

Planning for Operations in the Genesee-Finger Lakes Region



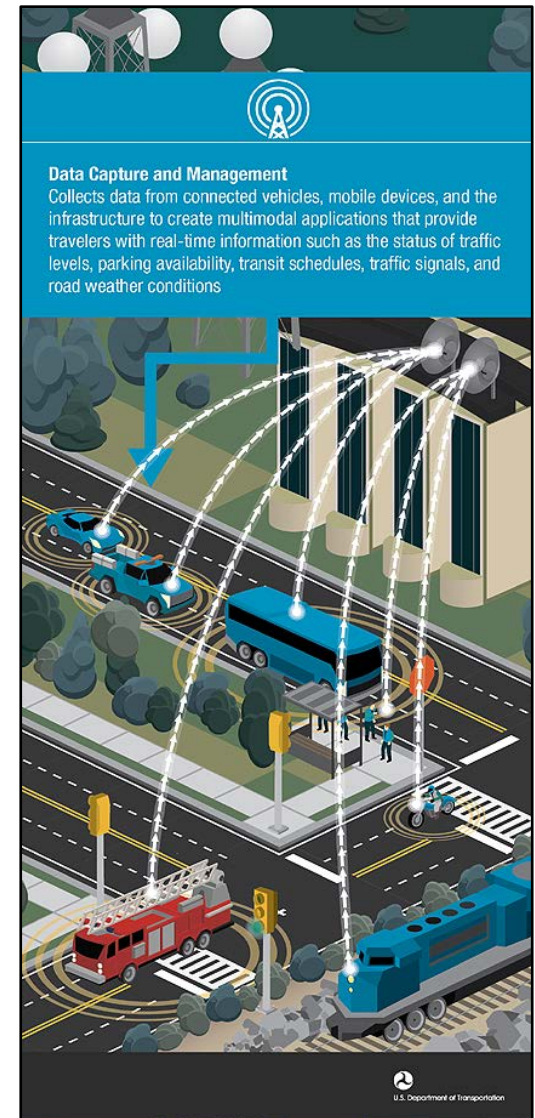
Joseph M. Bovenzi, AICP

ITS NY 30th Annual Meeting – Saratoga Springs, New York

June 14, 2023

Presentation Outline

- **MPO Overview**
 - ❑ **Purpose & Function**
 - ❑ **Long Range Transportation Plan**
- **Unified Planning Work Program (UPWP) – TSMO strategic planning**
 - ❑ **TSMO Planning Tasks**
- **Transportation Improvement Program (TIP)**
- **Challenges and Opportunities**



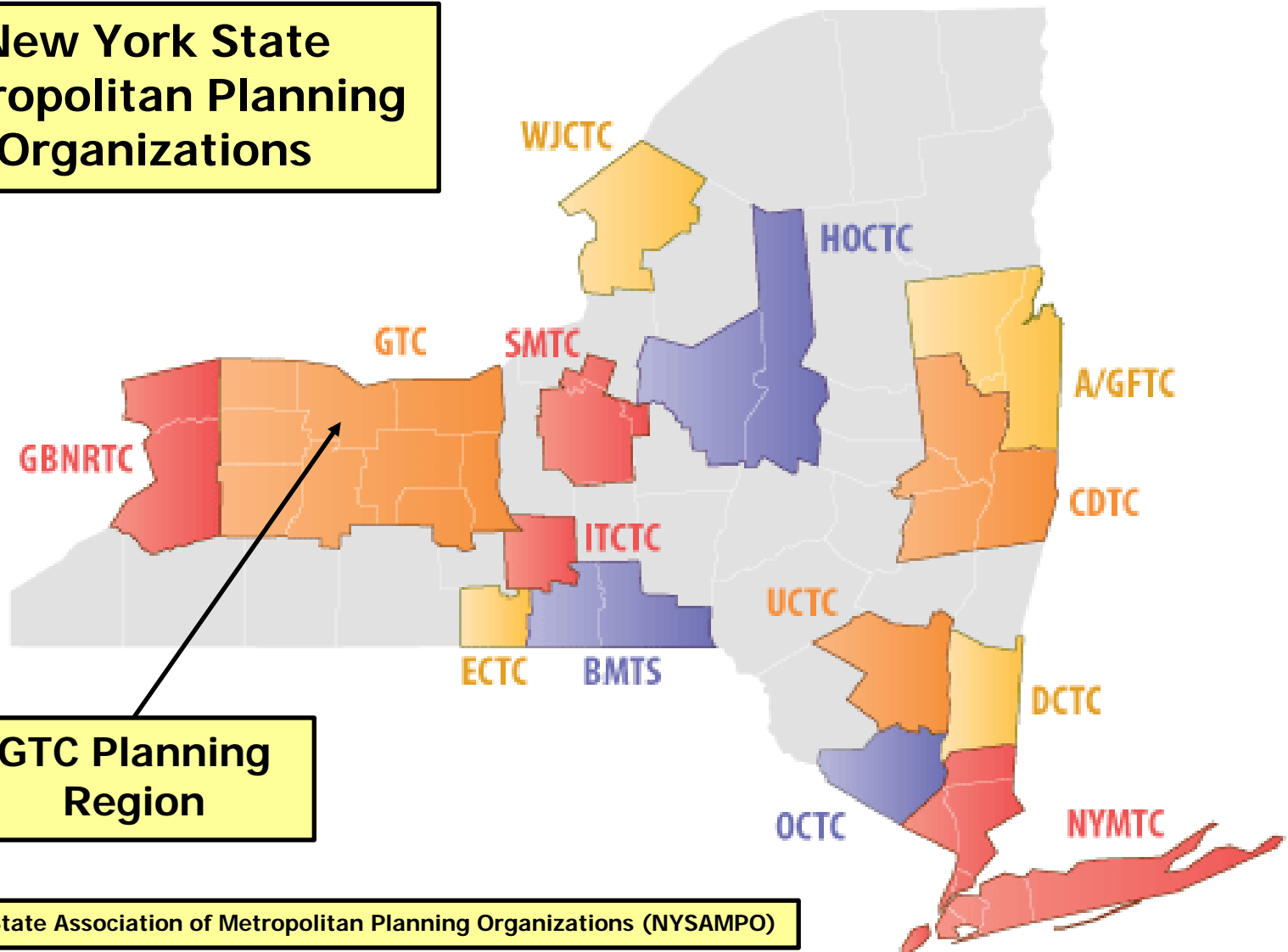
Metropolitan Planning Organizations (MPO)

