

Transportation Improvement Program

2023
2027



October 2022



GENESEE TRANSPORTATION COUNCIL

GENESEE TRANSPORTATION COUNCIL

RESOLUTION

Resolution 22-53 Adopting the 2023-2027 Transportation Improvement Program

WHEREAS,

1. The Genesee Transportation Council (GTC) has been designated by the Governor of New York State as the Metropolitan Planning Organization responsible for transportation planning for the nine-county Genesee-Finger Lakes Region, including the Rochester Metropolitan Planning Area (MPA);
2. Federal regulations require that the urban transportation planning process include the cooperative development of a transportation improvement program, consisting of a staged multi-year program of projects consistent with the metropolitan transportation plan;
3. The *Long Range Transportation Plan for the Genesee-Finger Lakes Region 2045* is the current metropolitan transportation plan which guides the planning and development of transportation improvements and their selection for inclusion in the transportation improvement program;
4. The proposed *2023-2027 Transportation Improvement Program (TIP)* is wholly consistent with the *Long Range Transportation Plan for the Genesee-Finger Lakes Region 2045*;
5. The TIP has been developed in accordance with the adopted *GTC Transportation Improvement Program Procedures Manual* and the *Agreement by and among GTC, New York State Department of Transportation, and Rochester Genesee Regional Transportation Authority*, which identifies and specifies the responsibilities and cooperative procedures for carrying out transportation planning (including without limitation corridor and subarea studies) and programming consistent with Title 23 Section 450 (23 CFR 450) Subpart C of the Code of Federal Regulations;
6. GTC, via the TIP, has proposed to be implemented in the Rochester MPA those projects utilizing eligible federal funding categories included in Title 23 and Title 49 of the United States Code (USC) as amended;
7. The TIP and the projects contained therein can be advanced with funds that are reasonably expected to be available to support their implementation;
8. The members of GTC agree to use the TIP as the project selection document for implementation to satisfy the project selection requirements of Infrastructure and Investment Jobs Act (IIJA) and any successor federal transportation legislation;

9. Projects in this document remain in effect until revised by further TIP actions;
10. Transportation projects outside of the Rochester MPA but within the GTC nine-county planning region that are eligible for funds from categories included in Title 23 and Title 49 of the USC may be included in the TIP for information purposes in order to give a comprehensive picture of transportation improvements within the region;
11. It is recognized that projects included in the TIP may cost incrementally more or less than the estimates provided and future funding availability and/or changes in investment priorities will require amendments to the adopted TIP; and
12. It is also recognized that the actions shown in the TIP will be included without change in the Statewide TIP to be approved by the Federal Highway Administration and the Federal Transit Administration.

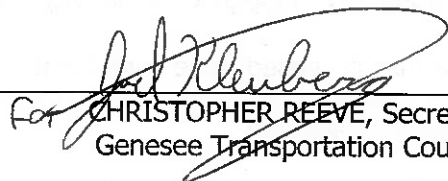
NOW, THEREFORE, BE IT RESOLVED

1. That GTC hereby adopts the *2023-2027 Transportation Improvement Program (TIP)* for the Rochester Metropolitan Planning Area;
2. That GTC fully intends those projects shown in the TIP to progress under the appropriate program categories of the Infrastructure and Investment Jobs Act (IIJA) and any successor federal transportation legislation, subject to fund availability, their continuing eligibility under those programs, and maintenance of their priorities when considered against other candidate projects as they may be developed under whatever rules and procedures may then pertain; and
3. That this resolution takes effect immediately.

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 August 25, 2022.

Date 08/25/2022


For CHRISTOPHER REEVE, Secretary
Genesee Transportation Council

GTC's Commitment to the Public

The Genesee Transportation Council 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 and activities, whether those programs and activities are federally funded or not.

En Español

El Consejo Genesee de Transporte asegura que ninguna persona, por motivos de raza, color, nacionalidad, discapacidad, edad, sexo o situación económica, será excluida de participar en ningún programa o actividad, ni se le negarán los beneficios de los mismos, ni será objeto de discriminación de ningún tipo. El GTC, (por sus siglas en inglés) asegura además que se hará todo lo posible para asegurar la no discriminación en todas las actividades de sus programas, ya sea que esos programas y actividades estén financiados por el gobierno federal o no.

Contact GTC

If you have any questions or comments regarding this document, please contact the Genesee Transportation Council:

City Place
50 West Main Street
Suite 5131
Rochester, New York 14614

Telephone: (585) 232-6240
Fax: (585) 262-3106
e-mail: contactgtc@gtcmpo.org

Financial assistance for the preparation of this report was provided by the Federal Highway Administration and Federal Transit Administration. The Genesee Transportation Council 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.

Cover photo credits: Genesee Transportation Council staff, New York State Department of Transportation, and Rochester-Genesee Regional Transportation Authority

Contents

| | |
|---|----|
| Introduction..... | 1 |
| Roles and Responsibilities..... | 1 |
| Exhibit 1 – TIP Area..... | 2 |
| GTC Structure..... | 2 |
| Exhibit 2 – Genesee Transportation Council Board Members..... | 4 |
| The Transportation Improvement Program | 5 |
| What is the TIP? | 5 |
| Exhibit 3 – LRTP 2045 Goals and Objectives..... | 6 |
| What Types of Projects are Included in the TIP?..... | 8 |
| Exhibit 4 - Major Projects from the Previous TIP | 8 |
| What Geographic Area Does the TIP Cover? | 9 |
| What Agencies are Involved in TIP Development? | 9 |
| How is the TIP funded?..... | 9 |
| Table 1 – Planning Targets..... | 10 |
| Table 2 – Federal Funding Programs..... | 10 |
| Programmed Projects versus System Needs | 12 |
| Table 3 - Federal Funds Requested..... | 13 |
| How are Projects Selected for the TIP? | 13 |
| Project Groupings | 14 |
| Nondiscrimination and Title VI Considerations | 15 |
| Table 4 – EJ Project Impacts..... | 17 |
| Addressing Performance Targets..... | 18 |
| Background | 18 |
| HSIP and Highway Safety..... | 19 |
| Table 5 – HSIP and Highway Safety Targets | 19 |
| Transit Asset Management | 20 |
| Table 6 – Transit Asset Management Targets..... | 21 |
| Pavement and Bridge Condition | 22 |
| Table 7 – Pavement and Bridge Condition Targets..... | 23 |
| System Performance, Freight, and Congestion Mitigation and Air Quality (CMAQ) | 24 |
| Table 8 – System Performance Targets..... | 25 |
| Transit Safety | 26 |
| Table 9 – Transit Safety Targets..... | 27 |

Introduction

Roles and Responsibilities

The United States Department of Transportation requires every metropolitan area with a population over 50,000 to have a designated Metropolitan Planning Organization (MPO) to qualify for receipt of federal highway and transit funds. The Governor of New York State designated the Genesee Transportation Council (GTC) as the MPO responsible for transportation planning in the Genesee-Finger Lakes Region, which includes Genesee, Livingston, Monroe, Ontario, Orleans, Seneca, Wayne, Wyoming, and Yates counties.

Because of the size of the nine-county region and per federal requirements and regulations pertaining to MPOs, 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 (Exhibit 1 – 'Regional Core').

The mission of GTC is to maximize the contribution of the transportation system to the social and economic vitality of the Genesee-Finger Lakes Region.

To maintain the certifiable transportation planning process required by the federal government as a precondition for receipt of federal transportation funding, GTC as the designated MPO for the region must at a minimum produce and manage three major products:

1. Long Range Transportation Plan (LRTP)

This product provides a 20-year or more perspective of existing and projected transportation system capabilities, needs, and associated objectives, as well as recommendations to meet these objectives. This assessment is performed in the context of the ten major transportation planning factors contained in the Infrastructure Investment and Jobs Act (IIJA), enacted in 2021. It provides the framework for guiding federally-funded planning and investment decision making in the region. The LRTP must be updated at least every five years.

