

# Long Range Transportation Plan for the Genesee-Finger Lakes Region

2005  
2025



**GENESEE TRANSPORTATION COUNCIL**



## GENESEE TRANSPORTATION COUNCIL

### **RESOLUTION**

Resolution 04-39      Adopting the Long Range Transportation Plan for the Genesee-Finger Lakes Region: 2005-2025

### **WHEREAS,**

1. Title 23, Section 134 of the United States Code requires that each Metropolitan Planning Organization (MPO) prepare and update a long range transportation plan (LRTP) for its metropolitan area;
2. Title 23, Section 134 of the United States Code requires that an LRTP shall, at a minimum, identify transportation facilities that should function as an integrated system, and include a fiscally-constrained financial plan for implementing the recommendations contained in the LRTP;
3. GTC has developed the Long Range Transportation Plan for the Genesee-Finger Lakes Region: 2005-2025 in a manner that meets and exceeds the requirements of Title 23, Section 134 of the United States Code in consultation with the general public, member agencies, and others;
4. Said LRTP has been produced and reviewed by GTC Staff and member agencies through the GTC committee process and its recommendations have been found to be consistent with the principles of sound transportation planning practices.

### **NOW, THEREFORE, BE IT RESOLVED**

1. That the Genesee Transportation Council hereby adopts the Long Range Transportation Plan for the Genesee-Finger Lakes Region: 2005-2025 as the official LRTP for the Rochester Transportation Management Area;
2. That the Council encourages those responsible for the development and advancement of transportation projects in the Rochester TMA do their utmost to adhere to its principles and recommendations in carrying out their respective programs.

### **CERTIFICATION**

The undersigned duly qualified Secretary of the Genesee Transportation Council certifies that the foregoing is a true and correct copy of a resolution adopted at a legally convened meeting of the Genesee Transportation Council held on December 9, 2004.

Date: 12/9/04



CHARLES MOYNIHAN, Secretary  
Genesee Transportation Council

## TABLE OF CONTENTS



If you have questions or comments about this document, please contact the Genesee Transportation Council at CityPlace, 50 West Main Street, Suite 8112, Rochester, NY 14614-1227; telephone (585) 232-6240, fax (585) 262-3106, or via e-mail at [contactgtc@gtcmpo.org](mailto:contactgtc@gtcmpo.org).

Financial assistance for the preparation of this document was provided by the U.S. Department of Transportation. The Genesee Transportation Council is solely responsible for its content.

Cover photo credits: Large photo – Greater Rochester Visitors Association; small photos – Greater Rochester Visitors Association and Genesee Transportation Council staff.



**CHAPTER 1 - INTRODUCTION**

Transportation's Role  
How the LRTP is Organized

**CHAPTER 2 - THE PLAN**

Overview  
The Genesee Transportation Council  
Responsibilities  
Organizational Structure  
How the LRTP was Developed  
Development Phases  
Development Activities

**CHAPTER 3 - THE REGION**

Overview  
Population  
Who We Are  
Where We Live  
Employment  
What We Do  
Where We Work  
Principal Themes  
Creating Jobs  
Enhancing Community Character  
Improving Mobility for the Physically Challenged  
Accessing Medical Services  
Integrating Air Quality Considerations  
Balancing Regional Objectives and Local Priorities

**1 CHAPTER 4 - THE TRANSPORTATION SYSTEM 27**

3 Overview 28  
3 Highways and Bridges 28  
    Accomplishments 33  
**5** Public Transportation 34  
6     Accomplishments 37  
6     Bicycle and Pedestrian 37  
6     Accomplishments 39  
8     Goods Movement 40  
12     Accomplishments 42  
12     Interregional Travel 47  
14     Accomplishments 48

**19 CHAPTER 5 - RECOMMENDATIONS 51**

20 Overview 52  
20 Highways and Bridges 52  
20     Preservation 52  
21     Operations 52  
22     Expansion 53  
22 Public Transportation 57  
22     Preservation 57  
23     Operations 57  
24     Expansion 57  
24 Bicycle and Pedestrian 61  
24     Preservation 61  
25     Operations 61  
25     Expansion 61  
26 Goods Movement 64  
    Preservation 64

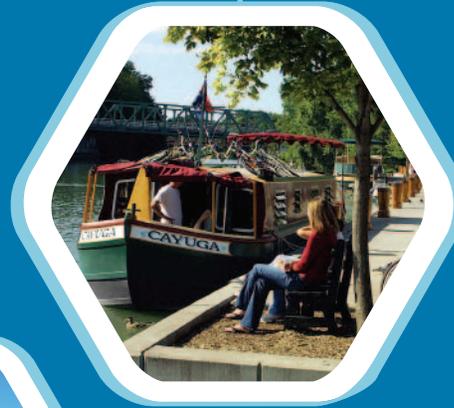


Operations	64	Exhibit 5	Population Growth Rate of Persons 65 and Over, 1980 to 2000	21
Expansion	64	Exhibit 6	Population by County, 2000	22
Interregional Travel	67	Exhibit 7	Households & Persons Per Household Growth Rates, 1990 to 2000	23
Preservation	67	Exhibit 8	Number of Businesses, 1990 to 2000	23
Operations	67	Exhibit 9	At-Home Workers, 1990 to 2000	24
Expansion	67	Exhibit 10	Means of Transportation to Work, 2000	25
Land Use	69	Exhibit 11	20-Year Projected Available Funding by Mode (in \$000's)	73
<b>CHAPTER 6 - FINANCE AND IMPLEMENTATION</b>	<b>71</b>	Exhibit 12	20-Year Projected Funding Shortfall	74
Overview	72	Exhibit 13	20-Year Projected Funding Allocation by Category	75
Anticipated Revenue Projections	72	Exhibit 14	20-Year Projected Emissions and Energy Use Changes	76
The Shortfall	73			
Allocation of Revenue Projections	74	<b>LIST OF MAPS</b>		
State Energy Plan	74	Map 1	Nine-County GTC Planning Region and Rochester Transportation Management Area	7
Analysis Methodology	75	Map 2	Highway & Bridge Network, 2004	29
Analysis Results	76	Map 3	Average Daily Traffic, 2002	30
<b>CHAPTER 7 - FOLLOW-ON ACTIVITIES</b>	<b>77</b>	Map 4	2005 Base Scenario Congested Links in the PM Peak Hour	31
Overview	78	Map 5	2025 No-Build Scenario Congested Links in the PM Peak Hour	32
Performance Measures	78	Map 6	Existing ITS Network in the Rochester Area, 2005	35
<b>APPENDIX A - SUMMARIES OF PUBLIC COMMENTS RECEIVED</b>	<b>82</b>	Map 7	Planned ITS Network in the Rochester Area, 2015	36
<b>LIST OF EXHIBITS</b>		Map 8	Public Transportation Routes, 2004	38
Exhibit 1	9	Map 9	Trails Network, 2004	41
Exhibit 2	11	Map 10	Inbound Tonnage by Economic Area, 2001	43
Exhibit 3	13	Map 11	Outbound Tonnage by Economic Area, 2001	44
Exhibit 4	20	Map 12	Roadways with Significant Daily Truck Traffic, 2002	45
		Map 13	Active Class 1 & Class 3 Railroads, 2001	46
		Map 14	Interregional Transportation Facilities, 2004	49

**GENESEE TRANSPORTATION COUNCIL**



## CHAPTER I - INTRODUCTION





Located in western-central New York State, the nearly 4,700 square-mile Genesee-Finger Lakes Region stretches south from the shores of Lake Ontario to the low rolling hills of the Appalachian Highlands. Many striking natural features and scenic vistas lie within the nine-county region including the western Finger Lakes, the Genesee River, and Letchworth State Park, commonly known as the “Grand Canyon of the East”.

Founded in 1803 and incorporated in 1834, Rochester is New York State's third largest city (2000 population: 219,773) and the internationally recognized corporate and cultural center of the region that includes the counties of Genesee, Livingston, Monroe, Ontario, Orleans, Seneca, Wayne, Wyoming, and Yates. The region is home to approximately 1.2 million residents and more than 27,000 businesses with over one-half million employees.

The region is known throughout the world as a leader in the development and production of optics and imaging products and technologies. The region's preeminence in these industries began in the late 19th century with the founding of Eastman Kodak and Bausch & Lomb in Rochester and has expanded significantly as other firms throughout the region have made advances in optics and imaging (photonics) technologies and integrated them into other sectors, including biotechnology and telecommunications.

In addition to optics and imaging, the region is a major manufacturer of precision instruments, fabricated metals, and transportation equipment. More persons are employed by manufacturing and related support service firms in this region than in any other in New York State.

Agriculture is also an important component of the regional economy with the production of fruits, vegetables, and dairy products both for export and in support of the expanding food processing sector and world-class wineries in the region.

Given the region's production of high-quality goods and its close proximity to major population centers in the United States and Canada, it is not

surprising that the region is a major exporter both domestically and internationally. As a national leader in export value per capita, the region exported over \$13 billion of products to more than 170 countries worldwide in 2001 — more than 40 of the 50 states.

With over 80,000 full- and part-time students, the more than 20 two- and four- year universities and colleges in the region are essential in training the future workforce, upgrading the skills of employees and those seeking work, and acting as an economic catalyst by employing over 5,500 persons. Furthermore, these institutions play a vital role alongside local industry in creating an environment of innovation that is unequaled in the nation as measured by the number of patents issued per worker.

Cultural and historical attractions abound throughout the region. The City of Rochester plays host to museums of science and art, theatrical productions, the Strong Museum, Rochester Philharmonic Orchestra, the George Eastman House and its International Museum of Photography and Film, and several festivals. From an historical standpoint, the region is renowned as the birthplace of the women's suffrage movement, center of the abolitionist movement, and for its American Indian heritage. This renowned past is preserved and celebrated in numerous venues including the Women's Rights National Historic Park, the Susan B. Anthony house, and the Ganondagan State Historical Site.

The average daily temperature of the region varies from 24 degrees Fahrenheit in January to 71 degrees Fahrenheit in July, providing recreation opportunities that range from downhill skiing at numerous locations during the winter to water sports and fishing in the summer. In addition, the region's local and state parks offer year-round opportunities to enjoy a range of outdoor activities and the changing of the seasons.

An integral part of the region's character is its spirit of philanthropy. The legacy of giving that was established by George Eastman and other early civic leaders continues through the charitable foundations that they and their counterparts throughout the region's history have created. More



significant than the largess of the more notable benefactors is the level of giving by residents of more modest incomes, as evidenced by Rochester and Monroe County currently leading the nation in per capita charitable contributions.

## TRANSPORTATION'S ROLE

While topography and natural features shaped the earliest physical development of the region, it was the opening of the Erie Canal in 1825 that laid the foundation for the Genesee-Finger Lakes Region's prosperous future. The presence of such an efficient transportation route to America's frontier enabled entrepreneurial skills and talents to be combined with the natural resources necessary to fill a burgeoning nation's demand for goods and provisions.

Even though the Erie Canal eventually gave way to railroads and then highways as the primary modes of travel, it remains a prime example of the impacts that the transportation system can have on the character and development of a region.

Regardless of the form it takes in the future, the ability of the transportation system to safely and efficiently move people and goods will continue to be a major factor in determining the quality of life and economic success of the region.

Accordingly, the mission of the Genesee Transportation Council is to maximize the contribution of the transportation system to the social and economic vitality of the nine-county Genesee-Finger Lakes Region.

"The Long Range Transportation Plan for the Genesee-Finger Lakes Region: 2005-2025" (LRTP) has been developed in a manner wholly consistent with this mission and provides a 20-year perspective of existing and projected transportation system capabilities, needs, objectives, and strategies to achieve these objectives. The LRTP serves as the framework for guiding the planning and implementation of transportation improvements in the region.

## HOW THE LRTP IS ORGANIZED

**Chapter 1 - Introduction** has provided an overview of why the region is a world-class community and the role that transportation has and will play in continuing this tradition.

**Chapter 2 - The Plan** provides an overview of the LRTP, discusses the role of the Genesee Transportation Council in transportation policy, planning, and investment decision making in the region, and describes the methodology used to develop the LRTP.

**Chapter 3 - The Region** highlights demographic and economic conditions (both current and projected) and identifies opportunities and issues that transportation can materially benefit, including principal themes.

**Chapter 4 - The Transportation System** discusses the current and projected characteristics of the transportation system by mode, including accomplishments since the completion of the previous LRTP in 1999.

**Chapter 5 - Recommendations** details the policies and actions that the LRTP recommends for implementation to improve the contribution of the transportation system to the social and economic vitality of the region.

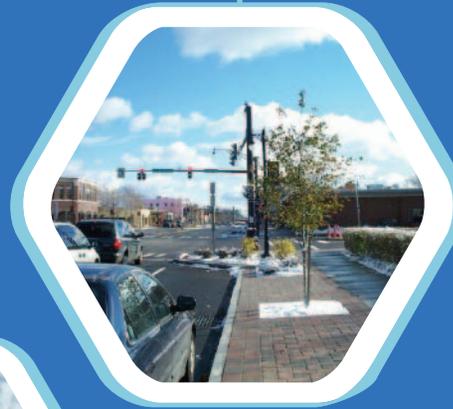
**Chapter 6 - Finance and Implementation** discusses the approach for advancing the policies and actions of the LRTP within the fiscal constraints of reasonably available funding.

**Chapter 7 - Follow-on Activities** presents performance measures to determine the impacts of the policies and actions in improving transportation with respect to the GTC Goals and Objectives.

**GENESEE TRANSPORTATION COUNCIL**



## CHAPTER II - THE PLAN





## OVERVIEW

The purpose of the Long Range Transportation Plan for the Genesee-Finger Lakes Region: 2005-2025 (LRTP) is to provide a 20-year perspective of existing and projected transportation system capabilities, needs, and associated objectives, as well as recommended policies and actions to meet these objectives.

As the designated Metropolitan Planning Organization (MPO) for the nine-county Genesee-Finger Lakes Region, the Genesee Transportation Council (GTC) is responsible for the development and maintenance of the LRTP for the Rochester Transportation Management Area (TMA). The Rochester TMA includes all of Monroe County and the adjacent developed areas of Livingston, Ontario, and Wayne counties.

Map 1 on the following page presents a map of the nine-county Genesee-Finger Lakes Region, highlighting the Rochester TMA.

Recognizing that the transportation system in the Rochester TMA both greatly influences and is influenced by the transportation system in the surrounding area, the LRTP discusses the system in the context of the entire nine-county region.

Neither the policies nor actions included in the LRTP represent funding commitments for specific projects. Rather, the policies and actions are intended to serve as a framework for future transportation planning and investment decision making.

As discussed below, implementation of the policies and actions included in the LRTP typically take the form of specific projects funded through the Transportation Improvement Program. Accordingly, federal funds for transportation improvements in the Rochester TMA are programmed by GTC and improvements outside the TMA are programmed by the New York State Department of Transportation (NYSDOT).

## THE GENESEE TRANSPORTATION COUNCIL

### Responsibilities

The U.S. Department of Transportation (USDOT) requires every metropolitan area with a population of over 50,000 to have a designated MPO to qualify for the receipt of federal highway and transit funds.

GTC is the designated MPO responsible for transportation policy, planning, and investment decision making in the Genesee-Finger Lakes Region.

To maintain the federally-certified planning process required by USDOT in order to receive federal transportation funding, GTC as a designated MPO must at a minimum produce and maintain three major products:

#### 1. Long Range Transportation Plan (LRTP)

As stated earlier, this product provides a 20-year perspective of existing and projected transportation system capabilities, needs, and associated objectives, as well as recommended policies and actions to meet these objectives.

The LRTP serves as a framework for guiding federally-funded transportation planning and investment decision making. The LRTP must be updated every three years.

#### 2. Unified Planning Work Program (UPWP)

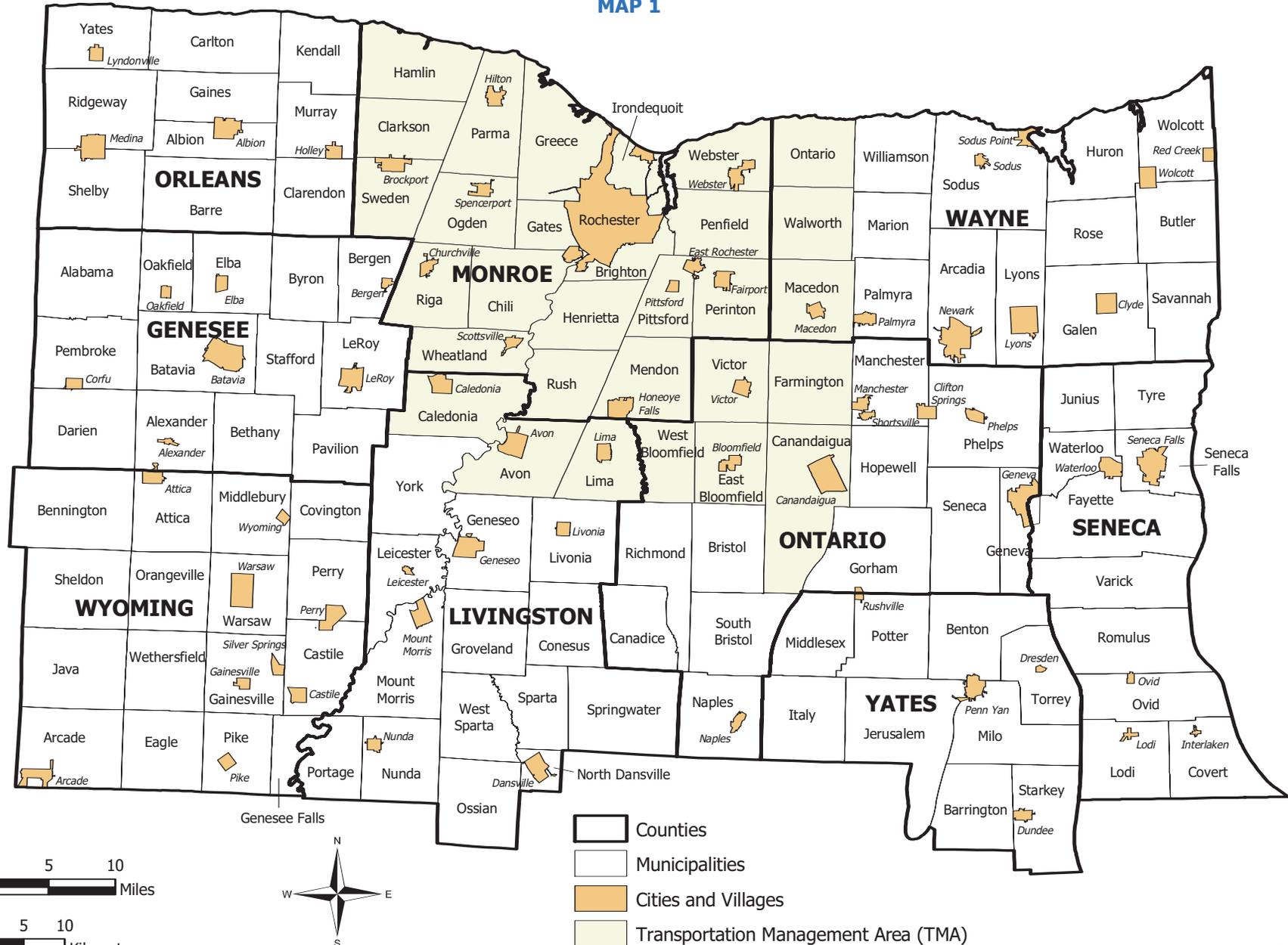
This product programs federally-funded transportation planning activities to further develop the policies and actions contained in the LRTP into concept-level projects and programs.

The UPWP allocates funding for both specific planning projects (e.g., corridor studies, strategic plans for public transportation, etc.) and on-going programmatic activities (e.g., transportation demand modeling, bicycle and pedestrian planning assistance, etc.). The UPWP is updated every two years.



NINE-COUNTY GTC PLANNING REGION AND ROCHESTER TRANSPORTATION MANAGEMENT AREA

MAP 1





### 3. Transportation Improvement Program (TIP)

This product identifies and schedules the specific transportation improvements that will receive federal funding over the next five years.

Projects included in the TIP typically emerge from recommendations identified in projects and programs in the UPWP and infrastructure needs identified by member agencies. The TIP must be updated every two years.

GTC and NYSDOT work cooperatively to develop the TIP. GTC is responsible for the development of the TIP within the Rochester TMA and NYSDOT has purview over projects included in the TIP that are outside the Rochester TMA.

In addition to completing these three major products, GTC also undertakes various other USDOT-mandated activities and programs. Examples include the GTC Public Participation Policy, Congestion Management System, and air quality conformity determination requirements.

In order to more effectively meet local and regional transportation planning needs, GTC continues to develop increased proficiency in several other technical fields including, but not limited to, bicycle and pedestrian planning, travel demand modeling, and intelligent transportation systems.

All GTC activities are responsive to mandates and guidelines including, but not limited to, the Americans with Disabilities Act, Clean Air Act Amendments of 1990, Title VI of the Civil Rights Act of 1964, and environmental justice considerations.

The framework established in the LRTP, the selection of planning activities carried out through the UPWP, the investment decisions programmed in the TIP, and all other activities and programs conducted by GTC are wholly consistent with the GTC Goals and Objectives.

These goals and objectives reflect local and regional objectives within the context of the seven major transportation planning focus areas established

by the federal Transportation Equity Act for the 21st Century (TEA-21), enacted in 1998. The GTC Goals and Objectives are presented in Exhibit 1.

### **Organizational Structure**

GTC is governed by a 27-member policy committee (the GTC Board) which is supported by the Executive Committee, Planning Committee, and various other committees. Their various roles in the MPO process are discussed below:

#### **GTC Board**

The GTC Board is the governing body of GTC. It provides direction and establishes policy with regards to the roles and responsibilities of GTC as the designated MPO for the region. The GTC Board approves all activities and work products, including the LRTP, UPWP, and TIP.

The 27 members of the GTC Board include elected officials from the nine counties of the region, the City of Rochester, and representatives of other local, regional, state, and federal agencies. GTC Board Officers are elected from among the members.

A listing of current GTC members is presented in Exhibit 2.

The GTC Board meets quarterly, or as required. Each GTC Board meeting is open to the public and advertised as such through media outlets across the region. A public forum is included at the beginning of all meetings to allow for public comment on meeting agenda items before GTC Board action is taken.

#### **Executive Committee**

The Executive Committee is a subset of the GTC Board responsible for specific decision making related to administrative, organizational, and financial issues affecting GTC and its staff.



## EXHIBIT 1 - **GTC GOALS & OBJECTIVES**

### **1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency**

- A. The transportation system should support balanced community and economic development of the metropolitan area
- B. The transportation system should be a distinguishing competitive feature of the metropolitan area relative to other areas, serving the needs of existing businesses and enhancing the region's attractiveness to new business

### **2. Increase the safety and security of the transportation system for motorized and non-motorized users**

- A. Transportation designs, services, and education programs should be promoted to enhance and protect life, health, and property

### **3. Increase the accessibility and mobility options available to people and freight**

- A. The transportation system should provide the capacity, coverage and coordination necessary to provide mobility to the region's population and commercial activities in a fashion consistent with the overall intent of Goal 1
- B. Reasonable travel alternatives should be available to all persons in the area regardless of age, physical or mental ability, and/or income

### **4. Protect and enhance the natural environment, cultural heritage and community appearance, and promote energy conservation**

- A. Transportation planning and decision making should support and reinforce local land use and development objectives

- B. Transportation planning and decision making should recognize local priorities balanced with broader community goals
- C. Transportation planning and decision making should strive to address issues on a corridor level, recognizing both the multi-jurisdictional component of travel and the interrelationship between transportation and non-transportation policies and investments
- D. The transportation system should encourage the efficient use of non-renewable energy resources and the exploration of renewable alternatives
- E. Transportation planning and decision making should strive to embrace designs and processes that respect the natural environment and enhance the overall contribution of the transportation system to community livability

### **5. Promote efficient system management and operations**

- A. The transportation system should be designed and managed in a fashion that minimizes lifetime maintenance and user costs
- B. Transportation investments should advance the Long Range Transportation Plan's goals and objectives in a fashion which maximizes benefits relative to costs\*
- C. Transportation and land use planning should be integrated in a fashion that optimizes the use of existing transportation and other municipal infrastructure
- D. Transportation investments should be guided by cooperative planning, design, and maintenance standards to promote system continuity and uniformity across jurisdictional boundaries



**6. Facilitate partnerships in planning, financing, and the execution of transportation initiatives**

- A. The transportation planning and decision making process should be multi-jurisdictional, fostering coordination and cooperation among local, county, state, and federal governments, concerned agencies, and the private sector
- B. The transportation planning process should be conducted in as open and visible a manner as possible, encouraging community participation and interaction between and among citizens, professional staff, and elected officials
- C. Financial and non-financial support for transportation initiatives should be provided by all levels of government and the private sector in a fashion which reflects their relative responsibilities for, and/or benefits from, the initiatives and related economic and social impacts
- D. Innovative financing/partnerships for transportation initiatives that reflect the full scope of interests impacted or served should be explored
- E. Transportation and transportation-related information resources should be developed and shared in a fashion that promotes informed public and private sector decision making
- F. Awareness should be promoted regarding the impact of individual, public, and private sector decisions on the quality of mobility and the potential impact of these decisions on others

\*Note: Benefits and costs are broadly defined, quantitative as well as qualitative, non-monetary as well as monetary, and involve non-transportation effects as well as those related to the direct provision of transportation services. ■

The Executive Committee is comprised of the chairperson of the GTC Board, the lead elected officials of the Rochester TMA counties, the mayor of the City of Rochester, the chairperson of the Rochester-Genesee Regional Transportation Authority (RGRTA), the chairperson of the Genesee/Finger Lakes Regional Planning Council (G/FLRPC), and the regional director of NYSDOT.

The Executive Committee meets as needed at the discretion of the GTC Board Chairperson.

**Planning Committee**

The Planning Committee provides professional and technical direction to the GTC Board. With input from the various committees noted below, the Planning Committee reviews and recommends action on all activities and work products that are considered by the GTC Board.

Each member of the GTC Board appoints a representative to the Planning Committee. The Planning Committee representative is typically a transportation or planning professional.

The Planning Committee meets eight times per year during the months that GTC Board meetings are not held, or as required. Each Planning Committee meeting is open to the public and advertised as such through media outlets across the region.

A public forum is included at the beginning of all meetings to allow for public comment on meeting agenda items before Planning Committee recommendations to the GTC Board are made.

The other committees that support GTC in executing its responsibilities include the LRTP Development Committee, UPWP Development Committee, and TIP Development Committee, as well as the Accessible Transportation Advisory Committee.



