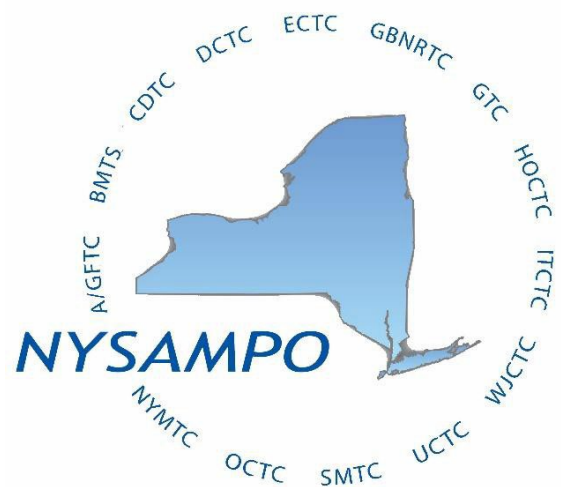




## NEW YORK STATE ASSOCIATION OF METROPOLITAN PLANNING ORGANIZATIONS

# 2022-2023 Working Groups Work Program



# 2022-2023 NYSAMPO Working Groups Work Program

## Table of Contents

INTRODUCTION .....	1
BICYCLE AND PEDESTRIAN WORKING GROUP .....	2
CLIMATE CHANGE WORKING GROUP .....	6
FREIGHT WORKING GROUP .....	9
GIS WORKING GROUP .....	14
MODELING WORKING GROUP .....	17
SAFETY WORKING GROUP .....	22
TRANSIT WORKING GROUP .....	25
TRANSPORTATION SYSTEMS MANAGEMENT AND OPERATIONS WORKING GROUP .....	27



## INTRODUCTION

The New York State Association of Metropolitan Planning Organizations (NYSAMPO) is a coalition of the fourteen MPOs in New York State that have committed to work together toward common goals. One of the hallmarks of NYSAMPO is its eight Working Groups. The Working Groups exemplify cost-effective collaboration that yields benefits for MPO member agencies, including their New York State and federal partners that participate directly in them.

The working groups were established several years ago and have evolved to address the issues and opportunities that MPOs may need to consider in their respective metropolitan transportation planning processes. The eight Working Groups are:

- ◆ Bicycle and Pedestrian
- ◆ Climate Change
- ◆ Freight
- ◆ Geographic Information Systems (GIS)
- ◆ Modeling
- ◆ Safety
- ◆ Transit
- ◆ Transportation Systems Management and Operations (TSMO)

The primary benefits of the Working Groups are:

- ◆ Providing topical forums to share practices, identify training needs, and collaborate on the development of best practices;
- ◆ Creating opportunities for MPO staff, the New York State Department of Transportation (NYSDOT), and other agency staff to develop professional networks through a “community of practice” concept;
- ◆ Collaborating with other Working Groups on topics of mutual interest;
- ◆ Involving additional partner agencies based on emerging issues and opportunities;
- ◆ Developing Fact Sheets and White Papers with MPO member agencies as the primary audience; and
- ◆ Serving as advisory panels for statewide planning efforts including (but not limited to) the National Performance Management Research Data Set (NPMRDS) web tool developed and being refined and expanded by the University at Albany Visualization and Informatics Lab (AVAIL) and the Long-Range Statewide Transportation Plan.

The Work Program identifies those specific activities that Working Groups anticipate undertaking during State Fiscal Year (SFY) 2022-2023 (April 1, 2022-March 31, 2023). The COVID-19 pandemic required that the Working Groups meet virtually during the previous SFY, and this is expected to continue for at least a portion of SFY 2022-2023. The purpose of working group meetings and associated activities will continue uninterrupted: share items of common interest and best practices; develop Fact Sheets; disseminate information on Federal and State items that affect MPOs; provide input to NYSDOT on statewide planning activities; and look for ways to further integrate respective activities with other Working Groups along with stakeholders new to metropolitan planning. In addition, some of the Working Groups have identified available resources that their members have found useful in their respective planning initiatives, which may be useful to others interested in guidance, tools, and data relevant to the respective topic areas.

## BICYCLE AND PEDESTRIAN WORKING GROUP

### Goals

1. Provide a forum through Working Group meetings and email correspondence to share best practices and help members plan projects that improve safety, mobility, and accessibility.
2. Increase bicycle and pedestrian safety by promoting best practices and coordinating with partners on outreach and education.
3. Support the implementation of Complete Streets by MPOs, NYSDOT, partner agencies, and local jurisdictions.
4. Collaborate with other NYSAMPO Working Groups, New York State agencies, and partners including the NYSDOT, the Governor's Traffic Safety Committee (GTSC), and NYS Department of Health (NYSDOH); non-profit organizations including the New York Bicycling Coalition (NYBC), Parks and Trails New York (PTNY), and the Walk-Bike New York Planning Committee; and others to achieve mutual goals.
5. Track State and Federal legislative and regulatory initiatives related to bicycling and walking, including relevant NYSDOT policies and Engineering Instructions.

### Tasks (\* = priority work products)

1. Provide a Forum for Sharing Bicycle and Pedestrian Planning Best Practices
  - A. Meet at least four times per year either in-person (if possible) or by web meeting/conference call.
    - i. Typically, two meetings will be virtual/conference calls and two meetings will be in-person. One meeting could be a combined meeting with other working groups depending on the topics of discussion, while the other would be a bicycle and pedestrian-focused meeting. Due to the COVID-19 pandemic, we may change in-person meetings to virtual as needed.
    - ii. All meetings will include a speaker and/or training element, if possible, to maximize the value of the meeting.
  - B. \*Continue to identify best practices for conducting pedestrian & bicycle counts. These best practices may include add-ons to NYSDOT Regional traffic count programs, use of the National Bicycle and Pedestrian Documentation Project guidelines, programs based on Chapter 4 of the Federal Highway Administration (FHWA) Traffic Monitoring Guidelines (Traffic Monitoring for Nonmotorized Traffic), or other methods.
    - i. The Working Group's Pedestrian & Bicycle Counts subcommittee was created to share information, experience, and support to MPO staff using automated pedestrian/bicycle counters, as well as those interested in learning more about

them. The Subcommittee has an online forum on the NYSAMPO website that is password protected for use by members only. This is not a public-facing forum, but anyone engaged with NYSAMPO can request access to it.

