The Innovation Knowledge Accelerator: Tools for Mobility

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Shared-Use Mobility Center
February 2, 2018
Making it possible to live well without having to own your own car, by creating a multimodal transportation system that works for all
Connect public agencies and transit, community and private sectors to scale benefits of shared mobility for all.

Create tools for cities to share policies and best practices.

Serve as a clearinghouse through conducting innovative research with practical results.

Provide technical assistance for cities creating & testing shared mobility pilot projects.

Convene the public and private sectors through workshops and conferences.
Putting transit at the center

"...public transit is the backbone of an efficient, equitable transportation system."
Big Investments & Convergence in Carsharing, Ridesharing, and Autonomous Vehicles
A Growing Number of **Shared Mobility Companies**

- **400** Cities with Carsharing
- **300** Cities with Bikesharing
- **600** Cities with TNCs

2017
Key Findings: TCRP Report 188

- The more that people use shared modes, the more likely they are to use transit, own fewer cars, and spend less on transit overall.

- People that use 3+ shared modes ("supersharers") report greater transportation cost savings, own half as many cars as people who use transit alone.
Key Findings: TCRP TNC/Transit Study

- Evenings and weekends see heaviest TNC use across all regions

- Most TNC trips are short and concentrated in downtown cores

- But some level of use across all parts of all study regions: people of all incomes/backgrounds are using TNCs

- No clear relationship between peak-hour TNC use and changes in transit ridership but there is evidence that riders are substituting TNC’s for certain transit trips, esp. later at night
Levers of Change

• Pilots, Partnerships, and Best Practice Exchange

• Tools – Understanding Benefits and Opportunities

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Pilots, Partnerships, and Best Practices
SUMC’s FTA MOD “Innovation Knowledge Accelerator” Project

Compiling best practices and facilitating knowledge exchange between the MOD Sandbox grantees

Types of Public-Private Partnerships (P3’s) include:
- First/Last Mile
- Multi-Modal App/Payment Integration
- Carpooling/Ridesharing
- Demand Response and Paratransit
- Incentive Strategies
- Expanded Services
MOD Sandbox At a Glance

- Chicago Transit Authority (CTA)
- Valley Metro Rail, Inc.
- RTA
- Pierce County Public Transportation Benefit Area Corporation
- Portland TriMet
- Dallas Area Rapid Transit (DART)
- OnRT
- CVLink
- Surdco
- Los Angeles County Metropolitan Transportation Authority (LA Metro)
- San Francisco Bay Area Rapid Transit District (BART)
- PSTA
- Valley Metro Rail, Inc.
- Vermont Agency of Transportation
- Tri-County Metropolitan Transportation District of Oregon
- St. Louis County Metrolink
- Philadelphia Southeastern Pennsylvania Transportation Authority (SEPTA)
- VTA
- Washington Metropolitan Area Transit Authority (WMATA)
- Miami-Dade County Public Transportation (Miami-Dade Transit, MDT)
- Baltimore Washington Metropolitan Area Rail Commuter (Metro North, MTA-NYCT, NJT)
Tracking Public Private Partnerships

Source: Mobility Rush and Shared Mobility Policy Database

Partnerships by Mode, 2002-2017
Shared Mobility Toolkit
SUMC's Shared Mobility Toolkit is designed to help cities and public sector leaders better realize the benefits of shared mobility.

**Shared Mobility Policy Database**
Features more than 700 of the most important shared mobility policies, studies and strategic plans in the United States. The database allows cities to access best practices and determine how other local governments are addressing new developments in shared mobility.

**Mapping & Opportunity Analysis Tool**
Pinpoints shared mobility vehicle locations in more than 50 North American cities. The tool also incorporates census data, transit quality, and other information to help cities better understand where greater service is needed, and what shared modes the market can support.

**Shared Mobility Benefits Calculator**
Models the impacts of shared mobility growth scenarios. Cities can use the calculator to assess potential decreases in greenhouse gas emissions, reductions in vehicle miles traveled and other benefits from implementing various transportation improvements.
Policy Database Content

Over 800 State and Local Policies related to Shared Mobility
In Depth Case Studies & MOD Webinars

Shared Mobility Policy Database

MBTA RIDE P3 Partnerships: Lyft/Uber and Centralized Call & Control Center for Paratransit Services

*New* Marketing Mobility on Demand Projects

*New* Webinar: Shared Mobility for People with Disabilities -- Challenges and Opportunities for Paratransit


Webinar Overview

The webinar brought together leading public sector experts to discuss new approaches transit agencies are exploring to increase flexibility and responsiveness of paratransit services for users while reducing costs and complying with Americans with Disabilities Act (ADA) requirements. This public webinar was part of the Federal Transit Administration-supported Mobility On Demand (MOD) Sandbox Information Knowledge Accelerator (IKA) aimed at supporting current and future MOD projects.