- **Federal-Aid Highway Act of 1962**
 - ❑ **Coordinate regional transportation planning and investment decision-making**
 - ❑ **Ensure local representation**
- **Federally mandated for urbanized areas with populations greater than 50,000**
- **Metropolitan Transportation Planning “3-C” Process**
 - ❑ **Continuing**
 - ❑ **Cooperative**
 - ❑ **Comprehensive**

GENESEE TRANSPORTATION COUNCIL

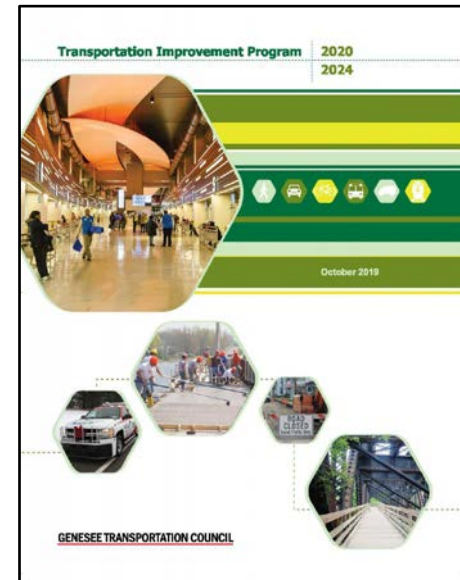
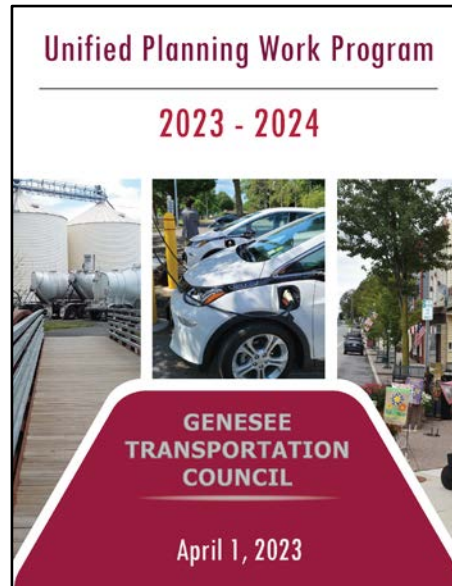
The Metropolitan Planning Organization for the Genesee-Finger Lakes Region

New York State Metropolitan Planning Organizations



Source: New York State Association of Metropolitan Planning Organizations (NYSAMPO)

Major MPO Work Products



**Strategic
Direction
(LRTP)**

**Concept
Development
(UPWP)**

**Investment
Decisions
(TIP)**

Long Range Transportation Plan (LRTP) 2045

➤ Adopted June 2021

- ❑ Region and System Profile
- ❑ Emerging Issues and Opportunities
- ❑ System Needs
- ❑ Recommendations
 - Health and Safety
 - Access and Equity
 - Management and Maintenance
 - Sustainability and Resilience
 - Economic Development



Long Range Transportation Plan (LRTP) 2045

➤ System Needs (*Selected*)

- ❑ Increasing Safety for all Users
- ❑ Ensuring Access for All to Employment, Goods, and Services
- ❑ Expanding Mobility and Connectivity for Active Transportation Users
- ❑ Reducing Energy Usage and Greenhouse Gas Emissions
- ❑ Enhancing Connectivity and Access for Freight
- ❑ Increasing System Resiliency



