



Connected and Autonomous Vehicle (CAV)

Task Force Meeting

Atkins Training Room

2001 NW 107 Avenue, Miami, FL 33172

Friday, September 16, 2016 – 10:00 AM

MEETING NOTES

The first CAV Task Force meeting was held to provide an opportunity for interested parties, prospective partners, local agencies and consultants to share information on the concept and implementation of Connected and Autonomous Vehicles (CAV).

A total of 27 people attended including Task Force members. A full list of attendees is noted on the Sign in Sheet attached. The meeting was facilitated by Suzanne Murtha, Atkins Senior Program Manager for CAV, and the event support team led by Elizabeth Rockwell of the Miami-Dade Metropolitan Planning Organization (MD-MPO) and Jack S. Schnettler, P.E., Vice President –Transportation for Atkins. They were both supported by public involvement staff members, Alicia Gonzalez and Paulette Summers with Media Relations Group, LLC.

1. Introductions/Welcome

The meeting commenced at 10:11 a.m. Mr. Humberto Alonso, Jr. with Atkins made opening remarks and welcomed the meeting's participants. He then introduced Aileen Bouclé, AICP, Executive Director of the MD-MPO, who discussed the role of the MPO and its vision for the future of CAV in the region. Ms. Bouclé made note of the private partners who have and continue to show interest in this collaborative effort on the advancement of the CAV pilot projects. The meeting attendees then introduced themselves, including those who joined the meeting via Skype.

The task force members sat within in a u-shaped table arrangement name placards to encourage face-to-face interaction. At this point everyone had the opportunity to speak about the organization they represented and briefly share their respective initiatives with the entire group.

2. Discussion Between Task Force Members

- At the onset of the meeting, participants were provided with an agenda for the day's program. Periodically, the order of some items changed due to the level of interest or addition of topics which arose during the meeting. The initial outline was as follows:
 - Introductions
 - Opening Remarks
 - Mission Statement and Role
 - CAV 101: An Orientation
 - Overview: Miami-Dade County "Ollie"
 - Pilot Project with IBM/Local Motors



- Ms. Murtha, with the aid of a PowerPoint Presentation, showcased the topics and items to be covered in the workshop. She was instrumental in effectively guiding the course of the workshop discussion and ensuring that all members had the opportunity to make comments and have any questions they may have addressed, and that the scheduled presenters were able to share their project or research findings.
- Adi Singh with Ford Motor Company Innovation Lab expressed how pleased he was with the level of effort for this initiative, having met with Ms. Bouclé on a previous occasion. Most members shared his initial enthusiasm and was eager to hear more.
- Ms. Bouclé was curious to find out about the proposed timeframe concerning the Local Motors AV pilot. Mr. Corey Clothier with Local Motors responded that his organization is planning a deployment within approximately 3-6 months.
- Several questions/comments were posed regarding partnering, the level of support, the pace of automation deployment, and liability concerns. It was stated that State and DMV Regulations require that someone should be in the vehicle to satisfy overall safety concerns, as the CAVs are "red light" challenged and could fail to stop unless there was another vehicle in front of it.
- Ms. Mayra Diaz with MDX made mention of the infrastructure required to run the cars efficiently and safely. She asked if the engineering and design staff should plan multiple lane roads based on the capacity need. She was also concerned about the Right Of Way (ROW) and planning efforts required on new transportation corridors, especially those planned for new transportation models.
- Ms. Elizabeth Rockwell with the MD-MPO made mention of the fact that it is especially concerning knowing that a fully autonomous vehicle cannot stop when approaching a red light and cannot operate effectively without the presence of lines or stripes in the roadway. She alluded to the fact that without that safeguard the car could veer and would have to be taken over by an "actual" driver.
- Ms. Bouclé spoke of the policy perspective at the MPO when looking at traffic forecasting and revitalization of the existing infrastructure. Mr. Singh responded by stating that it is important to ensure that the laws are in conjunction with deployment goals.
- When asked how to encourage the elderly to utilize the proposed technology, Mr. Clothier mentioned that he is working with federal experts to ensure that vehicles are ADA compliant. Charles McDermott with Intelsat added that the technology will enable mobility for those persons who are unable to travel, whether it be for health or age reasons. A noted drawback is the fact that this may increase the number of riders and cars, but pooling of trips would compensate.
- All participants agreed on the importance of implementing applications through a BSM (Basic Safety Message) that issues alerts in newly manufactured vehicles.
- There was mention of pilot testing areas within controlled areas, including FIU which has substantial foot traffic and over 38,000 people parking daily plus wheelchair accessibility.



