NEW YORK STATE ASSOCIATION OF MPOs
CLIMATE CHANGE AND SUSTAINABILITY WORKING GROUP
June 27, 2018
Webinar Meeting
1:30 PM – 2:30 PM

MEETING NOTES

Participating
- Jennifer Ceponis, Chair (CDTC)
- Joseph Bovenzi (GTC)
- Kevan Busa (SMTC)
- Zack Coleman (OCTC)
- Mark Debald (DCTC)
- Leslie Fordjour (NYMTC)
- Heather Holsinger (FHWA)
- Elisabeth Lennon (NYSDOT)
- Jack Mance (A/GFTC)
- Colleen Smith Lemmon (NYSDOT)
- Brian ten Siethoff (Cambridge Systematics, Consultant Support)
- Nicolette Wagner (ECTC)
- Nancy Welsh (NYSDEC)

1. Integrating Risk and Resiliency into Planning

*Presentation by Brian ten Siethoff, Cambridge Systematics.*
*[See PPT slides in separate attachment]*

Notes from Discussion:

Q: What other MPOs are good examples of incorporating resilience into planning?

A: In NY State, GTC completed the Genesee-Finger Lakes Regional Critical Transportation Infrastructure Vulnerability Assessment in 2016 ([http://www.gtcmpo.org/sites/default/files/pdf/2016/5750_-_final_report.pdf](http://www.gtcmpo.org/sites/default/files/pdf/2016/5750_-_final_report.pdf)), and CDTC has investigated the resilience issues around vehicle fleets that are transitioning from internal combustion engines to electric and alternative fuel drive trains.

The Metropolitan Transportation Commission (San Francisco Bay area), Hillsborough MPO (Tampa, FL), and Broward MPO (Ft. Lauderdale, FL) are three examples of MPOs who have participated in recent FHWA pilot projects on resilience and transportation vulnerability assessments. The full list of pilot project participants and links to deliverables is available at the following URL: [https://www.fhwa.dot.gov/environment/sustainability/resilience/pilots/](https://www.fhwa.dot.gov/environment/sustainability/resilience/pilots/)
Also, Heather Holsinger from FHWA mentioned that a project titled “Integrating Resilience into the Transportation Planning Process” has recently been completed. Reports and other deliverables can be found on FHWA’s website at the following URL: https://www.fhwa.dot.gov/environment/sustainability/resilience/ongoing_and_current_research/planning/

2. Automated Vehicle Fact Sheet

Jennifer Ceponis asked if anyone had comments on the draft Automated Vehicle Fact Sheet that was circulated to members. She asked members to please send final comments by end of the day Friday.

Notes from Discussion:

Q: Can we refocus the fact sheet on the environmental benefits of AVs?

A: There isn’t a lot of research or data on specific environmental benefits of AVs yet. There is some literature speculating that there may be potential for greenhouse gas emissions reduction (particularly if AVs are mainly electric vehicles powered by renewable sources) and some land use benefits. Most of the literature is general and emphasizes policy guidance rather than technical analysis.

Dutchess County is looking at what roads should AVs travel on.

Different users are looking at different applications of AV. For example, food bank deliveries vs. freight shipments. It’s not clear what environmental benefits will be associated with each of these applications.

Q: Is there any guidance or examples of preparing for AV at a regional scale or at an agency level?

A: Several specific resources were mentioned:

- The American Planning Association (APA) released a suite of autonomous vehicle resources in November 2017: https://www.planning.org/newsreleases/2017/nov08b/
- APA also recently released a briefing paper titled "Taming the Autonomous Vehicle: A Primer for Cities”, available at https://www.planning.org/knowledgebase/resource/9137796/
- The National Association of City Transportation Officials (NACTO) released a "Blueprint for Autonomous Urbanism” in October 2017: https://nacto.org/2017/10/31/blueprint-for-autonomous-urbanism/
3. Partner Agency Updates

NYSDOT: Elisabeth Lennon reported. NYSDEC released draft Flood Risk Management Guidance, which includes transportation-related guidelines. The deadline for comments is August 20. See http://www.dec.ny.gov/press/114000.html for details.

Also the draft guidance for Smart Growth is available for review. See http://www.dec.ny.gov/docs/administration_pdf/nysdga.pdf.

