Funding Shared Mobility as an Extension of Existing Public Transit Services

Final Report

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Public transit services are vital for the mobility and connectivity of communities. Rural public transit services connect users to health care, education, employment, and social and recreational activities. However, rural communities are limited in their mobility due to high costs and limited availability of affordable and reliable transportation options. Shared mobility is an innovative strategy to meet demand for public transit in rural areas that also provides social and environmental benefits. The Minnesota Department of Transportation (MnDOT) is exploring how public transit funding may be used to fund shared mobility services as an extension of existing public transit services in small urban and rural areas in Minnesota. This study identifies funding available for this purpose, as well as the limitations in the federal and state regulations for use of such funding sources. In addition, this research explores how transit agencies across the U.S. have funded similar projects and identify opportunities for improvements in Minnesota.
ACKNOWLEDGMENTS

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TABLE OF CONTENTS

CHAPTER 1: Introduction ......................................................................................................................... 1

CHAPTER 2: Review of Federal Funding for Public Transit ................................................................. 2

  2.1 Related Concepts........................................................................................................................... 2
  2.2 Federal Funding for Public Transportation ..................................................................................... 5
    2.2.1 Formula Grants....................................................................................................................... 6
    2.2.2 Competitive Grants ................................................................................................................ 9
  2.3 Transfers from the Federal Highway Administration Grants ......................................................... 10
  2.4 Transit Funding Opportunities from the Infrastructure and Investment Jobs Act ...................... 12

CHAPTER 3: Review of State Funding for Public Transit .......................................................................... 16

  3.1 Related Concepts ........................................................................................................................ 16
  3.2 State Funding for Public Transit ................................................................................................... 18
  3.3 State Funding to be Monitored for Shared Mobility ..................................................................... 21

CHAPTER 4: Survey of States on Funding Shared Mobility as an Extension of Transit Services .......... 23

  4.1 Survey Methodology ................................................................................................................... 23
  4.2 Key Findings ............................................................................................................................... 23
  4.3 Detailed Findings ......................................................................................................................... 24
    4.3.1 States Funding Shared Mobility Services as an Extension of Transit Services ...................... 24
    4.3.2 Funding Sources Used for Shared Mobility Services .............................................................. 26
    4.3.3 Barriers to Obtaining Funding for Shared Mobility Services and Strategies to Overcome Barriers .................................................................................................................. 30
    4.3.4 Types of Shared Mobility Services and Infrastructure Funded ............................................. 32
    4.3.5 Additional Comments from Survey Respondents .................................................................. 37

CHAPTER 5: Conclusions and Recommendations ................................................................................... 38

REFERENCES .......................................................................................................................................... 42

APPENDIX A: Areas of Persistent Poverty and Historically Disadvantaged Communities in Minnesota
APPENDIX B: CMAQ Project List for 2021

APPENDIX C: Survey Questionnaire

LIST OF FIGURES

Figure 4.1 States funding shared mobility services as an extension of transit services ......................... 25
Figure 4.2 Federal funding sources used for shared mobility services ...................................................... 26
Figure A.1 Areas of persistent poverty and historically disadvantaged communities in Minnesota ........ A-1

LIST OF TABLES

Table 2.1 Shared mobility eligibility under FTA Grant Program ................................................................. 4
Table 3.1 Eligible organization by grant .................................................................................................. 18
Table 4.1 Federal funding used for shared mobility services ................................................................. 27
Table 4.2 State funding sources for shared mobility services ............................................................... 28
Table 4.3 Barriers faced by states and strategies used to overcome barriers .............................................. 31
Table 4.4 Types of shared mobility services provided as an extension of transit services in small urban and rural areas by state ............................................................................................. 33
Table 4.5 Types of shared mobility infrastructure investments funded in small urban and rural areas by state ............................................................................................................................................... 34
Table 4.6 Public-private involvement in shared mobility project development and implementation by state ............................................................................................................................................. 35
Table B.1 CMAQ project list for 2021 ........................................................................................................ B-1
# LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>ADA</td>
<td>Americans with Disabilities Act</td>
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<tr>
<td>AIM</td>
<td>Accelerating Innovative Mobility</td>
</tr>
<tr>
<td>AoPP</td>
<td>Areas of Persistent Poverty</td>
</tr>
<tr>
<td>CAA</td>
<td>Clean Air Act</td>
</tr>
<tr>
<td>CMAQ</td>
<td>Congestion Mitigation and Air Quality</td>
</tr>
<tr>
<td>DelDOT</td>
<td>Delaware Department of Transportation</td>
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<tr>
<td>DTC</td>
<td>Delaware Transit Corporations</td>
</tr>
<tr>
<td>E&amp;D</td>
<td>Elders and Persons with Disabilities</td>
</tr>
<tr>
<td>EMI</td>
<td>Enhancing Mobility Innovation</td>
</tr>
<tr>
<td>EV</td>
<td>Electric Vehicle</td>
</tr>
<tr>
<td>FHWA</td>
<td>Federal Highway Administration</td>
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<td>FTA</td>
<td>Federal Transit Administration</td>
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<td>GHG</td>
<td>Greenhouse Gas</td>
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<tr>
<td>HOPE</td>
<td>Helping Obtain Prosperity for Everyone</td>
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<td>IIJA</td>
<td>Infrastructure and Investment Jobs Act</td>
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<td>IMI</td>
<td>Integrated Mobility Innovation</td>
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<tr>
<td>MBTA</td>
<td>Massachusetts Bay Transportation Authority</td>
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<td>MnDOT</td>
<td>Minnesota Department of Transportation</td>
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<tr>
<td>MOD</td>
<td>Mobility on Demand</td>
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<tr>
<td>PROTECT</td>
<td>Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation</td>
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<tr>
<td>PTPP</td>
<td>Public Transit Participation Program</td>
</tr>
<tr>
<td>STBG</td>
<td>Surface Transportation Block Grant Program</td>
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<tr>
<td>STP</td>
<td>Surface Transportation Program</td>
</tr>
<tr>
<td>TA</td>
<td>Transportation Alternatives</td>
</tr>
<tr>
<td>TAP</td>
<td>Technical Advisory Panel</td>
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<tr>
<td>TED</td>
<td>Transportation Economic Development</td>
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<td>TEDI</td>
<td>Transportation Economic Development Infrastructure</td>
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<tr>
<td>VIP</td>
<td>Vanpool Investment Program</td>
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<tr>
<td>ZAP</td>
<td>Zero-emissions Access Program</td>
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EXECUTIVE SUMMARY

Public transit services are vital for the mobility and connectivity of communities. Rural public transit services connect users to health care, education, employment, and social and recreational activities. However, rural communities are limited in their mobility due to high costs and limited availability of affordable and reliable transportation options. Shared mobility is an innovative strategy to address and meet demand for public transit in rural areas as well as to provide traditional public transportation that brings social and environmental benefits. The Minnesota Department of Transportation (MnDOT) is currently exploring how public transit funding may be used to fund shared mobility services as an extension of existing public transit services in small urban and rural areas in Minnesota. This study identifies funding available for this purpose and the limitations in federal and state regulations for the use of this funding. In addition, researchers explore how transit agencies across the U.S. have funded similar projects and identify opportunities for Minnesota.

Federal Funding for Public Transit

The Federal Transit Administration (FTA) defines public transportation as regular, continuing shared-ride surface transportation services that are open to the general public or to a segment of the general public defined by age, disability, or low income. While microtransit and vanpooling, as well as mobility management projects are designated as public transportation, exclusive ride services are not. Despite this, ride-sourcing services may be eligible for funding as an alternative to public transportation under some programs. Some facilities may also be eligible for funding if they are considered functionally related to transit.

Federal funding available to fund shared mobility includes formula grants and competitive grants from the FTA, transfers from the Federal Highway Administration (FHWA), and opportunities available under the Infrastructure and Investment Jobs Act (IIJA).

**Formula Grants** include grants in Title 49 Chapter 53 such as for Rural Areas (Section 5311), Urbanized Areas (5307), and the Enhanced Mobility of Seniors and Individuals with Disabilities (Section 5310). Eligible entities under these programs include a state or Indian Tribe as primary recipients and or local authorities or providers of public transportation including private for-profit and not-for-profit organizations as subrecipients. Eligible projects under Section 5311 and 5307 include capital projects, planning activities, operating costs, and the acquisition of transportation services. Eligible projects under Section 5310 grants include those that provide alternatives to public transportation and assist seniors and individuals with disabilities with their transportation needs.

**Competitive Grants** include the Areas of Persistent Poverty (AoPP) Program, Enhancing Mobility Innovation (EMI), and Integrated Mobility Innovation (IMI). Eligible recipients for the AoPP and Enhancing Mobility Innovation Competitive programs are those eligible under any of the aforementioned sections of Title 49 Chapter 53. Eligible recipients of funds under the IMI program are providers of public transportation. Eligible programs under the AoPP program are those eligible under any of the sections of Title 49 Chapter 53. Eligible projects under Enhancing Mobility Innovation
Competitive Program include those that (i) demonstrate new operational concepts or innovations that improve mobility and the user experience; and (ii) develop software to facilitate demand-response public transportation. Eligible projects under IMI are those that integrate mobility innovations with existing public transportation services.

Transfers from the FHWA Grants are grants from the FHWA that may also be used to support shared mobility development in rural communities. Examples include Carpool and Vanpool Projects from Section 146 of Title 23, the Surface Transportation Block Grant (STBG) Program, and the Congestion Mitigation and Air Quality (CMAQ) Improvement Program. These programs enable recipients to use funds to support projects designed to encourage the use of carpools and vanpools, public transportation, transit capital projects, bicycle projects, projects that enhance travel and tourism, and creation and operation of a state office to assist in the design, implementation, and oversight of public-private partnerships. Some of these programs have been amended through the IIJA to include micromobility or active transportation.

Transit Funding Opportunities from the IIJA include several funding opportunities under the Surface Transportation Program (STP) that could be used for transit purposes in small urban and rural areas. Some funding may be used to support mobility services or related infrastructure such as the Rural Surface Transportation Grant Program; the Local and Regional Project Assistance Program; the National Infrastructure Project Assistance Program; the Carbon Reduction Program; and the Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) Program.

State Funding for Public Transit

Minnesota statutes define public transit as “a general or specific transportation service provided to the public on a regular and continuing basis.” This includes regular route transit and paratransit. While the state does not specifically define or specify the eligibility of individual shared mobility services for transit funding, some funding programs are designed in such a way that incentivize the adoption of certain services.

Minnesota state funding for public transportation includes the Public Transit Participation program, Park and Ride Program, Ride-sharing Program, Greater Minnesota Transportation Alternatives Solicitation, Clean Transportation Pilot Program, and the Public Employer Commuter Program.

Limited shared mobility services may be eligible for funding under state transit programs. Programs like the Park and Ride, Ride-sharing, and Public Employer Commuter van programs promote transitioning to more multioccupancy vehicles. The Ride-sharing Program, for instance, provides governments with funding for the lease of vans to enable vanpooling. Other programs such as the Greater Minnesota Transportation Alternatives Solicitation promote the use of bicycles and other non-motorized transportation as an alternative to traditional public transportation.
**Shared Mobility Funding across the U.S.: Survey of State DOTs and MPOs**

The research team developed a survey that was administered to all states across the U.S. to collect information about the use of federal and/or state funds to fund shared mobility services as an extension of transit services in small urban and rural areas. The analysis includes 23 responses from 19 states.

Most of the responding states have used a combination of federal and state funding to fund shared mobility services. In a few instances, a state has used either only federal funding or only state funding. Section 5311 and Section 5310 grants were the most frequent federal funding sources used to fund shared mobility services across responding states. State-level funding is generally derived from state transportation trust funds, and some state allocations from the general fund. Most states also use local funding sources to fund shared mobility, typically required by the local matching requirements of most federal programs.

States fund different types of shared mobility services and infrastructure investments to support shared mobility in rural areas. Microtransit, ridesharing, and vanpool services were the most used type of service offered by states; electrification and charging infrastructure, park-and-ride facilities, technology investments, and multimodal mobility hubs were the most frequently developed types of infrastructure. Lastly, shared mobility projects were most often developed and implemented by government organizations, or in a partnership between public and private organizations.

The most common barriers the states face in funding shared mobility are funding challenges, including the lack of state funding available to support these services and difficulties in obtaining the local share, as well as the prioritization of resources for standard and existing services. IIJA changes to the CMAQ program, enabling funds for the operating expenses of already existing transit projects, help to address the problems many states raised with regard to federal funding being used primarily in the maintenance of existing programs.

**Recommendations to Fund Shared Mobility Services as an Extension of Public Transit Services**

Based on research findings, the research team developed the following recommendations:

- Make the state definition of public transit consistent with federal definition to improve funding opportunities for shared mobility
- Include a definition for shared mobility
- Provide shared mobility funding eligibility status under state law
- Create and improve webpages for state-level grant programs
- Use FTA Formula Grants to fund core shared mobility services in rural areas in Minnesota
- Use FTA Competitive Grants to develop shared mobility software and pilot programs in rural areas in Minnesota
- Use grant transfers from the FHWA to support funding shared mobility services in rural areas in Minnesota
- Take advantage of new and revised programs from the IIJA
- Consider the creation of a state-level grant program for shared mobility
CHAPTER 1: INTRODUCTION

Public transit services are vital for the mobility and connectivity of communities. Rural public transit services connect users to health care, education, employment, and social and recreational activities (Mattson, 2020). Public transit is particularly critical for transit-dependent people who do not own a car or do not drive. This population consists of people of color, young people without a driver’s license, people with disabilities, low-income people, and seniors (MDH, 2019; Mattson, 2020). In rural Minnesota, 44 percent of the population is age 50 or above, more than half of full-time workers earn less than $45,000 annually, and residents are more likely to live in poverty than urban residents (SDC, n.d.). Although 91 percent of rural Minnesotans self-identify as non-Hispanic White (compared to 75 percent in urban Minnesota), there is a higher representation of American Indians (which represent 2% of rural areas compared to 0.5% in urban areas) (APM Research Lab, 2018).

