

# REGIONAL TRANSPORTATION ADVISORY COUNCIL



## Regional Transportation Advisory Council

August 10, 2016, Meeting

3:00 PM, State Transportation Building, Conference Room 4, Boston, MA

### DRAFT Meeting Summary

#### Introductions

T. Bennett, Chair (Cambridge) called the meeting to order at 3:00 PM. Members and guests attending the meeting introduced themselves. (For attendance list, see page 5)

#### Chair's Report - T. Bennett Chair

T. Bennett recognized M. Sanborn who announced that he has accepted a position that precludes his ability to continue as the Vice Chair. He indicated that the Massachusetts Bus Association will continue participation on the Advisory Council with a new representative.

T. Bennett announced the approval of the TIP amendments being considered by the MPO Board. Public comments on the TIP and several document changes were reviewed and discussed.

The MPO Board discussed changes in the 'Shared Use Mobility Study' on rideshare services (Uber, Lyft, Bridj) being conducted by CTPS. Data availability and needs were cited as reasons to refocus the scope of the study.

The MPO will discuss the Notice for Proposed Rulemaking (NPRM) issued by the US DOT on the subject of Metropolitan Planning Organization Coordination and Planning Area Reform. The proposed rule would have major implications on how MPOs are organized and how they function.

#### Minutes - June 8, 2016

A motion to approve the minutes of the June 8 meeting was made and seconded. The minutes were approved with corrections noted.

## **Autonomous Vehicles: Roadways, Public Transit and our Communities - Shannon Greenwell, Office of Transportation Planning, MassDOT; Price Armstrong, Pioneer Valley Transit Authority**

P. Armstrong and S. Greenwell introduced themselves citing their interest and expertise in autonomous vehicles (AV) in transportation planning. Congestion reduction and greenhouse gas mitigation are two of the primary motivating forces in pursuing autonomous vehicles according to S. Greenwell. She indicated that the conversion to autonomous vehicles will not happen immediately and will involve phases which will have their own unique characteristics. P. Armstrong said that the goal is to maximize the benefits while minimizing the drawbacks of conversion to autonomous vehicles.

P. Armstrong played a [short video](#) addressing the current state of development of driverless cars. P. Armstrong explained that even if the AV technology is proven, there will still be many considerations such as policy and costs which will impact the complete adoption to AV.

There are four types of driverless vehicles which range from vehicles with specific functions like acceleration and speed control to assistance like parallel parking to emergency breaking control. Levels 1 to 4 distinguish between the increasing complexities of functions from executing specific tasks through fully self-driving automation. These function oriented levels reflect how the technology will likely develop into a fully self-driving landscape.

P. Armstrong described how technology for automated elements has adapted in US transit citing several cities with working and proposed automated transit service. Several cities in the world already have automated fixed guideway systems. Driverless airport fixed-rail transit vehicle technology is common globally.

Policies and regulations governing driverless vehicles are already being advanced in several US states. Many of these regulations relate to licensing covenants during vehicle operation.

The panelists presented a mutual address of the benefits and drawbacks of implementing driverless vehicles. Six topics were chosen to address the characteristics of driverless vehicles from a net negative social value to a net positive social value as full implementation goes forward. The topics are: public health, equity, environment, economy, emergency management, and land use.

The table below expresses some of the discussed benefits and drawbacks to full implementation of driverless vehicles.

