Rural Public Transportation and Maine: Review of State Best Practices

Technical Report

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Abstract

MaineDOT has a family of transit plans that have been developed over the past five years through collaborative efforts with partners and stakeholders. These plans share similar themes, guidance, and recommendations and tie into the Department's Long-Range Transportation Plan, which was completed in 2023. This report complements those plans, reviewing how other states with similar demographics, population disbursements, and climates are addressing their transit challenges, with a focus on rural areas, access, and equity. One caution is that states and transit agencies do not use the same metrics when reporting program costs and benefits.

Acknowledgements and Disclaimers

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Executive Summary

Access to critical services, such as jobs, education, healthcare, and shopping, is essential for the livability of any community. For those living in rural communities, these services are often farther away requiring access to a vehicle or public transit as active transportation options are challenging.

From 2010 to 2016, rural America experienced a decline in population. Recently, this trend reversed, and rural counties saw a modest increase in population. Though the population may be relatively stable, from 2010 to 2019, nationally, rural public transit ridership grew over 30%. In comparison, during the same period, urban ridership decreased by about 1%.

Given the larger population of older Americans in rural communities, this trend in rural transit is likely to continue. In Maine, the oldest and most rural state, preparing to meet this need is fundamental for our communities. The Maine State Transit Plan found a great need for public transportation, which provides access to essential services for individuals and households with limited access to a private vehicle or other transportation limitations.

This report reviews how other states with similar demographics, population disbursements, and climates are addressing their transit challenges, with a focus on rural areas, access and equity.

In Vermont

- Federal funding accounts for about 81% of total revenues for the Vermont Agency of Transportation (VTrans) public transit program. The Vermont State Transportation Fund covers the remaining amount.
- Directly generated revenue for rural transportation providers covers 31.5% of their operating expenses.
- Vermont identified that the critical needs of those with substance use disorders were not being met by current transportation programs. The Recovery and Job Access Pilot Program, funded by a grant from the Federal Transit Administration is designed to fill those gaps. It provides transportation to group meetings, access to recovery centers, drug testing sites, and medical appointments, as well as job access. Over 6,000 trips were provided by December 2022.
- The Rides to Wellness program lowers the transportation barrier for medical care by providing rides to medical appointments not covered by Medicaid or the Elders and Persons with Disabilities Transportation Program. As of June 2023, more than 2,300 trips have been provided.
- Key takeaways from Vermont:
    1) The consolidation of rural public transportation providers can produce cost savings through economies of scale, resulting in better pricing for vehicles, insurance, fuel, and supplies.
    2) Integration can lead to service improvements. Existing routes can be modified to better fit customers' needs. The cooperation between service providers through joint schedules can provide increased access and a better rider experience.

3) Potential feasibility of microtransit for areas with small populations. A microtransit pilot program is being tested in Montpelier, the first city of its size to use microtransit. Subsequent pilot programs have begun in Manchester, Middlebury, Morrisville, and Windsor.

In New Hampshire

- State funding covers about 7.2% of operating expenses for rural providers.
- Federal funding is the main contributor to operating expenses, covering 61.08%.
- Local funding sources cover 17.75% of operating expenses for rural transit providers and directly generated funding covers almost 14%.
- Key takeaways from New Hampshire:
  1) State partnerships with private transit providers can provide expanded intercity route coverage.
  2) Volunteer drivers provide critical transportation services, especially in rural areas, but cannot compensate for insufficient funding.

In North Dakota

- 1.5% of funding for public transportation is provided by the state through appropriations from the State Highway Fund.
- State funding covers 16.6% of operating expenses for rural transit providers. Federal funding covers 58.75% of operating expenses. Directly generated funding and local governments provide 12.4% and 12.3%, respectively
- Key takeaways from North Dakota:
  1) Offering programs specifically aimed at workers and allowing scheduling flexibility can make transit more accessible.

How Maine Compares

- When compared with the peer states (VT, NH, ND), Maine provided the second highest number of unlinked passenger trips in 2023. Maine also had the second highest operating expenses overall, behind Vermont. This compares similarly with 2019 data where Maine was the second largest rural transit provider for unlinked passenger trips, vehicle revenue miles, and vehicle revenue hours.
- Of the four states, Maine's rural public transit providers receive the smallest percentage of federal funding for operating expenses. In 2023, they received $6,968,007, or 31% of operating expenses from federal assistance. However, per trip, the federal funding of operational expenses for Maine's providers is comparable to the other peer states at approximately $9-10.
- Local funds covered 24.6% of rural providers' operating expenses in 2019, or over $3 million. However, there was a shift of funding source allocation in 2023 as the percentage of local funding covered only 4.6% of rural operating expenses, or approximately $1 million, even though the total amount of operating expenses increased by about 70%. This shift reflects the growing contribution of directly generated funding and federal assistance.

- In 2023, Maine had the highest operating expense per unlinked passenger trip of the four peer states, $30.55 per trip. Maine's cost is much higher than Vermont's cost of $16.28 per unlinked passenger trip. In the previous report using 2019 data, Maine had an operating cost of $12.27 and Vermont's cost was $12.09 per unlinked trip.
- Maine's largest contributor to the operating expense per unlinked passenger trips is directly generated funding sources, at $18.77 per trip. These funds include advertising, contract revenues, donations, and farebox revenues.

Innovative programs across the US (see: Microtransit Applications of Interest)

- Independent Transportation Network (ITN) is a community-based organization, specializing in the transportation of older adults and those with visual impairments. ITN uses private vehicles, in conjunction with both volunteer and paid drivers, to create a community transportation network.
- The California Green Raiteros Rideshare Program was started as an informal, self-organized, dial-a-ride program to provide service between the (low-income) rural farming community of Huron and essential services of Fresno. Through a partnership with EVgo and the Latino Equity Advocacy & Policy Institute (LEAP), the program has been expanded.
- Dynamic bus routing operates on the same concept as "mobility-on-demand" ridesharing services, such as Uber or Lyft. Baldwin County, a rural county in Alabama, utilizes Via microtransit technology to provide on-demand transportation to a 2,000 square mile service area, with a population of 200,000. They utilize three service zones, offering different levels of service depending on location. Ben Franklin Transit (BFT), in Washington state, uses microtransit to increase transit access and help solve the first mile/last mile problem.
- The VVTA Needles CarShare, in Needles, California, partnered with Enterprise to create a carshare program for a small population. Enterprise provided the vehicles. In return, VVTA guaranteed a minimum monthly payment, regardless of usage. To make this more accessible to lower income individuals, users did not have to pay annual fees or for insurance and fuel.

Discontinued Microtransit Programs (see: Discontinued Microtransit Programs)

- Microtransit programs are often discontinued without a clear statement of cause, but a few trends have been identified. These include:
    - A lack of a sustainable business model
    - The cost intensive nature of the business
    - Competition with other forms of transportation, and the low patronage attraction of the system.
- Lessons learned from discontinued programs include:
    - Microtransit programs must be reliable in terms of service and wait time
    - Microtransit programs will compete against other microtransit services as well as public and private transportation networks
    - Pilot programs need to have a sufficient advertising budget.

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Introduction

Access to critical services, such as jobs, education, healthcare, and shopping, is essential for the livability of any community. For those living in rural communities, these services are often farther away, requiring access to a vehicle or public transit as active transportation options are challenging given the distances involved and the lack of sidewalks and bike lanes.

From 2010 to 2016, rural America experienced a decline in population (Cromartie 2018). Recently, this trend reversed, and rural counties as a whole saw a modest increase in population (Cromartie 2020). Though the population may be relatively stable, from 2010 to 2019, rural public transit ridership grew over 30%, from 95.6 million trips to 125.5 million trips (National Transit Database 2020). In comparison, during the same time period, urban ridership decreased by 0.92% (National Transit Database 2020).

Given the larger population of older Americans in rural communities, this trend in rural transit is likely to continue. In Maine, the oldest and most rural state, preparing to meet this need, within available resources, is fundamental for our communities.

The Maine State Transit Plan published by the Maine Department of Transportation in March 2023 found a great need for public transportation (Cambridge Systematics 2023). Maine is not only the oldest state, but it is aging more rapidly than others. By 2030, one quarter of Mainers will be over 65. Moreover, Maine's Strategic Transit Plan 2025 forecasts that 90% of Mainers want to age in place (Peter Schauer Associates 2015).

Public transit is not just for Maine's older adults. Public transportation provides access to essential services for individuals and households with limited access to a private vehicle. Additionally, in some areas, individuals prefer to be carless. Currently about 7%, or 41,462 households in Maine are without private vehicles, 75% of whom are in rental occupied housing units (U.S. Census Bureau 2022).

However, rural public transit is often overlooked in transportation research. This report highlights lessons learned from three peer states (Vermont, New Hampshire, and North Dakota) which may inform Maine's own rural transit practices. Innovative transit solutions are discussed, as possible models for Maine's transit systems.

Peer State Case Studies

Vermont

Vermont has eight public transportation regions served by seven different public transit providers (Vermont Agency of Transportation Mapping Section 2020). Services offered include fixed-routes, demand-response routes, and deviated fixed-routes (fixed-routes with some deviations based on demand), as well as a recently launched on-demand microtransit service (Steadman Hill Consulting, Inc., Monahan Mobility, and Foursquare Integrated Transportation Planning 2020a). In addition to these more traditional programs, Vermont also has three pilot programs to increase transit access for at-risk groups: Rides to Wellness, Recovery and Job Access Rides, and Community Rides Vermont (Lorber and Falbel 2018; Vermont Agency of Transportation 2019; Zabriskie 2023).

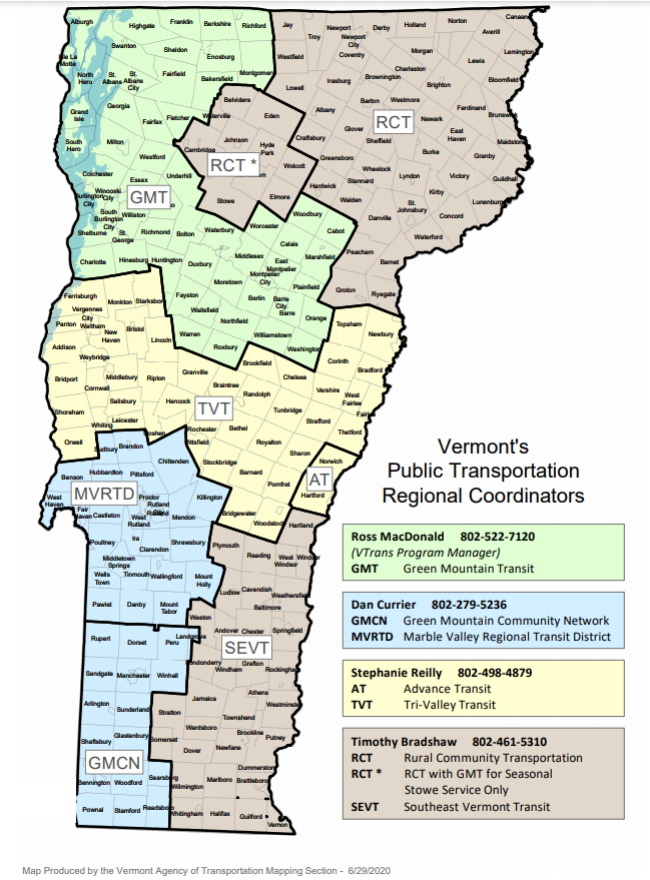


Figure 1: Map of Vermont's public transportation regions.

Transit providers vary greatly in terms of service area, number of routes, and passenger trips. Green Mountain Transit (GMT) Authority is the largest transit provider, in terms of passenger trips, vehicle revenue miles, and vehicle revenue hours in 2023 (see Table 1).[1] This marks a slight change from 2019 data in which Rural Community Transportation (RCT) had greater VRM than GMT.

[1] Green Mountain Transit Authority serves Chittenden, Franklin, Grand Isle, Lamoille, and Washington counties.

Table 1: Vermont Transit Providers: Revenue Miles and Hours, 2023.

Transit Provider	National Transit Database Reporter Type	Annual Unlinked Trips	Annual Vehicle Revenue Miles	Annual Vehicle Revenue Hours
Green Mountain Transit Authority	Full Reporter	2,455,808	3,573,941	203,894
Marble Valley Regional Transit	Rural General Public Transit	585,410	1,643,163	83,768
Southeast Vermont Transit	Rural General Public Transit	500,728	3,279,331	122,605
Tri-Valley Transit	Rural General Public Transit	173,945	2,205,256	83,790
Rural Community Transportation	Rural General Public Transit	165,554	2,926,490	91,415
Green Mountain Community Network	Rural General Public Transit	144,403	872,365	33,135
Advance Transit	Rural General Public Transit	521,593	625,878	48,659

Source: (Federal Transit Administration 2023)

Differences in annual vehicle revenue miles are largely accounted for by differences in service mixes and population density. GMT serves the most densely populated part of the state, and its most utilized service is bus transportation (fixed route or deviated fixed route service). Similarly, trips with Advance Transit are almost entirely bus trips (fixed-route or deviated fixed-route). On the other hand, about 60% of RCT's service is demand-response service, the most of any Vermont transit provider (see Table 2). This is a reduction of 5% compared to 2019 results, while the percentage of bus trips provided by RCT has increased by 10% since 2019.

Table 2: Unlinked passenger trips by mode, Vermont 2023.

Transit Provider	Commuter Bus Trips	Demand-response Trips	Demand-response – Taxi Trips	Bus Trips
Green Mountain Transit Authority	4.20%	6.07%	0.00%	89.73%
Marble Valley Regional Transit	0.00%	9.38%	0.00%	90.62%
Southeast Vermont Transit	3.29%	21.07%	0.00%	75.64%
Tri-Valley Transit	26.83%	28.04%	0.00%	45.13%
Rural Community Transportation	10.96%	60.66%	0.00%	28.38%
Green Mountain Community Network	0.00%	29.90%	0.00%	70.10%
Advance Transit[2]	0.00%	1.28%	0.00%	98.72%

Source: (Federal Transit Administration 2023)

Marble Valley Regional Transit (MVRT), Tri-Valley Transit (TVT), and Green Mountain Community Network (GMCN), similarly saw an increase in bus trips in 2023 compared to 2019. For TVT, the percentage of demand response trips decreased from 42.28% to 28.04% and bus trips increased from 37.23% to 45.13% over the course of this time (Federal Transit Administration 2023). On the other hand, the percentage of bus trips operated by Southeast Vermont Transit (SEVT) decreased by about 12%, while demand response increased by 15%, though bus trips remain the most used mode of transit offered by SEVT in 2023. A brief description of the routes and services offered by each rural public transportation provider can be found in Appendix A.

Funding

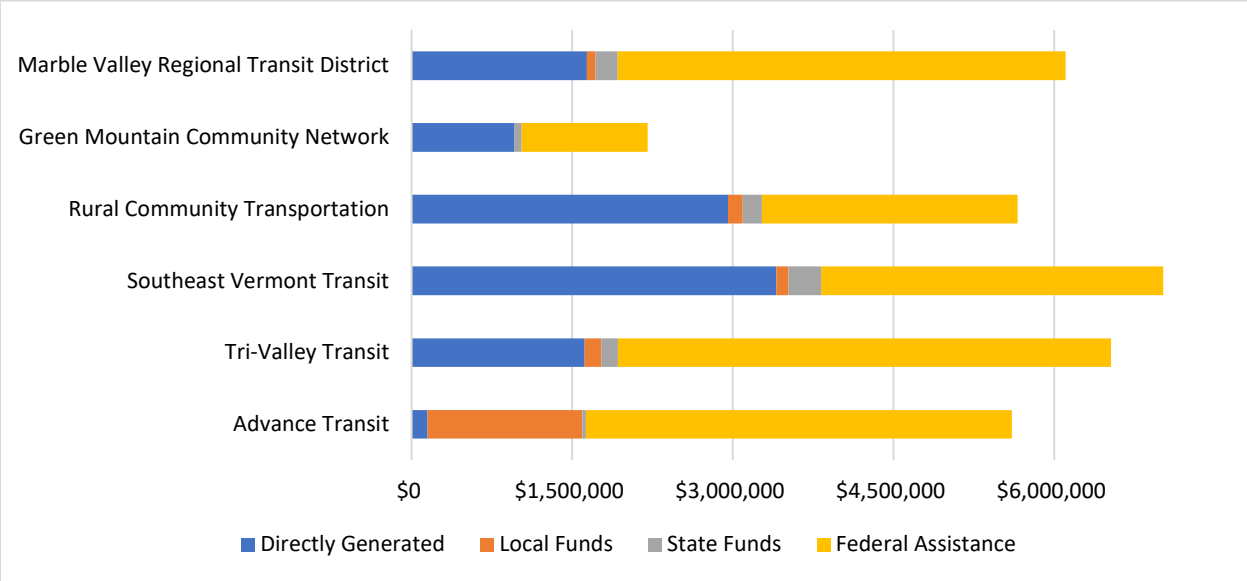
Total funding for the Vermont Agency of Transportation's public transit program is provided by a combination of state and federal funding (Vermont Agency of Transportation 2023b). This funding goes towards operational and capital assistance for a variety of public transit programs including GO! Vermont, Recovery and Job Access, RTAP, Elders and Persons with Disabilities, and more. In Vermont, federal funding accounts for about 81% of total revenues. The Vermont State Transportation Fund covers the remaining percentage (Vermont Agency of Transportation 2023b). Contributors to the Transportation Fund include motor vehicle taxes, penalties and fees, gasoline taxes, sales and use taxes on aviation jet fuel, and pilot and aircraft license fees

[2] Advance Transit is based in the Upper Valley and provides transportation in both Vermont and New Hampshire (Steadman Hill Consulting, Inc. et al. 2020). Service level and funding information is only available for Vermont in the NTD in 2023.