Long Range Transportation Plan (LRTP) 2045

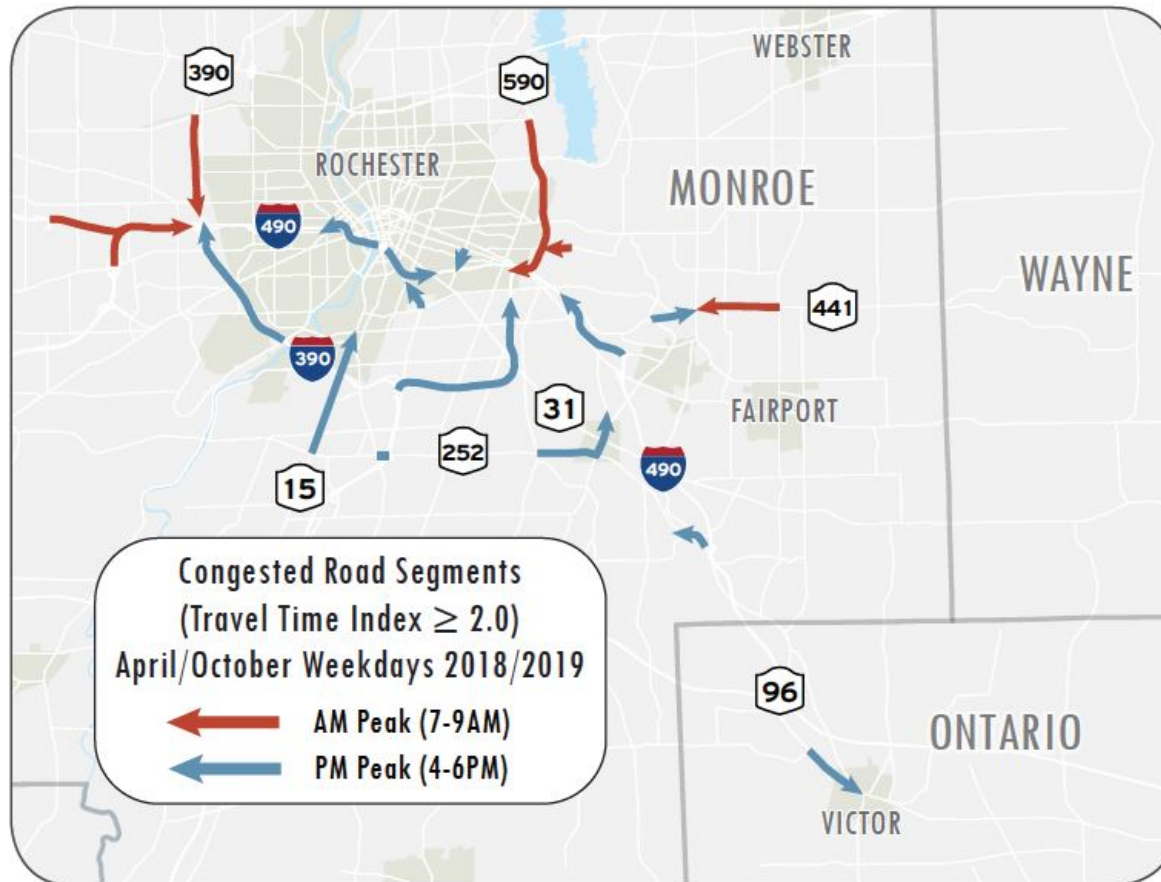
➤ System Management and Maintenance (MM) Recommendations

- ☐ **MM-1: Implement TSMO Strategic Plan Recommendations**
- ☐ **MM-2: ITS Integration**
- ☐ **MM-3: ITS Communications**
- ☐ **MM-5: Signal Synchronization**
- ☐ **MM-6: Interagency Operations Coordination**
- ☐ **MM-7: Traffic Incident Management**
- ☐ **MM-15: ITS Asset Management**



Long Range Transportation Plan (LRTP) 2045

➤ Congestion Management Process



Travel Time Index 2.0 or greater indicates corridor travel time is two or more times longer than during free-flow conditions. Source: INRIX © 2020

Long Range Transportation Plan (LRTP) 2045

➤ Transportation Operations Coordination Committee (TOCC)

- ❑ Regional Traffic Operations Center (RTOC) Initiatives
- ❑ Construction Updates
- ❑ Special Event Coordination
- ❑ Traffic Incident Management (TIM)



