



**NEW YORK STATE ASSOCIATION OF MPOs  
MODELING WORKING GROUP  
December 3, 2021**

**Conference Call  
9:30 AM – 11:00 AM**

**MEETING NOTES**

**Participating**

- SMTC, Jason Deshaies (Chair)
- CDTC, Chris Bauer (Co-chair)
- AVAIL, Catherine Lawson
- AVAIL, Adam Tobey
- AVAIL, Erika Corsi
- AVAIL, Eric Krans
- AVAIL, Alex Muro
- BMTS, Leigh McCullen
- BMTS, Ashely Seyfried
- CDTC, Andrew Tracy
- CS, Emma Stockton
- CS, Nikhil Puri
- DCTC, Emily Dozier
- ECTC, Courtney Taylor
- FHWA, Sarah Sun
- GBNRTC, Matt Grabau
- NYMTC, Michael Chiume
- NYSDOT, Jim Davis
- NYSDOT, Nate Harp
- NYSDOT, Richard Batchelder
- OCTC, Lauren Burns Bennett
- OCTC, Zack Coleman
- UCTC, David Staas

**1. MPO Model Sharing Policies and Practices (Lauren Burns Bennett)**

OCTC received a request several months ago from a consultant to use the MPO's regional model for a study. OCTC decided to not share the model but did share TAZ boundaries, SED models and forecasts. Lauren researched practices and policies MPOs have in place for sharing models with consultants or agencies, particularly when the model will be used to analyze a project sponsored by another agency. She shared the information she found.

- MPO/agency practices across the nation include:
  - Tend not to share due to concerns about version control.

- MPO models are regional and not designed for project-level analysis.
- Some MPOs only share inputs and outputs of the model. Others require agreements adopted by the MPO Board, or signed agreements for specific use, or require definition of project use (particularly relates to graduate student work).
- Some MPOs do share everything.
- Some specify that any modifications or enhancements must be clearly documented and shared with the MPO or agency.
  - Results must be presented as consultant's adaption of model, not the MPO model.
- There is no best practice, everyone did it differently.
- Model agreement resources:
  - Southern California Association of Governments (SCAG)
  - Chicago Metropolitan Agency for Planning
  - Denver Regional Council of Governments

## **2. Modeling Working Group Work Plan Update (Jason Deshaies)**

Each NYSAMPO Working Group will soon update its Work Plan. Rich Perrin will send information in the next few weeks to the WG chairs. Jason would like feedback for the Modeling WG Work Plan on any new projects, presentations, or trainings the participants think would be useful.

Chris mentioned that it would be useful to have a basic NPMRDS software training in next year's work plan.

## **3. NPMRDS Software Update**

Transit view (Alex Muro):

- Created new public transit page using GTFS conflation data that does not require login. Wanted to make this page more accessible to wider audience.
  - To get total bus count out of the MACRO tool, many steps are required, and it does not scale up to the state-level very well since it needs to load too much data. With these topical pages, it is easier to see the entire state.
    - MACRO view tool lets you do one measure at a time but there is dimensionality to this data.
  - Metadata includes RIS IDs, directional (to/from; 0,1), MPO, county, total bus traffic (daily average), agencies operating, and list of routes for each segment. There have been many requests for the shapefile for the entire state; anyone can download it in the tool.
    - The current version includes data from more transit agencies than the last version. The team will keep updating.
    - Will add document reference for the shapefile.

Q&A:

- Jason Deshaies: Can dates for data be added?
  - Alex Muro: We created this with the latest data from GTFS from every transit agency, which is not the best way to do this since it is not all consistent from

one date. We could pull dates into the metadata date for the GTFS file, though. We have been talking to DOT about a conversation with the vendor that runs GTFS database to do metadata marking where they do an annual list of canonical GTFS from September, for example, so we aren't responsible for that process. That is going to be an update going forward. This is a large improvement for matching and accuracy but is missing some segments, for example it particularly messes up when going to private roads.

- Emily Dozier: Is this live? I'm not seeing it.
  - Alex Muro: Hold shift while doing a refresh. They will figure out why it is doing that.

