NCHRP 20-65 Task 76:
Opportunities for State DOTs (and others) to Encourage Shared Use Mobility Practices in Rural Areas

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“How can you use the report?”

• Learn about emerging transportation solutions that can improve mobility in rural or small-urban communities.

• Help identify the type of shared-use mobility service that can meet your rural community’s mobility needs (ex: rural ridesourcing, bikesharing, carsharing, etc..)

• Guide rural community representatives, and their stakeholders to strategically plan, and implement Shared-Use Mobility (SUM) services.

• Provide guidance on the role that government, state DOTs, rural transit agencies, transportation planning agencies, and/or state economic development or small business development agencies to promote and advance rural SUM practices.
Introduction

- Shared-Use Mobility (SUM): transportation services that are shared among users (public transit; taxis and limousines; ridesourcing, carsharing, bikesharing, and ridesharing programs; microtransit services; scooter-sharing; shuttle services; and neighborhood shuttles).

- Smartphones, and technological advancements have presented new convenient and flexible options: ridesourcing, carsharing, bikesharing, microtransit, etc., - “technology enabled SUM.”

- Technology enabled SUMs are much prominent in urban setup compared to rural.

- Transit services are critical for rural communities - SUM practices have the potential to fill the mobility gaps.

- This study investigates opportunities for SUM in rural areas, and also in small-urban areas when applicable.
Study Objectives

• Review and compile emerging SUM practices and programs primarily from US rural settings.
• **Conduct SUM Interviews** - Learn about opportunities and challenges for various SUM practices in rural communities.
• **Conduct in-depth case studies** - Learn about planning and implementation aspects of rural SUM implementations.
• **Develop Rural SUM toolkit** – Toolkit can help rural communities become informed about tasks involved for strategically planning, and implementing various SUM services.
• **Develop Guidance Document** - Provide detailed guidance on the role of government, State DOTs, rural transit agencies, transportation planning agencies, and/or state economic development or small business development agencies have to play to advance SUM services in rural areas.
• **Convene a Focus Group** - Validate the rural SUM toolkit, and guidance documents with a focus group of experts in the field.
Shared-Use Mobility (SUM) Practices Considered.

- **Ridesourcing** (TNCs such as Uber, Lyft, Feonix Mobility Rising, etc.)
- **Carsharing** (Zipcar, Car2go, Enterprise Carshare, etc.)
- **Bikesharing** (BCycle, Citi Bike, Zagster, etc.)
- **Microtransit** (Chariot, Bridj, Via etc.)
- **Mobility as a Service (MaaS)**

**Rural and Small Urban Areas Defined.**

- **Rural Areas** – Population < 50,000
- **Small Urban Areas** – Population 50,000 – 200,000
Major research tasks involved:

- Monitored relevant FTA’s MOD sandbox projects, State DOT initiatives.
- Conducted interviews – SUM agency contacts, rural community contacts implementing rural SUM.
- Conducted eight in-depth case studies of rural SUM implementations.
- **Output 1:** Rural SUM Toolkit.
- **Output 2:** Guidance for State DOTs and Other Agencies to Promote SUM services in Rural Areas.
- Validate the two study outputs with rural transit experts.
## SUM Interviews

<table>
<thead>
<tr>
<th>SUM Category</th>
<th>Agencies</th>
<th>Community</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ridesourcing</strong></td>
<td>1. Uber</td>
<td>1. North Mankato, MN (Pop: 13,746)</td>
</tr>
<tr>
<td></td>
<td>2. Lyft</td>
<td>2. State of Missouri (Missouri HealthTran Partnership)</td>
</tr>
<tr>
<td></td>
<td>3. Feonix Mobility Rising</td>
<td>3. Breckenridge, CO (Pop: 4,982)</td>
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<tr>
<td></td>
<td>4. Ruby Ride</td>
<td></td>
</tr>
<tr>
<td><strong>Carsharing</strong></td>
<td>1. Zipcar</td>
<td>1. Needles, CA (Pop: 4,844)</td>
</tr>
<tr>
<td></td>
<td>2. GM Maven</td>
<td>2. Breckenridge, CO (Pop: 4,982)</td>
</tr>
<tr>
<td><strong>Bikesharing</strong></td>
<td></td>
<td>1. Manhattan, KS (Pop: 53,678)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Allen County, KS</td>
</tr>
<tr>
<td><strong>Microtransit</strong></td>
<td>1. Via</td>
<td>1. Arlington, TX (396,394)</td>
</tr>
<tr>
<td><strong>Rural MaaS</strong></td>
<td>1. Feonix Mobility Rising</td>
<td>1. Winnebago County, WI</td>
</tr>
<tr>
<td></td>
<td>2. Bosch/SPLT</td>
<td>2. Three Rural Michigan counties (Grand Traverse, Benzie, Allegan).</td>
</tr>
</tbody>
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Eight In-depth Case Studies of Rural SUM Implementations

