

Vermont Braided Model Service Study

Final Report

prepared for

Vermont Agency of Transportation

prepared by

Cambridge Systematics, Inc.

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List of Acronyms

Acronym	Description
AAA	Area Agency on Aging
ACTR	Addison County Transit Resources
ADA	Americans with Disabilities Act
AHS	Vermont Agency of Human Services
CCAM	Coordinating Council on Access and Mobility
CDL	Commercial Driver's License
CFR	Code of Federal Regulations
CHIP	Child Health Insurance Program
C.I.D.E.R.	Champlain Islanders Developing Essential Resources
CMAQ	Congestion Mitigation and Air Quality Program
CMS	Center for Medicare and Medicaid Services
CTAA	Community Transportation Association of America
DHHS	United States Department of Health and Human Services
DOT	Department of Transportation
DVHA	Department of Vermont Health Access
EOHHS	Massachusetts Executive Office of Health and Human Services
FHWA	Federal Highway Administration
FMAP	Federal Medical Assistance Percentage
FSSA	Indiana Family & Social Services Administration
FTA	Federal Transit Administration
FY	Fiscal Year
GATRA	Greater Attleboro-Taunton Regional Transit Authority
GMCN	Green Mountain Community Network
GM	Green Mountain Transit
HHS	Health and Human Services
HST	Human Services Transportation

Acronym	Description
KYTC	Kentucky Transportation Cabinet
HSTD	Human Services Transportation Delivery Branch (KYTC)
OTD	Office of Transportation Delivery (KYTC)
MaaS	Mobility-as-a-Service
MACPAC	Medicaid and Child Health Insurance Program Payment and Access Commission
MART	Montachusett Regional Transit Authority
MCO	Managed Care Organization
MCOTA	Minnesota Council on Transportation Access
MIDOT	Michigan Department of Transportation
MnDHS	Minnesota Department of Human Services
MTM	Medical Transportation, Inc.
MnDOT	Minnesota Department of Transportation
MPTA	Minnesota Public Transit Association
MTA	Flint Metropolitan Transportation Authority
MTC	Michigan Transportation Connection
MVRTD	Marbel Valley Regional Transit District
NCHRP	National Cooperative Highway Research Program
NEMT	Non-Emergency Medical Transportation
O&D	Older Adults and Persons with Disabilities
ODOT	Ohio Department of Transportation
PMPM	Per Member Per Month
PMPW	Per Member Per Week
PTAC	Public Transit Advisory Council
RCT	Rural Community Transportation
RTA	Regional Transit Authority
RTRC	Regional Transportation Resource Center
RUCA	Rural Urban Commuting Area Code
SEVT	Southeast Vermont Transit

Acronym	Description
SSTA	Special Services Transportation Agency
STSI	Stagecoach Transit Services, Inc.
TCRP	Transit Cooperative Research Program
TNC	Transportation Network Company
TVT	Tri-Valley Transit
USDOT	United States Department of Transportation
VPTA	Vermont Public Transportation Association
VTrans	Vermont Agency of Transportation

Executive Summary

This report presents the research findings of a Study commissioned by the Vermont Agency of Public Transportation (VTTrans) on the braided service model of demand-response public transportation in Vermont, including non-emergency medical transportation (NEMT) along with other services funded by the Federal Transit Administration (FTA) and Vermont Agency of Transportation (VTTrans).

This Study focuses on the benefits, risks, and tradeoffs associated with Vermont's current model for delivering demand-response transportation, with a special focus on NEMT. This current model, known as a braided service model, integrates NEMT with other demand-response programs and general public transit service, allowing public transit agencies to schedule demand-response trips for NEMT customers as well as other riders on the same vehicle run. This model exists in contrast to the approach used by many other states for their NEMT programs, in which NEMT and other public transit passengers use totally separate services. The main goals of Vermont's braided service model are to improve the customer experience through a seamless service delivery process, increase operational efficiency for providers by having riders from different programs share vehicles as much as possible, and to minimize overhead costs by sharing them across programs.

NEMT is an important component of Medicaid, a federally funded public health insurance program. Medicaid is administered at the state level, based on policy guidelines developed by the Centers for Medicare & Medicaid Services (CMS) of the United States Department of Health and Human Services (DHHS). NEMT allows Medicaid recipients to access non-emergency health services, ranging from primary care physician visits to specialized care for chronic health conditions. In Vermont, Medicaid is administered through the Vermont Agency of Human Services' (AHS) Department of Vermont Health Access (DVHA), which contracts with the Vermont Public Transportation Association (VPTA) to serve as the statewide NEMT broker. VPTA subcontracts with the state's public transit agencies to provide NEMT services.

To assess the braided service model, this Study undertook a four-part process. First was an analysis of existing conditions in Vermont, including operator interviews and data analysis. Second was a review of national best practices and interviews with four peer states: Kentucky, Massachusetts, Michigan, and Minnesota. Third was a consideration of how the best practices identified in the national review could be applied in Vermont. Finally, those best practices were translated into recommendations for VTTrans, DVHA, and VPTA to consider.

Based on this study, Vermont's provision of NEMT and public transportation is in alignment with national best practices, but there are areas for improvement. The current conditions are summarized as follows:

- **Operator Evaluation of NEMT Model:** Overall, the state's transit operators are supportive of the current braided service model of providing NEMT alongside other demand-response service. Despite some challenges identified with the current braided service model, operators expressed significant concerns about service degradation if the provision of NEMT were "unbraided."
- **Quality of Service:** From the user perspective, the current braided service model appears to be highly effective. Based on feedback from the operators and VPTA-administered surveys, users tend to be very satisfied with key factors, including on-time arrival, ease of booking and information accessibility, and overall quality of service provided. Multiple operators also cited users complimenting the degree of personalized service and the predictability associated with calling directly into the transit agency, as opposed to a statewide or regional reservations center.
- **Long-Term Concerns:** Despite the favorability of the existing braided service model, there are long-term concerns over the sustainability of the existing model. These concerns include the financial constraints of administering Medicaid transportation as an entitlement service and the ability to attract

and retain enough volunteer drivers. While interviewees acknowledged that the State has stepped in to fill recent funding gaps, there is concern that it will not be feasible in the future.

- **Service Provision Challenges:** Challenges to providing NEMT services include several uncontrollable factors: the members' need for trip frequency; the distance to medical providers, especially in rural areas; and the ongoing driver labor shortages. Some areas have a higher percentage of superusers (those users needing service 10 or more times per month) than others. None of these factors can be planned for, and service must be provided because Medicaid NEMT is an entitlement program.

The findings of this analysis and the input from the providers indicate that all stakeholders in the NEMT program would be worse off without the braided service model. The following negative impacts are likely to take place should service be unbraided:

- The riders would likely experience inferior service quality.
- Transit vehicles would carry fewer passengers as the opportunities for coordination would be greatly reduced, resulting in lower efficiency and a higher cost per passenger.
- Capital investments made by VTrans into customer-facing improvements, such as software solutions for trip requests and trip booking, would be lost and would need to be replicated by the new provider if they did not already have them, incurring higher program costs and creating redundant systems.
- The providers would need to reduce their staff and scope of operations, and the amount of service on their remaining programs would likely go down as overhead charges increase.

This Study determined that Vermont's existing braided service model is in alignment with national and peer states' best practices; it is recommended that VTrans and DVHA maintain the braided NEMT service delivery model while complying with competitive bidding processes established by State procurement procedures. The potential impacts of unbraiding funding and services on transit operator revenues, service, and ridership suggest that unbraiding would pose a significant risk to the service quality provided to Vermont residents as well as the financial and operational sustainability of Vermont's transit operators.

While the existing model is effective, this Study has identified a set of recommendations to pursue further improvements in NEMT service delivery. An Addendum from DVHA with commentary on the recommendations presented in this report is presented in **Appendix A**. These recommendations are presented below:

Table ES.1 Recommendations to Enhance NEMT Program Structure and Coordination

Recommendation	Benefits	Risks	Implementation Timeframe
1. Consider expanding Public Transit Advisory Council to include additional agencies	<ul style="list-style-type: none"> • Improved capacity for coordination across social service providers • Improved capacity to seek innovative funding opportunities 	<ul style="list-style-type: none"> • Increased complexity for scheduling meetings, achieving consensus on policy, etc. 	Medium

Recommendation	Benefits	Risks	Implementation Timeframe
2. Expand and maintain Mobility Management program	<ul style="list-style-type: none"> Improved customer experience Improved coordination across providers Greater awareness of benefits of Mobility Management 	<ul style="list-style-type: none"> Administrative costs Need to identify long-term funding for Mobility Manager position 	Medium

Table ES.2 Recommendations to Enhance NEMT Program Reimbursement and Cost Management Practices

Recommendation	Benefits	Risks	Implementation Timeframe
3. Assess feasibility and financial impacts of regular reimbursement rate adjustment on operating costs and administrative functions	<ul style="list-style-type: none"> Greater understanding of options to address financial sustainability concerns 	<ul style="list-style-type: none"> Administrative costs for Vermont transit providers, VTrans, the NEMT brokerage, and DVHA 	Short
4. Analyze financial impacts of a risk corridor framework on operating costs	<ul style="list-style-type: none"> Greater understanding of options to address financial sustainability concerns 	<ul style="list-style-type: none"> Administrative costs for Vermont transit providers, VTrans, the NEMT brokerage, and DVHA 	Short

Table ES.3 Recommendations to Enhance NEMT Service Capacity

Recommendation	Benefits	Risks	Implementation Timeframe
5. Establish dedicated forum within PTAC to monitor volunteer driver programs and community partner transit options	<ul style="list-style-type: none"> Greater understanding of challenges and opportunities to maintain and expand volunteer driver programs 	<ul style="list-style-type: none"> Additional roles and responsibilities for PTAC members Additional administrative and/or programmatic costs for outreach and engagement activities 	Short
6. Establish dedicated forum within PTAC to coordinate with Health and Human Services (HHS) providers on transportation options, resources, and challenges	<ul style="list-style-type: none"> Greater awareness of needs, priorities, and actions taken related to transportation provision among HHS partners 	<ul style="list-style-type: none"> Additional roles and responsibilities for PTAC members Additional administrative and/or programmatic costs for outreach and engagement activities 	Short

Recommendation	Benefits	Risks	Implementation Timeframe
7. Conduct a study of the December 2023 behavior policy to determine policy impact and assess if additional action is necessary	<ul style="list-style-type: none"> Greater understanding of impacts of disruptive and/or violent behavior on driver retention, especially in volunteer driver program 	<ul style="list-style-type: none"> Administrative costs 	Medium
8. Conduct a study on options and cost feasibility for Mobility-as-a-Service technology solutions	<ul style="list-style-type: none"> Greater understanding of costs and benefits of MaaS for transit providers and riders 	<ul style="list-style-type: none"> Administrative costs Need to update the Study to account for changes in MaaS 	Long

1.0 Introduction

The Vermont Agency of Transportation (VTrans), in consultation with the Department for Vermont Health Access (DVHA) and the Vermont Public Transportation Association (VPTA), has commissioned this report to study the risks, benefits, tradeoffs, and opportunities in the braided service model currently utilized by the state's public transit operators and Medicaid agency.

As required by Sec. 16 of Act 62 of 2023 – An act relating to the Transportation Program and miscellaneous changes to laws related to transportation - this study “[conducts] a benefit and risk assessment of the current systems for delivering public transit and nonemergency medical transportation services in Vermont, known as the ‘braided service model’ ... [and includes] a review of other public transit service approaches implemented in the United States and [makes] recommendations on modifications to the management of Vermont’s statewide mobility service design to make Vermont’s public transit system as efficient, robust, and resilient as possible and fully [maximizes] all available Federal funding.”¹

What is a Braided Service Model?

The Braided Service Model used by Vermont is one where demand response service – including NEMT, Older Adults and Persons with Disabilities (O&D), and other demand response programs – are scheduled and served on the same vehicles, supported by the same back-office equipment and staff, and all managed by the state’s transit operators (i.e., the trips are “braided” together). From the customer’s perspective, there is no difference between a NEMT trip versus an O&D trip; they simply call their transit agency to schedule a ride, and then use the service at the appointed time.

As described in this report, Vermont has numerous transportation programs that are braided together and served by the state’s public transportation providers, including Medicaid’s non-emergency medical transportation (NEMT) program. Reservations, scheduling, and service delivery across these various programs are all managed by the public transportation providers. Because the transit agencies’ funding comes from both transportation funding (via the Federal Transit Administration and VTrans) and Medicaid funding (via DVHA and VPTA), the braiding of these services requires close coordination between multiple agencies and programs.

Given the potential complexity of this coordination, as well as the administrative requirements of ensuring compliance with the various Federal requirements attached to the different funding sources, many states provide NEMT separately from other public transportation services. However, the rural nature of Vermont and the relative lack of transportation providers has largely influenced the development of Vermont’s braided service model. Due to this highly complex regulatory and operating environment, this report examines the state of the practice within Vermont and nationally, as well as provides recommendations in its four main sections:

- **Existing Conditions:** This section includes an analysis of current demand-response service performance for each of the Vermont transit providers in Fiscal Year 2023 (FY23) and the findings of a series of interviews with the transit operators and the VPTA.
- **National Best Practices:** This section includes a literature review of national research and policy guidance, a summary of findings from a series of interviews with NEMT practitioners from four peer states (Kentucky, Massachusetts, Michigan, and Minnesota), and the identification of best practices for further consideration.

¹ Vermont General Assembly. Act 62 of 2023 – An Act relating to the Transportation Program and miscellaneous changes to laws related to transportation. Signed 12 May 2023.
<<https://legislature.vermont.gov/bill/status/2024/H.479>>

- **Best Practices in the Vermont Context:** This section includes a review of the observed tradeoff between transportation service cost and service quality, an assessment of potential impacts associated with unbraiding the service from public transit operators, and an evaluation of different best practices identified in the Risks and Benefits section.
- **Recommendations:** This section presents a series of recommendations for VTrans, DVHA, and VPTA to pursue to improve service quality and financial sustainability of NEMT service delivery under the braided service model.

The reality is that no service model is perfect, and this report examines the tradeoffs associated with the braided service model from multiple perspectives – funding agencies, service providers, and, most importantly, the customers. However, the findings of these multiple analyses determine that the existing braided service model is an effective way to deliver NEMT services, and the model creates benefits for the transit providers and customers. No change to the model is recommended, but this report uses multiple information sources to identify recommendations that could improve the braided service model in Vermont, including transit agency interviews and data analysis; peer state agency interviews and customer satisfaction data; and a more robust literature review of national best practices. These recommendations, when incorporated into a continuous improvement plan, could improve upon the service model to enhance service sustainability and the customer experience.

2.0 Existing Conditions

This section documents the existing service structure used to provide non-emergency medical transportation, integrated with public transit services across Vermont. NEMT is an important component of Medicaid, a government-funded health insurance plan for income-eligible people and those who are categorically eligible. Medicaid is administered at the state level, based on policy guidelines administered by the Centers for Medicare & Medicaid Services (CMS) of the United States Department of Health and Human Services (DHHS). These Federal guidelines include longstanding entitlement requirements, including that states will assure necessary transportation for clients to and from covered services for eligible beneficiaries for both emergency and non-emergency needs.

Emergency medical transportation needs typically involve the use of ambulatory services, accessed by calling 911. In contrast, NEMT service can include a much broader range of options including public transit, taxi, van, and/or personal vehicle transport. In Vermont, Medicaid is administered through the Department of Vermont Health Access, which contracts with the Vermont Public Transportation Association to serve as the statewide NEMT broker. VPTA subcontracts with the state's public transit agencies to provide NEMT services.

State spending on Medicaid NEMT services is reimbursed by Federal Medicaid funding, but the reimbursement level is determined by the category of expenditure the State assigns to its NEMT services. States may report NEMT spending as an administrative expense or as a medical assistance expense. An administrative expense is reimbursed at the Federal medical assistance percentage (FMAP) of 50 percent, while a medical assistance expense is reimbursed at a minimum of 50 percent but varies for the state. For Vermont, the FY24 FMAP for medical assistance expenses is 56.75 percent.²

Across the US, there is a large degree of variation in NEMT policy, including the methods and types of options used to provide the service. Vermont currently adheres to a braided service model of providing NEMT. The term "braiding" refers to the integration of NEMT with other demand-response programs and general public transit service. The main goals are to increase operational efficiency for providers by having riders from different programs share vehicles as much as possible and to share overhead costs across multiple programs. This section describes existing conditions associated with this braided model, including key initial findings from interviews with the VPTA and the state's transit operators.

2.1 Demand-Response Service in Vermont

There are three programs that comprise the vast majority of demand-response transit service in Vermont. The NEMT program is the largest of the programs, with an annual expenditure of nearly \$14 million and approximately 312,400 trips carried in FY23. As mentioned above, DVHA contracts with VPTA and VPTA subcontracts with transit providers to operate the NEMT service. The transit providers use a combination of agency vans and buses, volunteer drivers in their own vehicles, and taxicabs to carry the passenger trips.

The second largest demand-response transportation program is called the Older Adults and Persons with Disabilities (O&D) Program (formerly the E&D program). People aged 60 and older and people with disabilities are eligible for the O&D program. They can use the program for access to adult day programs, medical trips, senior centers for meals and socialization, personal shopping, and other general trip purposes. While all trip purposes are permitted, the O&D program prioritizes medical and critical care appointments for service

² KFF. [Federal Medical Assistance Percentage \(FMAP\) for Medicaid and Multiplier](#).

provision. The annual expenditure for the O&D program is about \$6.7 million, with about 110,000 trips carried in FY23.

The funding for this program comes primarily from the United States Department of Transportation (USDOT) and consists of funds “flexed” from the Federal Highway Administration (FHWA)’s Surface Transportation Block Grant program into the Federal Transit Administration (FTA) Section 5311 (rural transit) program. Federal funding under these programs must be matched by state or local funding on an 80 percent / 20 percent basis for capital expenditures (i.e., purchase of new vehicles), administrative expenditures, and operating expenditures. Approximately one-quarter of the funding comes from local partners (such as area agencies on aging) and in-kind contributions from volunteer drivers associated with the transit providers.

The third largest demand-response transportation program is complementary paratransit required by the Americans with Disabilities Act (ADA). ADA paratransit is operated by only four agencies in Vermont: SSTA under contract to Green Mountain Transit in Chittenden County, Marble Valley Regional Transit District in Rutland, Advance Transit in the Upper Valley, and Southeast Vermont Transit in Brattleboro. About 60,400 ADA paratransit rides were provided in FY23, the vast majority of which were in Chittenden County. The total cost statewide was approximately \$2.1 million.

In the combined program, trips for any trip purpose are provided to people aged 60 and older and to people with disabilities. These trips include access to adult day programs, senior centers for meals and socialization, and personal shopping; trip types and figures vary by region across Vermont. Currently, transit service in Vermont is fare-free.

A critical element in providing NEMT and O&D services is the use of volunteer drivers (in addition to paid drivers), who provide trips with their own vehicles and are compensated on a per-mile basis for each trip they provide. While volunteer drivers need valid driver’s licenses, automobile insurance, and a clean driving record, they do not need a Commercial Driver’s License (CDL) like most full-time transit operators, and they generally operate smaller personal automobiles rather than purpose-built transit vans. As a result, volunteer driver programs are the most cost-effective way to operate service, especially long-distance trips that may involve waiting time at the destination (e.g., for a medical treatment or other purpose).

The remainder of this section provides an overview of the transit agencies in Vermont that operate NEMT service. Advance Transit operates only ADA paratransit and is thus not included. More extensive overviews of each public transit agency for Vermont can be found in the [2020 Vermont Public Transit Policy Plan](#).

2.1.1 Green Mountain Community Network (GMCN)

GMCN is the transit provider for Bennington County in southwestern Vermont. GMCN operates deviated fixed route and demand-response services, in addition to human services and contractual transportation services.

Table 2.1 GMCN Transit Services

Category	Information
Geography	Bennington County
Services	<ul style="list-style-type: none"> • Deviated Fixed Routes serving Bennington • Commuter Routes between Bennington and Manchester, Wilmington, Brattleboro, and Williamstown, MA • Microtransit serving Manchester • Seasonal & Shopping Shuttles
Demand-Response Ridership (FY23)	43,174 trips
Demand-Response Operating Costs (FY23)	\$1.3 million

2.1.2 Green Mountain Transit (GMT)-Rural

GMT is the primary transit provider for Chittenden, Franklin, Grand Isle, and Washington counties, including the Burlington, St. Albans, and Montpelier areas. GMT serves both urban and rural areas, and VTrans monitors the performance of the transit provider as two separate divisions – GMT-Urban and GMT-Rural – in order to align transit performance with the distinct categories of funding that the FTA provides for urban and rural systems. In Chittenden County, GMT contracts with the Special Services Transportation Agency (SSTA), a non-profit human services transportation (HST) provider, to operate NEMT and ADA services (see **Special Services Transportation Agency (SSTA)**). In its rural area, GMT operates a variety of services, including fixed route, deviated fixed route, commuter routes, seasonal (ski area) routes, and demand-response services.

Table 2.2 GMT-Rural Transit Services

Category	Information
Geography	Franklin County, Washington County, Grand Isle County, three towns in Orange County
Services	<ul style="list-style-type: none"> • Commuter Routes between Montpelier and Waterbury, Marshfield, and Northfield • Commuter Routes serving St. Albans and Grand Isle County • Local & Shopping Shuttle Routes • Seasonal (ski resort) Shuttle Routes
Demand-Response Ridership (FY23)	41,433 trips
Demand-Response Operating Costs (FY23)	\$3.4 million

GMT contracts with Champlain Islanders Developing Essential Resources (C.I.D.E.R.), a rural transportation provider, to provide O&D and NEMT service in Grand Isle County. In addition to demand-response services,

C.I.D.E.R. offers a variety of supportive services, including arranging meal delivery services for people at home and providing referrals for additional supportive services.

Table 2.3 C.I.D.E.R. Transit Services

Category	Information
Geography	Grand Isle County
Services	Demand-response services for people with disabilities and the elderly (under contract with GMT)
Demand-Response Ridership (FY23)	4,827 trips
Demand-Response Operating Costs (FY23)	\$0.3 million

2.1.3 Marble Valley Regional Transit District (MVRTD)

MVRTD is the primary transit provider for Rutland County. MVRTD operates fixed route, deviated fixed route, commuter, and seasonal services.

Table 2.4 MVRTD Transit Services

Category	Information
Geography	Rutland County
Services	<ul style="list-style-type: none"> • Fixed Routes serving Rutland • Deviated Fixed Route service between Rutland and Proctor • Commuter Route between Rutland and Middlebury, with pre-arranged service available to Burlington • Deviated Fixed Route service between Rutland and Fair Haven • Fixed Route service between Rutland and Killington • Deviated Fixed Route service between Rutland and Manchester • Paratransit • Seasonal Service between Rutland and Ludlow
Demand-Response Ridership (FY23)	54,923 trips
Demand-Response Operating Costs (FY23)	\$2.2 million

2.1.4 Southeast Vermont Transit (SEVT)

SEVT is the primary transit provider for Windham and southern Windsor Counties in southeastern Vermont. SEVT operates fixed route and seasonal services in southeastern Vermont, including service to Bennington and Lebanon, NH.