## EXHIBIT 2 - **GTC BOARD MEMBERS** *(AT THE TIME OF LRTP ADOPTION)*

### **COUNTY LEGISLATURE/BOARDS OF SUPERVISORS (9)**

Genesee County  
Mary Pat Hancock - Chair

Livingston County\*  
James Merrick - Chair

Monroe County  
Wayne Zyra - President

Ontario County\*  
Carmen Orlando - Chair

Orleans County  
Marcia Tuohey - Chair

Seneca County  
Robert Shipley - Chair

Wayne County\*  
Marvin Decker - Chair

Wyoming County  
A. Douglas Berwanger - Chair

Yates County  
Robert Multer - Chair

### **REGIONAL AGENCIES (2)**

Genesee/Finger Lakes Regional Planning Council\*  
Esther Leadley - Chair

Rochester-Genesee Regional Transportation Authority\*  
William Nojay - Chair

### **OTHER LOCAL MEMBERS (9)**

Monroe County Executive\*  
Maggie Brooks - County Executive

Monroe County Planning Board  
Bonnie Pedrick-Coles - Chair

Monroe County Supervisors' Association  
Gay H. Lenhard - Chair

Monroe County At-Large  
Daniel Hogan - At-Large Member  
Edward Marianetti - At-Large Member

Mayor - City of Rochester\*  
William Johnson, Jr. - Mayor

Rochester City Council  
Lois Geiss - President

Rochester City Planning Commission  
Dana Miller - Chair

Rochester At-Large  
Paul Haney - At-Large Member

### **STATE AGENCIES (4)**

Empire State Development Corporation  
Charles Gargano - Commissioner

NYS Department of Environmental Conservation  
Erin Crotty - Commissioner

NYS Department of Transportation\*  
Joseph Boardman - Commissioner

NYS Thruway Authority  
Michael Fleischer - Executive Director

### **FEDERAL AGENCIES (3)**

Federal Aviation Administration\*\*  
Phillip Brito - District Chief

Federal Highway Administration\*\*  
Robert Arnold - Division Administrator

Federal Transit Administration\*\*  
Letitia Thompson - Regional Administrator

### **COUNCIL OFFICERS:**

Marvin Decker - Chair  
Maggie Brooks - Vice-Chair  
Charles Moynihan - Secretary\*\* ■



GTC staff, in conjunction with key staff of GTC member agencies, provides professional and technical support for the execution of policies, programs, and projects established by the GTC Board, consistent with the responsibilities discussed in the preceding section.

## HOW THE LRTP WAS DEVELOPED

The development of the LRTP began in April 2002 with the creation of a critical path schedule that identified and programmed the steps necessary to produce the LRTP. It was recognized immediately that the process employed to produce the LRTP would determine its success in identifying policies and actions that most effectively meet the needs of transportation system users over the next 20 years.

Accordingly, the process used to develop the LRTP included the following key phases:

1. Identification of opportunities and issues facing the region
2. Development of alternatives to maximize the opportunities and address the issues
3. Selection of preferred alternatives (policies and actions) for inclusion in the LRTP
4. Adoption of the LRTP by the GTC Board

The first three phases combined both technical transportation planning and public involvement activities. These activities were divided into the following categories:

- Data and Information Analysis
- Review of Existing Plans and Studies
- Public Involvement
- Committee Involvement

Exhibit 3 on the following page presents the LRTP development process in graphic format.

## Development Phases

### 1. Identification of Opportunities and Issues

The identification of opportunities and issues phase was conducted in Fall and Winter 2003 to determine where we, as a region, want to be over the 20-year period covered by the LRTP.

An analysis of historical, current, and projected population, household, business establishment, and employment data was performed.

During this phase, the characteristics of the transportation system were not considered. The primary purpose of this phase was to determine what the ideal position of the region should be in 20 years with respect to:

- Economic Development
- Land Use
- Environment and Natural Resources
- Social and Human Services
- Parks, Recreation, and Open Space
- Historic Resources
- Safety and Security
- Fiscal Health

This phase was critical to assuring that the policies and actions included as recommendations in this LRTP are not self-serving but instead will strengthen this region's position as a world-class community when implemented over the next 20 years.



**2. Development of Alternatives**

The development of alternatives phase was conducted in Spring and Summer 2004 to identify the full range of transportation options available to the region over the next 20 years. An emphasis was placed on identifying physical and operational improvements, new or modified services, and strategies and policies that responded to the opportunities and issues identified in the previous phase.

An inventory and analysis of the existing transportation system was conducted to determine how the system is used today and, if past trends continue, how it will be used in the future. Transportation improvements that were completed since the adoption of the last LRTP in December 1999 or are currently underway were identified. Included in this analysis was an assessment of the performance of the transportation system based on current and projected uses.

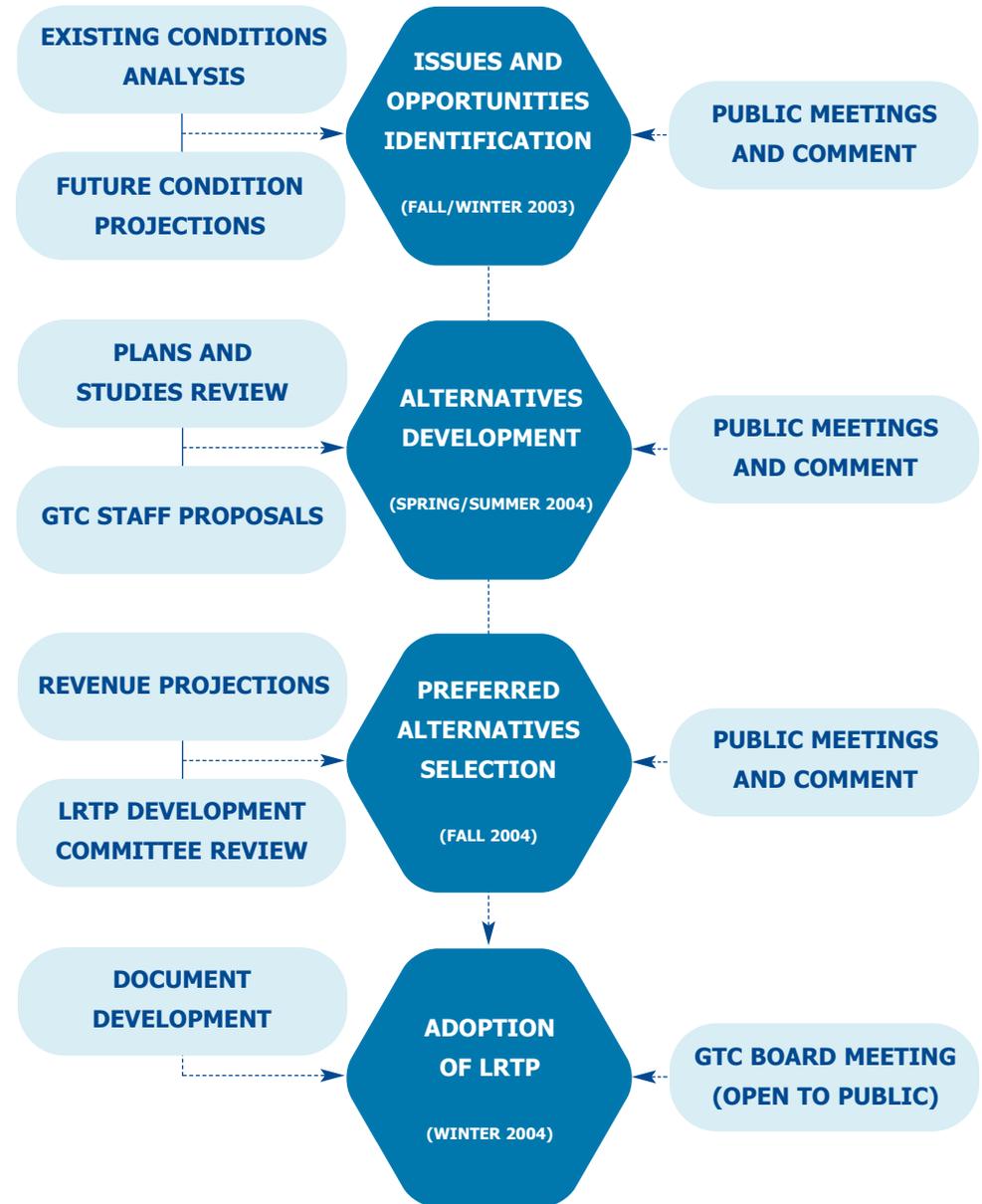
Once the performance of the transportation system now and in the future was determined, a review of recommendations included in transportation plans and studies completed since the last LRTP was performed. In addition, concept-level alternatives were developed to complete the identification of the full range of alternatives (along with associated costs) without regard to the fiscal constraints imposed by limited funding.

**3. Selection of Preferred Alternatives**

The selection of preferred alternatives phase was conducted in Fall 2004 to determine those alternatives that would best maximize the opportunities and address the issues facing the region over the next 20 years with respect to transportation.

The full range of transportation alternatives available to the region that was developed in the previous phase was reviewed. Given that the LRTP serves as a framework for future transportation planning (via the UPWP) and investment decision making (via the TIP), the selection of preferred alternatives included identifying policies and actions that would best

**EXHIBIT 3 - LRTP DEVELOPMENT PROCESS**





maximize the transportation system's contribution to the social and economic vitality of the region.

The LRTP must be a fiscally constrained plan. Accordingly, reasonably available transportation revenues were projected for the 20 years covered by the LRTP. Based on the revenue projections, a financing strategy for advancing the preferred alternatives was developed.

#### 4. Adoption of the LRTP

This LRTP document was produced in Winter 2004 providing a record of the findings, outcomes, and decisions that resulted from the completion of the phases discussed above. The GTC Board adopted the LRTP at its December 2004 quarterly meeting.

### Development Activities

#### 1. Data and Information Analysis

The analyses of current and projected demographic and economic conditions as well as the characteristics of the existing and future transportation system relied heavily on data collected from federal and state sources as well additional data developed by GTC and G/FLRPC.

Historical and current population and household data was obtained from the decennial censuses of population and housing produced by the U.S. Census Bureau.

Projections of population and households to the horizon year of the LRTP (2025) were developed by G/FLRPC based on the Regional Population Forecasts produced as part of the GTC Fiscal Year 2003-2004 UPWP.

Business establishment and employment data were obtained from the New York State Department of Labor (NYSDOL) ES-202 data set which accounts for workers employed by establishments covered under the

state's Unemployment Insurance Law - approximately 97% of non-farm employment. In addition, the decennial censuses noted above were utilized for data on the numbers of at-home workers.

Projections of manufacturing, retail, and total employment to 2025 were developed by GTC based on historical changes in the NYSDOL ES-202 data.

Place of residence, place of employment, and journey-to-work data were obtained from the Census Transportation Planning Package (CTPP) produced by the USDOT Bureau of Transportation Statistics.

The current and historical annual average daily traffic (AADT) counts and the percentage of trucks in those counts used in the analysis of the transportation system are collected by NYSDOT.

Data on freight movements by commodity and county are developed by Reebie Associates as part of its TRANSearch data set, provided to GTC by NYSDOT.

Data outputs from the GTC Travel Demand Model including vehicle miles traveled and volume/capacity ratios were also incorporated in the analysis of the existing and future transportation systems.

Ridership counts for public transportation were obtained from RGRTA and the County Area Transportation System in Ontario County.

Statistics on the number of passengers using interregional facilities were obtained from the individual service providers: Greater Rochester International Airport, Amtrak, Greyhound/ Trailways, and Canadian American Transportation Systems.

#### 2. Review of Existing Plans and Studies

The review of existing plans and studies included the GTC LRTP: 2000-2020, UPWP studies (various corridor studies, strategic plans for public transportation, the Regional Trails Initiative, etc.) approved by the GTC



Board since the adoption of the last LRTP in 1999, and plans completed by member agencies and others (e.g., Rochester 2010: The Renaissance Plan, Major Multimodal International Gateway Business Plan, etc.).

In addition, NYSDOT is updating the Statewide Transportation Master Plan (NYSDOT Master Plan). The LRTP has been developed in a manner consistent with the NYSDOT Master Plan based on information released to-date.

In particular, the policies and actions recommended in the LRTP are meant to complement activities that NYSDOT will undertake on a statewide basis with respect to the five priority areas of the NYSDOT Master Plan:

1. Mobility and Reliability
2. Safety
3. Economic Competitiveness
4. Environmental Conditions
5. Security

In addition, consideration of these priority areas with respect to the portions of identified statewide trade (I-90, I-390, and NYS Route 63) and tourism (Finger Lakes) corridors within the region have been integrated into the policies and actions recommended in the LRTP.

### 3. Public Involvement

The LRTP was developed with extensive public involvement. In total, the LRTP development process included nearly seven months of focused public involvement periods that included 18 public meetings, as well as specific outreach to low-income and minority populations (i.e., groups not traditionally well-represented in the transportation planning process).

Public comments on the LRTP were accepted during each of the three development phases of the LRTP.

Written comments were accepted in a variety of formats. A “hard copy” comment form was developed that could be mailed or faxed to GTC. A dedicated web page on the GTC website ([www.gtcmpo.org](http://www.gtcmpo.org)) with an online comment form was developed and updated during each LRTP development phase. In addition, GTC created a dedicated e-mail address ([LRTP@gtcmpo.org](mailto:LRTP@gtcmpo.org)) to which comments could be submitted.

A series of six public meetings was held during each of the three public involvement periods. During each series, three meetings were held in the Rochester TMA and three were held outside the Rochester TMA in locations that provided near-equidistant access from the western, southern, and eastern portions of the region.

At each series of public meetings, GTC staff presented findings and analysis based on the “Data and Information Analysis” and “Review of Existing Plans and Studies” development activities discussed above.

Advance notice of each series of public meetings was sent to over 40 media outlets (print, television, and radio) throughout the region.

All meetings began at 7 p.m. with the meeting space reserved until at least 9 p.m. The dates and locations of the public meetings by key LRTP development phase were as follows:

#### Identification of Opportunities and Issues

- ✧ Monday, November 10, 2003  
King's Bend Park (Pittsford)
- ✧ Wednesday, November 12, 2003  
Public Safety Building (Geneva)
- ✧ Thursday, November 13, 2003  
Chili Town Hall
- ✧ Monday, November 17, 2003  
Rochester Public Library



- ✧ Wednesday, November 19, 2003  
Livingston County Government Center (Geneseo)
- ✧ Thursday, November 20, 2003  
Genesee County Building #2 (Batavia)

## Development of Alternatives

- ✧ Monday, May 24, 2004  
Livingston County Government Center (Geneseo)
- ✧ Wednesday, May 25, 2004  
Public Safety Building (Geneva)
- ✧ Wednesday, June 2, 2004  
Perinton Community Center
- ✧ Thursday, June 3, 2004  
Rochester Public Library
- ✧ Monday, June 7, 2004  
Genesee County Building #2 (Batavia)
- ✧ Tuesday, June 8, 2004  
Ogden Town Hall

## Selection of Preferred Alternatives

- ✧ Wednesday, November 3, 2004  
Ogden Town Hall
- ✧ Thursday, November 4, 2004  
Public Safety Building (Geneva)
- ✧ Monday, November 8, 2004  
Perinton Community Center
- ✧ Tuesday, November 9, 2004  
Livingston County Highway Department (Groveland)

- ✧ Wednesday, November 10, 2004  
Genesee County Building #2 (Batavia)
- ✧ Monday, November 15, 2004  
Rochester Public Library

Sign-in sheets at each of the public meetings offered attendees the opportunity to receive announcements of upcoming public involvement periods and public meeting schedules by providing GTC with an e-mail address.

During the development of the LRTP, GTC developed an environmental justice database to directly contact more than 225 organizations serving low-income and minority population groups throughout the region. Each organization was mailed a notice of the second and third public involvement periods along with the associated public meeting schedules.

Environmental justice builds on Title VI of the Civil Rights Act of 1964. Executive Order 12898 (1994) requires federal agencies to make achieving environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations.

As recipients of federal-aid dollars, MPOs, including GTC, are required to identify and address Title VI and environmental justice implications of their planning processes and investment decisions. GTC incorporates these considerations into all of its transportation planning activities (including the LRTP), recognizing that such consideration improves both the planning and decision making processes and the results of these activities.

The materials from each of the three public involvement periods - "hard copy" comment form, GTC web page and on-line comment form, public meeting presentations, summaries of the comments received, and the copies of the individual comments - are provided in Appendix A.



#### 4. Committee Involvement

As noted above, GTC's core decision making process is built around the GTC Board making policy and providing direction with the assistance of the Planning Committee in a technical advisory capacity.

As such, informing and receiving feedback from both the GTC Board and Planning Committee with respect to tasks accomplished and upcoming work activities was a component of the LRTP development process.

Beginning in October 2003, GTC staff provided both the GTC Board and Planning Committee with updates on the progress, findings, and public comments received on the LRTP at each of their respective meetings.

As with the UPWP and TIP, a LRTP Development Committee (LDC) was formed. All Planning Committee members were invited to participate. Representatives from the Rochester TMA counties, the City of Rochester, RGRTA, G/FLRPC, and NYSDOT agreed to serve on the LDC.

The LDC met in October 2004 to review the full-range of alternatives identified in the second phase of the LRTP development process as well as performance measures for future assessment of the effectiveness of the LRTP in meeting the GTC Goals and Objectives.

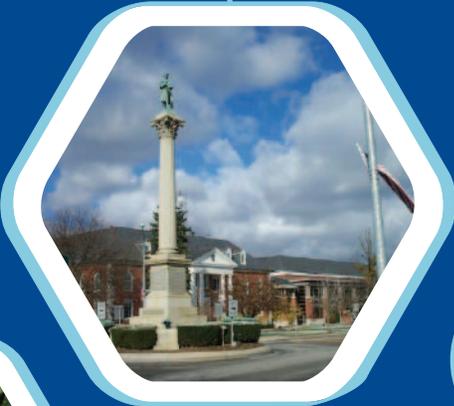
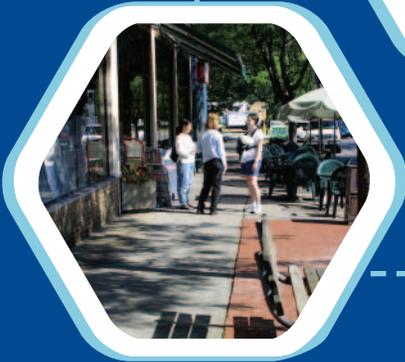
The insights provided by the LDC were invaluable in the selection of the initial preferred alternatives that were provided for public review in the Fall 2004.

As with any plan, the development and execution of a solid development process that combines technical planning and public involvement activities is the primary determinant of community acceptance and the plan's ultimate success. The LRTP was created in a manner that meets these criteria.

**GENESEE TRANSPORTATION COUNCIL**



**CHAPTER III - THE REGION**





**OVERVIEW**

The Genesee-Finger Lakes Region is a diverse area encompassing nearly 4,700 square miles. This diversity is evidenced by the transition from the dense, urban form of the cities and villages to the vast, open areas of the rural towns.

The economic activities that take place within the region's borders are as diverse as the physical terrain. The region's development is strongly rooted in its history of manufacturing and agriculture. While these industries remain top contributors to the regional economy, an evolution through diversification continues as a host of business support, photonics, and biotechnology-related firms continue to increase their contribution.

For the transportation system to contribute effectively to the social and economic vitality of the region, it must be responsive to not only existing socioeconomic conditions but also to reaching the desired state of the region in the future, as determined by the community.

**POPULATION**

**Who We Are**

Based on the 2000 U.S. Census of Population and Housing, approximately 1.2 million people reside in the nine-county Genesee-Finger Lakes Region.

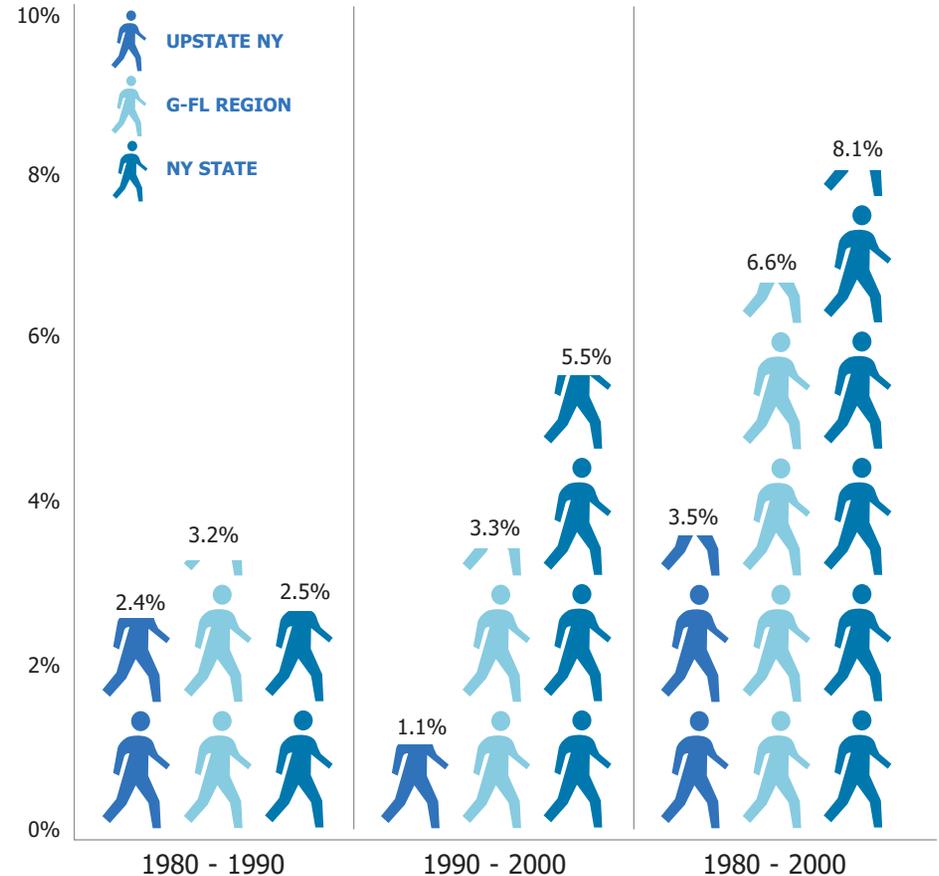
This represents an increase of nearly 40,000 residents between 1990 and 2000. The region experienced a steady growth rate over the past twenty years - just above three percent over each of the two 10-year periods of 1980 to 1990 and 1990 to 2000.

Exhibit 4 presents the growth rates of the region, Upstate New York, and New York State between 1980 and 2000 in 10-year increments and over the entire 20-year period. The region's growth in population outpaced population growth in Upstate New York over both 10-year periods. While the region maintained a steady growth rate in population between 1980

and 2000, the pace of growth in Upstate New York declined by more than half between 1990 and 2000 compared to the previous 10-year period.

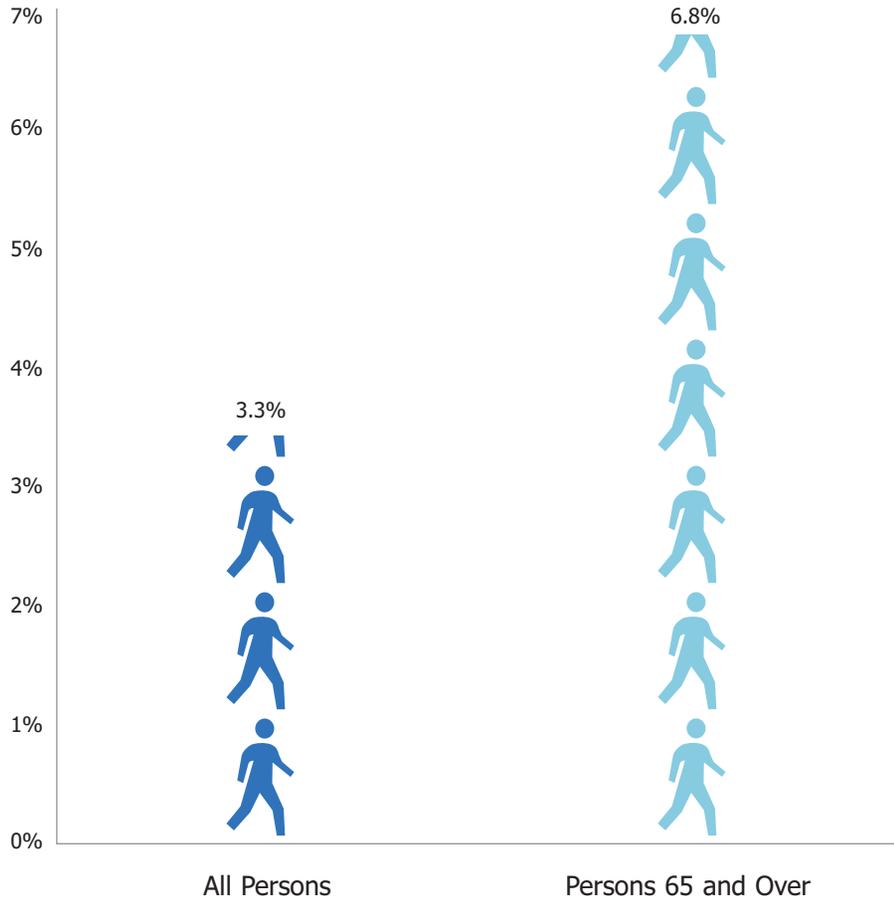
Population growth for the state as a whole was just the opposite of that in Upstate New York over the 20-year period. While population growth in the region outpaced that of the state between 1980 and 1990, the large influx of new residents in New York City and the surrounding downstate area (largely due to immigration) resulted in a growth rate for the state that exceeded the region's between 1990 and 2000.

**EXHIBIT 4 - POPULATION GROWTH RATE, 1980 TO 2000**





**EXHIBIT 5 - POPULATION GROWTH RATE OF PERSONS 65 AND OVER, 1990 TO 2000**



Population growth in the region is expected to continue over the 20-year time period of the LRTP. However, this increase in population is forecasted to occur at a slower rate than in the past. The population of the region is projected to reach nearly 1.25 million residents in 2025. Regardless of the decreasing growth rate, the increase in population will result in more trips on the region's transportation system.

As presented in Exhibit 5, the growth rate of persons 65 years and older in the region between 1990 and 2000 was more than double that of the population as a whole. In 2000, one out of every eight residents of the region was 65 or older - consistent with Upstate New York as a whole. Increases in life expectancy rates and the aging "Baby Boomer" generation will continue this trend over the period of the LRTP. The increasing senior segment of the Region's population will impact both the purpose of trips and the means by which they are made.

**Where We Live**

Approximately 60% (735,343) of the region's 1.2 million residents lived in Monroe County in 2000. Nearly 30% (219,773) of these persons resided in the City of Rochester, representing a decrease of over 10,000 residents between 1990 and 2000.

The largest number of persons outside Monroe County were to the east and south in Ontario (100,224 persons), Wayne (93,765), and Livingston (64,328) counties, combining for over 20% of the region's population. Exhibit 6 presents the distribution of population by county in the region in 2000.

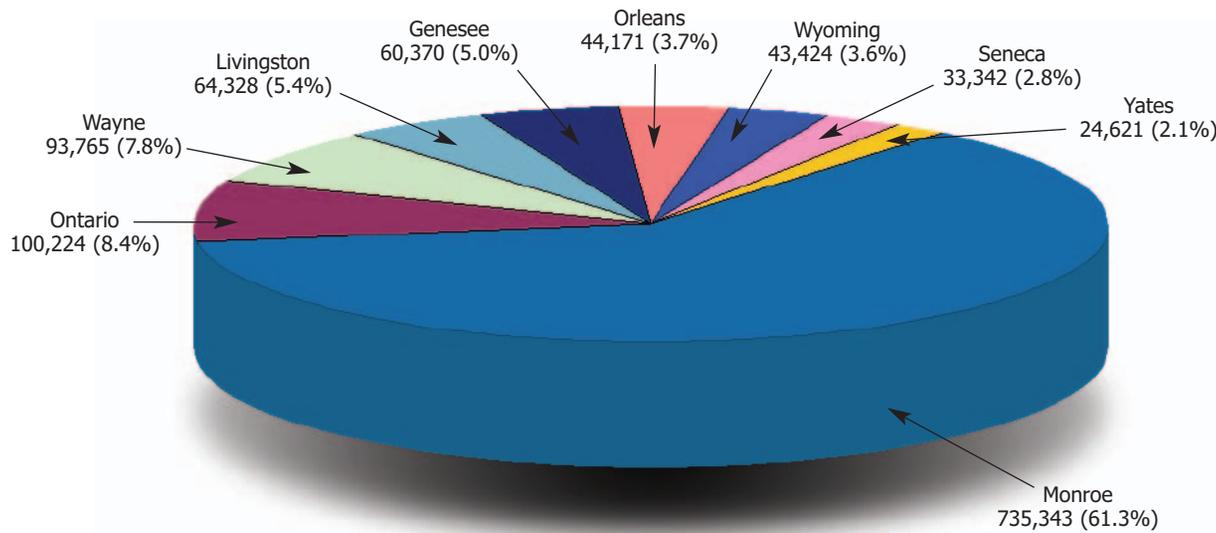
While Genesee and Seneca counties are forecasted to experience very slight decreases in population (less than 1.5% each), the distribution of population within the region by county is projected to be nearly identical in 2025.