(*Transportation Fund* 2019). For the 2024 fiscal year, the Vermont legislature has budgeted $48,795,330 for transit (Vermont Agency of Transportation 2023b).

Funding for local providers is a mix of federal, state, and local funds, as well as directly generated funding (includes farebox revenue, contract and advertising revenue, and donations). Federal assistance to transit contributes the majority of operating expenses of Vermont's rural transit providers. Following federal assistance, directly generated funding is the next most significant funding source for operational expenses, providing Vermont's rural providers with an average of 31.5% of operating expenses. State and local sources have varying levels of significance, depending on the transportation provider. Local funding ranges from 1.3% to 25.8% (for an average of 5.68% of all rural operating expenses) and state funding ranges from 0.6% to 3.8% (for an average of 2.77% of all rural operating expenses) in 2023 (Federal Transit Administration 2023).

Figure 2: Funding Sources for Operating Expenses of Vermont Rural Transit Providers, 2023.



Source: Figure created by authors, based on data from the National Transit Database (Federal Transit Administration 2023)

Vermont Alternative Transportation and Pilot Programs

Go! Vermont

Go! Vermont is Vermont's statewide transportation information clearinghouse. Their mission is to help individuals save money, reduce their carbon footprint, and provide mobility. Their website provides resources on public transportation, ferries, ridesharing, train travel, and cycling, as well as information on working remotely and telecommuting. For bus users, Go! Vermont provides real time bus tracking and trip planning by connecting to the websites of local and regional transit providers.

The trip planning function extends to other types of travel as well. After entering starting and ending locations, the trip planner shows users non-private car transportation options including carpool and vanpool matches, public transit routes, bike routes, and walking routes. If there are carpool or vanpool matches, registered Go! Vermont users can contact them to arrange a shared ride. The trip planner also shows the locations of park and ride lots, bike shares, car shares, bike paths, and electric vehicle charging stations.

By joining Go! Vermont, users can earn rewards for utilizing green transit, as well as qualifying for the Guaranteed Ride Home Benefit. To earn rewards, members track their green trips, for which they earn points. For many commuters, one of the barriers to using shared transit or alternative transportation is the fear of "getting stuck" if there were to be an emergency. The Guaranteed Ride Home ensures a ride home for bus riders, carpoolers, and vanpoolers if there is a personal/family emergency, illness, mechanical breakdown, unexpected overtime, or inclement weather affecting the return journey. The Guaranteed Ride Home Benefit will reimburse individuals for their travel costs, such as taking a taxi, up to $70 ("Guaranteed Ride Home Benefit" 2021).

Rides to Wellness Pilot Program

Access to transportation can be a barrier to receiving non-emergency medical care. Lack of transportation causes patients to miss appointments or avoid scheduling appointments, because they know they cannot get to the appointment (Lorber and Falbel 2018). Rides to Wellness is a pilot program in Vermont, funded by a grant from the Federal Transit Administration (FTA).

Rides to Wellness has three main goals:

A. To improve health outcomes for the vulnerable populations that use community centers.
B. To reduce the use of emergency services, thereby saving additional resources.
C. To improve financial performance for health centers, hospitals and funding programs (such as Medicaid) by reducing missed appointments. (Lorber and Falbel 2018, 5).

This effort began in April 2017 and an implementation plan was established in April 2018. This program started with two pilot sites, the Mount Ascutney region and St. Johnsbury, and has since expanded to five sites (MacDonald 2020). The site locations reflect the coordination between healthcare organizations and VTrans to develop this pilot project. A 2021 Rides to Wellness report, updated in 2023, shows that the program provides rides through gas cards (47%), volunteer drivers (33%), taxis (17%), and buses/vans (2%) (Steadman Hill Consulting, Inc. and Aplomb Consulting 2023). According to the report, the highest percentage of rides are requested on the same day of the appointment (42%), followed by 34% of rides requested within 24 hours, 10% within 48 hours, and 15% scheduled more than two days in advance. Although initially funded with a grant, each pilot site has committed to providing sustainable funding. The revolving loan fund and repayment concept has since been dropped by VTrans, though healthcare facilities may still allocate funds for the program (Steadman Hill Consulting, Inc. and Aplomb Consulting 2023). As of June 2023, more than 2,300 trips have been provided by Rides to Wellness (Steadman Hill Consulting, Inc. and Aplomb Consulting 2023).

Recovery and Job Access Rides Pilot Program

In spring of 2018, the Recovery Transportation Working Group was formed. They identified access to support groups and meetings, recovery centers, drug testing sites, job training and access, and medical appointments as critical needs. The working group estimated that transit providers could provide 800-1,000 trips per month, with costs ranging from $17-$36 per trip. Assuming an average trip cost of $20-$25 and 1,000 trips per month, the program cost would be between $20,000 to $25,000 per month (Baker et al. 2018). VTrans received a grant for $170,000 to fund this program and cover gaps in service. Rural Community Transportation and Marble Valley Regional Transit District also received $40,000 in federal assistance, with a 50% match requirement (Vermont Agency of Transportation 2019). Between September 2019 and April 2020, over 2,000 trips were provided (MacDonald 2020). By December 2022, over 6,000 trips have been provided through the program, primarily by RCT (Vermont Agency of Transportation and Agency of Human Services 2022).

Community Rides Vermont Pilot Program

The Community Rides program (also known as Gopher) is a non-profit organization provided by Capstone Community Action established in 2022 (Vermont Agency of Transportation 2023a). The service is partnered with Green Mountain Transit and is funded by VTrans, market rate rides, and donor grants. The service is available in rural Washington County and three towns in Orange County (Orange, Washington, and Williamstown) (Gopher VT 2025). The project offers subsidized EV rides as part of a mobility-for-all transportation program with a particular focus on prioritizing citizens lacking sufficient transportation access to work, medical appointments, shopping, and social trips. Community Rides Vermont plans to expand operations to increase its EVfleet, offer more service hours, and implement a mobile booking app (Zabriskie 2023). In its first 16 months, the program provided 6,088 rides; 31% of which were related to employment and 26% of these trips were for childcare/school (Carlson Amanda 2024).

Consolidation of public transportation providers

The consolidation of rural public transportation providers can have many benefits. Cost savings can be realized through economies of scale, resulting in better pricing for vehicles, insurance, fuel, and supplies. Integration can lead to service improvements. Existing routes can be modified to better fit customers' needs, or service can be expanded into new areas. Through consolidation, transit providers may be able to attain higher staff levels than they could individually.

Since 2011, Vermont has seen several mergers between multiple public transportation providers. Chittenden County Transportation Authority and Green Mountain Transit Agency combined to form Green Mountain Transit. Starting in 2014 and formally completed in 2017, Stagecoach Transportation Services and Addison County Transit Resources merged to become Tri-Valley Transit. In 2015, Connecticut River Transit was absorbed by Deerfield Valley Transit, becoming Southeast Vermont Transit.

The State of Vermont supports the consolidation of public transportation agencies, as a way to find cost savings (Monahan et al. 2017). VTrans provides technical assistance, facilitates

meetings, provides funding assistance, and can manage consolidation efforts, if requested, to help with the transition. VTrans is willing to take as active a role in managing the consolidation as desired by the providers; in the case of SEVT, VTrans initiated the process by suggesting the merge of DVTA and CRT and was subsequently invested in supporting the process to its conclusion.

The merger between Deerfield Valley Transit Association and Connecticut River Transit was able to realize many benefits. With a larger staff, management and operational efficiency increased. These efficiency increases gave time to review the bus routes and create service improvements (Monahan et al. 2017). They have also benefited from economies of scale when purchasing phone systems, insurance, and operating supplies. Though they have not experienced significant cost savings due to improvements in service, operating expenses per vehicle revenue mile in 2018 and 2019 were less than 2017 (Office of Budget and Policy 2020).

Cooperation between operators

Moving between service regions on public transportation usually requires transferring from one operator to another. With cooperation between service providers, Vermont has been able to improve the rider experience, by providing regional routes that extend beyond any individual service area. Providers can maintain their autonomy and their own fee structures, while operating a joint schedule. Though the fare payment system remains distinct between service providers, the Transit app available through GO! Vermont allows riders to plan trips across multiple routes.

There are currently four regional routes that are operating under a joint schedule, provided by four of Vermont's seven transit providers: The 116 Commuter travels between Middlebury and Burlington; The Burlington/Middlebury LINK; the Rutland Connector (as called by TVT), or the Middlebury Route; the Route 2 Commuter.

Feasibility of Microtransit

Starting in 2018, the Vermont Microtransit Working Group[3] began exploring the potential for microtransit service as a substitute for some of the existing fixed-route and demand-response services currently being offered (Microtransit Working Group 2019). In 2019, VTrans, in conjunction with Via, conducted a microtransit feasibility study for the Montpelier area. Via used historic ridership, land-use, demographic, and economic data, input from community partners, quality of service assumptions, and information on street layout and design to conduct their analysis. Different microtransit options, as well as different levels of demand, were modeled (VIA 2019). Via's recommendation, based on their analysis, was the replacement of three fixed-routes and on-demand transportation for non-emergency medical care, older adults and individuals with disabilities, and Medicaid services with a fleet of 3-5 microtransit vehicles. They estimated that a fleet of five vehicles could meet ridership needs of 35 trips per hour, which was greater than the current level of ridership (27 trips per hour at peak hours) (VIA 2019). Via estimated

[3] The Microtransit Working Group consists of members from VTrans, Montpelier City Council, Green Mountain Transit, the Sustainable Montpelier Coalition, Vermont Center for Independent Living, and the Central Vermont Regional Planning Commission (Microtransit Working Group 2019).

wait times of less than 15 minutes for riders in the 7.8 square miles service zone, a significant reduction from the existing one hour bus wait times (VIA 2019). The feasibility study concluded that microtransit in Montpelier could offer riders a higher quality of service than traditional fixed-routes and demand-response services then being offered.

Green Mountain Transit (GMT), Sustainable Montpelier Committee, and VTrans launched Montpelier's microtransit service, a two year pilot program called MyRide by GMT, on January 4th, 2020 (White 2020). MyRide by GMT replaces three fixed-routes. The service area currently includes most of Montpelier, as well as destinations in Berlin. Rides can be scheduled either through the MyRide by GMT app, an internet browser, a GMT kiosk, or through GMT's call center. A report from the June 2022 VTrans E&D Summit recorded a total of 41,000 rides, 1,309 active riders, 97% of demand met, and 91% of riders collected within five minutes of scheduled pickup time (Vermont Agency of Transportation 2022b). The report also listed the lessons learned, challenges, and potential improvements documented after the first year of the project (Vermont Agency of Transportation 2022b):

- Lessons learned: some riders found transitioning from fixed route to on-demand transit challenging, new riders appreciated the increased flexibility, service is more conducive to social trips (as opposed to commuting), and half of rides were scheduled by phone, rather than the app.
- Challenges: no penalty for cancellations, congestion at the high school, inefficiencies associated with connecting prebooked and on-demand trips, and drivers do not always follow the trip route algorithm.
- Recommended improvements: reinstate Montpelier Hospital Hill Route (fixed route), improve time sensitivity aspect of the algorithm, introduce fares for intermunicipal trips (except for ADA passengers), avoid trips to the high school at 3pm. There is also a proposal to transition to smaller vehicles if the service becomes permanent, considering there has never been more than four riders at a time.

Since the establishment of MyRide in Montpelier, microtransit programs in Vermont have expanded to Manchester, Middlebury, Morrisville, and Windsor. These 3-year pilot programs are funded by the Mobility and Transportation Innovations (MTI) Grant provided by VTrans (Vermont Agency of Transportation 2023c). The MTI Grant Program was adopted by the Vermont legislature in 2020 as part of the 2020 Transportation Bill and the program has been renewed each year since with the goal of supporting projects that improve access to transit services for transit-dependent citizens, reduce single occupancy vehicles, and reduce carbon emissions through the following focus areas: creation or extension of transportation demand management (TDM) programs, expansion of first/last mile programs, implementation of planned TDM programs, and support for employers to initiate TDM measures (Vermont Agency of Transportation 2025). The eligibility for projects seeking MTI program funding includes matching funds for other grant awards, TDM delivery costs, microtransit planning and implementation, and capital and operational expenses (Vermont Agency of Transportation 2025). The MTI grant program has a broad scope and is ideal for facilitating microtransit pilot projects, such as the four described below:

- Manchester: The Manchester Express is provided by Green Mountain Community Network with funding from VTrans and the FTA. The free service offers curbside pickup within Manchester, VT during operating hours. Users may schedule rides online, through the app, or by phone. The pilot program began on August 1, 2023 (Green Mountain Community Network 2024).
- Middlebury: The goal of the Middlebury microtransit program, provided by Tri Valley Transit, is to replace four fixed route services. EZ Trip Middlebury only runs during the week and requires reservations (either advance or same day requests are allowed). Recurring ride requests are accepted for up to three weeks at a time. The program launched on May 8, 2024 (Tri Valley Transit 2024).
- Morrisville: The HyMor service is provided by Rural Community Transportation (RCT). The program provides free rides to the Morrisville, Hyde Park, and Elmore areas. The service is available through an app or by phone and riders may schedule in advance or on demand. The service began operating in 2023 (Rural Community Transportation 2024).
- Windsor: The Windsor Microtransit Moover (MicroMOO) is provided by Southeast Vermont Transit with funding by VTrans and the FTA. The program is designed to complement existing transit services. The service operates within Windsor town boundaries and extends to a park and ride lot. Riders may book through the MicroMOO! App, by phone, or online. The service began operations on January 23, 2023 (Southeast Vermont Transit 2024b).

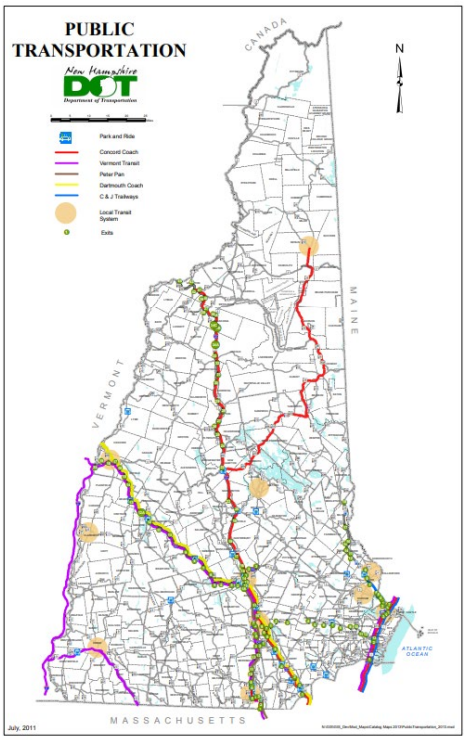
  In the first year of the pilot project, 6,276 rides were made by 198 riders (20 wheelchair bound passengers, 74 ambulatory adults aged 60+, and 104 non-seniors, each of whom used the service for an average of 32 trips). The purpose for rides is as follows: personal (38%), shopping (28%), medical (19%), employment (11%), and school (4%). On average, 24 rides were taken each day and the average trip length was two miles (Southeast Vermont Transit 2024a).

New Hampshire

New Hampshire has ten local transportation providers. Service is concentrated in the southern half of the state, where nine of the ten providers are located (New Hampshire Department of Transportation 2019a). Public transportation offerings include fixed-route, deviated fixed-route, and demand-response services.

In 2019, ridership on public transit was 3,309,109 one-way trips, plus 45,684 rides for older adults and individuals with disabilities. Ridership decreased in 2022, with a total of 1.78 million one-way trips and 34,572 trips for older adults and individuals with disabilities (New Hampshire Department of Transportation 2024). The New Hampshire DOT subsidizes Concord Coach's North Country routes. Riders took 16,295 intercity bus trips on those subsidized routes in 2019 (NHDOT 2019).

Figure 3: New Hampshire Public Transit Map



The level of ridership and service varies widely depending on the service provider. The University of New Hampshire public transportation system accounted for nearly a third of unlinked passenger trips in 2019 and 2023 (Federal Transit Administration 2023). Compared to the peer states documented in this report, the rural providers in New Hampshire provide significantly less rides overall. Carroll County Transit provides the least amount of rides in New Hampshire, while North Country Transit, Sullivan County Transportation, and Home Healthcare, Hospice, and Community services all provide a similar number of rides.

There is additional service provided through Advance Transit with routes to Dartmouth College and Dartmouth Hitchcock Medical Center. The data for this transit provider is categorized under Vermont's rural transit providers as the service operates in both states but is only listed in the NTD under Vermont in 2023.

