Vermont Elders & Persons with Disability Transportation Program Review

Act 40 (2015)

Section 12

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Submitted by:
Vermont Agency of Transportation

For:
House Committee on Transportation
Senate Committee on Transportation
EXECUTIVE SUMMARY

Vermont’s Elders and Persons with Disabilities (E&D) Transportation Program continues to play an important role filling gaps in existing transportation services for elders age 60 and above and individuals with disabilities. Vermont’s public transit providers serve as regional transportation brokers and work with human service agency partners to coordinate E&D trips together with Non-Emergency Medical Transportation (NEMT) provided through Medicaid, contracted service with community organizations and institutions, and transportation for the general public. This coordinated transportation approach extends the impact of available E&D funding, as the regional brokers utilize multiple funding sources and fill capacity on vehicles to the maximum extent possible.

The E&D Program currently covers only the most basic needs such as access to critical care and medical services and shopping, most often for essentials such as food, household items, and clothing. This level of service is vital for existing users who are primarily low-income elders and residents in rural areas that would otherwise be isolated. The regional brokers and their human service agency partners have operated a constrained program for many years due to funding limitations at both the state and local levels. Service parameters have been established in every region to prioritize trip types (medical over shopping and social), limit the number of trips per individual, and/or limit the days and times of service.

Facing funding constraints and increasing demand, both the regional partners and the clients that use E&D transportation have become more creative in meeting transportation needs. Regional brokers have been able to meet the need for longer trips, particularly to critical care and medical services, by increasing the use of volunteer drivers. Human service agencies are working with clients to identify other transportation resources available to them, and a few are providing their own transportation to fill gaps in E&D service. Elders and persons with disabilities have seen a growth in the public transportation services available, and some have become eligible for Medicaid so that their medical trips are provided through NEMT.

New technologies and new types of services have changed the ways that mobility needs are met. The demographics of the E&D populations have also changed, translating into demand for different amounts and types of service. Today and through 2020 individuals in their 60s comprise the largest share of Vermont’s elders population. These young elders are staying active and working longer, which translates into decreased needs for E&D transportation in

E&D Service Provides a Lifeline

“Without the E&D program, my 90-year-old mother would never be able to get out of the house and go to adult daycare or doctor’s appointments. It is no longer possible for me to get her in and out of the car (she is in a wheelchair), so the only way she can get anywhere is because of this program. This is not only about getting from here to there, it is also about increasing her relationships. She is so happy to see Wayne (her regular bus driver) in the morning. Wayne has become one of her friends who adds joy to her life.”

-Linda, whose mother Miriam uses E&D services in Chittenden County
the short-term, but high projected needs – in both volume and more specialized transportation needs – in the next 10-15 years. This combination of factors helps explain an observed leveling off in demand for E&D transportation in recent years, and outlines a projected increase in future needs.

This report examines the successes, challenges, and opportunities for E&D transportation in six areas, as requested by the Legislature: unmet needs, service delivery, coordination opportunities, local match, the Medicaid waiver, and technologies. The major findings and study recommendations per topic are summarized below.

**Unmet Needs**

Stakeholders reported that the E&D Program currently covers only the most basic needs such as access to critical care and medical services and shopping. This level of service is vital for existing users who are primarily low-income elders and residents in rural areas that would otherwise be isolated. However, Vermont’s elders and persons with disabilities have many unmet transportation needs that would enhance their quality of life:

- **An increased number of trips** - additional trips beyond the quota per person currently in place due to funding limitations.

- **A greater variety of trips, especially social and excursion trips** – elders and persons with disabilities have more needs than just going to the doctor and grocery shopping. Vermont elders often face numerous challenges including chronic pain and depression; when combined with physical isolation these factors make elders a high risk population. More social trips could help promote social wellness among elders.

- **More specialized transportation** – stakeholders reported a growing need for door to door and door through door service.

- **More freedom to make trips** – being able to request medical trips on shorter notice, travel outside of transit system operating hours (early morning, late evening, and weekends), and take trips at the day and time requested instead of needing to negotiate trips.

**Filling Gaps in Service**

Having served in the Marines Corps during the Korean War, Richard is eligible for medical care through the VA. The VA offers a van to help veterans access care at their facilities, but they are often short on volunteers to run this service. ACTR’s E&D Program fills the gaps when eligible veterans need care and cannot receive a ride through the VA. ACTR’s Dial-A-Ride service takes veterans to the VA clinic in Burlington and the VA hospital in White River Junction. “ACTR is a great service, and we’re lucky to have it.”

-Richard, Middlebury resident
Service Delivery

The regional service delivery model facilitates coordination and allows the brokers to effectively use multiple funding sources. The public transit providers, serving as regional transportation brokers, have become more creative in providing trips. Regional brokers have been able to meet the need for longer trips, particularly to critical care and medical services, by increasing the use of volunteer drivers, a very cost-effective mode. The difficult trips that require more specialized transportation are still provided through the E&D Program, and sometimes supplemented by human service transportation, but other trip needs are served through other means such as general public transit service, NEMT, and private transportation provided by family and friends.

