

MEMORANDUM

TO: GTC Planning Committee Members & Alternates
FROM: Joseph M. Bovenzi, AICP, Executive Director *JMB*
DATE: April 2, 2026
SUBJECT: Approval of the Draft *Long Range Transportation Plan 2050 (LRTP 2050)* for public review

The Draft *Long Range Transportation Plan 2050 (LRTP 2050)* establishes transportation priorities and provides a strategic direction for transportation policy, planning, and investment decision making for the nine-county Genesee-Finger Lakes Region. Federal, state, and local governments will use the *LRTP 2050* to guide decision making regarding the regional transportation system over the next 25 years. The upcoming LRTP must be adopted by June 2026, in keeping with the Region's current attainment status with respect to the Clean Air Act.

The Draft *LRTP 2050* includes 83 recommendations organized into the following five categories:

1. Health and Safety;
2. Access and Mobility;
3. System Management and Maintenance;
4. Innovation and Resilience; and
5. Economic Development.

Together, these recommendations address the transportation needs of the region's residents, businesses, and visitors. They provide the basis for regional programs and projects that advance the federal transportation planning factors identified in Title 23 U.S.C., Section 134. They will improve safety and security; enhance access, mobility, and efficiency; promote innovative technologies and safeguard community resources; and better link investments in transportation infrastructure and services to regional economic development opportunities.

These recommendations are the result of an assessment of the status and needs of the current transportation system; the identification of emerging issues and opportunities anticipated to impact the region during the timeframe of the plan; and community input received in the first round of public engagement, held during the summer and fall of 2025, on existing needs and conditions.

A second round of public engagement was conducted during January and February of 2026 to collect input on the draft recommendations. Based on the public input received, the following revision was made to add the recommendation HS-15.

Revised:

HS-15 Support the implementation of safety improving upgrades across the transportation system. Older transportation assets, including vehicles and infrastructure, may benefit from new safety improvements as technology improves. As new innovations

progress, the region should adopt safety improvements to enhance the transportation network.

Other public comments addressed the importance of bicycle safety within the region, particularly in areas with high non-motorized vehicle traffic, or in areas near community amenities such as schools or shopping areas. These comments are addressed in the Health and Safety section, and respondents found the section to be comprehensive.

The following item is provided for your consideration:

1. Draft *Long Range Transportation Plan 2050* for Public Review

The Draft *LRTP 2050* is the complete Long Range Transportation Plan for the nine-county Genesee-Finger Lakes Region.

Pending Planning Committee review and input, GTC staff will finalize the Draft *LRTP 2050* for public review. The public review period will extend from April 13, 2026 through May 12, 2026. After finalizing the draft plan based on public comments, GTC staff will present the final *LRTP 2050* to the Planning Committee on May 14. If approved, the Planning Committee will recommend that the GTC Board adopt *LRTP 2050* at its June 11, 2026 meeting.

Recommended Action:

Approve the Draft Long Range Transportation Plan 2050 for public review.

GENESEE TRANSPORTATION COUNCIL

RESOLUTION

Resolution 26-XX Adopting the *Long Range Transportation Plan for the Genesee-Finger Lakes Region 2050*

WHEREAS,

1. The Governor of New York State designated the Genesee Transportation Council (GTC) as the Metropolitan Planning Organization (MPO) responsible for transportation planning in the Genesee-Finger Lakes Region, which includes Genesee, Livingston, Monroe, Ontario, Orleans, Seneca, Wayne, Wyoming, and Yates counties;
2. Title 23, Section 134 of the United States Code requires that each MPO prepare and update a long range transportation plan (LRTP) for its metropolitan area;
3. 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 the implementation of recommendations contained in the LRTP;
4. The Infrastructure Investment and Jobs Act (IIJA) was signed into law on November 15th, 2021;
5. The specific LRTP elements mandated by the IIJA continued from the Metropolitan Transportation Planning Final Rule jointly published by the Federal Highway Administration and the Federal Transit Administration on May 27, 2016 are included within the LRTP;
6. GTC, in consultation with affected stakeholders and the general public, has developed the *Long Range Transportation Plan for the Genesee-Finger Lakes Region 2050* (LRTP 2050) in a manner that meets and exceeds the requirements of Title 23, Section 134 of the United States Code and the IIJA.
7. Public outreach for LRTP 2050 was conducted in a manner that exceeds the federal requirements and those in the GTC Public Engagement Plan;
8. LRTP 2050 has been developed and reviewed by GTC staff and member agencies through the GTC committee process, and its recommendations have been found 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 2050* as the official LRTP for the Rochester Metropolitan Planning Area and the Genesee-Finger Lakes Region in accordance with Title 23, Section 134 of the United States Code and the May 27, 2016 Metropolitan Transportation Planning Final Rule; and
2. That the Council encourages those responsible for the development and advancement of transportation projects in the Genesee-Finger Lakes Region to 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 June 11, 2026.

Date _____

BRADLEY A. WALIKE, Secretary
Genesee Transportation Council

Long Range Transportation Plan

Genesee-Finger Lakes Region

2050

GENESEE
TRANSPORTATION
COUNCIL

June 2026

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Financial assistance for the preparation of this report was provided by the Federal Highway Administration and the Federal Transit Administration. The Genesee Transportation Council (GTC) is solely responsible for its content and the views and opinions expressed herein do not necessarily reflect the official views or policy of the U.S. Department of Transportation.

GTC assures that no person shall, on the grounds of race, color, national origin, disability, age, gender, or income status, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity. GTC further assures every effort will be made to ensure nondiscrimination in all of its programs activities, whether those programs and activities are federally funded or not.

El Consejo Genesee del Transporte asegura completa implementación del Título VI de la Ley de Derechos Civiles de 1964, que prohíbe la discriminación por motivo de raza, color de piel, origen nacional edad, género, discapacidad, o estado de ingresos, en la provisión de beneficios y servicios que sean resultado de programas y actividades que reciban asistencia financiera federal.



INTRODUCTION/OVERVIEW

The Long Range Transportation Plan is a vision of future needs, the challenges ahead, and the solutions required to address them. This document forms the core of transportation planning over the next twenty-five years. It includes major investment decisions, infrastructure recommendations, and public engagement that will better shape the region for years to come. The Long Range Transportation Plan for the Genesee-Finger Lakes Region 2050 (LRTTP 2050) seeks to advance long standing regional transportation needs, including safety improvements, continued maintenance on existing infrastructure, and expanding alternative transportation modes. The plan also focuses on meeting the needs of the community through improved access to the transportation system.

Following the 2020 pandemic, the region experienced several shifts that have changed the way people interact with the transportation system. Most notably, a rise in working from home has decreased morning and afternoon rush hours, and transportation ridership numbers remain lower than pre-pandemic levels. Another major change comes in the slight rise in population after decades of

decline, a trend that is projected to continue over the next twenty-five years. The plan also continues to address recurring challenges such as persistent poverty, an aging population, rapidly changing technology, hazardous weather events, and limited resources to address growing maintenance demands. Despite the challenges that the region faces, the transportation system continues to be well positioned to meet them.

The transportation system consistently meets regional needs by providing efficient commute times, accessible employment centers, diverse recreational opportunities, and reliable delivery schedules. The system continues to favor personal vehicles over other transportation methods, which presents a challenge for those without cars. Opportunities to improve accessibility and mobility remain for those who rely on public transit, walking, bicycling, and other active transportation methods. To better meet the needs of the region, and address the rise in active transportation, the LRTTP 2050 strives to enhance alternative transportation methods while continuing to support existing transportation users.

The region continues to act as an innovation hub with its concentration of universities and colleges; world class health care facilities; optics and imaging industries; agriculture, viticulture, and food processing sectors; vibrant art and music scenes; and entrepreneurial culture. The policies described in LRTP 2050 seek to ensure that the transportation system will continue to be an asset to that center of innovation.

WHAT IS GTC?

The Genesee Transportation Council (GTC) is the Metropolitan Planning Organization (MPO) for the nine-county Genesee-Finger Lakes Region. This region includes Genesee, Livingston, Monroe, Ontario, Orleans, Seneca, Wayne, Wyoming, and Yates counties. The GTC is responsible for federally funded transportation policy, planning, and investment decision making as it concerns the movement of people and goods through the surface transportation system.

ORGANIZATIONAL STRUCTURE

The Genesee Transportation Council is governed by a policy board, made up of elected representatives from local, state, and federal agencies such as New York State Department of Transportation (NYSDOT), the Rochester Genesee Regional Transportation Authority (RGRTA), the Genesee-Finger Lakes Regional Planning Council (G/FLRPC), and other agencies. As a policy making agency, GTC does not own or operate transportation facilities.

The GTC Board is supported by the Executive Committee, the Planning Committee, and various other committees. The Planning

Committee provides professional and technical directions to the GTC Board. Following input from various individual project committees, the Planning Committee reviews and recommends action on activities and work products that are then considered for final approval by the GTC Board. GTC Staff, in conjunction with key staff of GTC member agencies, provide professional and technical support for execution of the programs and policies established by the GTC Board and committees.

ROLES/RESPONSIBILITIES

All federally funded transportation planning and investment decisions for the region are guided by the cooperative planning efforts at GTC. Federal transportation legislation guides the planning process at the MPO.

The Infrastructure Investment and Jobs Act (IIJA), signed into law on November 12, 2021, is the current five-year surface transportation reauthorization bill. The IIJA retains the following ten planning factors from the Fixing America's Surface Transportation (FAST) Act. These planning factors must be addressed through the projects and programs at the MPO:

1. Economy Vitality
2. Safety
3. Security
4. Increase Accessibility
5. Protect and Enhance the Environment
6. Enhance Integration and Connectivity
7. Promote System Efficiency
8. Emphasize System Preservation
9. Resiliency and Reliability
10. Enhance Travel and Tourism

All activities at the MPO are conducted using

a continuing, cooperative, and comprehensive planning process. This includes collaborating with local elected officials, transportation planning professionals, and the public.

The primary focus of GTC's transportation planning efforts is the Rochester Metropolitan Planning Area (MPA). The Rochester MPA includes all of Monroe County plus the adjacent developed areas of Livingston, Ontario, and Wayne counties. However, the GTC Planning Region includes all nine counties of the Genesee-Finger Lakes Region. Accordingly, the GTC conducts the metropolitan transportation planning process for the entire region. A map of the nine-county region along with the Rochester MPA is presented below.

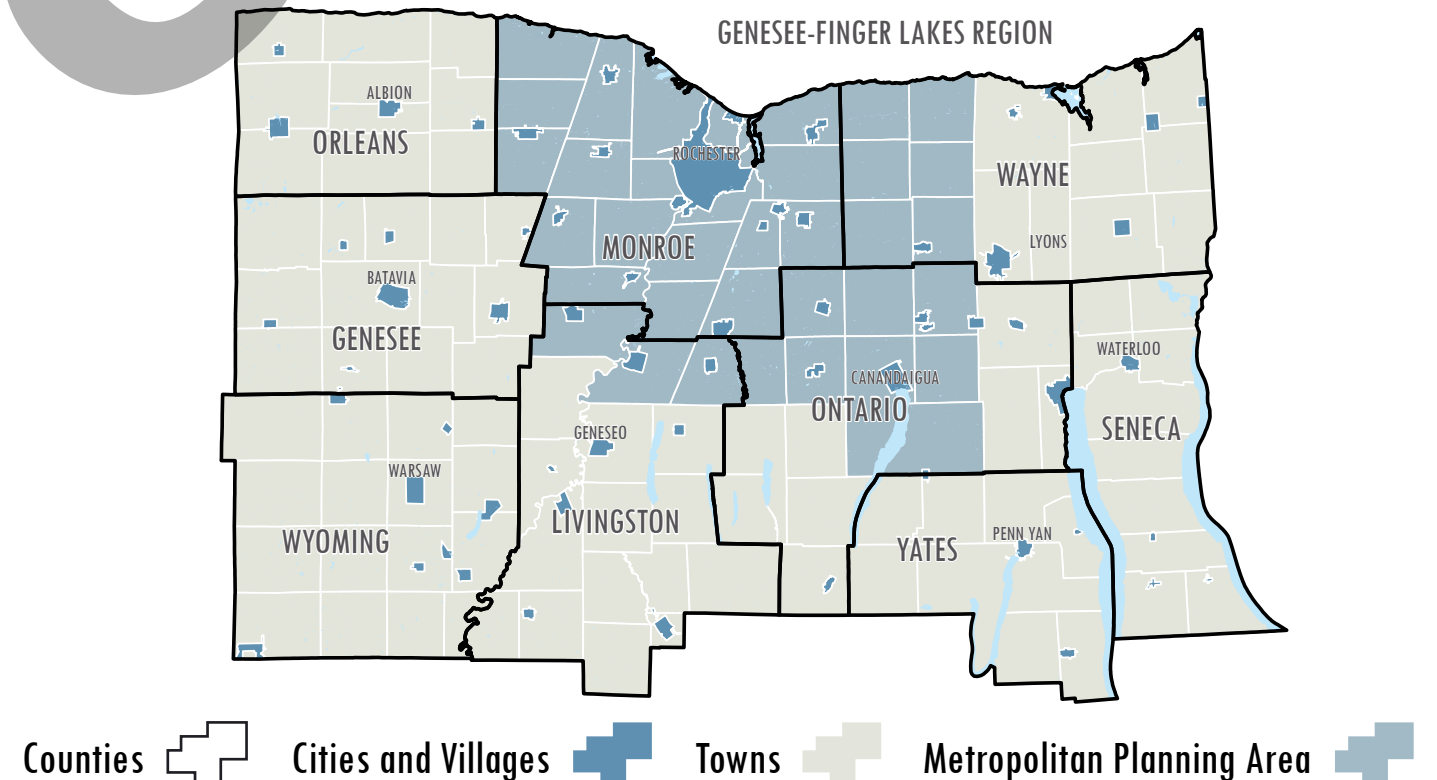
All MPOs, including the GTC, are responsible for three core documents: the Long Range Transportation Plan, the Unified Planning Work Program, and the Transportation Improvement Plan. The LRTP sets the strategic direction for

all GTC's actions and programs and is updated at least every five years. The policies in the LRTP are further refined in the UPWP through individual concept-level projects and programs. The UPWP serves as the GTC's annual operating plan and budget. Finally, the TIP is the capital program that funds the specific transportation improvements in the region that will receive federal funding over the next four-to-five years.

What is an MPO?

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

MPOs conduct required transportation planning activities for their designated Metropolitan Planning Area. An MPO must produce and periodically update a Long Range Transportation Plan (LRTP), a Unified Planning Work Program (UPWP), and a Transportation Improvement Program (TIP).



GOALS AND OBJECTIVES

The GTC Goals and Objectives reflect local and regional priorities within the context of the ten transportation planning factors outlined in the IIJA. The development of the LRTP 2050, the selection of planning activities through the UPWP, the transportation system investments programmed in the TIP, and all programs conducted by GTC are guided by the Goals and Objectives presented in pages 10 and 11.

LRTP DEVELOPMENT

Development of the LRTP is an ongoing and continuous process involving coordination of GTC staff in discussion with professionals throughout the region, partner agencies, state and federal agencies, and the public. It is not a stand-alone document, and it is not a static product. The document exists in combination with the UPWP and TIP, as well as companion documents and studies that inform the actions and decisions proposed within the LRTP. Likewise, the document is fluid. Changes and updates will be made to reflect the needs of the region as they change.

The first round of LRTP 2050 public engagement began in Summer 2025. GTC staff hosted both online and in-person listening sessions to gather participant thoughts on the direction of the 2050 LRTP update. Broader outreach efforts utilized a dedicated website, pop-up events, surveys, and social media. Continuous community engagement was maintained throughout the document's drafting to ensure the community's voice drove the final design.

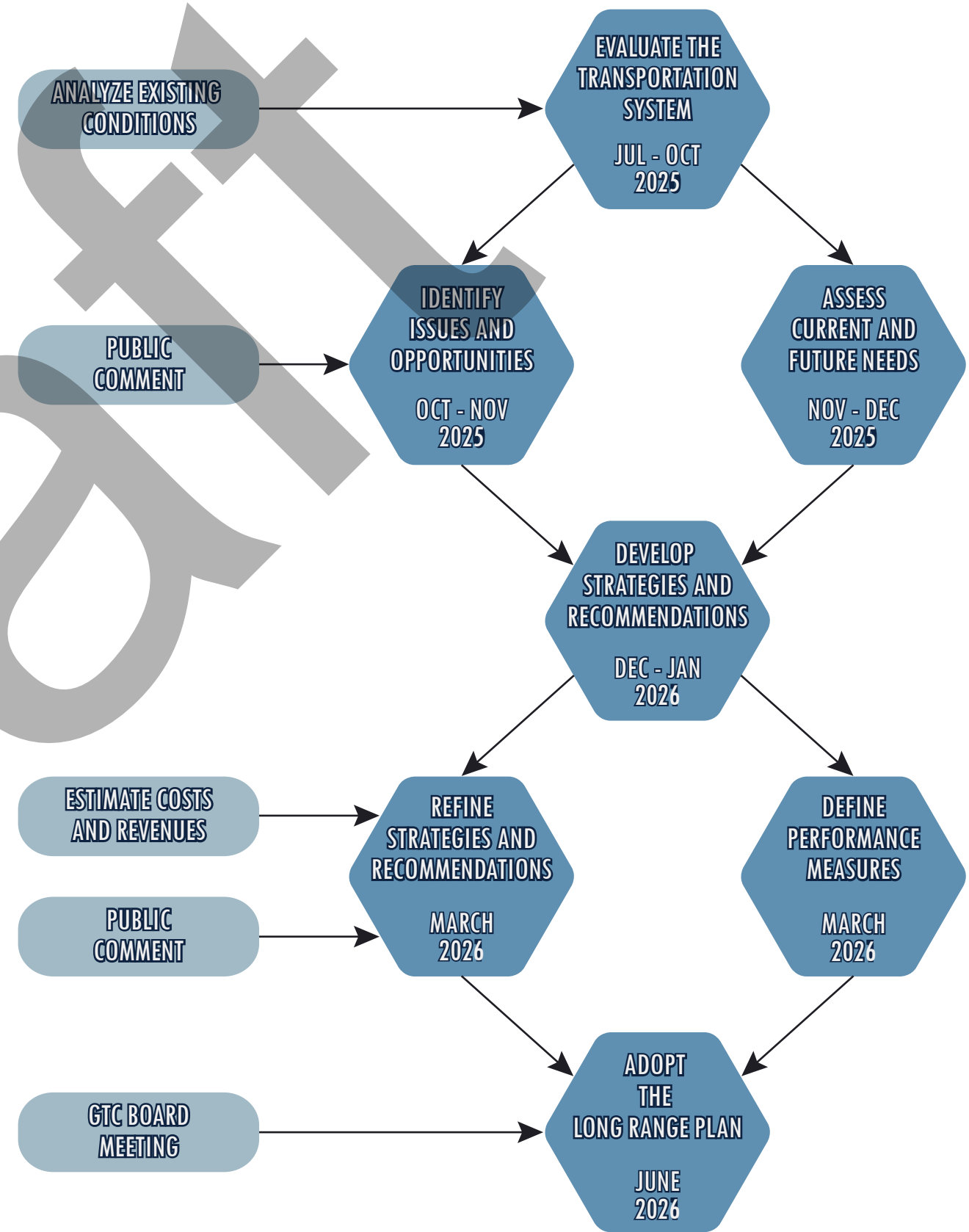
In parallel, GTC staff began to consider the demographic, geographic, and economic outlook of the region to see where gaps might

exist. This data was integrated with public feedback to create the backbone of this plan's needs assessment. Changes in residents' ability to access the transportation system aided in identifying major concerns in the network, such as service windows, bus stops, and problem intersections.

Once needs were properly assessed and described, staff developed a series of recommended strategies, implementation suggestions, programs, and policies. Staff grouped recommendations into five categories with direct links to both GTC goals and objectives, as well as the ten federally mandated metropolitan planning process planning factors. The recommendation groups seek to increase safety, access to the transportation system, improve mobility options, promote efficient system management, reduce hazard impacts, and support the economic vitality of the region.

The recommendation section was brought to the public for a 30-day review period in January of 2026. An online platform was created that included a video explanatory video from GTC staff regarding the process, the ability to review all recommendations and signal top priorities via a survey mechanism, and two public engagement meetings, one virtual and one in-person, allowed the public to ask questions and give input on the recommendations.

Following this second round of public input, staff began to develop the funding and cost estimates for the recommendations based on forecasted revenues to aid in the development of future Transportation Improvement Plans. Staff also prepared a progress update to the companion performance measures report required by the most recent federal surface transportation spending authorizations.



GTC Goals and Objectives

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

- The transportation system should support balanced community and economic development of the metropolitan area.
- 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 businesses.

2 Increase the safety of the transportation system for motorized and non-motorized users

- Transportation designs, services, and education programs should enhance and protect life, health, and property.

3 Facilitate partnerships in planning, financing, and the execution of transportation initiatives

- 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.
- 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.
- 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.
- Innovative financing/partnerships for transportation initiatives that reflect the full scope of interests impacted or served should be explored.
- Transportation and transportation-related information resources should be developed and shared in a fashion that promotes informed public and private sector decision making.
- 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.

GTC Goals and Objectives

4 Increase the accessibility and mobility options available to people and freight

- 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.
- Reasonable travel alternatives should be available to all people in the area regardless of age, physical or mental ability, and/or income.

5 Promote efficient system management and operations

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

6 Protect and enhance the environment, cultural heritage, and community appearance; promote energy conservation

- Transportation planning and decision making should support and reinforce local land use and development objectives.
- Transportation planning and decision making should recognize local priorities balanced with broader community goals.
- 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 politics and investments.
- The transportation system should encourage the efficient use of non-renewable energy resources and the exploration of renewable alternatives.
- 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.

7 Promote efficient and cohesive land-use

- Transportation planning should encourage efficient land-use to ensure viability of future transportation efforts.
- Transportation planning should right-size transportation infrastructure to maximize developable land.



WHERE HAVE WE BEEN?

HIGHLIGHTS AND ACCOMPLISHMENTS

Since the adoption of the LRTTP 2045 in 2021, the transportation system and land use patterns have seen minimal change. The region's overall growth patterns are continuing as before, including ongoing suburban expansion and revitalization of historic urban and village centers. The transportation system performs well by traditional standards with minimal traffic congestion and reliable travel times as compared to major metropolitan areas. Collectively, the region has emphasized maintaining current infrastructure assets and creating a more multi-modal active transportation system.

The region continues to hold a preservation and maintenance philosophy regarding the region's roads and bridges. Over 93 percent of federal funding is dedicated to maintaining existing transportation system assets and improving safety for all users. The 2023-2027 TIP includes transportation projects funded with approximately \$540 million of federal aid, supplemented by other state and local

funding sources. A preservation first mindset is consistent with the policies set forth in the previous LRTTPs and feedback received from the public. However, despite the majority allocation of the region's federal transportation funding to preservation, regional stakeholders have implemented changes to the transportation network. Highlights from the past five years follow below.

The GTC completed 58 projects or studies over the course of the last five years either as the project lead, partner, or funding source. The Ontario County Freight Rail Corridor Development Plan: Area 2 study was one of the largest in scope conducted during the period. The study focused on the potential development sights for industry along the Finger Lakes Railroad corridor, locating five shovel ready sites and several railyard relocation sites. These relocation sites ensure that additional development brought on by implementing the study does not disrupt residences near the buildings.

The City of Rochester, Monroe County, and the Town of Warsaw all completed active transportation plans. While the area has made significant progress in active transportation

in previous years, a lack of coordinated development plans has led to a sporadic and disconnected network, particularly for disabled individuals or those using bikes. For Rochester, and parts of Monroe County, the focus of these plans is on improving connectivity and pedestrian safety. And while these concerns impact the rest of the region, the needs of rural regions include more focus on sidewalks and crossings as those are more critical needs in those parts of the region.

RGRTA and RTS both completed ridership studies during the last five years to better serve their customers' needs. RGRTA conducted a large-scale Origin and Destination study looking into the distribution of trips in the region by their user base. This information will help provide higher quality service to their riders by allowing RGRTA to better tailor routes and stops to maximize customers served. RTS also completed their Regional Rural On-Demand Service Study, which studied the potential implementing region specific on-demand transportation. On-demand transportation, or microtransit, decreases the volume of any individual route, instead replacing volume for flexibility. Users can order a ride via an app or call a service center and travel point-to-point. Despite the decrease in service volume, local microtransit offers benefits such as greater flexibility, reduced vehicle size and maintenance, and lower operating costs.

LEVERAGING FUNDS TO SUPPORT LOCAL PLANNING – UPWP STUDIES

As an organization, GTC continues to leverage funding to support local planning. Each year, GTC programs about 40-50% of its annual allocation of FHWA Planning, or PL, funds

to support transportation planning efforts undertaken by member agencies and other local municipalities. These funds are allocated through the UPWP and support transportation planning activities that can complement existing local planning efforts, allowing studies that might be beyond the scope of a locality.

Over the five most recent federal fiscal years, GTC has programmed approximately \$6 million to its member agencies, leveraging over \$400,000 in local cash matches and \$500,000 in in-kind contributions in support of transportation planning activities.¹ For its 2025-2026 fiscal year, GTC awarded \$969,500 to new transportation planning projects sponsored by its local municipalities.

Over the last five years, 58 UPWP projects have been completed, encompassing plans, studies, and data collection. The UPWP funds concept-level planning, analysis, and design initiatives across a range of topics: active transportation, area/corridor studies, data collection, parking, freight, land use, management and operations (including ITS), safety, and transit. In accordance with federal regulations, UPWP funds are not used for property acquisition, site preparation, preliminary engineering, detailed design, and/or construction projects. The studies typically result in a basic level of analysis and recommendations that appropriate agencies can progress towards implementation.

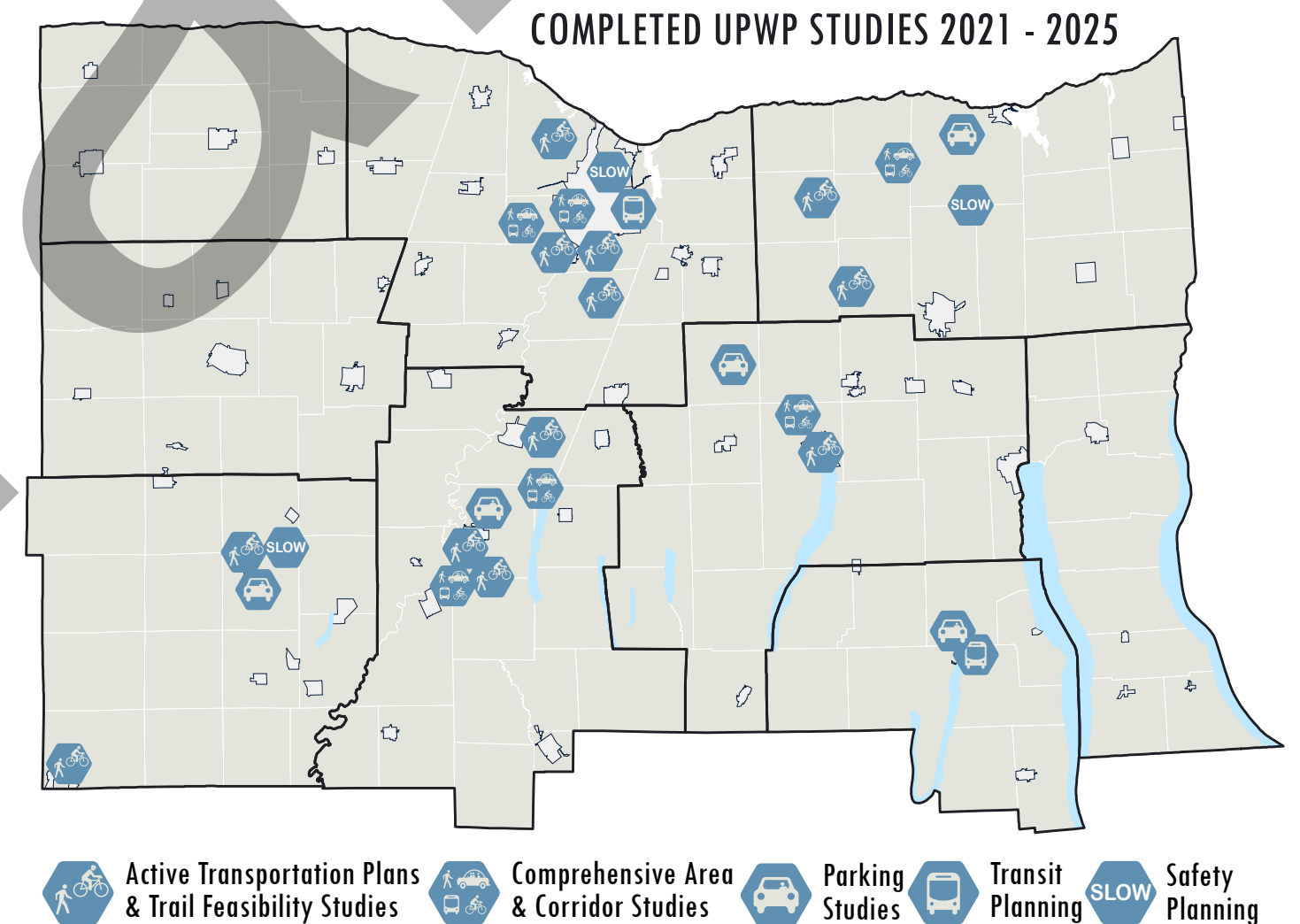
New York State is a home-rule state which means each of the region's 188 municipalities are responsible for their own local land use planning, zoning, and development policies and associated regulations. Distributing funding to municipalities helps them to integrate local planning priorities with regional transportation goals.

progress has been made on the following illustrative projects:

Inner Loop North is moving forward. The first redevelopment study was completed in 2022. The City of Rochester, in coordination with the community, is developing the preliminary design and working through the environmental review process, both set to complete in 2026. Following the final design and engineering process, the project is expected to begin construction in 2028. Ongoing community engagement will remain an important part of the development process well beyond initial groundbreaking. Within

ILLUSTRATIVE PROJECT STATUS

Many of the recommendations proposed in LRTP 2045 were part of the fiscally constrained plan. Fiscal constraint means that funding for recommendation implementation was predicted to be available over the lifecycle of the plan. Projects that did not have an identified and confirmed funding source were considered illustrative and presented for informational purposes. These projects were considered worthy of implementation if sufficient funding became available for their advancement. Since the adoption of LRTP 2045 in 2021, significant



WHERE HAVE WE BEEN?

the scope of this plan, the Inner Loop North transformation project is expected to be completed, continuing the revitalization of the inner loop area.²

Rochester City's Roc the Riverway is of the overarching name for a series of projects designed to improve the Genesee River's waterfront. These projects are redeveloping parks, bridges, and plazas along the waterfront to create a connected and beautiful environment. After receiving 100 million in New York State grant money, several of the over two dozen projects that compose Roc the Riverway have been completed, and many more others are underway. Those completed include: the Austin Steward Plaza, a plaza that connects the Genesee Riverway trail to the Sister Cities Bridge and Downtown Rochester; the completion of the repaving and restriping of Main Street in Downtown Rochester (completed in Fall 2022); the reopening of the Pont de Rennes Bridge; and the rehabilitation of High Falls Park and the creation of the Brewery Trail. These projects represent only a small part of the overall Roc the Riverway project. These will continue to progress over the course of this plan.³

High Speed Rail along the Empire Corridor has progressed in the last five years. In 2023, the Federal Rail Authority selected their preferred alternative for the creation of the corridor. The proposed alternative recommends a 90-mile-per-hour rail corridor between Albany and Buffalo, running four times a day, with an expected on-time percentage of over 95%. The trip travel time would decrease by one and a half hours, and the frequency of trains would slightly increase. The timeline for this project would be twenty-five years, and funding is still in the early stages.⁴

The **Charge New York Initiative** has resulted in significant electric vehicle infrastructure expansion in the last five years. Charge New York is an initiative that provides individuals and business owners rebates for supporting electric vehicle adoption. Over 200 charging stations have successfully been installed, both privately and publicly, seeing the region now hosting 522 EV charging stations.⁵



Genesee-Finger Lakes

L RTP
2050

THE REGION

The nine-county Genesee Finger Lakes Region includes the counties of Genesee, Livingston, Monroe, Ontario, Orleans, Seneca, Wayne, Wyoming, and Yates. The region encompasses nearly 4,700 square miles and extends from the Lake Ontario shoreline to the Southern Tier. Shaped by glaciation cycles that ended around 10,000 years ago, the region's landscape features many striking natural formations and vistas, including the Genesee River and Valley, Rochester's High Falls, eight of the eleven Finger Lakes, and Letchworth State Park.