Table 2.5 SEVT Transit Services

Category	Information
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Geography	Windham County, Southern Windsor County
Services	<ul style="list-style-type: none"> • Deviated fixed Routes serving Wilmington Area • Fixed Routes serving Brattleboro Area • Deviated fixed Routes serving Bellows Falls • Deviated fixed Route serving Springfield • Fixed Routes providing connections to Bennington and Lebanon, NH • Paratransit • Seasonal Shuttles serving local ski mountains
Demand-Response Ridership (FY23)	103,177 trips
Demand-Response Operating Costs (FY23)	\$3.7 million

2.1.5 Rural Community Transportation (RCT)

RCT is the primary transit provider for the Northeast Kingdom of Vermont, including Caledonia, Lamoille, Essex, and Orleans Counties. RCT operates deviated fixed route, commuter services and shopping shuttles.

Table 2.6 RCT Transit Services

Category	Information
Geography	Essex County, Caledonia County, Orleans County, Lamoille County
Services	<ul style="list-style-type: none"> • Commuter Route service between St. Johnsbury and Montpelier • Commuter Route service between Morrisville and Waterbury • Deviated Fixed Route service between St. Johnsbury and Lyndonville • Deviated Fixed Route service between Newport and Derby • Microtransit serving Morrisville, Hyde Park, and Elmore • Shopping Shuttle service between Lyndonville and Woodsville, NH • Shopping Shuttle service between Morrisville and Johnson • Shopping Shuttle service between Morrisville and Stowe
Demand-Response Ridership (FY23)	100,430 trips
Demand-Response Operating Costs (FY23)	\$4.1 million

2.1.6 Special Services Transportation Agency (SSTA)

SSTA is a private, non-profit HST provider in Chittenden County. SSTA operates as GMT's contracted service provider in the county for ADA complementary paratransit service and O&D service, and as a subcontractor to VPTA for NEMT service. SSTA also has contracts with other entities to provide local van services in Chittenden County.

Table 2.7 SSTA Transit Services

Category	Information
Geography	Chittenden County

Services	Demand-response services for people with specialized mobility needs, including coordinated transportation service to human service agencies
Demand-Response Ridership (FY23)	115,236 trips
Demand-Response Operating Costs (FY23)	\$4.7 million

2.1.7 Tri-Valley Transit (TVT)

TVT was formed in 2017 by the merger of Stagecoach Transit Services, Inc. (STSI) and Addison County Transit Resources (ACTR), and is the primary transit provider serving Addison, Orange, and north Windsor Counties in central Vermont. TVT operates deviated fixed route, commuter services and shopping shuttles, as well as a seasonal shuttle.

Table 2.8 TVT Services

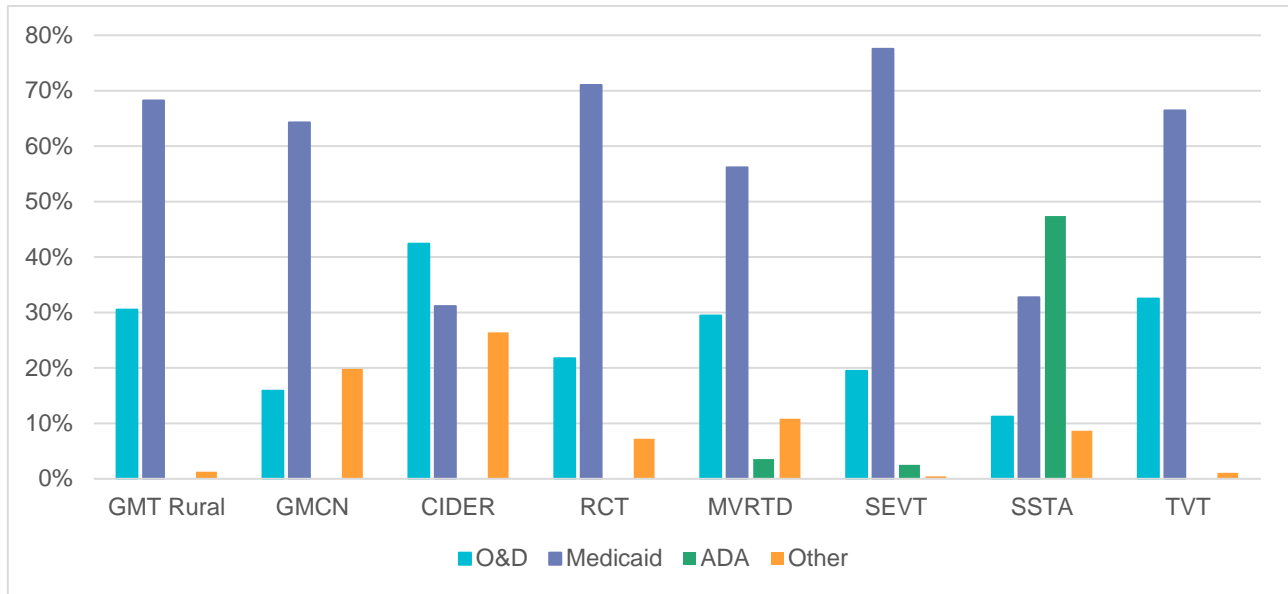
Category	Information
Geography	Addison County, Orange County, Northern Windsor County, Lamoille County
Services	<ul style="list-style-type: none"> • Deviated Fixed Route service between Randolph and Hancock • Deviated Fixed Route service between Fairlee and Woodsville • Deviated Fixed Route service within Randolph • Commuter Route service between Wells River and Lebanon, NH • Commuter Route service between Randolph and Lebanon, NH • Fixed Route service between Thetford and Strafford • Deviated Fixed Route service within Middlebury • Deviated Fixed Route service between Middlebury and Vergennes • Deviated Fixed Route service between Middlebury and Rutland • Deviated Fixed Route service between Middlebury and Burlington • Shopping Shuttle services in the Randolph area • Seasonal Shuttles serving local ski mountain
Demand-Response Ridership (FY23)	51,836 trips
Demand-Response Operating Costs (FY23)	\$2.7 million

2.1.8 Transit Provider Comparisons

This section presents a brief analysis of the rider market and service performance of the Vermont public transit operators' demand-response services. All data has been provided by the transit operators for FY23.

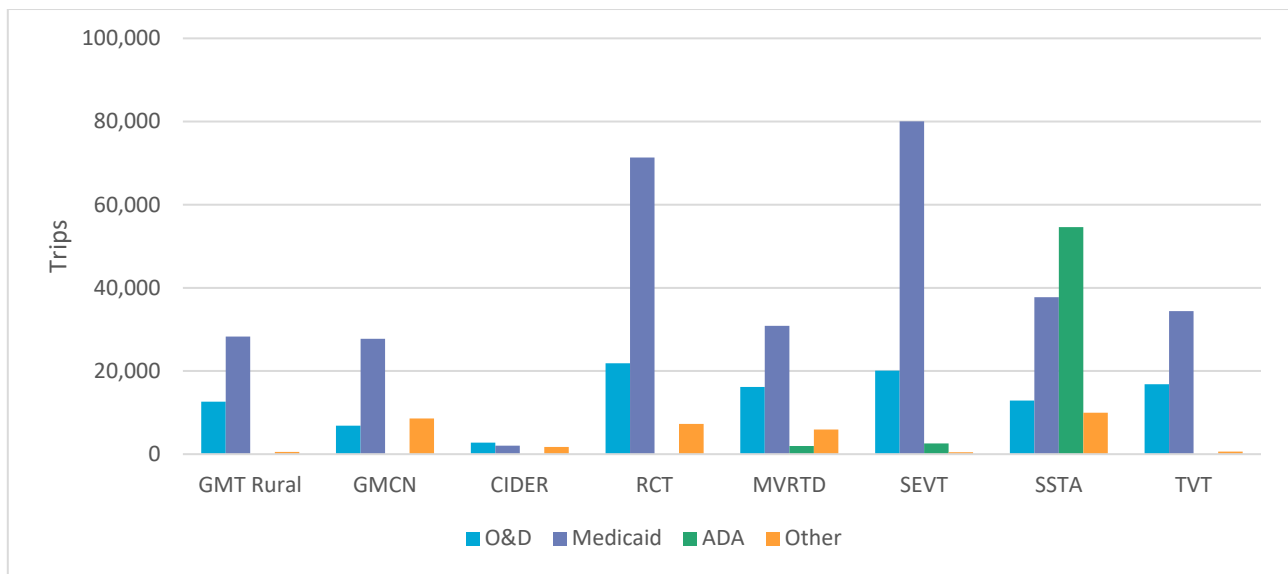
Figure 2.1 presents demand-response ridership share by program area and **Figure 2.2** on the next page presents total demand-response ridership by program area for FY23. Total ridership ranges from a low of 6,561 for C.I.D.E.R. to a high of 115,236 for SSTA. For most providers, Medicaid service represents the majority of demand-response ridership, with an average of 58 percent of riders taking transit for NEMT service. Exceptions to this trend include SSTA, of which ADA transit, at 47 percent, is the largest proportion of ridership; C.I.D.E.R., of which the largest proportion of ridership consists of O&D services. These trends demonstrate the significant role that NEMT plays in these operators' demand-response services.

Figure 2.1 Ridership Share by Program Area, FY23



Source: Vermont Agency of Transportation, 2023

Figure 2.2 Total Ridership by Program Area, FY23



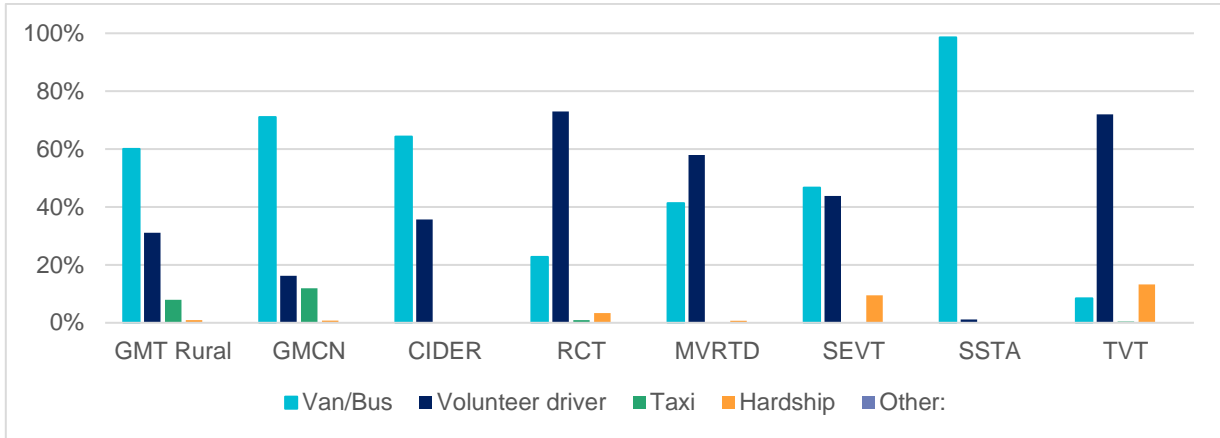
Source: Vermont Agency of Transportation, 2023

Figure 2.3 shows demand-response ridership share by mode: Van/bus, volunteer driver, taxi, hardship program,³ or other (e.g., ambulance, health care shuttle, etc.). For five of the seven providers, van or bus services provide the majority of trips. However, these findings indicate the critical role that volunteer drivers

³ The hardship mileage program is a program for Medicaid recipients who use their own vehicle (or are driven by a member of the household) for frequent and lengthy trips for medical services. The program reimburses these recipients for the high travel costs associated with accessing medical care, but trips must be arranged with the recipient's Transportation Provider.

play in demand-response service delivery. On average, 41 percent of ridership travels on volunteer vehicles; this figure rises to more than 70 percent for RCT and TVT. Maintaining a high level of training and support for volunteer drivers throughout Vermont is critical to the sustainability of demand-response services, including the NEMT program. This appears to be the case across both urban and especially rural geographies where transportation access can be more of a challenge.

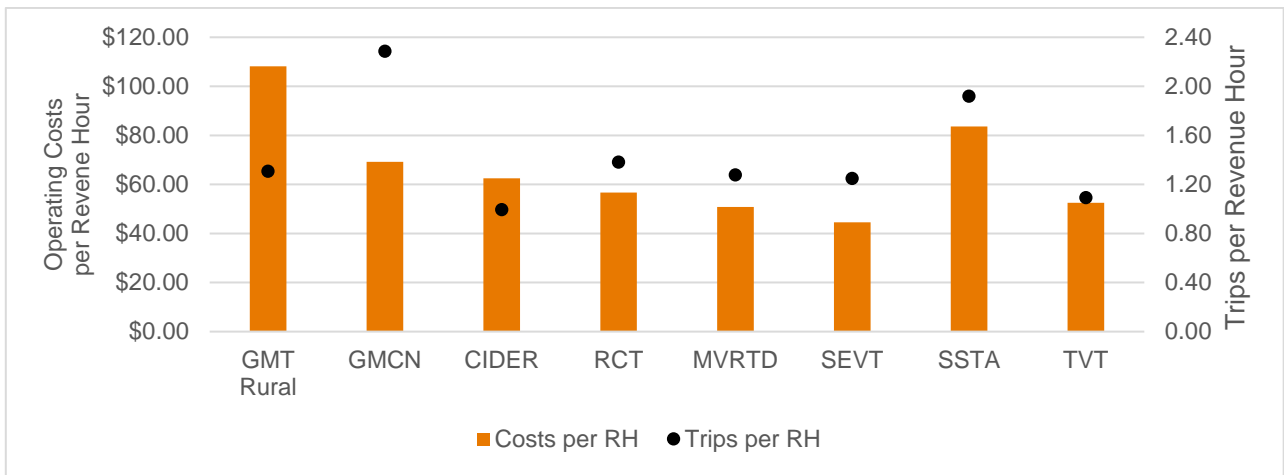
Figure 2.3 Ridership Share by Transit Mode, FY23



Source: Vermont Agency of Transportation, 2023

Figure 2.4 shows service performance for each provider in FY23. The analysis highlights operating costs per revenue hour (orange bars, left Y-axis) and trips per revenue hour (black dots, right Y-axis).

Figure 2.4 Cost and Trips per Revenue Hour, FY23



Source: Vermont Agency of Transportation, 2023

Among Vermont providers, there is significant variation in cost per revenue hour, with SEVT having the lowest operating costs per revenue hour (\$44.57) and GMT-Rural having the highest (\$108.16), a difference of 242.7 percent. The average cost per revenue hour for all Vermont providers was \$66.01. Factors that impact cost include trip length, congestion, vehicle age and fuel type, among other variables. The use of volunteer drivers has a significant impact on overall cost efficiency, but the ability of agencies to use volunteers depends on historical factors, proportion of trips requiring fully accessible vehicles, and geographic context. Shorter trips, such as those taken in more urbanized areas, are not very attractive to volunteer drivers, who generally prefer

longer trips. The need for NEMT customers to access medical services across state lines in New York, New Hampshire, or Massachusetts also has a significant impact on cost.

There is also substantial variation in unlinked passenger trips per revenue hour between operators. Trips per revenue hour ranges from 2.29 trips per revenue hour to 0.99 trips per revenue hour, and the average value across providers is 1.44 trips per revenue hour. As with cost, the context of Vermont transit providers informs this metric; the long travel distances associated with Vermont's predominantly rural context place a limit on the ability to serve large numbers of riders in a given amount of time. However, this is offset by the flexibility enabled by the braided service model. The ability to group trips across programs eliminates the need to dispatch separate vehicle runs for each program, allowing transit operators to combine trips and enhance the number of trips served on a given vehicle run.

2.2 NEMT Service and Funding

As identified above, VPTA subcontracts with the state's public transit providers to coordinate and provide NEMT services alongside other demand-response trips. A given transit vehicle can provide trips of all types on a single vehicle run, allowing for a more cost-effective service. This section provides a discussion of how NEMT is served and funded to establish context for how agencies operate this blended service.

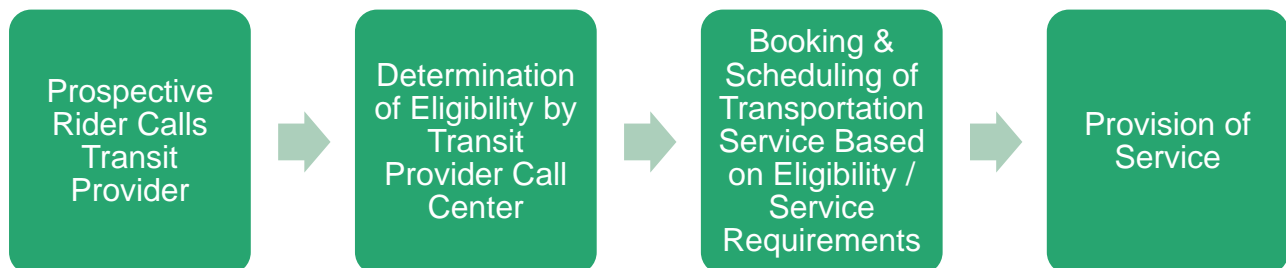
2.2.1 Trip Scheduling and Service Provision

As a braided service, trip requests for all trip types (including non-emergency medical appointments) go into the same regional call centers. The trip scheduling process commences with prospective riders calling into the sub-contracted transit provider serving their residence. Calls are typically managed by call centers operated by each transit provider. For example, RCT has a call center consisting of six staff members who receive trip requests. Upon receiving the call, the call center verifies which programs and services the prospective rider qualifies for and assigns the trip to the corresponding funding source.

Following this step, the subcontracted transit operator call center assigns the trip to a service. Subject to eligibility and related considerations, the trip is assigned to a particular mode based on factors of trip distance and length. Factors for consideration can include availability of fixed route service, flex routes, demand-response, or the use of volunteer driver, according to each operator's standards and thresholds, and via an internal scheduling and dispatch team. The availability of the volunteer driver is also factored into planning.

Figure 2.5 provides an overview of the service provision process.

Figure 2.5 Transportation Provision Process



There are several reasons why this typical process flow may be altered. For example, many agencies have standing orders for customers with repeat trips (e.g., regularly recurring dialysis appointments). In that case, no reservation call is necessary. Similarly, it is common for medical appointments to last longer than anticipated, meaning that return trips need to be rescheduled on the fly. As discussed in the next section, braiding service together provides some advantages for accommodating unexpected schedule changes by increasing the volume of service generally available to accommodate unexpected changes.

2.2.2 Reimbursement Structure

The reimbursement structure for NEMT service providers is different from the mechanism used to fund public transportation through USDOT sources. USDOT operates on a cost-share basis up to a specified amount, and then any service provided beyond that is not covered by the Federal funding. In contrast, NEMT is considered an entitlement program that must serve eligible non-emergency medical trips. DVHA pays VPTA with a per member per week (PMPW) formula. Per DVHA,⁴ this payment structure consists of the following steps:

1. Each week, DVHA will generate a report of the total number of unduplicated individuals served by the contractor over the prior 365 days.
2. DVHA will multiply the number of unique recipients by the PMPW dollar amount (\$40.00 per unique member per week as of FY24) and include the payment in the following week's electronic payment to the contractor's bank account. The current PMPW amount was increased, with base funding added in the enacted state budget in FY 2024.
3. DVHA's Fiscal Agent will also send weekly Remittance Advice (proof of payment) documents to the contractor. As a result, each operator's total reimbursement is indirectly impacted by the PMPW dollar amount in place between the VPTA and DVHA.⁵
4. If the weekly payment cannot happen due to data or processing errors, DVHA will send the payment the following week. DVHA agrees to make these payments on a weekly basis, but it will not be considered a breach of contract if DVHA postponed a payment for one week due to a data or processing issue.

2.3 Transit Operator Interviews

To further evaluate existing conditions associated with Vermont's braided service model of providing NEMT alongside other demand-response services, the project team conducted interviews with the state's transit operators, as well as with VPTA. These interviews were meant to identify nuances, geographic considerations, and any other variations among the providers. In total, the project team conducted eight interviews, as shown in **Table 2.9**. The interview guide is presented in **Appendix B**.

⁴ https://dvha.vermont.gov/sites/dvha/files/doc_library/NEMT%20PMPM%20Payment%20Methodology%204.14.21.pdf

⁵ It is noted that in 2022, to account for funding gaps between reimbursement and actual operating costs, the Vermont Legislature approved \$1.7 million in funding to be distributed through the VPTA to each operator.

Table 2.9 Vermont Transit Operator Interview List

Transit Provider/Agency	Meeting Date
Green Mountain Community Network	10/24/2023
Green Mountain Transit	10/25/2023
Marble Valley Transit	10/12/2023
SEVT	10/5/2023
RCT	10/5/2023
SSTA	10/20/2023
Tri-Valley Transit	10/9/2023
Vermont Public Transit Association	10/10/2023

2.3.1 Overall Interview Themes

Key takeaways from the interview process are grouped according to the themes in this section.

Trip Scheduling & Management

The discussion of scheduling and management covered multiple topics. Overall, operators indicated that NEMT typically comprises anywhere between 35 percent and 85 percent of fixed-route and demand-response ridership, with higher totals in the more rural portions of Vermont. Remaining operations consist of general public transit services, as well as transportation provided through programs such as Recovery and Job Access Rides, ADA, and O&D transportation.

Under Medicaid regulations, NEMT trips must be assigned to the lowest-cost mode. For Medicaid trips, each transit operator may request that advance notice be given, typically between one and two business days, to make a reservation. While VPTA requests that members schedule appointments with at least two business days' notice (48 hours), VPTA will take requests up to the time of the appointment. In relation to the selection of the transportation mode, operators indicated that efforts are made to assign trips to existing public transit services initially, such as fixed route services (as applicable).

Volunteer drivers are typically assigned long-distance trips, especially for users located in rural areas. Given that volunteer drivers are reimbursed based on mileage, longer trips can be more economically viable for the driver. Additionally, many volunteer drivers regard volunteer driving as their job and recognize that they can earn more income by driving longer distances.

In accordance with the "braided" format of transit service provision, subcontracted transit operators are tasked with assigning funding sources for each ride. For certain transportation options such as shared vans, this may include serving multiple users each with unique funding sources. Operators utilize external accounting software to allocate direct and indirect costs, with reimbursements by VPTA on a weekly basis. Despite potential

complexity in allocating costs across funding streams, operators did not cite challenges in the accounting process associated with allocating costs across multiple funding programs.