However, rural communities are limited in their mobility due to high costs and limited availability of affordable and reliable transportation options (Litman, 2017). In particular, lower population density than rural areas, long travel distances, population growth, and changing mobility needs in rural areas affect the efficiency of the delivery of transit services (MnDOT, 2009; Mattson, 2020). In addition, this is exacerbated by the lack of sufficient and reliable funding sources to maintain and expand public transit.

Shared mobility is an innovative strategy to address and meet demand for public transit in rural areas in addition to providing traditional transportation that brings social and environmental benefits. Several studies have documented that shared mobility complements public transit and enhances mobility. In addition, the use of shared mobility is associated with increased probability of using transit frequently, reduced vehicle use and ownership, reduced transportation spending, and increased access to areas not previously accessible via traditional public transportation. These benefits are realized mainly in urban areas where these services are provided.

The Minnesota Department of Transportation (MnDOT) is currently exploring how public transit funding may be used to fund shared mobility services as an extension of existing public transit services in small urban and rural areas in Minnesota. In this study, we refer to public transit and public transportation indistinctively. This study seeks to identify funding available for this purpose and the limitations in federal and state regulations for use of the funding. In addition, study researchers explore how transit agencies across the U.S. have funded similar projects and identify opportunities for Minnesota.
CHAPTER 2: REVIEW OF FEDERAL FUNDING FOR PUBLIC TRANSIT

This chapter presents an overview of federal funding available to fund shared mobility services as an extension of existing public transit services in small urban and rural areas in Minnesota. Funding available at the federal level includes formula grants and competitive grants from the Federal Transit Administration (FTA) and transfers from the Federal Highway Administration (FHWA). In addition, researchers also explore funding opportunities available under the Infrastructure and Investment Jobs Act (IIJA).

2.1 RELATED CONCEPTS

This section presents a review of concepts including public transportation, shared mobility services, and the eligibility of these services as well as the eligibility of private or nonprofit organizations under the current FTA framework.

Public Transportation

Public transportation is defined as regular, continuing shared-ride surface transportation services that are open to the general public or open to a segment of the general public defined by age, disability, or low income. Public transportation excludes intercity passenger rail transportation, intercity bus service, charter bus service, school bus service, sightseeing service, courtesy shuttle service for patrons, and intra-terminal or intra-facility shuttle services (49 U.S.C. § 5302, 2022).

Mobility on Demand

An integrated and connected multi-modal network of safe, affordable, and reliable transportation options that are available and accessible to all travelers (FTA, 2016). Consumers can access mobility, goods, and services on demand by dispatching or using shared mobility, courier services, unmanned aerial vehicles (UAVs), and public transportation solutions. MOD passenger services incorporate trip planning and booking, real-time information, and fare payment into a single user interface. Passenger travel facilitated through MOD providers include carsharing, bikesharing, ridesharing, ridesourcing/transportation network companies (TNCs), scooter sharing, microtransit, shuttle services, public transportation, courier network services (CNS) and delivery services, and other emerging transportation solution (Shaheen et al., 2017).

Micromobility

Any small, low-speed, human or electric-powered transportation device, including bicycles, scooters, electric-assists bicycles, electric scooters (e-scooters), and other small, lightweight, wheeled conveyances. Commonly defined as partially or fully motorized, low-speed, and small size (FHWA, 2021b).
Shared Mobility

Shared Mobility is a form of transportation in which transportation services are shared among users. Users may use the service at the same time or independently of one another. Examples of services that may be used at the same time include traditional public transportation, microtransit, and carpooling and vanpooling, while services that may be used independently include forms of car-sharing, bikesharing and scooter-sharing. Shared mobility has recently emerged as a more flexible alternative to more traditional fixed-route public transportation, as it enables users to interact with intelligent technology systems to travel throughout an area more efficiently. A list of common shared mobility terms and definitions from the FTA follows (FTA, 2020b):

**Bikesharing**: Short term bike rental over the course of a membership period.

**Carsharing**: A service that provides members with access to a car for periods of less than a day.

**Microtransit**: IT-enabled private multi-passenger transportation services that (1) serve passengers using dynamically generated routes, and (2) may expect passengers to make their way to and from common pick-up or drop-off points.

**Ridesharing/Vanpools**: Adding passengers to a private trip in which the driver and passengers share a destination.

**Ridesourcing**: Use of online platforms to connect passengers with drivers and automate reservations, payments, and customer feedback. These rides are often exclusive to an individual or a group.

**Ride-splitting/Dynamic carpooling**: Specialized ridesourcing that allows customers requesting a ride to be paired in real time with others traveling along a similar route.

**Paratransit**: Comparable transit service required by the Americans with Disabilities Act (ADA) for individuals with disabilities who are unable to use traditional fixed route transportation systems.

In addition to shared mobility services, mobility management is included as a shared mobility approach. Mobility management is an approach for managing and delivering coordinated transportation services to customers. Mobility management seeks to more closely meet the transportation needs of individuals by coordinating a wide range of transportation services through multiple service providers. In this way, mobility management is an approach to more efficient transportation services. Eligible mobility management activities may include projects that coordinate transportation services for older adults, individuals with disabilities, and individuals with low incomes. They may also develop and operate transportation brokerages to coordinate service providers, support local partnerships, provide travel training and trip planning activities to customers and purchase intelligent transportation technologies (FTA, 2018).
Eligibility of Shared Mobility for Federal Funding

Some shared mobility services may be eligible for federal funding under the current FTA framework (FTA, 2016). However, exclusive-ride services are not considered public transportation by the FTA.\(^1\) Currently, the federal government designates microtransit and vanpooling, as well as mobility management projects, as public transportation and therefore directly eligible for grants under this section. Ride-sourcing services, which include exclusive ride services, are not considered public transportation. Despite this designation, ride-sourcing services may be eligible for funding as an alternative to public transportation under the ADA, or as a reverse commute project. Reverse commute projects are those that enable the government to provide transportation services that transport low-income individuals to and from jobs and activities related to their employment. As these people tend to live in urban areas, this often involves transportation from urban to the suburban and rural areas where they work.

Some facilities may also be eligible for funding if they are considered “functionally related to transit”. Functionally related to transit means a project for which the primary intention of funding is to a public transit facility or other public transportation purpose but may also incorporate other forms of transportation into its design. While bikesharing and carsharing are not considered public transportation, facilities associated with the service may be considered “functionally related to transit”. Table 2.1 presents examples of eligible expenses and non-eligible expenses for these services and their specifications.

Table 2.1 Shared mobility eligibility under FTA Grant Program

<table>
<thead>
<tr>
<th>Shared Mobility Service</th>
<th>Eligible Expenses</th>
<th>Non-Eligible Expenses</th>
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<tbody>
<tr>
<td>Bikesharing</td>
<td>Costs of installing bike sharing stations and infrastructure when functionally related to public transportation (when these are located within a three-mile radius of a transit station or bus stop)</td>
<td>Purchase of bikes for a bike sharing network</td>
</tr>
<tr>
<td>Carsharing</td>
<td>Facilities functionally related to transit such as parking spaces dedicated for the use of car-sharing at local transit stops</td>
<td>Funds cannot be used to operate these services</td>
</tr>
<tr>
<td>Ridesourcing</td>
<td>Exclusive-ride services may be eligible as an alternative to public transportation in the 5310 program or as a job access and reverse commute project. A transit agency may use FTA funds to provide vouchers for individuals to use an exclusive-ride service</td>
<td></td>
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</tbody>
</table>

\(^1\) An exclusive ride is not defined by the number of passengers, but rather the way in which other parties may join the ride. If the service requires the consent of the first passenger or group of passengers to add others to the ride, it is consequently an exclusive ride.
Ride-splitting/ Dynamic carpooling | Eligible as public transportation if it meets the definition of shared-ride services. A transit agency could contract with a SM operator to provide a shared-ride service as a first/last mile solution as long as the contract requires both drivers and passengers to accept any additional riders identified along the trip.

Source: (FTA, 2016)

Eligibility of Private or Nonprofit Organizations for Federal Funding

When nonprofits and private organizations are otherwise ineligible for direct funding under FTA programs as a recipient or subrecipient, states, tribes and local government authorities may enter into contracts with these organizations to provide public transportation services. When federal law allows funding for transit operating expenses, in small urban and rural areas, or for job access and reverse commute activities and ADA paratransit services, the FTA may reimburse a transit agency for the costs of contracting with a shared mobility operator to provide shared ride services to the public. These types of projects can be found in several sections of U.S. Codes located in Chapter 53 of Title 49. As stated by the FTA, “The eligibility of shared mobility services will depend largely on the specific contracts entered into between FTA recipients and third parties, such as shared mobility operators. When structuring such contracts, grantees should consider whether the terms of service will meet the legal definition of public transportation, for example, or whether such service may be permitted as an alternative to public transportation within several of FTA’s grant programs” (Shared Mobility FAQs, 2016). States generally have the freedom to enter into contracts with third party providers of public transportation as they see fit.² States are required to provide the FTA with a yearly “self-certification” document to show that its procurement system complies with FTA requirements listed in the FTA’s Master Agreement (FTA, 2021b).³

2.2 FEDERAL FUNDING FOR PUBLIC TRANSPORTATION

In this section we present federal funding opportunities for transit purposes in rural areas. There are a variety of federal funding opportunities that could be used to fund shared mobility services or fund related infrastructure in rural areas.

² Federal agencies do not substitute their judgment for that of their state recipients and permit the states to establish their own standards rather than impose nation-wide standards unless the matter is primarily a federal concern.
³ A non-inclusive list of some of these requirements are on page 4 of the contracting guidance document (FTA, 2013).
2.2.1 Formula Grants

Formula Grants for Rural Areas – Title 49 U.S. Code 5311

Formula Grants for Rural Areas, found in section 5311 of Title 49, may be used to pay for shared mobility services in rural areas (49 U.S.C. § 5311, 2022). This section is specifically for areas with a population of less than 50,000. Grants from the section may be directly issued to a state or Indian tribe as a primary recipient. However, federal code allows primary recipients of a grant to allocate amounts of these grants to designated subrecipients that are local government authorities, nonprofit organizations, or operators of public transportation or an intercity bus service that receives federal transit program grant funds through a recipient. While federal law allows for private organizations to receive funds as a subrecipient, generally state policy prevents this practice (USDOT, 2014). The government may, however, enter into contracts with private organizations, such as a shared mobility provider, to provide transportation to the general public.

Primary recipients of rural area formula grants may use these funds for several purposes including capital projects. A capital project in this context can mean any of the following:

1. Acquiring, constructing, supervising, or inspecting equipment or a facility for use in public transportation, expenses incidental to the acquisition or construction, payments for the capital portions of rail trackage rights agreements, transit-related intelligent transportation systems, relocation assistance, acquiring replacement housing sites, and acquiring, constructing, relocating, and rehabilitating replacement housing
2. Rehabilitating or remanufacturing a bus
3. Overhauling rail rolling stock
4. Preventative maintenance
5. Leasing equipment or a facility for use for public transportation
6. Joint development improvement that economically or otherwise improves public transportation (FTA, 2020a).
7. The introduction of new technology into public transportation
8. Technological changes or innovations to modify low or no emissions vehicles or facilities as defined in U.S. Code 5339
10. Non-fixed route paratransit transportation services in line with the ADA

Grants for public transportation capital projects may fund up to 80 percent of net project costs. The section specifically references mobility management as an eligible capital project. In this context, a mobility management capital project that improves coordination between public transportation and other transportation service providers would be eligible for funding. Furthermore, the FTA states that
“Examples of eligible public transportation capital projects include constructing waiting or pick-up/drop off areas at a transit facility, or providing information technology systems that support the use of shared mobility services.”

Grants under this section may also be used for planning activities, operating costs, and in the acquisition of transportation services. Grants for planning activities require that funding must also be awarded to a state for planning directed specifically at the needs of rural areas falling under section 5305 of Title 49. These grants may fund only up to half of the net project costs of any planning activities. In addition, grants may be used for the operating costs of equipment and facilities in public transportation, as well as for job access and reverse commute projects. Finally, grants for rural areas may be used in the acquisition of public transportation services, which includes entering into agreements with private providers of public transportation. A state may use funds allocated under this section for a project included in any aforementioned program, and eligible for assistance under this chapter, if the project will provide a local transportation service in a rural area.

Funding under this section is applied as a factor of both land area and population for any given rural area. As these grants cover only up to 80 percent of net project costs, the remainder of the funds must come from other matching sources such as a service agreement with a state or local social service agency or a private social service organization.

Section 30006 of the IJIA amends this grant program by establishing fixed percentages for the Public Transportation on Indian Reservations and the Appalachian Development Public Transportation Assistance programs.