Table 3: New Hampshire summary of services provided in 2023.

Transit Provider	National Transit Database Reporter Type	Annual Unlinked Trips	Annual Vehicle Revenue Miles	Annual Vehicle Revenue Hours
University of New Hampshire	Reduced	543,185	298,029	20,480
Nashua Transit System	Full	315,974	516,690	34,978
COAST	Full	291,028	782,861	45,868

Transit Provider	National Transit Database Reporter Type	Annual Unlinked Trips	Annual Vehicle Revenue Miles	Annual Vehicle Revenue Hours
Manchester Transit Authority	Reduced	322,285	808,331	73,508
Belknap-Merrimack CAP/ Concord Area Transit	Rural General Public Transit	123,029	240,123	17,534
Tri-County CAP/North Country Transit	Rural General Public Transit	28,301	238,509	19,260
Home Healthcare, Hospice, and Community Services (Keene City Express)	Rural General Public Transit	27,931	85,904	6,452
Sullivan County Transportation (Southwestern Community Services Transportation)	Rural General Public Transit	30,716	156,681	3,104
Tri-County CAP/ Carroll County Transit	Rural General Public Transit	4,034	58,692	4,104

Source: (Federal Transit Administration 2023)

Service mixes vary widely between rural transit providers. 100% of trips with Carroll County Transit are demand-response. The other transit provider operating under Tri-County CAP, North Country Transit, offers the second largest percentage of demand-response trips; however, this service provides a similar percentage of demand-response and bus trips. For the other rural providers, bus trips heavily outweigh demand-response trips.

Table 4: Unlinked passenger trips by mode for rural transit providers in New Hampshire, 2023.

Transit Provider	Demand-response Trips	Bus Trips
Belknap-Merrimack CAP/ Concord Area Transit	20.82%	79.18%
Tri-County CAP/North Country Transit	51.51%	48.49%
Home Healthcare, Hospice, and Community Services (Keene City Express)	31.48%	68.52%
Sullivan County Transportation (Southwestern Community Services Transportation)	9.63%	90.37%
Tri-County CAP/ Carroll County Transit	100.00%	0.00%

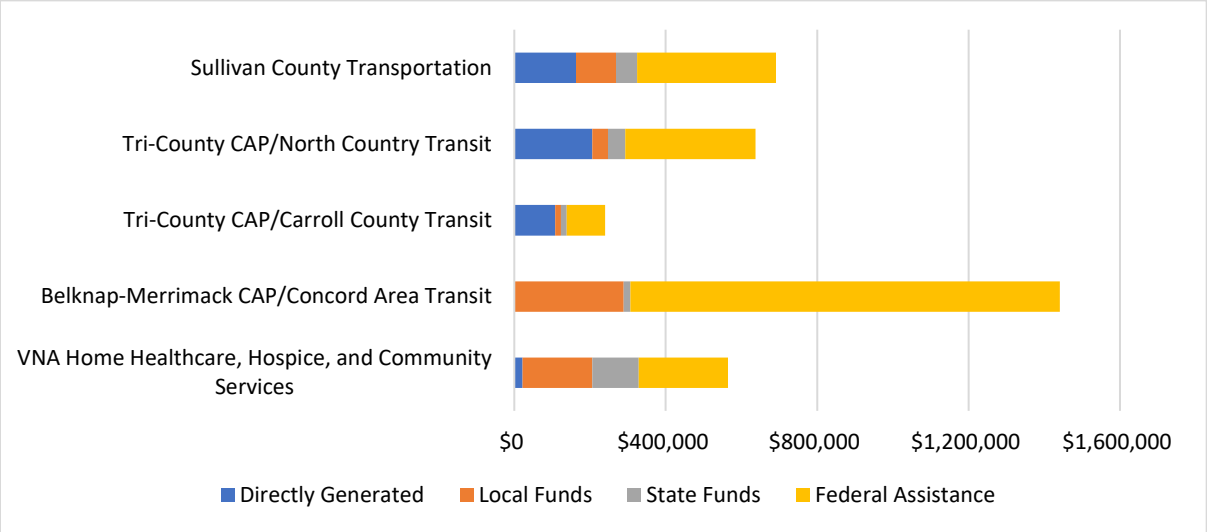
Source: (Federal Transit Administration 2023)

A brief description of the rural transportation providers and their routes and services can be found in Appendix A.

Funding

In the 2024 fiscal year, the State of New Hampshire spent $508,578 on state operating match for 10 public transit systems in order to maintain FTA funding (State of New Hampshire 2025). However, state funding is a minor contributor in the funding mix of rural transportation providers. In 2023, state funding covered 7.17% of the operating expenses of rural transit operators in New Hampshire (Federal Transit Administration 2023). Federal assistance is the main funding source for rural providers, contributing 61.08% of operating expenses (Figure 4) (Federal Transit Administration 2023). Less significantly, directly generated funding covers 14% of operating expenses while local funding contributes 17.75%.

Figure 4: Funding for Operating Expenses of New Hampshire Rural Transit Providers, 2023.



Source: Figure created by authors, based on data from the National Transit Database (Federal Transit Administration 2023)

Lessons Learned

Volunteer drivers play an important role in rural transit but cannot be the entire solution.

Volunteer drivers provide critical access to medical care, shopping services, social activities, and more. Volunteer drivers often help fill transit gaps, providing access when none would have been provided otherwise. Especially in rural areas, volunteer drivers are often the lowest cost mode of transportation (Steadman Hill Consulting, Inc. et al. 2020; Zhao 2017).

In New Hampshire, only 33 out of 244 communities have regular public transit service. However, volunteer driver programs operate in 197 out of 244 towns (New Hampshire Department of Transportation 2019b). They provide 65,000 trips/year, many of which would not have happened without the volunteer drivers. These trips, as important as they are, only provide 4% of the total estimated transportation needs for older adults and individuals with disabilities (New Hampshire

Department of Transportation 2019b).[4] All New Hampshire transit regions report being unable to meet all of the demand for volunteer driving. To manage, they have been prioritizing medical trips, but realize that they are not meeting all of their riders' needs (such as trips for social activities) (Steadman Hill Consulting, Inc. et al. 2020). The Statewide Strategic Transit Study recommends the expansion of volunteer driver program capacity, while also acknowledging the shortage of volunteer drivers and the inability to meet current levels of demand (Steadman Hill Consulting, Inc. et al. 2020).

State partnerships with intercity transportation providers can expand access for riders

New Hampshire's North Country region spans over 3,000 square miles, three counties, 50 municipalities, and 25 Unincorporated Places (North Country Council 2021). In this vast area live just over 90,000 people (North Country Council 2021). Transportation from the northern part of the state to the southern is essential for access to medical care, employment opportunities, and social/recreation activities. Concord Coach Lines provides this connection, offering service from Littleton and Berlin, just north of the White Mountain National Forest, to Concord, the state capital. Riders can continue to travel from Concord down to Boston.

This service is made possible due to a partnership between Concord Coach Lines and the New Hampshire DOT. Concord Coach Lines receives an annual subsidy of about $300,000 for the operation of this service, about 60% of the total cost for the routes (Steadman Hill Consulting, Inc. et al. 2020). Without this partnership, this service would not be economically feasible (Brooks 2019).

[4] The Community Transportation Association of America (CTAA) estimated that seniors and other transit-dependent people in New Hampshire required 1.9 million trips to meet basic life needs (New Hampshire Department of Transportation 2019b).

North Dakota

North Dakota has 24 rural public and tribal transit providers listed in the National Transit Database as of 2023. Demand-response service is by far the most commonly provided service for North Dakota's rural transit operators. All but one of the providers offer demand-response service. The City of Minot is the sole rural provider to offer a regular fixed-route bus service. Souris Basin Transportation and Standing Rock Public Transit serve as intercity providers, though they require pre-booked reservations.

Similar to the data from Vermont, the data from the North Dakota transportation providers show a decrease in performance metrics in 2021 compared to 2019, followed by a noticeable rebound to pre-pandemic ridership levels by 2023. To illustrate, North Dakota rural providers provided 566,176 trips in 2019, 385,919 trips in 2021, and 515,533 trips in 2023. This is a similar comparison to the rebound of ridership for Vermont's rural providers which dropped from 2,136,227 trips in 2019 to less than a million in 2021 and returned to 2,091,633 trips in 2023.

A brief description of North Dakota's rural and tribal transportation providers can be found in Appendix A.

Table 5: Summary of North Dakota rural and tribal transit providers, 2023.

Transit Operator	National Transit Database Reporter Type	Annual Unlinked Trips	Annual Vehicle Revenue Miles	Annual Vehicle Revenue Hours
South Central Adult Services	Rural General	97,286	967,385	55,236
City of Minot	Rural General	80,063	148,277	10,989
Souris Basin Transit	Rural General	83,468	418,706	32,848
James River Senior Citizens Center	Rural General	46,974	121,547	10,249
Stark County Council on Aging/Elder Care	Rural General	43,344	197,767	19,077
West River Transit	Rural General	27,594	195,580	9,744
Devils Lake Transit (Senior Meals and Services)	Rural General	24,216	50,219	6,321
Williston Council for the Aging	Rural General	31,537	123,625	12,302
Hazen Busing Project	Rural General	17,855	30,567	5,719
Standing Rock Public Transportation	Tribal Reporter	15,890	197,518	8,273
Southwest Transportation Services	Rural General	9,444	92,121	6,116

Transit Operator	National Transit Database Reporter Type	Annual Unlinked Trips	Annual Vehicle Revenue Miles	Annual Vehicle Revenue Hours
Kenmare Wheels and Meals	Rural General	5,067	11,723	1,479
Nutrition United	Rural General	7,853	196,983	6,944
Spirit Lake Tribe	Tribal Reporter	9,804	170,723	7,984
Cavalier County Senior Meals and Services	Rural General	7,837	17,039	2,147
Pembina County Meals and Transportation	Rural General	6,221	97,101	4,998
Kidder-Emmons County Senior Services	Rural General	4,117	47,065	1,717
Can-Do Transportation	Rural General	5,519	47,065	3,275
Turtle Mountain Band of Chippewa Indians	Tribal Reporter	2,181	59,674	4,500
Walsh County Transportation Program	Rural General	5,449	42,201	2,383
Dickey County Senior Citizens	Rural General	3,772	17,189	2,210
Golden Valley/Billings County Council on Aging	Rural General	2,464	97,501	3,231
Wildrose Public Transportation	Rural General	4,762	52,979	2,408
Benson County Transportation	Rural General	691	38,506	1,344

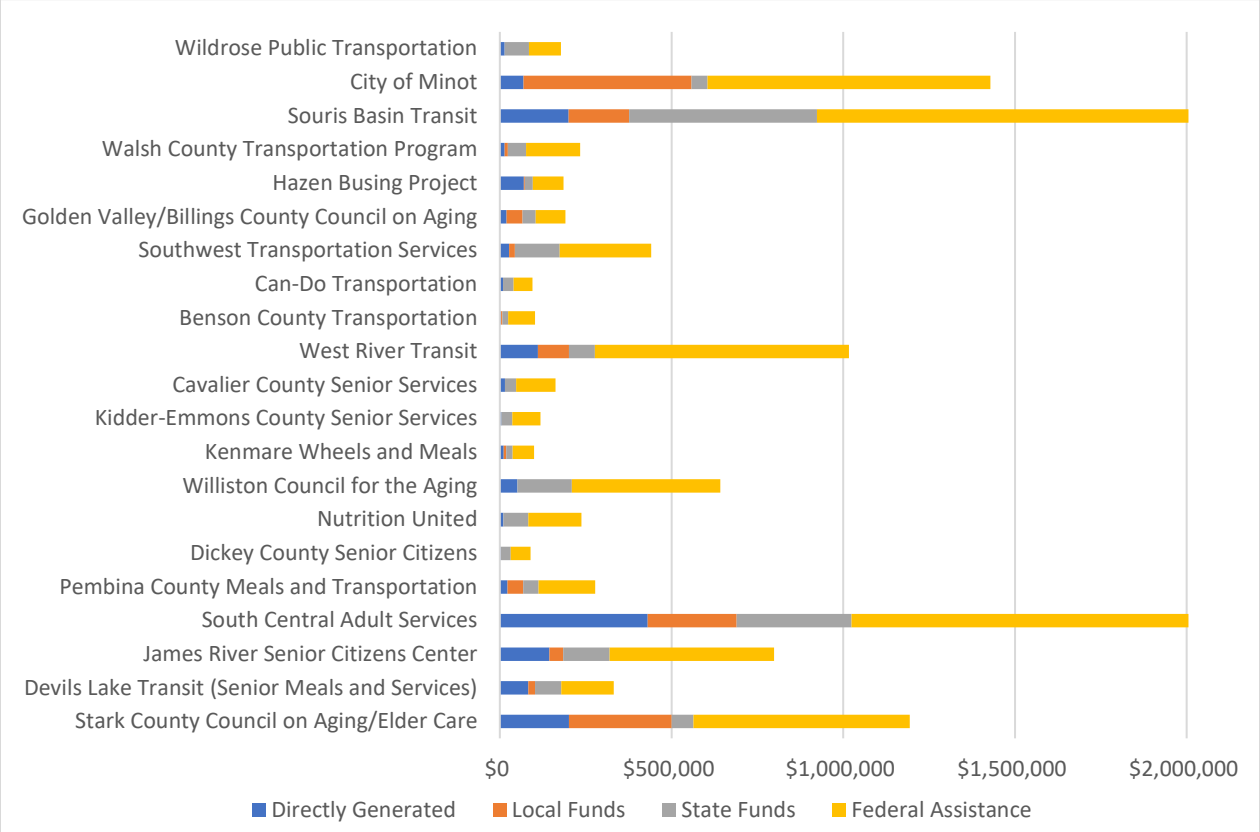
Source: (Federal Transit Administration 2023)

Funding

In North Dakota funding for public transportation comes from the Highway Tax Distribution Fund ("Legislative Appropriations 2019-2021 Biennium" 2017). Revenues from this fund come from the motor vehicle fuel tax, special fuel taxes, and motor vehicle registration fees. The first $5.5 million in the Highway Tax Distribution Fund are transferred to the State Highway Fund. The Public Transportation Fund receives 1.5% of the monthly revenues to the Highway Tax Distribution Fund ("State Revenue Distributions | The Office of North Dakota State Treasurer" 2024). Funds are then appropriated by the Director of the North Dakota Department of Transportation to transportation providers in each county according to a base amount and a per capita amount that is decided upon each year by the Director based on the available funds in the Biennium (North Dakota Legislature 2024). The funds must be used to establish or maintain public transportation and may be used to contract or match funds from other sources for the purpose of public transportation at the discretion of the Director (North Dakota Legislature 2024).

In 2023, the state of North Dakota covered 16.59% of the operating expenses for rural transit providers, an 6% decrease from 2019.[5] Federal funding accounts for 58.75% of expenses, an increase of 6% from 2019. Directly generated funding and local governments both contribute around 12% to operational funding. The relative importance of each funding source varies by transit provider, as seen in Figure 5 (Federal Transit Administration 2023).

Figure 5: Operating funding sources of North Dakota rural transit providers, 2023.



Source: Figure created by authors, based on data from the National Transit Database (Federal Transit Administration 2023)

Highly Rural Veteran Transportation Grant

The Highly Rural Veteran Transportation Grant program gives grant funding to Veterans Service Organizations and State Veterans Service Agencies for the transportation of veterans to medical care in eligible counties (U.S. Department of Veterans Affairs 2021). “Highly rural” is defined as a county or counties with population density of less than seven people per square mile (U.S. Department of Veterans Affairs 2015). The North Dakota Department of Veterans Affairs, in conjunction with the North Dakota DOT, has contracted existing transit operators to provide this service. 36 out of 53 counties in North Dakota are eligible (North Dakota Department of Veterans Affairs 2016). In Maine, Piscataquis County is the only eligible county and provides

[5] This does not include transit providers who do not report to the National Transit Database.

transportation to clinics in Bangor and Lincoln (U.S. Department of Veterans Affairs 2021). If the definition of "highly rural" is expanded, this grant program may be able to help meet the transit needs of Maine's veterans.

Flexibility for workers

Given the highly rural nature of North Dakota, the vast majority of transit providers only offer demand-response service. Two transit providers in North Dakota have taken innovative approaches to make their services more attractive to workers.

Kenmare Wheels and Meals provides door-to-door service every week day (Kenmare Wheels & Meals 2020). However, they do not offer evening transportation as part of their regular services. For many workers who rely on public transportation, this creates a barrier for employment. Kenmare Transit has implemented a "work transit" service. Employees can schedule rides to and from work outside of regular service hours, by special arrangement with Kenmare Transit (Kenmare Wheels & Meals 2020).

Having to schedule daily rides to and from work can be burdensome. James River Senior Citizens Center has created a service to reduce this burden. They have created a monthly master list of riders' work-related transit needs (James River Public Transit 2021). Riders fill out a monthly calendar with their pick-up times and these are then scheduled by the main office (James River Public Transit 2021). This simple process greatly reduces the daily tasks that would have previously been required to schedule work-related transportation.

