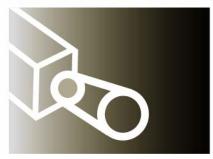


#### EXPLORATORY ADVANCED RESEARCH









# Positioning Challenges and Vision for Transportation

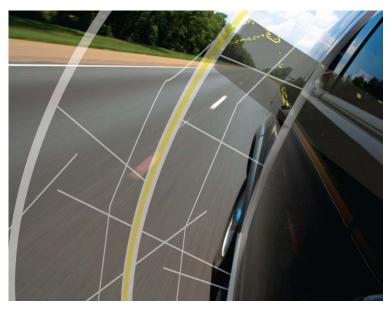
ION GNSS+ September 17, 2015





## **Enabling Research**

- Communications, Cloud Data
- Local Sensors
- Data Fusion
- ControlSystems
- Human-inthe-Loop







### Connected Vehicles



- Benefits: Safety, Mobility, Energy
- Applications
  - Platooning
  - Intersections
- What's Next
  - Scaling benefits, interoperability
  - Verification







## Truck Platooning

- Benefits: Energy, Mobility, Safety
- Research Issues
  - HMI, vehicle dynamics, scenarios







## Pedestrian Navigation

- Benefits: Mobility, Safety
- Research Issues
  - Signal access
  - Power
  - Indoor to outdoor transitions
- What's Next
  - HMI
  - Initial network









### Government Vision

- Public Benefit Promoting
  - Health and safety, economics
  - Access to open, heterogeneous network

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