In its role as broker, VPTA provides training at least twice per year, and Health Insurance Portability and Accountability Act (HIPAA) training is completed for all customer service representatives every two years. In addition, VPTA provides on-call support to subcontracted transit operators in terms of answering questions, processing referrals, identifying closest medical providers, and providing guidance related to concerns of scheduling trips and rides. Any changes that arise with programming and/or compliance issues, such as those identified during audits, are addressed with additional training on an as-needed basis. Additionally, VPTA coordinates with DVHA daily to ensure all NEMT requirements are being met and to address concerns directly with transit providers.

Service Provision Challenges

Key challenges related to service provision of NEMT as a component of existing public transit services include:

- **Geographic & Temporal Considerations:** As a predominantly rural state, transit operators face challenges in that medical specialists and appointments can be very far from existing service areas. As an example, one transit operator indicated that they provide between approximately 400 and 600 trips per day, with some trips taking up to 45 minutes or longer one-way. Some trips are even longer, requiring travel to out-of-state locations. This includes trips for dialysis treatment, a service which is typically required between 3 and 4 times per week and operates between 5:30 a.m. and 10:00 p.m. Hospital discharges can also happen late at night or early in the morning. The loss of drugstores within communities and a lack of local primary care physicians, dialysis centers, and dental offices put additional pressures on trip lengths and times for providers to connect customers with their needed services. VPTA has experienced an increase in out-of-area lodging requests for Medicaid members to access specialists.
- **Superusers:** Operators indicated that the number of Medicaid ‘superusers’ have increased in recent years. Superusers are defined as those users needing service 10 or more times per month. Trips serving treatments for substance use disorder and kidney failure are two types of NEMT service that fit this frequent trip profile. Given the fixed-price method of reimbursement per user and not per trip, superusers tend to have a large impact on operational costs.
- **No-Shows:** “No-show” passengers can strain operations, in that operators are unable to bill the cost of services for passengers who do not show up, despite the resources used to attempt to serve them. Providers do everything they can to minimize no-show passengers, including reminder calls and ride confirmations. The risks of no-show passengers are evident even when riders are asked to confirm their ride beforehand.

In an effort to manage the rapid growth in no-shows while complying with the CMS policy requiring no suspensions of riders, VPTA and DVHA have collaborated to proactively develop a no-show policy that allows for Medicaid members who are frequent no-shows with confirmed attendance at appointments to find their own drivers who may be reimbursed through the NEMT program. This process involves verifying that members did not board their scheduled ride upon the vehicle’s arrival and that members attended scheduled appointments. This policy has been implemented as of December 1, 2023. The policy is presented in **Appendix C** of this report.

- **Driver & Labor Shortages:** Ongoing driver shortages, both volunteer and paid professional, further add to the complexities of maintaining adequate levels of service. At least one operator indicated that

following the COVID-19 pandemic, transit agencies across the state lost approximately half of their total volunteer drivers due to the concerns over safety, combined with relatively low reimbursement rates. Especially with the volunteer driver program, concerns over behavioral problems with some passengers further exacerbate challenges with attracting and retaining drivers. To address this issue, VPTA is exploring alternative models for behavioral health rides, including coordinating with in-bed treatment facilities to provide transportation directly and be reimbursed via the brokered model.

- **Software Shortcomings:** Operators have cited shortcomings with the existing trip scheduling and dispatch software in that it is a labor-intensive software system that does not allow for easy data analysis, requires a manual download of user eligibility lists on a daily basis, and lacks support from the software provider. It is noted, however, that VPTA is implementing new software that should help to alleviate current shortcomings. TVT, which will be the first agency to use the new software, is coordinating with VPTA and the vendor to finalize software design. Initial launch with TVT is planned for early 2024, preceding statewide roll-out.
- **Entitlement Stipulations:** Operators are constrained on their ability to manage NEMT costs; total cost is driven by demand, and operators are unable to deny NEMT service due to lack of funding. This adds to the concerns about the ability to sustainably operate and provide the service over the long-term.
- **Additional Medicaid Regulations:** Operators cited challenges associated with complex state Medicaid regulations. This includes:
 - Eligibility confirmation of trips in cases where eligible activities (such as prescription pickups at pharmacies) are conjoined with ineligible activities (such as grocery shopping).
 - Provision of entitlement service for disruptive passengers who may pose a risk to drivers (e.g., transportation of Department of Corrections Medicaid members). This issue is particularly acute for volunteer drivers. VPTA and DVHA have collaborated on a behavior policy that should help reduce the impact of disruptive passengers and outlines a criminal behavior policy to address behavior that is dangerous or threatening to VPTA, DVHA, transit provider employees, or the public. A customer who displays such behavior is subject to escalating consequences under a “three-strikes” framework; for the second and third offenses, the customer is required to find their own transportation with reimbursement under the hardship program for 30 and 90 days, respectively. This policy is presented in **Appendix D**.

Capacity Considerations

The discussion of capacity was centered on two topics: the availability of vehicles and the availability of drivers. By measure of vehicle capacity, operators generally did not cite any shortcomings in the ability to provide NEMT and O&D service. The current braided model service format has also allowed operators to group users from different eligibility and funding programs together, and allocate costs accordingly, improving the productivity of the vehicle trip. On the other hand, as identified above, driver and labor shortages remain an ongoing concern, which in turn affects total capacity.

Financial Conditions

Interviewees generally cited concerns around the risk of losing money in servicing the Medicaid program, despite a goal of the program to break even. These concerns stem from the fixed PMPW payment formula. Although this method of reimbursement can lead to surpluses during some time periods, operators reported

recent experience of program funding deficits that need to be alleviated through other non-Medicaid funding sources.

Although operators indicated that the Vermont Legislature, through coordination with DVHA, provided an additional \$1.7 million in base transit funding for 2024 (and some donors have provided additional donations for service operation), longer-term viability concerns remain. VPTA has had discussions with DVHA around this important issue and understands the constraints that exist within state budget processes, state procurement processes, and Federal Medicaid requirements.

It has been proposed by some transit administrators that Vermont should adjust its reporting of NEMT spending from a medical assistance expense to an administrative expense in order to move to a fee-for-service model rather than the PMPW reimbursement structure. However, doing so would involve adjusting the rate of reimbursement that CMS pays under the FMAP. For Vermont, the FMAP would be adjusted in FY24 from 56.75 percent to 50 percent if the State changed from medical assistance expense categorization to administrative expense categorization. This adjustment would require the State to provide additional funding to cover the adjusted rate. In FY23, this additional funding would have totaled approximately \$840,000, further constraining the State's available resources for transit service. Vermont prioritizes leveraging Federal funds to the greatest extent possible, and this change would run counter to that goal.

Relationship Between VPTA and Transit Providers

Generally, transit operators report having a good relationship with VPTA. It was noted by at least one transit operator that the relationship with the VPTA is the best that it has been in recent years due to the current executive leadership and management structure at the agency. This sentiment is shared by the VPTA, which maintains a good working relationship with each subcontracted transit operator.

Multiple transit operators highlighted ongoing challenges facing VPTA. This includes those obligations imposed by Medicaid overlaid with existing FTA requirements. In addition, there is a need for increased staffing at VPTA to provide more training, which has proven to be a valuable resource to the transit and NEMT programs.

Customer Feedback

VPTA conducts rider surveys on an annual basis. Customer feedback can be submitted through multiple means, including the VPTA website, phone line, and fax line, and VPTA reviews and follows up with complaints within a 24-hour period. The surveying process generally covers the following topics:

- On-time arrival
- Ease of booking and information accessibility
- Quality of services provided

VPTA indicated that there is a generally high degree of customer satisfaction associated with the provision of NEMT, and this positive assessment is reflected in the results of the FY23 Q4 Performance Report survey. Most significantly, **95 percent of respondents indicated that they arrived on time for their most recent medical appointment using NEMT services, and 96 percent of respondents indicated that they were able to easily book their ride or get information about the ride from their transit provider.** The majority of complaints received by VPTA are related to services outside of the realm of Medicaid, such as a desire to accommodate grocery shopping or other non-Medicaid eligible trips.

Braided Service Model Advantages

In the discussion of the advantages of the existing braided service model, interviewees highlighted benefits to users as the key advantage. In particular, the ability to call a single number for NEMT and other demand-response transportation helps to ease navigating transportation eligibility and coordination amongst one or more health and human services (HHS) programs for both operators and customers. This model streamlines the trip booking process and allows operators to avoid segmenting vehicle runs by program, which can reduce the service effectiveness of each vehicle revenue hour. There have also been benefits for the customer in dealing with consistent and familiar staff for scheduling transportation, which allows for a greater degree of customization and personal touch in comparison to large regional or statewide NEMT brokerage models, as well as a reputation for high-quality and reliable service.

From an operations standpoint, the ability to control all facets of transit operations, including public transit, O&D, NEMT, and other social services transportation, is beneficial in that it allows operators to make the best decisions about trip assignment. Feedback from operators indicates that drivers experience a seamless experience with providing rides across different programs, allowing them to focus on vehicle operations and customer experience.

Braided Service Model Challenges

Operator challenges are identified through the above sections, and include general challenges associated with providing transit services. In relation to the braided service model, the primary challenges cited relate to long-term funding concerns, and the stretching of resources in the provision of NEMT. Funding concerns can be attributed to multiple factors, including the PMPW payment structure, a corresponding rise in the number of superusers, and challenges in healthcare accessibility across Vermont's rural geographies.

It is important to note that the NEMT contract with VPTA permits the broker to request a rate adjustment, but this request must be made with sufficient advance notice to be incorporated into the State budget process. All parties acknowledge working to the greatest extent possible to communicate any funding shortfalls and close them as expeditiously as possible within the parameters of the larger state budgeting process. While this could provide a pathway to respond to cost escalations, the operational reality is that VPTA may not know there is a funding shortfall until too late in the state budget process to request the additional funding.

Lastly, the challenges of navigating FTA and Medicaid rules can present challenges to operators, especially those with limited staffing and resources.

2.4 Key Takeaways

Initial takeaways from the Existing Conditions Assessment include the following:

- **Operator Evaluation of NEMT Model:** Generally, the state's transit operators are supportive of the current braided service model of providing NEMT alongside other demand-response service. Despite challenges identified with the current braided service model, operators expressed significant concerns about service degradation if the provision of NEMT is altered.
- **Quality of Service:** From the user perspective, the current braided service model appears to be highly effective. Based on feedback from the operators, as well as VPTA-administered surveys, users tend to be very satisfied with key factors including on-time arrival, ease of booking and information accessibility, and overall quality of service provided. Multiple operators also cited users complimenting

the greater degree of personalized service, as well as the predictability associated with calling directly into the transit agency, as opposed to a statewide or regional call center models.

- **Long-Term Concerns:** Despite the favorability of the existing braided service model, there are long-term concerns over the sustainability of the existing model. These concerns include the financial constraints of administering Medicaid transportation, as well as the ability to attract and retain a sufficient number of volunteer drivers. While interviewees acknowledged that the state has stepped in to fill recent funding gaps, there is concern that will not be feasible in the future.
- **Service Provision Challenges:** Challenges to providing NEMT services include several uncontrollable factors: the members' need for trip frequency; the distance to medical providers, especially in rural areas; and the ongoing driver labor shortages. Some areas have a higher percentage of superusers than others. None of these factors can be planned for and service must be provided because it is an entitlement program.

3.0 National Best Practices

This section presents an overview of different practices used to provide NEMT around the United States and the tradeoffs associated with those practices. While Medicaid is federally funded via the CMS, state administration of the Medicaid program results in a diversity of NEMT service delivery models tailored to the specific operating context of each state.

In order to identify these best practices, this section provides a literature review of national research and policy guidance; discusses the current practices, challenges, and opportunities in providing NEMT; provides a summary of interviews with NEMT practitioners from four peer states (Kentucky, Massachusetts, Michigan, and Minnesota) used as case studies in best practices; and identifies best practices for further consideration.

3.1 Overview of Service Delivery

The Code of Federal Regulations (CFR) requires states to ensure that eligible, qualified Medicaid beneficiaries have NEMT to take them to and from medical providers and other medically-necessary services.⁶ With broad national guidelines established by Federal statutes, regulations, and policies, each state has established its own eligibility standards; determines type, amount, duration, and scope of Medicaid services; sets the rate of payment for services; and administers its own Medicaid program, including its own NEMT program.⁷ This allows for each state to develop programs that best meet its goals and the needs of its residents.

While no two state programs may look alike, there are three foundational models for administering a statewide NEMT program, which can have bearing on the service delivery model. These include: **Fee-for-Service**, **Managed Care** and **Brokerage** models. Many states also use a combination of two or more administrative models together, also known as a mixed or hybrid model.⁸

In brief, defining characteristics of these models are:

- **Fee-for-Service:** Also referred to as “In-House,” transportation service providers (private, non-profit, and/or transit) contract directly with the state to provide NEMT for eligible customers at set rates. Reimbursement is typically set on a per-trip or per-mile basis.
- **Managed Care:** Managed Care Organizations (MCOs) administer all Medicaid services to beneficiaries, including NEMT. MCOs are reimbursed at a capitated monthly rate and have a strong incentive to control NEMT costs in their contracts with transportation operators.
- **Brokerage:** The most common NEMT model around the country, brokerages typically – although not exclusively – receive a capitated rate and contract with transportation providers (private, non-profit, and/or transit) to provide transportation service. The capitated rate is often set on a per-member basis,

⁶ Assurance of Transportation, 42 C.F.R. § 431.53. [eCFR: 42 CFR Part 431 – State Organization and General Administration.](#)

⁷ National Academies of Sciences, Engineering, and Medicine. 2018. Handbook for Examining the Effects of Non-Emergency Medical Transportation Brokerages on Transportation Coordination. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25184>. (p. 15).

⁸ The Center for Health Law and Policy Innovation of Harvard Law School (CHLPI) and Lung Cancer Alliance. Non-Emergency Medical Transportation: Past, Present, and Future of a Critical Service (Issue Brief, August 2018).

reflecting the general number of Medicaid customers eligible for NEMT⁹ but not the volume of trips delivered by the provider to serve those customers. The state Medicaid office delegates NEMT service provision to a statewide broker or multiple regional brokers, which then subcontract with service providers to transport customers.

Additional components of these models may include incentive structures for contracted providers to encourage high service performance or rigorous cost management. An administering agency may offer performance incentives for its contracted providers for exceeding targets in different metrics, such as on-time pick up performance or customer satisfaction. In such circumstances, the contracted providers are required to invest the incentives in service provision, such as hiring additional drivers or buying customer-facing technologies.¹⁰

One way to manage financial risk is through use of “risk corridors.” A risk corridor is a framework for protecting providers against significant changes in project costs that may threaten the ability of the provider to sustainably operate its services. Under a risk corridor framework, a provider shares a percentage of costs that exceed a threshold value with the administrative agency, reducing the provider’s risk exposure. The framework also establishes that cost savings resulting from lower-than-expected service or program costs are shared between the provider and the administrative agency as well. The risk corridor is established during the contract negotiation process with the provider to ensure that terms and conditions of the risk corridor are acceptable to both parties.

A breakdown of models across the states is presented in **Table 3.1**.¹¹

Table 3.1 NEMT Models by State, 2017

NEMT Model	Number of States	States
In-house Management	8	Alabama, Maryland, Minnesota, North Carolina, North Dakota, Ohio, South Dakota, Wyoming
MCO	10	Arizona, Florida, Hawaii, Illinois, Indiana, Iowa, Kansas, New Mexico, Oregon, Tennessee
Statewide Broker	13	Alaska, Connecticut, Delaware, Idaho, Mississippi, Nebraska, Nevada, New Jersey, Rhode Island, Utah, Vermont, West Virginia, Wisconsin
Regional Broker	7	Arkansas, Georgia, Kentucky, Maine, Massachusetts, South Carolina, Washington
In-house Management and MCO	4	California, Montana, New Hampshire, New York
In-house Management and Regional Broker	4	Colorado, Michigan, Pennsylvania, Texas
MCO and Statewide Broker	5	District of Columbia, Louisiana, Missouri, Oklahoma, Virginia

⁹ The capitated rate is typically based on all Medicaid members, not only those eligible for NEMT.

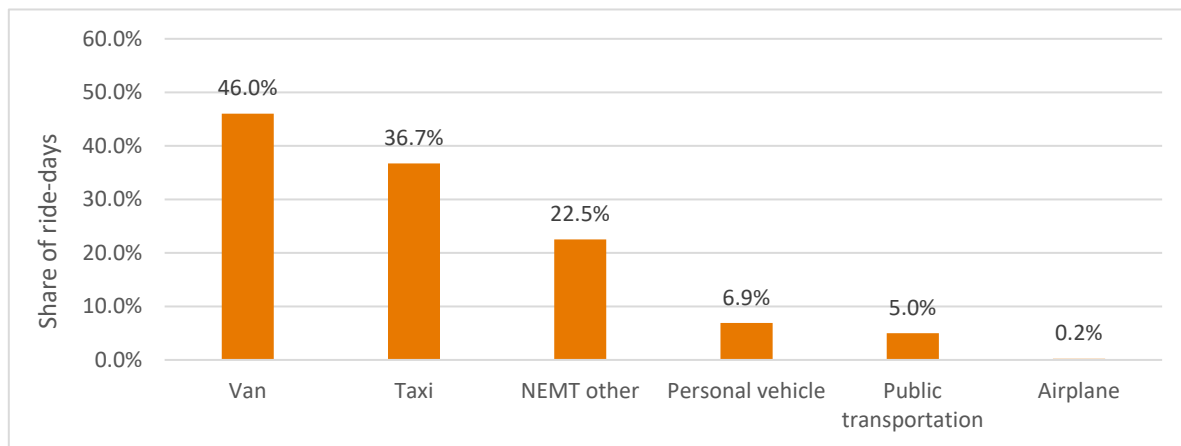
¹⁰ In Massachusetts, brokers are eligible to earn a percentage of trip payments or their broker management fees if they exceed standards of call center performance, on-time pick-ups, customer satisfaction, and percentage of trips taken as shared trips. See: https://www.healthmanagement.com/wp-content/uploads/HMA_NEMT_Report_MACPAC_Aug-21.pdf.

¹¹ Data from TRB presentation “Examining the Effects of NEMT Brokerages on Transportation Coordination” (October 25, 2018); slide 17. [181025.pdf \(trb.org\)](https://www.trb.org/publications/pubs/181025.pdf). Note: some of this data is out of date.

Within each administrative model, the entity responsible for providing NEMT – whether a broker, county or state government, or MCO – may contract with a variety of operators to deliver the transportation services. These operators can include public transportation agencies, taxi companies, human service agencies (e.g., adult daycare programs), or private for-profit operators.

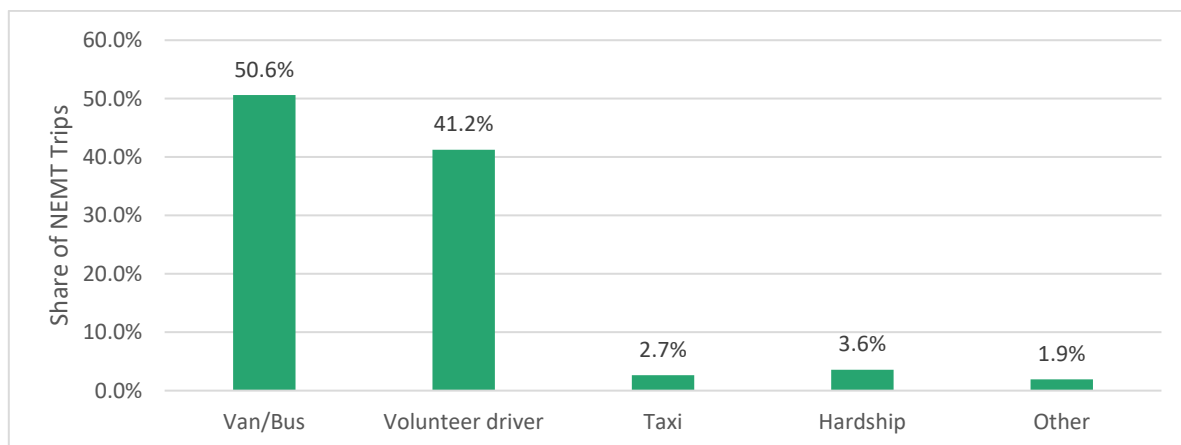
The Medicaid and Child Health Insurance Program (CHIP) Payment and Access Commission, or MACPAC, is mandated to report on Medicaid NEMT annually. In its 2021 report,¹² it noted that public transportation provided a small percentage of overall service, though some of the reported service categorized as “van” or “taxi” could have in reality been public transportation, depending on how these modes are incorporated into public transit agency portfolios. Unfortunately, the definitions used by the survey were open to some interpretation and so the categories are likely to overlap, which may explain why the total exceeds 100 percent across all categories. Regardless, it demonstrates the reliance of the NEMT system on providers other than public transportation agencies (**Figure 3.1**). These national trends contrast with Vermont, which relies much more heavily on transit service and volunteer drivers (**Figure 3.2**).

Figure 3.1 Share of NEMT Ride-Days by Mode of Transportation, FY18



Source: MACPAC, 2022.

Figure 3.2 Share of NEMT Trips by Mode of Transportation in Vermont, FY23



Source: Vermont Agency of Transportation, 2023.

¹² Medicaid and CHIP Payment and Access Commission, [Report to Congress on Medicaid and CHIP](#), 2021.

The literature indicates that the national best practice is to coordinate across these various transportation options to maximize service capacity and minimize cost. Coordination of service is explored in the next section.

3.1.1 Coordination of NEMT with Other Demand-Response Service

It is a well-established best practice for states to coordinate NEMT service with other demand-response transportation provided in the same area – a practice which Vermont has had in place for several years. To encourage the adoption and refinement of this best practice, the FTA established the [Coordinating Council on Access and Mobility](#) (CCAM), which is charged with issuing policy recommendations and implementing activities that improve the availability, accessibility, and efficiency of transportation for its target populations. The third goal in its *2023–2026 Strategic Plan* explicitly cites coordination between NEMT and FTA-funded activities as a priority.¹³

The Community Transportation Association of America (CTAA) noted in its report *Assembling the Elements of NEMT's Future* that one of the advantages to using FTA-funded transportation operators is service quality. They note:

*Community and public transportation services operating in the NEMT marketplace offer a higher degree of quality in terms of driver and equipment than their counterparts in the private sector ... Yet the community and public transit industry has not been able to successfully translate these levels of quality service when competing with the private sector ... for NEMT work. Too often, the only factor in decision making is price.*¹⁴

CTAA also cites the role that technology can play in improving coordination through mobile applications that can be used to reserve and operate trips across a wide array of public- and private-sector operators, specifically focusing on Mobility-as-a-Service (MaaS).¹⁵

Confirming coordination of NEMT with other public transportation services as a best practice, CMS published an updated Medicaid Transportation Coverage Guide encouraging the coordination of CMS-funded NEMT with other FTA-funded services. The letter noted, “Public transit agencies are often utilized in state Medicaid transportation programs and recognized as one of the least costly options. State departments of transportation (DOTs) and Medicaid agencies should explore partnerships to better serve the Medicaid population.”¹⁶

As noted in the Transit Cooperative Research Program (TCRP) Report 202 *Handbook for Examining the Effects of Non-Emergency Medical Transportation Brokerages on Transportation Coordination*, coordinating HST, including NEMT, with public transportation has many benefits:

- Avoid duplicative and overlapping services,
- Reduce service gaps,
- Increase services,
- Ensure cost-effectiveness and cost savings, and

¹³ Coordinating Council on Access and Mobility, [2023 – 2026 Strategic Plan](#), 2022.

