Connect public agencies and transit, community and private sectors to scale benefits of shared mobility for all

Serve as a clearinghouse through conducting innovative research with practical results

Create tools for cities to share policies and best practices

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

Convene the public and private sectors through workshops and conferences

**Expanding the benefits of shared mobility for all**
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
What is shared mobility & why is it important?
Decline in Driver’s Licensing

Baby Boomers Aging

Ubiquitous Connectivity

Autonomous Technology Expanding Fast

Growth of Active Transportation

Changing Work and Travel Preferences
Shift from the vehicle ownership

95% 5% 1,2

to vehicle "usership"

Google Z

Hytch

TURO

www.lvm.fi 21.5.2015
Traffic Congestion

Infrastructure Challenges due to Climate Change

Job Access Challenges

Suburbanization of Poverty
A Growing Number of Shared Mobility Companies

[Map of the United States showing various shared mobility companies and services]
AVs: Partnerships & Convergence

- Volvo and Uber entered into a $300 million joint venture to develop a fully autonomous car by 2021.
- Toyota and Tata (Owner of Jaguar Land Rover) have invested in each other after teaming up in China.
- Ford is among five investors who provided $6.6 million in seed funding for Civil Maps.
- GM invested $500 million in Lyft and bought Cruise Automation for $1 billion.
- Velodyne Lidar has a licensing agreement with Nirenberg Neuroscience.
- Ford and Baidu each invested $75 million in Velodyne Lidar.
- Apple invested $1 billion in Chinese ride-hailing company Didi, which partners with Lyft.

Network:
- Volvo, Tata, Toyota, Fiat Chrysler, Microsoft, Google, Uber, Civil Maps, SAIPS, Chariot, Lyft, Didi, Uber China, Sidecar, GM, Cruise Automation, Apple, Nirenberg Neuroscience
WHY DO WE NEED SHARED-USE MOBILITY?

- Reduces reliance on private autos
- Serves non-work trips (80% of total)
- Connects jobs + housing
- Can be implemented quickly
- Increase access to affordable transportation options
- Complements public transit
The more people use shared modes, the more likely they are to use transit, own fewer cars, and spend less on transportation overall.

“Supersharers” report greater transportation cost savings, and own half as many cars as people who use transit alone.
• Typical TNC trips are between 2-4 miles long (TCRP J11 Task 25)

• TNC use is heaviest during evening hours and weekends (TCRP J11 Task 25)
Shared, Autonomous Vehicles
• Add autonomous vehicles to the mobility mix
• Support active transportation choices
• Take advantage of opportunities to reshape and reimagine our communities
Shared AVs

- FEWER CARS
- REDUCED CONGESTION
- CLEANER AIR
- BETTER LAND USE

Privately Owned AVs

- "ZERO OCCUPANCY CARS"
- MORE CARS & TRAFFIC
- MORE POLLUTION
- MORE SPRAWL
How can we help:
- People with limited mobility
- Senior citizens
- Low-density areas
- Bad jobs access
Shared mobility & autonomous vehicles: Where do we want to go?
Plan for people, not cars
How do we get there?
AV Scenarios: Heaven

- Shared, Electric, and Autonomous Vehicles
- More street space dedicated to people
- Less dependence on private automobiles
- Greater transportation access for all
- Reduced GHG emissions and congestion in cities

What’s required for this to happen:
- Create supportive regulation for shared and electric autonomous vehicles
- Regulations to deter “zombie” cars through pay per mile fees
- Establish affordable pricing and public subsidies for shared AVs
- Public-private partnerships across OEMs, shared mobility providers, and public agencies
- Testing and investing in shared modes, such as AV shuttles and transit
- Land use regulations that support road diets and prioritize active modes
Make infrastructure & land use changes

- Mobility hubs
- Dedicated street, curb space
- Remaking parking lots: No minimums
- Active transportation oriented infrastructure
- BRT lanes prioritize transit and active modes
Key Scenarios: Hell

- Zero-occupancy vehicles (Zombie cars)
- Increased dependence on cars
- Greater social inequality in transportation
- Increased congestion and GHG emissions

What’s required for this to happen:
- Do nothing! Stick to single occupancy vehicle-oriented model
- Allow private interests to drive policy & market
- Lack of regulations on zero occupancy vehicles, autonomous freight
- Public use of street space not prioritized
States, cities and regions serving as mobility managers & brokers

Public entities need to ensure that benefits are widely and equitably shared.
The Future: Shared, Electric, Autonomous and Interconnected

Our Solution – The Netflix of Transportation

What if all transportation was converged... ...and tailored to your need as monthly packages?
Questions to Resolve

Street space, highway space:
• Who gets what and when? Who gets access to the curb?

Future of jobs:
• Where are new jobs located and who pays for the transportation?

How do we scale up and market new approaches?
• Can we break down silos and work together through P3s?

How do we face challenges in an emerging market?
• Companies come and go
• Data sharing needs
• Integrating modes requires agreements across jurisdictions, agencies, departments – many stakeholders
IT’S ABOUT THE PEOPLE
Thank you.

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