In the 1700's, the Seneca and Cayuga Nations of the Haudenosaunee Confederacy inhabited much of the region. Rich agricultural land attracted European settlers, but a lack of cost-effective commercial transportation slowed the pace of development. The Erie Canal, completed by 1825, provided the foundation for the region's future by connecting emerging settlements to New York City.

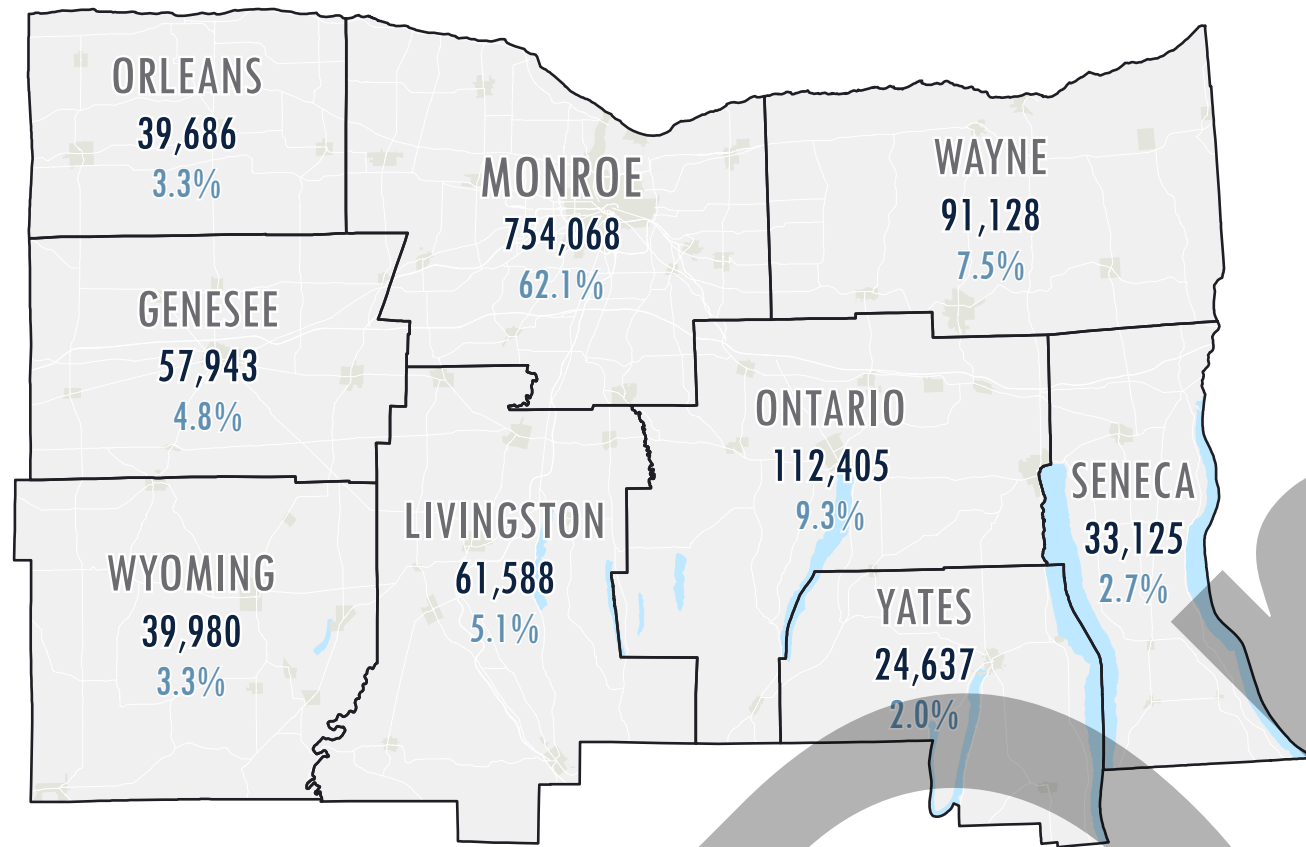
During the mid-1800s, the region emerged as a prominent agricultural and industrial center. Railroads replaced canals as the preferred long-distance transportation mode. The New York Central Railroad's Water Level Route Paralleled the old Erie Canal and connected New York

City with Chicago, linking Upstate New York to the Country's two major commercial centers of that era and further expanding economic opportunity within the region.

By the mid-1900s, the region has developed a strong industrial economy dominated by a few large companies. Vehicular highways and air travel replaced railroads as preferred long-distance transportation modes. The New York State Thruway, built in the 1950s, followed the route pioneered by the canal and railroad and connected the region to the rest of the country through the Interstate system. Within the region, suburbanization dispersed population centers and economic activity while increasing reliance on automobile travel.

Currently, the region is home to 1.2 million people, a population that is aging while becoming more demographically diverse. A small number of regional centers contain most residences and employment opportunities, though those activities are not often spatially mixed. As we move forward, the region's transportation system must continue to move people and goods safely, efficiently, and reliably to enhance economic opportunity and improve the overall quality of life for residents.

POPULATION

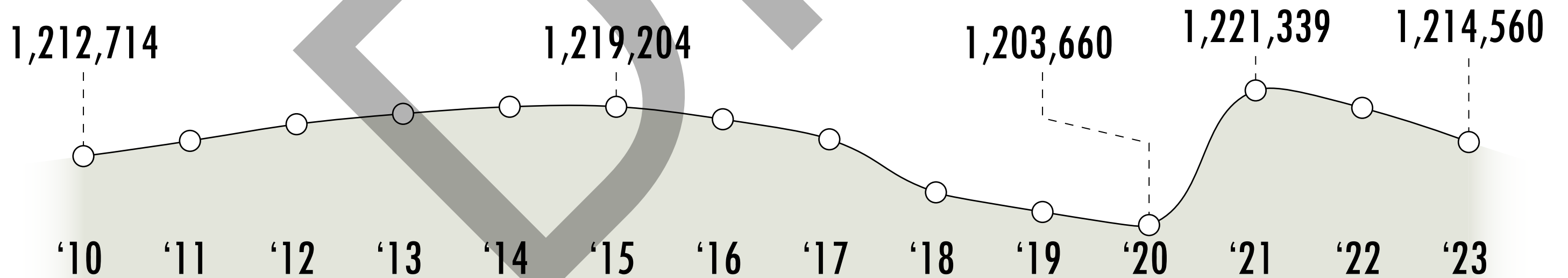


Approximately 1.2 million people live in the Genesee-Finger Lakes Region, a number that largely holds steady throughout the last decade of Census Bureau estimates. Rochester is the fourth largest city in New York State with a Census Bureau estimated population of 211,318.⁶ The core region of the GTC, which includes Livingston, Monroe, Ontario, Orleans, and Wayne Counties, comprises the 81st largest metropolitan statistical area in the nation. While the region is declining in relative population compared to the rest of the nation, there has been a slight population increase since 2018.⁷

Monroe County is by far the most populous county in the region; home to 62% of the region's residents. The second largest county, Ontario, has remained the fastest growing county by percentage of population, adding over 3,000 residents in the last five years. Monroe county has grown the most based on numbers alone, with over 10,000 more residents than in

2018. Wayne county's population has remained steady while all other counties populations have declined since 2018.

In 2018, more than 204,000 seniors called the Genesee-Finger Lakes Region home. By 2023, that number has become 231,825 as those born in 1963 reached retirement age. As the baby boom cohort ages, significant consideration must be given to their ability to access services. Typically, older adults are more reliant on transit access and are also more likely to have a physical disability that requires a higher level of service such as demand-response, wheelchair equipped door-to-door service. As population distributions continue to shift towards an aging population, transit in the region has an opportunity to augment its ridership base. Transportation agencies will need to focus on convenience and reliability to retain customers used to a different mobility arrangement.



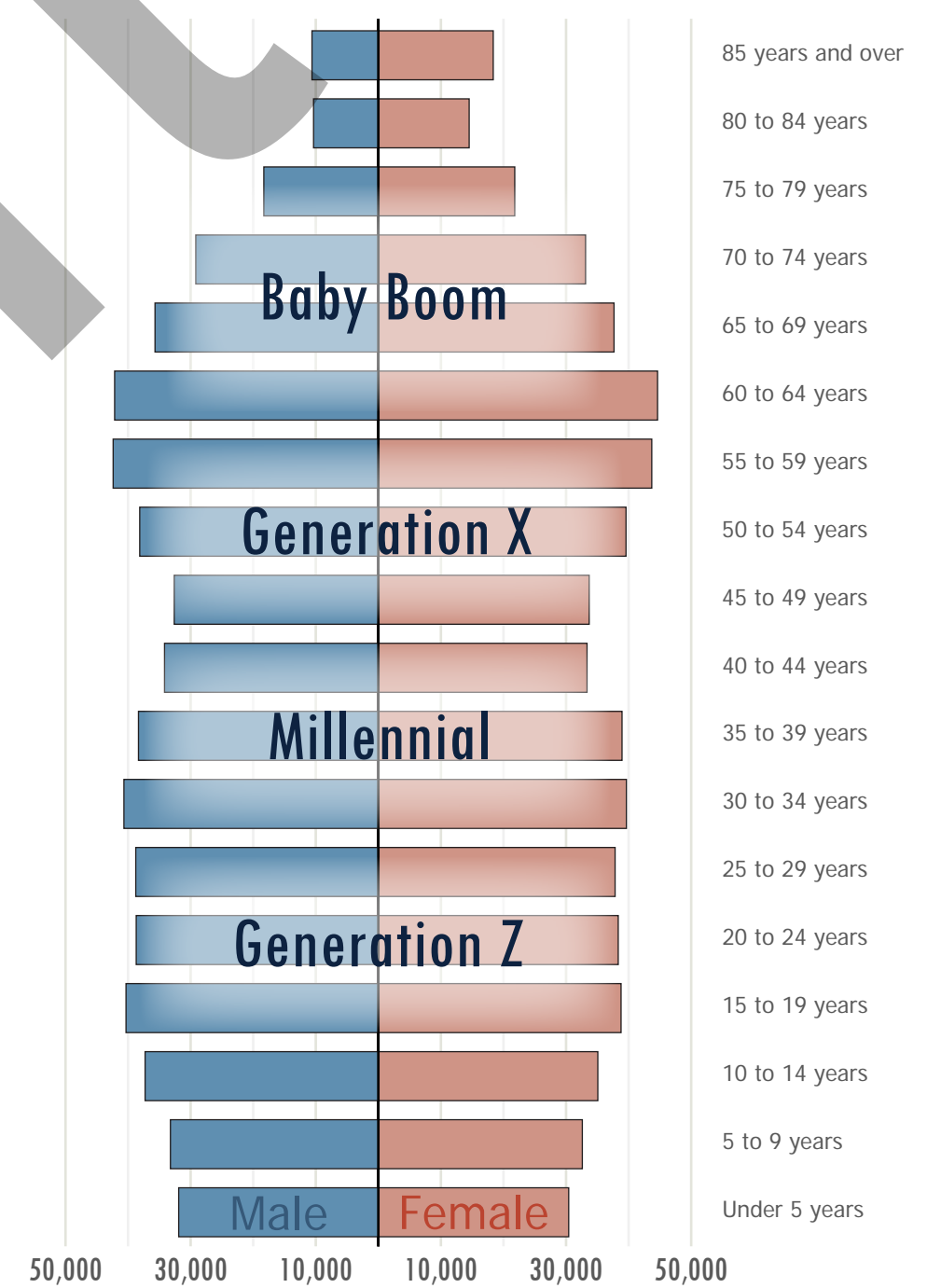
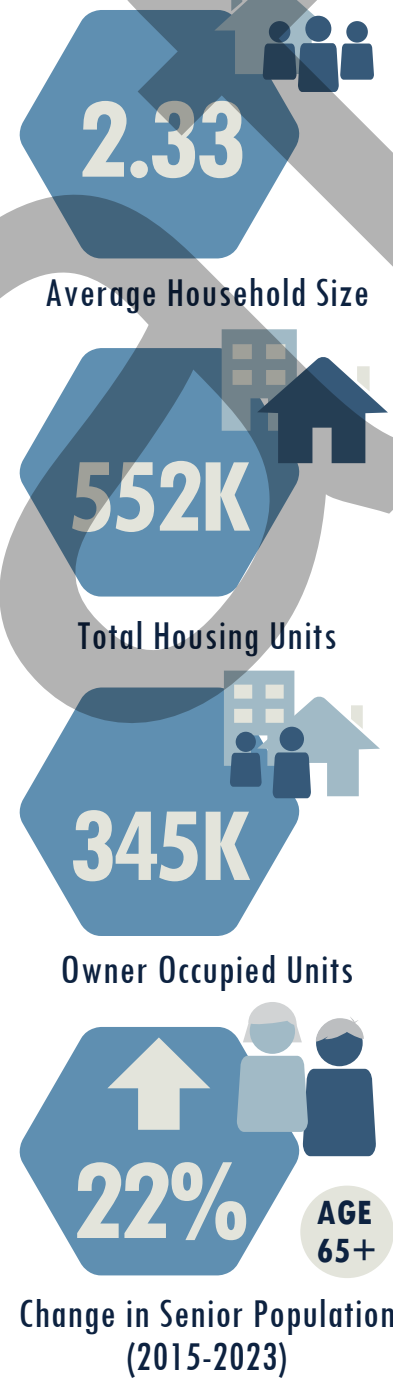
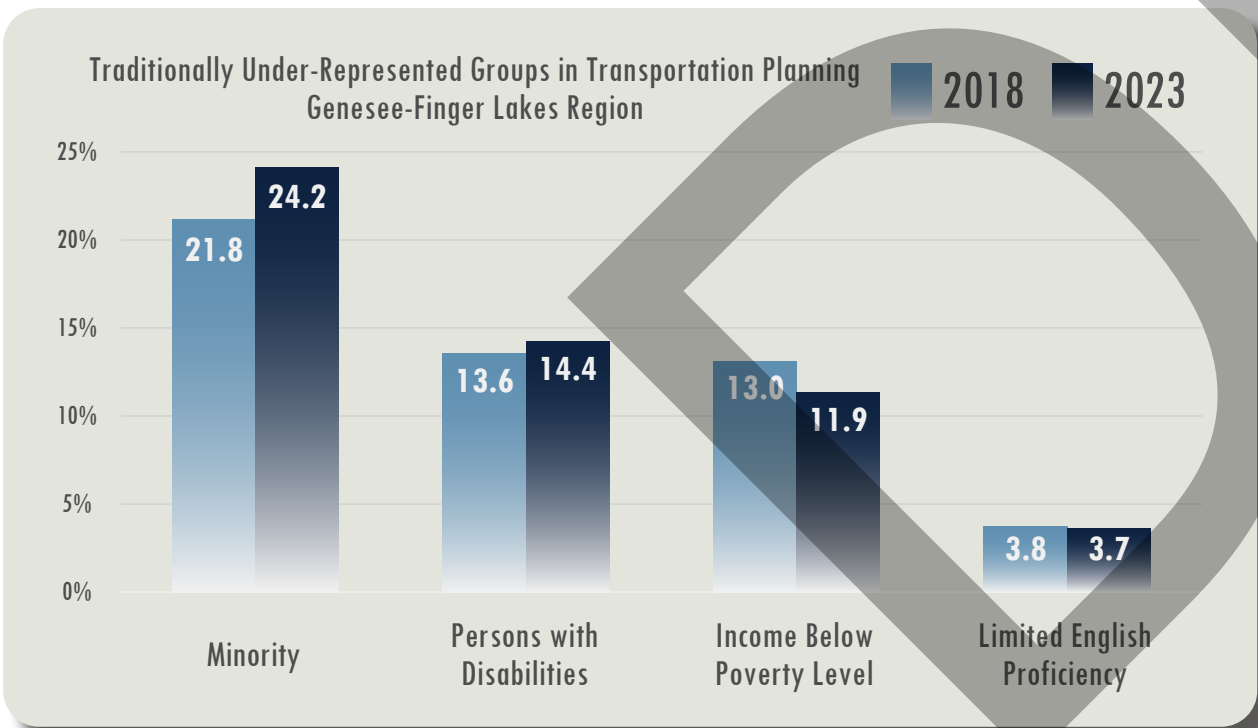
Source: American Community Survey 2010-2023 5-Year Estimates

DEMOGRAPHICS

While the region's population remains largely static, the region exhibits some unique characteristics. While owner-occupied homes are slightly above the national average, average household size, and the percentage of minority residents are all below national averages. The Millennial Generation is now completely in the workforce, and Generation Z is beginning to enter. The Millennial generation represents the largest identified fifteen-year cohort of residents. Females outnumber males by almost 20,000.

The GTC remains committed to ensuring all the region's voices have a place in transportation planning. Particularly those with limited income

or mobility challenges, who have historically not been given enough consideration in the transportation planning process. All citizens deserve a transportation system that meets their needs and remains accessible to them. Engagement materials and public meetings must also allow all voices to be heard. This should be done through providing language accessible services at all meetings. Meetings should also be scheduled at times where most people can have their voices heard.



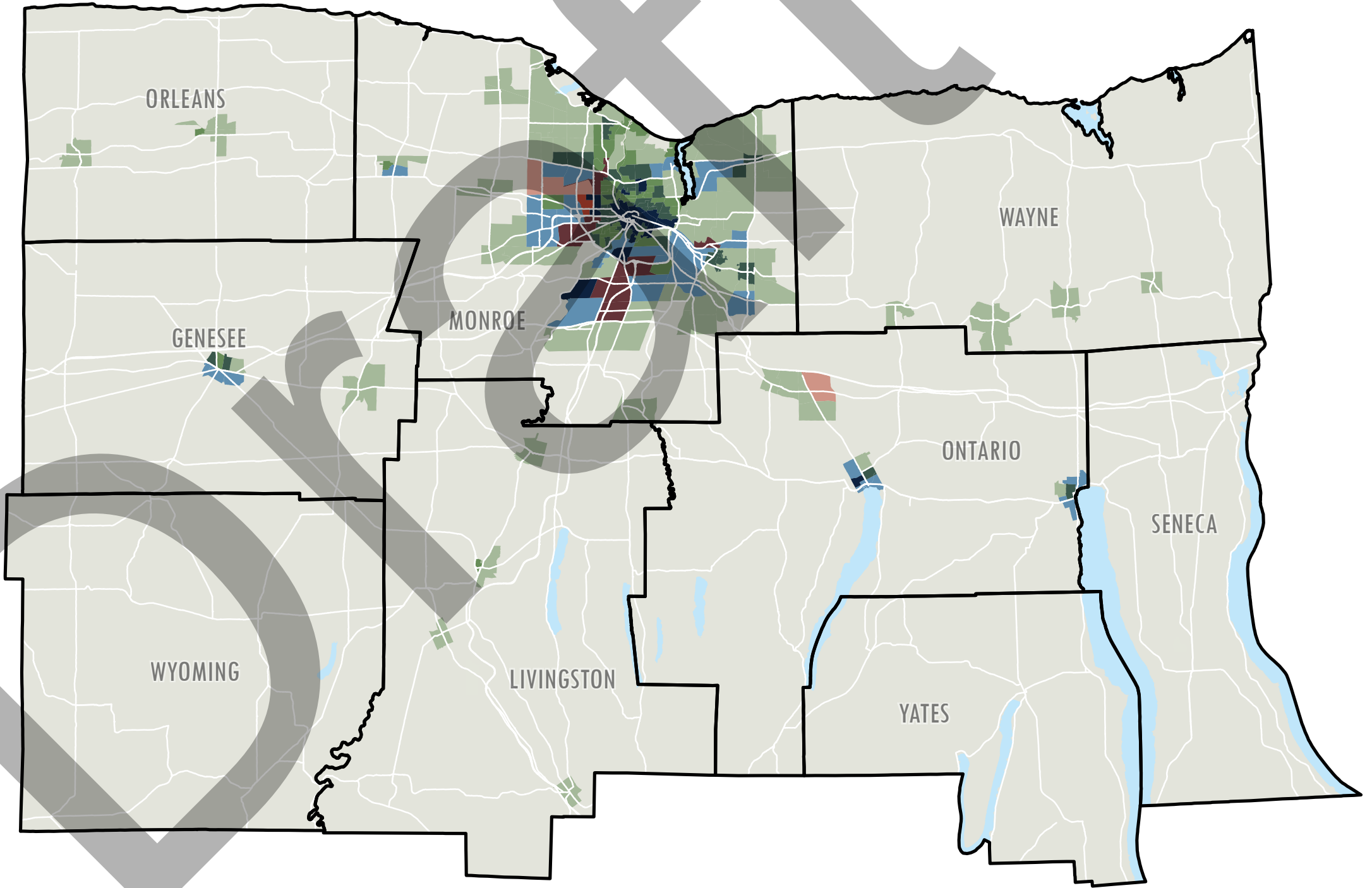
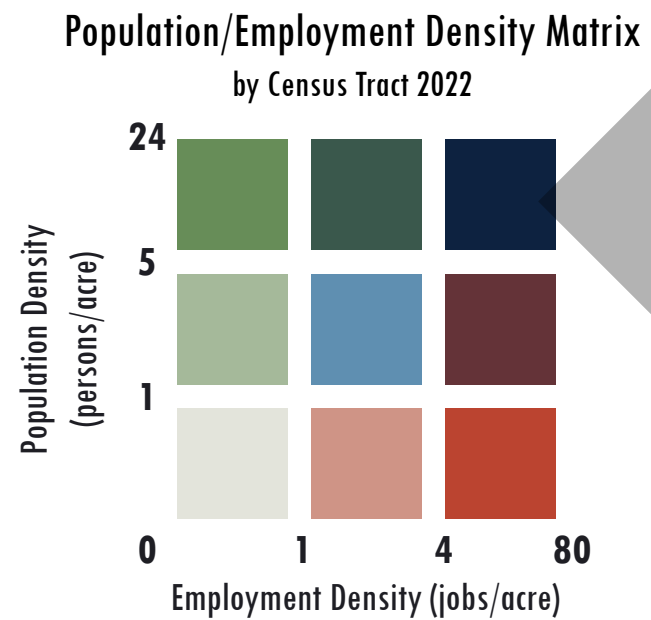
Source: American Community Survey 2018-2023 5-Year Estimates

EMPLOYMENT

Residential and employment centers are highly concentrated in a few areas across the region. The largest blend of population and employment density occurs in central Monroe County as well as other regional centers including the cities of Batavia, Canandaigua, and Geneva. A moderate mix is seen in other parts of those centers as well as select villages (Medina, Brockport, Spencerport, Lyons, and Dansville).

TOP FIVE EMPLOYMENT SECTORS IN THE GENESEE-FINGER LAKES REGION (2025)

- Private Education & Health Services (22.9%)
- Trade, Transportation, & Utilities (16.3%)
- Government (14.7%)
- Professional & Business Services (12.1%)
- Manufacturing (10.3%)



Source: LEHD/LODES 2022, American Community Survey 2023 5-Year Estimates

RECREATIONAL/CULTURAL RESOURCES

The Genesee-Finger Lakes Region is known for its stunning natural beauty, historic and cultural resources, and recreational opportunities. The region is recognized as the homeland of the Seneca and Cayuga Nations, a center of the abolitionist movement, and the birthplace of the women’s suffrage movement. Many of the region’s visitor attractions, such as Letchworth State Park and Ganondagan State Historic Site, are Native American heritage sites.

The region’s pastoral landscapes also offer agricultural and viticultural bounty. The Finger Lakes Wine Region is the largest wine producing area in New York State and is world-renowned for its Rieslings. Wineries and the budding craft beverage industry attract tourists

who support the regional economy, especially during the summer festival season and in the fall months when travelers admire the foliage along the lakeshores.

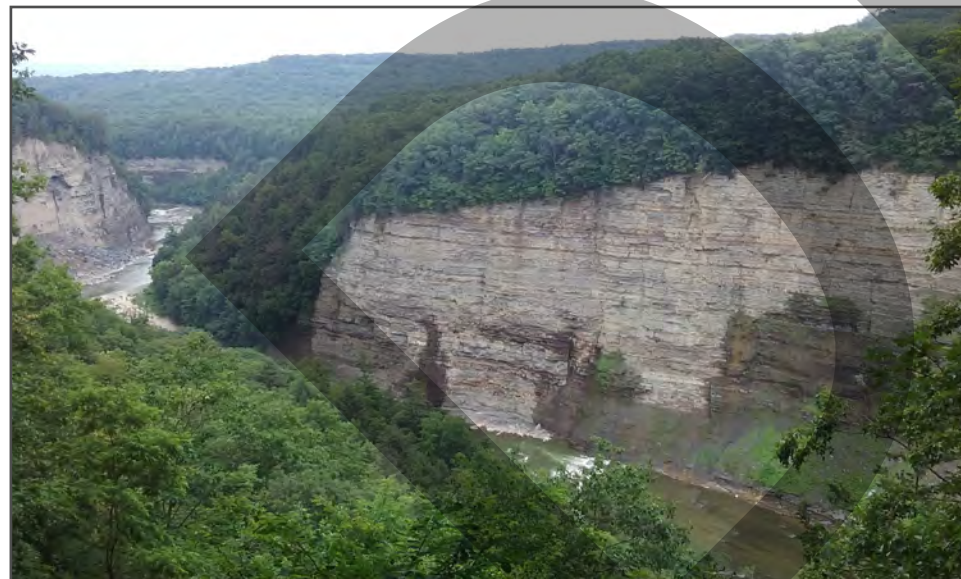
The region’s cultural resources include the Erie Canal Heritage Corridor, museums showcasing the region’s rich legacy of technological innovation, especially in photography and imaging, and numerous art festivals. These events attract visitors by also emphasizing unique regional assets such as horticulture and canal town culture. A strong foundation in music performance and education supports an international jazz festival as well as multiple performing arts venues.



\$4B

In 2023, the economic impact of tourism across the region reached \$4.4 billion. Over \$1.5 billion of traveler spending took place in Monroe County.

Source: Visit Rochester 2024 Annual Report



The Region is home to 20 New York State Parks. The most notable being Letchworth State Park, known as the Grand Canyon of the East, is nestled in southern Wyoming and Livingston Counties. The Genesee River winds through the park’s 14,350 acres, flows over three major waterfalls, and carves out the 17-mile gorge.

10%



Traveler spending in the region increased 10% in 2023.

Source: Visit Rochester 2024 Annual Report

\$700M



of labor income was generated by the tourism industry, in Monroe County.

Source: Visit Rochester 2024 Annual Report



The Erie Canalway Trail traverses east to west across the entire region, as well as the state, attracting cyclists from all over the world.



THE TRANSPORTATION SYSTEM



A glance at regional transportation choices reveals a common pattern: personal vehicles represent the most common mode of travel. Most residents have access to a private vehicle, and eight out of ten either drive or carpool in one during their daily commute.

Many workers in the region live in one community and work in another. Many rural commuters travel to urban cores, particularly to Monroe County and the City of Rochester. 39% of all workers who live outside of Monroe County commute to work. Conversely, only 6.4% of Monroe County based workers leave the County to access their jobs.

Several communities within the region also feature a significant share of residents who work locally. Over 40% of the workers who live in the villages of Penn Yan, Medina, and Geneseo and the Cities of Rochester, Geneva, and Batavia work in those places. In these small pockets of density residents are more likely to commute using an alternative to a personal vehicle.

The transportation system maintains 7,579 lane miles of federal aid eligible highways and 1,611 bridges.^{8,9} These roads and bridges carry most of the network's users.

Yet, active transportation modes are an important part of regional transportation activity. Public

transit systems operate one fixed route bus system in Monroe County and eight deviated route bus systems, one in each of the surrounding counties. The region also operates a metropolitan paratransit service transporting over 11 million passengers in 2024.¹⁰ All transportation systems in the region are operated by the Rochester-Genesee Regional Transportation Council with the exception of Yates County Transit. The region has made significant strides in bike facilities as well, with over 430 miles of bike infrastructure in the region.

The region's transportation infrastructure serves a vital purpose beyond moving people. Millions of tons of freight move around and through the region each year. A combination of limited-access expressways, freight routes, marine highways, and railroads facilitate this movement. As technology advances, more attention is being paid to shifting consumer demand and delivery methods.

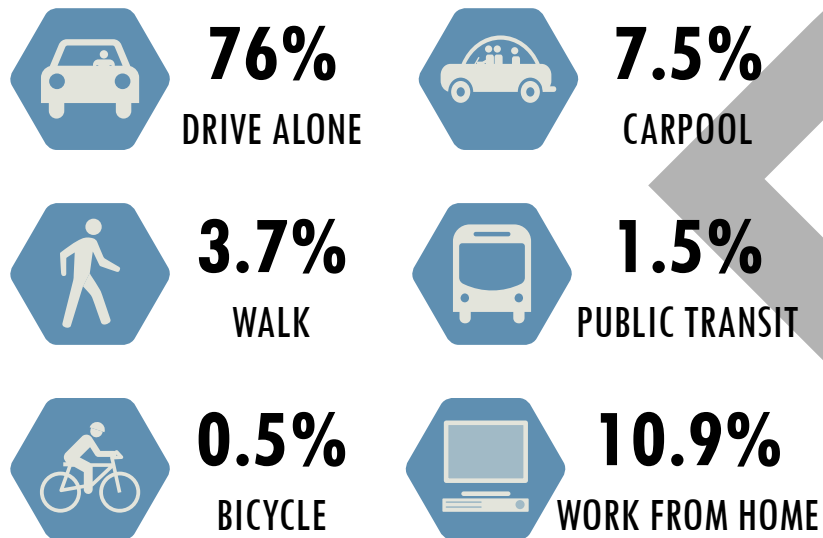
These personal and economic needs, coupled with the continual development and deployment of new transportation technology, create the need for modernized system management. Traditionally focused on performance, system management increasingly involves greater focus on the security and resiliency of transportation needs. The region features four interstate highways, two U.S. Routes, and seventy-two New York State Routes.

REGIONAL TRAVEL CHARACTERISTICS

A vast majority of regional households have access to a vehicle, though regional centers, and some rural communities have neighborhoods that have limited personal vehicle ownership.