Long Range Transportation Plan (LRTP) 2045

➤ Regional ITS Architecture

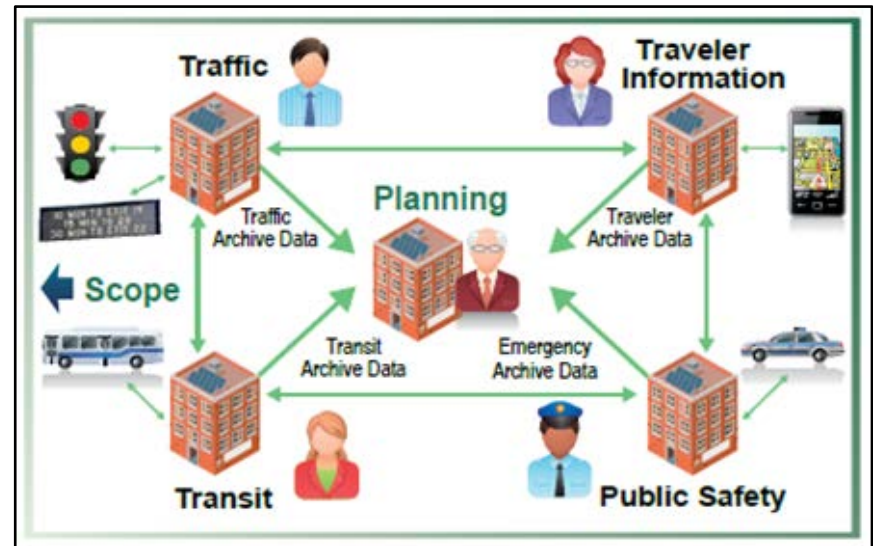
- ❑ Defines ITS elements and interconnections

➤ Components

- ❑ Subsystems
- ❑ Information Flows

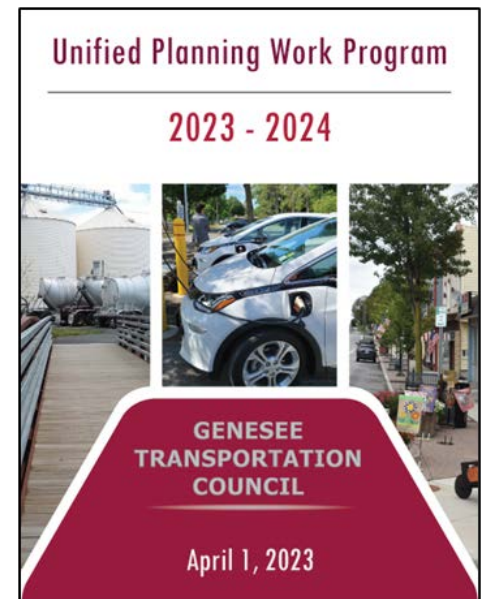
➤ Applicability:

- ❑ Integrate & Coordinate Technology
- ❑ Align Agency Efforts
- ❑ Maximize Existing Resources



Unified Planning Work Program (UPWP)

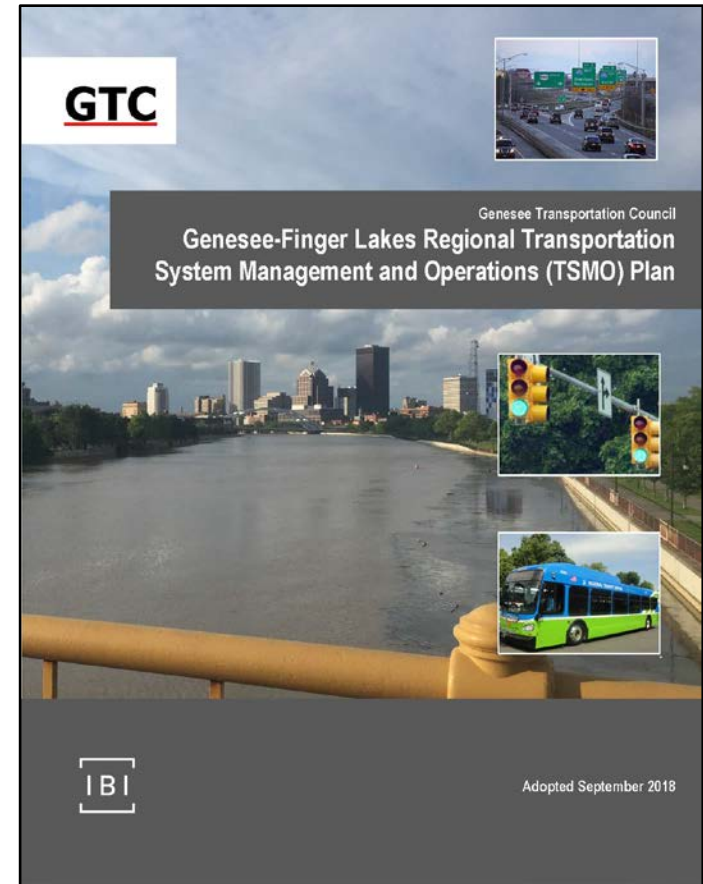
- Annual work program of federally-funded transportation planning activities
- Activities must be consistent with and advance:
 - ❑ Federal planning factors
 - ❑ Long Range Transportation Plan
 - ❑ Local plans and policies
- Eligible projects include concept-level planning, analysis, and design initiatives