2. Unified Planning Work Program (UPWP)

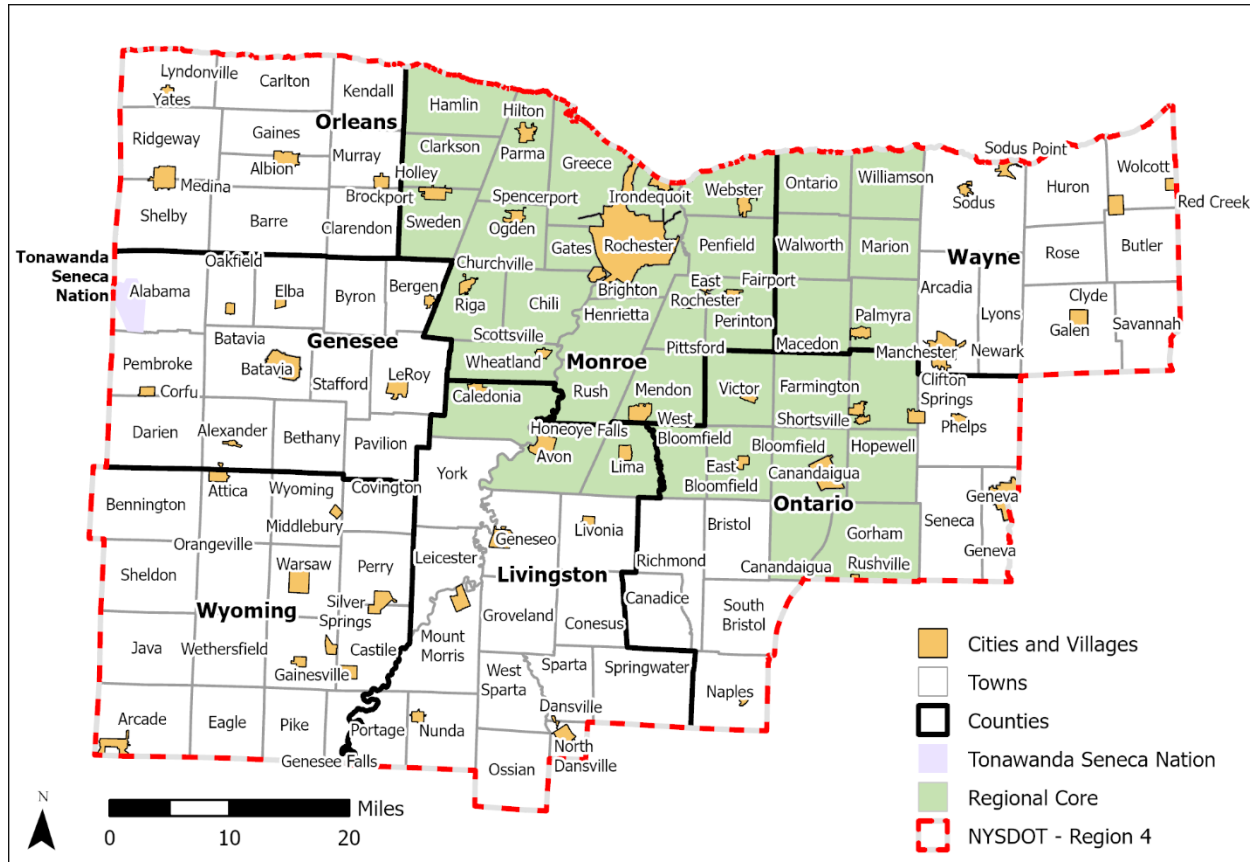
This product programs federally-funded transportation planning activities that further develop the policies and actions contained in the LRTP into concept-level projects and programs. The UPWP allocates funding for both specific planning projects and on-going programmatic activities. The UPWP must be updated at least every two years.

3. Transportation Improvement Program (TIP)

This product identifies and schedules the specific transportation improvements in the region that will receive federal funding in the near term (3 to 5 years). Projects included in the TIP typically emerge from infrastructure needs identified by member agencies and recommendations identified in projects and programs in the UPWP. The TIP must be updated at least every four years.

In addition to these requirements, GTC responds to other government mandates and guidelines such as the Title VI of the Civil Rights Act of 1964, Americans with Disabilities Act, and environmental justice considerations.

Exhibit 1 – TIP Area



GTC Structure

GTC is governed by a 27-member policy committee, the GTC Board, which is supported by the Executive Committee, Planning Committee, and various other committees. GTC staff, in conjunction with key staff of GTC member agencies, provides professional and technical support for execution of the policies and programs established by the GTC Board, consistent with the responsibilities identified in the preceding section. Citizen participation is incorporated at all meaningful levels of program development and decision making.

1. Board

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

The 27 members of the GTC Board consist of elected officials from the nine counties of the region and the City of Rochester, as well as representatives of other local, regional, state,

and federal agencies. The GTC Board elects its own officers from among its members. (See Exhibit 2 for current membership and officers.)

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

2. Executive Committee

The Executive Committee is a subset of the GTC Board responsible for specific decision making related to administrative, organizational, and financial issues affecting GTC and its staff. It has eight members and meets as needed at the discretion of the GTC Board Chair (See Exhibit 2 for current membership).

3. Planning Committee

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

Each member of the GTC Board appoints a representative to the Planning Committee. The Planning Committee representative is typically a transportation or planning professional. The Planning Committee typically meets eight times per year during the months that GTC Board meetings are not held, or as required. Each Planning Committee meeting is open to the public and advertised as such through media outlets across the region. Public forums are included at the beginning and conclusion of all meetings to allow for public comment on meeting agenda items before and after Planning Committee recommendations to the GTC Board are made.

Several ad-hoc committees exist to support GTC activities, including the UPWP Development Committee, the TIP Development Committee, and the Transportation Operations Coordination Committee, as well as others.

Exhibit 2 – Genesee Transportation Council Board Members

| Jurisdiction | Member | |
|---|-------------------------|----|
| Counties | | |
| Genesee County | Rochelle Stein | |
| Livingston County | David LeFeber | * |
| Monroe County | Yversha Roman | |
| Ontario County | Todd Campbell | * |
| Orleans County | Lynne Johnson | |
| Seneca County | Micheal Enslow | |
| Wayne County | Tony Verno | * |
| Wyoming County | Rebecca (Becky) Ryan | |
| Yates County | Leslie Church | |
| Other Local Members | | |
| Monroe County - Executive | Adam Bello | * |
| Monroe County - Planning Board | William Santos | |
| Monroe County - Supervisors' Association | Stephen Schultz | |
| Monroe County - At Large (1) | Jeffrey McCann | |
| Monroe County - At Large (2) | Daniel Hogan | |
| City of Rochester - Mayor | Malik Evans | * |
| City of Rochester - Council | Miguel Melendez | |
| City of Rochester - Planning Commission | David Watson | |
| City of Rochester – At Large | Erik Frisch | |
| Regional Agencies | | |
| Genesee / Finger Lakes Regional Planning Council | Rochelle Stein | * |
| Rochester-Genesee Regional Transportation Authority | Donald Jefferies | * |
| State Agencies | | |
| Empire State Development Corporation | Hope Knight | |
| NYS Department of Environmental Conservation | Basil Seggos | |
| NYS Department of Transportation | Marie Therese Dominguez | |
| NYS Thruway Authority | Frank Hoare | |
| Federal Agencies | | |
| Federal Aviation Administration | Evelyn Martinez | ** |
| Federal Highway Administration | Rick Marquis | ** |
| Federal Transit Administration | Michael Culotta | ** |

*Executive Committee

**Non-Voting Members

Officers

Peter Ingalsbe, Chairperson
James Brady, Vice-Chairperson
Christopher Reeve, Secretary

As of February 29, 2024, subject to change

The Transportation Improvement Program

What is the TIP?

As a condition for receipt of transportation funding, the federal government requires that the metropolitan transportation planning process include the cooperative development of a Transportation Improvement Program, or TIP. The TIP identifies the timing and funding of all capital and non-capital highway, bridge, transit, bicycle, pedestrian, and other surface transportation projects scheduled for implementation in a given region using federal transportation funds.

The TIP must cover at least a four-year period and it must be consistent with the goals and objectives identified in the current Long Range Transportation Plan. The TIP must also be adopted by the MPO (i.e., GTC).

The TIP must also be *fiscally constrained*. That is, the total amount of funds programmed in the TIP must not exceed the projected total amount of funds reasonably expected to be available to the region for that period. GTC staff worked with the New York State Department of Transportation (NYSDOT) and Rochester Genesee Regional Transportation Authority (RGRTA) to develop the projections of reasonably expected federal revenues to the region for the time period covered in the TIP.

