

MEET IN ASIA PACIFIC FOR THE
WORLD'S LEADING TRANSPORT TECHNOLOGY EVENT

ACTIVATING GLOBAL MOBILITY SOLUTIONS

ITS—ENHANCING LIVEABLE CITIES AND COMMUNITIES



2016
MELBOURNE

23rd World Congress on Intelligent Transport Systems

Melbourne Convention and Exhibition Centre

10–14 October 2016



Australian Government

PROGRAM PARTNER



HEADLINE PARTNER



SUPPORTED BY



HOSTED BY



CO-HOSTED BY



23rd World Congress on Intelligent Transport Systems
Melbourne Convention and Exhibition Centre
10-14 October 2016

Tri-Lateral Automation in Road Transport WG: Achievements and Next Challenges Digital Infrastructure

Carl Andersen
FHWA Office of Research, Development, and Technology
United States Department of Transportation
October 11, 2016



Content

- International Research Exchange
 - Tri-Lateral ART WG
 - Digital Infrastructure
- Accomplishments
 - Definition of Digital Infrastructure
 - Establish Work Plan
 - Completion of Survey 1
- Next Steps
 - Survey 2
 - Conduct Work Plan Activities



International Research Exchange

- The European Commission, United States and Japan work to foster cooperative international ITS research and to support international harmonization of ITS standards through international research exchange activities.
- This exchange was formalized in 2009 and 2010 with a series of three bilateral agreements among the three parties, officially authorizing exchange activities among them.

EU★US★JAPAN
ITS COOPERATION



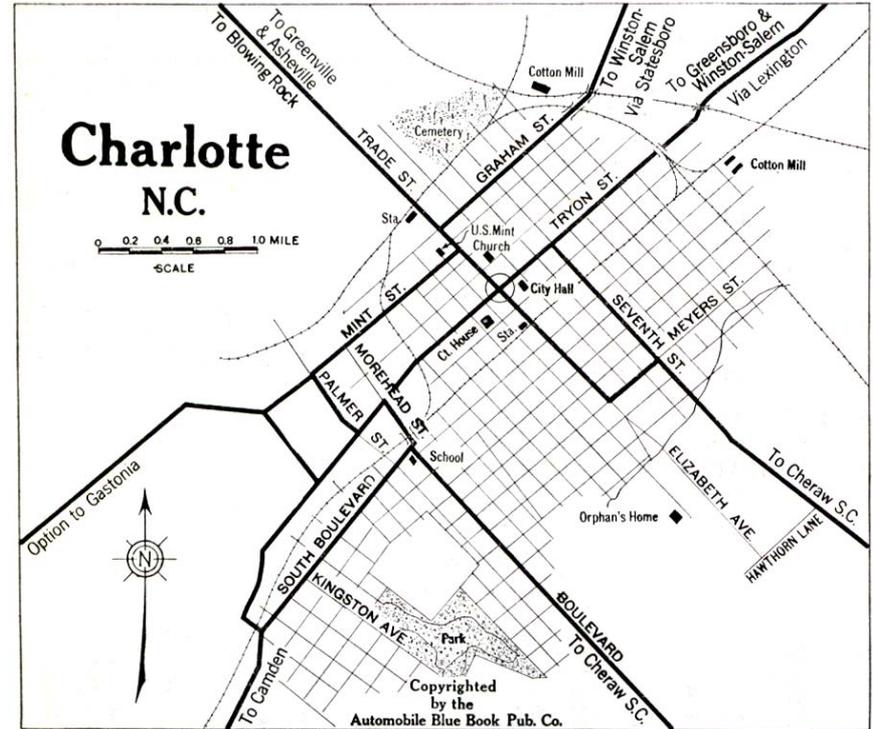
Automation in Road Transport

- Automation in Road Transport Working Group – Topic Areas
 - Human factors
 - Evaluation of Benefits
 - **Digital infrastructure**
 - Connectivity (V2V / V2I / I2V)
 - System Reliability and Security (to include cybersecurity)
 - Roadworthiness/Testing and Certification