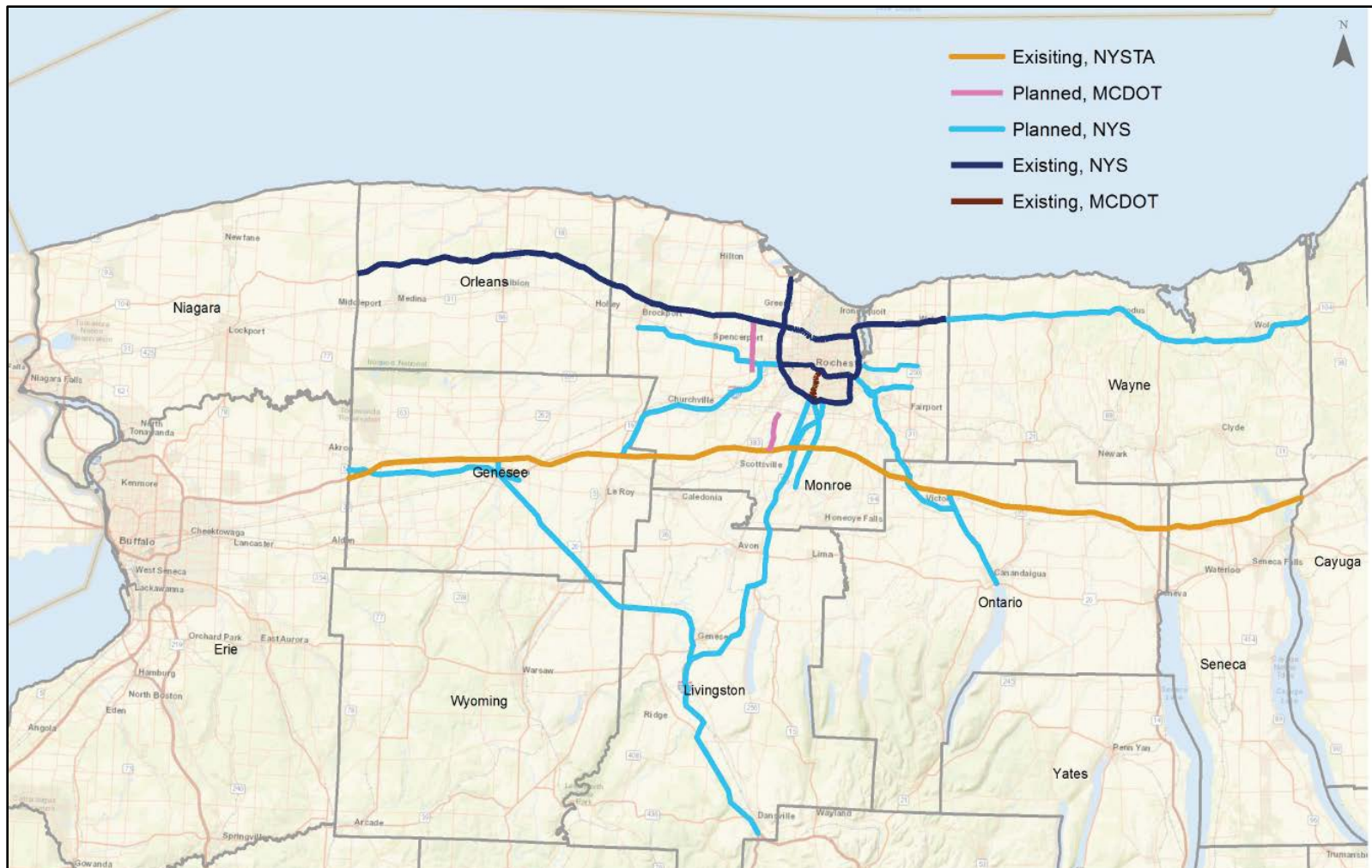
Transportation System Management and Operations (TSMO) Strategic Plan

➤ Objectives

- ❑ Rationale for investments in operations (“Why?”)
- ❑ Roles & responsibilities (“Who?”)
- ❑ Operations strategies (“What?” and “How?”)
- ❑ Ten-year timeframe (“When?”)