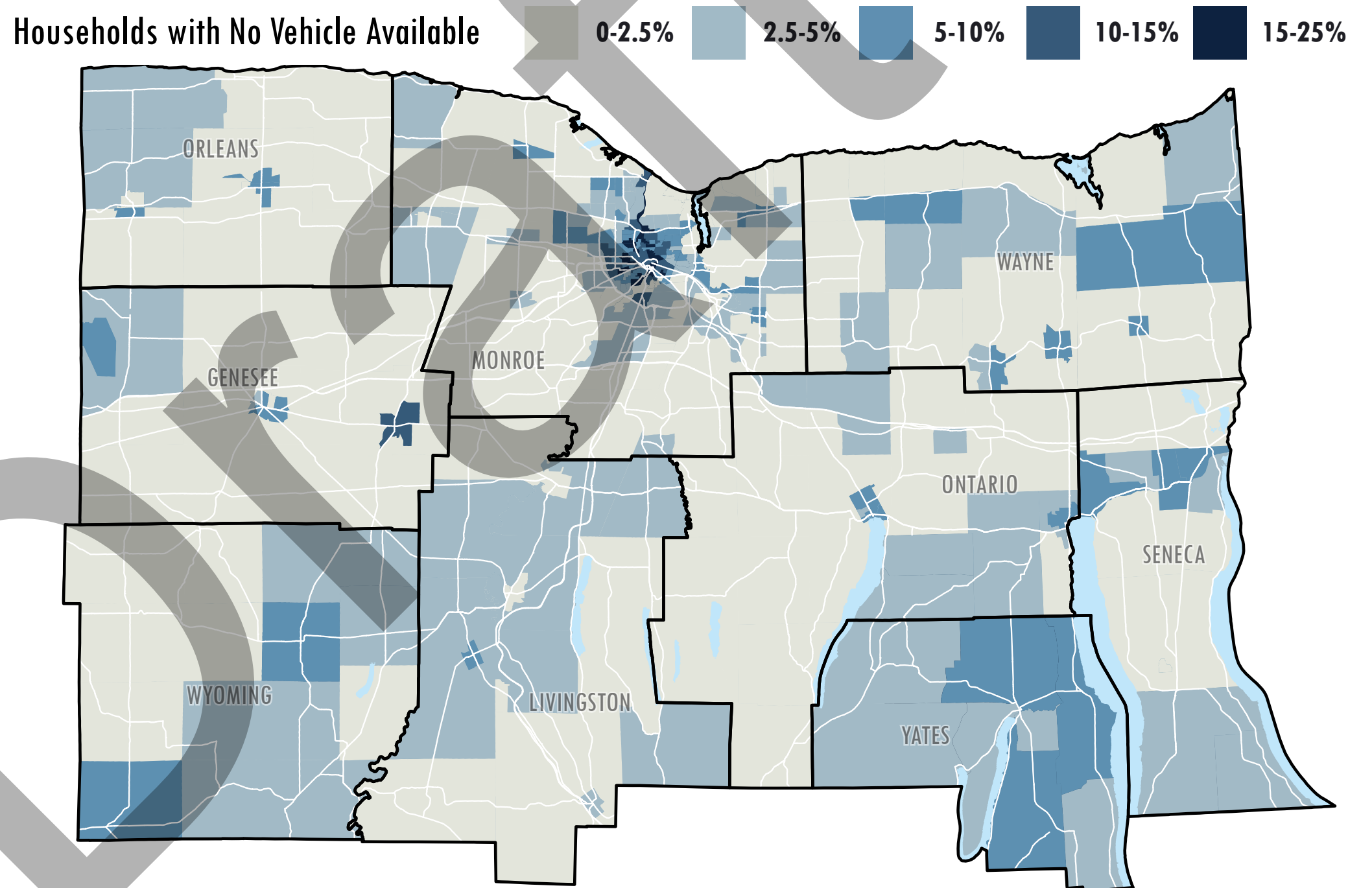
In 2023, Census Bureau data showed that approximately 15% of regional residents either commuted via an active transportation mode or worked from home. This represents a 50% increase from 2018 driven largely by a rise in remote work following the pandemic. Workers aged 16-24 were almost twice as likely to carpool, and more than twice as likely to engage in active transportation. While workers over 60 are still the most likely to work remotely, workers from 25-44 have significantly increased in likelihood of working from home in recent years.

COMMUTE MODE SHARE



Source: American Community Survey 2023 5-Year Estimates

Households with No Vehicle Available



Source: American Community Survey 2023 5-Year Estimates

DRIVING IN THE REGION

According to Census data, a little over 80% of people either drive or carpool to work in the Genesee-Finger Lakes Region. The highway and bridge network consists of nearly 27,500 lane miles and 1,693 bridges. Within this network approximately 7,700 lane miles are eligible to be repaired and improved with funding from federal transportation programs. Of roads surveyed by the New York State Department of Transportation, 93.82% of lane miles have a pavement surface score of "fair" or better. Surface score is measured by visual inspection and the International Roughness Index (IRI) score of the road.

Thirteen percent of bridges in the Region are in poor condition. Per FHWA's Pavement and Bridge Condition Performance Measures final rule published in February 2017, bridge condition is determined by the lowest rating of National Bridge Inventory deck, superstructure, substructure, or culvert condition ratings. If the lowest rating is less than or equal to four, the bridge is classified as poor.¹¹

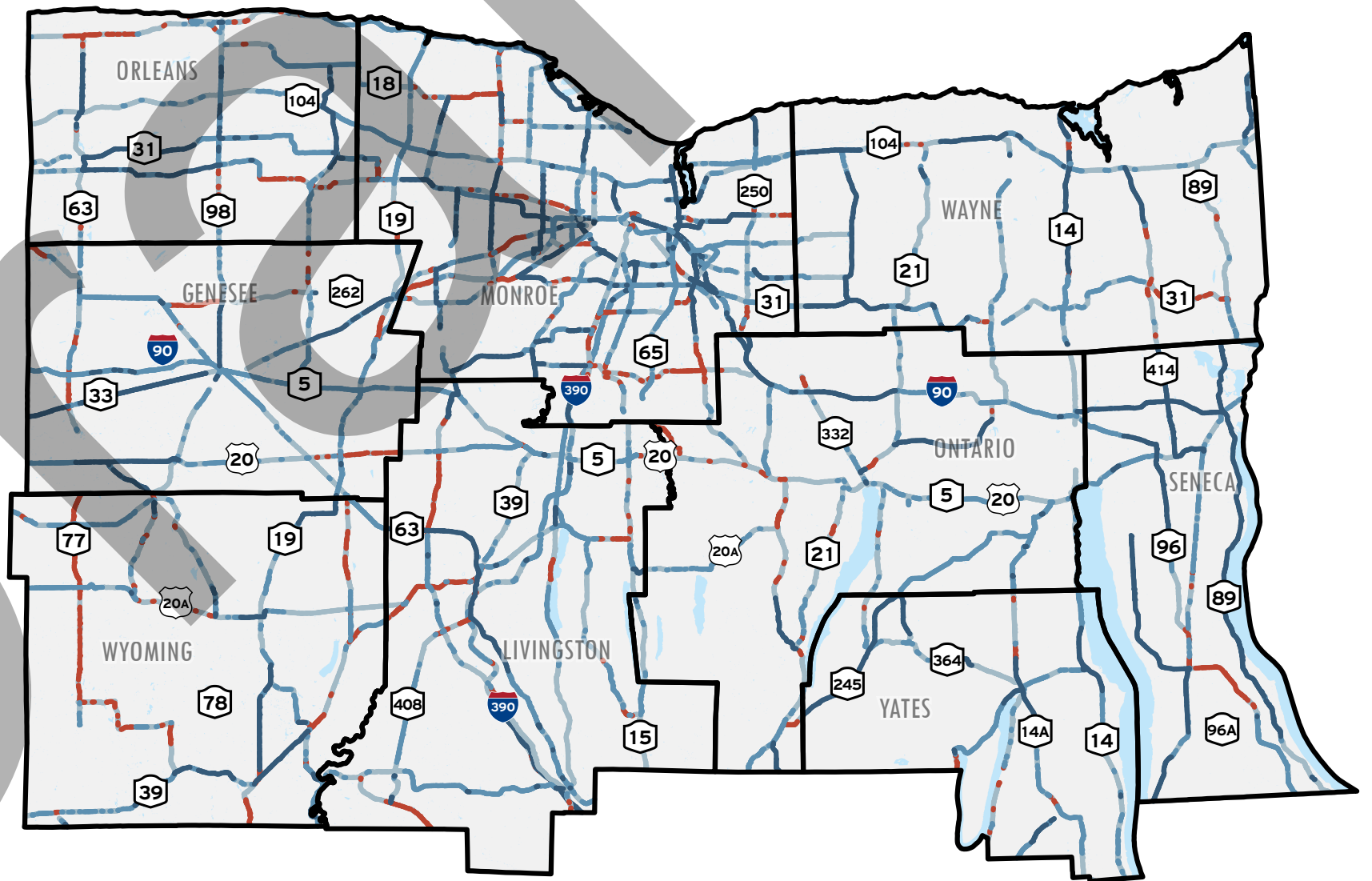
Pavement Surface Score

0-5

6

7-8

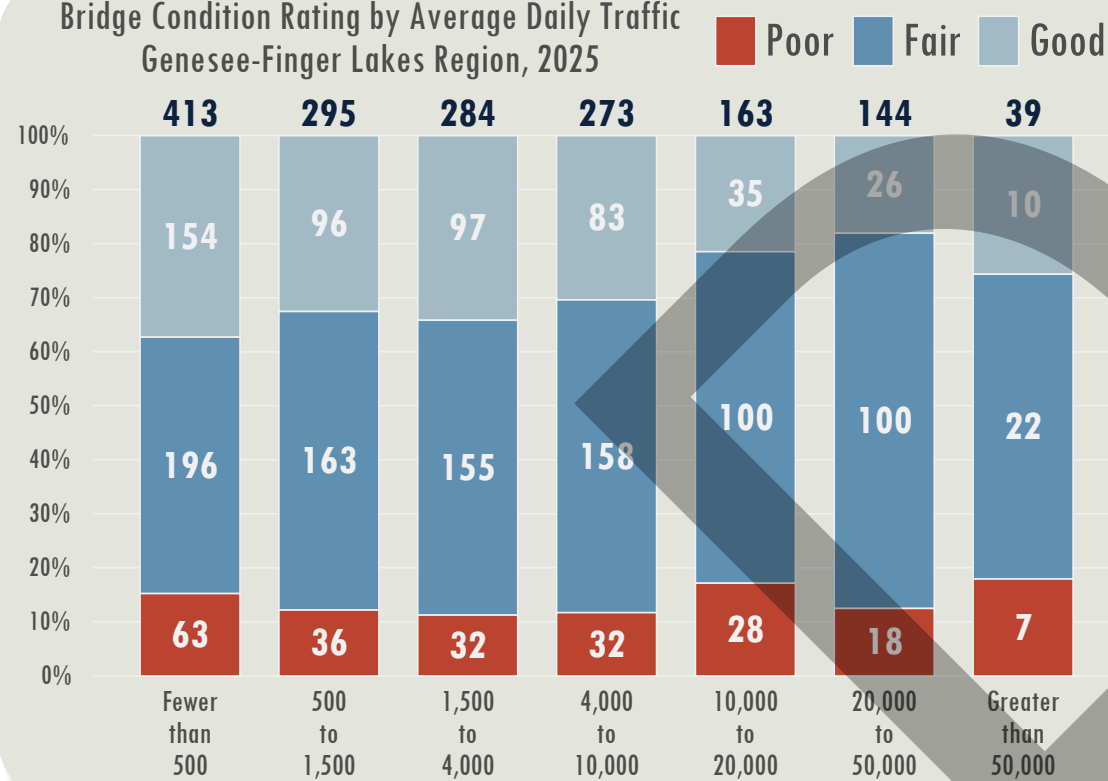
9-10



This map shows the Pavement Surface Rating for the region. Pavement surface rating measures the condition of the pavement through a ten point scale, where 10 is the best possible condition and 1 represents pavement in need of significant repair.

Source: NYSDOT Highway Data Services Bureau

Bridge Condition Rating by Average Daily Traffic
Genesee-Finger Lakes Region, 2025



Source: Federal Highway Administration LTBP InfoBridge

TRANSIT IN THE REGION

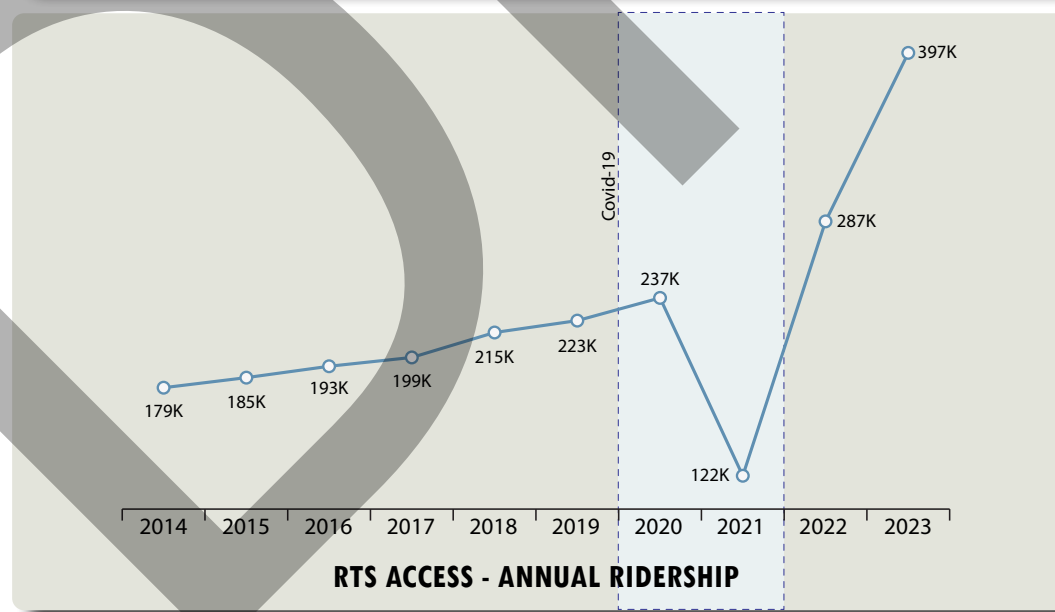
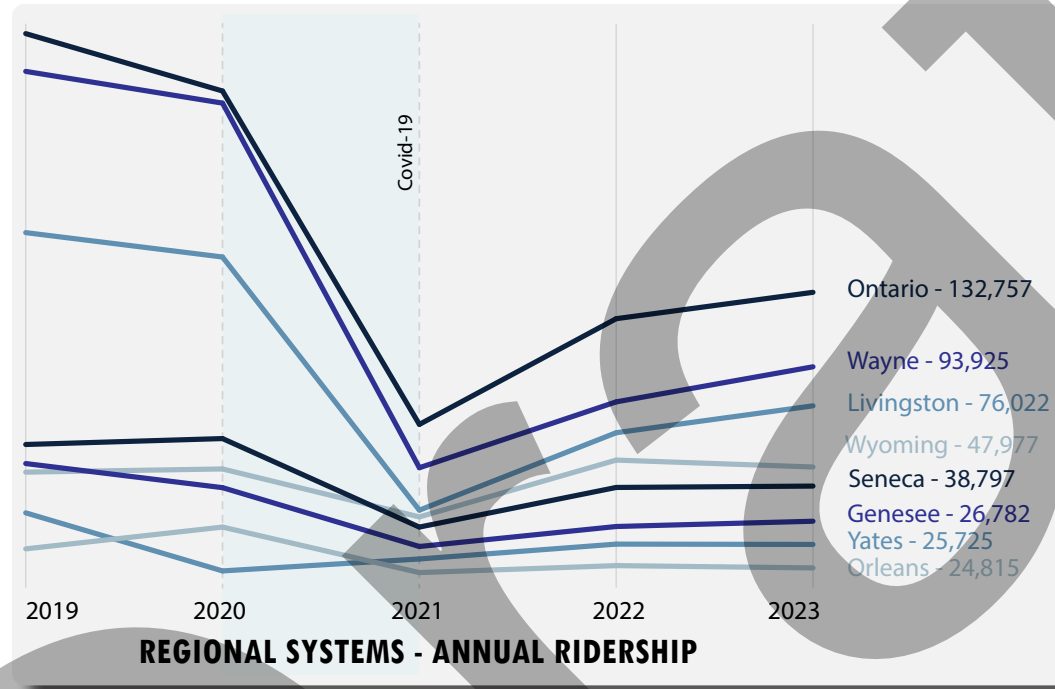
A robust public transportation system is critical to providing access to employment and needed services. Individuals unable to operate a private automobile rely on public transportation to get to work, to shop, and to recreate. A properly designed transportation system benefits all users as well, giving flexibility in mode choice to the whole region.

RGRTA operates one fixed-route public transportation system in Monroe County and seven deviated route systems in the remaining seven of the region's nine counties, with service sometimes crossing county lines. Yates County Transit has been operating independently since 2017 and is engaged in discussions investigating a merger with RGRTA. The Yates County Transit system is an affiliate of Mozaic, formerly known as the Arc of Yates County.

In 2023, nearly 9 million trips were made via public transit region wide. An additional 400,000 trips were fulfilled by on-demand services. While transit numbers have yet to fully recover from the 2020 COVID-19 pandemic, ridership numbers are quickly rising as travel patterns continue to adjust.

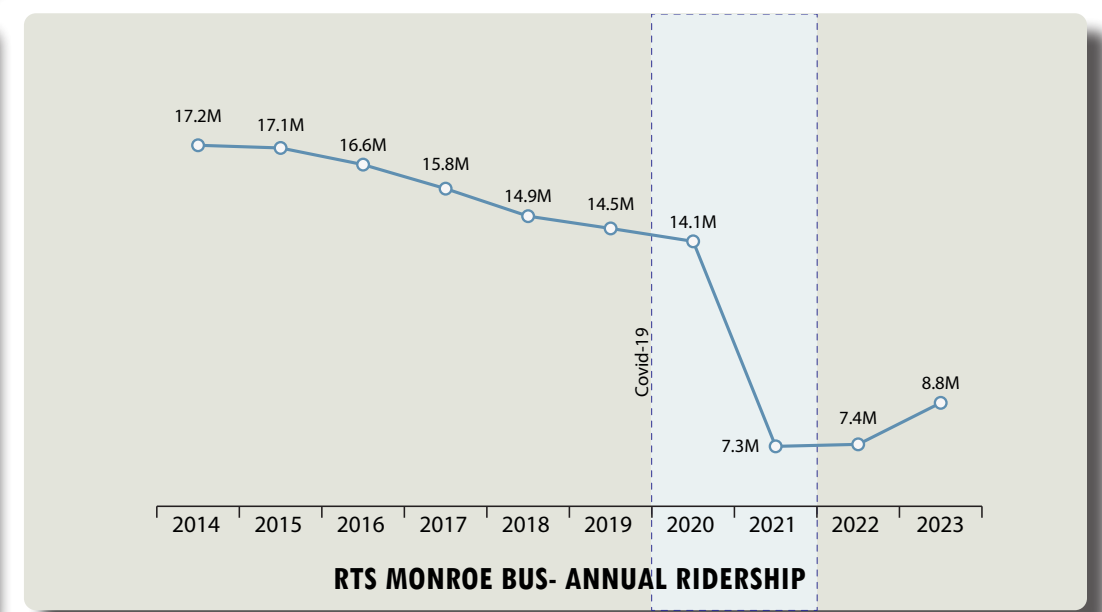
ReImagine RTS was successfully implemented following the delay caused by the pandemic and has seen a successful year over year increase in ridership since the initial decline in transportation numbers. Particularly in 2024, RTS saw an 18% increase in ridership over 2023.

Following the completion of the 2024 Regional Rural On-Demand Service Study, RTS will consider the implementation of microtransit in smaller transportation systems in the region, including Batavia, Geneseo, and Waterloo/Seneca Falls. Microtransit provides greater flexibility than fixed route bus service and provides a ride-share-like operation that users are familiar with. These improvements, if implemented, could see significant decreases in operating costs and greater transportation flexibility in these rural regions.¹²



Transit Assets in the Genesee-Finger Lakes Region

- 9 FIXED ROUTE BUS SYSTEMS**
Help people move throughout the region seven days a week
- 6 COMMUTER BUSES**
Reach locations outside Monroe County to connect people to employment
- 1 DIAL-A-RIDE SERVICE**
RTS Access provides curb-to-curb and door-to-door service for disabled riders
- 1 TRANSIT CENTER**
Connects most fixed routes and commuter buses in Downtown Rochester

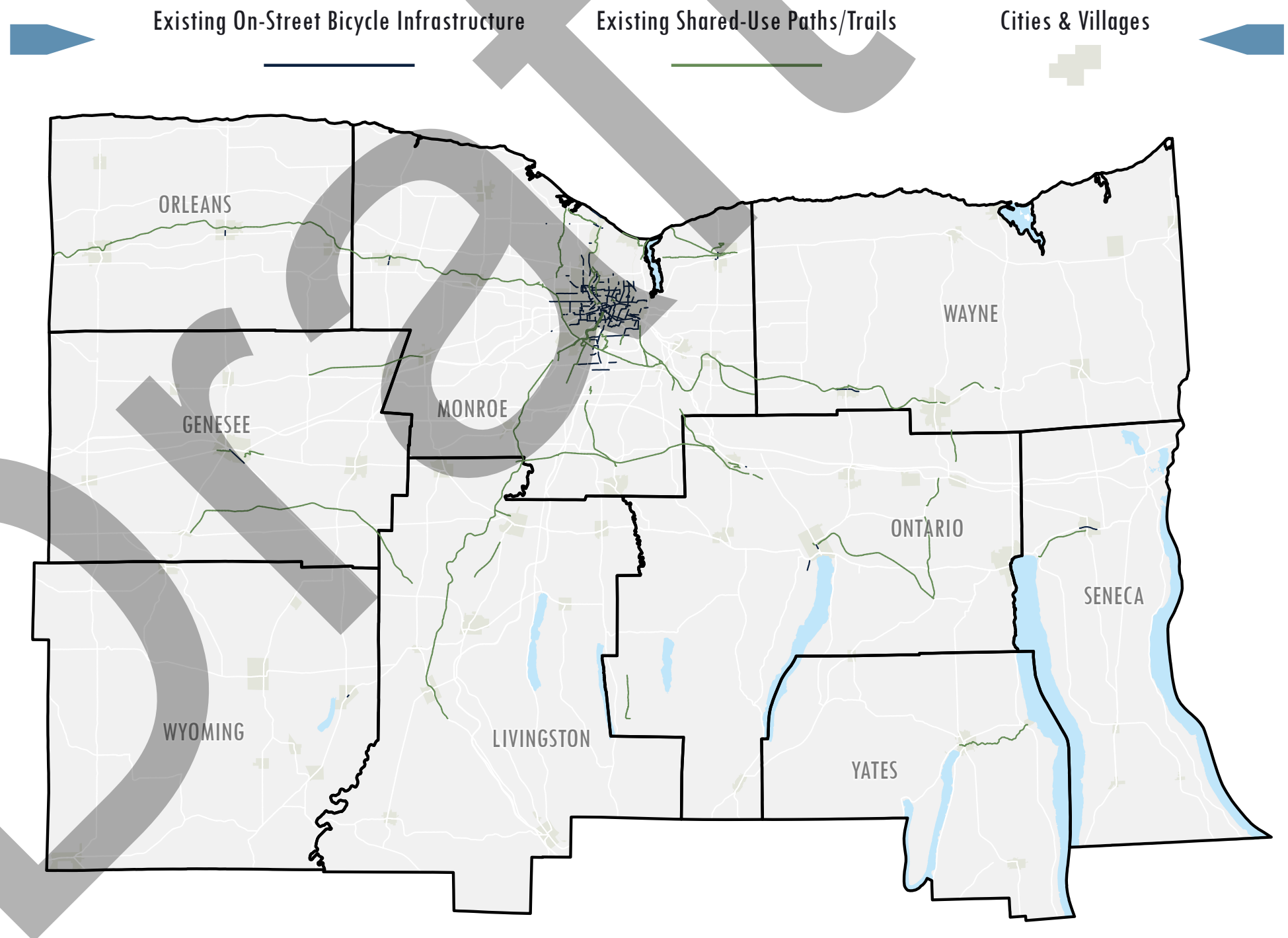


CYCLING IN THE REGION

Cycling as a means of transportation has grown in popularity over the last decade. The region includes over 430 miles of bicycle facilities have helped to accommodate and promote this growth. The region features 108 miles of on-street bike facilities as of 2026, a 25% increase since the last LRTP. Despite this progress, the non-motorized network still has many gaps that present a challenge for resident use and an opportunity for expansion.



The Genesee Valley Greenway is a 90-mile corridor and state park that follows the route of the Genesee Valley Canal and the Pennsylvania Railroad Rochester branch. An ongoing resurfacing project will improve trail conditions from Avon to Chili, further linking regional trail assets.

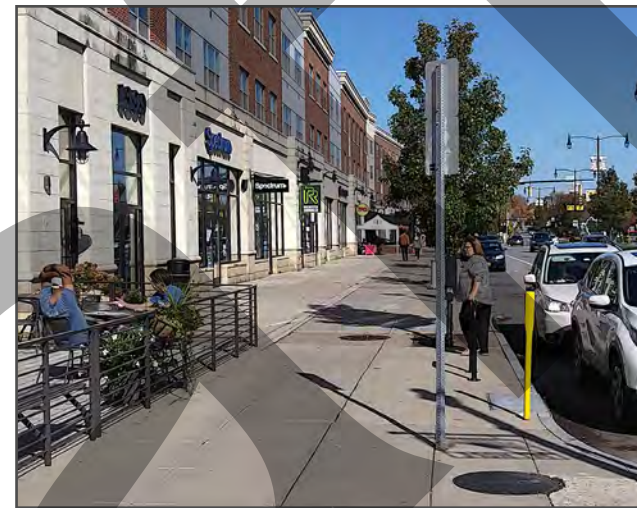


WALKING IN THE REGION

All travelers are pedestrians at some point, whether starting from home, a bus stop, a bike rack, or a parked car. Although cities and mature suburbs typically have better facilities, pedestrians still face challenges because of limited crossing opportunities at interchanges, multi-lane roadways, expressways, and in villages.

As shown in the following pages, hundreds of pedestrians are struck each year by vehicles on or along regional roadways. As such, continued investments in pedestrian-supportive infrastructure remain a critical consideration to improve safety for all roadway users.

Environmental context should be considered when designed and proving safe places to walk. While sidewalks are an important part of the transportation network, not every road requires pedestrian access. Investments should be focused on high demand destinations including schools, workplaces, and business districts. In more rural areas, creative design approaches that utilize alternative walkway surface materials at large roadway setbacks may be preferred.



Rochester's Collegetown integrated many pedestrian friendly elements into its design, making it safer and more inviting to walk despite its location adjacent to a multi-lane state highway.



Desire paths are observed along many high-speed roadways, indicating that there is pedestrian demand despite a lack of safe facilities



The regional trail network enhances opportunities for pedestrian activity, but safety can still be improved at roadway crossings



Many larger intersections have long crossing distances, but lack pedestrian safety measures such as curb cuts and refuge islands

TRAFFIC SAFETY

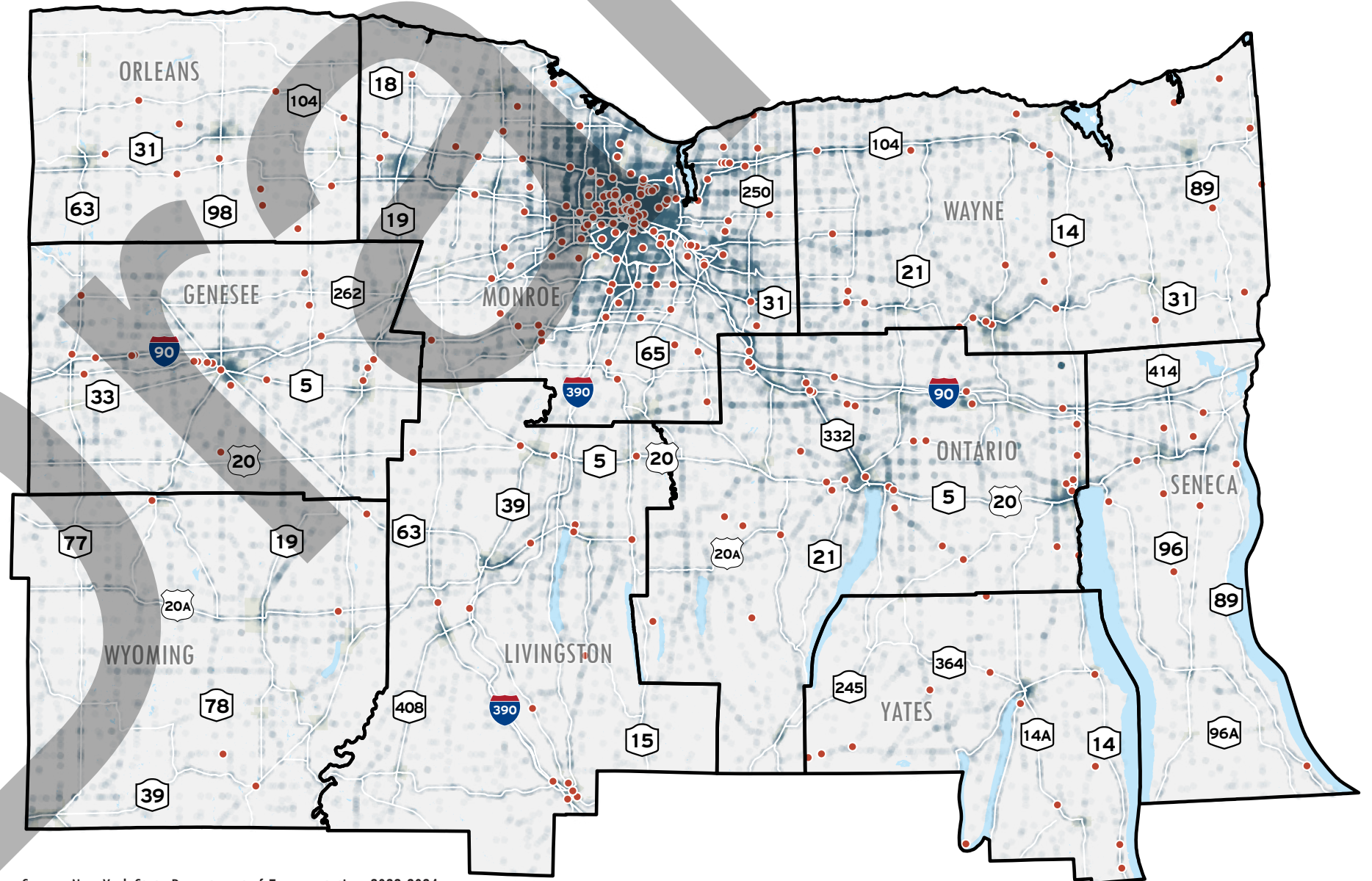
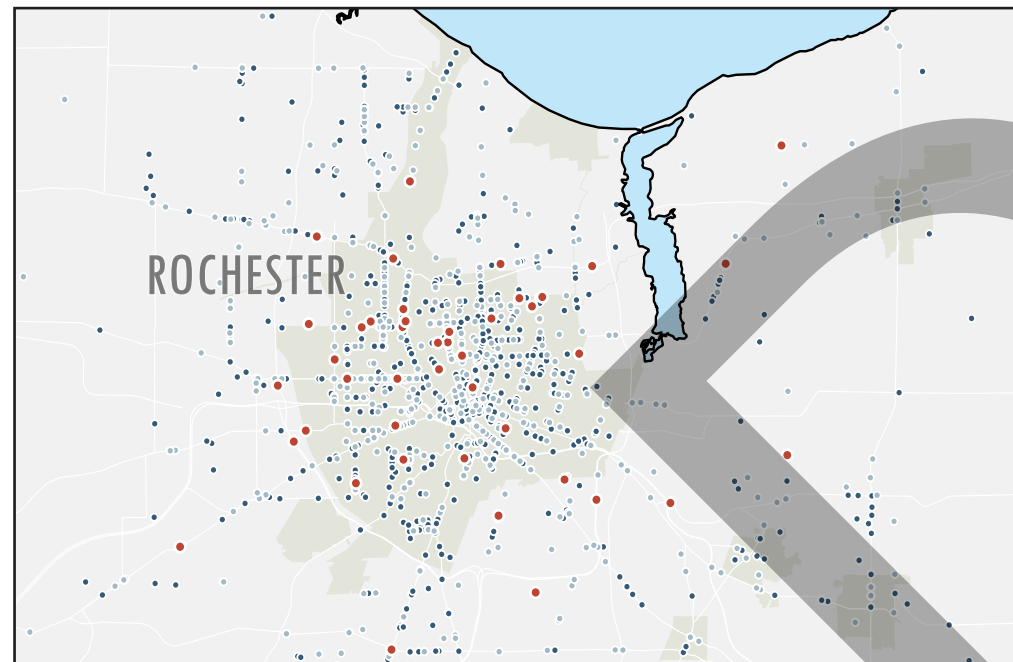
The region experienced 31,312 crashes in 2023. Of these, 7,535 crashes resulted in an injury, 1,073 serious injuries, and 120 fatalities. Collisions resulting in injuries are concentrated along high-volume corridors in regional centers. The greatest concentration of crashes with injury occurs at intersections with limited-access expressways such as State Street at the Inner Loop in Rochester, and Goodman Street at NY Route 104 in the town of Irondequoit.

