



JACKSONVILLE TRANSPORTATION AUTHORITY

Isaiah Rumlin
Chairman

Kevin J. Holzendorf
Vice Chairman

Ari Jolly
Secretary

Denise Wallace
Treasurer

Scott L. McCaleb
Immediate Past Chair

Greg Evans
Board Member

Jeanne Miller
Board Member

Nathaniel P. Ford Sr.
Chief Executive Officer

November 26, 2018

Docket Management Facility
U.S Department of Transportation
1200 New Jersey Avenue S.E.
West Building, Ground Floor
Room W12-140
Washington, DC 20590-0001

RE: Docket No. NHTSA-2018-0092

To Whom It May Concern:

On behalf of the Jacksonville Transportation Authority (JTA), I am submitting comments for the record regarding the National Highway Traffic Safety Administration's (NHTSA) advance notice of rulemaking (ANPRM) for the Pilot Program for Collaborative Research on Motor Vehicles with High or Full Driving Automation, (83 Fed. Reg. 50872) published on October 10, 2018.

The JTA has established a unique, cutting-edge and transformational program, initially branded as the Ultimate Urban Circulator (U²C) that will focus on integrating newer technologies to implement an automated transit network in Jacksonville, FL. The U²C presents a bold new vision for the Skyway that will allow the 2.5-mile elevated downtown people mover to reach existing and planned developments in and near Downtown Jacksonville. The U²C will make key at-grade extensions into nearby historic neighborhoods that would be too costly and intrusive if the existing elevated system was extended. (For additional information, please visit: <https://u2c.jtafla.com/>)

As part of our program, we have taken the initial steps of conducting a risk assessment of our system and program, performed an infrastructure study, held an industry forum with national and international experts in attendance, and opened a "Test and Learn" track. The Test and Learn track, located adjacent to the City of Jacksonville Sports and Entertainment Complex, allows JTA to use different vehicles and operators in multiple scenarios. The JTA is committed to testing autonomous vehicles (AV) over the next two years, during which we will rotate AVs provided by different vendors. We've already tested an Easymile vehicle operated by Transdev and are scheduled to begin testing the first domestically-produced vehicle by Navya and operated by First Transit in the upcoming weeks. This will allow us to learn how the different AVs function, interact with different operators, experiment with different operating domains, develop specifications for the future U²C vehicle, and gain public feedback on and acceptance of AV technology.

The Test and Learn track will operate in coordination with the City of Jacksonville, the Sports Management Group, the Jacksonville Sheriff's Office and the Jacksonville Jaguars. In addition, we implemented formal testing protocols and performance testing measures during this program. JTA holds in the highest regard the safety of our customers and pedestrians, and we recognize the additional risks presented by AV. Therefore, we strongly believe that local agencies need to be able to ensure that publicly-operated AVs are appropriately secure in a connected vehicle environment. For this reason, JTA has partnered with the Community and Transportation Information Sharing and Analysis Organization (C&T-ISA), the City of Las

121 W. Forsyth Street,
Suite 200
Jacksonville, FL 32202

main: (904) 630-3181
fax: (904) 630-3166

www.jtafla.com



Vegas, and others to work on this issue. JTA wants NHTSA to be part of this partnership and support how public agencies nationally can work with the manufacturers to be confident that vehicle technology platforms for public transportation are appropriately sharing information, minimizing cyber threats and addressing any other safety risks.

The JTA supports NHTSA's efforts to launch a pilot program, and we are available to partner with NHTSA to determine factors and the appropriate structure to consider when designing a pilot program that will enable, monitor and learn from the testing and development of the emerging advanced vehicle safety technologies. Our comments and recommendations are listed below by NHTSA's four goals areas as expressed in the Federal Register.