- Needles Carshare Program, Needles, CA
- Green Raiteros Electric Vehicle Ridesourcing, Huron, CA
- Via Microtransit, Arlington, TX
- Allen County Library Model Bikesharing, Allen County, KS
- Rural MaaS and Ridesourcing, Winnebago County, WI
- Michigan Mobility Challenge Grant, Rural MaaS, 3 Rural Counties, MI
- Pennsylvania Vanpool Incentive Program, PA
- NEMT-Lyft Partnerships, US
Case study: Needles carshare program in rural California.

Summary: Needles Carshare is a rural small-scale carshare program providing a flexible transportation option for carless rural residents, helping them to overcome isolation, become independent, and access basic facilities.

Impact: 50 registered members, 70 percent of the program cost covered by utilization revenue generated.

Victor Valley Transit Authority Fees and Rates

<table>
<thead>
<tr>
<th>One-Time Application Fee</th>
<th>Annual Membership Fee</th>
</tr>
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<tbody>
<tr>
<td>$20</td>
<td>$50</td>
</tr>
</tbody>
</table>

- Waived!

<table>
<thead>
<tr>
<th>Vehicle Class</th>
<th>Hourly</th>
<th>Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Size</td>
<td>$5</td>
<td>$40</td>
</tr>
<tr>
<td>Minivan</td>
<td>$6</td>
<td>$48</td>
</tr>
</tbody>
</table>

- First 200 miles per day are free; additional miles are $0.25 per mile.
- Age restrictions may apply.

Source: Google Maps

Source: Enterprise Carshare Website
**Case Study:** Rural Mobility as a Service in Winnebago County, Wisconsin – Winnebago Catch-a-Ride (WCAR).

**Summary:** Several Winnebago County entities created Winnebago Catch-A-Ride Rural Mobility as a Service program by collaborating with Feonix Mobility Rising and QRyde.
**Case Study:** Non-Emergency Medical Transport and Lyft Partnerships

- **Summary:** The ridesourcing company, Lyft, has created partnerships with non-emergency medical transportation (NEMT) providers to offer convenient and affordable medical-related transportation to those in need.
- **Impact:** Reduced wait times, increased on-time performance and cost efficiencies for patients across the United States.
Case Study: Allen County, Kansas Bikeshare

• **Summary:** A bikeshare program in Kansas offers bike access to rural community residents.

• **Impact:** Free bike rentals within the county for residents and visitors. Total of 40 bikes, and 2 tricycles. Close to 2,000 checkouts from May 2017 till November 2019.
**Output 1: Rural SUM Toolkit – Five Task Process**

**Task 1:** Identify mobility gaps, and determine service needs.
[1. Gather input from citizens and community representatives, 2. Leadership from community partners, 3. Form preliminary partnerships]

**Task 2:** Determine SUM category that best suits rural community needs. [Ridesourcing, Carsharing, Bikesharing, Microtransit, Rural Mobility-as-a-Service]

**Task 3:** Public Private Partnerships. [Private SUM service providers are important for rural SUM implementation]

**Task 4:** Evaluate Challenges, Accessibility, and Impacts.
[limited funding, low demand, gaining trust, broadband coverage, ADA accessibility, access to smartphone and bank accounts]

**Task 5:** Funding and Implementation. [Most SUM services are capital-light business models, and benefit more from assistance for operational expenses. **Funding Sources:** FTA Formula Funds (5310 & 5311), MOD Grants, State DOT funding, Community Initiatives, and other national/state/local grants]
Output 2: Guidance for State DOTs and Other Agencies to Promote SUM services in Rural Areas

1. Diversify state DOT funding between traditional and SUM services.
2. Importance of FTA formula grants (5310 & 5311), FTA’s MOD grants, and state DOT’s transit funding.
3. Create a one-stop learning platform about rural transportation challenges, and SUM opportunities.
4. Ensure availability of broadband internet service in rural areas.
5. Advocate the significance of transportation towards healthcare and employment in rural communities.
6. Role of Regional Transportation Agencies.
Acknowledgments

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Questions?

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