

# Smart Cities Transportation at TRB

TRB Executive Committee Summer Meeting  
June 21-22, 2017

# TRB and Smart Cities

## 2017 Annual Meeting Sessions

Session Type	Session Title	Sponsoring Committee
Lectern Session	Smart Cities, Smart Organizations	ABC10, Committee on Strategic Management
Lectern Session	Low-Carbon Transportation in Smart Cities	ADC00, Section - Environment and Energy
Lectern Session	Planning for Data Needs for Clean, Smart Cities and the Electric Vehicle-Autonomous Vehicle-Shared Vehicle Transition	ABJ20, Standing Committee on Statewide Transportation Data and Information Systems
Lectern Session	Smart Accessibility for Smart Cities	A0030T, Task Force on Data for Decisions and Performance Measures

# TRB and Smart Cities

## 2017 Annual Meeting Sessions

- 24 presentations made with “Smart Cities” in title
- Sessions sponsored by:
  - ABE90 (Transport in Developing Countries)
  - ABR10 (Critical Transport Infrastructure Protection)
  - ABC10 (Strategic Management)
  - ADC00 (Section – Energy and Environment)
  - ADC20 (Air Quality)
  - ABJ20 (Transportation Data and Information Systems)
  - AP000 (Group – Public Transportation)
  - A0030T (Task Force on Data for Performance)
  - ADC80 (Alternative Transportation Fuels and Technology)

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## Related Topics – 2017 Annual Meeting Workshops, Sessions, Presentations

“Hot” Applicable topics to Smart Cities:

- Market Disruption/Disruptive Technology
- Transformational Technology\*
- Connected and Automated Vehicles\*
- Shared Mobility / Mobility as a Service
- Big Data\*
- Accessible Transportation

\* Actual “hot” topics

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## Examples of Other Events, Conferences

- Use of Scenario Planning in Transportation Planning, August 2016, Portland, OR
  - Featured several runners up to the FHWA Smart City Challenge
- Integrated Network for Social Sustainability, sponsored by the National Academy of Engineering, June 2017, Baltimore, MD
  - Focus principally on how to achieve social sustainability through Smart Cities applications.
- World Transport Convention, July 2017, Beijing China
- European Transport Conference, October 2017, Barcelona

# TRB and Smart Cities

## Current Research Projects

- NCHRP 20-113: Framework for Connected Vehicle Pilot and Smart Cities Data Analytics for Policy Guidance
  - Aggregating data from various field and pilots tests to inform State and city policy decision making

# TRB Publications



# Smart Cities Mobility Topics and Tools

- Big Data – Smart phones, GTFS, Other Data
- Information Technology / ITS
  - Crowd Sourcing; Communications; Fare Payment and Collection; Traffic Management and Signals
- Connected and Automated Vehicle Technology
- Electric and Alternatively Fueled Vehicles, Facilities and Infrastructure
- Policy and Organizations
  - Funding and Finance; P3s



# Smart Cities Mobility Topics and Tools

- **Livability and Accessibility**
  - market access, equity, health and transport
- **Technology Enabled Transportation Services**
  - Shared mobility services
  - First Mile, last Mile (transit and freight)
- **Planning Methods**
  - Addressing uncertain futures via scenario planning; predictive modeling
- **Infrastructure resiliency**
  - Materials and design
  - Asset management

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## Sample Related Publications

- NCHRP 750: Strategic Issues Facing Transportation (2014)
  - Scenario Planning for Freight
  - Climate change/Extreme weather on highways
  - Expediting future technologies
  - Sustainability as an organizing principle
  - Preparing DOTs for uncertain energy futures
  - Effects of Socio-demographics on future transportation demand
- NCHRP Report 798: Role of Planning in a 21st Century State DOT – Supporting Strategic Decision-Making. (2016)