EMERGING COMMUNICATIONS TECHNOLOGY FOR TRANSPORTATION

ITS AMERICA ANNUAL MEETING, JUNE 4-7, 2018 – DETROIT, MICHIGAN

Kevin Gay, ITS Joint Program Office
Chief – ITS Policy, Architecture and Knowledge Transfer

Graphics Courtesy of U.S. DOT
Session Agenda

- Welcome
- Introduction of Panelists
  - Andrew Boedigheimer-Thiessen
    National Telecommunications & Information Administration/ITS Boulder
  - Jovan Zagajac
    Ford Motor Company
  - Hideki Hada
    Toyota Motor North America
- Opening Remarks
- Panelists Presentations
- Q&A

Photo: Automobile Italia/Flickr
Innovations in Telecommunications Offers Opportunities

- Ongoing Traffic Operations
- Connected Automation
- Platooning
- Machine-to-Machine Communications & Edge Computing
- Artificial Intelligence & Machine Learning
- Robotics
- Digitization of Assets
- Virtual Traffic Management

Photos: HNTB Corp./TransOvation™ 2017
Challenges That Lie Ahead

- Aligning technology lifecycles:
  - Consumer replacement cycles vs. lifespan of transportation

- New innovations require testing for safety and security

- Tools:
  - Communications Test Facilities
  - Architecture & Standards
  - Cybersecurity Frameworks
  - Planning Scenarios
  - Agile Systems Engineering
Focus Area 1 for Next Generation Communications Research

1. Research on Emerging Innovations:
   - Unlicensed Wi-Fi Sharing
   - C-V2X device to device communications

Graphics Courtesy of U.S. DOT
2. Public/Private Transportation Sector Collaborations for safety and mobility use cases for specifications and standards setting

With such innovations as automated transportation technologies, edge computing, virtual traffic management, or machine learning and artificial intelligence, transportation use cases will need to leverage a variety of forms of communications that enable:

- Higher throughput
- Higher reliability than we have today
- Lower latencies
- Narrowband and wideband delivery
Stay Connected

Visit our website for information on:
• Webinars
• Events
• Publications
• News

Twitter: @ITSJPODirector
Facebook: https://www.facebook.com/DOTRITA
Website: http://www.its.dot.gov

Kevin Gay, PMP
Chief – ITS Policy, Architecture and Knowledge Transfer
Kevin.Gay@dot.gov
Audience Q&A