- ii. NYSDOT EB-20-044 "Traffic Monitoring Standards for Non-Motorized Short Count Data Collection." See resources below for link.
  - C. \*Identify resources and tools to help MPO staff and project sponsors develop planning-level cost estimates for walking and bicycling projects. A Cost Estimating subcommittee will work to develop a toolkit highlighting these resources.
  - D. Continue to share available data, tools, and best practices for Americans with Disabilities Act (ADA) transition plans through updates to the [NYSAMPO ADA toolkit](#).
  - E. Encourage more MPO involvement in bicycle/pedestrian conferences, in particular, the 2022 Institute for Traffic Safety Management and Research's Walk-Bike New York Symposium.
  - F. Develop fact sheets, toolkits, and other resources for MPO staff and partners. In 2022-2023, the Working Group will continue to develop:
    - i. A bicycle/pedestrian facility cost estimating toolkit (see above);
    - ii. A Complete Streets toolkit (see below);
    - iii. A digital fact sheet about New York's recent e-bike legislation (see below); and
    - iv. A digital fact sheet about e-scooters focusing on safety concerns, in coordination with the Safety Working Group (as needed, based on further discussion).
2. Improve Pedestrian and Bicycle Safety
- A. Work with the Safety Working Group to update pedestrian and bicycle elements of the [Safety Education Toolkit](#) on the NYSAMPO website and determine the most effective ways to provide this information to the public.
  - B. Work with the Safety Working Group, GTSC, NYSDOT and NYSDOH to coordinate traditional media and social media campaigns such as bicycle safety public service announcements, pedestrian safety campaigns and other related efforts.
  - C. Discuss safety issues related to walking and bicycling and share best practice design, enforcement, and educational tools.
3. Support Complete Streets Implementation
- A. Support the implementation of Complete Streets at all levels:
    - i. \*Develop a Complete Streets Toolkit tailored to New York State laws and regulations to be added to the NYSAMPO website. The Working Group's

## 2022-2023 NYSAMPO Working Groups Work Program

Complete Streets subcommittee will develop a toolkit including a model ordinance, best practice plans, training opportunities, useful links, and other resources;

- ii. Work with partners to identify Complete Streets educational resources to highlight during meetings and on the toolkit; and
- iii. Understand the new Complete Streets requirements in the Bipartisan Infrastructure Law/IIJA (in particular, [Increasing Safe and Accessible Transportation Options \[Section 11206\]](#)).

#### 4. Coordinate with other Working Groups, State Agencies, and Partners

- A. Work with NYSDOT to review, develop, and implement plans, policies, and Engineering Instructions that affect walking and bicycling, including implementation of the New York State Complete Streets Act.
- B. Continue working to improve coordination between MPOs and NYSDOT Main Office and Regional staff on pedestrian and bicycle planning issues.
- C. Continue to support the NYSDOT Main Office Pedestrian & Bicycle Unit's efforts to provide statewide bicycle facility information. Support NYSDOT in their efforts to update the New York State Bicycle and Pedestrian Plan, provide bicycle and pedestrian information on the NYSDOT website, and develop web-based maps.
- D. Work with PTNY, the NYS Office of Parks, Recreation and Historic Preservation and others on implementation of the 2020 Statewide Greenway Trails Plan.
- E. \*Continue to collaborate with the Climate Change Working Group, Safety Working Group, Transit Working Group, and NYSDOT to research shared mobility and micromobility, including the safety implications in New York State and efforts to integrate with transit. This effort will include a fact sheet on e-bike regulation developed by a subcommittee and updating the [NYSAMPO shared mobility webpage](#).
- F. Continue to work with NYSDOT, GTSC, NYSDOH, and the NYSAMPO Safety Working Group to implement the Pedestrian Safety Action Plan (PSAP), Highway Safety Improvement Program (HSIP), Congestion Mitigation and Air Quality Improvement Program (CMAQ), Transportation Alternatives Program (TAP), and other pedestrian and bicycle programs.
- G. Work with NYSDOH, GTSC, PTNY, NYBC, and other organizations as needed to promote bicycling, walking, and Complete Streets.
- H. Plan for joint meetings or other opportunities for collaboration with the GIS Working Group, Safety Working Group, and Transit Working Group. When possible, coordinate this in conjunction with the NYSAMPO conference, Walk-Bike NY conference, or other conference/meeting opportunities.

### 5. Track Federal and State Legislative and Regulatory Initiatives

- A. Track State legislative and regulatory initiatives related to biking and walking and provide input as needed to the NYSAMPO Directors for their knowledge and potential action. Examples include:
  - i. A three (3)-foot amendment to the State's Safe Passing Law;
  - ii. Potential changes to e-bike and e-scooter legislation; and
  - iii. Potential changes to the State Complete Streets Act and the NYSDOT complete streets checklist.
- B. Track Federal transportation rulemaking and performance measures related to walking and bicycling.
- C. Track Manual on Uniform Traffic Control Devices (MUTCD) updates related to walking and bicycling.

### ***Available Resources***

- [NYSDOT Quick Estimator Reference Spreadsheet](#): Developed by NYSDOT for projects to be awarded funding through the Transportation Alternatives Program (TAP) and the Congestion Mitigation and Air Quality Improvement Program (CMAQ) in 2018, this spreadsheet provides unit cost estimates and associated information for bicycle and pedestrian improvements.
- [Crash Modification Factors Clearinghouse](#): Includes a web-based repository of crash modification factors (CMFs) along with a user's guide and other resources to estimate the proportion of crashes that would be expected to occur at a location after the implementation of CMFs. The CMFs Clearinghouse includes an internal search tool and listing of frequent searches, including "Pedestrian."
- [NYSDOT EB-20-044 "Traffic Monitoring Standards for Non-Motorized Short Count Data Collection"](#): This Engineering Bulletin details how NYSDOT non-motorized counts will be taken. The EB incorporates the FHWA standards and tries to standardize the data collection for NY state. NYSDOT prefers counts undertaken with federal funds be performed to this standard. Alternatively, MPOs can work with the Main Office Highway Data Services to modify the standards.

## CLIMATE CHANGE WORKING GROUP

### *Goals*

1. Provide a forum for sharing best practices among the MPOs and with New York State, federal, and other planning partners regarding climate change mitigation and adaptation, and sustainability.
2. Provide input to regional, state, or federal planning processes, legislation, and outreach initiatives that address climate change mitigation and adaptation, transportation system resiliency, and sustainability in New York State.
3. Engage with partners and stakeholders, including NYSDOT, the New York State Department of Environmental Conservation (NYSDEC), and the New York State Energy Research and Development Authority (NYSERDA) to stay informed about and participate in ongoing statewide climate change and sustainability efforts, including the implementation of the Climate Leadership and Community Protection Act (CLCPA).
4. Produce technical guidance and resources about climate change mitigation and adaptation, transportation system resiliency, and sustainability actions for MPO staff.
5. Assess data needs related to climate change across MPOs in New York State and elsewhere.