While this region has been successful in securing discretionary funds, this revenue is not predictable and was not included in the revenue projections. Accordingly, only funds apportioned to NYSDOT and RGRTA via formula are considered reasonably expected to be available for the time period covered by the TIP and discretionary funds included in the TIP are those that have already been authorized or appropriated.

In some cases the TIP may also include, for *illustrative purposes*, major transportation projects for which federal funds are desired but not yet included in the fiscally-constrained revenue projections. The *2023-2024 TIP* does not include any projects for illustrative purposes.

In accordance with federal guidance for demonstrating fiscal constraint, the TIP Financial Summary (Fiscal Constraint Table) presents reasonably expected revenues and the amounts programmed in the TIP by federal funding source. Project costs are provided in Year of Expenditure (YOE) dollars utilizing agreed upon inflation factors representative of likely escalation in materials and labor costs.

This region's TIP spans a five-year period and is updated as often as every two years. This TIP covers the time period of October 1, 2022 through September 30, 2027 (Federal Fiscal Years 2023 through 2027). It is developed in a fashion that directly responds to the goals and objectives of the current GTC Long Range Transportation Plan for the region (Exhibit 3).

Exhibit 3 – LRTP 2045 Goals and Objectives

The Long Range Transportation Plan for the Genesee-Finger Lakes Region 2045 identifies the following six goals and associated objectives that wholly incorporate the ten planning factors identified in the Infrastructure Investment and Jobs Act:

- 1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency**
 - a. The transportation system should support balanced community and economic development of the metropolitan area
 - b. The transportation system should be a distinguishing competitive feature of the metropolitan area relative to other areas, serving the needs of existing businesses and enhancing the region's attractiveness to new business
- 2. Increase the safety of the transportation system for motorized and non-motorized users**
 - a. 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**
 - a. The transportation planning and decision making process should be multi-jurisdictional, fostering coordination and cooperation among local, county, state, and federal governments, concerned agencies, and the private sector
 - b. The transportation planning process should be conducted in as open and visible a manner as possible, encouraging community participation and interaction between and among citizens, professional staff, and elected officials
 - c. Financial and non-financial support for transportation initiatives should be provided by all levels of government and the private sector in a fashion which reflects their relative responsibilities for, and/or benefits from, the initiatives and related economic and social impacts
 - d. Innovative financing/partnerships for transportation initiatives that reflect the full scope of interests impacted or served should be explored
 - e. Transportation and transportation-related information resources should be developed and shared in a fashion that promotes informed public and private sector decision making
 - f. Awareness should be promoted regarding the impact of individual, public, and private sector decisions on the quality of mobility and the potential impact of these decisions on others
- 4. Increase the accessibility and mobility options available to people and freight**
 - a. The transportation system should provide the capacity, coverage, and coordination necessary to provide mobility to the region's population and commercial activities in a fashion consistent with the overall intent of Goal 1

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

5. Promote efficient system management and operations

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

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

- a. Transportation planning and decision making should support and reinforce local land use and development objectives
- b. Transportation planning and decision making should recognize local priorities balanced with broader community goals
- c. Transportation planning and decision making should strive to address issues on a corridor level, recognizing both the multi-jurisdictional component of travel and the interrelationship between transportation and non-transportation policies and investments
- d. The transportation system should encourage the efficient use of non-renewable energy resources and the exploration of renewable alternatives
- e. Transportation planning and decision making should strive to embrace designs and processes which respect the natural environment and enhance the overall contribution of the transportation system to community livability

What Types of Projects are Included in the TIP?

Federal regulations require that any surface transportation project within a MPA that is to be funded with Federal Highway Administration (FHWA) or Federal Transit Administration (FTA) funds must be included in the TIP. The following types of projects are eligible for federal funding:

- Projects on the federal aid highway system (e.g., road and bridge construction, reconstruction, rehabilitation, preventive maintenance, etc.);
- Public transportation projects (e.g., vehicle purchases and preventive maintenance, capital improvement projects, mass transit system construction, etc.);
- Projects that are not on the federal aid system, but may be eligible for federal funding for other reasons (e.g., bridge projects, bicycle and pedestrian facilities, etc.); and
- Projects that improve air quality and/or mitigate congestion (e.g., alternative fuel infrastructure, vehicle retrofit/replacement, etc.).

Exhibit 4 lists below are major projects (i.e., typically, have a construction cost of \$5 million or more) from the *2020-2024 TIP* that advanced to construction between its commencement on October 1, 2019 and the adoption of this TIP on August 25, 2022. Detailed financial information on all projects programmed in the TIP are compiled and published by GTC in its Annual Listings of Federally Obligated Projects, which are available on the GTC website at

<http://www.gtcmpo.org/AnnualObligations>.

Exhibit 4 - Major Projects from the Previous TIP

| Project | Sponsor | Construction |
|--|-------------------|--------------|
| I-390, from Rt 5/US 20 (Exit 10 - Avon) to I-90 (Exit 12 - Thruway) | NYSDOT | \$23,355,600 |
| Rt 19 and Rt 98 over the Erie Canal Bridge Rehabilitation | NYSDOT | \$22,500,000 |
| Rt 390 Preventive Maintenance and Bridge Rehabilitation from Lexington Ave to Rt 104 | NYSDOT | \$15,424,100 |
| I-490, Bushnells Basin to S Landing Rd | NYSDOT | \$10,421,400 |
| State St Reconstruction | City of Rochester | \$10,285,000 |
| East Main Street Reconstruction | City of Rochester | \$9,930,000 |
| Rt 590 from Blossom Rd to Titus Ave and Rt 104 from Culver Rd to the Irondequoit Bay Bridge Preventive Maintenance | NYSDOT | \$8,800,000 |
| Region 4 Pedestrian Safety Action Plan Implementation Phase II | NYSDOT | \$7,871,000 |
| Rt 531 from Rt 259 to I-490 Preventive Maintenance | NYSDOT | \$7,205,000 |
| Lake Ontario State Pkwy from Payne Beach Rd to Rt 390 | NYSDOT | \$7,004,500 |
| Rt 104, from Monroe CL to Furnace Rd | NYSDOT | \$6,600,800 |
| Mount Hope Avenue Improvements - Phase 2 | City of Rochester | \$6,560,000 |
| Rt 31/Rt 96/Rt 64 Preventive Maintenance and Bridge Deck Replacement | NYSDOT | \$6,425,000 |

| | | |
|---|---------------|-------------|
| I-490 at I-590 Preventive Maintenance | NYSDOT | \$6,106,200 |
| Pavement Markings (2021 & 2022) | NYSDOT | \$5,900,000 |
| Highway Preventive Maintenance (No. 8) | Monroe County | \$5,826,300 |
| Rt 414 over CSX Bridge Rehabilitation | NYSDOT | \$5,700,000 |
| Highway Preventive Maintenance (No. 9) | Monroe County | \$5,372,000 |
| Substructure Repair or Replacement at 9 Locations | NYSDOT | \$5,093,800 |

What Geographic Area Does the TIP Cover?

Consistent with federal regulations, the primary focus of the GTC TIP is the Rochester MPA. The MPA includes all of Monroe County, plus the adjacent developed areas of Livingston, Ontario, and Wayne Counties (see Exhibit 1).

Projects outside of the MPA (in the counties of Genesee, Livingston, Ontario, Orleans, Wayne, and Wyoming) are under the purview of NYSDOT-Region 4. GTC and NYSDOT-Region 4 work together to coordinate programming of these projects and the projects within the MPA so as to maximize regional benefit.

What Agencies are Involved in TIP Development?

The Infrastructure Investment and Jobs Act (IIJA) requires that the MPO of a region work with the State Department of Transportation, public transportation providers, and local transportation agencies to develop the TIP. In accordance with the IIJA, GTC, NYSDOT, RGRTA, and other GTC member agencies continue the longstanding practice of working as a cooperative team with other interested parties to develop and manage this region's TIP.

To guide the TIP development process, GTC convened the TIP Development Committee (TDC) comprised of representatives from the MPA counties (Livingston, Monroe, Ontario, and Wayne), the City of Rochester, RGRTA, and NYSDOT. This Committee also meets regularly to assist GTC and NYSDOT in managing the TIP between the adoptions of new TIPs, including review of substantive changes in projects that may require amending the adopted TIP.

How is the TIP funded?

