

Mobility Management
Mobility on Demand
Mobility for All!

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Presentation Outline

MSAA
Evolution

Useful
Resources

The MOD
Evolution

MSAA
Current
Work

Mobility
Management/
MSAA
Connection

Mobility
for All

MSAA Background

80+ Federal programs fund transportation services for the transportation disadvantaged

- Pre-2004: FTA and DHHS Coordinating Council
- 2004: Transportation Coordinating Council on Access and Mobility (CCAM) established
- 2005:MSAA Launched by FTA/ITS-JPO
- 2006 – 2014: Foundational Research
- 2015: Current Round of Deployment Planning Grantees

MSAA's Goal: Use Service Coordination and Technology Integration to

- Increase mobility and transportation usability
- Increase effectiveness of mobility services
- More efficiently use Federal transportation funding resources

Intended Outcomes

- Enhance **customer experience**
- Improve **effectiveness** and **efficiency** of services
- Produce **sustainable institutional model(s)** enhanced by information technology
- **Data sharing** by addressing institutional barriers
- Utilization of **Intelligent Transportation Systems**

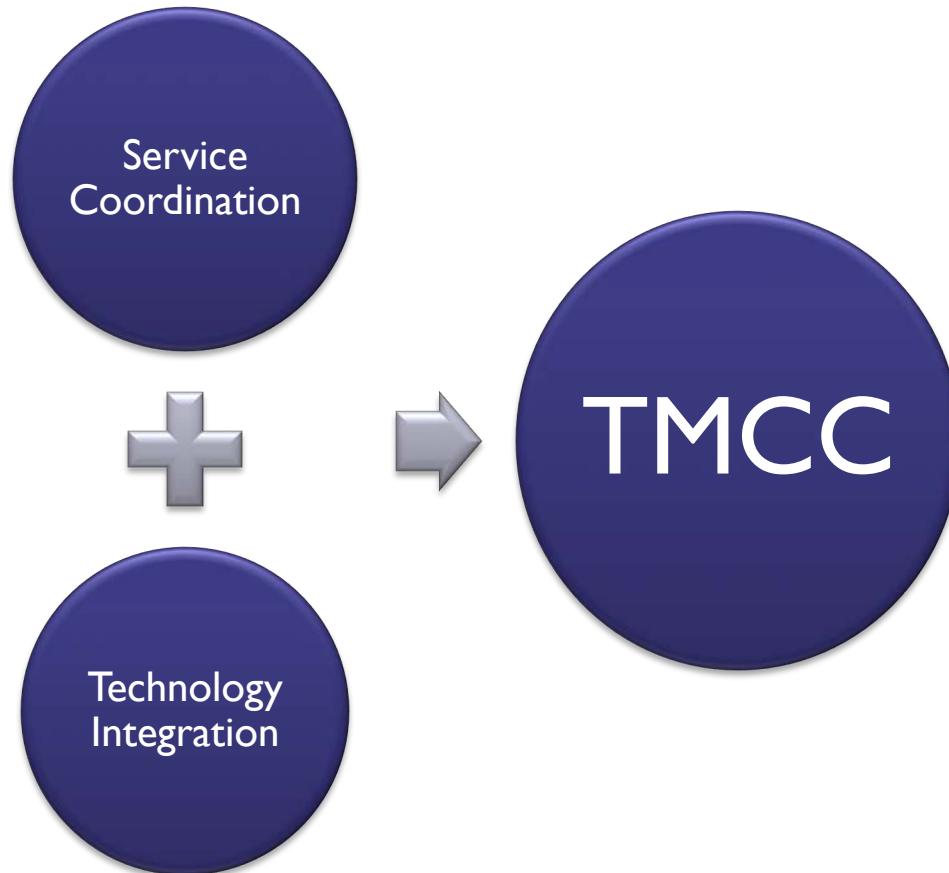
Advance the State-of-the-Art in

- Comprehensive traveler support
- Interoperable and coordinated transportation service operations and management
- Streamlined program management requirements

Data Sharing and Exchange Within HST

System interoperability by leveraging existing proprietary solutions

Travel Management Coordination Centers Bring it Together



Stage 0: Current Conditions.

- Things could be a lot better. Fragmented, hard-to-find, inefficient services.

Stage 1: System Interoperability.

- Single access point for travel needs. TMCC connects a traveler with various transportation needs. The ride is scheduled by the TMCC, the rider is notified before the ride will arrive.

Stage 2: Multi-Modal Accessibility and Traveler Connectivity.

