



October 25, 2019

The Honorable Haley Stevens
Chair
Subcommittee on Research and Technology
Committee on Science, Space, and Technology
United States House of Representatives
Washington, DC 20515

The Honorable Jim Baird
Ranking Member
Subcommittee on Research and Technology
Committee on Science, Space, and Technology
United States House of Representatives
Washington, DC 20515

Dear Chair Stevens and Ranking Member Baird:

In anticipation of the House Subcommittee on Research and Technology upcoming field hearing entitled “Smart Mobility: It’s a Community Issue,” the Intelligent Transportation Society of America (ITS America) writes to underscore how advances in robotics, artificial intelligence, and wireless communications will define the way people, goods, services, and information move in the 21st century.

Mobility is less about moving vehicles and more about moving people, data and freight. Long-existing silos among cities, states, counties, road and transit agencies are disappearing, and transportation network companies and other mobility service providers barely existed a decade ago. More choices exist now, but for people to fully realize the benefits of this new world of mobility, it must be easier to choose which option best meets their needs. This also means services should be accessible to everyone and in all communities and neighborhoods.

Technology innovation is enabling Mobility on Demand (MOD), which will expand mobility choices and fill access gaps including first/last mile services in cities, suburban areas, exurbs, and rural communities. As defined by the U. S. Department of Transportation, MOD is an innovative, user-focused approach which leverages emerging mobility services, integrated transit networks and operations, real-time data, connected travelers, and cooperative Intelligent Transportation Systems (ITS) to allow for a more traveler-centric, transportation system-of-systems approach, providing improved mobility options to all travelers and users of the system in an efficient and safe manner. MOD is a vision for an integrated network of safe, carefree, and reliable transportation options that are available to all.

In cities, MOD offers convenient, affordable, and, in the case of bikeshare, rideshare or micromobility services, more sustainable alternatives to driving within congested environments. For suburban areas, MOD offers first mile/last mile accessibility to mass transit, as well as more dynamic on-demand services to get around town. While often seen as an urban/suburban transportation solution, MOD deployed in exurban and rural areas also provides first mile/last mile connections to transit, intercity bus and rail transport, and essential air service airports. Rideshare and ride sourcing is providing support for seniors in rural areas to access social and health services. New and improved MOD transit and paratransit services also can benefit rural communities. Tompkins County, NY, is an excellent example of a rural community pushing carshare (Ithaca Carshare), rideshare (ZimRide), and transportation network companies (TNC) (Lyft/Uber) services, and it received funding through the Shared Use Mobility Center MOD On-Ramp Program.

MOD is more than simply mobility services for traveler; it is an integrated system of mobility management. It is a series of different building blocks that fuel how MOD is advancing a more seamless, traveler-centric, intelligent mobility future by focusing on:

- How viewing transportation as an “on-demand” commodity where both the public and private sectors are providing supply and responding to demand may impact how we achieve equity, accessibility and congestion relief;
- How cities, states and private mobility providers are looking differently at the type of infrastructure services and management they offer as mobility services like ridesourcing with TNCs, micromobility like shared scooters or e-bikes, micro-transit, and dynamic cargo delivery transform how people and goods move;
- How more robust data services are changing how people define and conduct real-time mobility operations and plan for longer-term mobility needs, as well as how data is really fueling the "business" of mobility;
- How pricing systems can better enable curb side management or how creating seamless trip planning and payment apps are reshaping the relationship with mobility customers; and
- How customers are really driving more how mobility is being planned and delivered, especially as the private sector is in many ways rewriting their service expectations.

The following includes urban, suburban, exurban, and rural MOD use cases. In order for policymakers at local, state, and federal levels as well as public and private transportation and mobility operators to realize the benefits of this new world of mobility, it is critical to address the policy, business models and shared values that power MOD, whether funding and program benchmarks, integrated operations, data sharing, pricing models or public benefits of equity, accessibility and sustainability.

BATA Partners for Late-Night Mobility (MI): The Bay Area Transportation Authority (BATA) has collaborated with Lyft to offer free transportation between 11pm and 1am along the Bayline route in Traverse City, Michigan. Through this 12-month pilot, Bayline riders can use a monthly promotional code for up to \$100 in late-night Lyft rides traveling to/from locations within a 0.2 mile-radius of the Bayline route. The promotional code can be found inside Bayline buses and is valid for a month, after which a new code will be available. Rides can be scheduled through the Lyft app and wheelchair accessible vehicles are available upon request. The program aims to fill gaps in existing public transit service by helping Bayline commuters get home safely after regular bus service has ended.

