

SNHPC Congestion Management Process (CMP)

Federal Highway Administration Comments and Consideration of Approval

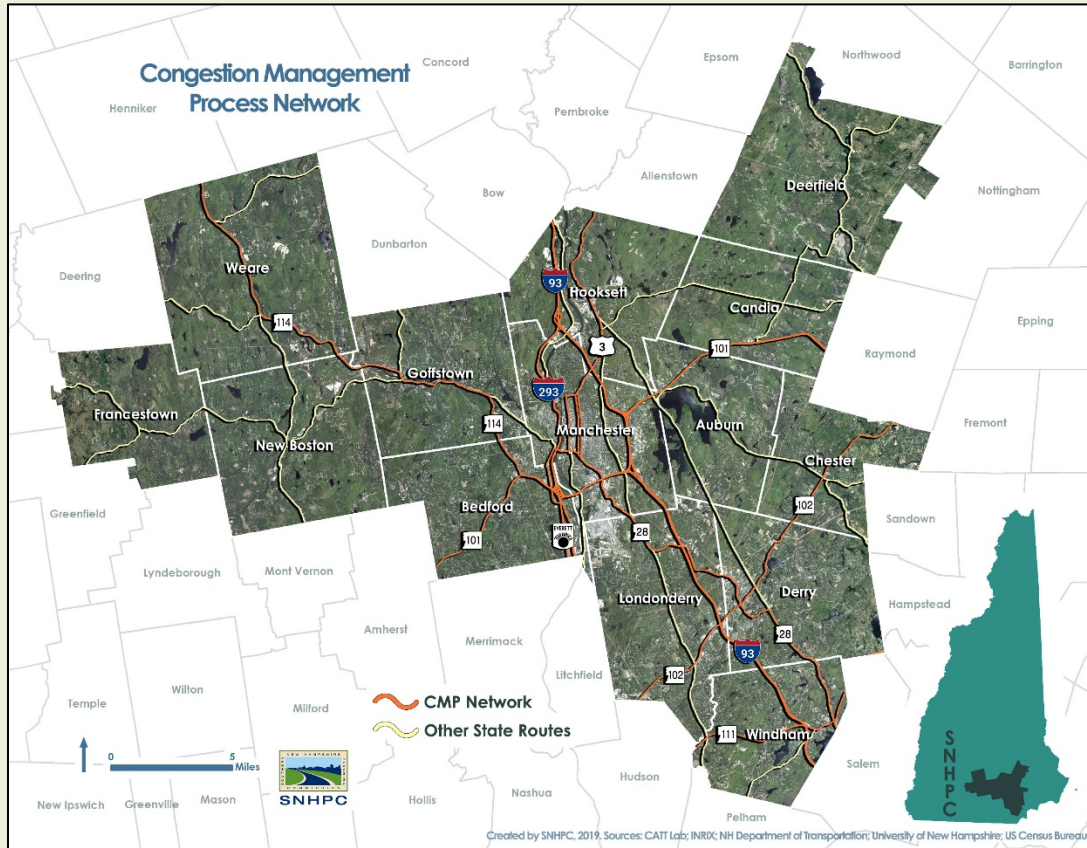
SNHPC TAC Meeting
December 17, 2020

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Principal Transportation Planner





SNHPC Congestion Management Process Network (2020)