The distribution of population within the region is expected to remain fairly constant but the trend in the number of households increasing at a greater rate than residents means that trips are originating from a greater number of locations.

Between 1990 and 2000, the number of persons in the region increased 3.3%. During the same period, the number of households grew by 6.0%, with most of the growth in one-person households. Two-person households also increased and three or more-person households declined.



EXHIBIT 6 - POPULATION BY COUNTY, 2000



The result was a decrease of .09 persons per household (-3.2%) across the region in 2000 compared with 1990. Exhibit 7 on the following page presents the rates of change in number of persons, households, and persons per household.

**EMPLOYMENT**

**What We Do**

Based on 2002 NYS Department of Labor ES-202 data, over 27,000 establishments employing over one-half million workers are located in the region. Workers employed in the region earned nearly \$19 billion in wages in 2002.

Over 80% of the workers in the region are employed in private businesses. In 2001, these establishments produced goods and services worth approximately \$50 billion - more than 12 of the 50 states.

Along with the rest of New York State and the majority of states in the Northeast and Midwest, manufacturing-related employment has and continues to decline as the industry continues its transition to higher value-added products. Still, manufacturing firms employ nearly 20% of all workers in the Genesee-Finger Lakes Region - a larger percentage than any other region in New York State.

For the most part, the regional economy has been able to absorb the significant decreases in manufacturing employment through increases in business-support and information services, wholesale trade, and technology-

related job opportunities.

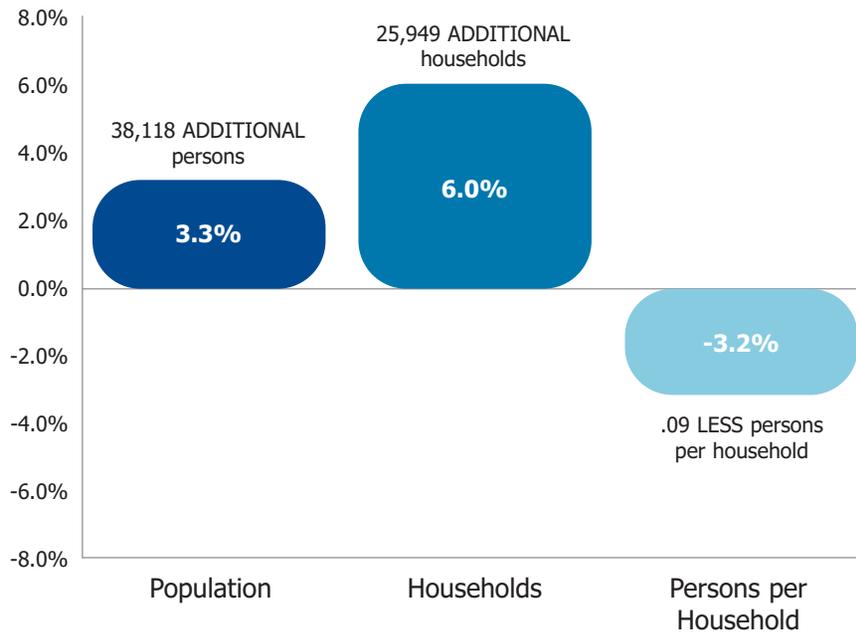
In addition, agriculture and related agribusiness activity remains a major component of the economy. Along with the change in the type of manufactured goods produced by regional businesses, the transportation system will still need to safely and efficiently transport goods - a predominantly service-oriented economy is likely not in the region's future.

**Where We Work**

As with population and households, approximately 60% of the region's businesses are located in Monroe County (see Exhibit 8). However, 70% of the region's employees work for establishments located in Monroe County. This is the result of a greater proportion of larger businesses being located in Monroe County.



EXHIBIT 7 - HOUSEHOLDS & PERSONS PER HOUSEHOLD GROWTH RATES, 1990 TO 2000

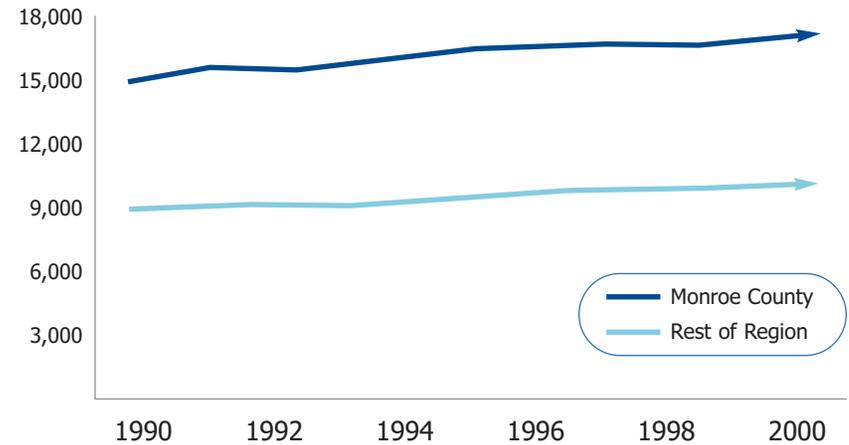


As presented in Exhibit 9, the number of at-home workers increased by just over 2,000 workers between 1990 and 2000. In terms of work-related commuting, the number of at-home workers has and will continue to have minimal impact. Even at-home workers make trips - particularly, sales and service professionals - and many of these may occur at morning and evening peak travel periods.

Travel to work is the single largest generator of trips on the region's transportation system. The vast majority of workers in the region use personal automobiles to travel to work, either driving alone or carpooling (81.5% and 9.3%, respectively).

Nearly four percent of workers biked or walked to work and approximately two percent used public transportation.

EXHIBIT 8 - NUMBER OF BUSINESSES, 1990 TO 2000



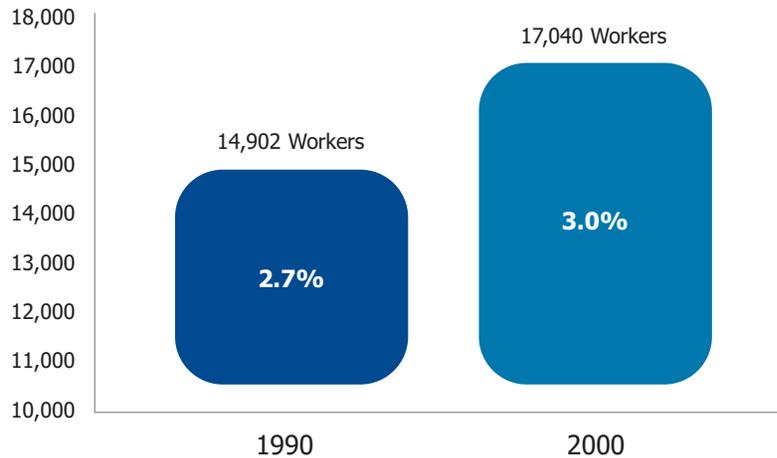
Between 1990 and 2000, the number of workers driving alone increased while all other means of transportation to work decreased. Exhibit 10 presents the means of transportation to work by employees residing in the region in 2000.

**Principal Themes**

Based on the analysis of existing and projected demographic and economic conditions and comments received during the public involvement periods, six principal themes emerged with respect to the opportunities and issues facing the region in which transportation can play a role.



EXHIBIT 9 - **AT-HOME WORKERS, 1990 TO 2000**



**Creating Jobs**

Throughout the public involvement periods it became evident that the primary concern of the region's residents was economic development and the associated creation of employment opportunities for residents.

Projections of future employment follow those of population - the number of jobs supplied by regional employers will continue to increase but at a slower rate than in the past. Given that job growth in the region has lagged that of the nation and the rest of New York State, the forecasted increases are not satisfactory for a community with the quality of life that this region has to offer.

Of particular importance is the loss of younger workers to other areas - the "Brain Drain". There is a perception that job creation is hindered because employers do not feel there is an adequate supply of labor. Improved retention of younger workers may solve this dilemma.

Public comments suggested that the retention of younger workers would be improved by increasing their awareness of and connections to regional attractions and social opportunities.

**Enhancing Community Character**

Transportation facilities are integral to community character. As gateways, transportation facilities announce to residents (current and past) that they have returned home while providing an important first impression to visitors.

Given the importance of transportation facilities to the historical development of the region (most notably, the Erie Canal), the current and future transportation system has an immediate impact on the perception and reputation of our community to visitors and residents alike.

Public comments suggested that improving the appearance of our gateways - highways and bridges leading into and out of the region as well as interregional transportation facilities - is essential to creating a positive impression of our region.

**Improving Mobility for the Physically Challenged**

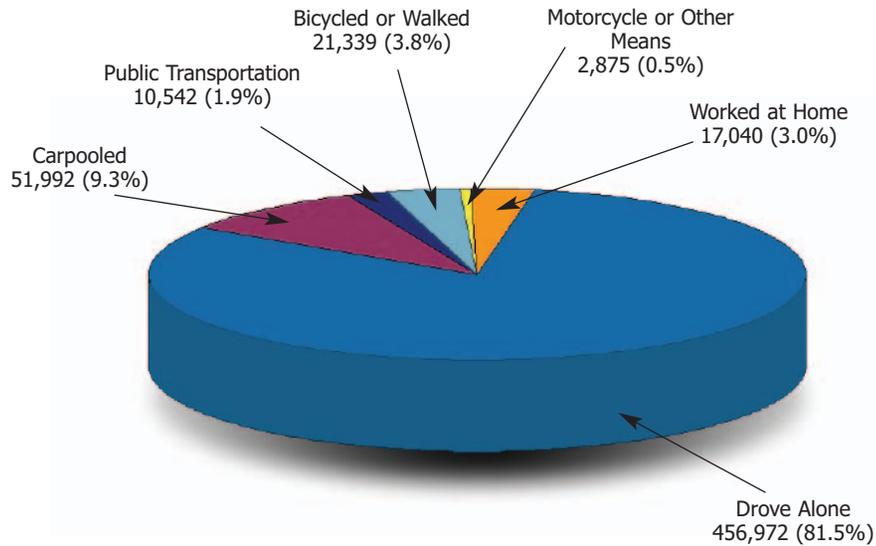
The ability to access employment, social, and recreational opportunities can be difficult for the physically challenged. The quality of life of these individuals is directly related to their independence in performing day-to-day activities. The transportation system is a major determinant of the independence of these individuals.

The aging population of the region will place an increased emphasis on the need of individuals with physical disabilities to have adequate mobility options.

Public comments suggested that components of the transportation system beyond public transportation services must be responsive to the needs of physically challenged individuals.



EXHIBIT 10 - MEANS OF TRANSPORTATION TO WORK, 2000



**Accessing Medical Services**

The ability to access needed medical services, both emergency- and non-emergency-related, varies greatly across the region. Residents of Monroe County and surrounding areas have multiple health care facilities within a closer proximity than their rural counterparts.

The consolidation, and subsequent closings, of hospitals and health care facilities along with the emergence of new technologies has changed the nature of access to medical services within the region.

At present, a variety of transportation means are currently used to access medical services: private vehicles, public transportation (including paratransit), taxi services, specialized medical transportation services, public and private human service agency transportation programs, volunteer services, and Medicaid transportation programs.

Public comments suggested that transportation's role in accessing medical services in the near future and over the 20-year period covered by the LRTP will need to quickly adapt to changes in the provision of medical services.

**Integrating Air Quality Considerations**

On April 15, 2004, the U.S. Environmental Protection Agency designated the Rochester Metropolitan Statistical Area (MSA) as being in nonattainment of the newly promulgated National Ambient Air Quality Standard for ground-level ozone.

This designation was the result of more stringent standards and does not reflect worsening air quality in the region. In fact, the amount of ozone in the region has decreased over the last decade.

Ground-level ozone is created when volatile organic compounds and nitrogen oxides combine with sunlight. Ozone in the upper levels of the atmosphere is beneficial because it blocks harmful ultraviolet rays. However, ground-level ozone can have serious adverse health consequences, particularly for the very young and elderly.

Regardless, GTC and its member agencies are now subject to increased regulatory requirements to ensure the uninterrupted receipt of federal transportation funds.

While the majority of ozone present in the region is created by sources outside its borders, the region has a responsibility to ensure that its transportation policy, planning, and investment decision making does not exacerbate air quality problems in areas downwind.

Given the need to increase job creation in the region, an increased importance will need to be placed on ensuring that transportation improvements balance economic development with environmental protection in a manner consistent with federal and state requirements.



### **Balancing Regional Objectives and Local Priorities**

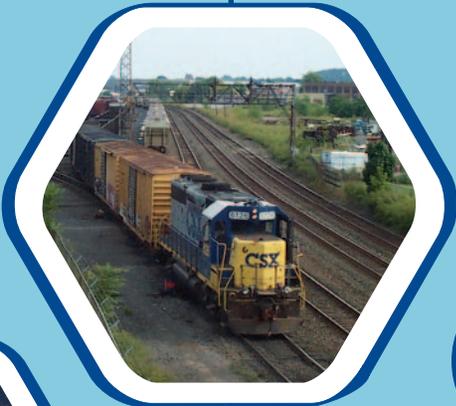
As the designated MPO for the region, GTC is charged with ensuring that the transportation system is responsive to the needs of each individual community and the region as an integrated network of communities.

The policies and actions contained in the LRTP strive to balance regional objectives with local priorities in a manner that respects the decisions made at both levels. Of particular relevance is the impact that transportation and land use decisions have on each other. While land use decisions are made at the local level, many major transportation investment decisions are made at the regional level through GTC.

The public comments received acknowledged the periodic difficulties in coordinating the decisions made at the local and regional levels with respect to land use and transportation planning and investment.

The LRTP must provide a framework for ensuring that the transportation system allows for the parts and the whole to simultaneously thrive socially and economically.

**CHAPTER IV - THE TRANSPORTATION SYSTEM**





## OVERVIEW

The transportation system is a major determinant of quality of life and economic development in every community. The ability to safely and efficiently move people and goods is essential to the social and economic prosperity of the Genesee-Finger Lakes Region.

The transportation system in the region can be divided into the following modes:

- Highway and Bridge
- Public Transportation
- Bicycle and Pedestrian
- Goods Movement
- Interregional Travel

The transportation system will perform best when these modes are integrated to the greatest extent possible to create synergies among their respective functions, recognizing funding limitations

## HIGHWAYS AND BRIDGES

The highways and bridges of the region account for the vast majority of physical infrastructure and carry nearly all trips. Over 12,000 centerline miles of federal-aid eligible highways and bridges traverse the region as presented in Map 2.

The vehicle miles traveled on highways and bridges in the Rochester TMA total approximately 27 million daily. Annual daily traffic volumes are highest on the Interstates (I-90, I-490, I-390, and I-590) and on select NYS and Monroe County routes. Map 3 presents the annual average daily traffic volumes on the region's highway and bridge network.

An important aspect of the highway and bridge network is its ability to carry traffic efficiently, minimizing delay due to congestion. As the number of vehicles attempting to travel on a highway (volume) approaches the maximum number the highway can accommodate (capacity), congestion worsens. The ratio of volume-to-capacity is commonly used as a measure of congestion.

Per standard planning practice, highway sections with a volume-to-capacity ratio of 0.9 (90% of capacity) or higher are typically considered to have high levels of congestion and result in excess delay.

Map 4 and Map 5 present the GTC Travel Demand Model's predictions of p.m. peak hour congestion in the base and future years: Map 4 shows where congestion occurs in 2005 and Map 5 shows where it may occur in 2025 if no corrective actions are taken.

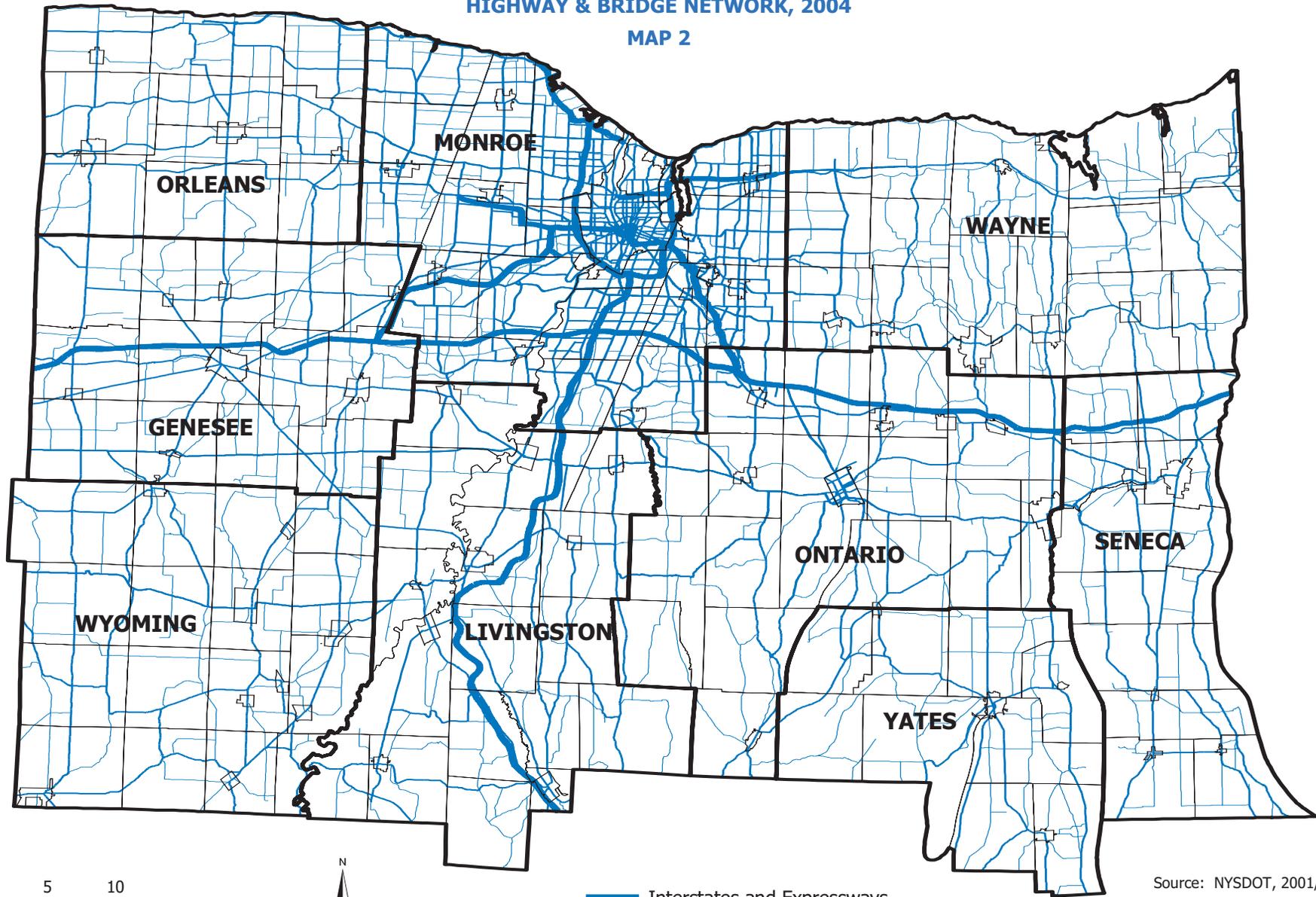
Without corrective actions, the GTC Travel Demand Model predicts a gradual worsening of the congestion that currently occurs, especially along the interstate highways and principal arterial roads that pass through and surround the City of Rochester, as well as the roads that carry traffic to those areas forecasted to experience the most population growth.

The GTC Travel Demand Model's forecasted congestion locations are an integral part of the GTC Congestion Management System (CMS). The CMS provides information on transportation system performance and allows for the assessment of strategies intended to alleviate congestion and enhance the mobility of people and goods.

Data from the GTC Travel Demand Model and CMS are considered during the identification and selection of transportation projects to be studied or implemented by GTC or its member agencies through the UPWP and TIP.

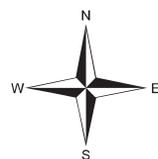


## HIGHWAY & BRIDGE NETWORK, 2004 MAP 2



0 5 10  
Miles

0 5 10  
Kilometers

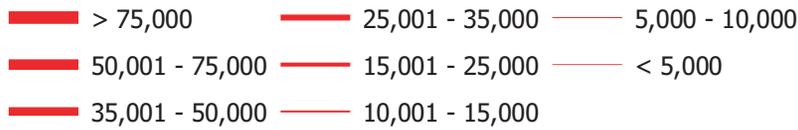
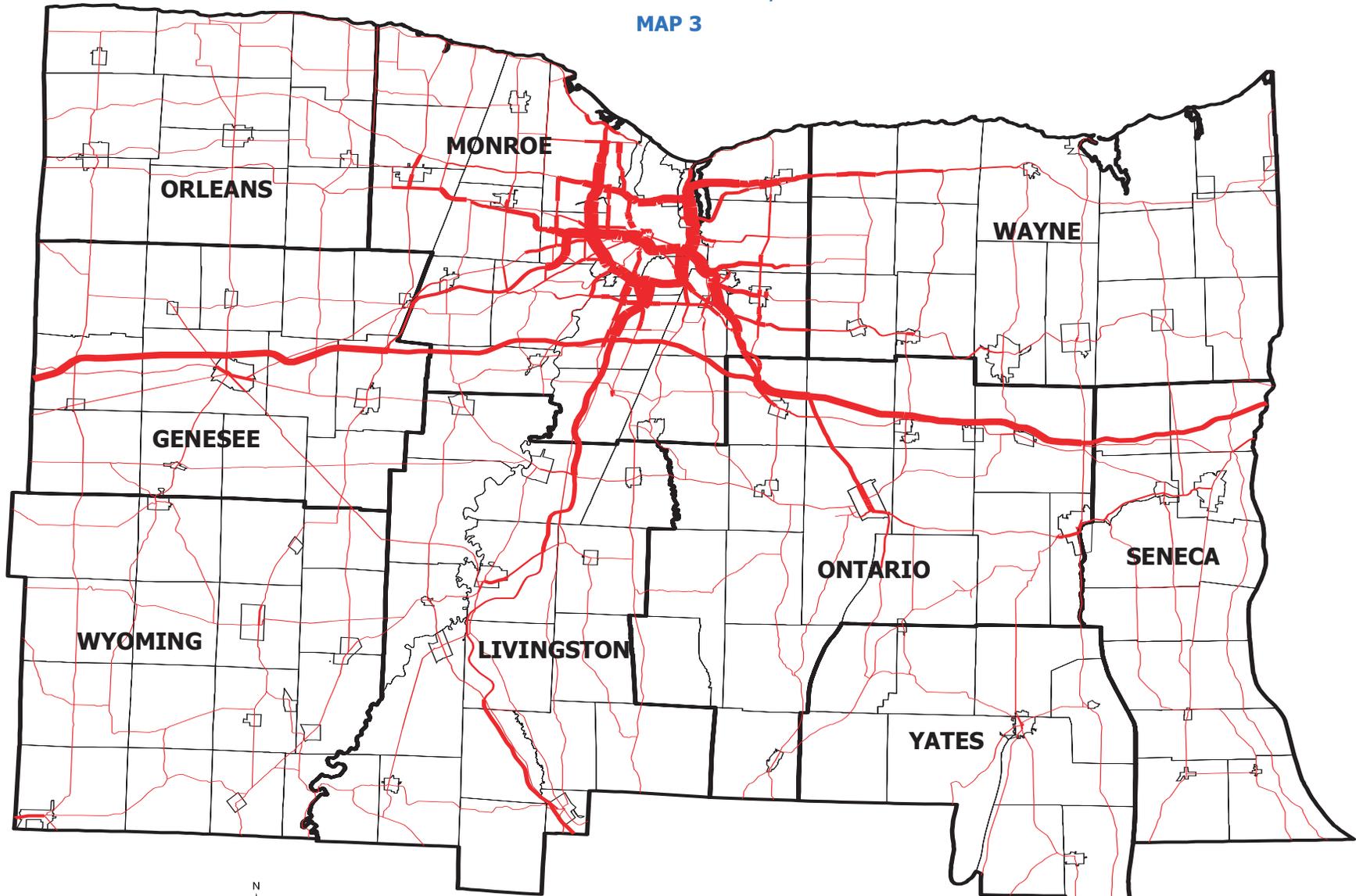