- Universally accessible TMCC app or desktop software connects users to standing order trips or demand response trips. Personal and travel information is updated in real-time.

Stage 3: On-Demand Spontaneous Transportation.

- TMCC integrates on-demand travel. Two-way GPS locations are used to ensure connections. Upon requesting through the app, the nearest appropriate vehicle arrives.

Stage 4: Mobility for All.

- With MSAA and MOD improvements to person-centered travel options, barriers to mobility are eliminated. Enablers such as integrated payment, vehicle automation and accessibility-enhancing personal technology have come together to make the Complete Trip accessible for all people.

Who Benefits?

Customer

- Simplified Access
- Trip Planning
- Information

Provider

- Operational Efficiency
- More Service (rides) with Same costs & Resources

Human Service Program

- Streamlined program management, billing, and accounting

Deployment Planning Projects

Overcome **technical and institutional** barriers to promote **system interoperability**

- Involve at least two human service transportation programs and providers
- Establish operational **data sharing and coordination** between **multiple technology platforms**
- Demonstrate functional common fleet information platform

Spreading the Knowledge

Resources Developed to:

- Explain MSAA's Potential
- Build Stakeholder Support
- Plan, Design, and Deploy MSAA-style Systems

Knowledge Transfer Resources

Fact Sheets:

- MSAA: What it is? How's it done? How does it help?
- Tackling the Technology
- Getting Started, Getting Help: Supporting Resources

Articles

- Deploying Technology to Facilitate Service Coordination: Making it Work (state of the practice survey)
- Integrating Human Service Transportation in the Mobility on Demand (MOD) Future

Presentations

- Planning to Overcome Challenges: Systems Engineering in Brief
- Case Studies in Advancing Universal Mobility

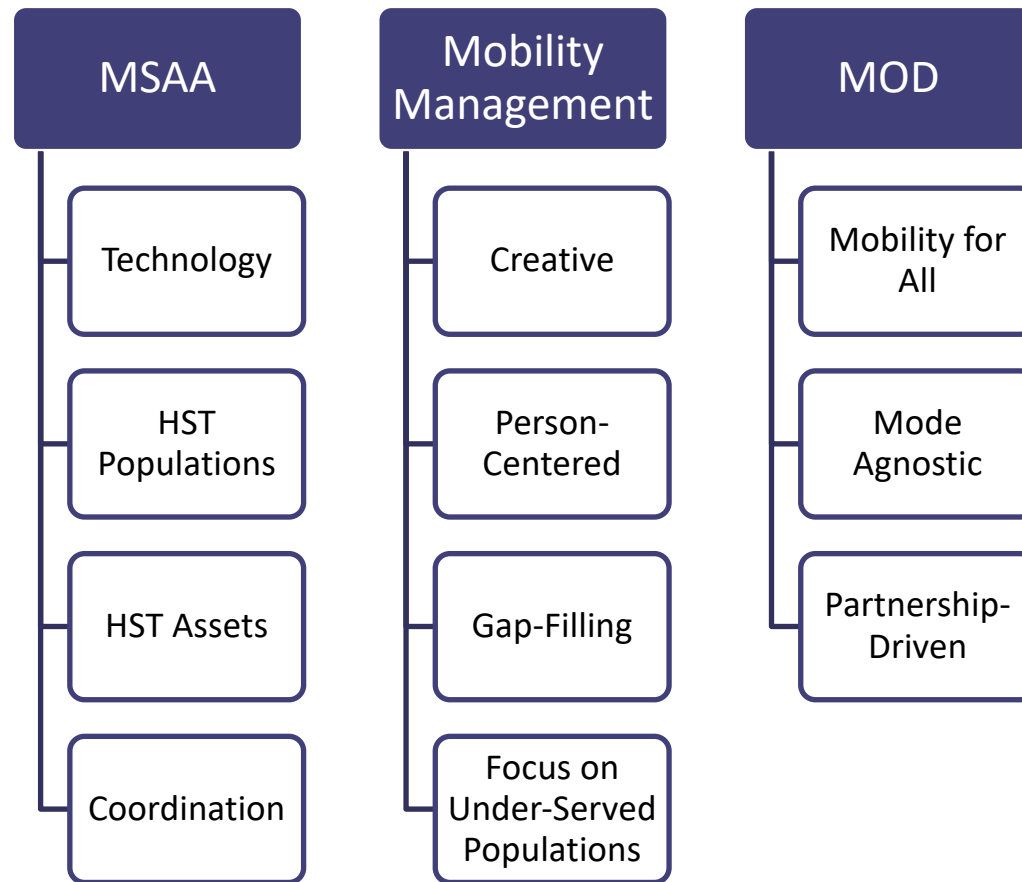
MSAA

- Using Technology
- Advancing Coordination
- Leveraging Human Service Assets
- Designing for People

