

Supporting the Mobility on Demand (MOD) Vision through Mobility Services for All Americans (MSAA)

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1. The Mobility on Demand Future: The Philosophy behind Integration

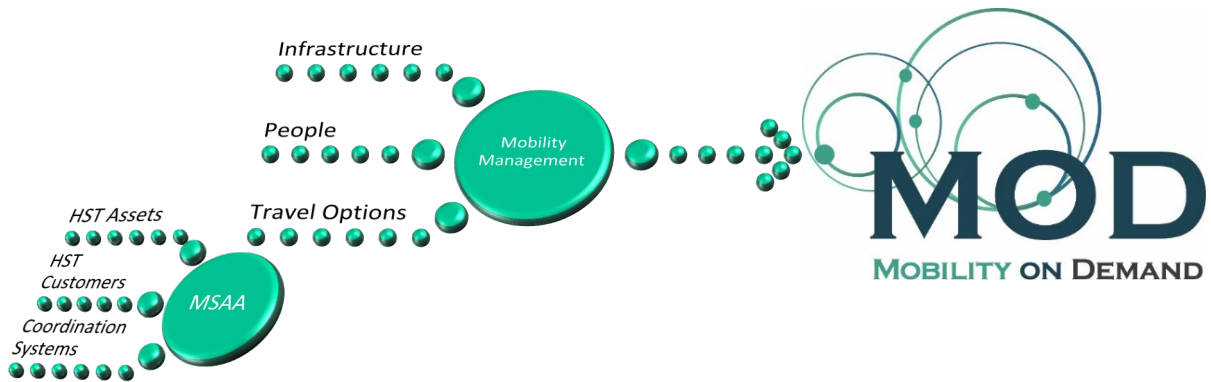
The US DOT's Mobility on Demand (MOD) program is rooted in the knowledge that America's communities are made stronger when all people have access to carefree, safe, reliable, transportation, regardless of where they live, who they are, and what their travel needs are. Realizing the MOD vision requires the collaboration of a full range of transportation options (e.g., public, private, human service transportation) to offer the greatest possible level of mobility within regional transportation systems. Through collaborative multi-provider and multi-option platforms, the objective of MOD emerges to not only provide a "basic" service, but one that improves the mobility of all Americans by increasing the number of available transportation options, enhancing their usefulness to the populations they serve, and offering new levels of value-based affordability and reliability due to effective/efficient operations. In combination, these features serve as essential elements for filling significant gaps in transportation services, especially for transit-reliant populations in areas where those services are heavily fragmented, unaffordable, and unreliable.

Maximizing the usefulness of transportation resources and creatively filling gaps in mobility is at the heart of Mobility Management, another MOD-related concept long advanced by US DOT, defined as: "a customer-centered approach to finding transportation solutions for all populations with a particular focus on people with disabilities, aging populations, English-language learners, low income communities, and other groups with unique needs."¹ Mobility Management takes a holistic approach to the community-wide transportation network, identifying opportunities to increase the efficiency of current operations and infrastructure, while seeking innovative approaches to bridging any gaps in the transportation network. Mobility Management is characterized by a focus on individual needs, not on moving the masses, and on innovation, unconstrained by usual business practices.² Built around the principles of an individual-centric perspective of Mobility Management concepts, Mobility on Demand takes the person-centered approach to integrate and create mobility options to a new level, **expanding it to serve the broader population.**

¹ National Center for Mobility Management and Corporation for National and Community Service Senior Corps Program, "Mobility Management: Introduction, Implementation, Community Service and Seniors," prepared for the Federal Transit Administration, August 2017, page 2

² Elizabeth Ellis, Mobility Management, prepared for AARP Public Policy Institute, October 2009, © 2009, p. 1, https://assets.aarp.org/rgcenter/ppi/liv-com/roundtable_091013_mobility.pdf

Mobility Services for All Americans MSAA concepts are key tools of mobility management; presenting an opportunity to better leverage Human Service Transportation (HST) resources and serve HST populations. Understanding the background of the MSAA Initiative helps show how MSAA's concepts



facilitate mobility management and ultimately realize the MOD vision.