— Interstates and Expressways  
— Other Major Roads

Source: NYSDOT, 2001/2004



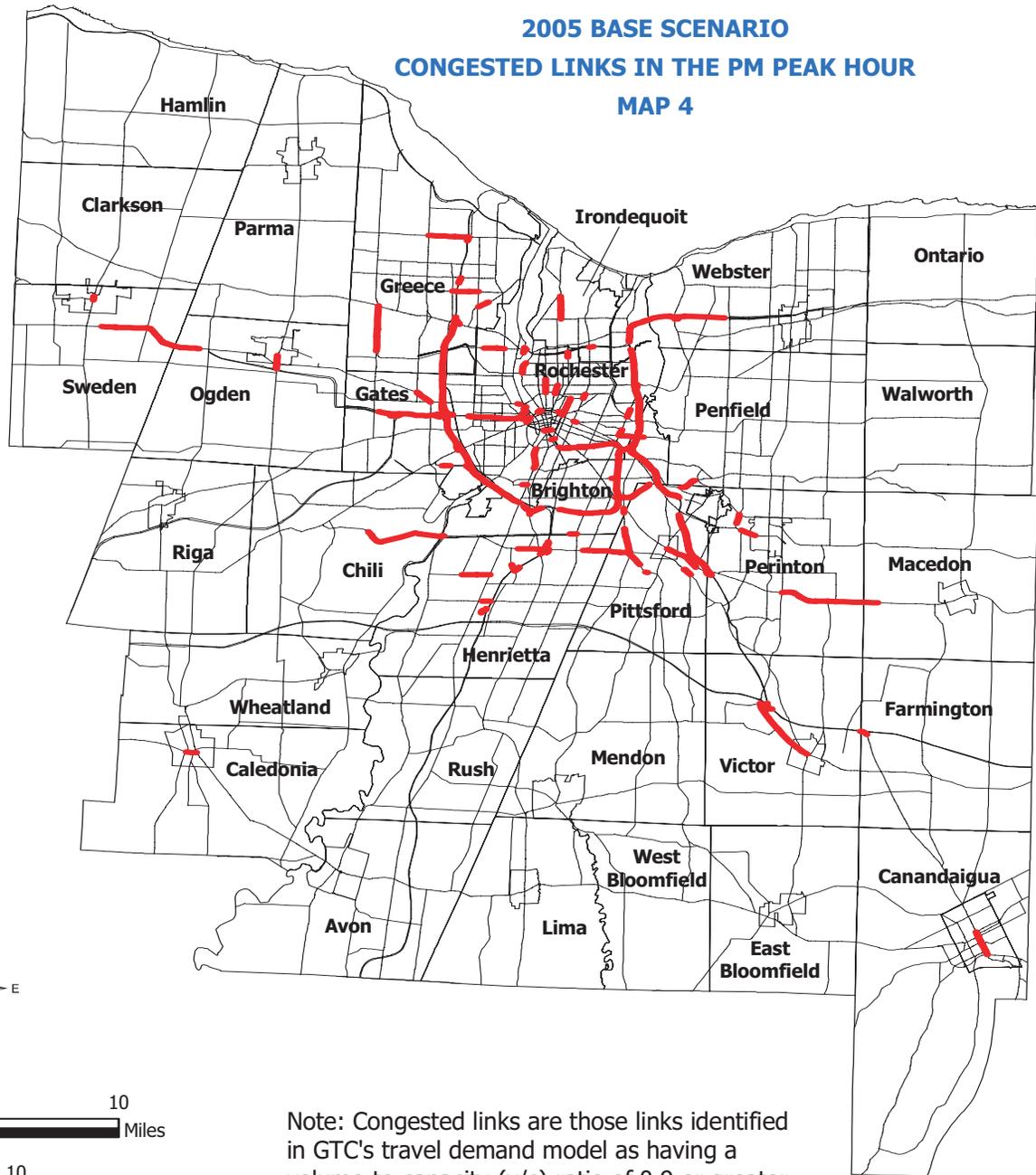
AVERAGE DAILY TRAFFIC, 2002  
MAP 3



Source: NYSDOT, 2003



## 2005 BASE SCENARIO CONGESTED LINKS IN THE PM PEAK HOUR MAP 4



- Congested Links
- Major Roads
- Municipalities

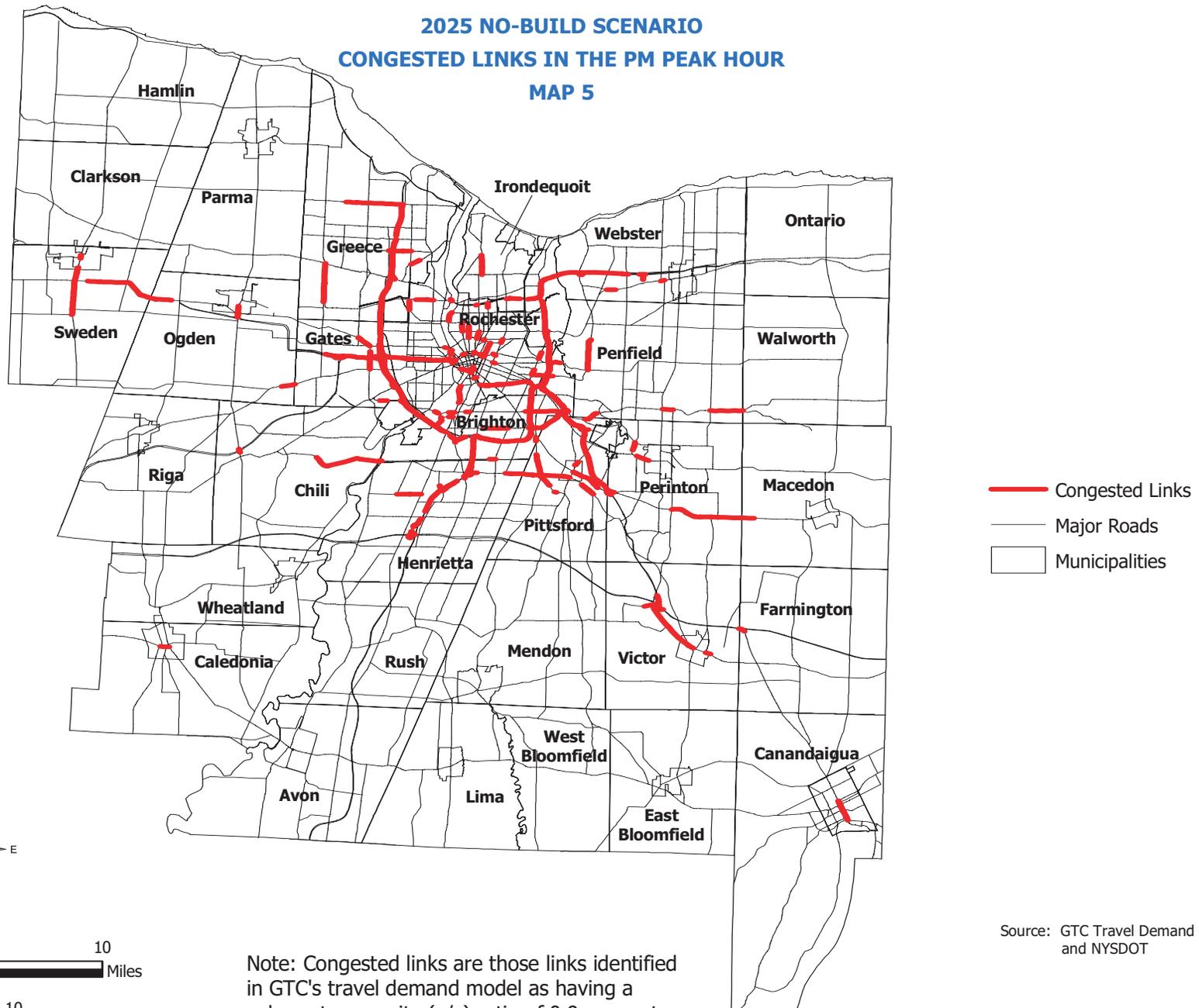


Note: Congested links are those links identified in GTC's travel demand model as having a volume-to-capacity (v/c) ratio of 0.9 or greater

Source: GTC Travel Demand Model and NYSDOT



## 2025 NO-BUILD SCENARIO CONGESTED LINKS IN THE PM PEAK HOUR MAP 5



- Congested Links
- Major Roads
- Municipalities

Source: GTC Travel Demand Model and NYSDOT

Note: Congested links are those links identified in GTC's travel demand model as having a volume-to-capacity (v/c) ratio of 0.9 or greater



## Accomplishments

The region has historically committed over 90% of its federal transportation funds to the preservation and maintenance of existing highways and bridges.

Examples of recent highway maintenance and rehabilitation projects include:

- Stone Road in the Town of Greece
- North Street in the City of Canandaigua
- Jefferson Road (NYS Route 252) in the Town of Henrietta
- Union Street (NYS Route 31) in the Village of Newark
- Center Street (NYS Route 31) in the Village of Medina

Examples of recent bridge maintenance and rehabilitation projects include:

- Crittenden Road Bridge in the Town of Brighton
- NYS Routes 5 & 20 Bridge in the Village of Avon
- Buffalo Road Bridge in the Town of Warsaw
- Lake Road Bridge in the Town of Ontario
- Fargo Road Bridge in the Town of Darien
- Harrison Road Bridge in the Town of Shelby

A number of major highway reconstruction projects were begun and/or completed since the adoption of the last LRTP in December 1999. Notable among these are:

- Pittsford-Palmyra Road (NYS Route 31) between Ayrault Road and Moseley Road (NY 250) in the Town of Perinton was reconstructed, including the addition of one travel lane in each direction, widened shoulders, curbs, new sidewalks, and the replacement of the bridge over the Erie Canal.

- West Ridge Road (NYS Route 104) between I-390 and Hanford Landing in the Town of Greece and the City of Rochester was reconstructed, including the installation of a median and construction of an Eastman Avenue extension to alleviate traffic at the Dewey Avenue / West Ridge Road intersection.
- Chili Avenue (NYS Route 33A) between West Avenue and the Rochester City line was reconstructed, including new utilities, curbs, sidewalks, driveway aprons, landscaping, and lighting.
- Main Street (NYS Route 5) in the Town and City of Batavia was reconstructed, including the installation of a raised and landscaped median, realignment of Jefferson Avenue, and various context-sensitive and aesthetic improvements.
- Main Street (NYS Route 36) and State and Chapel Streets (NYS Route 408) in the Village of Mount Morris and Main Street (NYS Route 5 & 20) in the Village of Avon are scheduled for reconstruction.

There were a number of major bridge reconstruction / replacement projects that were begun and/or completed in the region since the adoption of the last LRTP in December 1999. Notable among these are:

- The I-490 Troup-Howell Bridge over the Genesee River in the City of Rochester, the most heavily traveled section of roadway in the region, is being replaced with a signature 433-foot long, 70-foot tall three-member pure steel-arch bridge. Numerous aesthetic amenities including lighted pylons, decorative signage, landscaping, and new walkways along the river beneath are being included. Completion is expected in 2007.
- The Colonel Patrick O'Rorke Bridge was constructed to replace the Stutson Street Bridge over the Genesee River, connecting the City of Rochester and Town of Irondequoit. This project involved not only the construction of a new drawbridge but also improvements to surrounding roadways including the Lake Ontario State Parkway and Lake Avenue.



- The new two-lane Lyndon Road Bridge over the Erie Canal in the Town of Perinton was constructed with shoulders, sidewalks, and access to the Erie Canalway trail to accommodate bicyclists and pedestrians, replacing a link over the Canal that had been missing since 1992.
- The Ballantyne Road (NYS Route 252) Bridge project over the Genesee River in the Towns of Chili and Henrietta will replace the existing five-lane bridge with an eight-lane span. Scottsville (NYS Route 383) Road and River Road will be realigned and environmental improvements will be made. Completion is expected in 2006.

The deployment of Intelligent Transportation System (ITS) technologies has emerged as an integral part of transportation improvements in the region. ITS is discussed here because the majority of existing and planned components are intended to improve the operation of the highway and bridge network.

ITS employs communications and information technologies to better manage and improve the performance of the transportation system.

A number of ITS components have been deployed since the adoption of the last LRTP in December 1999, including:

- The construction of the Regional Traffic Operations Center (RTOC). RTOC is the backbone of the region's growing ITS capabilities including traffic signal coordination, dynamic message signs (DMS), highway advisory radio (HAR) components, and incident management capabilities.  
RTOC is a multi-jurisdictional facility that houses members of NYSDOT, Monroe County DOT, and New York State Police.
- The deployment of DMS, cameras, and HAR components on roadways, including, but not limited to, I-90, I-490, NYS Route 590, Route 390, and NYS Route 104.

Map 6 and Map 7 present the existing and planned ITS network in the Rochester area: Map 6 shows the location of deployed ITS components in 2005 and Map 7 shows where additional ITS components are planned for deployment by 2015.

## PUBLIC TRANSPORTATION

The provision of public transportation service is an important component of the transportation system in urban, suburban, and rural areas. Public transportation offers:

- Improved access to employment and needed services for individuals without a private automobile
- Expanded mobility options for the physically challenged
- Delayed deterioration of the region's highway and bridge network
- Positive contributions to air quality

Public transportation service is currently available in eight of the nine counties in the region. Combined, public transportation services throughout the region provide nearly 15 million trips covering 50 million passenger miles annually.

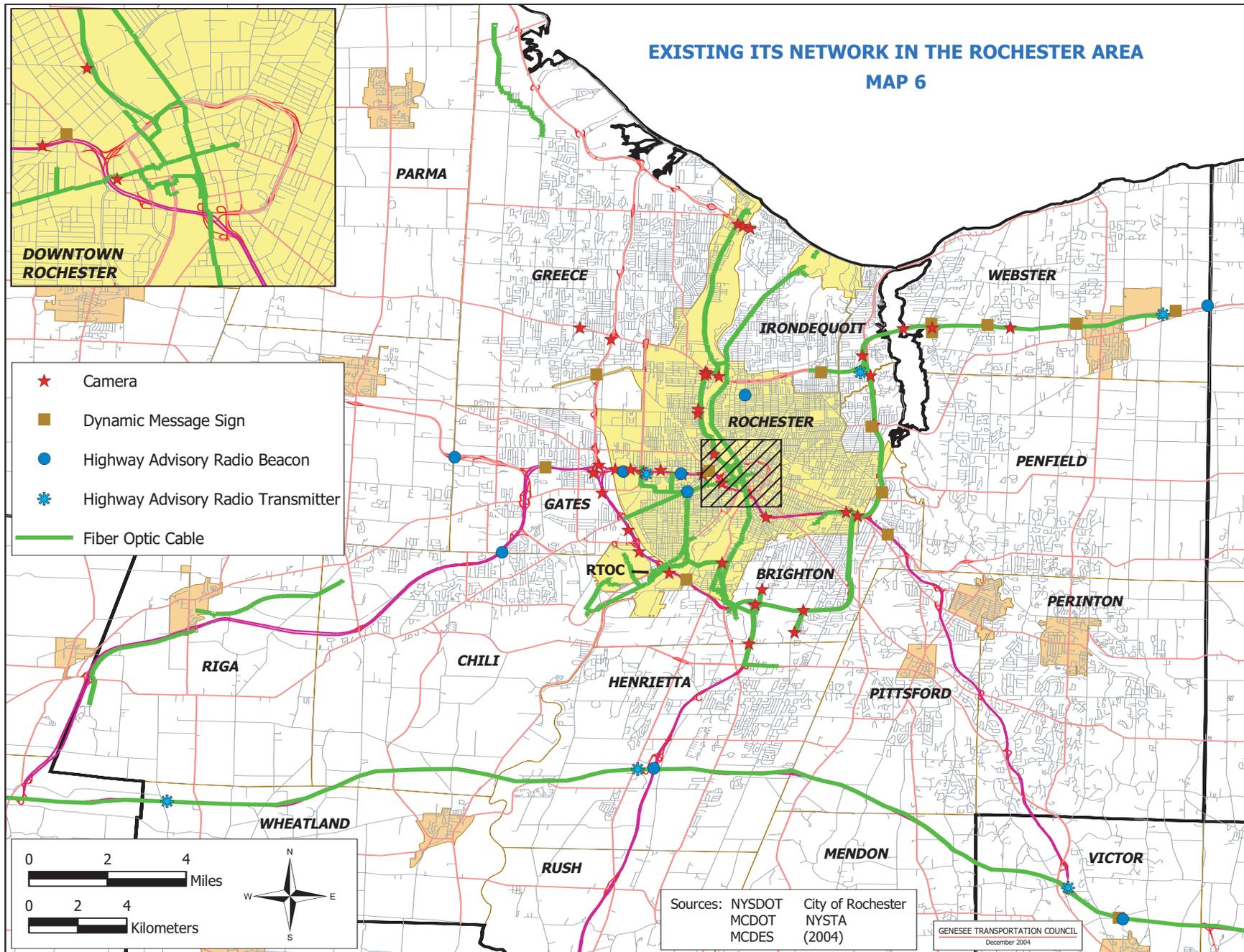
The current number of trips by public transportation represents an increase of approximately 15% over the last decade.

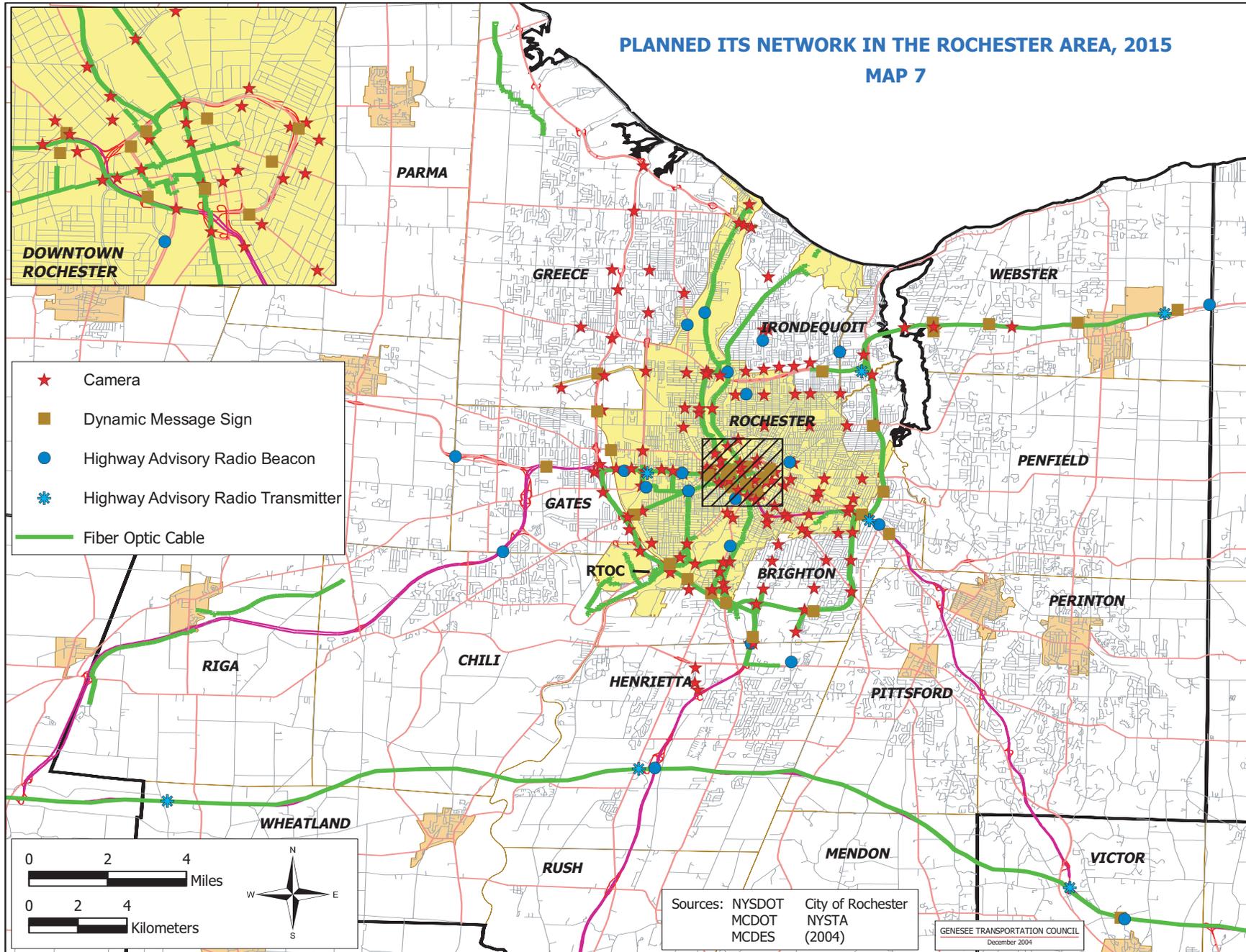
In Monroe County, RGRTA provides public transportation service through its Regional Transit Service, Inc. (RTS) subsidiary. In addition to RTS several other RGRTA subsidiaries provide fixed-route and/or demand-responsive public transportation service outside Monroe County:

- Batavia Bus Service, Inc. (B-Line or BBS) serves Genesee County
- Livingston Area Transportation Service, Inc. (LATS) serves Livingston County
- Orleans Transportation Service, Inc. (OTS) serves Orleans County



**EXISTING ITS NETWORK IN THE ROCHESTER AREA  
MAP 6**







- Seneca Transportation Service, Inc. (STS) serves Seneca County
- Wayne Area Transportation Service, Inc. (WATS) serves Wayne County
- Wyoming Transportation Service, Inc. (WYTS) serves Wyoming County

Ontario County operates the County Area Transit System (CATS) which provides fixed-route public transportation service to residents of Ontario County. Weekday demand-responsive service is provided in areas not served by the fixed route system.

The RTS fleet includes over 200 vehicles and provides over 90% of all public transportation trips in the region. All RTS buses are equipped with bicycle racks.

Paratransit services are available to individuals with developmental and/or physical disabilities throughout the region with the majority of these trips provided in Monroe County by Lift Line, Inc. a subsidiary of RGRTA.

Map 8 presents the routes of the eight public transportation service providers operating in the region.

## Accomplishments

The transit center component of Renaissance Square, a downtown transit center combined with a performing arts complex and the Monroe Community College downtown campus, has been allocated nearly \$50 million in federal transportation funds. Renaissance Square will integrate main street revitalization in downtown Rochester with improved public transportation to the largest employment district in the region.

RTS replaced nearly 60 buses since the adoption of the last LRTP in December 1999. As a result of this aggressive replacement schedule, all RTS buses are now accessible to the disabled. The average age of the RTS fleet is now just under six years, well below the federal retirement age of 12 years for most vehicles. Lowering the average age of the fleet allows

RGRTA to allocate fewer funds for preventive maintenance and more for operations.

RTS added a new line of quiet and comfortable suburban coach buses to its fleet. These new buses have been credited with increasing ridership on Park & Ride routes. RGRTA also continued its program of replacing Lift Line paratransit buses, replacing as well as purchasing 6 vans.

RTS added new routes serving additional areas of Monroe County as well as providing connections to RGRTA subsidiaries operating outside of Monroe County.

Strategic plans for public transportation service were conducted in Genesee, Livingston, Ontario, Orleans, Wayne, Wyoming, and Seneca counties. Many of the recommendations contained in these strategic plans have been or are being implemented, including:

- The introduction of fixed-route service in Livingston County (Fall 2003).
- The initiation of fixed-route and demand-responsive services in Orleans (Fall 2003) and Seneca (Fall 2004) counties.
- The development of new vehicle maintenance and storage facilities in Livingston (Hamptons Corner) and Ontario (Hopewell) counties.
- Vehicle replacement and expansion for these rural services.

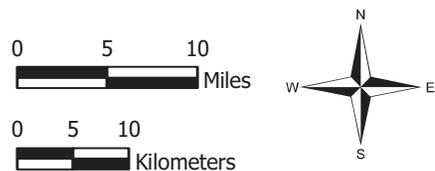
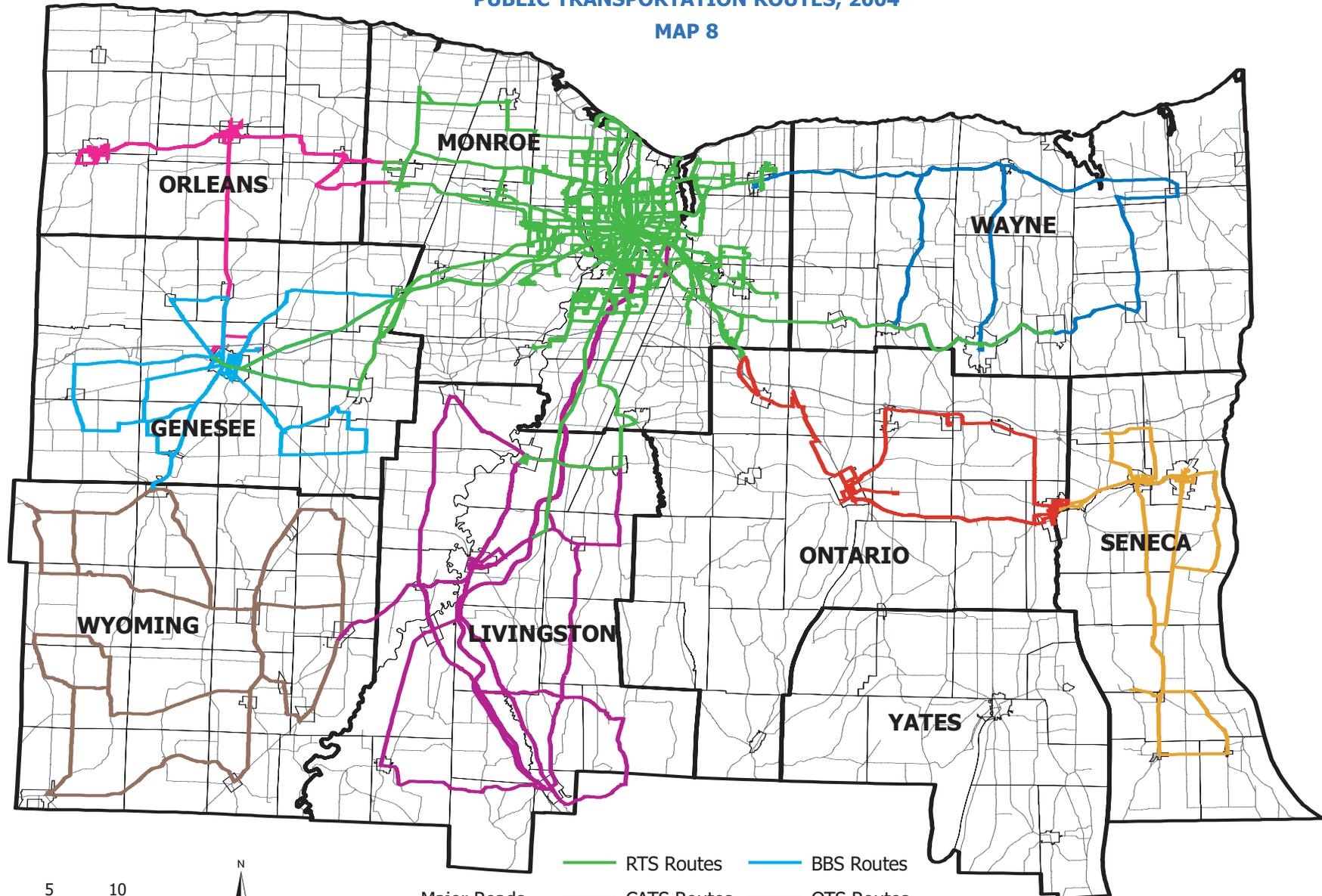
## BICYCLE AND PEDESTRIAN

Bicycle and pedestrian facilities are key elements of the regional transportation system. From increasingly walkable cities, villages, and towns to more connected multi-use trails, walking and bicycling as reasonable travel alternatives are quickly becoming distinguishing features of the Genesee-Finger Lakes Region.

Whether used for transportation or recreation, bicycle and pedestrian activity offers the potential for:



**PUBLIC TRANSPORTATION ROUTES, 2004**  
**MAP 8**



- Major Roads
- ▭ Counties
- ▭ Municipalities
- RTS Routes
- CATS Routes
- LATS Routes
- WATS Routes
- BBS Routes
- OTS Routes
- WYTS Routes
- STS Routes

Sources: Rochester-Genesee Regional Transportation Authority, 2004  
Ontario County Area Transit System, 2004



- Improved transportation choice
- Reduced congestion and more efficient use of the transportation system
- Healthier citizens and decreased community health care costs
- Increased attractiveness to existing and potential residents, employers and visitors
- Improved air quality and more efficient use of limited energy resources

The highway and bridge network doubles as the main component of the bicycle and pedestrian network. In addition, there are nearly 250 miles of existing multi-use trails and approximately 100 miles currently being developed.

These multi-use trails have the potential to increase the viability of bicycling and walking as an attractive alternative to motorized transport by serving as an expressway for non-motorized users of the transportation system - provided that convenient access to and from the highway and bridge network is provided.

Map 9 on the following page presents the existing, under development, and planned multi-use trails in the region.

## Accomplishments

New or reconstructed sidewalks and wider shoulders and travel lanes suitable for bicyclists were constructed as part of many highway and bridge projects. These constitute a large portion of the improvements made to the bicycle and pedestrian network.

Notable sidewalk additions and extensions include:

- The completion of the first phase of ARTWalk, a permanent urban art trail, in the City of Rochester in 2002.
- The construction of 12,000 feet of sidewalk in the Hamlet of Gorham in 2004.

- The extension of sidewalks along Buffalo Road (NYS Route 33) in the Town of Chili in 2004.
- The construction of pedestrian and streetscape improvements in the Village of Avon in 2004.