The requirements for a TIP Financial Plan are specified in 23 CFR 450.326(j). For purposes of transportation operations and maintenance, the financial plan shall contain system-level estimates of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain Federal-aid highways (as defined by 23 U.S.C. 101(a)(6)) and public transportation (as defined by title 49 U.S.C. Chapter 53).

On March 25, 2022, NYSDOT issued the TIP/STIP Policy Guidance and Instructions for the Update Period Beginning October 2022 (TIP/STIP Guidance). The Guidance included the amounts of Federal Highway Administration (FHWA) funds by program that are being made available to the GTC/NYSDOT-Region 4 TIP area (Planning Targets) for Federal Fiscal Years (FFYs) 2023 through 2026. Revenues were held consistent for FFY 2027.

The reasonably expected revenues (i.e., Planning Targets) used to initially develop the TIP are presented by source and year in Table 1. Table 2, provides an overview of each funding source.

Table 1 – Planning Targets (\$ millions)

| Source | FFY 2023 | FFY 2024 | FFY 2025 | FFY 2026 | FFY 2027 | Total |
|-------------|----------|----------|----------|----------|----------|-----------|
| FHWA | | | | | | |
| NHPP | \$37.126 | \$37.126 | \$37.126 | \$37.126 | \$37.126 | \$185.631 |
| STBG Flex | \$15.147 | \$15.147 | \$15.147 | \$15.147 | \$15.147 | \$75.737 |
| STBG Lg Urb | \$10.866 | \$10.866 | \$10.866 | \$10.866 | \$10.866 | \$54.330 |
| STBG OSB | \$1.957 | \$1.957 | \$1.957 | \$1.957 | \$1.957 | \$9.787 |
| HSIP | \$5.367 | \$5.367 | \$5.367 | \$5.367 | \$5.367 | \$26.833 |
| Total | \$70.463 | \$70.463 | \$70.463 | \$70.463 | \$70.463 | \$352.317 |
| FTA | | | | | | |
| FTA 5307 | \$16.691 | \$17.129 | \$17.482 | \$17.929 | \$12.823 | \$82.054 |
| FTA 5339 | \$1.155 | \$1.184 | \$1.209 | \$1.239 | \$1.090 | \$5.877 |
| Total | \$17.845 | \$18.314 | \$18.690 | \$19.168 | \$13.913 | \$87.931 |

Table 2 – Federal Funding Programs

| | |
|----------|--|
| HSIP | The Highway Safety Improvement Program (HSIP) provides funding to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned public roads and roads on tribal lands. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance. A highway safety improvement project is any strategy, activity or project on a public road that is consistent with the data-driven New York State Strategic Highway Safety Plan and corrects or improves a hazardous road location or feature or addresses a highway safety problem. |
| NHPP | The National Highway Performance Program (NHPP) provides support for the condition and performance of the National Highway System (NHS), for the construction of new facilities on the NHS, and to ensure that investments of Federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a State's asset management plan for the NHS. |
| STBG | The Surface Transportation Block Group (STBG) provides flexible funding that may be used by States and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals. STBG Flex funds can be used anywhere. STBG OSB can only be used for bridges carrying roads that are off the federal-aid system. STBG Lg Urb funds can only be used in the Adjusted Urbanized Area. |
| FTA 5307 | The Section 5307 Urban Area Formula Fund program provides capital funding to support public transportation services and facilities in the large urbanized area of Rochester with a population greater than 200,000. |
| FTA 5339 | The Section 5339 Bus and Bus Facilities program provides capital funding to replace, rehabilitate, and purchase buses and related equipment and construct bus-related facilities. |

New York State retains a portion of the federal-aid funding apportioned to the state to support projects selected as part of statewide solicitations. Various solicitations have specific project eligibility criteria. Projects that are selected for funding via statewide solicitations are considered for inclusion in the TIP. Since funds are provided from statewide resources and are specific to a project, they are considered reasonably expected. These additional revenues are offset by the costs of the projects and are incorporated via a TIP Amendment. When such amendments occur, the Financial Summary table demonstrating fiscal constraint is revised as appropriate. These funds are referred to as "Statewide".

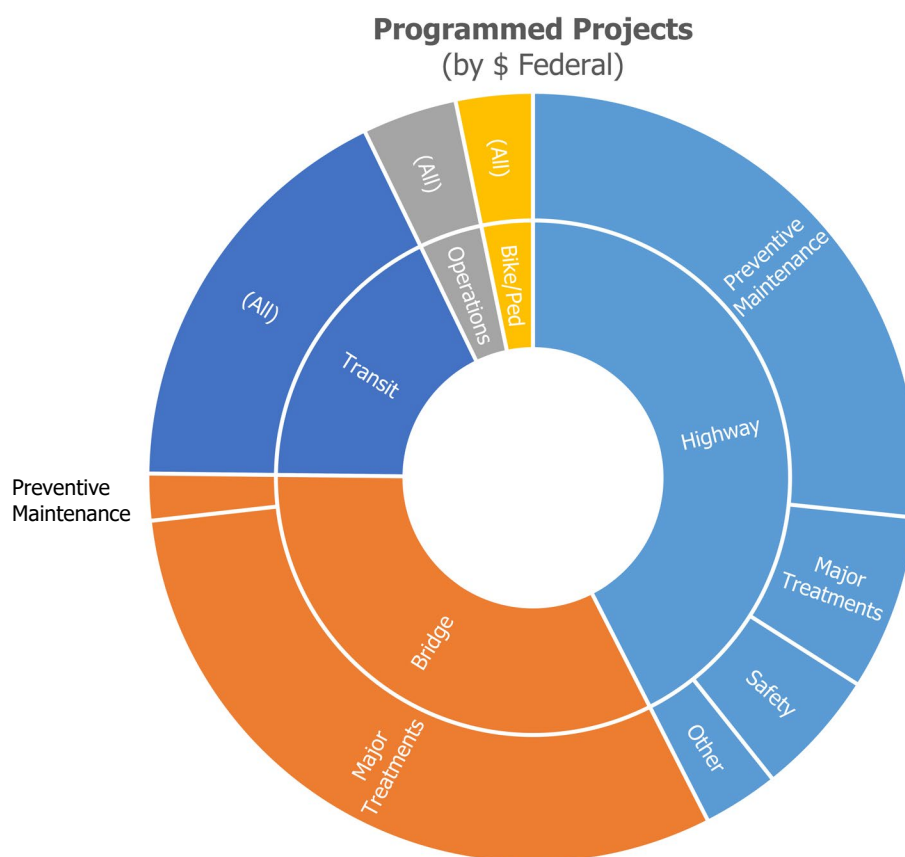
The TIP does not include any new funding sources; accordingly, there is no strategy to ensure their availability. During development of the TIP, GTC reached out to NYSDOT, RGRTA, and each County in the region to identify any regionally significant projects that are not federally funded. There are no regionally significant projects that are not federally funded.

In addition to public funds, a TIP must include private funds that support a federal-aid project or a regionally significant project. The TIP does not include any privately supported federal-aid or regionally significant projects.

Programmed Projects versus System Needs

The TIP project list balances cost-effective preventive and corrective maintenance with necessary major treatments, including replacements and rehabilitations of pavements, bridges, and transit assets. There are no roadway expansion projects in the FFYs 2023 through 2027. The projects included in the TIP can be broken down into the following categories:

- Preventive Maintenance – \$146 m (29%)
- Major Treatments – \$194 m (38%)
- Transit – \$90 m (18%)
- Bike/Ped – \$16 m (3%)
- Operations – \$20 m (4 %)
- Safety – \$27 m (5 %)
- Other – \$16 m (3 %)