Partnership for Non-Emergency Medical Transportation Service in Dayton, OH: The Greater Dayton Regional Transit Authority (RTA) has partnered with Ford Motor Company to offer Ford GoRide Health (GoRide) on-demand paratransit service in Dayton, Ohio. GoRide, powered by Ford, will be offered as part of RTA Connect. Through this partnership riders can order wheelchair accessible rides on-demand, which helps connect individuals with disabilities to healthcare and other services. All GoRide drivers have been professionally trained to assist passengers and are Health Insurance Portability and Accountability Act (HIPAA) compliant. By partnering with Ford, RTA aims to enhance its non-emergency medical transportation, complement existing mobility options, and improve first/last mile access.

Onondaga County (NY) Partners with Lyft to Help Job-Seekers on Welfare: Onondaga County has partnered with Lyft to launch a new pilot program designed to help individuals on welfare go to work. Through this program, Onondaga County – together with the employment agency JOBSplus! – will offer eligible residents free Lyft rides to local companies looking to hire, as well as to childcare if needed. While welfare recipients in Syracuse usually receive bus passes, ride-hailing may better accommodate those trying to commute during late hours or to areas away from transit. This pilot, paid for using the



publicly-funded budget of JOBSPlus!, aims to reduce transportation barriers facing job-seekers and make it easier for more people to get to work.

Partnership with Ford-owned Spin for Scooter Sharing Pilot in Ann Arbor, MI: The city of Ann Arbor, the University of Michigan (UM), and Ford-owned scooter company Spin have partnered to bring dockless, electric scooters to the Ann Arbor area. Through this partnership, 200 scooters are available for use on and around the UM campus. Scooters can be unlocked via the Spin app for \$1 plus \$0.15 per minute. The scooters can accelerate up to 15mph and may be operated on streets with speed limits less than 45mph, as well as on sidewalks – though some crowded areas on UM’s campus have been geofenced as no-ride zones. The scooters provide riders with instructions on parking and safety. Free helmets are also available upon request. This one-year pilot aims to offer a flexible, integrated mobility option.

Partnership between UTA & the Transit app in the Wasatch Front Region, UT: The Utah Transit Authority (UTA) has partnered with the Transit app to offer integrated, personalized trip planning. Through the Transit app, riders can access real-time information regarding nearby bus and rail options. The app provides transit departure times, allows for real-time tracking, and enables users to receive route-specific push notifications. Transit’s Go feature also offers step-by-step navigation, and riders can use the app’s Transit+ feature to get information on other modes – including Lyft, Uber, GREENbike, and Spin – for their first/last mile travel needs. Riders can book and pay for Lyft and Uber rides within the app. By partnering with the Transit app, UTA aims to facilitate multimodal trip planning and transit use.

COTA Launches Microtransit Program (OH): The Central Ohio Transit Authority (COTA) partnered with Grove City and Via to launch on-demand microtransit service, COTA Plus. Through this one-year pilot, which began July 15, residents and visitors in Grove City can book local rides on six-passenger vehicles through the COTA Plus app or by phone. The vehicles are operated by COTA drivers and can be used to connect passengers with any destination of their choice within the program service area (for a base fare of \$3) or designated COTA transit lines (for free). Day passes and weekly passes are available, and COTA Plus vehicles should arrive within 15 minutes of booking. This pilot aims to improve first/last mile mobility and offer a convenient, affordable transportation option.

Pilot with Lyft for Rides for Individuals with Disabilities in Dakota County, MN: Dakota County has partnered with Lyft to offer flexible, on-demand rides to individuals with disabilities who receive home and community-based services in Dakota County. Through this pilot program, eligible individuals may use Lyft credits, paid through Medicaid waivers, to order rides to/from work and community activities. These rides aim to supplement existing transportation options and make it easier for individuals with disabilities to access jobs and get around independently. The partnership is supported in part by a grant from the Minnesota Department of Human Services.