### *Tasks*

1. Provide a Forum for Sharing Best Practices
  - A. Hold quarterly meetings (ideally, three web meetings and one in-person meeting, when possible), providing opportunities for partners from NYSDOT, NYSDEC, NYSERDA, and other organizations to present on their current and planned climate change, transportation system resiliency, and sustainability initiatives.
  - B. Continue to collaborate with the Bicycle and Pedestrian Working Group, Safety Working Group, Transit Working Group, and NYSDOT to undertake research on shared mobility and micromobility, including the safety implications in New York State and efforts to integrate with transit. This effort will include regularly updating the NYSAMPO shared mobility webpage.
2. Provide Input to Planning Processes and Legislation
  - A. Provide comment letters on behalf of the Climate Change Working Group and NYSAMPO as needed.
  - B. Provide feedback and insight on developing policies and programs related to the CLCPA and monitor actions related to the Regional Low-Carbon Transportation



Policy spearheaded by the Transportation and Climate Initiative of the Northeast and Mid-Atlantic States.

- C. Provide input on alternative fuels and advanced vehicle technologies, including electric vehicle deployment and infrastructure siting across New York State.

### 3. Engage with Partners and Stakeholders

- A. Collaborate with NYSDOT on next steps for designated Alternative Fuel Corridors.
- B. Work with New York State to provide input on and disseminate information about the VW Settlement.
- C. Discuss resiliency planning topics, including: practices to protect and fortify transportation assets; conducting sea level rise and climate risk analysis for transportation assets; improving regional coordination of emergency and long-term responses to system-wide climate impacts; enhancing transportation network resiliency; addressing public health emergency issues in planning documents; and developing inventories of infrastructure assets and stressors (based on FHWA model and tools discussed in a 2021 Working Group meeting; see <https://www.fhwa.dot.gov/environment/sustainability/resilience/tools/>).

### 4. Produce Technical Guidance and Resources

- A. Post relevant resources to the Climate Change Working Group page on the NYSAMPO website on an ongoing basis.
- B. Research and compile technical approaches to developing and maintaining a greenhouse gas (GHG) emissions inventory and methods for forecasting.
- C. Target the development of up to two Fact Sheets or White Papers, including one on transportation system resiliency and reliability planning best practices.
- D. Identify MPO resiliency planning research needs and program recommendations.

### 5. Assess Data Needs

- A. Track changes to performance targets and associated progress towards the System Performance and Congestion Mitigation and Air Quality Improvement Program National Performance Management measures.
- B. Explore the feasibility of collaborating with other NYSAMPO Working Groups on developing tools or other guidance documents related to emissions, emerging technologies, and shared mobility and micromobility as these are trends which could accelerate the transition of New York State's transportation system to carbon neutral.
- C. Identify GHG emission data, best practices for measuring GHG emissions, and forecasting methods and models.

- D. Identify data needs and availability, forecasting methods, and performance metrics for MPO resiliency planning.
- 6. Coordinate planning on emerging climate change and greenhouse gas emission issues.
  - A. Track climate change legislation, initiatives, and new programs at the federal level that may affect the metropolitan planning process, including those in the Bipartisan Infrastructure Law.

## FREIGHT WORKING GROUP

### *Goals*

1. Knowledge Transfer: Build technical capacity by serving as a forum for dialogue among MPOs, NYSDOT, and others to share freight planning practices, arrange for relevant training courses, and disseminate ideas on effective public communication about the importance of freight.
2. Integration: Assist in the further incorporation of freight into MPO planning practice at all levels from the LRTP through unified planning work program (UPWP) initiatives to the transportation improvement program (TIP).
3. Stakeholder Outreach: Engage other freight-related organizations to determine opportunities to inform them of initiatives MPOs in New York State that are advancing opportunities for collaboration.
4. Transformational Technologies: Monitor and assess technical advances (e.g., automated vehicles, additive manufacturing, etc.) that impact the number, type, and mode of trips used to deliver goods to businesses and residences.
5. Data Availability: Catalog and evaluate the accessibility, quality, and cost of data that can be used to better analyze freight movements at various geographies from a statewide perspective to increase cost-effectiveness and efficiency.
6. Global and National Economies: Track the interrelationships between economic issues (including the COVID-19 pandemic), consumer trends, and resulting business models that impact metropolitan economies in New York State.

### *Tasks*

1. Knowledge Transfer
  - A. Hold quarterly web meetings, which include a roundtable agenda item so MPOs and other members can share current freight-related planning activities and lessons learned, including uses of TRANSEARCH data and updates related to the NYS Freight Transportation Plan.
  - B. Disseminate information to members through available web-based, teleconference, and in-person professional development and training opportunities of short- and longer-term durations – these include conferences, Talking Freight webinars, single-day and multi-day peer exchanges, the I-95 Corridor Coalition’s Freight Academy, and other offerings.
  - C. When possible, organize a freight facility site visit in conjunction with the next in-person NYSAMPO Conference (tentatively scheduled for May 2023). MPOs may consider organizing events with nearby MPOs when it is feasible and safe to do so.

- D. Coordinate the development of an analysis of the most recent results of the Freight Program Assessment for distribution to members and discussion on a web meeting with FHWA New York Division assistance.
- E. Conduct an annual survey to identify planning initiatives, activities, and trainings undertaken by members, as well as identify future topics of interest.

### 2. Integration

- A. Monitor, discuss, and implement/respond to future iterations of Federal freight-related rulemakings and requirements including (but not limited to):
  - i. Track changes to targets and associated progress towards the Percentage of Interstate System Mileage Providing Reliable Truck Travel Time (Truck Travel Time Reliability Index) National Performance Management measure;
  - ii. Additions/re-designations and associated certifications of the National Multimodal Freight Network, National Highway Freight Network, and Critical Urban (and, where appropriate, Rural) Freight Corridors inclusive of any updates; and
  - iii. Any MPO freight planning implications stemming from the Infrastructure Investment and Jobs Act (2021).
- B. Scan for, identify, and (as appropriate) discuss and track initiatives, projects, and regulations that have the potential to be of significance statewide or to multiple regions including (but not limited to):
  - i. Open road/cashless tolling impacts on tandem trailer movements at NYS Thruway Authority interchanges;
  - ii. Safety and security issues related to hazardous materials and customs procedures at international ports;
  - iii. Transportation system resiliency concerns related to aging infrastructure and the impacts of more frequent extreme weather events;
  - iv. Parking and curb management for deliveries where other travel activities (e.g., passenger pick up/drop off, walking, etc.) occur; and
  - v. Impacts of disruptive technology on the freight workforce.
- C. Ensure that freight projects in metropolitan areas are fully considered for submission to discretionary funding programs (namely, INFRA), and identify potential support activities that MPOs can provide to their members who may be considering a submission.
- D. Communicate with other Working Groups to determine opportunities for coordinated actions that further integrate freight into other MPO planning activities (e.g., automated/connected trucks with the Transportation System



Management and Operations Working Group, cleaner vehicles/fuels with Climate Change Working group, data, and analysis of existing and projected freight movements with the Modeling Working Group, etc.).