Mobility Management

- Knowing Mobility Gaps
- Understanding, Maximizing Available Resources
- Creating New Options, Tools
- Focused on Under-Served Populations

Conjunction Junction



Mobility on Demand

MOD is a *vision* for an integrated **multi-modal** network of **safe, carefree, affordable,** and **reliable** transportation options that are **available to ALL**



Traveler-centric

Technology-enabled

Partnership-driven

Mode-agnostic

Future of Mobility

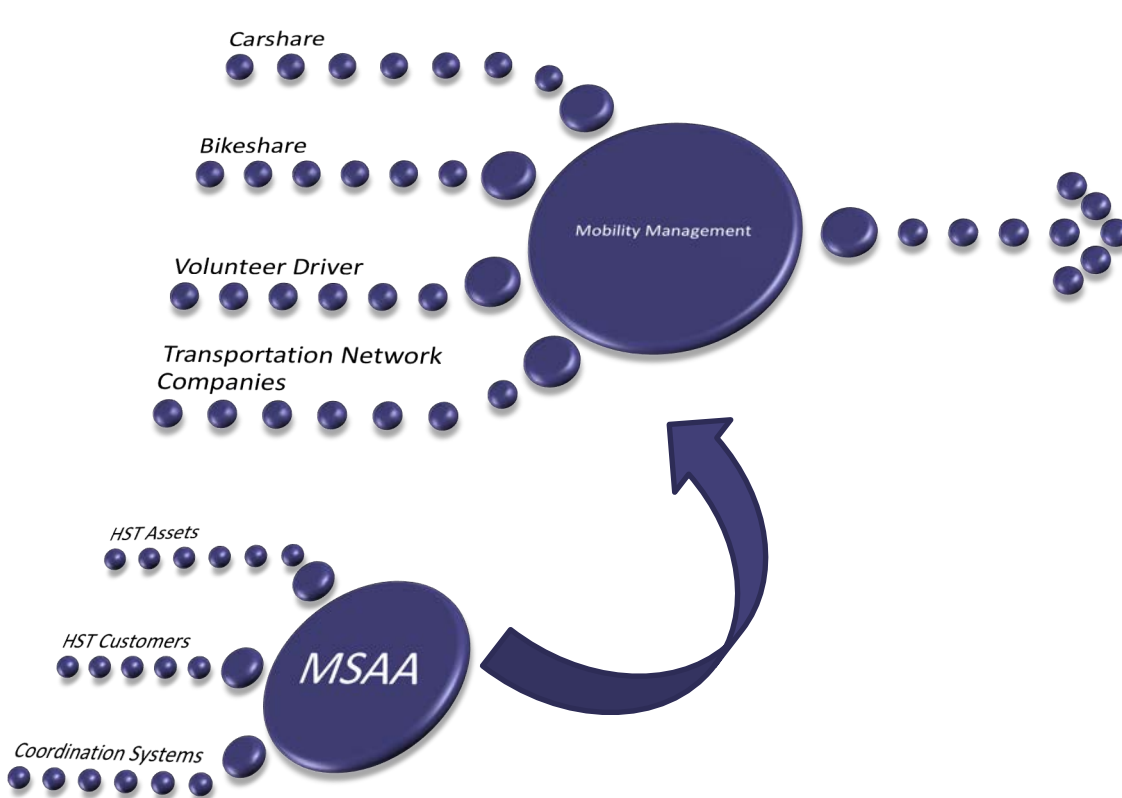


MCAA Supports Mobility on Demand

- Facilitating Inclusion of Human Service Transportation Resources
- Providing Options to Different Market Segments
- Connecting with HST Destinations
- Promoting Equity
- Encouraging Inclusiveness