**Formula Grants for Urbanized Areas – Title 49 U.S. Code 5307**

Small urban and rural areas in Minnesota may also utilize section 5307 for funding if the area is designated as an urbanized area by the Secretary of Commerce based on the most recent Census. These areas may have a population as small as 50,000 and may be as large as to exceed 200,000 people. For urbanized areas with a population of less than 200,000 the state is the primary recipient with the governor acting as the primary recipient, as is the case in the rural program (FTA, 2022d). For areas greater than 200,000 people, another entity such as a local government or other provider of public transportation may directly receive funds as a recipient (49 U.S.C. § 5307, 2022). In 2010, urbanized areas contained at least partially in Minnesota were those of the Duluth, Fargo, Grand Forks, La Crosse, Mankato, Minneapolis-St. Paul, Rochester, and St. Cloud urbanized areas (US Census Bureau, 2021). Of these areas just two, Minneapolis-St. Paul and Fargo have a total urbanized area population greater than 200,000.

Any urbanized area may use funds for purposes similar to those in the rural program. Grants under this section are authorized for capital projects, planning and job access and reverse commute projects. For any urbanized area with a population of less than 200,000, the operating costs of equipment and facilities for use of public transportation - with the exception of rail fixed guideway projects - are also eligible for grants under this section. For areas greater than 200,000 people, these operating expenses are also eligible, however they may only fund public transportation systems that operate less than 100
buses in fixed route services. Furthermore, the funding they receive may be only a fraction of what otherwise would be apportioned. Select costs associated with mobility management programs are directly eligible under this program. Similar to the rural formula grants, grants made under this section may finance up to 80 percent of capital project net costs, and 50 percent of operating expenses. In situations where the recipient seeks grants for the costs of vehicle-related equipment in order to comply with the ADA and the Clean Air Act (CAA), a 90 percent federal match is allowed. The remainder must come from a local matching source, such as from amounts received under a service agreement with a State or local social service agency or private social service organization (49 U.S.C. § 5307, 2022).

**Formula Grants for the Enhanced Mobility of Seniors and Individuals with Disabilities – Title 49 U.S. Code 5310**

Similar to the other formula grant programs, section 5310 may also be used to support alternatives to public transportation including contracting with a shared mobility operator to provide exclusive ride service. The recipient of a grant under this section is either a designated recipient, a state, or a government entity that operates a public transportation service. Subrecipients may be a state, local governmental authority, private nonprofit, for-profit private organizations, or an operator of a transportation service. An outcome of this program is the allocation of funds to private nonprofit organizations “for the purpose of assisting private nonprofit groups in meeting the transportation needs of older adults and people with disabilities when the transportation service provided is unavailable, insufficient, or inappropriate to meeting these needs” (FTA, 2022b).

Funds may be used for a variety of public transportation projects. Eligible projects share the common goal of meeting the needs of seniors and individuals with disabilities. Specifically, projects that provide transportation to these individuals when existing public transportation is insufficient, or to exceed the requirements of the ADA are eligible for grants under this section. Furthermore, projects that improve access to a fixed route service, and decrease reliance by individuals with disabilities on complementary paratransit are eligible. Under these requirements, projects may acquire public transportation services as an eligible capital expense. Perhaps most important to the issue of shared mobility under this section is the assertion that projects which provide alternatives to public transportation and assist seniors and individuals with disabilities with their transportation needs are eligible for grants under this section. As a result, FTA funds can be used to enable shared mobility projects in states to improve the accessibility of public transportation to these individuals. For instance, a transit agency may use FTA funds to provide vouchers for individuals to use an exclusive-ride service, or fund a vanpool ridesharing program operated by a nonprofit organization. Similar to the other formula grants, grants made under this section may finance up to 80 percent of capital project net costs, and 50 percent of operating expenses and the remainder must come from a local matching source (49 U.S.C. § 5310, 2022).
2.2.2 Competitive Grants

Areas of Persistent Poverty (AoPP) Program

This competitive program, previously carried out under the Helping Obtain Prosperity for Everyone (HOPE) program, is designed to provide grants for planning, engineering, technical studies, or financial plans to improve transit services in areas experiencing long-term economic distress. Regions defined as facing long term distress may be any of the following:

1. Any County that has consistently had greater than or equal to 20 percent of the population living in poverty during the last 30-year period
2. Any Census Tract with a poverty rate of at least 20 percent as measured by the 2014–2018 5-year data series available from the American Community Survey of the Bureau of the Census
3. Any U.S. Territory that is a Historically Disadvantaged Community

Data on regions that currently qualify under one or more of these criteria may be found using the Department of Transportation RAISE Persistent Poverty Tool. Currently, there are several Census Tracts in Greater Minnesota that meet the definition of an area of persistent poverty or historically disadvantaged community. As of May 2022, there are 178 Census Tracts in Minnesota that are areas of persistent poverty (73 of these tracts fall in areas outside the metro area) and 64 Census Tracts that are historically disadvantaged communities (see Appendix A).

Eligible programs and recipients are those eligible under any of the aforementioned sections of Title 49 Chapter 53. Subrecipients may be other operators of transportation or those who will contribute toward success of the program, such as a private nonprofit organization. Unlike other programs, the federal match for grants in the AoPP program is 90 percent of the net project costs and the recipient must provide the remaining local share in cash or in-kind. The most recent notice of funding for this program closed in September of 2021 (FTA, 2021a, 2022a).

Enhancing Mobility Innovation Competitive Program – Title 49 U.S. Code 5312

This program may be utilized to implement shared mobility modes of transportation as a means of innovating in the space of public transportation. Providers of public transportation, including public transportation agencies, state or local government DOTs, and federally recognized Indian tribes as well as private for-profit and not-for-profit organizations are eligible recipients of funds under this program.

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4 The tool is available at https://datahub.transportation.gov/stories/s/tsyd-k6ij
5 This includes Census Tracts in the counties of Becker, Beltrami, Benton, Blue Earth, Cass, Clay, Clearwater, Crow Wing, Freeborn, Hubbard, Kandiyohi, Koochiching, Lyon, Mahnomen, Martin, Mille Lacs, Morrison, Mower, Nicollet, Nobles, Olmsted, Pipestone, Polk, Rice, Sherburne, St. Louis, Stearns, Steele, Stevens, Todd, and Winona.
Importantly, this includes shared mobility providers and private operators of transportation (FTA, 2022c).

Projects under this section fall under the two broad categories of projects that either accelerate innovative mobility, or support software solutions. The first category is for projects that demonstrate new operational concepts or innovations that improve mobility and the user experience. In the second category, projects may be eligible if they develop software to facilitate demand-response public transportation, generally through mobile phones. Grants made under this program may finance up to 80 percent of capital project net costs. The recipient must provide the remaining local share in cash or in-kind. The most recent notice of funding for this program closed in January of 2022 (FTA, 2021a).

**Integrated Mobility Innovation (IMI)**

The IMI competitive program exists as a recognition of two issues. First, that “public transportation agencies are taking on new roles as mobility managers” and second, that “today, a diverse mobility ecosystem provides unprecedented flexibility and choices”, which includes public transit, bikesharing, electric scooters, and microtransit among others (FTA, 2021c). The IMI program seeks to integrate mobility innovations with existing public transportation services. Activities eligible for funds under this program include those such as planning and developing business models, obtaining equipment and service, acquiring or developing software and hardware interfaces, operating the demonstration project, and providing data to support performance measurement and evaluation. Eligible recipients of funds under this program are providers of public transportation. Grants made under this program fall under section 5312 of Title 49. The most recent notice of funding for this program closed in August of 2019 (FTA, 2021a).

### 2.3 TRANSFERS FROM THE FEDERAL HIGHWAY ADMINISTRATION GRANTS

In addition to grants apportioned by the FTA, grants from the FHWA may be utilized to support shared mobility development in rural communities. FHWA grants are primarily allocated under section 104 of Title 23. This section determines the amounts apportioned each year and conditions under which funds may be transferred to other programs. Importantly, this section allows the transfer of funds to amounts made available under Chapter 53 of Title 49 for transit projects. Specifically, the section states that “amounts made available for transit projects or transportation planning under this title may be transferred to and administered by the Secretary in accordance with Chapter 53 of Title 49” (23 U.S.C. § 104, 2022). This provides states and small urban and rural areas with more opportunities to secure funding for shared mobility projects and alternatives to traditional public transportation.

One such opportunity to support shared mobility lies in section 146 of Title 23, titled Carpool and Vanpool Projects. This section enables federal funding to support projects designed to encourage the use of carpools and vanpools. For example, a project may provide carpooling opportunities to the elderly and handicapped, or systems for locating potential riders and giving them information on carpooling opportunities. Funds may also be used in capital expenses such as acquiring vehicles.
appropriate for vanpool use. As vanpools are defined as eligible public transportation, this may be particularly beneficial for supplementing formula grants for rural areas as allocated under Title 49.  

Likewise, the FHWA’s Surface Transportation Block Grant Program provides an opportunity for recipients to invest in projects related to shared mobility (23 U.S.C. § 133, 2022). Among other eligible projects under this section, recipients may receive funding for any transit capital projects that are eligible for funding under Chapter 53 of Title 49. Also eligible are carpool and vanpool projects and pedestrian and bicycle projects in accordance with section 217 of Title 23, and projects that enhance travel and tourism. Finally, the creation and operation of a state office to assist in the design, implementation, and oversight of public-private partnerships eligible to receive funding under this title and Chapter 53 of Title 49 is an eligible expense under this section. The federal share of net project costs under this section may be up to 100 percent (23 U.S.C. § 133, 2022).

Finally, the Congestion Mitigation and Air Quality (CMAQ) Improvement Program may provide funds for the purpose of public transportation so long as it is for a project in a nonattainment zone for ozone, carbon monoxide, or particulate matter under the CAA (23 U.S.C. § 149, 2022). These projects must also broadly contribute to a high effectiveness in reducing air pollution and have air quality benefits, for instance through improved traffic flow. Currently in Minnesota this section is unlikely to provide funding to rural communities, because as of April 2022 Minnesota does not have any nonattainment areas for ozone, carbon monoxide, or particulate matter (EPA, 2022).

Section 11115 of the IIJA adds eligibility for shared micromobility into CMAQ, including bike share and shared scooter systems, as well as for the purchase of medium- or heavy-duty zero emission vehicles and related charging equipment (AASHTO, 2021). Additionally, for a state having a non-attainment zone or maintenance area the priority of usage of funds allocated to areas with a particle pollution of 2.5 is amended to emphasize on benefits to disadvantaged communities or low-income population living in or immediately adjacent to such nonattainment and maintenance areas. Similarly, section 11133 of IIJA provides some assistance for pedestrian walkways and bicycle transportation. It also amends section 217 of Title 23 regarding use of Surface Transportation Program (STP) and the CMAQ program to extend the purpose of funds for construction of pedestrian walkways and bicycle and shared micromobility transportation facilities and for carrying out projects that do not involve any construction related to safe access for bicyclists and pedestrians. This section defines bicycle transportation facility as a new or

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6 Section 11102 of the IIJA establishes that the Secretary can distribute remaining funds (funds available after distributing them for specific purposes) for purposes described in section 133(b) of Title 23. Purposes included are those that the Secretary determines provide substantial public transportation benefits including transit capital projects eligible for assistance under chapter 53 of Title 49 and infrastructure-based intelligent transportation system capital improvements including carpool projects in accordance with section 146.

7 In 2021, several states including Colorado, Delaware, Maryland, Michigan, Missouri, and Virginia used CMAQ funding for ride sharing projects (FHWA, n.d.). See Appendix B.
improved lane, path, or shoulder for use by bicyclists and a traffic control device, shelter, or parking facilities for bicycles.\(^8\)

### 2.4 TRANSIT FUNDING OPPORTUNITIES FROM THE INFRASTRUCTURE AND INVESTMENT JOBS ACT

In this section we focus on funding opportunities available under the Infrastructure and Investment Jobs Act (IIJA). On November 06, 2021, the U.S. Congress passed the bipartisan Infrastructure and Investment Jobs Act that authorizes funds for transportation purposes including transit programs. One of the objectives of the IIJA is to facilitate improved transportation options for all Americans and promote clean and green technology. With Build Back Better as the underlying theme of the Infrastructure Bill, Congress acknowledges the need to connect the underserved communities and regions and provide them equal opportunities for access to jobs, economic growth, and healthy living (The White House, 2021). In terms of public transit, the IIJA expands transit systems, supports clean transit options, and increases accessibility for seniors and persons with disabilities in addition to providing funding for the nation’s transit repair backlog.

We identified several funding opportunities under the STP that could be used for transit purposes in small urban and rural areas. Some funding may be used to support mobility services or related infrastructure such as the Rural Surface Transportation Grant Program, the Local and Regional Project Assistance Program, the National Infrastructure Project Assistance Program, and the Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) Program. In addition, we reviewed the Open Challenge and Research Proposal Pilot Program, which provides funding for research proposals that address a need, issue or challenge and could potentially be used to fund projects that expand transit services in small urban and rural areas.

#### Rural Surface Transportation Grant Program - Division A, Title I, Sec 11132

This section adds a section to Chapter 1 of title 23, U.S. Code and directs the Secretary to establish a Rural Surface Transportation Grant Program to provide grants to improve and expand the surface transportation infrastructure in rural areas (AASHTO, 2021). The goals of the program include increasing connectivity, safety, and reliability of the movement of people and freight; generating economic growth in the region; and improving the quality of life in rural areas. Rural areas are defined as an area outside an urbanized area with a population of over 200,000. Eligible entities include a state, a regional transportation planning organization, a unit of local government, a tribal government, or a consortium.