### 3. Stakeholder Outreach

- A. Increase awareness among freight-related organizations and associations of the presence and role of the Freight Working Group and offer them the opportunity to present as part of the quarterly web meetings. Potential agencies, organizations, and associations include (but are not limited to):

- i. New York Shipping Association;
- ii. I-95 Corridor Coalition;
- iii. New York State Thruway Authority;
- iv. Empire State Development/Regional Economic Development Council representatives;
- v. Railroads of New York; and
- vi. Trucking Association of New York.

Structure discussions with stakeholders to ensure that legislative and regulatory items such as driver hours of service rules, national trade policies, ballast water discharge issues, Jones Act, Harbor Maintenance Fee concerns, etc., are included.

- B. Identify noteworthy freight planning initiatives, capabilities, and techniques of state DOTs and MPOs in surrounding states either via a scan of a topic, capability, or methodology of case studies.
- C. Produce a fact sheet for municipalities that disseminates best practices on incorporating freight into zoning regulations and design guidelines, including examples for urban, suburban, and rural areas, including common community concerns around freight-generating land uses.

### 4. Data Availability, Transformational Technologies, & Global and National Economies

- A. Inventory data sources (outside of Transearch, NPMRDS, and Freight Analysis Framework), analysis techniques, and modeling applications utilized by other MPOs for distribution to members and discussion on a web meeting (FHWA NY assistance would be helpful). Investigate alternative marine freight data sources to PIERS, utilized by other MPOs, as applicable.
- B. Monitor advances in technologies such as automated/connected/electric vehicles, additive manufacturing, and drones that impact the amount and type of goods moved, modal options selected, and land use, and communicate the associated planning implications to members as appropriate.

- C. Monitor macro-level economic trends such as the further integration of e-commerce with bricks and mortar retail and the lasting effects of the COVID-19 pandemic that impact the amount and type of goods moved, modal options selected, and land use, as well as communicate the associated planning implications to members as appropriate.

### *Available Resources*

- [Carload Waybill Sample](#): Data collected by the Association of American Railroads (AAR), which provides information on rail traffic, commodity, revenue, and routing characteristics for railroads that carry at least 4,500 carloads per year over the past three years or carry at least five percent of an individual state's rail traffic. The data is maintained by the Surface Transportation Board and updated annually with 2019 data available at the time of publication of this document.
- [Commodity Flow Survey](#): Provides commodities flows on six modes originating in the 50 states and the District of Columbia. Commodities are identified using the Standard Classification of Transported Goods (SCTG) system. The data is maintained by the Bureau of Transportation Statistics and updated every five to seven years with 2017 data available at the time of publication of this document.

[Freight Analysis Framework](#): Database available for download allows users to summarize inbound, outbound, within, and through flows of domestic and international commodities on four modes for 50 States, with commodities classified using Standard Transportation Commodity Classification (STCC) codes. The data is maintained by the FHWA Office of Freight Management and Operations and updated every five to seven years with 2017 data available at the time of publication of this document.

- [TRANSEARCH](#): Provides a comprehensive and unified, multimodal goods movement database, which includes tonnage and equipment volumes by commodity, transportation mode, and trade lane at the county, ZIP code, metropolitan area, state, or provincial level for public and private sector freight planning since 1980. The goods are defined by commodity or North American Industry Classification System (NAICS) with volumes provided by loads, tonnage, and value. The data is proprietary and offered by IHS Markit. NYSDOT purchases this data and makes it available to the MPOs with 2018 data available at the time of publication of this document.
- [NPMRDS Web Tools](#): This platform was created to process and visualize the NPMRDS data for New York State Department of Transportation (NYSDOT) and the MPOs in New York State (registration is required to access the platform). The tool includes freight-relevant metrics, including truck travel time reliability on the interstate system and overall level of travel time reliability on the National Highway System. The data is maintained by the Albany Visualization and Informatics Lab (AVAIL) and updated monthly with 2021 data available at the time of publication of this document.

- [Port Import Export Reporting Service \(PIERS\)](#): Provides origin to destination information for foreign and domestic waterborne cargo movements of commercial ports by region and state, as well as waterborne tonnage for principal ports, states, and territories. The data is proprietary and offered by IHS Markit and updated monthly with 2019 data available at the time of publication of this document.
- [Transborder Surface Freight Data](#): This dataset provides information describing the value of North American trade by commodity, surface mode of transportation (rail, truck, pipeline, mail, or other), and shipment origin and destination by state, province, U.S. Customs port of entry, or Canadian or Mexican point of clearance, since April 1993. The data is maintained by the Bureau of Transportation Statistics and updated monthly with 2021 data available at the time of publication of this document.

### GIS WORKING GROUP

#### *Goals*

1. Knowledge Transfer: Conduct in-person meetings as the primary means for sharing practices and information on opportunities. Supplement or replace in-person meetings with virtual meetings as needed.
2. Data Collection and Assessment: Identify, compile, and assess spatial data that is useful to MPOs and their member agencies and, to the extent practical, partner organizations.
3. Coordination: Utilize the Working Group as a forum for coordination with partner organizations to obtain and share data and practices.
4. Software: Ensure that GIS software applications are consistent across the MPOs in New York State to the greatest extent practical.
5. Training: Identify training opportunities to improve the technical capabilities of MPO staff.

#### *Tasks*

1. Knowledge Transfer
  - A. Incorporate discussions about best practices for using GIS software packages and algorithms.
  - B. Consider web meetings, conference calls, and other communications in addition to in-person meetings as appropriate.
  - C. Ask members or guest speakers to share interesting GIS tasks/methodologies or cartographic work followed by a group discussion for thoughts and feedback.
2. Data Collection and Analysis:
  - A. Identify potential enhancements to existing data sources and altogether new ones for items such as traffic counts, pavement condition reporting, crash records, and travel demand surveys.
  - B. Determine how GIS technology can actively assist in data analysis efforts related to performance-based planning and programming, including National Performance Management target setting and reporting. (It is anticipated that sharing methods and ideas on how to spatially manage and measure various elements of system performance will be an ongoing effort of this group.)
3. Coordination:
  - A. Coordinate with other NYSAMPO Working Groups on GIS-related efforts, as needed and requested.