The Regional Trails Initiative (RTI) was completed for the Rochester TMA in June 2002 and for the remainder of the region outside the TMA in March 2004.

RTI is a comprehensive action plan for the development of a safe, accessible, and highly functional multi-use regional trail system that is fully integrated with the existing transportation system.

Notable trail extensions and additions include:

- Genesee Riverway Trail - construction of two miles of new trail between Turning Point Park and the O'Rorke Bridge scheduled for completion in 2005 and a pedestrian bridge at Lower Falls scheduled for completion in 2007, as well as neighborhood connector trails providing improved access to the main trail.
- Erie Canalway Heritage Trail - construction of 17 miles of new trail between Adams Basin (Town of Ogden) and the Village of Albion completed in 2002 and 6.5 miles of new trail between the Village of Palmyra and the Town of Arcadia scheduled for completion in 2005.
- Genesee Valley Greenway - construction of a missing segment between Scottsville Road and the Greenway in the Town of Chili and the one-mile Deep Cut trail section in the Town of Portage; both are scheduled for completion in 2005.
- Lake Ontario State Parkway Trail - construction of a three-mile segment of the trail connecting the Genesee Riverway Trail and Port of Rochester with the Route 390 Trail in the Town of Greece, scheduled for design in 2006.



An additional 25 miles of trails were constructed, reconstructed, or resurfaced along the Lehigh Valley Linear and Multi-use trails, Hojack Trail, Cayuga-Seneca Trail, Seabreeze-Charlotte Multi-use Trail, Wallington-Sodus Point Trail, Canandaigua Lagoon Walk Trail (including connecting sidewalks), and the Outlet Trail in Yates County.

## GOODS MOVEMENT

The economic growth and vitality of the region is dependent on the efficient movement of goods into, out of, within, and through the region. The relative ease of getting products to market and receiving necessary inputs is a key consideration of goods-producing businesses when looking to continue, expand, or relocate operations.

To ensure the economic success of the region, the goods movement network needs to be a distinguishing competitive feature of the transportation system relative to other metropolitan areas within New York State, across the nation, and around the globe.

The majority of inbound (75.9%) and outbound (87.5%) tonnage to and from the region originates and terminates within the Northeast U.S.

Map 10 and Map 11 present the inbound and outbound tonnage of goods moving into and out of the region by U.S. and Canadian economic area.

### Truck Service

Since the development of the interstate highway system, trucks have handled the vast majority of goods moving into, out of, within, and through the region, constituting the fastest growing component of travel on the region's highways and bridges.

The continuing increase in freight transport by truck coupled with the North American Free Trade Agreement (NAFTA) and the region's close

proximity to the Canadian border have resulted in measurable impacts to the highway and bridge network.

According to freight movement data for 2001, trucks handled 91% of all inbound traffic to the region and 99% of all outbound traffic, totaling 57 million tons of transported goods. The distinct competitive advantage that trucks offer in terms of flexibility for short hauls indicates that these trends will continue over the period covered by the LRTP.

Map 12 presents roadways with significant truck traffic as defined by facilities with average daily truck traffic that is more than 20% above the regional average. As expected, these roadways include interstates, major east-west routes, and the Route 63 corridor.

### Rail Service

The transport of freight in the region via railroads continues to decline. Two Class 1 (annual revenues in excess of \$250 million) railroads, CSX and Norfolk Southern, and ten Class 3 or "shortline" (annual revenues less than \$20 million) railroads operate in the region as displayed in Map 13.

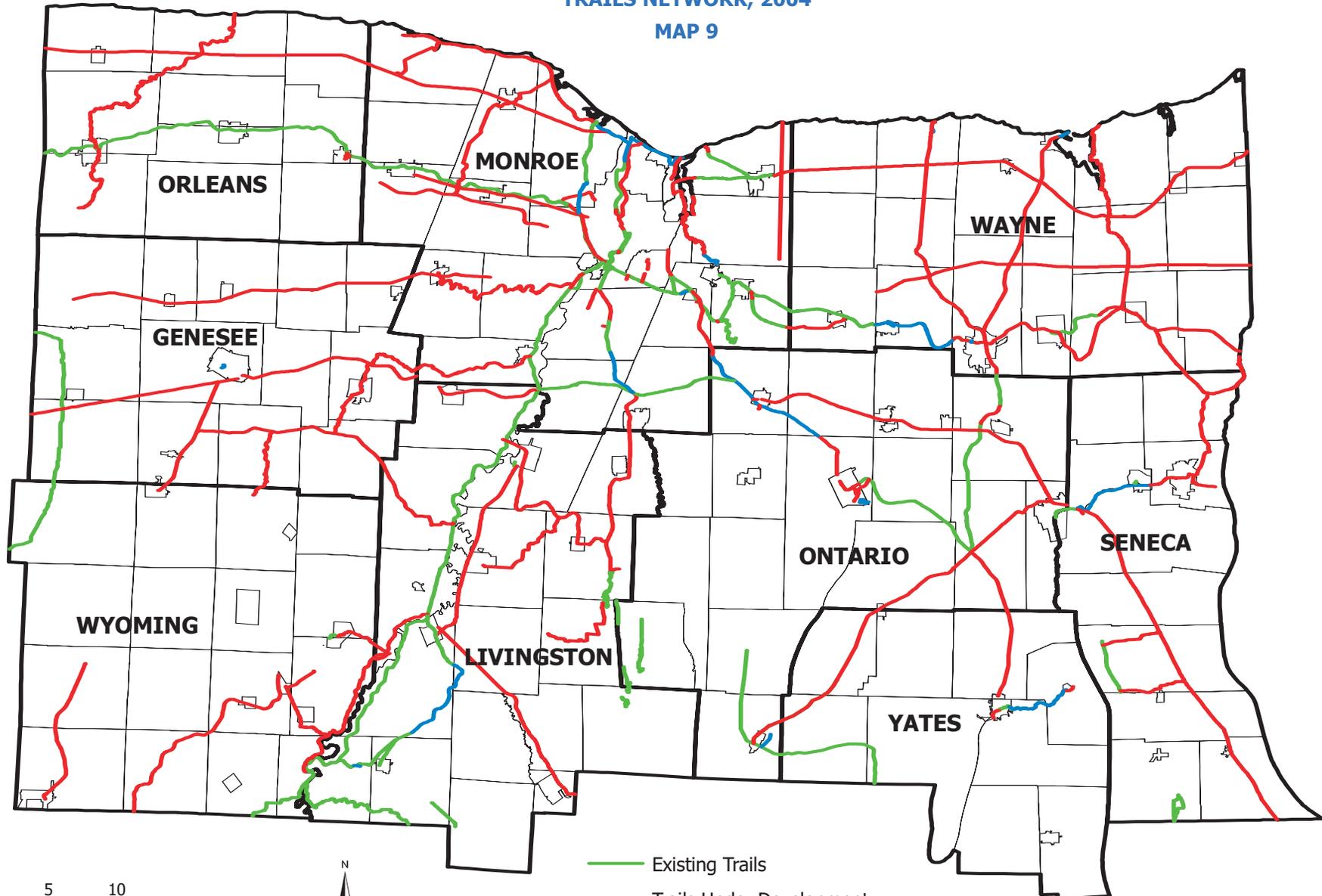
Less than 10% of the total tonnage imported to the region in 2001 arrived by rail. More than half of this 2 million tons was coal shipped from mines south of New York State. At the same time, less than one percent of the total tonnage produced by firms in the region was shipped out via rail. Much of this decline is the result of shifting logistics and management practices including, but not limited to, just-in-time delivery requirements.

### Air Cargo

According to the Federal Aviation Administration, more than 207,000 tons of freight was shipped through facilities at the Greater Rochester International Airport (GRIA) in 2002. This was a more than 400% increase over the amount of tonnage transported through GRIA in 1995.



TRAILS NETWORK, 2004  
MAP 9



- Existing Trails
- Trails Under Development
- Planned Trails

0 5 10  
Miles

0 5 10  
Kilometers





In 2002, GRIA was the largest air cargo airport in upstate New York. While the tonnage shipped through GRIA will in all likelihood never compete with that transported by truck, the value of goods moving through GRIA will gain a greater share of the regional total in the future.

As the regional economy continues to transition itself to higher value-added production industries, the requirements placed on GRIA's air cargo capabilities will increase, as will the ability of trucks and other vehicles to access freight facilities at the airport.

## Water Transport

The Port of Rochester at the mouth of the Genesee River handles the only significant waterborne freight movement in the region. Inbound shipments of cement to be distributed throughout the state are regularly received here. In addition, the Spirit of Ontario fast ferry service to Toronto, Ontario has the potential to handle up to 10 trucks on each trip.

Increasing the amount of goods transported along the Erie Canal has been raised by members of the community. Commercial activity along the Erie Canal is limited by varying controlling depths along the 524-mile long waterway. The New York State Canal Corporation, a subsidiary of the New York State Thruway Authority, is responsible for the maintenance and operation of the Erie Canal as well as entitling the transport of goods along it.

## Accomplishments

The highway and bridge network provides the primary infrastructure for the region's goods movement network. The further consideration of trucks and associated safety and efficiency issues will need to increase as future planning and improvements to the highway and bridge network are advanced.

Recent examples of planning studies conducted or underway with respect to goods movement include:

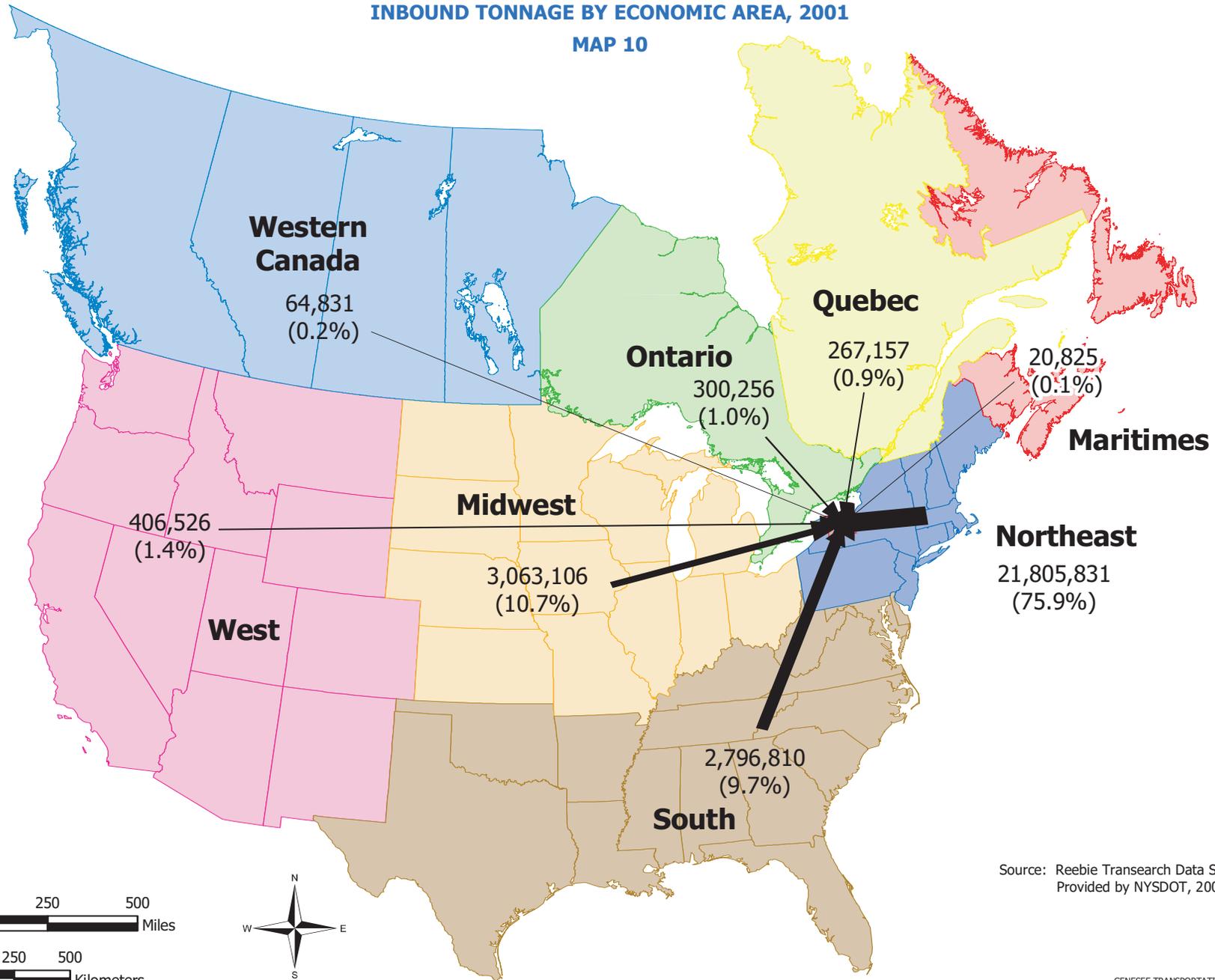
- Airport Corridor Major Investment Study - Monroe County conducted a study to assess current and forecasted mobility needs along roads leading and providing access to GRIA. The study recommended extending Jetview Drive and adding auxiliary lanes along Brooks Avenue and other roadways to increase through-flow of vehicles. The study was completed in April 2002.
- Route 14 Truck Study - The Town and City of Geneva conducted a study to identify issues related to truck traffic along NYS Route 14 in their municipalities. The Study recommended operational and regulatory improvements along the corridor to mitigate conflicts between trucks and other users of the corridor. The study was completed in June 2003.

The City and Town of Geneva along with the Town of Phelps received a NYS Quality Communities grant to develop a joint comprehensive transportation plan that will include a corridor management plan for NYS Route 14. Truck traffic and associated issues along the corridor will receive further attention as part of that effort.

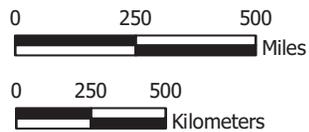
- Route 63 Corridor Study - NYSDOT is conducting a study to identify strategies to improve the safety and efficiency of the Routes 63, 20, and 77 corridor in Genesee, Livingston, and Wyoming counties. The corridor is heavily traveled by trucks as a shorter, faster, and less expensive alternative to the I-90/I-390 interchange. NYSDOT is developing possible alternatives to address the existing and future needs that were identified in the most recently completed phase of the study.
- Intermodal Freight Terminal Study - RGRTA conducted a study to determine the feasibility of developing an intermodal freight facility in the Rochester area. The study recommended developing an intermodal terminal combining rail and truck service to serve as an inland distribution facility for the Port of New York/New Jersey. The study was completed in October 2001.



INBOUND TONNAGE BY ECONOMIC AREA, 2001  
MAP 10

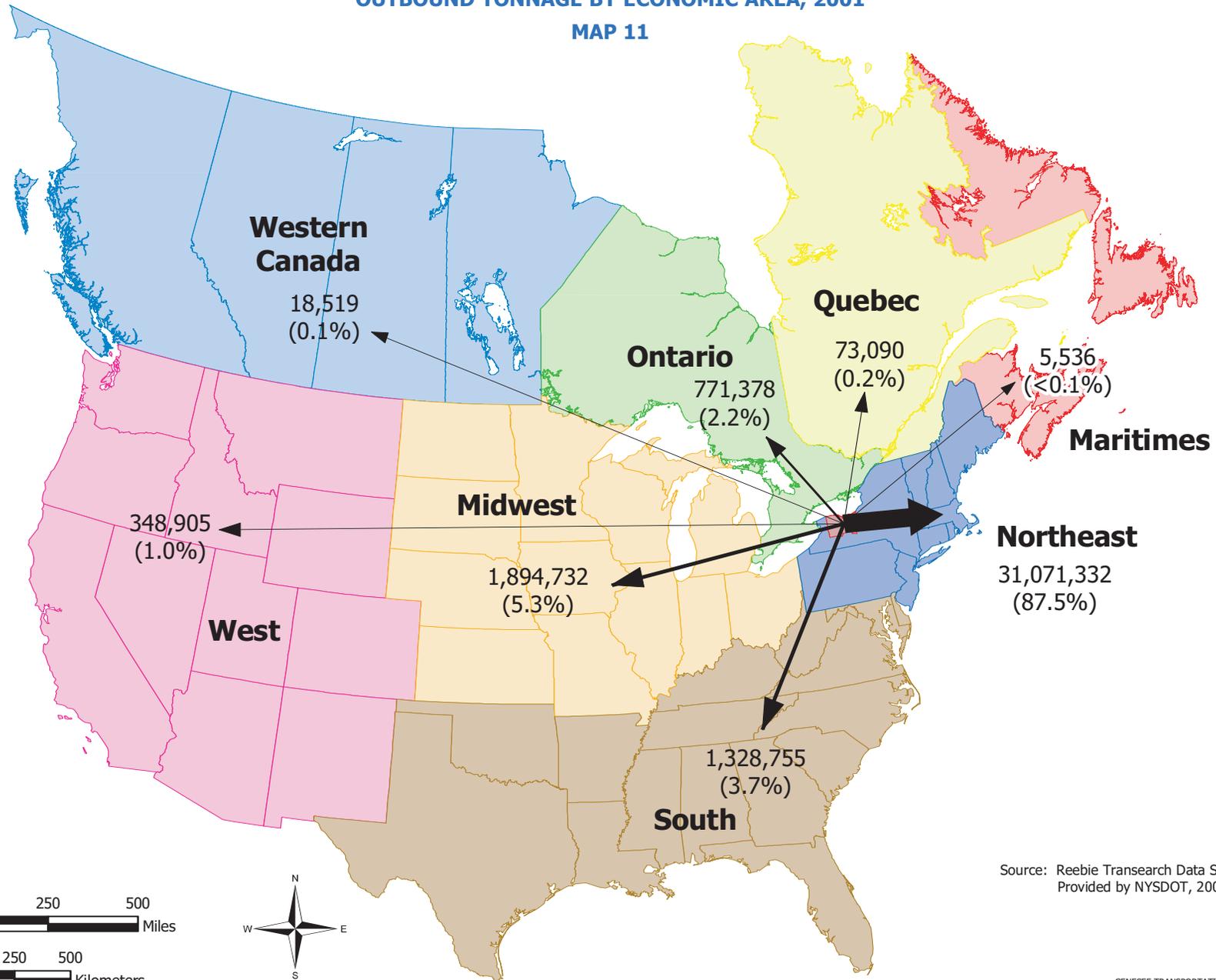


Source: Reebie Transearch Data Set  
Provided by NYSDOT, 2001





OUTBOUND TONNAGE BY ECONOMIC AREA, 2001  
MAP 11

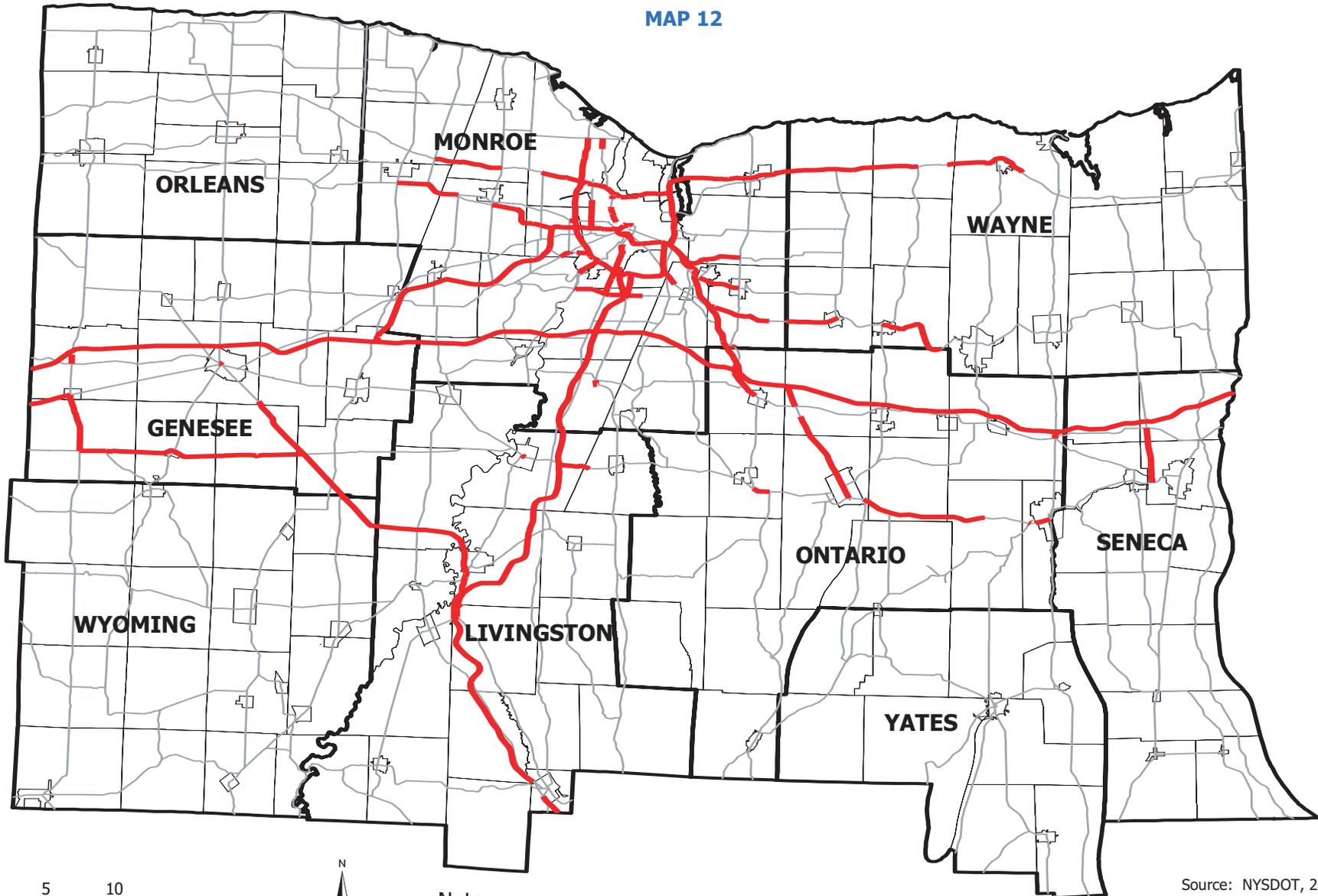


Source: Reebie Transearch Data Set  
Provided by NYSDOT, 2001

GENESSEE TRANSPORTATION COUNCIL  
December 2004



ROADWAYS WITH SIGNIFICANT DAILY TRUCK TRAFFIC, 2002  
MAP 12



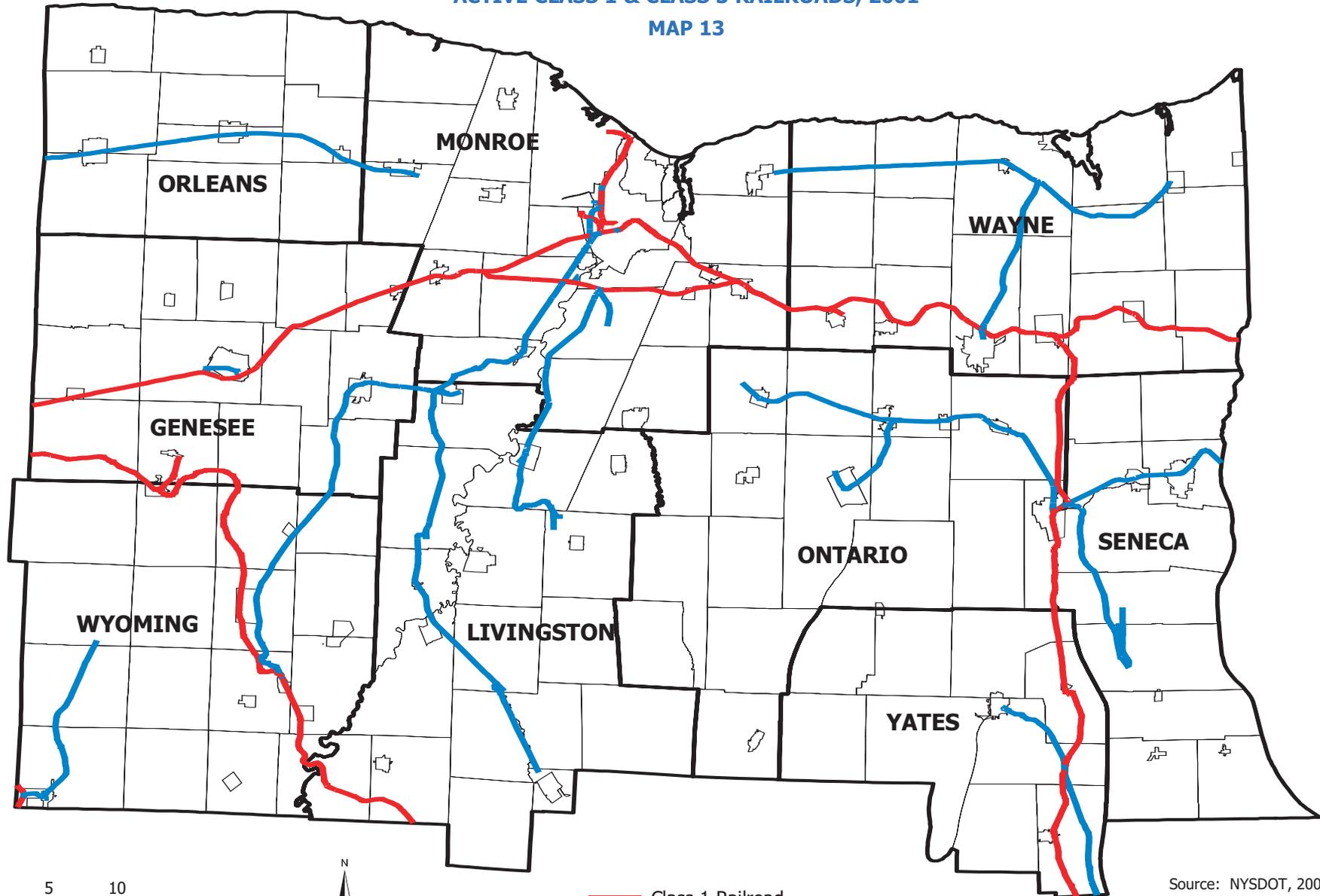
Source: NYSDOT, 2003

**Note:**

A roadway with significant daily truck traffic is defined as any one with average daily truck traffic that is more than 20% above the regional average for a roadway segment (i.e.,  $\geq 1,187$  trucks per day).



ACTIVE CLASS 1 & CLASS 3 RAILROADS, 2001  
MAP 13



0 5 10  
Miles

0 5 10  
Kilometers



- Class 1 Railroad
- Class 3 (Short Line) Railroad

Source: NYSDOT, 2001



Currently, no true intermodal freight facility with the ability to handle significant volumes of freight from various modes at a single location exists in the region. Efforts are underway to develop a tri-modal freight facility in the vicinity of GRIA near now-vacant Rochester and Southern Railroad yards in the Town of Chili.

## INTERREGIONAL TRAVEL

Interregional travel facilities provide opportunities for travel into and out of the region. Regions that are easily accessible by a variety of modes are generally considered more attractive places to live and to visit as well as to do business. Multiple modes of interregional travel currently provide service to the region, offering convenience to residents and visitors alike. The interregional travel facilities in the region are presented in Map 14.

### Via Air

There are 23 Public Use airports in the region. The Greater Rochester International Airport (GRIA) is the Primary Commercial Service airport for the region. A Primary Commercial Service airport provides regularly scheduled passenger and freight service and serves more than 10,000 enplanements annually.

