abraham Wings schools • Kmart • Price Chopper • Stichman Towers 	Eliminate service. Deploy services to higher need/more productive services. Serve some eliminated destinations with re-aligned Route 4 and putting deadhead vehicles in service.	Low ridership on existing route. Eliminate competition between Routes 3 and 4 at key locations.	Savings of 1,339 VRH Savings equate to 1,300 VRH from weekday service and 39 VRH from Saturday service.
Route 4 Hudson Falls – Fort Edward	Service from Glens Falls to Hudson Falls and Fort Edward. Bus has two alignments, along Dix and Boulevard Avenues. Major markets: <ul style="list-style-type: none"> • BOCES • Washington County Municipal Ctr • Super K-Mart • Eden and Village Parks 	Establish Route 4 as trunk route. Increase service level to half-hourly departures during peak periods and hourly during mid-day. Frequencies should be increased as resources become available. Service will continue to serve two alignments. With minor adjustments, this approach will support serving the new Walmart, when store opens. Saturday service level also increases.	Route 4 is a highly productive service with growing demand. Comments from stakeholder, public and survey request additional service. Corridor has several important destinations for travelers. New Walmart store will strengthen route. Serves population with high propensity to use transit and increases service to regional facilities (Washington County Municipal Center).	Requires 2,301 VRH

	Description of Existing Service	Proposed Changes	Justification	Estimated Annual Service Hour Requirements *
Route 5 Moreau-South Glens Falls	<p>Service from Glens Falls to South Glens Falls and Moreau. Select routes travel to Lamplighter on request. Major markets:</p> <ul style="list-style-type: none"> • Village of South Glens Falls • Midtown Plaza • Glens Falls Civic Center • South Glens Falls High School 	<p>Minor alignment changes to make service more direct.</p> <p>Implement regularly scheduled service to Lamplighter (upgrade from existing demand response service).</p> <p>Adjust schedule to meet Northway Express commuter service.</p> <p>Interline with Route 11/12 to create Route 9 service (where possible).</p> <p>Increase service frequency and span as funding permits.</p> <p>Create evenly spaced consistent schedules on weekday and Saturday services.</p>	<p>Current schedule has clustered service making it hard to remember and difficult to use. Create consistent, easily understandable schedules will address this concern.</p> <p>Existing riders rely on transit and are appreciative of service. Increased service frequency will help attract additional and choice riders.</p> <p>Survey/public requests for service to Lamplighter.</p> <p>Meeting Northway Express will support regional connections and expand employment opportunities.</p>	<p>Implementing proposed schedule changes will likely require small increases in VRH</p>
Route 6 West Loop	<p>Neighborhood service to western Glens Falls. Major markets:</p> <ul style="list-style-type: none"> • Glens Falls Hospital • Hannafords • Glens Falls Middle & High Schools • Irongate Center 	<p>Eliminate service, except for morning and afternoon peak service trips.</p> <p>Deploy services to higher need/more productive services.</p>	<p>Low productivity on existing routes, except for tripper services to schools, which have high ridership.</p> <p>Some segments of Routes 6 and 7 overlap and compete for passengers on Main and Broad Streets.</p>	<p>Savings of 1,209 VRH</p> <p>Savings equate to 1,170 VRH from weekday service and 39 VRH from Saturday service.</p>
Route 7 West Glens Falls	<p>Service from Glens Falls to West Glens Falls. Major markets:</p> <ul style="list-style-type: none"> • Glens Falls Hospital • Hannafords • Homestead Homes 	<p>Re-align to continue service to key elements of Route 6</p> <p>Reverse direction so inbound travelers don't have to cross street; also avoids recurring congestion</p> <p>Increase service frequency and span as funding permits</p> <p>Create evenly spaced consistent schedules.</p>	<p>Route 7 service area has strong potential.</p> <p>Reversing direction and adding trips will make service more attractive and easier to use.</p> <p>Public outreach effort indicated interest for more service.</p> <p>Increased service consistent with HHS use of hotels along route.</p>	<p>Requires 403 VRH</p>

	Description of Existing Service	Proposed Changes	Justification	Estimated Annual Service Hour Requirements *
Route 11/12 Glen Street/Aviation Mall/Walmart/ John Burke	Service from Glens Falls along Upper Glens Street. Major markets: <ul style="list-style-type: none"> • Aviation Mall • Walmart • John Burke Apartments • Shopping and employment along Glen Street 	No major changes proposed. Interline trips with collector routes. Potential to eliminate one mid-day trip to John Burke Apartments.	Route performs well and has good productivity. Interline helps address schedule concerns and creates one-seat rides. Eliminate trip to John Burke to alleviate schedule pressure.	No change
Route 19 Rt. 9 County Center	Service from Glens Falls to Gooney Golf on Route 9 outside of Lake George Village Major stops: <ul style="list-style-type: none"> • Warren County Municipal Center and Annex • Lake George Factory Outlet Stores Five trips per day between 9:15 am and 4:25 pm, plus one evening trip at 6:15 pm	Warren County Municipal Center Annex is scheduled to close in 2009. When Annex closes: <ul style="list-style-type: none"> • Stop in at Warren County Municipal Center on outbound and inbound leg • Extend service to Lake George Village (when trolleys are not running) • Add two trips per day to streamline schedule 	Ridership is fairly strong, with most trips carrying 8+ passengers. Additional trips will create more consistent, easily to understand schedule. Additional trips support employment at Stores. Public input demonstrated strong interest in year-round service to Lake George Village. Off-season, some Lake George hotels are used to meet ad hoc housing needs.	183.6 VRH to operate five trips to Lake George 414 VRH to add two trips

Assumptions:

- Adding one trip to Route 2 assumes marginal service increases amount to .5 VRH per day. Estimate is based on service operating 5 days per week, 52 weeks per year. Estimate is rounded.
- Extending existing service to Lake George assumes an additional .17 VRH per trip or 1.02 VRH per day (including night service). Assumes service operates 5 days per week for 36 weeks per year (excludes trolley seasons). Estimate is rounded.
- Adding two trips to Route 19 with service to Lake George assumes marginal service increase amounts to 2.3 VRH per day. Both estimates are based on service operating 5 days per week, 36 weeks per year. Estimate is rounded.

Chapter 1. Introduction

The Adirondack/Glens Falls Transportation Council (A/GFTC) and Greater Glens Falls Transit (GGFT) retained Nelson\Nygaard to conduct a transit development plan (TDP). The objective of the TDP is to develop a five-year plan for service and system improvements.

The TDP was prepared according to a work program with several major tasks, including developing a community profile of service area's demographic, socio-economic and land use characteristics. Nelson\Nygaard also worked with GGFT and A/GFTC to understand the perspectives, experiences and needs of existing passengers as well as community residents not currently using GGFT services. We also interviewed community leaders and public officials with a stake in transit services to ascertain their view on the need for service changes and improvements. This research was conducted using a combination of on-board surveys, intercept and mail-back surveys and telephone interviews.

Using this data, in conjunction with GGFT system statistics, Nelson\Nygaard evaluated each route individually to assess route strengths and weaknesses. Route evaluation results were combined with input from riders and members of the public to develop a series of recommendations. We evaluated these through discussions with GGFT and A/GFTC staff and members of the public. We also prepared maps and drafted service schedules to refine the preliminary recommendations into a set of recommended service improvements. These service improvement recommendations form the basis of the transit development plan and are presented as a phased implementation plan.

This final report documents the TDP process, key findings and proposed implementation plan. Material included in the plan represents the culmination of earlier working papers that help frame existing service needs and guide the development of future services. The draft final report is organized into six chapters immediately following this introductory section, including:

- Chapter 2:** System Overview – Describes existing public and community transportation services;
- Chapter 3:** Community and Market Analysis – Examines the distribution of the population, employment and key activity centers in GGFT's service area to assess how well transit services are structured to meet the local market. Much of this information is provided in a series of maps;
- Chapter 4:** Stakeholder and Public Input – Documents the results of stakeholder interviews, surveys with riders and non-riders and discussions with GGFT drivers;
- Chapter 5:** Service Evaluation – Describes the analysis and evaluation of individual services and routes within the GGFT system;
- Chapter 6:** Development and Evaluation of Alternatives – Presents the recommendations for new service options; and,
- Chapter 7:** Recommendations and Implementation – Provides draft service plans and schedules and discusses funding and implementation options.

Chapter 2. System Overview

GGFT currently operates three major services consisting of the regular fixed route system, complementary paratransit branded as the Freedom and Mobility Express (FAME), and seasonally trolley service to Lake George. These services operate in an area that encompasses the City of Glens Falls and adjoining Towns of Fort Edward, Kingsbury, Lake George, Moreau and Queensbury (see Figure 2-1). Four incorporated villages are situated within the service area: Fort Edward in Fort Edward Township; Hudson Falls in Kingsbury Township; Lake George in Lake George Township; and South Glens Falls in Moreau Township. In addition, to the administrative boundaries, GGFT's service area is also shaped by two major roadways:

- US 9 functions as a parallel local business route for the Northway, crossing at Exit 17 to the east side of I-87 and running north through the Village of South Glens Falls over the Hudson River into downtown Glens Falls, and continuing as Glen Street and Lake George Road through Lake George before crossing back over to the west side of I-87. Several GGFT routes operate on US 9, including Routes 11/12 between downtown and the Aviation Mall, Route 19 from Quaker Road to Exit 21, and the Lake George Trolley (summers only).
- US 4 runs along the eastern side of the GGFT service area, providing regional connections between Whitehall and Fort Edward and local connections between Hudson Falls and Fort Edward. GGFT Route 4 currently travels along US 4 between Hudson Falls and Fort Edward.

Fixed-Route System

GGFT operates nine fixed-routes that operate year-round. These routes are designed as a radial "pulse" system¹ focused on downtown Glens Falls. The complete route network is displayed in Figure 2-1, and route alignments within the City of Glens Falls are shown in more detail in Figure 2-2. All routes converge at an on-street terminal located along the east side of Ridge Street opposite City Hall. The Ridge Street Terminal is favorably located for transit riders within Glens Falls' central business district and near several key services, including senior housing. Selected route pairs are connected or "interlined" through the terminal; this scheduling strategy helps ensure vehicles are used effectively and helps facilitate efficient transfers between routes.

GGFT system and individual route characteristics are summarized in Figure 2-1. The full system operates primary on weekdays between 6:00 am and 6:30 pm. Eight of nine routes also operate on Saturdays, although several are on abbreviated schedules covering only part of the day. Weeknight service was introduced on three routes in November 2007. Cash-fares on the fixed-route system are currently set at \$1.00 for adult passengers and \$0.50 for adults aged 60 or more, persons with disabilities and holders of Medicare cards. Transfers between routes are currently priced at \$0.50. GGFT also sells monthly passes and other fare media, such as tokens that are available from public agencies and local businesses.

Except at the Ridge Street Terminal and a small number of selected locations where bus stops are specifically designated, GGFT passengers may get on or off buses anywhere along a route where it is safe to do so. This approach generally improves access by minimizing the distance

¹ The pulse system refers to a commonly used system design whereby transit routes are scheduled to meet at a single transfers point. Most or all of a system's routes end and begin their trips at a single location according to regularly scheduled times, such as on the hour or half-hour. This arrangement makes it easy for passengers to transfer between routes.

riders must travel to reach their boarding point. However, GGFT is beginning to install bus stops and shelters along more heavily traveled corridors such as Glen Street to improve bus operating speeds and manage schedule reliability. A process of educating passengers to use the marked stops is underway. To further enhance access, GGFT also accommodates rider requests for route deviation service to selected destinations. These are limited by time of day and to specific trips where schedules permit.

Figure 2-1 A/GFTC Region and GGFT Service Area

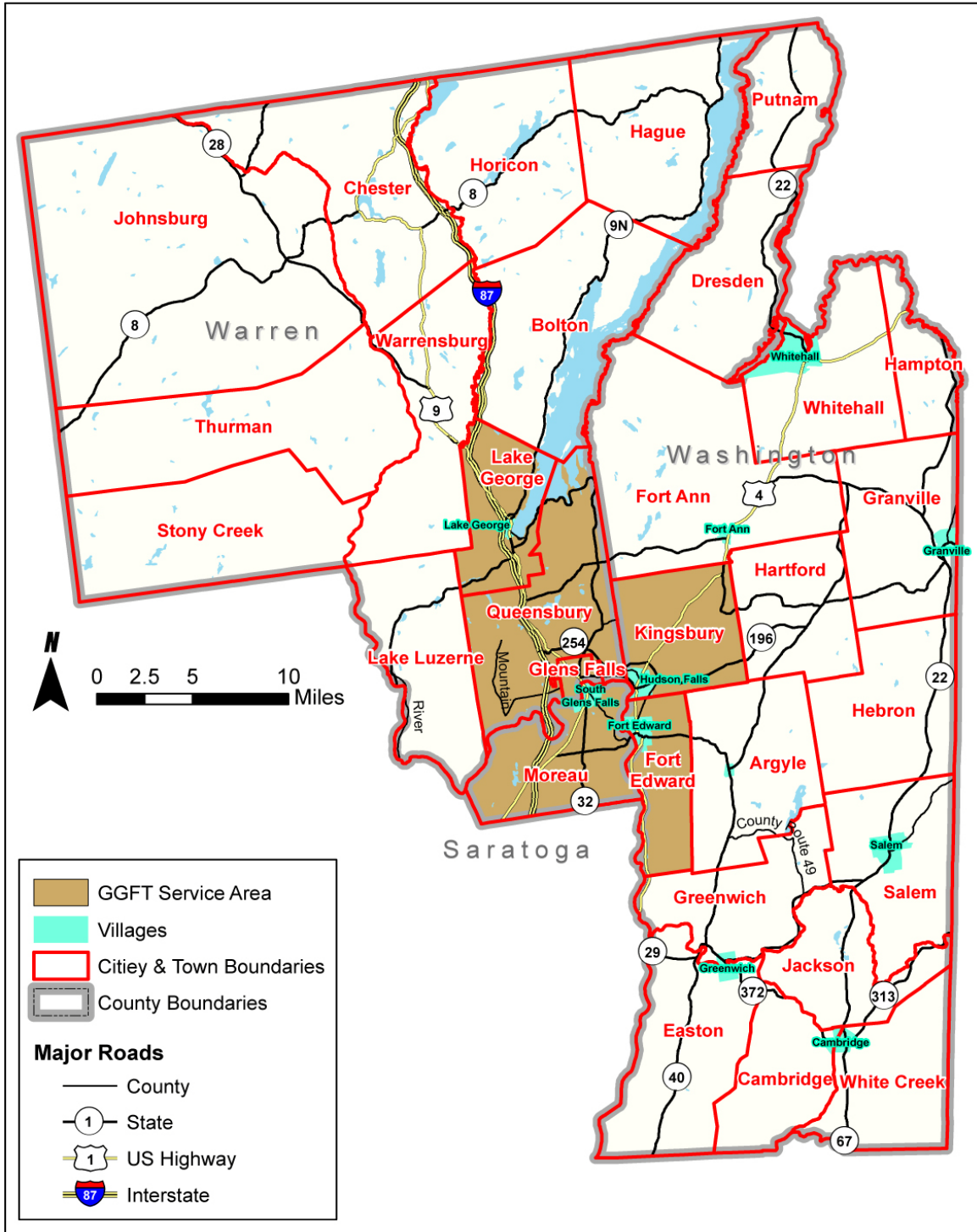


Figure 2-2 Overview of GGFT Fixed Route Service

Route No.	Service Area	Weekday Service		Saturday Service	
		Schedule	Trips/day	Schedule	Trips/day
2	Queensbury Town Hall via Adirondack Community College*	7:30 am–5:07 pm 7:00 pm – 9:15 pm	7 2	10:00 am–12:55 pm	2
3	East Glens Falls Loop	7:20 am–5:00 pm	10	9:30 am–1:50 pm	3
4	Fort Edward, Hudson Falls	6:30 am–6:40 pm 9:45 pm – 10:25 pm	13 1	8:00 am–6:30 pm	7
5	West Glens Falls	6:00 am–5:39 pm	9	8:30 am–5:29 pm	5
6	West Glens Falls Loop	7:00 am–5:30 pm	12	9:00 am–1:20 pm	3
7	South Glens Falls and Moreau	6:30 am–5:05 pm	6	11:00 am–3:53 pm	3
11/12	Glen Street – Aviation Mall	6:30 am–6:08 pm 6:15 pm – 9:45 pm*	22 4	8:00 am–5:58 pm	20
19	Warren County Municipal Center and Factory Outlet Stores	9:15 am – 4:25 pm	5	n/a	

Freedom and Mobility Express (FAME)

FAME is GGFT’s complementary paratransit service providing demand response, curb-to-curb transportation to individuals unable to use the regular fixed-route system. Passengers must have a qualifying disability and complete an application with GGFT to be eligible for the service. Once eligible, riders may schedule a ride at least 24 hours (and up to 14 days) in advance for travel to any destination within ¼ mile of existing fixed-route service; travel must also take place within the same operating hours as the fixed-route system. FAME’s service schedule, therefore, parallels the fixed-route services and is available Monday through Friday from 6:00 am to 6:30 pm and on Saturdays from 8:00 am to 6:00 pm, depending on the trip origin and destination.

Seasonal Trolley Service

GGFT began operating two trolley buses on a single route in 1994. The trolley component has grown steadily over the years to the current six vehicles running on three routes. The three trolley routes are briefly described as follows:

- Lake George South – operates every 20-30 minutes from Beach Road in Lake George south to Glens Falls and all points in between, including The Great Escape and factory outlet stores. All trolley routes pick up and discharge passengers on Beach Road near the Steamboat Dock in Lake George. Many destinations are available via transfer.
- Lake George South RV Parks – operates from Lake George south via Route 9 to RV parks and motels. The SOUTH – RV A route travels Route 9 to Route 149 and the Lake George RV Park once an hour. The SOUTH – RV B route travels to the Best Western/Travelodge Motels and the Wild West Ranch off Route 9.
- Lake George North – operates Beach Road in Lake George north along Canada Street (Rte 9) and Lakeshore Road (Rte 9N) to the Hearthstone State Campground, Diamond Point and Bolton Landing. Trolleys that display a “NORTH A” sign serve Canada Street and Lakeshore Road as far as Hearthstone State Campground. Trolleys that display a “NORTH B/C” sign travel to Diamond Point and Bolton Landing.

Trolley service operates between mid-May and Columbus Day with schedules varying during late spring, peak summer and autumn periods. The cash fare to ride a trolley to most destinations is \$1.00 for adult passengers and \$0.50 for persons 60 years of age and over, as well as for persons with disabilities. Transfers are available for \$0.50 between the North and South routes but are not valid between the trolleys and year-round route services.

Figure 2-3 GGFT System Map

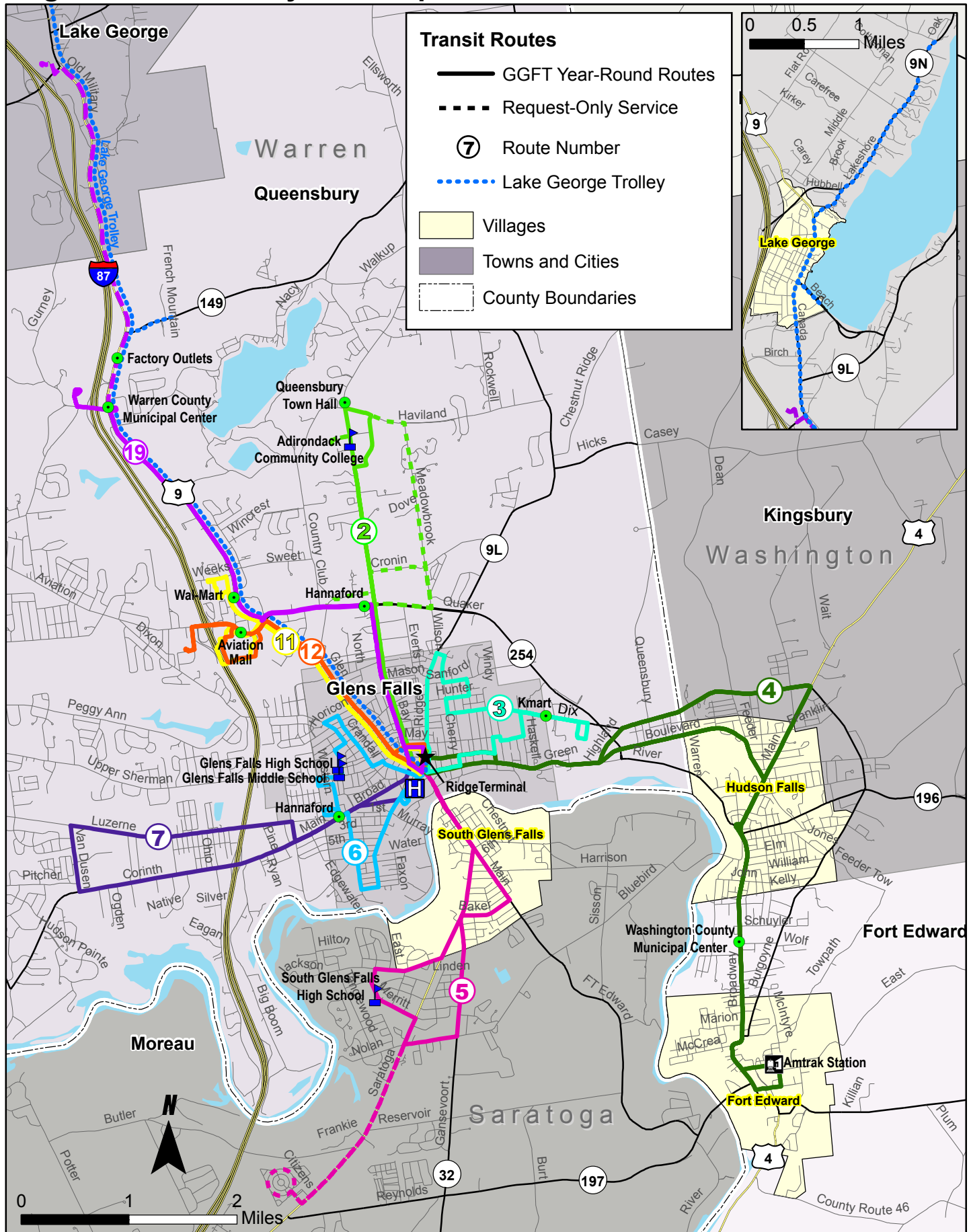
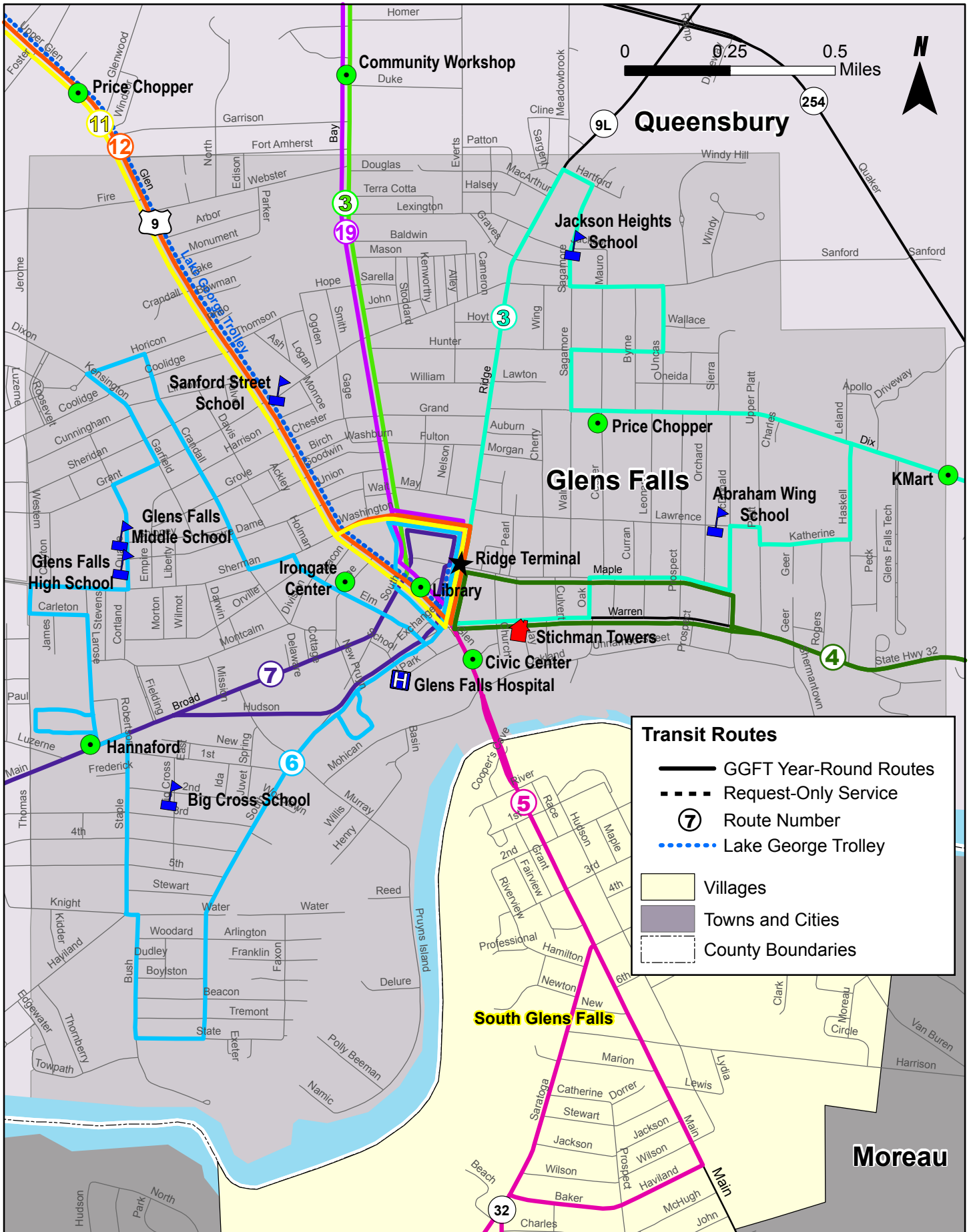


Figure 2-4 City of Glens Falls GGFT Routes



Chapter 3. Community Profile

A key aspect to gauging the effectiveness of the GGFT system is to understand the service area operating environment. To facilitate this analysis, Nelson\Nygaard prepared the following community profile highlighting demographic, employment and economic conditions in the study area. Key elements of the community profile include population and population density, distribution of workforce and major employers, the location of non-employment trip generators and the spatial distribution of residents with characteristics suggesting a higher propensity to utilize public transportation. For each element, the extent to which GGFT services respond to current needs is discussed and deficiencies noted.

Demographic Analysis

The estimated 2007 population of the service area is 77,791 persons¹, a 4.8% increase over the 2000 US Census population of 74,262 persons. The calculated average annual population growth rate approaches 0.7%, compared with 0.2% statewide. As shown in Figure 3-1, most of the growth occurred in Kingsbury and Queensbury. The City of Glens Falls lost population during this same period.

The GGFT service area is relatively large, covering nearly 206 square miles with an average population density of 361 persons per square mile. GGFT services, however, are concentrated in the region’s most densely populated regions. The City of Glens Falls, for example, has a population density of 3,771 persons per square mile.² Likewise, east of Glens Falls, the adjacent Village of Hudson Falls has nearly the same population density (3,765), and immediately south of Glens Falls, the Village of South Glens Falls has a population density of 2,500 persons per square mile. These three communities form the “urban core” of the GGFT service area. The Villages of Fort Edward (1,692) and Lake George (1,620) have population density characteristics that are more reflective of suburban style development. Population density information by community is summarized in Figure 3-2 and shown graphically in Figure 3-3.

Figure 3-1 Population Change by Town and City

	Pop 1990	Pop 2000	% Change	Pop 2007	% Change
Glens Falls	15,023	14,354	-4%	13,968	-3%
Moreau	13,022	13,826	6%	14,176	3%
Lake George	3,211	3,578	11%	3,600	1%
Queensbury	22,630	25,441	12%	27,802	9%
Fort Edward	6,330	5,892	-7%	6,019	2%
Kingsbury	11,851	11,171	-6%	12,406	11%
GGFT Service Area	72,067	74,262	3%	77,971	5%
New York State	17,990,455	18,976,457	5%	19,297,729	2%

Source: US Census 2000 and 2007 American Community Survey

¹ Per 2007 American Community Survey.

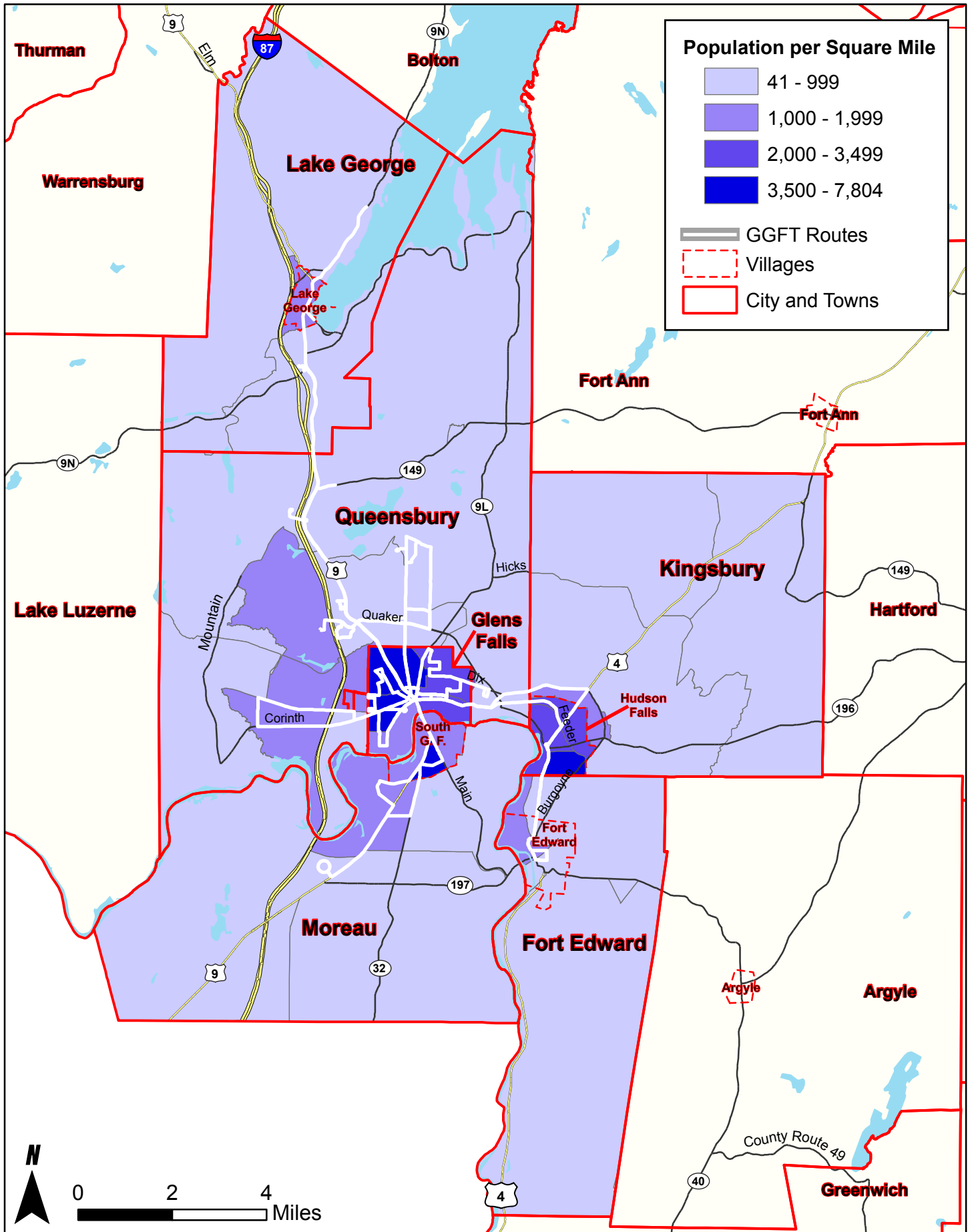
² In comparison, the population density of the City of Albany is 4,474 persons per square mile.

Figure 3-2 Geographic and Demographic Characteristics

Name	Total Population	Land Area (sq. miles)	Population Density	Median Age	Average HH Size
Glens Falls	14,444	3.83	3,771	35.6	2.3
Moreau	13,826	42.16	328	37.3	2.5
Lake George	3,578	30.24	118	42.4	2.3
Queensbury	25,351	63.01	402	39.3	2.5
Fort Edward	5,892	26.8	220	38.1	2.5
Kingsbury	11,171	39.87	280	36.8	2.4
GGFT Service Area	74,262	205.91	361	38.3	2.4
New York State	18,976,457	47,214	402	35.9	2.6

Source: US Census 2000

Figure 3-3 Population Density per Square Mile by Block Group



Employment

Jobs located in the GGFT service area are heavily concentrated in the City of Glens Falls and contiguous sections of Kingsbury and Queensbury Townships, as indicated in Figure 3-4. This figure reflects 2000 Census data compiling the number of workers reported by block group. Lesser concentrations of employment occur within the Villages of Lake George and Fort Edward, and in the I-87 corridor primarily around Exits 19 and 20.

Similarly, most major employers are located within the City of Glens Falls. This does not include the numerous small employers also located within the City of Glens Falls both in downtown Glens Falls and along Glen Street and Upper Glen Street. Among the region's 25 largest employers, 22 are within the GGFT service area as shown in Figure 3-5. The name and workforce size of these employers are listed in Figure 3-6³. Nine of the 22 employers are located in Glens Falls; eight are in the Town of Queensbury; three are in Fort Edward; and one each are in South Glens Falls and Bolton Landing. Glens Falls Hospital, which employs 2,800 workers, is by far the largest employer in the service area.

Most of the large employers identified currently are accessible via GGFT regular fixed route service. There are few large employers not currently served, however, in each case there are strategic reasons why service is limited or not provided:

- Angio Dynamics, the area's sixth largest employer⁴ with 540 workers located on Queensbury Avenue near the Glens Falls Airport, is not currently on a GGFT route. GGFT suggested this is a difficult employer to serve due to higher wage employees.
- Employment at factory outlet stores, located near the Exit 20, have excellent trolley service during the summer months when employment is highest. Off-season, the area has bus service, including an evening service, but the number of trips traveling between Glens Falls and the factory outlet stores is greatly reduced. This level reflects area employment, which is also significantly higher during the summer months as compared to the off-season.
- Community, Work and Independence (CWI), the fifth largest employer and second largest not-for-profit agency in the region with 741 workers. CWI's headquarters is located on Everts Avenue south of Quaker Road in the Town of Queensbury. A portion of workers travel to this site, which is accessible by the by-request only portion of GGFT Route 19. Most of CWI's workers, however, are employed at smaller workshops located throughout the region. Some but not all of these workshops are accessible by GGFT. In addition, CWI has its own transportation services, Transit Connections, which provides transportation to most CWI employees.

Other larger employers located in Argyle, Granville and Greenwich are not served because they are well beyond current GGFT service area boundaries.

³ Identification numbers displayed in Figure 6 correspond to employers listed in Figure 7. One major employer, National Grid, was not mapped because its workforce is highly dispersed.

⁴ Since the community profile was originally prepared in Fall, 2008, Angio Dynamics has relocated part of its workforce away from this site. Thus, it may no longer be the region's 6th largest employer.

Figure 3-4 Location of Workers per Block Group

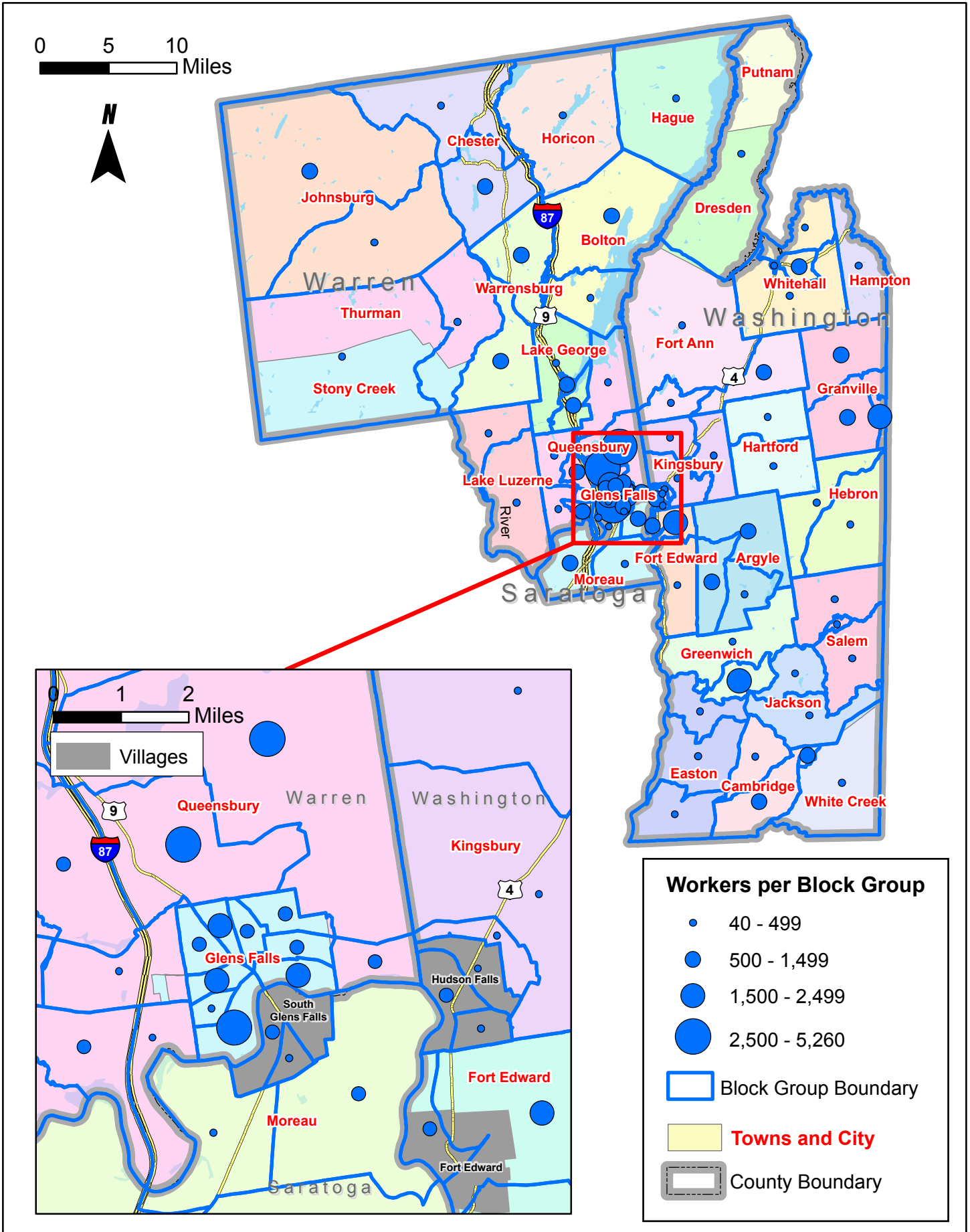


Figure 3-5 Major Employers Ranked by Number of Employees

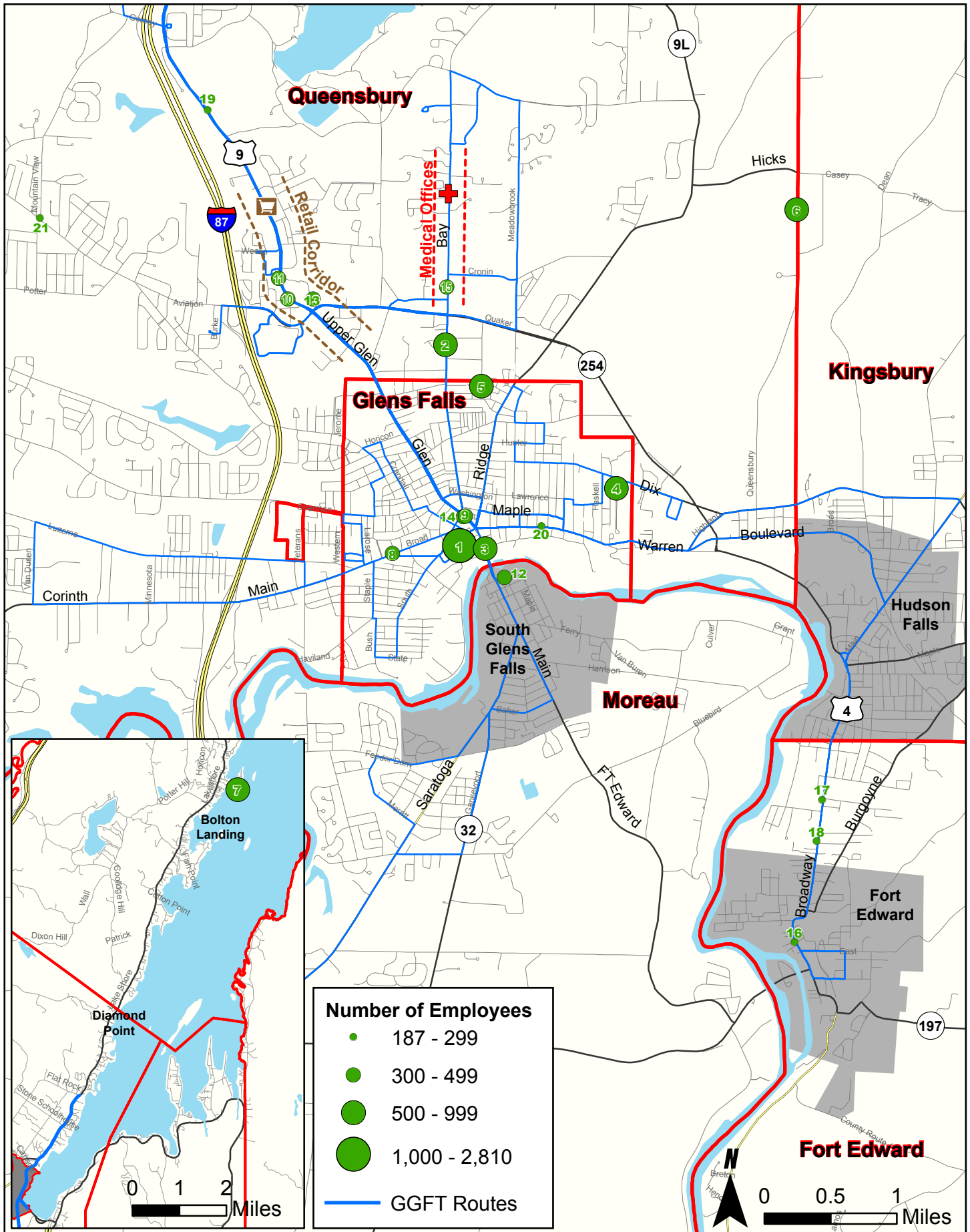


Figure 3-6 List of Large Private Employers in GGFT Service Area

Label	Name	Municipality	Employees
1	Glens Falls Hospital	Glens Falls	2,810
2	C.R. Bard	Queensbury	941
3	Finch Paper	Glens Falls	880
4	Navilyst Medical	Glens Falls	812
5	Community, Work & Independence	Glens Falls	741
6	Angio Dynamics	Queensbury	540
7	The Sagamore ⁵	Bolton Landing	500
8	Hudson Headwaters Health Network	Glens Falls	408
9	Glens Falls National Bank & Trust	Glens Falls	405
10	Tribune Media Services	Queensbury	400
11	Wal-Mart	Queensbury	400
12	SCA Tissue	South Glens Falls	370
13	Travelers	Glens Falls	358
14	TD Banknorth	Glens Falls	326
15	Warren/Washington ARC	Queensbury	314
16	Irving Tissue	Fort Edward	297
17	General Electric	Fort Edward	290
18	Fort Hudson Health System	Fort Edward	268
19	Great Escape Theme Park	Queensbury	265
--	National Grid	Glens Falls	224
20	The Pines	Glens Falls	190
21	Prospect Child & Family Center	Queensbury	187
Major Public Employers			
	Washington County	Queensbury	650
	Warren County	Fort Edward	550
Major Private Employers outside GGFT Service Area			
	Telescope Casual Furniture	Granville	256
	Covidien	Argyle	210
	Hollingsworth & Vose	Greenwich	208

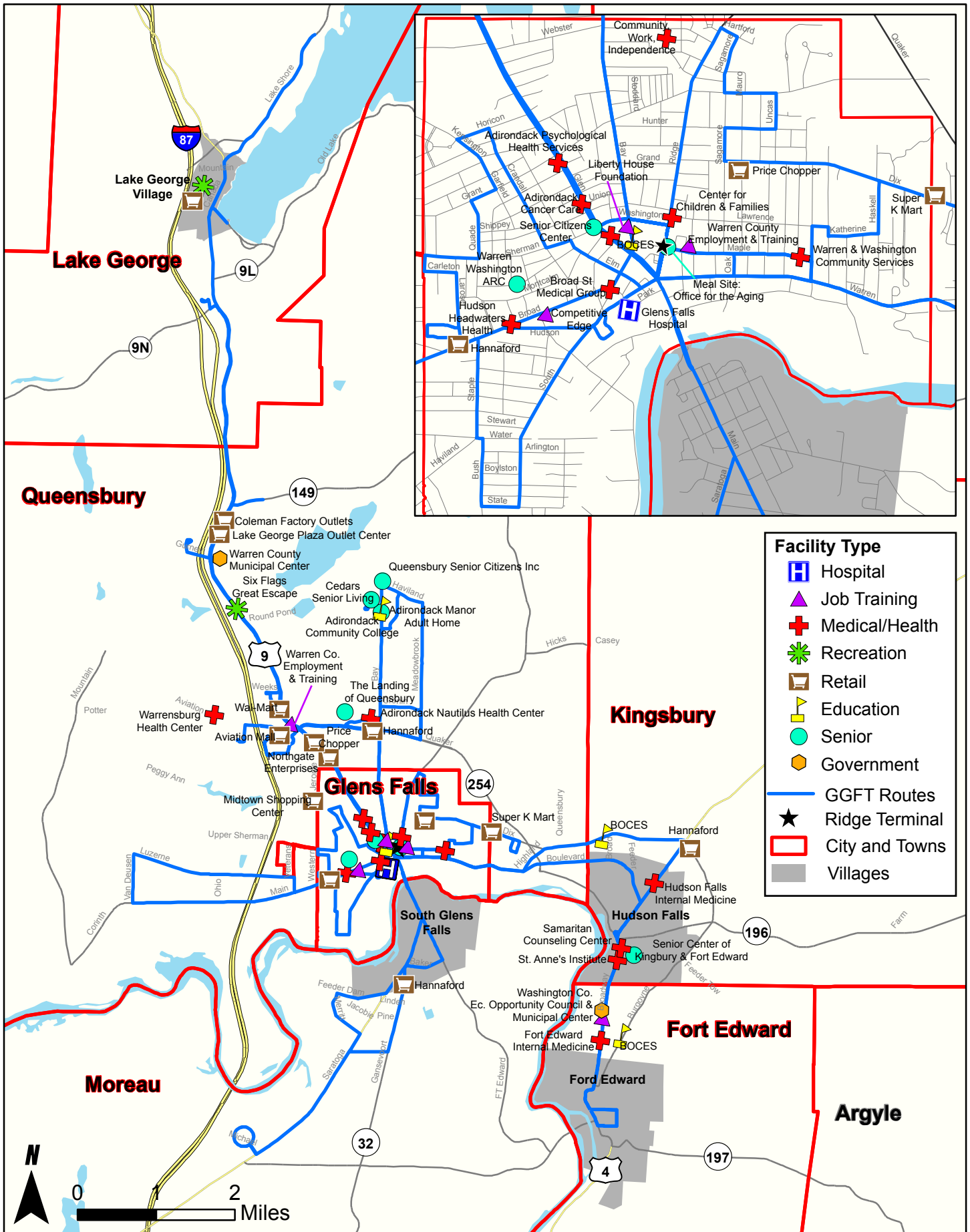
Source: Adirondack Chamber of Commerce

⁵ Employment at the Sagamore is seasonal.

