Outline

• Purpose
• Goal
• Objective
• Scope Tasks
• Schedule
• Discussion/Questions
Offer guidance regarding potential Automated, Connected, Electric and Shared-use Vehicles (ACES) impacts on long-range transportation planning to:

• Metropolitan Planning Organizations (MPOs)
• Transportation Planning Organizations (TPOs)
• Local governments
To develop a common understanding and approach for Florida MPOs/TPOS and local governments in regards to ACES for their upcoming LRTP updates.
Objective

Development of MPO Planning Guidance to assist MPOs/TPOs and local governments during LRTP updates on potential considerations of ACES in the future years.
Scope Tasks

• Task 1: Conduct Literature Search & Industry Coordination

• Task 2: Provide MPOAC & MTF Coordination & Guidance

• Task 3: Develop FDOT MPO ACES Planning Guidance
• Process for integrating ACES into modeling stream

• 2 Models
  – Activity Based Model (ABM) – North Florida TPO
  – Traditional 4-Step model - Gainesville MPO
• % Penetration by Facility Type
• Implications to Fixed Route Transit
• Ownership of ACES/Market Sectors
  – On Demand
  – Land Use Changes
• Supporting infrastructure based on penetration rates
  – VMT
  – Electric charging demand
  – Infrastructure utilization
• Develop sample LRTP goals and objectives
  – Used for different ACES integration scenarios
    • 6 FHWA Scenarios
  – Best realize potential efficiencies, safety improvements
  – Results included in Planning Guidance described in Task 3
Develop planning guidance to assist MPO/TPOs and local governments in considering potential future ACES impacts as part of LRTP updates
• Executive Summary

• Introduction and Purpose
  – Legislative Reference
  – Study Goals and Objectives
  – Methodology

• ACES Vehicle Technology Overview

• ACES Vehicle Operating Characteristics
  – Personal Vehicles
  – On Demand and Shared Taxi
  – Transit
  – Freight
  – Local Delivery

• Safety Impacts
  – Crash Rates
  – Crash Costs
  – Enforcement Costs
• Potential Travel Demand Impacts
  – Trip Generation
  – Land Use
  – Mode Choice

• Highway System Impacts
  – Freeway Lane Capacity
  – Dedicated Freeway Lanes
  – Arterial Intersection Capacity
  – Dedicated Arterial Lanes
  – Parking

• Transit System Impacts
  – Fixed Route Service Competitiveness
  – Paratransit
  – Integrated Payment
  – Transit Priority Corridors
  – Intercity Rail and Bus

• Funding Impacts
  – Motor Fuel Taxes
  – Vehicle Sales Taxes
  – Vehicle Registration Fees
  – Parking Revenues
  – Traffic Fines
Task 3: FDOT MPO AV Planning Guidance

• Strategies for Addressing ACES
  – Transportation System Planning Process
    • Travel Demand Modeling
    • Performance Measures
    • Project Prioritization
    • Scenario Planning
  – Transportation as a Service
  – Scenario Planning Tools- Project Prioritization
    • Policies
    • Smart Cities
    • Freight
    • Landuse
    • Stakeholder Involvement
    • Public Education

• Recommendations
2017 Schedule - Completed

• May  Notice to Proceed

• May/June  Initial discussions
            Literature review
            Issues identification

• June    Kick-off presentation
          Task 2 Report Development

• June    Presentation to MTF Model
          Advancement Committee
<table>
<thead>
<tr>
<th>Month</th>
<th>Event</th>
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<tbody>
<tr>
<td>October</td>
<td>Full MTF presentation</td>
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<tr>
<td>Nov. 14</td>
<td>Presentation to Florida Automated Vehicle Summit</td>
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<tr>
<td>January</td>
<td>Re-assessment of Project Tasks &amp; Schedule</td>
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<tr>
<td>March</td>
<td>Draft Report to FDOT</td>
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<tr>
<td>April</td>
<td>Final Report to FDOT</td>
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Discussion/Questions?

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