TSMO Strategic Plan – Tier I Corridors



TSMO-Supportive Planning – I-490 Integrated Corridor Management (ICM)

➤ Purpose:

- ❑ Guide future ITS deployments on the I-490 corridor
- ❑ Improve safety, minimize delay, and enhance operations efficiency

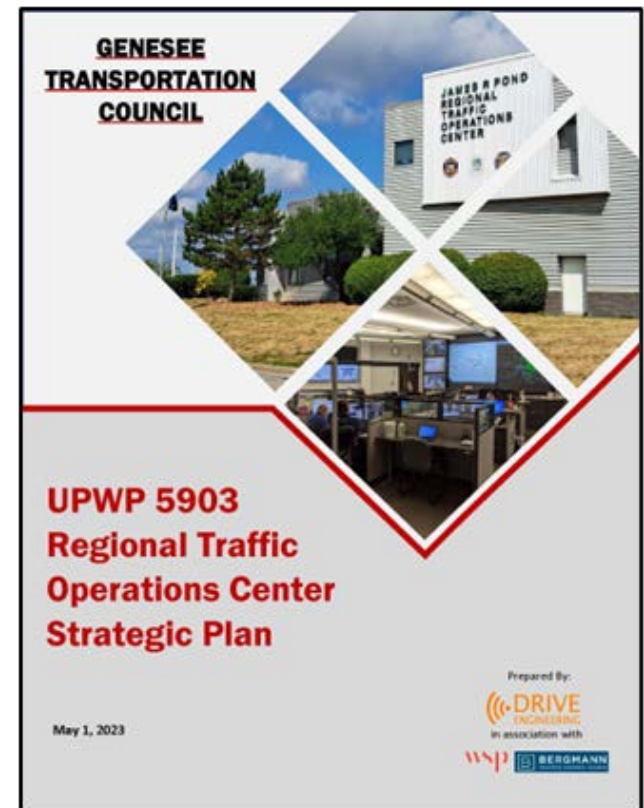
➤ Recommendations

- ❑ ITS Infrastructure
- ❑ Operations and Policy
- ❑ Regional ITS Architecture



TSMO-Supportive Planning – Regional Traffic Operations Center (RTOC) Strategic Plan

- Purpose: Develop a strategic plan to guide RTOC operations
- Recommendations
 - ❑ Workforce & Staffing
 - ❑ Business Processes
 - ❑ Systems & Technologies
 - ❑ Performance Measurement
 - ❑ Interagency Partnerships



Regional Performance Measurement Monitoring and Evaluation System

- **Purpose:** Establish a program for evaluating and reporting transportation operations data generated by the RTOC
- **Phase I**
 - ❑ Understand needs
- **Phase II**
 - ❑ Combine ticketing and dispatching services with performance measurement
 - ❑ Emphasis on internal data for analysis



Regional Performance Measurement Monitoring and Evaluation System

- Ticketing/Dispatching
 - ❑ Track ticket resolution
 - ❑ Six ticket types
- Reports
 - ❑ Tracks number and type of tickets
 - ❑ Extract data for analysis to better understand trends in service calls



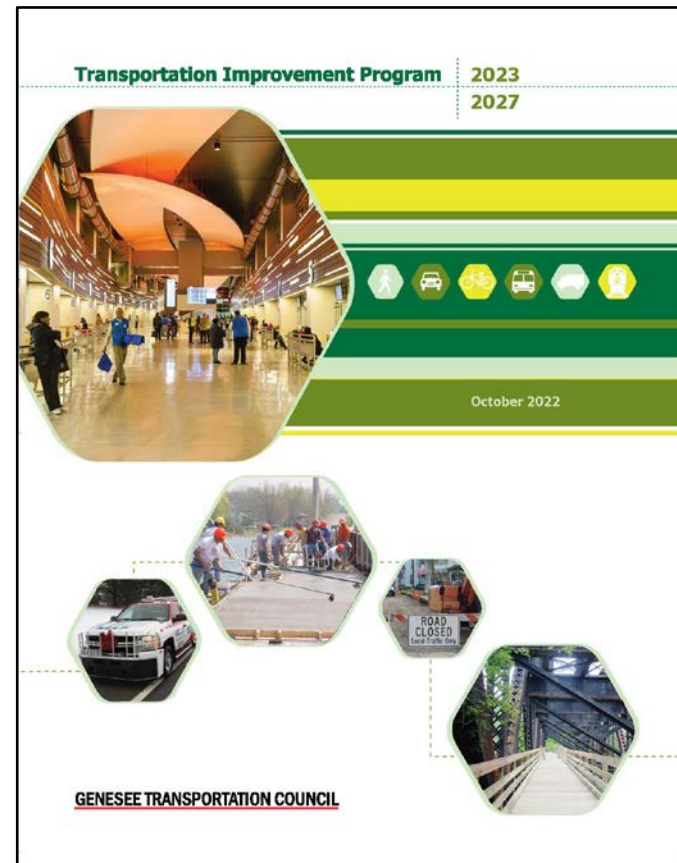
MONDAY May 22, 2023 Communication Relay

TICKETS

TICKET ID	LEVEL	TICKET TYPE	CONDITIONS	JURISDICTION	STATUS	CREATED BY	OPENED DATE
10269	L4	Signals		Monroe-East	Jurisdiction	Matthew	05/19/2023 12:23
10259	L4	Signals		Monroe County DOT	Jurisdiction	Team	05/08/2023 14:00
10258	L4	Sign's		Monroe-East	Jurisdiction	Adam	05/08/2023 13:55
10256	L4	Roadway / Infrastructure	Flooding	Ontario County	Jurisdiction	Matthew	05/08/2023 13:29
10255	L4	Roadway / Infrastructure	Pothole/Sinkhole	Monroe-East	Jurisdiction	alex	05/08/2023 13:21
10254	L4	Roadway / Infrastructure		Bella Paving - Deer Pickup	Jurisdiction	Adam	05/08/2023 13:15
10253	L4	Sign's			Rtoc	Matthew	05/08/2023 13:08
10252	L4	Crash			Rtoc	Matthew	05/08/2023 13:08