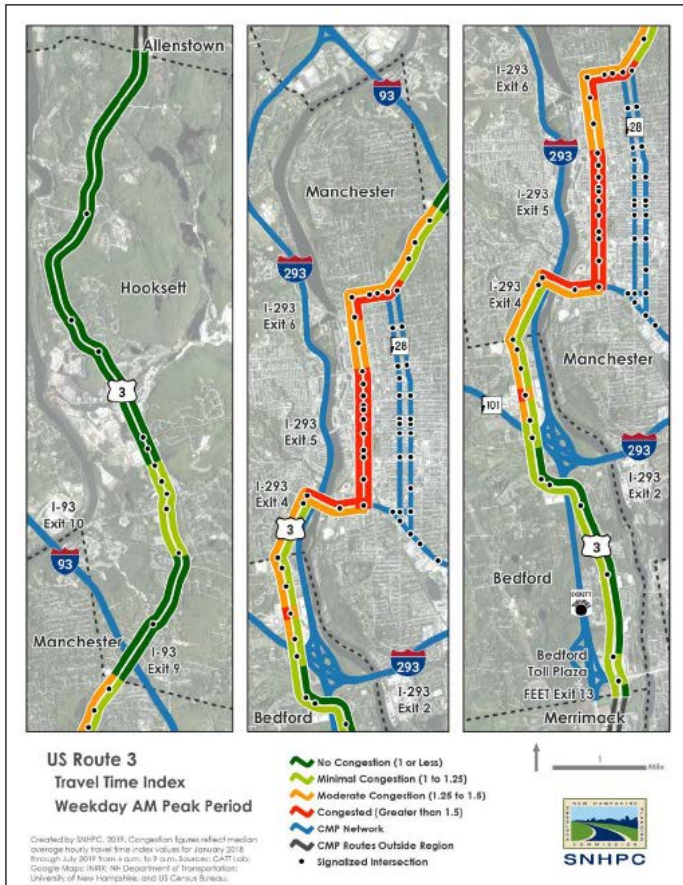
SNHPC CMP Network

- Interstate 93
- Interstate 293
- F.E. Everett Turnpike
- NH Route 28
- NH Route 101
- NH Route 102
- NH Route 111
- NH Route 114
- U.S. Route 3

The network was identified based on previous travel demand model results and input from the SNHPC Technical Advisory Committee.

Updated SNHPC Congestion Management Process (2020)

Figure 7.11.1 – U.S. Route 3 AM Peak Period Congestion



- Has been expanded to encompass entire MPO region.
- Includes corridor-specific congestion visualizations.
- Utilizes the NPMRDS probe dataset to quantify congestion.
 - The SNHPC partnered with other MPOs and RPCs to purchase expanded NPMRDS coverage.
- Identifies corridor-specific congestion management strategies.



FHWA Comments Received and Responses

- **SUMMARY OF COMMENTS 1 & 2:**

- Overall comments that recognized SNHPC's use of FHWA CMP Guidebook, and the 8-Step process it outlines.
- FHWA is appreciative of SNHPC's use of travel time performance data and mapping visualizations of congestion.
- FHWA provided examples of other MPO's of similar sizes as additional resources.

- **RECOMMENDED RESPONSE:**

- Acknowledged, and reviewed detailed comments 3 -14



FHWA Comments Received and Response

- **SUMMARY OF COMMENT 3:**

- Suggested enhancing the *Introduction* with narrative of how SNHPC approached the CMP update, people involved, what changed, and the role of public involvement

- **RECOMMENDED RESPONSE:**

- Added narrative explaining that the corridors and network were done in conjunction with TAC members and reviewed by MPO, and that partner agency staff are represented.
- Added narrative that the update document was prepared by staff and included a public comment period and hearing.



FHWA Comments Received and Response

- **SUMMARY OF COMMENT 4:**

- Recommended providing narrative around *Regional Objectives in the SNHPC Region* that provides clarity and consistency of appropriate Goals and Objectives between the Metropolitan Transportation Plan (MTP) and those in the CMP.

- **RECOMMENDED RESPONSE:**

- Added narrative describing the MTP Goals and Objectives and how they connect to required and relevant Performance Measures.



FHWA Comments Received and Response

- **SUMMARY OF COMMENT 5:**

- In the *Definition of the SNHPC Regional Network* section, recommended providing enhanced narrative on how some routes are only partially designated as National Highway System (NHS), and discuss the lengths and termini and how routes were selected.

- **RECOMMENDED RESPONSE:**

- Added narrative explaining the network and a table “*SNHPC CMP - National Highway System (NHS) Designation Limits*” that includes the Roadway, Length, Designation (partial or all NHS) and termini notes (if applicable).



FHWA Comments Received and Response

- **SUMMARY OF COMMENT 6 and 11:**

- In the *Definition of the Definition of Performance Measures* section, recommended explaining the 3 performance measures Travel Time Index (TTI), Level of Truck Time Reliability (LOTTR) Truck Travel Time Reliability (TTTR) and how we use them to measure and monitor congestion.