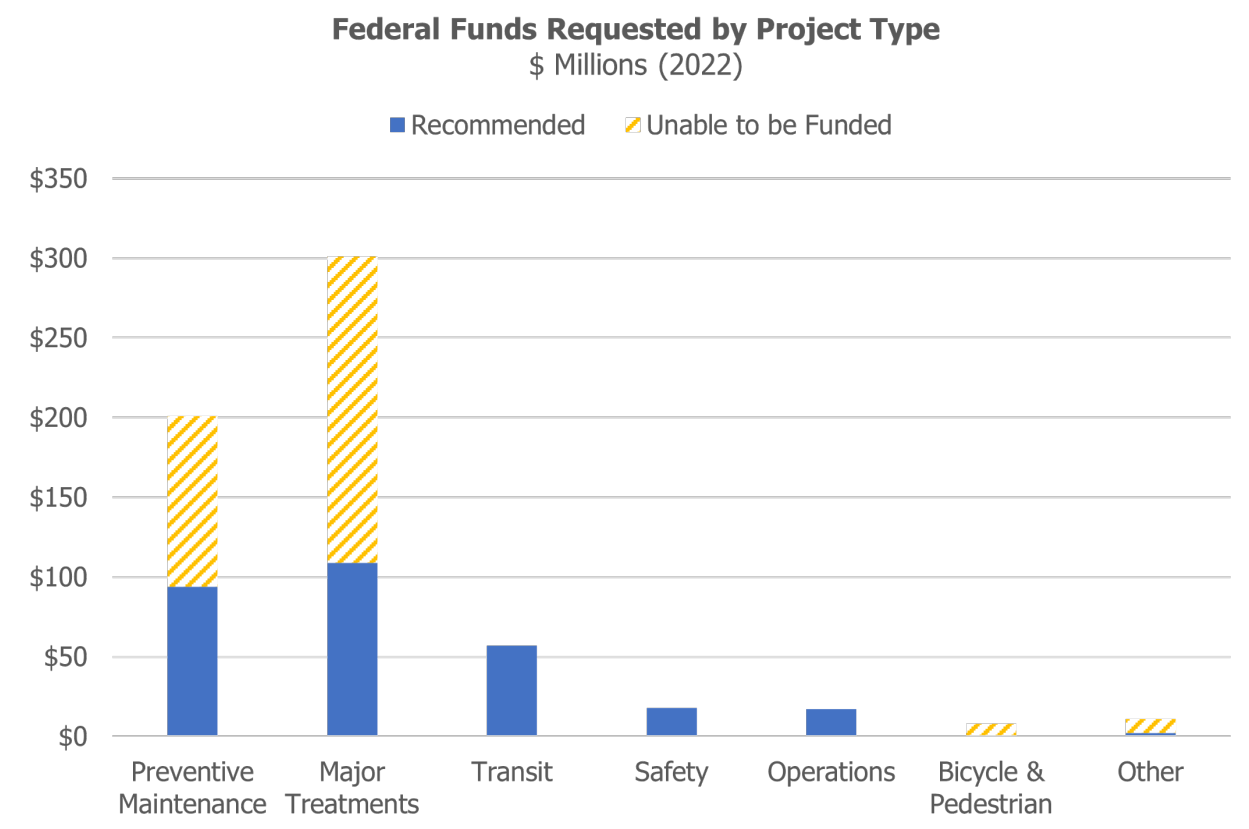


At the time of adoption, there were over \$316 million (Federal share, 2022 YOE) of requests that were unfunded across the region due to insufficient available balances given the Planning Targets:

- \$103 million in highway preventive and corrective maintenance projects
- \$65 million in highway reconstruction/rehabilitation projects
- \$4 million in bridge preventive maintenance projects
- \$127 million in bridge replacement/rehabilitation projects
- \$8 million in bicycle and pedestrian projects
- \$9 million in other projects

Table 3 shows the level of funds programmed by project type versus the level of funding requested. The largest funding gap by far is for major treatments that are beyond preventive maintenance. The gap in the amount of funding needing to address lower cost preventive maintenance projects represents many locations that will degrade to the point of needing more expensive work if they are not addressed in a timely manner.

Table 3 - Federal Funds Requested



How are Projects Selected for the TIP?

Key steps in the TIP development process are:

1. Solicitation of project proposals (December 17, 2021 – February 25, 2022)

GTC and NYSDOT-Region 4 issued a Call for Projects letter to GTC member agencies and the appropriate officials of eligible counties, municipalities, and authorities notifying them of the opportunity to prepare and submit project proposals in accordance with the TIP project evaluation and selection process. A TIP Applicant Workshop was held on January 4, 2022 for prospective applicants to review the proposal requirements, discuss potential proposals (including eligibility for federal funding), and receive answers to any questions on the TIP and the process used to develop it. Applicants had an opportunity to submit questions and receive feedback prior to submission of a final application.

2. Proposal evaluation and ranking (February 28, 2022 – May 2, 2022)

The GTC and NYSDOT-Region 4 staffs scored project proposals pursuant to the criteria included in the Project Evaluation Form, which is provided in Appendix B. As part of this evaluation. The resulting scores provided a preliminary basis for ranking project proposals within each mode and across all modes (mode categories include Highway & Bridge, Public Transportation, Bicycle & Pedestrian, Goods Movement, Intelligent Transportation Systems, and Other). Individual meetings were held with project sponsors to discuss schedule and cost details that would be needed for programming.

3. Preliminary program development (May 3, 2022 – July 6, 2022)

These preliminary rankings were reviewed and discussed with the TDC, and adjustments to rankings were made as necessary to reflect overall funding considerations, geographic balance, and other factors not specifically captured by the Project Evaluation Criteria. A list of projects recommended for funding as well as those projects proposed but not able to be funded given reasonably expected revenues was prepared and made available for public review.

4. Public review (July 15, 2022 – August 15, 2022)

The preliminary fiscally constrained program (Draft TIP) was issued for a 30-day public review, including three public meetings. 12 written and verbal comments, related to the projects, were received during this outreach. These comments were presented to the GTC Planning Committee. The Planning Committee did not recommend any changes to the list of projects recommended for funding based on their consideration of the comments.

5. Finalize program

After consideration of the comments received during the 30-day public review period, the Draft TIP was finalized and forwarded to the GTC Board with a recommendation to adopt the Draft TIP document.

6. GTC Board action (August 25, 2022)

The GTC Board adopted the *2023-2027 TIP* at its August 25, 2022 meeting.

Project Groupings

Federal rules and guidance allow projects to be grouped by function, work type and/or geographic area using the applicable National Environmental Policy Act (NEPA) classification of Categorical Exclusions under 23 CFR 771.117(c) and (d), 23 CFR 771.18(c) and (d), and/or 40 CFR part 93. The use of Grouped projects is subject to FHWA review in consideration of the management of the program.

Grouped projects can be established by fund type and Federal Fiscal Year for the following programs:

- FTA Section 5310 (Elderly and Disabled),
- FTA Section 5311 (non-urban areas),
- Section 130 Highway-Rail Grade Crossing Program

will not require a STIP amendment identifying specific projects funded from grouped programs; however, may request an updated list of projects related to it outside of the STIP amendment process.

NYSDOT has utilized these groupings for projects funded through these sources on a Statewide basis.

The 2023-2027 TIP includes these grouping categories. Each project for which Federal funds will be received in these categories will be reviewed to determine eligibility for categorical group. Grouped projects are not required to be listed in the TIP; however, projects are included in an Appendix for public information and will be reported to the Board.

Nondiscrimination and Title VI Considerations

Background

To identify and proactively address any potential concerns about the equity of investments in the transportation system, GTC staff developed a process to assess the impacts of the transportation projects included in this TIP on minority, low-income, and limited English proficiency (LEP) populations. This section presents the results of this assessment.

Title VI prohibits discriminatory practices in programs and activities receiving federal funds. Title VI is an abbreviated way of referring to the requirements of the federal Civil Rights Act of 1964 and other legislation that direct the fair treatment and meaningful involvement of all people, including environmental justice considerations. Executive Orders 12898 and 13166 require federal agencies to make achieving environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority, low-income, and LEP populations.

There are three fundamental principles at the core of environmental justice:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority, low-income, and LEP populations;
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process; and
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority, low-income, or LEP populations.

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

Title VI does not prescribe specific methods or processes for ensuring environmental justice in transportation planning. The analyses presented below represent GTC's best efforts to determine whether the benefits and burdens of the transportation projects in this TIP are distributed equitably among minority, low-income, and LEP populations and non-minority, non-low-income, and non-LEP populations

Analysis Methodology

It is recognized that transportation projects may have an impact beyond their immediate project limits. For this reason, geographic proximity analyses were used to determine how the location of the transportation projects in this TIP correlate to the location of minority, low-income, and LEP populations.

The data on minority, low-income, and LEP populations is derived from the 2016-2020 American Community Survey. The data was analyzed at the census tract level, which is the smallest geographic area at which race, income, and language data are available. The percentages of these populations were calculated for each census tract within the TIP Region. Percentages were then compared to averages for the TIP Region as a whole, using the regional averages as thresholds for determining whether or not an individual census tract should be considered as having above average concentrations of minority, low-income, or LEP populations.