GRIA served approximately 2.5 million passengers in 2003, roughly equal to 1998 despite the lingering effects of the September 11 attacks. As of April 2004, GRIA was experiencing a 10% increase over 2003.

There are currently ten commercial air carriers providing service to 24 destinations from GRIA, which is a noticeable increase over 1998. The carriers and their respective destinations are as follows:

- Air Canada (two round-trip flights daily to Toronto)
- AirTran Airways (eight round-trip flights daily to Atlanta, Baltimore/Washington, Fort Lauderdale, Orlando, and Tampa)
- American Airlines (six daily round-trips to Chicago - O'Hare)

- Continental (16 round-trip flights daily to Albany, Cleveland, Elmira/Corning, Newark, and Westchester County)
- Delta (10 round-trip flights daily to Atlanta and Cincinnati)
- Independence Air (eight round-trip flights daily to Washington - Dulles)
- JetBlue (five round-trip flights daily to New York - JFK)
- Northwest Airlines (seven round-trip flights daily to Detroit and Minneapolis/St. Paul)
- United (11 round-trip flights daily to Chicago - O'Hare and Washington - Dulles)
- USAirways (21 round-trip flights daily to Boston, Charlotte, Hartford, New York - LaGuardia, Philadelphia, Pittsburgh, and Washington - Reagan)

There are 10 General Aviation airports in the region. General Aviation refers to all civil aircraft that are not classified as air carrier, commuter, or military. Of these General Aviation airports, five are classified as Reliever airports and five are classified as Other.

A Reliever airport pulls private aircraft away from the Commercial Service airports, such as Greater Rochester, Buffalo Niagara, or Syracuse Hancock international airports, to reduce air traffic delays and increase safety in the region.

Improvements are also being made to the many General Aviation airports in the region. Both Canandaigua and Genesee County are in the process of major expansions that will extend their current runways, allowing service by corporate jets.

GRIA and the 10 General Aviation airports are State Aviation System Plan (SASP) airports, making them eligible for federal-aid



## Via Rail

Amtrak service in the region is provided at the Central Avenue station in downtown Rochester. Nine trains per day - four westbound and five eastbound - serve Rochester. Ridership at the Rochester station was estimated to be approximately 120,000 in 2001. Recent declines in Amtrak ridership in Rochester may be attributed to reduced air fares between Rochester and New York City.

The status of Amtrak as the national passenger rail provider is unclear. A significant infusion of funds is required for Amtrak to remain competitive and expand service. Planned high-speed rail improvements for the Empire Corridor linking Buffalo and Rochester with Albany and New York City are in question due to the current uncertainty surrounding Amtrak. GTC remains supportive of efforts to bring high-speed rail to the Empire Corridor.

## Via Bus

Intercity bus service in the region is provided by Greyhound Lines and New York Trailways. The central transfer point for intercity buses in the region is the terminal at Midtown Plaza. Greyhound and/or Trailways make stops at eight additional locations throughout the region. Current connections between intercity and intracity (public transportation) buses allows for convenient transfer between the two modes at Midtown Plaza.

## Via Water

The Spirit of Ontario fast ferry across Lake Ontario between the Port of Rochester to Toronto, Ontario began service in June 2004. Although it stopped service temporarily in September 2004, ferry service could resume as early as Spring 2005.

During its three months of service, "The Breeze" demonstrated that a market existed for passenger service with more than 140,000 passengers carried in that short time period. GTC supports the return of fast ferry service in the near future.

## Accomplishments

Extensive physical improvements are currently being made to GRIA. A new centralized security checkpoint will enhance the safety of the airport and its airlines for travelers and employees. Airfield improvements include new taxiways, reconstructed runways, and rehabilitated internal roadways.

A key consideration when flying into and out of a region is the cost. GRIA had some of the highest air fares in the nation in 1998. Since that time, fares have been cut substantially, due in large part to the presence of low-fare carriers such as AirTran, JetBlue, and Independence Air.

GTC completed the Rochester Amtrak Station Revitalization Study in March 2002. The purpose of the study was to position the greater Rochester area for the arrival of high-speed rail through the functional and aesthetic redesign of the station. Strategies were identified to ensure its full integration with downtown Rochester and the regional transportation system.

The study calls for the construction of a new station to be built just west of the existing station as well as the installation of high-level platforms, new passenger rail tracks to the north and south of the existing tracks, and a pedestrian bridge connecting the new station with the new tracks.

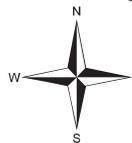
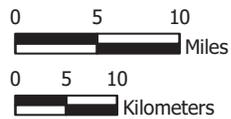
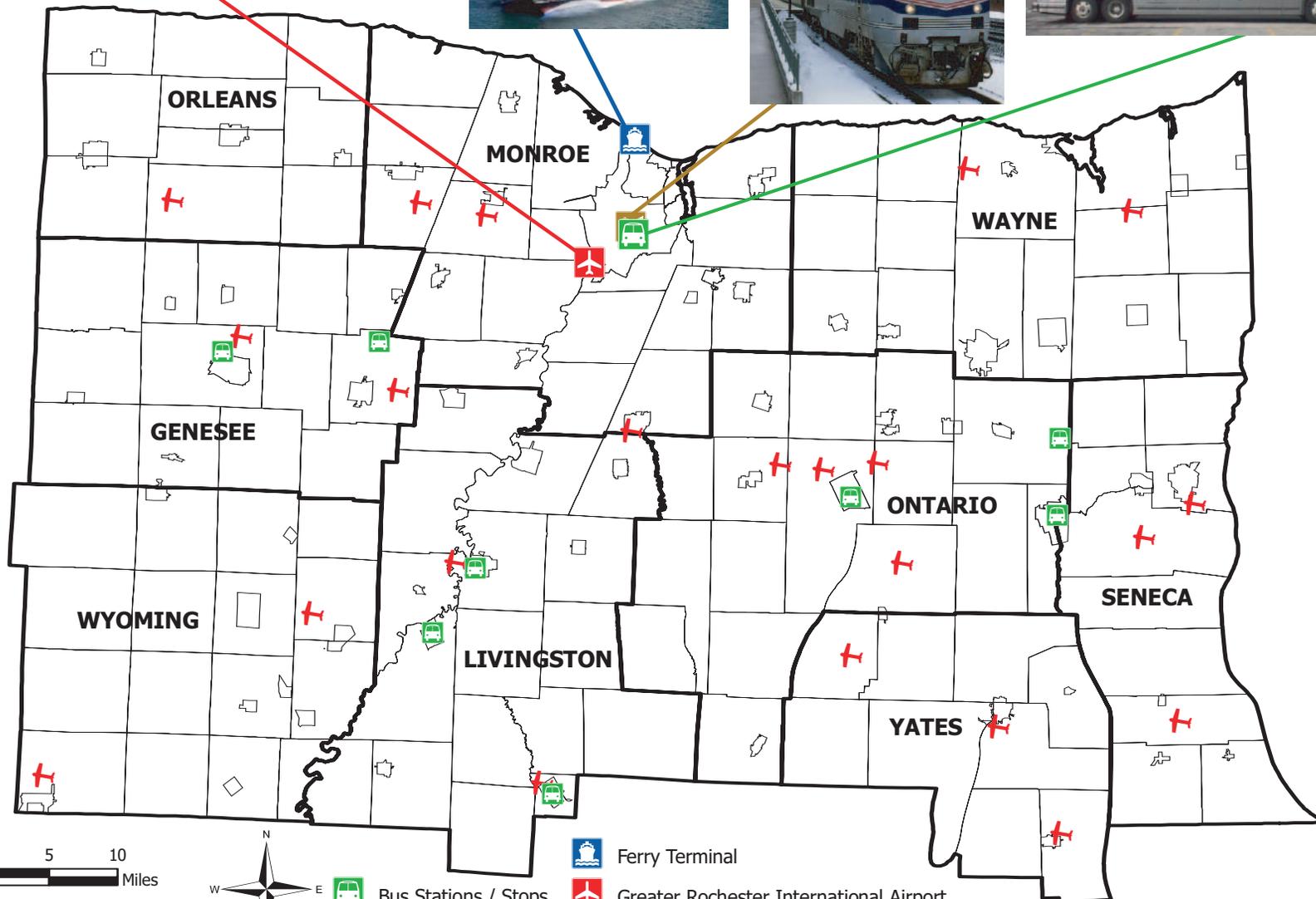
In addition, a new Amtrak station is planned in Lyons. This new station will improve access to passenger rail in the region and may act as a catalyst for economic development.

The introduction of ferry service between Rochester and Toronto via the Spirit of Ontario represents the most significant change in interregional travel since the last LRTP was adopted in December 1999.



## INTERREGIONAL TRANSPORTATION FACILITIES, 2004

MAP 14



-  Ferry Terminal
-  Bus Stations / Stops
-  Railroad Stations
-  Greater Rochester International Airport
-  General Aviation Airports

**GENESEE TRANSPORTATION COUNCIL**



**CHAPTER V - RECOMMENDATIONS**





## OVERVIEW

Recommendations are provided for the following modes:

- Highway and Bridge
- Public Transportation
- Bicycle and Pedestrian
- Goods Movement
- Interregional Travel

Given the strong connections between the built environment and the transportation system, Land Use recommendations are also included.

Recommendations for each mode (excluding Land Use) are divided into two types: policies and actions.

- Policies - programmatic strategies to achieve the GTC Goals and Objectives
- Actions - specific initiatives that GTC, member agencies, and others can undertake to meet the policies

In addition, the proposed recommendations (policies and actions) are classified into three categories: preservation, expansion, and operations.

- Preservation - recommendations that preserve and/or maintain existing infrastructure, equipment, etc.
- Operations - recommendations that provide for more efficient use of existing infrastructure, delivery of services, etc.
- Expansion - recommendations that increase capacity, provide services to new areas, etc.

Note that the Operations category does not include recommendations necessary for the maintenance or use of infrastructure or the provision of services. Rather, the Operations category includes recommendations for

capital projects that increase the functionality of infrastructure or allow for the more efficient provision of services.

## HIGHWAY AND BRIDGE

### Preservation

The region has an extensive highway and bridge network. It is critical to preserve and maintain existing roadways and bridges to promote safety, increase efficiency, and minimize lifetime costs. As a region, we must identify the most important existing highway and bridge deficiencies and address them in a cost-effective manner. GTC will establish a funding "set-aside" in the TIP for highway and bridge preventive maintenance projects that will minimize lifetime costs.

Tourism is an increasingly important aspect of the region's economy. Like many sectors of the economy, tourism is greatly impacted by the transportation system. Consequently, the maintenance and overall attractiveness of "gateway" roads and bridges as well as tourist corridors should be emphasized.

Truck traffic is another important area in which transportation infrastructure plays a sizeable role in economic development. Trucks, however, do accelerate the deterioration of roads. Appropriate resources should be devoted to enforcing truck weight regulations on the region's roadways.

### Operations

Improving the performance of the region's transportation system with little to no capital investment in physical capacity or reconstruction projects has emerged as a viable option for regions across the nation. The Genesee-Finger Lakes region is no exception. The deployment of Intelligent Transportation Systems (ITS), Transportation System Management (TSM), and Transportation Demand Management (TDM) activities are cost-effective alternatives to adding capacity to the highway and bridge network.



ITS and related technologies and strategies should be integrated into all future transportation planning efforts as well as the design of major reconstruction and rehabilitation projects. The region should continue to financially support the expansion of ITS efforts and should work to continually improve the organization of those efforts. Continued expansion of surveillance and information collection/dissemination through the use of fiber optic communications, cameras, Highway Advisory Radio (HAR), and Dynamic Message Signs (DMS) is encouraged.

Operational improvements are not limited to advanced technologies. Intersection improvements including, but not limited to, the addition of turn lanes or simple re-striping of a roadway constitute operational improvements as well.

To support the growing tourist economy, promotional and way-finding signage along tourist corridors in the region should be improved and expanded.

### **Expansion**

Expanding the capacity of the region's roadway network should be limited. As a nonattainment area for ground-level ozone, new travel lanes and/or facilities that increase capacity cannot be added to the transportation system unless a need has been identified through the GTC Congestion Management System (CMS). Correspondingly, the GTC CMS update will be completed and implemented.

Capacity expansion projects that have been identified by the GTC CMS and supported by Corridor or Major Investment Studies should be advanced in a manner that maximizes their contribution to the economic growth and vitality of the region. Additional analysis will be needed to prioritize capacity improvements. Projects will be selected for implementation through the TIP development process.



**HIGHWAY & BRIDGE**

**Preservation**

Policies	Preserve and maintain existing roadways and bridges in a manner that promotes safety, increases efficiency, and minimizes lifetime costs.	
	Identify and address key highway and bridge safety and efficiency deficiencies.	
	Ensure that "gateway" roads and bridges leading into/out of the region as well as those along tourist corridors are well maintained and attractive.	
Actions	H.1.	Continue current fiscal practices that place priority on improving the safety, efficiency, and reliability of the existing highway and bridge network.
	H.2.	Maintain safety features on all highways and bridges including, but not limited to, signage, lighting, striping, guardrails, and pavement markings.
	H.3.	Continue pavement condition monitoring and traffic count collection activities to identify current and future highway preservation investment needs.
	H.4.	Advance preservation, maintenance, and connectivity recommendations identified in corridor, major investment, access management, and other planning studies conducted by GTC and member agencies, as determined through the TIP development process.
	H.5.	Identify tourist corridors (in cooperation with NYSDOT) for further study and potential investment consideration based on their importance to the regional economy.
	H.6.	Identify "gateway" roads and bridges and develop maintenance plans that ensure these areas reflect positively on the region.
	H.7.	Maintain all Federal-aid roads at a "fair" or better pavement condition.
	H.8.	Establish a preventative maintenance "set-aside" in the TIP to increase cost-effectiveness by delaying the need for full reconstruction.
	H.9.	Identify the resources necessary to reduce premature deterioration of highways and bridges through increased enforcement of truck weight regulations.



**HIGHWAY & BRIDGE (CONTINUED)**

**Operations**

Policies	Utilize the GTC Congestion Management System to identify areas where intersection improvements can improve safety and efficiency.	
	Support operational improvements that are responsive to air quality, energy efficiency, and quality of life concerns.	
	Increase the use of Intelligent Transportation Systems (ITS), Transportation System Management (TSM), and Transportation Demand Management (TDM) applications to increase safety and efficiency of the existing highway and bridge network.	
	Ensure that regional attractions are easy to find by residents and visitors alike using the regional highway and bridge system.	
Actions	H.10.	Advance intersection improvement recommendations (including, but not limited to, reconfigurations) identified in corridor, major investment, access management, and other planning studies conducted by GTC and member agencies, as determined through the TIP development process.
	H.11.	More fully incorporate ITS applications into future planning studies conducted by or on behalf of GTC (examples include advanced communication networks for travelers, transportation agencies, and emergency medical service responders; expressway incident management; traffic signal coordination; adaptive response systems; etc.).
	H.12.	Encourage member agencies to increase integration of ITS infrastructure into preliminary engineering and design phases of major reconstruction projects.
	H.13.	Implement planned ITS improvements including, but not limited to, CCTV cameras, dynamic messaging systems, highway advisory radio systems, etc.
	H.14.	Continue financial support for the Highway Emergency Local Patrol (HELP), Areawide Rideshare, Rochester/Monroe County Traffic Control Center, and ITS Operations programs and activities.
	H.15.	Expand the use of ITS technologies approaching NYS Thruway interchanges to improve efficiency for commuters and freight.
	H.16.	Expand the use of ITS technologies in work zones to improve the safety of workers and travelers.
	H.17.	Identify a preferred structure for a Greater Rochester area regional ITS operating structure.
	H.18.	More fully incorporate TDM strategies into future planning studies conducted by or on behalf of GTC (examples include carpooling, car sharing, parking strategies, alternative work schedules, telecommuting, etc.).
	H.19.	Improve promotional and way-finding signage along major tourist corridors (as identified in coordination with local agencies and NYSDOT).



**HIGHWAY & BRIDGE (CONTINUED)**

**Expansion**

Policies	Increase capacity through new traffic lanes/facilities only when a need has been identified in the GTC Congestion Management System (CMS) and other alternatives have been exhausted.	
Actions	H.20.	Complete the update to and implement the GTC CMS.
	H.21.	Advance recommendations for new traffic lanes/facilities identified in corridor studies and major investment studies, as determined through the TIP development process.



## PUBLIC TRANSPORTATION

### Preservation

Use of public transportation is increasing in the region. Currently, there are transit services in eight of the nine counties in the region, the most recent addition being Seneca Transit Service in September 2004.

Average fleet age for the region's largest transit provider, RTS, is under 6 years and ridership has increased each of the past five years. Numerous routes and fare payment options have been introduced and many more enhancements are planned. First and foremost is the continuation of clean, comfortable, safe, and reliable public transportation services in the region. If transit service does not meet or surpass users' expectations, ridership will not continue to grow.

The nation, and indeed the region, is in the midst of the largest demographic shift in recent history. The population is aging at an increasing rate as the "Baby Boomers" begin to reach their sixties. Persons with disabilities need access to basic needs and want to actively participate in the community. The region must ensure that public transportation services meet the needs of the increasing senior population and of disabled residents.

An important consideration that has emerged in the region that public transportation can impact is air quality.

Reducing the emissions from the existing bus fleet through replacing or retrofitting existing buses with cleaner-running buses and filtering apparatus will have an impact on emissions levels.

### Operations

Transit service providers in the region should take advantage of emerging technologies to improve safety, efficiency, and customer service. In the RTS service area, kiosks and on-line fare purchasing and trip planning are planned. "Next-bus" traveler information displays at major stops are also

planned. GTC supports the implementation of these technologies and additional advancements in the coming years.

Any improvements made should be accompanied by increased marketing to make potential customers aware of the services available to them, especially in suburban and rural areas. Most importantly, facilities must be made accessible to all users at all times. Inclement weather should not preclude a user from having access to public transportation. Transit providers, municipalities, and private landowners should work cooperatively to ensure that transit stops are safe and accessible.

### Expansion

The development of new or expanded public transportation services should be undertaken so as to maximize their contribution to the region's economic growth and vitality.

New facilities which enhance the marketability and attractiveness of public transportation, especially in the suburbs, should be established. Access to employment opportunities and health care providers must be a key consideration when adding new, or extending existing, transit routes. Expanded service to and from the region's colleges and universities should also be a priority.

Construction of the transit component of Renaissance Square will provide improved conditions for transferring riders as well as significant economic development benefits to downtown Rochester. The establishment of suburban transit centers should improve the attractiveness of public transportation to suburban commuters as well as provide new community focal points.

A strategic plan for public transportation in Yates County should be conducted and the recommendations from it and other recently-completed rural county public transportation plans should be implemented. The region should also begin advancing the recommendations of the Strategic Plan for Access to Non-Emergency Medical Services.



**PUBLIC TRANSPORTATION**

**Preservation**

Policies	Ensure that existing public transportation services are provided in a convenient and safe fashion, offering an attractive alternative to the single-occupancy automobile.	
	Ensure that public transportation services meet the needs of the disabled and the increasing senior population.	
	Support investments in the existing public transportation system that are responsive to air quality and energy efficiency concerns.	
Actions	PT.1.	Maintain the average fleet age of all public transportation operators in the region at or below FTA standards.
	PT.2.	Periodically assess existing public transportation services relevant to current and projected needs, demand, and market potential and determine the necessary route structure and fleet requirements.
	PT.3.	Consider the locations of senior living communities and other areas where a high percentage of seniors reside when assessing route structures and schedules.
	PT.4.	Investigate the use of alternative fuel, hybrid, retrofitted, and/or smaller vehicles to reduce emissions and increase energy efficiency.
	PT.5.	Create stable funding mechanisms (including, but not limited to, an increase above the traditional FTA formula funds allocated to the TMA) for improvements to existing public transportation services.

**Operations**

Policies	Continue to utilize current technologies and integrate new ones to increase safety and efficiency and improve customer service for all public transportation users.	
	Increase awareness of existing and new public transportation services among specific customer groups within the region to better serve their mobility needs and increase business development.	
	Ensure that public transportation facilities are accessible to all users at all times, with special attention paid during the winter months and other periods of inclement weather.	
	Ensure that regional attractions are easy to find by residents and visitors alike using the regional public transportation system.	



**PUBLIC TRANSPORTATION (CONTINUED)**

**Operations (Continued)**

Actions	PT.6.	Introduce trip planning and fare purchase capabilities through kiosks at high activity locations served by public transportation.
	PT.7.	Increase the use of electronic security and surveillance applications on public transportation vehicles.
	PT.8.	Implement "next bus" traveler information displays at major stops and facilities in the RTS system.
	PT.9.	Conduct and implement the Integration Plan for Future Fare Collection and Hardware and Software study.
	PT.10.	Conduct targeted marketing of existing and new public transportation services to seniors, rural residents/businesses, and college students.
	PT.11.	Encourage transit providers, counties, and municipalities to work cooperatively to maintain accessibility to public transportation facilities during service hours.
	PT.12.	Install audible and/or visual bus stop/bus route messaging systems on all buses and at high-volume bus stops, as appropriate, to improve service for all public transportation users.
	PT.13.	Improve promotional and way-finding signage at high-volume bus stops in the region.

**Expansion**

Policies	Continue the development of new and expanded public transportation facilities to increase the marketability and attractiveness of services as an alternative to single-occupancy vehicle commuting, particularly in suburban areas.	
	Increase accessibility to employment opportunities and medical services for persons without access to a private automobile.	
	Improve the mobility of students at colleges and universities in the region to increase the likelihood of retention upon graduation.	
Actions	PT.14.	Provide support as needed to RGRTA and CATS for the development of new and expanded facilities, most notably the transit component of Renaissance Square, as well as the CATS Hopewell and LATS Hamptons Corners facilities.
	PT.15.	Establish suburban transit centers that include private retail and service establishments in the RTS service area.



**PUBLIC TRANSPORTATION (CONTINUED)**

**Expansion (Continued)**

PT.16.	Advance the recommendations of the rural county strategic plans for public transportation, as appropriate.
PT.17.	Conduct a strategic plan for public transportation in Yates County.
PT.18.	Advance the recommendations of the Strategic Plan for Access to Non-Emergency Medical Services Study, as determined through the TIP development process.
PT.19.	Explore partnerships with the not-for-profit sector to provide services that complement and expand on existing ADA-prescribed paratransit services for persons with disabilities.
PT.20.	Explore the establishment of circulator services linking proximate tourist and entertainment destinations within the region.
PT.21.	Conduct a strategic plan for public transportation service(s) to colleges and universities in the region.
PT.22.	Assess the potential of high-capacity transit corridors in the region to determine the threshold for implementing cost-effective fixed guideway public transportation services.



## BICYCLE AND PEDESTRIAN

### Preservation

Bicycle and pedestrian facilities are a growing asset of the region's transportation system. They offer quality of life improvements and provide an alternative to the automobile for some trips. Too often, however, these facilities are not given proper attention in regards to maintenance and preservation. All bicycle and pedestrian facilities should be preserved and maintained in a manner that promotes safety and efficiency, and minimizes lifetime costs.

For transportation purposes, a multi-use trail is only as good as the places it can provide access to. Therefore, another aspect of preserving the existing bicycle and pedestrian network is to alleviate connectivity deficiencies. The same holds true for sidewalks, crosswalks, bicycle lanes, and other facilities.

### Operations

In order to maximize the use of the region's growing bicycle and pedestrian network, it must be safe, efficient, and accessible to all users.

Traffic calming measures should be adopted, where appropriate, to improve the bicycle and pedestrian environment. Installation of ADA-accessible pedestrian treatments is required when reconstructing facilities. A regional bicycle parking program should be organized to ensure adequate storage for bicycles at activity and employment centers across the region. All new transit buses in the region should be equipped to handle bicycles.

### Expansion

The bicycle and pedestrian network in the region should continue to be expanded in a manner that maximizes its contribution to the economic growth and vitality of the region. Safety, connectivity, and accessibility are key considerations.

New, improved, or extended multi-use trails should be advanced based on the recommendations of the Regional Trails Initiative and further planning studies (i.e., Priority Trails Advancement plans). Consideration of sidewalks and bicycle facilities should be included in all highway and bridge projects as part of a "Complete Streets" approach. Development of a regional "Safe Routes to School" program will encourage bicycle and pedestrian travel to primary and secondary schools.



**BICYCLE & PEDESTRIAN**

**Preservation**

Policies	Preserve and maintain existing bicycle and pedestrian facilities, particularly trails, sidewalks, and crosswalks, in a manner that promotes safety, increases efficiency, and minimizes lifetime costs.	
	Identify and address key bicycle and pedestrian safety, efficiency, and connectivity deficiencies.	
Actions	BP.1.	Continue current fiscal practices that place priority on improving the safety, efficiency, and reliability of the existing bicycle & pedestrian network.
	BP.2.	Maintain safety features on all bicycle and pedestrian facilities including, but not limited to, surfaces, signage, lighting, striping, and markings.
	BP.3.	Conduct seasonal traffic count collection and surface condition monitoring on the region's multi-use trails to identify current and future trail preservation investment needs.
	BP.4.	Advance preservation, maintenance, and connectivity recommendations identified in the Regional Trails Initiative, Priority Trails Advancement, and other bicycle and pedestrian planning studies conducted by GTC and member agencies, as determined through the TIP development process.
	BP.5.	Develop a comprehensive GIS database of sidewalks in the Rochester TMA, noting the location and condition of existing sidewalks.

**Operations**

Policies	Increase the efficiency and safety of the region's bicycle and pedestrian network.	
	Ensure the accessibility of the bicycle and pedestrian network to all residents of the region.	
	Ensure that regional attractions are easy to find by residents and visitors alike using the regional bicycle and pedestrian system.	



**BICYCLE & PEDESTRIAN (CONTINUED)**

**Operations (Continued)**

Actions	BP.6.	Implement traffic calming measures, where appropriate, to improve the bicycling and walking environment.
	BP.7.	Institute a regional program to prioritize the retrofit and/or new installation of ADA accessibility treatments in the pedestrian transportation network.
	BP.8.	Establish a centralized bicycle parking program to support the purchase and proper installation of quality bicycle parking at public and private locations throughout the region.
	BP.9.	Identify and support pedestrian safety improvements at accident-prone rail crossing locations in the region.
	BP.10.	Install count-down pedestrian signals at key intersections (i.e., those experiencing significant vehicular and pedestrian traffic volumes) throughout the region, and consider installation at other select locations.
	BP.11.	Ensure that all public buses (non-paratransit) in the region can accommodate bicycles.
	BP.12.	Install promotional and way-finding signage on multi-use trails and at trailheads to improve connectivity between trails and regional activity centers.
	BP.13.	Increase marketing of bicycle and pedestrian activity as a healthy and viable means of transportation.

**Expansion**

Policies	Increase the size and scope of the region's bicycle and pedestrian network through the development of new or expanded facilities.	
Actions	BP.14.	Advance trail expansion recommendations as identified in the Regional Trails Initiative, Priority Trails Advancement, and other planning studies conducted by GTC and member agencies, as determined through the TIP development process.
	BP.15.	Develop "Complete Streets" that incorporate bicycle and pedestrian facilities as part of all highway and bridge reconstruction and expansion projects, as appropriate.
	BP.16.	Establish a regional "Safe Routes to School" program to support the development of bicycle and pedestrian alternatives for commuting to/from schools.
	BP.17.	Improve the connectivity of the region's bicycle and pedestrian network through the development of new trails, sidewalks, bicycle lanes, wide curb lanes, curb offsets, and/or paved shoulders that meet or exceed the minimum requirements of the agency responsible for the roadway.
	BP.18.	Establish a regional and local "Signed Shared Roadway" system of bicycle routes that link key destinations/generators of bicycle trips.



