



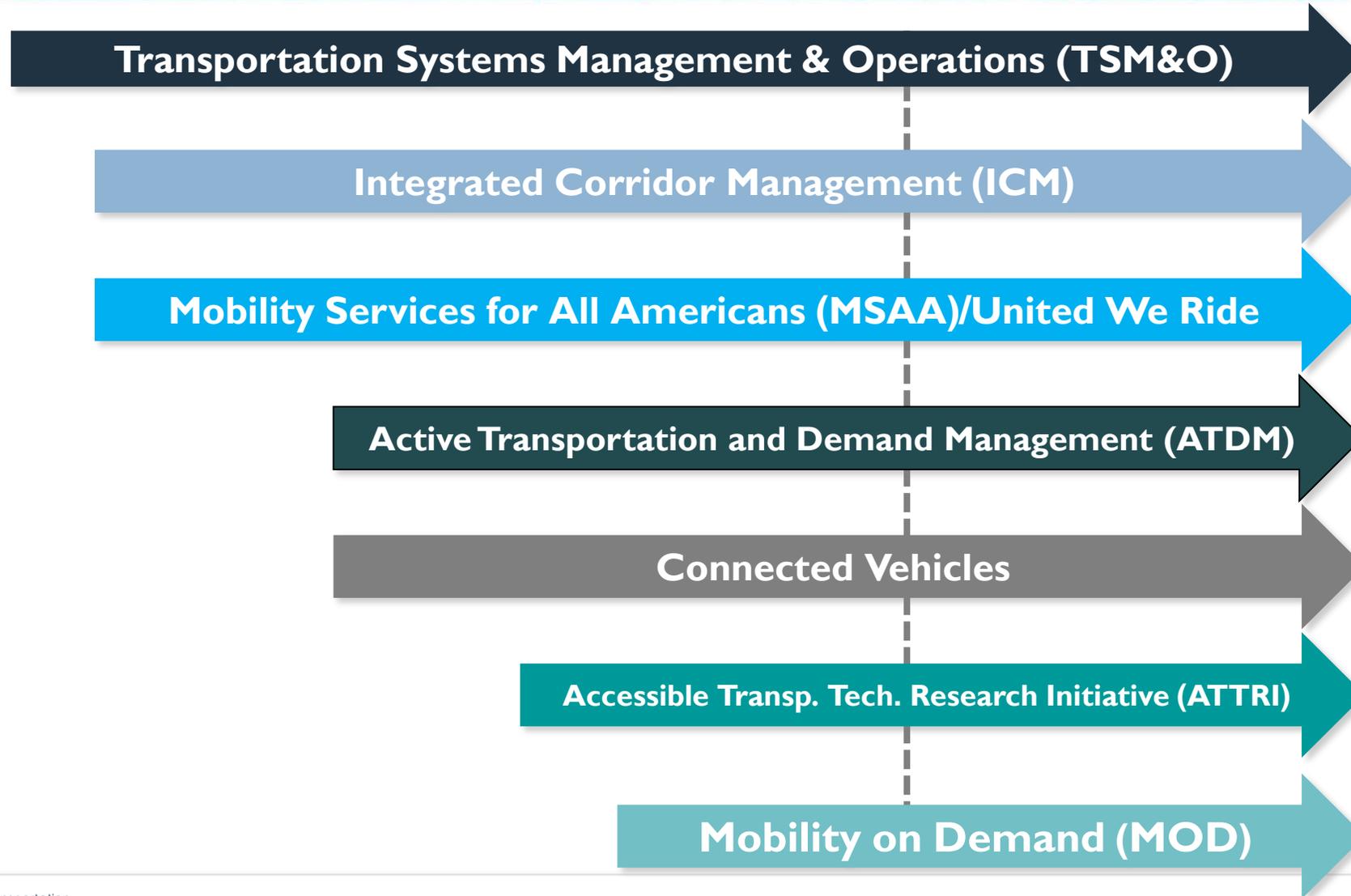
Introduction to Mobility on Demand (MOD)

