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Shared Mobility: Current Practices and Guiding Principles Brief

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Overview of Shared Mobility Services

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. The term shared mobility includes various forms of carsharing, bikesharing, ridesharing (carpooling and vanpooling), and on-demand ride services. It can also include alternative transit services, such as paratransit, shuttles, and private transit services (called microtransit), which can supplement fixed-route bus and rail services. With diverse options for mobility on the rise, smartphone apps that aggregate these options and optimize routes for travelers are also proliferating. In addition to these emerging travel modes, innovative ways of transporting and delivering goods are evolving. These courier network services have the potential to change the nature of the package and food delivery industry, as well as the broader transportation network. Shared mobility is playing a transformational role in many global cities by enhancing transportation accessibility, while simultaneously reducing driving and personal vehicle ownership.

Source: Thinkstock.com

Impacts of Shared Mobility

A number of environmental, social, and transportation-related benefits have been reported from the use of shared mobility modes. Several studies have documented reduced vehicle use, ownership, and vehicle miles/kilometers traveled due to carsharing and bikesharing, for instance. For example, the most current studies and member survey results released by U.S. and Canadian carsharing organizations show that up to 32 percent of carsharing members sold their personal vehicles, and between 25 percent and 71 perc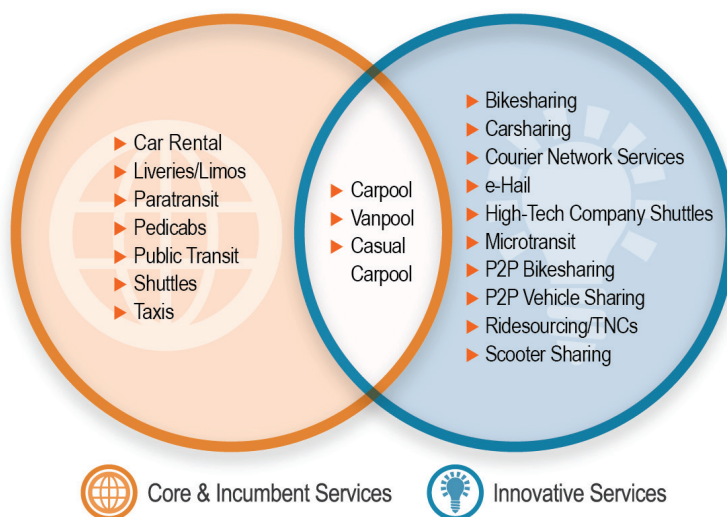ent of members avoided an auto purchase because of carsharing. Cost savings and convenience are frequently cited as popular reasons for shifting to a shared mode. Shared mobility can also extend the catchment area of public transit, potentially helping to bridge gaps in existing transportation networks and encouraging multimodality by addressing the first-and-last-mile issue related to public transit access. Shared mobility can also provide economic benefits in the form of cost savings, increased economic activity near public transit stations and multimodal hubs, and increased access by creating connections with origin points not previously accessible via traditional public transportation.

The Role of Public Agencies

Local and regional governments are common public partners to shared mobility operators because of their role in transportation planning, public transportation, and parking policy. Nine common areas that impact local and regional governments and shared mobility include:

▸ Health, Safety, and Consumer Protection

▸ Taxation

▸ Insurance

▸ Parking and Access to Rights-of-Way

▸ Signage and Advertising

▸ Multimodal Integration

▸ Planning Processes

▸ Data Sharing, Privacy, and Standardization; and

▸ Accessibility and Equity Issues.

The full primer is available at the following link: http://www.ops.fhwa.dot.gov/publications/fhwahop16022/index.htm

SHARED MOBILITY SERVICE MODELS

Core & Incumbent Services:
▸ Car Rental
▸ Liveries/Limos
▸ Paratransit
▸ Pedicabs
▸ Public Transit
▸ Shuttles
▸ Taxis

(Overlap):
▸ Carpool
▸ Vanpool
▸ Casual Carpool

Innovative Services:
▸ Bikesharing
▸ Carsharing
▸ Courier Network Services
▸ e-Hail
▸ High-Tech Company Shuttles
▸ Microtransit
▸ P2P Bikesharing
▸ P2P Vehicle Sharing
▸ Ridesourcing/TNCs
▸ Scooter Sharing

Core & Incumbent Services   Innovative Services

Challenges

As with all new disruptive technologies and business models, there are challenges to shared mobility's growth and expansion. Key challenges include:

▸ Recognizing the need for consistent public and private sector standards and definitions across a suite of shared mobility service models that guide public policy and distinguish between types of services for users;

▸ Developing metrics, modeling, planning platforms, and methodologies to measure the economic and travel impact of shared mobility, such as VMT/VKT, person miles traveled, and commute travel time, and incorporating these data into land use and transportation planning;

▸ Recognizing shared mobility as a key component of transportation policy and planning;

▸ Encouraging multimodal integration;

▸ Addressing potential accessibility issues as the systems expand and evolve (e.g., Americans with Disabilities Act (ADA); environmental justice (EJ); and the digital divide);

▸ Understanding insurance issues (e.g., regulation, availability, and affordability) across a wide array of existing and emerging shared business and service models; and

▸ Balancing data sharing (open data) and privacy for individual users and service providers.

Guiding Principles

It is helpful for public agencies to recognize several guiding principles when considering the role and implementation of shared mobility in a community:

1. **Shared mobility impacts everyone, not just users**. Because of its impacts on the transportation network and the environment, shared mobility affects an entire community, particularly at the local and regional level.

2. Shared mobility can be confusing for the public and policymakers. **Clear and consistent definitions** can help to reduce confusion about modes and service models.

3. Public agencies should **embrace public and private collaboration**. Public-private partnerships can lead to a stronger, more robust transportation network that contributes to access, livability, and quality of life.

4. **Public participation is key**. It is important to inform and involve the public in planning processes and to listen to the public's concerns in implementing shared mobility services.

5. **Public agencies should collect data and consider compulsory reporting requirements**. Data are critical to understanding and managing the impacts of shared mobility on the transportation network. Public agencies should establish data repositories and collect data to evaluate impacts and system performance. Public agencies may consider requiring data reporting by the private sector for this purpose.

6. **Incorporate shared mobility into transportation planning**. Transportation planners and policymakers should incorporate shared mobility into models and plans, particularly in light of their potential impacts on the transportation ecosystem and land use in the future (e.g., reduced auto ownership).

7. **Transportation should be accessible and equitable**. People are entitled to reasonable access to transportation services. Public agencies should ensure social, interregional, and intergenerational equity to meet the basic transportation needs of travelers.

8. **Shared mobility continues to evolve, and tracking these developments and its growth and impacts is important** in managing these emerging services and **developing sound policies for managing rights-of-way and public-private partnerships**.

Learn More on Active Transportation and Demand Management

Active transportation and demand management (ATDM) can include a variety of approaches, such as shared mobility, to manage, control, and influence travel demand across the transportation network. Improvements in mobile technology, the growth of social networking, and increased demand for real-time information support the evolution and development of shared mobility as part of the overall ATDM Knowledge and Technology Transfer program. For more information about ATDM, please visit the following link: http://ops.fhwa.dot.gov/atdm/

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