- B. Continue to support the Bicycle and Pedestrian Working Group, Safety Working Group, and Transit Working Group by sharing and evaluating data available for ADA Transition Plan efforts. Continue to develop and share methodologies on ADA Transition Plan best practices.
  - C. Ensure data flow from NYSDOT is as efficient and complete as possible by monitoring changes to NYSDOT's data procedures and working with NYSDOT staff to understand data availability and archiving. Collaborate with NYSDOT to ensure that data needed to carry out required MPO duties, such as TIP programming and performance management are provided by NYSDOT to all MPOs in a GIS format.
  - D. Plan for an in-person meeting or web meeting to be a joint meeting with the Bicycle and Pedestrian Working Group, Safety Working Group, and/or Transit Working Group. When possible, coordinate this in conjunction with the NYSAMPO Conference or other conference/meeting opportunities.
4. Software
- A. Work with NYSDOT to continue to provide MPOs with ArcGIS Desktop Basic and Advanced licenses and extensions as well as ArcGIS Pro and ArcGIS Online licenses and extensions.
  - B. Research and discuss best practices for integrating GIS with cloud-based systems outside the ESRI environment such as Microsoft, Amazon, and Google.
  - C. Discuss MPO experience with open-source software applications that can be used to supplement or provide an alternative to ESRI products.
5. Training
- A. Periodically poll members to identify professional development needs.
  - B. Identify and request relevant training based on needs determined through polling (this may include vendor-based training on significant changes to ESRI Arc software).

### ***Available Resources***

- ESRI Licenses: New York State provides each MPO with the following ESRI Licenses: one (1) Concurrent ArcGIS Advanced; up to five (5) Single Use ArcGIS Basic; one (1) Named Lead User for ArcGIS Pro/ArcGIS Online; and one (1) Named Analyst User for ArcGIS Pro/ArcGIS Online. Licenses and questions regarding them can be obtained by contacting the GIS Working Group Chair and Co-Chair and the New York State Office of Information Technology Services.
- [NYSDOT Traffic Counts](#): Per NYSDOT, "Traffic data is collected comprehensively on state routes and federal aid eligible roads, at most bridge locations, and selectively across other state, county, and local roadways within New York State. An estimated Annual Average of Daily Traffic (AADT) is developed for nearly all locations at which

traffic data is collected and is available via the Traffic Data Report, Traffic Data Viewer, Roadway Inventory, and other reports and data found online. Archived data is also available upon request.”

- [NYSDOT Roadway Inventory System \(RIS\)](#): NYSDOT can provide MPOs with a RIS geodatabase which is a detailed road layer that includes various attributes. It can also be viewed online using their RIS Viewer, which provides information on federal aid eligibility, posted speed limits, and AADT.
- [ESRI GeoNet](#): A global community of ESRI users with approximately 1,500 members where you can find solutions, share ideas, and collaborate to solve problems with GIS.
- [New York State GIS Clearinghouse](#): Base data for several GIS items across New York State including, but not limited to, ortho imagery, parcels, elevation, addresses, and roads. There is also a list of web services hosted by New York State Agencies.
- [NYSDOT On-Line GIS Applications](#): NYSDOT-created applications including Winter Travel Advisory, Oversize/Overweight Vehicle Pre-Screening Tool, Traffic Data Viewer, Posted Bridges, RIS Viewer, and Functional Classification & National Highway System Viewer.
- [EagleView CONNECTExplorer](#): High resolution orthogonal and oblique aerial images. EagleView's CONNECTExplorer is a suite of tools used to view images and perform basic analysis using various measurement tools. The data is proprietary though some agencies that purchase the products are able to share access with MPOs, who should consult their member agency planning offices regarding this resource.
- [Crash Location and Engineering and Analysis Reporting System \(CLEAR\)](#): This application will revolutionize traffic safety analysis for NYSDOT and its partners. The CLEAR application will replace three existing legacy systems including Accident Location Information System (ALIS), Safety Information Management System (SIMS), and Post Implementation Evaluation System (PIES). The CLEAR system is comprised of four different applications including Interactive Crash Location (ICL), Interactive Crash Editor (ICE), Crash Data Viewer (CDV) and CLEAR Safety. Phase I of the CLEAR system rolled out in January 2022 with the release of the CDV while CLEAR Safety application is anticipated to go live in 2022. This CDV will replace ALIS as the system of record for crash data. Introductions to CLEAR training sessions are currently being held. The recorded training sessions cover the basic CLEAR architecture and dive into how to use the CDV application to retrieve crash data. The recordings will be available after January 21, 2022. The latest information about CLEAR is available at: <https://www.dot.ny.gov/divisions/operating/osss/highway/accident-analysis-toolbox>.
- [ESRI Online Training Resources](#): ESRI offers many online training resources. Resources include: the Lesson Gallery through [Learn GIS](#) (free) and [ESRI Academy](#) (some free training, as well as courses requiring a maintenance subscription, can be accessed through our ESRI/ArcGIS global login tied to our NYSDOT OFT account).

## MODELING WORKING GROUP

### *Goals*

1. Facilitate a network of colleagues to encourage sharing of ideas and questions about modeling on an informal basis throughout the year.
2. Hold a minimum of ten meetings per year with at least one as an in-person meeting, if feasible. Invite partners from NYSDOT and other agencies to meetings to present and discuss data and modeling applications.
3. Evaluate data needs that are applicable to other Working Groups, including facilitating data coordination among the MPOs and with NYSDOT.
4. Share interesting modeling application practices at in-person meetings to spur creative thinking towards the broader use of existing and potential tools.
5. Share best practices related to post-processing activities such as air quality criteria pollutant and GHG emission modeling/estimation.

### *Tasks*

2. Enhancing Data-Driven Planning
  - A. Facilitate data coordination among MPOs and with NYSDOT and other data partners to improve modeling, planning, and the development and tracking of performance measures.
    - i. NPMRDS web tool: This initiative has provided an archive and web-based tool to access the NPMRDS. NYSDOT continues to contract with AVAIL for this initiative. The Modeling Working Group is serving as an advisory committee to NYSDOT as this work progresses. The tools are useful in understanding congestion and reliability at regional and corridor levels.
    - ii. National Performance Management: Based on NPMRDS data, the Modeling Working Group will provide support for MPOs implementing performance-based planning using the NPMRDS web tool. The AVAIL Team has added functionality to the web tool to calculate the following Performance Management Rulemaking 3 measures: Level of Travel Time Reliability (LOTTR), Truck Travel Time Reliability Index (TTTR), and Hours of Peak Hour Excessive Delay (PHED).
    - iii. Vehicles Miles Traveled (VMT) Growth Trends: Through research and dialogue, the Modeling Working Group will continue to monitor current trends in VMT and discuss implications for MPO modeling and forecasting of travel. The Modeling Working Group will also monitor peak hour versus daily VMT growth trends as well as seasonal variations.