¹⁴ Community Transportation Association of America, [Assembling the Elements of NEMT's Future](#), 2018.

¹⁵ Mobility-as-a-Service is a framework for transportation service delivery that integrates multiple transportation options into a single platform to make it easier for users to plan their travel and select and pay for a trip that most effectively meets their travel needs.

¹⁶ Centers for Medicare and Medicaid Services, [Medicaid Transportation Coverage Guide](#), 2023.

- Provide safe and reliable transportation services.¹⁷

More detail on these opportunities shown in **Table 3.2**.

Table 3.2 Opportunities for Coordinating NEMT with Public Transportation

Opportunity	Description
Benefit from the cost efficiencies of fixed-route public transportation	Where appropriate, individuals can travel to medical appointments on fixed-route public transportation for the fare. Public transit agencies benefit from NEMT riders on fixed-route services to increase productivity and cost-effectiveness. Brokers and MCOs benefit from the lowest cost for NEMT trips. If the State Medicaid agency directly contracts for NEMT, the State benefits from the lower cost.
Avoid service duplication; increase service productivity and efficiency	Coordinating transportation can improve the efficiency of transportation services in a community by reducing unnecessary redundancies in service and more efficiently using existing transportation resources (e.g., vehicles, drivers, and administrative staff).
Leverage public transportation expertise and resources	Coordinating NEMT with the local public transportation provider can help to make full use of the required compliances with FTA and State regulations, increasing the safety and quality of service for NEMT. Federal cost principles enable public transit agencies to share the use of vehicles to provide NEMT.
Follow a coordinated public transportation—human services transportation plan	The coordination of NEMT with public transportation and other HST programs can better meet the needs of transportation-disadvantaged individuals for all trip purposes.
Provide local match for FTA funding programs	The revenues earned by a transit agency from contracts to provide demand-response NEMT can be applied as a local match for FTA funding programs. The contract can be with the State Medicaid agency as a direct contractor or with a broker or MCO as a subcontractor.

Source: TCRP Report 202, 2018.

However, as evidenced by the reality that many states do not coordinate these transportation services, there are challenges to implementing a coordinated service. In general, the narrower scope of NEMT service and the various (and potentially conflicting) requirements of FTA and CMS programs can present challenges in braiding the two services together. A summary of these challenges is shown in **Table 3.3**.

Table 3.3 Challenges of Coordinating NEMT with Public Transportation

Challenge	Description
Coordination should not conflict with the Medicaid program	For initiatives to coordinate NEMT with public transportation, coordination is appropriate as long as it does not conflict with the policies and rules of the Medicaid program. For example, NEMT brokers can participate in a locally developed, coordinated human services transportation—public transportation plan.
Medicaid funding is limited to authorized services	Medicaid will only permit NEMT funds to be used for transporting eligible Medicaid beneficiaries to authorized medical services.

¹⁷ The National Academies of Sciences, Engineering, and Medicine, [Handbook for Examining the Effects of Non-Emergency Medical Transportation Brokerages on Transportation Coordination](#), 2018.

Challenge	Description
Differences in service requirements	Coordinating NEMT and public transportation may require the public transit agency to adapt to different service requirements of the State Medicaid agency, broker, and/or MCO. Adapting to different service requirements may increase costs to the public transit agency. Any costs not reimbursed by the Medicaid agency must be subsidized from other public resources.
Requirements for NEMT documentation	NEMT requires verification that the Medicaid-eligible passenger receives an authorized medical service on the date of transportation.
Shifts from NEMT to ADA paratransit	Some brokers may shift NEMT clients to the ADA paratransit program to reduce operating expenses. The public transit agency must serve any trip request for an ADA-eligible rider. Unless the broker negotiates a reasonable payment for the service, the public transit agency recovers only the fare for the ADA trip, not the cost of the trip.
Contract rates that may not cover the fully allocated costs of providing NEMT	Medicaid expects to pay only the direct costs for the eligible NEMT trip. Medicaid will not pay shared costs when NEMT is part of coordinated services. A broker has an incentive to purchase from the lowest-cost transportation provider. The public transit agency's reimbursement rate for providing NEMT may not cover the fully allocated costs of providing the service. If it does not, the public transit agency must find some other source of public subsidy.
Prohibition against self-referral for governmental NEMT brokers	If a public transit agency intends to be a governmental broker for NEMT, the public transit agency must meet certain requirements set out in the Deficit Reduction Act of 2005 (DRA) to be the provider of NEMT transportation.

Source: TCRP Report 202, 2018.

Some of these challenges are exacerbated by operating in a rural context. The smaller organizational size of rural transportation providers means that compliance with Federal Medicaid rules may require more oversight and support than for larger organizations that can hire dedicated staff for Federal compliance. National Cooperative Highway Research Program (NCHRP) Report 20-65: Task 82 *Issues Associated with Providing Customized, Client-Based Transportation Services* identified compliance requirements for smaller agencies as a key issue, especially in rural areas.¹⁸

3.1.2 Volunteer Drivers

A national scan of best practices revealed the considerable value that volunteer driver programs bring to rural transportation systems. In Vermont, volunteer drivers provided 41.2 percent of NEMT trips in FY23, the second-highest share of ridership behind vans and buses at 50.6 percent (see **Figure 3.2**). Using the Independent Sector's 2023 estimate, the value of a volunteer's hour in Vermont is \$30.04.¹⁹ With 177,294 hours of volunteer driving in fiscal year 2023, that is a value of over \$5.3 million in donated labor supporting Vermonters' mobility needs.

¹⁸ National Academy of Sciences, Engineering, and Medicine, [Issues Associated with Providing Customized, Client-Based Transportation Services](#), 2022.

¹⁹ Independent Sector, <https://independentsector.org/resource/value-of-volunteer-time/>, accessed 12/29/23.

Volunteer driver programs are generally on the decline around the country for a variety of reasons, but still comprise an important share of NEMT trips, especially in rural areas.²⁰ The National Aging and Disability Transportation Center (NADTC) publishes annual reports on Volunteer Driver Trends, and notes that the main motivation for using volunteer drivers is because of cost and lack of other alternatives.²¹ Because the drivers are volunteering their time, NEMT trips served using volunteer drivers are highly cost effective. However, there are several challenges:

- **Availability:** While there is an increase in demand for transportation services, there are significant recruitment challenges due to conflicts with personal schedules and lack of awareness about the programs. Many agencies in the HHS and transportation sectors indicate that they all draw from the same pool of volunteer drivers, making it difficult for each agency to secure the capacity it needs to maintain responsive service.
- **Safety:** Volunteer drivers may feel especially exposed to customers with behavioral issues because they are using their personal vehicle and are alone with the client. COVID is also an issue, as NADTC's 2020 Trends report noted the challenge and strategies for operating a volunteer driver program during the COVID pandemic.²² They wrote that the COVID pandemic has put an even greater emphasis on the importance of ensuring driver safety, as safety fears related to COVID became a new barrier to retention.
- **Trip Assignment:** As described by Vermont operators in the Existing Conditions section, volunteer drivers are typically less interested in serving shorter-range trips because the mileage reimbursement is very low.

Despite these challenges, volunteer driver programs are especially valuable in rural settings where other transportation providers may have limited presence and where other forms of transportation are very difficult to operate in a cost-effective manner. In Vermont, the average cost per trip for a demand-response trip provided by a volunteer driver was \$37.72 in FY23, half the cost per trip for a public transit vehicle (\$75.17). To maintain this critical source of cost-effective demand-response transportation, VPTA and DVHA have established new policies related to disruptive and criminal behavior on transit to address behavior that is dangerous or threatening to drivers and the public.

The National Volunteer Transportation Center developed a guide in 2016 on best practices for recruitment and retention.²³ The guide lays out the "Top Ten" venues for potential recruitment:

1. The faith community
2. Retirees and retiree groups
3. Community service and civic groups
4. Education programs and institutions
5. Community events
6. Senior and community services

²⁰ National Academy of Sciences, Engineering, and Medicine, [Impact of Decline in Volunteerism on Rural Transit Systems](#), 2021.

²¹ National Aging and Disability Transportation Center, [2021 Trends Report](#), 2022.

²² National Aging and Disability Transportation Center, [2020 Trends Report](#), 2021.

²³ The National Volunteer Transportation Center, [Volunteer Driver Recruitment and Retention Experience and Practice](#), 2016.

7. Neighborhood and community groups
8. Volunteer and information centers
9. Chambers of commerce
10. Job boards at senior centers and colleges

The guide also lays out several strategies for recruiting volunteer drivers. One of these is that the best spokesperson for the volunteer driver program is a volunteer driver – they can speak personally and passionately about the importance and value the work brings. Bringing an existing volunteer driver as an ambassador to the venues listed above can provide a compelling pitch for future volunteer drivers.

However, retention of existing drivers is just as important as recruiting new drivers. The guide lists typical reasons that volunteer drivers leave the program, including aging out of driving, moving away, burn out due to too few drivers, poor match with a passenger, or feeling unappreciated. The guide noted that the primary reason drivers continue to drive is because of the satisfaction they get from helping others in need, underscoring the importance of driver appreciation to increasing retention rates.

The Rural Health Information Hub also provides valuable information about volunteer driver programs. In addition to describing volunteer driver reimbursement, they also identify Trip Banking/Time Banking as an alternative model.²⁴ This is where an individual provides transportation for others and banks that for future use. For example, if a volunteer driver spends five hours providing transportation for someone, they can use those five hours for obtaining their own transportation at another time.

3.1.3 Mileage Reimbursement Programs

Reimbursement of miles (i.e., “friends and family” trip reimbursement) for Medicaid beneficiaries is allowed under CMS rules, and some states, especially those with less transportation network coverage (i.e., large rural areas), have implemented those practices. However, mileage reimbursement is not a common form of NEMT, likely because of the requirement that Medicaid be the transportation provider of last resort and, as such, there are typically strict application requirements for eligibility for reimbursement. As MACPAC notes, “... Indiana offers mileage reimbursement as an option. However, according to Indiana Medicaid officials, mileage reimbursement accounts for as little as 2.0 percent of NEMT, perhaps because of burdensome application requirements.”²⁵ For reference, these trips account for 4.2 percent of total demand-response service for Vermont; Vermont’s Medicaid program offers hardship mileage reimbursement to members who travel more than 50 miles per week or 215 miles per month.

MACPAC goes on to note that states with coverage challenges identified mileage reimbursement as a viable option for maintaining NEMT access. In the context of increased competition for drivers from other employers, vehicle insurance costs, lower Medicaid payment rates, and lingering safety concerns in the aftermath of the COVID-19 pandemic, mileage reimbursement represents an attractive safety valve during periods of high trip demand, especially in rural areas.

²⁴ Rural Health Information Hub website, <https://www.ruralhealthinfo.org/toolkits/transportation/2/models-to-improve-access/volunteer-models>, accessed 12/28/23

²⁵ Medicaid and CHIP Payment and Access Commission, [Report to Congress on Medicaid and CHIP](#), 2021.

3.2 Peer Agency Interviews

In addition to the literature review presented above, the project team conducted a series of interviews with representatives from agencies in four states identified by VTrans, VPTA, and DVHA: Kentucky, Massachusetts, Michigan, and Minnesota. These states were chosen because of their diversity in delivering NEMT and reputation for innovation. The project team contacted representatives from DOTs and DHSs within each of the peer states and conducted a one-hour virtual interview with these representatives. During the interview, the project team asked the representatives to discuss the structure and operation of their NEMT services, identify challenges with current practices, and highlight opportunities to improve service delivery.

3.2.1 NEMT in Kentucky: Regional Brokers and Shared Rides

Program Structure and Coordination

The Kentucky Transportation Cabinet (KYTC, i.e., the Kentucky Department of Transportation) Human Service Transportation Delivery Branch (HSTD) oversees NEMT through a regional brokered model and a travel reimbursement program. KYTC's Office of Transportation Delivery (OTD) administers the NEMT Program, contracting for brokerage services and overseeing compliance with Medicaid requirements for NEMT. The OTD also operates a statewide call center to provide customer assistance for NEMT members. However, customers must contact their regional brokers to schedule trips.

The travel reimbursement program provides reimbursement to Medicaid members who rely on a personal vehicle for NEMT trips. If a member lives at least 120 miles from their appointment, they are eligible for a gas/food allowance and hotel reimbursement for themselves and up to one child. For approximately 90 percent of trips supported by the travel reimbursement program, the program relies on members traveling in a personal car that they or an immediate family member own and operate. The travel reimbursement program represents less than 10 percent of total NEMT trips, and its users predominantly consist of families traveling to Cincinnati for specialized care.

NEMT in Kentucky is delivered through 15 regions to offer more tailored transportation service to regional populations, connect members to local transportation services and local medical facilities, and maintain more predictable customer demand. The highly regionalized system is seen as an advantage both for cost management and for trip planning, as Medicaid members can receive treatment at the closest medical facility and local transportation providers and brokers oversee a more predictable service area with a more stable Medicaid member population. NEMT is administered by a regional broker, but a given broker is permitted to operate in more than one region.²⁶ Each broker is responsible for confirming the member's eligibility and scheduling trips on the lowest-cost transportation service.

Currently, all contracted transportation brokers are non-profit public transit agencies. Because of this structure, brokers will often request capacity assistance from each other when NEMT demand is particularly high in their respective regions. Volunteer drivers have not been used as part of the Medicaid transportation service for at least six years.

While brokers provide NEMT services directly, NEMT rides can be taken on general public transit. Additionally, NEMT providers can serve trips for members seeking services via the Department of Vocational Rehabilitation,

²⁶ A current listing can be found on the Human Services Transportation webpage:
<https://transportation.ky.gov/TransportationDelivery/Pages/Human-Services-Transportation.aspx>

the Blind Services Division, Department of Corrections, the Department of Aging and Independent Living, foster parents, the Department of Behavioral Health, and the Division of Developmental and Intellectual Disabilities. These services are coordinated via the OTD, following the consolidation of multiple agencies' transportation service provision responsibilities under the HSTD program. This consolidation was undertaken to streamline service delivery across social programs.

Reimbursement and Cost Management

NEMT service in each region is compensated on a unique per Medicaid member per month (PMPM) capitation rate (regardless of whether the region is covered by a unique broker).²⁷ The rate is set and certified to CMS by the Kentucky Department for Medicaid Services (DMS) actuary, who bases certification of these rates on utilization encounters, new covered services, external factors, and populations unique to the each. Brokers have expressed appreciation for this monthly reimbursement structure, as it helps to balance out revenue across months with varying levels of demand.

Challenges and Opportunities

Two common challenges encountered by brokers and service providers are addressing customer complaints with on-time pick-ups and booking trips to pharmacies as separate trips from medical appointments. However, the 2022 NEMT Rider Survey found that 98 percent of respondents were satisfied with their service.

The OTD does not use a volunteer driver program, and brokers have reported struggling with attracting and retaining drivers to provide transportation services.

3.2.2 NEMT in Massachusetts: Consolidated Brokers, Expanding Service Offerings

Program Structure and Coordination

In Massachusetts, NEMT is administered by the Massachusetts Executive Office of Health and Human Services (EOHHS). The current NEMT delivery model for the majority of services is a two-broker model operated by two Regional Transit Authorities (RTAs): the Greater Attleboro-Taunton Regional Transit Authority (GATRA) and the Montachusett Regional Transit Authority (MART). Some specialized services (non-emergency ambulance and wheelchair van NEMT services) are administered directly by EOHHS, which contracts with third-party providers and reimburses them on a fee-for-service basis.²⁸ These brokers also coordinate trip booking and scheduling for other demand-response programs, including the Massachusetts Department of Mental Health and the Massachusetts Commission for the Blind.

The two-broker model was established in 2021 following a consolidation effort of six brokers led by EOHHS to decrease administrative complexity. Representatives of the EOHHS have indicated that the consolidation effort has demonstrated a positive cost-benefit analysis, although this amount has not been formally quantified as of 2023. Anecdotally, customer feedback on the consolidated brokerage model has been positive, with customers citing lower wait times.

²⁷ The capitated rate is typically based on all Medicaid members, not only those eligible for NEMT.

²⁸ Silow-Carroll, Sharon et al. "Medicaid's Non-Emergency Medical Transportation Benefit: Stakeholder Perspectives on Trends, Challenges, and Innovations." *Prepared for the Medicaid and CHIP Payment and Access Commission*. August 2021. <https://www.healthmanagement.com/wp-content/uploads/HMA_NEMT_Report_MACPAC_Aug-21.pdf>

GATRA manages trip requests for southeastern Massachusetts, while MART manages the rest of the state. Both RTAs contract with third-party HST providers to provide the services directly and rely on a large, flexible pool of third-party providers to manage capacity on a dynamic basis. GATRA and MART also maintain a coordinating capacity to “trade trips” through the use of a common trip booking software platform. However, Medicaid members are assigned to one of the brokers upon enrollment and must use a unique member portal, app, or phone line based on the broker to which they are assigned.

Reimbursement and Cost Management

For the majority of NEMT service, EOHHS maintains one average rate for brokers, with reimbursement issued on a per-week basis and based on the average cost of all trips provided during the service.²⁹ The rate is adjusted every two weeks to account for fluctuations in cost; the goal is to cover the actual costs of providing service while maintaining incentives for brokers and service providers to manage costs effectively. As required under Medicaid regulations, the brokers also assign trips to the least-cost provider. State statute also requires Medicaid members to use public transit if the member’s origin and destination are within 0.75 miles of transit service, unless authorized by an exception.

However, the flexible pool of service providers maintained by the brokers allows for more frequent rate negotiation with service providers, further encouraging cost management. In particular, MART uses a web-based, real-time competitive bidding system for its contracted service providers to bid for trips. Since vendors know to move quickly in order to claim trips, this allows the broker to reduce prices and minimize the delay for building schedules for travel.

Challenges and Opportunities

While EOHHS encourages its brokers and providers to group trips by program, current practices do not include braiding service trips across Medicaid-funded trips and trips funded by transportation programs. While there is interest in the braided service delivery model used by Vermont and Kentucky, EOHHS representatives expressed concern regarding available administrative capacity to organize trips across programs as well as the potential regulatory liability for combining passenger types.

Two additional program limitations are the elimination of a hardship mileage reimbursement program and the current lack of coverage for trips to pharmacies. EOHHS had previously offered this as an option for disruptive passengers in order to reduce risk to vehicle drivers and other passengers, but recently discontinued it.

Similarly, trips to pharmacies are not provided by GATRA or MART, despite being eligible trip purposes under Medicaid regulations. Historically, NEMT administrators have struggled to identify pharmacies that are eligible since many pharmacies are located within grocery stores or shopping plazas, and these destinations may be determined as ineligible medical trips under Medicaid regulations. EOHHS indicated that they are studying how to address this issue in the future.

However, EOHHS has been innovative in addressing another common limitation in NEMT service provision: trip reservation times. Under current procedures, GATRA and MART request that Medicaid members reserve their trips three days in advance of intended travel time, although they will try to accommodate shorter trip

²⁹ Certain wheelchair-accessible vehicle services and non-emergency ambulance services are reimbursed on a fee-for-service rate directly by EOHHS.

reservation requests.³⁰ A three-day trip reservation can be difficult for Medicaid members to manage. In response, EOHHS implemented a pilot program in 2021 with Lyft, a transportation network company (TNC) to provide service on a one-hour wait time. This service is designed to provide customers with more immediate service to more significant healthcare needs. The program has been very well-received among users.

3.2.3 NEMT in Michigan: Third-Party Broker for Medicaid; Supplemental Service provided by Transit Nonprofit

Program Structure and Coordination

In Michigan, NEMT is provided by a private third-party broker and service provider, ModivCare, which contracts directly with the Michigan Department of Health and Human Services (MDHHS). Additionally, the Michigan Transportation Connection (MTC) provides supplemental NEMT service to the Medicaid transportation program. MTC operates as a broker for transit agencies across the state, but it does not cover all services. Some counties operate their own services and either contract with MTC or other nonprofits. MTC was established as a nonprofit at the advocacy of the Michigan Public Transit Association. MDHHS has historically directed NEMT funding to private providers, but their services were not cost-competitive.

MTC conducted a one-year pilot with MDHHS to provide mobility management services in a three-county region in 2016, which determined that the mobility management model was more effective at connecting members with transportation needs and generated cost savings.³¹ A mobility management model uses dedicated mobility planners to coordinate targeted transportation services for customers with specialized mobility needs. This model focuses on maintaining information about customers' eligibility and travel needs and working with multiple providers and program administrators to identify transportation options that meet those needs in a cost-effective and reliable manner.

The pilot exceeded its goal of providing 5,400 trips per year and has been extended into a 10-year service provision contract; although, DHHS continues to contract with ModivCare and local transportation providers for NEMT service in areas not covered by MTC as well as in areas that overlap with MTC service.

Reimbursement and Cost Management

For several years, State regulations for NEMT allowed private providers to be reimbursed at \$15.00 per trip, while transit providers were just reimbursed for their fare, creating a difficult financial environment for transit providers. As of July 2022, NEMT reimbursement policies allow for demand-response trips to be reimbursed at \$0.625 per mile, with an additional \$35.00 per round trip for trips taken on wheelchair lift and Medi-Van vehicles.³² These rates are consistent for transit agencies and nonprofit transit operators alike.

While Federal regulations now allow for fully allocated costs to be charged as long as they are consistent across all HST trip types, Michigan has not implemented these yet, leading to an ongoing concern regarding

³⁰ CMS regulations require that trip reservation windows must be no more than 48 hours in advance of intended travel time. It is possible that EOHHS avoids noncompliance by making this three-day trip reservation window a "request" rather than a "rule."

³¹ Hansle, Vanessa V. "The Michigan Transportation Connection (MTC): A Statewide Approach to Connecting Transportation & Information." *National Aging and Disability Transportation Center*. 18 Oct 2017. <<https://www.nadtc.org/news/blog/michigans-statewide-approach-to-connecting-transportation-information/>>

³² Michigan Department of Health and Human Services. Non-Emergency Medical Transportation Rate Schedule July 2022. <<https://www.michigan.gov/mdhhs/doing-business/providers/providers/billingreimbursement/non-emergency-medical-transportation>>

the financial sustainability of NEMT service provision.³³ To manage costs, MDHHS and MTC rely on the Federal rule regarding NEMT trip assignment to least-cost transportation modes.