Maine

Maine has eight transit regions (see Figure 6). Each region has one designated regional transportation provider. In addition to the designated regional providers, Maine DOT partners with other public transportation systems across the state (Multimodal Planning Division 2019). In total, there are 16 local public transportation providers seven of which are rural bus and/or demand-response service providers. A summary of their ridership in 2023 can be found in Table 6. A brief summary of the rural transit providers can be found in Appendix A.

Figure 6: Maine transit regions. Source: Bureau of Maintenance and Operations, 2018.

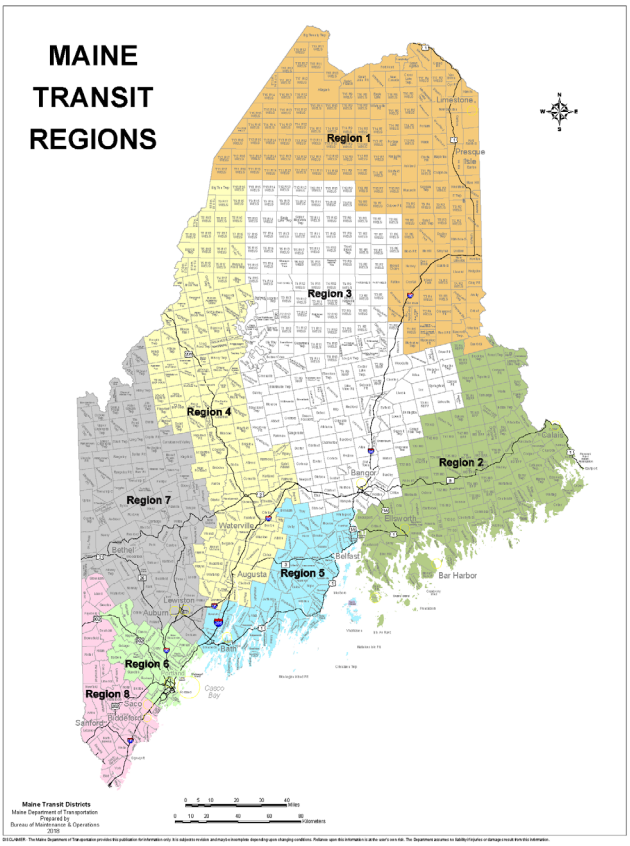


Table 6: Summary of services provided by Maine rural transit providers, 2023

Provider	Annual Unlinked Trips	Annual Vehicle Revenue Miles	Annual Vehicle Revenue Hours
Downeast Transportation	453,937	560,870	34,520
Kennebec Valley Community Action Program	127,892	1,382,233	71,328
Waldo Community Action Partners d/b/a Mid-Coast Public Transportation	55,168	930,364	45,214
Aroostook Regional Transportation System	46,375	478,729	20,603
Downeast Community Partners	30,809	567,797	23,495
City of Bath	14,144	35,101	2,838
West's Transportation	5,025	74,440	3,356

Source: (Federal Transit Administration 2023)

Comparison with Peer States

Through the aggregation of service metrics for rural transportation providers, Maine can be compared against its peer states. Vermont is the largest service provider, by far (see Table 7). In 2023, they had nearly three times the number of annual unlinked trips and annual vehicle revenue miles as Maine. That being said, Maine's rural transit providers provided more service than New Hampshire and North Dakota in 2023. Due to North Dakota's highly rural nature and reliance on demand-response service, it had a similar number of vehicle revenue hours as Maine, despite having a fewer number of passenger trips.

While these peer states are similar in many regards, there are also distinct differences in the number of rural service providers in each state, the area covered by transit providers, and the population density of these states. For instance, the data collected for this study is based on seven rural transit providers in Maine serving a state with a population density of 44 people per square mile, six rural transit providers in Vermont and a population density of 70 people per square mile, five rural transit providers in New Hampshire and a population density of 154 people per square mile, and 21 service providers in North Dakota and a population density of 11 people per square mile (U.S. Census Bureau 2021). These differences in the number of people within each service area and the relative rurality of each state are important to consider when comparing the results of the service metrics.

Table 7: Aggregation of service metrics for rural transportation providers by state, 2023

State	Annual Unlinked Trips	Annual Vehicle Revenue Miles (VRM)	Annual Vehicle Revenue Hours (VRH)
Vermont	2,091,633	11,552,483	463,372
New Hampshire	214,011	779,909	50,404
North Dakota	515,533	3,011,679	200,737
Maine	733,350	4,029,534	201,354

Source: (Federal Transit Administration 2023)

Given the service levels, it should be unsurprising that Vermont greatly outspends New Hampshire, North Dakota, and Maine when it comes to the operating expenses of rural transit providers (see Table 8). Interestingly, directly generated funding sources, a combination of farebox revenue, advertising revenue, contract revenue, donations and other funds, cover more than half of the operating expenses of rural transit providers in Maine, a far larger percentage than any of the peer states. Rural providers in Maine receive the least percentage of federal assistance. This is the case in all of the study years: 2019, 2021, and 2023. Compared to 2019, the percentage of operational funding coming from federal assistance in 2023 has increased for Maine, New Hampshire, and North Dakota. This increase amounted to almost 13% (or approximately 4 million dollars) in the case of Maine's rural providers. It is interesting to note that local and state funds constitute a significantly smaller funding source overall for all four peer states and, in the case of Maine, this is a decrease from 2019.

Federal assistance for operational funding for transit is generally part of a 50% match, though this percentage can vary depending on the status of the transit provider (for instance, rural providers are eligible for FTA 5311 formula grants for rural areas and tribal providers are eligible for 100% of funding from the FTA (Federal Transit Administration 2021). The rest of the funding match can be covered by directly generated, local, or state funds. Each state has differing policies around how to meet the match requirement. In Vermont, available state funds in the State Operating Program are allocated to rural operators according to need and the desire to maximize federal dollars (Steadman Hill Consulting, Inc. and Monahan Mobility 2020). In North Dakota, there is no specific requirement for local match, but may be covered by state or local human service agencies (ex. State or local appropriations, mill levy, other directly generated funds, or Medicaid reimbursements) (North Dakota Department of Transportation 2024).

Table 8: Funding sources for operating expenses of rural transit providers by state, 2023.

State	Directly Generated	Local Funds	State Funds	Federal Assistance	Total
Vermont	$10,721,819 31.50%	$1,934,840 5.68%	$942,460 2.77%	$20,443,503 60.05%	$34,042,622
New Hampshire	$500,038 13.99%	$634,517 17.75%	$256,391 7.17%	$2,182,994 61.08%	$3,573,940

State	Directly Generated	Local Funds	State Funds	Federal Assistance	Total
North Dakota	$1,514,206 12.37%	$1,503,992 12.29%	$2,030,548 16.59%	$7,192,045 58.75%	$12,240,791
Maine	$13,765,561 61.45%	$1,028,373 4.59%	$638,552 2.85%	$6,968,007 31.11%	$22,400,493

Comparing absolute operating expenses does not account for the number of passenger trips, vehicle hours, or vehicle miles. In Table 9, below, the operating expense per unlinked passenger trip is broken down by funding sources. For Maine, the operating expense per unlinked passenger trip is the highest at $30.55, a significant increase from 2019 ($12.27). The amount of federal assistance per unlinked passenger trip increased from $2.25 to $9.50, though the contribution of local funds decreased from $3.02 to $1.40. The contribution of state funds stayed the same at $0.87. In comparison, Vermont, with an operating expense per unlinked passenger trip of $16.28 (an increase from $12.09 in 2019), receives a similar amount in federal assistance per trip, though much less in terms of directly generated funding. It is noticeable that state funds cover a higher percentage in North Dakota than in the other peer states.

Table 9: Operating expense per unlinked trip of transit providers by funding source, 2023.

State	Directly Generated	Local Funds	State Funds	Federal Assistance	Total
Vermont	$5.13	$0.93	$0.45	$9.77	$16.28
New Hampshire	$2.34	$2.96	$1.20	$10.20	$16.70
North Dakota	$2.94	$2.92	$3.94	$13.95	$23.74
Maine	$18.77	$1.40	$0.87	$9.50	$30.55

When looking at efficiency metrics, Maine's rural transit providers have the highest operating expense per trip by far (see Table 10). This comes down to the relative amount of money expended for operational funding compared to the number of trips provided. Vermont's rural providers receive much more funding than Maine, but the number of trips they provide is also much higher. Conversely, New Hampshire's providers receive less funding, but they also provide significantly fewer trips.

Table 10: Efficiency metrics of rural transit providers, by state, 2023.

State	Operating Expense/Trip	Average VRM/Trip	Operating Expense/VRM	Operating Expense/VRH
Vermont	$16.28	5.52	$2.95	$73.47
New Hampshire	$16.70	3.64	$4.58	$70.91
North Dakota	$23.74	5.84	$4.06	$60.98
Maine	$30.55	5.49	$5.56	$111.25

Source: (Federal Transit Administration 2023)

Innovative Solutions

Green Raiteros – California

The Green Raiteros is a ride share program founded in 2018 in Huron, California. Their population is made up of mostly farmworkers and the median household income is $25,060, about one-third of California's median household income (Shared-Use Mobility Center 2020a). Huron lacks many critical services, including hospitals and social services. Most of these services are located in Fresno, 50 miles northeast of Huron. However, about 25% of residents do not own a car (Godavarthy et al. 2019). Bus service to Fresno is available, but it requires a six hour round trip bus ride (Godavarthy et al. 2019).

The raiteros network is a community-led, self-organized answer to this transportation gap. "Raitero" is a Spanish slang term for a driver who transports individuals for a fee. These drivers are usually retired or semi-retired neighbors who act similarly to an Uber or taxi service. This service is relatively expensive and residents of Huron spent about 20-30% of their income on transportation costs alone (Godavarthy et al. 2019).

Green Raiteros was created in December 2018 by the Latino Environmental Advancement & Policy Institute (LEAP), alongside EVgo, Mobility Development Partners, and the Shared-Use Mobility Center (Shared-Use Mobility Center 2021; EVgo 2021; Latino Environmental Advancement Project 2021). Huron leveraged their preexisting raiteros network as well as $519,000 from a legal settlement with the California Public Utilities Commission. The program's goal was to address five major problems: economic justice, environmental justice, climate justice, health justice, and transportation justice. LEAP developed a business plan with the Shared-Use Mobility Center and purchased two electric cars (Chevy Volt and BMW i3) and installed several charging stations in Fresno and Huron. A $1 million grant from the California Air Resources Board through the Clean Mobility Options Voucher Pilot Program will expand the Green Raiteros program by introducing three new electric vehicles and create a Green Cruiser program which will provide Huron with 30 e-tricycles and 10 docking stations (California Air Resources Board 2024). The expansion began in March 2023, and will increase accessibility to jobs, school, medical facilities, and grocery stores within the Huron area (Perez-Bobadilla 2023).

Figure 7: Green Raiteros service area.

Source: (Shared-Use Mobility Center 2020b)

Green Raiteros was implemented in three phases. The first phase involved setting aside $8,000 for a promotional period in order to serve Green Raiteros clients for free, with the goal of marketing the program to both drivers and riders, and to collect data on driver's preferences for vehicles (electric or conventional private). The second phase, implemented nine months later, involved asking for clients to pay $0.55 per mile for rides. This part of the plan also involved recruiting additional volunteer drivers and accepting rides reimbursed by California Medicaid. The issues that occurred in this phase are twofold: their registration as a primary NEMT (non-emergency medical transportation) is still awaiting approval from the State of California and the Green Raiteros was denied enrollment in the Fresno County taxi scrip program, because with only volunteer drivers, they are not a formal taxi program.

Potential hurdles for the implementation of similar ride systems include the cumbersome method for reserving a ride which requires pre-registration with the LEAP office one week in advance where they are manually matched up with a volunteer driver whose availability matches that of the client. This program also does not provide service to the disabled population due to the use of conventional, not handicapped equipped, vehicles. In addition, the volunteer drivers can refuse rides such as those involving children on trips that do not directly require the child's involvement (such as a parent's medical appointment). These details complicate the system, slowing down registration, adding to the cost, and limiting the client base.

Despite these limitations, Green Raiteros provides a round trip ride to Fresno at about $25, which is a 75% decrease from the traditional raiteros system rate of $100. The program currently receives grant funding from the Fresno Clean Shared Mobility Network and plans to pursue

funding from California DOT and the California Air Resources Board. Green Raiteros is looking for increased funding in order to expand into new towns and counties.

The successful implementation of this program demonstrates the value and power of rural and environmentally friendly transit options and supplies a method of incorporating such a system into one's own state. However, a challenge arises when considering the roots of such an organization, as it was founded upon the already established Latinx cultural tradition of raiteros. Adopting this type of community-led transit program has promise for Maine but would require a network of volunteers and, perhaps, a unifying sense of community.

Microtransit

Microtransit is small-scale, on-demand public transit. It utilizes dynamic routing software to operate similarly to on-demand ridesharing services, such as Uber or Lyft. Instead of operating on a standard fixed-route or deviated fixed-route, buses follow no predetermined route. Users in the service area can request a ride using a phone call or app. Routes are then generated in real-time in response to user requests (Koh et al. 2018). Microtransit programs may be operated by transit agencies, municipalities, counties, or regional planning organizations with funding provided by FTA grants or state funding sources, depending on eligibility (Humann 2024).

Microtransit programs have specific purposes depending on where and why they were implemented. In most cases microtransit is designed to fulfill a gap in fixed-route transit service in a given area. Other reasons for microtransit implementation include interchanges (providing connections to existing public transport infrastructure) destination specific service, or as a substitute to traditional public transit service (Humann 2024). The use of microtransit as a substitute or as an interchange service are almost as common as the need to fulfill spatial and temporal service gaps, while the use of destination-specific microtransit is much more rare (Humann 2024).

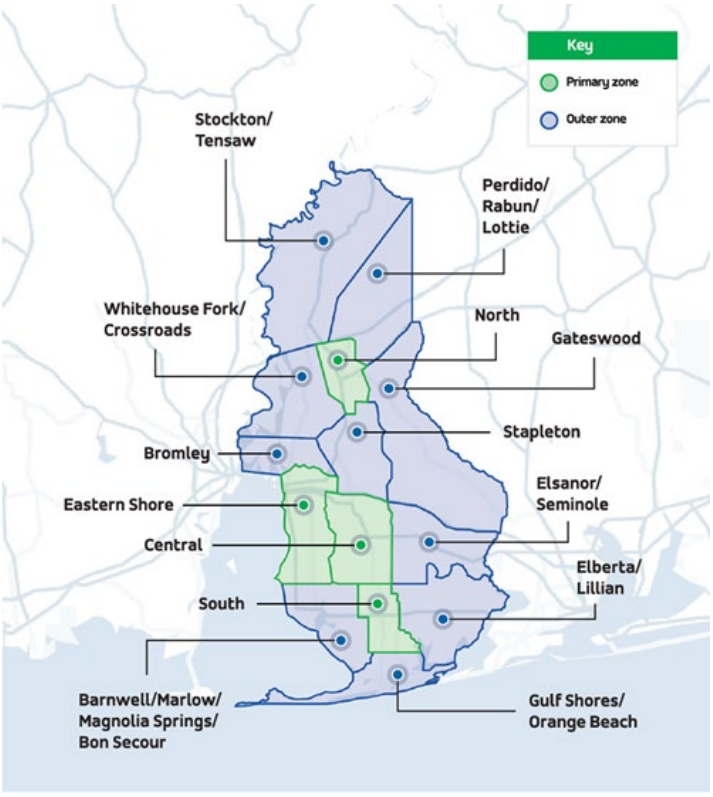
Microtransit services have been deployed in many urban areas, but there's limited deployment in rural areas. Via, a prominent microtransit service, believes that rural communities may be one of the best applications of dynamic routing (Godavarthy et al. 2019). Sending vehicles directly to the rider, instead of having low-density fixed-routes, saves gas, miles traveled, and wear and tear on the vehicle. A feasibility study conducted in Vermont by Via details how and where microtransit is best suited. For example, in urban areas microtransit is ideal for replacing underperforming routes or supplementing specialized mobility services, whereas in small towns microtransit is well adapted for connecting to regional fixed-route or commuter services (Via Mobility 2023). In rural settings, microtransit functions best on a pre-scheduled basis to allow for smaller fleets to cover a larger area. Several case studies are discussed below, to better describe the application of microtransit in different settings.

The City of Arlington, Texas became the first city to rely solely on microtransit when they launched Arlington On-Demand in December 2017, replacing their fixed-route bus. Service was provided to a 24 square mile operating zone, which included the University of Texas at Arlington, AT&T Stadium, the downtown, and the entertainment district. In the first year, over 120,000

rides were taken (Via 2019). Since its launch, Arlington On-Demand has grown. The service has grown from 18 to 53 vehicles and increased the service area to 99 square miles (Via 2021a). Public transit ridership has increased tenfold and as a result, decreased vehicle miles traveled by 400,000 miles (Via 2021a). In 2021, Arlington began an autonomous vehicle pilot project called Arlington RAPID through a Federal Transit Authority grant (Via 2024a). This program was incorporated into the existing Arlington On-Demand service. Initially funded for one year, Arlington RAPID provided over 28,000 rides and will continue through 2024 (Via 2024a).