- iv. The NYSDOT Statewide Policy & Performance Bureau extended its purchase of 2017 National Household Travel Survey (NHTS) Add-on Data to the MPOs for their use. The purchase represents over 15,000 samples taken across the state, capturing non-commercial travel by all modes and the characteristics of the travel, household members, and their vehicles. The Add-on Data will be available through the Data Explorer found on the NHTS website. The Modeling Working Group will work with NYSDOT to understand and analyze 2017 NHTS data and its implications for MPO modeling and forecasting. The Modeling Working Group will also work with NYSDOT to review plans and options for the post-2017 version of the NHTS. New methodologies including a proposed shift to passive data sources will be considered in the review.
  - v. Connected and Automated Vehicles: The Modeling Working Group will continue to monitor the impacts of developments in these technologies, as well as emerging best planning practices on modeling and forecasting. The Modeling Working Group will explore the products of the national Association of MPOs' Connected and Automated Vehicles Work Group for applications to MPO modeling and planning in New York State. The Modeling Working Group will look at research on potential positive and negative impacts of these vehicles on VMT, land use, emissions, and other topics along with implications for modeling.
  - vi. Shared Mobility and Micromobility: The impacts of ride-hailing services (via Transportation Network Companies or TNCs), shared bikes, e-bikes, and e-scooters, and other new services and technologies will be considered with respect to travel demand modeling. This also applies to freight and the impacts of e-commerce and increased deliveries to businesses and residences.
  - vii. Travel Data: The Modeling Working Group will evaluate sources of passive travel data and explore its use in the travel demand forecast models.
  - viii. Census Data: The Modeling Working Group will monitor census activities, including the roll out of any new 2020 Census data, and pursue associated training as necessary.
  - ix. COVID 19 Pandemic Impacts: The Modeling Working Group will study the impacts of the current pandemic on regional and local travel patterns using data such as the NYSDOT traffic count summaries and Bureau of Transportation Statistics COVID 19 related transportation statistics.
3. Enhancing Modeling Practice
- A. Scenario Planning: The Modeling Working Group will explore best practices for incorporating scenario planning into MPO practice, especially with respect to the expected transformation of travel behavior including changes in VMT growth and penetration of connected and automated vehicles in the fleet mix.



- B. The Modeling Working Group will explore the practice of looking back at old MPO forecasts as part of the calibration of existing models with new data.

#### 4. Collaboration with Other Working Groups

- A. The Modeling Working Group will collaborate with NYSDOT, the Climate Change Working Group, the Freight Working Group, and the Transportation Systems Management and Operations Working Group in estimating and forecasting transportation GHG emissions for LRTP and TIP performance measures. The Modeling Working Group will explore emerging trends and data sources.
  - i. Using NPMRDS data to understand operations and management strategies, including Intelligent Transportation Systems deployment, implementation, and traffic signalization, will be explored in coordination with the Transportation Systems Management and Operations Working Group.
  - ii. Coordinate with the Freight Working Group on issues such as electrification of railroads and open rail corridors for renewable energy transmission, potential diversion of truck shipments to rail, emerging opportunities for application of freight data, freight modeling, and shifts between freight modes.
- B. The AVAIL Team is developing transit and freight modules within the NPMRDS web tool. The Modeling Working Group will collaborate with the Transit Working Group, the Freight Working Group, and the AVAIL Team to coordinate development of these modules.

#### 5. Webpage

- A. The Working Group will maintain a webpage on the NYSAMPO website to share modeling practice presentations.

#### 6. Training

- A. The Working Group will identify training needs and opportunities in modeling and air quality and explore opportunities for the staff support consultant to provide training and tools through trainings at in-person meetings (if possible) and web meetings, a clearinghouse on the website, and other means.
  - i. Pursue training on the NPMRDS tool with the AVAIL team. Training would address basic through advanced tool functionality and MPO planning applications.
- B. The Modeling Working Group will discuss the possibility of group and/or individual training opportunities through the FHWA Resource Training Center. This will include an annual review of the Resource Center's Call for Services.

### *Available Resources*

- [NPMRDS Web Tools](#): This platform was created to process and visualize the NPMRDS data for New York State Department of Transportation (NYSDOT) and the MPOs in New York State (registration is required to access the platform). The software modules contained within are useful in understanding congestion and reliability, and include auxiliary modules for analysis of traffic counts, incidents (i.e., accidents, construction), and transit trips per road segment. The data is maintained by AVAIL and updated monthly with 2021 data available at the time of publication of this document.
- [Data Axle \(formerly InfoGroup\) Business Points Data](#): Business locations in New York State with various company specific attributes in ESRI Geodatabase format. The data is proprietary and NYSDOT purchases it and makes it available to the MPOs.
- [National Household Travel Survey \(NHTS\) Add-on Data](#): NYSDOT is extending its purchase of 2017 NHTS Add-on Data to the MPOs. The purchase represents over 15,000 samples taken across the state capturing non-commercial travel by all modes and the characteristics of the travel, household members and their vehicles. The Add-on data will be available through the Data Explorer found on the NHTS website. The Data Explorer mimics the functionality of the NHTS public-use tool but with the added ability to select weighting (five- or seven-day) and the choice of three levels of geography to include in crosstabulations: MPO, county, or state.
- [Average Daily VMT estimates by MPO Planning Area & Functional Classification](#): The NYSDOT Highway Data Services Bureau provides annual updates to the Average Daily VMT estimates for each MPO Planning Area and also breaks the estimates down by Functional Classification.
- IHS Global Insights US Economic and US Regional Long-Term Forecasts: Available for all counties in New York, New Jersey, and Connecticut. Includes information such as historical and projected population employment data by County. The data is proprietary and NYSDOT purchases it and makes it available to the MPOs.
- [MOtor Vehicle Emission Simulator \(MOVES\)](#): A U.S. Environmental Protection Agency modeling system that estimates emissions for mobile sources at the national, county, and project level for criteria air pollutants, greenhouse gases, and air toxics.
- [Travel Model Improvement Program \(TMIP\)](#): Per FHWA, "TMIP was established in 1994 with the mission of transferring improved travel analysis technologies and practices to staff at state and local planning agencies. Over this period the transportation industry has undergone significant changes and TMIP has continued to lead the charge in supporting research and providing opportunities for information sharing."
- [Cornell Program on Applied Demographics \(PAD\)](#): Per Cornell University, "brings skills in demographics, economics, statistics, data gathering and data analysis together to provide a variety of organizations with data, information and advice. PAD works

closely with the New York State Department of Labor, the U.S. Census Bureau and other organizations to assist them in their activities.” The site includes population and employment trends as well as population projections for all counties and school districts in NY. County profiles are also available.