Activity Centers

In addition to employment destinations, GGFT also provides access to key facilities, services and activity centers located within the service area. These include shopping centers, grocery stores, medical facilities, social and human service centers, educational institutions, job training sites and community centers. Figure 3-7 shows the approximate location and distribution of major trip generators relative to the GGFT regular route network. Nearly all locations are accessible via public transit.

Figure 3-7 Activity Centers in the GGFT Service Area



High Propensity Transit Markets

Understanding the composition and characteristics of a community's demographics, employment and land use are essential to designing and developing effective public transportation services. Generally there are two key markets for public transportation services:

- “Transit dependent” riders who largely use public transportation services due to a lack of other transportation alternatives. Many of these individuals lack access to or are unable to operate a private vehicle.
- “Choice” riders who have adequate resources and capabilities to operate a private vehicle but choose to use transit because public transit offers them comparable convenience and/or because of other personal lifestyle and value choice.

While GGFT is concerned with both of these population segments, the spatial distribution and density of persons with demographic characteristics typically associated with higher use of public transit services are of particular interest. Individuals most likely to depend on public transportation are typically characterized by age (youths aged 5-17 and older adults aged 65 or more), disability, income and access to a personal automobile. A composite distribution of residential locations of all persons with a higher propensity to use transit within the GGFT service area is shown graphically in Figure 3.8 and summarized in tabular format in Figure 3-9. The mapped data is based on census block data. In rural areas, census blocks cover geographically large areas and thus can obscure the distribution of the described population.

These figures suggest that the area with the greatest concentration of transit needs is mostly in the City of Glens Falls. A band just south of Glens Falls extending from South Glens Falls, Hudson Falls and Fort Edward is also a higher need area. The Village of Lake George also contains an area with a population suggesting high propensity to use transit. As seen in Figure 3-8, much of existing areas with characteristics associated with higher transit usage are served by fixed-route service.

The individual groups that comprise the composite distribution are highlighted in the following paragraphs.

- **Youth (Ages 5-17):** Nearly 16,441 individuals (19% of the total population) in the GGFT service area are between 5 and 17 years of age (see Figure 3-10). The highest concentration of youths is located in Western Queensbury, along West Mountain Road. This area is just outside of existing GGFT routes, located to the west and north of the West Glens Falls route.
- **Older Adults (Ages 65+):** The distribution of older adults is fairly even across the GGFT service area. In total, 12,761 older adults (18% of the total population) live in the Greater Glens Falls region; about one-quarter of these older adults live in Queensbury (see Figure 3-11). The area around Quaker Road in Queensbury contains high densities of older adults, reflecting the assisted living homes located in this corridor. A block group in southeast Glens Falls also has a high density of older adults. Most of the areas with the highest concentration of older adults are served by GGFT.
- **Persons with Disabilities:** Approximately 22% (16,451 individuals) of the service area population are classified as persons with disabilities. The City of Glens Falls, especially along Warren and South Streets contains the highest density of persons with disabilities in the service area (see Figure 3-12). The Village of Hudson Falls, Village of Lake George and Town of Kingsbury also have relatively higher proportions of individuals with disabilities. In the Town of Kingsbury and Village of Lake George persons with disabilities

are dispersed throughout the communities. The Village of Hudson Falls and Town of Kingsbury has transit service while the Village of Lake George currently has seasonal service only.

- **Persons with Low Income:** In the 2000 Census, there were 15,405 individuals (22% of total) with low incomes⁶ living in the GGFT service area. This population is concentrated in a contiguous set of block groups from downtown Glens Falls along Warren Street, through Hudson Falls, and south to the Village of Fort Edward (see Figure 3-13). The low income population straddles GGFT Route 4. Within Glens Falls, low income populations are most dense near Broad and Main Streets, between Glen Street and Ridge Street and between Dix Avenue and Warren Street. These areas are also served by transit.

⁶ For purposes of this study, individuals with low income include individuals living at or below 150% of the federal poverty level.

Figure 3-8 Composite Distribution of Persons with High Propensity Transit Use Characteristics

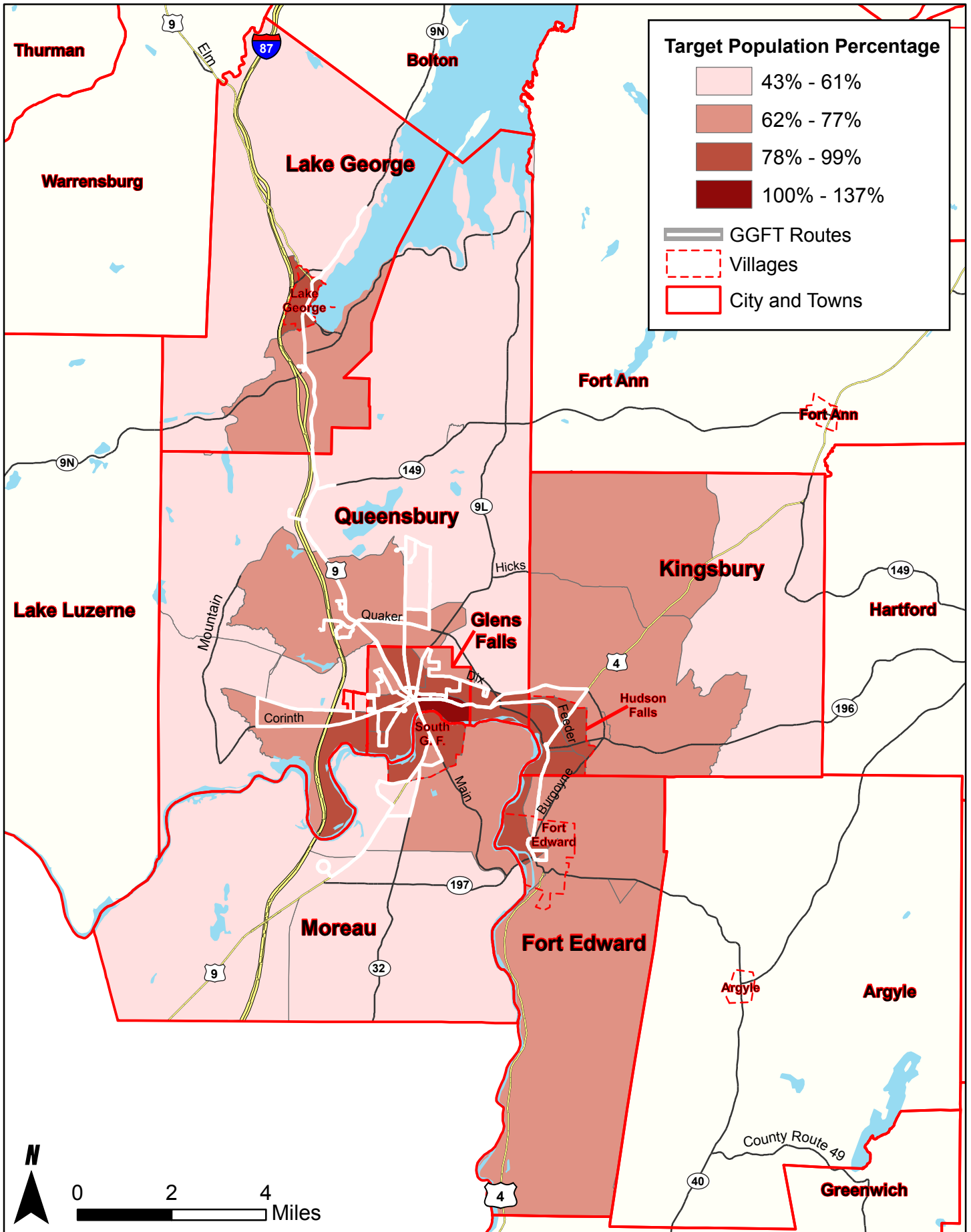


Figure 3-9 Residential Location of Persons with High Propensity Transit Use Characteristics

Geography Type	Name	Total Population	Youth Age 5-17		Older Adults 65+		Persons with Disabilities		Persons with Low Income	
			Number	Percent	Number	Percent	Number	Percent	Number	Percent
City	Glens Falls	14,444	2,672	18%	2,019	14%	3,287	23%	3,701	26%
Town	Moreau	13,826	2,466	18%	1,774	13%	2,362	17%	1,664	12%
	Lake George	3,578	585	16%	536	15%	695	19%	573	16%
	Queensbury	25,351	4,959	20%	3,801	15%	3,413	13%	2,672	11%
	Fort Edward	5,892	1,119	19%	958	16%	1,017	17%	1,284	22%
	Kingsbury	11,171	2,090	19%	1,595	14%	2,486	22%	2,235	20%
Village	Fort Edward	2,921	522	18%	339	12%	597	20%	675	23%
	Hudson Falls	6,927	1,274	18%	1,013	15%	1,668	24%	1,723	25%
	Lake George	988	191	19%	132	13%	181	18%	215	22%
	South Glens Falls	3,368	563	17%	594	18%	745	22%	663	20%
Service Area	GGFT	88,466	16,441	19%	12,761	14%	16,451	19%	15,405	17%
State	New York	18,976,457	3,446,844	18%	2,450,697	13%	3,606,147	19%	4,178,786	22%

Source: US Census 2000, Summary File 3, Tables P8, P42, P88

Figure 3-10 Youth (Age 5-17) as a Percent of Total Population

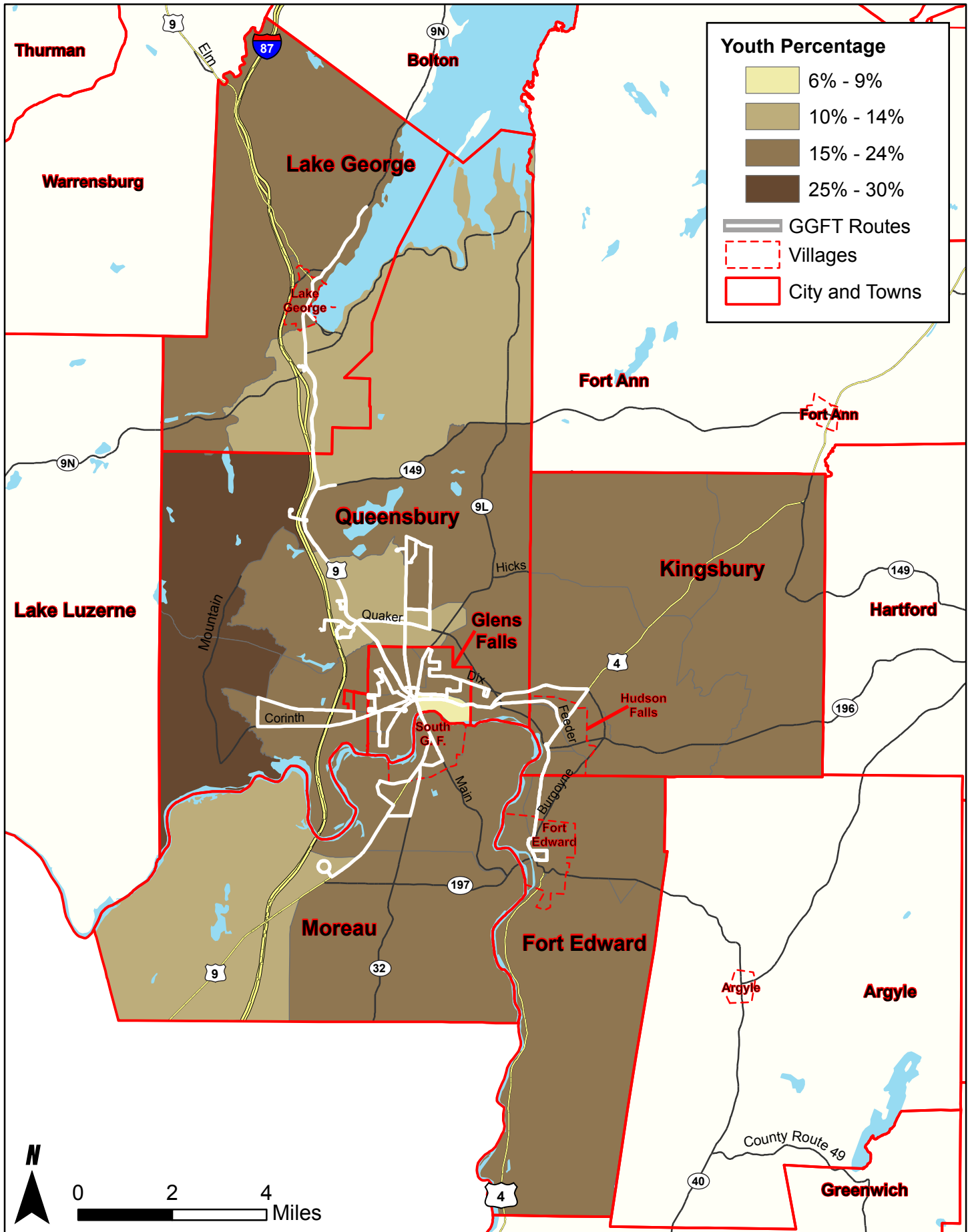


Figure 3-11 Older Adults (65+) as a Percent of Total Population

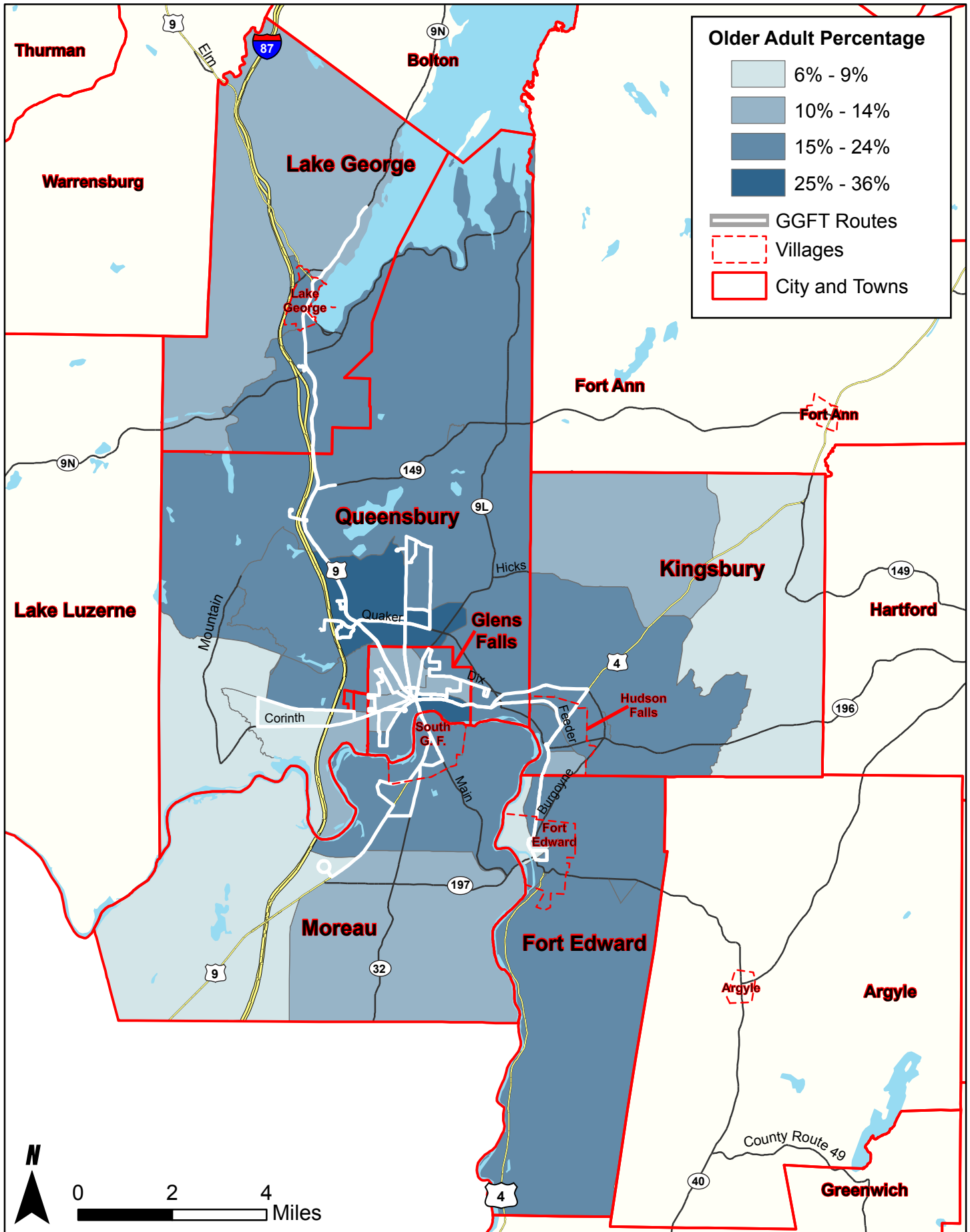


Figure 3-12 Persons with Disabilities as a Percent of Total Population

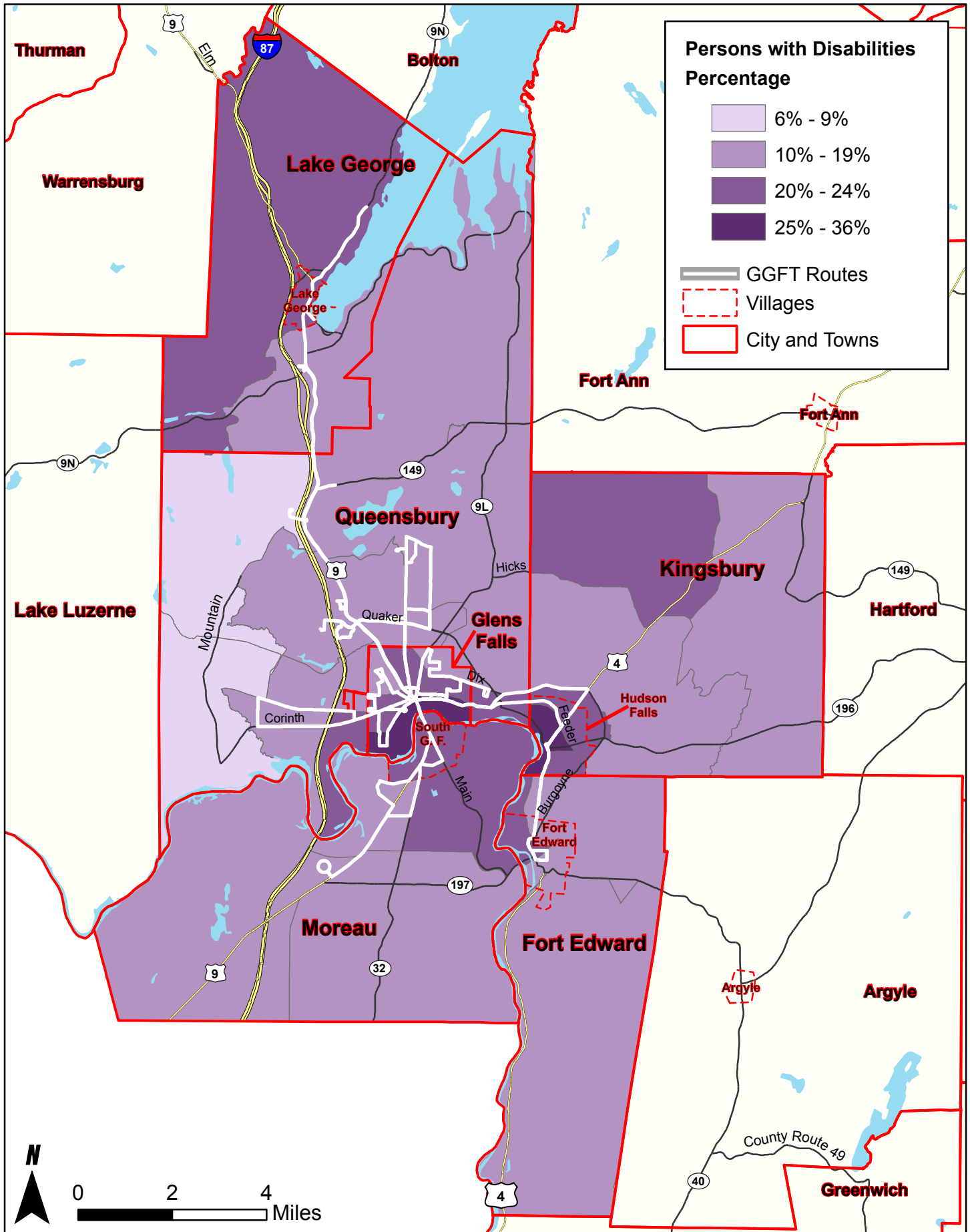
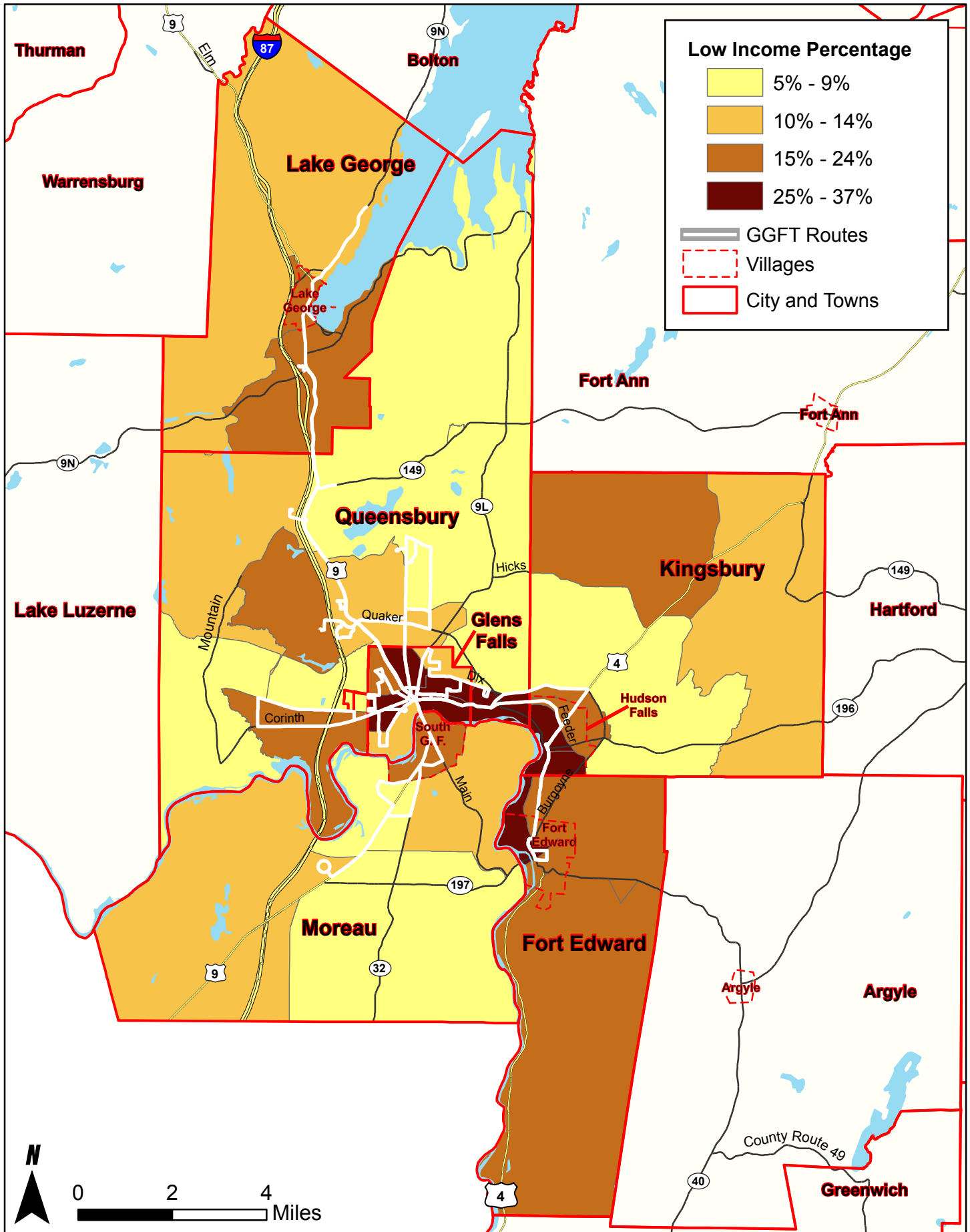


Figure 3-13 Persons with Low Income as a Percent of Total Population



Chapter 4. Stakeholder and Public Input

In addition to looking at the GGFT services from a quantitative and analytical perspective, the TDP study team also reached out to members of the community, including individuals who currently ride the bus and those who do not. The objective of this outreach was to gauge people’s perception of the current service, understand their priorities for service improvements, and identify their preferences for service improvements. Our outreach efforts focused on stakeholders, existing transit riders, bus drivers, and individuals living near existing GGFT routes but who do not regularly ride the bus. A brief overview of the approach used to reach out to each of these audiences and the key lessons learned from their input is summarized in the following sections.

Stakeholder Interviews

The study team conducted ten interviews with social service providers and representatives from local employers and the business community. With a couple of exceptions, interviews were conducted primarily over the phone in November and December 2008. Figure 4-1 displays the list of stakeholders interviewed as part of this study. The purpose of this section is to document the community’s need for transit and the perception of the current system’s effectiveness and ability to meet those needs.

Figure 4-1 List of Interviewed Stakeholders

Name	Title	Organization
Kevin Geraghty	Supervisor	Town of Warrensburg
Brian Durant	Dean of Student Services	Adirondack Community College
Shelia Weaver	Commissioner	Warren County Department of Social Services
Dave Standton	Commissioner	Washington County Department of Social Services
	Staff Person	Lake George Chamber of Commerce
Matt Brasfield	Store Manager	Walmart
Dave King	Owner/Manager	Lake George RV Park
Lou Tessier	Supervisor	Town of Lake George
Bob Orlando	Manager	Aviation Mall
Nick Caimano	Staff	Adirondack Regional Chamber of Commerce

Interviews were tailored to the individual stakeholder. However, the questions generally covered:

- Is transit important to your clients/patrons/community? If yes, how/why?
- How do your clients/program participants/patrons use the existing service?
- Are you satisfied with the service available? Why/why not?

- In your opinion, what groups should be a priority for transit to serve? What are their needs?
- What times and days should transit service run?
- What locations should transit serve?
- Are there other groups that could be served by transit? Who/how?
- How can transit support economic development and quality of life goals?
- What are the strengths and potential improvements of the current transit system?

Key Findings - Stakeholders

In general, stakeholders were very supportive of the existing public transportation services and most comments revolved around ideas to expand and improve the service. An overview of some of the ideas expressed in the stakeholder interviews include:

Geographic Expansion

- There is an interest in service to Warrensburg. A large proportion of its population is transit dependent and commuter service would benefit people, especially as gas prices get higher. Demand will largely be to travel south. Potential for some service on Saturdays for the garage sales, but this market might not be as strong.
- Bus service is very important to the Department of Social Services. This is true in both Washington and Warren County.
- Serving Route 9 is very important and ideally there should be more service, especially during the middle of the day and later in the day.
- Need to expand the service to more areas of Washington County, such as Granville, Whitehall and Fort Ann.

Service Hours and Days of Week

- Potential to expand services later in the evening and on weekends, especially to Walmart, Aviation Mall and Hudson Falls/Fort Edward.
- Bus service is essential for many of the region's large employers, especially retail. Employees at some locations depend on the bus to get to and from work. Some employers will work and try to schedule shifts around bus schedules, but service expansions will help everyone.
- Trolley service is extremely important to the success of the region.
- Service frequency is important. Many buses and trolleys only run hourly, which is not really enough.

Information Systems and Marketing

- GGFT could improve its visibility, especially of the trolley service, because getting more people to ride the bus is an important part of reducing traffic congestion. There is also a need for more shelters, also in relation to the trolleys. Visitors do not like to stand out in the sun (or rain) and wait for the bus.

- The environmental conservation aspect of the transit service is becoming more and more important to people. GGFT should capitalize on this.
- The bus schedules and timetables are not easy to read. Improving the information would help more people understand and use the service. This is true for both regular bus service and the trolleys.

Existing GGFT Transit Riders

Nelson\Nygaard (NN) also conducted a survey of GGFT transit users. The purpose for surveying GGFT transit riders was to understand existing travel patterns and gain insight into traveler attitudes, preferences and priorities. The survey was administered over a two day period, Wednesday, November 12 and Thursday, November 13, and staggered over these days to ensure all service hours were surveyed. The following section summarizes the findings.

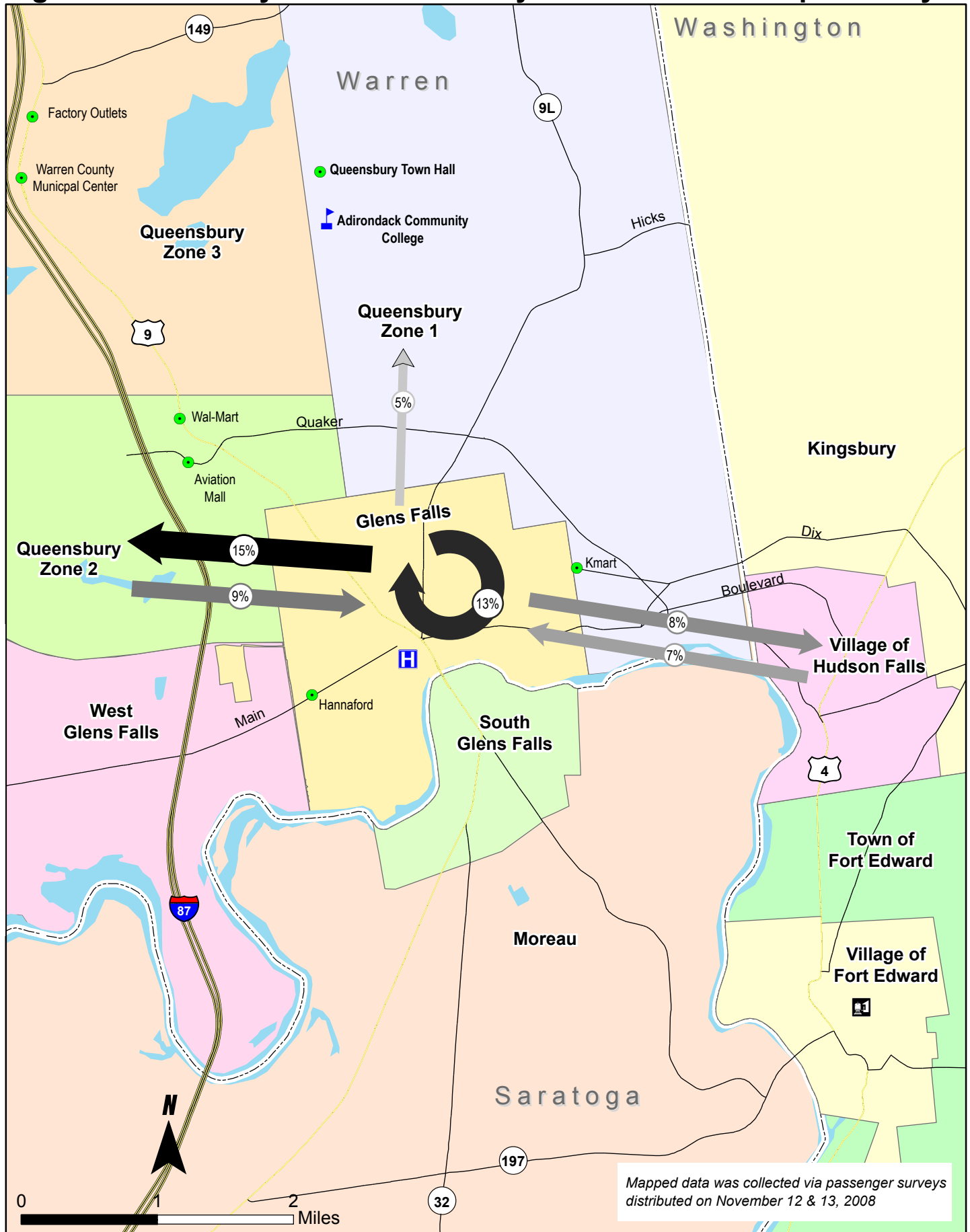
A goal of the survey administration was to collect as large a sample as possible. Therefore, surveyors were assigned to ride the busiest routes in the GGFT system, ask passengers to fill out the survey and once completed, collect the survey. On routes with lower ridership, bus drivers distributed and collected pre-coded surveys. Passengers who filled out the survey also received a bus token for a future trip on GGFT; this was greatly appreciated and significantly increased the survey response rate. Overall, the refusal rate was very low, and a high percentage of riders traveling on GGFT on Wednesday and Thursday completed surveys. In total 334 surveys were completed. A copy of the full survey report is included as Appendix A.

Key findings from the survey suggest the following about existing GGFT riders:

- Passengers are very appreciative of GGFT services. They ride the bus frequently and are generally pleased with the service.
- Most passengers use the bus to travel between home and work, but a considerable number of passengers also use GGFT for other trip destinations, such as shopping, recreation and other purposes.
- Passengers expressed a strong desire for more service. They are interested in more trips on existing services as well as more evening and weekend service.
- Several passengers expressed an interest in service to regional destinations, including (in the order of most frequent suggestions) Saratoga, Lake George Village (year round) and Warrensburg.

By analyzing trip origin and destination locations, we were able to gauge how existing passengers use the service. Figure 4-2 maps the travel flows of passengers using GGFT services. This data largely reflects ridership data, but also reveals that passengers use the bus to travel to/from Exit 18 area (Walmart and Aviation Mall), within Glens Falls, and to/from Hudson Falls.

Figure 4-2 Primary Travel Patterns by Percent of Total Trips Surveyed



Mapped data was collected via passenger surveys distributed on November 12 & 13, 2008

GIS Data Source: Adirondack Glens Falls Transportation Council

Non-Riders Living in Glens Falls Service Area

The study team also conducted surveys to gain insights into non-riders perceptions of GGFT services and understand why people don't use the bus. Accordingly, we conducted two surveys with non-riders. The first attempt was an intercept survey specifically targeting South Glens Falls and West Glens Falls, two areas where transit ridership is lower than would be expected. This process yielded 53 completed interviews. A second attempt to reach out to non-riders involved mailing a survey to residents in South Glens Falls and West Glens Falls. This survey yielded 86 responses. Although the survey questions were different in each effort, we generally summarized the findings across each effort and presented them in the following section. Reports on each of the independent efforts are included as Appendix B.

Survey results suggest that awareness of GGFT services in these neighborhoods is good. Nearly half of the individuals participating in the intercept survey had ridden the bus at least once and another 40% had ridden the bus at least three times. Individuals responding to the mail-back survey were also familiar with the bus services. According to the mail-back survey:

- 69% (59 people) said they had bus service near their home;
- 60% (52 people) reported being able to walk to a bus route in 5 minutes or less.
- 16% (14 individuals) were not sure if they lived near a bus stop or not.
- Nearly half (48%) said they had ridden on GGFT in the past.

Most respondents had a positive image of GGFT, even if they are not frequent riders. When asked to choose which statement best describes their most recent experience on GGFT, the majority said their last experience on GGFT was great. The findings include:

- Most (74%) said "The last time I used GGFT was great. I would like to ride the bus more often" as the statement that best described their most recent experience.
- 21% agreed with "The last time I used GGFT, I got where I needed to go. I prefer not to use GGFT."
- 5% agreed with the statement that read, "I don't like using GGFT buses."

The primary reasons given for not taking the bus were 1) bus takes too long (26%); 2) other – typically that they had a vehicle available (16%); 3) I don't know where to catch the bus (14%) and 4) I don't feel safe on the bus (12%).

When given a list of potential improvements, respondents reported they would be more likely to take the bus if:

- Increased service hours
- Regularly scheduled service to Lamplighter Acres
- More information about the service
- Saturday and weekend service
- More covered waiting areas and bus shelters
- Expanded geographic coverage, including stopping closer to home or work

The mail back survey also had an open ended question about public transportation in Glens Falls. Most responses were very favorable. A sample of the responses is included below.

“I have used the bus for past 15 years. It is our only transportation and it works out good for us.”

“I have been around for many, many years and it has always been great. Keep up the good work.”

“I used the bus once about 20 years ago when my car wouldn’t start. Was good alternative transportation to work (Queensbury to downtown Glens Falls)”.

“I may have to ride the bus later on in years.”

“Keep up the good work.”

Meeting with GGFT Bus Drivers

Nelson\Nygaard (NN) held a drop-in session with GGFT drivers on Thursday, December 18, 2008. The purpose of this session was to talk directly with drivers and hear their perspective on challenges in the existing system and get their ideas to improve routing and scheduling. We also asked drivers about rider needs and for recommendations to improve communication with the riders. The following documents the main ideas, concerns and perspectives of the drivers that they expressed to us during our meeting with them.

Overview of Key Points

- Potential to increase service along main travel corridor (Glen Street) to Aviation Mall, Wal-Mart and John Burke Apartments.
- Hail and ride policy challenges drivers. Passengers flag the bus in unsafe locations, at high traffic locations and close proximity to other stops. Drivers also said efforts to educate passengers about where to flag the bus have not been successful.
- East and West loops can be improved – suggested ideas include shortening and/or combining the two loops and/or replacing one loop with a cross-town service.
- Drivers are frustrated by a lack of clear consistent rules regarding key service policies, such as fares, rider conduct, route deviation service, and hail and ride.
- The effectiveness of route deviations in system varies by route. Deviations on Route 2 are more challenging than those offered on Routes 5/7.
- Communicating with the customer base is challenging, despite ongoing efforts to educate passengers by staff and drivers.

Routing/Scheduling

- In general, drivers had mixed comments about route scheduling. Most drivers agreed that the mall runs are scheduled too tightly. For other routes (such as Route 5), however, the schedule might be tight in the morning but in other parts of the day they have extra time.
- Aviation Mall routes (11/12) would benefit from increased frequency and travel time. Drivers felt there is potential to add another bus on the mall route, improve service frequency to every 20 minutes and increase the scheduled travel time to 40 minutes. Service could still be organized with alternating service to Wal-Mart and John Burke Apartments.

- Current schedule on Route 19/County run has sufficient time in the schedule to go all the way into Lake George Village and turn into Westmont (Warren County Annex Building) as requested. Several drivers said that turning at Gooney Golf makes no sense, especially when they sit and wait at the county building so they won't be early at Ridge St. Terminal.
- Service coordination with Route 19/County Bus needs to be improved. This bus does not operate on the pulse system and thus connections can be challenging. Some of the connecting services, especially the WGF and SGF routes frustrated passengers; these services tend to arrive just after Route 19 departs or just before it arrives, leaving passengers with long wait times or stranding them downtown.
- Hudson Falls 2 pm bus should be unchanged. Need this run to meet BOCES.
- West Glens Falls route has low ridership but riders need the service.
- WGF need to coordinate stops; there is a lot of traffic in some spots and letting the bus stop frequently creates problems for traffic and sometimes means passengers board in unsafe locations.
- East and West Loops could be improved; potential ideas include:
 - East and West Loops have large “dead” segments where there is consistently a lack of riders. For example, on the East Loop very few riders get on or off along Ridge Street, Dix Avenue or Sanford/Hunter segments. The key destinations and productive segments of this route are Kmart; and along Maple. The West Loop also has several segments with few riders, especially the loops out to Horicon Avenue and south to State Street has low ridership.
 - Potential to replace East and West Loops with cross town route that would serve new Wal-Mart and connect to Routes 4 and 7.
 - Shortening East and West Loops and doing both in 30 minutes. Extra time could be used in other parts of the system.
- SGF is a good route. Request only service to Lamplighter works. The only challenge is the gap between 11:30 – 2:30; this is the biggest gap in service in the GGFT network.

Communication

- There is a lack of consistency with GGFT rules and regulation, including fare policy. Some drivers expressed frustration over the lack of consistency with rider conduct (number of bags allowed, cell phones, etc.), hail and ride and fare policy. This makes it challenging for drivers trying to enforce the rules. It also frustrates them when there is abuse in the fare policy and passengers hail the bus in unsafe locations.
- Communicating with passengers is challenging. On one hand, the schedules are not that easy to read, but even fairly simple things are hard for many passengers to comprehend, such as hourly service to John Burke and half-hourly services to Wal-Mart.
- Several passengers recognize the route by the driver; when drivers change passengers get confused.

Miscellaneous

- Drivers were mixed about route deviation service, depending on the route. Drivers on Route 2 said some deviations prevent them from staying on schedule. For other routes, such as Routes 5/7, drivers were more positive and felt that the deviations make sense.
- Riders need more education about where to hail the bus. They often want to be picked up in unsafe or problematic locations.
- Snow banks are a challenge with regards to safe places to pick-up and drop-off passengers. Bus shelters and stops are not always shoveled out. Need to coordinate with community service groups to get the shelters and stops shoveled out.
- GGFT staff said they offer travel training to several of the senior housing complexes, but have never had anyone take them up on it.
- Drivers like using a trolley on the mall run during the holidays. It is festive and the passengers like it.
- Bikes on buses are great – a lot of people use them.

Chapter 5. Service Evaluation

Overview

This chapter provides an evaluation of each of the fixed-routes as well as the trolley and FAME services individually to assess potential improvements or service changes that offer opportunities to improve the accessibility and effectiveness of the public transportation system. A full range of service improvements is included. Our intention with this evaluation exercise is to be as inclusive as possible, with all ideas subjected to review and discussion before being carried forward for more detailed analysis. We recognize that several of the proposed options may be mutually exclusive, may need to be implemented in tandem in order to work well and/or may not support other GGFT service priorities.

Service Overview

As discussed, GGFT operates three types of public transportation services: fixed-route buses, seasonal trolleys and ADA complementary paratransit. The fixed-route bus system consists of nine routes designed as a radial pulse system focused on downtown Glens Falls, with most routes converging at an on-street terminal located along the east side of Ridge Street opposite City Hall. The pulse system allows passengers to easily transfer between routes; GGFT offers timed transfers and will hold buses for a few minutes to make sure services meet. The full system operates primarily on weekdays between 6:00 am and 6:30 pm. Eight of nine routes also operate on Saturdays, although several are abbreviated schedules that cover only part of the day.