Challenges and Opportunities

MTC plans to expand and cover the entirety of the state's NEMT service, but funding has not been secured to do so. Operating and mobility management funding has been provided on a continuing basis for the past eight years, with no increase in funding for these sources. This financial pressure creates conflict with the recognition that there is still unmet need for NEMT throughout Michigan.

To address capacity needs, MTC obtained an FTA grant to establish a multi-county Rides to Wellness program operated in coordination with the Flint Mass Transportation Authority (MTA). Funding was used to purchase a fleet of sedans for volunteer drivers to use for NEMT provision. A 2019 presentation to NADTC indicated that the Rides to Wellness program had demonstrated sustained growth over its first three years of operation, growing from three vehicles providing fewer than 200 trips per month to 80 vehicles providing more than 10,000 trips per month.³⁴ MTC is also establishing contracts with local transit agencies and hospitals to provide transit service as contracted providers while MTC operates as the broker. While this is expanding coverage, it does so with increasing complexity in service administration, but Michigan Department of Transportation (MIDOT) representatives indicated that this is a necessity given the geographic scale of service coverage in Michigan.

MTC is currently conducting a study to establish mobility management performance standards and to determine which areas are not receiving service on par with the mobility management framework. MTC intends to use the findings of the study to identify priority areas to either expand into or provide technical support to improve transportation outcomes.

3.2.4 NEMT in Minnesota: Decentralized Service Delivery, but Increasing Administrative Support and Coordination

Program Structure and Coordination

In Minnesota, 87 counties and 11 Tribal governments are responsible for ensuring that NEMT services are provided to Medicaid members. Under State statute, each county or Tribal government is the "single administrative agency" responsible for administering service within its respective geography and reimbursing service providers. The Minnesota Department of Human Services (MnDHS) enters into contracts with the counties and Tribes as the administrator for the Medicaid program and its funding. Each county's NEMT service must adhere to the standards established in its Management Plan, although multiple counties can establish a regional NEMT service provision model and enter into joint contracts with providers.

Additionally, counties are required to submit monthly reports on their transportation service performance, including unfulfilled trips, canceled trips, no-shows, complaints, and appeals. MnDHS reviews these reports to

³³ During the interview with the consultant team, there was some discussion among MIDOT stakeholders as to whether the cost allocation model had been fully implemented.

³⁴ Lloyd, Harmony. "Flint Rides to Wellness: An innovative, personalized approach to assisting Flint residents in accessing critical services." Webinar presentation on behalf of National Aging and Disability Transportation Center, 2019. <<https://www.nadtc.org/wp-content/uploads/MTAFlint-RidesToWellness-Module-3.pdf>>

identify trends and conducts follow-up on any issues that emerge from the data analysis. MnDHS indicated that current trends are overall positive.³⁵

This decentralized model of service delivery has led to a wide array of service delivery models, from contracted third-party providers to direct state operations. Many counties have engaged Medical Transportation Management, Inc. (MTM), a third-party provider, to operate as a broker and a service provider. MTM operates in rural and urban areas, including a five-county part of the Minneapolis-St. Paul metropolitan area. MCOs also provide service to nearly 750,000 Medicaid members, while 250,000 members receive NEMT directly from the State. A volunteer driver program administered by the Minnesota Public Transit Association (MPTA) also plays a role, as some local transit providers tap into the volunteer driving program to augment their NEMT services.

Transit agencies also provide NEMT service as contracted operators with counties, although historically many transit agencies have avoided NEMT provision due to the funding restrictions associated with NEMT service. The Minnesota Department of Transportation (MnDOT) has been providing technical assistance to transit agencies to explore braided funding models that would ease the financial pressure on delivering NEMT. Specifically, MnDOT is encouraging transit agencies to use their USDOT funding as matching funds for non-DOT programs, including Medicaid.

Reimbursement and Cost Management

NEMT reimbursement rates are set by state formula on a base per-trip rate plus a per-mile basis. Rates vary by transportation mode (e.g., private vehicle, public vehicle, wheelchair accessible vehicle, etc.). The regulating statute for NEMT includes a particular reimbursement rate for “protected transport,” which “includes transport provided to a client who has received a prescreening that has deemed other forms of transportation inappropriate and who requires a provider: (i) with a protected vehicle that is not an ambulance or police car and has safety locks, a video recorder, and a transparent thermoplastic partition between the passenger and the vehicle driver; and (ii) who is certified as a protected transport provider.”³⁶ Additional rate adjustments are applied to areas defined as “super-rural” by the Rural-Urban Commuting Area (RUCA) codes.

In addition to adhering to the Medicaid rule regarding least-cost transportation mode assignment for trips, State statute establishes regulations on trip distance to manage program costs. NEMT provider trips may not exceed 30 miles for a primary care provider or 60 miles for a specialty care provider unless authorized by the single administrative agency. Out-of-state NEMT trips require approval from MnDHS.

Opportunities and Challenges

MnDOT and MnDHS have established the Minnesota Council on Transportation Access (MCOTA), a 13-member council of State agencies that impact or are impacted by transportation service provision. MCOTA works on issues of service standardization and coordination, based on the CCAM model. MCOTA has developed regional coordinating councils to support this effort at the regional level, providing more contextualized support based on the resources, needs, and priorities of counties within the regions. As part of this effort, MnDOT subsidizes local coordinating support services for local agencies to assist with funding

³⁵ The project team has requested data on these trends. As of 12/22/23, these data have not been received.

³⁶ 2023 Minnesota Statutes. 256B.0625: Covered Services. Subd.17.1.6.
<<https://www.revisor.mn.gov/statutes/cite/256B.0625>>

identification, funding braiding, and service planning in order to provide more comprehensive, coordinated service throughout the state.

These councils were established in recognition of the complexity that arises from a highly decentralized service. MnDOT and MnDHS representatives noted that pricing structure has created lopsided incentives in terms of where to deliver services. Since operator reimbursement is issued on a per-trip basis, there are more incentives to provide service in southeastern Minnesota, which is wealthier and has more activity, compared to northwestern Minnesota, which is lower income and very rural. While the payment structure has additional rate adjustments applied to areas defined as “super-rural” by the RUCA codes, these do not seem to be sufficient for attracting private sector providers to the rural areas.

MnDOT is also working on a MaaS platform to serve as a single-entry portal for customers to identify travel options in their communities, request trips for different public transportation and HST providers, and pay for those services. This platform is designed to simplify the process for trip planning for customers while allowing smaller transit systems, which often lack digital infrastructure for online trip request and payment services, to take advantage of a shared platform. While the MaaS platform is designed to cover all types of public transit in addition to NEMT, it has been a strategic priority for MnDOT to ensure that NEMT is covered.

To date, MnDOT has encountered challenges with managing data quality and privacy considerations to incorporate NEMT service into the platform. Rural areas are particularly challenging due to the variation in rural program structure and coverage. Rural systems are very limited in their ability to generate funding locally, since most local revenue in Minnesota is generated by the property tax and populations in rural areas are too low to support a robust property tax base.

Agencies and providers are also struggling to attract and retain drivers. This difficulty is particularly acute for volunteer drivers. The reimbursement rate for volunteer drivers is based on the Federal volunteer driver income charitable rate, which has not kept pace with inflation. Additionally, Minnesota regulations require that a driver who receives reimbursement for their services is categorized as a for-hire service, similar to a taxicab driver. A for-hire driver must carry commercial insurance to drive, which is cost-prohibitive for many volunteer drivers.

3.2.5 Peer Agency Comparison

The four peer states demonstrate a high level of diversity in program structure, administration, and reimbursement approach. The program structures and service delivery models that the states use are heavily shaped by their respective geographies and distributions of residents and medical services. Maintaining coverage is referenced as a challenge in the larger states (Minnesota and Michigan), while smaller states (Kentucky and Massachusetts) indicate that their brokers are able to share resources more effectively due to smaller coverage areas. Yet among smaller states, conditions vary: Massachusetts has moved to consolidate brokers to streamline administrative structures, while Kentucky maintains multiple brokers and smaller service regions to provide more targeted care. Michigan does not currently maintain customer satisfaction data, but the other three states report positive feedback from customers on service provision. These findings suggest that customer experience of NEMT is a multifaceted condition that does not point towards a single model of service delivery.

Table 3.4 presents a comparison of peer agency structures and practices in five areas: Program Structure and Coordination, Reimbursement Structure, Program Cost Management, Service Capacity, and Customer Experience.

Table 3.4 Comparison of NEMT Programs Across Peer States

NEMT Component	Kentucky	Massachusetts	Michigan	Minnesota
Program Structure and Coordination	<ul style="list-style-type: none"> Multi-regional, decentralized service 	<ul style="list-style-type: none"> Two brokerages (consolidated from six) with common software platform for trip planning and scheduling Separate customer-facing portals for trip requests 	<ul style="list-style-type: none"> Multiple brokerages (private and nonprofit) with paralleling services and overlapping service areas Goal is to establish a statewide brokerage to simplify 	<ul style="list-style-type: none"> Highly decentralized service run at the county level Statewide and regional coordinating councils provide technical assistance
Reimbursement Structure	<ul style="list-style-type: none"> Per Member Per Month capitated rate, adjusted annually 	<ul style="list-style-type: none"> Weekly rate based on average trip costs, adjusted every two weeks 	<ul style="list-style-type: none"> Fee-for-service per mile reimbursement for most services, per trip reimbursement for wheelchair-accessible vehicles, adjusted annually 	<ul style="list-style-type: none"> Fee-for-service base rate per trip plus per mile reimbursement
Program Cost Management	<ul style="list-style-type: none"> Regional broker structure allows for shorter trips to medical facilities for most trips 	<ul style="list-style-type: none"> State statute requires transit usage if origin and destination are within 0.75 mi of transit service, unless authorized Broker utilizes real-time cost bidding for trip booking to manage costs 	<ul style="list-style-type: none"> Least-cost transportation mode assignment requirement Federal funding used to support a volunteer driver program 	<ul style="list-style-type: none"> State statute limits trip distance for NEMT trips unless authorized by County administrator Out-of-state NEMT travel requires authorization by DHS
Service Capacity	<ul style="list-style-type: none"> Regional broker structure designed to keep member population more stable Brokers will share resources when capacity is tight No volunteer driver program Driver shortages are an issue 	<ul style="list-style-type: none"> Brokers “borrow” providers from each other using common trip booking platform Pilot program with Lyft is designed to reduce trip request and wait time windows No pharmacy trips 	<ul style="list-style-type: none"> Federal funding used to expand a volunteer driver program with dedicated sedan fleet (Benefit) Unmet need due to lack of funding to expand statewide 	<ul style="list-style-type: none"> MnDOT Mobility-as-a-Service program is intended to expand travel options for users, but rural areas have been challenging Driver shortages are an issue
Customer Experience	<ul style="list-style-type: none"> 2022 rider survey demonstrated a 97.6 percent customer satisfaction rate 	<ul style="list-style-type: none"> FY23 Annual Broker Performance report demonstrated customer satisfaction rates of 94 percent and 97 percent for the two brokers 	<ul style="list-style-type: none"> Does not track customer satisfaction as of March 2022 	<ul style="list-style-type: none"> Customer satisfaction data not provided.

3.3 Best Practices for Further Consideration

Based on the findings of the Literature Review and the Peer Agency Interviews, several best practices emerge for further consideration. These best practices are presented below.

3.3.1 Program Structure and Coordination

Establish a multi-agency transportation council to support providers

At its foundation, NEMT is a cross-sector program, providing transportation services in a healthcare context. Successful delivery of NEMT requires an in-depth awareness of the regulatory frameworks of CMS and the FTA. A multi-agency transportation council similar to the [Kentucky Coordinated Transportation Advisory Committee](#) or the [Minnesota Council on Transportation Access](#) can provide technical assistance in a coordinated structure that facilitates knowledge transfer and administrative capacity-building.

This council should focus on elements that impact all providers, such as regulatory compliance, training, funding availability, and performance management. Considerations of braided funding models is a key component of this effort, since the agencies can build a shared awareness of program eligibility, requirements for local match, and other factors that determine funding access and use. The council should prepare and distribute relevant training materials and technical guides to NEMT service providers on a regular basis. The council should also meet on a regular basis to review regulatory updates or guidance from relevant Federal agencies or changes in State legislation.

Benefits: Increased regulatory compliance, greater awareness of funding opportunities.

Risks: Greater administrative costs for administrative agencies.

Incorporate Mobility Management framework into administrative structure

A Mobility Management framework builds a more supportive network around Medicaid members to provide greater assistance in navigating mobility options and identifying which mobility choices most effectively meet their needs, including interregional or interstate travel. This framework relies on Mobility Managers who work directly with Medicaid members or clients from other programs to understand their mobility needs and travel needs as well as with service providers to identify and evaluate options for service provision. Mobility Managers play a critical role in service coordination and in building client familiarity with using NEMT services and other mobility programs. Where gaps in service access or coverage exist, a Mobility Management framework can provide an approach for identifying potential providers and engaging with them to determine what barriers exist and how those barriers can be addressed.

Incorporating a Mobility Management framework requires expanding the administrative functions within the administrative agency and/or the brokerages to ensure that Medicaid members have advocates and representatives within the NEMT service provision system.

In addition to the Mobility Management practices identified in the peer state interviews, Ohio incorporated Mobility Management into the foundation of its HST system. Ohio established Mobility Ohio, a collaboration of seven State agencies that fund community and HST, with the goal of improving efficiency and effectiveness of HST. The Mobility Ohio Committee implemented key steps to improve coordination, address consistent methods to set transportation rates, create a statewide database to provide up-to-date records and ensure

compliance with safety and quality requirements, procure trip coordination scheduling and dispatch software to support its coordinated trip brokering model.³⁷

The Ohio Department of Transportation (ODOT) received \$2.8 million as part of the FY21 Innovative Coordinated Access and Mobility grant to implement the Regional Transportation Resource Center (RTRC) pilot program. The goal of the RTRC is to serve as a hub for mobility management activities, establish contracts with qualified for-profit, non-profit, and public transportation providers and ensure compliance with consistent, updated safety and quality standards that meet or exceed the requirements of Federal transportation regulations, and to incorporate lessons learned from the pilot program into the statewide coordinated transportation model.

Benefits: Improved customer experience; greater coordination between providers, brokers, and/or administrative agencies; lower administrative burden across agencies.

Risks: Administrative costs.

3.3.2 Reimbursement and Cost Management

Regularly adjust reimbursement rates

A practice identified by Massachusetts is a more dynamic adjustment of the weekly reimbursement rate. In the case of Massachusetts, the reimbursement rate is adjusted weekly to reflect the on-the-ground reality of the cost of providing transportation service more accurately, from trip distance to trip demand. It is important to note, however, that these rate adjustments require brokers and providers to submit service performance and cost data more frequently to their administrative agencies. Up-to-date and timely cost data is essential to ensure that the administrative agencies are using the most accurate information when determining rates.

Benefits: Greater alignment between reimbursement and cost of service; improved financial stability for providers.

Risks: Greater administrative costs for administrative agencies, brokers, and providers.

Establish risk corridors for brokers and/or service providers

FTA funding is allocated to transit agencies as a share of overall projected program costs, and any costs above that projected budgeted are borne by the transit agency. As such, transit agencies design service parameters to the availability of FTA funding. This stands in contrast to NEMT program requirements, which treat transportation as an entitlement and trip requests cannot be denied due to lack of funding. As identified in the literature review, any NEMT costs not met by Medicaid reimbursements must be filled by other resources, putting pressure on other limited pots of transit funding.

A risk corridor is one way to address the perceived risk of operating an entitlement service. A risk corridor is a mechanism for sharing risk between the administrative agency and its brokers and/or service providers for NEMT delivery. The purpose of a risk corridor is to reduce the risk of drastic changes in service delivery costs

³⁷ National Center for Mobility Management (NMCC) "Effective Coordination Strategies: Mobility Ohio" (March 2023) <https://nationalcenterformobilitymanagement.org/wp-content/uploads/2023/06/Effective-Strategies-final-2.pdf>

causing financial instability for brokers and/or service providers. Under a risk corridor, both budget deficits and surpluses can be shared between all parties involved in NEMT service delivery.

A risk corridor will establish rules for covering losses with additional funding from the administering agency while using profits to fund these future overruns. The risk corridor gives greater financial stability to the service providers while allowing the administering agency to retain a percentage of cost savings.

For example, the Indiana Family and Social Services Administration (FSSA), Indiana's Medicaid administrator, established a risk corridor in its contract with Southeastrans, a third-party broker.³⁸ The contract establishes thresholds for dividing and retaining profits and losses at different value thresholds. For losses, Southeastrans incurs all losses less than 1 percent of its capitation payments, shares losses greater than 1 percent and less than 3 percent of its capitation payments on a 50-50 basis with the State of Indiana, and incurs no losses greater than 3 percent of payments, with those losses being carried by the State. For surpluses, Southeastrans keeps all cost savings less than 2 percent of its capitation payments, shares cost savings greater than 2 percent and less than 5 percent on a 50-50 basis with the State of Indiana, and gives all cost savings above 5 percent to the State of Indiana.³⁹

Benefits: Insurance against financial risk; establishes similar incentives for all parties involved in NEMT service delivery to manage costs; reduced risk of non-NEMT service cuts in response to cost overruns.

Risks: Funding agencies may experience significant risk exposure.

3.3.3 Service Capacity

Expand volunteer driver program/community-based organization partnerships

As noted in the literature review, volunteer drivers are a critical part of rural transportation. Volunteer driver programs and community-based transportation programs often have lower per-mile or per-hour costs of service provision due to their lower administrative overhead and, when using volunteers, the fact that there is no paid driver in the vehicle. Volunteer drivers or community organizations are not required to maintain the same administrative functions as a transit agency or department of transportation and can direct their resources to service provision, often relying on trip booking and scheduling systems maintained by a broker or administrative agency. Volunteer driver programs also represent a flexible source of capacity that is able to expand or contract in response to demand.

However, volunteer drivers and community-based drivers still need to adhere to regulatory and training standards related to customer engagement, insurance, and other factors, requiring training and oversight by the administering agency and/or the brokers. Some factors, such as requirements for carrying insurance, are established outside of an administering agency's jurisdiction. Additionally, using volunteer drivers to provide NEMT trips for Medicaid beneficiaries with behavioral health issues has been identified as a nationwide challenge due to increasing frequency of behavioral health incidents.

Benefits: Additional capacity for service delivery; lower cost per unit of service delivery.

³⁸ Silow-Carroll et al. 2021.

³⁹ Professional Services Contract #000000000000000000026282. Contract between Indiana Family and Social Services Administration, Office of Medicaid Policy and Planning and Southeastrans, Inc. May 2018. <<https://contracts.idoa.in.gov/idoacontractswb/PUBLIC/112380-000.pdf>>

Risks: Training/certification costs; factors beyond an administering agency’s control limit ability of volunteers to provide services.

Expand contracts with hospitals, inpatient facilities, Area Agencies on Aging, and other health and human service providers to provide transit service as contracted providers

The literature review emphasized the importance of coordination with other transportation serviced providers. Many hospitals, inpatient facilities, rehabilitation clinics, Area Agencies on Aging (AAAs), and other HHS providers often maintain their own vehicle fleet and operator pool to provide transportation services to their facilities. For example, a 2023 survey of AAAs found that 91 percent of AAAs provide transportation services.⁴⁰ However, these transportation services are often limited to a specific set of locations, timeframes, and/or customers and are not integrated into NEMT service networks. These services represent a valuable source of capacity for brokers and service providers, and their engagement in HHS service provision provides them with a high level of familiarity with CMS requirements.

Furthermore, studies of the health impacts of NEMT have shown that NEMT provision reduces expenditures on chronic conditions that require regular care.⁴¹ NEMT services enable those with chronic conditions to receive care on a reliable and regular basis and reduce the risk of chronic conditions worsening and requiring acute care. This represents a significant incentive for HHS providers to ensure transportation is reliable and efficient, and partnering with NEMT service providers will allow the healthcare facilities to access expertise in transportation service delivery. However, this incentive is balanced against the perceived risk of HHS providers entering into contracts to provide services beyond their original design. These providers may express concern over delivering services or meeting standards set by third-party administrators.

In California, hospitals in many rural counties serve as approved NEMT providers, and city fire departments and emergency medical service departments throughout the state serve this role as well.⁴²

Benefits: Additional capacity for service delivery; shared understanding of regulatory environment; cost saving incentives for HHS providers.

Risks: Additional contracting costs; risk of loss of operational control for HHS providers.

Use protected vehicles for disruptive passengers

Because NEMT is an entitlement, it is generally not allowed to deny service. This can present a challenge when transporting passengers with a history of behavioral issues, especially if traveling on a shared ride. One solution is using protected vehicles to transport these passengers. Protected vehicles include additional safety features, such as safety locks and a plastic partition between the driver and the passenger, that reduce the risk of harm to the driver. These vehicles are operated by certified drivers who understand the purpose and

⁴⁰ USAgging and Miami University Scripps Gerontology Center. *2023 Chartbook: More Older Adults, More Complex Needs: Trends and New Directions from the National Survey of Area Agencies on Aging*. 2023. <<https://www.usaging.org/Files/AAA-Survey-Report-23-508.pdf>>

⁴¹ Medical Transportation Access Coalition. “The Value of Medicaid’s Transportation Benefit: Results on a Return on Investment Study.” August 2018. <<https://mtaccoalition.org/wp-content/uploads/2018/08/NEMT-ROI-Study-Results-One-Pager.pdf>>

⁴² California Department of Health Care Services. “List of Approved Non-Emergency Medical Transportation Providers.” Accessed 9 December 2023. <https://www.dhcs.ca.gov/services/medi-cal/Documents/List-of-Approved-NonEmergency-Medical-Transportation-Providers.pdf>

use of the safety features and who understand how to transport passengers who have been historically disruptive in a safe and respectful manner. These vehicles can allow disruptive passengers who have demonstrated that they are a risk to others to receive their NEMT services in a safe manner, while also offering greater comfort and safety to the driver.

Minnesota's State statutes regulating services covered under Medicaid identify protected vehicles as a form of NEMT eligible for Medicaid reimbursement. The statute identifies this category of service as being eligible for "a client who has received a prescreening that has deemed other forms of transportation inappropriate and who requires a [protected transport] provider."⁴³

Benefits: Greater safety for drivers and passengers.

Risks: Higher vehicle costs; higher training costs for specialized drivers; introduction of more specialized vehicles limits flexibility to assign vehicles across all trip categories.