Transportation Improvement Program (TIP)

- Multi-year program of projects
- Categories:
 - ❑ Highway
 - ❑ Bridge
 - ❑ Transit
 - ❑ ITS/Operations
 - ❑ Bicycle & Pedestrian
- Schedules
- Funding sources



Transportation Improvement Program (TIP)

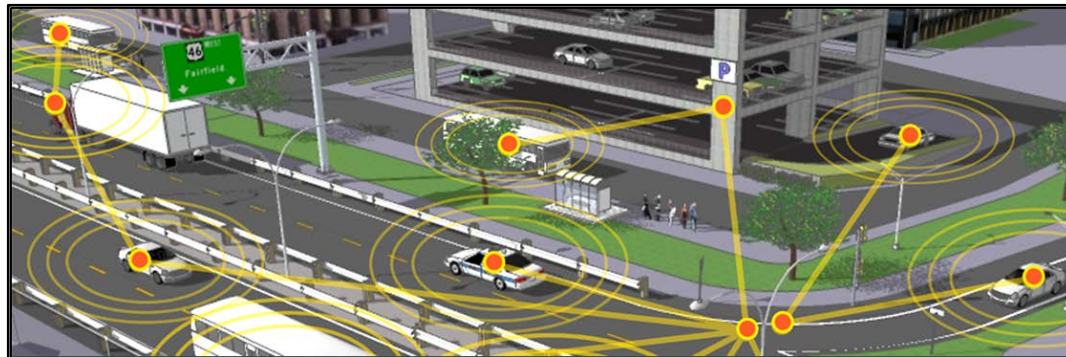
➤ Project Evaluation – Common Criteria

Area	Criteria
Safety	<ul style="list-style-type: none">• Improve safety
Mobility	<ul style="list-style-type: none">• Improve efficiency and reliability
Accessibility	<ul style="list-style-type: none">• Promote travel alternatives
Community & Economic Development	<ul style="list-style-type: none">• Support new and existing business• Support from state, regional, or local policy• Enhances designated freight corridor
System Continuity & Operations	<ul style="list-style-type: none">• Advance UPWP recommendations• Improve resiliency
Environment	<ul style="list-style-type: none">• Reduce vehicle emissions
Fiscal Responsibility	<ul style="list-style-type: none">• Minimize lifetime maintenance• Increased non-federal share• Innovative funding/financing partnerships

Transportation Improvement Program (TIP)

➤ Project Evaluation – Mode-Specific Criteria

Mode	Criteria
System Management & Operations	<ul style="list-style-type: none">• Reduce travel times on major roadways• Reduce incident clearance times• Increase productivity of regional transportation agencies/providers• Support or advance existing & proposed ITS elements



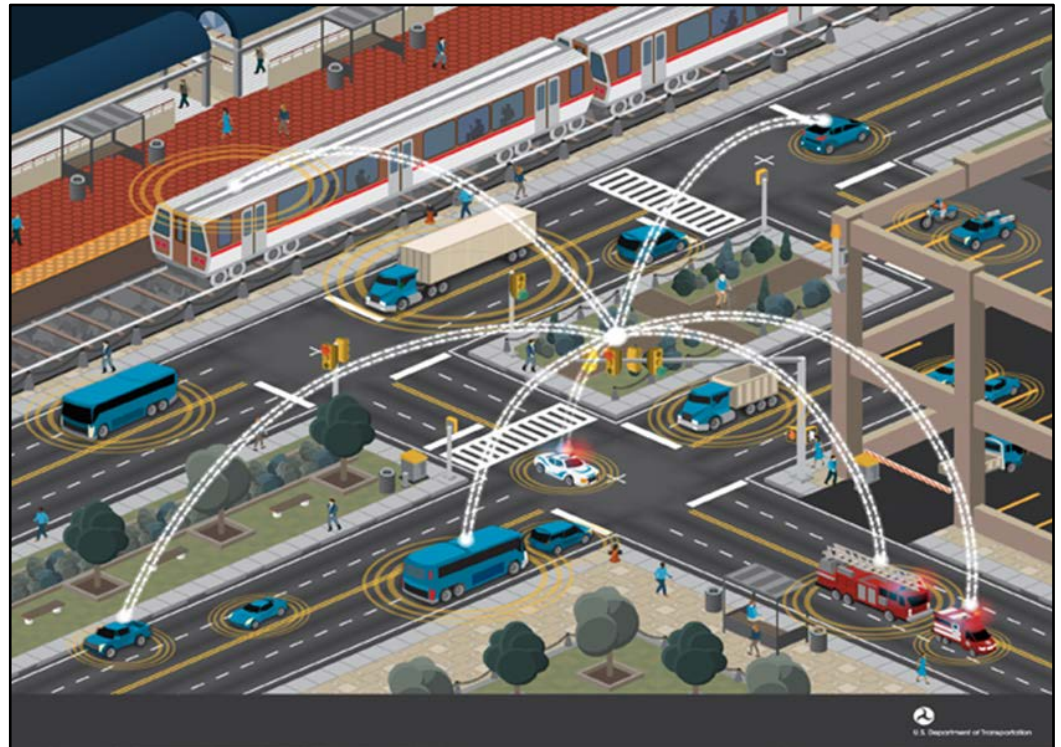
Transportation Improvement Program (TIP)