The seasonal trolley service provides public transportation around the Lake George resort areas and between the Village of Lake George and Glens Falls. Service operates between mid-May and Columbus Day with schedules varying during late spring, peak summer and autumn periods. In total there are three trolley routes; Lake George South, Lake George South RV Parks and Lake George North. The South Route provides service from Lake George Village to the Ridge Street Terminal in downtown Glens Falls and is integrated with other GGFT fixed-route bus service.

GGFT's third service, Freedom and Mobility Express (FAME), is designed to meet Federal Americans with Disabilities Act (ADA) requirements by providing paratransit service to individuals unable to use the regular fixed-route system.

System Productivity

In 2007, GGFT provided 329,461 one-way trips on its public transportation system, including 326,576 trips on the fixed-route system and 2,885 trips on the demand response services. A breakdown of the regular fixed-route bus service productivity is provided in Figure 5-1.

Figure 5-1 GGFT System Productivity

	Daily Passengers	Passengers per Trip	Passengers per Service Hour	Cost per Passenger
Weekdays	743.6	8.96	15.3	\$4.12
Weekday Evening	15.1	2.52	3.9	\$16.31
Total Weekday	758.7	8.52	14.4	\$4.37
Saturday	375.5	8.73	14.4	\$4.35
Saturday Evening	27.0	6.75	9.3	\$6.80
Total Saturday	402.5	8.56	13.9	\$4.52
All Weekday Service	1161.2	8.54	14.2	\$4.42

Source: GGFT/Nelson\Nygaard Consulting Associates

Based on data from the week of October, 6, 2008

Route 2: Bay Road, ACC, and Quaker Road

Route Description

Route 2 travels north from the Ridge Street Terminal on Bay Street to Bay Road, turning on Haviland Road to serve the Queensbury Town Hall and Queensbury Senior Center. It travels off-route into Adirondack Community College (ACC) and the Cedars, a senior living community (see Figure 5-2). Drivers on Route 2 will also accommodate requests to travel to portions of Glenwood Avenue on trips after 9:00 am. Route 2's alignment along Bay Street to Quaker Road is shared with Route 19.

Service on Route 2 includes two evening trips, but has no Saturday service. There is a Bay-Quaker-Glen Street loop which operates two trips on Saturdays in a similar corridor as Route 2. Travel statistics for Route 2 are shown in Figure 5-3.

Major stops on Route 2:

- C.R. Bard (private employer)
- Adirondack Community College
- Queensbury Senior Center
- Queensbury Town Hall
- Medical clinics and offices along Bay Road
- Social Security Building (by request only)
- Regency Park Apartments (by request only)

Figure 5-2 Route 2

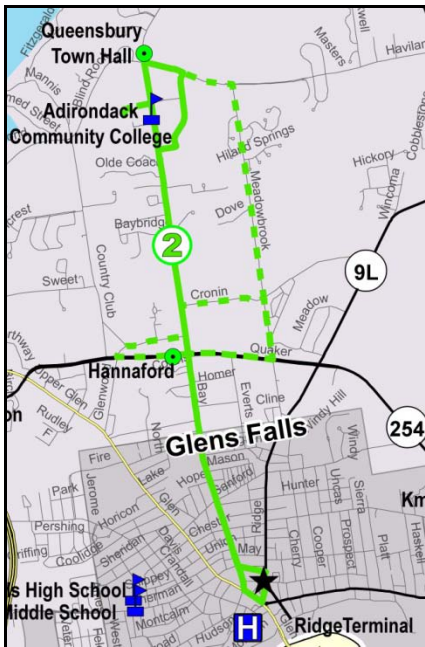


Figure 5-3 Route 2 Service Statistics

	Weekday	Evening
Span of Service	7:30 am – 5:07 pm	7:00 pm – 9:00 pm
Round Trips	7	2
Frequency (min)	60 peak	n/a
	90-120 off peak	
Route Length (miles)	9.1	9.1
Travel time	30 min	30 min

Source: GGFT

* Trip length varies depending on requests. Length shown represents average.

Ridership

Ridership on Route 2 increased substantially between 2006 and 2007, gaining more than 10%. It also grew between 2007 and 2008, albeit by a slower rate of 3.8% (see Figure 5-4).

Figure 5-4 Route 2: Changes in Annual Ridership 2006-2007

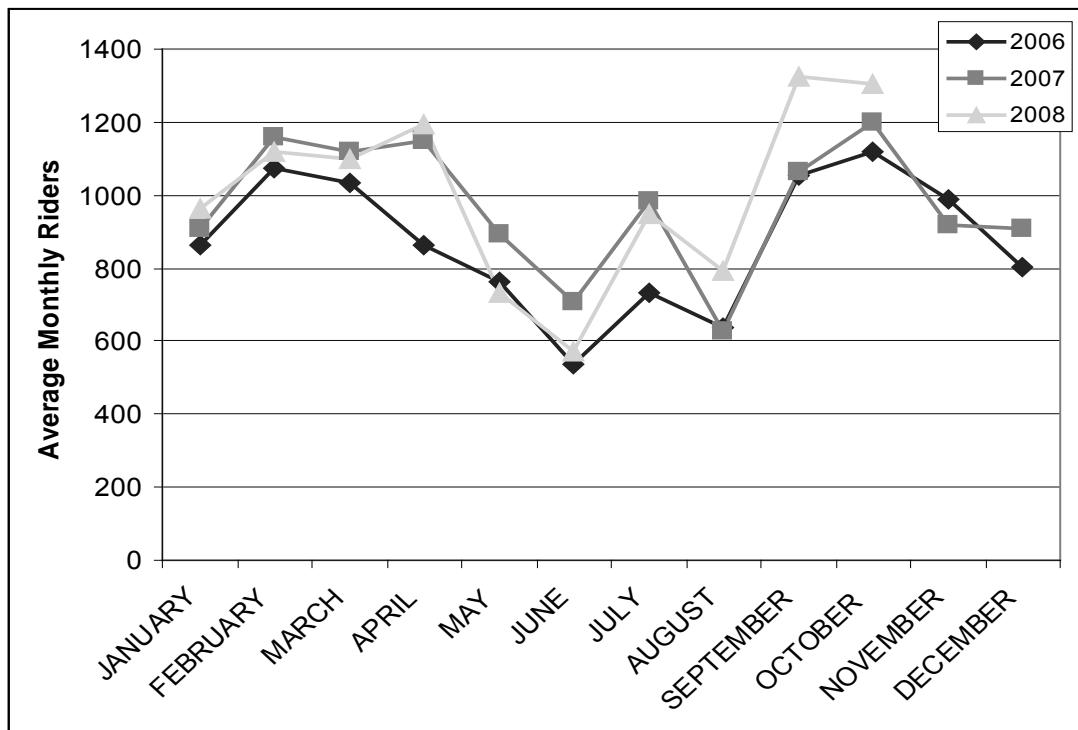
Year	Annual Total	Monthly Average	Annual Change
2006	10,471	872.6	
2007	11,631	969.3	11.1%
2008	10,058	1,006	3.8%

Source: GGFT

* Represents 10 months of data

Ridership data by month shows ridership peaking in September, falling off in December and January, but increasing again during the spring and dropping off during the summer (see Figure 5-5). This ridership pattern likely reflects the schedule of the Adirondack Community College, one of the route's major destinations. This finding is consistent with survey data, that suggests that ACC is one of the biggest passenger generators on the route, with students comprising the majority of the riders. Of the Route 2 riders responding to the survey, 67% were traveling to/from ACC and all of these riders were traveling to ACC for school.

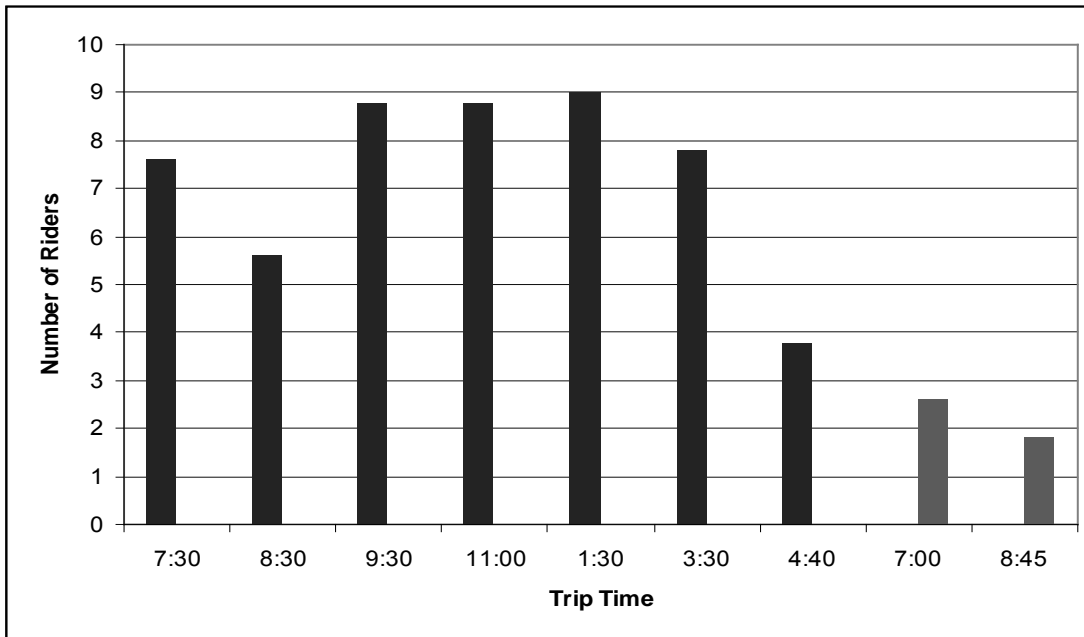
Figure 5-5 Ridership by Month



Source: GGFT

As shown in Figure 5-6, ridership is strongest during the morning and afternoon hours, but declines after the 3:30 pm trip. Ridership on the evening services is low.

Figure 5-6 Route 2 - Ridership by Time of Day



Source: GGFT

Productivity

Figure 5-7 shows Route 2’s productivity, broken down by daytime and evening service. In general, Route 2 has good productivity, performing near to the system average for all metrics measured. The evening service is also productive relative to other evening services; however, evening trips are significantly less productive as compared with the daytime service.

Figure 5-7 Route 2 Productivity

	Weekday	System Average	Evening Service	Evening Service Average
Operating Cost per Passenger	\$4.28	\$4.12	\$14.29	\$16.31
Average Daily Ridership	51.4	82.6	4.4	3.8
Passengers per Trip	7.3	8.96	2.2	2.5
Passengers per Vehicle Service Hour	14.7	15.3	4.4	3.9
Passengers per mile	0.8	1.0	0.3	0.2

Input from 2008 Passenger Survey

Passenger survey data reveals unique characteristics of riders using Route 2, in particular that the majority of trips originated at home (39%) or school (39%) and ended at home (44%) or school (33%). As compared with other GGFT services, Route 2 had a high portion of transfers (39%), monthly pass users (61%) and a very loyal ridership with 72% of the riders saying they used GGFT every day. Twenty-two percent of passengers ride GGFT buses between 2 and 4 days per week.

Strengths and Weaknesses

Strengths

- Good productivity in relation to the rest of the system.
- Higher levels of loyalty among passengers as compared with other routes.
- Increased productivity over time.
- ACC is a strong source of ridership.

Weaknesses

- Productivity on late afternoon and evening trips is poor.
- Deviations on Route 2 are more challenging than on some other routes and can throw route off schedule – the full deviation takes the driver down Meadowbrook to Quaker Road, then back north to Cronin Road.
- Low summer ridership - monthly ridership patterns indicate that student ridership falls off during the course of the school year.

Potential Improvements

- Reach out to C.R. Bard regarding commuting patterns – this manufacturing center employs 941 people and could provide more year-round ridership on Route 2.
- Increase service to ACC – great potential for increasing ridership, as ACC enrolls more than 2,000 full-time students, 1,400 part-time students, and staff/faculty.
- Decrease service during the summer months, when ACC is not in session.
- Potential to develop “UPass” program and leverage institutional support for increased service.
- New development along Bay Road suggests route productivity will increase over time.
- Shorten or limit distance for deviations – survey data suggests Regency Park Apartments and Social Security have limited importance to riders.
- Eliminate evening service.

Route 3: East Loop

Route Description

The East Loop is a neighborhood route operated in a small transit vehicle that serves the eastern half of Glens Falls. The route is interlined with Route 6; thus service is alternated such that Route 3 leaves on the half hour and Route 6 leaves on the hour. Route 3 travels north out of the Ridge Street Terminal along Ridge Street to Hartford Street, jogging through the neighborhood and turning on Dix Avenue, where it provides service to Price Chopper, East Field and Super K-Mart. From Dix Avenue, Route 3 turns on Haskell Avenue working its way through Jackson Heights neighborhoods to Warren Street, returning back to the Ridge Street Terminal (see Figure 5-8). Route 3 primarily runs through residential areas. The service area includes areas with higher population densities and concentrations of persons with low income. Route 3 provides nine hours of service on weekdays and three Saturday trips. Service statistics for Route 3 are shown in Figure 5-9.

Major Stops on Route 3:

- Jackson Heights School
- Super Kmart
- Abraham Wing School
- Stichman Towers
- Price Chopper (Dix Avenue)

Figure 5-8 Route 3 Map

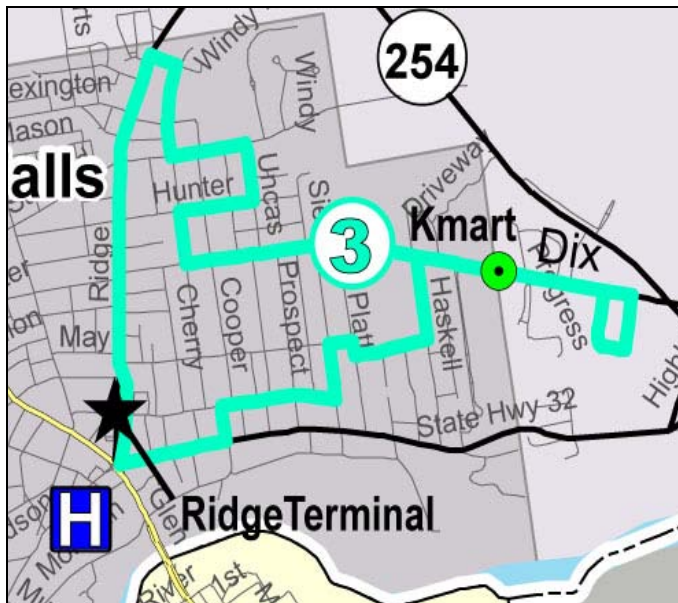


Figure 5-9 Route 3 Service Statistics

	Weekday	Saturday
Span of Service	7:20 am - 5:00 pm	9:30 am - 1:50 pm
Round Trips	10	3
Frequency (min)	60*	120
Route Length (miles)	5.8	5.8
Travel time	7:20 am - 5:00 pm	9:30 am - 1:50 pm

Note: * First two morning trips are spaced 40 minutes apart;

Source: GGFT

Ridership

Data on annual ridership shows that ridership increased considerably between 2006 and 2007. Ridership data from 2008, however, shows the trend reversing, with an estimated loss of 3% of ridership based on data collected from January to October (see Figure 5-10).

Figure 5-10 Route 3 Changes in Annual Ridership 2006-2008

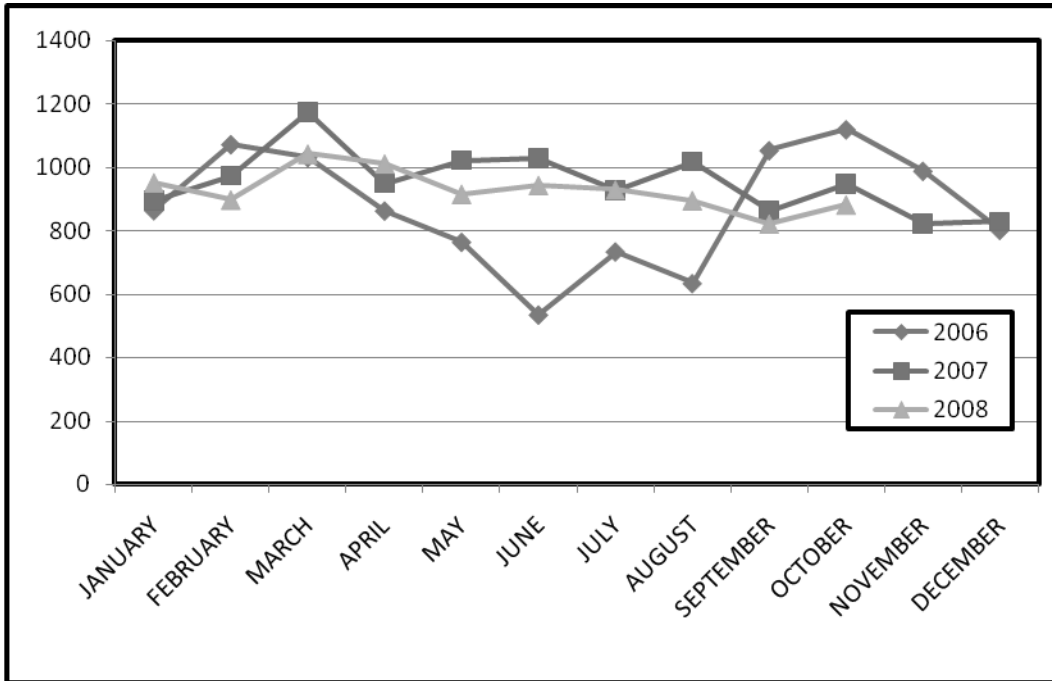
Year	Annual Total	Monthly Average	Annual Change
2006	9,721	810	
2007	11,446	954	18%
2008	9,295*	930	-3%

*Represents 10 months of data

Source: GGFT

Ridership levels by month for the three year period between 2006 and 2008 are shown in Figure 5-11 (partial data available for 2008). This data suggests that ridership in 2006 was heavily dominated by school trips; average monthly ridership dropped significantly in the summer months, but increased again in September. As compared with 2006, data for 2007 and 2008 show more constant levels of riders. While 2008 has a very similar pattern as 2007, it shows lower ridership overall.

Figure 5-11 Route 3: Ridership by Month (2006-2008)

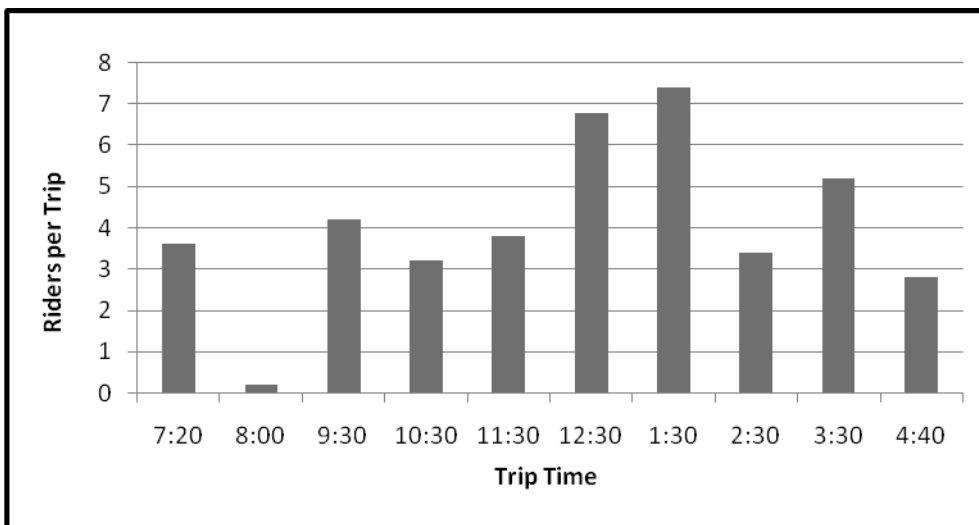


Note: 2008 represents 10 months of data only

Source: GGFT

Ridership data by time of day shows that the number of riders using Route 3 is low generally, with no trip carrying more than eight passengers. Among Route 3’s ten trips, ridership is highest during the middle of the day. On most trips, however, the route carries five or fewer riders. The 8:00 am trip had only a single rider (see Figure 5-12).

Figure 5-12 Route 3 – Weekday Ridership by Time of Day



Source: GGFT

Productivity

Route 3 has the lowest productivity in the GGFT system with operating costs per passengers 88% higher than the system average (see Figure 5-13). Productivity on the Saturday service is likewise low. The service carries very few riders overall; low productivity is further exacerbated by a relatively generous schedule, allowing the service to travel 5.8 miles in 30 minutes with minimal stops.

Figure 5-13 Route 3 Productivity

	Weekday	Weekday System Average	Saturday	Saturday Route Average
Operating Cost per Passenger*	\$7.75	\$4.12	\$11.10	\$4.35
Average Daily Ridership	40.6	82.6	8.5	41.7
Passengers per Trip	4.06	8.96	2.83	8.73
Passengers per Vehicle Service Hour	8.1	15.3	5.7	14.4
Passengers per Mile	0.7	1.0	0.49	1.0

Source: GGFT and Nelson\Nygaard

Input from 2008 Passenger Survey

Survey data shows that passengers riding Route 3 were primarily traveling between home (29%) and shopping (32%). Most people walked to the bus (62%) but as compared with other routes, walking times were considerably shorter – closer to 2.6 minutes. A large number of passengers also reported that they transferred to (23%) or from another route (42%) to another route. Most travelers were making a round trip (61%) and 81% of the passengers surveyed on Route 3 said they ride GGFT daily.

Strengths and Weaknesses

Strengths

- Serves geographic area with medium-high population density and areas with relatively high concentrations of individuals with low income.
- Ridership is low, but many riders are loyal and use the route daily.

Weaknesses

- Highest per passenger operating costs in GGFT system; this is true for weekday and Saturday service.
- Drivers suggest that route has segments with very few or no passenger boardings.
- Alignment is circuitous, travels through neighborhoods and has one out and back segment, increasing travel time for many riders.

- Few strong destinations along route.

Potential Improvements

- Eliminate Route 3.
- Replace Route 3 with demand response service.
- Combine Route 3 and 6 into single route with shorter, more direct alignment that link to more important destinations. This shortened and combined route may require less operating time, freeing vehicle service hours for other parts of the system.
- Combine Route 3 and 6 into single route with a new alignment that provides cross town service and is linked to Routes 4 and 7 at key locations.
- Expand/realign Route 3 to provide service along Dix Avenue, potentially serving the new Walmart.
- Try to build and expand ridership on Route 3 by working with schools and reaching out to Navilyst Medical, who employs 812 people.

Route 4: Fort Edward and Hudson Falls

Route Description

Route 4 travels between the Ridge Street Terminal in downtown Glens Falls and the Villages of Hudson Falls and Fort Edward. All trips depart from the Ridge Street Terminal and travel outbound along Warren Street to River Street in Queensbury. From River Street, Route 4 alternates its alignment between traveling 1) directly to the Villages of Hudson Falls and Fort Edward via Boulevard, Broadway and Main Streets; and 2) turning off River Street onto Dix Avenue, turning onto Main Street north of the Village of Hudson Falls and rejoining the first alignment. The second alignment serves the Super K-Mart and BOCES center (see Figure 5-14) on Dix Avenue. Traveling via Dix Avenue adds 2.6 miles and approximately eight minutes to Route 4 as compared with the Boulevard route.

Route 4 currently operates 12 trips a day; service frequencies are hourly during the morning and throughout the day. The Saturday schedule is reduced to hourly departures in the morning and once every two hours in the afternoon. There is also a single evening service that combines key destinations on Routes 4 and 11/12. Travel statistics for Route 4 are shown in Figure 5-15.

Route 4's alignment from the Ridge Street Terminal along Warren Street to Oak Street (outbound) and from Oak Street to Maple Street (inbound) is parallel with Route 3. Route 3 and Route 4 also both serve the Super K-Mart on Dix Avenue, although Route 3 pulls directly into the Super K-Mark parking lot, while Route 4 drops passengers off at the street and requires a long walk to the store's front entrance.

Major stops on Route 4:

- Eden Park
- Village Park
- Washington County Municipal Center
- Amtrak Station
- General Electric

- BOCES (every other trip only)
- Super K-Mart (every other trip only)

Figure 5-14 Route 4 Map

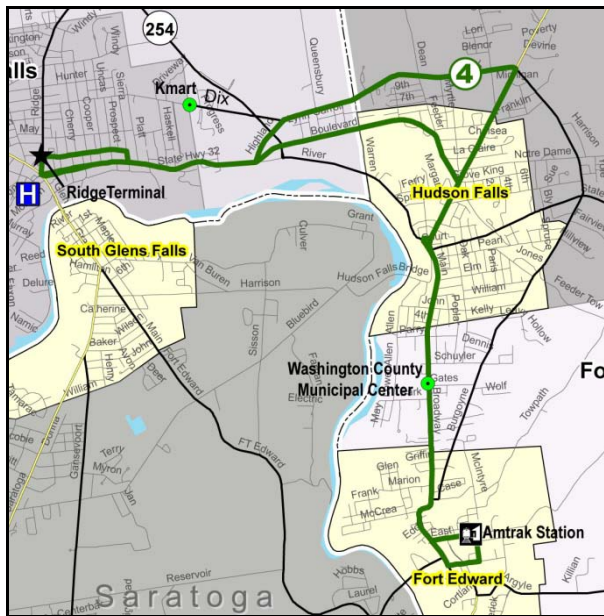


Figure 5-15 Route 4 Service Statistics

	Weekday	Saturday
Span of Service	6:30 am – 6:49 pm	8:00 am – 6:39 pm
Round Trips	13	7
Frequency (min)	30 am *; 60 daily	60-120
Route Length (miles)	14.1; 16.7	14.1; 16.7
Travel time	45-52 min	45-48 min

Note: * 30 minute headways for first three trips only.

Source: GGFT

Ridership

Ridership on Route 4 was steady between 2006 and 2007, increasing by 1%. Between 2007 and 2008, however, ridership increased significantly, with nearly 10% more riders in 2008 as compared with 2007 (see Figure 5-16).

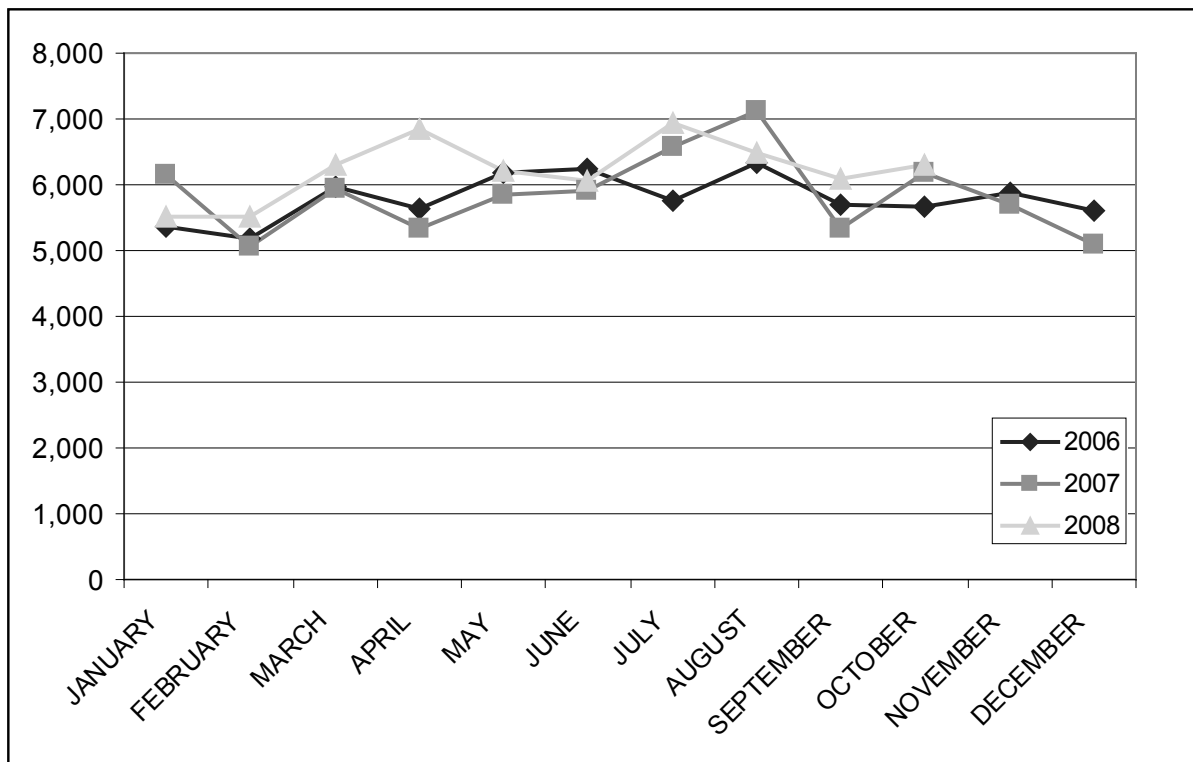
Figure 5-16 Route 4: Changes in Annual Ridership 2006-2007

Year	Annual Total	Monthly Average	Annual Change
2006	69,520	5,793	
2007	70,257	5,855	1.0%
2008	64,352	6,435	9.9%

Source: GGFT * Represents 10 months of data

Ridership patterns by month are shown in Figure 5-17 for the three year period between 2006 and 2008 (partial data available for 2008). Average monthly ridership on Route 4 is fairly steady at approximately 6,000 riders per month, with higher monthly ridership observed during the spring and fall months. The winter months (December, January and February) generally show lower ridership.

Figure 5-17 Route 4: Ridership by Month (2006-2008)

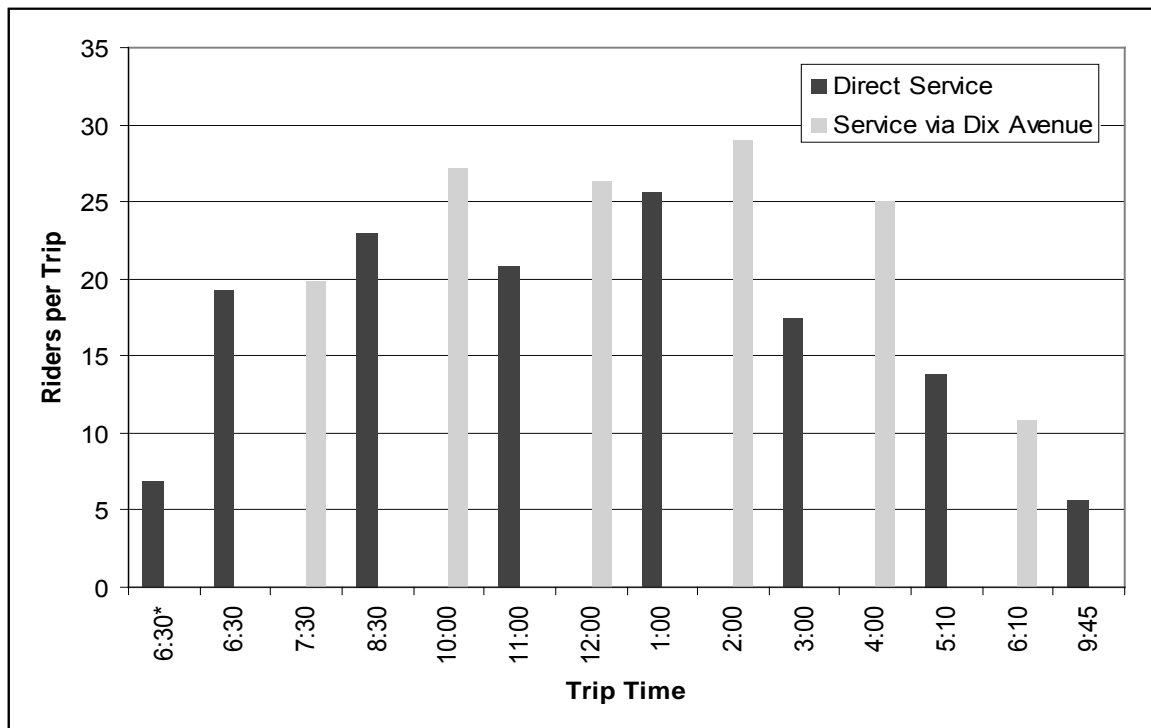


Source: GGFT

Note: 2008 represents 10 months of data only

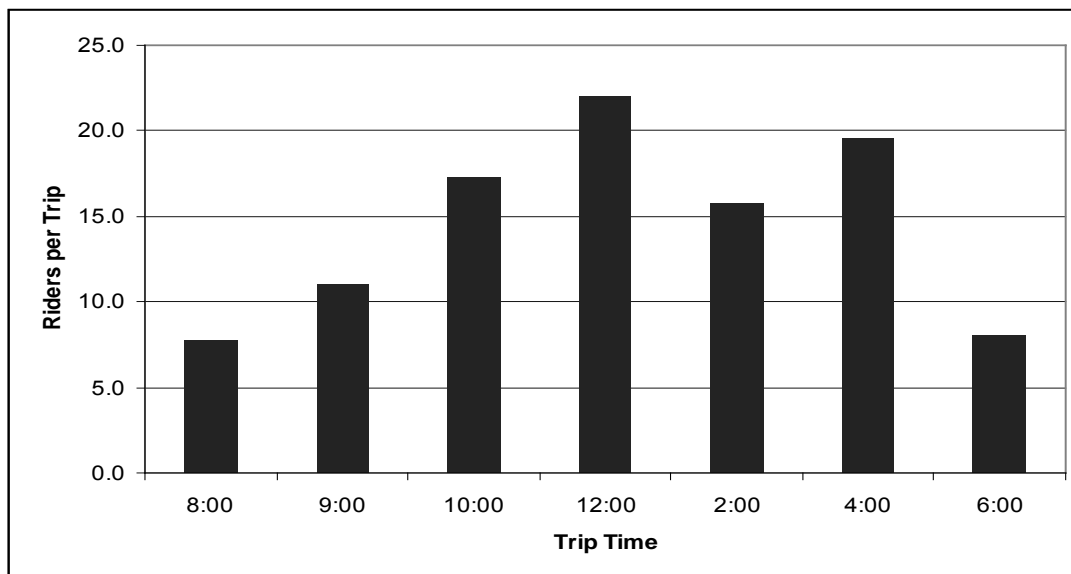
Ridership data by time of day shows that Route 4 ridership is highest during the mid-day between 10 am and 4 pm. Trips that travel via Dix Avenue have slightly higher ridership as compared with routes that travel directly to Fort Edward and Hudson Falls (see Figure 5-18). Increased ridership on the Dix Avenue afternoon trips benefits from passengers traveling to/from BOCES. This data also shows that travel during the morning peak is higher as compared with the afternoon peak. Saturday service shows a similar pattern; ridership is highest in the middle of the day and lowest on the first and last trips of the day (see Figure 5-19).

Figure 5-18 Route 4 – Weekday Ridership by Time of Day



Source: GGFT

Figure 5-19 Route 4 – Saturday Ridership by Time of Day



Source: GGFT

Productivity

The Route 4 weekday service is the most productive service among the GGFT regular fixed-routes. The route travels a long distance and carries a lot of passengers; an average of 265 passengers per day and 20.4 passengers per trip. Operating costs per passenger are also well below the system average. Productivity on the Saturday service is also strong; Route 4 is equal to or surpasses the system average on nearly all productivity metrics (see Figure 5-20).

Figure 5-20 Route 4 Productivity

	Weekday Route Average	Weekday System Average	Saturday	Saturday System Average
Operating Cost per Passenger*	\$2.97	\$4.12	\$4.36	\$4.35
Average Daily Ridership	264.8	82.6	101	41.7
Passengers per Trip	20.4	8.96	14.4	8.73
Passengers per Vehicle Service Hour	21.2	15.3	14.4	14.4
Passengers per Mile	1.4	1.0	.97	1.0

Note: Statistics do not include evening service

Source: GGFT and Nelson\Nygaard

Input from 2008 Passenger Survey

Passengers on Route 4 comprise a large portion of GGFT’s ridership overall, therefore, survey results are consistent with the system-wide findings. While most (61%) people begin their trip at home, passengers also reported traveling to home (27%), work (22%), and to other destinations (22%). Among the passengers traveling for other reasons, many riders reported traveling to the Department of Social Services (DSS), the Courthouse, or the East Side Center. Survey data also shows a relatively high portion of riders (20%) said they would transfer to another bus to get to their final destination.

Strengths and Weaknesses

Strengths

- Highly productive route with strong ridership. Ridership is strong throughout the day, except for an early trip originating from Hudson Falls and the evening service.
- Route passes by several key destinations including the Villages of Hudson Falls and Fort Edward, the Washington County Municipal Center and BOCES.
- Most passengers are regular riders.
- Service is fairly stable – both in terms of monthly ridership and time of day.

Weaknesses

- Alternating alignment along Dix Avenue increases travel time for passengers not traveling to destinations along Dix Avenue.
- Service operates at half hourly schedule during AM peak, but on hourly frequencies for the remainder of the day.
- Saturday service is low - hourly in the morning but every two hours in the afternoon.
- Route 4 overlaps with Route 3 in downtown Glens Falls.

Potential Improvements

- Change alignment to serve new Walmart.
- Increase service levels to 30 minute frequencies.
- Combine portions of Route 3 and Route 4, especially if Route 4 frequencies are increased.
- Break Route 4 into two services with similar number scheme, schedule and service pattern as Route 11/12.

Route 5: South Glens Falls

Route Description

Route 5 provides connecting service from downtown Glens Falls to the Village of South Glens Falls and the Town of Moreau. Route 5 runs south out of Glens Falls on Glen Street, traveling along Main Street into the Village of South Glens Falls. On request, passengers can travel off Main Street to Second, Riverview and Third Streets. From South Glens Falls, Route 5 continues to Moreau to South Glens Falls High School and returns via Bluebird Road to Gansevoort Road (see Figure 5-21). On three of the daily trips, Route 5 will travel on request to Lamplighter Acres, a high-density housing complex north of Exit 17.

Route 5 has nine weekday departures that are roughly spaced every 60 minutes, although there is a long break in the service between 11:30 pm to 2:30 pm. There are five trips on Saturday. However, unlike the weekday service, Saturday trips are not allowed to deviate from the primary alignment. A summary of service characteristics is shown in Figure 5-22.

Major Stops:

- Village of South Glens Falls
- Midtown Plaza
- South Glens Falls High School
- Lamplighter Acres
- Glens Falls Civic Center

Figure 5-21 Route 5 Map

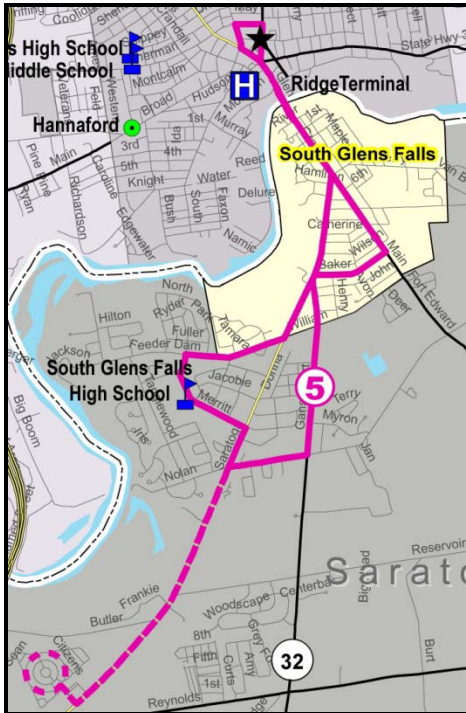


Figure 5-22 Route 5 Service Statistics

	Weekday	Saturday
Span of Service	6:00- am - 5:39 pm	8:30 am - 5:29 pm
Round Trips	9	4
Frequency (min)	30-90*	180
Route Length (miles)	8.7*	7.8

Source: GGFT

Note: * Does not include mid-day break.

** This is an average of the regular route and route with deviations

Ridership

Ridership on Route 5 has decreased steadily from 2006 to 2008 (see Figure 5-23), losing nearly 30% of its ridership over the three year period.

Figure 5-23 Route 5 Changes in Annual Ridership 2006-2008

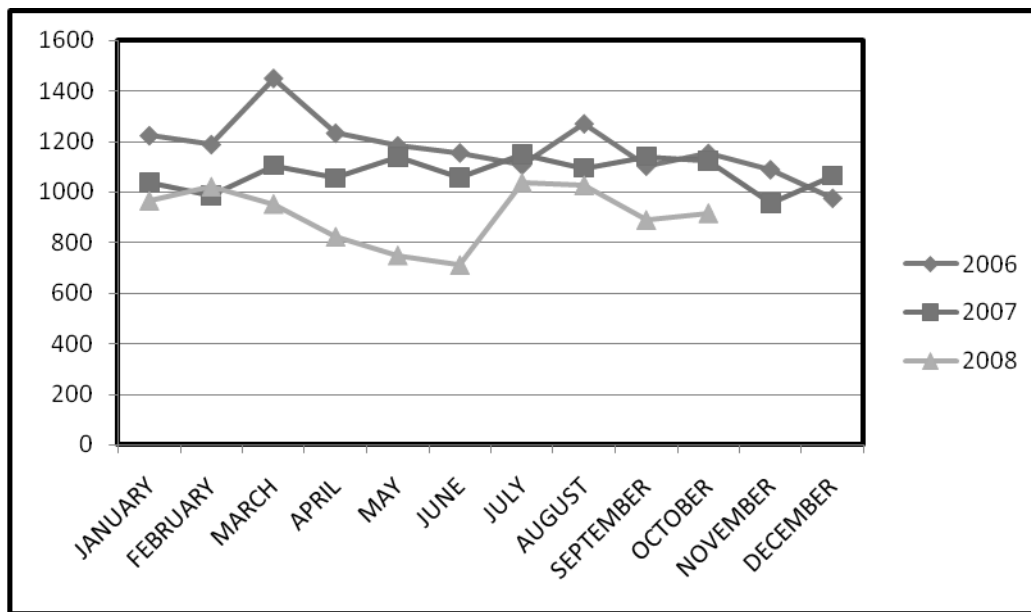
Year	Annual Total	Monthly Average	Annual Change
2006	14,129	1,177	
2007	12,906	1,076	-9%
2008	10,930*	911	-15%

Source: GGFT

*Estimated based on 10 months of data

The loss in ridership is illustrated by Figure 5-24, which shows ridership by month for the three year period between 2006 and 2008 (10 months of data for 2008). This figure shows a trend of declining ridership beginning in March/April and continuing to the summer months. While ridership increases during the summer months, it begins to decline again in August.

Figure 5-24 Route 5 - Ridership by Month (2006 – 2008)



Ridership by hour (see Figures 5-25 and 5-26) further illustrates low ridership on Route 5. These figures show that most individual trips carry six or fewer passengers. The weekday trip with the highest boardings, the 4:00 pm, carries eight passengers. A similar pattern is observed for the Saturday service. Among the five trips, only one trip at 3:00 pm carries more than six passengers, the remaining trips have five or fewer riders.

Figure 5-25 Route 5: Weekday Ridership by Time of Day

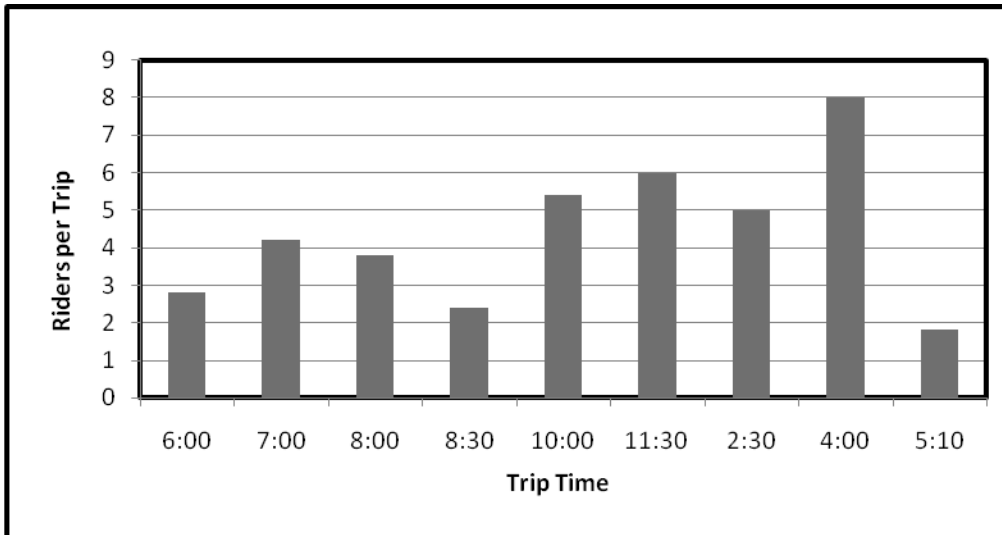
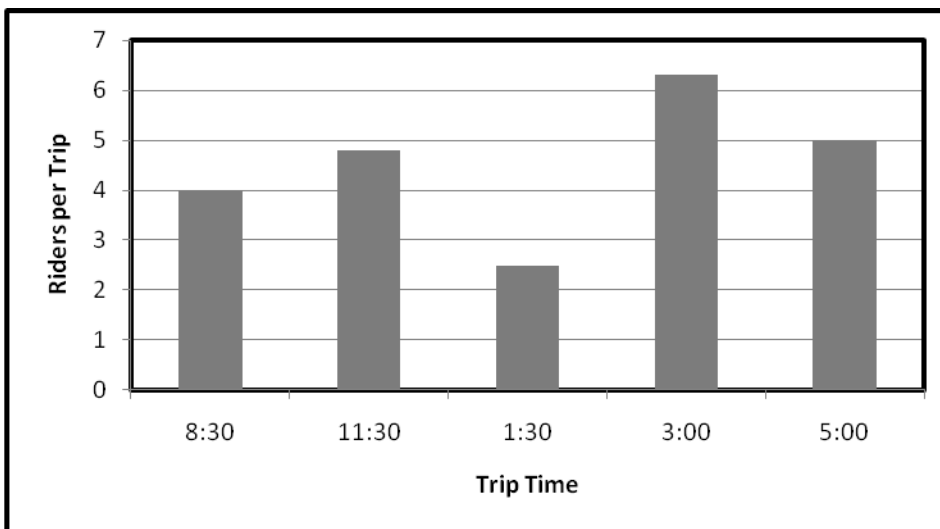


Figure 5-26 Route 5: Saturday Ridership by Time of Day



Productivity

Not surprisingly, productivity on Route 5 is low. A relatively long trip distance combined with low ridership means the route carries fewer passengers per mile of service than any other route (except Route 7 which also carries 0.5 passengers per mile). As a result, operating costs per passenger are nearly 75% higher than the average for the GGFT weekday services (see Figure 5-27). Route 5’s Saturday service is also low. However, the Saturday service has higher productivity than the weekday service, with marginally lower operating costs per passenger.