## GOODS MOVEMENT

### Preservation

The movement of goods into, out of, and through the region is a major function of the transportation system. Truck traffic is growing and is expected to continue to do so for the foreseeable future. As a result, it is important that goods movement considerations are fully incorporated into all future transportation planning studies and road and bridge reconstruction projects.

For now, existing roadway, bridge, and rail infrastructure needs to be maintained in a fashion that ensures the efficient movement of goods and the safety of other users of the transportation system.

### Operations

Enhancing the safety and efficiency of the region's goods movement system benefits all users of the transportation network. Overhead clearance issues that impede trucks should be mitigated appropriately to ensure a decrease in incident-based delay. Where the mixing of trucks with local traffic is causing significant problems, alternatives should be sought out and implemented. For instance, reassigning Route 54 in the Village of Penn Yan could alleviate truck traffic conflicts on busy village streets. The findings of the Route 63 Corridor Study should be advanced in a timely manner to mitigate the issues associated with truck traffic in that area.

The safety of at-grade railroad crossings has become an important regional issue. All hazardous and/or high-traffic, at-grade rail crossings in the region should be analyzed and mitigated appropriately.

Overhead clearance is also an issue for railroads. Removal of these obstructions could allow for double-stacked rail cars, which would shorten trainsets running through the region.

The traffic being carried on Class I railroads and the speeds at which they operate can pose safety and noise issues for the communities they are

located in. The fencing and/or buffering of Class 1 rail lines in developed areas should be investigated.

Transportation plays a major role in the attractiveness of industrial parks and facilities. Access to these sites is crucial to business attraction and retention. Brownfield sites face numerous difficulties and transportation should not hinder their redevelopment.

Safe and efficient access to agricultural areas and related establishments by trucks and large equipment is also vital to the regional economy.

Recommendations resulting from the Transportation & Industrial Access project should be advanced to alleviate transportation issues that may negatively impact industrial parks and sites.

### Expansion

Existing goods movement facilities should be expanded and new facilities constructed to meet the needs of the changing economy. Projects should be advanced in a manner that maximizes their contribution to the economic growth and vitality of the region.

An emerging goods movement need in the region is the development of a tri-modal freight facility near the Greater Rochester International Airport. As an inland port, this facility could serve existing business and spur the development of new businesses, creating jobs and improving the region's goods movement capabilities.

A waterborne freight facility at the Port of Rochester is another facility worthy of study. Currently, the Port handles one freighter carrying cement shipments. The establishment of a full-scale port facility could lead to additional economic growth and goods movement capabilities.

Another potential goods movement investment worthy of study is the conversion of certain abandoned rail corridors for truck-exclusive use. These corridors could provide access to existing industrial areas, removing truck traffic from local roads and improving freight travel times.



**GOODS MOVEMENT**

**Preservation**

Policies	Preserve and maintain existing roadway, bridge, and rail infrastructure in a manner that supports the movement of goods and ensures the safety of other motorized and non-motorized users of the transportation system.	
Actions	GM.1.	More fully incorporate goods movement considerations into future planning studies conducted by or on behalf of GTC.
	GM.2.	Encourage member agencies to increase integration of goods movement considerations into preliminary engineering and design phases of major reconstruction projects.

**Operations**

Policies	Increase the efficiency and safety of the region's goods movement system.	
	Address significant transportation issues that may negatively impact industrial parks and sites (including brownfields) and agricultural/agribusiness establishments.	
Actions	GM.3.	Address safety issues related to the presence of trucks and slow-moving vehicles, most notably farm vehicles on rural roadways.
	GM.4.	Identify locations of low overhead bridge clearance for trucks and develop appropriate mitigation strategies.
	GM.5.	Reduce the number of hazardous and/or high traffic at-grade rail crossings on Class 1 railroads.
	GM.6.	Identify and improve locations of low overhead bridge clearance to allow for double-stacked rail cars, shortening train-sets on Class 1 railroads in the region.
	GM.7.	Work with the Class I railroads to identify ways to improve safety on and along railroads in the region.
	GM.8.	Implement goods movement operational improvements which ensure that negative impacts of truck traffic on local communities are minimized, as appropriate.
	GM.9.	Complete and advance the recommendations of the Transportation and Industrial Access study, as appropriate.



**GOODS MOVEMENT (CONTINUED)**

**Expansion**

Policies	Develop new facilities and expand existing ones to meet the changing needs of the regional economy.	
Actions	GM.10.	Support the development of a tri-modal freight terminal near the Greater Rochester International Airport (GRIA), combining truck, air, and rail capabilities to serve as an inland port distribution center.
	GM.11.	Explore the development of a Port of Rochester freight facility on Lake Ontario.
	GM.12.	Expand rest areas to meet NYSDOT's policies, providing additional space for trucks and upgraded comfort facilities.
	GM.13.	Advance goods movement capital recommendations identified in corridor, major investment, access management, and other planning studies conducted by GTC and member agencies, as determined through the TIP development process.
	GM.14.	Investigate the potential for truck-only roadways using existing and abandoned rights-of-way.



## INTERREGIONAL TRAVEL

### Preservation

The ability to quickly and easily travel into and out of the region is important to the regional economy. Recent efforts have resulted in lower air fares and improved security at the Greater Rochester International Airport (GRIA). Development of the transportation component of Renaissance Square will improve Greyhound and Trailways intercity bus facilities.

Advancing recommendations of the Rochester Amtrak Station Revitalization Study that lead to the reconstruction of the station on the existing site will facilitate improved operations for intercity rail in the region and may provide an economic spark for the north end of downtown Rochester.

### Operations

Improving the efficiency of transportation into and out of the region will have both economic and transportation benefits. If the experience of traveling into and out of the region is enjoyable, a traveler is more likely to use the system again. For example, the largest recent interregional transportation investment in the region is the Spirit of Ontario ferry service.

As a regional destination, it is important that traffic at the Port of Rochester be monitored and improvements made based on the monitoring regardless of the resumption of ferry service.

The provision of adequate way-finding signage to the region's interregional transportation facilities as well as to key traveler destinations (e.g., museums, parks, shopping, etc.) is a relatively simple yet effective way to improve operations.

Adequate parking space for both cars and bicycles must be included. Interregional travel facilities should also be serviced by public transportation on a regular basis.

### Expansion

New or expanded facilities that will increase travel options for residents and visitors alike should be pursued. Transfers between the region's interregional transportation facilities (e.g., GRIA, Renaissance Square, Amtrak Station, and the Port of Rochester Ferry Terminal) should be facilitated, possibly through the introduction of a shuttle service.

Construction of a new Amtrak station in Lyons will provide improved access to interregional travel for residents in the eastern portion of the region.

Efforts to add high-speed rail service on the Empire Corridor between Buffalo and New York City should be supported. Additional improvements and expansions at GRIA identified in their upcoming Master Plan update should also be supported.



**INTERREGIONAL TRAVEL**

**Preservation**

Policies	Ensure a variety of quality interregional transportation options are available to residents of and visitors to the region.	
Actions	IR.1.	Reconstruct the Rochester Amtrak Station at its current Central Avenue site as recommended in the Rochester Amtrak Station Revitalization Study. (Not eligible for Federal Formula funds)

**Operations**

Policies	Increase the efficiency of travel into and out of the region.	
	Ensure that regional attractions are easy to find by residents and visitors alike using interregional travel facilities.	
Actions	IR.2.	Provide adequate way-finding signage to interregional travel facilities in the region.
	IR.3.	Monitor traffic at the Port of Rochester and make operational improvements as needed to support ferry service from Rochester to Toronto.
	IR.4.	Provide sufficient parking at interregional travel facilities in the region.
	IR.5.	Establish connections between interregional travel facilities and rural public transportation services.

**Expansion**

Policies	Develop new facilities and expand capacity at existing ones to increase interregional travel options.	
Actions	IR.6.	Enable connections between Renaissance Square, the Port of Rochester, and other interregional travel facilities throughout the region.
	IR.7.	Construct a new Amtrak Station in Lyons. (Not eligible for Federal Formula funds)
	IR.8.	Support efforts to establish double-tracked, high-speed rail service on the Empire Corridor. (not eligible for Federal Formula funds)
	IR.9.	Provide assistance as needed to the Greater Rochester International Airport in the development of their Master Plan update.
	IR.10.	Improve access to the Erie Canal and other major waterways in the region.



### LAND USE

There is a strong connection between land use and transportation. Transportation facilities determine what land uses can be supported and land uses determine what transportation facilities are needed. Planning for either should not be done in isolation, but rather in a cooperative and complementary manner. Regional transportation needs and local land use and development objectives must be balanced with respect to transportation planning and investment decision making.

Local communities should be encouraged to pursue infill development, with attention paid to the redevelopment of brownfields, whenever possible. With established infrastructure already in place, infill development and redevelopment is an efficient use of this region's physical resources.

Preservation of existing active and abandoned rights-of-way for future transportation use is strongly recommended. These rights-of-way often pass through desirable locations and would be highly difficult and expensive to restore once they are fragmented.

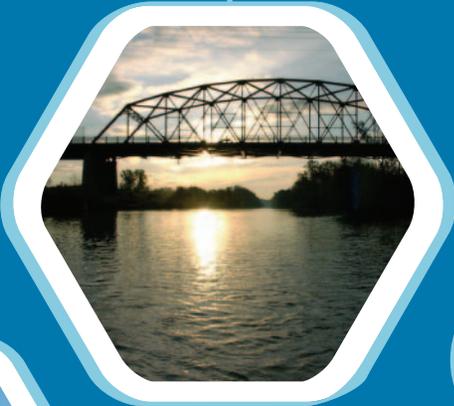
All transportation projects advanced in the region should be done in a manner that enhances and protects community character. Accordingly, context sensitive design principles should be incorporated into the design of transportation projects, as appropriate. In addition, Main Street planning activities should be continued to help ensure that the region's cities, villages, and hamlets are suitably planned for.



LAND USE

Policies	LU.1.	Encourage infill development and redevelopment of areas (including brownfields) with existing transportation infrastructure.
	LU.2.	Encourage land use practices that incorporate consideration of the transportation system early in the development process.
	LU.3.	Ensure that transportation planning and investment decision-making balances local land use and development objectives with regional transportation needs.
	LU.4.	Continue to provide technical planning assistance to member agencies and municipalities.
	LU.5.	Preserve existing rights-of-way for possible future transportation uses.
	LU.6.	Expand the distribution of GTC instructional materials including, but not limited to, the How-To Guidebook for Rural Transportation Plans, Access Management Video and Guide, and various bicycle and pedestrian safety fact sheets.
	LU.7.	Continue funding for land use related planning activities (e.g., Monroe County Land Use Monitoring, Regional Land Use Monitoring, Optimizing Transportation Infrastructure through Effective Land Use, Cluster Development Enhancement Feasibility Project, etc.) in the biennial Unified Planning Work Program.
	LU.8.	Encourage the inclusion of transportation components in local comprehensive plans.
	LU.9.	Further incorporate context sensitive design principles into highway reconstruction projects.
	LU.10.	Work with member agencies to expand Main Street planning activities.
	LU.11.	Develop model transit-supportive zoning language for use by municipalities served by fixed-route transit service.

**CHAPTER VI - FINANCE AND IMPLEMENTATION**





## OVERVIEW

Given the important role that transportation plays in determining the quality of life and economic success of the region, it is important that the policies and actions of the LRTP be advanced.

A major component of insuring that the recommendations of the LRTP are advanced is the development of a finance plan to allocate reasonably expected revenues.

### Anticipated Revenue Projections

Title 23 of the U.S. Code of Federal Regulations governing MPOs requires the LRTP to “include a financial plan that demonstrates the consistency of proposed transportation investments with already available and projected sources of revenue.” The requirement further states that “the estimated revenue by existing revenue source (local, state, federal, and private) available for transportation projects shall be determined...” and “all cost and revenue projections shall be based on the data reflecting the existing situation and historical trends.”

Given the uncertainty concerning the reauthorization of TEA-21, the “existing situation” referenced in Title 23 with respect to anticipated federal revenues is nonexistent. As such, GTC staff relied solely on “historical trends” - past federal allocations as represented by federal formula funds included in the 2001-2006 TIP and 2003-2008 TIP - to determine the anticipated revenue projections.

These anticipated federal formula funds combined with an additional 20%, representing the minimum non-federal match, comprise the total anticipated revenues available to the region.

These projections represent a conservative amount of federal formula funding that can be reasonably expected over the next 20 years based on past funding levels

## How the projections were developed

GTC analyzed the 2001-2006 TIP and the 2003-2008 TIP, as originally adopted, to determine the amount of federal formula funds programmed in the nine-county GTC planning region. Although there are projects in the TIP that utilize federal discretionary funds, GTC staff did not include these funds in the projections because they cannot be reasonably expected to recur at past levels on a consistent basis in the future.

For those projects that include both formula and discretionary federal funds, only the formula funds were included in the analysis. GTC staff did not analyze amendments to either TIP because the overwhelming majority of the amendments use federal discretionary funds or set-asides allocated to NYSDOT and the NYS Thruway Authority (e.g., dedicated Interstate Maintenance, Transportation Enhancements Program funds, etc.).

To project anticipated revenues for the next 20 years, the average annual amounts of federal formula funds by source were calculated over the seven federal fiscal years covered by the 2001-2006 TIP and the 2003-2008 TIP. These annual averages by federal fund source were then extrapolated to produce a 20-year total. This analysis was done for each source of federal formula funds included in the TIP.

Because the receipt of federal funds for transportation investments require a minimum 20% non-federal match, this minimum was used to determine the non-federal amount of funding to ensure that the anticipated revenue projections would be conservative and therefore “reasonable”.

The 2001-2006 TIP and the 2003-2008 TIP do not include any private sources of matching funds. Accordingly, no private funds are projected to be available during the 20 years covered by the LRTP.

GTC staff recognized that the 2003-2008 TIP represents funding commitments that overlap with the LRTP. Consequently, federal formula funds and the associated non-federal matching funds for projects programmed in the last three years of the 2003-2008 TIP (federal fiscal



years 2005-06, 2006-07, and 2007-08) were identified and subtracted from the 20-year total to determine the amount of funding available for the proposed recommendations.

The anticipated revenue projections by federal formula fund source were then aggregated by the modes that they could be used for. The summary of the anticipated revenue projections along with the breakdown by revenues available by mode(s) is presented in Exhibit 11.

**EXHIBIT 11 - 20-YEAR PROJECTED AVAILABLE FUNDING BY SOURCE (\$000'S)**

<b>Funding</b>	<b>2005-2008</b>	<b>2008-2025</b>	<b>20-year Total</b>
Highways & Bridges, Bike & Ped	\$19,151	\$121,352	\$140,503
Bridges Only	\$62,521	\$347,402	\$409,923
All Modes	\$45,398	\$343,036	\$388,434
National Highway System	\$31,651	\$281,492	\$313,143
Interstate Maintenance	\$10,976	\$141,887	\$152,863
Urban Public Transportation	\$17,870	\$127,573	\$145,443
Rural Public Transportation	\$557	\$17,906	\$18,463
<b>Total Federal</b>	<b>\$188,124</b>	<b>\$1,380,647</b>	<b>\$1,568,771</b>
Non-Federal			
20% State & Local Match	\$47,031	\$345,162	\$392,193
Total Non-Federal	\$47,031	\$345,162	\$392,193
<b>Total Program</b>	<b>\$235,155</b>	<b>\$1,725,809</b>	<b>\$1,960,964</b>

Since this analysis only analyzed federal formula funds, it does not account for several funding programs that are likely but not guaranteed to be available for projects in the region. These programs include FTA Section 5310, FTA Section 5309, and the Transportation Enhancements Program.

In addition, as a newly designated nonattainment area for ground-level ozone, the region is now eligible for Congestion Mitigation and Air Quality (CMAQ) funds. However, the uncertainty associated with the reauthorization of TEA-21 and no prior receipt of CMAQ funds make it impossible to consider these monies as a reasonably expected source of revenue.

Any funds received through either the discretionary programs or CMAQ will have a positive impact on revenue to the region but cannot be considered anticipated revenues for the purposes of the LRTP.

**THE SHORTFALL**

While TIP-eligible funding costs for transportation needs across all modes (as represented by the policies and actions included in the LRTP) amount to approximately \$2.51 billion, GTC can reasonably anticipate \$1.96 billion in federal formula fund revenues to be available for funding the proposed recommendations.

The shortfall is the difference between the costs of the policies and actions and the anticipated revenue projections and totals approximately \$550 million over the last 17 years covered by the LRTP.

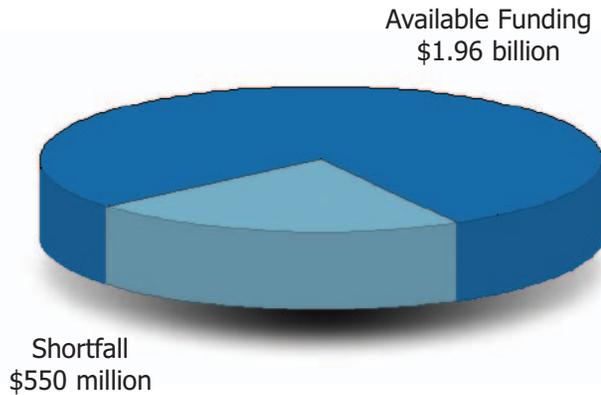
As discussed below, the TIP-eligible costs represent a conservative estimate of the region's transportation needs. Accordingly, the shortfall is likely greater than \$550 million presented below in Exhibit 12.

**How the TIP-eligible costs were developed**

The TIP-eligible costs were developed through methodologies similar for each category but unique for each mode. The TIP-eligible costs are a



EXHIBIT 12 - FUNDING SHORTFALL



conservative estimate of the total transportation needs of the region. A synopsis of the methodologies used to develop the TIP-eligible costs follows:

- **Preservation** - primarily TIP proposals (funded and unfunded) with adjustments made in Bicycle and Pedestrian for costs associated with preserving and maintaining an increased number of multi-use trails as more are developed over the 20-year period covered by the LRTP
- **Operation** - a combination of TIP proposals (funded and unfunded) and estimated costs provided as part of the recommendations included in the plan, study, or report from which they were taken
- **Expansion** - primarily estimated costs provided as part of the recommendations included in the plan, study, or report from which the recommendation was taken

As stated earlier, the total TIP-eligible costs for all modes and categories of proposed recommendations in the LRTP amount to approximately \$2.51 billion.

A reasonableness check was performed on the TIP-eligible costs developed for the proposed recommendations based on similar estimates produced by GTC in August 2003 for the New York State Metropolitan Planning Organizations Long-Term Funding Needs Study. The two sets of estimates were within two percent of each other, indicating that the TIP-eligible costs developed for the LRTP are a reasonable measure of the alternatives needed to meet the region's minimum transportation needs.

In some instances, a specific proposed recommendation had a cost assigned to it that is not included in the TIP-eligible cost for that category. An example is the Amtrak Station Improvements (Action IR.1.). The costs associated with these types of recommendations are not considered TIP-eligible and are noted as such.

**ALLOCATION OF REVENUE PROJECTIONS**

The projected funding for the duration of the plan - \$1.96 billion - is allocated to modes and categories at the same levels that it has been in the past two TIPs. Exhibit 13 presents the projected funding allocations to the categories using these past distribution levels.

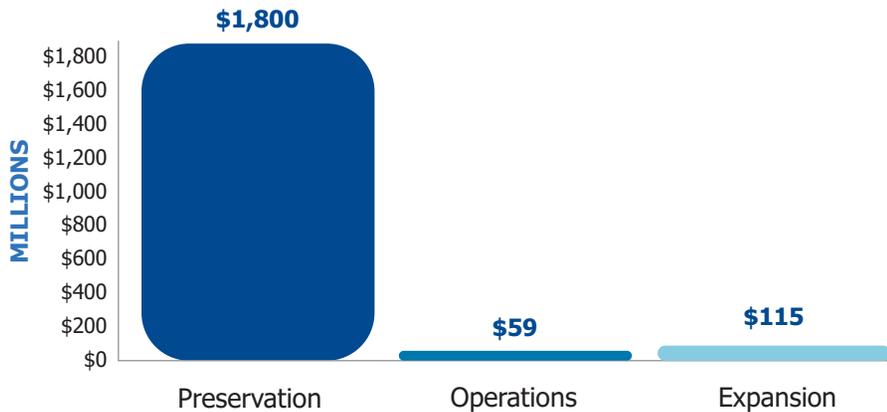
**State Energy Plan**

Pursuant to the New York State Energy Plan, GTC staff undertook an analysis of the impact of the 2003-2008 TIP on the emission of five pollutants and on energy use. The results of this analysis were used to project emissions and energy use over the period covered by this LRTP. Emissions analysis was done for the following pollutants:

1. Volatile Organic Compounds (VOC)
2. Nitrogen Oxides (NOx)
3. Carbon Monoxide (CO)



EXHIBIT 13 - FUNDING ALLOCATION BY CATEGORY



4. Greenhouse gas - Carbon Dioxide (CO2)
5. Particulate Matter (PM)

Energy usage was calculated for two “types” of energy:

1. Direct Energy - the energy consumed by vehicles using a transportation facility
2. Indirect Energy - the energy consumed to construct a transportation facility

**Analysis Methodology**

The analysis was based on guidance received from NYSDOT-Environmental Analysis Bureau. The analysis was done for the TMA, the area covered by the GTC Travel Demand Model.

Projections of emissions and energy use for the LRTP were based on the assumption that future TIPs developed during the period covered by this LRTP will have similar mixes of projects to those found in the 2003-2008 TIP because the allocation of funding by category will be the same.

GTC staff updated the future year (2025) GTC Travel Demand Model to include all of the regionally significant projects in the 2001-2006 TIP that were able to be modeled (this became the “No-Build” scenario for the analysis). The projects new to the 2003-2008 TIP that were able to be modeled were added to the No-Build scenario (thereby creating the “Build” scenario for the analysis). A comparison of the output from the two model scenarios provided the impact of the projects new to the 2003-2008 TIP.

VOC, NOx, and CO were analyzed by applying Emission Factors (grams emitted per mile of each pollutant based on vehicle speed and roadway functional classification) to the output from the two model scenarios.

Direct energy was calculated by applying Fuel Consumption Rates (gallons of fuel used, for three vehicle classes, based on speed) to the output from the two model scenarios. Indirect energy was calculated by applying Construction Energy Factors (energy consumed, per lane-mile, for specific types of roadway and bridge improvements) to the output from the Build scenario.

Direct and indirect greenhouse gas (CO2) emissions were calculated based on the results of the direct and indirect energy calculations. Direct greenhouse gas emissions were calculated by multiplying the total direct energy impacts (by vehicle class) for each of the two model scenarios by Carbon Emission Coefficients (carbon emitted during fuel consumption, for gasoline and diesel fuels). Indirect greenhouse gas emissions were calculated by multiplying the total indirect energy impact of the Build scenario by the Carbon Emission Coefficient for diesel fuel.

Particulate matter emissions (PM-2.5 and PM-10; the number specifies the maximum size, in microns, of the particles) were analyzed qualitatively. This analysis consisted of a consideration of the potential impacts of project types (e.g., transit replacement and roadway reconstruction projects) from the TIP on the emission of particulate matter.



Qualitative analysis was also undertaken for those projects new to the 2003-2008 TIP that were not model-able. This included all of the transit projects and the “Other” projects (including funding for the Regional Traffic Operations Center, Highway Emergency Local Patrol vehicles, and Intelligent Transportation Systems activities). This analysis consisted of a consideration of the potential impacts of these projects on emission levels and energy use.

The impact of carpooling on travel in the TMA was determined by estimating the number of work trip-related carpool passengers and calculating how many vehicle miles of travel would be added to the TMA roadways if each of these carpool passengers drove their own car.

**Analysis Results**

The results of the quantitative analyses demonstrate that the projects new to the 2003-2008 TIP will decrease the emissions of VOC, NOx, CO2, and the amount of direct energy consumed, albeit by small amounts, and hold constant the emissions of CO. It is expected that the projects in the TIPs

to be developed during the period covered by the LRTP will continue to decrease the emissions of VOC, NOx, CO2, and the amount of direct energy consumed by small amounts and hold constant the emissions of CO.

The qualitative analyses suggest that the transit and bicycle and pedestrian projects new to the LRTP will bring about additional decreases in emissions and direct energy usage. A second qualitative analysis suggests that the projects new to the LRTP should result in a decrease in transit-based particulate matter emissions, no increase in these emissions related to highway vehicle miles of travel, and minimal construction-related particulate matter emissions.

Finally, continued funding of the region's Rideshare program, which supports carpooling efforts, should help reduce the number of automobile trips (and the emissions and direct energy consumption associated with these trips).

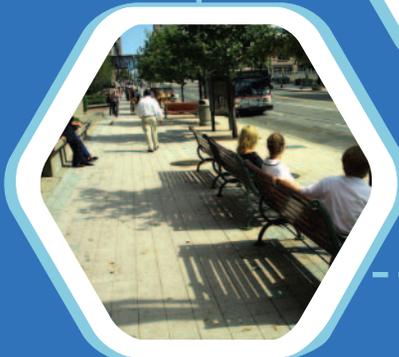
Exhibit 14 presents the projected changes in emissions and energy usage resulting from the implementation of the LRTP.

**EXHIBIT 14 - PROJECTED EMISSIONS AND ENERGY USE CHANGES RESULTING FROM THE LRTP**

Scenario	Air Pollution Emissions			Energy		Greenhouse Gas (CO2) Emissions	
	VOC (grams)	NOX (grams)	CO (grams)	Direct (BTUs)	Indirect* (BTUs)	Direct (tons)	Indirect* (tons)
Change	-10,798.60	-10,213.00	5,147.00	-198,514,580.50	2,432,640,000,000.00	-4.30	52,946.50
% Change	-0.070%	-0.100%	0.004%	-0.123%	--	-0.126%	--

\*The intent of the indirect energy and greenhouse gas calculations was to measure the impact of the construction of the projects new to the 2003-2008 TIP. The indirect energy used in the 2025 No-Build scenario is zero (as is the greenhouse gas emissions arising from the indirect energy used); therefore it is not possible to compute the percentage difference between the two scenarios.

## CHAPTER VII - FOLLOW-ON ACTIVITIES





## OVERVIEW

As stated earlier, the LRTP is updated every three years. The next LRTP update will be adopted in December 2007. In the interim, the performance of the transportation system will be monitored to measure the amount of change, if any, the policies and actions of the LRTP have on its performance.

## Performance Measures

Performance measures have been developed that address the basic concerns of users of the transportation system (accessibility, mobility, safety) and the existing and emerging priorities of GTC, NYSDOT, and USDOT (efficiency, emissions, freight movement, and environmental justice) among others.

The performance measures were chosen based on their universality and the reasonableness of the efforts needed to obtain and collect the required data. Combined, these performance measures will provide GTC and its member agencies with a means to assess whether or not the policies and actions of the LRTP are better meeting the GTC Goals and Objectives on a system-wide basis.

All of the performance measures will be evaluated through the comparison of conditions in future years versus the base year (2005).