Connection, Progression



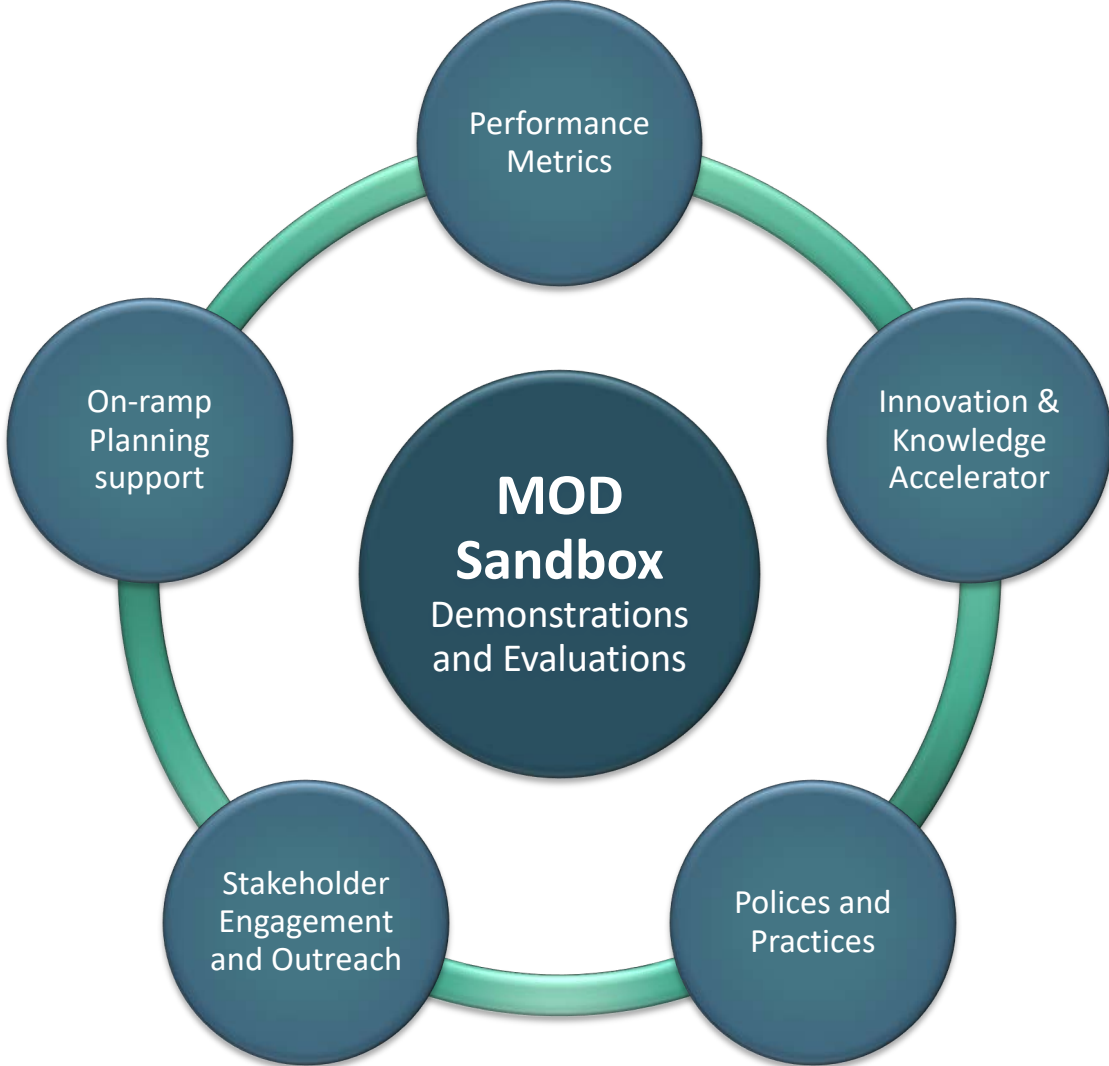
FTA Approach to Future Mobility

- **Explore emerging technology solutions and new business approaches**



- **Enable public transportation industry to adopt innovative mobility partnerships and solutions**
- **Facilitate widespread deployment of proven mobility solutions and partnerships**

FTA MOD Program Activities



2016 MOD Sandbox Program

- **11 projects** demonstrating different approaches, technologies
- Each project leads to **12-month demonstration**
- All projects include **independent evaluation**
- **\$8 Million in Section 5312 Research funds** (projects range from 200K to \$1.35M)
- Minimum 20-percent **local cost-share**
- **Providers of public transportation** with one or more **partners**
- **Competitive** process to select projects



Use Cases from the MOD Sandbox



Trip Planning/Payment Integration

Consolidates options for travelers to plan, book and pay for trips, often through mobile app



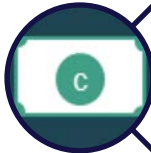
First/Last Mile

Bridges gaps in the traditional transportation network by providing trips to and from transit connections



Supplemental/Extended Service

Augments the traditional transportation network when transit service is insufficient or not available