NYCDOE Teams Up for “Via for School Bus Routing and Tracking in New York City: The New York City Department of Education (NYCDOE) has partnered with ridesharing company Via to launch “Via for Schools.” The “Via for Schools” platform enables dynamic school bus routing and real-time tracking via mobile app, which also automatically communicates schedule updates. The platform is “designed to serve the city’s diverse student populations, including general education, special education, students in temporary housing, and others through one integrated school transportation system.” Through this partnership, NYCDOE aims to make communication regarding bus service more efficient and help make transportation to and from schools safer and more reliable.



Partnership for MOD Microtransit Service for Seniors in Newton, MA: The city of Newton has partnered with Via to launch Newton in Motion (NewMo), an on-demand microtransit service for seniors. Through this program, Newton residents over the age of 60 can order NewMo rides using the Via app or by phone. After booking, riders will be directed to nearby virtual bus stops where they will be picked up and may share a ride with other passengers traveling similar routes. NewMo service is available from 8am to 5pm on weekdays and from 9am to noon on weekends. This on-demand service replaces the previous taxi voucher system that required users to book rides at least 72 hours in advance. NewMo aims to offer convenient, reliable mobility to help seniors travel around the city.

Partnership with TransLoc for Microtransit Service in the Village of Milan, IL: The Rock Island County Metropolitan Mass Transit District (MetroLINK) has partnered with Ford Smart Mobility company TransLoc to launch an on-demand microtransit pilot program. Through this pilot, riders in Milan can order a 12-passenger, wheelchair accessible van for local curb-to-curb microtransit service. To use the service, riders can request rides through TransLoc's Microtransit app. Same-day rides can also be requested via phone call. Trips cost \$1 for standard passengers (with discounted rates available for students and designated individuals). The service, which aims to enhance mobility, is owned by MetroLINK and will be evaluated based on on-going performance information provided by TransLoc.

Zipcars Now Available at Rail Stations in Baltimore, MD: The Maryland Department of Transportation's Maryland Transit Administration (MDOT MTA) and Zipcar have partnered to offer car-sharing service at select rail stations and enhance transportation options in Baltimore. Through this partnership, 15 Zipcars are available for on-demand use at eight rail stations along the Light Rail Link, Metro Subway Link, and Maryland Area Regional Commuter (MARC) train lines. Transit riders can reserve vehicles for one hour or up to seven days after joining Zipcar. The reservation cost includes gas, insurance, and maintenance. By partnering with Zipcar and adding a sustainable mobility option at local transit stations, MDOT MTA hopes to increase connectivity and reduce the need for commuters to drive.

Chesterfield County (VA) Partners with Uber and Goodwill to Connect People with Critical Services: Chesterfield County has partnered with Uber and Goodwill of Central and Coastal Virginia to launch a pilot program providing free, treatment-related transportation to individuals trying to overcome opioid addiction. Through this program, those undergoing treatment through the county's Mental Health Support Services Department who do not own a personal vehicle can take an Uber, free of charge, to any pre-approved location. Participants can reserve rides from 6 am- 6 pm, Monday through Saturday, by calling Goodwill. Goodwill contacts Uber and oversees the trips, and rides can also be reserved in advance. The pilot, funded through a state grant, aims to make it easier and more affordable for recovering participants to seek treatment.

Pinellas Suncoast Transit Authority Making Trip Planning and Travel More Seamless (FL): The Pinellas Suncoast Transit Authority (PSTA) selected the Transit app as the official trip planning application of Pinellas County. The Transit app offers an easy-to-use, multi-modal platform, through which users can access real-time information regarding PSTA's transportation options and arrival/departure times. The application also integrates information on MOD services, so that transit riders can, for example, check local bikeshare availability or request an Uber ride as needed from within a single app. As part of this partnership, PSTA will officially advertise the Transit app, and the Transit app will share anonymous data regarding users' trip behavior, which can better inform PSTA planning and operations.

