

Charter for the Joint Subcommittee on System Mobility and Emerging Technologies

Adopted-September 26, 2019

Purpose

Mobility is transforming as new technologies disrupt traditional ways people and goods move throughout our transportation systems. While the many new technologies and modes bring more convenience and efficiency to the users and to local and national economies, they also create new problems, needs, and challenges that state DOTs as Infrastructure Owners and Operators (IOOs) must address as decision makers. During the current, Fourth Industrial Revolution, technology previously foreign to transportation rapidly challenges old ways of doing business and how agencies perceive and support mobility. Previously, the focus was mostly road infrastructure; but, now, system mobility performance are affected across all modes and aspects of transportation agencies' responsibilities. Institutional processes are changing to adapt to more effective methods to improve system performance and mobility outcomes. The fusion of the many disruptive technologies brings a technological revolution that will fundamentally alter the way we live, work, and relate to one another. In its scale, scope, and complexity, the transformation is moving at a pace that governmental entities are not readily prepared to respond to.

The purpose of the Joint Subcommittee on System Mobility and Emerging Technologies is to serve as the central forum to share information on how state DOTs are managing system operation and system mobility and how performance is impacted due to current and emerging transportation technologies, programs, operational strategies and connected environments. This may include examining the impacts of current system management approaches as well as new programs such Connected and Automated Vehicle (CAV) technology, Cooperative Automated Transportation (CAT) and Mobility on Demand (MOD). Based on member needs, the subcommittee will explore system and mobility related performance metrics, data management and analytical tools, performance communication and reporting approaches and private sector partnerships with the understanding that state DOTs are facing increased policy and legislative demands, diminished funding and therefore need to maintain a high level of accountability.

Goals

1. Serve as the central forum to:
 - a. **Share information and practices** on how state DOTs are managing system mobility performance impacted by current and emerging transportation technologies, programs, operational strategies and connected environments.
 - b. **Identify emerging transportation technology issues** that will affect a state DOTs ability to address system mobility performance management; categories of technology disruptors (e.g., data, digitization, information; vehicle technologies;

- shared mobility; evolving modes); and new business or partnership models involving the private sector to support system performance.
- c. **Examine agency policy issues** related to the regulation of new mobility options and the potential trade-off between performance improvement and changes in risk.
 - d. **Define key gaps** between current system and mobility performance management practices and the evolution required to implement or maintain meaningful performance management programs.
2. Promote the development of needed guidelines, guidance, training, and educational resources to address the topics above
 3. Promote and advance research in the field of mobility and operational performance analysis, performance management and performance communication
 4. Promote and support information exchanges, peer reviews, conferences, discussion forums, webinars and other related opportunities to share best practices and insights gained

Membership

- **Structure**—Joint subcommittee of the both the Committees on Performance-Based Management and Transportation System Operations.
- **Leadership**—One chair and one vice chair each being a member of either parent committee to ensure equal representation.
- **Membership**
 - *State DOTs*—Members of the subcommittee can include a member from each state representing each parent committee or their designee.
 - *Federal Agencies*—FHWA, FTA, etc. Serve as a liaison for that agency and approved by the subcommittee co-chairs.
 - *Association*—Members from relevant sister organizations to AASHTO to serve as a liaison that are approved by the subcommittee co-chairs.
 - *Research and Academic*—A person(s) from an academic institution or private company that will serve as a knowledge resource given the work of the subcommittee as deemed appropriate by the subcommittee co-chairs.

Meetings and Events

- **Conference Calls**—Occurs bi-monthly on the xx day at xx time.
- **Summer Meeting**—Occurs each summer at a time and place determined by the leadership.
- **Other meetings**—As identified by the subcommittee leadership.

Resources

- N/A

Action Plan

The joint subcommittee will develop an action plan that aligns with the strategic plans of both standing committees. Some of the actions undertaken in the first year will include:

Goal Area #1: Provide Value to Subcommittee Members

Strategy 1.1: Coordinate Work with Other AASHTO Committees, Forums, and Task Forces to Advance AASHTO Transportation Performance Management Interests

1. Communicate and promote the subcommittee and identify multiple opportunities to communicate the new subcommittee's purpose and scope.
2. Initiate a membership drive and identify members interested in both participating in and/or leading respective action plan activities.
3. Closely work with other AASHTO committees that have overlapping interest. The initial focus will be coordinating work with the Committee on Data Management and Analytics (CDMA).

Strategy 1.2: Foster Collaborative Interrelationships and Interactions with Partner Organizations, Groups, and Industry

4. Identify and establish working relationships with respective FHWA programs

Strategy 1.4: Provide Opportunities for Committee Members to Interact on Key Technical and Policy Issues

5. Identify, schedule and communicate regular subcommittee meetings

Strategy 1.5: Ensure the Committee Strategic Plan and Action Plan are Implemented

6. Reach out to the subcommittee and working groups of both standing committees to identify work plan needs, priorities and opportunities for collaboration.

Goal Area #2: Provide Innovative Technical Products and Professional Services

Strategy 2.1: Facilitate Training and Educational Sessions on Key Issues

7. Begin to identify possible agencies/candidates for case studies to share information on how system performance was affected by current and emerging transportation technologies or operational programs and strategies
8. Identify opportunities for partnering and supporting panels, tracks and sessions at related forums, webinars or conferences (i.e. AASHTO meetings; TRB meetings, AVS2020)

Strategy 2.2: Develop and Support a Robust Research Program

9. Identify possible partner TRB committees and reach out to create partnerships
10. Actively support and advise on the recently approved NCHRP 08-127: *Emerging Issues: Impact of New Disruptive Technologies on the Performance of DOTs.*

Strategy 2.4: Support the Transportation Performance Management Pooled Fund and Other Resources

11. Develop a process and possible options to serve as a clearinghouse to collect and share approaches to measuring and communicating the system results of technology deployments (i.e. CAV, AV, CAT, MaaS, MOD) related to system mobility.