Motor vehicles struck 428 pedestrians and 238 cyclists during that same calendar year, resulting in 124 serious injuries and 35 fatalities. Collisions with non-motorized users were concentrated in regional centers, the areas that experience the most non-motorized use. 53% percent of cyclist and pedestrian crashes occur in the Cities of Rochester, Batavia, Canandaigua, and Geneva.

Crash with Injury Density

Fatal Collisions

Greater



Collisions with Pedestrians

• Pedestrian/Cyclist Fatalities

Collisions with Cyclists

• Cities & Villages

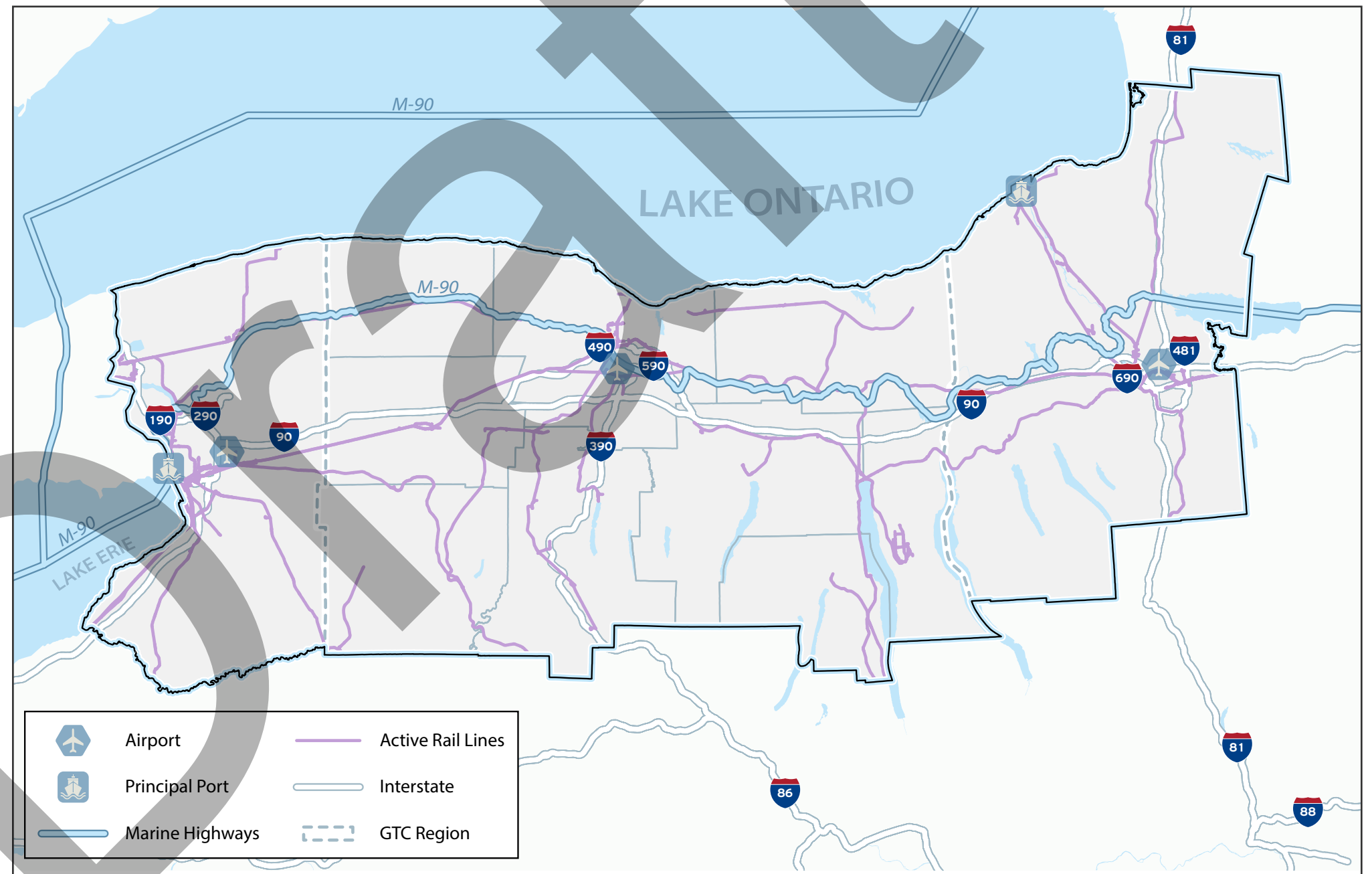
Source: New York State Department of Transportation, 2022-2024

REGIONAL GOODS MOVEMENT

Goods movement through the regional transportation system is an important consideration for GTC as changes in technology, demographics, and modes of transportation are reshaping the way that freight moves in the region. The freight sector is typically the first to embrace changes in technology. Before railroads were trusted to carry passengers, they carried freight. Companies with goods to move have already begun experimenting with autonomous delivery vehicles, utilizing drones for front door delivery, and self-driving trucks for long haul shipments on the interstate system.

The region has always been an important destination or transfer point for freight. Since the early settlements, the Port of Rochester has had role in state and national transportation, and while the mode has shifted, freight movement remains a crucial part of the economy. Today, the dominant modes of freight movement are truck and rail, which reflects trends nationwide.

Over the next twenty-five years, the population of the planning region is expected to remain static, but goods demand and movement are expected to increase significantly. Ensuring the system remains focused on efficiency and maintenance, is expected to remain the primary focus of the region. Capacity improvements are a part of the region's future, particularly with high throughput means of transportation such as rail. These allow minimal land use to bring maximum benefit to the region, capitalizing on investments that can bring the most return.



Regional Freight Network from the Genesee-Finger Lakes Regional Freight Plan Update 2025

REGIONAL GOODS MOVEMENT

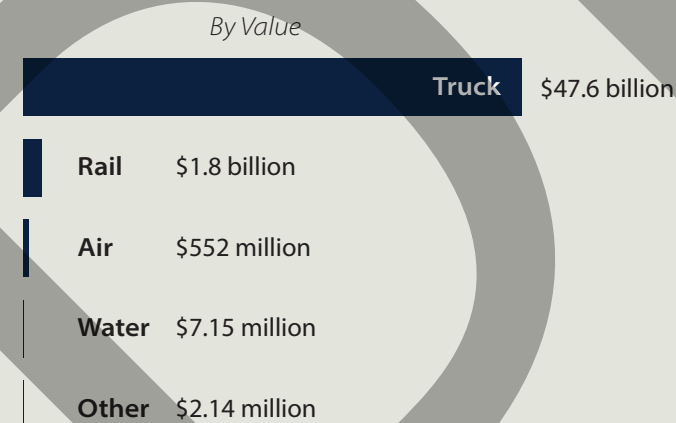
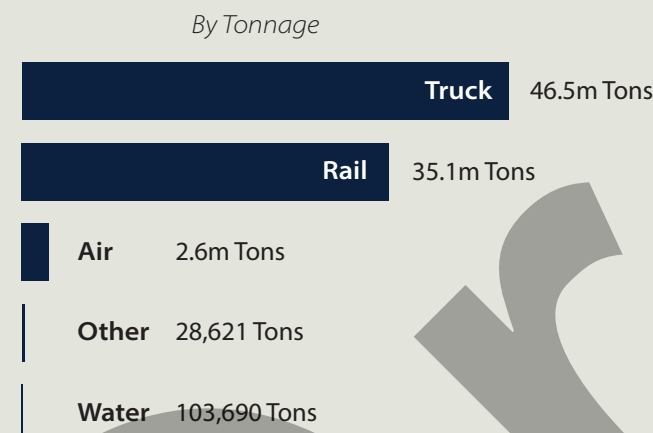
The highway system currently moves the highest value of cargo, but rail, air, and sea all provide an important linkage to the network as well. Both Lake Ontario and the Erie canal see goods movement to and through the region even as the primary use has shifted toward recreation. Rail facilitates goods movement to and from the ports of Syracuse and Buffalo, as well as to local and regional manufacturing centers. The major cargo aviation terminals in Rochester as well as the aforementioned cities also play an important role in providing quick access to goods from across the country.

The transportation network supports all types of goods movement. Pass through freight is the most common freight movement in the region, highlighting the importance of maintaining the interregional transportation network in high traffic areas. The region imports roughly equivalent amounts of goods as it exports in both tonnage and value, with relatively limited intraregional goods movement. This trend is expected to remain similar in the future even as the volume of goods continues to rise.

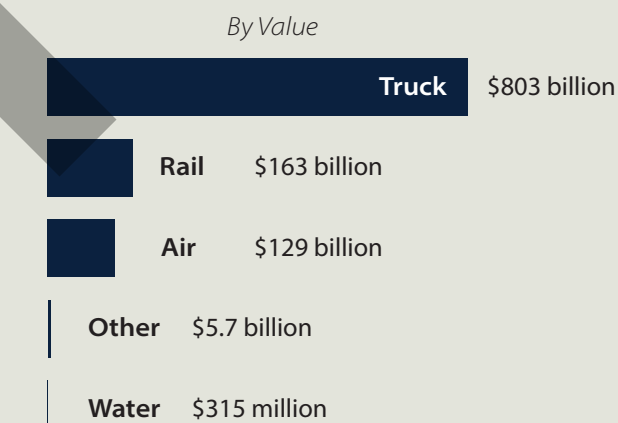
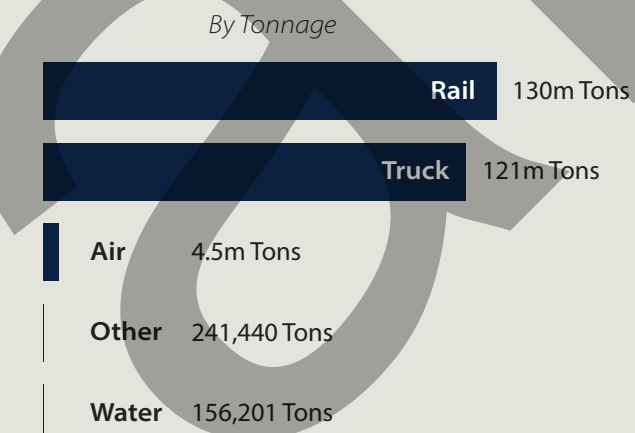


The McKeil Spirit entering the Port of Rochester

Commodity Flow by Mode (2021)

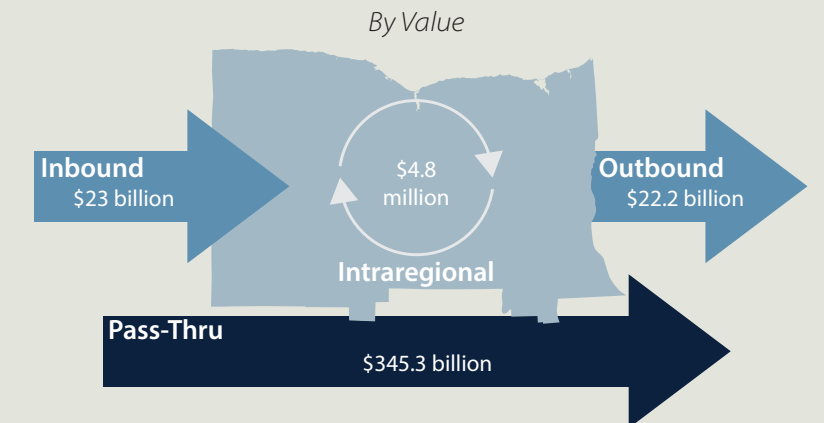
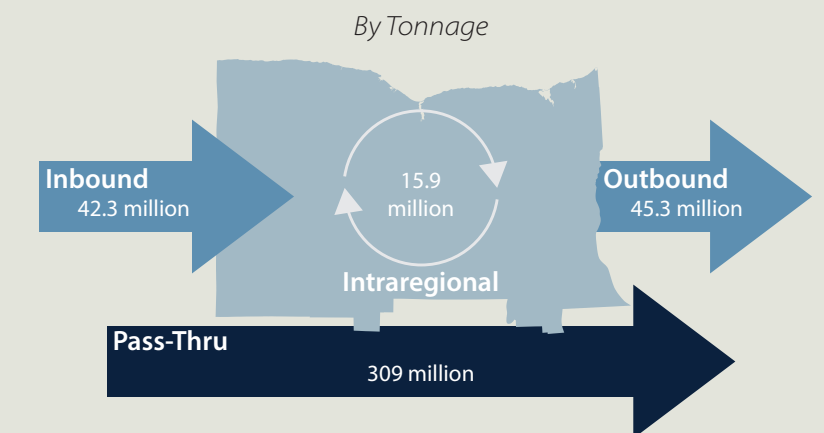


Forecasted Commodity Flow by Mode (2050)



Source: Genesee-Finger Lakes Regional Freight Plan Update, 2025

Forecasted Commodity Flow by Direction (2050)



INTERREGIONAL TRAVEL

Air Travel

The Frederick Douglass/Greater Rochester International Airport (GRIA) is the region's primary commercial passenger and cargo handling airport. The airport serviced over 1.3 million passengers and saw approximately 135,000 tons of freight move through the region.¹³ Through coordination with the state, the airport has undergone a major \$38.1 million renovation to the main terminal focusing on improving passenger experience by updating the ticketing area, renovating the departure lounge, baggage area, and building

of a new canopy and entranceway. Connections to and from the airport can be made through a number of transportation options including shuttle, rideshare, and taxi services as well as the Rochester Transit Systems West Avenue/Airport route.

Passenger Rail Service

Rochester's Louise M. Slaughter station serves as the region's primary rail station and has connections to three major rail lines; The Empire Service (New York to Niagara Falls), the

Lakeshore Limited line (New York City/Boston to Chicago), and the Maple Leaf Line (New York City to Toronto). Amtrak also provides a yearly, seasonal route serving the New York State Fair during its operational period. The station has seen a consistent year-over-year increase in ridership since the pandemic, with 2024 seeing 158,640 passengers traveling through the station representing a 22% increase.

The station is served by a number of public transportation options connecting it to the region and city of Rochester. The terminal is served by Greyhound and New York State Trailways, as well as RTS Routes 2 and 3.

Intercity Bus

Intercity bus services are provided by Greyhound and New York State's Trailways. The bus station is located directly across from the existing Amtrak station. The station has been in this temporary terminal since 2012, with state and local leaders pushing for a permanent location. In addition to the bus terminal, there are three additional stops that Trailways operates from. These stops are located at the Rochester Institute of Technology, the University of Rochester, and Downtown Rochester which is also served by Greyhound. The region was served by Megabus until 2024 when its parent company cut the service due to financial constraints.



Source: governor.ny.gov



Source: trailways.com

TECHNOLOGY

Technology can rapidly change the transportation system overnight. New technology is constantly being developed and deployed to assist people in both choosing and connecting to transportation options. The 2050 Long Range Transportation Plan strives to be aware of recent developments and trends with the intention to carefully shape their influence on the regional built environment through the planning process.

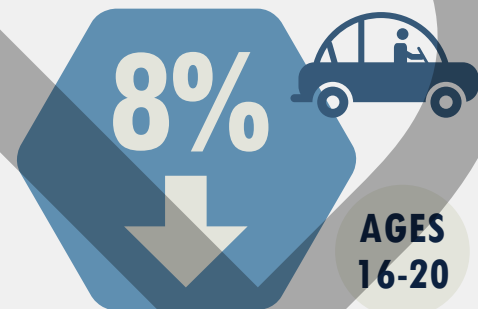
Rochester has seen a significant increase in demand for e-bikes in the last five years. HPOR initially, then Veo have operated e-scooters in Rochester providing cheap and quick mobility options. Veo began operations in Rochester in 2023 and has seen significant ridership in recent years. In 2024, Veo officials stated that 425,000 trips had been made with Veo that year, with 50% of riders not owning a car, and 42% not possessing a driver's license. Micromobility options provide users with a means to work, recreation, and events even without a vehicle.¹⁴

In 2023, GTC, in coordination with the James R. Pond Regional Traffic Operations Center, developed a strategic plan to improve transportation services in the Greater Rochester area. As a part of this plan, recommendations included significant technological improvements including shared data storage, better data analytics tools, and investment in new software to streamline traffic management.

In 2024, RTS celebrated bringing the first hydrogen powered buses to New York as a part of the organization's goal to achieve a zero emissions fleet by 2040. These new buses provide an alternative electric fuel source that requires far less down time than traditional electric buses, allowing for greater accessibility and running time for the fleet as the organization continues to pursue this electricity type.

GENERATIONAL PREFERENCES

65.4% of Gen Z teens (aged 16–20) had a driver's license in 2017. This is 8.3% and 8.1% lower than in 2001 and 2009. This decrease is attributed to a generational shift in attitudes and cultural changes.



Sources: Wang, 2024

SHARED MOBILITY

Ride share systems make vehicles readily available while reducing the need for ownership. In 2024, Veo riders in Rochester took more than 425,000 trips, using their public use e-bikes and e-scooters.



According to a 2025 survey of riders:

- 63% agreed that shared mobility makes it easier to live in the Rochester
- 45% agreed that shared mobility helps them support local business more often
- 61% don't have access to a car
- 48% don't have a drivers license
- 78% said they were able to decrease car travel because of shared mobility
- 52% said they had used shared mobility to connect to public transportation within the past week

Source: cityofrochester.gov

SECURITY AND RESILIENCE

Safeguarding transportation infrastructure from hazards is a key concern of federal, state, and local transportation agencies. Preventing and mitigating both natural and human-caused hazards not only protects transportation infrastructure but also safeguards the lives and property of the traveling public.

Security refers to the reduction of risk to transportation assets from hazard impacts. Resiliency refers to the ability to prepare for, withstand, and rapidly recover from hazard events. Strengthening an asset's resilience to hazard impacts improves the security of both

that asset as well as the entire transportation system.

Related concepts that inform the discussion of security and resiliency include adaptation and mitigation. Adaptation refers to the process of preparing transportation assets to withstand and recover from hazard impacts. This can also be referred to as resilience. Mitigation refers to the process of reducing hazard occurrence and minimizing the severity of hazard events that do occur.

Consideration of the security and resiliency benefits of transportation programs and projects is important for several reasons. It helps improve the transportation system's ability to withstand hazard impacts and minimizes travel disruption. It addresses anticipated impacts on transportation infrastructure. Lastly, it protects the public and private investments in transportation assets.

Regional Hazard Impacts

The Genesee-Finger Lakes Region has less exposure to potentially devastating hazards, such as earthquakes, tornadoes, hurricanes, and volcanoes, than many other parts of the country. However, the region is vulnerable to flooding, severe winter storms and ice storms, and high wind events. In the past, these hazards have damaged transportation assets by inundating roads and bridges, blocked roads by knocking down trees and powerlines, and caused widespread power outages that darkened streetlights and traffic signals. The Genesee-Finger Lakes Regional Critical Transportation Infrastructure Vulnerability Assessment, completed in 2016, assessed the vulnerabilities of critical transportation assets and identified potential actions to mitigate hazard impacts.

COUNTERMEASURES

Countermeasures to strengthen transportation system and asset resiliency can be grouped into one of the following four categories:

Prevention – Actions to stop hazardous events from occurring.

Protection – Actions to minimize exposure to hazard events and reduce damage impacts from hazard events that occur.

Redundancy – Actions to prevent the catastrophic failure of systems and assets from a hazard event. "Micro-scale" countermeasures are asset specific while "macro-scale" countermeasures are system wide.

Recovery – Actions to restore systems and assets to pre-hazard operating condition. Short-term actions include the event, while long-term actions include restoration of disrupted services and the reconstruction of damaged assets.



In 2017, a temporary dam was erected along NYS Route 404 (Empire Boulevard) at the southern end of Irondequoit Bay to protect the road from high water levels

CONGESTION MANAGEMENT

In regions containing a Transportation Management Area, MPOs are required to develop and periodically update a Congestion Management Process (CMP). The purpose of the process is to integrate congestion management strategies with broader transportation planning policies.

Congestion management mitigates the adverse impacts of travel delay on the movement of people and goods. Excessive delays have adverse safety, environmental, and economic impacts, causing increases in travel times, fuel consumption, vehicle emissions, and emergency response times, as well as lost productivity.

The GTC congestion management process identifies the location and causes of traffic congestion within the Greater Rochester Area and informs regional policies aimed at improving the mobility of people and goods. These policies emphasize corridor-level and region-wide solutions to mitigate the impacts of delay and promote greater travel time reliability.

Delay Categories

Travel delays fall into one of the following three categories:

Recurring Capacity-Related Delay – Caused by predictable daily, weekly, or seasonal increases in demand for space that exceeds available capacity. Examples include

daily commuter traffic during morning and evening peak periods and seasonal traffic patterns such as increased demand for access to commercial centers during the holiday shopping season.

Planned Event-Related Delay – Caused by planned events such as construction work and special events including concerts, festivals, and sports games in major venues that place a greater than normal demand for access to those venues.

Non-Recurring Incident-Related Delay – Caused by traffic incidents that block travel lanes or cause road closures. Incident-related delay may range from a few minutes for a minor crash to a long-term road or bridge closure resulting from a major commercial vehicle crash, such as a hazardous material spill.

The impacts of travel delays are often broadly similar regardless of category; however, each of the three types of delay has different causes. Strategies aimed at reducing congestion caused by one type may not be appropriate for managing congestion caused by other types

Reliability

Travel time reliability is a measure of the amount of congestion users of the transportation system experience at a given place and time. A reliable system, road, or

route ensures travel times are consistent for the same operating conditions and throughout the year.

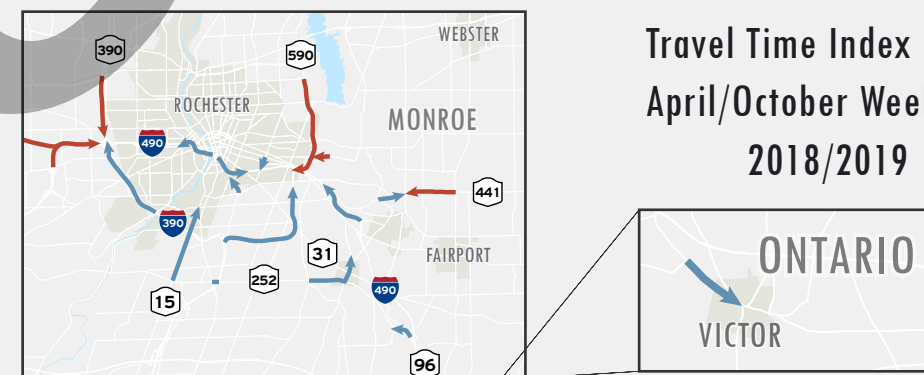
Reliable travel time is important for commuters, freight carriers, recreational travelers, delivery and courier services, for-hire vehicles, and other transportation system users because it provides them with a degree of certainty regarding the length of time a trip will take. This allows them to factor travel times into their schedules and know that, on a given road at given times, they will be able to reach their

destination within a specified timeframe.

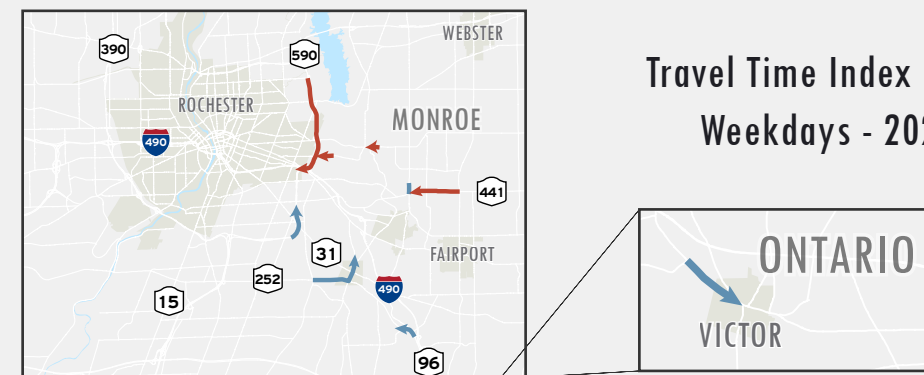
Over the last five years, congestion in the region has significantly decreased. In the graphs below, you can see traffic around Rochester during peak hours has fallen significantly. Please note that the graphs use a different scale, with the 2018/2019 graph showing at travel time index of 2.0 and the 2024 map showing a travel time index of 1.7. Were they to use the same scale, the 2024 index would show next to no data.

Congested Road Segments - Change 2018 to 2024

← AM Peak (7-9AM)
← PM Peak (4-6PM)



Travel Time Index \geq 2.0
April/October Weekdays
2018/2019



Travel Time Index \geq 1.7
Weekdays - 2024

A Travel Time Index of 2.0 or greater indicates corridor travel time is two or more times longer than during free-flow conditions. Source: INRIX © 2024

TRANSPORTATION SYSTEMS MANAGEMENT & OPERATIONS

TSMO is an integrated program to optimize transportation system performance through interagency coordination initiatives to improve safety, efficiency, and reliability for all modes of transportation. TSMO-supportive initiatives can be grouped into one or more of the following categories:

Technology – Intelligent transportation systems (see the ITS Call-Out Box) provide the technical tools needed to manage and operate transportation assets.

Coordination – Multi-modal and multi-jurisdictional interagency coordination initiatives that maximize the efficiency of ITS operations and service delivery.

Demand – Real-time travel information is provided to help motorists, transit passengers, freight carriers, and others make informed decisions about where, when, and how to use regional transportation system.

TSMO programs and projects in the Technology and Coordination categories address supply



The James R Pond Regional Traffic Operations Center (RTOC) provides critical TSMO coordination for the region.

(i.e., management and operations) while the demand category addresses use (i.e., community expectations for system use).

Initiatives in all three categories are implemented in accordance with recommendations in the Genesee-Finger Lakes Regional Transportation System Management and Operations (TSMO) Strategic Plan, which established the strategic direction for regional TSMO initiatives and ITS deployments.

TSMO Benefits

Benefits of TSMO initiatives can be grouped into one or more of the following categories:

Increased Safety – TSMO enables enhanced incident detection, verification, response, and clearance; vehicle technologies are designed to prevent crashes from occurring and minimizing the severity of those that happen.

Improved Mobility – TSMO emphasizes a multimodal approach to improving travel time reliability, including both proactive actions taken to minimize traffic congestion and delay as well as dynamic, real-time responses to problems that occur.

Reduced Costs – By enabling predictable and consistent travel time and fuel consumption for people and freight.

Regional Traffic Operations Center

In the Genesee-Finger Lakes Region, TSMO-supportive technologies and services are managed from the James R. Pond Regional Traffic Operations Center (RTOC). Opened in 2002, the RTOC houses personnel from four separate organizations including Monroe County DOT, NYSDOT, New York State Police, and Monroe County Airport Authority. By collocating personnel from these agencies in the same facility, the RTOC facilitates effective interagency coordination and collaboration. RTOC personnel actively manage the transportation system by using ITS field instrumentation, which are linked to the RTOC through an extensive fiber-optic and wireless communications network, to respond to crashes, traffic congestion, weather conditions, and other situations as they occur.

Rochester-Genesee Regional Intelligent Transportation Systems Architecture

Metropolitan areas that use federal funds to implement ITS projects are required to develop and maintain Regional ITS Architecture (RITSA). The RITSA is a framework that documents the institutional agreements and technical integration needed to operate ITS. It identifies what organizations are involved in ITS, what systems are operated, what functions those systems perform, how those systems and their specific ITS components communicate with each other, and what information is exchanged.

INTELLIGENT TRANSPORTATION SYSTEMS (ITS)

Current ITS deployments and services in the Genesee-Finger Lakes Region include:

511NY – A real-time information service regarding traffic conditions as well as trip planning resources.

Automatic Vehicle Location technology enables real-time operations monitoring and efficient dispatch of response vehicles.

Traffic Cameras provide real-time images of road conditions.

Coordinated Traffic Signal Operations enables operators to adjust signal timing in response to incidents, special events, and adverse weather.

Dynamic Message Signs display travel times and alerts about road conditions, congestion, closures, and detours.

Road Weather Information Stations provide system operators with weather data to make informed decisions about optimal road management during inclement weather.

System Sensors detect congested conditions by monitoring the percentage of time a lane is occupied by vehicles.

Payment infrastructure is now in place to allow RTS customers to pay fares with debit and credit cards, as well as Apple and Google pay.¹⁵



EMERGING ISSUES AND OPPORTUNITIES

Identification of Emerging Issues and Opportunities was first incorporated into the GTC long range planning process in 2011. With each subsequent LRTP they have been revised and refined. The region has limited financial responses, both in planning for the future of the transportation system and for capital improvements. The identified Emerging Issues and Opportunities guide the MPO's program activities along with the distribution of the planning and capital funds.

The time horizon of the LRTP covers the next twenty-five years. Planning for the future is full of uncertainty and the identification of these issues and opportunities is meant to recognize and embrace this uncertainty. The 2020 pandemic remains fresh on the mind as the long-term impacts of the disease continue to unfold. Daily life has become altered in many ways, including the rise of remote work, changes in business hours, and the ways people interact with the transportation system broadly. As such, public input has been a critical part of the LRTP and is included in this section.

The 2050 LRTP includes the new category Transportation/Housing Connection which highlights the direct link between people and their movement. Transportation connects people

where they are to where they want to be and how they get there. Critically, as transportation means shift, and as demographics change, ensuring that the land use of the region supports multiple types of movement allows for a more comprehensive transportation fabric.

Coordination with other agencies will be critical for seeing change in this area as the GTC cannot directly affect land use planning on its own. Partnerships with localities will be essential, and with coordination on similar projects such as Inner Loop East, the GTC is in a good position.

