

MOBILITY ON DEMAND (MOD) PROGRAM



Photo Source: U.S. DOT

The U.S. Department of Transportation (U.S. DOT) uses the term Mobility on Demand (MOD) to represent its vision for future mobility. MOD envisions a safe, reliable, and carefree mobility ecosystem that supports complete trips for all, both personalized mobility and goods delivery. The U.S. DOT achieves this vision by leveraging innovative technologies and facilitating public-private partnerships to allow for a user-centric approach that improves mobility options for all travelers and delivery of goods and service.

The U.S. DOT's MOD Program is a multimodal program initiated by the Intelligent Transportation Systems Joint Programs Office (ITS JPO), Federal Transit Administration (FTA), and the Federal Highway Administration (FHWA) to study emerging mobility services; public transportation networks and operations; goods delivery services; real-time data services; and ITS that can enhance access to mobility, goods, and services for all.

Guiding Principles

- **User-Centric:** Promotes choice in personal mobility and uses universal design principles to satisfy the needs of all users.
- **Mode-Neutral:** Supports connectivity and interoperability where all modes of transportation work together to achieve the complete trip vision and efficient delivery of goods and services.
- **Technology-Enabled:** Leverages emerging and innovative use of technologies to enable and incentivize smart decision making by all users and operators in the mobility ecosystem.
- **Partnership-Driven:** Encourages partnerships, both public and private, to accelerate innovation and deployment of proven mobility solutions to benefit all.

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MOD PROGRAM

The MOD Research Program is an innovative, user-focused research initiative with a transformative approach to travel. It leverages emerging mobility services, integrated transportation networks and operations, real-time data, connected travelers, and existing transit services and infrastructure. The program is guided by three goals:

- **Goal 1:** Explore emerging technology solutions and new business approaches that have the potential to transform mobility services.
- **Goal 2:** Prepare the transportation industry to deliver innovative mobility solutions that will enhance transportation efficiency and effectiveness, improve customer service, and foster personal mobility and access to goods and services.
- **Goal 3:** Enable the widespread deployment of integrated mobility solutions that are connected, equitable, and effective to enhance the personal mobility of everyone and provide access to all users.



Recent Projects

The following are recent MOD research projects. For a full list of deliverables and resources, please visit the ITS JPO MOD Program website: www.its.dot.gov/research_areas/mod/index.htm.

MOD Business Model Analysis

This project identified and analyzed innovative business models where MOD solutions providers and transit agencies partnered to collectively deliver better service to travelers, while mutually benefiting from the partnership.

MOD Special Studies

This project investigated core enablers, challenges, opportunities, and solutions for MOD including:

- Opportunities for Supplementing Off-Peak Fixed-Route Transit
- Opportunities and Challenges of Shared Micromobility Infrastructure.

MOD Planning and Implementation

This project produced an inventory of best practices and tools that support the needs of agencies and local governments to effectively implement MOD solutions in their communities.

Mobility Marketplace

This project examined the concept of a mobility marketplace that connects users (people and goods) with service providers (public and private) in an efficient and productive manner.

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Sandbox Independent Evaluation

This project led the comprehensive independent evaluation of the MOD Sandbox demonstration projects. The MOD Sandbox Program provided a venue through which integrated MOD concepts and solutions—supported through local partnerships—were demonstrated in real-world settings.

Multimodal and Accessible Travel Standards Assessment

This project developed a framework to inform the selection and prioritization of standardization work needed to support the development, testing, and deployment of multimodal and accessible travel systems.

MOD Resources

Webinars

Access MOD webinar recordings and presentations from the 2017–2018 and 2019–2020 MOD webinar series: www.its.dot.gov/research_archives/mod/mod_resources.htm.

Publications

Download resources and publications for additional support in the adoption and deployment of MOD technologies, policies, and practices: www.its.dot.gov/research_archives/mod/mod_resources.htm.



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How to Get Involved

ITS JPO

Learn more about the MOD Program on the ITS JPO website: www.its.dot.gov/research_areas/mod/index.htm.

FTA

Explore additional innovative mobility research programs:
Integrated Mobility Innovation: www.transit.dot.gov/IMI
Accelerating Innovative Mobility: www.transit.dot.gov/AIM
MOD Sandbox: www.transit.dot.gov/research-innovation/mobility-demand-mod-sandbox-program



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For more information about this initiative, visit https://www.its.dot.gov/research_areas/mod/index.htm, or contact:

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