\(^8\) It is possible that a bike share station is considered parking facilities for a bike. Projects eligible for CMAQ include shared micromobility and the FHWA discusses "shared micromobility systems" as shared fleets that “provide users with on-demand access to devices. These fleets are most commonly parked in the public right-of-way, either grouped at a dock or as dockless devices.” A FHWA report also states that bicycle parking can be provided using three basic approaches: Bike racks, bike lockers, and bike lock-ups (FHWA, 2013).
of tribal governments and a multijurisdictional group of these entities.\(^9\) Eligible projects under this grant include a project to develop, establish, or maintain an integrated mobility management system, a transportation demand management system, or on-demand mobility services (USDOT, 2022c). The funds under this grant are dedicated to development phase activities which include but are not limited to planning activities, feasibility analysis, forecasting environmental review, and preconstruction activities; it will also include costs that are required for land acquisition and construction. The Secretary may also consider, among others, diversity among the grant recipients and the incorporation of innovative technologies for transportation and project delivery.

**Local and Regional Project Assistance Program- Division B, Title I, Sec 21202**

The IIJA widens the scope of Chapter 67 under Subtitle III of title 49, regarding Multimodal Infrastructure Investment by adding funding opportunities specifically for local and regional projects that will make a significant local or regional impact and improve the transportation infrastructure. This program requires a 50-50 split between urban and rural\(^10\) projects and that at least one percent of available funds go toward projects in historically disadvantaged communities or areas of persistent poverty (HDR, 2022).\(^11\) In addition, the framework under this program exempts the projects for rural areas, historically disadvantaged communities or areas of persistent poverty from the cap of 80 percent of the cost of the project as the federal share limit.

Eligible projects under this program include, but are not limited to, public transportation projects under Chapter 53 of Title 49 and any other surface transportation infrastructure project that the Secretary considers to be necessary to advance the goal of the program. Eligible entities for this program include a unit of local government, a public agency, a transit agency, a federally recognized Indian Tribe or a consortium of Indian tribes, or a multi-state or multijurisdictional group of entities. The primary selection criteria include an increase in economic competitiveness and opportunities, tourism, improvement in mobility, and community connectivity. In addition, collaboration with public or private entities and use of innovative technologies are also considered in the selection process.

**National Infrastructure Project Assistance Program - Division B, Title I, Sec 21201**

This section establishes the National Infrastructure Project Assistance to provide single- or multi-year grants to projects generating national or regional economic, mobility, or safety benefits. Eligible projects include a public transportation project that is eligible for assistance under Chapter 53 or that is part of

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\(^9\) To be monitored. These are currently the eligible entities and there is no information regarding subrecipients. Additional information will be forthcoming (USDOT, 2022b).

\(^10\) For this program, ‘rural area’ means an area located outside of the urbanized area with a population of less than 200,000 residents.

\(^11\) Historically disadvantaged communities include certain qualifying census tracts, Tribal lands, or any other territory of the U.S. In addition, an area of persistent poverty is defined as any county or territory in possession of the U.S. that has 20 percent or more of its population continually living in poverty as per the census data (USDOT, 2022a).
other eligible projects. Eligible entities include states, MPOs, a unit of local government, a special purpose district or local authority or a Tribal government. In providing grants, the Secretary must ensure geographical diversity and a balance between rural and urban communities.

**Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) Program (New 23 U.S.C. 176) - Division A, Title I, Section 11405**

This program provides grants to improve the resiliency of transportation infrastructure. This program funds projects that address vulnerability to the effects of extreme weather and natural disasters through formula funding, competitive planning grants, and competitive resilience improvement grants (Office of Senate Counsel, Research, and Fiscal Analysis, 2021). Under this program, funding can be allocated to public transportation projects or services eligible for assistance under Chapter 53 of Title 49. Eligible entities include a state or Indian tribe that receives a Federal Transit program grant directly from the government and subrecipients include a local governmental authority, a nonprofit organization, or an operator of public transportation or intercity bus service that receives Federal transit program grant funds indirectly through a recipient (49 U.S.C. § 5311, 2022). The IIJA also stipulates that the Secretary shall use not less than 25 percent for grants for projects located in areas that are outside an urbanized area with a population over 200,000.

**Research and Technology Development and Deployment - Division A, Title III, Section 13006**

This section amends Section 503 of title 23. Among others, this section establishes an Open Challenge and Research Proposal Pilot Program, which provides funding for open highway challenges and research proposals. Research proposals funded shall address a research need, issue, or challenge identified or determined to be important by the Secretary. Eligible entities for this program are a state, a unit of local government, a university transportation center, a private nonprofit organization, a private sector organization working in collaboration with eligible entities previously listed, or any other individual or entity that the Secretary determines to be appropriate. The federal share to meet the costs of this project shall not exceed 80 percent.

**Carbon Reduction Program - Division A, Title I, Section 11403**

The IIJA amends Chapter 1 of title 23 and establishes the Carbon Reduction Program. This program provides funds for projects designed to reduce transportation emissions. Eligible projects include, for instance, projects for deployment of alternative fuel vehicles, advanced transportation and congestion management technologies (described under Section 503 (c)(4)(E)), and public transportation projects that are eligible for assistance under Section 142 of title 23.

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12 Other projects include a highway or bridge project, a freight intermodal or freight rail project, a railway project or an intercity passenger rail project.
Projects for deployment of alternative fuel vehicles - Funding available for acquisition, installation, or operation of electric vehicle charging or alternative fueling (such as natural gas, propane or hydrogen) infrastructure that is publicly accessible, and purchasing or leasing of zero-emission construction equipment, vehicles and supporting facilities.

Advanced transportation and congestion management technologies - Funding for advanced mobility, access, and on-demand transportation service technologies. It encompasses services such as dynamic ridesharing and other shared-use mobility applications and information systems that support human services for elders and disabled individuals (23 U.S. Code § 503).

Public transportation projects - Projects in Section 142 include electric vehicle charging stations or natural gas refueling stations. In addition, capital transit projects eligible for assistance under Chapter 53 of title 49 may be eligible for funding. This also includes projects that enhance coordination between intercity and rural bus services, and construction of facilities that improve the connectivity between the highway transportation and other modes of transportation (23 U.S. Code § 142).

Of the total funding apportioned to the state, states must suballocate 65 percent to counties and other local governments by population in proportion to their relative shares (FHWA, 2021a; Office of Senate Counsel, Research, and Fiscal Analysis, 2021). The state is divided in the following areas: urbanized areas with population over 200,000; urbanized area with population of not less than 50,000 and not more than 200,000; urban areas with population of not less than 5,000 and not exceeding 49,999; and other areas of the state with a population of not less than 5,000. The remaining 35 percent of the funding can be allocated in any area of the state. Funds could also be attributed to an urbanized area and may be obligated in the metropolitan area.

Under Section 11403, a state is also instructed to develop its own carbon reduction strategies. The projects and strategies should mitigate traffic congestion by facilitating alternative modes of transportation including public transportation facilities, pedestrian facilities, bicycle facilities, and shared or pooled vehicle trips within the state or an area served by any metropolitan planning organization.
CHAPTER 3: REVIEW OF STATE FUNDING FOR PUBLIC TRANSIT

This chapter presents an overview of state funding available to fund shared mobility services as an extension of existing public transit services in small urban and rural areas in Minnesota.

3.1 RELATED CONCEPTS

This section presents a review of concepts used at the state level, including public transit, ride-sharing arrangement, and prearranged ride. This section also discusses the eligibility of shared mobility services and private or nonprofit organizations to receive state funding.

Public Transit

Public transit or transit is defined by Minnesota Statutes as “a general or specific transportation service provided to the public on a regular and continuing basis”. This includes regular route transit and paratransit. Regular route transit is “the transportation of passengers for hire by a motor vehicle or other means of conveyance by any person operating on a regular and continuing basis as a common carrier on fixed routes and schedules”.  

Paratransit is “the transportation of passengers by motor vehicle or other means of conveyance by persons operating on a regular and continuing basis”. This includes transportation by carpool and commuter van, point deviation and route deviation services, shared-ride taxi service, dial-a-ride service, and other similar services (Sec. 174.22 MN Statutes, 2010).

Prearranged Ride

A prearranged ride is defined as “the provision of transportation by a driver to a rider, beginning when a driver accepts a ride requested by a rider through a digital network controlled by a transportation network company, continuing while the driver transports a requesting rider, and ending when the last requesting rider departs from the personal vehicle” (Sec. 65B.472 MN Statutes, 2021). A prearranged ride excludes transportation provided using a taxicab, limousine, or other for-hire vehicles.

Ride-Sharing Arrangement

Ridesharing arrangement is defined as the transportation of persons, for a fee or otherwise, in a motor vehicle when the transportation is incidental to another purpose of the driver. This includes the following forms of shared transportation: car pools, commuter vanpools, and bus pools, whether or not

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13 It does not include transportation of children to or from school or of passengers between a common carrier terminal station and a hotel or motel, transportation by common carrier railroad or common carrier railroads or by taxi, transportation furnished by a person solely for that person's employees or customers, or paratransit.

14 Personal vehicle is defined as “a vehicle that is used by a transportation network company driver in connection with providing a prearranged ride and is: (1) owned, leased, or otherwise authorized for use by the transportation network company driver; and (2) not a taxicab, limousine, for-hire vehicle, or a private passenger vehicle driven by a volunteer driver” (Sec. 65B.472 MN Statutes, 2021).
furnished by an employer. A ride-sharing arrangement does not include transportation of employees by an employer from one place of employment to another (Sec. 169.011 MN Statutes, 2021). The following are the definitions of different forms of shared transportation:

- **Bus pool:** A prearranged ride-sharing arrangement in which a group of persons travel together on a regular basis in a bus, especially to and from their place of employment or to and from a transit stop authorized by a local transit authority.

- **Car pool:** A prearranged ride-sharing arrangement in which two or more persons travel together on a regular basis in an automobile, especially to and from their place of employment or to and from a transit stop authorized by a local transit authority.

- **Commuter vanpool:** A prearranged ride-sharing arrangement in which seven to 16 persons travel together on a regular basis in a commuter van, especially to and from their place of employment or to and from a transit stop authorized by a local transit authority.

**Eligibility of Shared Mobility for State Funding**

Limited shared mobility services may be eligible for funding under state transit programs. Programs like the Park and Ride, Ride-sharing, and public employer commuter van programs promote transitioning to more multioccupancy vehicles. The Ride-sharing Program, for instance, provides governments with funding for the lease of vans to enable vanpooling. Other programs such as the Greater Minnesota Transportation Alternatives Solicitation promote the usage of bicycles and other non-motorized transportation as an alternative to traditional public transportation.

**Eligibility of Private or Nonprofit Organizations for State Funding**

Private organizations are generally not directly eligible for state funding as it applies to shared mobility. While private organizations are eligible for many grants if they are operators of public transit services, in the context of Minnesota law, public transit services are confined to the definition that they are paratransit or regular route transit services. In this way, private organizations are unlikely to receive state funding for the purposes of shared mobility services. However, eligible entities may partner with or contract out to these private organizations through most state programs. Nonprofit organizations generally are eligible to function as a primary recipient of state funds. Some programs, such as the Transportation Alternatives Solicitation, restrict the eligibility of nonprofit organizations to only those

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15 This includes electric-assisted bicycles, but does not include scooters, motorized foot scooters, or similar devices (Sec. 169.011 MN Statutes, 2021).

16 A third-party contractor must comply with state laws, rules and regulations, and they shall make their contracts available for audit. Third-parties must furthermore comply with financial records requirements (MN Rules- 8835.0265, 2007).
with a stated interest in the primary goals of the program, or those currently providing services in the program’s field of interest.

### 3.2 STATE FUNDING FOR PUBLIC TRANSIT

**Public Transit Participation Program - Statute 174.24**

The Public Transit Participation Program (PTPP) seeks to meet at least 90 percent of transit service needs in Greater Minnesota by July 1, 2025. This program is an extension of the FTA’s 5311 programs in the form of the Rural Transit Program. This program provides funding for small and large urban areas, and rural areas outside of the seven-county Twin Cities metropolitan area. The terms small and large urban areas, and rural areas in Minnesota are adopted from federal definitions.

This program is open to operators of public transportation services, tribal governments, state or local governments, private nonprofit organizations or private operators of public transportation services. However, eligibility for organizations is in some instances limited by the specific project an organization seeks to carry out (see Table 3.1). The PTPP prioritizes some projects over others. Funding priorities are as follows: (1) funding the operating costs of existing public transit systems; (2) funding capital costs for existing public transit systems; and (3) funding operating and capital costs for public transit services in a community or area not currently served by public transit (MN Rules- 8835.0270, 2013).