While the MPO cannot plan for all unforeseen events or changes of the next several decades, we can plan for the certainties that we are aware of. A second strategy the GTC has continued to pursue is that of strategic divestment. Bridges have a defined lifetime from the moment they are completed, with the average being seventy years, with repairs typically happening even before thirty-five years have passed. The average useful life of a road is only fifteen years before major maintenance is required. The consequences of construction will be with the region for generations. It is our responsibility to stewards of the transportation system to ensure that future generations will not be burdened with decisions made today.

WHAT WE HEARD

Over the course of 2025, eight listening and public engagement sessions were held throughout the GTC planning area to receive public input on the five categories of recommendations. Staff were on hand to answer questions regarding plan development and the transportation system.

The survey focused on gauging public opinion regarding transportation issues and opportunities facing the region over the next twenty-five years. There was a high level of demand for more bicycle facilities and more efficient public transportation. Residents in Monroe County in particular saw this as their primary concern. These community members were also interested in decreasing the number of personal vehicles in dense urban areas due to the increased traffic they can cause. In rural communities, primary concerns were centered in the sidewalk system and interregional travel. This highlights the need for improved system access for those lacking personal vehicles. For these residents, access to jobs, recreational, and support for the tourism industry represent the main reasons for their concerns.

Residents also raised concerns for continued electric vehicle support and infrastructure as well as insulating the region's transportation network from environmental hazards. Safety concerns also represented a large percentage of feedback, with desires for more speed control measures such as speedbumps, complete streets design, and better road crossings.

JOIN US! Represent your community by attending your local Transportation Listening Session

Register for the Transportation Listening Session in your County. See dates below for both IN PERSON & VIRTUAL meeting dates:

MONROE COUNTY Henrietta Public Library July 8 th 4:30-6:00 pm 652 Calkins Rd. Rochester Or Virtually... July 10 th 4:00-5:30 pm	ONTARIO & WAYNE COUNTY Canandaigua Wood Library July 17 th 4:30-6:00 pm 134 N Main St. Canandaigua Or Virtually... July 15 th 4:00-5:30 pm	ORLEANS & GENESEE COUNTY Genesee County Building 2 July 22 nd 4:30-6:00 pm 3837 West Main Street Rd. Batavia Or Virtually... July 24 th 4:00-5:30 pm
YATES & SENECA COUNTY Yates County Building August 5 th 4:30-6:00 pm 417 Liberty St. Penn Yan Or Virtually... August 7 th 4:00-5:30 pm	WYOMING & LIVINGSTON COUNTY Government Center August 12 th 4:00-5:30 pm 6 Court Street Genesee Or Virtually... August 14 th 4:00-5:30 pm	Questions? Email us at: listening@publicinput.com Or, Tyler Carey (G/PLRPC) at: tcarey@glrpc.org

Scan to Register OR VISIT: publicinput.com/listeningsessions

GTC Genesee Transportation Council



Are there other factors that you think will impact the transportation system in the region over the next 25 years?



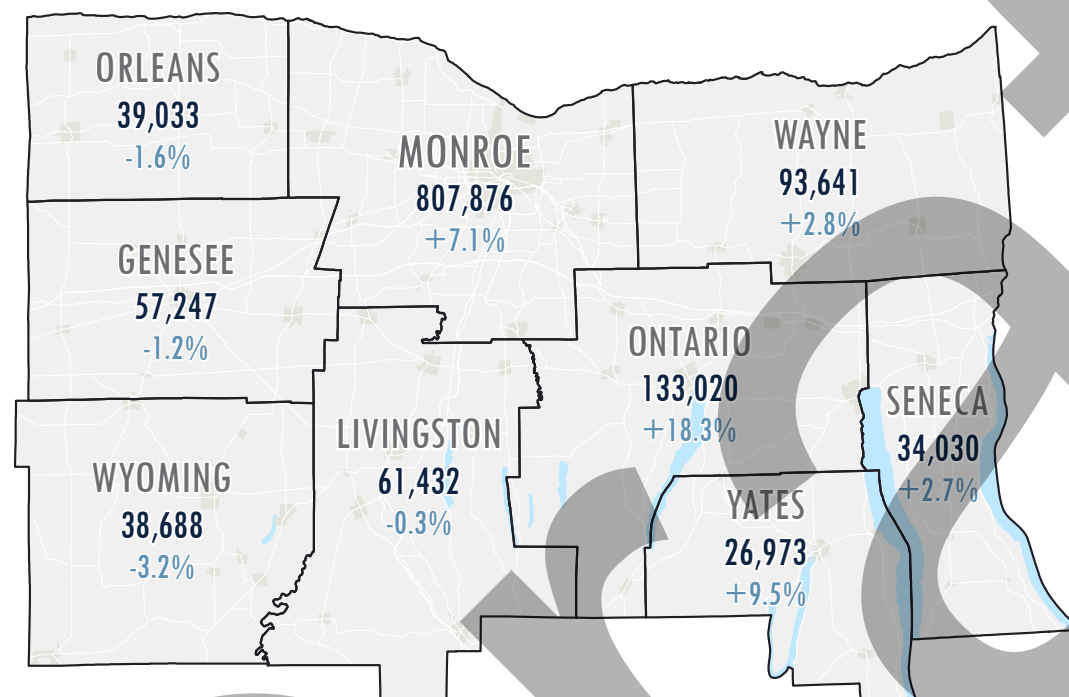
“There’s places that need improvement, but we’ve got a great place here, and now it’s just making it all work.”

DEMOGRAPHIC PROJECTIONS*

*Demographic projections are based on preliminary data. These numbers will be updated to reflect the projections when the final data is available.

Since the 1970s, the region has experienced approximately two percent growth per decade. The region is expected to grow slightly over the course of the next twenty-five years, with projections forecasting roughly a net 60,000 residents to come to the region. This growth will be concentrated in Monroe and Ontario counties due to the major metropolitan hub of Rochester, New York. All other counties will remain at largely the same population or decline.

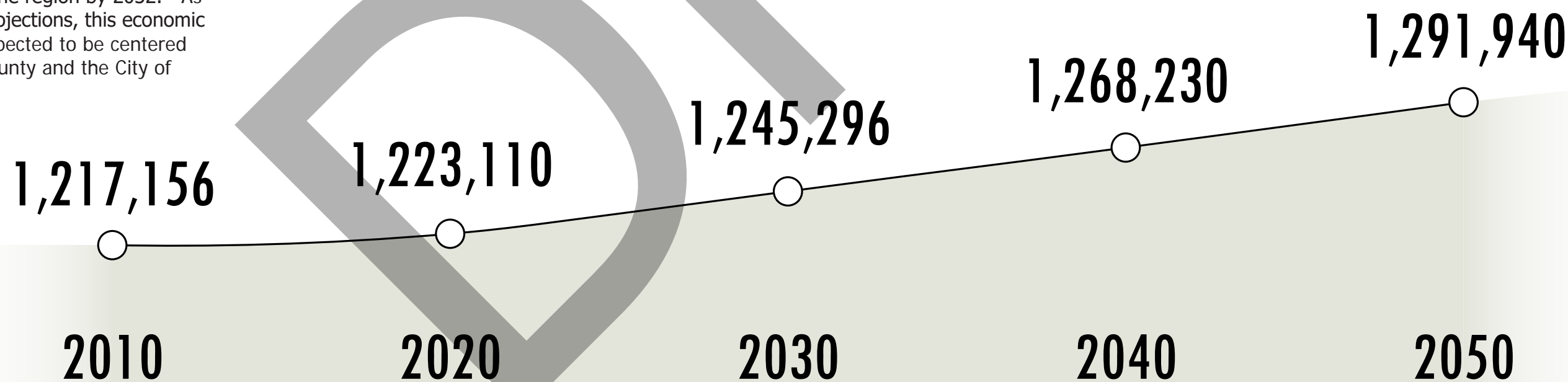
According to the Bureau of Labor Statistics Quarterly Census of Employment and Wages, the region is home to 31,365 businesses employing 546,000 workers. The Finger Lakes region is expected to see continued growth into the future, with New York's Department of Labor projecting an additional 60,000 jobs to be available in the region by 2032.¹⁶ As with population projections, this economic development is expected to be centered around Monroe County and the City of Rochester.



Sources: Genesee Finger Lakes Regional Planning Council Population Projection Report, 2025



Sources: democratandchronicle.com



Sources: Genesee Finger Lakes Regional Planning Council Population Projection Report, 2025

TRANSPORTATION AND PUBLIC HEALTH

While transportation is an economic and social factor that influences both personal and community health, health has not typically been considered in transportation planning to the same extent as physical safety and air quality. Transportation is more than simply conveyance. Transportation systems provide access to goods and services, most critically healthy food options and health care facilities. Individual mobility is linked directly to quality of life of an individual and their family as well as economic development of a community.

While safety and air quality remain prominent links between transportation and health, the impact of the prevailing transportation system on physical activity has emerged as a third major focus of policy makers. Physical inactivity contributes directly to obesity, a condition affecting almost one third of New Yorkers.¹⁷ This condition causes elevated risk of heart disease, diabetes, stroke, hypertension, and some forms of cancer among other diseases. Active transportation infrastructure creates transportation options that can contribute greatly to incidental physical activity by making opportunities for walking and bicycling safe and convenient. Well-designed and maintained pedestrian and bicycle facilities, including roadway crossings, encourage daily physical activity. Additionally, strong public transit systems encourage physical activity as most riders walk to and from transit stops.

Agencies and municipalities that are prepared to implement options that promote and prioritize physical activity in transportation will benefit by preventing avoidable diseases, injury due to modal conflicts, and environmental

degradation while stimulating local economic activity by ensuring access to goods and services for all users.

TRANSPORTATION/HOUSING CONNECTION

Transportation and land use go hand in hand. Where people live impacts where they travel, when they leave their homes, and how long they are on the road. From a transportation planning standpoint, certain levels of density mean that different public transportation methods become viable. For buses, numbers vary between six to eight to as high as fifteen people per square acre to support a fixed route, but with higher density comes greater ridership, and thus greater access to economic amenities that high densities drive. Therefore, to maximize transportation investment, smart land use focusing on ensuring a strong population base remains critical.

Transit Oriented Development (TOD) has become a common theme in discussions surrounding land-use and transportation. TOD focuses on creating dense neighborhoods centered around effective public transit, often light rail or bus rapid transit to encourage development of businesses and housing.¹⁸ The FTA's TOD projects have seen successful promotion of affordable housing, increased investment in the areas surrounding transportation infrastructure, increased ridership, and decreased congestion in traffic near the development. Providing opportunities for employment and shopping near effective transportation alternatives decreases the negative impacts that a new development can often bring on a community and can serve as a more sustainable way to expand infrastructure in the region.

In-fill development can provide significant benefits as well that further increase the connectivity and effectiveness of infrastructure in a region. In-fill development is the process of revitalizing, constructing, or filling in of previously vacant or underutilized lots in an urban area with development already supported by infrastructure. An EPA study found that in-fill developments in Denver could reduce congestion by 8% and emissions by 4%. A similar development in Charlotte could improve transportation ridership by 6,000 trips per day.¹⁹

IMPACTS OF EXTREME WEATHER

Transportation infrastructure and services are vulnerable to extreme weather and natural hazards, which can damage transportation assets and disrupt services, threaten public safety, and cause economic loss. New York State is experiencing increased events with an economic cost of over \$1 billion.²⁰ In 2024 alone, just ten disasters caused over \$50 billion in damage.

This increased frequency in extreme weather requires the transportation system to change to ensure that critical disaster response services are not disrupted. A more resilient infrastructure has remained, and will continue to be, essential to high-quality infrastructure. Physical improvements, maintenance, and new construction should consider their vulnerabilities to disruptive events and adjust plans accordingly. Low-lying roads and facilities like highway garages vulnerable to flooding can be elevated or relocated to reduce flood risk. Bridges and culverts can be raised and enlarged to increase the volume of water that can pass underneath them. Stormwater

gardens, permeable pavements, and stormwater drains can significantly increase the water storage capacity along roads. Many of these solutions can be implemented as a part of reconstruction or rehabilitation projects.

In addition to safeguarding lives and property, adapting infrastructure to withstand hazard impacts protects public investments. There is substantial cost associated with building, operating, maintaining, and repairing transportation assets including roads, bridges, culverts, sidewalks, and support facilities such as highway garages, or salt sheds. Likewise, managing transit vehicles, other public fleets, and roadside infrastructure such as traffic signals, lighting, and signage, and protecting these assets from hazards is a crucial means of securing the community's investments. During the lifetime of this plan, agencies responsible for managing transportation infrastructure are anticipated to increase their efforts to redesign and operate that infrastructure in ways that maximize public investments and minimize the impacts of potential hazards.

UNFORSEEN SYSTEM DISRUPTIONS

The COVID-19 pandemic had a massive disruptive effect on regional transportation activity that continues to be felt to this day. While many of the immediate economic impacts have dissipated, the region still has not recovered from the sharp decline in ridership and continues to adjust to changes in workplace. The next event causing large scale disruptions may not be a pandemic but understanding the effects this event had provides for opportunities to better shape a response in the next event. Public transportation remains one of the least

common means of transportation to work for people on a given day, and driving, either in a carpool or alone, remains far and away the most common. However, despite the greater than 80% of population of the region that drives to work, a sharp rise in telework has led to a decrease in congestion on the road system overall. No major roadway segment in the region has a travel time index of greater than 2.0, meaning no trip takes twice as long as it should on a given part of the road.²¹

Major congestion causes on the roads today center around are signal caused delay and hazard events such as vehicle accidents.²²

STRATEGIC DIVESTMENT

Asset management efforts aim to keep existing infrastructure in a state of good repair. In a fiscally constrained environment, agencies must be open to non-traditional approaches to transportation improvements. In areas where populations are projected to remain stagnant or slightly rise, maintaining infrastructure designed for rapid growth creates an unnecessary financial burden and an excess maintenance need.

Strategic divestment is the deliberate process of reducing the maintenance burden from the transportation network caused by oversized infrastructure. This can take several forms, such as bridge removal, reduction in asset capacity such as reducing lane counts on a road or replacing an asset with a simplified design such as transforming an overpass into an at-grade intersection.

Rightsizing transportation infrastructure requires careful consideration. The regional transportation system must be able to meet current and future needs. That said there is a

real benefit in reducing the burden of overly large infrastructure both in real monetary value and in the opportunity cost in land use they present. These decisions are not made lightly. We rely on the insights of our partner agencies, and local officials, to ensure that transportation infrastructure is the right size for the community.

In areas with aging infrastructure, the typical course of action is simply to reconstruct to previous facility capacity with modern standards. When regional infrastructure is near the end of its expected life, agencies across the region are responsible for revisiting past the decision making process around the transportation system to ensure that the network fits the changing environment. Some recent examples of strategic divestment projects implemented within the region include:

- The transformation of Inner Loop North, currently underway in the planning phase by the city of Rochester.
- Recommended downsizing of the interchange between New York Routes 96 and 14 north of Geneva.
- The City Center Interchange study along Interstate 490.

Strategic divestment looks to balance the costs and benefits of developing and maintaining infrastructure. Infrastructure has historically prioritized auto-based transportation with high growth models. The Genesee-Finger Lakes Region's population has not risen to meet the capacity its large-scale infrastructure was designed for. Rather than continuing to maintain expensive infrastructure, alternative means of transportation such as public and active transportation can provide viable

alternatives to meet capacity. This shift in capacity can include bus and bike lanes, sidewalks, and more developable land.

The GTC continues to support the redevelopment and reconfiguration of overbuilt assets to ensure that they are the right size for the projected use. In the case of the Route 96/14 interchange, the average AADT is an order of magnitude lower than the expected number for an interchange of this size. Rather than continuing to occupy a large section of valuable land, redevelopment can provide the opportunity not just for decreased maintenance cost, but also open new land for industrial or commercial development to continue the economic growth of the region.

EXPANSION OF ALTERNATIVE FUELS

Alternative fuels are vehicle fuels derived from entirely or partially from non-petroleum sources. They include, but are not limited to, electricity, compressed natural gas, liquified natural gas, hydrogen, propane, methanol, and biofuels such as biodiesel. Alternative Fuel Vehicles (AFV) are vehicles that operate on alternative fuels either exclusively or on a combination of alternative and conventional fuels.

The main environmental benefit of alternative fuels is that they generate little to no air pollution, which is particularly important for maintaining National Ambient Air Quality Standards. Reduced vehicle emissions contribute to better air quality for the region, improving both the natural environment and public health. In addition, domestic production of alternative fuels contributes to national economic growth and energy security by

promoting investments in manufacturing, technology innovations, and workforce development while reducing national economic vulnerability to geopolitical instability.

Federal and state funding has been provided for improving access for alternative fuel vehicles. In 2021, the Infrastructure Investment and Jobs Act (IIJA) was passed and continues to provide for the authorization of alternative fuel programs. These programs include, but are not limited to, the Carbon Reduction Program, Community Alternative Fuel Infrastructure Grants, and the Congestion Mitigation and Air Quality Improvement Program.²³ New York State has also provided an increased focus on electric vehicle incentives and infrastructure through the Drive Clean Rebate and the Alternative and Electric Vehicle Recharging Property Credit, both providing thousands of dollars to support consumer and business electric vehicle adoption.^{24,25}

Electricity is the most popular and rapidly growing fuel source. There has been extensive public and private construction of electric vehicle charging stations throughout the region, with over 500 private and public charging stations at gas stations, local businesses, hotels, parking garages, and many other locations.²⁶

Fleet electrification continues in the region, with RTS continuing to pursue its goal of a 100% zero-emission fleet by 2040. Currently, RTS operates twenty plug-in electric buses within the Rochester area. RTS has also pursued the purchase of twelve hydrogen cell buses, which were unveiled in late summer 2024.²⁷ The expansion of alternative fuel use and availability, especially for electric vehicles, is expected to continue during the lifetime of this plan.

Currently, over 250,000 Electric Vehicles are registered in New York State, representing 8% of new registrations in 2025, nearly five times the amount registered in 2020.

There are 20,000 Electric Vehicles on the road in the GTC area, representing 1.5% of all vehicles.²⁸

EMERGING TECHNOLOGIES

As technology advances, its transportation applications continue to shape movement in the region. While not every technology below is present in the region in large numbers, each has the potential to impact the area soon as they become increasingly present in the nation.

Autonomous Vehicles on Traffic Operations and Regional Travel Patterns

Autonomous vehicles are already on the roads even in the region. These vehicles are primarily limited to passenger taxi services operated by companies such as Waymo. Waymo currently operates in cities such as Austin and Los Angeles, but currently is running testing in Geneva.^{29,30} While these technologies may be the cutting edge of automated vehicles many features of automation are already present in consumer vehicles. For instance, forward warning systems in modern car models have reduced rear-end collisions by 44-59%.³¹ These warning systems are becoming increasingly common in consumer vehicles, even as fully automated vehicles remain only operational in certain areas.

Freight automation remains elusive, with the only currently operational automated freight route in West Texas. Operated by Atlas Energy Solutions, the Kodiak Robotics trucks operate

completely autonomously on non-public roads.³² While this technology remains out of reach at the moment, within the scope of the LRTP 2050, this technology has the potential to revolutionize freight movement within the United States.

Development in the freight sector can provide an answer to a growing problem in America, a shortage of commercial driver's license holders. An estimate by the Trucking Association of New York puts the nationwide shortage of CDL drivers in the country at over 80,000.³³ Autonomous vehicles may provide an answer to this problem without increasing costs of freight movement as availability of CDL's become scarcer.

Mobility as a Service

Mobility as a Service (MaaS) platforms integrate all aspects of travel by any mode into a single digital trip planning application. A traveler is presented with a complete route and mode option information along with pricing in real time. Booking, payments, and ticketing related to any transportation service are streamlined. The user may choose to subscribe to a payment plan that allows unlimited use of certain services for a period or a refillable pay-as-you-go option.

This technology, once theoretical, is now a reality with the Rochester Transit System. RTS Partnered with the company Transit to provide real time bus route information, service updates, payment, connections, and travel time information all within a single app for all routes operated by the service. This service significantly improves the rider's experience and provides a level of information that was unheard of even a decade ago.

While this technology remains limited, with not

every transit provider in the region operating this service, accessible information provides significant customer experience improvement. Coordination between and across transit providers in the region through both public and private transit providers would improve the system beyond the existing level.

E-Commerce

While automation may change the face of freight movement, e-commerce is equally shaping the way American's receive their goods and how travelers' shop. E-commerce is the sale of goods and services sold on the internet. It has seen a rapid rise in popularity in the last decade through companies like Amazon and Walmart. 2024 saw over 20% of all transactions taking place online, which compared to 2019, represents a 7% increase.³⁴ Total e-commerce sales in the United States represents a nearly \$2 trillion dollar industry.

Increased reliance on e-commerce also means changes in land use and transportation patterns. Brick and mortar retail becomes less relevant as warehousing and distribution centers become more relevant. Increased consumer demand coupled with disruptive technologies will continue to alter traditionally held assumptions regarding retail and freight services. Municipalities in the region need to be cognizant of these changes as they update zoning codes and review traffic impact studies.

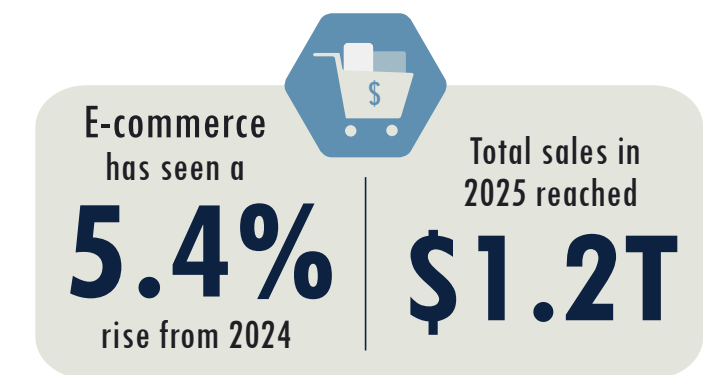
Investigate Potential AI Applications to Transportation Systems and Services

AI first hit the popular consciousness on November 30, 2022, with the release of ChatGPT. Since then, AI has filtered its way into society at a breakneck speed. Applications

for AI have been wide ranging, with the potential to automate and improve traffic modeling, data management, and reporting. Transportation data management represents one of the major ways that AI can improve safety and efficiency. In Texas, AI has shown significant improvement in dynamically shifted traffic signals to prevent long wait time and back up.³⁵

Real time traffic data collection is another area where AI can significantly improve transportation. While data collection has changed much in the last decades, AI can significantly improve collection by automatically recognizing and categorizing traffic without the need for complicated equipment. Companies like Goodvision and Traffic Logix currently have this technology already prepared for release.^{36,37}

While AI is still new to the traffic management world, and there are potential shortfalls to such usage, there is potential for great improvement that this technology can be used for.



Source: US Census Bureau



TRANSPORTATION SYSTEM NEEDS



All residents and visitors, regardless of ability or mode, deserve a safe and equitable transportation system that provides access to leisure, goods, services, and economic opportunities. The region also deserves a system in a state of good repair that is resilient to extreme weather events and does not unnecessarily contribute to greenhouse gas emissions. The transportation needs that are presented in subsequent pages identify aspects of a transportation system that accomplishes the above objectives to the greatest extent possible both in the present day and through the Plan's horizon year of 2050.

The transportation system needs are derived from the existing conditions analysis of the transportation system, socioeconomic and demographic data, feedback from the public, identified emerging issues and opportunities, and the evaluation of recently completed local and regional transportation plans and studies. Federal transportation authorization legislation also guided the needs identification process.

Where people live, work, and participate in leisure activities will determine the appropriate solutions to their transportation needs. The nine-county region is home to a wide range of

places ranging from Rochester's urban core to car-centric suburbs, to walkable villages with traditional main streets, as well as to pastoral farmlands and scenic vistas overlooking the Finger-Lakes. The transportation needs of residents are similar across all places in the region. However, while everyone requires mobility and access to and from their home, job, stores, and services, how these needs are met will differ.

Previous L RTPs defined specific types of places in the region and categorized their transportation needs accordingly. L RTP 2050 recognizes that despite broad similarities in transportation needs in each place type, the needs of specific locations within each place type may differ. For example, mobility and access needs in a rural village with a college campus are different from a village without a similar institution. Rather than presuppose similarity in a place type and need, L RTP 2050 considered the expressed desires of residents of many different places across the region. Input is taken both directly regarding this plan and indirectly from prior planning efforts specific to those unique places. Through these considerations, residents have a voice and are heard during GTC's transportation planning process.

Ensuring Access Throughout the Transportation System

Providing a transportation system for all users is crucial given the significant portion of the community that lacks motor vehicle access, particularly in the City of Rochester and in certain sections of the rural communities in the planning area. An accessible transportation system helps facilitate increased economic and social opportunities for those that have limited access to the personal vehicle-oriented transportation network. Owning a private vehicle is not possible for all users of the system due to economic and/or physical limitations. Ensuring that low- to moderate-income households, zero-vehicle households, and people with disabilities have sufficient mobility options is vital to increasing quality of life and offering a brighter economic future for all the region's residents.



The average person in Monroe County spends **24%** of their income on transportation.

Source: Urban Institute | Upward Mobility Initiative

Increasing Safety for All Users

The regional transportation system should ensure that all users, regardless of physical ability or chosen mode of transportation, are able to travel safely and securely. Best practices in pedestrian and bicycle accommodation should be followed and implemented not just in denser areas that exhibit pedestrian activity, but also in locations where demand is suppressed. Likewise, motor vehicle safety can be improved by adopting roadway design guidelines that promote self-enforcing design principles. These guidelines also serve to reduce modal conflict with the most vulnerable users. Public transit facilities, especially bus stops, should not only be accessible, but also secure and inviting to patrons. Future roadway design and maintenance, especially in relevant areas, should also prioritize the safe operation of long-haul freight vehicles and less common road traffic like farm machinery.

Maintaining the Existing System in a State of Good Repair

Given the region's anticipated stable population, the ongoing revitalization of historic urban and village centers, and the growing interest in multi-modal transportation solutions for suburban areas, the need for large-scale road expansion outside the region's developed cores is minimal. Additionally, the lack of sufficient federal-aid resources to maintain current transportation infrastructure presents significant challenges in any consideration of road network expansion. Therefore, transportation agencies are prioritizing federal-aid investments on preserving existing transportation infrastructure assets. These investments include preventative and corrective

maintenance on roads, bridges, sidewalks, trails and the supporting infrastructure required to operate them such as intelligent transportation system instrumentation. These investments are also focused on infrastructure repair and rehabilitation work to extend asset service life. Furthermore, agencies will consider strategic divestment from assets that are no longer required. A strategic divestment approach helps agencies reduce long-term operations and maintenance costs while retaining existing capabilities.

Ensuring Access for All to Employment, Goods, and Services

Public health and economic well-being hinge on access to employment, goods such as healthy food, and services, especially those related to medical treatment. Vulnerable populations—such as low-income people, the elderly, and those with disabilities—are disproportionately disadvantaged by the lack of viable alternatives to private vehicles, which severely restricts their access to personal needs and opportunities. While these needs can be partially addressed by providing more useful transportation options, physical location decisions for these important elements of everyday life are just as important. Taking steps to improve access to common needs will help to improve public health, meet sustainability goals, and allow all residents of all place types within the region to more fully participate in society.

Addressing the Mobility Needs of an Aging Population

According to the American Association for Retired Persons yearly survey on Home and Community Preferences, 75% of Americans

want to retire in their own home, and 73% want to retire in their own community. However, most older Americans don't feel that this is a viable option due to financial issues, lack of specialized medical care, and a lack of mobility options.³⁸ Dispersed land use patterns decrease transit viability, posing a major challenge for the aging population as driving becomes more difficult with age. Aging populations require additional medical care exceeding that of working aged people, and access to these critical services becomes harder as mobility options decrease. Particularly in rural areas of the nine-county region, this challenge becomes more pressing. Existing transit, and more importantly paratransit can provide a gap filling service that can mitigate some of these challenges, as can connections with non-profits and community services. More focus on bringing affordable homes for retirement in proximity to services needed by an aging population represents a critical challenge to the region during the LRTP 2050.

The U.S. Centers for Disease Control and Prevention defines aging in place as, "the ability to live in one's own home and community safely, independently, and comfortably, regardless of age, income, or ability level."

75% of Americans over 50 would prefer to remain in their current home for as long as possible.



Of those older adults **44%** expect having to relocate at some point.

Expanding Mobility and Connectivity for Active Transportation Users

The region has seen significant rise in active transportation users in the past five years. Particularly with the rise in e-bikes and bike rental services such as Veo, the need in the region is higher than it has ever been. While over 100 lane miles of bicycle facilities have been built since LRTP 2045, there is still a long way to go to ensure a truly connected active transportation network. Many residents don't live close enough to safe active transportation infrastructure. Those who do have access typically benefit from connected paths that eliminate the need to contend with vehicle traffic. New and reconfigured transportation facilities should seek to connect gaps in the existing network and improve access to that network through additional spurs into underserved areas. System enhancements focused on increasing network usefulness and rider comfort will encourage greater usage, particularly among less confident riders who represent the majority of potential users.

Improving Coordination of Transportation Services

Coordination of transportation services makes the most efficient use of limited transportation resources, especially those dedicated to human service transportation and demand-response transit. Today, that need for coordination extends into shared mobility, membership services that directly impact vehicle ownership dynamics, and parking supply. Coordination across modes and user groups can improve overall mobility within communities and across the region. Agencies in a position to coordinate transportation services should consider non-traditional transportation providers and

technologies to help meet a higher percentage of specialized transportation demand. Those in need benefit from higher quality service when greater coordination leads to greater efficiency.

Reducing Energy Usage and Greenhouse Gas Emissions

Fossil fuel consumption is a major contributor to urban air pollution. Increasing the share of public transit and active transportation as primary modes is the most direct and effective way to realize emissions reduction. Where and when a mode shift proves impractical, electricity is a cleaner vehicle fuel option. The region has made great progress in moving in this direction, deploying 20 electric buses and 12 hydrogen fuel buses. Similarly, there have been over 250 deployed public and private electric vehicle charging stations deployed in the last five years alone. These energy sources contribute to both economic development and to a reduction in urban air pollution. This supports local energy independence as electricity from natural sources is plentiful due to hydroelectric dams in the region. The increasing availability of electric vehicles, combined with public tax credits and grant



Source: 13WHAM

programs for charging stations, is expected to encourage more interest in the adoption of alternative fuels for the duration of this plan.

Enhancing Connectivity and Access for Freight Movement

The competitiveness of a region's economy is inextricably linked to the strength of that region's transportation network. Manufacturing and agriculture remain important sectors of the region's economy which heavily depend on reliable, accessible means of transportation for their goods to the rest of the nation. Connectivity and access for freight transported by truck, rail, air, and water is a primary economic need for the region now and in the future.

Overall, the transportation system is reliable, and congestion is not a major barrier. Consideration should be given to increasing the efficiency of the freight system along the road, bridge, railroad, and waterway networks through direct infrastructure improvements to strengthen last mile connections, expanding the use of existing and upcoming technologies, and promoting coordination among local, state, and federal partners. Ultimately, coordinating and better utilizing existing freight networks is key to realizing economic development opportunities for network users, which may include exploring modal shifts for certain goods.