- [StreetLight Data](#): StreetLight Data is an on-demand mobility analytics platform that uses big data from mobile devices to conduct origin-destination, travel times, and select link analyses. Their clients get access to the web-based platform and can set up and run their analyses, then view heatmaps and interactive visualizations, or export the output to other usable formats. The data is proprietary.
- [INRIX](#): INRIX provides various online applications to analyze and forecast various mobility features, including (but not limited to) traffic, parking, connected vehicles, and shared mobility and micromobility. The data is proprietary.
- [AirSage](#): AirSage is a US-based technology company specializing in collecting and analyzing anonymous location data, such as cell phone and GPS data, processing more than 15 billion mobile locations every day – and turns them into meaningful and actionable information. The data is proprietary.
- [Replica](#): Replica is an enterprise data platform that delivers critical insights about the built environment - across people, mobility, economic activity, and land use. Replica offers three tools in their platform including trends (nationwide model with census-tract level fidelity), places (high-fidelity activity-based travel model), and scenario (forecasting and scenario analysis built on places data).
- [Woods & Poole Economics, Inc. Regional Projections](#): Data Pamphlets provide economic data and demographic data for specific geographies with annual historical economic and demographic information from 1970 and annual projections to 2050. The data is proprietary.

### SAFETY WORKING GROUP

#### *Goals*

1. Provide a forum for the exchange of safety planning information and ideas with New York State, federal, regional, local, and international safety partners.
2. Collaborate with NYSDOT and other safety partners on New York State and federal safety initiatives.
3. Provide training and technical support for MPO safety planning efforts.

#### *Tasks*

1. Working Group Meetings
  - A. Hold monthly meetings to exchange information and ideas related to transportation safety planning in New York State.
  - B. Schedule presentations from practitioners within and outside of New York State to be provided during monthly meetings. Topics of interest include: MPO crash data analysis and safety planning initiatives, Roadway Safety Departure Action Plans, Safe Systems Approach, Complete Streets, e-bike and e-scooter safety, truck and motorcycle safety, equity, safety plan implementation, and bicycle and pedestrian accommodations in work zone traffic control settings.
  - C. Hold joint meetings with other NYSAMPO Working Groups, as needed. When possible, schedule joint meetings concurrently with the NYSAMPO Conference or other conferences/workshops. Due to the COVID-19 pandemic, it is anticipated that joint meetings will be virtual during at least part of the 2022-2023 Work Plan period.
  - D. Explore a virtual panel discussion or peer exchange with MPOs outside of New York State on safety related topics.
2. Safety Planning Coordination
  - A. Work with NYSDOT and safety partners on the implementation and evaluation of the New York State Strategic Highway Safety Plan, Pedestrian Safety Action Plan, and Roadway Departure Safety Action Plan.
  - B. Support NYSDOT and safety partners on the development of new safety plans (e.g., intersection safety action plans, etc.).
  - C. Collaborate with NYSDOT on the development of the federally required annual safety performance targets, and track safety performance statewide and by MPO.
  - D. Coordinate with other NYSAMPO Working Groups on overlapping topics related to safety. This may include developing resources for the NYSAMPO Safety Education



Toolkit and website, hosting training, or holding virtual workshops. Topics will include e-bike and e-scooter safety, Crash Location Engineering & Analysis Repository (CLEAR) training, and a safety countermeasure cost inventory for use with CLEAR and as part of a cost estimating toolkit on the NYSAMPO website.

- E. Collaborate with NYSDOT and the Cornell Local Roads Program's Local Technical Assistance Program Center to develop a safety project flow chart/decision tree for local governments to identify safety project funding options, including the FHWA Highway Safety Improvement Program (HSIP) and Safe Streets and Roads for All program.
- F. Track the use of HSIP funding on capital transportation projects.
- G. Monitor proposed state safety related legislation, especially state legalization of recreational marijuana.
- H. Monitor proposed federal safety related rulemaking, especially the new eligible activities and the vulnerable road user safety assessments as part of the Highway Safety Improvement Program, and the creation of the Safe Streets and Roads for All program.
- I. Develop Local and Regional Safety Plan scope of work templates that incorporate the NYS Strategic Highway Safety Plan and related emphasis area plans, CLEAR system capabilities, and best MPO practices to date. The template(s) would support a 'comprehensive safety action plan' that enables jurisdictions to be eligible for the Safe Streets and Roads for All program.

### 3. Data

- A. Support NYSDOT deployment of the CLEAR application to MPOs to replace ALIS (Accident Location Information System).
- B. Update the MPO crash data use and dissemination agreement.
- C. Support the preparation of the New York State FFY 2022 Traffic Safety Information Systems Strategic Plan through the NYS Traffic Records Coordinating Council.
- D. Monitor safety data system updates in New York State including the NYSDMV Accident Information System.
- E. Review guidance relating to Title VI and Executive Order 13985, [Advancing Racial Equity and Support for Underserved Communities Through the Federal Government](#), and methodologies for use in equity analyses of safety programs and funding.

### 4. Education and Outreach

- A. Maintain and update the Safety Education Toolkit on the NYSAMPO website and determine the most effective ways to provide this information to the public.

- B. Promote the Traffic Safety Statistical Repository (TSSR) and other publicly available safety data resources through the Institute of Traffic Safety Management and Research (ITSMR) to MPO staff, member agencies and the public.
- C. Coordinate with GTSC, NYSDOT, NYSDOH, and NHTSA to support distribution of transportation safety campaign materials and public service announcements for pedestrians, distractions, and impairment among other safety topics.
- D. Attend New York State Association of Traffic Safety Board meetings to exchange safety education program information.

### *Available Resources*

- [NYSAMPO Safety Education Toolkit](#): This resource on the NYSAMPO website provides links to outreach materials and design and policy guidance for MPOs to use or adapt to their use. It addresses several safety topics including bicycle safety, design guidance & training, navigating new infrastructure, traffic safety campaigns, Complete Streets/share the road, driver & passenger safety, pedestrian safety, motorcycle safety, plans and reports, and walk/bike to school. Crash data resources include Fatality Analysis Reporting System (federally required fatal crash database), ITSMR TSSR (publicly accessible crash data for New York State), and the NYSDOT Accident Analysis Toolbox which contains information about accessing CLEAR (web-based application with location-based crash data), crash analysis forms, and statewide crash rates and associated costs.
- Crash Location Engineering & Analysis Repository (CLEAR): CLEAR is a web-based GIS application that allows users to access motor vehicle crash data through custom queries and analyze the data with a number of reporting options and formats. CLEAR launched in the winter of 2022. NYSDOT can provide the MPOs access to crash datasets on request. For more information see: <https://www.dot.ny.gov/divisions/operating/osss/highway/crash-analysis-toolbox>

### TRANSIT WORKING GROUP

#### Goals

1. Coordinate with other NYSAMPO Working Groups as needed throughout the year.
2. Monitor New York State and federal legislation and regulations, as applicable, and provide input to the NYSAMPO Directors Group for their knowledge and potential action.
3. Promote coordination of transit planning and programming activities among MPOs, NYSDOT, transit providers, and Federal Transit Administration (FTA) staff.

