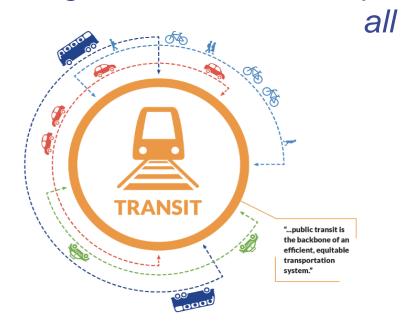


Overview

- About the Shared Use Mobility Center
- Lessons from recent mobility pilots
- The evolving agency role: models and risks

Shared-Use Mobility Center

Creating a multi-modal transportation system that works for



Annual Summit - March 5, 2019

Recent Studies

- TCRP 195: TNCs + Transit
- TCRP 196: Private Transit
- European Shared Mobility Best Practices (for FHWA)

MOD Learning Center

Clearinghouse of policies, tools, and best practices

Technical Assistance & Pilots

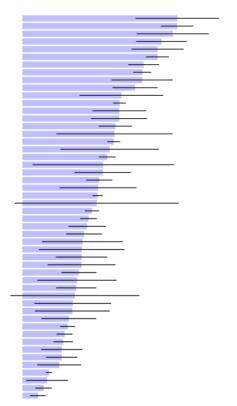
- Providing support + evaluation in 25+ cities
- FTA MOD Sandbox Innovation & Knowledge Accelerator
- MOD On-Ramp: bringing promising MOD concepts to reality
- All-EV carsharing in low-income areas
- Twin Cities and LA Shared Mobility Implementation Plans

New Evidence on New Mobility Penetration

% of metro area residents who used ridesourcing in past month

NHTS 2017
in Conway, Salon, & King, 2018. "Trends
in Taxi Use and the Advent of
Ridehailing, 1995–2017: Evidence from
the US National Household Travel
Survey." Urban Sci. 2, no. 3: 79.

Boston-Cambridge-Newton, MA-NH Washington-Arlington-Alexandria, DC-VA-MD-WV Miami-Fort Lauderdale-West Palm Beach, FL Denver-Aurora-Lakewood, CO San Jose-Sunnyvale-Santa Clara, CA Los Angeles-Long Beach-Anaheim, CA San Diego-Carlsbad, CA New York-Newark-Jersey City, NY-NJ-PA Chicago-Naperville-Elgin, IL-IN-WI Seattle-Tacoma-Bellevue, WA Tampa-St. Petersburg-Clearwater, FL Atlanta-Sandy Springs-Roswell, GA Baltimore-Columbia-Towson, MD Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Phoenix-Mesa-Scottsdale, AZ Louisville/Jefferson County, KY-IN Austin-Round Rock, TX Orlando-Kissimmee-Sanford, FL Sacramento-Roseville-Arden-Arcade, CA Providence-Warwick, RI-MA Raleigh, NO Charlotte-Concord-Gastonia, NC-SC Columbus, OH Dallas-Fort Worth-Arlington, TX Milwaukee-Waukesha-West Allis, WI Houston-The Woodlands-Sugar Land, TX St. Louis, MO-IL Minneapolis-St. Paul-Bloomington, MN-WI Pittsburgh, PA Birmingham-Hoover, AL Hartford-West Hartford-East Hartford, CT Las Vegas-Henderson-Paradise, NV Detroit-Warren-Dearborn, MI Nashville-Davidson-Murfreesboro-Franklin, TN Jacksonville, FL Oklahoma City, OK Cleveland-Elyria, OH Indianapolis-Carmel-Anderson, IN Kansas City, MO-KS San Antonio-New Braunfels, TX Riverside-San Bernardino-Ontario, CA Portland-Vancouver-Hillsboro, OR-WA Salt Lake City, UT Grand Rapids-Wyoming, MI Cincinnati, OH-KY-IN MSAs less than 1 million Memphis, TN-MS-AR Buffalo-Cheektowaga-Niagara Falls, NY Rochester, NY





Lessons from recent Pilots: MOD Sandbox

Service Pilot Partnerships: Transit Agencies with Tech Companies







- Public records laws predate big data; need modernization to protect PII and trade secrets
- Third-party repositories being explored



WAVs

- Equity of service delivery is challenging to provide
- Many projects using third-party or in-house vehicles



- Business Models: Different Cultures and Workflow
 - Business models alignment with public sector interests
 - Rapid changes
 - Custom development for small pilots can be big effort
- Constant evolution of business models and companies SHARED-USE