1. Potential factors that should be considered in designing a pilot program for the safe on-road testing and deployment of vehicles with high and full driving automation and associated equipment.
 - Data Sharing – Pilot programs should have specific provisions for the sharing and management of data between private companies, public entities, and NHTSA. We do not believe the provisions need to be prescriptive but should be transparent to all parties involved so that NHTSA and public agencies can evaluate the best architecture for data storage, management and analysis in the future.
 - Public Feedback – A public feedback mechanism should be built into any pilot. Surveys, web links, and tablet interactions are all helpful, but the questions should be carefully designed to measure public experience and acceptance over the duration of the pilot and include a before-and-after ride comparison.
 - Safety – A robust safety management plan should include and document accident avoidance, incident recovery, cybersecurity, physical security, and anti-terrorism should all be considered and documented. The documentation should grow as the learning from the pilot grows.
 - Performance – Agencies and NHTSA should take care to develop performance metrics, often referred to as KPI's (key performance indicators) such that agencies can begin to form opinions on the performance of Automated Driving Systems (ADS).
 - Additional recommendations – To ensure pilot effectiveness, prior to pilot deployment agencies should:
 - Demonstrate organizational capacity and commitment to implementation and development of pilot programs as precursors for full deployments (e.g., agency adoption of a mobility plan that integrates AVs in the transit system).
 - Evaluate legal and policy framework from state and local government that support these projects.
 - Consider ability to leverage items such as: private investment, university research and workforce development.
2. Use of existing statutory provisions and regulations to allow for the implementation of a pilot programs.
 - While we encourage NHTSA to pursue pilot programs of under its existing authority, we encourage a growth in funding as pilot programs prove successful.
 - In addition, we highly recommend NHTSA evaluate the current level of development and commitment of agencies and communities in the deployment of AV when considering funding pilots.

121 West Forsyth
Street, Suite 200
Jacksonville, FL 32202

main: (904) 630-3181
fax: (904) 630-3166

www.jtafla.com



- Communication of connected vehicles and devices will become a critical design feature of pilots, including many communication medium, including cellular, 5G, Wi-Fi, DSRC, and others. NHTSA should make clear what role the agency has in communications.
3. Elements of regulatory relief (e.g., waivers, variances, or other potential measures) that might be needed to facilitate the efforts to participate in the pilot program and conduct on-road research and testing involving these vehicles, especially those that lack controls for human drivers and thus may not comply with all existing safety standards.
- Vehicle waivers should be granted based on the merit of the pilot program, to include foreign and domestically produced vehicles.
 - Agencies should be able to obtain permission (or waivers) for multi-technology and multi-site programs. Agencies should be encouraged to think about their entire ADS portfolio in the terms of a pilot program, therefore approvals should not be limited to the use of specific technology to specific location or route.
 - Consider flexibility in use of federal funds, such as FTA 5307, for pilots with lease or acquisition of vehicles without useful life or capital leasing requirements.
 - In the alternative, useful life determinations should travel with the lease, as a contractual obligation to further develop the technology, instead of remaining with the asset to maximize flexibility
 - Consider waiver of any useful life requirements associated with conversion of existing infrastructure to AV facility.
4. The Agency seeks comments on the nature of the safety and any other analyses that it should perform in assessing the merits of individual exemption petitions and on the types of terms and conditions it should consider attaching to exemptions to protect public safety and facilitate the Agency's monitoring and learning from the testing and deployment, while preserving the freedom to innovate.
- Agencies and companies should be required to share all safety data in real-time or nearly real-time.
 - Risk assessments should be completed for all operating domains (e.g. routes) and should be updated regularly (every three to six months) and/or as operating conditions change (e.g., construction on the route).
 - Minimum public safety and vehicular safety features should be provided on all vehicles that are granted permission to operate.
 - Agencies should be encouraged to co-mingle vehicle design and infrastructure design for optimal safety. The designs and results should be shared with NHTSA. For example, a stop design or cross-walk designs will likely be modified for ADS integration.

Once again, we want to express our support for NHTSA's creation of a framework for initiating pilot vehicle programs and offer to be part of that implementation. Please feel free to contact me at (904) 632-5500 with any comments or requests.

Sincerely,



Nathaniel P. Ford
Chief Executive Officer

121 West Forsyth
Street, Suite 200
Jacksonville, FL 32202

main: (904) 630-3181
fax: (904) 630-3166

www.jtafla.com