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The Evolution of Mobility Research



Innovative partnerships and technologies are changing how we travel

- ▶ Transit agencies and state/local DOTs leveraging ridesourcing/TNCs, taxis, and volunteer drivers to address service gaps
- ▶ Integrated multimodal traveler information apps improving to include a variety of public and private options
- ▶ Carpool and ridesharing start-ups enabling high-occupancy commuting
- ▶ Auto manufacturers rebranding as mobility companies, acquiring start-ups, and pursuing self-driving vehicles



What is Mobility on Demand (MOD)?

The United States Department of Transportation (USDOT) 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. USDOT 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 services.



MOD Guiding Principles

- **User-centric** – promotes choice in personal mobility and utilizes 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.



What is Shared Mobility?

Shared mobility—the shared use of a vehicle, bicycle, or other mode—is an innovative transportation strategy that enables users to gain short-term access to transportation modes on an as-needed basis



Standards for Shared Mobility

- ▶ MOD program's Multimodal and Accessible Travel Standards Assessment (MATSA)
- ▶ SAE Standard J3194: Micromobility
- ▶ SAE Standard J3163: Shared Mobility
- ▶ TCRP G-16



MOD Enablers



Business Models & Partnerships

Strategic Partnerships
Financing
Incentives



Infrastructure

Land Use
Built Environment
Transportation Infrastructure
Curbspace management
Complete Streets



Policies & Regulations

Equity Considerations
Accessibility Considerations
Safety Considerations
Mobility Issues
Standardization



Emerging Technologies

Wireless Networks
GPS/Sensors
Big Data and Predictive Analytics
Mobile Devices
Machine Learning
Artificial Intelligence
Augmented/Virtual Reality



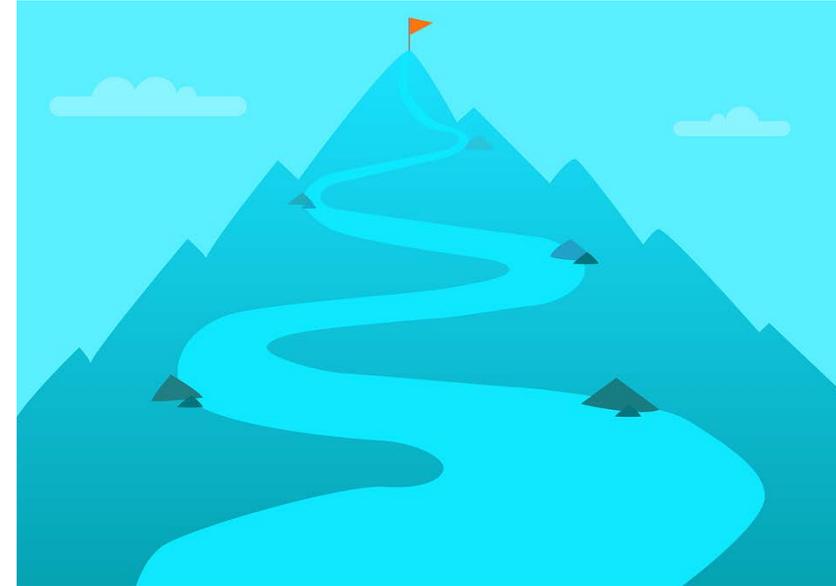


The MOD Program



MOD Program Goals

- ▶ **Explore emerging technology solutions and new business approaches**
- ▶ **Prepare transportation industry to deliver innovative mobility solutions**
- ▶ **Enable the widespread deployment of integrated mobility solutions**



Current Research Efforts

- Mobility Marketplace
- Planning and Implementation
- Special Studies
- Multimodal and Accessible Travel Standards Assessment
- Business Models
- Independent Evaluation (IE) of Federal Transit Administration's (FTA) MOD Sandbox

