Presenter Introductions

Todd Hansen

Associate Research Scientist

Transit Mobility Program

Texas A&M Transportation Institute

Agenda

- Study Overview

  - Project goals

  - Your role

  - Shared-use mobility & rural transportation needs and challenges

- Small Group Breakouts

Project Goals

- To provide state DOTs, public transportation providers, and other local government agencies and stakeholders in less-populated areas with the tools and information necessary to better facilitate the implementation of viable, scalable shared-use mobility (SUM) service.

- Products

    - Final Report

    - Implementation Guidebook

Your Role Today

Learn about the project

Provide input to the small group breakouts

Your Input Will Help Guide:

- The remainder of the project (what do we focus on?)

- Guide the content and structure of the Guidebook

What's Shared-Use Mobility?

- Transportation services (including but beyond public transit) that are designed to provide users with mobility on a vehicle (or other conveyance) on an as-needed basis (without having to own the vehicle).
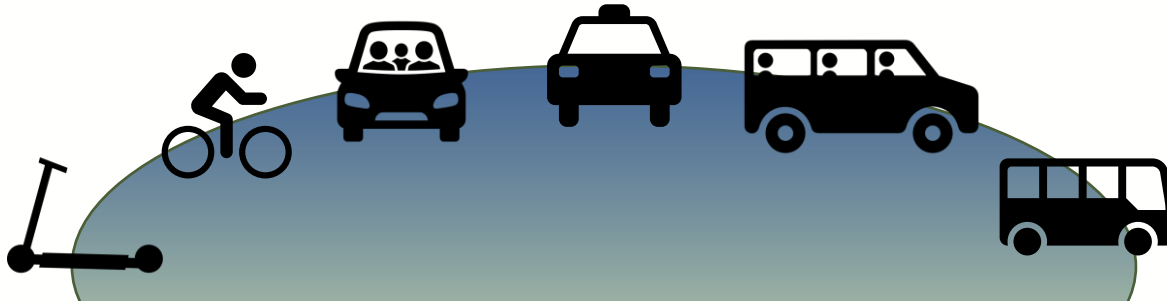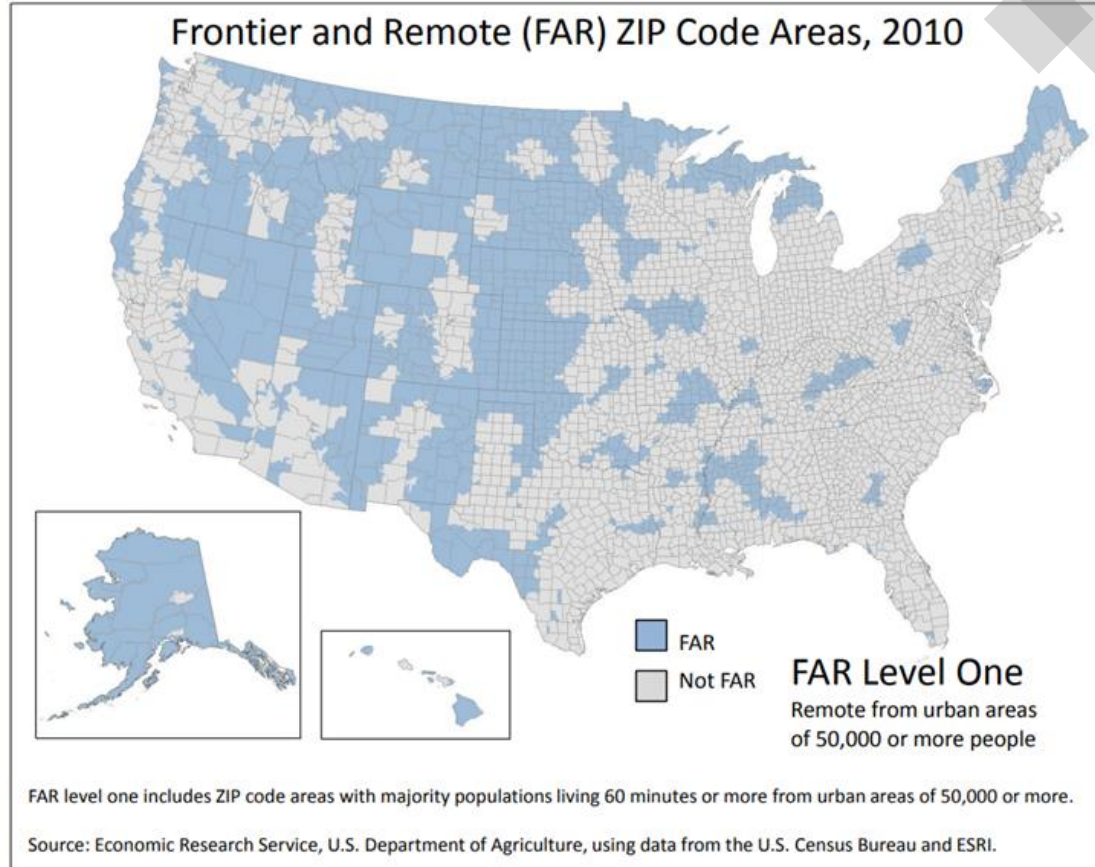
What Does On-Demand Mean?

- Shared mobility: "The shared use of a travel mode that provides travelers with access to a transportation mode on an as-needed basis"

- On-demand: "The ability to reserve or dispatch a service upon request by users"

- Mobility on Demand (MOD): an interconnected and coordinated mobility ecosystem to meet the needs of all users; personalized mobility and goods delivery options, matched with a coordinated network of service providers

Rural and Frontier Areas in the U.S.