Flexible Pricing /Incentives

Strategies to influence traveler choice on when or how to travel using incentives or games



Innovative Paratransit Services

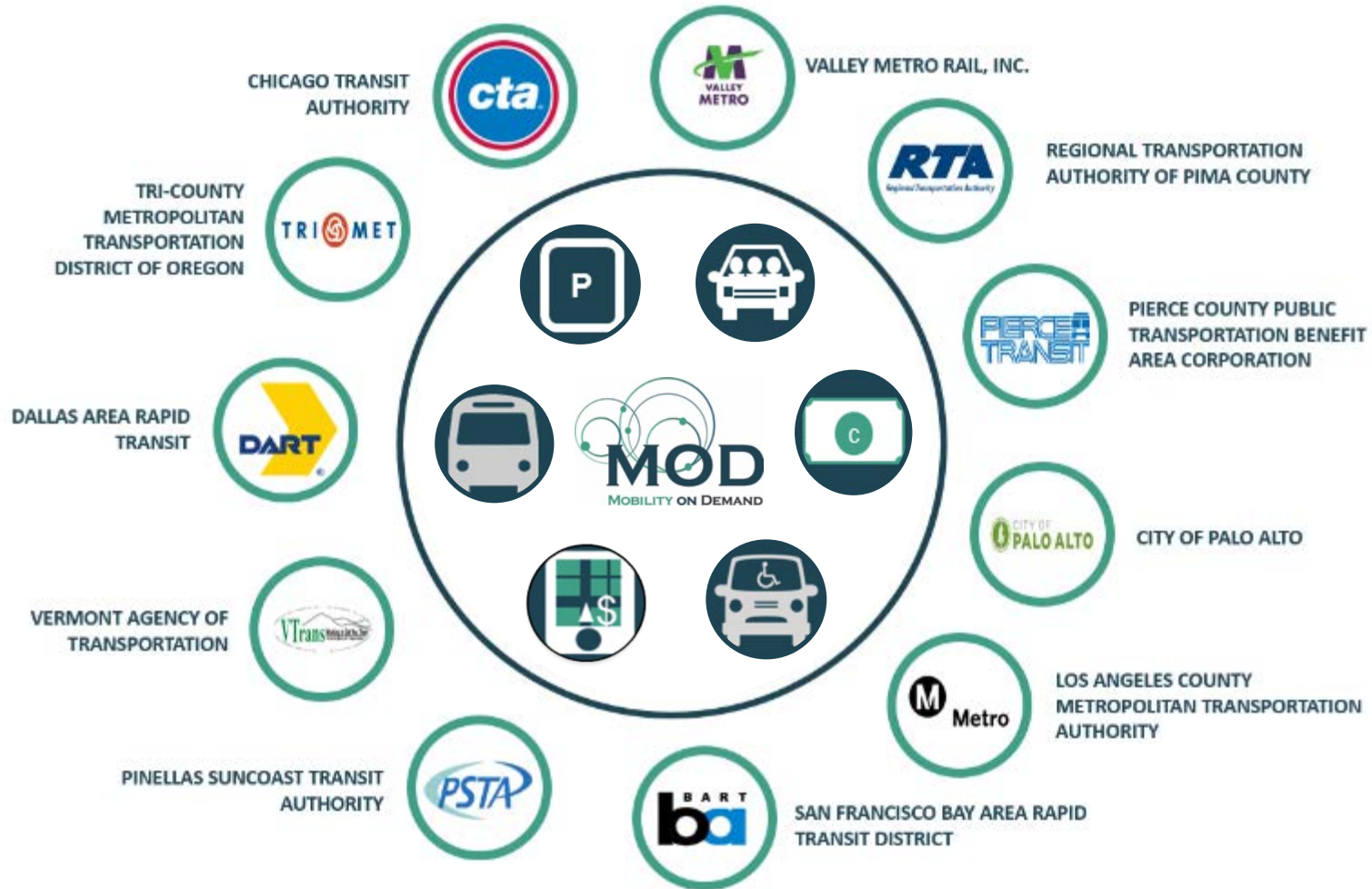
Technologies and tools to enable more flexibility to plan, request, and pay for paratransit trips, greatly reducing booking and response times, and costs



Parking Utilization

Strategies to help manage parking supply to optimize utilization and access to transit for more individuals

2016 Sandbox Projects At a Glance



Make the Connection Real

- See and design MSAA as part of the Mobility Management toolkit
- Leverage Human Service assets in coordinating efforts
- Take a broad view of Mobility on Demand