The Mobility on Demand innovation and Knowledge Accelerator is operated as a cooperative agreement between the Shared-Use Mobility Center and the Federal Transit Administration Mobility On Demand Sandbox project.

The Webinar Recording & Presentations are Available for Download Here:

Download the Presentations without Audio
View the Webinar Recording

Webinar Details

Welcome & Overview of Mobility On Demand (MOD) & Accessibility Considerations - Sharon Fegran, Executive Director, Shared-Use Mobility Center

Sharon moderated the webinar and offered an introduction to ways different MOD strategies and can be used to serve persons with disabilities.
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Over 50 Across North America

Scan of Existing Conditions & shared Mobility Opportunities
Existing Shared Mobility Conditions & Opportunities

Current Shared Mobility & Opportunities

Los Angeles may be known for its auto culture, but the city has been adopting shared-use mobility at a fast pace. Transit expansions over the past decade, combined with bicycle improvements and the resurgence of a walkable downtown, have made living and working in LA without a vehicle easier than ever. There is a modest carshare fleet in the city, but plans to grow its fleet with electric vehicle technology are underway. The State of California’s early adoption of a regulatory structure for ridehailing companies made LA a very active carshare market. Bike share is planned for LA in 2016. Additionally, the City of LA received a $1.67M grant from the California Air Resources Board to launch an electric vehicle carshare pilot program in low-income communities.

Comparing to Income Levels

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**Shared Mobility Benefits Calculator**

Shared mobility is a powerful tool cities can use to reduce congestion and household transportation costs.

Use the calculator below to explore the benefits of pursuing shared mobility. Simply select a personal target vehicle reduction goal, view or adjust the optimal mix of shared modes to account for your specific planning needs, and quickly assess the benefits of implementing transportation improvements.

### To reduce personal vehicles by 5% - 4,541 vehicles in Kansas City

<table>
<thead>
<tr>
<th>Mode</th>
<th>Additional units</th>
<th>Adjust the mix</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transit commuters</td>
<td>1,498</td>
<td></td>
<td>46,793,600 fewer miles traveled</td>
</tr>
<tr>
<td>Carshare vehicles</td>
<td>379</td>
<td></td>
<td>16,800 fewer metric tons of GHG</td>
</tr>
<tr>
<td>Shared bikes</td>
<td>500</td>
<td></td>
<td>$16,496,900 saved in personal</td>
</tr>
<tr>
<td>Ridesharers/carpoolers</td>
<td>734</td>
<td></td>
<td>vehicle transportation costs</td>
</tr>
</tbody>
</table>
Shared Mobility
Action Plans
The Toolkit and Shared Mobility Action Plans
Minneapolis-St. Paul Action Plan

Remove **20,000** Cars from Minneapolis/St. Paul Cities

- 30k Transit Riders
- 600 Carshare Vehicles
- 800 Bikeshare Bikes
- 1,000 Vanpool Users
- 2,000 Microtransit & Ridesplitting Users

Could Save

- 200 million VMT
- 80,000 metric tons GHG
- $70 million annual household costs
Austin Texas Shared Mobility Roadmap

Shared Mobility Benefits Calculator

TO REDUCE PERSONAL VEHICLES BY 20% IN AUSTIN...

- 36,507 Transit Commuters
- 17,889 Rideshare/Carpoolers
- 9,238 Carshare Vehicles
- 6,748 Shared Bikes

= 1,140,027,400 Fewer miles traveled by personal vehicles

= 409,100 Fewer metric tons of GHG emissions related to personal vehicle ownership

= $401,912,300 Saved in personal vehicle transportation costs

Graphic recreated, with permission, from “Shared Mobility Benefits Calculator,” Shared-Use Mobility Center.
Prioritize People

Active transportation infrastructure

Remaking Parking Lots: No minimums

Pedestrian streets

BRT Lanes prioritize transit, active modes
Thank you!

Brian Holland
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