Figure 5-27 Route 5 Weekday and Saturday Service Productivity

	Weekday	Weekday System Average	Saturday	Saturday System Average
Operating Cost per Passenger	\$7.22	\$4.12	\$6.99	\$4.35
Average Daily Ridership	39.2	82.6	22.5	41.7
Passengers per Trip	4.36	8.96	4.5	8.7
Passengers per Vehicle Service Hour	8.7	15.3	9.0	14.4
Passengers per mile	0.5	1.0	0.6	1.0

Input from 2008 Passenger Survey

Passenger survey data shows that existing riders are most likely to be traveling between home and work. Most passengers reported that they walk to (71%) and from (79%) the bus to get to/from their destinations. Walk times are slightly lower than average in the range of 6 to 8 minutes. A relatively smaller proportion of riders said they were making a round trip (36%) on GGFT. Passengers were also equally likely to pay for their fare using cash (29%), discount cash (29%) and tokens (29%). Ridership is fairly loyal with nearly 86% saying the ride GGFT at least 2 to 4 days per week.

Strengths and Weaknesses

Strengths

- Route 5 uses deviations to expand service area on an as-need basis.
- Route 5 serves an area and population with a high propensity to use transit. Likely that there is potential to attract more riders to the route.
- Public outreach and survey results show existing passengers rely on Route 5 for travel and are highly appreciative of service.
- Saturday ridership is stronger and has higher productivity as compared to weekday service.

Weaknesses

- Route has low productivity.
- Ridership patterns show a steady decline over the past three years.
- Route schedule is irregular, despite being interlined with Route 7. Services are not evenly spaced throughout the day, and there is a gap in service from 11:30 am to 2:30 pm.
- Route 5 travels close to the West Marion Avenue Park and Ride lot, but service is not timed to meet the Northway Express commuter services, which depart from the park and ride at 6:50 AM and arrive back at 5:40 pm.

- Route scheduling works well in the morning, but drivers suggest they have extra time in the afternoon.

Potential Improvements

- Eliminate route.
- Replace fixed-route service with demand response service.
- Streamline and simplify route schedule so that departures are evenly spaced and mid-day gap is eliminated.
- Restructure route to pass more important destinations. Consider running every trip to Lamplighter Acres.
- Schedule services to meet Northway Express commuter routes. This will increase regional connectivity and expand employment opportunities for individuals depending on transit.
- Reach out to South Glens Falls High School to increase student ridership.
- Realign route to create regularly schedule service specifically timed (i.e. tripper services) to meet scheduled institution times. Other trips continue on Saratoga Road to Moreau, improving travel time. All non-tripper services may continue out to Lamplighter.
- Consider realigning route to out-and-back pattern rather than looping to simplify service and improve travel times.
- Explore whether Finch Paper and SCA employees could be served by Route 5 (company employs 880 people).

Route 6: West Loop

Route Description

The West Loop, like Route 3 (East Loop) is a neighborhood service that circulates through the western part of Glens Falls. Route 6 is interlined with Route 3; thus it is also operated using a small transit vehicle. Route 6 follows a 5.8 mile loop that begins at the Ridge Street Terminal and heads south on South Street to State Street, traveling through neighborhoods to Hannaford, Glens Falls High School and Glens Falls Middle School. From the schools Route 6 continues north, turning on Horicon Avenue and heading south on Crandall Street to Elm Street and back to the Ridge Street Terminal.

Route 6 is one of two routes that serves the Glens Falls Hospital, a major regional destination and employer. The route travels mostly through residential neighborhoods, including areas with high population densities and high concentrations of persons with low income. There are 12 weekday trips and three Saturday trips on Route 6. Travel statistics are shown in Figure 5-29.

Major Stops:

- Hannaford
- Glens Falls Middle and High Schools
- Sanford School (3 PM route only)
- Glens Falls Hospital
- Irongate Center

Figure 5-28 Route 6 Map

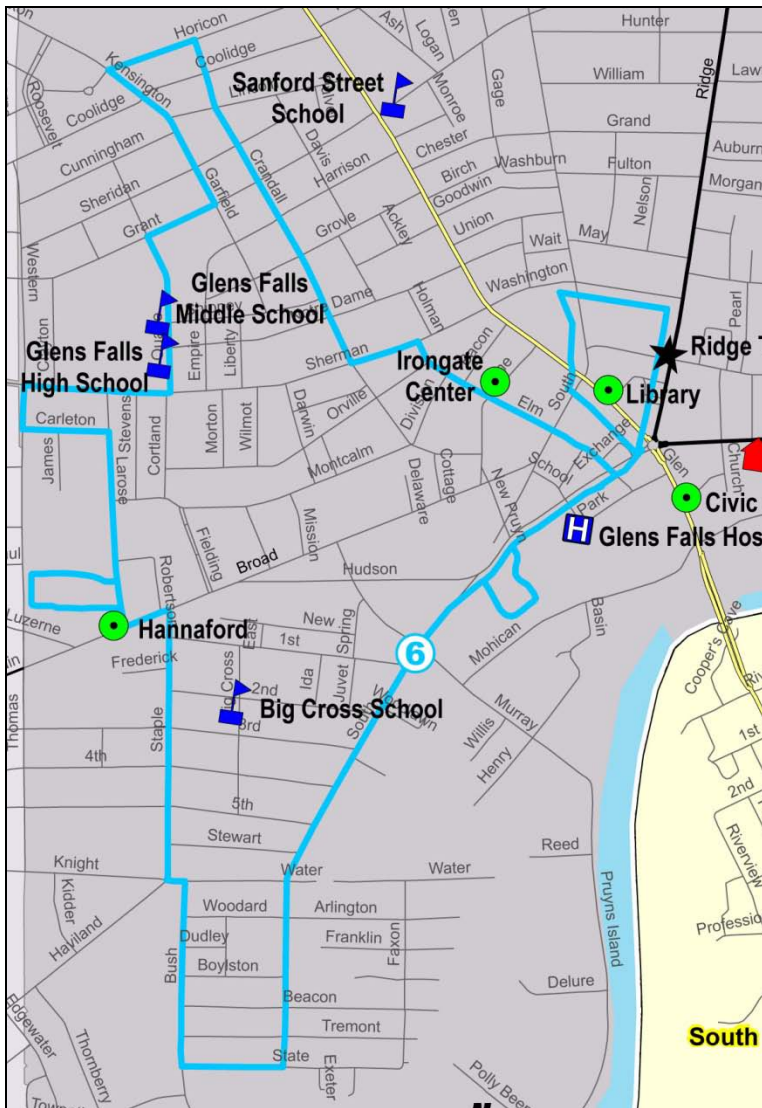


Figure 5-29 Service Statistics

	Weekday	Saturday
Span of Service	7:00 am - 5:30 pm	9:00 am - 1:20 pm
Round Trips	11	3
Frequency (min)	60*	120
Route Length (miles)	5.8**	5.8

Source: GGFT

Note: * First two trips are 40 minutes apart

** 7:40 AM route measures 10 miles

Ridership

Data on annual ridership, suggests that Route 6 has been losing riders steadily over the latest three year period. Between 2006 and 2008, ridership is down by nearly 26% (see Figure 5-30).

Figure 5-30 Route 6 Changes in Annual Ridership 2006-2008

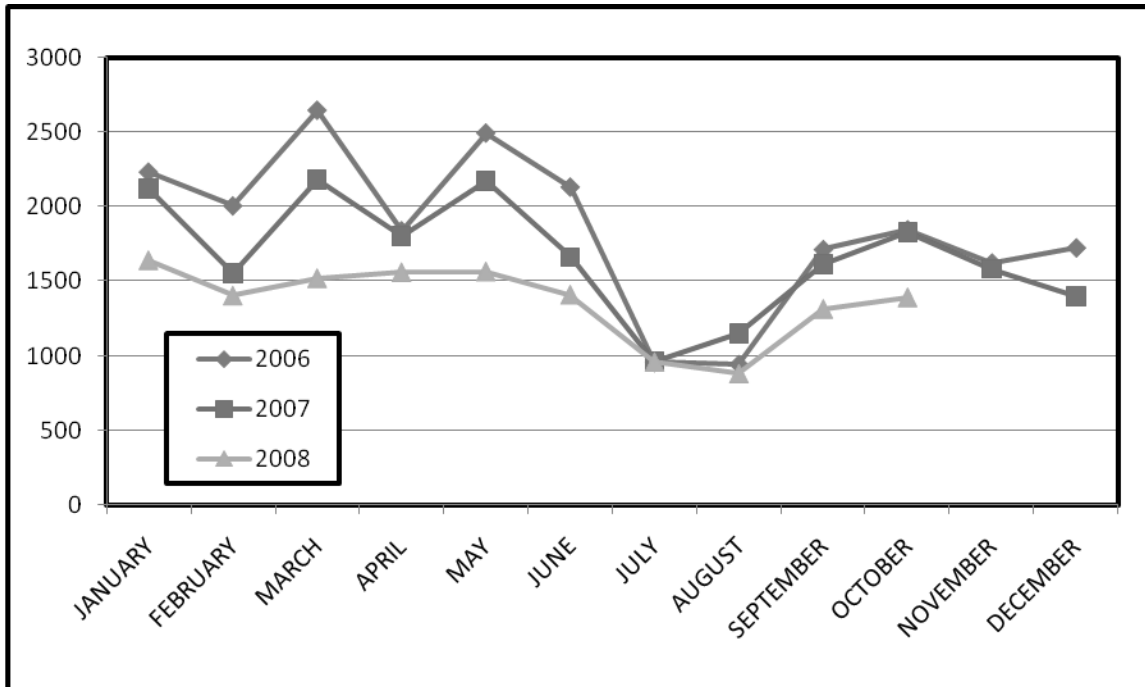
Year	Annual Total	Monthly Average	Annual Change
2006	22,173	1,848	
2007	20,020	1,668	-9.7%
2008	13,678*	1,368	-18%

Source: GGFT

*Represents 10 months of data

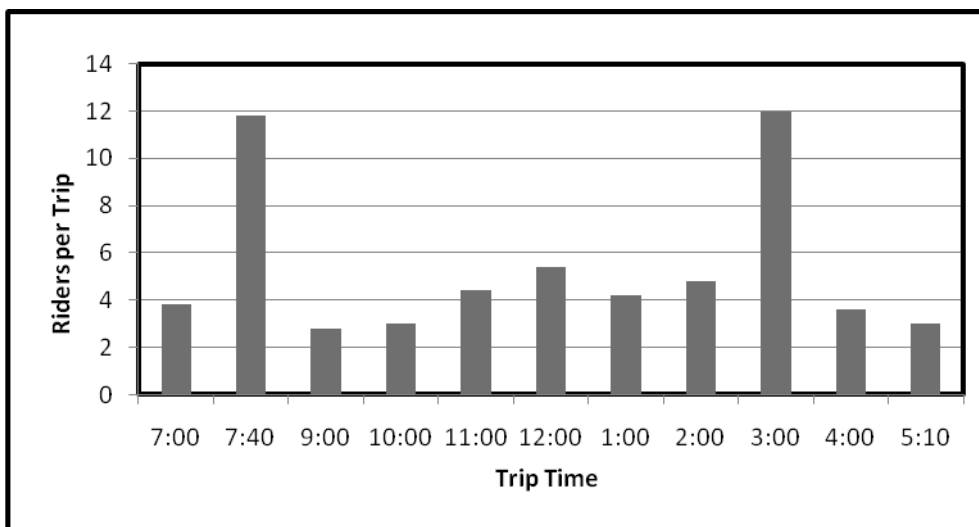
Ridership data by month suggests that annual trends in ridership were similar for 2006 and 2008. However, 2007 was an unusual year for Route 6 with ridership fluctuating considerably during the first half of the year. Ridership in 2008 was lower than 2006 and 2007 for every month especially during the first half of the year (see Figure 5-31).

Figure 5-31 Route 6: Ridership by Month (2006-2008)



Ridership by time of day (see Figure 5-32) shows that the school trips (7:30 am and 3:00 pm) carry the most passengers as compared with other trips in the day. Outside of these two trips, Route 6 carried fewer than six passengers per trip; school trips account for 40 percent of total weekly ridership.

Figure 5-32 Route 6 Ridership by Time of Day



Productivity

Weekday productivity on Route 6 is poor with operating costs per passenger 43% higher than the system average. If school trips are excluded from the analysis, operating costs are even higher at \$8.08 per passenger. Without the school trips, Route 6 would have the lowest productivity of all routes. Saturday productivity is also very low. Only Route 3 has lower productivity on its Saturday service (see Figure 5-33).

Figure 5-33 Route 6 Productivity

	Weekday	Weekday System Average	Saturday	Saturday System Average
Operating Cost per Passenger*	\$5.90	\$4.12	\$9.68	\$4.35
Average Daily Ridership	58.6	82.6	9.75	41.7
Passengers per Trip	5.3	8.96	3.25	8.73
Passengers per Vehicle Service Hour	10.7	15.3	6.5	14.4
Passengers per Mile	0.9	1.0	0.6	1.0

Source: GGFT and Nelson\Nygaard

Input from 2008 Passenger Survey

Data from the passenger survey shows that most passengers on Route 6 were traveling between home and work. A smaller portion of people also used Route 6 to travel to/from school. Most people walked to the bus (70%) and from the bus (75%). About half of the riders were making a round trip and about half paid for their fare with a token. Route 6 passengers are regular GGFT customers, but only 60% reported using the route daily as compared with 81% on Route 3.

Strengths and Weaknesses

Strengths

- Route operates in areas with relatively high population densities and serves an area that has a strong market for transit ridership.
- Route provides service to Glens Falls Hospital, one of the region’s largest employers and most important destinations.

Weaknesses

- Route demographics suggest transit ridership, but route remains low in productivity
- Route productivity is inflated due to ridership on school trips.
- Route has several segments where no passengers board or disembark.
- Saturday service has very low ridership and productivity.

- Alignment is circuitous, travels through neighborhoods and has one out and back segment, increasing travel time for many riders.

Potential Improvements

- Eliminate route.
- Replace Route 6 to demand response service.
- Work with schools to offer passes or programs that will increase ridership from school students – drivers stated that school ridership has decreased over time
- Re-schedule Route 6 so that it meets hospital shift schedules and /or work with Hospital to create employer transportation program with specific routes/runs that will meet employee needs.
- Combine Routes 3 and 6 into a single route with a shorter, more direct alignment that link more and more important destinations. This shortened route may be run in less time, freeing capacity for other parts of the system.
- Re-align Routes 3 and 6 to provide cross-town service.
- Eliminate Saturday service

Route 7: West Glens Falls

Route Description

Route 7 provides connecting service between Glens Falls and West Glens Falls. It travels from the Ridge Street Terminal along Broad Street and Main Street to West Glens Falls where it makes a large loop along Corinth, Van Dusen and Luzerne Roads (see Figure 5-34). Route 7 is interlined with Route 5 and operates six trips on weekdays and three on Saturdays. There is no evening service on Route 7. Service statistics for Route 7 are shown in Figure 5-35.

Major Stops:

- Glens Falls Hospital
- Hannaford
- Homestead Mobile Park Home

Figure 5-34 Route 7 Map



Figure 5-35 Route 5 Service Statistics

	Weekday	Saturday
Span of Service	6:30 am - 5:05 pm	8:30 am - 5:29 pm
Round Trips	6	4
Frequency (min)	90 – 160	180
Route Length (miles)	8.4	7.8

Source: GGFT

Note: * Does not include mid-day break.

** This is an average of the regular route and route with deviations

Ridership

Relative to other GGFT routes, Route 7 has a low annual ridership. However, ridership on the route has increased significantly between 2006 and 2008. In the three year period, ridership has grown by nearly 26% (see Figure 5-36).

Figure 5-36 Route 6 Changes in Annual Ridership 2006-2008

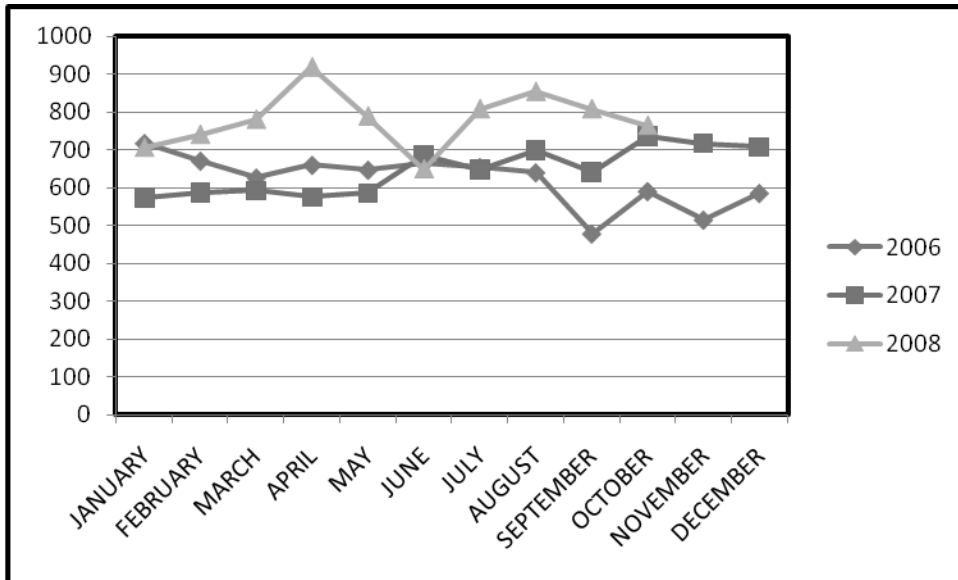
Year	Annual Total	Monthly Average	Annual Change
2006	7,447	621	
2007	7,752	646	4%
2008	7,817*	782	21%

Source: GGFT

*Represents 10 months of data

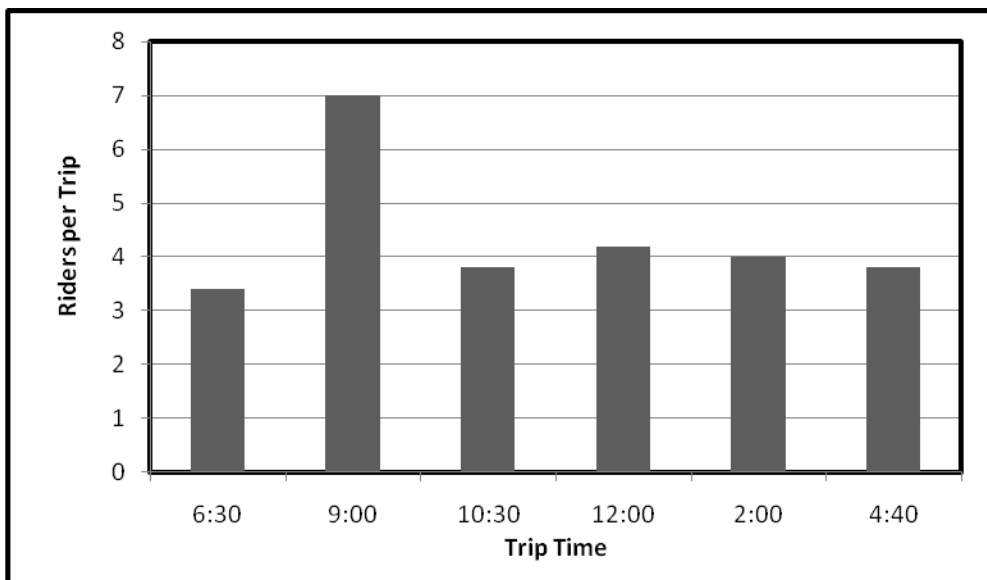
Changes in ridership are broadly shown in Figure 5-37, which shows ridership by month for the period between 2006 and 2008. Although ridership in 2008 is higher overall as compared with 2006 and 2007, ridership patterns are not stable and show sharp peaks (April, 2008) and declines (June, 2008).

Figure 5-37 Route 7 - Ridership by Month (2006 – 2008)



Ridership by hour (Figure 5-38) shows five of the six trips on Route 7 carry four passengers or less each. One trip at 9:00 am carries seven passengers. Ridership on the Saturday service is not shown graphically, but each of the three trips carries an average of between two and three passengers each.

Figure 5-38 Route 7 Weekday Ridership by Time of Day



Productivity

Productivity on Route 7 is poor. The route has the lowest passengers per mile among all GGFT bus services and the operating cost per passenger is only marginally (\$0.02 per passenger) higher than the lowest performing route, Route 5 (see Figure 5-39).

Productivity on the Saturday service is also low. Route 7 attracts only a handful of riders on its Saturday service. On the three trips (11:00 am, 1:00 pm and 3:00 pm), data shows ridership as 3.5, 2.3 and 3.0 riders respectively. With few riders and a relatively long round trip length, cost per passenger is 50% more expensive than the weekday system average.

Figure 5-39 Route 7 Productivity

	Weekday	Weekday System Average	Saturday Service	Saturday System Average
Operating Cost per Passenger	\$7.20	\$4.12	\$3.11	\$4.35
Average Daily Ridership	26.2	82.6	8.75	41.7
Passengers per Trip	4.37	8.96	2.92	8.73
Passengers per Vehicle Service Hour	8.7	15.3	5.8	14.4
Passengers per Mile	0.5	1.0	0.35	1.0

Input from 2008 Passenger Survey

The passenger survey yielded ten responses from Route 7 riders. The data suggests that most people use Route 7 to travel between work and home. Most people reported walking to the bus, but some said they would transfer or get picked up on the destination end of their trip. About half were making a round trip and most used cash (either full or half) to pay their fare. All ten of the survey respondents said they use GGFT at least 2 and 4 days per week.

Strengths and Weaknesses

Strengths

- Ridership has increased significantly between 2006 and 2008.
- Existing land uses and development along the area support transit use. Demographic characteristics also suggest the area should be a strong market for transit.
- Route serves major regional destinations, including Glens Falls Hospital and Homestead Mobile Park. Potential to attract more riders from these destinations.
- Straight-forward route alignment with only a single loop at external end.
- Land uses along the route are zoned for industrial uses. As development occurs, there is potential for growth along route.

Weaknesses

- Despite gains in ridership, route carries a very small number of riders and its productivity is low. This is true for weekday and Saturday service.
- Service is not consistently scheduled throughout the day; morning trips are spaced every 90 minutes and afternoon services every 120 minutes making the departure times difficult to remember.

- Route has no external ‘anchor’ to draw passengers on outbound trips.
- Service ends early (last departure from Ridge Street Terminal is 4:40 pm) making it difficult for some workers.

Potential Improvements

- Eliminate route.
- Replace route with demand response service.
- Eliminate Saturday service
- Consider reversing operating direction to reduce delay on Main Street heading into downtown Glens Falls. Traffic primarily occurs during the afternoon peak period.
- Combine Routes 7 and 6 into a single route that serves Hannaford on Broad Street, Glens Falls Hospital, and destinations in West Glens Falls.
- Eliminate loop in West Glens Falls to create out-and-back service alignment to simplify service and reduce travel time.
- Reschedule route with more frequent, regularly scheduled departures that can be more easily used by workers at the Glens Falls Hospital.

Route 11/12: Upper Glen Street, Aviation Road

Route Description

Routes 11 and 12 are a pair of services that follow a similar alignment for much of their routes, but have different outer ends. Both routes operate from the Ridge Street Terminal to Aviation Mall, traveling along Glen Street and Upper Glen Street (US 9). At the intersection of US 9 and Quaker/Aviation Roads, Route 11 continues on US 9, turning off US 9 onto Weeks Road to serve the Robert Gardens Apartments and Walmart. Except for the early morning trips, Route 11 travels from Walmart to the Aviation Mall as part of its return trip.

At the intersection of US 9 and Quaker/Aviation Roads, Route 12 turns on Aviation Road, traveling to the John Burke Apartments. Like Route 11, Route 12 serves the Aviation Mall after the John Burke Apartments as it heads inbound. Departures are timed so that service to Walmart (Route 11) leaves on the half-hour and service to John Burke Apartments (Route 12) leaves on the hour (see Figure 5-40).

For purposes of this analysis, Routes 11 and 12 are considered a single route (Route 11/12). Route 11/12 has 22 trips per day, more than any other route in the GGFT system. It also operates four evening trips and nine and half hours of service on Saturdays (see Figure 5-41).

Major stops on Route 11/12:

- Sanford Street School
- Crandall Park/YMCA
- Price Chopper
- Aviation Mall
- Robert Gardens Apartments (Route 11)

- Walmart (Route 11)
- John Burke Apartments (Route 12)

Figure 5-40 Route Map

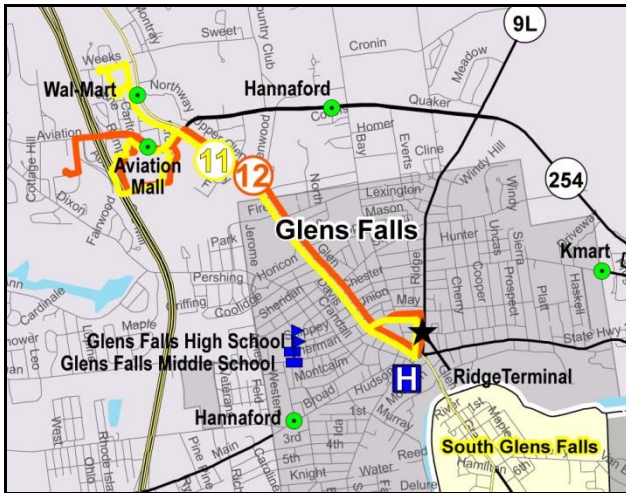


Figure 5-41 Route 11/12 Service Statistics

	Weekday	Weekday Evening	Saturday
Span of Service	6:30 am – 5:40 pm	6:15 9m – 9:45 pm	8:00 am – 5:30 pm
Round Trips	22	4	20
Frequency (min)	30 min	45 – 75 min	30 min
Route Length (miles)	5.4 – 9.9	7.8 (11.8*)	7.8 (11.8*)
Travel time	25-29 min	45 min	25-29 min

Source: GGFT

Notes: 6:15 evening service travels to Lake George Factory Outlet Stores, thus has a longer travel time.

Ridership

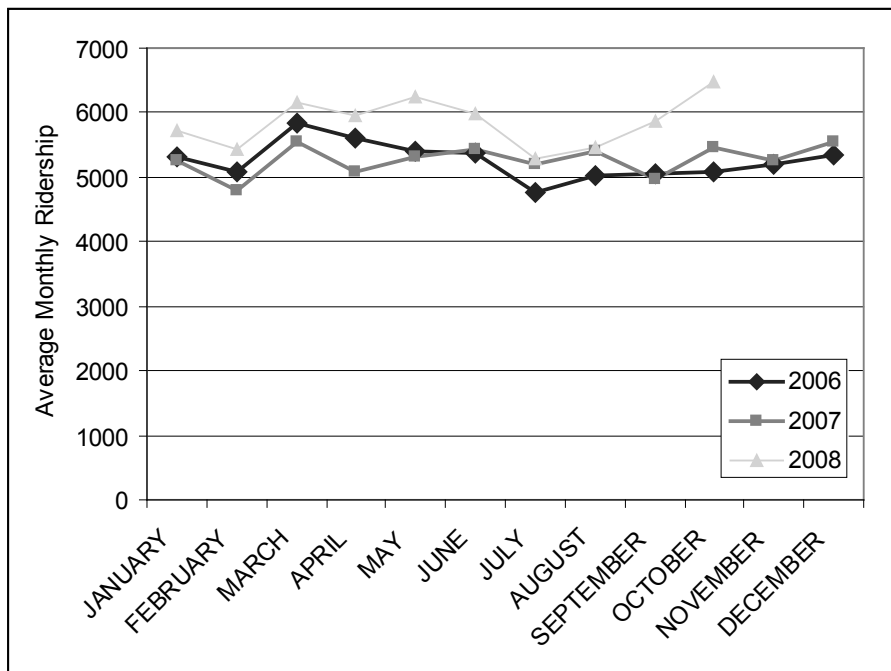
Ridership on Route 11/12 was nearly unchanged between 2006 and 2007, but increased by 11% between 2007 and 2008 (see Figure 5-42). As shown on Figure 2, 2008 ridership is higher for every month, but gains are most pronounced in the spring (May and June) and fall (September and October).

Figure 5-42 Route 11/12: Changes in Annual Ridership 2006-2007

Year	Annual Total	Monthly Average	Annual Change
2006	63,085	5,257	
2007	63,254	5,271	0.3%
2008	58,581*	5,858	11.1%

Source: GGFT * Represents 10 months of data

Figure 5-43 Route 11/12: Ridership by Month (2006-2008)



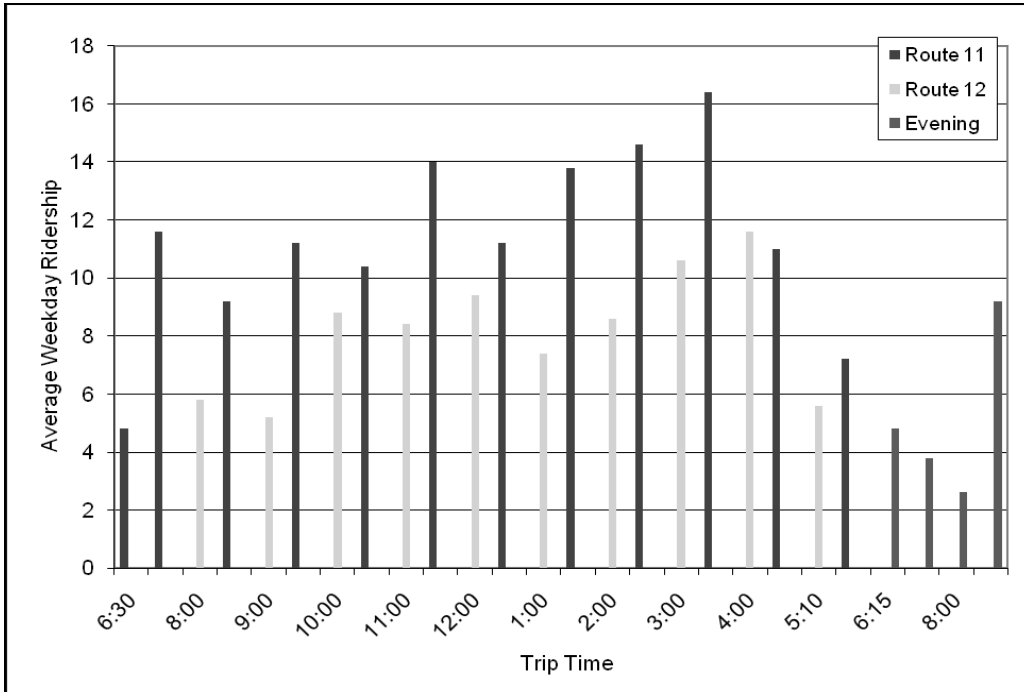
Source: GGFT

Note: Date for 2008 represents January through October only (10 months)

Route 11/12 makes 22 trips on weekdays and 20 trips on Saturdays; both weekdays and Saturdays also have four evening trips. Ridership is fairly consistent throughout the day, although the early trips on Route 11 (6:30 am) and Route 12 (8:00 am and 9:00 am) have lower ridership with fewer than six passengers (see Figure 5-44). Figure 5-44 also shows that weekday ridership is consistently higher on Route 11 (to Walmart) as compared to Route 12 (John Burke Apartments).

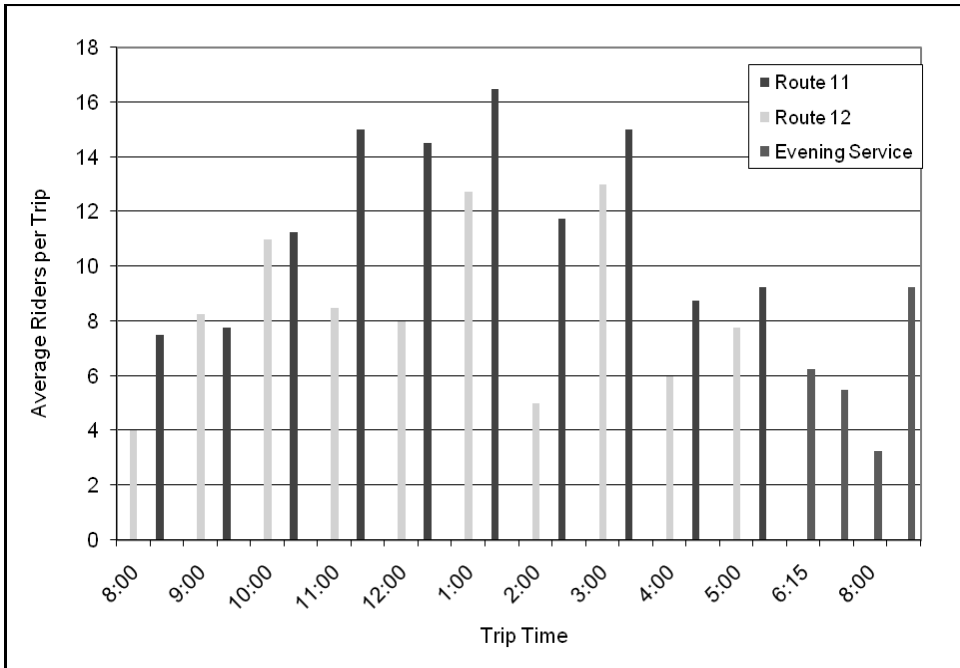
Similar patterns are also observed for Saturday service; ridership peaks during the middle of the day and ridership on Route 11 is generally higher as compared with Route 12 (see Figure 5-55), although this difference is not as pronounced as on weekdays. Evening service has fewer riders per trip generally, with the last trip of the day attracting the most riders. This is true for weekdays and Saturdays.

Figure 5-44 Route 11/12 – Weekday Ridership by Time of Day



Source: GGFT

Figure 5-45 Route 11/12 – Saturday Ridership by Time of Day



Source: GGFT

Productivity

Route 11/12 has excellent productivity as compared with the GGFT system, with lower per passenger operating costs and more passengers per hour, mile and trip (see Figure 5-46). This is true for weekday and Saturday service. Indeed, Route 11/12 Saturday service is slightly more productive than weekday service with regards to passengers per trip and passengers per vehicle service hour. This likely reflects the fact that Saturday service does not include the earliest morning trips that carry fewer passengers. In addition, Saturdays are typically the busiest days for retailers.

Figure 5-46 Route 11/12: Weekday and Saturday Productivity*

	Weekday Service		Saturday Service	
	Route 11/12	Weekday System Average	Route 11/12	Saturday System Average
Operating Cost per Passenger*	\$3.19	\$4.12	\$3.11	\$4.35
Average Daily Ridership	216.8	82.63	201.5	41.7
Passengers per Trip	9.85	8.96	10.1	8.73
Passengers per Vehicle Service Hour	19.7	15.3	20.6	14.4
Passengers per Mile	1.5	1.0	1.5	1.0

Note: Statistics do not include evening service

Source: GGFT and Nelson\Nygaard

In terms of evening service, as compared with other GGFT evening services, Route 11/12 performs poorly during weekdays but excellent on Saturdays (see Figure 5-47). Differences in productivity are because ridership on Saturday is significantly higher than any other evening service.

Figure 5-47 Route 11/12: Evening Service Productivity

	Evening Service			
	Weekday	Weekday System Average	Saturday	Saturday System Average
Operating Cost per Passenger*	\$27.75	\$16.31	\$5.84	\$6.80
Average Daily Ridership	5.1	3.8	24.2	9.0
Passengers per Trip	1.7	2.5	8.1	6.8
Passengers per Vehicle Service Hour	2.3	3.9	10.8	9.3
Passengers per Mile	0.1	0.2	0.7	1.0

Note: Statistics do not include evening service

Source: GGFT and Nelson\Nygaard

Input from 2008 Passenger Survey

The passenger survey results show that most passengers on Route 11/12 are traveling between home, work, and shopping. As expected, passengers on Route 11/12 are more likely to be coming from (13%) or going to (27%) shopping as compared with other routes. Most people walk to/from the bus, with an average of 7.7 minutes walking to the bus and 5.2 minutes walking from the bus to their final destination.

Consistent with the system overall, riders on Route 11/12 are loyal riders; 44% ride daily and 39% ride 2 to 4 days per week.

Strengths and Weaknesses

Strengths

- Highly productive route that carries a lot of passengers throughout the day and on Saturdays.
- Combining Routes 11/12 and operating at a fairly high frequency provides a high level of service along Upper Glen Street (US 9), one of the region’s primary corridors for shopping and employment.
- Destinations along route include regional attractions (Aviation Mall and Walmart) as well as a larger number of smaller retail and service establishments, such as Queensbury Plaza, Price Chopper, Northway Plaza, and Crandall Park/YMCA.
- Route also serves several housing complexes, including Robert Gardens and John Burke and passes by other areas with relatively high housing density off of Glen Street in Glens Falls.

Weaknesses

- Route alignment serves Aviation Mall on the inbound portion of the trip, after going to Walmart or Burke Apartments. While this alignment provides access to the Mall for people boarding at Robert Gardens and John Burke Apartments, it increases travel time for other passengers.
- Route 11 attracts about 30% more passengers than Route 12, resulting in an imbalance in the combined service.
- The time allocated to complete the trip (30 minutes) is tight for the drivers, especially during the morning peak periods.
- Ridership is low during early morning trips. This is partially due to the service hours of key destinations along the corridor, which have a later opening time.
- Evening service, especially during the weekdays, has poor productivity.

Potential Improvements

- Increase daytime service frequency to 15-20 minutes.
- Increase span of service to offer continuous service between 5:30 pm and 9:30 pm. This service schedule could be extended to weekdays and Saturdays.
- Use Route 12 to provide direct service to Aviation Mall and, at the same time, realign Route 12 and combine with Route 19, so that it continues along US 9 to Exit 20.
- Operate Route 11/12 on Sundays.
- Consider adding extra service during peak shopping seasons e.g., in December.

Route 19: Warren County Municipal Center

Route Description

Route 19 is a longer distance route as compared with other routes in GGFT, traveling from the Ridge Street Terminal along Bay Street, to Quaker Road, turning on US 9 and ending at Gooney Golf about 1 mile south of Lake George Village. Outbound trips turn into the Warren County Municipal Center and continue on Route 9 to the Lake George Factory Outlet Stores near Exit 20. Inbound trips make an additional stop at the County Annex Building; on the west side of I-87 (see Figure 5-48). There is no Saturday service on Route 19, but one of the Route 11/12 evening trips travels north to the Lake George Factory Outlet Stores (see Figure 5-49).

Route 19 operates along a similar alignment as the seasonal Lake George Village Trolley Route South and its schedule varies accordingly. When trolley service is available on weekends only (late May to late June and September to late October), Route 19 travels to Lake George Village on every trip. When the trolley is operating (late June to Labor Day), Route 19 terminates at the Warren County Municipal Center.

Major stops on Route 19:

- C.R. Bard (private employer)
- Hannaford (on Bay Road)
- Warren County Municipal Center
- Warren County Municipal Center Annex
- Lake George Factory Outlet Stores (Exit 20)

Figure 5-48 Route 19 Map

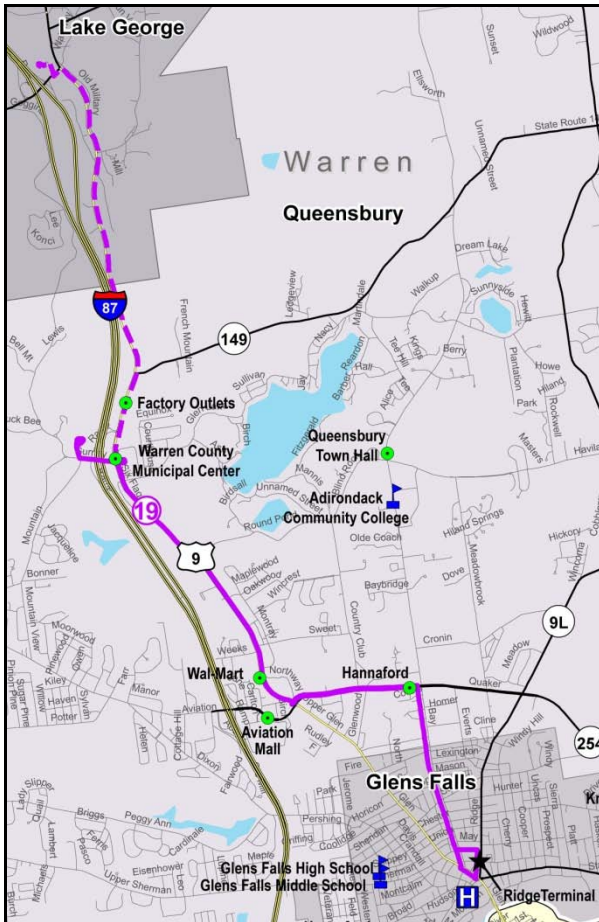


Figure 5-49 Route 19 Service Statistics

	Weekday
Span of Service	9:15 am – 4:25 pm
Round Trips	5
Frequency (min)	60 morning/afternoon 120-135 mid-day
Route Length (miles)	
Travel time	55 min

Source: GGFT

Ridership

Ridership on Route 19 decreased slightly between 2006 and 2007. Data from the first 10 months of 2008 shows an increase in ridership over both 2006 and 2007 levels. 2008 ridership is 9% higher than 2007 levels and 5% higher than recorded in 2006 (see Figure 5-50).