Baldwin County, Alabama became one of the first in the nation to use microtransit in a rural setting. The Baldwin County Commission received a grant through the Federal Transit Administration's Integrated Mobility Innovation Program to fund the creation of their mobility on-demand system, known as BRATS On Demand (Federal Transit Administration 2020). BRATS On-Demand has a service zone of over 2,000 square miles, serving a population of 223,000 people (Via 2021b). Providing service to such a large area can be challenging. To make it more manageable, the service area has been broken down into primary zones and outer zones (see Figure 8). Those in the primary zone can use on-demand service. Those in-between primary zones, such as in Stapleton, need to book a trip three hours in advance. Those in the outer zones, such as Gulf Shores, need to book twelve hours in advance (Baldwin County Commission 2021). This approach allows BRATS to efficiently offer service to a larger area. BRATS On-Demand can serve as a model for rural counties with variation in population density. In Maine, this zoned approach may work well in Aroostook County. Population centers, such as Caribou and Presque Isle, could serve as primary zones. Less densely populated areas could be outer zones. This could have the potential to increase transit access in an efficient manner.

Figure 8: Service zones for BRATS On-Demand



Source: (Shared Use Mobility Center 2022)

Ben Franklin Transit (BFT), located in the Tri-Cities area of Washington state, has deployed their own microtransit service, BFT CONNECT, to increase transit access and help solve the first mile/last mile problem (Madison 2020). BFT operates 18 bus routes, dial-a-ride, and demand-response service. With BFT Connect, a partnership with Via, they have subdivided their service area into six service zones. All rides must begin and end in the same service zone and also begin or end at a designated Transit Connection. Riders can request a ride from their home to the Transit Connection, on demand, or from the Transit Connection back to their home (Ben Franklin Transit 2020). This service mode may work well in Maine in conjunction with the commuter services offered by Downeast Transportation. Commuters could take the bus from Bangor to Ellsworth or Bar Harbor, and then use the microtransit service to get to their place of employment. This mixed fixed-route/on-demand system has broad applicability when it comes to solving the first mile/last mile problem.

Independent Transportation Network

The Independent Transportation Network (ITN) is a community-based organization, specializing in the transportation of older adults and those with visual impairments. ITN uses private vehicles, in conjunction with both volunteer and paid drivers, to create a community transportation network (Freund 2015). In 2019, the ITN affiliate network provided 100,927 rides (ITNAmerica 2019). Annual ride counts have remained steady overall and despite declines resulting from the pandemic, there were some increases in ridership in the second half of the 2023 fiscal year

(ITNAmerica 2023). Three ITN affiliates have provided more than 100,000 rides in total; including ITN Portland (371,952 rides), ITNBluegrass (117,690 rides), and ITNGateway (119,389 rides) (ITNAmerica 2023).

ITN has three branches: ITN*America*, ITN*Country*, and Trusted Transportation Partners. ITN*America* affiliates provide 24/7 transportation services in their service areas. ITN*America* affiliates are intended to be sustainable without taxpayer support, instead relying on user fees and donations (Freund 2015). However, for the first seven years of service, they may fund their service with up to 50% public funding (ITNPortland 2021). ITN*Country* is built upon the ITN*America* model, though it has been customized for rural and small communities (ITNAmerica 2021). ITN*Country* affiliates can choose their service area, fares, service type, and times; they are not required to provide 24/7 service. ITN*Country* affiliates are not required to be self-sufficient without taxpayer support (Freund 2021). Trusted Transportation Partners are independent transportation services that have been approved by ITN*America* and received the ITN "seal of excellence" (ITNAmerica 2019).

Riders with ITN have Personal Transportation Accounts. Riders use these accounts to pay for their rides. These accounts can be funded through a multitude of options, including direct payment, gift certificates, credits for volunteer driving, and car donations to ITN. For low income older adults who may not be able to afford rides, they offer the ITN Road Scholarship. ITN volunteer drivers can donate their transportation credits to the Road Scholarship program, which will in turn provide transportation funds to older adults in need (ITNAmerica 2019). ITN also partners with local stores and medical providers to provide transportation discounts to older adults. Through the Ride & Shop and Healthy Miles programs, older adults can access the critical services they need, at a discount (ITNAmerica 2019).

VVTA Needles Vanpool and CarShare

Needles, California is a small town of just under 5,000 people, lying on the borders of Arizona and Nevada. Over a quarter of its residents are living below the poverty line ("Needles, CA | Data USA" 2024). Many of the essential services, such as grocery stores and medical centers, are nearby but across the border in Laughlin, NV, or Bullhead, AZ, out of the reach of public transit (Gray 2017). Victor Valley Transit Authority (VVTA) provides fixed route, intercity, commuter, microtransit, paratransit, and vanpool service. VVTA was already operating in conjunction with Enterprise Rent-A-Car for their vanpool service (Gray 2017). VVTA's Consolidated Transportation Services Agency (CTSA) director contacted Enterprise to form a partnership, this time for a carshare program (Godavarthy et al. 2019). The carshare program provided access for those without a vehicle at a low cost, with no annual membership requirement (Godavarthy et al. 2019). Despite the low cost, the user fees for the program cover about 70% of the cost; VVTA pays the remaining percentage (Godavarthy et al. 2019). However, VVTA discontinued the carshare service citing a lack of vehicle availability the rural community, considering the program only had two vehicles at its disposal (Victor Valley Transit 2024). While the carshare service has been discontinued, the vanpool program is still being provided, and VVTA is looking to remodel and expand the vanpool program to incorporate more employers and to adapt to hybrid work schedules (Victor Valley Transit 2024).

Discontinued Microtransit Programs

The reasons for microtransit programs being discontinued are often not publicly stated. However, a few trends have been identified (Coutinho et al. 2020), the most prominent being a lack of a sustainable business model. The programs are often cost-intensive in nature compared to individual-trip offerings, as vehicles must be rented and employee drivers paid. Private microtransit companies must compete with subsidized public transportation, which is difficult to do in low-demand areas. Furthermore, the systems can have low patronage attraction. Successful microtransit programs need to have a sufficient advertising budget and meet the needs of the target population in terms of service area, ride requests, and reliable and acceptable wait times. Below are some examples of discontinued microtransit and on-demand transit programs.

Chariot

Chariot was based in San Francisco, California and operated in an urban to suburban environment. It ran across the United States and Europe. The company was privately owned and operated a fixed route schedule. Unique to Chariot, these routes were decided by user vote. Users would vote for a certain route and, if 120 users voted for a certain route, would buy a monthly pass upfront. Chariot would then launch the new line in a few days in a bottom up approach to route decisions (Coutinho et al. 2020). The program ran from 2014-2019. In 2016, it was acquired by Ford. In 2019, the program was discontinued (Hawkins 2019a). At this time, spokesperson Erin Simpson stated the company struggled with ridership (Marshall 2019).

Lessons Learned: Microtransit services compete against each other; services must be reliable.

Bridj

Bridj was an on-demand bus transit service that ran from 2014 until it was discontinued in the United States in 2017. Bridj operated 14-passenger buses that could be hailed via an app. In 2016, Bridj partnered with the local public transit authority and Ford to create an on-demand transit option called RideKC in Kansas City, Missouri (Coutinho et al. 2020). Upon booking a trip, customers were directed to a pickup location supposedly 5 minutes or less from their location by walking. This distance was longer for two-thirds of customers. The service was only available in the commuting direction (called the direction of demand), and only available during rush hours (6am-10am, 3pm-7pm M-F).

KCATA and Bridj expected the pilot to provide 200 rides in a day. Within the first six months, the service provided a total of 597 rides. In the final six months, one-third of riders took more than 10 rides apiece. The pilot concluded with costs amounting to roughly $1,000/per ride (Borgman et al. 2018). In 2017, the service was discontinued due to insufficient marketing, inadequate operating times (the pilot only ran during peak hours), and service areas not meeting population needs. After a deal fell through with Toyota in the same year, Bridj shutdown services in the United States, was subsequently bought by an Australian transportation operator and relaunched in Sydney. It now operates as a feeder service to train stations (Coutinho et al 2020).

Lessons Learned: Pilot programs must be targeted to meet the needs of the population in terms of service area and operational times; sufficient advertisement must be utilized.

Kutsuplus:

Kutsupus was an on-demand transit program in Helsinki, Finland that operated from 2013 to 2015, when it was discontinued. Kutsuplus was found to be faster than fixed public transit, biking, or walking and on par with private cars for shorter journeys. While the demand for Kutsuplus had been steadily increasing over time in the Helsinki Metropolitan Area (HMR), and Kutsuplus could have been used for further distances than it was intended for if the operating area and number of vehicles was significantly increased (Haglund et al. 2019), the service was discontinued in 2015. An inability to achieve density needed for economies of scale due to most trips not being shared, a low awareness in Helsinki, high costs, and a lack of long-term vision were cited (Gray 2016).

Lessons Learned: Programs designed around ride sharing are inefficient when primary use comes from single passenger trips, advertisement is an important component in a pilot, and programs are often costly.

Leap Transit

Leap was a San Francisco based transit company founded in 2013. The company presented itself as a luxury alternative to the Muni, San Francisco's public bus system. Despite raising $2.5 million from investors, the company filed for bankruptcy in July 2015. Leap ran into problems with local authorities, such as when it used public bus stops to pick up customers without prior authorization (Manjoo 2015).

Lessons Learned: Private microtransit programs may compete against public alternatives, pilot programs must fulfil a wanted niche for travelers.

Shuddle

Shuddle was a San Francisco based start-up that aimed to be Uber for kids. Their target audiences were parents with busy schedules. They were founded in 2014 but were discontinued in 2016. Online reviews of the program revealed that kids were routinely left stranded, bookings were canceled, wait times were long, and customer service was unreliable. The company shut down in 2016 due to financial trouble ((Kumparak 2016), (Cava 2016)).

Lessons Learned: Reliability is a key component of microtransit programs and wait times must be reasonable.

VTA Flex

The Santa Clara Valley Transportation Authority (VTA) experimented with microtransit in 2015 (Gray 2017). The goal of the program was to provide commuters with fast and efficient transportation to their employment. However, the program only generated 0.4 boardings per hour, which did not meet the VTA's requirement of 15-boardings an hour. The core ridership only consisted of 20 people (Borgman et al. 2018). At the program's onset, the algorithm, which was only able to handle on-demand requests and not advanced reservations, prioritized picking

people up over dropping people off. This was adjusted so that customers' ride time would not exceed 20 minutes. The algorithm did not account for load factor in its optimization which made it challenging to utilize the full capacity of the bus, able to seat 26 passengers (Borgman et al. 2018). VTA FLEX originally covered an area of 3.25 square miles based on the greatest unmet transit demand. This was expanded to 5.5 over the course of three months once it was realized that the program was not meeting transit demand due to low ridership. While this did increase ridership, the program was discontinued after six months due to high operating costs and low farebox recovery. A total of 2,714 trips were completed with an average of 16 boardings per day in the first three months, which increased to 41 boardings per day once the service area expanded. 70% of riders desired the option to schedule, reserve, and pay for rides in advance. The result of VTA Flex was that the service generally replaced walking and TNC trips.

VTA had a small marketing budget, relying on local businesses and housing developments to promote the pilot. Marketing materials were placed in light rail stations, bus benches, and on posters. In-person education was identified as the most effective marketing tool, followed by offering free rides to frequent riders. Staff identified a lack of available information on how to use the service as a substantial barrier to acquiring ridership.

Lessons Learned: Pilot programs need sufficient advertising, customers like to prepay and reserve in advance, microtranist can perform a first mile last mile role, ride share programs must serve multiple customers at once, the service area chosen must be one of high demand with low alternative service.

Share Now

A car share company formerly called Car2Go, Share Now was owned by Daimler and BMW. The company left the North American market in February 2020. The reasons cited for ceasing operations were a result of the "volatile state of the global mobility industry" and rising infrastructure costs for car share companies in North America (Hawkins 2019c). The service is still available in European cities in Austria, Spain, Italy, France, Netherlands, and Germany where there is potential for "profitable growth and mobility innovation."

Lessons Learned: Microtransit companies may require public funding similar to traditional public transit

Maven

Maven, run by GM, discontinued its car sharing service in 8 of 17 cities in 2019 in order to concentrate on markets with the strongest demand and growth potential (Hawkins 2019b). The service began in 2016 as a no-membership-fee rental service and more recently launched a product known as Maven Gig for Uber and Lyft drivers without vehicles. In 2020, Maven ceased operations altogether. The decision was partially a result of the pandemic, and also lack of profitability (Wayland 2020).

Lessons Learned: Microtranist companies benefit from subsidization and must have flexibility for disruptive events.

Equity

Increasing access to convenient and affordable transportation options for all Mainers is a driving goal of the Maine Department of Transportation and the State of Maine.

The Equity Subcommittee of the Maine Climate Council recommended that the State of Maine work towards three equity goals for improving accessibility to clean and affordable transportation systems (Maine Climate Council Equity Subcommittee 2023):

- Increase EV ownership among low-to-moderate income (LMI) households, renters, and multifamily renters, and LMI households in rural areas
- Increase EV charging availability among LMI and rural drivers, renters, and multifamily residents
- Expand access to affordable, efficient, and safe active, shared, and public transportation for LMI people, non-drivers, and other disadvantaged populations, particularly in rural areas

Specifically, the proposed objectives for meeting the first goal are to expand EV rebate options and locations, communicate with low-income drivers to address financial barriers, implement other financing options for decreasing costs to LMI drivers, and establish baseline data on EV availability. The second goal seeks to expand EV network accessibility and establish baseline data of the available public funding for EV charging, particularly in rural areas. The next steps for the third goal of expanding public transit access are through implementing clean transit pilot programs, developing public education campaigns, and gathering baseline transit data. The third goal may be achieved through optimizing on demand microtransit and improving multimodal connections to active, shared, and paratransit.

The purpose of these goals is to remove barriers and create a more equitable system for priority populations, including low-income individuals, older adults (65+), people with disabilities or health vulnerabilities, people with limited transportation access, Black, Indigenous and People of Color (BIPOC), people with limited English proficiency, migrant workers, unhoused individuals, and families. Priority populations also include individuals from low-income, rural, disadvantaged, climate frontline, and Tribal communities.

Equity encompasses providing public transit to individuals without adequate access to reliable transportation. An option is to expand volunteer driver networks, such as ITNAmerica. However, the demand for these services is greater than the supply, in part, because of the lack of volunteer drivers (Freund et al. 2019). Driver shortages are especially prevalent in rural locations. In Maine, only 14 percent of volunteer and non-profit ride-share services were located in rural areas in 2018 (Freund et al. 2019). Therefore, volunteer incentives and rideshare service awareness/knowledge is necessary, particularly as technology improves. Furthermore, the ITNAmerica report explained the need to expand access to rideshare programs by offering both scheduling in advance and on-demand options, reduced fares, multiple trip booking methods, and door-to-door services. Consideration should be given as to the type of vehicle provided for

rideshare services because the report noted that older adults may be embarrassed to be seen using shuttle buses (Freund et al. 2019). An example of a volunteer driver program operating in an area without sufficient public transit access is the Winnebago Catch-a-Ride program, located in rural Winnebago County, Wisconsin. The grant funded program offers services specifically for work commutes.

Access to multimodal transportation services will reduce the first/last mile connection barrier that is of particular concern in rural areas. Transit services that may be incorporated into a multimodal system include bikeshare programs, safe walking routes, fixed route and on-demand bus stops, carpooling services, microtransit and paratransit services. Expanding existing infrastructure and technology (such as GO MAINE) to further incentivize the use of multiple forms of public transit, particularly in rural areas may help to reduce transportation barriers.

Justice40 Initiatives: Transportation Inequality

The US Department of Transportation is currently providing funding for disadvantaged communities to expand access to reliable public transportation as part of the Justice40 Initiative ("Justice40 Initiative | U.S. Department of Transportation" 2024). The goal of Justice40 is to address transportation infrastructure and public service gaps by ensuring at least 40 percent of program and grant benefits go to disadvantaged communities. The program prioritizes communities that face barriers to affordable, equitable, reliable, and safe transportation. The objectives of the initiative are to reduce the percent of income spent on transportation travel costs, reduce travel times, increase access to key destinations, and increase mobility options (U.S. Department of Transportation 2022). These key performance indicators in the Equity Action Plan were determined to assist with the implementation of the goals outlined by the USDOT. In Maine, the areas defined as disadvantaged by the Climate and Economic Justice Screening Tool (CEJST) are primarily in northern, central, and eastern Maine (Council on Environmental Quality 2022). Specifically, within the USDOT's Equitable Transportation Community Explorer, there are three parameters listed as measures of transportation insecurity: lack of access, transportation cost burden, and traffic safety (U.S. Department of Transportation 2024). The data for each of these parameters is used to indicate whether a census tract is considered disadvantaged.