#### Short tutorials/reminders (Eric Krans):

- How to navigate the web-tool.
  - Every so often it's helpful to remind people about the tools. AVAIL is still working on documentation of the tool; more is available now. As they increase documentation, AVAIL is making a series of videos and sharing with more organizations, such as NYSDOT regions, in upcoming months.
  - To dive into your region or county, the most useful tool is the MACRO view.
    - Launching a new version soon; "map" tool doesn't work fully right now but the team will make MACRO view more intuitive. At this time, MACRO view is still best way to get information on your region.
    - First you need to select a region; the default performance measure is Level of Travel Time Reliability (LOTTR). A quick way to see where reliability issues are occurring is to click on bottlenecks.
    - Data quality will affect accuracy, so AVAIL suggests using 10% data quality.
    - There are many performance measures available. The new version will make this more intuitive. If anyone needs a hands-on tutorial for any performance measure calculations and what they are best used for, talk to AVAIL.
    - Can see comparison from year to year to see change over time.
- Exporting data from MACRO view.
  - Click "Data downloader," which can do shapefile or .csv. There are default data, but you can choose more performance measures and metavariables. Can then use this data offline.
- How to create a route and analyze it.
  - Click routes, then "New Route" button. There are then two ways to make a route:
    - Pin in map – first to second pin, this gives TMC list; or
    - Select TMCs one at a time.
  - Example of making report for an incident:
    - Once you create an incident route, select day of incident, you can then compare routes, years, and more. Many customizable options, such as graphs and display data, available.
  - Another helpful thing is to show a route overtime (compare before and after changes).

#### Q&A:

- Jason Deshaies: When you select to remove under 10% data quality in the MACRO view, is that applied to the download too?
  - Eric Kranz: Don't believe that is the case now – we will take a look at that because that is important to include in the new update.
- Chris Bauer: MPOs have had staff turnover in last two years. With many new and younger folks, it would make sense to do training for new staff on the basics. Suggest adding this to the next work plan.
  - Jason Deshaies: Great idea. That would be helpful for everyone, and the tool is always evolving.
  - Eric Krans: AVAIL is very interested in doing this. We can go slower in a training to show the basics and step by step process. They are creating the curriculum modules with videos, based on questions users may have, and will be working on that over the next few months.
  - Jim Davis: NYSDOT signed a new multi-year agreement with AVAIL to support the tool. One thing we want is to get the tool out widely and use with regional offices and different parts of the Department. We are trying to accumulate use-case applications where it may apply as a foundation for the curriculum. One of the reasons this tool effort has been successful is because MPOs took a leadership role in figuring out what types of problems this tool can assist with. We should compare notes on the applications that MPOs intend or hope this platform will support. The tool can be used for both application and training.
  - This can provide use-cases and workflow best practices, particularly to new people coming into the industry to see what people use it for.
  - Jason Deshaies: Use-case list will expand once we get the tool and trainings out to more people.
  - Chris Bauer: NYSDOT Region 1 is trying to re-energize their traffic incident management (TIM) committee. We've discussed how MPOs can help TIM committees; modeling and data is one answer. He showed this tool to the TIM committee and there was a lot of interest overall, and in the tool's ability to analyze a major incident. They are focused on clear times and how an incident impacts the network. We let them know we can help or show them how to use tool.

#### Coming soon: Operations and Freight Modules (Eric Krans):

- Moving towards different modules with different dimensionalities. Currently, the MACRO view shows yearly summaries, but moving forward, we will create more up-to-date dashboards with monthly or weekly data too (still deciding dimensions). These could show what happened in your region last month and how that changed. Transit was the first module worked on but there will be more. For example, a freight module is underway.
- The incident/congestion piece is another multi-dimensional piece AVAIL is working on. Can present more in depth in coming months as continue to figure out algorithm.

- Routes and MACRO view gives AVAIL a springboard to create more pointed and curated modules. Will be looking for assistance in how this will be used in your work.

#### Q&A

- Emily Dozier: Mid-Hudson Valley is working on freight plan and would be interested in using the freight module. They have done initial analysis and used congestion and reliability measures from a few years ago. Updated freight data could be incorporated.
- Jim David: NYSDOT had a recent purchase of Transearch data flow. The purchase agreement allows us to share with MPOs. If that's helpful, give us a call. If you see something useful in the state freight plan, let us know; they may have data to share. The eventual contact is David Rosenberg.
- Eric Kranz: Contact AVAIL with your timeline and needs as well.

#### **4. Next Meeting**

There will be two MWG meetings in January. The next meeting will take place on January 7, 2022. There will be another one during the final week of January.