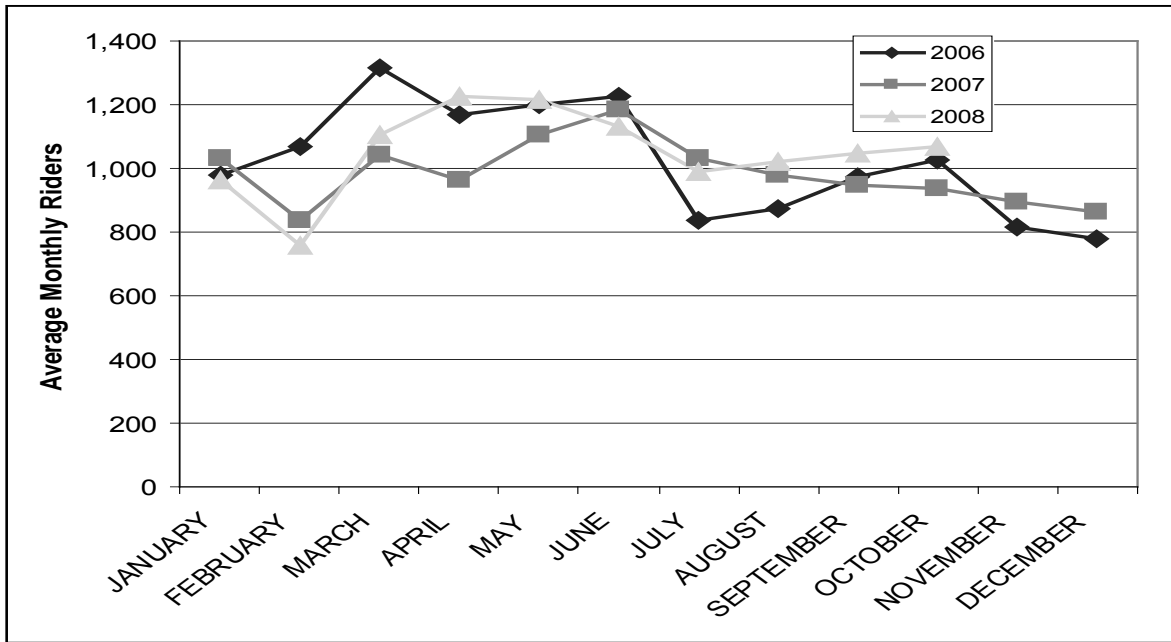
Figure 5-50 Route 19: Changes in Annual Ridership 2006-2007

Year	Annual Total	Monthly Average	Annual Change
2006	12,263	1,022	
2007	11,826	986	-3.6%
2008	10,778*	1,078	9.4%

Source: GGFT * Represents 10 months of data

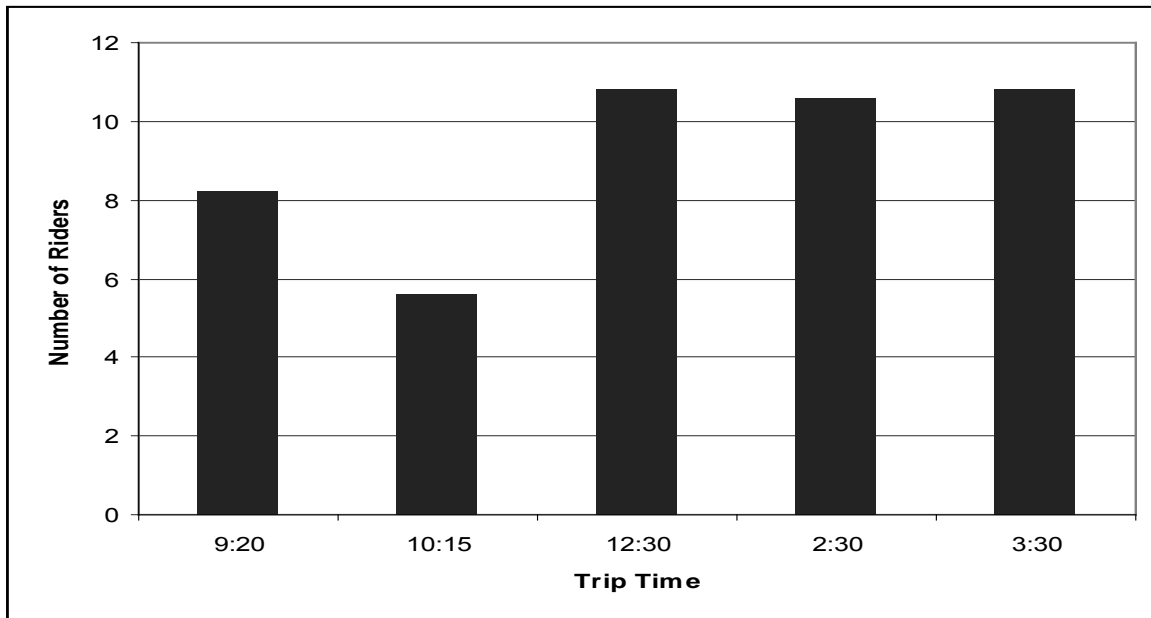
Ridership patterns by month are shown in Figure 5-51 for the three year period between 2006 and 2008 (partial data available for 2008). Monthly ridership patterns suggest that ridership on Route 19 is highest during the tourist “shoulder periods”, i.e. May and June and September and October. These are the time periods when there are still tourists in the region and trolley service is only available on weekends. Lower ridership in summer reflects the trolley service, which operates along a similar alignment with more departures.

Figure 5-51 Route 19: Ridership by Month (2006-2008)



As shown in Figure 5-52, Route 19 has five trips each day and carries just over nine riders per trip. Ridership data by time of day shows that ridership is slightly higher in the afternoon as compared with the morning trips.

Figure 5-52 Route 19 – Ridership by Time of Day



Productivity

As compared with other routes in the GGFT system, Route 19's productivity is moderate (see Figure 5-53). The route performs well in terms of passengers carried per trip and operating costs per passenger are just marginally higher as compared with the system average. Route 19's productivity on other metrics, such as passengers per mile and passengers per vehicle service hour is lower. Many of these metrics are influenced by the fact that Route 19 travels a long distance between destinations and takes more time to complete.

Figure 5-53 Productivity Statistics: Route 19 Weekday Service

	Route 19	
	Weekday	GGFT Route Average
Operating Cost per Passenger	\$5.13	\$4.12
Average Daily Ridership	46.0	82.60
Passengers per Trip	9.2	8.96
Passengers per Vehicle Service Hour	12.3	15.3
Passengers per Mile	.65	1.0

Input from 2008 Passenger Survey

Survey results suggest that the majority (75%) of trip origins are from home, while the main destinations are work (29%) and other (29%). Riders traveling to work, said they work at the factory outlet stores, Aviation Mall and Hannafords. Among those who said they were traveling for "other" purposes, more than half of the riders defined other as the Department of Social Services (DSS).

As compared with the GGFT system overall, passengers surveyed on Route 19 reported being less frequent riders but more likely to be making a round trip. There was also a high portion of riders using a token (38%) suggesting ad hoc travel to the Warren County Municipal Center.

Strengths and Weaknesses

Strengths

- Route 19 provides service to important destinations not served by other routes, including Warren County Municipal Center, Municipal Center Annex and Factory Outlet Stores.
- Service is coordinated with trolley services to avoid duplication; coordination helps to maintain service for riders who need service.
- Alignment increases service level on Bay Street.

Weaknesses

- Ridership drops off considerably during winter months. This reflects that part of the route's target market (tourists and workers at tourism facilities) is not traveling. However, ridership from other key markets (i.e. workers at factory outlet stores and Warren County Municipal Center) is also low.
- Ridership outside of tourist season tends to be casual riders traveling for specific purposes, i.e., to Warren County Municipal Center or the Annex, rather than people traveling along corridor for daily travel needs (e.g., employees).
- Existing trip times are not timed to support employment.
- Route 19 travels long distance to Gooney Golf with very limited ridership; potential to terminate route at factory outlet stores or continue all trips into Village of Lake George.
- Service schedule allows too much time; drivers sit and wait at Municipal Center Annex so they do not arrive early to inbound destinations.
- Departures from Ridge Street Terminal are not well timed with rest of system. Consequently people traveling between routes must wait 15 – 45 minutes for connections, significantly increasing overall trip times. Extending service schedule to 60 minutes would coordinate service with pulse but would may have idle time at Ridge Street Terminal, which would lower service productivity.

Potential Improvements

- Terminate service at Factory Outlet stores and provide service to Gooney Golf on select trips only. This is already suggested in schedule but was not observed in the field.
- Extend service from Gooney Golf to Lake George Village – service extension may be for all trips or select runs. Drivers feel they have time to drive the extra mile.
- Combine with Route 11; travel along Glen Street, stop outside of Walmart and continue along Route 9 to Exit 20. Increase service level to support employment.
- Eliminate deviation service to Solomon Heights Apartments. This is shown on schedule but apparently not frequently requested.
- Expand Route 19 to create employment runs that link Glens Falls, Lake George Village and Warrensburg.

Seasonal Trolley Routes

Route Description

In addition to the regular route system, GGFT operates on road (rubber-tire) trolley service in Lake George during the summer months from late June through Labor Day. Two routes extend north and south from the Steel Pier on Beach Road in the Village of Lake George for about 20 miles between Bolton Landing and downtown Glens Falls (see Figure 5-54).

- Lake George North – operates along the west shore of Lake George between the Village of Lake George and Bolton Landing via Beach Road, Canada Street (US Rte 9) and Lakeshore Drive (Rte 9N). Most trips (designated “North A”) operate only as far north as the Hearthstone Point State Campground located south of Flatrock Road. Five of 36 total daily round trips continue north to Bolton Landing (designated “North B”).

- Lake George South - operates between the Village of Lake George and downtown Glens Falls via Beach Road, Lake George Road, Upper Glen and Glen Street (US Rte 9). Approximately 60% of 49 daily round trips extend the full distance to Glens Falls. The remaining trips terminate either at the Lake George RV Park on Rte 149 (designated "South RV A") or at the Wild West Ranch near Rte 9 (designated "South RV B").

The seasonal trolley routes operate seven days per week at times and service frequencies that are primarily oriented to visitors' travel schedules and itineraries. Weekday and weekend schedules are the same (see Figure 5-55).

Major stops on North Trolley:

- Bolton Landing
- Town of Bolton
- Diamond Point
- Hearthstone Point State Campground
- Lake George central business district
- Beach Road terminal

Major stops on South Trolley:

- Beach Road terminal
- Best Western Motel
- Wild West Ranch
- The Great Escape
- Factory outlets stores
- Aviation Mall
- Downtown Glens Falls

Figure 5-54 Route Map



Figure 5-55 Lake George Trolley Route Service Statistics

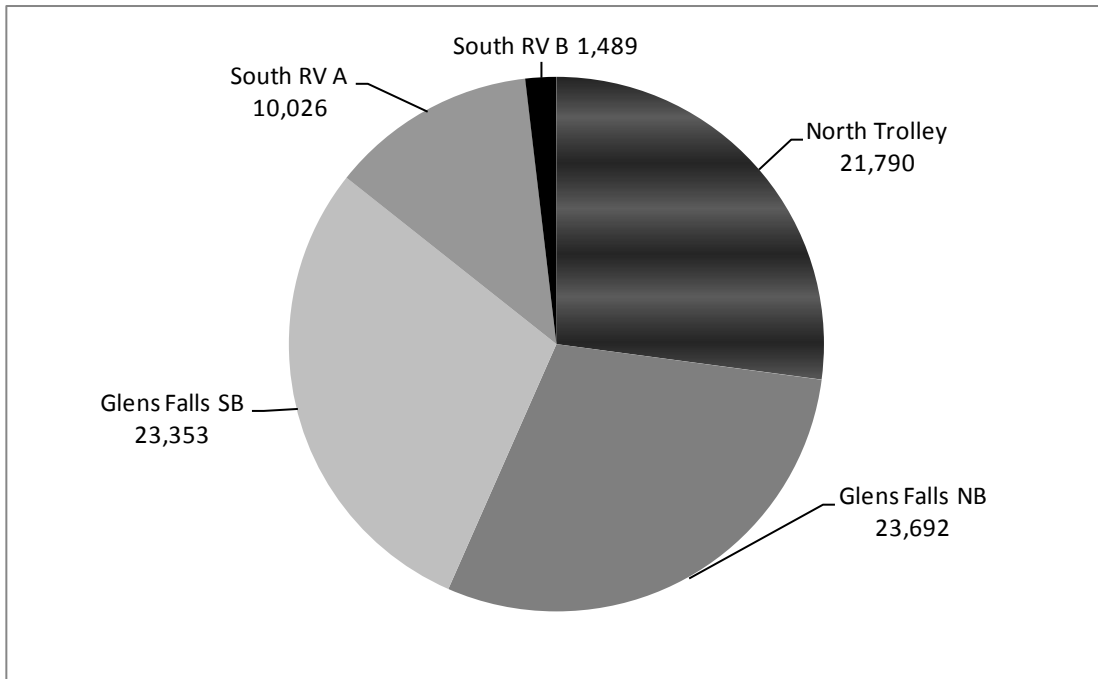
	North A Hearthstone	North B Bolton Landing	South Glens Falls	South RV A LG RV Park	South B Wild West
Span of Service	8:30a – 10:30p	8:30a – 9:30p	8:30a – 11:22p	9:45a – 10:45p	8:24a – 11:22p
Round Trips	31 (36)	5	29	13	9
Frequency (min)	AM– 30; PM-15	AM–180; PM-225	20 - 40	60	Variable 1 -20
Route Length (miles)	3.0	10.5	9.5	6.5	2.3
Travel time (min)	15	30	30	15	4-6

Ridership

The Lake George Trolleys cumulatively carried 82,056 passengers in calendar year 2008, including 80,350 during the Summer 2008 season (Memorial Day through Labor Day); an additional 979 passengers during the week of limited schedule service preceding Memorial Day; and 727 passengers on post-season Saturday service running during the month of September. Average weekday Trolley ridership between Memorial Day and Labor Day (when full schedules are in effect) was 1,340 passengers on weekdays, 1,372 on Saturdays, and 1,174 on Sundays.

South Trolley service between Lake George and downtown Glens Falls accounts for nearly 59% of all trips during the official summer season (see Figure 5-55). Approximately 27% ride the North Trolley; 12% use the South RV-A route serving the Lake George RV Park; and just 2% use the South RV-B route serving Wild West Ranch and the Best Western Motel only.

Figure 5-56 Lake George Trolley Routes: Seasonal Ridership Memorial Day to Labor Day 2008



South Trolley – Lake George / Glens Falls

On weekdays, South Trolley ridership between Lake George and Glens Falls is highest on the first trip of the day in the southbound direction (Figure 5-56), and in the evening hours in the northbound direction (Figure 5-57). The first southbound trip, which departs Lake George at 9:00am averages over 30 passengers per trip; and the first northbound trip departs Glens Falls at 8:30am averages over 20 passengers per trip. Later morning and early afternoon buses carry smaller loads averaging 10-15 passengers per trip in both directions. Ridership picks up beginning around 2:00pm and peaks at 20-25 passengers per trip between 7:00pm and 9:00pm in the northbound direction. The 7:30pm northbound trip carries 34 passengers. Southbound passenger volumes peak in the late afternoon.

Figure 5-57 Lake George/Glens Falls Trolley Weekday Ridership by Time of Day - Southbound

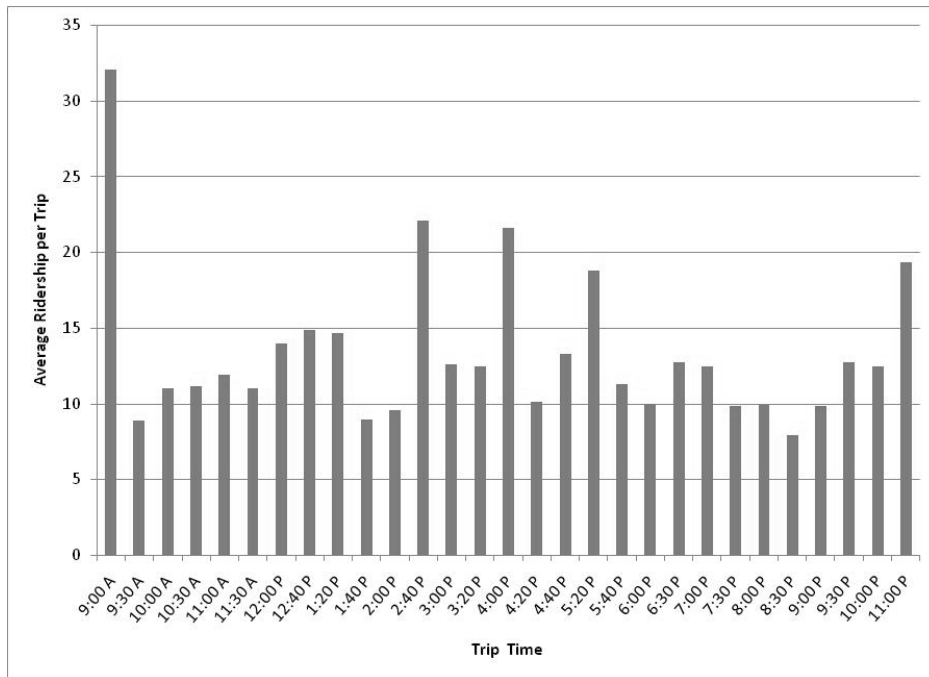
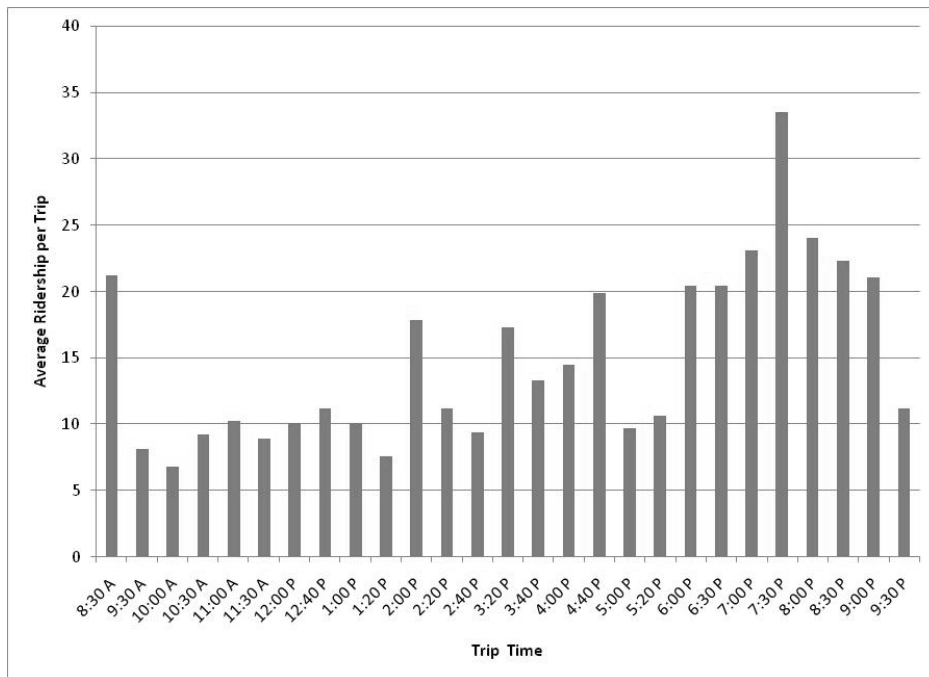


Figure 5-58 Glens Falls – Lake George Trolley Weekday Ridership by Time of Day - Northbound



The pattern is similar on weekends, with the first southbound trip leaving Lake George with nearly 35 passengers both on Saturdays (Figure 5-58) and Sundays (Figure 5-59). In the northbound direction, average loads peak at 20-25 passengers per trip between 8:30pm and 9:30pm.

Figure 5-59 Lake George/Glens Falls Trolley Weekend Ridership by Time of Day – Southbound

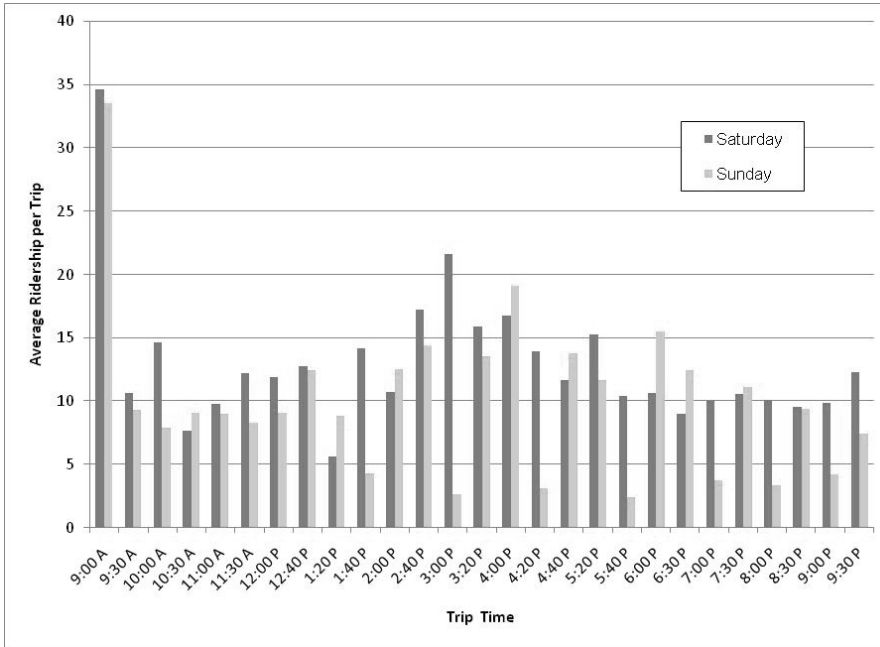
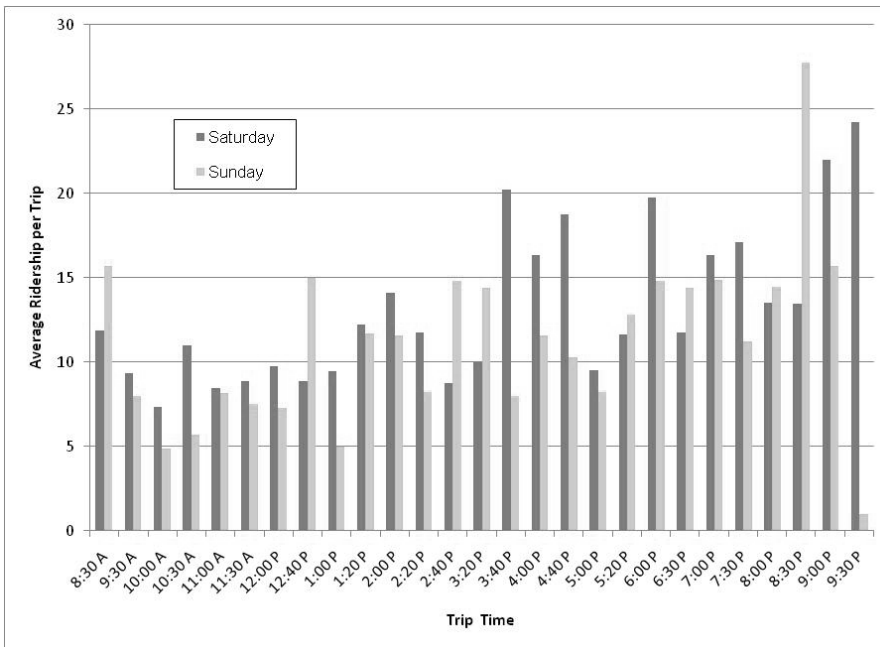


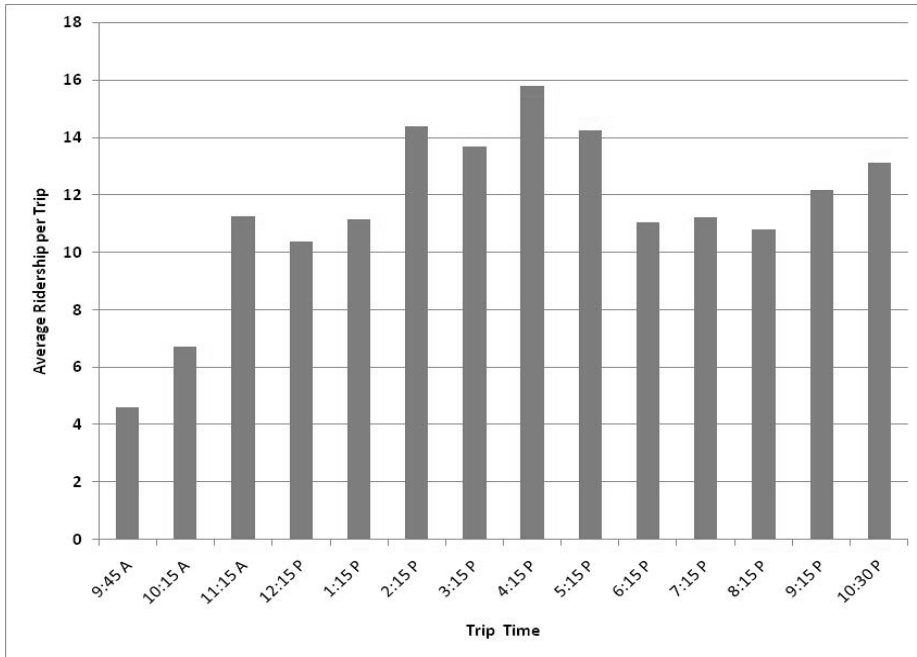
Figure 5-60 Glens Falls / Lake George Trolley Weekend Ridership by Time of Day – Northbound



South Trolley – Lake George / RV Park (RV-A)

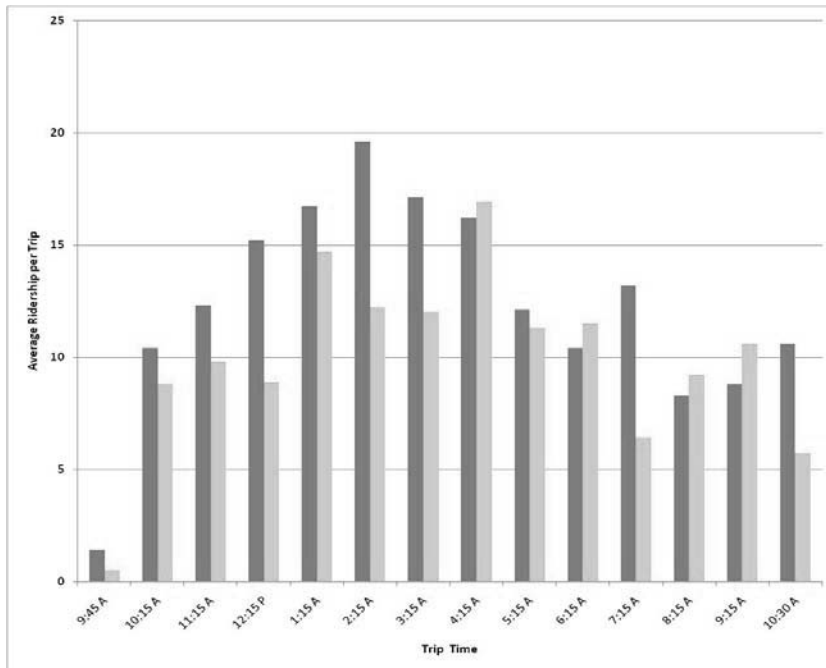
On weekdays, South Trolley RV-A trips serving the Lake George RV Park on Rte. 149 east of Rte. 9 carry fairly consistent passenger volumes across the service day (Figure 5-60). After 11:00am, this route averages 10-15 passengers per round trip and experiences its highest patronage between 2:15pm and 5:15pm.

Figure 5-61 South RV A Trolley Weekday Ridership by Time of Day



The pattern is somewhat similar on weekends, although ridership on the first northbound trip from the RV Park is extremely low and mid to late afternoon trips carry slightly more riders than on weekdays (Figure 5-61).

Figure 5-62 South RV A Trolley Weekend Ridership by Time of Day



South Trolley – Lake George / RV Park (RV-A)

Ridership on South Trolley “RV-B” trips generally is low both on weekdays and weekends. These trips are short, running only as far south as Wild West Ranch, and carry fewer than five passengers per round trip on weekdays (Figure 5-62); up to eight passengers per trip on Saturdays and two to five passengers per trip on Sundays (Figure 5-63).

Figure 5-63 South RV B Trolley Weekday Ridership by Time of Day

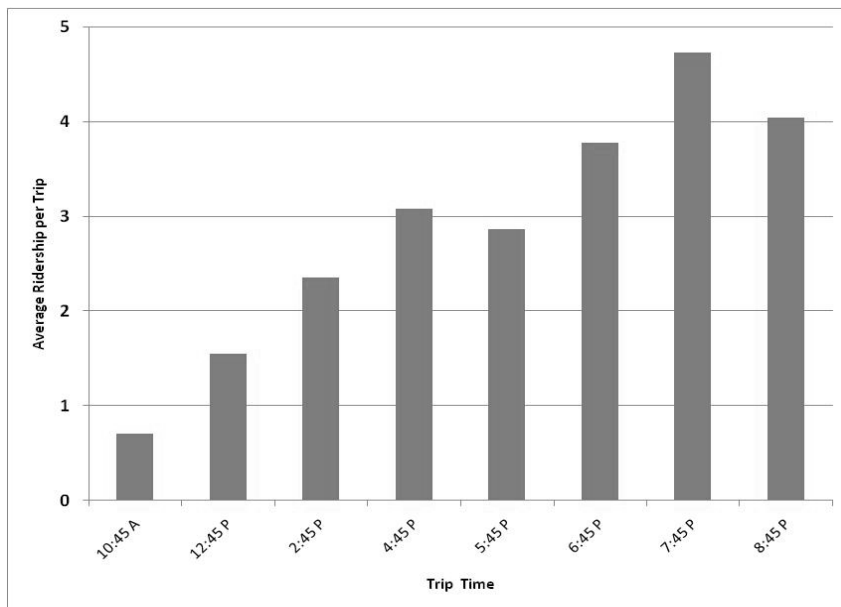
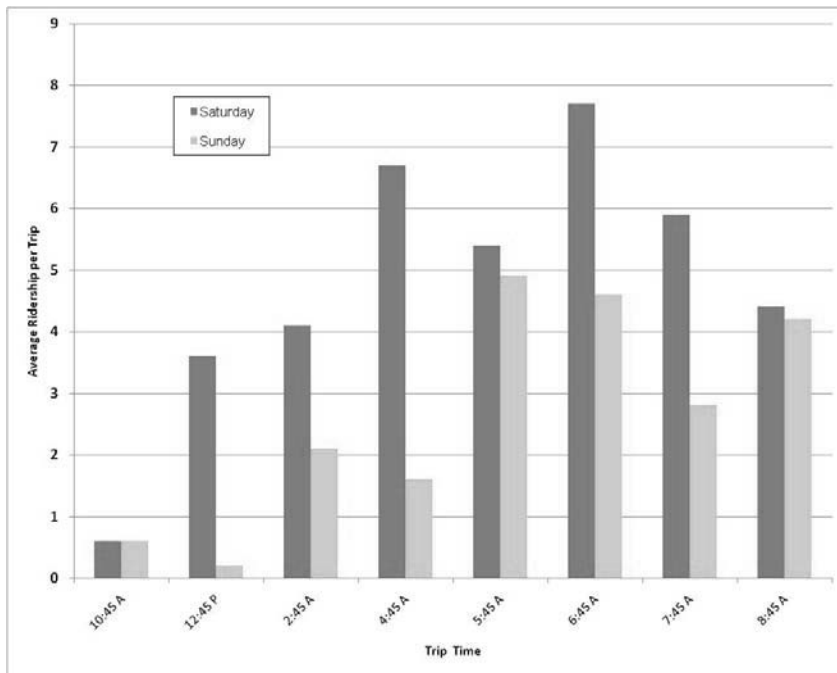


Figure 5-64 South RV B Trolley Weekend Ridership by Time of Day



North Trolley – Lake George / Hearthstone Campground / Bolton Landing

North Trolley ridership is fairly consistent across the service day, generally averaging 6 to 10 passengers on most trips with individual loads spiking up to 19 passengers (Figure 5-64). Weekend passenger loads are about 20% higher on weekends than on weekdays (Figure 5-65).

Figure 5-65 North Lake George Trolley Weekday Ridership by Time of Day

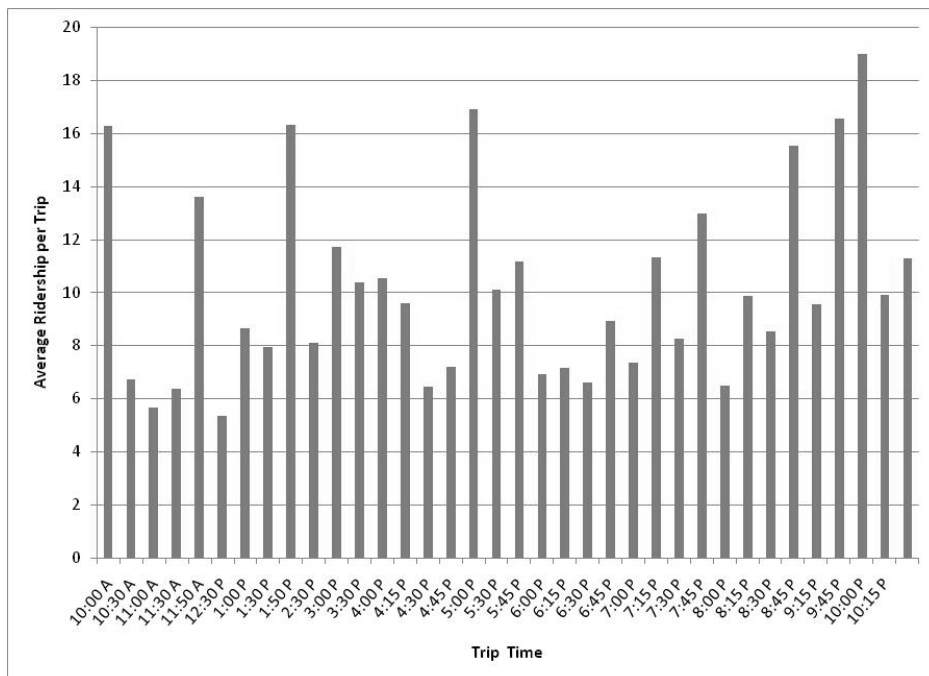
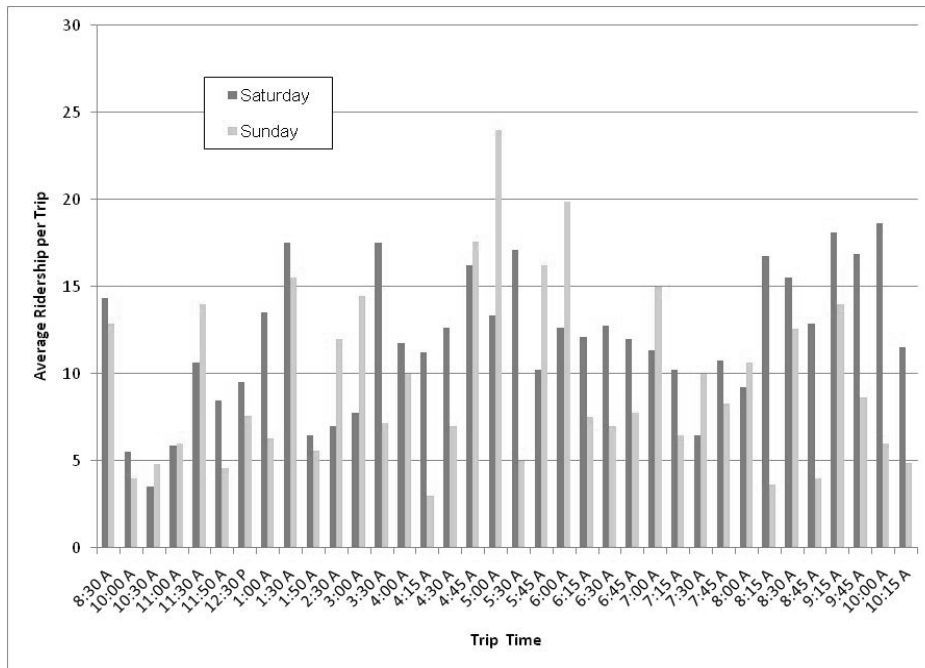


Figure 5-66 North Lake George Trolley Weekend Ridership by Time of Day



Productivity

GGFT Trolley service is very productive relative to the regular fixed route network. For example, cumulative weekday service productivity is 23.6 passengers per revenue vehicle hour (see Figure 5-66), compared to 15.3 passengers per hour on the daytime fixed routes, and 14.4 passengers per hour including evening service. Saturday service productivity is even higher than on weekdays (27.1 passengers per hour); Sunday service productivity is 20.6 passengers per hour.

Figure 5-67 Lake George Trolleys Productivity by Service Day, 2008

	All Trolleys	North Trolley	South Trolley Glens Falls	South RV A LG RV Park	South RV B Wild West
Weekday					
Average Ridership*	1,340	365	791	161	23
Passengers per Revenue Service Hour	23.6	17.8	28.3	23.7	14.4
Passengers per Revenue Service Mile	1.3	1.0	1.5	1.2	0.6
Passengers per One-way Trip	7.4	4.5	14.1	6.0	1.4
Operating Cost per Passenger	\$2.67	\$3.53	\$2.23	\$2.66	\$4.37
Saturday					
Passengers per Revenue Service Hour	27.1	20.9	26.2	25.3	23.8
Passengers per Revenue Service Mile	1.3	1.2	1.4	1.3	0.9
Passengers per One-way Trip	7.6	5.2	13.1	6.4	2.4
Operating Cost per Passenger	\$2.61	\$3.01	\$2.40	\$2.49	\$2.65
Sunday					
Average Ridership*	1,174	428	586	139	21
Passengers per Revenue Service Hour	20.6	20.9	20.9	20.4	13.1
Passengers per Revenue Service Mile	1.1	1.2	1.1	1.1	0.5
Passengers per One-way Trip	6.5	5.2	10.5	5.1	1.3
Operating Cost per Passenger	\$3.05	\$3.01	\$3.00	\$3.08	\$4.79

Note *: Data reflects Memorial Day through Labor Day only

Among individual routes, South Trolley trips running between Lake George and Glens Falls are the most productive. On weekdays, these trips average 28.3 passengers per hour and cost \$2.23 per passenger, which is 25% lower than most cost effective regular fixed route (Route 4 at \$2.97 per passenger). South Trolley RV A trips serving the Lake George RV Park similarly are more productive than Route 4 as well as above the average of the Trolleys as a group. The North Trolley is more productive on weekends (20.9 passengers per hour) than on weekdays (17.8 passengers per hour). South Trolley RV B trips are significantly less productive on weekdays and Sundays than on Saturdays. On a cost per passenger basis, these trips are the least productive at \$4.37 per passenger on weekdays and \$4.79 per passenger on Sundays. The average cost per passenger for the Trolleys as a group ranges from \$2.61 per passenger on Saturday to \$2.65 on weekdays and \$3.05 on Sundays. In contrast, the average cost per passenger on the regular fixed route system is \$4.37 on weekdays and \$4.35 on Saturdays.

Strengths and Weaknesses

Strengths

- The Trolleys carry substantially more riders per day than the regular fixed route system, and operate at significantly higher productivity.
- The Trolley routes are consistently utilized on weekdays and weekends. Passenger volumes do not vary greatly from weekdays to weekends, and total ridership actually is slightly greater on Saturdays than on weekdays. This suggests that the trolley service is effectively addressing the visitors' local travel needs as intended.

Weaknesses

- South RV-B Trolley trips generate low ridership and are significantly less productive than the other trolley routes. The route is short and it is difficult to maintain even spacing between longer trips serving the Lake George RV Park or Glens Falls.
- At least in the case of South Trolley service between Lake George and Glens Falls on Saturday and Sunday, the lack of morning service before 8:30am may pose some inconvenience for riders. The first morning trip in both directions generates average loads of 30-35 passengers both on Saturdays and Sundays.
- Trolley service overlaps portions of Routes 11, 12 and 19.

Potential Improvements

- Discontinue South Trolley RV-B trips and reschedule South Trolley service.
- Begin South Trolley service between Lake George and Glens Falls one hour earlier on weekdays and weekends.
- Consider route and schedule coordination opportunities involving the South Trolley and regular GGFT routes operating in the Rte. 9 corridor.

Freedom and Mobility Express (FAME)

Service Description

GGFT offers complementary paratransit service to individuals unable to use the fixed-route service. This service is branded as Freedom and Mobility Express (FAME). FAME is available for travel within $\frac{3}{4}$ mile of GGFT's fixed-route services and all passenger pick-ups and drop-offs must be within this area. The service is available during the fixed-route operating hours and based on the route schedule. While GGFT's overall operating hours are Monday through Friday 6:00 am to 9:30 pm and on Saturdays from 8:00 am to 9:30 pm, not all parts of the service area are served during these times. For example, if the last scheduled fixed-route bus to an area is at 3:15 pm, FAME cannot schedule a drop-off in that area later than 3:15 pm.

All trips on FAME must be scheduled in advance. Passengers wishing to schedule a trip must call at least 24 hours and up to 14 days in advance of a desired travel date. All information about the trip must be recorded as part of the reservation process; drivers are not allowed to change the schedule.

Fares for FAME trips are \$2.00 per one-way trip, double the fare on the fixed-route system. For trips that would require a transfer on the fixed-route system, an additional \$0.50 is charged. Likewise, additional fares are charged for each destination, therefore, if a passenger requests to travel to the store and the doctor's office, their fare would be \$3.00, assuming no transfers would have been required on the fixed-route. GGFT will allow a personal care attendant (PCA) to travel with a rider free of charge. Non-FAME eligible travel companions are also allowed to use FAME on a space available basis, if they have same pick-up and drop-off locations. Travel companions must also pay the same fare as the FAME eligible rider.

Service Overview

The focus of the TDP was on fixed-route services, therefore, FAME service statistics and cost data were not analyzed. Instead, our analysis of the service concentrated on examining trip origins and destinations. Consistent with the service design, FAME travel patterns are clustered around existing fixed-route services. As shown in Figure 5-67, most trips origins are clustered on the eastern and western borders of Glens Falls and destinations are primarily clustered at the hospital and along Bay Road. Smaller clusters of trips are scattered around the service area, although there are few generated to/from Fort Edward and Hudson Falls.

Strengths and Weaknesses

Strengths

- FAME service meets ADA requirements and provides complementary paratransit service to passengers who need it.
- Service is concentrated around downtown Glens Falls, helping GGFT to operate an efficient and effective service.
- Rules about using the service are clearly laid out and accessible to members of the public.
- No complaints about the FAME service were voiced during the public outreach process. This includes stakeholders, transit riders, survey respondents and bus drivers.

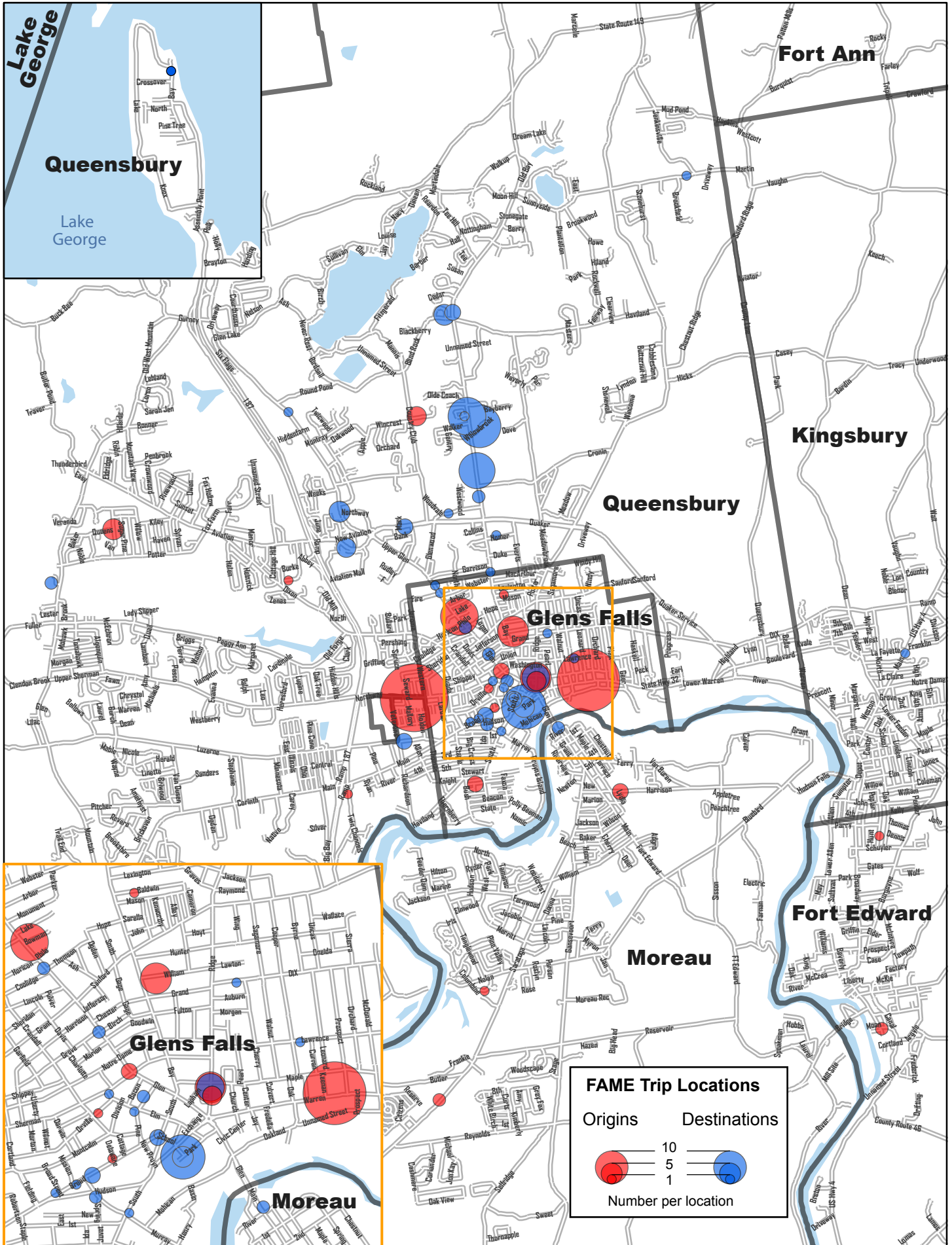
Weaknesses

- None

Potential Improvements

- Explore possibilities to coordinate FAME with other human service transportation, such as the Transit Connection, to help improve service capacity and efficiency.

Figure 5-68 FAME Paratransit Origin and Destination Locations



Chapter 6. Service Improvement Options

Overview

The primary purpose of preparing a transit development plan is to identify a series of short term (3-5 year) improvement options. The data and analysis presented in the previous chapters documents our evaluation of the existing system as well as comments and suggestions raised by stakeholders, riders and non-riders. This next chapter outlines the process used to develop service improvement options. It begins with service improvement concepts developed by the consulting team in conjunction with GGFT and A/GFTC staff. Subsequent sections document the process whereby these initial service concepts are modified and developed into a series of final recommendations. The development process included discussions between the project team, input from the public and review by GGFT staff as well as more detailed technical analysis.

Service Improvement Concepts

Building on the survey results and route analyses, members of the Nelson\Nygaard team conducted additional field work so that we could re-examine GGFT service while discussing travel patterns and observing land uses. Through this process we identified potential service improvement concepts that are based in transit design principles and are intended to create a system that is easy to understand, easy to use and encourages ridership. The initial service concepts are the basis upon which we developed and redefined proposals for service improvements. The concepts for service improvements are presented here, followed by recommendations as they apply to GGFT.