- Micropolitan areas: between 10,000-49,000 people and outside of metropolitan areas

- Frontier, tribal, and remote counties are designated by travel times of 60 minutes+

Frontier and Remote (FAR) ZIP Code Areas, 2010

FAR

Not FAR

FAR Level One
Remote from urban areas of 50,000 or more people

FAR level one includes ZIP code areas with majority populations living 60 minutes or more from urban areas of 50,000 or more.

Source: Economic Research Service, U.S. Department of Agriculture, using data from the U.S. Census Bureau and ESRI.

Shared-Use Mobility in Rural Areas

- Most newer on-demand services in shared-use mobility (SUM) have been focused in large metropolitan areas

  - For-hire ride services (TNCs, taxis, etc.), micromobility (scooter-share and bikeshare), microtransit, carsharing, vanpooling

- Several issues for SUM in rural, frontier, and tribal areas:

  - Funding sustainability, service equivalency, driver availability, cellular/broadband infrastructure, technology integration, etc.

- Importance of coordination and collaboration for success

User Characteristics and Trends

- In low-density and rural areas, transit demand typically comes from populations especially reliant on transit options
  - Ex. elderly, persons with disabilities, and low-income individuals

- Rural transit is more vulnerable to declines in ridership
  - Wider geographic coverage areas, more rapidly aging populations

- Over-65-year-old population doubling nationwide between 2010 and 2050

Mobility Needs

- Rural residents travel longer distances to access education, health services, shopping, and employment

- Transit agencies may have older software systems
  - Advanced reservation, non-dynamic routing

- Flexible transportation services sometimes used to address low-demand areas

- Informal carpooling, reliance on friends and family for travel

Service Challenges

- Dispersed population locations

- Lack of available certified drivers

- Poor road quality for vehicles

- Poor digital connectivity and infrastructure

- Limited funding resources
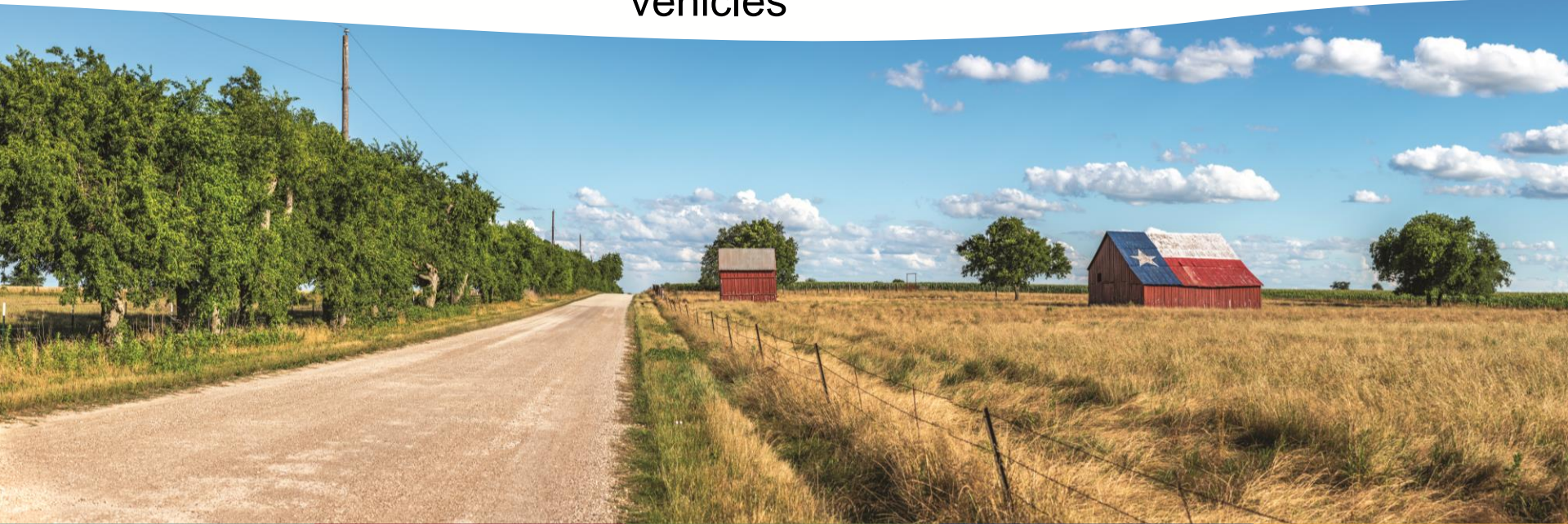
Tribal-Specific Needs

Expansive transit service areas

Outside trips take long hours

Photo: Peter Schauer

- Many tribal members often travel a long way to access services

- May have lower internet access and cellular data availability, along with high levels of poverty

- Partnership agreements between employers, tribal councils, and stakeholders

Accessibility of SUM Service

- In rural areas, lack of third-party providers with WAVs available

- Emergence of commingling advanced reservation ADA paratransit trips with on-demand general public trips on the microtransit service

- Further evidence needed on ADA compliance with third-party WAVs or commingling service designs

Photo Credit: Uber

Copyright: Ecov France

Equity of SUM Service

- Partnerships often have included accommodations for low-income customers to address reduced payment options, lack of smartphone ownership, and low internet access.

  - Ex. kiosks and call centers for trip requests; gas cards or prepaid debit card options

- Access for non-English speakers should be enhanced with information available in their languages

Breakout Groups

Breakout Group Topics

- Financial and Organizational Resources

- Compliance and Accessibility

- Geographic Coverage and Infrastructure

- Partnerships and Coordination

Breakout Instructions

- Select a topic you're most interested in

- Join that group

- As a group, answer the provided questions

- Open discussion

- Turn in your responses

Report Out & Discussion

Contact Information

Texas A&M Transportation Institute

Todd Hansen (PI)

t-hansen@tti.tamu.edu

713-613-9205