Key Considerations from the Maine Transit Plan

In the Maine State Transit Plan, Maine DOT lists strategies to improve access to public transit systems in Maine. These strategies aim to remove barriers to using public transit by improving service (frequency, coverage, connections, door-to-door service), expanding service to specific areas, improving accessibility and safety of transit facilities, strengthening volunteer driver programs, addressing driver shortages, and transitioning to cleaner vehicles (Cambridge Systematics 2023). The report identifies potential locations for expanded or additional public transportation service including, north of Bangor (including Howland/Enfield, Indian Island), Lewiston/Auburn (expanding CityLink service to Mechanic Falls, Turner, Sebattus), Augusta/Waterville (including Winthrop, Winslow, China, Belgrade, Sydney, Vassalboro), Midcoast region (Rockland, Camden, Belfast), and the area around Oxford, Norway, and South Paris (Cambridge Systematics 2023). As the demand for transit services increases, so does the

need for qualified drivers. The Transit Plan identifies options for using smaller cutaway vehicles that do not a require commercial drivers' license and revamping driver education programs.

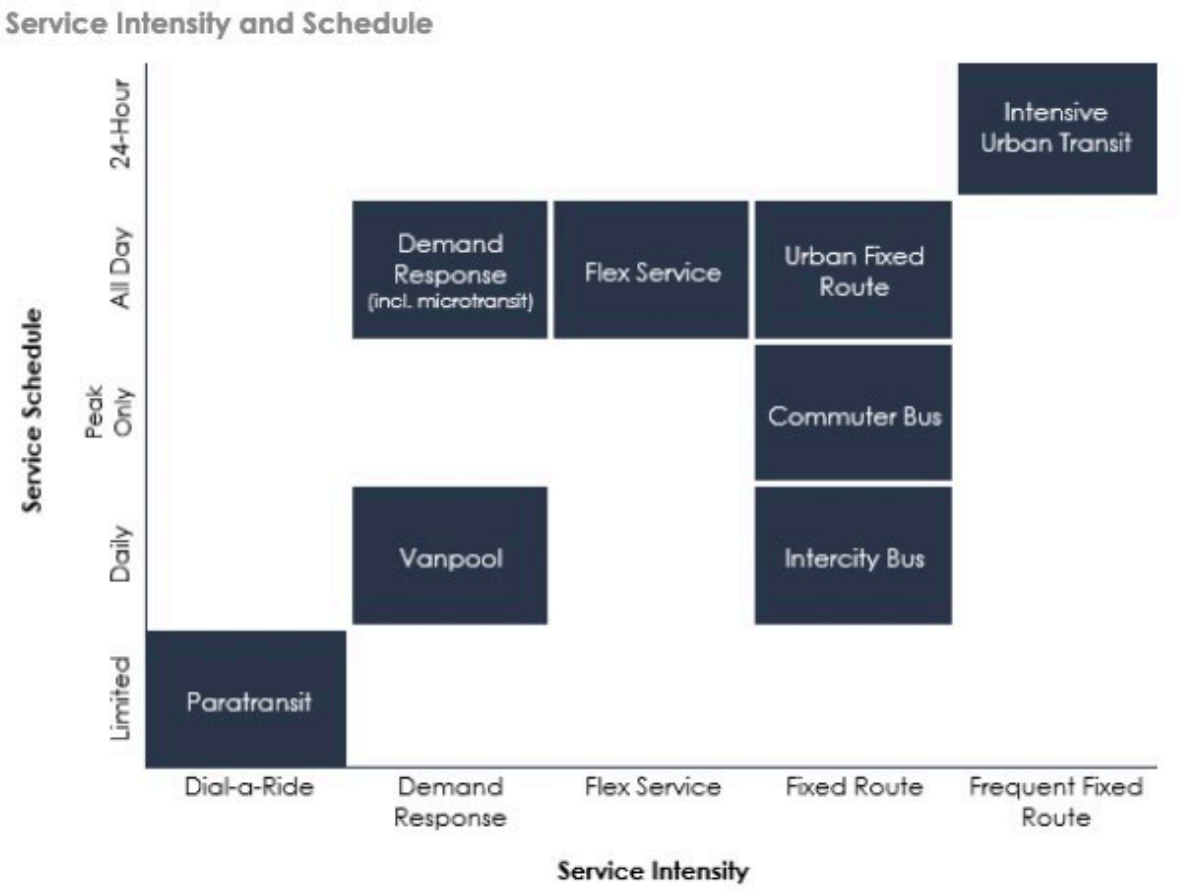
The transit plan also identifies demand and accessibility needs related to limited technology access and internet availability, as well as mobility challenges associated with an aging population (p.32-33). These barriers could be reduced by implementing multiple options for payment and booking, ensuring all vehicles and transit infrastructure are ADA compliant, and increasing multimodal options. A strategy for improving payment services and improving coordination between services, as outlined in the transit plan, should include integrated fare payment systems (p.55). The DiriGo Pass payment system, used by 3 transit agencies in Greater Portland, is an option that could be implemented statewide for a simpler and more comprehensive system that is available to individuals with or without smartphone/internet access. A benefit of expanding this system is the fare capping feature and the potential to offer reduced fares to priority individuals.

Another option outlined in the Maine State Transit Plan is to expand GO MAINE, a statewide trip planning and ride-sharing program (p.51). Carpooling is a viable option in rural areas that do not have fixed route public transportation. A goal of GO MAINE is to reduce single occupancy vehicles and vehicle miles traveled by increasing participation and key stakeholders. In addition to carpooling, GO MAINE provides resources to multimodal transportation, including biking and walking paths, bus routes, and vanpool options.

Definitions of Transit Terminology

Public transit terms are changing with the development of new technologies and approaches to serve more diverse needs. Different public transit services can be characterized by the service frequency and intensity Figure 9.

Figure 9: Schematic of Public Transit by Service Intensity



Source: (Cambridge Systematics 2023)

Definitions

Demand Response: Primarily service that does not operate on a fixed schedule nor on a fixed Route, (Vermont Agency of Transportation 2022a)

Deviated Fixed Route: "Fixed route service that diverts from scheduled service to allow stops at nearby locations on passenger request" (Cambridge Systematics 2023)

Flex Route: "Routes that have fixed stops and run on a circulatory schedule. Flex route buses combine the convenience and affordability of public transit with the ability to access off-route destinations. These routes are designed to allow for deviations without creating excessive delays for other riders on the bus."(Tri-County Transit 2024)

Microtransit: "a technology-based form of shared mobility in which transportation service is shared amongst users, typically concurrently. The service is characterized by on demand availability, in which a user can request service in advance. Unlike traditional fixed route service, which operates along a prescribed route according to a fixed, published schedule, microtransit service has a flexible schedule and routing within a designated service area and span of operating hours" (Cambridge Systematics 2023).

Paratransit: "on-demand shared-ride public transportation specifically for people with disabilities that complement fixed-route transit service provided by the transit agency

operating in an area" (Riggs and Pande 2022)

On-demand Transit: a service that is flexible in both space and time, responsive to user demand

Rideshare: transportation arranged through a third party where a person is a passenger in a private automobile

Rural transit: Routes operating in towns with fewer than 50,000 people (Federal Transit Administration 2024)

Appendix A

Vermont Rural Public Transportation Providers

Green Mountain Community Network

The Green Mountain Community Network (GMCN) provides deviated fixed-route and demand-response services in and around Bennington County (Steadman Hill Consulting, Inc., Monahan Mobility, and Foursquare Integrated Transportation Planning 2020b). Their deviated fixed-route service is made up of both regional and local routes. GMCN provides demand-response services for Medicaid, Reach Up, Fair Hearing, and individuals who are eligible for Vermont's Elders and Persons with Disabilities (E&D) Transportation Program ("Services" 2021; Steadman Hill Consulting, Inc., Monahan Mobility, and Foursquare Integrated Transportation Planning 2020b). GMCN utilizes volunteer drivers to help meet the transit needs of their riders ("Services" 2021).

Marble Valley Regional Transit District

The Marble Valley Regional Transit District (MVRTD), also known as The Bus, provides transit in Rutland County. Their services are a mix of fixed-routes, deviated fixed-routes, and demand-response services. MVRTD operates five local routes and six regional routes. Their demand-response service provides Medicaid transportation and ADA Paratransit services. The Medicaid Transportation program provides free service to medical, Reach Up, and Fair Hearing appointments. Transportation may be provided by standard fixed-route service, volunteer drivers, or taxis. The Paratransit service operates within 0.75 miles of the fixed-route system and operates on the same schedule as the Rutland City fixed-routes.

Southeast Vermont Transit

SEVT offers fixed-route, deviated fixed-route, and demand-response services in Windham and southern Windsor counties. All services are fare free. The Wilmington MOOver has four year-round deviated fixed-routes and nine seasonal routes. The Rockingham MOOver operates eleven year-round routes, one seasonal route, and one shopping shuttle.

The MOOver operates demand-response services for seniors, individuals with disabilities, and approved Medicaid transportation. For seniors and individuals with disabilities, the MOOver will provide transportation for non-emergency medical trips, critical care trips, congregate meal sites and meals-on-wheels deliveries, congregate shopping trips, and personal care trips. For those with approved Medicaid transportation, the MOOver will provide transportation to non-emergency medical appointments for residents of Windham or southern Windsor County without access to a vehicle. ADA services for the Rockingham MOOver are provided for those who live within 0.75 miles of the Red or White Line. The Wilmington MOOver provides ADA services for those living within 0.25 miles of one of the Wilmington MOOver's fixed routes. Rides for both services must be requested at least 24 hours in advance.

Tri-Valley Transit

TVT provides service in Addison, Orange, and northern Windsor counties. Services provided include fixed-route, deviated fixed-routes, and demand-response transit. At this time, Addison

County Transit Resources (ACTR) and Stagecoach still operate separately, though they are integrated with Tri-Valley Transit.

ACTR operates five deviated fixed-routes and one fixed-route. Stagecoach offers three commuter routes, four shopping routes, and two local shuttles. Stagecoach and ACTR both offer dial-a-ride services. Rides for their dial-a-ride programs are usually provided by volunteer drivers or wheelchair accessible buses when required.

Rural Community Transportation

Rural Community Transportation (RCT) is a public transportation provider in the Northeast Kingdom. They provide free commuter, shuttle, and shopping routes. RCT operates five deviated fixed-route shopping shuttles. RCT has a number of demand-response services, which make up the majority of their ridership ("Annual Report" 2021). Their Dial-A-Ride program can be used to access school, medical appointments, social activities, et cetera. They are also participants in the Rides to Wellness Pilot Project and the Rides to Recovery and Job Access Pilot Program. More information on these programs can be found under "Alternative Transportation and Pilot Programs."

New Hampshire Rural Transportation Providers

Tri-County Transit

Transportation in Coos, Carroll, and northern Grafton counties is provided by Tri-County Transit, a division of the Tri-County Community Action Partnership (CAP) (Tri-County CAP 2021). Their service area spans over 3,000 square miles and covers more than 40 towns (Tri-County Transit 2017a). They provide two deviated fixed-routes, door-to-door, and long-distance medical services.

Door-to-door service provides shared ride trips for those who are unable to use a traditional deviated fixed-route service. These rides are provided by six different service agencies and cover approximately forty towns (Tri-County Transit 2017b).

The long-distance medical transportation provides transportation for non-emergency medical appointments for persons aged sixty or older and disabled individuals. Their service area covers Vermont, New Hampshire, and Maine. These services are provided completely by volunteer drivers. By utilizing volunteer drivers and a mix of funding sources, the service is free for seniors. Those under sixty must pay, as the funding sources don't cover the cost (Tri-County Transit 2018).

Sullivan County Transportation Program

The Sullivan County Transportation Program, a division of Southwestern Community Services, provides deviated fixed-route and demand-response services. Their three deviated fixed-routes cover Claremont, Newport, and Charlestown. Demand-response services include Dial-A-Ride (only available in Claremont) and volunteer drivers. The volunteer drivers program provides rides for individuals with a disability or seniors over the age of sixty. Most trips are taken using private vehicles, but paratransit vans are available for individuals who cannot use traditional vehicles.

This program covers all of Sullivan County (Upper Valley Lake Sunapee Regional Planning Commission 2019) .

Concord Area Transit

Concord Area Transit (CAT), a division of Belknap-Merrimack CAP, operates three fixed-routes, as well as demand-response service. The fixed-routes provide access to medical appointments and hospitals, shopping destinations, higher education, and residential neighborhoods (Concord Area Transit 2017).

There are three different origin-to-destination demand-response services. The ADA Paratransit service serves individuals who cannot access a fixed-route service. CAT Senior Transit Services (CST) is a shared ride service for those aged sixty or older in the Greater Concord Area. The third service is the Rural Transportation Service. This service provides transportation for seniors 60 years and older who live outside the Greater Concord Area (Concord Area Transit 2020).

Home Healthcare, Hospice & Community Services (HCS) Transportation

HCS operates four transportation programs in the City of Keene. The City Express is Keene's fixed-route service ("City Express" 2020). The Friendly Bus is a shared-ride demand-response service for seniors aged sixty or older. This service is fare free and can be used for any reason (HCS 2021a). The Para Express is Keene's shared-ride door-to-door para-transit service. This service will pick up and drop off riders within 0.75 miles of the City Express's fixed-routes (HCS 2021c). HCS also operates a deviated fixed route shared long-distance medical transportation service. While priority is given to seniors, veterans, and individuals with disabilities, this service is open to the public. A donation is suggested, but the service is fare free (HCS 2021b).

North Dakota Tribal Transportation Providers

Standing Rock Public Transit

Standing Rock Public Transit provides demand-response service in Sioux, Morton, and Burleigh counties in North Dakota and Corson and Walworth counties in South Dakota. The service operates thirteen routes, providing service to twelve communities, two casinos, and two Veterans Affairs hospitals. Three routes are in-town; the rest are intercity routes. Trips to the hospitals are run twice monthly, on alternating Wednesdays. Additionally, they provide Medicaid transportation services. Advance reservations are required for all routes. Fees vary depending on the trip. For those attending college courses or GED tutoring and testing sessions, Standing Bull College will pay their transit fares.

Spirit Lake Tribe

The Spirit Lake Transportation Program provides demand-response service for community members upon request (Spirit Lake Nation 2020). They also provide transportation for clients of human service programs (Mattson, Mistry, and Hough 2020).

North Dakota Rural Transportation Providers[6]

South Central Adult Services

The South-Central Transit Network provides demand-response service in eight counties (Barnes, Emmons, Foster, Griggs, Lamoure, Logan, McIntosh, and Nelson). Trips must be scheduled in advance. Transit needs are met through a combination of bus, van, and taxi service. In-town services are offered in six out of eight counties, in select communities. Intercity service is offered in all counties, on a rotating basis ("Schedules | South Central Transit Network" 2024).

Souris Basin Transit

Souris Basin Transportation provides demand-response transportation in the city of Minot, as well as Burke, Bottineau, McHenry, Mountrail, Pierce, Renville, and Ward counties. Services include both local and intercity routes. Local routes are offered in Bottineau, Minot, and Rugby. Fares and days of service vary depending on the location and route. All rides must be scheduled in advance.

James River Senior Citizens Center

James River Public Transit (JRPT) provides local and intercity demand-response service and is also a Medicaid transit provider. Local dial-a-ride service is available in Jamestown, seven days a week. Intercity service to Bismarck is available twice a month and service to Fargo is available on Wednesdays. All trips, both local and intercity, must be booked in advance. JRPT maintains a master schedule for daily work rides. Instead of calling daily to schedule a ride to work, individuals can fill out a monthly work schedule calendar (James River Public Transit 2021). Their rides will be scheduled for the month by Dispatch. JRPT provides transportation to meal sites for James River Senior Citizens Centers for both lunch and supper meals, as well as to Jamestown Regional Medical Center (James River Senior Citizens Center 2021).

West River Transit

West River Transit provides demand-response service in Burleigh, Dunn, Grant, Oliver, Mclean, Mercer, and Morton counties. They provide intercity transit to Bismarck, Prairie Knights, Dickinson, Minot, Butte, and 4 Bears Casino. In Mercer and Mclean counties, they also provide transportation to local shopping, available Monday through Friday. Shopping rides are also available in Morton County; days and locations vary. For those with children, West River Transit provides preschool and daycare transportation, Monday through Friday, in all counties. In addition to their traditional transit offerings, they also operate an "event bus." This bus can be hired for trips to Dickinson, Bismarck, Minot, Prairie Knights Casino, and more.

Devils Lake Transit (Senior Meals and Services)

Senior Meals and Services provides transportation in Devils Lake and Eddy County. All services are demand-response and must be scheduled in advance. In Devils Lake, local service is offered Monday through Friday. Intercity trips to Grand Forks, Starkweather, Hampden, Edmore, Lawton, and Brocket are provided with varying frequency. Trips to Grand Forks are provided approximately four times a month. To all other locations, trips are offered once a month. In Eddy

[6] Providers who do not report to the National Transit Database are excluded.

County, local trips in New Rockford are provided Monday through Friday. Trips to Carrington, Devils Lake, and Sheyenne can be arranged by special request. Senior Meals and Services is an approved Medicaid transportation provider.

Northwest Public Transit

Northwest Public Transit, provided by Williston Council for the Aging, offers demand-response transit within the cities of Williston and Watford City. In Williams County, veterans with a VA card have their fares waived. Public transportation is available Monday through Friday, 7:00 AM to 5:30 PM.