**Table 3.1 Eligible organization by grant**

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<th>Grant</th>
<th>Eligible Organizations</th>
<th>Local Match Requirement</th>
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| Public Transit New Service Grant     | Legislatively established public transit commission or authority, county or statutory or home rule charter city providing financial assistance to or operating public transit, private operator of public transit, tribal government | *Small Urban - 20%  
*Small Urban Paratransit - 15%  
*Rural: 5% |
| Public Transit Operating Grant       | Legislatively established public transit commission or authority, county or statutory or home rule charter city providing financial assistance to or operating public transit, private operator of public transit, tribal government | *Small Urban - 20%  
*Small Urban Paratransit - 15%  
*Rural: 5% |
| Public Transit Facilities and Capital Grant (1) | Local governments, non-profits, and Tribal governments are eligible for projects greater than $5,000 | 20% |
| Greater Minnesota Public Transit Operating Grant (1) | Legislatively established public transit commission or authority, county or statutory or home rule charter city providing financial assistance to or operating public transit, private operator of public transit, tribal government | 20% |

**Notes:** (1) Previously listed as part of the 2024-2025 program but not currently available in the 2023 program.

**Source:** (MnDOT, 2020a; Sec. 174.24 MN Statutes, 2021).
Park and Ride Program - Statute 174.256

The Park and Ride Program seeks to, among other things, promote the usage of multioccupancy vehicles. The program also has an interest in promoting shared mobility, stating, “it is also the purpose of this section to encourage the use of vanpools, carpools, and ride sharing by the citizens of the state”. The section centers its funding on the development of park and ride facilities, which consist of a park-and-ride lot where commuters' automobiles are parked and a station or some transfer point where commuters board other modes of transit, which may include a bus, carpool, vanpool, or other similar services. The distance between the station and parking lot must be within a reasonable walking distance. The program must aid recipients of funding in the “planning, promotion, development, operation, and evaluation of park-and-ride service facilities” (Sec. 174.256 MN Statutes, 2014). Eligible recipients for the program include any statutory or home rule charter city, county, school district, independent board, or agency. Funding is available for all areas across the state. Currently, there are park and ride lots in all transportation districts except for Districts 2 and 8 (MnDOT, 2022f).

Ride-Sharing Program - Statute 174.257

The Ride-Sharing Program is designed to advise “citizens” of the available alternatives to travel by low-occupancy vehicles and the benefits derived from sharing rides (Sec. 174.257 MN Statutes, 2022). The program is intended to provide general information to potential ride-sharing users and establish procedures for the implementation of ride-sharing programs by individuals, groups, corporations, or local agencies. Furthermore, it must offer assistance to local governments and other political subdivisions in implementing ride-sharing programs and provide them technical assistance, and must assist in obtaining insured leased vans and management assistance to individuals and persons implementing ride-sharing programs. In this way, the Ride-sharing Program may be utilized by both private and public organizations.

Greater Minnesota Transportation Alternatives Solicitation

The Greater Minnesota Transportation Alternatives Solicitation (TA) is a competitive program that seeks to “fund projects for pedestrian and bicycle facilities, historic preservation, Safe Routes to School and more” (MnDOT, 2022d). It follows the eligibility criteria of transportation alternatives formerly located in Section 101 of Title 23. Among the relevant activities under this program, projects for the construction, planning, and design of on-road and off-road trail facilities for pedestrians, bicyclists, and other non-motorized forms of transportation are eligible. This includes projects for bicycle

17 Due to the sizing of park and ride lots, some facilities may not have any transit services. Lots with 50-99 parking spaces do not need to have transit services at them, those with 20-49 spaces must have carpool/vanpool services, and facilities with greater than 99 must offer transit services (MnDOT, 2012).
18 The term citizen is not defined under this program.
19 Parts of this section were removed in the FAST Act of 2015, but they remain eligible under the Minnesota Transportation Alternatives Solicitation.
infrastructure\textsuperscript{20} and bicycle signals, as well as safety-related infrastructure. Furthermore, the conversion of abandoned railways for bike and pedestrian trails, or other non-motorized transportation are eligible projects. Transportation alternative infrastructure projects are not required to be located along highways.

Eligible recipients for funding under the TA solicitation are local governments, regional transportation authorities, transit agencies, natural resource or public land agencies, school districts, tribal governments, or any other local or regional government entity that administers public transportation. Nonprofit organizations are not eligible recipients or subrecipients of TA funds unless they qualify through one of the eligible entity categories, or if they are responsible for public transportation safety programs. The local match for this program is 20 percent. Finally, the recipient structure of the program works in a similar manner to federal applications, in which the state operates as the direct recipient for small urban and rural areas. State aid cities,\textsuperscript{21} and any MN county are qualified recipients of federal funds. The TA solicitation requires the participation of these cities and counties as a sponsor and/or applicant. If an eligible applicant is not a state aid city or county, the applicant will need a state aid city or county to also sponsor the project.

**Clean Transportation Pilot Program**

The Clean Transportation Pilot Program distributes funds for the piloting, testing, and increased adoption of clean transportation technology. Each year, half of the program’s funds go to Greater Minnesota.\textsuperscript{22} The primary goal of the program is to meet greenhouse gas (GHG) reduction goals set forth in the Next Generation Energy Act, as it applies to statewide transportation. Among other goals, projects that advance infrastructure or systems for the purpose of avoiding or reducing transportation GHG emissions are eligible for funds under this program. Examples include shifting single-occupancy vehicle trips to other modes of transportation, reducing peak trip demand, and increasing the availability of electric vehicles (EVs) and charging facilities (MnDOT, 2022c). Other qualifying activities include projects that demonstrate innovative uses and/or adoption of commercially available clean transportation technologies in new or underserved communities, or to help to overcome barriers to new technology adoption. In addition, projects that demonstrate the scaling up of clean transportation technologies are eligible for funding. The local match for this program is 20 percent, and all funds must be used within 12 months.

\textsuperscript{20} Although there is not a formal definition for bicycle infrastructure in statutes, the MnDOT Bicycle Facility Design Manual discusses bike facility infrastructures and bike parking facilities as bicycle infrastructures. The manual outlines six types of bike facility infrastructure including shared-use paths, sidewalks, separated bike lanes, bike lanes, paved shoulders, and shared roadways (Barnes et al., 2020). The manual also discusses short- and long-term bike parking facilities. It is important to note that they do not refer to bikesharing in these forms of bicycle infrastructures.

\textsuperscript{21} Those with a population greater than 5,000.

\textsuperscript{22} The next solicitation is delayed until at least fall 2022 due to contracting delays for the first round of funding and the federal infrastructure bill (MnDOT, 2020b).
Eligible recipients for funding are similar to those for the TA solicitation. Recipients may be local governments, regional transportation authorities, transit agencies, natural resource or public land agencies, school districts, tribal governments, or any other local or regional government entity that administers public transportation. Nonprofit organizations with a stated mission involving transportation or clean energy are eligible recipients. Finally, the pilot guide states that “MnDOT encourages lead applicants to form partnerships with other public, private, and/or non-profit entities to serve as supporting applicants.” These entities may or may not also be eligible independent of a partnership (MnDOT, 2020b).

Public Employer Commuter Van Program - Statute 174.27

The Public Employer Commuter Van Program enables cities, counties, school districts, and independent boards or agencies to lease commuter vans, purchase a commuter van service, or contract with a public or private employer to acquire or lease vans for a commuter van program for employees of the public organization (Sec. 174.27 MN Statutes, 1994).  

3.3 STATE FUNDING TO BE MONITORED FOR SHARED MOBILITY

The following three programs - the AT, TED, and TEDI programs - are currently unlikely to fund shared mobility projects due to constraints in their eligibility requirements. These constraints are mostly due to restrictions in infrastructure eligibility. However, with future expansion, these programs have the potential to fund shared mobility services in rural areas.

Active Transportation (AT) Program – Statute 174.38

The AT program provides funding for planning and infrastructure meant to increase the number of people walking and biking to their destinations. Infrastructure projects are limited to the construction and maintenance of bicycle, trail, and pedestrian infrastructure. This includes eligible Safe Routes to School program activities (Sec. 174.38 MN Statutes, 2017). Projects may also support Minnesota Strategic Highway Safety Plan goals and advance recommendations made by the Sustainable Transportation Advisory Council (MnDOT, 2022b). Examples of eligible activities for infrastructure grants under this program include pedestrian curb ramps, intersections or midblock crossings, speed humps, median refuges, raised crossings, raised intersections, curb extensions, bicycle lanes, and multi-use or shared-use paths (MnDOT, 2022e). Bike racks, bike parking, and other “non-permanent” improvements are not eligible for AT funding.

23 Similar programs are operated by Metro Transit, including CMAQ funded commuter and vanpool programs (MetroTransit, 2021a).
Transportation Economic Development (TED) Program - Statute 174.12

The TED program provides competitive grants to construction projects on state highways that contribute to job creation or retention or another measurable economic benefit (MnDOT, 2022g). Eligible applicants are any governmental entities. The TED program will provide funding for up to 70 percent of the total transportation infrastructure costs. In addition, funding under TED may be used only for trunk highway purposes (Sec. 174.12 MN Statutes, 2019). Projects may do more than improve a trunk highway, however the TED program can only fund work on the trunk highway and trunk highway right of way (MnDOT, 2022a). MnDOT in partnership with the Department of Employment and Economic Development (DEED) administers the TED program.

Transportation Economic Development Infrastructure (TEDI) Program - Statute 116J.436

The TEDI program is a competitive grant program available to communities for road and public infrastructure projects that create jobs and support economic development. TEDI funds must be used to fund predesign, design, acquisition of land, construction, reconstruction, and infrastructure improvements that will promote economic development, increase employment, and improve transportation systems to accommodate private investment and job creation (Sec. 116J.436 MN Statutes, 2021). While funding cannot be used on trunk highway improvements, it can be used for infrastructure improvements in coordination with trunk highway improvement projects undertaken by MnDOT. There is no match requirement and funding can be combined with the TED program (DEED, n.d.). Although eligible applicants must be governmental entities, private entities - that are not currently eligible for TEDI funding - may enter into agreements with eligible applicants to request funding for eligible public infrastructure and transportation projects. The application and selection process must distribute funding to local units of government for publicly owned infrastructure based on specific criteria.

Projects are evaluated based on the following criteria: job creation (25 points); increase in local tax base (20 points); level of private investment (15 points); leverage of non-state funds (15 points); and improvement to the transportation system to serve the project area (25 points). In addition, there should be an appropriate geographical balance between the metropolitan area and greater Minnesota (lower scoring applications can bump high scoring applications if DEED deems it necessary for geographic balance).
CHAPTER 4: SURVEY OF STATES ON FUNDING SHARED MOBILITY AS AN EXTENSION OF TRANSIT SERVICES

This chapter discusses the results of an online survey distributed across the 50 states to explore the mechanisms states use to fund shared mobility services as an extension of existing public transit services.

4.1 SURVEY METHODOLOGY

The research team developed a survey that was administered to all states across the U.S. The survey was administered to collect information about the use of federal and/or state funds to fund shared mobility services as an extension of transit services in small urban (with under 200,000 people) and rural (with under 50,000 people) areas. The questionnaire consisted of a total of 18 questions that included multiple-choice and open-ended questions (see questionnaire in Appendix C). Respondents were asked whether they have funded shared mobility services as an extension of public transit, whether they have used federal or state funding for those services, the type of shared mobility services funded, and barriers to obtaining funding for such services among others.

The survey was developed in Qualtrics, a web-based survey tool, and distributed through the email list of members and friends of the American Association of State Highway and Transportation Officials (AASHTO) to state Department of Transportation (DOTs) and Metropolitan Planning Organizations (MPOs) across the U.S. The survey was available from May 25th to June 10th, 2022.

Shared mobility was defined in the survey to get consistent information. The concept was defined as transportation services provided and/or managed by nonprofit organizations, private for-profit organizations or public providers of transportation. These services may involve sharing a vehicle by multiple users at the same time or used by multiple users at separate times. Examples include taxis, carpools, vanspools, bike-sharing, scooter-sharing, ridehailing services, microtransit, and car-sharing services.

4.2 KEY FINDINGS

Eleven of nineteen states that responded to the survey fund shared mobility services in rural areas as an extension of public transit.

Most of the responding states have used a combination of federal and state funding to fund shared mobility services. In a few instances, a state has used either only federal funding or only state funding. Formula Grants for Rural Areas (Section 5311) and Formula Grants for the Enhanced Mobility of Seniors and Individuals with Disabilities (Section 5310) were the most frequent federal funding sources utilized to fund shared mobility services across responding states. States that used federal funding generally received close to the maximum allowable amount for transit (50 percent of net project
costs for operating expenses and 80 percent of net project costs for capital expenses). State-level funding is generally derived from state transportation trust funds, and some state allocations from the general fund. Most states also utilize local funding sources to fund shared mobility, typically required by the local matching requirements of most federal programs. Other local funding sources may include general budget appropriations, mileages, farebox, and the required budget contributions of regional providers with funds from local partners. States also mentioned that state appropriations have increased as a result of the Infrastructure Investment and Jobs Act (IIJA).

The most common barriers the states face in funding shared mobility are funding challenges -including the lack of state funding available to support these services and difficulties in obtaining the local share- and the prioritization of resources for standard and existing services. IIJA changes to the CMAQ program, enabling funds for the operating expenses of already existing transit projects, help to address the problems many states raised with regards to federal funding being used primarily in the maintenance of existing programs.

States fund different types of shared mobility services and infrastructure investments to support shared mobility in rural areas. Microtransit, ridesharing, and vanpool services were the most utilized type of service offered by states; electrification and charging infrastructure, park-and-ride facilities, technology investments, and multimodal mobility hubs were the most frequently developed types of infrastructure. Finally, shared mobility projects were most often developed and implemented by government organizations, or in a partnership between public and private organizations.

4.3 DETAILED FINDINGDS

The research team received a total of 27 responses, 25 of them from the Qualtrics survey, and two email submissions. Four responses from the Qualtrics survey were blank and excluded from the analysis. In addition, four states submitted two responses. In such cases, the responses were used to supplement the information. In total, researchers analyzed 23 responses from 19 states. All the responses were from state DOTs, except the two from Delaware (in this case, one was from the state DOT and the other from the Delaware Transit Corporation -DTC, which is the transit division of the Delaware DOT - DelDOT).