- *Eliminate unproductive routes and route segments* – Within the GGFT network, there are some routes that, with the exception of one or two trips, carry only a few passengers and demonstrate poor productivity overall. Parts of other routes travel through low density areas with few or no attractions and thus have very low passenger boardings. Our goal is to eliminate these unproductive routes and segments and divert resources to more productive parts of the system.
- *Strengthen the trunk and feeder system* – GGFT service is currently structured around a pulse system and a loosely organized trunk and feeder network. The two trunk routes, Routes 11/12 and 4, operate along the service area's main corridors, serve a multitude of activity centers (employment, social services, shopping) and are the system's most productive routes. The remaining routes (Routes 2, 3, 5, 6, 7 and 19) are primarily feeder routes and bring people from residential areas into activity centers. These routes typically carry fewer riders but are essential to the system because they provide access from outlying areas to the region's service areas. Our initial analysis suggests that the structure of the trunk and feeder routes could be strengthened to carry more riders.
- *Smooth out service schedules so trips are evenly spaced throughout the day* – As discussed, most of GGFT's routes adhere to a pulse system, and therefore, depart from the Ridge Street Terminal at the half hour and top of the hour, making departure times easy to remember. Many routes, however, have awkward schedules whereby trips are not evenly spaced throughout the day and/or have large gaps between trips. Irregular schedule spacing make it difficult for passengers to easily remember when service is available and makes the service more challenging to use. One of our objectives, therefore, is to even out schedules and schedule all services according to a system that is easy to understand and to remember.

- *Eliminate competition between routes* – GGFT is a fairly small system that serves a compact area. The pulse system design requires that services converge at a common point; in Glens Falls this is the Ridge Street Terminal. Consequently, some of the routes overlap as they enter and exit from Ridge Street and around the roundabout at the center of town. Our analysis, however, suggests there is additional overlap in other areas such that routes inadvertently compete for the same passengers. While some key destinations may be served by more than one route to improve service frequency or alleviate capacity problems, competition among routes at small destinations and low density segments should be avoided.
- *Straighten route alignments to close loops and create more direct alignments* – It is very common for rural and small urban systems to design transit routes as one-way, single direction loops. This approach increases geographic coverage and maximizes the number of people in the service area who live within walking distance to a route. On the downside, however, loop service significantly increases travel time for the passenger. Loops are also difficult to understand because they often mean passengers get on and off the bus at different locations. Where possible, therefore, we will look for opportunities to close loops and encourage two-way, bi-directional alignments.
- *Alleviate schedule pressure on select services* - GGFT's current system design is based on a pulse system with a high level of service along its most important service corridor (Glen Street to Upper Glen Street) served by Route 11/12. This is an effective approach that brings people in from residential areas and allows them to easily connect to service along the Glen Street corridor. A key challenge in the system, however, is that during some times of the day, drivers are challenged to complete their trip on Route 11/12 within the 30 minutes allocated. This means that some trips are late into Ridge Street Terminal, creating problems for the pulse system and putting pressure on drivers. There are a variety of ways to alleviate schedule pressure, each of which has advantages and disadvantages. Options include shortening the route, increasing the scheduled travel time, and interlining service.
- *Create opportunities for one-seat rides between key origins and destinations* – All travelers, including transit riders, prefer fast, direct trips. By creating a pulse system, GGFT has traded-off direct service by offering a timed transfer. This is an effective strategy for a small system and successfully increases travel options. It is possible, however, to create some direct trips by interlining key routes between the largest origins and destinations. Interlining routes will create one-seat rides for some riders and, although passengers will continue to stop at the Ridge Street Terminal, they are guaranteed to meet their connection and will not have to get off one bus and onto another.
- *Improve service along key corridors* – As discussed, within GGFT's pulse system, Route 11/12 is designated as a "trunk corridor" that operates with higher frequency and a longer span of service on both weekdays and weekend days. This is one of GGFT's most successful and well used services in the system. Based on passenger volumes, survey input and our review of the existing services, we recommend expanding the trunk service concept to create a second higher frequency travel corridor to Hudson Falls and Fort Edward. Similar with the Glen Street/Upper Glen Street corridor, there are several key destinations and high density housing along the corridor. In addition, existing ridership data suggests this corridor could support increased service.
- *Create links between key regional service centers* – When asked about their preference for service expansions, passengers consistently recommended expanding service to provide regional connections, primarily to Saratoga and Lake George but also to

Warrensburg. Existing GGFT service does connect to the early morning Northway Express (NX 12) trip, operated by the Capital District Transit Authority (CDTA). In addition, after seasonal trolley services end, there are no transit services to Lake George Village. Service improvements, therefore, look for opportunities to support and increase regional travel.

- *Improve information systems* – Information about GGFT’s service is readily available through schedules, information posted at the Ridge Street Terminal and on the system’s web-site. In general, however, the information systems is geared towards people already using the service, rather than attracting new riders. The information contained in the schedules, system maps and web-site as well as the format and presentation of the information could be improved so that it is more attractive, more interesting and easier to understand.
- *Develop new service marketing and branding image* – GGFT’s branding overall, including its logo, name and bus paint schemes could be updated to make the system more user-friendly and attractive to riders. Cut-away vehicles which currently serve several routes are indistinguishable from Transit Connections vehicles, the local operator that exclusively serves individuals with disabilities. Ideas for improving the service, therefore, include ideas to increase service visibility, improve information systems and enhance the system’s image. This may involve developing an appealing color scheme and logo that reflects GGFT’s role in the community, potentially capitalizing on the environmental benefit provided by the service (and people using the service). This color scheme could be implemented by on agency vehicles, passenger information systems, on-street signage and agency web materials.

Service Improvement Options

Building on these concepts, the Nelson\Nygaard team identified a series of service improvement options, which were presented to and discussed with members of GGFT and A/GFTC staff. As we discussed the ideas, GGFT and A/GFTC staff offered local insights and made suggestions to several of the ideas proposed. Through this process, the combined team prepared a series of preliminary service improvement options. Nelson\Nygaard documented these recommendations into a series of potential service improvements that were deemed appropriate for discussion with members of the general public. This information does not include improvement options for service information and marketing materials. These options were carried forward but were not included in the options discussed with members of the public. The following text highlights the service improvement options. Materials presented to members of the general public and their comments are documented in the following section of this chapter.

- Eliminate neighborhood collector service Routes 3 and 6, but combine key segments of these routes with other routes, specifically incorporating segments of an eliminated Route 6 into a re-aligned Route 7 (or new route) and incorporating segments of an eliminated Route 3 into Route 4.
- Create new “back door” route to serve John Burke Apartments and Aviation Mall. This route would be designed to pick up key segments of the existing Route 6 by traveling through west Glens Falls to the John Burke Apartments and Aviation Mall. Under this proposal, Route 11/12 would no longer serve the John Burke Apartments, helping to alleviate schedule pressure.
- Create system of long and short services in Route 5 and Route 7. Both Route 5 and Route 7 have inner segments that serve destinations, such as Glens Falls Hospital and

South Glens Falls Village as well as several dense neighborhoods. The outer segments of the routes, however, travel through areas with significantly lower housing density and fewer services and amenities. As a result, the outer segments attract few riders. One service improvement option, therefore, would be to create a series of short and long trips that alternate between serving the close in neighborhoods and attractions and the more rural areas. This design would ensure areas with more population and amenities would receive more service, while the outer areas would continue to be served with fewer trips.

- Increase service along Route 4 corridor to half-hourly service and provide service to the new Walmart store scheduled to open in the Town of Queensbury along Route 254. The existing Route 4 is one of GGFT's most successful routes and can support an increased frequency, especially because the existing route operates along two alignments. Increasing service to half-hourly departures creates hourly service on the alternate alignments. In addition, the new Walmart store will generate demand from residents in east Glens Falls, Hudson Falls and Fort Edward.
- Interline Route 4 and Route 11/12 to create single trunk corridor between Fort Edward and Exit 19 area via downtown Glens Falls. By interlining Routes 4 and 11/12, GGFT would create a transit "spine" with consistent, reliable service along the most productive corridor in the system. Offering a one-seat ride benefits passengers by eliminating concerns about missed connections. It also makes the service easy to understand and convenient to use.
- Add mid-day trip on Route 2 and extend route to serve Glens Falls Hospital. Route 2 operates on Bay Road, which is a good corridor for transit service with several higher density housing units, medical offices and the Adirondack Community College. This idea would include adding a mid-day trip on Route 2 to eliminate the existing gap in service. There is also potential to extend the route to offer two-way service to Glens Falls Hospital, providing a direct connection between senior housing and medical offices.
- Add peak period trip on Route 19, serve Warren County Municipal Center on inbound and outbound trip, and extend route to Lake George Village. The study team suggests adding a morning trip to support employment trips to the factory outlet stores. Our proposal also includes extending the route to Lake George Village when the trolleys are not operating. In addition, because the Warren County Annex Building, located on the west side of I-87 will close in the fall of this year, Route 19 will have time to stop in front of the Warren County Municipal Center on both the inbound and outbound trips. Combined these improvements will increase route attractiveness and help attract additional passengers.
- Create "super corridor" along Route 9 with high frequent service to Exit 19 and extended service year round to the factory outlet stores and Lake George Village. This proposal would call for moving the existing GGFT Route 19 to Glen Street and staggering routes so that every third trip traveled along Glen Street to Lake George Village. A high level of service along this corridor means passengers could use all three services to get to destinations between the Ridge Street Terminal and Exit 19 area.

Public Review of Service Improvement Options

As discussed, the next step associated with developing recommended service improvements involved vetting the potential ideas with existing transit riders and members of the general public. These comments and views were incorporated into the final system recommendations which are presented in the subsequent chapter.

For this stage of public input, GGFT, A/GFTC and Nelson\Nygaard held a public meeting on Monday March 9 at the Crandall Public Library, located a short walk from the Ridge Street Terminal in downtown Glens Falls. The meeting was structured as a workshop format and attendees were encouraged to drop by to the meeting as their schedule permitted. Visual aids included maps showing existing GGFT service and the possible service changes (see Figures 6-1 and 6-2). When members of the public came to the meeting, staff explained the potential changes, asked for their feedback and gave them an opportunity to draw new routes, ask questions and make comments. Individuals who had specific comments were encouraged to write them down. The open house was staffed from 2:00 pm until 6:00 pm. In total, approximately 20 people stopped by during the four-hour period.

In addition to meeting with members of the public at the library, Nelson\Nygaard staff also brought the maps to the Ridge Street terminal and discussed potential service changes with riders as they waited for the bus. Staff was available at this location for about an hour between 12:00 pm and 1:00 pm. Results from this outreach effort mirrored those received at the Crandall Library.

In general, people were amenable to the possible service changes. Hudson Falls residents were excited about increased service, especially people who need to travel on Boulevard or Dix as service to these locations is currently only available once every two hours. There was also specific support for increasing service on Route 2 along Bay Road and adding mid-day service on the South Glens Falls route (Route 5). At least one participant also expressed her frustration with trying to read and understand the existing bus schedules. There were, however, exceptions to the proposal, including:

- Need for service on both Main and Saratoga Streets in South Glens Falls Village
- Need to keep Route 3 operating through neighborhoods, especially to Hartford and Sagamore Streets.

Meeting attendees and people interviewed at Ridge Street Terminal also voiced several of their own ideas for service improvements. These recommendations primarily centered around providing service on Sundays, operating more evening service, and increasing service to Walmart.

Figure 6-1 GGFT Conceptual Service Improvements

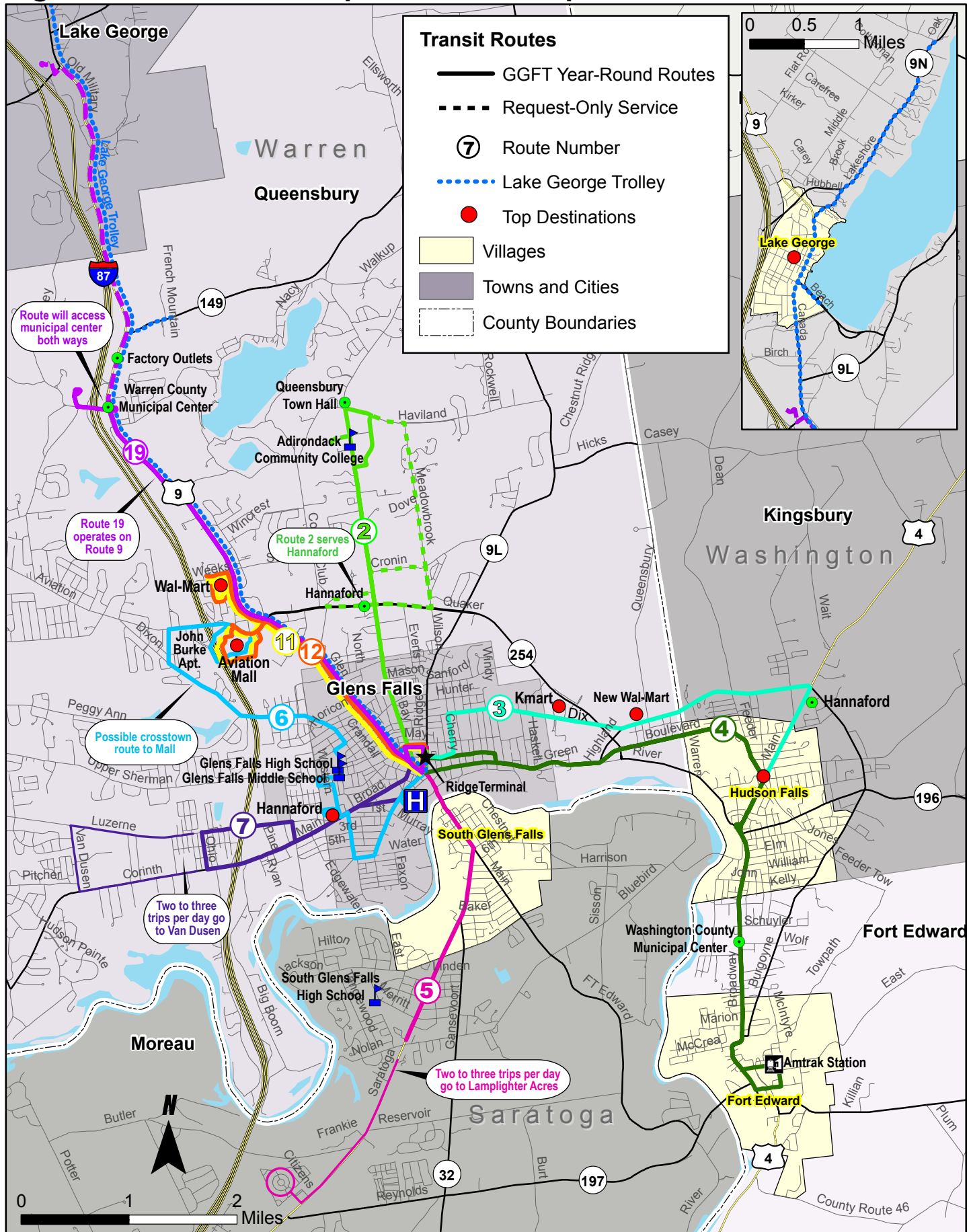


Figure 6-2 Possible Improvements to Routes 3 and 6

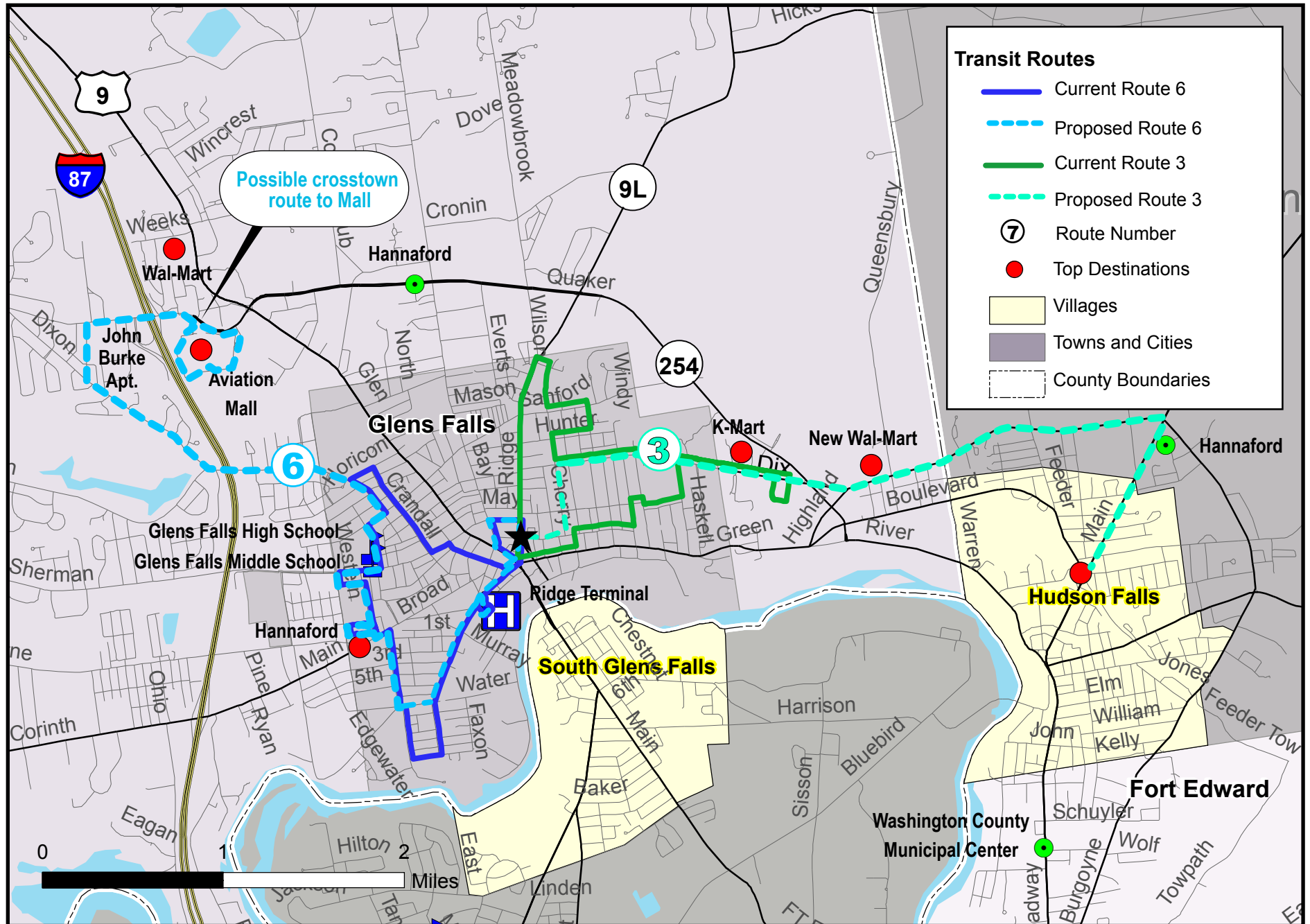


Figure 6-3 Greater Glens Falls Transit – DRAFT of Possible Ideas for Service Improvements

These are potential ideas that are for comment only

Route	Description of Existing Service	Possible Changes to Service
Route 2 Bay-College	Service along Bay Street to Bay Road to Queensbury Major stops: <ul style="list-style-type: none"> • Adirondack Community College • the Cedars (assisted living) • Queensbury Town Hall and Queensbury Senior Center Will travel off-route on request to Meadowbrook 7 trips a day on weekdays with 2-hour break in middle of day	Add mid-day trip to provide hourly service all day Re-route to link with Glens Falls Hospital <ul style="list-style-type: none"> • Create direct link between doctor offices, senior housing and hospital
Route 3 East Loop	Neighborhood service in eastern Glens Falls Major stops <ul style="list-style-type: none"> • Jackson Heights and Abraham Wing Schools • Kmart • Price Chopper • Stichman Towers Hourly service (10 trips on weekdays)	When new Walmart opens: <ul style="list-style-type: none"> • Re-route along Dix Avenue to Main Street • Connect into Village of Hudson Falls • Eliminate portions of Glens Falls neighborhood service • Coordinate with Route 4 Maintain as hourly service
Route 4 Hudson Falls-Fort Edward	Service from Glens Falls to Hudson Falls and Fort Edward Bus has two travel routes <ul style="list-style-type: none"> • along Dix Avenue • along Boulevard Avenue Hourly service (13 trips) on weekdays; 7 trips on Saturday	When Walmart opens, coordinate Routes 4 and 3 so that <ul style="list-style-type: none"> • Re-aligned Route 3 serves Dix Avenue to Hudson Falls • Route 4 travels along Boulevard Avenue to Hudson Falls and Fort Edward Coordinate Routes 3 and 4 so Hudson Falls has half-hour service

Route	Description of Existing Service	Possible Changes to Service
Route 5 Moreau-South Glens Falls	Service from Glens Falls to South Glens Falls and Moreau Route has two loops through Village of South Glens and to South Glens Falls High School Select routes travel to Lamplighter on request Roughly hourly service (9 trips) on weekday with 2-hour in middle of day; 5 trips on Saturday	Make service more direct and travel out and back on Saratoga Avenue. Create short and long trips <ul style="list-style-type: none"> • Most trips travel to Midtown Plaza only • One morning and afternoon long trips travel to Lamplighter Coordinate some trips with Route 11/12 so that passengers boarding Route 5 can travel to Walmart and Aviation Mall without getting off bus at Ridge St Terminal
Route 6 West Loop	Neighborhood service to western Glens Falls Major stops <ul style="list-style-type: none"> • Glens Falls Hospital • Hannaford • Glens Falls Middle and High school • Irongate Center Hourly service (10 trips) on weekdays	Create new cross-town service: <ul style="list-style-type: none"> • Continue to serve Glens Falls Hospital, Hannaford and schools • Travel on Dixon Road to John Burke Apartments and Aviation Mall • Eliminate portions of Glens Falls neighborhood service Maintain as hourly service
Route 7 West Glens Falls	Service from Glens Falls to West Glens Falls Route has big loop traveling out on Main/Corinth Road to Van Dusen and back on Luzerne Street Service every 90 minutes or two hours for 6 weekday trips; 3 trips on Saturdays	Create short and long trips <ul style="list-style-type: none"> • operate most trips as short trips, turning on Ohio Street • operate 2-3 trips per day as “long trips” that turn on Van Dusen Street Coordinate some trips with Route 11/12 so that passengers boarding Route 7 can travel to Walmart and Aviation Mall without getting off bus at Ridge Street
Route 11/12 Glen-Aviation Mall	Service from Glens Falls along Upper Glen Street Major stops: Aviation Mall, Walmart, John Burke Apartments and Shopping plazas along Upper Glen Street Half-hourly service throughout the day with 22 weekday trips	Coordinate with new Route 6 <ul style="list-style-type: none"> • All trips travel to Walmart and Aviation Mall • John Burke Apartments served by new Route 6 Changes will make it easier for Route 11/12 to keep schedule

Route	Description of Existing Service	Possible Changes to Service
Route 19 Rt. 9 County Center	Service from Glens Falls to Gooney Golf on Route 9 outside of Lake George Village Major stops: <ul style="list-style-type: none"> • Warren County Municipal Center • Warren County Municipal Center Annex • Lake George Factory Outlet Stores Five trips per day between 9:15 am and 4:25 pm	Warren County Municipal Center Annex is scheduled to close in 2008. When Annex closes: <ul style="list-style-type: none"> • Stop in at Warren County Municipal Center on outbound and inbound leg • Extend service to Lake George Village (when trolleys are not running) • Add two trips per day to streamline schedule

Analysis of Service Improvement Options

After the public reviewed the potential service improvements, Nelson\Nygaard was charged to create scenarios that included both increased and reduced funding levels. Our base case service proposals, however, needed to be achievable within existing resources. This critical last step in the design of recommended improvements meant not only incorporating input from the public review process but also considering the service improvements from a detailed cost perspective and determining if the proposals could be implemented within GGFT’s existing resources. As part of our analysis, therefore, Nelson\Nygaard prepared a series of draft service schedules to examine the impact of individual proposals within GGFT’s existing service hours and capital equipment.

This process served to narrow down the proposals to a handful of options, in particular, the following service options were either eliminated or altered. A summary of the initial proposals and final recommendations is shown in Figure 6-4. The main changes from the original service options under consideration include:

- The concept of creating short and long trips on Routes 5 and 7 was dropped not only in response to the public reaction but also because constraints associated with the pulse operating system make it difficult to redeploy vehicle service hours.
- The ‘back door’ route to John Burke Apartments was not carried forward. Upon closer evaluation, the service would offer only limited value to riders and thus was determined not to be the most effective use of system resources.
- Existing schedules make it challenging to consistently interline routes. In particular, because service levels are not even, it is challenging to interline most services with Route 11/12.

A full analysis of the final recommendations is documented in Chapter 7.

Figure 6-4 Initial and Final Proposals for Service Improvements

	Initial Proposal	Final Recommendation
Route 2 Bay-College	Add mid-day trip to provide hourly service all day Re-route to link with Glens Falls Hospital <ul style="list-style-type: none"> • Create direct link between doctor offices, senior housing and hospital 	Add mid-day trip Eliminate proposal for direct link to Glens Falls Hospital – required routing would be too time consuming
Route 3 East Loop	When new Walmart opens: <ul style="list-style-type: none"> • Re-route along Dix Avenue to Main Street • Connect into Village of Hudson Falls • Eliminate portions of Glens Falls neighborhood service • Coordinate with Route 4 Maintain as hourly service	Same as proposed

GREATER GLENS FALLS TRANSIT

	Initial Proposal	Final Recommendation
Route 4 Hudson Falls-Fort Edward	<p>When Walmart opens, coordinate Routes 4 and 3 so that</p> <ul style="list-style-type: none"> Re-aligned Route 3 serves Dix Avenue to Hudson Falls Route 4 travels along Boulevard Avenue to Hudson Falls and Fort Edward <p>Coordinate Routes 3 and 4 so Hudson Falls has half-hour service</p>	<p>Create new Route 4:</p> <ul style="list-style-type: none"> Half-hourly departures from Ridge Street Terminal All service travels to Fort Edward and Hudson Falls Provide hourly service on each alignment (Boulevard and Dix)
Route 5 Moreau-South Glens Falls	<p>Make service more direct and travel out and back on Saratoga Avenue. Create short and long trips</p> <ul style="list-style-type: none"> Most trips travel to Midtown Plaza only One morning and afternoon long trips travel to Lamplighter <p>Coordinate some trips with Route 11/12 so that passengers boarding Route 5 can travel to Walmart and Aviation Mall without getting off bus at Ridge St Terminal</p>	<p>All trips operate full length of existing route. Select trips will be scheduled to Lamplighter. Coordinate last Route 5 trip to meet NX commuter service.</p>
Route 6 West Loop	<p>Create new cross-town service:</p> <ul style="list-style-type: none"> Continue to serve Glens Falls Hospital, Hannafords and schools Travel on Dixon Road to John Burke Apartments and Aviation Mall Eliminate portions of Glens Falls neighborhood service <p>Maintain as hourly service</p>	<p>Proposal for new cross-town service is dropped.</p> <p>Additional analysis suggests low ridership. Resources needed to support other higher need options.</p>
Route 7 West Glens Falls	<p>Create short and long trips</p> <ul style="list-style-type: none"> operate most trips as short trips, turning on Ohio Street operate 2-3 trips per day as “long trips” that turn on Van Dusen Street <p>Coordinate some trips with Route 11/12 so that passengers boarding Route 7 can travel to Walmart and Aviation Mall without getting off bus at Ridge Street</p>	<p>All trips operate full length of existing route. Operate in reverse direction. Use Route 7 to continue service to some of Route 6’s most important destinations, including the Glens Falls Hospital and the Broad Street Hannafords.</p>
Route 11/12 Glen-Aviation Mall	<p>Coordinate with new Route 6</p> <ul style="list-style-type: none"> All trips travel to Walmart and Aviation Mall John Burke Apartments served by new Route 6 <p>Changes will make it easier for Route 11/12 to keep schedule</p>	<p>No changes proposed to Route 11/12.</p>

	Initial Proposal	Final Recommendation
Route 19 Rt. 9 County Center	<p>Warren County Municipal Center Annex is scheduled to close in 2009. When Annex closes:</p> <ul style="list-style-type: none"> • Stop in at Warren County Municipal Center on outbound and inbound leg • Extend service to Lake George Village (when trolleys are not running) • Add two trips per day to streamline schedule 	<p>Service to Lake George Village is recommended as is service into Warren County Municipal Center on inbound and outbound trip.</p> <p>Route 19 continues to operate on Bay Road south of Quaker Road.</p> <p>Additional service limited to a one or two trips.</p>

Chapter 7. Recommendations and Implementation

Overview

As discussed, the objective of the TDP was to develop a five-year plan for service and system improvements. Specifically, the goals of the project were to:

- Improve the viability and utility of public transit as a mode of transportation choice in the greater Glens Falls area.
- Review current transit service structure and recommend updates to reflect current demand and development patterns.
- Develop recommendations to optimize the productivity of available transit resources in the near, intermediate, and long term time horizons and under different levels of funding availability.

The following section documents Nelson\Nygaard's proposed recommendation and a phased implementation plan.

Recommended System Objectives

In addition to identifying specific project recommendations, Nelson\Nygaard, working in conjunction with GGFT and A/GFTC staff, identified a series of system objectives, or service standards to support future development of transit services. These system objectives are guidelines that can shape implementation of projects recommended as part of this TDP as well as future opportunities. The guidelines include standards that may be achieved over time; however, at all times before adding service, GGFT should review ridership and allocate additional service based on demand and ridership patterns.

Recommendations are based on strengthening the organization of GGFT services into trunk and feeder routes and where possible simplifying service. Trunk routes will serve primary corridors in the Glens Falls service area and provide access to the region's largest destinations. These routes will have higher service levels (higher frequencies and longer spans of service) and carry the most riders. Feeder routes, in turn, will serve primarily residential areas and provide access to the trunk routes. They will have lower service levels and carry fewer riders as compared with trunk routes.

- Trunk routes should be designed to transport passengers along the service area's most developed corridors and to/from the region's most important destinations.
 - Trunk routes will have a higher level of service and longer span of service and be located along the systems strongest transit corridors.
 - Weekday service levels for trunk routes should be, at a minimum, 30 minute peak/60 minute off-peak (during the mid-day) service level. Ideally service levels will be 30 minutes throughout the day. Service levels should be consistent throughout the day with even spacing of trips.
 - Evening and Saturday service levels may be lower as compared to weekdays, but should be based on a 30 minute peak/60 minute off-peak schedule, also adding

service to create a 30 minute schedule through the day. Schedules should be based on easily understandable, evenly spaced trips.

- Route 11/12 is designed as a trunk route. Currently, it is the only trunk route in GGFT's system.
- Collector/distributor routes should be designed to transport people from primarily residential areas and areas with a lower density of services, employment and activity centers.
 - Collector distributor routes will have a lower level and span of service as compared with trunk routes.
 - Fully implemented collector/distributor routes will provide a minimum level of service of hourly service during the peak periods and 120 minute service during the off-peak. As resources become available, frequencies may increase to hourly service throughout the day.
 - Saturday service levels on collector/distributor routes may be lower as compared to weekdays, but should be based on consistent, evenly spaced service schedules.
 - Examples of collector/distributor routes in the GGFT system are:
 - Route 2 Bay College
 - Route 5 South Glens Falls
 - Route 7 West Glens Falls
 - Route 19 Warren County Municipal Center/Factory Outlet Malls/Lake George Village
- Vehicles should remain in revenue service as long as possible to increase geographic coverage and minimize unproductive vehicle time.

An additional overall improvement for the GGFT system not directly related to service design is improving the presentation and availability of the information about GGFT's service. System marketing and information systems for transit, like any other product used by members of the public, is paramount to success. GGFT should ensure its information systems are up-to-date, easy to read and accessible to riders and non-riders. As possible, increase community awareness of GGFT services by signing routes (not stops), creating colorful, easy-to-read system maps and schedules, establish a distinctive and attractive "brand" to define service image, and potentially capitalizing on the system's environmental attributes. This may also involve making the GGFT vehicles external appearance more appealing and friendly and coordinating the color schemes with any branding efforts.

Recommended Improvements and Implementation

Recommendations to improve the service follow the above described guidelines. We also recommend implementing the recommendations in two phases. In the first phase, we suggest a series of projects that have lower costs and are less disruptive for riders, but at the same time will begin to strengthen and improve services. The second phase of improvements will take more time to implement, may require discussions with stakeholders, public education and will definitely require updating information systems prior to moving forward. Accordingly, we have organized the recommendations into those that can be implemented as quickly as in the next few months and those that will require a longer lead time.

Immediate Term

There are a several recommendations that GGFT can implement fairly quickly and without significant disruption to the existing service schedule. These recommendations are summarized in Figure 7-1 and are described below:

- Add mid-day service on Route 2 and create a consistent, evenly spaced service schedule.** This route currently provides seven trips per weekday, with roughly hourly service during the morning peak and late afternoon, but service only once every two hours in the middle of the day. Route 2 also has two evening trips. By increasing frequency along the corridor so that the service is more consistent, bus service will be easier to understand and use. A sample schedule is shown in Figure 7-2. The Bay Road corridor is significant because of the employment opportunities associated with assisted living facilities, and doctor’s offices/medical clinics. Improved service on Route 2 would also increase access to the Adirondack Community College (ACC), one of the region’s important job training facilities.

Figure 7-1 Sample Weekday Schedule for Route 2

Current Schedule	Time Between Trips (in minutes)	Proposed Schedule	Time Between Trips (in minutes)
7:30 am		7:30 am	
8:30 am	60	8:30 am	60
9:30 am	60	9:30 am	60
11:00 am	90	11:00 am	90
1:30 pm	150	12:30 pm	90
3:30 pm	120	2:00 pm	90
4:40 pm	70	3:30 pm	90
		4:40 pm	70

Source: Nelson\Nygaard Consulting Associates

- Expanded service on GGFT Route 19 with both increased frequency and expanded geographic coverage.** Route 19 currently provides limited service between Glens Falls and Gooney Golf, a turn-around point about 1 mile south of Lake George Village. The route also serves the Lake George Factory Outlet stores located near the intersection of Routes 9 and 149. There are currently six trips per day inclusive of evening service. Service is offered between 9:15 am and 4:25 pm, plus a single evening trip at 6:15 pm, making the span of service supportive for some but not all retail workers. Furthermore, by stopping the service just short of Lake George, the only way to access off-season employment in Lake George Village is by walking one mile from Gooney Golf. The TDP recommends extending the existing route to Lake George Village when trolley service is not operating and adding two additional trips, one in the early morning and a second in the late afternoon. The expanded service will increase regional connections, expand employment opportunities and maintain year-round service between Glens Falls and Lake George.
- Maintain existing evening services on Routes 11/12, 4/5 and 2.** GGFT currently offers just over four hours of evening service to support employment opportunities for people working outside of the traditional business hours. Evening service was initiated in Fall

2008 and is scheduled to operate between 6:15 pm and 10:25 Monday through Saturday. While productivity on the services is lower as compared with weekday or Saturday daytime services (estimated at 4.4 riders per trip), the service is new and awareness is still under development. In addition, the expanded temporal coverage meets needs for after hour connections from employment areas to residential neighborhoods. In this capacity the evening routes are “lifeline” services.

Evening services on Route 11/12 are not needed when seasonal trolleys offer evening services; however, evening service for Route 4/5 should be maintained. Evening service on Route 2 may be reduced when ACC is not in session, but ideally, at least one evening service would be maintained to support existing commuters relying on the service in the corridor.

- **Adjust schedule to put deadhead vehicles in service.** Currently, GGFT buses leave the bus garage on Queensbury Avenue and travel as deadhead service to the Ridge Street Terminal in downtown Glens Falls. They change their head signs at Ridge Street and begin revenue service with their first scheduled trip. GGFT may put vehicles into revenue service at the intersection of Queensbury Avenue and Dix Avenue and allow passengers to ride the bus along Dix Avenue to Ridge Street en route to the Ridge Street Terminal. Out of service vehicles leaving the Ridge Street Terminal may carry passengers in the reverse direction, from RST to the intersection of Dix and Queensbury. This service will be difficult to explain to passengers, but will allow GGFT to add additional trips during the morning, mid-day and late afternoon at no additional cost to the agency. In fact, it will result in a gain of resources based on the New York State Operating Assistance (STOA) program which funds agencies based on miles traveled. In the short term, putting buses in revenue service on Ridge Street will overlap somewhat with the existing Route 3. Starting the service now, however, will help passengers get accustomed to proposed changes (elimination of Route 3) and build support and trust for up-coming changes.

Figure 7-2 Immediate-Term Implementation Recommendations

	Proposed Changes	Justification	Estimated Annual Cost*
Route 2 Bay-College	Add mid-day trip	Ridership is strong mid-day, with more than 7 riders per trip. Mid-day trip will create consistent service throughout day, making route easier to understand and use. Anticipated ridership is between 7-10 riders per trip.	\$8,200 per trip
Route 19 Rt. 9 County Center	Warren County Municipal Center Annex is scheduled to close in 2009. When Annex closes: <ul style="list-style-type: none"> • Stop in at Warren County Municipal Center on outbound and inbound leg • Extend service to Lake George Village (when trolleys are not running) • Add two trips per day to streamline schedule 	Ridership is strong, with most trips carrying 8+ passengers. Additional trips will create more consistent schedule that is easier to understand and use. Additional trips support employment at both Lake George and factory outlet stores. Although employment at Lake George and the factory outlet stores is largely seasonal, opportunities do exist in off-season. Survey data showed strong interest in year-round service to these destinations for work and other purposes. In off-season, some Lake George hotels are used to meet ad hoc housing needs.	\$11,600 to operate five trips to Lake George \$26,000 to add two trips
Evening Service on Route 4/5 and Route 2	When trolley services are operating, evening service on Route 11/12 may be stopped, but service on Routes 2 and 4/5 should be maintained.	Evening service is new, but riders rely on service to travel to/from work. Evening service will provide connections to/from trolley services in evening, strengthening access to seasonal employment. Regular schedule will help build and maintain ridership.	Estimated cost \$9,100 for 16 weeks of services

Assumptions:

Adding one trip to Route 2 assumes marginal service increases amount to .5 VRH per day and an hourly operating cost of \$62.89. Estimate is based on service operating 5 days per week, 52 weeks per year. Estimate is rounded.

Extending existing service to Lake George assumes an additional .17 VRH per trip or 1.02 VHR per day (including night service). Assumes service operates 5 days per week for 36 weeks per year (excludes trolley seasons). Estimate is rounded.

Adding two trips to Route 19 with service to Lake George assumes marginal service increase amounts to 2.3 VRH per day and an hourly operating cost of \$62.89. Both estimates are based on service operating 5 days per week, 36 weeks per year. Estimate is rounded.

Maintaining evening service on Routes 4/5 and Route 2 assumes 1.5 VRH of service operating 6 days per week. With hourly costs of \$62.89, weekly costs are estimated at about \$750. Seasonal trolleys operate 16 weeks per year. The seasonal reduced evening service will cost an estimated \$9,100 per year (rounded).

Longer-Term

Implementation of the longer term recommendations, which are mapped in Figures 7-3 and 7-4, and summarized in Figure 7-5, may begin as soon as the immediate term proposals are underway. These recommendations are described in the following section. By implementing these longer-term recommendations GGFT will work towards achieving the system objectives outlined at the beginning of this chapter. This will help GGFT move towards a system that is more direct and responsive to passenger needs, easier to understand, and more straight-forward to use. Nelson\Nygaard also expects that the combined changes will increase ridership overall.

A draft schedule demonstrating how these recommended changes may be implemented is included as Appendix C as one potential example of how the changes may work. It also demonstrates that the recommendations are feasible. Appendix C also documents the changes in vehicle service hours associated with recommendations. Both analyses include both weekday, Saturday and evening service.

Most of the recommendations must be implemented concurrently as some routes will need to be eliminated in order to redeploy resources to more productive parts of the system. This will require stakeholder and public outreach efforts as the proposals will change the existing route network.

- **Eliminate Route 3 East Loop.** Productivity on Route 3 is low, with an average of four riders per trip on weekdays and 3 per trip on Saturdays, making the route about half as productive as the system average. In addition, portions of the route overlap with Route 4 along Maple and Warren Streets. As a result, the TDP recommends eliminating Route 3. The portions of Route 3 which overlap with Route 4 will continue to be available when Route 3 is eliminated. In addition, other route segments along Dix Avenue and Ridge Street can be served by deadheading vehicles. We recommend eliminating this route and redeploying the 1,339 VRH (1,300 weekday, 39 Saturday) to other parts of the GGFT network.

We recommend eliminating Route 3 during the spring months when the weather is better and there is more daylight. We make this suggestion because while nearly all passengers will continue to have access to service, some will have to walk longer distances to get to their service. It will be more manageable for passengers to get used to service changes and find optimal walking routes during good weather and when there is more daylight.

- **Eliminate Route 6 West Loop.** With the exception of two trips (7:40 am and 3:00 pm), productivity on Route 6 is low, carrying fewer than four riders per trip on weekdays and 3 per trip on Saturdays. Similarly with Route 3, portions of the route overlap with Route 5 overlap with another route, which in this case is Route 7 along Broad Street. In addition, Route 6's routing along Crandall Street is two blocks from Glen Street; therefore a higher frequency service is within walking distance. We recommend retaining the 7:40 am and 3:00 pm trips but eliminating all other portions of Route 6, including Saturday service. This will save the system an estimated 1209 VRH annually.

Similar with Route 3, we also recommend eliminating Route 6 during the spring months. This recommendation is for the same reason; service changes are easier to get used to when they are walking or waiting in daylight and good weather.

- **Increase service on Route 4 Hudson Falls to strengthen trunk corridor.** Route 4 is one of the most productive routes in GGFT's network, carrying more than 20 passengers per trip on weekdays and 14 passengers per trip on Saturdays. Recommendations include increasing the service to 30 minute peak period frequencies and hourly service during the middle of the day on weekdays and hourly service throughout the day on

Saturdays (see Figure 7-6). Route 4 currently alternates service between Boulevard and Dix Avenue before joining Main Street in Hudson Falls. We recommend retaining both of these alignments and alternating service to create hourly service on each alignment. The TDP also recommends vehicles start revenue service at the intersection of Dix and Feeder when they are traveling to the Amtrak Station in Fort Edward and ending the last revenue service trip at Walmart, rather than the Ridge Street Terminal. Implementing this recommendation will require an additional 2301 VRH.

Figure 7-3 Sample Weekday Schedule for Route 4: Hudson Falls/Fort Edward

Scheduled Departures Times from RST	Time Between Trips (in Minutes)	Proposed Departure Times from RST	Time Between Trips (in Minutes)
6:30 am*		6:30 am**	30
7:30 am	60	7:00 am**	30
8:30 am	60	7:30 am	30
10:00 am	90	8:00 am	30
11:00 am	60	8:30 am	30
12:00 pm	60	9:00 am	30
1:00 pm	60	9:30 am	30
2:00 pm	60	10:00 am	30
3:00 pm	60	10:30 am	30
4:00 pm	60	11:00 am	30
5:10 pm	70	12:00 pm	60
6:10 pm	30	1:00 pm	60
		1:30 pm	30
		2:00 pm	30
		2:30 pm	30
		3:00 pm	30
		3:30 pm	30
		4:00 pm	30
		4:30 pm	30
		5:00 pm	60
		6:00 pm	60

Source: Nelson\Nygaard Consulting Associates

* Departs from Amtrak Station in Fort Edward; ** Goes into revenue service at Dix/Feeder, time shown is for departure from Amtrak Station in Fort Edward.

- **Streamline schedule on Routes 5 South Glens Falls and schedule three trips per day to Lamplighter Acres.** Route 5 currently provides nine trips on weekdays, with roughly hourly service during the morning peak and an ad hoc schedule for the remainder of the day. There are five trips per day on Saturday, spaced between 90 and 120 minutes

apart. Currently, there is no scheduled service to Lamplighter Acres but passengers may be asked to be picked up or dropped off at Lamplighter Acres on the 8:30 am and 10:30 am trips. In addition, Route 5 does not serve the regional Northway Express (NX) commuter service to Saratoga, Albany and Rensselaer, which departs from the West Marion Avenue Park and Ride Lot in South Glens Falls at 6:50 AM and arrives back at the park and ride at 5:40 PM.

At this time, we are not recommending an increase in service, but suggest minor adjustments to the schedule (sample shown in Figure 7-7) to accommodate scheduling three trips to Lamplighter Acres and meeting the NX commuter service. Results from the survey research suggest an interest in service to Lamplighter Acres and a misunderstanding about the availability of service. Operating service to the manufactured home park three times a day will increase awareness of service and attract riders. Service to Saratoga and Albany were also requested in the survey data and public comments. These changes will require adjustments to vehicle scheduling and driver deployments and, consequently, increase vehicle revenue hours assigned to the route. Actual increases are difficult to estimate and will be based on final scheduling and work assignments.