#### Tasks

1. Promote Knowledge Transfer
  - A. Meet four times per year with one meeting being in-person, if possible and if it adds value to the discussion. Meetings are anticipated to take place in March, June, September, and December. Subject matter experts will be invited to present/discuss on relevant topics.
    - i. Plan for one meeting to be a joint meeting with the Bicycle and Pedestrian Working Group, GIS Working Group, and Safety Working Group for topics of interest.
  - B. Sponsor a National Association of City Transportation Officials' (NACTO) *Transit Street Design Guide* training.
  - C. Encourage MPO staff to share information on transit-focused work taking place within each MPO at the quarterly meetings by providing a short presentation on the main elements that might be of interest to Working Group members (e.g., plans, actions, events, etc.).
  - D. Share and discuss current and developing practice on:
    - i. Mobility as a Service (e.g., business models/concepts, etc.);
    - ii. Transit and TNCs as they relate to specific actions/activities taking place across New York State; and
    - iii. COVID impacts and transit agency response
2. Coordinate with Other NYSAMPO Working Groups
  - A. Continue to collaborate with the Bicycle and Pedestrian Working Group, Climate Change Working Group, Safety Working Group, and NYSDOT to undertake research on shared mobility and micromobility, including the safety implications in New York State and efforts to integrate with transit and assessments of safe routes to transit.

- B. Coordinate with the Modeling Working Group and Transportation Systems Management and Operations Working Group to explore research and issues related to equity in the implementation of connected and autonomous vehicles and transit.
- 3. Promote Coordination of Transit Planning and Programming Activities
  - A. Share notices of transit-related funding opportunities and programs. Track the release/continued release of guidance on the Bipartisan Infrastructure Law.
    - i. Continue information sharing for the 5310 program as it is developed, during reviews, and for any discussion/follow-up.
  - B. Identify and discuss data sources, collection techniques, and new technology that support transit planning activities.
  - C. Discuss ongoing and transit-related enhancements as they are advanced by NYSDOT.
  - D. Continue as a conduit for input, participation, and reference throughout the Shared Transit Service Planning & Analytics Initiative.

### ***Available Resources***

- [National Transit Database](#): Developed and maintained by FTA, the National Transit Database, or NTD, provides essential multi-year information for time-series comparisons of transit agencies' assets (e.g., vehicles, facilities, etc.), operations (e.g., passenger miles traveled, unlinked passenger trips, etc.), finances (e.g., capital costs, operating costs, etc.), and safety event reports. NTD products include (but are not limited to) transit provider profiles, national summaries and trends, time series data going back to 1991, and monthly ridership data.
- [ESRI Transit Network Analysis Tools](#): These are proprietary GIS tools that allow for various transit analyses to be conducted using ArcMap and ArcGIS Pro. These include the Calculate Travel Time Statistics, Calculate Accessibility Matrix, Prepare Time Lapse Polygons, and Create Percent Access Polygons tools. ESRI also produces the BetterBusBuffers tool, which allows for the quantitative analysis and mapping of the frequency of public transit across a service area.
- [Conveyal](#): This proprietary platform allows for accessibility analyses based on various transportation network and land use scenarios. The platform is a suite of integrated components that include building scenarios, evaluating and comparing access based on these scenarios, and a secure, online collaboration for sharing and discussing results of the evaluations and comparisons.
- [NACTO Transit Street Design Guide](#): This design guidance includes examples of how to incorporate and promote transit via on street facilities, stations and stops, intersections, and system strategies based on research, evaluation, and case studies of the effects of several types of guidance on transit in North American cities.

### TRANSPORTATION SYSTEMS MANAGEMENT AND OPERATIONS WORKING GROUP

#### *Goals*

1. Knowledge Transfer: Provide a venue for transferring TSMO knowledge, experiences, and best practices among members and partners.
2. Policy Coordination: Provide commentary on New York State and federal TSMO and congestion management-related policies, initiatives, and legislation to NYSAMPO.
3. Coordinate Planning Initiatives for Emerging TSMO Issues: Facilitate a uniform planning approach to emerging issues in the TSMO field among MPOs by coordinating TSMO-related initiatives across member agencies.
4. Metropolitan Transportation Plans: Support New York State MPO efforts to integrate TSMO-supportive commentary and recommendations into their metropolitan transportation plans (MTPs).
5. Congestion Management Process: Support MPO efforts to integrate TSMO-oriented congestion management strategies into their Congestion Management Process (CMP), including the use of performance measures to monitor congestion and inform those strategies.

#### *Tasks*

1. Knowledge Transfer
  - A. Conduct web meetings at least four times per year with presentations by subject matter experts.
  - B. Distribute pertinent information (e.g., TSMO-related publications, websites, training opportunities, etc.) to members via e-mail.
  - C. Work with member agencies and other Working Groups to host training sessions for MPO staff and other interested stakeholders on technical topics related to TSMO programs and activities, including development and dissemination of associated training materials.
2. TSMO Policy Coordination
  - A. Prepare comment letters on the anticipated impacts of New York State and federal TSMO and congestion management-related policies, initiatives, and legislation for consideration by NYSAMPO as needed.
  - B. In coordination with other Working Groups, advance recommendations in the NYSDOT Transportation Systems Management and Operations Strategic Plan.

### 3. Coordinate Planning Initiatives for Emerging TSMO Issues

- A. Promote a common approach to emerging issues where feasible and practical, and support MPO member agency actions to implement TSMO-related programs and projects, especially those of statewide and/or inter-regional significance.
- B. In coordination with other Working Groups, identify emerging issues in the TSMO field that are of broad interest and significance across New York State.
- C. In coordination with other Working Groups, convene roundtables of MPO staff and subject matter experts to discuss how MPOs can best prepare for these emerging issues.
- D. Prepare and disseminate fact sheets and supporting materials outlining how MPOs can prepare for emerging issues.

### 4. Metropolitan Transportation Plans

- A. Support member MPO efforts to integrate TSMO-supportive commentary and recommendations into their MTPs including, but not limited to:
  - i. Importance of interagency and multi-jurisdictional coordination and collaboration;
  - ii. Identification of desired future capabilities that regional TSMO partners want to develop and the associated ITS field instrumentation deployments needed to support those capabilities; and
  - iii. Impacts of recent trends and emerging technologies.
- B. Provide TSMO resources for member agencies to use when revising/updating their MTPs.
- C. Produce a fact sheet listing key TSMO-supportive concepts for MPOs to consider integrating into their MTPs.

### 5. Congestion Management Process

- A. Identify congestion management related TSMO resources for MPOs to reference when revising/updating their CMPs.
- B. Produce a fact sheet discussing key TSMO-oriented congestion management strategies for MPOs to consider integrating into their CMPs.
- C. Collaborate with other Working Groups and MPO member agencies in support of efforts to integrate vehicle probe data-based analytics into CMPs.