Definition of Digital Infrastructure

- “Digital representation of road environment required by Automated Driving Systems, C-ITS, and Advanced Road/Traffic Management Systems”



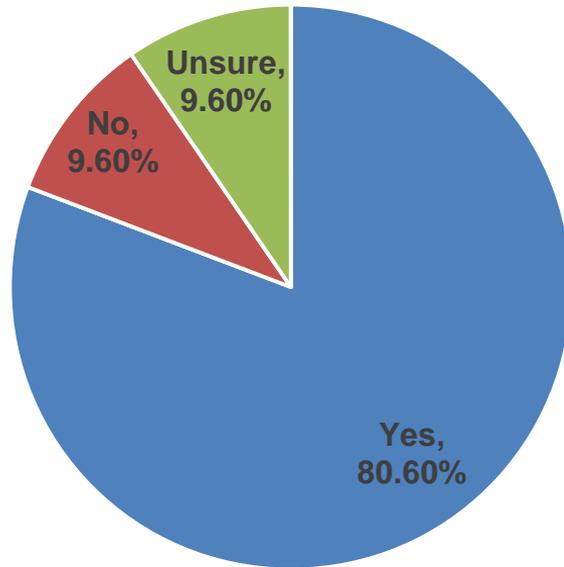
Stepwise Implementation of DI

- Use Case Identification
 - Connected/Automated Vehicles
 - Advanced Road Management
 - Advanced Traffic Management
- System Architecture Development
- Prototype Development
- Model Deployment
- Standardization



Survey 1 – Is there a role for government?

Is there a role for national governments in promoting or facilitating the development of the necessary static and dynamic geospatial infrastructure for *cooperative or connected vehicles*? (31 responses)

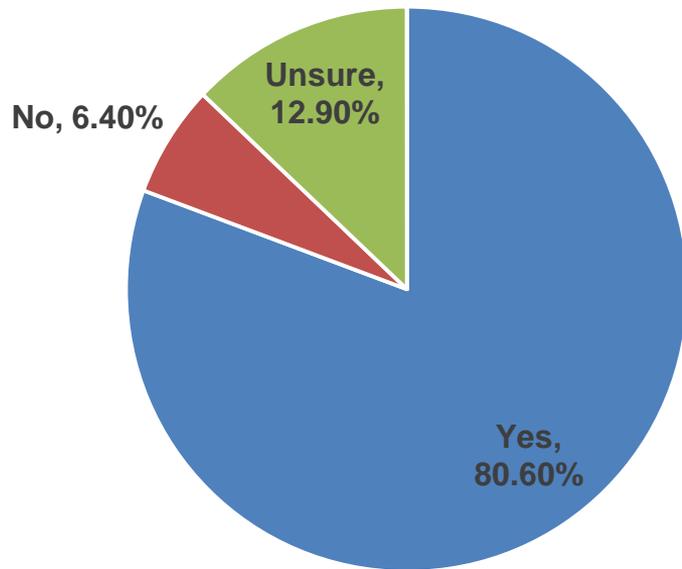


- Yes – 80.6%
- No – 9.6%
 - Digital map provider (1), Auto industry (1), University(1)
 - EU (2), Japan (1)
- Unsure – 9.6%



Survey 1 – Is there a role for government?

Is there a role for national governments to play in promoting of facilitating the development of the necessary static and dynamic geospatial infrastructure for automated vehicles? (31 responses)



- Yes – 80.6%
- No – 6.4%
 - Automobile industry supplier (1), University (1)
 - EU (2)
 - Two of the 3 that answered “No” to the previous question
- Unsure – 12.9%



Next Steps – Survey 2

- Why a 2nd Survey?
- Status of 2nd Survey?



Thank You!