Figure 7-4 Sample Weekday Schedule for Route 5: South Glens Falls

Scheduled Departures Times from RST	Time Between Trips (in Minutes)	Proposed Departure Times from RST	Time Between Trips (in Minutes)
6:00 am		6:30 am*	
7:00 am	60	7:00 am	30
L 8:00 am	60	8:00 am	60
L 8:30 am	30	9:00 am L*	60
10:00 am	90	11:00 am	120
11:30 am	120	1:00 pm L*	120
2:30 pm	180	3:00 pm	120
L 4:00 pm	90	4:00 pm L*	60
5:10 pm	70	5:30 pm*	90

Source: Nelson\Nygaard Consulting Associates

Note: L indicates route will travel to Lamplighter Acres on request. L* indicates route is schedule to travel to Lamplighter Acres. * Scheduled to meet NX commuter service departing from West Marion Ave Park and Ride lot.

- **Add three trips on Route 7 West Glens Falls, reverse service direction and streamline schedule to even out trip spacing.** Route 7 currently has six scheduled weekday and three scheduled weekend trips. While ridership on the service is fairly low, it has been increasing over the past several months, largely as a result of the Department of Social Service’s increased use of hotel accommodations near I-87 Exit 18. Ridership on Route 7 will also be supported as the route serves some key destinations formerly served by Route 6, including Glens Falls Hospital and the Broad Street Hannafords. Our recommendations to improve the service are three-fold:
 - Add three trips to the existing service weekday schedule and one trip on Saturdays for a total of nine weekday and four Saturday trips. This will create a comparable service

level as implemented on other collector/distributor routes and work to attract additional riders.

- Reverse the direction of the service. Route 7 currently travels outbound on Main Street to Corinth Road, turning at Van Dusen Road and heading back towards Glens Falls on Luzerne Road. By reversing direction (heading outbound, turn on Richardson Street to Luzerne Road to Van Dusen Road and Corinth Road), will help avoid traffic delays at key time near Exit-18. In addition, many passengers board the bus from hotels located on the southern side of Corinth Road. Reversing the direction means passengers will not have to cross the street to board the bus traveling inbound.
- The addition of additional trips provides an opportunity to create a streamlined schedule with consistent trip spacing throughout the day. A potential service schedule is shown in Figure 7-8.

Reversing the service direction and streamlining the schedule do not require additional VRH. Adding three new trips on weekdays and one additional trip on Saturdays will require an addition of 403 VRH.

Figure 7-5 Sample Weekday Schedule for Route 7: West Glens Falls

Scheduled Departures Times from RST	Time Between Trips (in Minutes)	Proposed Departure Times from RST	Time Between Trips (in Minutes)
6:30 am		6:30 am	
9:00 am	150	7:30 am	60
10:30 am	90	8:30 am	60
12:00 pm	90	10:00 am	90
2:00 pm	120	11:30 am	90
4:00 pm	120	1:30 pm	120
		3:00 pm	90
		4:00 pm	60
		5:00 pm	60

Source: Nelson\Nygaard Consulting Associates

Note: L indicates route will travel to Lamplighter Acres on request. L* indicates route is schedule to travel to Lamplighter Acres

- **Update system brochures and schedules.** Implementing the proposed recommendations requires that GGFT update its existing passenger information systems. This, in turn, creates an opportunity to improve the current information systems, including printed schedules, system maps, and web-based information. As a result, we recommend that GGFT develop a full color system brochure that includes a system map and printed information on the routing and schedule of individual routes. We recognizes that color schedules are expensive to produce. To insure system maps and timetables are used wisely by consumers, we suggest that GGFT provide free system maps and timetables for a limited time after the schedule changes are implemented (potentially three to six months). After this initial time period, the system maps may be sold for a nominal cost of \$0.50 or \$1.00. Individual route schedules may be provided free of charge. The purpose of selling the schedules is to avoid people requesting multiple copies. Several examples

of transit agency system maps and schedule timetables are included as a reference, in Appendix C. Most of these schedules were designed cost effectively. The Portland Metro (Maine) system map, for example, was developed for approximately \$15,000, not including printing.

- **Create public outreach campaign.** In addition to needing new passenger information systems, implementing the proposed recommendations also requires that GGFT conduct an outreach campaign to educate riders and non-riders about the service changes. Similar to the system brochures and information systems, the route changes provide GGFT with an opportunity to update the system image. GGFT may use this opportunity to re-brand the service as a green, easy-to-use and user-friendly system. This effort may include developing an appealing name for the system as a whole (e.g., “The Ride” “the Bee Line”) or developing a new naming convention for individual routes. Marketing and branding opportunities may also include developing a clearly identifiable color scheme for GGFT that is incorporated into agency buses, logos and passenger information systems.

Figure 7-6 Recommended Improvements – Overall System

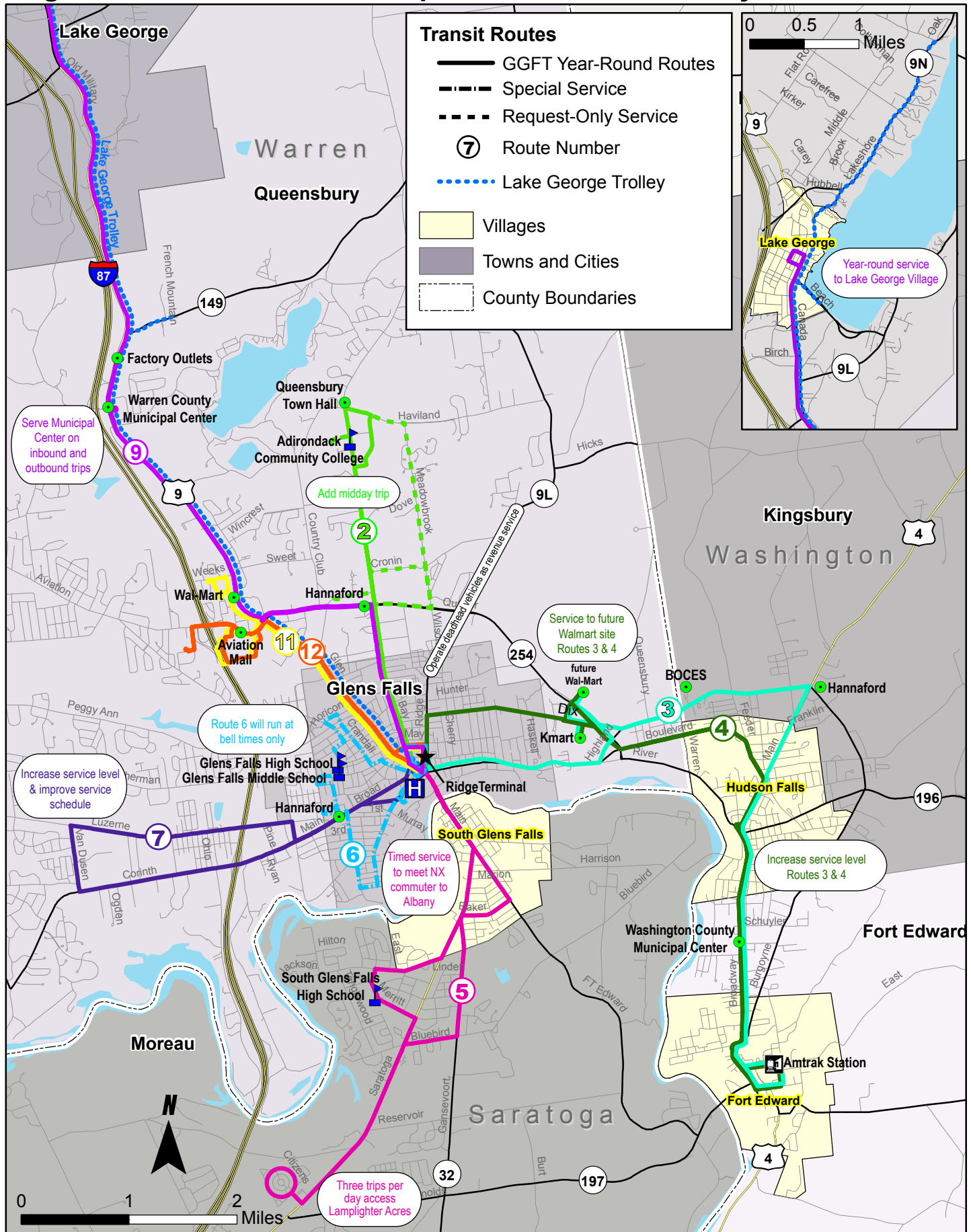


Figure 7-7 Recommended Improvements - City of Glens Falls

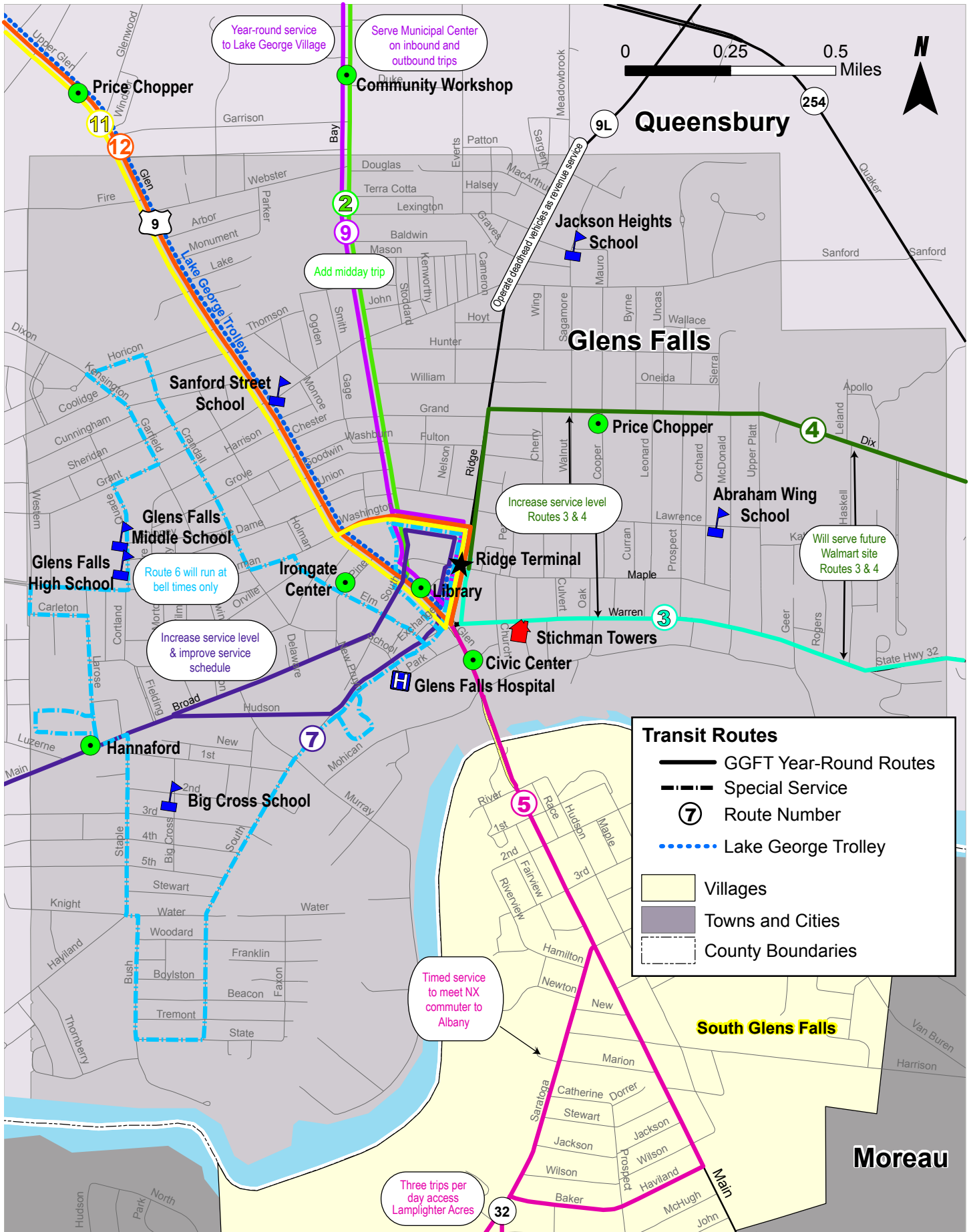


Figure 7-8 Longer Term Route by Route Recommendations

	Proposed Changes	Justification	Estimated Cost/Savings
Route 3 East Loop	Eliminate service Deploy services to higher need/more productive services Serve some eliminated destinations with re-aligned Route 4 and putting deadhead vehicles in service	Low ridership on existing route Eliminate competition between Routes 3 and 4 at key locations	Annual savings: 1,339 VRH (Weekday 1,300 VRH Saturday 39 VRH)
Route 4 Hudson Falls – Fort Edward	Establish Route 4 as trunk route with higher service level - half-hourly during peak service and hourly during mid-day Saturday service level also increases	Current productivity on Route 4 is excellent Comments from stakeholder, public and survey request service Serves population with high propensity to use transit and increases service to regional facilities (Washington County Municipal Center)	Requires addition of 2,301 VRH annually
Route 5 Moreau-South Glens Falls	Minor alignment changes to make service more direct Implement scheduled service to Lamplighter Adjust schedule to meet Northway Express commuter service (6:50 am and 5:40 pm) Interline with Route 11/12 to create Route 9 service Increase service frequency and span as funding permits Create evenly spaced consistent schedules on weekday and Saturday services	Current schedule has clustered service – more difficult to use Create consistent, easily understandable schedule Increased service frequency helps attract riders Survey/public requests for service to Lamplighter Meeting Northway Express will support regional connections and expand employment opportunities	Implementing proposed schedule changes will likely require small increases in VHR
Route 6 West Loop	Eliminate service Deploy services to higher need/more productive services	Low productivity on existing routes Eliminate competition between Routes 6 and 7 at key locations	Annual savings: 1,209 VHR (Weekdays 1,170 VRH from and Saturdays 39 VRH)
Route 7 West Glens Falls	Re-align to continue service to key elements of Route 6, retain school tripper services Reverse direction so inbound travelers don't have to cross street Increase service frequency and span as funding permits Create evenly spaced consistent schedules on weekday and Saturday services	Route 7 service area has strong potential Reversing direction and adding trips will make service more attractive and easier to use Public outreach effort included interest for more service Increased service consistent with HHS use of hotels along route	Requires addition of 403 VRH annually

	Proposed Changes	Justification	Estimated Cost/Savings
Route 11/12 Glen Street/Aviation Mall/Walmart/John Burke	No major changes proposed Interline with some collector routes (Route 5) Potential to eliminate one mid-day trip to John Burke Apartments	Route performs well and has good productivity Interline helps address schedule concerns and creates one-seat rides Eliminate trip to John Burke to alleviate schedule pressure	No change
Improve Information Systems	Improve route schedules to make them clearer, easier to read and use (sample schedules included as Appendix D. Create stand-alone web-site. Develop to scale system map and post at Ridge Street Terminal and other key stops.	Existing schedules are functional but have a lot of detail that confuses readers and makes them difficult to understand. Existing web-based information is buried in City of Glens Falls web-site and is hard to find and use. Schedules may be posted as PDF rather than excel files. Existing schedule is not to scale and is not intuitive to riders.	Costs estimated at \$5,000 to \$10,000. Does not include on-going costs to update schedules and web-site periodically.

Scenario Analysis

Part of the analysis tasked for the TDP was to analyze scenarios associated with an increase and decrease in revenues. Our analysis is based on changes to GGFT’s existing service network, the “base case” which, for purposes of this analysis, includes the eight year-round fixed-route services. In this scenario, we assumed that none of the proposed recommendations have been implemented. Under this case, if service cuts are required, the likely targets for service reductions are:

- Eliminating weekday services with the lowest productivity (i.e., Routes 3 and 6).
- Closing Saturday service on all feeder routes and/or reducing service frequency on Saturday trunk service.
- Terminating all evening services.

There are advantages and disadvantages associated with each of these proposals. Saturday and evening services are less productive as compared with other parts of the system, however, they provide essential lifeline service to the individuals who use them. Saturday and evening services are also less resource intensive. As a result, to realize the necessary cost savings, all or most services would need to be eliminated. Routes 3 and 6, on the other hand, also have relatively lower productivity and many segments on these routes are close to other GGFT routes. As a result, many riders using Routes 3 and 6 will continue to have access to transit. These two routes also operate all day and on Saturdays, thus the potential to realize significant savings is greater.

In the event a service reduction is required, the TDP recommends eliminating all or partial service provided by Routes 3 and 6. If the service cuts are less drastic, on the order of 5% of total service hours, savings may be realized by eliminating Saturday services on Routes 3 and 6 and reducing weekday service schedules. If the service cuts are more dramatic and require reducing operating costs by 10%, weekday and Saturday service on Routes 3 and 6 will need to be eliminated. These cuts will generate more savings than necessary. However, in order to retain some service quality, we would recommend retaining the productive Route 6 weekday tripper service and reinvesting some of the saved resources to expand service on Routes 4 and 7 (see Figure 7-9). Scheduling additional service on Routes 4 and 7 will help minimize the impact of service reductions for some passengers in some neighborhoods.

Figure 7-9 Scenario Analysis Recommendations with Base Case Implemented

Scenario	Change	Total Service Hours	Service Change Highlights
Existing Network	-	80.5	Existing GGFT Route Network – 8 year-round fixed-routes
Scenario A	-10%	73.5	Eliminate weekday and Saturday service on Routes 3 and 6 (save 16 VRH) Reinvest some of the saved resources: <ul style="list-style-type: none"> • Retain two scheduled tripper services on Route 6 (2 VRH) • Increase service on Routes 4 and 7 to maintain service in key neighborhoods and areas (add 4 VRH) Net savings 8 VRH

Scenario	Change	Total Service Hours	Service Change Highlights
Scenario B	-5%	76.5	Eliminate Saturday service on Routes 3 and 6 (save 3 VRH) Eliminate mid-day trip on each Route 3 and 6 (save 1 VRH) Estimated savings 4 VRH
Scenario C	+10%	89.85	Add two trips on Route 19 to Lake George Add two trips during off peak (mid-day) to Route 4 (consistent all day 30 min) Add one Saturday trip on Routes 4 and 11/12 even out schedule

Source: Nelson\Nygaard Consulting Associates

As a second analysis, we proposed service cuts or service increases based on a base case that assumed the recommendations laid out in the TDP are implemented (our recommendations for this scenario analysis are to follow the system objectives described in the beginning of this chapter). Under this scenario, as resources increase, GGFT should build the trunk and collector/distributor network until all routes operate at the recommended standards on weekdays and then on Saturday. Once the minimum standards are met, service frequency on collector/distributor routes may be increased to hourly service throughout the day, again filling out the schedule on weekdays first and then on Saturdays. Likewise, when services need to be reduced, GGFT may cut service during the off-peak period, initially by extending the span of the off-peak period.

For example, the proposed schedule for the new Route 4 has hourly service between 11:00 am and 1:00 pm. If additional resources become available, trips may be added to create a half-hourly service during this period. If GGFT is required to reduce service, the off-peak period (with hourly instead of half-hourly service) may be extended to include the hours between 10:00 am and 2:00 pm. This approach ensures consistency in the schedule and that there is a clearly understandable operating approach. It will also be straight-forward to communicate with stakeholders and members of the public. Scenario analysis recommendations assuming the base case is implemented are shown in Figure 7-10.

Figure 7-10 Scenario Analysis Recommendations with Base Case Implemented

Scenario	Change	Total Service Hours	Service Change Highlights
Base Case	-	81.75	System of 6 routes
Scenario A	-10%	73.75	Increase duration of hourly service during off-peak (mid-day) on Route 4 Implement off-peak (mid-day) hourly schedule (11 am to 1 pm) on Route 11/12 Eliminate single trip on Route 2, 5 and 7
Scenario B	-5%	77.85	Increase duration of hourly service during off-peak (mid-day) on Route 4 Eliminate single trip on Route 7 Slight reduction of Saturday service during off-peak (mid-day) on Routes 4 and 11/12

Scenario	Change	Total Service Hours	Service Change Highlights
Scenario C	+10%	89.85	Add two trips on Route 19 to Lake George Add two trips during off peak (mid-day) to Route 4 (consistent all day 30 min) Add one Saturday trip on Routes 4 and 11/12 even out schedule

Source: Nelson\Nygaard Consulting Associates

APPENDIX A

RESULTS FROM THE ON-BOARD PASSENGER SURVEY

MEMORANDUM

To: Scott Scopczyk, Transportation Director, GGFT
Aaron Frankenfeld, Transportation Planning Director, A/GFTC
From: Bethany Whitaker, Nelson\Nygaard
Date: December 3, 2008
Subject: TDP Ridership Survey Results

Overview

As part of the TDP process, Nelson\Nygaard (NN) carried out two surveys: a rider survey with GGFT transit users and intercept interviews with non-riders. In total, we collected 334 surveys and 53 intercept interviews. This data will be used to support several aspects of the TDP, including detailed origin and destination analysis, route and system evaluations. The purpose of this memo, however, is to provide an overview of the survey results. Copies of the surveys are attached at the end of the memo.

Our initial evaluation of the survey results, suggests the following about exiting GGFT riders:

- Passengers are very appreciative of GGFT services. They ride the bus frequently and are generally pleased with the service.
- Most passengers use the bus to travel between home and work, however, a considerable number of passengers also use GGFT for other trip destinations, such as shopping, recreation and other purposes.
- Passengers expressed a strong desire for more service. They are interested in more trips on existing services as well as more evening and weekend service.
- Several passengers expressed an interest in service to regional destinations, including Saratoga, Lake George Village (year round) and Warrensburg.

Preliminary data from non-riders suggests a lack of awareness and understanding of GGFT service among non-riders. A key perception among non-riders is that GGFT is not convenient for them. That said, 17% of those interviewed said they would consider riding the bus if gasoline prices rose to \$4.00 per gallon.

Survey Administration

Transit Riders

The purpose for surveying GGFT transit riders was to understand existing travel patterns and gain insight into traveler attitudes, preferences and priorities. The survey was administered over

a two day period, Wednesday, November 12 and Thursday, November 13, and staggered over these days to ensure all service hours were surveyed. Surveyors were in the field from 12:30 pm to 10:45 pm on Wednesday and from 5:45 am until 1:00 pm on Thursday.

A key goal of the survey administration was to collect as large a sample as possible. Therefore, surveyors were assigned to ride the busiest routes in the GGFT system, ask passengers to fill out the survey and collect it from them. On routes with lower ridership, bus drivers distributed and collected pre-coded surveys. Passengers who filled out the survey also received a bus token for a future trip on GGFT; this was greatly appreciated and significantly increased the survey response rate. Overall, the refusal rate was very low, and a high percentage of riders traveling on GGFT on Wednesday and Thursday completed surveys. In total 334 surveys were completed.

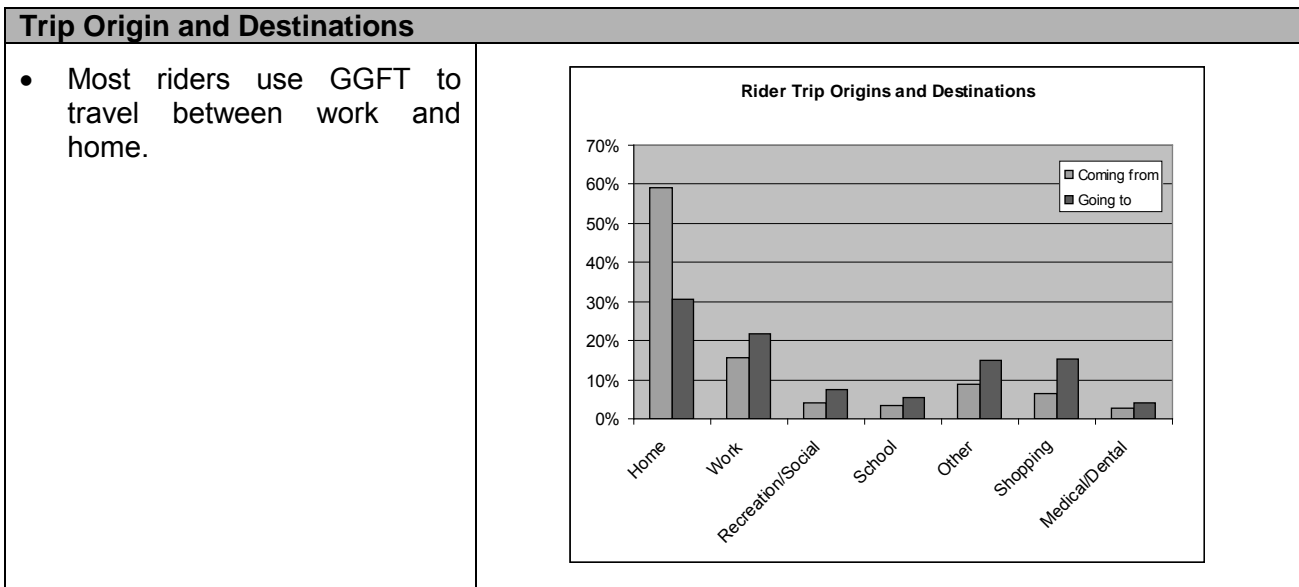
Non-Riders

NN also conducted a survey with non-riders, specifically targeting South Glens Falls and West Glens Falls; two areas where transit ridership is lower than would be expected. Our original plan was to interview people outside of the Stewart’s shop at the corner of Corinth and Big Bay Roads in West Glens Falls and Hannafords on Saratoga Avenue and William Street in South Glens Falls. Hannafords, however, has a no solicitation policy; thus, surveyors were not allowed on the premises. NN did conduct interviews outside of Stewart’s on Wednesday afternoon and Thursday morning and collected a total of 53 completed interviews. While this is not considered an adequate sample size, this memo provides an overview of the results. NN will make additional efforts to interview members of the general public later in the study.

Results – Existing GGFT Transit Riders

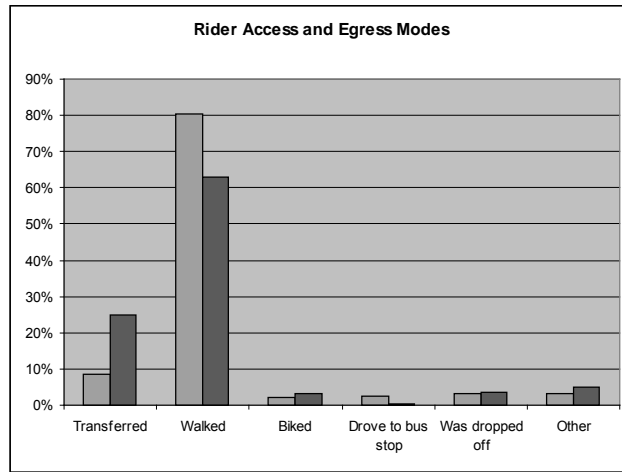
As discussed the goal of the transit rider survey was to understand how passenger use GGFT service and gain insights into their attitudes and priorities for new service. As mentioned, this data will support a detailed analysis of individual routes and the overall system, however, this memo is intended to provide an overview of the results. Survey results are presented in two parts; the first section presents information about the passenger’s trip and the second section presents results on attitudes and priorities for new service.

Part I: Travel characteristics



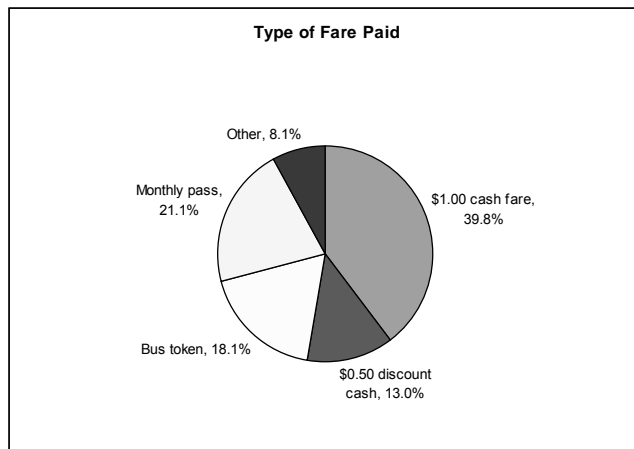
Access and Egress Modes

- Most riders walked to and from their bus stop.
- The average walking time at the beginning of the trip was 6.9 minutes and 7.1 minutes at the end of the trip.



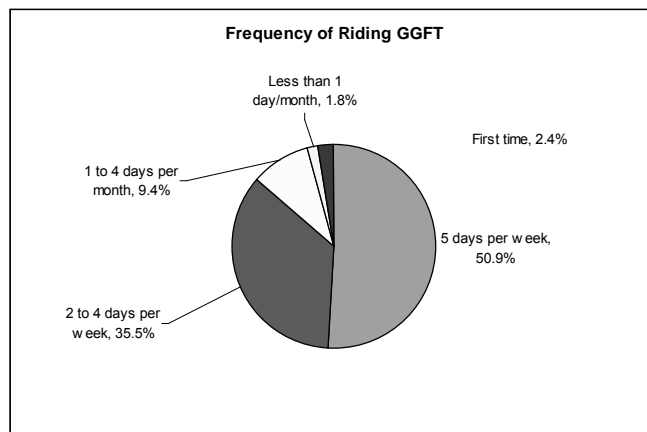
Type of Fare Paid

- Just under 40% of the riders paid a cash fare for their trip.
- About 20% used a monthly pass and 18% used a bus token.



Frequency of Riding GGFT

- Most riders are frequent users of the system.
- 51% ride the bus 5 days per week.
- 36% use the system between 2 and 4 days per week.



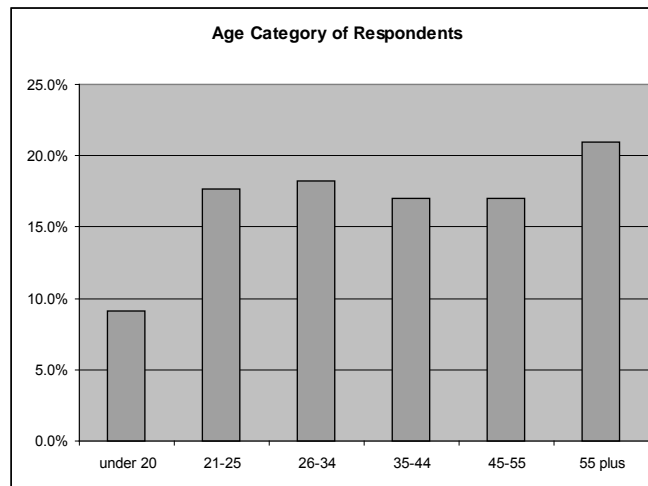
Rider Travel Options without GGFT

- Riders depend on GGFT.
- If transit service was not available:
 - 28% of the riders would take a taxi;
 - 27% would walk; and,
 - 20% would get a ride from someone else.



Age of Survey Respondents

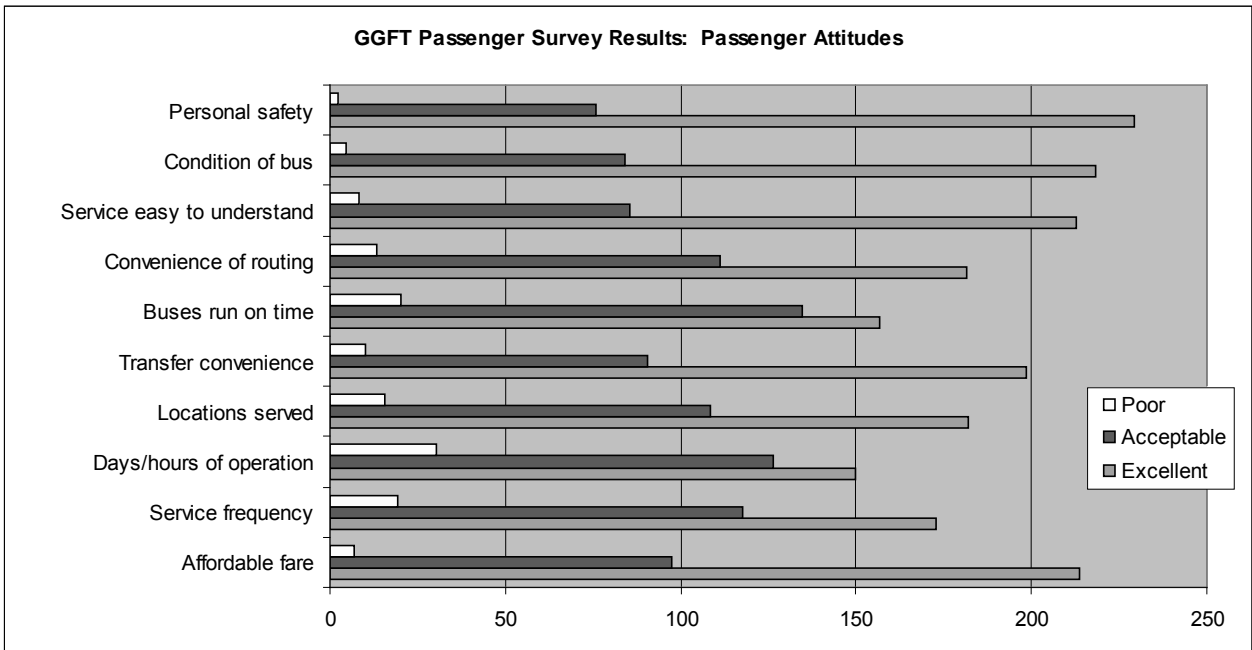
- Surveyed transit riders are fairly equally distributed across age categories, with fewer riders aged 20 or less.
- The median age of Warren county area residents is 39.0 (US Census) suggesting the age of bus riders is generally consistent with the general population.



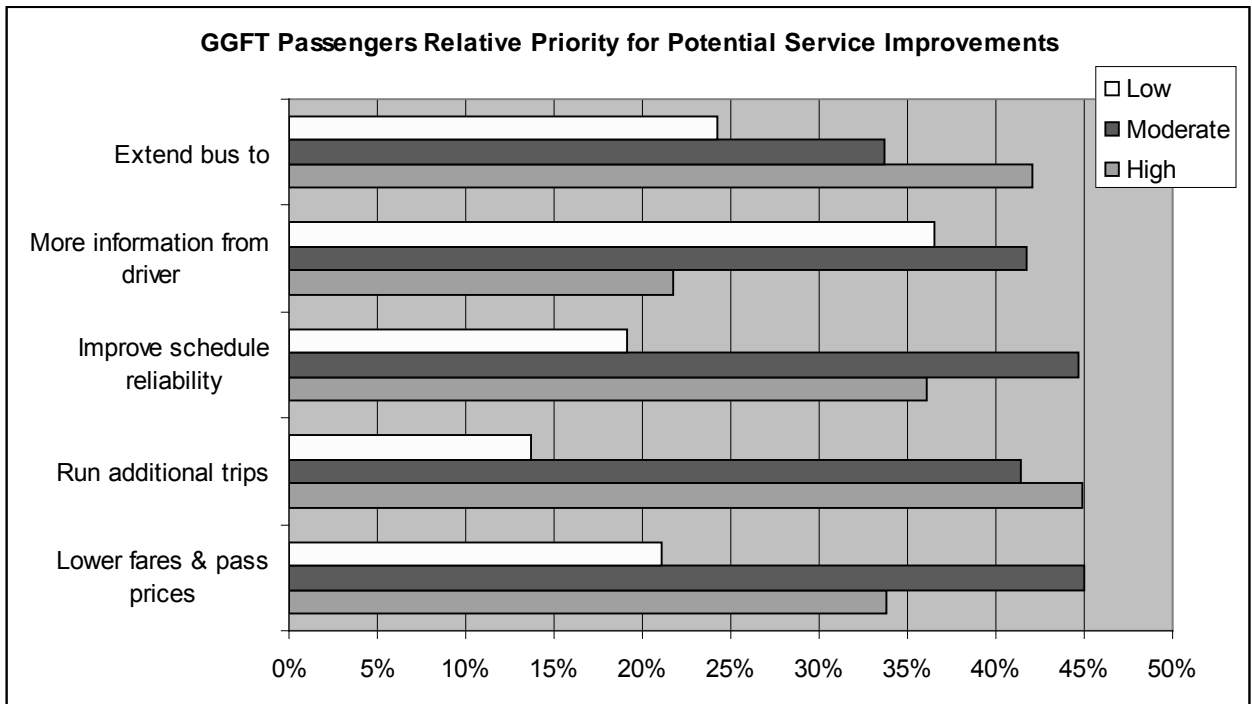
Part II: Traveler Attitudes and Preferences

Passengers were asked to rank GGFT service on ten service characteristics. In general, riders gave GGFT high marks; all categories of service received considerably more “excellent” ratings than “poor” ratings.

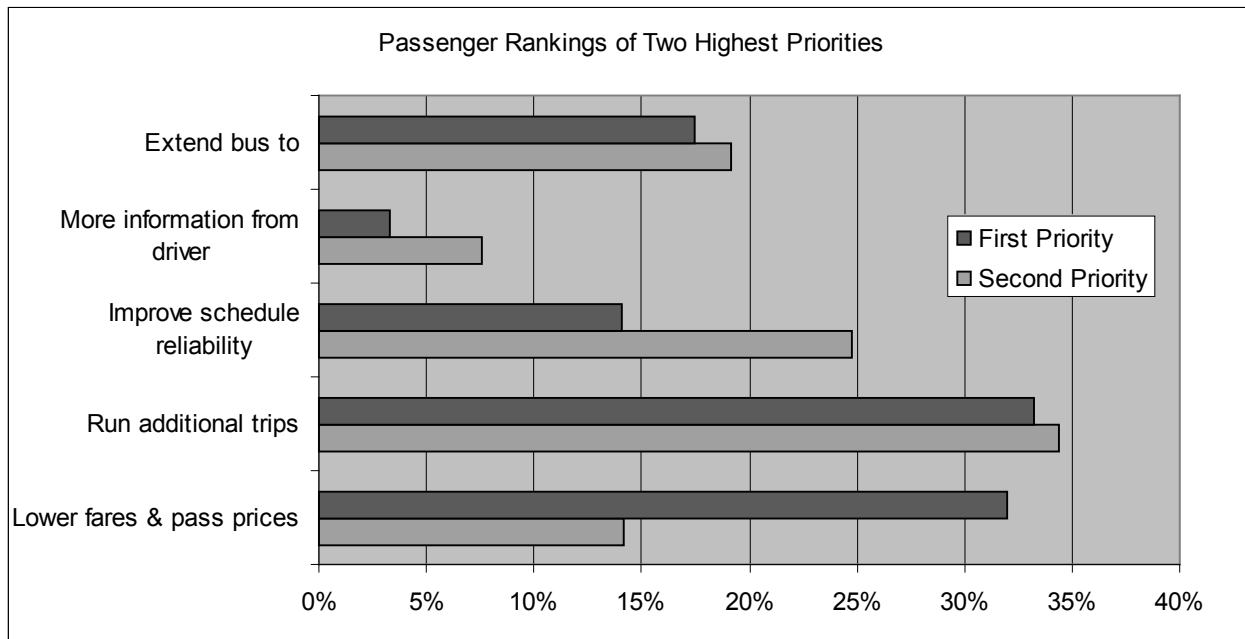
The service characteristics with the highest rankings were 1) safety; 2) affordable fares; 3) condition of buses; and 4) service is easy to understanding. GGFT characteristics with the lowest ratings were 1) days and hours of operation; and 2) buses run on time.



When asked to rank the relative priority for potential service changes, passenger rankings placed the highest priority on running additional trips and a general interest in extending the service. Improving schedule reliability was ranked as a high priority, but only marginally more so than lowering fares. Getting more information from drivers received the fewest number of high priority rankings.



Passengers were also asked to select two of the potential changes as their highest priorities. In this case, passengers were most likely to select “run additional trips”; this potential change received the highest number of first and second priority rankings. “Lower fares and pass prices” received the second highest number of first priority rankings.



The survey also provided passengers with three opportunities to write in new destinations or types of service improvements. For purposes of this analysis, the answers provided in all three questions were tallied together. While a wide range of suggestions were provided, the top recommendations included:

- Provide service to Saratoga (42 votes)
- Extend evening service (37 votes)
- Provide service to Lake George Village year round (31 votes)
- Expand weekend service – includes increased Saturday service and Sunday service (20 votes)
- Offer service to Warrensburg (9 votes)
- Other ideas included extending West Glens Fall service; service on Manor Drive; more service to outlets and service to West Mountain Road.

Results – Non-Riders

As discussed, NN also conducted an intercept interview survey with non-riders to get a sense of their knowledge and awareness of existing service and to understand their reluctance to use GGFT services. Challenges in the administration of the survey resulted in a lower than anticipated response level, therefore, NN will follow-up with non-riders and conduct another survey later in the study. The following provides a brief overview of non-rider attitudes collected to date:

- While 60% of survey respondents knew that there was public transportation available, 40% did not. This suggests a sizable portion of the non-riding public has low awareness of GGFT services.
- Among the people who knew of the service, 69% identified the provider as GGFT.

- 44% of the respondents had ridden GGFT at least once in the past. Among those with experience on GGFT, 44% had ridden the bus at least 3 times and 30% more than 3 times.
- The primary reasons given for not taking the bus were 1) bus takes too long (26%); 2) other – typically that they had a vehicle available (16%); 3) I don't know where to catch the bus (14%) and 4) I don't feel safe on the bus (12%).
- When given a list of potential improvements, respondents reported they would be more likely to take the bus if:
 - The bus stopped closer to my home or work (31%)
 - Gasoline prices rise to \$4.00 a gallon; (17%)
 - Nothing – they'll never take the bus (15%) ; and
 - The bus started earlier and finished later (10%).
- The majority of individuals interviewed reported living in Kingsbury (61%), outside Washington and Warren County (14%) and in South Glens Falls (10%).
- The vast majority (96%) were licensed drivers.

APPENDIX B

RESULTS FROM NON-RIDER SURVEY AND
PUBLIC OUTREACH EFFORTS

MEMORANDUM

To: Scott Scopczyk, Transportation Director, GGFT
Aaron Frankenfeld, Transportation Planning Director, A/GFTC
Sarah Gebbie-Measeck
From: Bethany Whitaker, Nelson\Nygaard
Date: March 26, 2009
Subject: Public Outreach and Mail back Survey Results

Overview

This memo reports on the results of two public outreach efforts conducted as part of the Greater Glens Falls Transit (GGFT) Transit Development Plan (TDP): 1) a mail survey distributed to residents of South Glens Falls and West Glens Falls; 2) a public meeting held on Monday, March 9 at the Crandall Public Library in downtown Glens Falls. Results from each effort are described in subsequent sections with major implications for the TDP are summarized as follows:

- Survey results and comments at the public meeting efforts reinforce early findings that show passengers are very appreciation of GGFT services.
- Proposed service changes that suggest operating on Saratoga Street only through South Glens Falls should be revisited. A small group of residents from SGF village expressed the importance of keeping service on Main and Saratoga Street.
- Scheduled service to Lamplighter Acres should be re-visited. Several respondents said they would like to see scheduled service to Lamplighter Acres, including a designed stop.
- Hudson Falls residents are excited about the addition of an additional route. However, no residents of Fort Edward participated in the outreach.
- There is a need for more information and awareness about the bus service. Nearly 60% of the survey respondents reported living within a 5 minute walk of bus service. Despite generally favorably impressions of the GGFT, only a handful of survey respondents were regular riders.
- Consistent with transit riders everywhere, people asked for extended service hours and more geographic coverage. This includes additional evening service and weekend service.

Mail Survey with West Glens Falls and South Glens Falls Residents

A/GFTC mailed a survey to residents of South Glens Falls and West Glens Falls in an attempt to reach GGFT riders and non-riders. The objective of this survey was to understand residents' experience with GGFT service and evaluate how service could be improved to attract more riders. By design, the survey was short and open-ended; the study team wanted to encourage responses, present no bias in the questioning and allow for any reasons might give regarding their experience using transit. The survey also produced 26 names for the GGFT mailing list. A copy of the survey is attached as Appendix A.

In total, 86 people responded to the survey. The distribution of responses by residents was Queensbury (51%); South Glens Falls (22%); Moreau (26%) and other (1%). The majority (73%) of the respondents reported having access to an automobile.

A series of questions asked people about their awareness of bus service near their homes:

- 69% (59 people) said they had bus service near their home;
- 60% (52 people) reported being able to walk to a bus route in 5 minutes or less.
- 16% (14 individuals) were not sure if they lived near a bus stop or not.
- Nearly half (48%) said they had ridden on GGFT in the past.

The survey also had a question which asked people which statement best describes their most recent experience on GGFT. A sub-set of the total respondents (39 individuals) responded to the question. The people who responded to the question reported the following:

- Most (74%) said "The last time I used GGFT was great. I would like to ride the bus more often" as the statement that best described their most recent experience.
- 21% agreed with "The last time I used GGFT, I got where I needed to go. I prefer not to use GGFT."
- 5% agreed with the statement that read, "I don't like using GGFT buses."

The survey also included an open-ended question asking people for specific changes that would encourage them to ride the bus. Respondents said the following would encourage them to use GGFT:

- Increased service hours (8)
- Regularly scheduled service to Lamplighter Acres (7)
- More information about the service (5)
- Saturday and weekend service (3)
- More covered waiting areas and bus shelters (2)
- Expanded geographic coverage (2)

The survey also had an open ended question about public transportation in Glens Falls. Most responses were very favorable. A sample of the responses is included below.

"I have used the bus for past 15 years. Our only transportation. Works out good for us."