Lessons from recent Pilots: MOD Sandbox

Integrated Trip-Planning Apps

- Comapneis challenge easy price & time comparisons between competitors in single app but possible
- Smaller mobility providers more open to API integration
- Lack of open API requirements or incentives will be a persistent hurdle for full mobility integration
- Integration within different public systems complicated and human services providers add new layers SHANDING hurdles













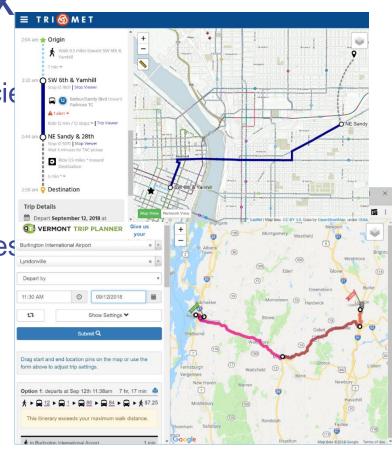


Implementation of Trip Planning Makes a Difference: MOD Sandbox

Open-Source Trip Planning Apps

- Create architecture to allow multiple agencie to use and build on
- TriMet: Multiple modes onto one platform
- VTrans: GTFS-Flex for fixed + DRT services
 - Beta statewide trip planner <u>up and running</u>
 - Small towns, rural
- European Models interesting examples





Lessons from other Service Pilots

- Productivity of TNC/taxi/microtransit varies widely
 - F/L mile, low-density. late night, and underserved areas
 - Takes time involves customer and agency behavior change
- On-demand paratransit a reality, with potential for improved service and lower cost

Data sharing agreements vary broadly by project,

agency, provider - no best practice vet







Lessons from Pilots: Beyond Sandbox

- TNC services—best as feeder services w/focus on specific populations or places or complicated routes
- Microtransit needs some level of density, but works best when small vehicle is preferred and fixed route challenging
- Bikeshare can extend and replace (for some) transit system. Works best when easy connections and management of availability and safety

 Carshare: more one-way & two-way models developing, use for EV testing and TNC drivers –longer rides (VW Settlement funds expanding availability of charging infrastructure)

Scooters

- Unexpected arrival upending mobility world just getting used to TNCs
- Huge potential in core cities, whole news set of ROW issues







Brokers, Convenors, and Integrators

- Connecting across services & modes: public & private, DRT, shared use,
- Next Frontier- adding social services/NEMT
- Connecting a variety of agencies
 - MPOS, City DOT's, Regulatory Agencies
- Private mobility service regulation
 & coordination
 - Rights of Way --access (curbs, streets, sidewalks, EV charging)
 - AV approaches

- Start staking out a role now on key issues:
 - Data Management: volumes continue to increase dramatically.
 - Establish standards and goals to start incorporating into procurement: service discovery, transactions & reporting, provider fairness across vendors
 - Next wave of preemption pushes will be on connected & AV policy. What are public goals and implications here?



SHARE POPULITY CENTER

The Evolving Agency Role: Risks

Risk if don't invest in core service – wake up call to transit- FIX IT NOW Or lose customer base

Risks to agencies betting heavily on MOD to move customers

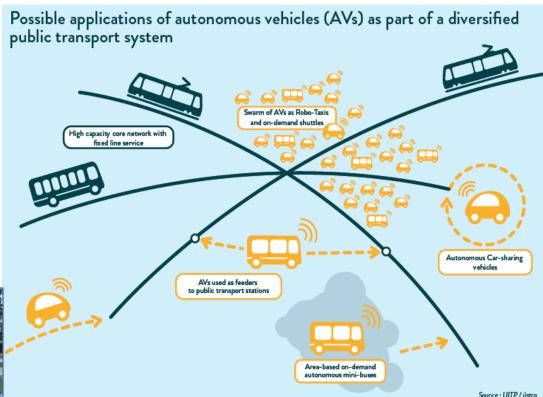
 VC evaporates—TNC fares, other private company fares increase dramatically or SHARROLL STOLLAND altogether

- Nimbleness cuts both ways
 - Relying on the market to supply services—they can disappear as quickly as they show up
 - Procurement/contracting trades speed for predictability
- Two-tiered system: different "services" for different classes of people.

Evolving Transit Agency: Addresses Core plus Choice

Fundamentals working well
Partnership with customers
Frequency and Reliability
Connectivity between
housing and jobs
Travel time competitive
Layer on Multi Modal Options
and Automation







Bringing it Together: Many Options







Sharon Feigon, Executive Director sharon@sharedusemobilitycenter.org