Increasing System Resiliency

A resilient transportation system is crucial to the region's security and economy. Regional transportation agencies aim to minimize damage and disruption to transportation infrastructure and services from natural and

human-caused hazards. This is achieved through several key strategies: relocating vulnerable infrastructure from hazard areas, strengthening assets to protect them from hazard impacts, and building in redundancy on both asset-specific and system-wide scales. These efforts will enable the region to better withstand hazard impacts. Additionally, planning for recovery and adjusting to a new post-incident standard are other key elements of resiliency that will become increasingly important during the timeframe of this plan.

Stormwater management techniques should be integrated into transportation projects to further enhance system resilience. Techniques that reduce runoff, safeguard transportation infrastructure from flooding, and protect waterbodies from pollutants should be integrated into projects. Potential stormwater management techniques to apply at appropriate sites throughout the region include, but are not limited to, bioretention areas, vegetated and dry swales, and vegetated filter strips.

Supporting Leisure Travel and Tourism

The Finger Lakes Region saw over \$4.4 billion in tourism income in 2023 alone. Ensuring that travelers can easily access all the region has to offer is vital for the industry's continued success. The transportation system is the mechanism by which visitors first experience a place. Planning for a system that considers the needs of the community naturally creates a sense of place with a strong identity. Enhancements such as wayfinding ensure that visitors can easily reach and discover destinations.

Projects, programs, and services that enhance access and increase mobility should be

prioritized. This will bolster attractions and help create a sense of place within the region. Where feasible, recreational attractions should be served by transit and active transportation options, such as bike share, to ensure access for those without a personal vehicle. Special emphasis should be given to rural places and outdoor recreational attractions where on-demand transportation services are lacking or sparse.

Improving Coordination of Land-Use and Transportation

Decentralized land use patterns are a challenge for developing increased public transportation. While this land use may provide privacy and support single family zoning, the transportation network suffers from congestion as more residents seek to travel on the road. There are compromises that may create a network that values both home preference and efficiency.

Infill development offers increased density on existing infrastructure, decreasing the cost of maintenance per resident served. This is particularly important for transit systems where fixed costs are significant. Other solutions are to encourage accessory dwelling units, multi-family structures, and decreased lot sizes where appropriate. While a single solution is impossible, coordination with localities to find a right-sized answer for their community is imperative.

Investment in New Technology

In the 21st century, technology has catalyzed global change, driving advancements in transportation at an ever-accelerating pace. The rise of automated vehicles, e-commerce, artificial intelligence, and new software all present the potential to radically change the way the transportation system evolves. The GTC is committed to monitoring new developments in technology, adapting the plan to improve the region's network as opportunities arise.

Autonomous Taxi's in the Region

Waymo recently conducted a showcase of their autonomous taxi technology at the Hobart and William Smith Colleges. Recent developments in this technology have seen the company, and companies like it, implement autonomous vehicles as a rideshare service in major cities across the nation. While at the time of writing New York is not expecting further investment in this budget cycle, the technology has potential to shape the region's roads in the horizon year of this plan. Challenges and questions regarding implementation, decision making, and safety will all play a role in how autonomous vehicles will be utilized. GTC will continue to monitor these advancements.³⁹



Source: rochesterfirst.com



RECOMMENDATIONS

GTC staff synthesized several sources of information into the needs assessment in the preceding chapter. These sources included regional demographic and employment data, an assessment of the current transportation system, identified emerging issues and opportunities, and direct input from regional residents. The following recommendations address regional transportation system needs for the next 25 years.

The strategies, physical implementations, programs, and policies recommended in this chapter are designed to help GTC fulfill its commitment to agency goals, objectives, and federal planning factors. These factors guide the region's efforts to enhance system safety, increase access to more mobility options, promote efficient system management, protect the environment, support regional economic vitality, and ensure necessary partnership are built to maintain these plans. The following recommendations maintain the region's continued commitment to the preservation and maintenance of the existing surface transportation system.

Recommendations that seek to add capacity to the system primarily focus on increasing mobility and system access through enhancing the public transit system and active transportation networks. Additionally, recommendations encourage the adoption of new technology where appropriate and ensure that the transportation system does not negatively impact air quality. The network should be a positive place where riders are not negatively impacted by infrastructure or assets. Technology is rapidly evolving. Over the next 25 years, how we receive goods, how we move, and how we access information will continue to evolve and change. Recommendations that focus on technology are flexible, acknowledging that while we may know that change is upon us, we do not yet understand all the implications of such changes.

Across all recommendations, L RTP 2050 looks to provide a transportation system that benefits and protects all users. The future transportation system will not hinder residents' ability to pursue personal, economic, and social opportunities or negatively impact their well-being.

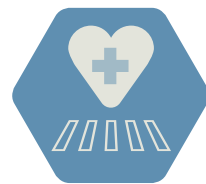
RECOMMENDATION GROUP AND TIMELINE

GTC will initiate some of these programs, but successful implementation will require strong partnerships with cooperating agencies and community groups. Funding these recommendations will be discussed in the following chapter.

The recommendations on the following pages consist of an identifier, an actionable goal, a statement of importance, a list of partners, and a timeframe for the recommendation in which to begin the execution of the recommendation.

Recommendations are organized into broader topic areas listed on the right and accompanied by the corresponding iconography. Section 450.306 of Title 23 of the Code of Federal Regulations establishes the scope of the metropolitan transportation planning process. The code requires that the planning process provides for consideration and implementation of projects, strategies, and services that will address ten specific factors. The five recommendation groups in LRTP 2050 incorporate those planning factors.

The recommended strategies, projects, programs, and policies will be implemented in order of prioritization phases as funding allows. Actions related to ongoing recommendations have already begun and should continue without interruption. Actions related to Near-, Medium-, and Long-Term recommendations should begin within one-to-five, six-to-ten, and eleven-to-twenty-five years, respectively, from the adoption of this plan.



HEALTH AND SAFETY



ACCESS AND MOBILITY



SYSTEM MANAGEMENT AND MAINTENANCE



INNOVATION AND RESILIENCE



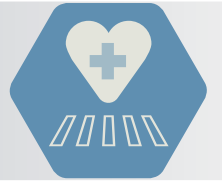
ECONOMIC DEVELOPMENT

The recommended strategies, projects, programs, and policies will be implemented in order of prioritization phases as funding allows. Actions related to ongoing recommendations have already begun and should continue without interruption. Actions related to Near-, Medium-, and Long-Term recommendations should begin within one-to-five, six-to-ten, and eleven-to-twenty-five years, respectively, from the adoption of this plan. Within subsequent pages of this chapter, these time frames are represented by the iconography pictured below.

Recommendation Categories	Federal Planning Factors									
	Economic Vitality	Increase safety for users	Increase security for users	Increase accessibility and mobility	Protect and enhance the environment	Integration and connectivity	Efficient system management and operation	Preservation of the existing system	Resiliency and Reliability	Travel and Tourism
Health and Safety		X	X							
Access and Mobility				X		X				
System Management and Maintenance							X	X	X	
Innovation and Resilience					X				X	
Economic Development	X			X		X				X

For more information regarding the ten federal planning factors, please refer to the Code of Federal Regulations, Title 23, Section 450.306

HEALTH AND SAFETY






A well-designed transportation system naturally supports user safety and promotes incidental physical activity. Both user safety and public health are emerging issues, in the transportation system. Recommendations in this category seek to address these challenges, improve elements of the transportation system, and to promote the well-being of the entire region.

These recommendations address two key themes: roadways should encourage safe travel through self-enforcing design and should be accessible to all users. Recommendations also continue GTC support for federal safe-routes programs such as safe routes to schools. An effective system creates a safe environment that protects regional well-being and allows all users to access all the Region has to offer.






New Traffic Roundabout at New York State Route 96 and Lynaugh Road in Victor

Action Statement	Description	Importance	Partners	Timeline
HS-1 Consider the safety needs of all users when planning, designing, and building transportation facilities.	Where appropriate, pedestrian and bicycle facilities should be included in projects. Intersections should accommodate all roadway users, and all facilities should be safe to use.	Improperly designed intersections and corridors are more likely to cause harm, especially vulnerable road users such as people with disabilities or non-traditional roadway users.	New York State Department of Transportation County Departments of Transportation Municipalities	 Ongoing
HS-2 Continue the expansion of sidewalk connectivity in appropriate locations throughout the region in a coordinated and cohesive manner.	Follow FHWA guidance for inclusion of sidewalks along roadways. Develop new local codes that require the inclusion of sidewalks adjacent to and within new developments based on nearby land use and density. Follow existing policies and develop new codes to retrofit sidewalk gaps adjacent to existing developments.	Sidewalks improve pedestrian safety and convenience and ensure that vehicle travel is not hindered by non-vehicular travel on the road. Sidewalks provide a firm, solid, and slip resistant surface separate from the roadway, decreasing the likelihood of a motor vehicle collision with pedestrians.	New York State Department of Transportation County Departments of Transportation Municipalities	 Ongoing
HS-3 Expand the existing on-street bicycle network in appropriate places throughout the region.	Prioritize on-street bicycle facility implementation that connects to existing facilities by identifying priority projects based on the short distance trip reassignment methodology described in the Rochester Comprehensive Access and Mobility Plan.	The presence of dedicated cycling infrastructure for the entirety of a trip provides a safer environment for cyclists while encouraging more cycling activity, which ultimately improves overall public health.	New York State Department of Transportation County Departments of Transportation Municipalities	 Ongoing

HEALTH AND SAFETY



Action Statement	Description	Importance	Partners	Timeline
HS-4 Prioritize development of context-sensitive bicycle facilities.	While on-street bicycle facilities are accessible to many roadway users, less confident riders prefer to use off-street, or street adjacent bicycle facilities. Not every location can support this type of facility, but where applicable, designs should incorporate recommendations based on the NACTO Urban Bikeway Design Guide.	High speed and volume roadways require separation between a dedicated bicycle facility and the vehicular traffic lanes. Nationally, a majority of residents have an interest in cycling as a means of transportation but only feel secure on separated bikeways.	New York State Department of Transportation County Departments of Transportation Municipalities	 Ongoing
HS-5 Revitalize multi-use trails to maintain a state of good repair and improve safety for all users.	Initiate and promote studies to assess, rehabilitate, and/or reconstruct older multi-use trails to meet current design standards and improve user safety.	As the region's multi-use trail network ages, maintenance is required to ensure safe use. Facility deterioration results in surface impediments and obstructions.	New York State Department of Transportation County Departments of Transportation Municipalities	 Ongoing
HS-6 Conduct Health Impact Assessments of regional transportation facilities and incorporate those results into future projects.	Improvements alone do not measure success. Gathering data on the impacts of regional projects can help better understand the effects these projects have on the region and give valuable insight for future studies.	Health impact assessments provide planners with information used to mitigate potentially adverse health impacts and leverage the potential health benefits of transportation policy and infrastructure.	Regional Health Planning	 Ongoing

PROJECT SPOTLIGHT

Lakeville Corridor Strategic Plan

Livingston County worked closely with the Genesee Transportation Council to conduct a corridor analysis of Big Tree Road in the town of Livonia. This minor arterial road serves residences and businesses along its length, but it lacks amenities that could support pedestrian and bicycle movement along the corridor.



Photo: Canal Pond Park Conceptual Crossing

The project consultants evaluated existing conditions, corridor history, zoning, stormwater management, and hazard events. Consultants identified strong community support for the project, and through this input, highlighted key targets for traffic calming measures.

The final recommendations of the study included implementation strategies to support a strong sense of place and increase safety. These include better wayfinding, additional street lighting, sidewalks along the entire corridor, and trees lining the road. These improvements will improve the comfort level of pedestrians and decrease risk of crashes.

The project supports the following recommendations:

- HS-12 Include Self-enforcing street design principles in transportation planning projects.
- AM-1 Design access and mobility options with the needs of all users in mind.
- SMM-9 Improve System Connectivity to remove gaps in the network.

HEALTH AND SAFETY

PROJECT SPOTLIGHT

Joseph Avenue Artwalk Master Plan

The Joseph Avenue Artwalk Plan is a comprehensive plan to redevelop the street into a high-quality place that fosters community and cultural activity. The community along this corridor has invested considerable time and effort into establishing this area as an arts corridor. However, transportation infrastructure and park space lacked the quality required to support the community's goal.




The City of Rochester conducted this study to address these infrastructure challenges. The study identified fourteen subsequent projects that would resolve both corridor wide challenges, and identified small scale, individual opportunities to support the corridor. These include additional crosswalks, street furniture, decorative pavement markings, and recreational services to foster the community.

The project supports the following recommendations:

- HS-10 Continue the implementation of local active transportation plans.
- HS-13 Employ self-enforcing street design principles in projects supported by GTC.
- SMM-9 Improve System Connectivity to remove gaps in the network.



Photo: Joseph Avenue Project Area

Action Statement	Description	Importance	Partners	Timeline
HS-7 Include self-enforcing street design principles in transportation planning projects.	Employ self-enforcing design principles in roadway design. Deliver a roadway system that allows for intuitive understanding of reasonable travel speed through design features including lane widths, turning radii, and street edge features.	Street users are more likely to comply with operating expectations when following environmental cues compared to signage obedience or police enforcement. This improves the safety of the road for all users.	New York State Department of Transportation County Departments of Transportation Municipalities	 Ongoing
HS-8 Investigate safety concerns at rural intersections to identify safety improvements.	Using data including collision records, observed speeds, and physical factors, identify safety improvements at rural road intersections.	Rural intersections have unique safety needs that may differ from urban and suburban locations. Focusing on rural intersections enables	New York State Department of Transportation County Departments of Transportation	 Near-Term 1-5 Years
HS-9 Perform Pedestrian Intersection Safety Analyses.	Perform a Pedestrian Level of Service (PLOS) analysis and collect pedestrian count information at intersections that have recorded motor vehicle-pedestrian collisions in the previous five years.	The collection of safety, service, and use data at key intersections throughout the region helps decision makers prioritize reconfiguration and safety enhancements.	New York State Department of Transportation County Departments of Transportation Municipalities	 Near-Term 1-5 Years

HEALTH AND SAFETY



Action Statement	Description	Importance	Partners	Timeline
HS-10 Support the continued implementation of local active transportation plans.	Implement recommendations included in municipal active transportation plans throughout the region.	In the last several years, many of the region's municipalities have completed or started active transportation plans. These projects can help close many of the gaps and upgrade facilities in the active transportation network.	New York State Department of Transportation County Departments of Transportation Municipalities	 Near-Term 1-5 Years
HS-11 Perform a mid-block crossing safety analysis at appropriate locations.	Perform a region-wide analysis on both marked and potential mid-block crossing locations. Identify and prioritize locations for pedestrian activated traffic controls exceeding the standards set in the New York State Pedestrian Safety Action Plan.	The perceived ability to safely and efficiently cross roadways is a key factor in the decision to travel as a pedestrian. Yield-to-pedestrian compliance varies depending on the crossing treatment and implemented control devices.	New York State Department of Transportation County Departments of Transportation Municipalities	 Near-Term 1-5 Years
HS-12 Implement bicycle specific roadway markings at appropriate locations throughout the region.	Reinforce the safety and visibility of the bicycle system by including bicycle facility markings through roadway intersections, and at junctions where off-road bicycle facilities intersect roadways, in street design policies.	Bicyclists experience the most significant conflict and the highest likelihood of collision with vehicles at intersections or at trail crossings.	New York State Department of Transportation County Departments of Transportation Municipalities	 Near-Term 1-5 Years

Action Statement	Description	Importance	Partners	Timeline
HS-13 Continue the development of safe routes to community destinations.	Continue to develop Safe Routes to School, Safe Streets for All, and Transit Programs. Provide technical resources and staff support related to funding sources and physical/policy implementation partners.	Safe Routes programs promote safe and accessible walking and bicycling routes to schools, community centers, transit stops, and other key destinations through infrastructure improvements and education.	New York State Department of Transportation County Departments of Transportation Municipalities	 Near-Term 1-5 Years
HS-14 Reconfigure Pedestrian Facilities Identified and Prioritized by the Pedestrian Intersection Assessment.	Using the data gathered in the Pedestrian Intersection Assessment, implement interventions identified at high priority intersections. Improvements should focus on reductions of crossing distance, improved curb design, refuge islands, curb radii, and signalization.	Even well-connected segments of the pedestrian network experience collisions resulting in injuries. Facilities that are perceived as unsafe or difficult to cross discourage walking as a form of mobility.	New York State Department of Transportation County Departments of Transportation Municipalities	 Medium-Term 6-10 Years
HS-15 Support the implementation of safety improving upgrades across the transportation system.	Older transportation assets, including vehicles and infrastructure, may benefit from new safety improvements as technology improves. As new innovations progress, the region should adopt safety improvements to enhance the transportation network.	Automated vehicle detection alerts, turning and backup cameras, and automated alert systems all provide enhanced safety in the transportation system. GTC supports any advancement that may improve the quality of the transportation network.	New York State Department of Transportation County Departments of Transportation Transportation Agencies Municipalities	 Ongoing

ACCESS AND MOBILITY






The success of the transportation system is measured by the ability to use it. Both people and goods move through the region in many ways. New technology continues to shape and improve this. Mobility-as-a-service, rental e-bikes and scooters, and new types of transportation all provide new avenues for residents to get where they need to go. Recommendations in this group seek to promote these new systems and the infrastructure that supports this movement.

Design and implementation recommendations are more common here because of the specific challenges this group addresses. ADA compliance serves as the foundation of these recommendations and is further built on through the encouragement of safe infrastructure for other modes of transportation, such as walking or biking. Lastly, regional land use is also examined here due to its importance to transportation access.



Opening Day at the RTS Transit Center in Rochester

Action Statement	Description	Importance	Partners	Timeline
AM-1 Design access and mobility options with the needs of all users in mind.	All users should be able to access all modes where possible. New facilities and plans undertaken should consider all types of physical abilities to ensure that all users can enjoy them.	Transportation is only as useful to those who can access it. Traditionally, those with disabilities or mobility challenges have been underserved.	New York State Department of Transportation County Departments of Transportation Municipalities	 Ongoing
AM-2 Continue enforcing and improving ADA accessibility.	Enhance access to public rights-of-way by installing ADA-compliant treatments on new and existing transportation facilities in accordance with the U.S. Access Board's Public Rights-of-Way Accessibility Guidelines.	Providing ADA-compliant accommodation increases mobility while ensuring that people with disabilities are not discriminated against in their use of roadways and pedestrian facilities.	New York State Department of Transportation County Departments of Transportation Municipalities RGRTA	 Ongoing
AM-3 Expand the existing Regional Trail Network.	Continue to develop near- and medium-term trail project recommendations found in the Genesee-Finger Lakes Regional Trails Initiative (RTI) Phase III by conducting trail feasibility studies and initial design activities.	The presence of dedicated cycling infrastructure for the entirety of a trip provides a safer environment for cyclists while encouraging more cycling activity, which ultimately improves overall public health.	New York State Department of Transportation New York State Parks County Planning Departments	 Ongoing

ACCESS AND MOBILITY



PROJECT SPOTLIGHT

Regional Micromobility Expansion

Micromobility is on the rise in the region and the nation. Over the past five years, the GTC has worked and cooperated with RGRTA to develop several on-demand travel studies supporting RTS On-Demand. Micromobility provides offers flexibility and responsiveness while minimizing operating costs. This works best in low population communities where demand is low, but the need is still present.



Photo: RTS On-Demand Bus in Canandaigua

The Regional Rural On-Demand Service Study and the RGRTA Regional Village Local Service Study along with several others, provide a strong use case for micro transit. In these rural communities, population is small, but the transportation need still must be met. This is especially true in communities with significant amounts of car-free households, a challenge in some rural towns.




RTS On-Demand has been implemented in Henrietta, Brockport, Greece, Irondequoit, and Webster with other communities exploring the idea.

The project supports the following recommendations:

- AM-12 Support implementation of on-demand service in rural communities.
- SMM-9 Improve System Connectivity to improve gaps in the network.
- ED-9 Promote travel to the region.

Action Statement	Description	Importance	Partners	Timeline
AM-4 Update the Regional Trail Initiative based on successful studies and projects.	Assess progress on the RTI near- and medium-term network recommendations and reassess long term planning and management recommendations by updating the Regional Trails Initiative.	As a unifying trails plan for the region, periodic updates allow decision makers to measure progress of system connectivity and accessibility while applying up-to-date best practices to revised recommendations.	New York State Department of Transportation New York State Parks County Planning Departments	Near Term 1-5 Years
AM-5 Provide for more direct routes via non-motorized modes of transportation.	Seek opportunities to make non-motorized transportation more direct and convenient by identifying candidate locations for shared-use paths and/or limiting vehicular traffic on existing network links.	Residents are dissuaded from using active transportation modes for daily trips when dedicated facilities do not serve the entire length of the trip or when distances are too long.	Municipalities	Near Term 1-5 Years
AM-6 Encourage transit supportive street design.	Include transit supportive enhancements in street design by encouraging municipalities to develop a bus stop hierarchy that establishes standards for the inclusion of seating, lighting, shelter, waste receptacles, and other amenities.	Buses carry tens of thousands of regional residents every weekday. Infrastructure investments along the routes both better serve existing customers and increase the attractiveness of transit as an option.	RGRTA Municipalities	Near Term 1-5 Years

ACCESS AND MOBILITY

Action Statement	Description	Importance	Partners	Timeline
AM-7 Facilitate partnerships, cooperation, and coordination across transit services areas.	Explore ways to increase county to county transit connections by reviewing and updating the strategic plans for public transportation for each county within the region.	Increased transit services improve access to services, health care providers, and employment opportunities, especially those not found in rural communities.	RGRTA Yates County Transit	 Near Term 1-5 Years
AM-8 Encourage transportation efficient land-use decision making.	Encourage the adoption of polices at various tiers of government to revise zoning codes and site selection criteria to realize full-service neighborhoods that place less demands on motor vehicle infrastructure.	Mobility is a primary quality of life factor. Access to goods, services, and employment options at a lower transportation cost strengthens a community.	Counties Municipalities	 Near Term 1-5 Years
AM-9 Promote transit-oriented development (TOD) at appropriate locations around the region.	Investigate the implementation of transit-oriented development (TOD) in similar urban areas to see the potential applications in the region.	Transit-oriented development improves the coordination between the transportation system and local land use, spurring development around high-capacity transportation facilities. This development can spur economic growth and improved ridership.	Municipalities New York State Department of Transportation County Departments of Transportation	 Near Term 1-5 Years

PROJECT SPOTLIGHT

Comprehensive Active Transportation Strategies

Active transportation remains an important part of the transportation system. To continue improving this part of the system, GTC has facilitated studies focused on addressing network challenges like connectivity, directness, and safety.



Photo: Erie Canal in Fairport

The City of Rochester Active Transportation Master Plan provided a framework for addressing bike challenges within the city. Recommendations include improving facility and network infrastructure, developing staff capacity at city and transit authority levels, and establishing equitable safety programs and engagement strategies. The Monroe County Comprehensive Active Transportation Plan introduced a plan to expand the existing bike network to include 500 miles of connected paths, which serves as a focal point for their similar recommendations. The Monroe County ATP Implementation project seeks to put recommendations into action and is underway as of 2026.




GTC additionally is conducting additional Active Transportation Projects in Nunda, Ovid, Wyoming County, Rush, and the Town of Gates. These active transportation projects support economic development and accessibility by creating viable alternative means of transportation and leading to job creation in the region.



The project supports the following recommendations:

- AM-4 Expand on the existing Regional Trail Network.
- AM-7 Provide for more direct routes via non-motorized modes of transportation.
- SMM-11 Include active transportation in studies and new infrastructure development.

ACCESS AND MOBILITY



Action Statement	Description	Importance	Partners	Timeline
AM-10 Support investment in infill development projects.	Invest federal-aid resources in transportation infrastructure projects and services that support infill development.	Infrastructure and service improvements that support infill development maximize the impact of the existing transportation network and shift federal-aid investments away from costly new construction.	New York State Department of Transportation County Departments of Transportation Municipalities	 Ongoing
AM-11 Support implementation of on-demand service in rural communities.	Support the implementation of RGRTA's 2024 Regional Rural On-Demand Service Study in implementing on-demand, or micro transit, services in regions where fixed route service are less viable.	Micro transit provides an opportunity to deliver quality transportation services in a convenient and economical manner to rural communities. These services operate similar to ride share apps that many travelers are familiar with at a far lower cost.	RGRTA New York State Department of Transportation County Departments of Transportation	 Near Term 1-5 Years
AM-12 Minimize system disruption by supporting a wide range of transportation options.	New mobility options are reaching large scale implementation in the region. Encouraging development of new curbside management policies and identifying funding sources can allow for implementation of these new mobility options in a way that creates a cohesive transportation fabric.	Mobility management services provide new and innovative ways to get around in the region. These services must be implemented in a coordinated way to harmonize with the existing transportation system rather than taking away from it.	RGRTA Municipalities	 Near Term 1-5 years

Action Statement	Description	Importance	Partners	Timeline
AM-13 Support projects that improve intermodal connections within and outside the region.	Intermodal hubs such as airports, train stations, and inter-city bus stations facilitate transfers from the region to the rest of the country. Projects should focus on increasing the user experience and support other local modes of transportation through investment in improvements like transit stops in proximity and bicycle parking.	Access to community resources, including inter-city transportation facilities, via multiple modes, is key to providing a complete regional transportation system.	RGRTA Shared Mobility Providers Inter-City Transportation Operators	 Near Term 1-5 Years
AM-14 Support projects that improve transit facilities.	Support transit operations through the configuration of other physical facilities such as curb extensions, bus turnouts, dedicated transit lanes, transit signal priority, and layover facilities. Provide for the clearance of snow and ice from bus stop landing zones and pathways.	Transit agencies have limited control over the physical facilities on which they operate. Localities can maximize the value of regional transit investments and enhance year-round access by adopting transit supportive policies related to the built environment.	RGRTA New York State Department of Transportation County Departments of Transportation Municipalities	 Medium Term 6-10 Years

SYSTEM MANAGEMENT AND MAINTENANCE






As the transportation system ages, maintenance and management have become an important part of GTC planning efforts. If infrastructure begins to wear down, people's quality of life is disrupted, and the economy suffers. Recommendations in this category aim to catch problems before they occur and preserve the system so that future generations can enjoy it.

Key topics in this section include management of intelligent transportation systems, reconnecting neighborhoods, strategic divestment studies, and access management policies. These principles and technologies all serve to increase the efficiency of movement in the region.



Control Room at the Regional Traffic Operations Center on Scottsville Road

Action Statement	Description	Importance	Partners	Timeline
SMM-1 Implement recommendations outlined in the Regional TSMO Strategic Plan.	Implement programs and services in accordance with the recommendations in the Genesee-Finger Lakes Regional Transportation System Management and Operations (TSMO) Strategic Plan.	TSMO programs and services focus on operational improvements that optimize transportation system performance before extra capacity is considered.	New York State Department of Transportation New York State Thruway Authority County Departments of Transportation	 Ongoing
SMM-2 Integrate ITS into plans and studies as a solution to safety, mobility, and other needs where appropriate.	Integration of Intelligent Transportation Systems (ITS) into transportation assets during the planning, design, and construction phases aids in the facilitation of future ITS deployments.	ITS aims to reduce travel time and enhance safety as well as comfort for commuters by minimizing traffic problems. Building ITS-supportive elements into new infrastructure expands ITS services and reduces future costs.	New York State Department of Transportation New York State Thruway Authority County Departments of Transportation	 Ongoing
SMM-3 Expand and upgrade regional ITS communication infrastructure.	Due to high data transportation requirements that advanced ITS requires, improving the region's fiber optic and wireless communication facilities will aid in the implementation of future ITS projects.	Improved communication capabilities enable agencies responsible for managing transportation infrastructure to more effectively respond to and coordinate ITS services.	New York State Department of Transportation New York State Thruway Authority County Departments of Transportation	 Ongoing

SYSTEM MANAGEMENT AND MAINTENANCE






Action Statement	Description	Importance	Partners	Timeline
SMM-4 Continue supporting core TSMO-related programs.	Continue federal-aid funding for core TSMO-related programs, including the Regional Traffic Operations Center (RTOC) and the Highway Emergency Local Patrol (HELP) programs.	HELP trucks, dispatched via the RTOC, decrease the delay and increase safety by providing emergency roadside service to disabled vehicles on high volume expressways.	New York State Department of Transportation County Departments of Transportation	Ongoing
SMM-5 Improve Traffic Signal Coordination to increase safety and system efficiency.	Coordinate traffic signal timing at interchanges and intersections along corridors, and for special events to enhance safety, efficiency, and reliability.	Traffic signal coordination reduces idling while preserving capacity and travel time reliability along critical travel corridors.	New York State Department of Transportation County Departments of Transportation	Ongoing
SMM-6 Facilitate Interagency Operations Coordination.	Facilitate interagency coordination committees to encourage cooperation among organizations responsible for managing transportation assets and services.	Interagency coordination allows for faster project and service delivery resulting in less disruptions to the traveling public.	New York State Department of Transportation New York State Thruway Authority County Departments of Transportation	Ongoing

Action Statement	Description	Importance	Partners	Timeline
SMM-7 Promote interagency Traffic Incident Management (TIM).	TIM techniques provide for the safeguarding of the travelling public and first responders, as well as minimizing incident-related delay.	TIM training prepares first responders with the tools to quickly respond to and clear an incident scene, which clears congestion faster and reduces secondary incidents.	New York State Department of Transportation New York State Thruway Authority County Departments of Transportation	Ongoing
SMM-8 Maintain and periodically update the regional Congestion Management Process.	Identify the location and causes of traffic congestion, in accordance with federal requirements, through the regional congestion management process.	Awareness of the location and causes of recurring congestion enables agencies to implement context-sensitive solutions to enhance user safety while maintaining the capacity of critical travel corridors.	New York State Department of Transportation County Departments of Transportation Municipalities	Ongoing
SMM-9 Improve System Connectivity to remove gaps in the network.	Focus new infrastructure construction on connecting gaps in the regional transportation system. Link streets and roads to complete grid patterns, or extend nearby trails to make connections, rather than implementing costly capacity expansion projects.	Closing accessibility and mobility gaps in the transportation system maximizes infrastructure investments while minimizing future operations and maintenance.	New York State Department of Transportation County Departments of Transportation Municipalities	Ongoing

SYSTEM MANAGEMENT AND MAINTENANCE



Action Statement	Description	Importance	Partners	Timeline
SMM-10 Implement access management principles to maintain functionality of roadways.	Invest federal-aid resources in transportation infrastructure projects and services that include access management solutions, such as limits on driveways, shared parking inventory, turning lanes, median openings, and traffic signal spacings.	Integrating access management solutions into infrastructure projects benefits transportation system users and business owners by enhancing the safety and efficiency of travel flow.	New York State Department of Transportation County Departments of Transportation Municipalities	 Ongoing
SMM-11 Include active transportation elements in studies and new infrastructure development.	During transportation infrastructure repair, rehabilitation, and replacement projects, enhance assets with active transportation elements such as sidewalks, trail connections, and pedestrian crossing where appropriate.	Integrating active transportation elements into transportation infrastructure expands accessibility and mobility for all modes and maximizes the investment.	New York State Department of Transportation County Department of Transportation Municipalities	 Ongoing
SMM-12 Support active community gathering spaces at appropriate locations in the transportation system.	Support local communities via the creation of car free areas focused on providing a safe and comfortable place for non-motor vehicle traffic and recreation.	Transit infrastructure provides a unique place to create spaces that foster local businesses and communities as a gathering place. Non-automobile streets can revitalize spaces in larger metropolitan areas and create a unique amenity.	New York State Department of Transportation County Planning Departments Municipalities	 Ongoing

PROJECT SPOTLIGHT

Route 96 over Route 14 Interchange Redesign



Photo: Route 96 over Route 14 Interchange Project Area

The Route 96 and Route 14 Interchange, also known as Five Points, located north of Geneva was studied to investigate alternatives to the existing structure. The interchange was built to support large volumes of traffic that have not materialized as the region has developed. As the maintenance cost grows, and the bridge's condition deteriorates, NYSDOT investigated potential benefits of removing the existing grade-separated interchange.