Using this methodology, the following thresholds were developed:

- Above average concentration of minority individuals: 26% or more of the population in a census tract was from a minority group (i.e., non-white and/or Hispanic).
- Above average concentration of low-income population: 15% or more of the population in a census tract was at or below the poverty level.
- Above average concentration of households with LEP population: 12% or more of individuals in a census tract identified as speaking language other than English at home.

The census tracts that exceeded the thresholds were identified using Geographic Information System (GIS) software. GIS was used to determine how many of the transportation projects in the TIP lie within or on the boundaries of these census tracts.

Projects located in Seneca and Yates counties are not included in this analysis as projects in these counties are programmed by NYSDOT-Region 3 and NYSDOT-Region 6, respectively.

Only those transportation projects with a *specific location* (i.e., “*mapped*” projects) were included in these analyses. For example, an intersection improvement project is specific to one location (mapped), while the purchase of new buses serves multiple transit routes over a large area (not mapped). The impacts of projects that are not mapped, including most of the public transportation and operations projects and programs, are generally spread over a county, several counties, or the region.

There are 36 mapped project locations within environmental justice areas of concern with a total cost (federal share only) of approximately \$203 million are located in census tracts with concentrations of minority, low-income, or LEP persons above the regional average.

Analysis Results

| | EJ Tracts as share of Regional Total | % of TIP Projects* | Total \$ (Federal) | % of TIP |
|------------|--------------------------------------|--------------------|--------------------|----------|
| Minority | 65% | 33% | \$90,398,000 | 32% |
| Low-Income | 61% | 38% | \$133,990,400 | 48% |
| LEP | 65% | 39% | \$123,636,100 | 44% |

*Located in or on the boundary of these census tracts

Each mapped project located within or on the boundary of an environmental justice area of concern was evaluated as to its likely benefits and impacts on the minority, low-income, and LEP populations in the region. Projects were evaluated based on their effects on accessibility, mobility, congestion, safety, and recreational opportunities using the scale presented below.

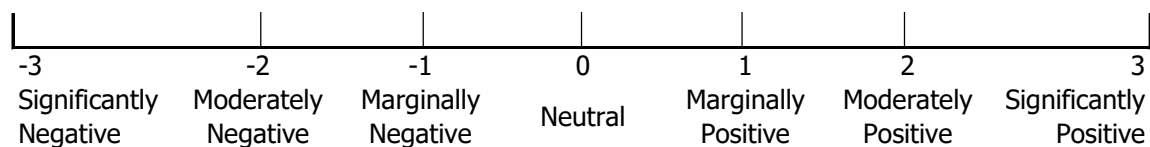


Table 4 presents the results of the evaluation of benefits and impacts of 36 mapped projects in environmental justice areas included in the *2023-2027 TIP*.

Table 4 – EJ Project Impacts

| Impact | Number of Project Locations: | Total Federal Share: |
|-------------------------|------------------------------|----------------------|
| Significantly Negative: | 0 | \$0 |
| Moderately Negative: | 0 | \$0 |
| Marginally Negative: | 0 | \$0 |
| Neutral: | 22 | \$157,036,400 |
| Marginally Positive: | 12 | \$35,143,500 |
| Moderately Positive: | 2 | \$11,253,300 |
| Significantly Positive: | 0 | \$0 |
| Totals: | 0 | \$0 |

The federal share figures shown in the table above are presented in year of expenditure dollars. They do not include adjustments for inflation based on the years in which the projects are scheduled (FFYs 2023 - 2027), which will increase the dollar amounts for all projects.

The results suggest that minority, low-income, and LEP populations in the region should receive equitable shares of the benefits arising from the transportation projects in the *2023-2027 TIP* while not being subjected to inequitable shares of any of the burdens.

Addressing Performance Targets

Background

Pursuant to federal requirements, MPOs must employ a transportation performance management approach in carrying out their federally-required planning and programming activities. Chapter 23 part 150(b) of the *United States Code* [23USC §150(b)] includes the following seven national performance goals for the Federal-Aid Highway Program:

- Safety – To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- Capital Assets Condition – To maintain the highway infrastructure and transit capital asset systems in a state of good repair.
- Congestion Reduction – To achieve a significant reduction in congestion on the National Highway System.
- System Reliability – To improve the efficiency of the surface transportation system.
- Freight Movement and Economic Vitality – To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
- Environmental Sustainability – To enhance the performance of the transportation system while protecting and enhancing the natural environment.
- Reduced Project Delivery Delays – To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practice

On the public transportation side, transportation performance management shall be utilized to advance the general policy and purposes of the public transportation program as included in 49USC §5301(a) and (b).

The Genesee Transportation Council *2023-2027 TIP* was developed and is managed in cooperation with the New York State Department of Transportation (NYSDOT) and the Rochester-Genesee Regional Transportation Authority (RGRTA). It reflects the investment priorities established in the *Long-Range Transportation Plan for the Genesee-Finger Lakes Region 2045*, which incorporates comments and input from affected agencies and organizations and the public.

TIPs “shall include, to the maximum extent practicable, a description of the anticipated effects of the transportation improvement program toward achieving the performance targets established in the metropolitan transportation plan, linking investment priorities to those performance targets” [23USC §134(j)(2)(D)]. TIPs and metropolitan transportation plans (MTPs) adopted or amended after the following dates must include performance targets for the associated measures:

- May 27, 2018 – Highway Safety Improvement Program (HSIP) and Highway Safety
- October 1, 2018 – Transit Asset Management

- May 20, 2019 – Pavement and Bridge Condition
- May 20, 2019 – System Performance/Freight/Congestion Mitigation & Air Quality Improvement Program (CMAQ)
- July 20, 2021 – Public Transportation Agency Safety Plan

This portion of the adopted TIP meets the requirements of 23USC §134(j)(2)(D).

Highway Safety Improvement Program (HSIP) and Highway Safety

Performance Targets

On March 15, 2016, FHWA published the final rule for the HSIP and Safety Performance Management (Safety PM) Measures in the *Federal Register* with an effective date of April 14, 2016.

The 2023 New York State *Strategic Highway Safety Plan* (SHSP) “strives for an equitable and sustainable transportation system that works towards zero fatalities and zero serious injuries for all roadway users.” The SHSP guides NYSDOT, the MPOs, and other safety partners in addressing safety and defines a framework for implementation activities to be carried out across New York State. The NYSDOT HSIP annual report documents the statewide performance targets.

GTC agreed to support the NYSDOT statewide 2024 targets for the following Safety PM measures based on five-year rolling averages per Title 23 Part 490.207 of the *Code of Federal Regulations* on February 29, 2024 via Resolution 24-02:

Table 5 – HSIP and Highway Safety Targets

| Performance Measure | NY Statewide Target 2024 |
|---|---------------------------------|
| Number of Fatalities | 1,016.1 |
| Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT) | 0.886 |
| Number of Serious Injuries | 11,089.9 |
| Rate of Serious Injuries per 100 million VMT | 9.606 |
| Number of Nonmotorized Fatalities and Serious Injuries | 2,628.4 |

Anticipated Effects

Safety is a critical component of GTC’s mission, and the projects on the TIP are consistent with the need to address safety. Safety is a primary consideration in the selection of projects to be included in the TIP. As noted above, GTC works with NYSDOT to cooperatively develop and manage the TIP. Prior to each TIP/STIP cycle, GTC is provided Planning Targets for each Federal formula fund source. All projects submitted for consideration of funding from the Planning Targets are evaluated against multiple criteria. The extent to which the project improves the safety of the existing transportation system is the highest weighted criterion. The TIP includes projects programmed with HSIP funds and other fund sources that are expected to

materially benefit the safety of the traveling public on roadways throughout the metropolitan planning area. The anticipated effect of the overall program is that it will contribute toward achieving NYSDOT's safety performance targets.

Transit Asset Management

Performance Targets

On July 26, 2016, the Federal Transit Administration (FTA) published the final Transit Asset Management rule. This rule applies to all recipients and subrecipients of Federal transit funding that own, operate, or manage public transportation capital assets. The rule defines the term "state of good repair" (SGR), requires that public transportation providers develop and implement transit asset management (TAM) plans, and establishes performance measures for four transit asset categories: rolling stock, equipment, transit infrastructure, and facilities. The rule became effective on October 1, 2016.

