Regional Considerations of Public Transportation and Vehicle Automation

Derek Toups, AICP
TRB Committee APo20
2013 Mid-Summer Meeting
Palo Alto, CA

What is Vehicle Automation?

- Range of technologies
 - Automated guideway transit
 - Vehicle automation and assistance technologies
 - Lane-keeping (collision avoidance/warning systems)
 - Steering/Precision docking
 - Navigational control
 - Personal Rapid Transit (PRT)
 - Connected Vehicles
 - Driverless Cars











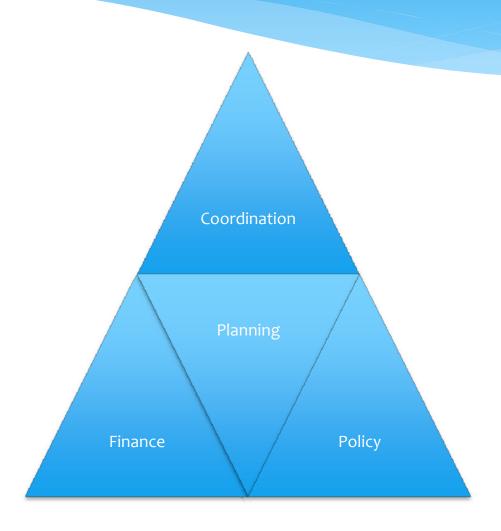
Why is Regional Consideration Important?

- Public interests
- Regional efficiency/consistency
- Risk management
- To obtain public support or acceptance
- Examines legal questions

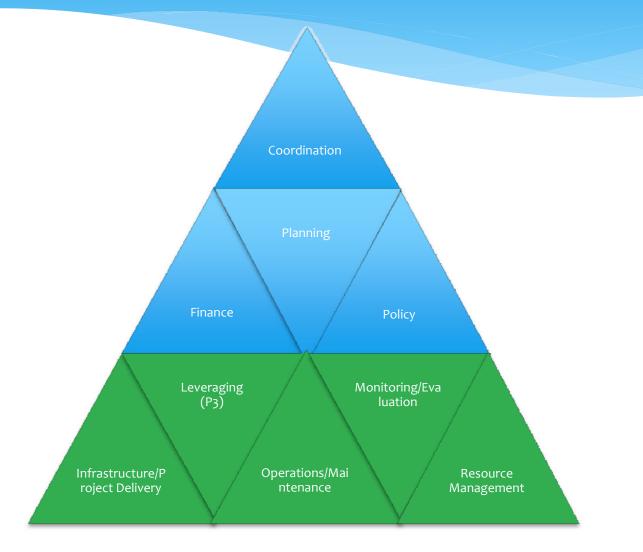




Traditional Roles of Regional Government



Expanding Roles of Regional Government



Bay Area Opportunities

- Express Lanes
- Shared Economy/P2P
 - Carsharing
 - Ridesharing
 - Taxi
- Public Transport
 - o Bus
 - o Rail
- Casual Carpool









Factors Driving Automation

- Millennial's attitudes toward driving
- Connected culture
 - Smart phones
 - Social networking
 - Wireless infrastructure
- Safety mandate
- Economic need
 - Urban congestion/value of time





Possible Role for Region in Automation

- Spur interest, advocacy
- Sponsor legislation, research
- Provide seed funding
- Technical and financial evaluation
- Establish "test bed" environment
- Clear the way for private sector innovation
- Eliminate barriers to use





Short Video: Fiat Mio Concept Car

FIAT MIO Corte 11A 5'37" 27/10/2010 - 10h Thank you:)