The study area included 42 acres of land and identified two alternatives as preferred replacements for the interchange. These alternatives, a roundabout or signalized intersection, would remove the grade separation and significantly reduce the interchange's footprint. The roundabout emerged as the preferred alternative due to its projected better safety outcomes and lower costs while still achieving the efficiency required to support existing and projected traffic volumes.




This replacement will reclaim over 25 acres of land, support economic development and job creation as well as saving the region millions of dollars in maintenance costs.

The project supports the following recommendations:

- SMM-16 Conduct strategic divestment analyses at appropriate locations.
- SMM-18 Reconfigure intersections and interchanges to improve safety, efficiency, and reliability.

SYSTEM MANAGEMENT AND MAINTENANCE

Action Statement	Description	Importance	Partners	Timeline
SMM-13 Maintenance must consider the impact on all users.	Maintenance has historically prioritized motor vehicle throughput as the main metric for success, which disproportionately impacts those of high incomes. Those with limited access to vehicles, or those who have mobility challenges are often underrepresented in maintenance considerations.	Income inequality leads to many in poverty being underrepresented in conversations regarding roadway maintenance. Ensuring that all mobility options are considered allows the transportation system to provide for these users.	New York State Department of Transportation County Departments of Transportation Municipalities RGRTA	 Ongoing
SMM-14 Maintain assets in a state of good repair throughout the transportation roadway network.	Preventative maintenance is imperative to ensure the state of good repair before infrastructure becomes too expensive to maintain due to consistent wear and tear.	Preventative maintenance projects are a cost-effective method to avoid future corrective maintenance or full repair and rehabilitation projects.	New York State Department of Transportation County Departments of Transportation Municipalities	 Ongoing
SMM-15 Maintain the state of good repair on public transportation infrastructure.	As a part of preventative maintenance or other transportation improvement projects, ensure that transportation stops receive maintenance to allow all users to access transportation.	Maintenance is an imperative part of ensuring the transportation system continues operation. Particularly transportation stops, where many users are those that have limited transportation options.	Municipalities County Planning Departments	 Ongoing

Action Statement	Description	Importance	Partners	Timeline
SMM-16 Conduct strategic divestment analyses at appropriate locations.	Conduct strategic divestment assessments to determine whether specific roads, bridges, interchanges, and other transportation facilities can be decommissioned with acceptable impacts on safety, efficiency, reliability, access, and mobility.	Strategic divestment studies enable transportation management agencies to determine the optimal investment strategy for maintaining or decommissioning assets.	New York State Department of Transportation County Departments of Transportation Municipalities	 Ongoing
SMM-17 Maintain ITS assets in a state of good repair.	Replace current ITS instrumentation, including but not limited to traffic cameras, dynamic message boards, traffic sensors, and communications elements at the end of their useful lives.	Regular replacement of ITS field instrumentation maintains current TSMO capabilities and enables effective service delivery.	New York State Department of Transportation New York State Thruway Authority County Departments of Transportation	 Ongoing
SMM-18 Reconfigure intersections and interchanges to improve safety, efficiency, and reliability.	Investigate and implement improvements to intersections and interchanges throughout the region that focus on enhancing overall intersection operations.	Infrastructure reconfigurations should be considered as a part of projects relating to potentially unsafe intersections and interchanges where appropriate to ensure that traffic congestion remains minimal.	New York State Department of Transportation County Departments of Transportation Municipalities	 Ongoing

SYSTEM MANAGEMENT AND MAINTENANCE



PROJECT SPOTLIGHT

Regional Traffic Operations Center Strategic Plan

The James R. Pond Regional Traffic Operations Center is one the region's most valuable transportation assets. It provides a place for coordination between key transportation stakeholders including the Monroe County DOT, NYSDOT, and the New York State Police. The facility identifies crashes, accident locations, and congestion and can coordinate an effective response.



Photo: James R. Pond Regional Traffic Operations Center
Source: SWBR

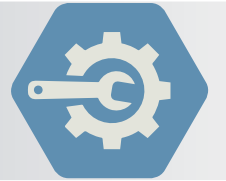
However, the facility lacks modern equipment and software that could improve the effectiveness of this asset significantly. The Regional Traffic Operations Center Strategic Plan included a S.W.O.T. analysis of the facility and provided recommendations to conduct over the next decade of operation. These strategies include modernization of data collection and management technology, improvements in continuity of operations, and improving staff experience and training to better use the technology already available.




The project supports the following recommendations:



- SMM-7 Promote interagency traffic incident management (TIM).
- SSM-21 Upgrade older ITS Field Instrumentation as new models are developed.

Action Statement	Description	Importance	Partners	Timeline
SMM-19 Coordinate with municipalities to implement complete streets policies.	Support the recommendations from the 2023 Implementing Complete Streets in the Genesee-Finger Lakes Region guidebook.	A local Complete Streets Policy ensures that the safety of all users of the transportation system is considered through all steps of the planning process.	Counties Municipalities	Ongoing
SMM-20 Maintain roadside safety infrastructure in a state of good repair.	Guardrails, road signs, and pavement markings should remain in a state of good repair to ensure that transportation users are not harmed.	Supportive transportation safety features can reduce the amount and severity of impacts and collisions at all intersections. Periodic evaluations of the state of these critical parts of the infrastructure are imperative to remain good stewards of the transportation system.	New York State Department of Transportation County Departments of Transportation	Near Term 1-5 Years
SMM-21 Deploy non-motorized ITS instrumentation at important non-motor crossings.	Deploy ITS field instrumentation at crosswalks, along shared-use trails and sidewalks, and at intermodal transfer centers to support non-motorized modes of transportation.	ITS deployments in support of non-motorized transportation emphasize safety enhancements, and traveler information systems to encourage expanded use of non-motorized modes.	New York State Department of Transportation County Departments of Transportation	Near Term 1-5 Years

SYSTEM MANAGEMENT AND MAINTENANCE



Action Statement	Description	Importance	Partners	Timeline
SMM-22 Support locally implemented access management policies.	Encourage municipalities to adopt land use policies and regulations that require site access management solutions.	Local municipalities are responsible for a significant share of the transportation system. Access management concerns extend to these facilities not always eligible for federal aid.	County Planning Departments Municipalities	 Near Term 1-5 Years
SMM-23 Support Corrective Maintenance as needed in the region.	Maintain a state of repair by conducting corrective maintenance projects to address emerging maintenance issues before they require more costly repairs.	When preventative maintenance is infeasible, corrective maintenance projects are a way to avoid the need for costly full repair or rehabilitation projects.	New York State Department of Transportation County Department of Transportation Municipalities	 Near Term 1-5 Years
SMM-24 Rehabilitate and repair transportation infrastructure assets at appropriate times.	Maintain a state of good repair by conducting repair and rehabilitation projects to preserve and extend the useful life of transportation infrastructure assets.	When corrective maintenance projects are infeasible, repair and rehabilitation of transportation assets is a cost-effective approach to preserve transportation system safety, efficiency, and capacity.	New York State Department of Transportation County Departments of Transportation Municipalities	 Medium Term 6-10 Years

Action Statement	Description	Importance	Partners	Timeline
SMM-25 Replace Infrastructure assets when repair and rehabilitation is not possible.	Maintain a system state of good repair by replacing infrastructure assets at the end of their useful life to ensure continuity of service.	Transportation assets should be replaced with new facilities when the cost of repair or rehabilitation exceeds the benefits of keeping the facility in service.	New York State Department of Transportation County Departments of Transportation Municipalities	 Long Term 11-25 Years
SMM-26 Upgrade older ITS Field Instrumentation as new models are developed.	Replace current ITS field instrumentation with next generation ITS devices as a part of coordinated deployment of new technologies and services.	Expanding coverage and enhancing ITS capabilities improves transportation safety, efficiency, and reliability through direct communication with roadway users.	New York State Department of Transportation New York State Thruway Authority County Department of Transportation	 Long Term 11-25 Years

INNOVATION AND RESILIENCE






Hazard events are a regular challenge facing the transportation system today. These can include small disruptions like a single car accident or large scale weather events that can affect the whole region. Large scale disruptions can interrupt the supply chain, hamper emergency efforts, and can significantly escalate the scope of a disaster. The innovation and resilience category focuses on reducing the impact of these hazard events. This is done through building resilient infrastructure that minimizes disruptions and adopting policies and technologies that allow for speedy recovery after hazard events.

Policy recommendations include stormwater management practices and improved coordination with emergency response. Technology recommendations include research into implementation of ai, improved monitoring systems, and automated driver alerts. These recommendations remain flexible, and GTC will continue to monitor the cutting edge of innovation to bring the best service to the Region.






Source: 13WHAM

Action Statement	Description	Importance	Partners	Timeline
IR-1 Prepare the transportation system to withstand disruptions from hazard events.	Minimize the impacts of hazards on transportation assets and services by implementing the recommendations in the Genesee-Finger Lakes Regional Critical Infrastructure Vulnerability Assessment.	Integrating resiliency considerations into planning, design, construction, operation, and maintenance safeguards facilities, minimizes disruptions, and protects lives and property.	New York State Department of Transportation New York State Thruway Authority County Departments of Transportation RGRTA	 Ongoing
IR-2 Implement stormwater management best practices as a part of transportation infrastructure projects.	Adopting stormwater management best practices include supporting policies that minimize runoff, remove pollutants, and ensure safety at agencies and municipalities throughout the region.	Effective stormwater management policies minimize flooding, pollution, erosion, sedimentation of waterways, and other negative impacts of flooding events.	New York State Department of Transportation County Departments of Transportation Municipalities	 Ongoing
IR-3 Promote resilient environments near infrastructure.	Pursue hazard mitigation through development of natural barriers including wetlands, natural drainage systems, and forests to reduce the impacts of severe weather events on transportation assets.	Natural environmental mitigation provides a clean and relatively low maintenance system to reduce the impacts of severe weather. Secondary benefits also provide spaces for recreation, prevent air and water pollution, and improve aesthetics.	New York State Department of Transportation County Departments of Transportation Municipalities	 Ongoing

INNOVATION AND RESILIENCE



Action Statement	Description	Importance	Partners	Timeline
IR-4 Continue supporting investments in alternative fuels.	Continue to coordinate with stakeholders to educate the public and fleet operators on the benefits of alternative fuel vehicles.	Reliable information about alternative fuels enables informed decision-making about how domestically produced fuels can support the regional transportation system.	NYS Energy Research and Development Agency Greater Rochester Clean Cities Municipalities	 Ongoing
IR-5 Monitor and investigate the impacts of autonomous, connected, and automated vehicles on the regional transportation system.	Monitor the advancements made in emerging autonomous, automated, and connected vehicle technologies and deployments to ensure the benefits of these developments accrue to the community.	Informed planning agencies and decision makers regarding the advancements and impacts of emerging technologies on the transportation system are better able to adapt to disruptive changes caused by new technologies.	New York State Department of Transportation New York State Thruway Authority County Departments of Transportation	 Ongoing
IR-6 Support the expansion of alternative fuel infrastructure.	Deploy alternative fuel supply infrastructure, including but not limited to electric charging and hydrogen, propane, and natural gas fueling infrastructure, in strategic locations around the region.	The increased availability of alternative fuel facilities enables increased use of alternative fuel vehicles and decreased emissions, improved air quality, and reduced fossil fuel dependency.	NYS Energy Research and Development Agency Greater Rochester Clean Cities Municipalities	 Near Term 1-5 Years

PROJECT SPOTLIGHT

RGRTA's Adoption of Hydrogen Buses

In a first for New York State, RGRTA began operating the first of ten new hydrogen buses in its fleet in Fall 2024. These buses create no emissions other than water vapor and have a range of 275-325 miles. Their range is farther and their refueling time is shorter than traditional electric buses.



Photo: RTS Hydrogen Bus
Source: WXXI News

The buses reduce operating costs, improve air quality for the surrounding area, and produce far less noise than traditional engine powered buses. These buses continue to push RGRTA toward its zero emissions goal by 2040. RGRTA also expects to purchase some smaller hydrogen cell vehicles in the future based on the success of these vehicles.

The project supports the following recommendations:

- IR-5 – Continue supporting investments in alternative fuels.
- IR-6 – Support the expansion of alternative fuel infrastructure.
- IR-7 – Expand the use of alternative fuel fleet vehicles.

INNOVATION AND RESILIENCE

PROJECT SPOTLIGHT

Regional Resilience Improvement Plan

Natural hazards like flooding, winter storms, and high winds pose significant risks to regional infrastructure, disrupting travel and straining emergency services. Ensuring the transportation network can withstand these events is a critical long-term priority for the Genesee-Finger Lakes Region.



Photo: Flooding on NYS Thruway in Henrietta
Source: 13WHAM

The Regional Resilience Improvement Plan* is currently identifying vulnerable assets and potential hazards to develop targeted mitigation strategies. A regional map is being developed to highlight assets ranked by criticality. By including both overarching policy and asset-specific mitigation strategies, the plan will assist state and local agencies to improve the long-term viability of the regional transportation network.

The project supports the following recommendations:



- IR-8 Prevent hazard impacts on transportation assets where possible
- IR-9 Protect transportation assets from hazard impacts.

*The resilience improvement plan is an update of the Regional Vulnerability Assessment that was completed in 2016.

Action Statement	Description	Importance	Partners	Timeline
IR-7 Expand the use of alternative fuel fleet vehicles.	Expand the use of alternative fuel vehicles, such as municipal public waste trucks, transit buses, and delivery vans, in public and private fleets.	Alternative fuel vehicles decrease emissions and improve air quality. During the time frame of this plan, the automobile industry is expected to increase	NYS Energy Research and Development Agency Greater Rochester Clean Cities Municipalities	 Near Term 1-5 Years
IR-8 Prevent hazard impacts on transportation assets where possible.	Relocate, elevate, and/or limit access to vulnerable transportation assets to reduce the impact of potential hazards.	Preventing hazard impact can reduce or eliminate asset damage and service disruption due to hazard events.	New York State Department of Transportation County Departments of Transportation RGRTA	 Near Term 1-5 Years
IR-9 Protect transportation assets from hazard impacts.	Strengthen transportation assets to better withstand anticipated hazard impacts such as flooding and severe weather.	When hazard prevent methods are unfeasible, strengthened assets can better resist anticipated hazard impacts.	New York State Department of Transportation County Departments of Transportation RGRTA	 Medium Term 6-10 Years

INNOVATION AND RESILIENCE



Action Statement	Description	Importance	Partners	Timeline
IR-10 Increase system and asset redundancy.	Incorporate redundant elements such as duplicate structural members and alternative routes to prevent asset and system failure from hazard impacts.	Redundancy can prevent catastrophic infrastructure and service failures by ensuring that assets and systems have multiple structural and operational backups.	New York State Department of Transportation County Departments of Transportation Municipalities	 Medium Term 6-10 Years
IR-11 Implement Recovery Operations using ITS.	Integrate recovery considerations such as traveler information dissemination and alternative route planning into infrastructure and service design. Where possible, incorporate new technologies to increase dissemination impacts.	Recovery considerations minimize the effects of hazard impacts by enabling faster restoration of damaged infrastructure and disrupted services.	New York State Department of Transportation County Departments of Transportation RGRTA	 Long Term 11-25 Years



ECONOMIC DEVELOPMENT






The movement of goods in the region is the backbone of the economy. Jobs, lives, and businesses all depend on the transport of food, medicine, and merchandise. Our region has an efficient system with low congestion and quick travel times. The region is well connected to state and national highways. The focus of this section is to ensure this remains true into the next twenty-five years.

The needs of the Region will continue to change into the future, so it is important that the network improves as well. The region will prosper by improving last-mile connections, and providing better access to shopping and work. The GTC will continue to be an active partner with businesses, localities, and residents to get people and goods where they need to be.






CSX Mainline Class I Railroad in Lyons

Action Statement	Description	Importance	Partners	Timeline
ED-1 Improve travel time reliability on regional freight corridors.	Support reliable travel times across the surface transportation system, especially along interstates and freight corridors, utilizing all available management tools and roadway designs elements.	The private sector struggles to consistently estimate the duration of freight trips due to hours-of-service rules and rigid delivery windows. Unforeseen congestion costs time and money.	New York State Department of Transportation County Departments of Transportation Municipalities Railroads	 Ongoing
ED-2 Support rail enabled businesses by expanding facilities.	Support rail enabled businesses through the development of new rail siding and adopt and use regulations that support industrial uses in proximity to rail facilities and reduce conflicts with residential properties.	Shifting goods shipment to rail reduces emissions, decreases conflicts with truck traffic, and utilizes existing infrastructure. Support of local businesses promotes regional economic growth.	Economic Development Agencies Railroads	 Ongoing
ED-3 Maintain and modernize rail infrastructure to support modern use patterns.	Improving existing infrastructure entails improving the maximum allowed weights at the highest permitted operating speeds. Enable short line railroads to remain competitive.	Short lines provide critical access to class 1 railroads for local businesses. Railroads need to maintain and modernize their infrastructure to operate efficiently and competitively.	Railroads	 Ongoing

ECONOMIC DEVELOPMENT



Action Statement	Description	Importance	Partners	Timeline
ED-4 Preserve existing transportation corridor rights-of-way for future developments.	Preserve existing linear rights-of-way by following the preservation strategies identified in the 2015 Regional Rights-of-Way Study. Coordinate with local landowners to maintain potential access.	Existing right-of-way offers options for future transportation needs that may not be currently realized. Procuring new right-of-way is difficult and expensive. Once right-of-way is disassembled, it is often impossible to restore.	Utilities Municipalities	 Ongoing
ED-5 Coordinate federal-aid investments on the transportation system with municipal, regional, state, and national economic development programs.	Invest federal-aid resources in transportation infrastructure and services that advance regional economic development, job growth, and private investment priorities.	The private sector relies on a safe, efficient, and reliable transportation system to obtain raw materials for manufacturing, deliver goods to market, and provide employees with access to job sites.	Economic Development Agencies New York State Department of Transportation County Departments of Transportation Municipalities	 Ongoing
ED-6 Improve first and last mile access to manufacturing, warehousing, and other industrial and commercial sites.	Improve the ability of freight to move from expressways to local freight-related facilities via local roads and intersections, known as last mile access, and typically the most complicated move of a freight trip.	Freight facilities often lack properly designed ingress/egress points. Long queues may develop, including through incompatible residential areas, if operation needs are not properly planned.	New York State Department of Transportation County Departments of Transportation Municipalities	 Near Term 1-5 Years

PROJECT SPOTLIGHT Inner Loop North Mobility and Development Strategy

Following the successful completion of Inner Loop East, the City of Rochester is continuing the transformation by studying Inner Loop North. Completed in December of 2025, the project analyzed the existing conditions in the area, challenges to reconstruction, and to gather community input.



Photo: Inner Loop North Project Area




The study was broken into three sub-areas, east, west, and central, each with their own challenges and opportunities. The plan includes significant investment into mixed-use development projects, green spaces, and improved connections between neighborhoods on either side of the existing Inner Loop.




This plan represents the first step in the redevelopment process and includes a multi-phase implementation strategy. Some projects are highlighted specifically, but most are design forward to ensure that the plan remains flexible to support a wide array of development strategies.

The project supports the following recommendations:

- HS-1 Projects initiated or supported by the GTC will ensure that all road users are considered in design recommendations.
- SMM-14 Conduct strategic divestment assessments where transportation facilities may be unfit for their location.
- IR-4 Support investment in infill development.

ECONOMIC DEVELOPMENT

Action Statement	Description	Importance	Partners	Timeline
ED-7 Support e-commerce through effective and efficient last mile transportation.	Ensure that last mile e-commerce deliveries can continue to be made in a safe and timely manner. Reconsider traditional commercial land use policy as brick-and-mortar retail continues to evolve. Plan for future implications of autonomous delivery methods.	E-commerce's market share continues to grow, signaling a shift away from traditional retail. An evolving transportation system that meets the needs of a changing economy creates a competitive regional advantage.	New York State Department of Transportation County Departments of Transportation Municipalities	 Near Term 1-5 Years
ED-8 Ensure curbside deliveries are safe, efficient, and non-disruptive.	Ensure that delivery vehicles have adequate curbside accommodation for commercial deliveries in urban areas. Likewise, accommodate the safe operation of transit shared mobility, and private transportation services in these areas.	Curbside access is valuable along denser corridors found in city and village centers. Municipalities that actively manage use of this space are best able to capture that value while realizing their access priorities.	Municipalities Shared Mobility Providers Private Transportation Providers	 Near Term 1-5 Years
ED-9 Expand and maintain interregional transit travel options.	Encourage transfers between all modes with particular attention to enhancing connections to local transit, active transportation, and rideshare. Promote projects that enhance the traveler's experience within station facilities.	Travel by air, rail, and bus provides critical connections to economic and social opportunities outside the region. The quality of station facilities has a direct impact on intercity travel mode choice.	Intercity Bus Providers Amtrak Greater Rochester International Airport County Departments of Transportation	 Near Term 1-5 Years

Action Statement	Description	Importance	Partners	Timeline
ED-10 Promote recreational travel to and within the region.	Portray the transportation system as a distinguishing feature in providing access to events, natural attractions, historically significant places, and nationally acclaimed trails.	Affordable and easy access to an efficient transportation system increases the attractiveness of regional assets as destinations to visit, generating economic activity.	New York State Department of Transportation County Departments of Transportation Municipalities	 Near Term 1-5 Years
ED-11 Increase active transportation and multimodal connections to and within rural communities.	Expand transportation options to employment and service destinations in rural communities, especially where personal vehicles are the dominant mode.	Increasing multimodal options provides additional access to rural residents without vehicle access. This can further support rural economies that may be dependent on tourism.	New York State Department of Transportation County Departments of Transportation Municipalities	 Near Term 1-5 Years
ED-12 Study, design, and implement improved wayfinding.	Study, design, and implement physical and technology-based wayfinding systems in downtowns, in neighborhoods, and along historic districts and routes throughout the region.	Wayfinding systems establish a coherent sense of place and allow users of a space to navigate to and from destinations which promotes feelings of comfort, safety, and security.	Business Associations Economic Development Agencies Municipalities	 Near Term 1-5 Years

ECONOMIC DEVELOPMENT



PROJECT SPOTLIGHT

GTC Regional Freight Plan, Ontario County Freight Corridor Plan - Area 2

Manufacturing has always been an important part of the regional economy. The Ontario County Freight Corridor plan was identified as a potential location for manufacturing development, as it meets the criteria as a shovel ready site in New York due to the parcel size, utility availability, roadway access, and zoning. While this site is highly desirable, the study recommends improvements to allow for the site to better support large scale industrial development.



Photo: Freight Train over Letchworth Park

Improvements in rail infrastructure, as well as development of the Ontario County site, can provide significant economic and job growth to the region. Corridor upgrades will improve safety, especially at at-grade crossings, optimize rail efficiency and access, and minimize the impact on surrounding properties.

The project supports the following recommendations:

- IR-9 Encourage municipalities to implement infill development.
- ED-3 Maintain and modernize rail infrastructure to support modern use patterns.
- ED-14 Improve rail corridors in the region to better enable concentrated business parks.

Action Statement	Description	Importance	Partners	Timeline
ED-13 Enhance air freight connections with the surface transportation system and services.	Improve airport cargo infrastructure to allow for smoother delivery of freight into the region.	Airport cargo infrastructure is a critical leg of the freight transportation system in the region. Ensure that airport infrastructure can remain a competitive part of the system.	Economic Development Agencies Greater Rochester International Airport New York State Department of Transportation	Medium Term 6-10 Years
ED-14 Revise parking requirements and management techniques.	Revise traditional parking requirements and management techniques given recently observed shifts in travel behavior. Changes in local land use regulations and codes should reflect changing parking needs in terms of new, infill, and existing development.	The continued growth of telework, and other travel behavioral changes, diminishes the dominance of work trips as the primary trip type. A meaningful response will require codified rules that favor more productive land use over parking facilities.	Landowners Major Employers Municipalities	Medium Term 6-10 Years
ED-15 Encourage shared parking in new developments.	Encourage shared parking among new and infill development as well as existing districts. Develop and employ models that aid planning efforts to identify parking demand for sites and district areas based on land use and time of day.	Shared parking results in more productive land use, allow for increased flexibility in site design, reduces impervious surfaces, and improves stormwater management.	Business Owners Municipalities	Medium Term 6-10 Years

ECONOMIC DEVELOPMENT



Action Statement	Description	Importance	Partners	Timeline
ED-16 Improve rail corridors in the region to better enable concentrated business parks.	Support the implementation of recommendations in the 2024 Ontario Freight Rail Corridor Development Plan: Area 2 study.	The region has a robust rail infrastructure connecting and service many of the major industries in the area. To remain competitive, coordinating future development around specific, developable sites can provide maximum return on investment in both economic and job growth.	Economic Development Agencies Railroads New York State Department of Transportation County Departments of Transportation	 Long Term 11-25 Years
ED-17 Support workforce development opportunities.	Support workforce development through educational and job training opportunities related to careers in the transportation, freight, logistics, and manufacturing industries.	Employers require a skilled workforce to effectively operate and grow their business.	Workforce Development Agencies Economic Development Agencies	 Long Term 11-25 Years





FINANCIAL PLAN

The Financial Plan demonstrates that the recommendations proposed in recommendations section in the L RTP 2050 can be implemented while ensuring fiscal constraint. The funding outlined in the plan will provide for agencies at the Federal, State, and Local levels. The Financial Plan illustrates how each level of government funds and implements highway, transit, and multimodal projects.

The emphasis of L RTP 2050 remains on investments that maintain, rehabilitate, and reconstruct existing highways, bridges, transit, and other assets. The Financial Plan is directed towards maintaining a transportation network that is safe and efficient for both people and goods. Projects are prioritized based on their support for the recommendations outlined in this document. This section outlines the flow of funding for projects that maintain the existing infrastructure and programs of the region. Focusing spending on existing needs prevents overcommitting projected finances at the GTC's disposal in the planning horizon. The plan must be fiscally constrained, so the cost of future projects does not exceed the projected funding expected through 2050. These amounts can be seen in the Projected Revenue Table on the following page.

While L RTP 2050 does not fully fund every identified need. Instead, it demonstrates how projected revenue can be allocated in future Transportation Improvement Programs. It provides a framework for short-term implementation of long-term objectives that align with regional and federal transportation objectives. The L RTP balances the maintenance of existing infrastructure with strategic investments in new opportunities to enhance the transportation system. The GTC and its partners will continue to pursue all funding available while positioning the region to meet the changing needs of the transportation system.

The L RTP and Financial Plan can be amended by the GTC Board to reflect significant changes to funding that may result from the successors to the Infrastructure Investment and Jobs Act (IIJA) set to expire on September 30, 2026.

Projected Revenues

Projected revenues for L RTP 2050 are based on current federal, state, and local funding levels for roads, bridges, transit, and trails. The GTC estimates these sources will generate \$12.9 billion through 2050.

PROJECTED REVENUE (in millions)

The projections are based on conservative estimates of growth of existing sources. The projections were based upon past and current federal, state, and local funding levels.

The Financial Plan was developed based upon:

- projects programmed in the GTC 2026-2030 Transportation Improvement Program;
- the New York State Thruway Authority 2026 Budget Book;
- the SFY 2025-2026 New York State Consolidated Local Street and Highway Improvement Program (CHIPS);
- the City of Rochester’s 2024-25 to 2028-29 Capital Improvement Program transportation investments (over and above Federally funded projects);
- the Monroe County 2026-2032 Capital Improvement Program transportation investments (over and above Federally funded projects);
- other county’s transportation investments (over and above Federally funded projects).

Given the exceptional nature of the Inner Loop North Transformation Project (PIN 4CR017), it was excluded from the financial baseline so as not to overestimate reasonably available revenue. The project is currently programmed with \$100 million from the federal Reconnecting Communities Program, \$100 million from New York State, and \$20 million from the City of Rochester. A specific funding plan for this project was not finalized at the time of LRTP development, but it is anticipated that the New York State commitment may include both federal and state sources of funding.

LRTP 2050 does not assume receipt of discretionary awards from FHWA, FTA, the USDOT, or Congress. However, if any proposed projects align with the LRTP, the GTC will provide the MPO support necessary to advance them.

The GTC Region has been the successful recipient of multiple discretionary awards in the past ten years, including the Inner Loop East and I-390 at I-490 Interchange Improvements. It is anticipated that project sponsors will actively pursue these opportunities in the future for implementation.

SOURCES	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	'36-'40	'41-'45	'46-'50	TOTAL
Federal	174	179	130	141	127	173	173	173	173	173	905	946	989	4458
Highway	152	152	101	124	99	147	147	147	147	147	770	805	841	3782
NHPP	62	44	44	44	44	65	65	65	65	65	341	355	370	1630
STBG Flex	20	23	9	15	11	16	16	16	16	16	86	90	94	432
STBG Lg Urb	1	19	12	9	9	10	10	10	10	10	55	57	60	274
STBG OSB	3	4	4	4	3	4	4	4	4	4	20	21	22	100
BFP	13	10	12	13	13	13	13	13	13	13	67	70	74	336
BNY	5	19	12	12	12	13	13	13	13	13	68	71	75	341
HSIP	14	9	7	5	5	9	9	9	9	9	45	47	49	225
NHFP	10	0	0	10	0	4	4	4	4	4	21	22	22	105
TAP	1	11	0	6	0	4	4	4	4	4	20	21	22	101
CMAQ	9	2	0	5	0	3	3	3	3	3	18	19	20	90
CRP Lg Urb	1	1	1	1	1	1	1	1	1	1	7	7	7	34
PROTECT	13	9	0	0	0	4	4	4	4	4	23	24	24	115
Transit	22	26	29	17	28	26	26	26	26	26	135	142	149	676
FTA 5307	14	19	19	9	16	16	16	16	16	16	86	90	95	431
FTA 5310	8	8	8	8	8	8	8	8	8	8	43	45	47	214
FTA 5311	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FTA 5339	0	0	2	0	3	1	1	1	1	1	6	6	7	31
State	239	215	223	176	171	210	210	210	210	210	1076	1102	1130	5383
Highway	171	147	155	108	103	140	140	140	140	140	716	734	752	3585
H-SDF	52	46	67	20	13	41	41	41	41	41	211	219	226	1058
CHIPS	61	61	61	61	61	61	61	61	61	61	303	303	303	1514
Thruway	58	40	28	28	29	39	39	39	39	39	202	212	223	1013
Transit	68	68	68	68	68	70	70	70	70	70	359	369	378	1798
ATC	17	18	18	18	18	18	18	18	18	18	94	97	99	472
T-SDF	3	3	4	2	3	3	3	3	3	3	17	18	19	84
STOA	48	47	46	48	47	48	48	48	48	48	248	254	261	1241
Local	92	123	93	100	102	104	113	115	116	118	614	647	676	3013
Highway	64	94	65	71	73	75	84	85	87	88	462	491	516	2254
H-Local	64	94	65	71	73	75	84	85	87	88	462	491	516	2254
Transit	29	29	29	29	29	30	30	30	30	30	152	156	160	759
T-Local	19	20	20	19	20	20	20	20	20	20	103	106	109	517
MRT	10	9	9	10	9	9	9	9	9	9	48	50	51	243

FEDERAL REVENUE SOURCES

Program	Abbrev.	Eligible Activities
National Highway Performance Program	NHPP	Roads and bridges located on the National Highway System.
Surface Transportation Block Group	STBG	Federal-aid highway, pedestrian and bicycle facilities, and transit capital projects. Flex funds can be used anywhere. Off-System Bridge (OSB) program funds can only be used for bridges carrying roads that are off the Federal-Aid system. Large Urban funds can only be used in the Rochester Urbanized Area.
Bridge Formula Program	BFP	Repair and rehabilitate bridges.
Bridge New York	BNY	New York grant to repair and rehabilitate bridges.
Highway Safety Improvement Program	HSIP	Capital safety improvements.
National Highway Freight Program	NHFP	Roads and bridges on the National Highway Freight Network.
Transportation Alternatives Program	TAP	Bicycle and pedestrian improvements.
Congestion Mitigation and Air Quality Improvement Program	CMAQ	Capital projects and programs that improve air quality.
Carbon Reduction Program	CRP	Projects designed to support reduction of air emissions.
Promoting Resilient Operations for Transformative, Efficient, and Cost Saving Transportation Grant Program	PROTECT	Resiliency and reduce hazard event impacts.
Urbanized Area Formula	FTA 5307	Capital Funding for rolling stock and facilities in the Rochester Urbanized Area.
Enhanced Mobility of Seniors and Individuals with Disabilities	FTA 5310	Support the transportation needs of older adults with disabilities.
Rural Area Formula	FTA 5311	Capital and operations in rural areas.
Buses and Bus Facilities	FTA 5339	Capital funding to replace buses, related equipment, and construct bus-related facilities.