- **RECOMMENDED RESPONSE:**

- Provided a "dashboard" approach providing a corridor-level snapshot of TTI as well as regional LOTTR and TTTR figures.



FHWA Comments Received and Response

- **SUMMARY OF COMMENT 7:**

- In the *Data and Monitoring of System Performance* section, it was recommended that an update on data collection activities be provided explaining the relationship between these activities and CMP and overall MPO planning process.

- **RECOMMENDED RESPONSE:**

- Added narrative of SNHPC's current data collection programs. This includes the travel demand model, traffic counts, vehicle classification counts, and bicycle and pedestrian counts, as well as high-crash locations, traffic signal warrant studies, and Road Safety Audits



FHWA Comments Received and Response

- **SUMMARY OF COMMENT 8:**

- In the *Data and Monitoring of System Performance*, we were asked about adjustment to TTI thresholds. The SNHPC's TTI thresholds do not vary between road types. However, we did adjust the free-flow speed based on road classification.

- **RECOMMENDED RESPONSE:**

- No need for any edits. In the future, we will consider incorporating different TTI thresholds for different road types and communicate the differences in delay on roadway types – that delay on an interstate is not equivalent to delay a local road and could be evaluated differently.



FHWA Comments Received and Response

- **SUMMARY OF COMMENT 9:**

- It was suggested that *Analysis of Congestion and Identification of Strategies* section could be enhanced by adding how the strategies were identified and recommended for each corridor. Additional info around Responsibility for Implementation, Estimated Cost, Funding Sources, and Implementation Schedule should be included.

- **RECOMMENDED RESPONSE:**

- Additional narrative and a table with this information will be included.



FHWA Comments Received and Response

- **SUMMARY OF COMMENT 10:**

- It was suggested that *Analysis of Congestion and Identification of Strategies* section could be enhanced by describing some strategies SNHPC anticipates applying regionally.

- **RECOMMENDED RESPONSE:**

- Additional narrative explaining regional strategies in Transportation Demand Management (TDM), Active Transportation (Bicycle/Pedestrian) and Land Use and Transportation will now be included.



FHWA Comments Received and Response

- **SUMMARY OF COMMENT 12:**

- It was suggested that *Programming and Implementation Strategies* section could be enhanced by describing the relationship between the CMP, Ten Year Plan (TYP) and the Metropolitan Transportation Plan (MTP), and project prioritization, selection, and programming via a graphic similar to one presented at the Review.

- **RECOMMENDED RESPONSE:**

- An enhanced graphic has been added showing the relationship between these planning processes.



CMP/MTP Integration

Construction

Year 1-4

**Transportation
Improvement Program (TIP)**

Federal
Requirement

Year 5-10

**Ten-Year Transportation
Improvement Plan (TYP)**

State
Requirement

Year 11-20+

**Metropolitan
Transportation Plan (MTP)**

Federal
Requirement

**Congestion Mgmt.
Process** (*granular,
corridor-specific analyses
based on existing trends*)

*Provides Calibration/validation
Data via NPMRDS*

*Assists in Identifying CMP
Network and CMP Strategies*

Travel Demand Model
(*forward-looking analysis
of future congestion at
the system-level*)

Concept



FHWA Comments Received and Response

- **SUMMARY OF COMMENT 13:**

- It was suggested that *Programming and Implementation Strategies* section could be enhanced by confirming the update schedule for the CMP, describing additional activities and resources will use to communicate the resulting issues and strategies.

- **RECOMMENDED RESPONSE:**

- A narrative will now be included with the anticipated 5-year update schedule (next in 2025) and references the outreach, equity and technological means in the recently adopted SNHPC Public Participation Plan.



FHWA Comments Received and Response

- **SUMMARY OF COMMENT 14:**

- It was suggested that *Programming and Implementation Strategies* section could be enhanced by describing how SNHPC will use future CMP updates to evaluate the effectiveness of the CMP strategies and resulting projects, perhaps by corridor.

- **RECOMMENDED RESPONSE:**

- A narrative is now included explaining that comparative Travel Time Index data and associated mapping for the nine corridors in the CMP Network will be included in future CMPs with noted project improvements. Future CMP updates will incorporate updated data to track and monitor results.



Questions?