Use technology to expand capacity

The literature and peer interviews revealed a role that technology can play in expanding the number of operators providing NEMT. Massachusetts indicated the customer benefit of allowing online and mobile reservation portals to reduce wait times when requesting a trip. Minnesota indicated the opportunity they saw in developing a MaaS app that provided comprehensive access to customers for transportation services across funding sources (CMS, FTA, etc.), although acknowledged that data access and quality across modes was a challenge. CTAA also identified MaaS as way to better integrate public transportation, human service transportation, and private operators into a consolidated, coordinated transportation system.

Benefits: Improved customer experience; reduced administrative costs of coordination.

Risks: Cost of technology development and maintenance; training costs for staff and other users; challenge of maintaining data access and quality.

⁴³ 2023 Minnesota Statutes. 256B.0625: Covered Services. Subd.17.I.6.
<<https://www.revisor.mn.gov/statutes/cite/256B.0625>>

4.0 Best Practices in the Vermont Context

This section presents a consideration of how the best practices identified in the previous section apply to the Vermont context. The Federal design of Medicaid as a state-administered program has produced a wide array of models for providing and administering NEMT around the country. Vermont's braided model of service delivery for NEMT could potentially benefit from the innovation and lessons learned from other states in their service delivery approaches, and the purpose of this section is to consider whether these practices could be implemented in Vermont and, if so, how they would be applied. In order to assess the application of these best practices, this section is organized into the following sub-sections:

- A review of the observed tradeoff between transportation service cost and service quality in order to provide context for understanding available choices in the NEMT service delivery model.
- Potential impacts associated with changing the current NEMT service delivery model – namely, the consequences of unbraiding the service from public transit operators and operating it as a standalone service.
- An evaluation of different best practices in the context of Vermont's administrative and operational framework.

These findings are intended to support efforts led by VTrans, DVHA, and VPTA to identify implementable changes that will improve the performance of the system for customers, service providers, and funders.

4.1 Cost and Quality in Transit Provision

In considering how the best practices could apply in Vermont, the tradeoff between total cost of the program and service quality is critical to understanding the potential impacts – especially to the customer – of any changes. The cost of NEMT programs has steadily increased as the nation's population continues to age and Federal legislation expanded eligible groups and coverage under NEMT. Furthermore, the Affordable Care Act of 2010 included provisions to include additional compliance and reporting requirements for NEMT to reduce fraud, which increases the administrative burden. Medicaid eligibility also expanded to nearly all individuals with incomes of up to 138 percent of the federal poverty level. One study estimated the Medicaid expansion would account for 6.16 million new enrollees nationally, with 185,000 to 616,000 of the new enrollees projected to require NEMT.⁴⁴ The growing cost of NEMT has led states to examine new, innovative ways to reduce costs while still providing quality services.

4.1.1 Cost Versus Customer Service Impacts

As noted by the GAO in a 2016 report, controlling the cost of providing service is a priority for CMS because NEMT has a high risk for fraud and abuse.⁴⁵ The report goes on cite typical challenges with administering Medicaid programs, which included cost control, vendor oversight, and maintaining adequate capacity (especially in rural areas). These challenges are interrelated; the CTAA suggests a negative correlation

⁴⁴ TRCP Project No. B-44, Examining the Effects of Separate Non-Emergency Medical Transportation (NEMT) Brokerages on Transportation Coordination: Review and Summary of Relevant Literature (2014). <https://transit-mobility.tti.tamu.edu/files/2015/12/TCRP-B-44-Review-and-Summary-of-Relevant-Literature-FinalR.pdf>

⁴⁵ Government Accountability Office, [Non-Emergency Medical Transportation: Updated Medicaid Guidance Could Help States](#), 2016.

between states' efforts at cost control and the quality of service being provided.⁴⁶ In the context of growing Medicaid enrollment and other factors increasing demand and costs, many states looked to offset the growing demand by transitioning to new NEMT models, including capitated managed systems to control costs. While some states found success, other states saw unintended consequences of cost-sensitive models, including decreased customer service and lower overall usage of NEMT programs from eligible Medicaid enrollees.⁴⁷

By using a Broker or MCO, a state can offset costly administration and pass on the risk of overrun costs. The capitated payment can be set at a rate that theoretically rewards efficiency when the cost per trip is lowered (since capitated payments are structured on a per-member basis rather than a per-trip basis) and therefore do not increase as service usage increases. States such as Kansas and Louisiana have seen success in maintaining NEMT costs following the adoption of such models. Louisiana officials reported setting fixed provider reimbursement fees that have remained relatively constant in recent years.⁴⁸ Kansas attributed a 6 percent reduction in costs, compared to historical expenditures, to utilization of the broker-capitated per-member, per-month (PMPM) rate payment method.⁴⁹

By contrast, Virginia and Texas both produced reports that found customer service decreased after the State switched to Broker and MCO models. Virginia analyzed the impact of switching NEMT models in 2011 and found that while performance improved in 2013, performance declined in 2015 across three critical measures: complaints, unfulfilled trips, and late pick-ups upon hospital discharge.⁵⁰ The cost per trip also increased from \$17.78 in 2012 to \$18.94 in 2015, with the number of trips slightly decreasing by 11,518 trips from 4.12 million to 4.11 million and total spending increasing by \$4.5 million from \$73.2 million to \$77.8 million.⁵¹ In a similar report, Texas found that after moving to a Regional MCO model, the percentage of members who are dissatisfied with service coordination increased from 8 percent in 2008 to 26 percent in 2014.⁵²

In Oregon, the Tri County Area Disability Services Advisory Councils compiled a list of problems identified by consumers and consumer advocacy organizations on NEMT service, following its transition from a regionally brokered model to a "carved-in" MCO model, in which NEMT is part of a spectrum of health services offered by the MCO.⁵³ These problems included: wrong vehicles sent to pick up/return the consumer, poor safety of vehicles, no show vehicles due to showing up at the wrong address, last minute cancellation of rides by the provider, late pickups resulting in cancelled appointments, long waits before return trips, and no response to complaints.⁵⁴ For NEMT users, poor customer service like the examples listed above can mean the difference between getting to critical healthcare treatments or not. The lack of reliable access to healthcare can in turn

⁴⁶ Community Transportation Association of America, [Assembling the Elements of NEMT's Future](#), 2018.

⁴⁷ Report to the Governor and General Assembly of Virginia: Performance and Pricing of Medicaid Non-Emergency Transportation (2015). <https://jlarc.virginia.gov/pdfs/reports/Rpt477.pdf>

⁴⁸ TRCP Project No. B-44

⁴⁹ TRCP Project No. B-44

⁵⁰ Senate Document 12 (2016). Report to the Governor and General Assembly of Virginia: Performance and Pricing of Medicaid Non-Emergency Transportation (2015). <https://jlarc.virginia.gov/pdfs/reports/Rpt477.pdf>

⁵¹ Report to the Governor and General Assembly of Virginia: Performance and Pricing of Medicaid Non-Emergency Transportation (2015). <https://jlarc.virginia.gov/pdfs/reports/Rpt477.pdf>

⁵² Legislative Budget Board Staff Reports (January 2017) [Legislative Budget Board Staff Reports 2017 \(texas.gov\)](#)

⁵³ [Chapter 5 - Models for Providing Non-Emergency Medical Transportation | Handbook for Examining the Effects of Non-Emergency Medical Transportation Brokerages on Transportation Coordination | The National Academies Press](#)

⁵⁴ Non-Emergency Medical Transportation (NEMT) Best Practice Brainstorm (BPB) (August 2017) [5.1 NEMT BPB Aug 2017.pdf \(oregon.gov\)](#)

worsen health outcomes, particularly for chronic conditions that require more expensive interventions, ultimately raising healthcare costs.⁵⁵

In short, switching administrative or service models to reduce costs has a mixed history of success, and there is evidence showing that these efforts may also have degraded the customer experience.

4.1.2 Coordination

Another key consideration for applying best practices to the Vermont context is the importance of coordination. One way to save costs without undergoing a fundamental shift in how NEMT is administered is by improving coordination among service providers. As highlighted in the previous section, coordination of NEMT with public transportation and human service transportation providers is considered a best practice.

The Transit Cooperative Research Program (TCRP) Report 144 found that coordination among a variety of agencies offers an opportunity to achieve more and better outcomes for the same levels of investment.⁵⁶ Similarly, TRCP Report 101 found that coordinating transportation can lower administrative costs, avoid duplication of services, increase productivity, improve cost effectiveness, and enhance mobility in rural communities.⁵⁷ Some cost-beneficial aspects of coordination include:

- Fixed route services are considered the lowest cost NEMT (the cost billed to Medicaid for reimbursement is the transit fare), while transit providers benefit from NEMT riders on fixed route to increase productivity and cost effectiveness (cost per passenger).⁵⁸ North Carolina coordinated NEMT with rural public transit and saw an estimated increase of 5 percent in productivity across community transportation systems.⁵⁹
- Investments in information technology infrastructure can strengthen existing program efficiency and oversight.⁶⁰ Coordination of technology across multiple agencies allows for the sharing of costs, administrative burden, and lowers the risk of fraud through improved data collection systems.
- The development of an allocated cost model for NEMT can result in improved coordination across multiple Federal programs that provide funding to access HST.⁶¹

Conversely, the lack of service coordination can lead to duplication and overlapping services, service gaps, and negative impacts on cost-effectiveness. One study found that when NEMT is scheduled separately from other demand-response programs, the segmented service results in an increased number of vehicles,

⁵⁵ See Medical Transportation Access Coalition, *Non-Emergency Medical Transportation: Findings from a Return on Investment Study* (2018). <<https://mtaccoalition.org/wp-content/uploads/2018/07/NEMT-ROI-Methodology-Paper.pdf>>

⁵⁶ TCRP Report 144, *Sharing the Cost of Human Services Transportation* (2011). <https://nap.nationalacademies.org/read/14490/chapter/1>

⁵⁷ TCRP Report 101, *Toolkit for Rural Community Coordinated Transportation Services* (2004).

⁵⁸ TCRP Report 202, *Handbook for Examining the Effects of Non-Emergency Medical Transportation Brokerages on Transportation Coordination* (2018). <https://nap.nationalacademies.org/read/25184/chapter/9#74>

⁵⁹ TRCP Report 202.

⁶⁰ *Cost Allocation Technology for Non-Emergency Medical Transportation Final Report* (June 2020).

⁶¹ *Cost Allocation Technology for Non-Emergency Medical Transportation Final Report* (June 2020).

operating expenses, maintenance, fuel, and labor to serve the same number of trips in a community.⁶² A disconnect in coordination can also negatively impact overall user experience if general transportation information across modes is not readily available and easily understood.

Coordination among various transportation programs is facilitated by councils or boards that guide policy for and review performance of transit operators. **Table 4.1** presents the current membership of such councils in Vermont and two peer states: Minnesota and Kentucky. Vermont's Public Transit Advisory Council already has broad representation from diverse constituencies, but it could consider expanding to include additional state agencies and service provider associations, enhancing the potential for service coordination.

Table 4.1 Coordinating Transportation Advisory Bodies for Vermont and Peer States

Agencies / Entity Committee	Vermont Public Transit Advisory Council	Minnesota Minnesota Council on Transportation Access	Kentucky Coordinated Transportation Advisory Committee
Transportation	VTrans	MnDOT	Transportation Cabinet
Health and Human Services	Human Services Secretary	Human Services; MN Department of Health	Health and Family Services
Disability / Independent Living	Vermont Center for Independent Living	Council on Disability	
Department of Education		Department of Education	Education and Workforce
Office of the Governor		Office of the Governor	
Veteran's Affairs		Veteran's Affairs	
Elderly / Older Residents	Council of Vermont Elders	Board on Aging	
Metropolitan Planning Organization	Vermont Association of Planning and Development Agencies	Metropolitan Council	
Local Transit Agency	Green Mountain Transit (formerly Chittenden County Transportation Authority)	Metropolitan Council	
Commerce	Commerce and Community Development	Department of Commerce	
State Transit Association	Vermont Public Transportation Association	Minnesota Public Transit Association	
Economic Development	Department of Labor	Employment and Economic Development	Education and Workforce
Executive Finance/Budget Office		Management and Budget	

⁶² TRCP Project No. B-44, Examining the Effects of Separate Non-Emergency Medical Transportation (NEMT) Brokerages on Transportation Coordination: Review and Summary of Relevant Literature (2014). <https://transit-mobility.tti.tamu.edu/files/2015/12/TRCP-B-44-Review-and-Summary-of-Relevant-Literature-FinalR.pdf>

Agencies / Entity	Vermont	Minnesota	Kentucky
Committee	Public Transit Advisory Council	Minnesota Council on Transportation Access	Coordinated Transportation Advisory Committee
Private Operators	Private Bus and Taxi Operators; Intercity Bus Operators		
Municipal	Vermont League of Cities and Towns		
Citizen / Public	Governor-Appointed Citizen		
Elected	One State Senator, One State Representative		

4.1.3 Implications for the Vermont Context

The national research conducted during this study has emphasized three important principles relevant to the Vermont context when considering what changes to make or best practices to implement in terms of cost and coordination – two themes that continually emerged during the development of this report:

- Rural Transportation tends to be more expensive:** All research and peer experience suggests that rural transportation is especially expensive to operate given the longer travel distance and lack of operators, both of which increase costs. Vermont’s use of volunteer drivers and leveraging existing public transportation resources in these rural areas are effective best practices.
- Financial incentives and contract oversight matter:** States seeking to control costs by changing (e.g., privatizing) the NEMT model have had mixed results. Regardless of the operator, it is critical that the State take an active role in overseeing the delivery of service to ensure quality and compliance. The close coordination of VPTA and DVHA identified in Section 2 indicates oversight is largely aligned between the public transit and NEMT programs.
- Coordination with public transportation is important:** Especially in contexts like Vermont with few providers of transportation service, coordination of public transportation with NEMT is critical to maintaining adequate transportation capacity and reducing costs. Vermont’s operating approach of using a braided service model is in alignment with that best practice, and also reflects the anecdotal evidence that public transportation operators provide a higher quality service to customers.

Vermont’s current model seeks to provide the needed transportation service at the lowest possible cost while still maintaining high service standards and ensuring the financial stability of the transit providers, which, of course, plays a crucial role in mobility for Vermonters generally, beyond those enrolled in Medicaid. The significant efforts put into cost allocation models over the past five years⁶³ have all but eliminated the potential for cost shifting, with the result being each transportation program—FTA Section 5311, Congestion Mitigation and Air Quality (CMAQ) program funding, O&D, human service contracts, and Medicaid—pays its fair share

⁶³ In FY 2022, VTrans embarked on a statewide assessment of the Cost Allocation Plans (CAPs) for each VPTA member. This was conducted in an effort to align allocations and ensure these basis and general approaches for these plans allow for continuity for the program management the invoicing processes. With these updated CAP now established, these will be reviewed and adjusted as necessary and/or reviewed in full during the 3-year “Rural Public Transit Management Capability, Financial Capacity and Compliance Review”.

of the overall expense. With neither the transit providers nor VPTA seeking to earn a profit from the program, as a national brokerage firm does, the current model allows for the best service at the lowest cost.

These findings suggest that Vermont is managing its NEMT service in alignment with the findings of this research into cost versus service quality. While other states may have found cost savings from focusing solely on cost (contracting with for-profit brokers who in turn contract with private NEMT operators), the results are mixed and, at least anecdotally, the impact on service quality seems to have been detrimental.

4.2 Assessing Impacts of NEMT Separation for Vermont Transit Agencies

Research described above suggests that coordination is a benefit to NEMT and public transit providers, and unbraiding funding and services (that is, having separate operators for NEMT and public transportation) would likely have severe and negative impacts on transit funding and operations. Elimination of NEMT ridership revenue for public transit providers would substantially reduce funding and service provided by the transit agencies. This reduction subsequently translates into fewer transportation services for seniors and persons with disabilities, thus reducing the overall amount of transportation in the community.⁶⁴ In a case study on the co-dependency between NEMT and public transportation, researchers found that it would be financially untenable for a local community transportation agency in Iowa to have its vehicles serve routes without NEMT riders, as Medicaid generates 34 percent of its ridership and accounts for 36 percent of its revenue.⁶⁵

This reduction in service can be self-reinforcing; the loss in revenue can in turn force a cut in services, negatively impacting transit mobility in the region. Without transportation options, especially in rural areas, communities must rely increasingly on private operators (such as taxicabs) for NEMT, which can negatively impact cost and quality of the service. Furthermore, private transportation options in rural areas are sparse at best. Given this risk, the potential financial impacts to Vermont service providers resulting from a separation of NEMT service from general transit are considered in this section.

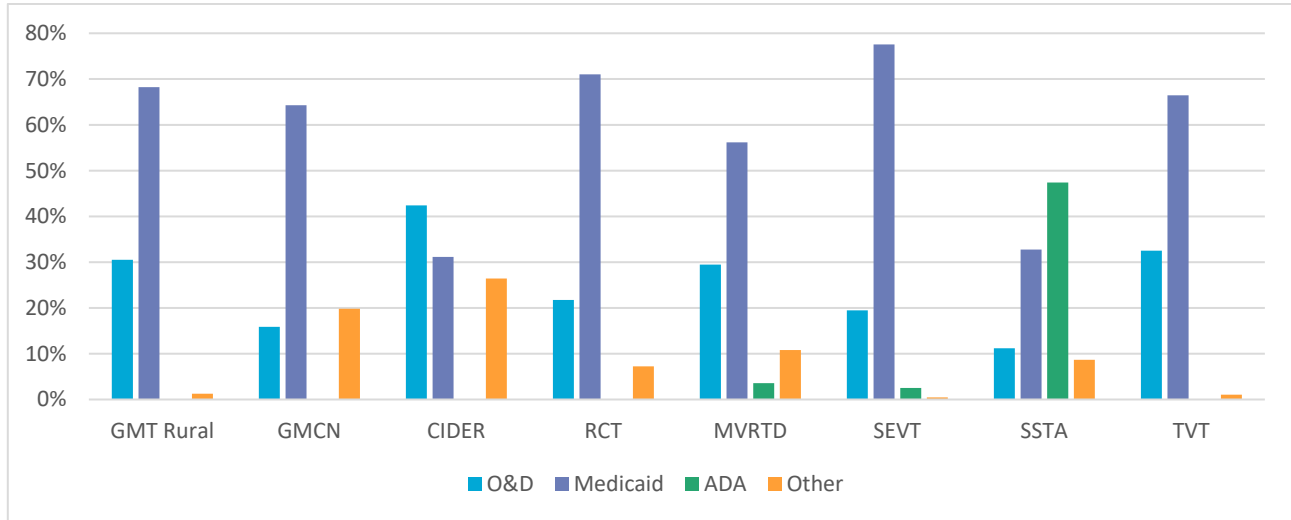
4.2.1 Demand-Response Service Impacts

NEMT trips are a critical component of demand-response service provision among Vermont's transit agencies. In FY23, Medicaid-funded trips represented 60.5 percent of total demand-response trips across the eight transit providers, or more than 310,000 trips. For half of the transit providers, Medicaid trips exceed two-thirds of total ridership. **Figure 4.1** on the next page shows the share of demand-response ridership by program area for each of these transit providers.

⁶⁴ Sundeen, Matt, Reed, James, B., Savage, Melissa, *Coordinated Human Services Transportation: State Legislative Approaches*, (January 2005).

⁶⁵ The Hidden Risk of Cutting Medicaid NEMT: An Examination of Transportation Service Interdependency at the Community Level (https://ctaa.org/wp-content/uploads/2021/02/NEMT-White-Paper_MTAC_CTAA.pdf)

Figure 4.1 Demand-Response Ridership Share by Program Area, FY23



Source: Vermont Agency of Transportation, 2023.

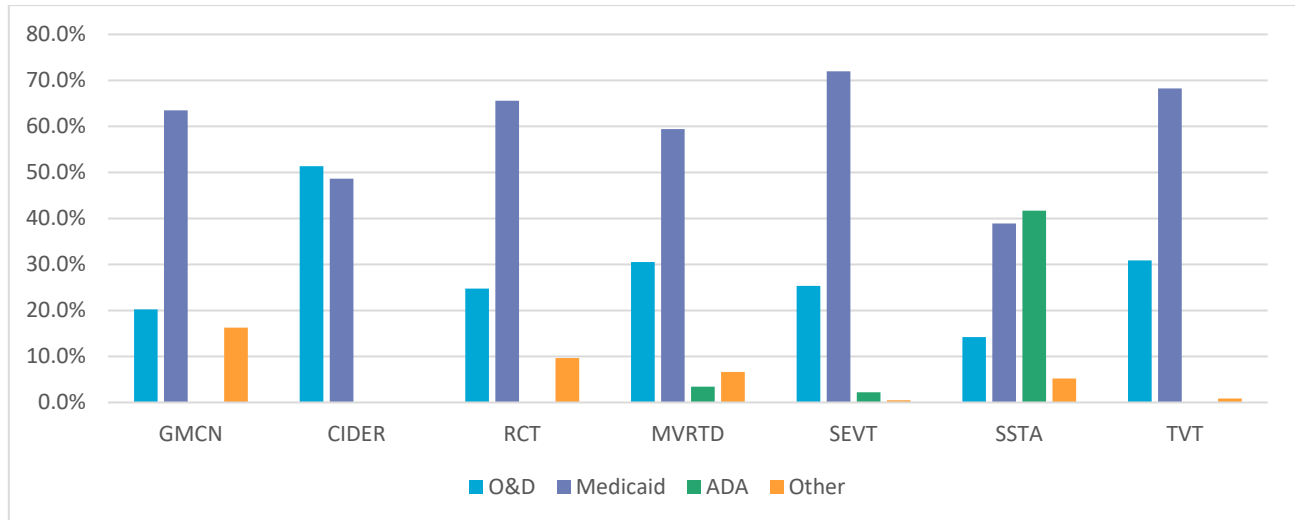
If NEMT were to be separated from Vermont transit providers and transitioned to a different operating model, this would cause a significant erosion in the Vermont transit ridership base. In the event of a new NEMT service model being established, riders would likely need to transition to a new service provider, such as a for-profit broker or private human service transportation operator. The capital investments that VTrans has made into software solutions for trip scheduling and other customer-facing solutions would largely be lost if NEMT were to be separated. The new vendor would either lose the efficiencies that transit providers currently have because of these investments, or they would have to enact these investments, creating redundancy in the new service model (although the software solutions would still create value for remaining demand-response programs that the Vermont transit operators would continue to operate).

The complexity associated with shifting to another service provider exclusively serving NEMT trips could lead to additional ridership loss for Vermont transit agencies. An advantage of the braided service model is that the customer has a seamless experience with accessing transit; they do not have to determine which services can be used for specific purposes. Requiring the customer – instead of a trained reservationist – to navigate the different programs and determine their eligibility for different services increases the complexity of using the system, which may be a barrier resulting in overall lower ridership.