STATE REVENUE SOURCES

Program	Abbrev.	Eligible Activities
Highway - State Dedicated Fund	H-SDF	Capital and operations on the State system.
Consolidated Local Street and Highway Improvement Program	CHIPS	Apportionments to Counties, Cities, Towns, and Villages for facilities not on the State system.
Thruway Authority	Thruway	Toll and other revenues supporting capital and operations on the Thruway system.
Accelerated Transit Capital	ATC	Allocation to transit agencies for capital assets.
Transit - State Dedicated Fund	T-SDF	Support for agency sponsored Federal Aid projects.
State Transit Operating Assistance	STOA	Allocation of operations funding to transit agencies.

LOCAL REVENUE SOURCES

Program	Abbrev.	Eligible Activities
Highway - Local	H-Local	Match for Federal Aid projects and Capital Improvement Programs (Rochester/Monroe).
Mortgage Recording Tax	MRT	Apportionment to transit agencies for capital and operating assistance.
Transit - Local	T-Local	County contributions to RGRTA.



Implementation Investment Strategies

The Financial Plan divides the projected funds into eighteen investment strategies that implement the Recommendations section of this document. The investments encompass the broad range of capital and operations projects that are currently programmed in the Transportation Improvement Program or implemented with local revenues.

Estimates for these categories were derived from system-level plans and current expenditure projections. The funding for each category balances identified needs with reasonably available resources. The fiscal constraint of the Financial Plan limits the amount of potential funding that could fully address any one specific category. The categories will be used to inform programming levels of federal funding programs among the range of projects.

The categories also consider emerging project types that address the evolving needs of the region. Transit electrification (including hydrogen), shared mobility, and critical asset resiliency support recommendations that promote transportation access while limiting air pollution. These projects are already underway in the region and continued investment is included in the Financial Plan.

Individual projects will be solicited for consideration through the Transportation Improvement Program. Future funding programs, amounts, and years of implementation will be determined through the TIP process. There are no individual regionally significant projects identified in the Financial Plan. Illustrative Projects are identified and will require separate action later.

Projected Investment Strategies (\$ millions)

PROGRAM	EXPENSE
NHS Assets - Pavements	1,454
NHS Assets Bridges	1,293
Regional Pavements	485
Regional Bridges	375
Local Roads and Bridges	4,477
Critical Asset Resiliency	398
Safety Enhancements	266
Safety Emphasis Areas	361
Systems Management and Operations	327
Active Transportation Expansion	116
Regional Trails Initiative	40
Transit Rolling Stock	2,298
Transit Electrification	116
Transit Services and Operations	888
TOTAL	12,854

Strategy	Description
NHS Assets - Pavements	Preservation and renewal of National Highway System pavement assets per the <i>NYSDOT Transportation Asset Management Plan</i>
NHS Assets - Bridges	Preservation and renewal of National Highway System bridge structures per the <i>NYSDOT Transportation Asset Management Plan</i>
Thruway Capital	Implementation of the NYS Thruway Authority Capital Plan
Regional Pavements	Preservation and renewal of Federal Aid-eligible roads
Regional Bridges	Preservation and renewal of Federal Aid-eligible bridges
Local Roads and Bridges	Preservation and renew of local roadway and bridge facilities
Freight Mobility	Preservation of assets identified as National Highway Freight Network and other Critical Urban Freight Corridors
Critical Asset Resiliency	Improvements to critical assets to mitigate against hazards per the GTC Critical Transportation Infrastructure Vulnerability Assessment
Safety Enhancements	Site-specific countermeasure implementation to reduce crashes
Safety Emphasis Areas	Systemic safety improvements for pedestrians and others identified through NYS Strategic Highway Safety Plan Emphasis Area programs
Systems Management and Operations	Highway management and support for operations to ensure reliability and safety per the GTC TSMO Strategic Plan
Active Transportation Expansion	Bicycle and pedestrian improvements and expansions where facilities do not currently exist.
Regional Trails Initiative	Enhancement of existing trails and development of new connections as identified in the GTC Regional Trails Initiative
Shared Mobility	Capital and operational support for bicycle sharing and other emerging shared mobility modes
Transit Rolling Stock	Preventive maintenance and replacement of buses serving both urban and rural services per the RGRTA Transit Asset Management Plan
Transit Facilities	Passenger and maintenance facilities included
Transit Electrification	Rolling stock and capital equipment necessary to achieve a NYS goal of a 100% electric fleet at RTS Monroe by 2035
Transit Services and Operations	Operations of RTS Monroe, Ontario, Orleans, Genesee, Wyoming, Livingston, and Wayne fixed-route and paratransit services.

ILLUSTRATIVE PROJECTS

The following projects have not been programmed for improvements at the adoption of the LRTP 2050. Illustrative projects may be considered for future programming depending on additional financial resources becoming available. An LRTP amendment would be required to add them to the fiscally constrained Financial Plan.

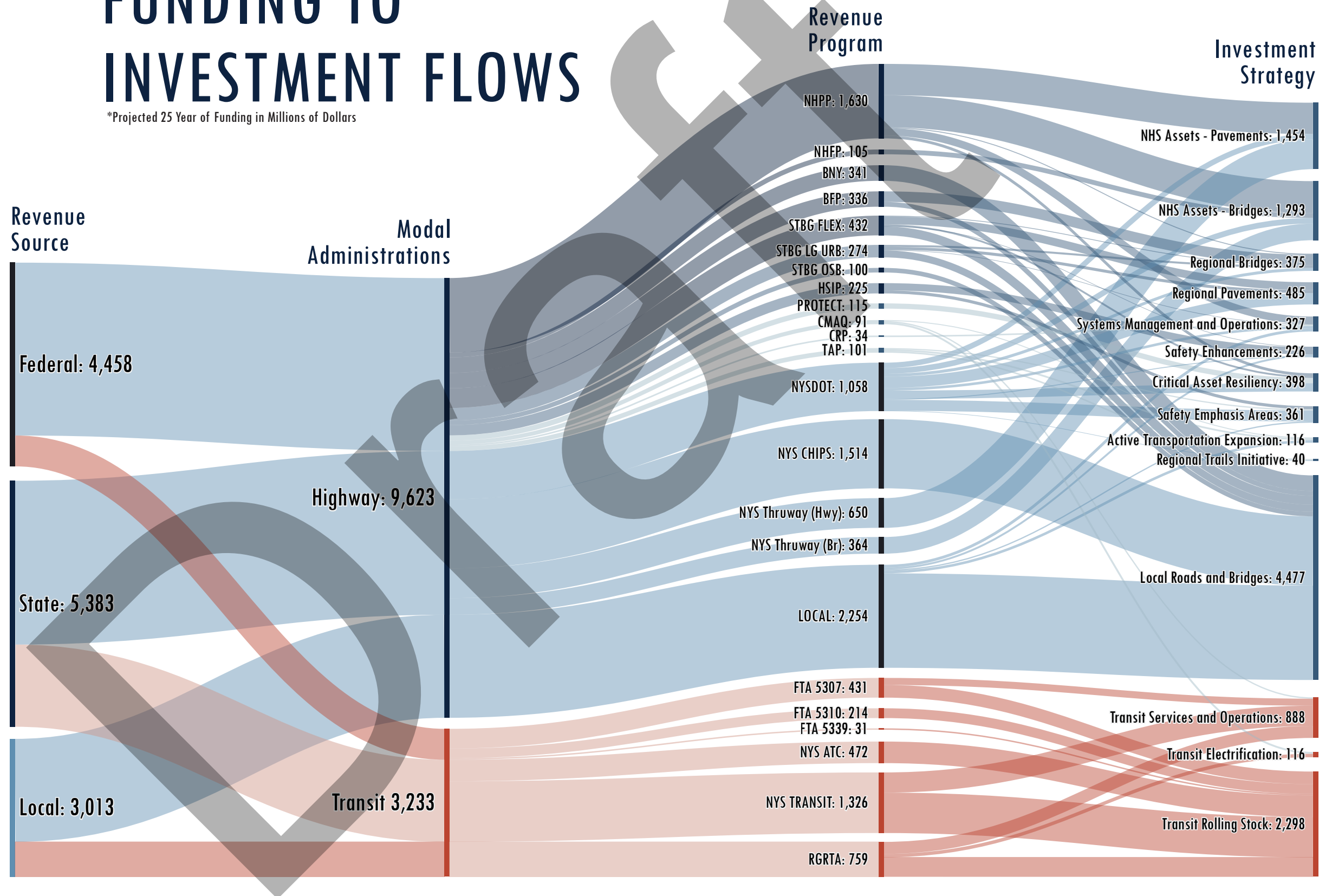
Among regionally significant projects, the Empire State High Speed Rail Corridor will require additional support from local, state, and federal agencies. This document will remain a living one and will be updated as projects and projections change in the coming years.

The upcoming Empire Boulevard Safety Enhancement Project will focus on improving safety along State Route 404 between Winton Road and Daytona Avenue. A pending study of the I-490 Center City Interchange will likely lead to large-scale transformative projects as will the underway study of Mount Read Boulevard.

Following a completed study of the connected I-490 and I-590 interchanges, potential construction regarding widening of bridges and lane reconfiguration based on identified preferred alternatives is being considered for a future capital project. Additionally, the region will be conducting a planning level scoping report for the Irondequoit Bay Bridge to develop recommendations for a major capital investment that will likely occur within the horizon of LRTP 2050.

FUNDING TO INVESTMENT FLOWS

*Projected 25 Year of Funding in Millions of Dollars



REVENUE CHANGES

The Financial Plan is based upon a continued interest by the Federal, State, and Local government in maintaining and enhancing the transportation network. The current surface transportation legislation expires on September 30, 2026. Congress has begun developing successor legislation. It is expected that there will continue to be an emphasis on the asset management of the National Highway System (NHS) and to enhance safety on all roads. There is also increased recognition of the need to support efforts to repair and replace facilities owned by local governments.

L RTP 2050 recognizes that there will most likely be changes to sources of revenues for transportation at both the Federal and State levels over the planning horizon. The projected funding sources in this Financial Plan are based upon the current programs in the IIJA. The current authorization reflects a past effort to consolidate the number of programs from previous packages and is likely the basis for a new multi-year package.

The Financial Plan expects that both the Federal government and New York State will take actions to pursue revenue streams to continue existing and develop new funding mechanisms. The Federal Highway Trust Fund is assumed to continue to decline with growing fuel efficiency and the projected increase of the share of electric vehicles into the market. However, the overall amount of Federal support for surface transportation is not expected to fall below existing levels. Potential Federal and State revenue sources could include:

- **Vehicle Miles Traveled (VMT) Fees** – Charges to users based upon the number of miles driven. Fees could be adjusted based upon time of day and other travel demand strategies.
- **General Fund Transfers** – Continue Congressional actions that transfer a portion of the General Fund to supplement the Highway Trust Fund.

Several potential new revenue sources have been piloted in other cities and regions across the United States. Additional study and coordination among local jurisdictions and regional partners is needed to determine if they are appropriate in this region:

- **User Fees** – Charges to individual users, transportation network companies, and freight transporters that may both maximize revenue generation while supporting effective provision of limited assets.
 - Parking – Variable pricing based upon demand
 - Curb Space – Designated areas that are reserved for goods delivery and transportation networking companies
- **Land Value** – Property taxes and fees that are focused on the financing of specific improvements.
 - Tax Increment Financing – Dedicating a portion of the assessed property tax revenues to finance transportation improvements that drive redevelopment along a corridor or area.
 - Transportation Management Districts – Special assessments related to the improvement and maintenance of roads.

GTC will continue to support the planning and coordination of potential new revenue sources through the UPWP. The Financial Plan may be amended to account for these evolving issues and to account for significant changes brought about by the successor to the IIJA.



EVALUATING PROGRESS

Carefully tracked performance measures indicate how well the transportation system is meeting regional goals and expectations. They are useful in monitoring the achievement of specific safety, access, maintenance, sustainability, and economic goals, such as minimized traffic fatalities and serious injuries, serving the largest population possible conveniently via public transportation, preserving roadway and bridge facility condition, minimizing energy user and emissions, and ensuring reliability of the freight delivery network. A performance-based planning approach intends to improve project and program delivery, inform decision-making keep priorities at the forefront, and provide for greater transparency. Decisions are backed by data, facilitating justification of realistic and achievable transportation investments.

MAP-21 originally established requirements related to performance-based planning to increase accountability and transparency. The 2021 IIJA continues to support the implementation of performance measures and planning targets. Subsequently, MPOs must employ a transportation performance management approach in carrying out their planning and programming activities. 23 U.S.C.

Section 134 (C)(1) requires that each MPO establish performance measures to use in tracking progress toward attainment of critical outcomes for the region.

On July, 13, 2018, a Performance Management Agreement between GTC, NYSDOT, and RGRTA was executed. Under the federal requirements, RGRTA and NYSDOT are responsible for establishing specific performance targets for the federally required National Performance Measures. GTC has exercised the option of adopting the targets set by RGRTA and/or NYSDOT and programming projects towards achieving those targets.

GTC will also continue to document progress against the Nation Performance Measures in a companion report. For information regarding the federally required measures and how L RTP 2050 supports the attainment of the latest performance targets, see the National Performance Measures Report, herein incorporated by reference. The following performance measures are unique to L RTP 2050 and directly quantify progress toward the achievement of the plan's recommendations.

TRAFFIC SAFETY

NYS DOT is responsible for establishing targets for federal safety performance measures. The measures chosen for inclusion in LRTP 2050 assess the absolute number of individuals affected by reportable crashes. The measures for the number of fatalities and serious injuries include all system users. The measure for non-motorized system users include only pedestrians and bicyclists.

What constitutes a fatality and/or a serious injury is defined by the Model Minimum Uniform Crash Criteria, approved by United States Department of Transportation. Fatalities include all deaths which occur within thirty days following a motor vehicle or other crash. Serious injuries, broken or distorted limbs, unconsciousness, severe lacerations, severe burns, and individuals unable to leave the scene without assistance.

Crash totals are provided by the New York State Accident Location Information System (ALIS) database managed by the NYS Department of Motor Vehicles. In 2024, the Genesee-Finger Lakes region witnesses 120 traffic fatalities and 1,073 serious injuries. Non-motorists represented 159 of those killed or seriously injured in vehicle collisions.

PHYSICAL ACTIVITY

As a comprehensive active transportation network positively contributes to overall public health, quantifying the number of people utilizing that network provides a glimpse into physical activity levels in the region. Future network expansion and improvements are intended to make walking and biking preferred modes of travel and thus increase the number of individuals engaged in physical activity as

part of their daily routine.

GTC has already begun an active transportation count program and proposed to record annual recurring bicycle and pedestrian counts at key locations on the regional trail network to measure progress against this performance measure. The recurring count locations and time frames are as follows:

- Genesee Riverway Trail at Turning Point Park (May 1 – June 6)
- El Camino Trail at Avenue D, Rochester (May 1 – June 5)
- Empire State Trail at Lehigh Valley Trail (May 1 -June 5)
- Genesee Valley Greenway at State Street, Mt. Morris (June 7-July 17)
- Route 390 Multi-Use Trail at Basil Marella Park, English Road, Greece (August 14 – October 27)

In 2022, during the time frames specified 54,843 walkers and cyclists passed by the locations identified for recurring measurement.

TRANSIT EFFECTIVENESS

Passenger trips per revenue vehicle is a standard transit productivity metric that all transit operators must report annually to the Federal Transit Administration. This measure helps to understand system-wide ridership as a function of resources expended; in service route miles in this instance. In 2023, RTS Monroe reported providing 1.95 passenger trips per mile on their fixed-route bus service, up from 1.69 in 2022 and 1.60 from 2021. Despite the rise in recent years, transit ridership has still not recovered from pre-COVID levels. Passenger trips per mile is down from 2.8 in 2019.

The 2024-2025 RGRTA Comprehensive

Strategic Plan defines on-time performance as the percentage of total time points encountered by a transit bus inside the parameters of two minutes early to five minutes late. The metric functions as an indicator of reliability of transit as a viable and consistent transportation options. The transit on-time performance as reported by RGRTA for the RTS Monroe system for the 2023 fiscal year is 92.9% percent.

BICYCLE FACILITY INVENTORY

The number of miles of multi-use trails, conventional bicycle lanes, and bicycle boulevards measure the magnitude of the regional non-motorized transportation network. The inventory has since grown to include 108.11 lane miles of conventional lanes and 28.95 lane miles of buffered lanes as of 2026. The regional trail network grew to include 292 miles of dedicated multi-use facilities.

Despite this growth, gaps do remain in the network, identified by the Regional Trails Initiative and various cycling master plans. These gaps present challenges to more complete regional access for cyclists. Increased expansion of the dedicated cycling network as described in previous planning is a desired performance outcome directly related to the Health Safety, as well as Access and Mobility, recommendation groups.

CONNECTIVITY

Connectivity refers to the directness of links and density of connections a path or road network. A well-connected network has many links, numerous intersections, and minimal dead ends of cul-de-sacs. As connectivity increases, route and mode options increase, allowing more direct and convenient travel

between destinations, and creating a more accessible system that is more resilient to volume pressures.

The most appropriate connectivity measure for the Metropolitan Planning Area (MPA) has proven to be the Connected Node Ratio (CNR) because it does not show bias against less dense proportions of the MPA. Nodes are defined as the endpoint of a link. A Real Node is a node that connects to other links; an intersection. A dangle node is an endpoint with no other connections. CNR is calculated by dividing the number of Real Nodes by the sum of Real and Dangle Nodes. The maximum CNR value is 1.0. Higher numbers indicate fewer dead ends and a higher level of connectivity.

CNR was calculated for all non-limited access roadways within the MPA using the New York State GIS Clearinghouse's street layer and trial data collected and validated by GTC staff. As the MPA features 22,398 three-way intersections, 4,285 four-way or greater intersections, the CNR in 2025 was 0.81. This number can be increased through a focus on connecting gaps in the regional transportation system with any new infrastructure construction rather than projects to increase isolated through-capacity.

TRAVEL TIME AND DELAY

Minimizing travel time delay and encouraging reliable travel times are key considerations for managing the regional transportation system. Reducing delay saves costs, such as time and fuel, while reliable travel times improve safety and facilitate trip planning.

Travel Time Index (TTI) is a ratio between free-flow speeds and measured speeds that measures relative travel time delay. A TTI

value of 1.3 indicates that a trip that takes 10 minutes to complete at free flow speed took 13 minutes to complete when the TTI was measured. Likewise, a TTI value of 1 indicates that traffic was moving at free-flow speed at the time of the measurement.

Using data gathered by INRIX in 2023, the TTI was calculated for all roads throughout the region, including state, county, and local roads, where vehicle probe-based travel time data was available. The average TTI for major roadways in the region was 1.03, indicating that travel times on these corridors were generally reliable and not significantly impacted by delay.

TRANSIT FLEET ASSET MANAGEMENT

All transit providers that are recipients or subrecipients of Federal financial assistance under 49 U.S.C. Chapter 53 and own, operate, or manage transit capital assets used in the provision of public transportation required to develop Transit Asset Management (TAM) Plans to achieve and maintain a state of good repair. RGRTA, the Tier I transit provider for this region, establishes performance targets.

The transit asset management performance measures assess the condition in which a transit capital asset is able to operate at a full level of performance. For age-based assets, the metric quantifies the percentage of assets per class that exceed the RGRTA-defined useful life benchmarks. RGRTA has opted to adjust the industry standard Expected Useful Life criteria to reflect the anticipated useful life of assets based on operational experience. These benchmarks list a 12-year useful life for 40 foot and 60 foot transit buses and a 5-year useful life for paratransit vehicles. RGRTA has established targets that no more than 15% of revenue vehicles within a class should exceed

the useful life benchmarks. The 2025 report to the National Transit Database shows that 17.9% of vehicles serving the urbanized area exceed their useful life benchmarks.

Category	Quantity	Exceed ULB	Percent
RTS 40-ft	166	25	15%
RTS 60-ft	20	0	0%
RTS Access	66	20	30%
Total	252	45	18%

BRIDGE AND PAVEMENT CONDITION

Pavement conditions determine the daily trip quality of regional residents more so than any other performance measure. The score measured in this document is the pavement Surface Rating, which analyzes the roughness of the road and the visual condition of the road's surface. These scores are measured through photography and standard operating procedures to normalize the data and ensure consistency.

The percentage of federal-aid highways with pavement conditions rated fair or better is calculated from a dataset collected by NYSDOT and GTC, which includes the vast majority of roadways in the region that are eligible for federal funding. Pavement conditions are rated "fair" or better for 93.82% percent of measured federal-aid roadways as of 2024.

Ensuring the structural integrity of bridges is vital to safety and connectivity. According to the Federal Highway Administration, bridge condition is calculated using the lowest rating

of National Bridge Inventory condition ratings. Inspectors evaluate the condition of a bridge's deck, super structure, substructure, and culvert on a scale from one to seven. In 2024, 86.38% percent of regional bridges were rated 5 or higher, corresponding to the "fair" or "good" condition.

ENERGY USE AND EMISSIONS

Further reduction of the transportation system's dependence on fossil fuels as the main source of energy will lead to better air quality for all. Environmental performance measures were first reported fifteen years ago with the adoption of LRTP 2035. Methods used to calculate environmental impacts have evolved significantly from 2011. For LRTP 2050 greenhouse gas emissions along with on-road direct energy usage were calculated for the Metropolitan Planning Area (MPA) using the latest EPA Motor Vehicle Emissions Simulator (MOVE5).

Using 2024 data provided by NYSDOT related to vehicle type, age distribution, fuel formulation, and other factors, average summer weekday (June, July, August) on-road direct energy usage was calculated at 146, 546 million Btu per day. This usage corresponds to 11,370 metric tons per day of carbon dioxide, nitrous oxide, and methane emissions and adjusting by the corresponding global warming potential of each contributing pollutant.

ALTERNATIVE FUEL ADOPTION

Expanding the availability and use of alternative fuels is a key strategy for reducing emissions and improving air quality throughout the region. To facilitate expanded use of electric vehicles, public and private charging stations have been installed throughout the

region. As of October 2025, NYSERDA records indicate that the region boasts 522 public charging stations, containing 1,673 individual outlets. 163 of these outlets are fast charging stations.

Based on DMV records, approximately 9,000 battery and plug-in hybrid vehicles have been registered in the region between 2020 and 2024. Over 3,600 of those vehicles were registered in 2024 alone. This number is expected to increase as the availability and popularity of electric vehicles during the time frame of this plan. As with the availability of charging stations, the registered electric vehicle count will be a key metric to track progress toward meeting regional sustainability goals.

FREIGHT RELIABILITY AND DELAY

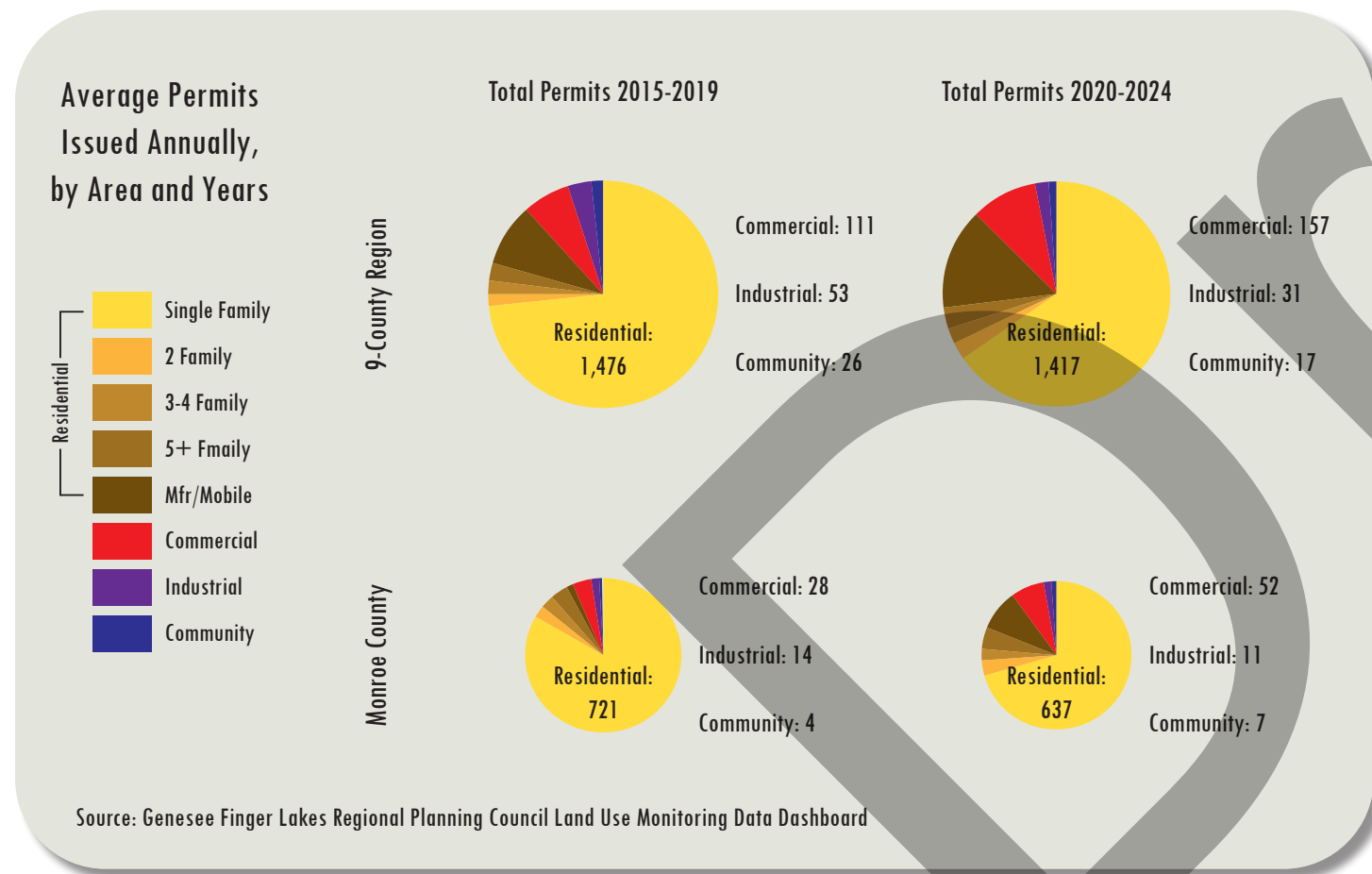
As previously stated, pavement condition is the top determinant of trip quality. Poor pavement conditions result in accelerated deterioration of equipment. Greater required maintenance increases operating costs for freight carriers. Pavement condition that was rated "fair" or better for 94 percent of the regional freight network in 2023.

Efficient goods movement also depends on reliable travel times. Using travel time data generated by INRIX for the region during 2023 and 2024, the TTI was calculated for the Regional Freight Corridors as defined on Page 40 as roadway segments where truck ADT according to the New York State Roadway Inventory System exceeds 400. The average TTI for these corridors was 1.05, indicating that travel times of these corridors are reliable and not significantly impacted by delay.

LAND USE AND TRANSPORTATION CONNECTION

The transportation system is built to bring people from place to place. Building an effective and long-lasting transportation system requires an analysis of the connection between the network and the people who use it. Development in the region has been concentrated in Monroe and Ontario County. In recent years permitting has slowed significantly across the entire region.

80% of regional permits have been issued for the construction of single-family homes in the last decade, but there has been a decline in permitting during the same period. Single family home permits have decreased by 13% over the last five years compared to the previous five-year rolling average, but there has been an increase in multi-family permits and in manufactured homes. The rise in multi-family home permits supports transportation in the region by increasing density, allowing for more efficient public transportation.



L RTP 2050 PERFORMANCE MEASURES

The performance framework summarized below will help GTC monitor progress toward addressing the needs and implementing the recommendations described in LRTP 2050. The table lists a benchmark for each performance measure along with a target direction that indicates improvement, or the maintenance of an already well-performing metric, consistent with GTC Goals and Objectives.

Group	Metric	Benchmark	Target
Health and Safety	Number of traffic fatalities	101.2*	↓
	Number of serious injuries resulting from vehicle collisions	976.2*	↓
	Number of fatalities and serious injuries: Non-motorized transportation system users	131.8*	↓
	Monthly bicycle and pedestrian volumes at key locations on the regional trail network	54,843 (2024)	↑
Access and Mobility	Passenger trips per revenue vehicle mile (RTS-Monroe)	1.95 (2024)	↑
	Transit on-time performance percentage (RTS-Monroe)	92.9% (2025)	↔
	Connected Node Ratio of the non-limited access network	0.79 (2024)	↑

*5 year rolling average

Group	Metric	Benchmark	Target
System Management and Maintenance	Travel Time Index (INRIX) on major roadways	1.03 (2024)	↔
	Percent of federal-aid roadways with pavement condition rated "Fair" or better	93.82% (2024)	↔
	Percent of regional bridges with condition rated "Good" or "Fair"	86.38% (2024)	↔
Innovation and Resilience	Percent of revenue transit vehicles that have met or exceeded useful life benchmarks	17.9 (2025)	↔
	Millions of Btu per day directly used by on-road transportation in the Metropolitan Planning Area	146,526 (2024)	↓
	Metric tons per day of Carbon Dioxide Equivalent emissions in the Metropolitan Planning Area	11,370 (2024)	↓
Economic Development	Number of electric vehicle charging stations	522 (2024)	↑
	Travel Time Index (INRIX) on the regional freight network	1.05 (2024)	↔
	Percent of the regional freight network with pavement condition rated "Fair" or better	94% (2024)	↑

FOOTNOTES

1. In-Kind contributions include technical support, software, hardware, expertise, or any other non-monetary contribution or support.
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