➤ 2023-2027 TIP – TSMO Project Table

2023-2027 TIP - TSMO Projects				
Project:	Federal Share:	State Share:	Local Share:	Total:
Highway Emergency Local Patrol [HELP] (2023-2027)	\$ 2,564,000.00	\$ 641,000.00	\$ -	\$ 3,205,000.00
MCDOT RTOC Operations (2023-2027)	\$ 3,160,000.00	\$ 110,600.00	\$ 679,400.00	\$ 3,950,000.00
MCDOT Traffic Signal Replacements-Group 1	\$ 2,414,800.00	\$ -	\$ 603,700.00	\$ 3,018,500.00
NYSDOT RTOC Operations (2023-2027)	\$ 4,620,000.00	\$ 1,155,000.00	\$ -	\$ 5,775,000.00
NYSDOT RTOC Staffing (2023-2027)	\$ 8,500,000.00	\$ 2,125,000.00	\$ -	\$ 10,625,000.00
Totals:	\$ 21,258,800.00	\$ 4,031,600.00	\$ 1,283,100.00	\$ 26,573,500.00

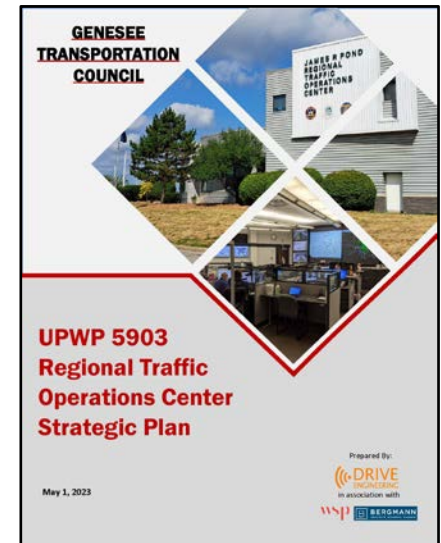
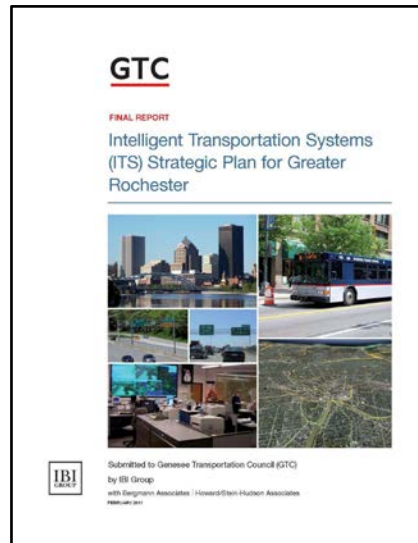
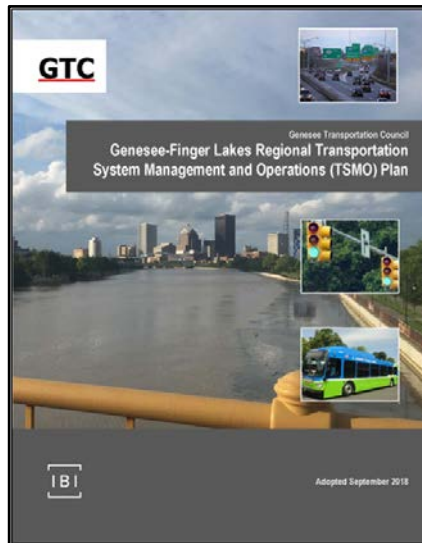
Challenges and Opportunities

- **ITS Asset Management**
- **Expanding Core Capabilities & Functions**
- **Operations Data & Performance Measurement**
- **Future-Proofing**
- **Vulnerability & Resiliency**



GTC Plans and Studies

➤ Available: <https://www.gtcmpo.org/plans-and-studies>





GENESEE TRANSPORTATION COUNCIL

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