"I have been around for many, many years and it has always been great. Keep up the good work."

"Used the bus once about 20 years ago when my car wouldn't start. Was good alternative transportation to work (Queensbury to downtown Glens Falls)".

“May have to ride the bus later on in years.”

“Keep up the good work.”

Public Meeting

Staff from GGFT, A/GFTC and Nelson\Nygaard held a public meeting at the Crandall Public Library in downtown Glens Falls. Announcements for the meeting were placed in all GGFT vehicles, at major transit stops and in public places and community centers. The meeting was structured as a workshop format and attendees were encouraged to drop by to the meeting as their schedule permitted. Visual aids included maps showing existing GGFT service and the possible service changes. When members of the public came to the meeting, staff explained the potential changes, asked for their feedback and gave them an opportunity to draw new routes, ask questions and make comments. Individuals who had specific comments were encouraged to write them down. In addition, the Washington County Department of Social Services also submitted written comments. The open house was staffed from 2:00 pm until 6:00 pm. In total, approximately 20 people stopped by during the four-hour period. Summarized comments received as part of this meeting included (in no particular order):

- Most people were amenable to the possible service changes. Exceptions to this included:
 - Need for service on both Main and Saratoga Streets in South Glens Falls Village
 - Need to keep Route 3 operating through neighborhoods, especially to Hartford and Sagamore Streets.
- Add a bus run extending from Burgoyne Avenue to Dix Avenue to Quaker Road.
- Trolley service should start earlier in the season.
- Operate service to Aviation Mall later in the evening.
- A bus to go all the way up Route 4 to Route 149 in Fort Ann and then to Lake George.
- As a rural county, it would be helpful to reach some of the out-lying areas.
- Add evening runs to the Hudson Falls/Fort Edward routes as well as the Bay Street area.
- Add evening hours to some of the primary runs to accommodate people who work later or who have non-traditional shifts.
- Some clients have difficulty reading/translating the bus schedules.
- Add mid-day service on South Glens Falls run.
- Add a stop at Aldi
- Make Stichman Tower request only stop
- Add service to Saratoga Springs
- Sunday service to Wal-Mart during the non-trolley season

- Increase service to Hudson Falls – hourly service is not enough
- Increase frequency on Bay Road – college students want and need it
- Advertise
- Add Sunday service (2)
- More evening service

In addition to meeting with members of the public at the library, Nelson\Nygaard staff also brought the maps to the Ridge Street terminal and discussed potential service changes with riders as they waited for the bus. Staff was available at this location for about an hour between 12:00 pm and 1:00 pm. Results from this outreach effort mirrored those received at the Crandall Library:

- Most people were interested and open to the potential service changes. No major negative comments were received.
- Hudson Falls residents were excited about increased service, especially people who need to travel on Boulevard or Dix as service to these locations is only available once every two hours.
- Increase Sunday and evening service
- Add more service to Exit 18.

APPENDIX C

SAMPLE OPERATIONS SCHEDULES FOR PROPOSED RECOMMENDATIONS

Route 5 - South Glens Falls / Moreau

PO	Block	Lv RST	Main Saratoga	SGF HS	Lampighter Acres	Bluebird Gansevoort	Main Fifth	AR RST	PI
5:45 AM	101	6:00 AM	6:09 AM	6:13 AM		6:19 AM	6:23 AM	6:29 AM	to 12
	101	7:00 AM	7:09 AM	7:13 AM		7:19 AM	7:23 AM	7:29 AM	to 2
	101	8:00 AM	8:09 AM	8:13 AM		8:19 AM	8:23 AM	8:29 AM	to 2
	101	9:00 AM	9:09 AM	9:13 AM	9:20 AM	9:28 AM	9:32 AM	9:38 AM	to 2
	101	10:15 AM	10:24 AM	10:28 AM		10:34 AM	10:38 AM	10:44 AM	to 2
	101	11:30 AM	11:39 AM	11:43 AM	11:50 AM	11:58 AM	12:02 PM	12:08 PM	to 2
	151	2:30 PM	2:39 PM	2:43 PM		2:49 PM	2:53 PM	2:59 PM	to 12
	151	4:00 PM	4:09 PM	4:13 PM	4:20 PM	4:28 PM	4:32 PM	4:38 PM	to 2
	151	5:10 PM	5:19 PM	5:23 PM		5:29 PM	5:33 PM	5:39 PM	5:54 PM

Changes
 Maintain 9 scheduled trips
 Shift 8:30a trip to 9:00a
 Shift 10:00a trip to 10:15a
 Shift Lampighter trips for even spacing
 Operate Lamighter as fixed route service

Route 7 - West Glens Falls

PO	Block	Lv RST	GF Hospital	Knight Staple	Sanford Glen	GF HS	Hannaford Plaza	Van Dusen Luzerne	Main McDonalds	Hannaford Plaza	Knight Staple	GF Hospital	Ar RST	PI
6:15 AM	102	6:30 AM	6:34 AM	6:37 AM			6:39 AM	6:44 AM	6:47 AM	6:50 AM	6:52 AM	6:55 AM	6:58 AM	to 11
	102	7:30 AM	7:34 AM	7:37 AM			7:39 AM	7:44 AM	7:47 AM	7:50 AM	7:52 AM	7:55 AM	7:58 AM	to 11
	102	7:30 AM	>>>School Days Only>>>	>>>Non-school Days>>>	7:35 AM	7:38 AM	7:41 AM	--	--	7:41 AM	7:43 AM	7:46 AM	7:49 AM	to 11
	102	8:30 AM	8:34 AM	8:37 AM			8:39 AM	8:44 AM	8:47 AM	8:50 AM	8:52 AM	8:55 AM	8:58 AM	to 11
	102	10:00 AM	10:04 AM	10:07 AM			10:09 AM	10:14 AM	10:17 AM	10:20 AM	10:22 AM	10:25 AM	10:28 AM	to 11
	102	11:30 AM	11:34 AM	11:37 AM			11:39 AM	11:44 AM	11:47 AM	11:50 AM	11:52 AM	11:55 AM	11:58 AM	to 11
	102	1:30 PM	1:34 PM	1:37 PM			1:39 PM	1:44 PM	1:47 PM	1:50 PM	1:52 PM	1:55 PM	1:58 PM	to 11
	102	3:00 PM	>>>School Days Only>>>	>>>Non-school Days>>>	3:05 PM	3:08 PM	3:11 PM	--	--	3:11 PM	3:13 PM	3:16 PM	3:19 PM	to 11
	102	3:00 PM	3:04 PM	3:07 PM			3:09 PM	3:14 PM	3:17 PM	3:20 PM	3:22 PM	3:25 PM	3:28 PM	to 11
	102	4:00 PM	4:04 PM	4:07 PM			4:09 PM	4:14 PM	4:17 PM	4:20 PM	4:22 PM	4:25 PM	4:28 PM	to 11
	102	5:00 PM	5:04 PM	5:07 PM			5:09 PM	5:14 PM	5:17 PM	5:20 PM	5:22 PM	5:25 PM	5:28 PM	to 11

Changes
 Consolidate 17 trips (6/7) into 9 trips
 60 minute peak headway; 90-120 minute base headway
 School day routing of 7:30 am & 3:00 pm trips

Routes 11/12 -Glen Street

PO	Block	Lv RST	Glen Sanford	Glen YMCA	Glen Quaker	Aviation Mall	J. Burke Apts	Ar Walmart	Lv Walmart	J. Burke Apts	Aviation Mall	Glen YMCA	Glen Sanford	Ar RST	PI
101		6:30 AM	6:33 AM	6:35 AM	6:37 AM			6:42 AM	6:42 AM	6:47 AM		6:51 AM	6:53 AM	6:58 AM	to 5
102		7:00 AM	7:03 AM	7:05 AM	7:07 AM		7:10 AM	7:15 AM	7:15 AM	7:42 AM		7:20 AM	7:22 AM	7:25 AM	to 7
	AM - 1	7:30 AM	7:33 AM	7:35 AM	7:37 AM			7:42 AM	7:42 AM	7:47 AM		7:51 AM	7:53 AM	7:58 AM	to 7
	102	8:00 AM	8:03 AM	8:05 AM	8:07 AM		8:12 AM				8:14 AM	8:18 AM	8:20 AM	8:23 AM	to 7
8:15 AM	105	8:30 AM	8:33 AM	8:35 AM	8:37 AM			8:42 AM	8:42 AM			8:48 AM	8:50 AM	8:55 AM	to 9
	102	9:00 AM	9:03 AM	9:05 AM	9:07 AM		9:12 AM			9:12 AM	9:14 AM	9:18 AM	9:20 AM	9:25 AM	to 2
	102	9:30 AM	9:33 AM	9:35 AM	9:37 AM			9:43 AM	9:43 AM		9:48 AM	9:51 AM	9:53 AM	9:58 AM	to 7
	AM - 2	10:00 AM	10:03 AM	10:05 AM	10:07 AM		10:12 AM			10:12 AM	10:14 AM	10:18 AM	10:20 AM	10:25 AM	to 2
	102	10:30 AM	10:33 AM	10:35 AM	10:37 AM			10:42 AM	10:42 AM		10:48 AM	10:51 AM	10:53 AM	10:58 AM	to 2
	102	11:00 AM	11:03 AM	11:05 AM	11:07 AM		11:12 AM			11:12 AM	11:14 AM	11:18 AM	11:20 AM	11:25 AM	to 7
	104	11:30 AM	11:33 AM	11:35 AM	11:37 AM			11:42 AM	11:42 AM		11:48 AM	11:51 AM	11:53 AM	11:58 AM	12:13 PM
	102	12:00 PM	12:03 PM	12:05 PM	12:07 PM		12:12 PM			12:12 PM	12:14 PM	12:21 PM	12:23 PM	12:28 PM	to 2
	102	12:30 PM	12:33 PM	12:35 PM	12:37 PM			12:42 PM	12:42 PM		12:48 PM	12:51 PM	12:53 PM	12:58 PM	to 2
	102	1:00 PM	1:03 PM	1:05 PM	1:07 PM		1:12 PM			1:12 PM	1:14 PM	1:18 PM	1:20 PM	1:25 PM	to 7
1:15 PM	151	1:30 PM	1:33 PM	1:35 PM	1:37 PM			1:42 PM	1:42 PM		1:48 PM	1:51 PM	1:53 PM	1:58 PM	to 2
	102	2:00 PM	2:03 PM	2:05 PM	2:07 PM	2:09 PM				2:09 PM	2:13 PM	2:15 PM	2:20 PM	2:25 PM	to 2
	102	2:30 PM	2:33 PM	2:35 PM	2:37 PM			2:42 PM	2:42 PM		2:48 PM	2:51 PM	2:53 PM	2:58 PM	to 7
	151	3:00 PM	3:03 PM	3:05 PM	3:07 PM		3:12 PM			3:12 PM	3:14 PM	3:18 PM	3:20 PM	3:25 PM	to 2
	102	3:30 PM	3:33 PM	3:35 PM	3:37 PM			3:42 PM	3:42 PM		3:48 PM	3:51 PM	3:53 PM	3:58 PM	to 7
	PM - 2	4:00 PM	4:03 PM	4:05 PM	4:07 PM		4:12 PM			4:12 PM	4:14 PM	4:18 PM	4:20 PM	4:25 PM	to 7
	102	4:30 PM	4:33 PM	4:35 PM	4:37 PM			4:42 PM	4:42 PM		4:48 PM	4:51 PM	4:53 PM	4:58 PM	to 7
	152	5:00 PM	5:03 PM	5:05 PM	5:07 PM	5:09 PM	5:13 PM			5:13 PM	5:18 PM	5:20 PM	5:25 PM	5:30 PM	5:40 PM
	102	5:30 PM	5:33 PM	5:35 PM	5:37 PM			5:42 PM	5:42 PM		5:48 PM	5:51 PM	5:53 PM	5:58 PM	6:13 PM
	191	7:00 PM	7:03 PM	7:05 PM	7:07 PM			7:12 PM	7:12 PM		7:18 PM	7:21 PM	7:23 PM	7:28 PM	
	191	8:30 PM	8:33 PM	8:35 PM	8:37 PM			8:42 PM	8:42 PM		8:48 PM	8:51 PM	8:53 PM	8:58 PM	

Route 9 - Glens Falls / Lake George

PO	Block	Lv RST	Hannaford Quaker	Wal mart	County Center	Rt 9 Rt 149	Rt 9 Rt 9N	LG Village	LG Village	Rt 9 Rt 9N	Rt 9 Rt 149	County Center	Wal mart	Hannaford Quaker	Ar RST	PI
105		9:15 AM	9:20 AM	9:25 AM	9:33 AM	9:36 AM	9:41 AM	9:46 AM	9:50 AM	9:55 AM	10:00 AM	10:03 AM	10:11 AM	10:17 AM	10:22 AM	to 9
105		10:30 AM	10:35 AM	10:40 AM	10:48 AM	10:51 AM	10:56 AM	11:01 AM	11:05 AM	11:10 AM	11:15 AM	11:18 AM	11:26 AM	11:32 AM	11:37 AM	11:52 AM
12:00 PM	153	12:15 PM	12:20 PM	12:25 PM	12:33 PM	12:36 PM	12:41 PM	12:46 PM	12:50 PM	12:55 PM	1:00 PM	1:03 PM	1:11 PM	1:17 PM	1:22 PM	to 4
2:15 PM	152	2:30 PM	2:35 PM	2:40 PM	2:48 PM	2:51 PM	2:56 PM	3:01 PM	3:05 PM	3:10 PM	3:15 PM	3:18 PM	3:26 PM	3:32 PM	3:37 PM	to 9
	152	3:45 PM	3:50 PM	3:55 PM	4:03 PM	4:06 PM	4:11 PM	4:16 PM	4:20 PM	4:25 PM	4:30 PM	4:33 PM	4:41 PM	4:47 PM	4:52 PM	to 11

Changes
 Extend to Lake George Village
 Change 12:30p trip to 12:15p

SATURDAY

Saturday Block Summary

BLK	PO	IN	OUT	PI	RVH	DH	TVH
201	7:45 AM	8:00 AM	5:58 PM	6:13 PM	9:58:00	0:30:00	10:28:00
202	8:15 AM	8:30 AM	1:58 PM	2:13 PM	5:28:00	0:30:00	5:58:00
203	7:37 AM	7:42 AM	6:12 PM	6:17 PM	10:30:00	0:10:00	10:40:00
251	2:45 PM	3:00 PM	3:58 PM	4:13 PM	0:58:00	0:30:00	1:28:00
Total					26:54:00	1:40:00	28:34:00

Route 2 - Bay / College

PO	Block	Lv RST	Bay Sanford	Bay Quaker	Q'bury Town Hall	Glen Hiland Meadows	Hannaford Quaker	Robert Gardens	Wal mart	Aviation Mall	Price Chopper	Ar RST	PI
202	202	10:00 AM	10:03 AM	10:05 AM	10:10 AM	10:15 AM	10:21 AM	10:26 AM	10:31 AM	10:38 AM	10:43 AM	10:53 AM	to 7
202	202	12:00 PM	12:03 PM	12:05 PM	12:10 PM	12:15 PM	12:21 PM	12:26 PM	12:31 PM	12:38 PM	12:43 PM	12:53 PM	to 5

Routes 3/4 - Glens Falls / Hudson Falls / Fort Edward

PO	Block	Lv RST	Warren McDonald	Dix McDonald	Super K	Wal Mart	Boulevard Feeder	Dix Feeder	Main St Village Park	County Center	Broadway East	Amtrak Station	County Center	Main St Village Park	Dix Feeder	Boulevard Feeder	Wal Mart	Super K	Dix McDonald	Warren McDonald	AR RST	PI	
7:37 AM	203																						
	203	8:00 AM	--	8:03 AM	8:06 AM	8:08 AM	8:12 AM	--	8:16 AM	8:19 AM	8:24 AM	8:27 AM	8:30 AM	8:36 AM	8:43 AM	7:42 AM	7:46 AM	7:48 AM	7:52 AM	8:53 AM	7:56 AM		
	203	9:00 AM	9:04 AM	--	9:07 AM	9:09 AM	--	9:12 AM	9:19 AM	9:22 AM	9:27 AM	9:30 AM	9:33 AM	9:39 AM	--	9:42 AM	8:47 AM	8:49 AM	--	8:53 AM	8:57 AM		
	203	10:00 AM	--	10:03 AM	10:06 AM	10:08 AM	10:12 AM	--	10:16 AM	10:19 AM	10:24 AM	10:27 AM	10:30 AM	10:36 AM	10:43 AM	9:42 AM	9:46 AM	9:48 AM	9:52 AM	10:53 AM	10:57 AM		
	203	11:00 AM	11:04 AM	--	11:07 AM	11:09 AM	--	11:12 AM	11:19 AM	11:22 AM	11:27 AM	11:30 AM	11:33 AM	11:39 AM	--	11:42 AM	10:47 AM	10:49 AM	--	10:53 AM	10:57 AM		
	203	12:00 PM	--	12:03 PM	12:06 PM	12:08 PM	12:12 PM	--	12:16 PM	12:19 PM	12:24 PM	12:27 PM	12:30 PM	12:36 PM	12:43 PM	12:42 AM	12:47 PM	12:49 PM	--	12:53 PM	12:57 PM		
	203	1:00 PM	1:04 PM	--	1:07 PM	1:09 PM	--	1:12 PM	1:19 PM	1:22 PM	1:27 PM	1:30 PM	1:33 PM	1:39 PM	--	1:42 PM	1:46 PM	1:48 PM	1:52 PM	2:53 PM	2:57 PM		
	203	2:00 PM	--	2:03 PM	2:06 PM	2:08 PM	2:12 PM	--	2:16 PM	2:19 PM	2:24 PM	2:27 PM	2:30 PM	2:36 PM	2:43 PM	3:42 PM	2:47 PM	2:49 PM	--	2:53 PM	2:57 PM		
	203	3:00 PM	3:04 PM	--	3:07 PM	3:09 PM	--	3:12 PM	3:19 PM	3:22 PM	3:27 PM	3:30 PM	3:33 PM	3:39 PM	--	3:42 PM	3:46 PM	3:48 PM	3:52 PM	4:53 PM	4:57 PM		
	203	4:00 PM	--	4:03 PM	4:06 PM	4:08 PM	4:12 PM	--	4:16 PM	4:19 PM	4:24 PM	4:27 PM	4:30 PM	4:36 PM	4:43 PM	6:12 PM	4:47 PM	4:49 PM	--	4:53 PM	4:57 PM		
	203	5:30 PM	5:34 PM	--	5:37 PM	5:39 PM	--	5:42 PM	5:49 PM	5:52 PM	5:57 PM	6:00 PM	6:03 PM	6:09 PM	--							6:17 PM	

Route 5 - South Glens Falls / Moreau

PO	Block	Lv RST	Main Saratoga	SGF HS	Bluebird Gansevoort	Main Fifth	AR RST	PI
8:15 AM	202	8:30 AM	8:39 AM	8:44 AM	8:49 AM	8:53 AM	8:59 AM	to 7
	202	9:30 AM	9:39 AM	9:44 AM	9:49 AM	9:53 AM	9:59 AM	to 2
	202	11:30 AM	11:39 AM	11:43 AM	11:49 AM	11:53 AM	11:59 AM	to 2
	202	1:00 PM	1:09 PM	1:13 PM	1:19 PM	1:23 PM	1:29 PM	to 7
2:45 PM	251	3:00 PM	3:09 PM	3:13 PM	3:19 PM	3:23 PM	3:29 PM	to 7
	203	5:00 PM	5:09 PM	5:13 PM	5:19 PM	5:23 PM	5:29 PM	to 3

Add 9:30a trip

Route 7 - West Glens Falls

PO	Block	Lv RST	GF Hospital	Knight Staple	Hannaford Plaza	Van Dusen Luzerne	Main McDonalds	Hannaford Plaza	Knight Staple	GF Hospital	Ar RST	PI
202	202	9:00 AM	9:04 AM	9:07 AM	9:09 AM	9:14 AM	9:17 AM	9:20 AM	9:22 AM	9:25 AM	9:28 AM	to 5
	202	11:00 AM	11:04 AM	11:07 AM	11:09 AM	11:14 AM	11:17 AM	11:20 AM	11:22 AM	11:25 AM	11:28 AM	to 5
	202	1:30 PM	1:34 PM	1:37 PM	1:39 PM	1:44 PM	1:47 PM	1:50 PM	1:52 PM	1:55 PM	1:58 PM	2:13 PM
	251	3:30 PM	3:34 PM	3:37 PM	3:39 PM	3:44 PM	3:47 PM	3:50 PM	3:52 PM	3:55 PM	3:58 PM	4:13 PM

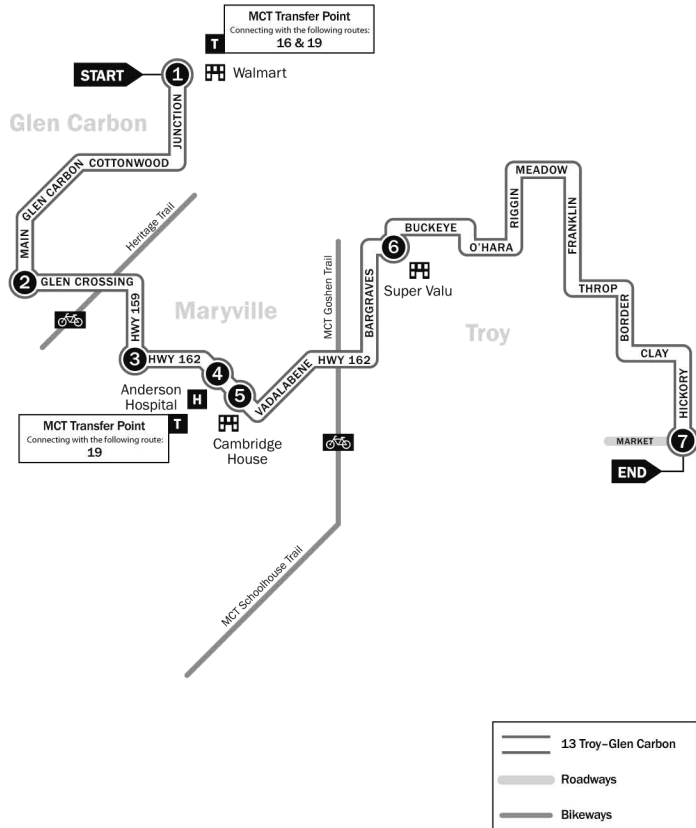
Change from 1:00p to 1:30p

Routes 11/12 - Glen Street

PO	Block	Lv RST	Glen Sanford	Glen YMCA	Glen Quaker	Aviation Mall	J. Burke Apts	Ar Walmart	Lv Walmart	J. Burke Apts	Aviation Mall	Glen YMCA	Glen Sanford	Ar RST	PI
7:45 AM	201	8:00 AM	8:03 AM	8:05 AM	8:07 AM		8:12 AM				8:14 AM	8:18 AM	8:20 AM	8:23 AM	
	201	8:30 AM	8:33 AM	8:35 AM	8:37 AM			8:42 AM	8:42 AM			8:48 AM	8:50 AM	8:55 AM	
	201	9:00 AM	9:03 AM	9:05 AM	9:07 AM		9:12 AM			9:12 AM		9:14 AM	9:18 AM	9:25 AM	
	201	9:30 AM	9:33 AM	9:35 AM	9:37 AM			9:43 AM	9:43 AM			9:48 AM	9:51 AM	9:58 AM	
	201	10:00 AM	10:03 AM	10:05 AM	10:07 AM		10:12 AM			10:12 AM		10:14 AM	10:18 AM	10:25 AM	
	201	10:30 AM	10:33 AM	10:35 AM	10:37 AM			10:42 AM	10:42 AM			10:48 AM	10:51 AM	10:58 AM	
	201	11:00 AM	11:03 AM	11:05 AM	11:07 AM		11:12 AM			11:12 AM		11:14 AM	11:18 AM	11:25 AM	
	201	11:30 AM	11:33 AM	11:35 AM	11:37 AM			11:42 AM	11:42 AM			11:48 AM	11:51 AM	11:58 AM	
	201	12:00 PM	12:03 PM	12:05 PM	12:07 PM		12:12 PM			12:12 PM		12:14 PM	12:21 PM	12:28 PM	
	201	12:30 PM	12:33 PM	12:35 PM	12:37 PM			12:42 PM	12:42 PM			12:48 PM	12:51 PM	12:58 PM	
	201	1:00 PM	1:03 PM	1:05 PM	1:07 PM		1:12 PM			1:12 PM		1:14 PM	1:18 PM	1:25 PM	
	201	1:30 PM	1:33 PM	1:35 PM	1:37 PM			1:42 PM	1:42 PM			1:48 PM	1:51 PM	1:58 PM	
	201	2:00 PM	2:03 PM	2:05 PM	2:07 PM	2:09 PM						2:09 PM	2:13 PM	2:20 PM	
	201	2:30 PM	2:33 PM	2:35 PM	2:37 PM			2:42 PM	2:42 PM			2:48 PM	2:51 PM	2:58 PM	
	201	3:00 PM	3:03 PM	3:05 PM	3:07 PM		3:12 PM			3:12 PM		3:14 PM	3:18 PM	3:25 PM	
	201	3:30 PM	3:33 PM	3:35 PM	3:37 PM			3:42 PM	3:42 PM			3:48 PM	3:51 PM	3:58 PM	
	201	4:00 PM	4:03 PM	4:05 PM	4:07 PM		4:12 PM			4:12 PM		4:14 PM	4:18 PM	4:25 PM	
	201	4:30 PM	4:33 PM	4:35 PM	4:37 PM			4:42 PM	4:42 PM			4:48 PM	4:51 PM	4:58 PM	
	201	5:00 PM	5:03 PM	5:05 PM	5:07 PM	5:09 PM	5:13 PM			5:13 PM		5:18 PM	5:21 PM	5:28 PM	
	201	5:30 PM	5:33 PM	5:35 PM	5:37 PM			5:42 PM	5:42 PM			5:48 PM	5:51 PM	5:58 PM	6:13 PM

APPENDIX D

SELECT EXAMPLES OF TRANSIT AGENCY PASSENGER SCHEDULES



	1 BUS STARTS Walmart	2 Bus Leaves Main & Glen Crossing	3 Bus Leaves HWY 162 & HWY 159	4 Bus Leaves Anderson Hospital	5 Bus Leaves Cambridge House	6 Bus Leaves Super Valu	7 BUS ENDS Market & Hickory
--	----------------------------	---	--------------------------------------	--------------------------------------	------------------------------------	-------------------------------	-----------------------------------

	Monday – Friday						
AM	8:34	8:41	8:46	8:48	8:51	8:57	9:02
	9:36	9:43	9:48	9:50	–	9:57	10:02
	10:34	10:41	10:46	10:48	10:51	10:57	11:02
	11:36	11:43	11:48	11:50	–	11:57	12:02
PM	12:36	12:43	12:48	12:50	–	12:57	1:02
	1:36	1:43	1:48	1:50	–	1:57	2:02
	2:36	2:43	2:48	2:50	–	2:57	3:02
	3:36	3:43	3:48	3:50	–	3:57	4:02

Instructions

North is always at the top of the timetable map.

The bus stops here at listed times. Look for the matching symbol below the map.

Transfer points and MCT Stations show where other bus routes intersect with this route.

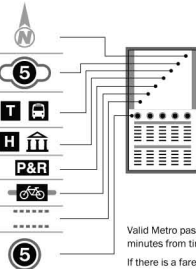
Indicates points of interest.

Indicates Park & Ride Lots available along the route.

Bike Routes which may connect to the bus route.

Indicates select trips.

Times for bus stops along the route. The bus stops at other locations along the route as well. For details please call: (618) 931-7433 or TDD (618) 797-6000.



Cash Fares

	Adult	Elderly ¹ Disabled ² Children under 5	Elderly ³ Disabled ⁴ Children 5-12	Monthly Passes
MCT Shuttle	\$1.00	FREE	\$0.50	Local \$40.00
MCT Cross County	\$1.50	FREE	\$0.75	
MCT Regional	\$2.00	FREE	\$1.00	System \$60.00
MCT Express	\$3.00	FREE	\$3.00	
Local Transfer	FREE	FREE	FREE	
Regional Transfer	\$0.75	FREE	\$0.35	

- Elderly (65 and up) with MCT Senior ID or Metro Senior Pass.
 - Registered Paratransit users with valid MCT Paratransit ID, Metro Paratransit Pass, MCT ADA ID, or MCT Circuit Breaker ID.
 - Elderly (65 and up) with MCT Half Fare ID or Metro Reduced Fare Permit.
 - Persons with disabilities with MCT Half Fare ID or Metro Reduced Fare Permit.
- Valid Metro passes and tickets are accepted for value toward fare. Valid transfers are good for 30 minutes from time marked. Regional transfers good for 2 hours from time marked.
- If there is a fare or transfer dispute, pay the fare as requested and contact MCT. For additional fare or schedule information, call (618) 931-7433 or TDD (618) 797-6000.

Instrucciones

El norte está siempre en lo alto del horario.

El autobús para aquí a las horas marcadas. Busque el símbolo que corresponda debajo del mapa.

Puntos de transferencia y estaciones de MCT donde otras líneas de autobuses cruzan esta ruta.

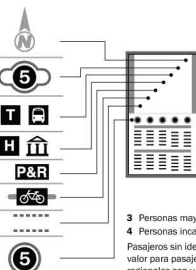
Indica los puntos de interés.

Indica lotes de estacionamiento "Park & Ride."

Las Rutas de bicicletas que unen a rutas de autobuses.

Indica viajes escogidos.

El horario muestra horas de paradas indicadas a lo largo de la ruta. Si necesita ayuda en determinar las horas para otras paradas, llámenos al: (618) 931-RIDE (7433) o TDD (618) 797-6000.



Pasaje En Efectivo

	Adulto	Anciano ¹ Deshabilitado ² Menores de 5	Anciano ³ Deshabilitado ⁴ Niños 5 - 12	Passage Mensual
MCT Shuttle	\$1.00	GRATIS	\$0.50	Local \$40.00
MCT Cross County	\$1.50	GRATIS	\$0.75	
MCT Regional	\$2.00	GRATIS	\$1.00	System \$60.00
MCT Express	\$3.00	GRATIS	\$3.00	
Local Transfer	GRATIS	GRATIS	GRATIS	
Regional Transfer	\$0.75	GRATIS	\$0.35	

- Personas mayores de edad (65 años o más) que tienen tarjeta de Identificación de MCT mayor o que tienen tarjeta de Identificación de Metro mayor.
 - Personas incapacitadas que han sido registradas y usen MCT Paratransit, deben mostrar tarjeta validada de MCT Paratransit, Metro Paratransit, MCT ADA o Metro Circuit Breaker.
 - Personas mayores de edad (65 años o más) con tarjeta de MCT Tarifa Media o Metro Tarifa Rebajada.
 - Personas incapacitadas que tienen tarjeta de MCT Tarifa Media o Metro Tarifa Rebajada.
- Pasajeros sin identificación deben pagar el precio completo. Pasajes Metro y billetes son aceptados como valor para pasaje. Transferencias válidas duran 30 minutos desde la hora marcada. Transferencias regionales son válidas por dos horas desde el tiempo marcado.
- Si hay una disputa de pasaje o transferencia, pague el pasaje como requerido y póngase en contacto con MCT. Para más información sobre pasajes y horarios llame al (618) 931-7433 o TDD (618) 797-6000.

Holidays

There is no bus service on the following holidays: New Year's Day, Easter (only AM Sunday Special; no Sunday U Mall or Sunday Special in PM), Memorial Day, July 4th, Labor Day, Thanksgiving, Christmas.

Other Services

BIKES ON THE BUS

All CCTA buses are equipped with easy to use bike racks. Bike racks hold a maximum of two bikes and are available on a first come, first served basis. There is no extra charge for bringing your bike on the bus.

WHEELCHAIRS ON THE BUS

All CCTA buses are equipped with wheelchair lifts and two wheelchair tie-down spaces. Just ask the driver if you need assistance.

PARATRANSIT SERVICE

Lift-equipped vans are available for those who cannot use the regular bus service. For information and to apply for eligibility, please call 864-CCTA (2282).

HEARING AND SIGHT SERVICES

CCTA phone lines are equipped with a telecommunications device for the deaf (TDD). Our TTY # is 264-1033. Passengers can also contact CCTA through the Vermont Relay system by calling 800-253-0191. System Guides in large print are available on request. Please call 864-CCTA (2282).

Complete maps of all CCTA routes are available by going online to www.cctaride.org



BUS SCHEDULE



University Mall / Airport

SERVICE TO:

University Mall
Burlington International Airport
UVM
Downtown Burlington

FOR MORE INFORMATION:

Call: (802) 864-CCTA • Go online: cctaride.org

STEP 1: FOLD ALONG LINE

It's Easy to Ride!

Thank you for choosing us for your transportation needs! By using public transportation, you're helping the environment, reducing congestion on our roadways, and saving money!

Our mission is to promote and operate safe, convenient, accessible, innovative and sustainable public transportation services in the Chittenden County region that reduce congestion and pollution, encourage transit-oriented development and enhance the quality of life for all.

Plan to get to the bus stop 5 minutes before the bus is scheduled to arrive. Have your fare ready. All CCTA buses have electronic fare boxes that accept coins and dollar bills. Drivers however, CANNOT make change. You may also use coupons, a Ten-Ride Ticket, or a Monthly Bus Pass.

TRANSFERS: If you need to take more than one bus to get where you want to go, ALWAYS ask the driver for a transfer to the next bus when you exit the first bus. Please keep in mind that you cannot transfer back on the same route you received the transfer from.

How to Buy Tickets

BY PHONE: Ten-Ride Tickets and Monthly Bus Passes can be purchased by calling **864-CCTA (2282)** Mon through Fri, 8:00am to 5:00 pm. TTY # (802) 264-1033 • Vermont Relay Service (711) • MasterCard / Visa accepted.

AT TICKET OUTLETS: Tickets are available at many locations within Chittenden County. Please call **864-CCTA (2282)** for a complete list of CCTA ticket outlets.

CCTA Fares

REGULAR:

\$1.25/One-way \$10/Adult Ten-Ride Ticket

\$42/Adult Monthly Pass

Exact fare required; drivers will not make change.

DISCOUNT:

\$5/One-way \$5/Ten-Ride Ticket \$21/Monthly Pass

CCTA discount fares available to those age 6 to 17, seniors 60 and over, Medicare card holders and riders with a CCTA Disabled & Senior ID. Children under 6 ride free when accompanied by a fare-paying passenger.

UVM AND CHAMPLAIN COLLEGE "RIDE CCTA FREE":

Students, faculty, and staff with a valid ID ride all CCTA buses for free! If you need to change buses, be sure to ask for a transfer. Visit CCTA's website for complete program information.

ST. MICHAEL'S COLLEGE "RIDE CCTA FREE":

Students with a valid ID ride all CCTA buses, with the exception of the LINK Express routes, for free! If you need to change buses, be sure to ask for a transfer. Visit CCTA's website for complete program information.

STEP 2: FOLD ALONG LINE



University Mall/Airport



ROUTE *



SCHEDULE

MONDAY-FRIDAY

	1 Cherry Street	2 Main & Univ. Hgts.	3 UMall ⇄	4 Country Park	5 Airport	3 UMall ⇄	2 Main & Univ. Hgts.	1 Cherry Street
6:15	6:19	6:25	R	6:36	6:49	6:56	7:08	
6:45	6:49	6:55	R	7:06	7:19	7:26	7:38	
7:15	7:20	7:25	7:33	7:36	7:49	7:57	8:08	
7:45	7:50	7:55	-	8:06	8:19	8:27	8:38	
8:15	8:20	8:25	-	8:36	8:49	8:57	9:08	
8:45	8:50	8:55	-	9:06	9:20	9:27	9:38	
9:15	9:20	9:25	-	9:36	9:49	9:57	10:08	
9:45	9:50	9:55	10:03	10:08	10:23	10:31	10:39	
10:15	10:20	10:25	-	10:36	10:49	10:57	11:08	
10:45	10:50	10:55	-	11:06	11:20	11:27	11:38	
11:15	11:20	11:25	-	11:36	11:49	11:57	12:08	
AM 11:45	11:50	11:55	-	12:06	12:20	12:27	12:38	
PM 12:15	12:20	12:25	-	12:36	12:49	12:57	1:08	
12:45	12:50	12:55	1:03	1:08	1:21	1:29	1:40	
1:15	1:20	1:25	-	1:36	1:49	1:57	2:08	
1:45	1:50	1:55	2:03	2:08	2:21	2:29	2:40	
2:15	2:20	2:25	-	2:36	2:49	2:57	3:08	
2:45	2:52	2:58	-	3:10	3:25	3:3	3:45	
3:15	3:20	3:25	-	3:36	3:49	3:57	4:08	
3:45	3:50	3:55	-	4:08	4:21	4:29	4:40	
4:15	4:20	4:25	-	4:36	4:49	4:57	5:08	
4:30	4:35	4:45	4:53	5:00	5:19	5:25	5:40	
4:45	4:52	5:00	-	5:12	5:27	5:35	5:45	
5:15	5:20	5:30	-	5:41	5:55	6:03	6:15	
5:45	5:50	5:55	R	6:06	6:17	6:25	6:36	
6:15	6:20	6:25	R	6:36	6:47	6:55	7:06	
7:15	7:20	7:25	R	7:36	7:47	7:55	8:06	
8:20	8:25	8:30	R	8:41	8:52	9:00	9:08	
9:30	9:35	9:40	R	9:51†	10:02	10:10	10:21	

⇄ Please ask driver if Williston route transfer is possible.
 R On-board request only.
 † This bus will travel as far as the intersection of North Street and North Avenue on request.

SATURDAY

	1 Cherry Street	2 Main & Univ. Hgts.	3 UMall ⇄	4 Country Park	5 Airport	3 UMall ⇄	2 Main & Univ. Hgts.	1 Cherry Street
6:15	6:20	6:25	R	6:36	6:48	6:57	7:06	
7:15	7:20	7:25	R	7:36	7:48	7:57	8:06	
8:15	8:20	8:25	R	8:36	8:48	8:57	9:06	
9:15	9:20	9:25	-	9:36	9:48	9:57	10:06	
9:45	9:50	9:55	10:03	10:08	10:20	10:29	10:39	
10:15	10:20	10:25	-	10:36	10:48	10:57	11:06	
10:45	10:50	10:55	11:03	11:08	11:20	11:29	11:39	
11:15	11:20	11:25	-	11:36	11:48	11:57	12:06	
AM 11:45	11:50	11:55	12:03	12:08	12:20	12:29	12:39	
PM 12:15	12:20	12:25	-	12:36	12:48	12:57	1:06	
12:45	12:50	12:55	1:03	1:08	1:20	1:29	1:39	
1:15	1:20	1:25	-	1:36	1:48	1:57	2:06	
1:45	1:50	1:55	2:03	2:08	2:20	2:29	2:39	
2:15	2:20	2:25	-	2:36	2:48	2:57	3:06	
2:45	2:50	2:55	3:03	3:08	3:20	3:29	3:39	
3:15	3:20	3:25	-	3:36	3:48	3:57	4:06	
3:45	3:50	3:55	4:03	4:08	4:20	4:29	4:39	
4:15	4:20	4:25	-	4:36	4:48	4:57	5:06	
4:45	4:50	4:55	5:03	5:08	5:20	5:29	5:39	
5:15	5:20	5:25	R	5:36	5:48	5:57	6:06	
5:45	5:50	5:55	R	6:06	6:18	6:27	6:38	
6:15	6:20	6:25	R	6:36	6:48	6:57	7:06	
7:15	7:20	7:25	R	7:36	7:48	7:57	8:06	

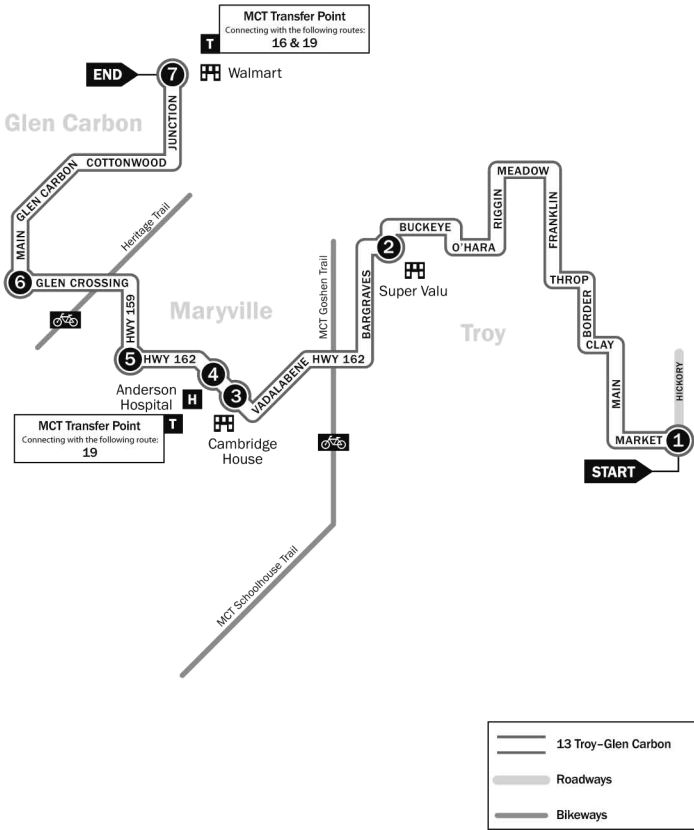
SUNDAY

	1 Cherry Street	2 Main & Univ. Hgts.	3 UMall ⇄	4 Country Park	5 Airport	3 UMall ⇄	2 Main & Univ. Hgts.	1 Cherry Street
8:45	8:50	8:55	9:00	9:06	9:20	9:25	9:35	
9:45	9:50	9:55	10:00	10:06	10:20	10:25	10:35	
10:45	10:50	10:55	11:00	11:06	11:20	11:25	11:35	
AM 11:45	11:50	11:55	12:00	12:06	12:20	12:25	12:35	
PM 12:45	12:50	12:55	1:00	1:06	1:20	1:25	1:35	
1:45	1:50	1:55	2:00	2:06	2:20	2:25	2:35	
2:45	2:50	2:55	3:00	3:06	3:20	3:25	3:35	
3:45	3:50	3:55	4:00	4:06	4:20	4:25	4:35	
4:45	4:50	4:55	5:00	5:06	5:20	5:25	5:35	
5:45	5:50	5:55	6:00	6:06	6:20	6:25	6:35	



Route 13 – Troy-Glen Carbon

Troy to Glen Carbon



	1 BUS STARTS Market & Hickory	2 Bus Leaves Super Valu	3 Bus Leaves Cambridge House	4 Bus Leaves Anderson Hospital	5 Bus Leaves HWY 162 & HWY 159	6 Bus Leaves Main & Glen Crossing	7 BUS ENDS Walmart
--	-------------------------------------	-------------------------------	------------------------------------	--------------------------------------	--------------------------------------	---	--------------------------

Monday – Friday							
AM	8:02	8:08	–	8:15	8:17	8:22	8:28
	9:02	9:08	9:14	9:17	9:19	9:24	9:30
	10:02	10:08	10:14	10:17	10:19	10:24	10:30
	11:02	11:08	–	11:15	11:17	11:22	11:28
PM	12:02	12:08	–	12:15	12:17	12:22	12:28
	1:02	1:08	–	1:15	1:17	1:22	1:28
	2:02	2:08	–	2:15	2:17	2:22	2:28
	3:02	3:08	–	3:15	3:17	3:22	3:28
	4:02	4:08	–	4:15	4:17	–	–

Madison County Transit Services

- MCT Shuttle**
Bus service within a single Madison County community. Routes 2, 8, 9, 10, 11, 12, 15, 16, 17
- MCT Cross County**
Bus service from city to city within Madison County and select locations in St. Clair County. Routes 1, 4, 7, 13, 14, 19
- MCT Express**
Weekly commuter bus service to downtown St. Louis. Routes 1X, 3X, 12X, 14X, 18X, 18X
- MCT Regional**
Bus service to Metrolink and downtown St. Louis. Routes 5, 18
- MCT EZ Ride**
Bus service that offers a flexible, convenient way to go where you want to, and a choice of how to get there. Routes 5, 14
- MCT Many Express**
Find the best seat at the Many for every Friday evening performance.
- MCT Rams Express**
Catch every Rams home preseason, regular season and playoff game.
- MCT Trails**
Experience the more than 100 miles of scenic trails that comprise the MCT Trails bikeway system. Visit www.mctrails.org
- ACT Paratransit**
Residents age 65 or older or who have a disability can travel curb-to-curb on the ACT Runabout paratransit service.
- RideFinders**
Move into the fast lane to a better commute by sharing the ride to and from work in a carpool or vanpool. Visit www.ridefinders.org
- For specific information on these and other services, check our schedules, please call (618) 531-RIDE (1433) / TDD (618) 797-6000 or visit www.mctd.org

13 Troy-Glen Carbon

May 10, 2009

CROSS COUNTY

BUS SERVICE FROM CITY TO CITY WITHIN MADISON COUNTY

- Troy
- Super Valu
- Maryville
- Anderson Hospital
- Cambridge House
- Glen Carbon
- Downtown Glen Carbon
- Walmart

Timetable & Map