Figure 1: The MSAA Transition to MOD (Source: U.S. DOT, 2018)

2. The Vision of Mobility Services for All Americans (MSAA)

The goal of MSAA is to improve access to employment, healthcare, education, recreation, and other community activities for people with special transportation needs. This is done by coordinating and integrating HST and community transportation resources to create more effective mobility options. MSAA advances the state-of-the-art in comprehensive traveler support; interoperable and coordinated transportation operations and management; and streamlined program management requirements addressing both technical and institutional barriers to coordination. US DOT has proposed a phased approach to meeting the MSAA vision:

- Stage 0: Current Conditions
- Stage 1: System Interoperability
- Stage 2: Multi-Modal Accessibility and Traveler Connectivity
- Stage 3: Real-Time and Information-based Spontaneous Transportation
- Stage 4: Mobility on Demand

Mobility Services for All Americans produces benefits for many: simplified trip-making for riders, effectiveness for service planners, efficiency for operators, and streamlined management for human service programs. In addition to the obvious localized impacts of these benefits, the aggregated outcomes also provide positive regional and National impacts, not only from a quality of life perspective by improving social and healthcare aspects, but also advancing equity, accessibility, productivity, workforce participation and economic strength.

Realizing the vision of MSAA requires establishing partnerships among the agencies and organizations that provide and pay for transportation and developing technology-based systems that support person-centered coordination of those resources. Figure 1 illustrates the different components and stakeholders of the MSAA and Travel Management Coordination Center (TMCC) collaborations. Such complex systems must be developed in a structured way to “synchronize” the essential elements

involving the demand, supply, payment, and information. The TMCC systems, therefore, aim to integrate the traveler (demand), service provider (supply), relevant funding programs (payment), and the data flow between them (information).



Figure 21. How MSAA Works (Source: U.S. DOT, 2018)

3. Brief History of MSAA

There are over 80 Federal programs that fund transportation services for the general public and transportation disadvantaged. The recognition that this situation created barriers to transportation coordination, among other issues, led to the February 2004 Presidential Executive Order³ on Human Service Transportation Coordination which established the Federal Interagency Transportation Coordinating Council on Access and Mobility (CCAM) to enhance accessibility and mobility for persons who are transportation-disadvantaged, especially individuals with low-incomes, people with disabilities, and older Americans. This Council is chaired by the Secretary of Transportation with representation from 11 executive departments or agencies of the Federal government. The Executive Order requires all Federal agencies to work together to enhance transportation access, minimize duplication of Federal services and facilitate the most appropriate, cost-effective transportation for older adults, people with disabilities and low-income populations. After the creation of the CCAM, USDOT launched the MSAA Initiative with funding from the Intelligent Transportation Systems (ITS) Joint Program Office (JPO) to

3 Executive Order 13330 (<https://www.transportation.gov/sites/dot.gov/files/docs/eo13330.pdf>)

apply ITS solutions to HST delivery. From 2006 to 2014, the Foundation Research, Deployable Model System Designs, and Model Deployment of Select Travel Management Coordination Centers phases of MSAA were accomplished as three distinct phases. In late 2006, eight project sites were selected for demonstrations⁴. Those demonstrations proved that a TMCC could provide one-stop, unified, customer-based travel information and trip planning services, and support coordinated human service transportation. Building on the success of Phase 1 and 2 efforts, a round of MSAA Deployment Planning grants were awarded to another four agencies in 2015⁵.

The result of this last round of planning grants will be the completion of fundable deployment plans for technological and integration systems that bring together a variety of transportation options to enhance mobility of the HST population and beyond. The continuation of support for TMCC-based transportation coordination and transition of MSAA to fit the greater vision of Mobility on Demand (MOD) is currently being made possible by aligning cross-program objectives of several FTA and ITS JPO initiatives/programs under the MOD umbrella. The MOD vision supports mobility management concepts that are similar to TMCC systems, with an overall goal of integrated mobility for all.

4. MSAA in Mobility Management

Mobility Managers work to ensure that all of a community's transportation assets and resources are used to their greatest potential, providing the most mobility possible in the most effective and efficient way. In many areas, particularly smaller suburban and rural settings, the human service transportation fleet represents a significant portion of the available transportation assets, regardless of whether funded by government, philanthropy, or the faith-based organizations.