- Mr. Ivan Del Campo with MDX, mentioned that the MDX Board has passed a resolution for a designated smart road. (Dedicated Short Range Communications) DSRC and other technologies may be used to execute applications including as a safety measures such as wrong way detection.
- Mr. Clothier added that there are over 50 deployment sites throughout the United States including New York, Wyoming and Tampa. It was noted that deployers do not need permission or grants in order to accomplish this.
- Mr. Alonso mentioned that FHWA collects useful data and that is readily available. This discussion was followed by inquiries on privacy concerns, such as, who ultimately owns the data and whether information obtained can be used for insurance purposes.
- Mr. Clothier made a presentation on the Miami-Dade County "Ollie Pilot Project", which has planned deployments in Florida and Las Vegas.
- Ms. Diaz asked about the services being envisioned when it comes to this specific technology.
- Ms. Bouclé stated that this technological application is to complement existing trade and transit technology and not replace them. It was agreed that this technology could not compete with light rail for example. It was later noted that the County spends over \$45M annually on its Special Transportation Services.
- Before breaking for lunch, Ms. Bouclé shared her unique perspective on the CAV. She believes that her views have been augmented having seen what the technology has to offer to the members of the workshop, their specific entities and the community at large. She was very encouraged and shared her enthusiasm with the committee members, present in the room and via Skype.
- The second half of the workshop commenced with an outline of the remaining topics of discussion which included:
 - More about the technology
 - Deployment considerations
 - Briefings from technology leaders
 - Other potential CAV projects in Miami-Dade County
 - Emerging Priorities
 - Summary and Closing Remarks
- Dr. Mohammed Hadi with the FIU-Lehman Center for Transportation Research presented his research including travel time accuracy; connected vehicle data and FDOT projects with the SunGuide Traffic Management Center, and his collaboration with Carlos Cruz-Casas and the transit agency on 10 transit buses.
- Ms. Bouclé made the point that traditional perspective in doubling capacity of lanes may not result in optimizing utilization of traffic lanes.



- The final topic for the meeting was that of "Emerging Priorities", where participants and staff alike made suggestions and recommendations as to what should be ultimately included on that list. In order of importance:
 - Preservation of Mobility and Safety
 - Shared Mobility On Demand
 - Addressing Congestion
 - Using Existing Infrastructure (Dedicated Express Lanes, HOV)
 - Scalability – Small and Build; Do Once and Replicate
 - Aging Population Needs (Differently Abled)
 - Somewhat Proven Technology
- Ms. Bouclé inquired about MPO and FDOT partnering, as well as making I-95 a smart corridor. Javier Rodriguez, FDOT, responded and mentioned testing existing infrastructure for vehicles at intersections, adding fiber optic capabilities and determining the benefits of implementing this one the corridor. He added that FDOT can't compete with WAZE but will work in conjunction with data providers to build on the expertise of all of the providers.
- Mr. Del Campo asked about flexibility, time and the intention to show results from MDX's Smart Road research by year end. He added that there was continuous collaboration and the need for a controlled system.
- Mr. Alonso suggested getting measurable outcomes by identifying 2 or 3 corridors/expressways.

3. Additional Points Made

- Proven Technologies – Applications can be brought in to increase the ways technology and infrastructure will merge.
- Rollout – Working with MDPW on rollout
- Collaborations – Collaboration efforts with City of Miami Beach, Miami-Dade County, TMC and MDX.
- Sidewalk Labs – Super Public, A City Innovative Foundation
- Variable Speed – Reasonable Expectation; how did it increase safety and shared mobility

4. Next Steps

- Future meetings will be held quarterly, with next meeting at a time and date to be announced.

Closing remarks were given where all participants were thanked for their time and interest in this venture and informed that they would be provided with meeting notes, a copy of the presentation, and the list of attendees as well.



The meeting adjourned near the scheduled time of 3:00 pm.

Follow up required:

- Mr. Ivan Del Campo, CIO/ITS Manager with MDX will present all of his findings to his Board, to be followed by presentations to other interested parties
- Ms. Aileen Bouclé (MDX), Mr. Javier Rodriguez (FDOT) and Ivan Del Campo (MDX) to have a follow up meeting in a joint effort to unite their respective agencies to begin discuss I-95 and a Smart Corridor.