The ridership loss would be accompanied by a substantial reduction in service provided; 61.7 percent of total demand-response vehicle revenue hours (VRH) across the transit agencies were used to provide Medicaid service. As with ridership, this share is greater 60 percent for half of the providers.

Figure 4.2 shows the share of demand-response VRH by program area for each of the transit providers.⁶⁶

Figure 4.2 Demand-Response Vehicle Revenue Hours Share by Program Area, FY23



Source: Vermont Agency of Transportation, 2023

This decrease in VRH would likely result in multiple vehicles being taken out of service and multiple drivers being laid off by each transit provider, as there would not be sufficient demand for service to justify operating the existing fleet and keeping as many drivers on payroll. Even though a smaller number of vehicles would be servicing a smaller ridership base, the reduction in service capacity would impact service quality on a broader scale for all users. It is likely that agencies would have to adjust their service standards to a lower level of performance, such as longer expected wait times for pick-up or reduced hours of service.

The reduction in service efficiency is the result of fewer vehicles and drivers in each fleet having to cover the same service area. A rural environment, with its long trip distances, is difficult for transit vehicles to serve effectively; the elimination of Medicaid transportation service means a reduction in the number of destinations that can be linked together to improve service productivity and therefore service efficiency. This shift would negatively impact operational performance for the transit agencies and pose the risk of additional ridership loss. The lower level of service would make transit less attractive for all users, likely leading to further declines in ridership.

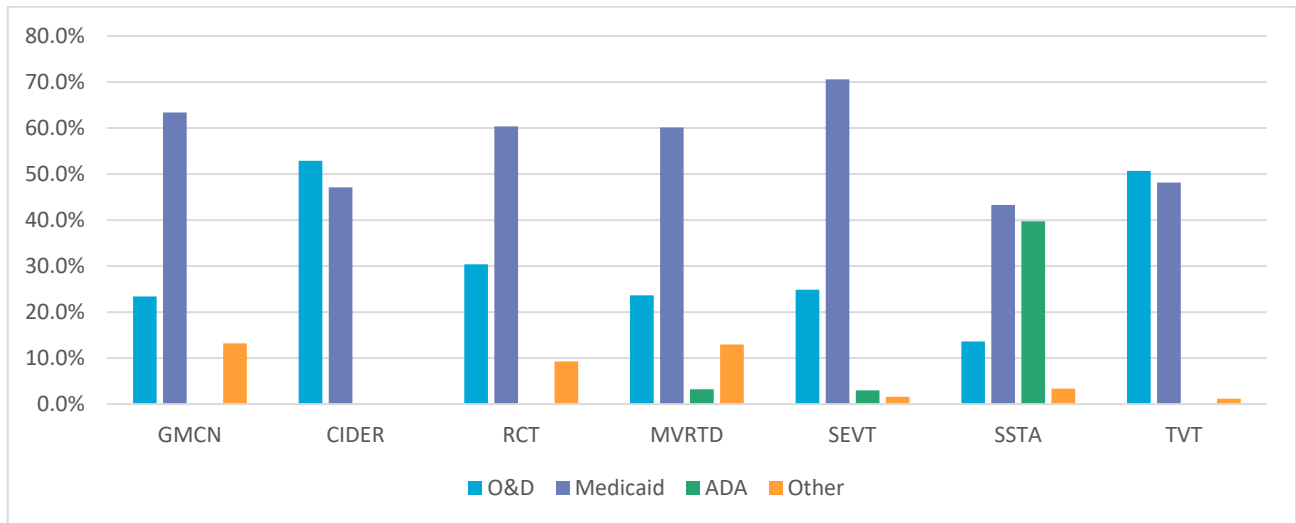
4.2.2 Financial Impacts for Transit Agencies

The reduction in service discussed in **Section 4.2.1** also has a direct impact on funding. In addition to representing a majority of demand-response ridership across transit agencies, NEMT service also represents a majority of operating budget, with 56.3 percent of total demand-response operating costs across all transit providers attributable to Medicaid service in FY23.

⁶⁶ GMT-Rural data on demand-response VHR by program area was not available for FY23.

Figure 4.3 shows the share of demand-response operating costs by program area for each of these transit providers.⁶⁷

Figure 4.3 Demand-Response Operating Costs by Program Area, FY23



Source: Vermont Agency of Transportation, 2023.

It is important to note that Medicaid’s share of demand-response ridership across providers (61.7 percent) is more than five percentage points higher than its share of demand-response operating costs (56.3 percent). This difference is likely due to a higher proportion of NEMT trips being operated by volunteer drivers compared to other programs.

Both the NEMT program and the transit providers benefit financially from the current braided service model. The agency vans that are used to carry a large share of NEMT riders are paid for by Federal transportation grants matched by state and local dollars. While the NEMT program helps pay for the cost of maintenance of these vehicles through cost allocation, it does not pay any part of the initial capital cost. Similarly, VTrans’ major investments in paratransit scheduling software have great benefits for NEMT, while Medicaid pays none of that cost. Conversely, a significant share of the transit providers’ administrative overhead is paid for by Vermont’s Medicaid program. Through cost allocation, NEMT helps to pay for administrative personnel and other overhead costs associated with running a transit agency. If NEMT were to be removed from transit providers’ portfolios, the overhead costs for all other programs would increase substantially. With higher overhead rates, less actual service could be provided to older adults and people with disabilities, as well as to the general public because more of the available funds would be consumed by overhead.

Table 4.2 through **Table 4.9** present an overview of the potential operational and financial impacts on agency budgets and operations associated with the separation of Medicaid NEMT from Vermont transit providers’ service portfolios. The tables present changes in operating revenue, VRH, and ridership for each transit provider’s fixed-route and demand-response services. Additionally, input from several transit operators provides additional context on the financial and operational impacts of unbraiding the service.

⁶⁷ GMT-Rural data on operating costs by program area was not available for FY23.

Table 4.2 C.I.D.E.R. Potential Impact for NEMT Separation

Champlain Islanders Developing Essential Resources	With NEMT	Without NEMT	% Difference
Revenue Expended on Operations	\$303,294	\$160,369	-47.1%
Vehicle Revenue Hours	4,853	2,492	-48.7%
Ridership (Trips)	4,827	2,783	-42.3%

Note: C.I.D.E.R. also carries riders who pay directly for the service and performs numerous other social service functions in Grand Isle County. The figures in the table represent only the portion of C.I.D.E.R.'s operations related to its contract with GMT.

Since C.I.D.E.R. operates as a subcontractor to GMT, the additional input provided by GMT is applicable to C.I.D.E.R.

Table 4.3 GMCN Potential Impact for NEMT Separation

Green Mountain Community Network	With NEMT	Without NEMT	% Difference
Revenue Expended on Operations	\$2,203,195	\$1,374,480	-37.6%
Vehicle Revenue Hours	33,135	21,143	-36.2%
Ridership (Trips)	144,403	116,649	-19.2%

Additional input from GMCN indicated that there could be significant impacts to one of the smaller agencies in Vermont. The agency would likely reduce its fleet by five vehicles, and reduce its staffing by seven positions (two administrative staff and five drivers). They noted that the cost of operating NEMT is a crucial service and worth investing in, despite the rising costs of providing it.

Table 4.4 GMT-Rural Potential Impact for NEMT Separation

Green Mountain Transit - Rural	With NEMT	Without NEMT	% Difference
Revenue Expended on Operations	\$6,924,351	\$4,912,169	-29.1%
Vehicle Revenue Hours	61,857	39,271	-36.5%
Ridership (Trips)	345,401	317,135	-8.2%

Additional input from GMT indicates that overall transit operations would have weaker economies of scale if NEMT service were to become unbraided since similar fixed costs would be distributed across fewer programs, leading to a 12 percent increase in operating costs per revenue hour. GMT also flagged the risk of greater administrative costs associated with having to coordinate trips for customers with a third-party NEMT provider, although this may be offset by administrative staff having fewer responsibilities if they do not have to administer NEMT directly.

The decrease in ridership from the removal of NEMT would also lead to a reduction in the rural fleet size by seven vehicles, accompanied by a reduction of seven full-time drivers. While GMT expects this reduction could be managed through attrition rather than layoffs, it would likely lead to an increase in split-shifts, in which an operator works multiple segments with an unpaid break in between them. These split-shifts have been seen as a significant barrier to recruitment and retention, which may hinder overall transit service performance.

Table 4.5 MVRTD Potential Impact for NEMT Separation

Marble Valley Regional Transit District	With NEMT	Without NEMT	% Difference
Revenue Expended on Operations	\$6,105,239	\$4,732,997	-22.5%
Vehicle Revenue Hours	83,768	58,213	-30.5%
Ridership (Trips)	585,410	554,561	-5.3%

Additional input from MVRTD indicates that unbraiding NEMT service would reduce the vehicle fleet by seven vehicles and would reduce staff counts by 10 (seven drivers and three office staff), representing a significant decrease in administrative capacity. The 5.3 percent reduction in ridership compared to a 30.5 percent reduction in vehicle revenue hours indicates a loss in service capacity that would likely produce worse customer experiences for remaining riders, including longer waits for trip pick-ups.

This reduction would represent a loss of a program that has been effectively run for several years. Between FY19 and FY23, MVRTD operated its NEMT program at a net surplus in four of the five years, despite operating costs per vehicle revenue hour increasing by 2.7 percent per year (when adjusted for inflation). This record suggests effective program cost management that would be difficult for a new operator to replicate.

Table 4.6 RCT Potential Impact for NEMT Separation

Rural Community Transportation	With NEMT	Without NEMT	% Difference
Revenue Expended on Operations	\$5,658,265	\$2,991,999	-47.1%
Vehicle Revenue Hours	91,415	43,818	-52.1%
Ridership (Trips)	165,554	94,227	-43.1%

Additional input from RCT indicates that ridership losses of 45 percent and revenue losses of nearly 50 percent would cause a significant negative impact on system usability for customers. RCT estimates that the loss of NEMT would reduce its staff by 50 percent to 60 percent and its fleet by 25 percent (since volunteer drivers who operate their own vehicle are used to provide the majority of Medicaid rides). RCT is able to maintain transit operations through ridesharing under the braided service model. If service were unbraided and NEMT were to be provided by another provider, RCT estimates that total trips and vehicle fleets would double due to the need to run a separate service in parallel with the existing transit service.

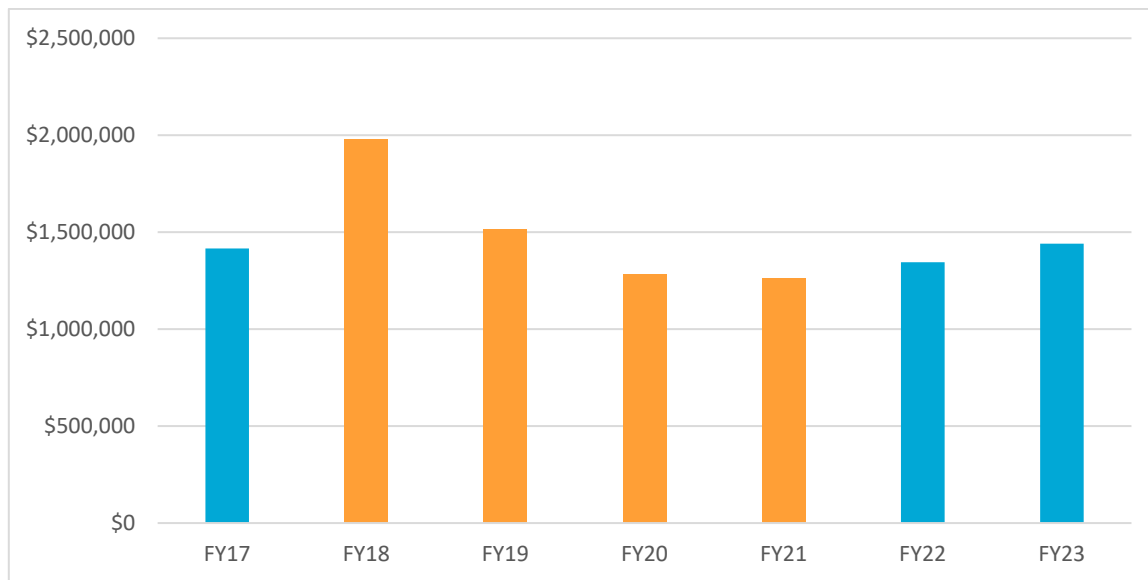
However, the administrative and overhead costs associated with the separate service would lead to less efficient service for both RCT and the third-party provider. This redundancy would create significant financial pressure for a third-party provider to maximize Medicaid transportation enrollment (to maximize revenue) while minimizing trips provided (to minimize costs), leading to a deterioration in NEMT service quality and customer experience.

Table 4.7 SEVT Potential Impact for NEMT Separation

Southeast Vermont Transit	With NEMT	Without NEMT	% Difference
Revenue Expended on Operations	\$7,970,559	\$5,367,249	-32.7%
Vehicle Revenue Hours	122,605	63,107	-48.5%
Ridership (Trips)	500,728	420,696	-16.0%

Additional input from SEVT provides insight into what happens when NEMT is unbraided. SEVT left the State Medicaid NEMT program in January 2018 (midway through FY18), with GMCN and MVRTD taking over SEVT's Medicaid operations. While SEVT ultimately rejoined the NEMT program in FY21 following a change in the revenue sharing plan and additional financial support from VTrans, its experience is illustrative of the concerns raised by other transit providers. As a result of unbraiding its NEMT service, SEVT experienced a minor decrease in administrative costs that were not sufficiently large enough to offset the loss in Medicaid revenue. Existing fixed costs remained relatively unchanged as well, but the transit provider now had fewer programs to support the service. **Figure 4.4** demonstrates how fixed costs declined initially for SEVT after leaving the program, but then stabilized and have remained relatively stable after SEVT resumed NEMT service.

Figure 4.4 SEVT Indirect Costs With (Blue) and Without (Orange) NEMT Service



Source: Southeast Vermont Transit, 2023.

During SEVT's departure, the transit provider laid off seven staff – three dispatchers and four drivers – most of whom were hired by GMCN and MVRTD to provide additional capacity to absorb Medicaid ridership in the SEVT service area. GMCN and MVRTD experienced significant challenges in covering the SEVT service area despite the additional capacity, including a significant increase in “deadhead” hours and miles in which the transit operators had to travel to the SEVT service area without any passengers on-board in order to pick up passengers in the SEVT service area. These deadhead hours incurred costs for the operators without recouping revenue, yielding inefficient trips that impacted their financial status.

With lower ridership, SEVT found that its services were less efficient. In the absence of braided service, SEVT duplicated miles and routes for non-NEMT trips while the NEMT trips were provided by the other transit providers. Invoicing and reporting tasks were also duplicated, representing additional inefficiencies for all the transit providers. Customers who were eligible for multiple programs had to book rides with two different agencies. For social service agencies that arrange trips for their clients, this process became more difficult and confusing as they determined which customers were eligible for what types of service in a given service area. Since returning to NEMT service, SEVT has experienced more efficient service even as ridership and operating costs have increased.

Table 4.8 SSTA Potential Impact for NEMT Separation

Special Service Transportation Agency	With NEMT	Without NEMT	% Difference
Revenue Expended on Operations	\$4,728,713	\$2,680,965	-43.3%
Vehicle Revenue Hours	58,578	35,782	-38.9%
Ridership (Trips)	115,236	77,500	-32.7%

Additional input from SSTA indicates that the unbraiding of NEMT services would reduce the vehicle fleet by 29 percent and the driver workforce by at least 15 percent, with accompanying eliminations in administrative and operations positions. The loss in ridership and revenue would decrease service efficiency and raise costs for all other programs, since fixed costs and administrative costs would be distributed across a smaller number of programs supported by a smaller revenue pool. For example, facility space for maintenance and operations could not be reduced just because there is a smaller number of vehicles occupying the space.

SSTA emphasizes that the unbraiding of services would have a significant impact on customer experience as well, since the braided model enables SSTA to handle customer assistance for all demand-response transportation programs via a consolidated call center. The centralized model of the call center enables customers to understand their eligibility and options in a single source, similar to a Mobility Management model. If NEMT were unbraided from the other programs, customers would have to contact multiple sources for information on their trip planning and ride scheduling. SSTA expects that complicating the process for trip scheduling would lead customers to reduce their travel under other programs beyond NEMT, leading to ridership reductions in other demand-response programs.

Table 4.9 TVT Potential Impact for NEMT Separation

Tri-Valley Transit	With NEMT	Without NEMT	% Difference
Revenue Expended on Operations	\$6,531,046	\$5,092,613	-22.0%
Vehicle Revenue Hours	83,790	50,133	-40.2%
Ridership	173,945	139,557	-19.8%

Additional input from TVT indicates that when they calculate the program cost savings from NEMT unbraiding weighed against the Medicaid revenue loss, they estimate a deficit of more than \$630,000. While some savings would be generated through staff reductions of up to three positions and fleet reductions of one vehicle, TVT finds that the majority of administrative and overhead costs are fixed, and as such, would be distributed across a smaller number of programs and supported by a smaller revenue pool, yielding a net deficit. For example, the agency would not be able to reduce facility space for maintenance and operations just because fewer vehicles occupy the space.

TVT expects that these program cuts would have additional impacts on service quality. Namely, ride coordination would be difficult to maintain since rides are shared across multiple programs, and segmentation between providers would hinder this ridesharing. Customers would have to interface with multiple providers and trips would be more difficult to link together, leading to less efficient service for customers. TVT also anticipates that the staff reduction would negatively impact their planned microtransit service, which will rely on their current staffing levels in trip scheduling and dispatching in order to function effectively.

The findings of this analysis and the input from the providers indicate that all stakeholders in the NEMT program would be worse off without the braided service model:

- The riders would face inferior service quality as the impetus to cut costs would take precedence over good service.
- Transit vehicles would carry fewer passengers as the opportunities for coordination would be greatly reduced, resulting in lower efficiency and a higher cost per passenger.
- Capital investments made by VTTrans into customer-facing improvements, such as software solutions for trip requests and trip booking, would be lost and would need to be replicated by the new provider if they did not already have them in place, incurring higher costs for the program and potentially creating redundant systems.
- The providers would need to reduce their staff and scope of operations, and the amount of service on their remaining programs would likely go down as overhead charges rose.

The end result would be a diminished public transit program in Vermont and reduced mobility for NEMT riders and other passengers.

4.3 Best Practices Assessment

The peer interviews and a desk review summarized in previous sections confirmed several aspects of the Vermont braided service model in alignment with national best practices. However, there were several elements identified for further consideration of how they might be applied within the Vermont context. On the next page in **Table 4.10**, these best practices are laid out and provide considerations relevant to the Vermont service model. Some potential next steps are also considered. Where appropriate, points of ownership for these next steps are identified.

In general, these best practices should be explored more fully by VPTA, VTTrans, and DVHA, in consultation with the transit agencies operating the service and, potentially, augmented by more general feedback from drivers and/or riders. Cost will be a major factor for several of the potential changes, especially related to technology improvements.

Table 4.10 Best Practice Assessment Summary Table

NEMT Component	Best Practice	Applicability	Key Considerations	Key Steps for Implementation
Program Structure and Coordination	Establish multi-agency transportation council for technical assistance and coordination	Vermont PTAC provides a strong multi-agency foundation – additional potential agencies to include are: <ul style="list-style-type: none"> • Vermont Office of Veteran’s Affairs • Agency of Education • Representative of the Office of the Governor or Department of Finance and Management • Vermont Association of Hospitals and Health Systems 	<ul style="list-style-type: none"> • Availability of representatives • Size and scope of PTAC • Relevance of agency work to coordination / braiding of service 	<ul style="list-style-type: none"> • VTrans can initiate discussions within PTAC on the appropriateness of expanding the Council, and then reach out to representatives of the level of interest in joining. • Legislative action to amend Title 24, Chapter 126, Section 5084 of the Vermont Statutes may be required.
	Incorporate Mobility Management framework into administrative structure	VPTA has received grant funding to hire a Mobility Manager. Additionally, VTrans dedicates Federal Section 5310 funding to mobility management in the Burlington area.	<ul style="list-style-type: none"> • Long-term financial sustainability of a statewide position should be considered. Performance tracking to assess the success and value of Mobility Management will support future funding. • Statewide mobility management should complement – not duplicate – services in Burlington. 	<ul style="list-style-type: none"> • VPTA should develop policies and procedures for the Mobility Manager position • VPTA should develop policies and procedures for VPTA members to engage with Mobility Manager • VPTA should develop and implement a performance monitoring framework for grant funding and Mobility Management practices.
Reimbursement and Cost Management	Adjust reimbursement rate regularly	Vermont could update per-member-per-week rate more frequently (e.g., quarterly), though assessment of costs will require more frequent cost tracking on the part of operators.	<ul style="list-style-type: none"> • This will more accurately reflect the costs of providing service, though could result in overall cost increase for DVHA. • It could increase the administrative burden on operators and VPTA. 	<ul style="list-style-type: none"> • VPTA and VTrans should facilitate discussions between themselves, DVHA, and operators to assess feasibility of implementing more frequent rate adjustments and basing the PMPW rate on the overall number of Medicaid members rather than just those eligible for NEMT.
	Establish risk corridors for budget surplus / loss sharing	CMS provides considerable flexibility in providing NEMT, with no prohibition on establishing risk corridors in contractual arrangements for NEMT. DVHA could implement risk corridors in contracts to share in budget surpluses and deficits for NEMT.	<ul style="list-style-type: none"> • This approach would shift a portion of risks and benefits from VPTA to DVHA. 	<ul style="list-style-type: none"> • VPTA, DVHA, and VTrans can review cost data from past five years to assess what the impact of risk corridors would have been, had they been in place. This will provide insight on implications for incorporating risk corridors into future contracts.

NEMT Component	Best Practice	Applicability	Key Considerations	Key Steps for Implementation
Service Capacity	Expand volunteer driver and community partnership programs	<ul style="list-style-type: none"> NEMT depends on volunteer drivers, especially in rural areas. However, the number of volunteer drivers has declined, especially since the COVID pandemic. There is a pilot program called “Gopher” by Community Rides Vermont in the Barre area that fills gaps in GMT service. A scan of senior centers and human service agencies in Vermont indicates that community organizations offer limited-to-no transportation service. 	<ul style="list-style-type: none"> Identifying key concerns from volunteers to address them may help recruitment – disruptive passengers and exposure to COVID have been identified. Consider building on/replicating the Gopher service should it prove to be a viable model. However, preliminary cost analysis shows the cost per trip to be equal to or greater than the cost of service provided by transit operators. Vehicles that do not require a Commercial Driver’s License (CDL) to operate (e.g., sedans) are more cost effective to operate, as the drivers do not command a wage premium compared to CDL drivers. 	<ul style="list-style-type: none"> Consider hosting a round-table discussion, survey, or other forum with past and present volunteer drivers to identify potential measures to expand the program. Continue monitoring for other HHS providers to establish non-transit human service transportation programs to include in coordinated NEMT. Identify and evaluate resources to assist community partners with procuring and operating transportation services that are coordinated with broader NEMT service. Monitor the results of the Gopher pilot to inform considerations on expansion and/or replication of the program. Consider investment in non-CDL vehicles to allow for lower-cost transportation service.
	Expand contracts with hospitals, inpatient facilities, Area Agencies on Aging, and other health and human service providers	Similar to the recommendation around partnerships with community-based organizations, a scan of hospitals, senior centers, and other potential providers of demand-response transportation did not reveal Vermont-based resources that could be incorporated into NEMT service.	<ul style="list-style-type: none"> Should human service transportation or other demand-response resources be identified, VTrans, VPTA, and/or DVHA could reach out to identify if they would be willing to provide service under the statewide brokerage. 	<ul style="list-style-type: none"> Continue monitoring for additional transportation resources from HHS providers. Maintain regular communication with HHS providers to stay aware of their understanding of challenges and opportunities related to transportation provision Monitor State and Federal funding opportunities to leverage with HHS providers, including matching grant sources.