The regional service delivery model has also helped establish a safety network in communities, where elders and persons with disabilities can access services beyond transportation through the partner agencies, and the volunteer drivers help monitor the wellness of individuals.

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Recommendations Regarding Unmet Needs

- Continue to support the E&D Program through consistent or increased funding.
- Continue to monitor how the needs of elders and persons with disabilities are being met through various transportation resources including the E&D Program, in order to regularly assess the role of the program and the level of funding needed.
- Increase outreach and marketing about the program to help identify the true need for E&D transportation.
- Expand Ticket to Ride Program with private contributions and to other regions.
- Expand State support through assistance in recruiting volunteer drivers and regular involvement with Regional E&D Advisory Committees.

Recommendations Regarding Service Delivery

- Continue to support the regional service delivery model, which facilitates successful coordination between public transit and human service agency transportation services.
- Better utilize available trips and capacity (e.g., encourage more clients to use fixed route bus when feasible, coordinate more riders on volunteer driver trip, schedule trips during midday when capacity is available).
- Explore innovative service models based on peer examples of E&D transportation.
- Hold regular meetings of the statewide E&D stakeholder group to facilitate an idea exchange on successes, best practices, & lessons learned between the regions.
Coordination Opportunities

Every region is successfully coordinating transportation to provide cost-effective services to multiple markets including E&D riders, Medicaid riders, riders of contracted service, and the general public. The regional brokers have made significant progress in coordinating public transit and human service transportation services since 2004. The E&D Program is an important contributor to coordinated transportation across the State. The regional brokers and human service agency partners work well together. This partnership helps extend the reach of E&D Program resources.

The challenges associated with coordination include impacts to the customer experience (longer waits and trip times, having to negotiate trips), difficulties blending different client types such as elders with people receiving substance abuse treatment, the disruption of cancellations and no shows, and difficulties splitting costs with comingled rides.

Recommendations Regarding Coordination Opportunities

• Continue to support the transportation coordination efforts between the regional brokers/transit providers and the human service agency partners.
• Increase coordination of trips across regions and brokers.
• Coordinate additional trips at times when vehicles have capacity.
• Add new partners to the E&D Program where possible and appropriate.

Local Match

Most regions are meeting the 20% local match requirement for the E&D grants. The flexibility to provide local match as cash or in-kind volunteer driver hours allows the regional brokers and their human service agency partners to use the resources most available to them. Regions that provide local cash have struggled when partner agencies' budgets have seen reductions. With transportation vital to their programs, the partner agencies have sometimes eliminated other programs, staff, or benefits to be able to provide the local cash. A concern with using in-kind match as opposed to cash is that in-kind match uses the E&D grant faster, so fewer trips can be provided overall.
Impacts of the Medicaid Waiver and NEMT

The Choices for Care (Long Term Care Medicaid) Program has supported more individuals staying in their homes longer and receiving home- and community-based care, rather than moving to nursing facilities. This has resulted in some increase in the need for community transportation, such as shopping and social/personal trips, which are not covered under Medicaid and can be provided through the E&D Program. An increase in Medicaid enrollment and NEMT services, following expansion of Medicaid eligibility under the ACA, may have had a greater impact on E&D services. The increase in NEMT demand has led regional brokers to use a majority of volunteer driver resources to serve NEMT trips, with fewer volunteer driver resources available for E&D trips. Regional brokers reported that NEMT reimbursements have been insufficient to cover NEMT costs, so it is possible that costs have shifted to other programs including E&D.

Technologies

The regional brokers have high hopes for the VTrans’ supported update of their scheduling and dispatch software to improve trip coordination within each region and across regions, data processing for the billing/invoicing process, cost allocation to different funding sources, communication to partner agencies, and the ability to track vehicles in real time. The new system can also potentially improve the customer experience by sending notifications of delays and wait times.

The brokers have expanded the variety of vehicles used to provide E&D transportation. Some are now using smaller accessible vehicles as well as sedans, both of which have lower operating costs than the full-size vans with wheelchair lifts that were used exclusively for E&D.
transportation in the past. Stakeholders expressed interest in using technology to improve the information available to customers and human service agency partners.

