Miami-Dade Metropolitan Planning Organization

2016 Florida Automated Vehicles Summit
Tampa, Florida

Aileen Bouclé, AICP
Executive Director
I. Framework for Long Range Planning & Integration
II. Challenges & Opportunities
III. Miami-Dade Current Planning Efforts
IV. The Future
MPO PERSPECTIVE

- Development of LRTP within rapidly changing technology world, including land use planning and services
- Assuring existing assets & investments are reused/re-purposed
- Understanding how AV technology will influence traveler decisions and behavior

TRANSPORTATION AGENCY RESPONSIBILITY

- How to keep pace with technological changes
- Make sure emerging technologies are integrated into the mobility ecosystem that is in place
- Increase in the use of single-occupancy vehicles
- Integration of CAV vehicles and other mobility modes
- Land use planning
- Data management
- Provision of equitable and accessible transportation for disadvantaged groups
- Changes in local, state, and federal regulations
- Changes in Labor/work force
Challenges & Opportunities

- Heavy Traffic Congestion & Transit Coverage
- Mobility Options & Operational Interconnectivity
- Equitable Mobility & Accessibility Service
- Complex Multi-Jurisdictional Regional transportation grid
- Emerging Transportation Data Challenge
- Federal Regulatory Challenges
Challenges & Opportunities

- Shared, Connected and Automated (SCA) mobility ecosystem
- Enable proactive planning & management
- Improve transportation safety
- Increase reliable information & mobility options
- Increase vehicular & transit capacity
- Opportunity for reduced car-ownership reliance
- Enhanced transportation mode connectivity
RESOLUTION 10-16 DIRECTING MPO EXECUTIVE DIRECTOR TO CONSIDER THE PROSPECTIVE USE OF AUTONOMOUS VEHICLES IN FUTURE TRANSPORTATION STUDIES AND REPORTS
RESOLUTION 16-16 DIRECTING MPO EXECUTIVE DIRECTOR TO CREATE A TECHNICAL GROUP TO IDENTIFY NECESSARY STEPS FOR IMPLEMENTATION OF AUTONOMOUS VEHICLES TO BE CHAIRMED BY THE MPO EXECUTIVE DIRECTOR

WHEREAS the use of autonomous vehicles is likely to revolutionize the transportation patterns throughout the county, and

WHEREAS, those communities that plan for this pending technological change will be best situated to provide a seamless transition and enhancement to their transportation systems, and

WHEREAS, in the 2016 Session, the Florida Legislature adopted HB 7027 which requires that Metropolitan Planning Organizations include in their Long Range Transportation Plan “consideration of infrastructure and technological improvements necessary to accommodate advances in vehicle technology, such as autonomous technology,” and

WHEREAS, the Miami-Dade MPO, even prior to the actions of the Florida Legislature, adopted MPO Resolution 16-15 which directed the MPO Executive Director or designee “to consider the prospective use of autonomous vehicles in future transportation studies and reports,” and

WHEREAS, establishing a task force chaired by the MPO Executive Director will facilitate this community’s preparations for the impending technological changes,

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BOARD OF THE METROPOLITAN PLANNING ORGANIZATION FOR THE MIAMI URBANIZED AREA, that the MPO Executive Director is hereby directed to create a technical group to identify the necessary next steps to prepare for the implementation of autonomous vehicles. Members of said technical group shall have expertise in transportation planning and/or transportation technology. The MPO Executive Director is hereby authorized to retain the services of one or more of the consultants from the General Planning Consultant Contract to provide assistance to said technical group.

The adoption of the foregoing resolution was sponsored by Board Member Dennis C. Moss and Co-sponsored by Chairman Jane Munos, Vice-Chairman Francis Suarez and Board Members Rebecca Sosa and Danielle Levine Cava. The resolution was moved by Board Member Dennis C. Moss. The motion was seconded by Board Member Rebecca Sosa. The vote was by voice, and the vote was as follows:

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<tr>
<th>Member Name</th>
<th>Voice</th>
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<tr>
<td>Board Member Bruno A. Barrios</td>
<td>Aye</td>
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<tr>
<td>Board Member Eulogio Reyes, Jr.</td>
<td>Aye</td>
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<tr>
<td>Board Member Jose “Pepe” Diaz</td>
<td>Aye</td>
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<td>Board Member Audrey M. Edmonson</td>
<td>Aye</td>
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<tr>
<td>Board Member Maurice Ferré</td>
<td>Aye</td>
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<tr>
<td>Board Member Oliver C. Gilbert, III</td>
<td>Aye</td>
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<tr>
<td>Board Member Perla Tabares Haines</td>
<td>Aye</td>
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<tr>
<td>Board Member Carlos Hernandez</td>
<td>Aye</td>
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<tr>
<td>Board Member Sandy A. Heyman</td>
<td>Aye</td>
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<td>Board Member Richard J. Scott</td>
<td>Aye</td>
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<tr>
<th>Member Name</th>
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<td>Board Member Smith Josep</td>
<td>Aye</td>
<td>Absent</td>
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<td>Board Member Philip Levine</td>
<td>Aye</td>
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<td>Board Member David Levine Cava</td>
<td>Aye</td>
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<td>Board Member Rebecca Sosa</td>
<td>Aye</td>
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<td>Board Member Xavier L. Suarez</td>
<td>Aye</td>
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<td>Board Member Ivan C. Zapata</td>
<td>Aye</td>
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Goal: Enhance interagency dialogue & collaboration, facilitate CAV project development & deployment within Miami-Dade County & the Region
• New Advanced Traffic Management System (ATMS) state-of-the-art with Smart signals technology to monitor flow in real time and reprogram signal timing

• SHIELD + Mobile Eye (autonomous collision avoidance) technology pilot to be deployed on Metrobuses in Miami Beach.

• Traffic signal priority (TSP) integration for Metrobuses
MDX Board designated a “Smart Corridor” along SR 836 from the MIC to SW 137th Avenue

Suggesting to develop a “Connected Loop” utilizing this Smart Corridor segment along with: SW 137th Avenue, SW 8th Street & SR 826
• Explore best procurement practices on data management and consumer modal choice

• Integration on CAV vehicles and other mobility modes such as bicyclists and pedestrians

• Connected freight pilot project along NW 25th Street Viaduct

• Ensure equitable access and accessible transportation for disadvantaged groups

• Identify high priority corridors

• Continue working with CAV Task Force
City Innovate Foundation (CIF)’s Superpublic

Workspace for policymakers, academics, entrepreneurs, industry experts, nonprofit leaders
Focused on tackling urban mobility problems and devise solutions
Miami-Dade as leading metro area in a series of colliders (deep-dive workshops) for Open Backend Integration and Mobility On Demand solutions

Transportation for America (T4America)’s Smart Cities Collaborative
National collaborative to find technology solutions to urban transportation and mobility challenges

National Association of City Transportation Officials (NACTO)
1st County to join NACTO’s vast network
Miami-Dade 2nd transit agency to join NACTO
Questions & Discussion

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