NEMT Component	Best Practice	Applicability	Key Considerations	Key Steps for Implementation
	<p>Use protected vehicle fleet for disruptive passengers</p>	<p>Vermont operators reported the challenge of meeting the transportation requirement for NEMT when transporting disruptive customers, especially in volunteers' cars.</p> <ul style="list-style-type: none"> Colorado established a Behavioral Health Secure Transportation service in 2023 as part of its Medicaid-funded transportation services. While these services are for unscheduled urgent trips in response to behavioral health crises, the program demonstrates how protected vehicles can be integrated into Medicaid transportation portfolios. Operators could use protected vehicles with features similar to taxi cabs or police cruisers (partition between front and back seats, video recorder, safety locks) to transport customers with a history of disruptive behavior. 	<ul style="list-style-type: none"> This could expand the cost of service, as a specialized fleet of vehicles would need to be made available. CMS 2023 Medicaid Coverage Guide provides guidance on using law enforcement as a provider, and in general does not allow for reimbursement of police transportation costs if the person is being transported involuntarily because this would violate the principle of an individual's free choice of provider. 	<ul style="list-style-type: none"> VTrans, VPTA, and DVHA should continue conversations with operators to identify the feasibility of and need for protected vehicles. VTrans, VPTA, and DVHA should study the impacts of the behavior policy established in December 2023 that outlines a criminal behavior policy to address behavior that is dangerous or threatening to VPTA, DVHA, transit provider employees, and/or the public Safety is the top priority for operation of NEMT, and if unsafe passenger behavior is jeopardizing any drivers, implementation of these specialized vehicles may be a necessary – though costly – step.
	<p>Use technology to expand capacity and trip coordination</p>	<p>Review of best practices revealed the role that technology can play in expanding capacity.</p> <ul style="list-style-type: none"> Minnesota is developing a Mobility-as-a-Service (MaaS) application that would allow people to book rides across programs and providers. Massachusetts allows for online booking that has significantly shortened reservation wait times. Recent CMS guidance explicitly allows for incorporation of Transportation Network Companies (TNCs) as service providers, and Massachusetts is running a pilot that includes them. 	<ul style="list-style-type: none"> The cost of building a mobile application for booking and/or coordination across programs may be substantial. The new paratransit scheduling software will have online booking capabilities, but not mobile booking. Previous inquiries by VPTA into contracting with TNCs as operators has cast serious doubt as to whether it is a viable option given lack of transparency and control regarding driver training and screening. The availability of TNC services is subject to change since TNC drivers can choose when, where, and how often they want to drive. If the supply of TNC drivers is unreliable, it will be difficult for Vermont to ensure capacity. 	<ul style="list-style-type: none"> VPTA, VTrans, and DVHA should continue internal deliberations and discussions with service operators about how technology may be used to expand coordination and enhance capacity, as well as improving the customer experience. Continue monitoring requirements and guidance for opportunities to incorporate TNC service that is compliant with regulations and provides for sufficient continuing control of the funding agencies. Explore options to conduct a subsequent planning study focusing on technology, which may reveal additional opportunities and barriers, as well as assess a realistic cost for building and implementing a MaaS application.

5.0 Recommendations

Based on the findings of this Study, it is recommended that the State of Vermont maintain the braided service delivery model for NEMT. The existing model is aligned with several national best practices for NEMT service delivery, and transit providers across the state provide NEMT in a cost-effective manner. Furthermore, the potential impacts of unbraiding funding and services on transit operator revenues, service, and ridership suggest that this unbraiding would pose a significant risk to the service quality currently provided to Vermont residents and the financial sustainability of Vermont's transit operators.

While the existing model is effective, this Study has identified a set of recommendations to pursue further improvements in NEMT service delivery throughout the State. These recommendations are presented below.

1. Consider expanding PTAC to include additional agencies

VTrans should consider expanding PTAC to include additional agencies, including:

- Vermont Office of Veteran's Affairs
- Vermont Department of Corrections
- Vermont Department of Disabilities, Aging and Independent Living
- Vermont Agency of Education
- The Reach Up social assistance program of the Vermont Agency of Human Services Department for Children and Families
- Other HHS providers, including Area Agencies on Aging and the Vermont Association of Hospitals and Health Systems.

The purpose of this expansion is to strengthen PTAC members' awareness of resources, issues, priorities, and other factors that concern the delivery of NEMT and other transportation services in Vermont.

Participation in PTAC related to NEMT can be structured based on the expertise of different members and their familiarity with Medicaid regulations. For example, some agencies can be brought on as members of the Council while others can be invited to participate in standing forums.

Benefits: Improved capacity for coordination across social service providers; improved capacity to seek innovative funding opportunities.

Risks: Increased complexity for scheduling meetings and other coordination activities, achieving consensus on policy.

2. Expand and maintain Mobility Management program

VPTA should institutionalize and maintain the position of Mobility Manager within the organization to support long-term engagement under a consistent process, pending positive performance against established program goals. This effort should include the development of policies and procedures for the Mobility Manager position to detail how and when the Mobility Manager interacts with customers. Additionally, this effort should include policies and procedures for VPTA members, including transit operators, to engage with the Mobility Manager in order to provide assistance to operator staff and/or customers.

VPTA should establish a performance monitoring framework for the Mobility Manager position to communicate the value of this position and the broader Mobility Management program to internal and external stakeholders. This framework should capture the frequency and breadth of the Mobility Manager's engagement with transit providers and customers. The framework should also identify metrics that demonstrate the impact of the position, such as the number of calls taken by VPTA or transit providers regarding trip eligibility (since Mobility Managers can help customers understand what services they are eligible for, allowing call centers to focus on trip scheduling).

Benefits: Improved customer experience; greater coordination between providers, brokers, and/or administrative agencies; greater awareness among stakeholders of Mobility Management benefits.

Risks: Administrative costs; need to identify long-term funding for Mobility Manager position.

3. Assess feasibility and financial impacts of regular reimbursement rate adjustment on operating costs and administrative functions

There should be continued assessment of the feasibility of implementing more frequent rate adjustments as well as the feasibility of basing the PMPW rate on the overall number of Medicaid members (which is a standard practice among many State Medicaid programs), rather than just those eligible for NEMT. Consideration of the tradeoffs involved with such a program include the need for transit operators to conduct more frequent and regular cost tracking in order for the reimbursement to accurately reflect costs. Findings should be included in a formal study for further consideration by State decision-makers.

It is important to note that regular rates adjustments should be done in a cycle that is consistent with the State's budgetary process. This recommendation does not represent a funding commitment from the Governor, the Legislature, or DVHA.

Benefits: Greater understanding of options to address financial sustainability concerns.

Risks: Administrative costs for Vermont transit providers, VTrans, the NEMT brokerage, and DVHA.

4. Analyze financial impacts of a risk corridor framework on operating costs

There should be continued development of one or more risk corridor scenarios that defines threshold values above which excess costs and cost savings are shared between transit providers and DVHA. The analysis should review cost data from the past five years to assess what the impact to each transit provider's financial performance would have been if these risk corridors had been in place. The aggregate impact on DVHA and Medicaid expenditures should also be calculated. Findings should be presented in a final report for further consideration by State decision-makers.

This recommendation does not represent a funding commitment from the Governor, the Legislature, or DVHA.

Benefits: Greater understanding of options to address financial sustainability concerns.

Risks: Administrative costs for Vermont transit providers, VTrans, the NEMT brokerage, and DVHA.

5. Establish dedicated forum within PTAC to monitor volunteer driver programs and community partner transit options

VTrans should establish a forum within PTAC that monitors Vermont's volunteer driver programs, community organization-run transit programs, and other transportation programs not currently within the public transit service network. The purpose of this effort is to identify partners, service models, or volunteer driver pools to connect with and potentially integrate into the service network through contracting, knowledge exchange, or other methods.

Monitoring activities may include roundtable discussions, surveys, or other engagement activities with past and present volunteer drivers to identify challenges with participating in volunteer driver programs and to develop policies, procedures, or programs to encourage participation. PTAC forum participants should also monitor other HHS providers, including hospitals, outpatient clinics, and AAAs, to see if these providers establish transportation programs separate from NEMT.

One such program for PTAC to monitor is the Gopher demand-response program operated by Community Rides Vermont in Washington County and three towns in Orange County. Gopher is operating as a subcontractor to GMT to provide trips for existing program customers (including NEMT) as well as new customers who are currently not served by GMT, either due to program eligibility or geographic location. While Gopher is not a volunteer driver program, it is a new subcontractor that expands the reach and responsiveness of GMT services. Its success may contain several lessons learned for VTrans and VPTA about the viability of expanding mobility services through contracts with small third-party operators.

Another potential driver pool that this sub-group within PTAC could reach out to is TNC drivers. These drivers that work on contract with Uber and Lyft could potentially be recruited to also drive for local transit agencies, potentially easing the driver shortage experienced around the state.

Benefits: Greater understanding of challenges and opportunities in volunteer driver programs; greater awareness of partnership opportunities and available service capacity.

Risks: Additional roles and responsibilities for PTAC members; additional administrative and/or programmatic costs for outreach and engagement activities.

6. Establish dedicated forum within PTAC to coordinate with HHS providers on transportation options, resources, and challenges

VTrans should establish a forum within PTAC for HHS providers to discuss matters related to HST and NEMT service provision. This forum can function as a space to discuss challenges in current service provision, review emerging practices in service provision, and identify and evaluate Federal and State funding and technical assistance resources. The forum can serve as a standing space to maintain regular communication with HHS providers to facilitate exchange on the successes and challenges of existing NEMT service provision and to understand where these HHS providers see opportunity for improvement. A key component of this communication should include the regular review of State and Federal funding opportunities that VTrans, VPTA, or DVHA could pursue in coordination with these HHS providers. Identifying matching grant funding sources in this forum would be particularly beneficial for this effort.

Benefits: Greater awareness of needs, priorities, and actions taken related to transportation provision among HHS partners.

Risks: Additional roles and responsibilities for PTAC members; additional administrative and/or programmatic costs for outreach and engagement activities.

7. Conduct a study of the December 2023 behavior policy to determine policy impact and assess if additional action is necessary

As discussed in **Section 2.3.1**, VPTA and DVHA established a criminal behavior policy in December 2023 that outlines consequences for riders who exhibit behavior that is dangerous or threatening to VPTA, DVHA, transit provider employees, or the public. VTrans, VPTA, and DVHA should coordinate to conduct a study of this policy in late 2024 or early 2025 to determine what impact this policy has had on disruptive behavior among NEMT customers. This study should include interviews with transit operators, volunteer drivers, and customers to assess if perceptions of safety have improved since the policy was established.

The findings of the study can determine whether the policy should be revised or if additional actions are necessary to reduce the risk of disruptive and harmful behavior. The study can also determine whether the policy has contributed to a reduction in the attrition rate among volunteer drivers and transit operators or if other barriers, such as the reimbursement mileage rate for volunteer drivers, remains more significant.

Benefits: Greater understanding of impacts of disruptive and/or violent behavior on driver retention, especially in volunteer driver program; greater understanding of the challenges and barriers of participating in the volunteer driver program.

Risks: Study costs.

8. Conduct a study on options and cost feasibility for Mobility-as-a-Service (MaaS) technology solutions

VTrans and VPTA should explore options to conduct a planning study focused on MaaS deployments for demand-response services. This study should take a national perspective to identify MaaS deployments in different contexts and assess the costs and requirements of building MaaS solutions, administering them, and training agency staff and customers on how to use them. Establishing a realistic range of cost estimates for different components would be a key outcome of this process. The study should also consider the impacts of MaaS solutions on administrative functions, including call centers and eligibility determination processes, as well as the customer experience.

Benefits: Greater understanding of costs and benefits of MaaS for transit providers and riders.

Risks: Study costs; ongoing changes in MaaS technology may require regular study review and update.

These recommendations are presented in **Table 5.1**. In addition to the benefits and risks identified above, the table also contains an implementation timeframe for delivering the recommendations, as stated below:

- **Short:** Recommendation can be implemented within the next year
- **Medium:** Recommendation can be implemented within the next one to five years
- **Long:** Recommendation can be implemented in more than five years

It is important to note that many recommendations may have a discrete implementation timeframe, in which a practice, policy, or procedure is established, but the recommendation requires ongoing maintenance and management in order to be successful.

Table 5.1 Recommendations to Enhance NEMT Service Delivery

NEMT Component	Recommendation	Benefits	Risks	Implementation Timeframe
Program Structure and Coordination	1. Consider expanding PTAC to include additional agencies	<ul style="list-style-type: none"> Improved capacity for coordination across social service providers Improved capacity to seek innovative funding opportunities 	<ul style="list-style-type: none"> Increased complexity for scheduling meetings, achieving consensus on policy, etc. 	Medium
	2. Expand and maintain Mobility Management program, pending positive performance evaluation	<ul style="list-style-type: none"> Improved customer experience Improved coordination across providers Greater awareness of benefits of Mobility Management 	<ul style="list-style-type: none"> Administrative costs Need to identify long-term funding for Mobility Manager position 	Medium
Reimbursement and Cost Management	3. Assess feasibility and financial impacts of regular reimbursement rate adjustment on operating costs and administrative functions	<ul style="list-style-type: none"> Greater understanding of options to address financial sustainability concerns 	<ul style="list-style-type: none"> Administrative costs for Vermont transit providers, VTTrans, the NEMT brokerage(s), and DVHA 	Short
	4. Analyze financial impacts of a risk corridor framework on operating costs	<ul style="list-style-type: none"> Greater understanding of options to address financial sustainability concerns 	<ul style="list-style-type: none"> Administrative costs for Vermont transit providers, VTTrans, the NEMT brokerage(s), and DVHA 	Short
Service Capacity	5. Establish dedicated forum within PTAC to monitor volunteer driver programs and community partner transit options	<ul style="list-style-type: none"> Greater understanding of challenges and opportunities to maintain and expand volunteer driver programs 	<ul style="list-style-type: none"> Additional roles and responsibilities for PTAC members Additional administrative and/or programmatic costs for outreach and engagement activities 	Short
	6. Establish dedicated forum within PTAC to coordinate with HHS providers on transportation options, resources, and challenges	<ul style="list-style-type: none"> Greater awareness of needs, priorities, and actions taken related to transportation provision among HHS partners 	<ul style="list-style-type: none"> Additional roles and responsibilities for PTAC members Additional administrative and/or programmatic costs for outreach and engagement activities 	Short
	7. Conduct a study of the December 2023 behavior policy to determine policy impact and assess if additional action is necessary	<ul style="list-style-type: none"> Greater understanding of impacts of disruptive and/or violent behavior on driver retention, especially in volunteer driver program 	<ul style="list-style-type: none"> Administrative costs 	Medium
	8. Conduct a study on options and cost feasibility for MaaS technology solutions	<ul style="list-style-type: none"> Greater understanding of costs and benefits of MaaS for transit providers and riders 	<ul style="list-style-type: none"> Administrative costs Ongoing changes in MaaS technology may require regular study review and update 	Long

Appendix A. DVHA Memo

A memo presenting DVHA's response to the Braided Model Service Study is presented on the following page.



State of Vermont

Department of Vermont Health Access

280 State Drive, NOB 1 South

Waterbury, VT 05671-1010

<http://dvha.vermont.gov>

[Phone] 802-879-5900

Agency of Human Services

Re: Addendum to Vermont Braided Model Service Study

**From: Adaline Strumolo, Acting Commissioner
Department of Vermont Health Access**

DocuSigned by:
Adaline Strumolo
ABEDE75BDF50473...

Date: January 11, 2024

DVHA appreciates the work reflected in this report. The narrative summary of the status and operations of NEMT services in Vermont is beneficial to administrators, policymakers, service providers, and the general public.

DVHA agrees with the recommendations contained in the report to continue to analyze:

- 1) the impact of regular NEMT rate adjustments and potential Medicaid beneficiary basis change, and
- 2) the impact of establishing financial risk corridors.

DVHA does want to state very clearly that the provision of NEMT services will need to follow established procurement procedures, and when required this will include a competitive bid process. DVHA's participation in this report does not constitute a commitment to a specific vendor or a specific funding level in future NEMT competitive bid procurement processes.



Appendix B. Transit Operator Interview Guide and Format

Each interview lasted approximately one hour, utilizing a discussion format rather than a strict 'question & answer' format. The discussion, led by the project team, was guided by an interview guide consisting of the following question guide:

- How does your agency currently manage demand-response trips (NEMT, O&D)?
- What are your agency's current challenges with providing NEMT and O&D trips as part of standard public transit service? Do you encounter capacity issues with your ability to serve NEMT trips alongside public transit trips?
- How do the demand-response programs and revenues support (or fail to support) the rest of your agency's services?
- How are NEMT and O&D trips monitored and counted for NTD reporting, cost accounting, and other Federal requirements?
- Do you collect customer feedback data? If so, what do you hear about their experience with NEMT and O&D trips?
- How would you describe your agency's relationship with VPTA in its capacity as a broker for NEMT? Where would you like to see things change or improve?
- What are the benefits associated with the current braided service model? What aspects of it work well for your agency or your customers?
- What are the challenges associated with the current braided service model? Where would you like to see things change or improve?

It is noted that these questions were altered as necessary for the interview with VPTA to reflect the perspective of the brokerage, as opposed to the individual transit agency

Appendix C. DVHA No-Show Procedure

The following procedure is contained in the DVHA NEMT Manual, effective as of 12/1/2023:

C.1 No-Show Procedures

At the first recorded no-show by a member, VPTA will send out the “No-Show Warning Notice”. After the third no-show, VPTA must send a “No-Show Call Ahead Notice” to the member that advises that they will now be required to call the VPTA to set up rides and to confirm those rides before they take place.

A member with three no-shows will be required to call in advance to confirm their ride the day before the scheduled appointment by noon. If the appointment is on a Monday, the member will need to call on Friday by noon to confirm. If the member does not call in, the driver will not be sent for the pickup, and the ride shall not take place.

Good cause for missing rides may be taken into consideration when addressing specific no-show incidents. Late or last-minute appointment cancellations by providers shall not be counted as no-shows for members.

If there are no no-shows in the next six months, the member may be allowed to revert to the normal process. A notice advising of this change must be sent to the member. Any subsequent no-show, however, will result in the member again being forced to comply with the new call in guidelines.

If a Reach Up member is a “no-show,” copies of all notification letters will be sent to the member’s Reach Up Case Manager at the local DCF office.

No-shows shall count for the entire immediate family (all related family members living in the same Medicaid-defined household). For example, a no-show by a child shall count as one no-show for all related family members of that household, whereas a no-show by a non-related roommate shall not count against others in the home. All questions concerning the composition of the “Medicaid-defined household” should be directed to DVHA.

NOTE: If VPTA does not send the appropriate notices, the member’s no-shows cannot be counted against them until the correct notices have been sent

C.1.1 No Show Hardship Program

The current no-show letter process still applies. Once the member is on the call ahead list and no-shows three additional times in a 30-day period, and VPTA confirms attendance at appointments, the member will be sent a 10-day notice that the mode of transportation is changing to the hardship reimbursement program. The member will have the ability to find their own driver who will be reimbursed at the hardship mileage rate. VPTA will include the hardship forms with the NOD, outlining the ability for the hardship driver to receive mileage reimbursement.

A member’s failure to find their own driver should not result in an increased cost to VPTA. Any member that cannot find their own transportation must not be denied access to care.

Appendix D. DVHA Procedure for Unruly, Dangerous or Illegal Behavior and Behavioral Hardship Program

The following procedure is contained in the DVHA NEMT Manual, effective as of 12/1/2023:

D.1 Unruly, Dangerous or Illegal Behavior

VPTA must ensure that transportation to and from necessary medical services is available for eligible members. VPTA may not deny transportation services because the member is unpleasant or disagreeable. In cases where member behavior is obnoxious or offensive but not dangerous or illegal, VPTA should inform the member in writing that the behavior is unacceptable and may jeopardize future transports. This process is outlined below.

D.1.1 Behavioral Hardship Program

First offense - written warning - outlining behavior violation and supporting documentation.

Second offense - written notification outlining the 2nd violation and notifying the member that they are required to find their own transportation for 30 days from the date of the offense, with reimbursement falling under the hardship program (all hardship rules apply).

Third offense - written notification outlining the 3rd violation and notifying the member that they are required to find their own transportation for 90 days from the date of the offense, with reimbursement falling under the hardship program (all hardship rules apply).

VPTA, under direction from DVHA, also has the option to “lock-in” a member to one specific volunteer driver due to repeated instances of offensive or inappropriate behavior. If the member chooses not to ride with that driver, then transportation will not be provided.

A member should be reported to the police if their behavior is dangerous or threatening to VPTA, DVHA, or subcontractor employees or the public. It should also be reported to the police if VPTA believes the member is engaging in behavior that is against the law, such as using illegal drugs. These actions should also be reported to DVHA.

After making a report, VPTA must notify the member in writing that the threats, physical abuse, or dangerous or illegal behavior has been reported to the appropriate authorities and that these actions may affect the member's ability to obtain further rides. This notice will be in the form of a behavior contract, which outlines the need for compliance to ride and behavior guidelines. Any actions or behaviors which are in violation of set trip rules will result in a transition solely to the hardship behavior program. The member will only be eligible for hardship reimbursement payments to a driver that they find. The process of dealing with specific situations must involve DVHA input.

In cases where a member has a history of poor behavior and as a result no driver is willing to provide a ride, the member must receive a denial notice advising them “No carrier or driver willing to transport.” Please alert DVHA about these cases as soon as possible.

If a member has lost access to a closer provider due to inappropriate actions or behaviors, VPTA shall not be held responsible for transporting the member to a more distant location. In all cases where a request is denied, a notice must be sent in accordance with HCAR 8.100.

A member's failure to find their own driver should not result in an increased cost to VPTA. Any member that cannot find their own transportation must not be denied access to care.