Hazen Busing Project/Public Transportation

Hazen Busing provides demand-response transportation. Local trips, either within Hazen city limits or nearby, are offered Monday through Friday. Trips to Bismarck are taken every Wednesday and trips to Dickinson are scheduled every second Tuesday. Trips are also scheduled for special events, such as to the Medora Musical, or to casinos.

Southwest Transportation Services

Southwest Public Transportation offers local and intercity demand-response services in Adam, Bowman, Hettinger, and Slope counties. Local service is provided in Bowman and Hettinger, Monday through Friday. Intercity routes are scheduled on-demand. Southwest Public Transportation has agreements with many clinics and hospitals, to share the cost of the fare. For medical appointments, fares for veterans are paid by the Department of Veterans Affairs.

Kenmare Wheels and Meals

Kenmare Transit provides demand-response transit in Ward County. Local rides are available Monday through Friday. Transit to Minot is provided the first and third Tuesday of the month. They also provide special transit options for workers. For those who work within the city of Kenmare, they can arrange to have transportation provided outside of regular service hours.

Cavalier County Senior Meals and Services

Cavalier County Transit provides demand-response transit within Cavalier County. Trips within the city of Langdon are available Monday through Friday. Transportation out of town is available on-demand and fulfillment is contingent on the volume of need for the service (Cavalier County Senior Meals & Services 2020).

Pembina County Meals and Transportation

Pembina County Meals and Transportation offer local and intercity demand-response service in Pembina County, with intercity trips to other counties. In-town transportation is provided in Cavalier and Drayton. General purpose intercity trips from Pembina County to Grand Forks are offered 2-4 times per month, depending on the location of origin. Trips from Drayton and St. Thomas to Grafton are offered daily, Monday through Friday. Transportation for medical appointments in Grand Forks is available every Friday. Medical transportation for other locations is available upon request. Their final service is employment transportation. Fares for rides to employment will be determined on a case-by-case basis, depending on the distance to the worksite (North Dakota Department of Transportation, n.d.).

Kidder-Emmons County Senior Services

Kidder-Emmons County Senior Services' transportation service is Kidder County Transit. They provide transportation in Kidder, Burleigh and Stutsman counties. Local transportation within the city of Steele is provided daily, Monday through Friday. Travel between Robinson and Tuttle, both in Kidder County, is provided every Tuesday and the first Friday of the month. Transportation to other locations outside the county, like Jamestown, Bismarck, Carrington, and Harvey is offered more sporadically, ranging from twice a week to once a month, depending on the location. Additional trips and locations can also be arranged upon request. Travel demand has increased due to transit needs for medical appointments.

Can-Do Transportation

Can-Do Transportation is a demand-response service located in Rolla, North Dakota. They provide service in Rolette County (Mattson, Mistry, and Hough 2020).

Walsh County Transportation Program

Walsh County Transportation is a demand-response service. They provide local transportation in Park River, as requested. Intercity transportation is provided for Grand Forks, Grafton, and Fargo. Transit to Grafton and Grand Forks is offered multiple times a week. Trips to Fargo are taken once a month. They are a Qualified Medicaid Provider and prioritize transportation for medical care.

Dickey County Senior Citizens

Dickey County Transportation is operated by Dickey County Senior Citizens. They offer demand-response service in Ellendale and Oakes. Local transportation is available in Oakes and Ellendale two to three days per week. Travel from Ellendale to Oakes occurs twice a month. Trips from Oakes and Ellendale to Aberdeen occur once a month. Fares are not required; they are donation based.

Benson County Transportation

Benson County Transportation provides demand response service in Benson County. Transit to Rugby, Harvey, and Devils Lake is available once-a-week. Trips to Bismarck and Grand Forks are scheduled once a month. Trips to Jamestown are provided twice per week.

Maine Rural Transit Providers

Aroostook Regional Transportation Services, Inc. (ARTS)

ARTS provides demand-response service in Aroostook County, Patten, Stacyville and Danforth. Transportation is offered in Caribou, St. John Valley, Presque Isle, and Houlton areas. Services are offered five days a week, though services are not offered every in every area every day. To provide their service, ARTS utilizes a combination of buses, volunteer drivers, private car drivers, and taxis.

In 2019, a new Presque Isle loop was launched in collaboration with the Going Places Network. This route offered seven days a week service in Presque Isle. The route was ended in late March

2020, when ARTS stopped serving the route during the pandemic and the Going Places Network was unable to find a replacement (Lizotte 2019; Marino Jr. 2020)

Downeast Community Partners

Downeast Community Partners (DCP) provides demand response service in Washington County. They offer transportation assistance for child protective visits, sheltered workshops, and MaineCare-covered medical appointments. They also operate DCP Rides, which is open to the public. DCP Rides operates in Eastport, Pleasant Point, Calais, Princeton, Baileyville, Lubec, Machias, Milbridge, and Columbia. Thanks to a partnership with the Eastern Area Agency on Aging and the FTA, DCP Rides is able to offer free rides to seniors from Lubec and Eastport to Bangor and Bucksport to Bangor.

Kennebec Valley Community Action Program (KVCAP)

KVCAP offers fixed-route, deviated fixed-route, and demand-response service in Kennebec and Somerset County. The Kennebec Explorer is a fixed-route bus service operating in the greater Waterville and Augusta area. The Somerset Explorer is a deviated fixed-route bus service operating in Somerset County. The Somerset Explorer also has the Move More Kids Transit Program. This summertime transportation program is designed to bring young adults to places with healthy activities.

Their demand-response services are all non-emergency medical transportation. The KV Vans are a fleet of paratransit vans providing door to door service for elderly, disabled, and low-income individuals in Kennebec and Somerset counties. KVCAP offers MaineCare transportation, in collaboration with Penquis CAP. Finally, though not a direct service, they provide a mileage reimbursement for friends and family members who provide transportation for those unable to transport themselves. To meet the needs of the demand-response service, KCAP utilizes volunteer drivers.

City of Bath

The Bath Citybus service, now operated by Western Maine Transportation Services, includes a year-round city bus service and a seasonal trolley. The CityBus has two flex route services within Bath that operate Monday through Friday. They also offer demand-response service to Mid Coast Hospital twice daily. The CityBus has an employee shuttle for Bath Iron Works Employees. This shuttle picks up riders at their homes. The seasonal trolley runs from June through October, six days a week, through the City of Bath.

Selected Microtransit Companies

BRATS

BRATs (Baldwin Regional Area Transit System) is the public transit system for Baldwin County, Alabama. In 2019, the service partnered with Via to transition the previous on-demand responsive transit service, operational since 1985, to an on-demand microtransit service. The switch was funded through a $260,800 FTA Integrated Mobility Innovation grant (IMI), which was expended by early 2021. Funding now comes from FTA formula grant funds, namely 5307 Urbanized Area Formula Grant and 5311 Formula Grants for Rural Areas. The amount of formula

grant funding allocated to BRATS will have likely changed with the release of the 2020 census data in 2022. BRATS predicted a decrease in 5311 funding and an increase in 5307. The system covers the entirety of Baldwin County except for a small rural area. Rides are requested through an app or online. The former allows users to signal if they have accessibility needs and for payment, which can be mailed in alternatively. Fares are $2 for the first five miles and $0.50 for each additional five miles. An additional passenger costs $2 dollars. BRATs own 46 vehicles, 30 of which are used in day-to-day operations. Most are small cutaway buses with a capacity of 10-25 people. There are also 8 full-size buses. All vehicles are wheelchair accessible. The vehicles are distributed among 4 operational hubs (Shared Use Mobility Center 2022).

Belleville Transit

Belleville Transit offers an on-demand service for their evening customers. Belleville has a population of 55,071. The system uses technology developed by Pantonium Inc. and the ON DEMAND app (or BTletsgo.ca) to schedule rides. As of July 2021, preliminary reports have found a 300% increase in nighttime bus ridership (Zhang, Farber, and Young 2022). Zhang et al (2021) has found that the system has increased ridership at night, provided flexible and affordable transit options to disadvantaged segments of the population, and presents a solution to social exhaustion. The service aims at providing shorter wait times to further boost ridership. (Sanaullah et al. 2021) found that 39% of wait times were less than 15 minutes, while 28% were between 15-30 minutes. The service covers the boundaries of Belleville (City of Belleville 2023).

ECOV

ECOV is a private company in the later venture capitalism stage that utilizes public private partnerships to promote ridesharing. Founded in 2014, it provides a ride-sharing service that focuses on carpooling for areas outside city centers, especially urban and peri-urban environments. Integrated hardware and software allow drivers to offer empty seats to commuters traveling to a similar destination. They are based in Nantes and operate across France, with 30 networks as of 2022. Cities which partner with ECOV place carpool lanes in their cities where individuals wait and summon rides. Rides can also be summoned through an app, by phone, or through text (“About Ecov | Ecov” 2024). The system operates similarly to a bus route: an individual goes to the nearest stop, enters their destination at the stop or on their phone, and an individual who is driving the same direction stops and picks up the passenger. The driver is automatically paid via the platform. Passengers and drivers are connected in real time. Routes are set up on existing high traffic roads, and carpooling lines link up with other local transport and mobility services. Four out of ten passengers demotorized. The average wait time for passengers in 2022 was less than 4 minutes, with a guaranteed departure time of less than 20 minutes comparable to a metro in low density areas. The cost-per-passenger is lower than for bus travel for comparable waiting times. Services focus on end-to-end solutions. The most advanced versions of these networks allow for transportation of 0.35 euros/pers.km (Matagne 2023)

Green Raiteros

Green Raiteros operates in Huron, a town of 6,700 in Fresno County, California, as well as Madera, Kings, and Kern Counties (Green Raiteros 2024). The program was created in 2018 by a

partnership between local raiteros, who act as an unofficial taxi service, the Latino Environmental Advancement and Policy Institute (LEAP), EVgo, the Fresno County Rural Transit Authority, and the Shared-Use Mobility Center (Shared-Use Mobility Center 2020b). The program was originally funded from a legal settlement which allocated settlement funds towards green initiatives in low-income communities, $519,000 of which was given to LEAP. Two electric vehicles were purchased, making Green Raiteros eligible to receive funding from California Clean Air Resources Board Community Clean Air grants. $8,000 was set aside to reimburse drivers and allowing the program to be free for six months. Many Green Raiteros drivers use their own vehicles, which creates funding challenges as the company is neither a taxi service nor a transportation network company (TNC). After the promotional period ended, rides cost $0.55 a mile. A ride into Huron can cost as much as $25, though this is still cheaper than available alternatives. Rides can be requested via telephone.

May Mobility

May Mobility is an Ann Arbor, Michigan based company that was founded in 2017. The company designs microtransit solutions with autonomous vehicles through their multi policy decision making platform (MPMD). This system continually runs real-time, on-board simulations to virtually imagine thousands of possible scenarios every second and enable a vehicle to decide for itself which action is the safest. This leads to emergent behavior which allows a vehicle to instantly solve problems (May Mobility 2024). May Mobility has programs in Sun City, Arizona; Arlington, Texas; Ann Arbor, Michigan; and Grand Rapids, Minnesota ((Shared-Use Mobility Center 2023).

MyRide

MyRide is operated by Green Mountain Transit and Via in Montpelier, Vermont. It was launched as a two-year pilot program that replaced Montpelier's three fixed bus routes in January 2021. MyRide has 3 18 seat buses with plans to purchase vans and electric buses in the future. Vehicles are wheelchair accessible and have a curbside pick-up option. (Ruehsen 2022) Wait time is 15-30 minutes. The service is currently provided fare free, though future plans will only provide trips fare free within Montpelier, with trips to Berlin priced at $1.00 with discounts for seniors age 60 and over and children ages6-17 ($0.50) (Green Mountain Transit 2024). Future plans also include reinstating a portion of the fixed route system to supplement the program.

Miocar

Miocar is a membership-based carsharing service which provides rentable vehicles to the populations of Richmond, Stockton, Tulare, and Kern County, California. The private company is partnered with California Climate Investments, San Joaquin Valley Air and Pollution Control, University of California at Davis, San Joaquin Council of Governments, California Air Resources Board, Clean Mobility Options, Stockton Mobility Collective, Charge up Contra Costa, the Housing Authority of San Joaquin, California Air Resources Board, RCF Connects, California Climate Investments, and Self-Help Enterprises (Miocar 2024). Miocar provides EV access to the above counties for $4 an hour or $35 a day. Vehicles are rented through the app or website, and only members are eligible to rent. Membership requires an individual to be 21 years of age or older, have a valid driver's license, or a valid payment card; and there is a one-time application fee of

$20. Insurance, vehicles maintenance, and roadside assistance are included in the hourly and daily rates, with users responsible for a $500 deductible and any third-party claims in the event of an accident. Users pick up the vehicle from a designated home space. Since its inception in 2019, the company reports more than 2700 reservations and more than 180,000 miles traveled (Miocar 2024). Miocar members often live in households with lower incomes than the median for their census block, with many users having lacking or having limited access to private vehicles. Studies have found that 60% of trips served by Miocar would not have taken place without the service (Paul et al. 2023).

Uber Pool in Innisfil, Ontario

The Innisfil Transit Partnership with Uber began in 2016. Innisfil, Ontario has an estimated population of 43,667 in 2024. The program had a pre-pandemic ridership high of 85,943 trips in 2018 (Cecco 2019) The partnership sees the town of Innisfil subsidizing the cost of an Uber Pool ride. With the subsidy, users get $4 off any trip to or from Innisfil and a flat rate of $4 or $6 to select locations (Uber 2024). A ride can be summoned through the Uber App or by calling 1-855-464-6872. There is a monthly trip limit of 30 trips, but individuals who rely on the service for transportation can apply to have the limit raised to 50 (Innisfil 2024). As of February 2019, Innisfil estimates it has saved more than $8 million a year compared to the equivalent door to door bus service. At the same time, the average wait time was 7:20 minutes and trip completion rate was around 87% as of July and August 2018. 30% of ride pools are matched. The service operates 24 hours a day, seven days a week (Zenasni 2019).

ITNAmerica

ITN*America* is a volunteer transport program based in Westbrook, Maine. The nonprofit network includes 100 transportation providers across the United States, with three (ITN*Portland*, the Kennebunk Kennector, and Age-Friendly Rides of Windham) based in Maine. ITN*America* provides technology, training, market research, volunteer recruitment, and policy analysis in an effort to support nonprofit, community-based volunteer transportation. The mission of the program is to promote mobility for older adults and those with mobility challenges.

The services offered by ITN*America* include:

- ITN*Rides*: software for routing, logistics, finance, volunteer recruitment, and marketing. A 178-field research database on the Salesforce platform with routing algorithms donated by Esri. This program supports over 1.5 million rides.
- Rides in Sight (RIS): largest, searchable, online database of all transportation services for older adults and people with mobility challenges. Offers a toll-free hotline for those who need personal assistance.
- Community in the Cloud: online learning center to help communities plan and manage volunteer transportation services.
- America's Volunteer Driver Center: online platform to increase the supply of volunteer drivers and match potential drivers to local programs.
- ITN Affiliates: independent 501c3 nonprofit organizations that focus solely on 24/7 transportation regardless of purpose. Uses ITN*Rides*.

- ITNCountry: Flexible, low-cost program that brings all the resources of ITN to rural and small communities, or to municipalities or nonprofits that wish to add transportation to their services.
- Trusted Transportation Providers: nonprofit volunteer-based providers selected by ITN*America* as subgrantees to increase transportation availability across the nation.

Via

Via is a private company which partners with public and other private entities to provide transit services. Via launched its first operation, ViaVan, in New York in 2015 (Coutinho et al. 2020). This service was area based, allowing individuals to travel to virtual stops within a defined area. Via operates across the world, notably North America, Europe, Asia, and Oceania. Via prides itself on its flexibility, offering different marketing products (public/private shuttles, technology/algorithms for fleet/driver management, independently contracted drivers), differentiated levels of service, and different environments, varying from suburban or urban areas. In 2018, it was estimated that ViaVan had an occupancy (passenger km/vehicular km) of 1.136 (Coutinho et al. 2020). Via offers a variety of services, including microtransit, paratransit, student transit, planning and consulting; and citymapper for cities. Partnering with Via has caused a decrease in public transportation cost per trip in Hall County, Georgia; allows New York City to track 10,000 school buses in real-time, and a 39% reduction in trip durations for paratransit services in Hampton Roads, Virginia. Via's TransitTech has provided more than 125 million rides in more than 650 communities in 40+ countries (Via 2024b).

Comparing Via and May Mobility

Via and May Mobility are similar as both companies work with public entities to provide on demand and microtransit services. However, the two companies differ in a few aspects. May Mobility focuses on providing such services with autonomous vehicles. Via, on the other hand, provides many services that are needed in the on-demand process and prides themselves on their flexibility. Via offers public entities shuttles, technology for fleet management, and drivers, all at differentiated levels of service to meet the requirements of the area of service. As such, the two companies are not mutually exclusive: Arlington RAPID in Arlington, Texas, is a partnership between Via, May Mobility, the City of Arlington, and the University of Texas at Arlington.
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Appendix B: Microtransit Companies Examined & Characterized

Shown below are the 41 microtransit companies selected based on three criteria: they operated in a rural environment (marked R), they operate in a state similar to Maine (S), or they have interesting aspects of their operations (I). From these, the ten above companies were selected.