NYS DHSES (Department of Homeland Security and Emergency Services) is preparing to release the 2017 State Hazard Mitigation Plan to the public soon. Check http://www.dhses.ny.gov/recovery/mitigation/plan.cfm for details.

NYSERDA: (no representative present)

NYSDEC: Nancy Welsh reported. The Transportation and Climate Initiative (TCI) of the Northeast and Mid-Atlantic States has been holding listening sessions to gather input on how to reduce emissions from the transportation sector. There was a NY State-sponsored meeting in Albany in April. There will be a NYC metro area session on July 2, 1-4 PM at NYU; registration is required. Go to the TCI website for registration details (scroll down for registration link): http://www.transportationandclimate.org/listening-sessions-transportation-and-climate-initiative.

DEC, NYSERDA, and DOT are sponsoring a similar series of listening sessions/stakeholder engagement sessions to hear about these issues in NY State. There will be three sets of sessions: a first set in the Buffalo and Syracuse areas, a second set in Long Island and New York City, and a third set planned in the Mid-Hudson area. They are targeting Fall 2018 for the meetings.

4. Other Items/MPO Updates

There were no additional comments from WG members.

After some group discussion, there was consensus that the next meeting should be held as a phone call vs. an in-person meeting.

5. Adjourn

The meeting was adjourned at approximately 2:30 PM.
Presentation Overview

- Processes
- Decision Models
- Organizational Models
- Performance Measures
Generic Planning, Project Development, and Implementation Cycle

Monitor Performance Results & Outcomes
- Amend policy framework
  - Establish performance measures

Establish Vision, Goals & Performance Measures
- Risk management
  - Program-level resource allocation

Assess Tradeoffs Between Modes and Programs
- Toolbox of strategies
  - Climate-risk-adjusted BCA

Formulate and Evaluate Policies, Strategies, and Investments
- Prioritization
  - Timing of investments

Apply Practical Design, Prioritize & Implement
- Monitor actual climate change
  - Archive damage and disruption event data
  - Plan vs. actual analysis
Generic Process for Assessing Vulnerability and Risk

1. Define Climate Impacts and Scenarios for Analysis
2. Assess Vulnerability
   - Exposure to Climate Stressors
   - Sensitivity of Facility/Component
   - Adaptive Capacity of System and Facility
3. Assess Risk
   - Likelihood of Damage and Disruption
   - Consequences
4. Formulate and Assess Potential Adaptation Strategies

Regional Assumptions
- Consistent Assumptions
- Regional exposure
- Corridor or network-scale exposure

Subarea Assumptions
- Corridor or network-scale exposure
- Sensitivity, adaptive capacity
- Establish policy framework (e.g., risk tolerance)
- Network-scale risk assessment to identify highest-priority facilities

Facility Assumptions
- Facility- and component-specific exposure
- Sensitivity, adaptive capacity
- Full risk assessment for facilities and components
- Facility-specific strategies; optional benefit-cost analysis
- General strategies relevant to region
- Strategies relevant to subarea context
Decision Models
Decision Models (continued)
Decision Models (continued)

- Asset Inventory and Condition Assessment
- Forecast Future Condition and Formulate Repair/Rehab/Replacement Projects
- Risk Matrix:
  - Storm Surge
  - Sea Level Rise
  - Temperature
  - Wind
  - Premature Deterioration
- Climate Vulnerability and Risk Assessment
- Decision-Making:
  - Benefit-Cost
  - Project Optimization (Performance-Based Practical Design)
  - Capital and Financial Plans
- Near-Term Adaptation Needs versus Longer-Term Input to Design of Normal Replacement
Organizational Models

- Centralized decision making
- Decentralized “liaison” approach
- Hybrid: Clearinghouse + regional and program-area decision making
Communication and Collaboration

- Climate Scientists
- Policy Experts
- Planners
- Designers/Engineers
- Operations
- Emergency Management
- Law Enforcement and First Responders
- Elected Officials
- Community Representatives
Performance Measures

Availability
- Impacts of damage and disruption

Criticality
- Economic and social value

Cost
- Program-level metrics

Qualitative and proxy measures
- Customer satisfaction
- Expert input