Public transportation providers must establish TAM targets annually for the following fiscal year and report them to the FTA. Each provider shares its targets with the MPO in which the provider's projects and services are programmed in the MPO's TIP. The MPO is required to establish its first set of TAM targets within 180 days of the date that public transportation provider established its first targets. After this, MPOs are not required to establish TAM targets each year after the transit provider establishes targets. Instead, MPOs must set updated TAM targets when the MPO updates its LRTP.

When establishing transit asset management targets, the MPO can either agree to program projects that will support the transit provider targets or establish its own separate transit asset management targets for the MPO planning area. GTC agreed to support these transit asset targets on June 10, 2021 via Resolution 21-48. With this action, GTC agrees to plan and program projects in the TIP that will, once implemented, make progress toward achieving the transit asset targets.

FTA defines two tiers of public transportation providers based on size parameters. Tier I providers are those that operate rail service or more than 100 vehicles in all fixed route modes, or more than 100 vehicles in one non-fixed route mode. Tier II providers are those that are a subrecipient of FTA 5311 funds, or a State or Indian Tribe, or have 100 or less vehicles across all fixed route modes, or have 100 vehicles or less in one non-fixed route mode. Tier I providers must establish their own transit asset management targets, while Tier II providers have the option to establish their own targets or to participate in a group plan with other Tier II providers whereby targets are established by a plan sponsor for the entire group. A state DOT is typically the group TAM plan sponsor.

GTC has the Rochester-Genesee Regional Transportation Authority (Tier 1) operating in the planning area. RGRTA's initial TAM Plan was adopted on September 30, 2018 and is updated on an annual basis to reflect service changes.

Table 6 – Transit Asset Management Targets

| Asset Category - Performance Measure | Asset Class | Useful Life Benchmark | 2023 Target |
|---|----------------------------|------------------------------|--------------------|
| Rolling Stock | | | |
| Age - % of revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB) | 40' Bus | 12 | 7% |
| | 60' Articulated Bus | 12 | 0% |
| | Paratransit IA | 4 | 15% |
| | Regional Type III | 5 | 15% |
| | Regional Type IV | 7 | 15% |
| Equipment | | | |
| Age - % of non-revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB) | Non Revenue Cars | 7 | 24% |
| | Maintenance Vehicles | Various | 58% |
| Facilities | | | |
| Condition - % of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) Scale | Passenger/Parking | n/a | 20% |
| | Administration/Maintenance | n/a | 20% |

Anticipated Effects

The GTC TIP was developed and is managed in cooperation with the RGRTA. The TIP includes specific investment priorities that support the MPO's goals, including transit asset management, using a project selection process that is anticipated to address transit SGR in the MPO planning area. The MPO's goal of addressing transit asset condition is linked to the investment plan of the RGRTA, and the process used to prioritize the projects within the TIP is consistent with federal requirements.

The focus of GTC's investments that address transit SGR include:

- 63 – 40' bus replacements;
- 20 – 60' bus replacements;
- 50 – paratransit bus replacements;
- 5 – Low-Floor bus replacements;
- 6 – Type VI bus replacements;
- 2 – Hydrogen bus acquisitions;
- 2 – Hydrogen van acquisitions; and
- Annual preventive maintenance of buses.

GTC anticipates that the projects in the TIP, once implemented, will contribute toward achieving the established transit asset management targets. Improving the SGR of transit capital assets is an overarching goal of the MPO.

Pavement and Bridge Condition

Performance Targets

On January 18, 2017, FHWA published the Pavement and Bridge Condition Performance Measures Final Rule in the Federal Register. This second FHWA performance measure rule, which has an effective date of May 20, 2017 (originally February 17, 2017), established six performance measures to assess pavement conditions and bridge conditions for the National Highway Performance Program (NHPP).

The pavement condition measures represent the percentage of lane-miles on the Interstate and non-Interstate National Highway System (NHS) that are in good or poor condition. FHWA established five pavement condition metrics¹: International Roughness Index (IRI); cracking percent; rutting; faulting; and Present Serviceability Rating (PSR). FHWA set a threshold for each metric to establish good, fair, or poor condition. Each section of pavement is classified as being in good condition or poor condition based upon the ratings of the metrics applicable to that pavement type. Pavement sections that are not good or poor condition are classified as fair.

The bridge condition measures represent the percentage of bridges, by deck area, on the NHS that are in good condition or poor condition². The condition of each bridge is evaluated by assessing four bridge components: deck, superstructure, substructure, and culverts. The Final Rule created a metric rating threshold for each component to establish good, fair, or poor condition. If the lowest rating of the four metrics is greater than or equal to seven, the structure is classified as good. If the lowest rating is less than or equal to four, the structure is classified as poor. If the lowest rating is five or six, it is classified as fair.

NYSDOT reported the 2022 Full Performance Period (i.e., the first full four-year performance period) to FHWA, as well as progress toward achieving the four-year targets. NYSDOT also reported the new two-year and four-year targets for the next performance period, 2023 and 2025 respectively, as shown in the table below. GTC agreed to support the NYSDOT statewide targets on June 8, 2023 via Resolution 23-15. The table also lists performance for each measure for the 2021 baseline year.

¹ Per FHWA, "To ensure consistent definitions, a distinction between 'performance measure' and 'performance Metric' was made in 23 CFR 490.101. A 'metric' is defined as a quantifiable indicator of performance or condition whereas a 'measure' is defined as an expression based on a metric that is used to establish targets and to assess progress toward meeting the established targets." (*FHWA Computation Procedure for the Pavement Condition Measures – FHWA-HIF-18-022*, FHWA Office of Infrastructure and Office of Policy & Governmental Affairs, April 2018)

² The sum of total deck area of good or poor NHS bridges is divided by the total deck area of all bridges carrying the NHS to determine the percent of bridges in good or in poor condition. Deck area is calculated by multiplying the structure length by either the deck width or approach roadway width.

Table 7 – Pavement and Bridge Condition Targets

| Performance Measures | New York Performance 2021 Baseline | New York 2-year Target (2023) | New York 4-year Target (2025) |
|---|---|--|--|
| Percent of Interstate pavements in good condition | 45.3% | 53.2% | 54.3% |
| Percent of Interstate pavements in poor condition | 1.1% | 1.4% | 1.7% |
| Percent of non-Interstate NHS pavements in good condition | 18.9% | 22.3% | 20.7% |
| Percent of non-Interstate NHS pavements in poor condition | 7.6% | 9.3% | 10.9% |
| Percent of NHS bridges (by deck area) in good condition | 25.3% | 24.1% | 21.1% |
| Percent of NHS bridges (by deck area) in poor condition | 11.3% | 12.5% | 12.8% |

The two-year and four-year targets represent pavement and bridge condition at the end of calendar years 2023 and 2025.

Anticipated Effects

Maintaining (and, where possible, improving) the condition of NHS pavements and bridges is a critical component of GTC's mission, and the projects on the TIP are consistent with the need to address the condition of these infrastructure assets. NHS highway and bridge conditions are primary considerations in the selection of projects to be included in the TIP.

Pavement and bridge conditions are primary considerations in the selection of projects to be included in the TIP. As noted above, GTC works with NYSDOT to cooperatively develop and manage the TIP. Prior to each TIP/STIP cycle, GTC is provided Planning Targets for each Federal formula fund source. All projects submitted for consideration of funding from the Planning Targets are evaluated against multiple criteria. The extent to which the project improves the condition of the existing pavements and bridges is the second highest weighted criterion, only after safety. These projects are prioritized using pavement and bridge condition data, treatment life, and traffic volume. The evaluations are conducted for pavement and bridge preventive maintenance and rehabilitation/replacements, respectively.

The TIP includes projects programmed with NHPP funds and other fund sources that are expected to materially benefit the condition of pavement and bridge assets throughout the metropolitan planning area. GTC anticipates that the projects in the TIP, once implemented, will contribute toward achieving NYSDOT's pavement and bridge condition targets.

System Performance, Freight, and Congestion Mitigation and Air Quality (CMAQ)

Performance Targets

On January 18, 2017, FHWA published the system performance, freight, and CMAQ Performance Measures Final Rule in the Federal Register. This third and final FHWA performance measure rule, which has an effective date of May 20, 2017 (originally February 17, 2017), established six performance measures to assess the performance of the NHS, freight movement on the Interstate System, and traffic congestion and on-road mobile source emissions for the CMAQ Program.