4.3.1 States Funding Shared Mobility Services as an Extension of Transit Services

States were asked whether they have funded shared mobility services as an extension of public transit. Overall, 11 states fund shared mobility services in rural areas (see Figure 4.1).

25 Delaware, Oregon, Massachusetts, and Washington.
Eight responding states do not fund shared mobility. These states were asked what had prevented them from funding such services. Four states responded to this question. Arkansas expressed that in their state, the DOT is the oversight agency and assists with technical assistance; while local transit agencies are the organizations who implement such services. Indiana mentioned that the DOT only funds transit vehicles. Missouri explained that they do fund mobility management on a very limited basis, but that most of the funding is used to replace or expand transit vehicles. They expressed the need for a dedicated funding stream to fund shared mobility. Finally, South Dakota was not aware of a need for such services.

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26 They fund mobility management though the FTA Section 5310 program only, which is for seniors and individuals with disabilities.
4.3.2 Funding Sources Used for Shared Mobility Services

Most of the responding states have used a combination of federal and state funding to fund shared mobility services. Among responding states, New Hampshire and Iowa have only used federal funding to fund shared mobility services, while Oregon has only used state funding.

4.3.2.1 Federal Funding Sources Used for Shared Mobility Services

States were asked about federal funding sources they have used to fund shared mobility services as an extension of transit services in small urban and rural areas in their states. Response options included in the survey were informed by the review of federal funding available for funding public transportation and feedback from members of the technical advisory panel (TAP). A total of 10 states responded to this question (Figure 4.2).²⁷

![Figure 4.2 Federal funding sources used for shared mobility services](image)

**Note:** Virginia selected the ‘Other’ category but did not elaborate.

Figure 4.2 Federal funding sources used for shared mobility services

²⁷ Two agencies responded to this question from Delaware: A representative from Delaware DOT and a representative of the Delaware Transit Corporation.
According to the survey responses, the most widely used federal sources to fund shared mobility services as an extension of public transit are the Formula Grants for Rural Areas (Section 5311) and Formula Grants for the Enhanced Mobility of Seniors and Individuals with Disabilities (Section 5310) (Table 4.1). Another highly utilized federal funding source is the CMAQ improvement program from the Federal Highway Administration (FHWA). Other utilized sources are Formula Grants for Urbanized Areas (5307); and competitive programs offered under section 5312, those being Enhancing Mobility Innovation, Mobility on Demand (MOD) Sandbox, and Accelerating Innovative Mobility (AIM). Funding from the FHWA is also utilized through the Carpool and Vanpool Projects Program. No states reported using funds from the Areas of Persistent Poverty Program or the Surface Transportation Block Grant Program.

Table 4.1 Federal funding used for shared mobility services

<table>
<thead>
<tr>
<th>State</th>
<th>Federal Grants Used</th>
<th>Total project costs covered by federal funding (in percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaware</td>
<td>Formula Grants for Rural Areas (Section 5311) (1)</td>
<td>75%</td>
</tr>
<tr>
<td></td>
<td>Formula Grants for Urbanized Areas (Section 5307)(1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Carpool and Vanpool Projects (Title 23 Section 146)(1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Formula Grants for the Enhanced Mobility of Seniors and Individuals with Disabilities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Section 5310)(1)(2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AIM (Section 5312)(2)</td>
<td></td>
</tr>
<tr>
<td>Iowa</td>
<td>Formula Grants for Rural Areas (Section 5311)</td>
<td>80%</td>
</tr>
<tr>
<td></td>
<td>Formula Grants for Urbanized Areas (Section 5307)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Formula Grants for the Enhanced Mobility of Seniors and Individuals with Disabilities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Section 5310)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IMI (Section 5312)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AIM (Section 5312)</td>
<td></td>
</tr>
<tr>
<td>Massachusetts</td>
<td>Formula Grants for Rural Areas (Section 5311)</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td>Formula Grants for the Enhanced Mobility of Seniors and Individuals with Disabilities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Section 5310)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Michigan</td>
<td>Formula Grants for Rural Areas (Section 5311)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IMI (Section 5312)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CMAQ (Title 23 Section 149)</td>
<td></td>
</tr>
<tr>
<td>Montana</td>
<td>Formula Grants for Rural Areas (Section 5311)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Formula Grants for the Enhanced Mobility of Seniors and Individuals with Disabilities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Section 5310)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CMAQ (Title 23 Section 149)</td>
<td>As far as I am aware, 100% minus the local share requirement</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>Formula Grants for the Enhanced Mobility of Seniors and Individuals with Disabilities</td>
<td>80%</td>
</tr>
<tr>
<td></td>
<td>(Section 5310)</td>
<td></td>
</tr>
<tr>
<td>Ohio</td>
<td>Formula Grants for Rural Areas (Section 5311)</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>Formula Grants for the Enhanced Mobility of Seniors and Individuals with Disabilities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Section 5310)</td>
<td></td>
</tr>
<tr>
<td>Vermont</td>
<td>Formula Grants for Rural Areas (Section 5311)</td>
<td>80% (some ops at 50/50)</td>
</tr>
<tr>
<td></td>
<td>Enhancing Mobility Innovation Competitive Program (Section 5312)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MOD Sandbox (Section 5312)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Carpool and Vanpool Projects (Title 23 Section 146)</td>
<td></td>
</tr>
</tbody>
</table>
States that reported using federal funding sources for funding shared mobility services were also asked about the percentage of the total shared mobility projects covered by these sources. Ten states responded to this question. Consistent with the local match requirements of the Federal Transit Administration (FTA) funding, states reported federal funding covering between 50 to 80 percent of project costs. Most of the respondent states (eight states) reported that federal funding covered between 70 to 80 percent of total project costs. Massachusetts, Michigan, and Vermont reported federal funding covering 50 percent of the total project costs under some of the grants. Lastly, Michigan reported receiving 100 percent of funding for projects under CMAQ.

4.3.2.2 State Funding Sources Used for Shared Mobility Services

States were asked about state funding sources available to fund shared mobility services. Nine states responded to this question. Overall, state funding is mostly coming from state transportation trust funds, and some state allocations from the general fund (Table 4.2).

<table>
<thead>
<tr>
<th>State</th>
<th>State Funding Sources Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaware</td>
<td>Funding from the State of Delaware Transportation Trust Fund</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>State operating funds (State Contract Assistance). These were allocated through a competitive process.</td>
</tr>
<tr>
<td>Michigan</td>
<td>State Comprehensive Transportation Fund (revenue comes from fuel tax and auto-related sales tax) is used to fund certain state programs, such as Service Initiatives and Transportation to Work. One-time general funds were earmarked to fund the $8M Michigan Mobility Challenge.</td>
</tr>
<tr>
<td>Montana</td>
<td>TransADE- revenue from a rental car tax. Approximately $1.5M annually for statewide services.</td>
</tr>
<tr>
<td>Ohio</td>
<td>GRF Funds</td>
</tr>
<tr>
<td>Oregon</td>
<td>Statewide Transportation Improvement Fund (STIF)</td>
</tr>
<tr>
<td>Vermont</td>
<td>Transportation Bill funds. Vermont's public transit budget includes up to $8.5M in State funds. Coupled with the FHWA Flex, these two sources make up more than 60% of the total budget (in addition to the basic FTA formula funds received).</td>
</tr>
</tbody>
</table>
The Washington State DOT uses the Vanpool Investment Program (VIP) grants and the Zero-emissions Access Program (ZAP) grant to support shared mobility. The VIP funds can be used to expand vanpool fleets, replace aging vans, and provide incentives to employers to increase vanpool ridership (WSDOT, n.d.-b). The funding can be used to purchase vans with alternative fuel types (including low-emission plug-in hybrids and zero-emission all-electric vans). The program is supported by state funding and the DOT has $2 million in grant funding for the 2021-2023 biennium. The VIP grant does not have a match requirement and all Washington state transit agencies are eligible to apply. On the other hand, the ZAP grant provides funding for zero-emissions carshare pilot programs in underserved and low- to moderate-income communities (which have limited access to public transportation or are in areas where emissions exceed state or federal standards) (WSDOT, n.d.-c). The ZAP grant is supported by state funding authorized by RCW 47.04.355 and the DOT has $2.2 million available for the 2021-2023 biennium. The grant is open to nonprofit organizations and local governments in Washington state and follows a competitive application process. Applicants to these grants must provide matching funds equal to at least 10 percent of the total project cost.

### 4.3.2.3 Other Funding Sources Used for Shared Mobility Services

States were asked about other funding sources for shared mobility services in small urban and rural areas. Eight states responded to this question. Overall, in most states, local funding sources are used to fund shared mobility services as an extension of transit services in small urban and rural areas.

Five states mentioned that local funds have been used to fund shared mobility services. Of these, four states specified these as local matches used for shared mobility services. In Oregon, these are potentially local, state, and federal sources outside of Oregon DOT. The Vermont respondent noted that regional providers are required to contribute up to 20 percent of their budget with funds from local partners including municipalities, businesses, resorts, healthcare facilities, and partner organizations. In Michigan, local funds include mileages, farebox, and general budget appropriations among others. Lastly, Virginia did not elaborate.

New Hampshire mentioned they have utilized fundraising and donations. Lastly, Delaware and Washington reported not having used any other sources of funding for shared mobility services. Of

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28 Local governments include cities, counties, housing authorities, ports, and public transit agencies.

29 This includes direct contributions and or in-kind contributions.
these, the Washington respondent noted that while local transit agencies may have received federal dollars for pilot programs, they were unaware of any.

4.3.2.4 New Funding Available from the Infrastructure Investment and Jobs Act (IIJA)

States were also asked whether they have identified new funding sources as a result of the IIJA. Eleven states responded to this question. Vermont identified changes made to CMAQ as a way to expand their microtransit pilots in rural areas. According to the respondent, the ability to use CMAQ funds for the operating expenses of already existing transit projects and shared micromobility enabled their state to use 5311 funds for more operating expenses and pilot programs. In the past, these 5311 funds were being used up to fund the operating expenses of existing programs. The respondent also noted that the state legislature also added $1.2 million for state match on their microtransit pilots.

Delaware expects to find new or expanded funding for microtransit as changes from the IIJA begin to be implemented. The respondent noted that the state is currently using the AIM grant to support the technology component of their DART Connect microtransit program along with state funds. The state intends to expand this program potentially through formula funds if authorized under IIJA, though many initiatives at the DTC and DelDOT may compete for those funds. In addition, the respondent noted that while they have identified the Rural Grant program, they have not applied for this fund to support shared mobility services.

The other nine respondents did not identify new funding sources as a result of the IIJA. Montana, however, noted that while no additional sources have been identified, state appropriations have been significantly increased under IIJA. Similarly, Ohio noted that no additional sources have been identified specifically for shared mobility services, but the state is open to applying to any discretionary funds targeted at rural/small urban mobility services.

4.3.3 Barriers to Obtaining Funding for Shared Mobility Services and Strategies to Overcome Barriers

States were asked about barriers they have faced in funding shared mobility services as an extension of transit services. A total of nine states responded to this question. The most common barriers the states face in funding shared mobility are funding challenges and the prioritization of resources for standard and existing services. Other challenges include accountability of individual providers and record-keeping, lack of coordination at the regional level, and knowledge and training around carsharing and its rules and requirements (Table 4.3).
Table 4.3 Barriers faced by states and strategies used to overcome barriers

<table>
<thead>
<tr>
<th>State</th>
<th>Barriers to funding shared mobility services</th>
<th>Strategies to overcome barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Funding Challenges</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lack of State Funding</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delaware</td>
<td>Funding availability is based on State of Delaware annual budget allocations.</td>
<td>Funding requests were made in a timely manner in order to secure available funding.</td>
</tr>
<tr>
<td>Vermont</td>
<td>Barriers could include a lack of funding (due to prioritization of annual budgets) and a lack of coordination at the regional level.</td>
<td>Prioritized these activities and used regional mobility committees and partners to ensure proper outreach, communication and advocacy.</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>There is no state funding for such services, which makes non-profit personnel have to spend time attempting to secure 20% local match in addition to their having to actually run the program.</td>
<td>The state is divided into regional coordinating councils (RCCs). As the services within each region benefit the entire region, any in-kind match generated by one agency can be &quot;pooled&quot; for use by other projects within the region. This generally results in less than the full 20% local cash match being needed.</td>
</tr>
<tr>
<td>Montana</td>
<td>No barriers. However, the local share can be challenging to obtain.</td>
<td>MT DOT isn't involved with obtaining the local share.</td>
</tr>
<tr>
<td><strong>Challenges obtaining the local share</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iowa</td>
<td>With the formula grants, a lot of the transit agencies use the money for their standard services, so there is not always money set aside for shared mobility.</td>
<td>Encouraged shared mobility through statewide ridesharing software.</td>
</tr>
<tr>
<td>Washington</td>
<td>The way WSDOT funds transit projects tends to prioritize existing projects and levels of service over innovations such as car sharing. The second issue is knowledge and training around carsharing and its rules and requirements.</td>
<td>When developing the grant application for the Zero-emissions Access Program grant, WSDOT staff did considerable research on rideshare operations and conducted outreach and education on this transportation option to potential applicants of this grant program.</td>
</tr>
<tr>
<td><strong>Other challenges</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ohio</td>
<td>Accountability of individual providers, record keeping.</td>
<td>Software to ensure financial, FTA and safety compliance.</td>
</tr>
</tbody>
</table>

Funding challenges include the lack of state funding available to support these services and difficulties in obtaining the local share. Delaware, Vermont, and New Hampshire noted the lack of state funding as a barrier to funding shared mobility services. To address this barrier, states refer to organizational strategies including requesting funds in a timely manner to secure funding and leveraging regional mobility committees and partners to ensure proper outreach, communication, and advocacy. Similarly, New Hampshire and Montana refer to the challenges of obtaining local funding. The representative from New Hampshire mentioned that any in-kind match generated by one agency can be "pooled" for
use by other projects within the region. This has generally resulted in less than the full 20 percent local cash match being needed.