Better leveraging of those assets presents an opportunity to improve mobility across the board. In the case of MSAA, technology-based mobility management concepts play a great role in the collaboration of assets and resources in a way that transforms mobility from being a commodity to a service. MSAA has shown how such coordination would work, how the developed systems and processes would support that integration, and demonstrated the value of a structured process for including stakeholders like funders, operators, customers, and system users in the design process. Such partnership development is a key competency of mobility managers. MSAA has provided tools and a process to bring the right people around the table, with the right process to lead to a useable integration, and, more importantly, having the right objectives for a common goal built around consensus of all stakeholders.

For mobility managers, leveraging the human service network in the way envisioned by MSAA allows them to reach farther and do more, to improve their community's mobility by integrating and creating travel options, (e.g., bikeshare, carshare, volunteer driver programs), in more contexts.

5. Supporting Mobility on Demand

It is also important for the agency/region to have a mobility plan in place to support continuous and effective mobility management operations by keeping up with the technological advances, business

⁴ USDOT Announces Site Selections for Human Service Transportation Improvement Demos (https://www.its.dot.gov/research_archives/msaa/msaa_human_service.htm)

⁵ 2015 Research Funds for Mobility Services for All Americans (MSAA) Deployment Planning Projects (<https://www.transit.dot.gov/funding/grants/2015-research-funds-mobility-services-all-americans-msaa-deployment-planning-projects>)

collaboration models, and policy evolutions in the industry. Integration of and monitoring these elements are part of the MOD vision, which is one of the primary reasons for the logical progression of MSAA and TMCC types of concepts and systems into the community-based mobility management concepts, and, ultimately, transition into the integrated mobility system as envisioned by the MOD philosophy. MSAA supports the Mobility on Demand vision by leveraging HST resources and connecting with the customer base served by the 80-plus federal programs that are part of the CCAM. Using MSAA as a key link in the MOD vision helps provide options to different market segments and promotes equity and inclusiveness in transportation options by promoting access to individuals with fewer options.

MOD encourages expanded research opportunities including those that foster greater system connectivity, demand responsiveness, and automated travel. Integration of mobility services from different providers and agencies is being accomplished under the MOD Sandbox projects, where innovative business, technology, and platform collaborations are implemented as demonstration projects, and their effectiveness is measured through performance metrics. From the broader perspective of FTA's mobility ecosystem, the intention is to transform the rather isolated MSAA-supported projects (implemented or in the deployment planning stages) into the broader ecosystem of mobility for a region, supporting an integrative service provision. Some of the initial steps in the integration phase are to understand the opportunities for integration and plan for the transformation process. Such transformation and integration planning is particularly challenging due to the localized uniqueness of each system and setting. Therefore, developing a framework for the integration of technology-based demand-response systems to the regional mobility system appears to be the next logical phase in the process.

[The MOD Sandbox](#)

Social, cultural and technological changes are dramatically remaking the mobility landscape. The prevalence of smart phones, the growing power of data processing and the explosion of Big Data have helped seed the development of mobility concepts and solutions from bike- and car-sharing systems to microtransit and re-envisioned paratransit services. These are providing travelers with flexible and convenient transportation options while impacting the funding and business models that have long sustained public transportation in this country. Through the [Mobility on Demand Sandbox program](#), the Federal Transit Administration (FTA) is researching how these new service options, in combination with available technologies can support greater individual mobility.

[Managing Mobility on Demand: Key Concepts United](#)

The transportation universe is moving toward a more on-demand and demand-responsive future driven by technology, demographics, and other shifting realities. This brave new world holds much promise, but also challenges. It will be important to ensure that all people can share in the benefits of this evolution...that we achieve Mobility Services for All Americans.

The MSAA program helped our industry see the potential in coordination, integration, and inclusive service planning and delivery. It laid out systems and approaches for capitalizing on the range of human service transportation assets in communities to make mobility easier for those with disadvantages and providers more efficient in providing transportation.

Coordination and inclusion are central principles in the field of mobility management and integrated mobility concepts. The Transportation Management Coordination Center (TMCC) concept, explored and

developed through the MSAA program, supports the mobility management goal of simplifying consumer access to their mobility choices with One-Call, One-Click centers spread around the country to meet this need.

Today, the vision has expanded. Mobility Services for All Americans means exactly, that- whether the person is older, has a disability, or not, we are creating a world in which appropriate choices are made readily available to all travelers. This vision of Mobility on Demand, founded on creative partnerships and supported by technological systems and innovation is the logical next step in a movement toward universal mobility for all.