The framework for aggregating and managing supply and demand depends on connected data rather than particular technology. MOD is powered by technology and mobility services that currently and will include:

- Data systems and data analytics platforms, specifically open data platforms, open source technologies, and data sharing agreements that allow public and controlled access to mobility data to plan real-time operations and longer-term planning;
- Asset management systems (parking, curb, freight delivery), specifically to provide opportunity for mapping assets to develop more comprehensive use management strategies and value pricing systems (e.g. assessing a fee for curb-side passenger drop off, or use of designated delivery or drop-off zone or conversely a fee for not using provided zones);
- Security/safety systems, which can include physical technologies – like locking systems for bikeshares where bikes must be secured at the end of a trip – or cybersecurity systems. With the potential introduction of automated/autonomous vehicles into MOD services, like rideshare, it will be increasingly important to have systems that monitor performance and track/mitigate any security breaches. It also may be increasingly important to have systems that confirm the intended rider and potentially (in the case of AVs, for example) monitor riders' safety throughout their trip.
- Geospatial Technology: defined as the collective data and associated technology that has a geographic or locational component; technology used to acquire, manipulate, and store geographic information. Geographic Information Systems (GIS) is one form of geospatial technology. GPS, remote sensing, and geofencing are other examples of geospatial technology. Geofencing, for example, is being used in scootershare and bikeshare programs to monitor use and designate certain areas as no-go or no-park zones.
- Connected vehicle platforms and data, specifically to provide opportunity for real-time operations such as deployment of emergency service providers, rerouting of traffic during major events, and fleet management (public or private);
- Integrated trip planning technology platforms that power travel across a variety of modes, including public transportation, TNCs, car and bike sharing services, micro-transit providers, and even private vehicle mobility planning;
- Integrated booking and payment systems that power seamless travel across a variety of modes to include both public and private mobility services;
- Integrated payment systems for transportation adjacencies or value-pricing asset usage (e.g., tolling, congestion pricing, dynamic parking, curb-side pricing, motor vehicle administrative transactions, electric charging stations);
- Integrated payment systems that include other specialized and demand-response transportation (e.g., human service transportation, faith-based transportation, non-emergency medical transportation, paratransit, volunteer-based transportation, closed or open loop shuttle services, employee and campus transportation); and
- Integrated payment systems that could include multiple non-transit/non-mobility services (e.g., retail, incentivization, loyalty programs); social programs (e.g., travelers with disabilities, student discounts, transit benefits, social security, senior citizens, veteran benefits, human service programs); and access and authorization (e.g., student cards, government IDs, campus/ academic cards, library access, community and facility access, municipal programs, age-based programs).

In the future, Augmented Reality (AR) enhanced by 5G connectivity could make MOD and the delivery of real-time data even more useful. For instance, AR can be used to create interactive maps to help people



navigate transit systems. By using the camera in a traveler's mobile device and superimposing digital information on what the camera is capturing, AR can make it easier for the user to make more informed decisions based on up-to-date information. Holding a mobile device on top of a transit map, for example, would allow users to see real-time movement of trains and buses near their location.

ITS America's FAST Act Reauthorization Platform: *Moving People, Data, and Freight: Safer. Greener. Smarter.* supports establishing a MOD program that encourages flexibility within federal transportation programs to meet changing mobility needs, including partnerships with companies offering shared-use trips (car, bicycle, new mobility modes), data management, and other technology companies for first mile/last mile services and improved freight delivery, the integration of mobility services and technologies, and new fare and integrated payment technologies. ITS America supports a MOD program that establishes a data sharing framework providing standardization for the transfer of data among transportation operators and providers to foster the efficient use of capacity, enhances management of new modes of mobility, and promotes the creation of innovative planning tools.

The transportation sector in communities across the nation is undergoing historic transformations with the promise of greatly boosting the safety, access, equity, and sustainability of our transportation system.

New forms of mobility are being deployed even as others are being developed. When cars were invented a century ago, Departments of Roads were created to build infrastructure for this new form of transportation. Those agencies are now Departments of Transportation, having grown to include many modes of transportation. Now those same agencies are evolving again to provide seamless multimodal mobility and to build smart infrastructure that will support the technology-driven 21st-century economy, which is all about moving, people, data, and freight.

Changes are happening today that will fundamentally affect how people interact with transportation in the months and years ahead. ITS America is helping cities, suburban communities, states, the private sector, and researchers as we work toward our vision of a better future transformed by Mobility on Demand - one that is safer, greener, and smarter.

Sincerely,

A handwritten signature in black ink, appearing to read "Shailen P. Bhatt".

Shailen P. Bhatt
President and CEO
Intelligent Transportation Society of America

Cc: House Subcommittee on Research and Technology
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