| <b>TOPIC</b>         | <b>BENEFITS</b>  | <b>WARNINGS/DRAWBACKS</b>   |
|----------------------|--|---|
| Equity               | Increased mobility, accessibility, and independence for populations unable to drive.   | Quality of public transportation could decrease as systems lose ridership; low-income residents could face higher burden when low-cost public transportation options decrease and autonomous vehicles remain out of reach.                                  |
| Environment          | Fuel efficiency; congestion reduction; fewer autos/person; fewer environmental impacts of auto production.   | Increased VMT, during gradual adoption as lower driving costs will influence mode choice; public transportation may lose “choice riders”.<br><br>Increased congestion, especially during gradual adoption impacting fuel consumption and harmful emissions. |
| Economy              | Travel time becomes productive time; “Green Dividend”; value-added land uses; new services sector; fewer crashes will result in police and fire savings. | Reduced revenues for municipalities and public transit systems; employment shifts especially for transit and taxi drivers; impact on the “crash economy” involving insurance and legal services.  |
| Emergency Management | Easier evacuation; easier emergency vehicle navigation.  | Increased vulnerability to hacking and malware; risks by outside parties and vehicle users.   |
| Land Use             | Drastic reduction in parking needs.  | Increased sprawl and less active transportation outside “inner core”.   |
| Public Health        | Increased safety with fewer crashes; network reacts to live conditions; more active transportation.  | Tesla autopilot fatality; decreased active transportation outside the “inner core” with loss of the healthy trip link; longer commutes with sedentary impacts; less dense land use and impact on biking and walking.  |

## **DISCUSSION**

Several members expressed concern over potential increases in congestion and VMT and the resulting increases in fuel consumption and GHG gas emissions.

Parking availability was mentioned as an issue that reflects the current disposal of public spaces for electric vehicles.

The public transit versus the private ownership of vehicles dichotomy was questioned in terms of its potential impact on public transportation. Lowered costs were cited as a way of making AV access affordable as labor costs of current transit facilities are the major component of providing the service.

M. Gowing commented on the benefits of travel training as the AV service is integrated into the transportation system.

T. Bennett asked if there are lessons to learn from a policy development standpoint. S. Greenwell pointed out that developing policy and plans for preparing for AV will come from a variety of sources and will impact the quality of policies. P. Armstrong stated the last transportation revolution, the personal automobile, could be used as a forebear technology from which negative attributes might be avoided. He added that the various levels government must consider the various roles they need to play in developing this technology.

## **Election Committee - M. Gowing, Chair**

M. Gowing explained that the election of candidates for the upcoming year is underway. The Election Committee will meet before the September meeting to encourage candidates to run for the office of Chair and Vice Chair. The Committee will bring its recommendation for candidates to the September 14 meeting. All nominations from the floor will be closed at the end of the September meeting and the election will be held at the October meeting.

Membership on the Election Committee is open to all Advisory Council voting members. Members are encouraged to contact the Advisory Council Coordinator, David Fargen at [dfargen@ctps.org](mailto:dfargen@ctps.org).

## **Old Business, New Business, and Member Announcements**

M. Gowing described the field trip held at the Commuter Rail Maintenance Facility on July 10.

J. Rowe announced a Community Forum on Innovative Mobility in Codman Square, 6:00 – 8:00 PM on August 11. See J. Rowe for details.

## **Adjournment**

A motion to adjourn was made and seconded. The meeting adjourned at 4:30 PM.

## **Attendance**

### **Municipalities (Voting)**

Acton  
Cambridge  
Needham

### **Attendee**

Mike Gowing  
Tegin Bennett  
Rhain Hoyland

### **Citizen Groups**

American Council of Engineering Companies  
Association for Public Transportation  
Boston Society of Architects  
Massachusetts Bus Association  
MassBike  
WalkBoston

Fred Moseley  
Barry Steinberg  
Schuyler Larrabee  
Mark Sanborn  
David Ernst  
John McQueen

### **Agencies (Voting)**

Executive Office of Elder Affairs  
MassRides

Emmett Schmarsow  
Gary St. Fleur

### **Agencies (MPO & other non-voting)**

MassDOT  
BRA

Shannon Greenwell  
John Weiland

### **Guests**

Scott Zadakis  
Ed Lowney  
D. Whittlesey

Crosstown Connect  
Malden Resident  
Boston Resident

### **Staff**

Lorenço Dantas  
Jen Rowe

David Fargen  
Matt Archer