Innovative Mobility and Driverless Cars

Tony Dutzik, Frontier Group

*Driverless Cars: What Will They Change and When?*

Metropolitan Area Planning Council and Transportation for Massachusetts

13 June 2016
Deaths on Massachusetts roads in 2012, along with >4,000 serious injuries.

Commonwealth of Massachusetts, Executive Office of Public Safety and Security
Economic losses due to motor vehicle crashes in Mass. in 2010.

Premature deaths in Massachusetts annually from particulate air emissions from road vehicles.

Commonwealth of Massachusetts, Executive Office of Public Safety and Security
64

Hours of peak period delay experienced by typical Boston-area car commuter each year.

By Rene Schwietzke - Own work, CC BY 2.0, https://commons.wikimedia.org/w/index.php?curid=165289

Texas A&M Transportation Institute
Share of Boston metro area jobs that cannot be accessed via a 90-minute transit trip.

Adie Tomer et al., Metropolitan Policy Program, Brookings Institution, *Missed Opportunity: Transit and Jobs in Metropolitan America*
Transportation share of household expenditures in Boston metro area, 2013-14.

U.S. Bureau of Labor Statistics
Greenhouse gas emission reductions required in Massachusetts by 2050 under Global Warming Solutions Act.

Photo: The Birkes - http://www.flickr.com/photos/brbirke/8136033826/, CC BY 2.0
17.5% Projected population increase in inner core of Greater Boston between 2010 and 2030.

A Better City, State of the Built Environment: Greater Boston’s Infrastructure
Innovative mobility technologies and services create an opportunity to address our greatest transportation challenges.

Harnessing that opportunity is up to us.
T4MA Innovative Mobility Project

- Summarize status of innovative mobility.
- Identify opportunities and challenges.
- Develop public policy framework.
- Identify potential pilot projects.

White paper due to be published Sept. 2016.
Innovative Mobility White Paper
Innovative Mobility White Paper

Informed by:

- Interviews with innovative mobility practitioners.
- Four roundtables (including with organizations representing low-income communities and communities of color).
- Survey of T4Mass members.
- Literature review.
“Innovative Mobility”

- Information technology supporting sustainable modes of travel
  e.g. real-time transit info, multi-modal apps, mobile payment
- Shared mobility services
  e.g. carsharing, bikesharing, ridesourcing/TNCs, microtransit
- Autonomous and connected vehicles
Many changes happening at once...

FUTURE: CONFLUENCE OF TRENDS

Shaheen, 2015

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### Innovative Mobility White Paper

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Autonomous Vehicle Impacts

Appear to depend on:

- Deployment model (shared v. individual ownership; evolutionary v. revolutionary)
- Integration into the transportation system

Policy is critically important and may be decisive.

Transitions are worth our attention.