Other agencies identified organizational priorities as a barrier to funding shared mobility. Iowa and Washington both explained that the prioritization of standard and existing services when using federal funding leaves little remaining for expanding shared mobility.

Lastly, Michigan and Oregon reported not having faced any barriers to obtaining funding for shared mobility services. Of these, Oregon noted that they award funding under a discretionary solicitation to small urban and rural transit providers.

### 4.3.4 Types of Shared Mobility Services and Infrastructure Funded

States were asked about the different types of shared mobility services and infrastructure investments they have funded. Eleven states responded to each question. Both questions examine the variety of services and infrastructure employed in states, rather than the quantity of such services and infrastructure. Service response options included in the survey were informed in part by the FTA’s shared mobility definitions (FTA, 2020b). Infrastructure response options included in the survey were informed by the review of federal and state funding available for funding public transportation.

All state respondents that currently fund shared mobility services fund less than ten distinct services in rural areas of their state. The number of services funded ranges between one and ten, with an average of three services. Microtransit, and ridesharing/vanpooling services are the most frequently funded services, while ridehailing and ridesplitting/dynamic carpool services are the least frequently funded services (Table 4.4). The states of New Hampshire, Michigan, and Delaware mentioned they have funded other services including a voucher program for taxi services in New Hampshire, and an after-hours taxi service in Michigan. Delaware also funds a matching service for those interested in carpooling or ridesharing. The service only matches users and does not provide vehicles.
Table 4.4 Types of shared mobility services provided as an extension of transit services in small urban and rural areas by state

<table>
<thead>
<tr>
<th>State</th>
<th>Microtransit</th>
<th>Ridesharing/Vanpools</th>
<th>Carsharing</th>
<th>Bikesharing</th>
<th>Ridehailing/TNC</th>
<th>Ride-splitting/Dynamic carpooling</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaware</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
</tr>
<tr>
<td>Iowa</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Michigan</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
</tr>
<tr>
<td>Montana</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
</tr>
<tr>
<td>Ohio</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>Oregon</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Vermont</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Virginia</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Washington</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>9</td>
<td>9</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

*Note: Other includes a rideshare matching service in Delaware, a taxi service in Michigan, and a taxi voucher program implemented by New Hampshire.*

In terms of shared mobility infrastructure, a diverse spread of projects has been developed by states. Electrification and charging-related infrastructure was by far the most utilized form of infrastructure to support shared mobility services. Park-and-ride facilities, technology investments (such as virtual stops for microtransit or phone applications for ridesharing), and multimodal mobility hubs were also popular investments for state DOTs. Bicycle- and scooter-related facilities were implemented by a few states (Table 4.5).
Table 4.5 Types of shared mobility infrastructure investments funded in small urban and rural areas by state

<table>
<thead>
<tr>
<th>State</th>
<th>Electrification/Charging Infrastructure</th>
<th>Park-and-Ride Facilities</th>
<th>Technology Investments</th>
<th>Multimodal Mobility Hubs</th>
<th>Bicycle/Scooter Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaware Transit Corporation</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>Iowa</td>
<td>x</td>
<td>X</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Michigan</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Montana</td>
<td>x</td>
<td>X</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>Ohio</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Oregon</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Vermont</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Virginia</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Washington</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

The representative from Michigan clarified that the state DOT has funded electrification/charging infrastructure as part of regular transit service, but it has not been installed yet. This infrastructure could theoretically also be used for other shared mobility. In addition, the tech investments in the state include software that will lead to a ridehailing program; the software has been developed but ridesharing has not been deployed yet. The representative from Montana stated they have implemented microtransit-related software at locations that offer 5311 services. Lastly, the representative from Massachusetts noted that many of the shared mobility infrastructure investments have been made by the MBTA and localities (cities and towns) and the state DOT does not have information about them. It is worth noting that although the representative from Oregon did not select shared mobility technology investments in this question, they referred to them in other sections of the survey. Specifically, they shared a link to its Get There Oregon platform, a web application that helps users to find and share a ride (this is discussed more thoroughly later in this report).

Service and infrastructure projects were overwhelmingly carried out in one of two ways. Projects were most often developed and implemented by an MPO, local government authority, public transit agency, or other government organization (mentioned by ten respondents). Only in Montana is this not the case. When not done in such a way, projects were generally the result of a public-private partnership (PPP).
between a government organization and a private organization (mentioned by six respondents). Few states have contracted at least one project out to a private non-profit organization. In Ohio, at least one project was also contracted out to a private for-profit organization (Table 4.6).

Table 4.6 Public-private involvement in shared mobility project development and implementation by state

<table>
<thead>
<tr>
<th>State</th>
<th>Developed and implemented by a government organization (1)</th>
<th>PPP between a government organization and a private organization</th>
<th>Project contracted out to a private non-profit</th>
<th>Project contracted out to a private, for-profit organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaware</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Iowa</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Michigan</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Montana</td>
<td>x</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Ohio</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Oregon</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>Vermont</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>Virginia</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>Washington</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

Total 10 6 4 1

Notes: (1) Includes an MPO, local government authority, public transit agency, or other government organization.

Respondents were asked to highlight some of the shared mobility projects they have implemented in rural areas in their state. The following paragraphs include a brief description of a project, or a few different projects, as well as information from the links they provided.

Delaware - DART Connect is a microtransit option available to all people in Georgetown and Millsboro, DE, two cities with a combined population of less than 12,000. In addition to trips within each city, the service may also be used to travel to a high school and health facility between the two cities, as well as
to travel between Georgetown and Millsboro. DART Connect utilizes smaller vehicles operated by DART to provide on-demand bus service to customers in a more direct, convenient fashion. Rides can be scheduled through the DART Connect app, or by calling in to DART. The cost to use DART Connect is the same as a DART bus fare ($2 per ride) (DTC, n.d.).

**Iowa** - They developed a text service to create more efficient rides. With this service, the transit agency in Iowa would be able to combine similarly timed rides of users in close proximity to one another, as opposed to taking two or three different trips.

**Michigan** - The BCGo program is a twelve-month pilot program for an on-demand transportation system in Calhoun County, a primarily rural area with a total population of around 136,000. The program is operated by Battle Creek Transit, and takes ride bookings through a call center and phone application, called *BCGo Calhoun County*. The cost to use BCGo is based on travel distance, ranging from $3 per ride for a trip of less than six miles to $15 per ride for trips greater than 20 miles. Additional passengers may be added for $3 each, per ride (BCGo, n.d.). Michigan also sent a Tech Talk document that offered recommendations for similar services based on their experience with BCGo. Among the suggestions, Michigan recommended being prepared for a slower roll-out than anticipated, testing app accessibility before launching and developing a training plan for all staff, and ensuring that staff are trained in both the user-facing and operations-facing sides of the app (MDOT, 2021).

**Ohio** - They created a transportation brokerage service through a local transit agency for users that cannot be served by standard public transit. The Regional Transportation approach helps ten counties in the Ohio Mid-Eastern Government Association area to coordinate transportation trips (Mid-Ohio Mobility Solutions, 2019).

**Oregon** - Get There Oregon is a platform that offers trip planning and ride-matching services for carpool, vanpool, bike, and rideshare throughout rural counties in Oregon (ODOT, 2019). Users enter their starting point and destination and are provided with options for arriving at that destination. Overall, Get There seeks to increase awareness about the value and benefits of commute options including biking, walking, transit, carpool, vanpool, and remote work. Get There is a partnership between regional transportation districts that work with employers to use and promote commute options in the workplace.

The Rogue Valley Connector was one of the regional district travel options previously available through Get There Oregon. It was renamed the Ashland Connector, but the service was discontinued in late 2021 (RVTD, 2022). The service offered rides to those within the city limits of Ashland through the Rogue Valley Connector app.

Oregon also developed the Cottage Grove Connector, a $1 per ride microtransit service pilot program in the city of Cottage Grove, OR, a city with a population of just over 10,000. The service began in early

30 List of counties: Belmont, Carroll, Columbiana, Coshocton, Harrison, Holmes, Guernsey, Jefferson, Muskingum, and Tuscarawas.
2019 and was renewed in August 2020 (LTD, 2022). Service may be scheduled through the TransLoc app, website, or through a phone call (LTD, n.d.).

**Vermont** - The DOT noted their support for Carshare VT, the Burlington Bikeshare program, and 5 planned microtransit projects for 2023, in addition to one already in operation. They also made mention of their Elders and Persons with Disabilities (E&D) Transportation Program. A service for adults age 60 and above and individuals with disabilities. The program offers door-to-door services to medical appointments, local adult day facilities, senior meal sites, and essential shopping (VTrans, 2022).

**Washington** - Through the VIP program, the DOT has provided capital to support the purchase of vans (gasoline and hybrid) in several areas and funding for employer incentives to promote vanpool participation (e.g., Intercity Transit) (WSDOT, n.d.-a).

Lastly, the representative from Massachusetts mentioned that all the projects funded with state funds are microtransit but did not provide details about those projects. In addition, the representative added that one project for central dispatch for carsharing was canceled shortly after the award was made.

### 4.3.5 Additional Comments from Survey Respondents

Researchers also include a space for respondents to share any additional comments they have about funding shared mobility as an extension of transit services. We received two comments. The representative from Michigan mentioned that the state is eager to fund shared mobility services as funding and staff capacity allow. However, many transit agencies do not have the financial, staff or technical capacity to take on such projects, and there is a fear (within the agency or a perception related to their riders) of technology or anything new. They also added that they partner with Michigan's Office of Future Mobility and Electrification (OFME) to fund mobility projects, which may include shared mobility. Specifically, they plan to issue future challenge grants with OFME, which may also include shared mobility. Lastly, the representative from Washington mentioned that they did not include the demand response service (funded by Large Urban FTA 5310 funds). If this was included, many of the human service transportation grants could be included as part of the conversation.
CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

Shared mobility, an innovative strategy, can meet demand for public transit in areas where such services are limited or do not exist. This study explored how public transit funding may be used to fund shared mobility services as an extension of existing public transit services in small urban and rural areas in Minnesota. Researchers identified funding available at the federal and state levels that could be used for this purpose, as well as the limitations in federal and state regulations for use of the funding. In addition, researchers explored how transit agencies across the U.S. have funded similar projects and identified opportunities for Minnesota. Based on research findings, the research team developed the following recommendations.

Recommendations 1-4 seek to address information gaps in current Minnesota policy as it pertains to shared mobility. Addressing these gaps by expanding and developing resources with more information on state public transportation funding programs such as definitions, eligibility requirements, and additional program information will save MnDOT time and effort by enabling grant applicants to identify eligibility requirements and locate program information more easily.

1. **Make the state definition of public transit consistent with the federal definition to improve funding opportunities for shared mobility.**

   Currently, the definition of public transit emphasizes the provision of services on a regular and continuing basis and does not reflect its shared use. In addition, public transit is defined only as regular route transit and paratransit. Furthermore, paratransit at the federal level refers to service for the elderly and disabled, while at the state level, it refers to transporting people through shared-ride services like vanpools and dial-a-ride services. The discrepancy in the definition of paratransit narrows and prevents the funding of shared mobility as a public transit service. MnDOT should work with the legislature to make this definition consistent across different levels of government.

   Making the definition of public transit consistent with other government definitions would clarify and expand the type of services that are considered public transit and potentially increase the funding available for shared mobility as an extension of transit services.

2. **Include a definition for shared mobility.**

   Shared mobility is not currently defined in Minnesota statutes or regulations. The terms “paratransit” and “ride-sharing arrangement” are the closest to shared mobility because they include bus pool, carpool, and commuter vanpool. While these concepts are not exclusive, they may generate confusions about the inclusion (or funding eligibility) of other forms of shared mobility such as microtransit, mobility management, and car-sharing.

   MnDOT should work with the legislature to define shared mobility, and shared mobility terms, using existing FTA definitions as a reference. For example, the FTA defines shared-use mobility as “transportation services that are shared among users, including public transit; taxis and limos;
bikesharing; carsharing (round-trip, one-way, and personal vehicle sharing); ridesharing (carpooling, van-pooling); ridesourcing; scooter sharing; shuttle services; neighborhood jitneys; and commercial delivery vehicles providing flexible goods movement” (FTA, 2020b). They also define shared mobility terms and services, such as microtransit, demand-response systems, paratransit and ride-sharing.

Providing a comprehensive definition of shared mobility helps to create a framework to fund shared mobility as an extension of transit services. In addition, it helps to alleviate confusion and promote continuity between federal and state programs for MnDOT staff and grant applicants.

3. **Provide shared mobility funding eligibility status under state law.**
Currently, Minnesota statutes or regulations do not define what shared mobility services or infrastructure are eligible for funding. Consequently, potential shared mobility projects may not be funded due to a lack of information on their eligibility status. In our research, we found that funding eligibility for microtransit is not well defined.