The performance measures are:

### Average travel time to work

Measure of: mobility (defined as the relative ease or difficulty with which a trip is made)

GTC Goals addressed

1. Support Economic Vitality
3. Increase Accessibility and Mobility

### 5. Promote Efficiency

Modes

- ✧ Highway and Bridge
- ✧ Public Transportation
- ✧ Bicycle and Pedestrian

Data source(s)

- U.S. Census
- GTC Travel Demand Model

### Average travel time on major roads with above average truck traffic

Measure of: freight mobility

GTC Goals addressed

1. Support Economic Vitality
3. Increase Accessibility and Mobility
5. Promote Efficiency

Modes

- ✧ Goods Movement

Data source(s)

- ✧ U.S. Census
- ✧ GTC Travel Demand Model



## Excess delay by highway link and system-wide

Measure of: mobility, congestion

GTC Goals addressed

1. Support Economic Vitality
3. Increase Accessibility and Mobility
5. Promote Efficiency

Modes

- ✧ Highway and Bridge
- ✧ Goods Movement

Data source(s)

- GTC Travel Demand Model

Note: complements the above average travel time measures by identifying areas that contribute to congestion

## Volume/capacity ratio (level of service)

Measure of: mobility, congestion

GTC Goals addressed

1. Support Economic Vitality
2. Increase Safety and Security
3. Increase Accessibility and Mobility
5. Promote Efficiency

Modes

- ✧ Highway and Bridge

Data source(s)

- GTC Travel Demand Model

## Accident rate

Measure of: safety

GTC Goals addressed

2. Increase Safety and Security
5. Promote Efficiency

Modes

- ✧ Highway and Bridge
- ✧ Bicycle and Pedestrian

Data source(s)

- NYSDOT
- NYS Dept. of Motor Vehicles
- County Sheriffs
- Municipal Police



## Emission levels

Measure of: environmental protection

GTC Goal addressed

4. Protect Community Character and Conserve Energy

Modes

- ✧ Highway and Bridge
- ✧ Public Transportation
- ✧ Goods Movement (based on fleet mix)

Data source(s)

- GTC Travel Demand Model and associated emissions post-processor

## Percent of federal-aid roadways with pavement conditions rated “fair” or better

Measure of: system preservation, mobility

GTC Goals addressed

1. Support Economic Vitality
2. Increase Safety and Security
3. Increase Accessibility and Mobility
5. Promote Efficiency

Modes

- ✧ Highway and Bridge

- ✧ Public Transportation,
- ✧ Goods Movement,
- ✧ Bicycle and Pedestrian

Data source(s)

- GTC
- Monroe County
- City of Rochester
- NYSDOT

## Percent of low-income persons within one-quarter mile of fixed route transit service

Measure of: accessibility (defined as ability of persons to reach destinations)

GTC Goal addressed:

1. Support Economic Vitality
3. Increase Accessibility and Mobility
5. Promote Efficiency

Modes

- ✧ Public Transportation

Data source(s)

- GTC GIS data



### Energy Usage

Measure of: environmental protection

GTC Goal addressed

4. Protect Community Character and Conserve Energy

Modes

- ✧ Highway and Bridge
- ✧ Public Transportation
- ✧ Goods Movement

Data source(s)

- GTC Travel Demand Model and associated emissions post-processor

### User Cost per Mile per Trip

Measure of: operational efficiency

GTC Goal addressed

5. Promote Efficiency

Modes

- ✧ Highway and Bridge
- ✧ Public Transportation

Data source(s)

- GTC Travel Demand Model
- GTC TIP

**GENESEE TRANSPORTATION COUNCIL**



**APPENDIX A - PUBLIC INVOLVEMENT**





## SUMMARIES OF PUBLIC COMMENTS RECEIVED

This appendix provides summaries of the public comments received during the development of the LRTP. The individual written comments received are available for review by contacting GTC.

## GENESSEE TRANSPORTATION COUNCIL LONG RANGE TRANSPORTATION PLAN: 2005-2025 OPPORTUNITIES AND ISSUES

### Summary of Public Comments

Six public meetings were held throughout the Genesee-Finger Lakes region between November 10 and November 20, 2003 to introduce the Long Range Transportation Plan: 2005-2025 (LRTP) and gather input on the opportunities and issues facing the region.

The following represents a summary of the comments received from the participants at the six public meetings and others who provided written statements by December 31, 2003. They are categorized into eight topic areas.

The unique identifier (e.g., EDV-12) assigned to each opportunity/issue is used for reference purposes only. No priority has been assigned to any individual opportunity/issue.

### Economic Development

EDV-1. The region's economy is still very much based on manufacturing and public investment should support the activities of both traditional and high-tech manufacturers.

EDV-2. The visibility of the region and its assets needs to be increased throughout New York State, across the nation, and around the world in order to increase the influx of out-of-area dollars spent by tourists.

EDV-3. Visitors arriving at major gateways such as the Greater Rochester

International Airport, the Amtrak Station, and the Port of Rochester via the fast ferry need attractive, efficient, and convenient access to regional attractions and activity centers, most notably downtown Rochester, the Finger Lakes (including but not limited to the wine trails), the Erie Canal, Letchworth State Park, and the Waterloo Premium Outlets Mall.

EDV-4. Ample market rate housing, state-of-the-art telecommunications capacity, and multiple cultural and entertainment attractions are key to creating a downtown Rochester that is vibrant 24 hours a day and serves as the anchor of a strong regional economy.

EDV-5. The Erie Canal is a resource of international significance that is severely underutilized as an economic development tool and job creation engine.

EDV-6. The numbers of workers and jobs in the region need to be increased simultaneously to create a cycle of providing employers with a skilled workforce and residents with quality employment opportunities.

EDV-7. The perception that Rochester is not "sexy" or does not offer many social opportunities limits the region's ability to attract and retain younger workers with world-class talent, discouraging businesses looking to relocate or expand from choosing the region.

EDV-8. Agriculture is a major component of the regional economy and currently faces serious obstacles to continued profitability, including but not limited to an aging workforce and small profit margins.

EDV-9. Seasonal migrant workers are a crucial component of the agricultural economy but are not very well integrated into the larger community.

EDV-10. The use of locally produced goods and services by consumers and firms in the region should be encouraged over the use of those produced outside the region to increase economic self-sufficiency.

EDV-11. Economic development efforts should focus on creating and



expanding locally-owned retail businesses as an alternative to “big box” superstores with little or no stake in the community’s long term economic health.

EDV-12. The regional trails system is a unique asset and should be utilized as an economic development tool to attract and retain businesses and a qualified workforce.

EDV-13. The redevelopment of the Seneca Army Depot is crucial to increasing job opportunities for residents in the eastern section of the region whose non-agricultural employment prospects are limited.

EDV-14. Economic development opportunities that link regions in Upstate New York should be explored to reduce duplication of efforts and maximize economies of scale in select industries.

EDV-15. The region’s waterways are currently underutilized as a means for moving people and goods throughout the region, particularly areas south of the City of Rochester that could benefit from access to Lake Ontario.

### Land Use

LDU-1. Conflicting land uses along municipal boundaries need to be minimized and the efficiency of land use needs to be increased throughout the region.

LDU-2. The region’s cities and the villages make efficient use of land with their mixed uses and high densities of development, integral components of community character.

LDU-3. Land is being developed for residential uses at a rate greater than the increase in the number of households, resulting in an increase in the vacancy rate of habitable housing units.

LDU-4. For the majority of residents, their places of employment and residences are not in close proximity to each other, limiting their transportation options for commuting to and from work.

LDU-5. Much of the growth in businesses that employ entry-level workers such as retail and service operations has been located in the suburbs with a large number of potential employees located in the City of Rochester, many of whom have limited transportation options.

LDU-6. Installation of sewers and other public infrastructure leads to increased types of development allowed under existing land use regulations but not consistent with the intent of the infrastructure (e.g., sewers are installed to support farming operations and public health objectives but lead to residential development that is in conflict with the agriculture industry).

LDU-7. Residents of rural areas are further removed from hospitals, shopping, and education facilities than their urban and suburban counterparts, resulting in accessibility issues for those with mobility limitations.

LDU-8. The region’s colleges and universities are not connected to the social and recreational opportunities that the City of Rochester offers to their students upon graduation, hampering the retention of young, locally educated workers.

LDU-9. Colleges and universities also bring a need for associated goods and services to be in proximity to the campuses, most notably restaurants and stores for students and hotels for visiting family members.

LDU-10. Connections between the Greater Rochester International Airport and major regional activity centers and attractions, including those in the Buffalo and Syracuse areas, are important functions. Similarly, so are connections between general aviation airports and smaller, local activity centers.

LDU-11. Increased development on the west side of Monroe County is likely and will bring with it a need for increased infrastructure capacity.



## Environmental and Natural Resources

ENR-1. Transportation activities can result in air and noise pollution as well as negatively impact the visual aesthetics of communities, most notably the impacts resulting from the movement of goods that are a necessary function of the regional economy and highly dependent on large, diesel fueled trucks.

ENR-2. Dependence on foreign oil supplies for the movement of goods and commuting by individuals should be reduced to mitigate transportation's impacts on the environment and increase economic independence from politically volatile nations.

ENR-3. Opportunities exist to "piggyback" the environmental and economic benefits of hydrogen fuel cells through the associated research and development activities currently being advanced in the region.

## Social and Human Services

SHS-1. There appears to be a disconnect between where persons with special mobility considerations (including seniors) live and where they need and want to go for required services and recreational outings, respectively.

SHS-2. Mobility options for those with physical disabilities need to be convenient and efficient, particularly during colder months.

SHS-3. Many persons with physical disabilities are reliant on fixed incomes and would benefit from flexible payment options for transportation related expenses.

SHS-4. The senior population (age 65 and over) will continue to increase over the next 25 years and it appears a shortage of senior housing units will occur in the foreseeable future.

SHS-5. Current closings of hospitals and the subsequent merging of health services in fewer facilities results in many persons throughout the region having to travel longer distances for needed services and treatments.

SHS-6. Schools throughout the region need to become more fiscally efficient and insure that the instruction they provide is producing a qualified future workforce.

SHS-7. Public investment can play a vital role in building healthy communities by providing opportunities for residents to easily include exercise in their daily activities.

## Parks, Recreation, and Open Space

PRO-1. Because loss of open space (including farmlands) is permanent and detracts from the quality of life enjoyed by the region's residents, open space preservation should be considered as part of all planning and development decisions.

PRO-2. The regional trails system is a distinguishing feature of the region and should be continually improved through increased connectivity between existing trails and development of new ones.

PRO-3. Parks and other recreation venues and facilities are important components of quality of life that do not receive as much attention as they should when making planning and public investment decisions.

PRO-4. Concerts and other events at Six Flags Darien Lake in Genesee County can result in congestion and other inconveniences for event-goers and others using roads in and around the amusement park.

## Historic Resources

HSR-1. Historic preservation should be encouraged in a community-friendly manner that balances existing and future needs while protecting those facilities and landmarks that exemplify a community's character.

HSR-2. The loss of historic resources is permanent and reduces the uniqueness of this region, detracting from why it is a special place to live, visit, and conduct business.



HSR-3. There are a number of historic resources throughout the region that are of national significance but unknown to residents and under-promoted to visitors (e.g., Waterloo is the birthplace of Memorial Day).

### Safety and Security

SAS-1. Security (real or perceived) is based on visibility with lighting being the most important element of providing safe and comfortable settings for social and economic activities.

SAS-2. There is safety in numbers and, as such, opportunity for crime is greatest when there are smaller numbers of persons present (e.g., a single person using a single transit stop at night).

SAS-3. When emergency or criminal incidents do occur, response times must be as short as possible to minimize damage.

SAS-4. The number of seniors driving will continue to increase and this will require that attention be paid to insuring that the design of transportation infrastructure and facilities meet their needs, particularly in terms of visibility and reaction time.

SAS-5. Consideration should be given to insuring that transportation facility designs of all types do not limit access by pedestrians, particularly those with special mobility considerations such as seniors and the disabled.

SAS-6. Freight movements can present significant safety concerns that should be minimized to reduce loss of life and property, most notably motor vehicle accidents involving trucks and at-grade railroad crossings.

SAS-7. A current evacuation plan for the area immediately adjacent to the Greater Rochester International Airport should be in place and residents and businesses should be apprised of what to do in an emergency.

### Fiscal Health

FHL-1. Regional fiscal health is dependent on the creation of well-paying jobs that allow residents to spend more, and subsequently pay more in taxes (property and sales) and fees that comprise public revenues.

FHL-2. Fiscal issues arise when there are substantial portions of more than one school district in a municipality because future development may not benefit the districts equally in terms of the school taxes raised based on assessed property.

FHL-3. Local governments' ability to provide services above existing levels is severely constrained by Federal and State mandates coupled with an electorate that feels they are already overtaxed.

FHL-4. Public spending for transportation infrastructure and operations has not always been for improvements that the public has expressed its desire for at public meetings.

### Other

OTH-1. There needs to be an increased sense of pride and ownership among residents as it relates to their being involved in making decisions that will impact the region for many years to come; this is particularly true of young people throughout the region.

OTH-2. Inclement weather is a fact of life during the winter months and the design and implementation of public projects and services should reflect this.



## GENESSEE TRANSPORTATION COUNCIL LONG RANGE TRANSPORTATION PLAN: 2005-2025 ALTERNATIVES

### Summary of Public Comments

Six public meetings were held throughout the Genesee-Finger Lakes region between May 24 and June 8, 2004 to solicit ideas from the public on potential transportation alternatives that will maximize the contribution of the transportation system to the social and economic vitality of the nine-county Genesee Finger Lakes region over the next 20 years.

The following represents a summary of the comments received from the participants at the six public meetings and others who provided written statements by July 31, 2004. They are categorized into the seven modes for which recommendations will be made in Long Range Transportation Plan: 2005-2025.

The unique identifier (e.g., PT-2) assigned to each alternative is used for reference purposes only. The comments are presented in order of quantity received (number in parentheses); no priority has been assigned to any individual alternative.

### Highway & Bridge

EDV-16. Where feasible, convert the Inner Loop Expressway to an at-grade boulevard to reconnect neighborhoods and encourage economic growth. (2)

EDV-17. Consider the use of tolls on area highways to manage traffic flow. (2)

EDV-18. Limit highway investment to maintenance and spot improvements (i.e, do not add capacity to area highways). (2)

EDV-19. Extend the Route 531 Expressway to connect with I-190 in Niagara County to improve access to and foster economic growth in

Orleans County. (2)

EDV-20. Improve the efficiency of area highways through the use of Transportation Demand Management (TDM) strategies. (2)

EDV-21. Establish a car-sharing program in the Rochester area. (2)

EDV-22. Improve the intersection of East Main Street and North Goodman Street in the City of Rochester to reconnect neighborhoods and promote economic growth. (1)

EDV-23. Further study methods to alleviate truck traffic in the Route 14 corridor of Geneva. (1)

EDV-24. Do not construct a Thruway interchange in the Town of Chili. (1)

EDV-25. Pursue the downsizing or downgrading of overbuilt streets and arterials in the region. (1)

EDV-26. Investigate and correct problems at high accident intersections in rural areas. (1)

EDV-27. Increase speed limits on outlying expressways in the region (e.g., 90, 390, 490, 590). (1)

EDV-28. Explore the establishment of high-occupancy vehicle (HOV) lanes on area expressways. (1)

EDV-29. Explore adding capacity to the Thruway given increasing volumes. (1)



## Public Transportation

LDU-12. Initiate light rail and/or commuter rail transit service on one or more corridors in the region to improve transportation options and create economic development opportunities. (9)

LDU-13. Expand transit services across the region, including increased night and weekend service, more balanced scheduling, and increased headways. (7)

LDU-14. Decentralize the current RTS bus system and convert to a grid-like system with satellite transfer centers at important activity centers, such as Twelve Corners. (5)

LDU-15. Institute an electric rail-based heritage trolley service across the region. (3)

LDU-16. Increase marketing of public transportation services in rural counties. (3)

LDU-17. Institute an intermodal public transportation system utilizing rail service (light rail and/or commuter rail) augmented with feeder bus service. (3)

LDU-18. Access to bus stops should be designed to be safe for all users, especially at suburban shopping destinations. (3)

LDU-19. Improve public transportation and paratransit services for persons with disabilities. (2)

LDU-20. Improve transit traveler information services through the use of an automated bus schedule information system such as NextBus. (2)

LDU-21. Insure that all buses in the region, especially in rural areas, can accommodate bicycles. (1)

LDU-22. Establish a transit service between Wayne County and the Rochester and Syracuse airports. (1)

LDU-23. Establish an accessible taxi service(s) in the Rochester area. (1)

LDU-24. Use smaller buses on less popular transit routes to improve efficiency. (1)

LDU-25. Improve transit service to area colleges and universities. (1)

LDU-26. Expand transit service to the Port of Rochester and ferry terminal. (1)

LDU-27. Improve RTS transfer times. (1)

LDU-28. Establish a coordinated transportation information resource in Genesee, Orleans, and Wyoming Counties. (1)

LDU-29. Increase transit service in rural communities. (1)

LDU-30. Provide transit service to major regional attractions from Batavia. (1)

LDU-31. Preserve the Hojack Swing Bridge between Charlotte and Irondequoit for potential transportation use. (1)

LDU-32. Establish a Saturday shuttle service between Penn Yan and The Windmill Market in Milo. (1)

LDU-33. Establish a transit service in the Palmyra area linking sites along the Erie Canal with Mormon historic sites. (1)

LDU-34. Install bus shelters in villages served by WATS, notably Palmyra. (1)

LDU-35. Establish a north-south transit route serving Sodus Point, Lyons, Geneva, and Watkins Glen. (1)

LDU-36. Establish a CATS / WATS transit connection at the Route 14 / Lyons Thruway Greyhound / Trailways stop. (1)



LDU-37. Establish regular transit service along Route 31 between Perinton and Pittsford to serve seniors and shopping areas. (1)

LDU-38. Insure that all transit buses are fuel efficient. (1)

LDU-39. RTS bus facility should be located at Sibley Building, not Renaissance Square. (1)

LDU-40. Re-instate the EZ-Rider entertainment shuttle, with a small fare. (1)

LDU-41. Insure that the downtown transit center is connected to the Amtrak Station by a shuttle. (1)

## Bicycle & Pedestrian

ENR-4. Expand the use of traffic calming techniques in the region to improve the attractiveness and walkability of the region's roadways. (4)

ENR-5. Build upon the existing multi-use trail network to extend bicycle/pedestrian access to all parts of the region. (3)

ENR-6. Improve the pedestrian environment for all users, especially the disabled, through the use of tactile and audible signals and improved signage. (2)

ENR-7. Insure that all bridges are ADA-compliant. (1)

ENR-8. Expand the downtown Rochester Skyway system. (1)

ENR-9. Promote bicycling and walking as healthy exercise and travel alternative. (1)

ENR-10. Consider pedestrian-friendliness when studying the use of a roundabout in the design of a project. (1)

## Goods Movement

SHS-8. Eliminate at-grade crossings from Class I railroad freight lines. (1)

SHS-9. Establish multi-modal freight facilities at the Greater Rochester International Airport. (1)

SHS-10. Enclose or fence the CSX Main line for safety and noise abatement purposes. (1)

SHS-11. Shift SR 54 to North Avenue from Clinton Street to Liberty Street to alleviate truck traffic in the Village of Penn Yan. (1)

## Interregional Transportation

PRO-5. Support the development of high-speed rail on the Empire Corridor between Buffalo, Albany, and New York City. (6)

PRO-6. Develop an intermodal terminal in downtown Rochester to serve Amtrak and Greyhound/Trailways. (5)

PRO-7. Implement the recommendations from the Rochester Amtrak Station Revitalization Study. (4)

## Land Use

HSR-4. Encourage an integrated land use / transportation planning process. (2)

HSR-5. Preserve active and abandoned railroad corridors for future transportation uses. (2)

HSR-6. Preserve open space for public use. (1)

HSR-7. Respect community character when designing and constructing transportation projects. (1)



## Other

SAS-8. Encourage investment in the research and development of alternative fuel vehicles (e.g., hydrogen fuel cells) and fueling stations. (2)

SAS-9. Transportation policy should put less emphasis on automobiles and more emphasis on alternate modes. (1)

SAS-10. The transportation system should recognize and support recreational travel. (1)

SAS-11. Transportation professionals should consult the disabled community on all transportation projects to insure that their needs are being met. (1)

## GENESSEE TRANSPORTATION COUNCIL LONG RANGE TRANSPORTATION PLAN: 2005-2025 RECOMMENDATIONS

### Summary of Public Comments

Six public meetings were held throughout the Genesee-Finger Lakes region between November 3 and November 15, 2004 to seek input on draft recommendations (policies and actions) developed by GTC for inclusion in the Long Range Transportation Plan: 2005-2025 (LRTP).

The following represents a summary of the comments received from the participants at the six public meetings and others who provided written statements. They are categorized by the modes (i.e., Highway & Bridge, Public Transportation, Bicycle & Pedestrian, Interregional Transportation, Goods Movement, and Land Use) and categories (i.e., Preservation, Operations, and Expansion) which comprise the Recommendations section of the LRTP.

The unique identifier (e.g., PT.O.2.) assigned to each comment is used for reference purposes only. The comments are presented in order of quantity received (number in parentheses); no priority has been assigned to any individual alternative.

### Highway & Bridge – Preservation

HB.P.1. Eliminate the Inner Loop to make pedestrian travel, bicycle travel, and business density more viable. (1)

HB.P.2. Enhance gateways to/from the region – new O’Rorke Bridge, High Falls/Inner Loop, and Troup-Howell Bridge provide excellent examples. (1)

### Highway & Bridge – Operations

HB.O.1. Increase landscaping to improve motorists’ perceptions of the place they are driving through. (1)

HB.O.2. Increase development of alternative fuels infrastructure (e.g., fueling stations). (1)

HB.O.3. Make information from traffic cameras on the region’s expressways and arterials accessible via television or the internet. (1)

HB.O.4. Reconfigure Troup-Howell Bridge to allow two-way travel on South Clinton and South Avenue. (1)

HB.O.5. Improve key intersections such as West Henrietta / Rush-Henrietta Town Line Road, East Henrietta / Rush-Henrietta Town Line Road, and Schoen Place / North Main Street (Rt. 96). (1)

HB.O.6. Make improvements to I-590 South from Webster to Henrietta to reduce congestion during the morning rush hour. (1)



## Highway & Bridge - Expansion

HB.E.1. Explore tunneling under Highland Park and the Swillburg neighborhood to bring I-390 toward Downtown Rochester. (1)

## Public Transportation - Preservation

No comments received.

## Public Transportation - Operations

PT.O.1. Improve the provision of next-day service for Lift Line and offer same day service. (3)

PT.O.2. Provide lighting at major bus stops to improve safety. (1)

PT.O.3. Encourage the use of public transportation by new users; the current perception is that buses are mainly for the economically and/or physically disadvantaged. (1)

PT.O.4. Raise awareness of existing public transportation services, particularly in the rural counties. (1)

PT.O.5. Provide promotional and way-finding signage at all stops, not just high-volume stops. (1) PT.O.6. Implement "next bus" traveler information displays that are accessible to all riders, especially blind or visually impaired. (1)

PT.O.7. Supports Action PT.12., installing audible and/or visual bus stop/bus route messaging systems on all buses and at high-volume bus stops. (1)

PT.O.8. Incorporate a more grid-based route structure instead of the hub and spoke system currently used by RTS. (1)

PT.O.9. Include dedicated phone number for each bus stop so people can call for information as part of "next bus" concept. (1)

## Public Transportation - Expansion

PT.E.1. Advance the Renaissance Square project as it will revitalize Downtown Rochester. (41)

PT.E.2. Support the development of light rail connecting activity centers in Rochester and the surrounding area. (5)

PT.E.3. Increase opportunities to use public transportation across county boundaries; there is a need for increased connections, especially for specialized medical services. (1)

PT.E.4. Conduct a market study to determine the type of public transportation college students want. (1)

PT.E.5. Increase public input opportunities during the development of the Renaissance Square project, especially for the disabled community. (1)

PT.E.6. Any additional studies on light rail service should be focused on moving the concept forward to implementation rather than another look at "threshold". (1)

PT.E.7. Establish a policy that supports a local transit system with intense coverage of the built-up parts of the region such that no home is more than a quarter-mile from a bus stop and headways are sufficient to provide a high level of service. (1)

PT.E.8. Conduct a study to determine exactly what we can and cannot do with regard to rail transit. (1)

PT.E.9. Develop smaller RTS suburban transfer stations as recommended in the 1995 LRTP. (1)

PT.E.10. Conduct a high-capacity transit Major Investment Study that looks at various types of service to determine which is best for the region. (1)



## Bicycle & Pedestrian - Preservation

No comments received.

## Bicycle & Pedestrian - Operations

BP.O.1. Include distances on multi-use trail way-finding signage to improve user experience. (1)

BP.O.2. Supports Action BP.10., install count-down pedestrian signals at key intersections but would like to add audible signals as well. (1)

BP.O.3. Raise awareness of the requirement that motorists must stop for pedestrians in crosswalks. (1)

## Bicycle & Pedestrian - Expansion

BP.E.1. Improve bicycle lanes/trails making a continuous route from Genesee Valley Park to Charlotte. (1)

BP.E.2. Improve bicycle trails to the Route 104 - Irondequoit Bay Bridge and accommodate bicycles on the bridge. (1)

BP.E.3. Complete the Genesee River Trail on the west side and construct a trail on the former Beebee line and Bridge between Rochester and Irondequoit. (1)

## Goods Movement - Preservation

No comments received.

## Goods Movement - Operations

GM.O.1. Implement Commercial Vehicle Operations systems to improve goods movement, where appropriate. (1)

## Goods Movement - Expansion

No comments received.

## Interregional Transportation - Preservation

No comments received.

## Interregional Transportation - Operations

IR.O.1. Action IR.3. should be more pro-active; citizens should be able to take part in any studies that take place concerning the Port of Rochester.

(1) IR.O.2. Be more specific about which “interregional travel facilities” are being referred to. (1)

IR.O.3. Passenger rail service needs to better accommodate wheelchair/scooter users with regard to the separation between the rail car and station platform. (1)

IR.O.4. Rehabilitate the Rochester Amtrak station to provide a proper gateway to the region. (1)

IR.O.5. Supports construction of a new Amtrak station in Rochester and the implementation of high-speed passenger rail service. (1)

## Interregional Transportation - Expansion

IR.E.1. Improve transportation service between important attractions and institutions in the region. (1)

IR.E.2. Improve accommodations on the Erie Canal and other waterways. (1)

## Land Use

LU.1. Require a thorough review of transportation provisions when developing housing for seniors and/or disabled people; the review should ensure adequate infrastructure and proximity to public transportation. (1)

LU.2. Pleased at the recognition of the important relationship between transportation and land use and the inclusion of several actions to address that relationship in the LRTP. (1)



### General

GEN.1. Advance comments and suggestions that the disability community makes at public forums and make recommendations to implementing agencies to commit to accessibility in all forms of transportation. (4)

GEN.2. Implement accessible private taxi service. (3)

GEN.3. Convene a transportation meeting/summit for older adults and agencies serving seniors to assist in planning for the transportation needs of the expanding senior population. (2)

GEN.4. The plan should include a larger discussion of the regional vision beyond promoting a healthy economy, environment, and quality of life. (1)

**GENESEE TRANSPORTATION COUNCIL**





**GENESSEE TRANSPORTATION COUNCIL**



50 West Main Street | Suite 8112 | Rochester, New York | 14614  
585.232.6243 | [www.gtcmpto.org](http://www.gtcmpto.org)