Company	Location	Description	Funding	Reason of Interest	Source
Belleville Transit	Belleville, Ontario	Utilizes on-demand buses to fulfill demand at night. The program began in 2018 and is still operational. Fares paid for on the bus. Rides are primarily requested through an app, but users can also utilize phone, email, or online options. Operates 9pm-12:30am Monday through Friday; 7:30pm-12:30am on Saturday/Sunday		I	https://www.sciencedirect.com/science/article/pii/S0965856421000288 , https://www.belleville.ca/en/walk-ride-and-drive/mobility-bus.aspx
BRATS	Baldwin County, Alabama	Partnership between Alabama and Via. Operates 30 vehicles on a day-to-day basis with a capacity of 10-25 passengers for each vehicle. Utilizes an app.	Received $260,800 through FTA's IMI program to fund the deployment of the on-demand software. As a condition of the grant, 20% of the project's budget needed to be a local match. Transitioned to permanent funding through FTA 5307	I	https://learn.sharedusemobilitycenter.org/casestudy/a-county-wide-transformation-of-demand-response-service-into-microtransit-baldwin-county-alabama/

Company	Location	Description	Funding	Reason of Interest	Source
			Urbanized Area formula grants and FTA's 5311 Formula Grants for Rural Areas.		
Ecov	Multiple locations in France	Private company, occasionally subsidized by private entities. Started in 2014 and still in operation. Rides can be requested by an app, telephone, or text; or found at carpool lanes.	Funded through public subsidies and private partners.	I	https://www.ecov.fr/en/page/about-us
ITN*America*	Across United States	Nonprofit based in Westbrook, Maine with 100 transportation providers across the United States. Mission of promoting lifelong mobility for older adults and people with mobility challenges. Operates volunteer driver networks and technology which supports them.	Nonprofit	I	https://www.itnamerica.org/
May Mobility	Various	Based in Ann Arbor, Michigan. Private company focused on providing microtransit through autonomous vehicles through their Multi-Policy Decision Making (MPDM) technology. Founded in 2017.		I	https://annarborusa.org/news/may-mobilitys-expansion-in-ann-arbor-focused-on-growing-its-autonomous-vehicle-fleet/ , https://maymobility.com/locations/arlington-tx/ , https://maymobility.com/technology/
Green Raiteros	Huron, California	Free for residents. Partnership	Started by $519,000	I	https://greenraiteros.org/

Company	Location	Description	Funding	Reason of Interest	Source
		between LEAP, EVgo, the Fresno County Rural Transit Authority, and Shared-Use Mobility Center. Vehicles are electric.	grant from California Public Utilities Commission.		
MioCar	Richmond, Stockton, Tulare, and Kern Counties, California	Vehicles can be rented for $4 per hour or $35 for a full day. Company was founded in 2019. Vehicles are electric. Reservations can be completed online or through an app. Available 24/7.	Private company subsidized by the California government. Partners include California Climate investments, San Joaquin Valley Air Pollution Control District, UCDavis, SJCOG, and more.	I	https://miocar.org/ and https://www-tandfonline-com.wv-o-ursus-proxy02.ursus.maine.edu/doi/full/10.1080/01944363.2023.2268064
UberPool	Innisfil, Ontario	Public private partnership between Uber and Innisfil. Fare is $3-$5 one way. Program piloted in 2016. App based but has a phone option. The town of Innisfil subsidizes the local UberPool option.		I	https://innisfil.ca/en/living-here/using-innisfil-transit.aspx , https://www.uber.com/us/en/u/innisfil/, https://sustain.ubc.ca/sites/default/files/2018-69%20Transit%20On-Demand%20Case%20Studies_Zenasnii.pdf
Via	Various	Private company. Works with public entities to create microtransit systems and apps. Worldwide reach.		I	https://www.sciencedirect.com/science/article/pii/S0739885920301086?via%3Dihub , https://www.bloomberg.com/news/articles/2017-11-

Company	Location	Description	Funding	Reason of Interest	Source
					20/microtransit-lands-in-arlington-texas-with-via-partnership
Arlington RAPID	Arlington, Texas	Partnership between May Mobility, Via, the City of Arlington, and University of Texas at Arlington (UTA). Created in 2021 and still operational. The fare is $3 and free to students and staff at UTA. Vehicles are autonomous shuttles demanded through an app and phone hotline. Operates 8am-8pm.	Supported by $1.7 million grant from FTA with additional funding from the City of Arlington and North Central Texas Council	R, I	https://maymobility.com/locations/arlington-tx , https://maymobility.com/resources/arlington-rapid-case-study/ , https://www.keranews.org/transportation/2023-12-06/arlington-self-driving-shuttle-program-passes-45-000-rides-nearly-3-years-into-service
CARTS Now	Marble Falls, Bastrop, Taylor, and Lockheart, Texas	Partnerships between Capital Area Rural Transportation system and Via. Still currently operating. Used to connect the rural areas surrounding Austin. Utilizes an app or hotline. Operates 7am-7pm Monday through Friday		R	https://learn.sharedusemobilitycenter.org/overview/carts-expands-microtransit-service-to-marble-falls-tx-2022/ , https://ridewithvia.com/news/carts-launches-new-on-demand-service-in-marble-falls-tx
CATA GO	Titusville, Pennsylvania	Operates 3 ADA accessible vans that charge $1.50 per trip. Seniors and children under the age of six ride free. Utilizes an app. Operates 7:30am-5:30pm.	Funded by Pennsylvania Department of Transportation and Titusville Area Hospital	R	https://learn.sharedusemobilitycenter.org/overview/city-launches-on-demand-microtransit-titusville-pa-2023/ , https://www.meadvilletribune.com/news/cata-starts-titusville-on-demand-bus-

Company	Location	Description	Funding	Reason of Interest	Source
					service-today/article_db05e7d4-1b7f-11ee-ab70-474a7d8a4d13.html
CATAGO!	Bellefonte, Pennsylvania	Started as a partnership between Centre Area Transportation Authority (CATA) and Transloc, but now is a partnership between Via and CATA. Fare is $2 a ride. Vans include a bike rack and can seat 7. Operates Monday through Friday from 6am to 11pm and Saturdays 6pm to 7pm. Utilizes an app but has a call in option.		R	https://www.statecollege.com/centre-county-gazette/catago-offers-on-demand-shuttle-service-in-bellefonte/ , https://www.twp.ferguson.pa.us/regional/news/introducing-catago-new-and-improved-app-powered
DARTT	Centralia and Chehalis, Washington	Partnership between Spare and Twin Transit. Fare is $3 with an additional $0.30 per mile. Utilizes an app.		R	https://learn.sharedusemobilitycenter.org/overview/twin-transit-launches-rider-app-for-demand-responsive-service-lewis-county-wa-2022/
MicroCAT	Albemarle County, VA	Private-Public Partnership between Via and Charlottesville Area Transit (CAT). Utilizes an app. Vehicles are hybrid and wheelchair accessible.	$1.5 million grant from the Department of Rail and Public Transportation, $338,000 matching grant from Albemarle County.	R	https://learn.sharedusemobilitycenter.org/overview/cat-launches-microtransit-in-albemarle-county-va-2023/
Pelivan	Oklahoma	Owned by Grand Gateway EDA	Funded annually with	R	https://www.pelivantransit.

Company	Location	Description	Funding	Reason of Interest	Source
		and partnered with Via. Base fare is $3 each way, senior fare is $1 each way, and discounts are available for veterans and tribal members. Rides can be scheduled ahead in the app or by phone. Operates Monday-Friday 8am-4:30pm.	FTA grants.		org/
PICK	Eastern Oklahoma	Operated by four transit agencies: Pelivan Transit, JAMM Transit, Cimarron Public Transit, KI BOIs Area Transit, and nine tribal nations under the PICK Transportation Consortium. Fare is $3. Vehicle fleet is 41 vehicles. Rides are requested through the Uber app, the uber website, or the region's mobility management center phone line. Operates Monday-Friday 5pm-10pm, 10am-2pm.	Formerly funded through FTA IMI Grant, currently funded by Oklahoma Department of Transportation funding and FTA 5310 Formula Grant.	R	https://learn.sharedusemobilitycenter.org/casestudy/bringing-regional-mobility-on-demand-service-to-rural-oklahoma-a-case-study-of-pick-transportation/
RIDE	Wilson, North Carolina	Partnership between the City of Wilson and Via. Fare is $1.50, with an additional passenger costing $1. Discount bundles are available. Rides requested through an app. Operates Monday through Saturday 5:30am-7pm	FTA's AIM Grant and the budget for the former fixed route system.	R	https://doi.org/10.21949/1527656

Company	Location	Description	Funding	Reason of Interest	Source
RideLV	Leavenworth, Kansas	Partnership between RideCo, The Guidance Center, the City of Leavenworth, and Kansas City Area Transportation Authority. Fare is $2. Fleet consists of three wheelchair accessible vans. Rides can be booked up to 7 days in advance through an app, web portal, or dispatch lines. Operates Monday-Friday 8am-5pm.	Funded through various federal, state, and local sources, including a formula grant for rural areas and a countywide sales tax. Section 5311 grant	R	https://learn.sharedusemobilitycenter.org/overview/ridelv-microtransit-service-launches-in-leavenworth-ks-2023/ , https://www.leavenworthks.org/citymanager/page/ridelv-micro-transit-program-launch-april-10
Winnebago Catch-a-ride	Winnebago, Wisconsin	Lead agency is East Central Wisconsin Regional. Fare is $0.25 a mile. Founded 2018. Volunteer driver program that can be booked online.	Funded through $100,000 Easter Seals Project Action (ESPA) grant and $30,000 "Commute to Careers" grant.	R	https://winnebagocatcharide.com/
Benson County Transportation	Benson County, North Dakota	Rides coincide with fixed transit schedules. Utilizes vans, at least one of which is wheelchair accessible. Fare is currently free until funding runs out. Rides are requested by phone. Operates Monday through Friday 8am-4pm.	Funded through Statewide Greatest Needs Fund and donations from Medica Foundation	S	https://www.bensoncountytransportation.com/
Can-Do Transportation	Towner County, North Dakota	Operates in Towner County, a rural county in North Dakota. Fare is $1 each way, and vehicles are handicap accessible and have		R, S	https://carechoice.nd.assistguide.net/AGISModules/ProviderSearch/ProviderDetails.aspx?OrgID=549075&mid

Company	Location	Description	Funding	Reason of Interest	Source
		a lift or ramp. Utilizes a hotline.			=321&pageid=0&letter=C&state=
Cavalier County Transit	Cavalier County, North Dakota	Fare is $1.50 one way and $3.00 round trip. Specifically operates in Langdon, North Dakota.		S	https://www.cavaliercountyseniormealsandservices.com/Cavalier-County-Transit , https://www.cavaliercountyseniormealsandservices.com/
Dickey County Senior Citizens	Dickey County, North Dakota	Specifically serves Oakes and Ellendale, North Dakota. Vehicles are wheelchair accessible and requested by phone. Runs Monday through Friday 8am to 2pm.		S	https://ellendalend.gov/community/#organizations , https://carechoice.nd.assistguide.net/AGISModules/ProviderSearch/ProviderDetails.aspx?OrgID=548450&mid=321&pageid=0&letter=D&state=
Devils Lake Transit	Devils Lake, North Dakota	Rides are requested by phone and cost $3 for adults, $1 for escorts/aids, and $1 for those under 16. Fare varies out of town. Operates 7:35am-5pm Monday through Friday.		S	https://www.seniormealsandservices.com/dl-transit.html
Hazen Public Transportation	Hazen, North Dakota	Run by the town of Hazen. Fees are $1 each way but increase if going outside the city. Operates 7:30am-4:30pm.		S	https://www.hazennd.org/transit , https://www.hazennd.org/vertical/sites/%7B3541AE07-8F10-4F5C-8015-24696DA58E22%7D/uploads/Brochure_2018.pdf

Company	Location	Description	Funding	Reason of Interest	Source
James River Public Transit	Stutsman County, North Dakota	Run by James River Senior Center but open to the public. Fare is $2.50 for a one-way trip and out of town tickets can be bought online. Vehicles are all ADA compliant. Rides are requested by phone. Vehicles run Monday through Thursday 6:15am-6pm, Friday 6:15am-7pm, Saturday 8am-6pm, and Sunday 8am-1pm.		S	https://jamesriverseniors.files.wordpress.com/2023/11/2023-riders-guide.pdf , https://jamesriverseniors.com/transit/
Kenmare Wheels and Meals	Kenmare, North Dakota	Fare can be paid on the bus or tickets can be bought online. Runs Monday through Friday 9am-4pm.		S	https://www.wheelsandmeals.org/kenmare-public-transit
Kidder Emmons Transit	Kidder County, North Dakota	Nonprofit run by the Kidder County Council on Aging. Rides go to Bismarck, Jamestown, Steele, Tuttle-Robinson, and the northern parts of Carrington County and Harvey County. Operational since 1981 and has a 21 passenger bus. Rides are scheduled by phone and are available Monday through Friday from 8am-5pm.		S	https://www.kiddertransit.com/about-us
MicroMoo	Windsor, Vermont	Founded by partnership between VTrans and SEVT. Rides are free and can be booked online, over the phone, or through an app.	State Grant around $2 million dollars.	S	https://www.moover.com/windsor-microtransit/ , https://vtdigger.org/2022/09/11/vtrans-to-fund-on-

Company	Location	Description	Funding	Reason of Interest	Source
					demand-microtransit-in-five-more-communities/ , https://learn.sharedusemobilitycenter.org/overview/sevt-pilots-zero-fare-microtransit-in-windsor-vt-2023/
MyRide	Montpelier, Vermont	Partnership between Green Mountain Transportation (GMT) and Via. Service is free to Montpelier currently. Began operation in 2021 has a two-year pilot program. Has 3 buses with 18 seat capacity and wheelchair accessibility. Wait time is 15-30 minutes. Rides can be requested by the GMT app, by phone, or online. Service runs from 7am-6pm Monday through Friday and 7am-6pm on Saturday. GMT plans to reinstate fixed route schedule and use both services together.	Federal Funding		https://ridegmt.com/myride/ , https://vtdigger.org/2022/06/05/despite-challenges-green-mountain-transit-looks-to-expand-myride-pilot-project/
Northwest Dakota Public Transit	Williston and Watford City, North Dakota	Rides are $3 with seniors and veterans riding free. Must be scheduled 48 hours ahead by phone. Operates from 6:30am-5:30pm in Williston and 7:30am-4pm, 5pm-9pm in Watford.		S	https://www.willistonseniors.org/nw-public-transit

Company	Location	Description	Funding	Reason of Interest	Source
Souris Basin Transit	Minot, North Dakota	Nonprofit founded in 1979. All vehicles are handicap accessible. Rides must be scheduled ahead of the desired trip by phone or online. Operates 7:30am-10pm Monday through Friday, Saturday 7:30am-5pm, and Sunday 7:30am-3pm.		S	https://www.sourisbasintransit.com/about-us
South Central Adult Services	Barnes, Emmons, Foster, Griggs, Lamoure, Logan, McIntosh, Nelson Counties, North Dakota	Provides public transit available throughout the covered counties for all ages and purposes. Vehicles are ADA compliant, and payments can be made online.	Started with 5310 FTA Grant, funded through 5311 and 5311 c grants, SAFETEA-LU, New Freedom, Job Access and Reverse Commute	S	https://southcentraltransitnetwork.org/
Standing Rock Public Transportation	South/Central North Dakota and North/Central South Dakota	Run by Sitting Bull College since 1989. Fares are paid on the bus, and student fee is covered in tuition. Vehicles are accessible and hold between 5-26 passengers. Fleet consists of 14 vehicles. Rides are requested over the phone. Operates 7:30am-4:30pm Monday through Friday.		S	https://sittingbull.edu/uploads/22/0riders-guide.pdf, https://sittingbull.edu/sitting-bull-college/community/transport/ , https://sittingbull.edu/uploads/22/transit-plan-2018-2023-docx.pdf
VTrans	Barre, Manchester, Middlebury, Montpelier,	The Vermont Agency of Transportation has piloted microtransit programs in six Vermont cities. Works with FTA.		S	https://vtdigger.org/2022/09/11/vtrans-to-fund-on-demand-microtransit-in-five-more-communities/

Company	Location	Description	Funding	Reason of Interest	Source
	Morrisville, Windsor				
Walsh County Transportation	Walsh County, North Dakota	Private nonprofit that specifically serves Grafton, Grand Forks, Park River, and Fargo. Vehicles are wheelchair accessible with ramps and are requested by calling their office. Hours vary by location.		S	https://www.walshcountytransportation.com/copy-of-making-reservations
West River Transit	Bismark and Mandan, North Dakota	Nonprofit was founded in 1975. Fares can be paid on the bus or online. Vehicles have walker/wheelchair accessibility and are summoned over the phone.	Originally funded through a grant application in 1975.	S	https://www.westrivertransit.com/mission

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