Preparing for the Future

AMPO Connected and Autonomous Vehicle Planning Technical Working Group
April 4-5, 2017

Transportation History

Animal  Bicycle  Train  Early Car  Modern Car  Self-driving Car

Current Performance Connection

Policy
Goals and Objectives
Monitoring

Real Data
Past and Current

Travel Demand Model
Current and Future Model Data
"People born today will never drive a car."
-Henrik Christensen
UC San Diego Robotics

"A blind person could have access to the same things as a seeing person."
-Kevin Dopart - Managing Director
Intelligent Transportation Systems Joint Program Office

Insight From Experts

Understanding Future

Data + Connectivity
- Vehicle Technologies
- Mobility Options
- Freight & Logistics

System Management & Smart Infrastructure
- Smart Cities

Measuring Our Challenges
ARC's work to date

- Metro Atlanta Speaks Survey
- MetroQuest Surveys
- Modeling of Autonomous Vehicles using ABM
- SHRP2 Visioning and the RSPM Tool
- Regional Transportation Technology Policy Document

ABM Scenarios

<table>
<thead>
<tr>
<th>Scenario</th>
<th>2040 NB C</th>
<th>CTO</th>
<th>CTOP</th>
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<tbody>
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<td>baseline</td>
<td>• capacity increase</td>
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- • decrease in travel time disutility
- • decrease in travel time disutility
- • reduction in vehicle operating cost
- • reduction in parking cost

VMT and VHT: 2040 ABM
### Smart Corridor Demonstration

We picked North ave between Northside & Moreland

### SHRP2 Scenario Planning with RSPM

### Key Drivers of Change for the Atlanta Region

<table>
<thead>
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<th>Key Drivers</th>
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<td>Water Supply</td>
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<td>Autonomous Vehicles</td>
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<td>Aging of the Population</td>
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<td>Transportation Finance</td>
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<td>Spatial, Social, and Economic Equity</td>
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<td>Port Traffic</td>
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<td>Ridehailing/Carsharing</td>
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<td>Climate Change Regulations</td>
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<td>Intelligent Infrastructure/Technology</td>
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Drivers Woven Together to Form Alternate Futures

Four Alternate Futures (2050) for the Region

FULL STEAM AHEAD
FIERCE HEADWINDS
TECHNOLOGY REIGNS
GREEN GROWTH

Analysis Process

4 Alternate Futures
Personalized Alternate Futures

Can you tell our future?

Tomorrow belongs to those who prepare for it today

African Proverb
ANY QUESTIONS?

THANK YOU

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