There are two NHS performance measures that represent the reliability of travel times for all vehicles on the Interstate and non-Interstate NHS. FHWA established the Level of Travel Time Reliability (LOTTR) metric to calculate reliability on both the Interstate and non-Interstate NHS. LOTTR is defined as the ratio of longer travel times (80th percentile) to a normal travel time (50th percentile) during four time periods from the hours of 6 AM to 8 PM each day (AM peak, midday, and PM peak on Mondays through Fridays and weekends). The LOTTR ratio is calculated for each segment of applicable roadway. A segment is reliable if its LOTTR is less than 1.5 during all time periods. If one or more time periods has a LOTTR of 1.5 or above, that segment is unreliable. The measures are expressed as the percentage of person-miles traveled on the Interstate and non-Interstate NHS that are reliable.

The single freight movement performance measure represents the reliability of travel times for trucks on the Interstate system. FHWA established the Truck Travel Time Reliability (TTTR) Index, which is defined as the ratio of longer truck travel times (95th percentile) to a normal truck travel time (50th percentile). The TTTR Index is calculated for each segment of the Interstate system over five time periods from all hours of each day (AM peak, midday, and PM peak on Mondays through Fridays, overnights for all days, and weekends). The highest TTTR Index value among the five time periods is multiplied by the length of the segment, and the sum of all length-weighted segments is then divided by the total length of Interstate to generate the TTTR Index.

There are three traffic congestion and on-road mobile source emissions performance measures that represent peak hour excessive delay per capita (PHED), non-single occupancy vehicle (SOV) travel, and total on-road mobile source emissions reductions. GTC meets all current air quality standards and is not subject to establishing targets for these performance measures.

NYSDOT reported the 2022 Full Performance Period (i.e., the first full four-year performance period) to FHWA, as well as progress toward achieving the four-year targets. NYSDOT also reported the new two-year and four-year targets for the next performance period, 2023 and 2025 respectively. GTC agreed to support the NYSDOT statewide targets on June 8, 2023 via Resolution 23-15. The table also lists performance for each measure for the 2021 baseline year.

Table 8 – System Performance Targets

| Performance Measures | New York Performance 2021 Baseline | New York 2-year Target (2023) | New York 4-year Target (2025) |
|--|---|--|--|
| Percent of person-miles on the Interstate system that are reliable (Interstate LOTTR) | 81.6%* | 75.5% | 75.0% |
| Percent of person-miles on the non-Interstate NHS that are reliable (Non-Interstate NHS LOTTR) | 85.7% | 70.0% | 70.0% |
| Truck travel time reliability index (TTTR) | 1.39* | 2.00 | 2.00 |

*as adjusted by FHWA per NYSDOT

Anticipated Effects

Providing for the reliable movement of people and goods is a critical component of GTC's mission, and the projects on the TIP are consistent with the need to address the reliability of travel times for vehicles, including trucks. These are primary considerations in the selection of projects to be included in the TIP.

National Highway System, freight, and emissions reductions are significant considerations in the selection of projects to be included in the TIP. As noted above, GTC works with NYSDOT to cooperatively develop and manage the TIP. Prior to each TIP/STIP cycle, GTC is provided Planning Targets for each Federal formula fund source. All projects submitted for consideration of funding from the Planning Targets are evaluated against multiple criteria. The extent to which the project improves system performance and reduces emissions are primary criteria.

The TIP also includes projects that are not primarily intended to address deficiencies in system performance but do address such deficiencies as part of the larger project. The TIP includes projects programmed with NHPP, STGB, and other fund sources that are expected to have benefits to improve the reliability in travel times for people and freight.

The projects on the TIP align with the *Genesee-Finger Lakes Regional Transportation System Management and Operations (TSMO) Strategic Plan*. The TIP includes funding for the continued operations of the Regional Traffic Operations Center and Highway Emergency Local Patrol program. These programs and ITS expansion support reductions in non-recurring delay (including secondary crashes) and emissions related to congestion.

Congestion Mitigation and Air Quality Improvement Program (CMAQ) funds have been programmed to support the implementation of low/no-emissions vehicles and travel demand management programs. Such programs include the implementation of shared mobility programs that have introduced bike share, vanpool, and other transportation options that have demonstrated potential to reduce single-occupancy vehicular trips.

The TIP includes projects programmed with funds from various funding programs that have benefits to reliability in travel times for people and freight. GTC anticipates that the projects in the TIP, once implemented, will contribute toward achieving NYSDOT's system performance and freight performance targets.

Transit Safety

Performance Targets

The Federal Transit Administration (FTA) published a final Public Transportation Agency Safety Plan (PTASP) rule on July 19, 2018. Under this rulemaking, providers of public transportation systems that are a recipient or sub-recipient of FTA Urbanized Area Formula Grant Program funds under 49 U.S.C. Section 5307, or that operate a rail transit system that is subject to FTA's State Safety Oversight Program, must develop and implement a PTASP based on a Safety Management Systems (SMS) approach. As it relates to this documentation, each PTASP must include performance targets based on the safety performance measures established in FTA's National Public Transportation Safety Plan (NSP). Other elements of a PTASP include, but are not limited to, approval by the agency's Accountable Executive and Board of Directors, designation of a Chief Safety Officer, documented processes of the agency's SMS, an employee reporting program, and process and timeline for annual reviews and updates of the PTASP.

Providers subject to the rule must annually certify a PTASP, including targets for transit safety measures that cover fatalities, injuries, safety events, and system reliability. The date by which providers must first certify a PTASP and targets was initially July 20, 2020. However, FTA extended the deadline to July 20, 2021, to provide regulatory flexibility due to the operational challenges presented by the COVID-19 public health emergency.

Upon establishing transit safety targets, a public transportation provider must make the targets available to the MPO in which the provider's projects and services are programmed in the MPO's TIP. The MPO is required to establish its first set of transit safety targets within 180 days of the date that provider established its first targets. After this, MPOs are not required to establish transit safety targets each year after the transit provider establishes targets. Instead, MPOs must set updated targets when the MPO updates its LRTP.

An MPO must reflect the transit safety targets in any LRTP and TIP updated on or after July 20, 2021. When establishing transit safety targets, the MPO can either agree to program projects that will support the transit provider targets or establish its own separate targets for the MPO planning area.

The Rochester-Genesee Regional Transportation Authority is subject to the PTASP rule in the GTC planning area. They are responsible for developing a PTASP and establishing transit safety targets annually. In December 2023, the RGRTA Board of Commissioners approved the 2023-2024 PTASP. RGRTA has set December 2023 through December 2024 targets to meet the latest PTASP requirement. GTC agreed to support RGRTA's transit safety targets on February 29, 2024 via Resolution 24-02, thus agreeing to plan and program projects that are anticipated to make progress toward achieving the targets.

Table 9 – Transit Safety Targets

| Transit Mode | Service | Fatalities (total) | Fatality Rate (per 100,000 VRM) | Injuries (total) | Injury Rate (per 100,000 VRM) | Safety Events (total) | Safety Event Rate (per 100,000 VRM) | System Reliability (VRM per change off) |
|---------------------|----------------|---------------------------|--|-------------------------|--------------------------------------|------------------------------|--|--|
| Fixed Route | DO | 0 | 0 | 42 | 0.71 | 23 | 0.39 | 5,500 |
| Demand Response | DO | 0 | 0 | 6 | 0.33 | 3 | 0.17 | 20,000 |

Anticipated Effects

The GTC TIP was developed and is managed in cooperation with RGRTA. The TIP includes specific investment priorities that support the MPO's goals, including transit safety, using a project selection process that is anticipated to address transit operations in the MPO planning area. The MPO's goal of addressing transit safety is linked to the safety plans of the RGRTA, and the process used to prioritize the projects within the TIP is consistent with federal requirements.

GTC's investments that address transit safety include on-going preventive maintenance of rolling stock and a commitment to associated transit improvements that provide safe, accessible connections between transit trips and other modes.

GTC anticipates that the projects in the TIP, once implemented, will contribute toward achieving the established transit safety targets. GTC will continue to coordinate with the region's transit provider(s) to improve the safety of travelers in the MPO planning area and maintain transit assets in a state of good repair.