MnDOT should work with the legislature to establish the eligibility of shared mobility for state funds. After eligibility terms are clearly defined, MnDOT should create a guideline that clearly explains the eligibility status of shared mobility services, and situations in which a non-eligible service may still receive funding. MnDOT could use the FTA Shared Mobility Frequently Asked Questions page as a reference. For instance, regarding micromobility, while bike sharing is not independently eligible, the FTA explains that bicycle facilities and improvements are eligible, or “functionally related to transit,” when they are located within a three-mile radius of a transit station or bus stop.

Providing clear eligibility terms for shared mobility eligibility for state funds will help service providers and governmental organizations fund shared mobility services whose current eligibility under state law remains ambiguous. In addition, this will help service providers and governmental organizations develop more complete transit projects, with diverse service offerings. Such definitions will also save MnDOT time and effort by enabling grant applicants to identify eligibility requirements and locate program information without the assistance of MnDOT more easily.

4. **Create and improve web pages for state-level grant programs.**
MnDOT currently provides information on grant programs through its website; however, the grant pages are not well organized, information is not readily available, and there are discrepancies between the information on the web page and the grant solicitations that could confuse grant applicants. For example, the webpage for the 5311 Rural Transit Program provides a brief description of the goals of the program and the organizations eligible for funding. However, there is no information about project eligibility and local match requirements among others. In addition, the website states that *any non-profit organization* is eligible for funding, but these are not listed as eligible organizations in the grant solicitation and
instructions document. Furthermore, for some programs, like the public employee commuter van program, the state statutes are the only place any information can be found. While for the metro area, information for these programs could be found on the Metro Transit website (MetroTransit, 2021b), and for Greater Minnesota, such information cannot be found.

MnDOT should create and improve existing webpages for state-level grant programs by including information on eligible organizations, eligible projects, and the local match required for each grant. The information should be consistent across all documents linked in the webpage.

Creating webpages that place context around the language of state statutes will make the information more accessible to grant applicants, which will lead to more well-developed applications.

Recommendations 5-9 are related to the use of existing federal funding sources and the creation of a state funding program to fund shared mobility services in rural areas.

5. **Use FTA Formula Grants to fund core shared mobility services in rural areas in Minnesota.**
MnDOT should use FTA Formula Grants 5307, 5310 and 5311 to fund a variety of shared mobility services in small urban and rural areas in the state. Sections 5307 and 5311 allow for a broad range of eligible entities and operating and capital projects, and in this way these programs provide the greatest opportunity for expanding shared mobility. Similarly, section 5310 allows for the development of such services to assist in the transportation of the elderly and disabled. These programs should serve as the foundation of a diverse stream of funding sources for shared mobility services.

6. **Use FTA Competitive Grants to develop shared mobility software and pilot programs in rural areas in Minnesota.**
MnDOT should use FTA competitive grants such as Areas of Persistent Poverty (AoPP), Enhancing Mobility Innovation (EMI), and Integrated Mobility Innovation (IMI) to support shared mobility in Greater Minnesota. Using AoPP funding for the planning of shared mobility services in eligible areas within Greater Minnesota will reduce the competition for funding from FTA Formula Grants. Grants like EMI and IMI that seek to integrate mobility innovations within public transportation can also be used to advance pilot programs, support software solutions, and provide new shared mobility services in rural areas. Using these funding sources to develop software and pilot programs will further reduce the need for core funding like 5311 to support shared mobility services.

7. **Use grant transfers from the FHWA to support funding shared mobility services in rural areas in Minnesota.**
MnDOT should use Flex Funding to help alleviate competition for funding from FTA Formula Grants. Amounts made available for transit projects or transportation planning under Title 23
may be transferred to and used in accordance with Chapter 53 of Title 49. For instance, programs like CMAQ and STBG may offer additional funding sources to support shared mobility services in rural areas. Among others, programs like Carpool and Vanpool Projects may also be flexed to transit uses.

8. **Take advantage of new and revised programs from the IIJA.**
   MnDOT should use the new and revised programs authorized under the IIJA to fund shared mobility services in rural areas in Minnesota. For instance, new IIJA programs such as the National Infrastructure Project Assistance, PROTECT, and the Carbon Reduction programs may be used to fund qualifying, existing transit projects such as those eligible for assistance under Chapter 53 of Title 49. Together, these new programs present opportunities to diversify funding sources for MnDOT and may be used to reduce the dependency on FTA Formula Grants to fund shared mobility services.

9. **Consider the creation of a state-level grant program for shared mobility.**
   Several surveyed states noted the lack of funding for shared mobility and the prioritization of standard and existing transit services as barriers to funding shared mobility services. MnDOT should work with the legislature on creating state-funded programs to support shared mobility. Washington state, for instance, developed the Vanpool Investment Program and the Zero-emissions Access Program for this purpose. In Minnesota, bills like HF 230 (2021) would have supported shared mobility, but the bill did not pass the House ([HF 230 Status in the House for the 92nd Legislature (2021 - 2022), 2021](https://www.republicans.leg.mn/SessionHistory/2021-2022)). This bill would have created the Microtransit Rideshare Pilot Program, a program “to provide needed mass transit options to underserved areas of the state, offer more flexible mass transit options, and explore the use of autonomous vehicles to deliver mass transit to the people of Minnesota.”
REFERENCES


APPENDIX A: AREAS OF PERSISTENT POVERTY AND HISTORICALLY DISADVANTAGED COMMUNITIES IN MINNESOTA
Figure A.1 Areas of persistent poverty and historically disadvantaged communities in Minnesota
APPENDIX B: CMAQ PROJECT LIST FOR 2021
Table B.1 CMAQ project list for 2021

<table>
<thead>
<tr>
<th>State</th>
<th>Project Description</th>
<th>Responsible Entity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado</td>
<td>Shared Ride Project - Public Program - Park &amp; Ride Lot</td>
<td>Pikes Peak Area COG</td>
</tr>
<tr>
<td>Delaware</td>
<td>Pooling of low emission vehicles. The Rideshare program provided the following services: business community outreach; carpool and vanpool matching and formation; employee transit benefit program promotion. Specific worksite services include: carpool and vanpool formation activities; tax benefits services; alternative work hour programs (e.g., compressed work weeks and flex time).</td>
<td>State sponsored project - Delaware DOT through the Delaware Commute Solutions (DECS) program (Delaware Transit Corporation -DTC)</td>
</tr>
</tbody>
</table>
| Maryland | *Pooling of low emission vehicles  
*Park & ride Lot  
*Rideshare Facilities - Construction | Baltimore Metropolitan Council  
Metropolitan Washington COG |
| Michigan | *Pooling of low emission vehicles  
*Congestion Reduction  
*Manage the Genesee County and Lapeer County Rideshare program  
*MichiVan capital and marketing in Genesee County. Supplies fully insured passenger vans to commuter groups.  
*Pooling of low emission vehicles  
*MichiVan capital and marketing in Ingham, Eaton, and Clinton Counties. Supplies fully insured passenger vans to commuter groups.  
*CMAQ Clean Commute Alternatives | Genesee County Metropolitan Planning Commission  
Tri-County Regional Planning Commission |
|          | Pooling of low emission vehicles                                                     | Grand Valley Metropolitan Council                                                                    |
|          | *Pooling of low emission vehicles  
*MichiVan program (sponsored by the MDOT and operated by Enterprise Rideshare)  
*Manage the Rideshare program in Cass County, Berrien County, and Van Buren County. These programs offer a free rideshare matching service to everyone that lives, works, and commutes in the county.  
*Manage the Southeast Michigan Council of Governments (SEMCOG) areawide rideshare program. Program aimed at reducing the single occupancy vehicle trips in the SEMCOG region during peak periods of travel. | Southeast Michigan Council of Governments |
<p>| Maryland | Vanpool Program: Wheels for Workers vanpool program                                    | Kalamazoo Area Transportation Study                                                                  |</p>
<table>
<thead>
<tr>
<th>Location</th>
<th>Description</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missouri</td>
<td>Pooling of low emission vehicles - Marketing and outreach for regional Rideshare program</td>
<td>East-West Gateway Coordinating Council</td>
</tr>
<tr>
<td>Virginia</td>
<td>Pooling of low emission vehicles, Park and Ride Lots &amp; Ride Sharing Program</td>
<td>Richmond Regional Planning District Commission</td>
</tr>
</tbody>
</table>

*Source: (FHWA, n.d.)*
APPENDIX C: SURVEY QUESTIONNAIRE
Survey of State Funding Shared Mobility Services as an Extension of Public Transit

The purpose of this survey is to collect information about the use of federal and/or state funds to fund shared mobility services as an extension of transit services in small urban (with under 200,000 people) and rural (with under 50,000 people) areas. This survey is part of research conducted by the Institute for Urban and Regional Infrastructure Finance (IURIF) at the Humphrey School of Public Affairs, University of Minnesota. This research is funded by the Minnesota Department of Transportation (MnDOT). The information you provide is critical for expanding public transit services through shared mobility services within Greater Minnesota.

This survey will take about 15-25 minutes to complete. You can save your responses and complete the survey later using the same link. If you have any questions about this survey or the research, please contact Anthony Schuette at schue417@umn.edu. We greatly appreciate you taking the time to respond to this survey.

If you agree to take this survey, please click "Agree".

a. Agree
b. Decline [skip logic-end]

General Information

1. Which state do you represent?
2. Which organization do you represent?
   a. State DOT
   b. MPO
   c. Other (please specify): _______________

For the following questions we define shared mobility as transportation services provided and/or managed by nonprofit organizations, private for-profit organizations or public providers of transportation. These services may involve sharing a vehicle by multiple users at the same time or used by multiple users at separate times. Examples include taxis, carpools, vanpools, bike-sharing, scooter-sharing, ridehailing services, microtransit, and car-sharing services.

3. Has your organization funded shared mobility services as an extension of transit services in your state?
   a. Yes
   b. No (skip logic-Q14)
**Funding Shared Mobility Services as an Extension of Transit Services**

For the following questions we are focusing on the areas that are outside of the metropolitan area and may include small urbanized areas with under 200,000 people and rural areas with less than 50,000 people.

1. Which of the following federal funding sources has your organization used to fund shared mobility services as an extension of transit services in small urban and rural areas in your state? (select all that apply)
   - a. Formula Grants for Rural Areas (Section 5311)
   - b. Formula Grants for Urbanized Areas (Section 5307)
   - c. Formula Grants for the Enhanced Mobility of Seniors and Individuals with Disabilities (Section 5310)
   - d. Areas of Persistent Poverty Program
   - e. Enhancing Mobility Innovation Competitive Program (Section 5312)
   - f. Mobility on Demand (MOD) Sandbox (Section 5312)
   - g. Integrated Mobility Innovation (IMI) (Section 5312)
   - h. Accelerating Innovative Mobility (AIM) (Section 5312)
   - i. Carpool and vanpool projects (Title 23 Section 146)
   - j. Surface Transportation Block Grant Program (Title 23 Section 133)
   - k. Congestion mitigation and air quality improvement program (Title 23 Section 149)
   - l. Other (please specify): ________________________________

2. On average, what percentage of the total shared-mobility project costs did the federal funding cover?

   [Blank]

3. What sources of state funding, if any, were used to fund shared mobility services as an extension of transit services in small urban and rural areas in your state? (please explain)

   [Blank]

4. What other funding sources, if any, were used to fund shared mobility services as an extension of transit services in small urban and rural areas in your state? (please explain)

   [Blank]
5. What barriers to obtaining funding did your organization face in funding shared mobility services as an extension of transit services in small urban and rural areas in your state? (e.g. state statutes, regulations, etc.)

6. How did your organization overcome these barriers, if applicable?

7. As a result of the Infrastructure Investment and Jobs Act (IIJA), has your organization identified any additional sources of funding to fund shared mobility services as an extension of transit services in small urban and rural areas in your state? (please explain)

Project Description

8. How many distinct shared mobility services have been, or currently are, publicly funded in your state?

9. What type of shared mobility service(s) have been provided as an extension of transit services in small urban and rural areas in your state? (select all that apply)
   a. Bikesharing
   b. Scooter sharing
   c. Carsharing
   d. Microtransit
   e. Ridesharing/Vanpools
   f. Ridehailing/Transportation Network Companies
   g. Ride-splitting/Dynamic carpooling
   h. Other (please specify): _________________________________
   i. None
10. What types of shared mobility infrastructure investments have been funded in small urban and rural areas in your state? (select all that apply)
   a. Electrification/charging infrastructure
   b. Multimodal mobility hubs (e.g., pick-ups and drop-offs)
   c. Bicycle/scooter facilities
   d. Park-and-ride facilities
   e. Technology investments (e.g., virtual stops for microtransit)
   f. Other (please specify): ________________________________
   g. None

11. How was(were) the project(s) implemented? (select all that apply)
   a. A project developed and implemented by a MPO, local government authority, public transit agency or other government organization
   b. A project contracted out to a private non-profit
   c. A project contracted out to a private, for-profit organization
   d. A public-private partnership between a government organization and a private organization
   e. Other (please specify): ________________________________

12. Please provide a brief description of the project(s)

   _____________________________________________________

13. Please provide any links or resources containing information about your projects, if possible (Skip to Q15)

   _____________________________________________________

14. What has prevented your organization from funding shared mobility services as an extension of transit services in small urban and rural areas in your state?

   _____________________________________________________

15. Is there anything additional you would like to share with us?

   _____________________________________________________