<table>
<thead>
<tr>
<th>Recommendations Regarding Technologies</th>
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</thead>
<tbody>
<tr>
<td>• Continue to implement RouteMatch system statewide, and pursue best use of built-in functions.</td>
</tr>
<tr>
<td>• Continue to monitor modern ridesharing platforms (Uber, Bridj, etc.) for their potential application in rural environments; pursue pilot projects to explore these potential solutions as appropriate.</td>
</tr>
<tr>
<td>• Provide real-time information to improve the customer experience.</td>
</tr>
<tr>
<td>• Develop one source for customers to schedule rides across regions and providers.</td>
</tr>
<tr>
<td>• Establish an online ride scheduling system for partner agencies to directly schedule trips with the regional brokers.</td>
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</table>

Many of the recommendations described above are interrelated. For example, the recommendation to increase coordination between the regional brokers will be facilitated by implementing the new RouteMatch software across all transit providers. With the same platform, the transit providers should be able to view each other’s vehicles and capacity to coordinate additional trips that cross regional lines. The software update should also assist the regional brokers in better coordinating trips within their regions. RouteMatch will automatically schedule trips and maximize the use of vehicles, saving significant time and effort that transit system staff currently spends in manually scheduling coordinated trips.
SECTION 1: INTRODUCTION

This study was conducted at the request of the Vermont Legislature to review the Vermont Elders and Persons with Disabilities (E&D) Transportation Program, the last comprehensive review for which was conducted in 2004. This update examined the characteristics of the current E&D Transportation Program, the gap between the current resources and the projected funding needs of the program over the next 15 years, and opportunities to improve the effectiveness of the program in providing mobility options for elders and persons with disabilities.

Study Objectives

Conducted in consultation with the Vermont Agency of Human Services (AHS) and the Vermont Legislative Joint Fiscal Office, this review of the Vermont E&D Transportation Program analyzed the following issues identified by the Vermont Legislature:

1) Unmet Needs - The gap between current and projected E&D Program resources and needs over a ten-year timeframe, on regional and statewide levels;

2) Service Delivery - Regional transportation service delivery models and their adequacy in meeting E&D Program participant needs;

3) Coordination Opportunities – Efficiencies achieved by coordinating the E&D Program and other human services transportation programs, and obstacles to achieving such efficiencies;

4) Local Match - Challenges that exist for partner organizations to raise local matching funds for transportation services;

5) Medicaid Waiver - The current and expected impact of the Medicaid waiver on the E&D Program; and

6) Technologies - Existing and emerging technology and the potential role it could play in increasing service to elders and persons with disabilities.

Research Approach

The 2015 E&D Program review used both quantitative and qualitative methods to identify current and future needs and issues.

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1 The projections are provided over the next 15 years, instead of 10 years as requested by the Legislature, due to the available data on projected population growth rates to 2030.
Quantitative Methods

The quantitative approach involved reviewing existing studies and program statistics, conducting a demographic analysis, and identifying population forecasts for Vermont’s E&D population. Several existing studies were reviewed to identify transportation needs for elders and persons with disabilities:

- VTrans recently completed a 2014 update to Vermont’s Human Service Transportation Coordination Plan, which documented priority statewide transportation needs including those for E&D populations.

- AHS studies by the Department of Disabilities, Aging, and Independent Living (DAIL) provided insights into the transportation needs of individuals with disabilities and the impact of the Choices for Care Program (part of the State’s 1115 Global Commitment to Health Medicaid Waiver) on transportation demand. AHS studies reviewed for this report included:
  - Long-Term Care System Sustainability Study (2007)

- Stakeholders interested in the E&D review also recommended recent studies that provided data and identified transportation priorities for Vermont’s elders:
  - Successful Aging in Orleans County: The 2014 Community Survey of Residents Age 45-plus in Orleans County, VT (2015) by AARP
  - Access to Transportation for Chittenden County Senior Citizens (2013) by University of Vermont College of Medicine and United Way of Chittenden County

For the demographic analysis, the research team analyzed Census data from the American Community Survey (2009-2013 five-year estimates) on Vermont’s E&D population statewide and by region. VTrans provided historical E&D Program data on number of clients, trips, and costs to identify changes since the 2004 program review. AHS’s Department of Vermont Health Access (DVHA) also provided historical data on Vermont’s Medicaid program, which the study team reviewed to identify possible impacts of Non-Emergency Medical Transportation (NEMT) and the Affordable Care Act on E&D Program needs.

The Vermont Agency of Commerce and Community Development produced population projections for 2020 and 2030, which were used to estimate future E&D populations to identify potential transportation demand. The Vermont Legislative Joint Fiscal Office...
produced a 2015 issue brief on the challenges of projecting Vermont’s population, which was consulted in estimating future E&D populations.

**Qualitative Methods**

The qualitative approach to the 2015 program review involved two stakeholder meetings and 17 individual stakeholder interviews. VTrans invited a group of stakeholders to provide input to the study. Members of the Public Transit Advisory Council and the Vermont Public Transportation Association\(^2\) were invited to participate, as well as representatives of many other organizations involved in some way with the E&D Program. These stakeholders included public transportation providers; AHS Medicaid staff; human service agencies that use E&D Program services, including adult day centers and area agencies on aging; and regional planning organizations, which coordinate the Regional E&D Advisory Committees.

The first stakeholder input meeting took place at VTrans on October 29, 2015. The study team presented the study overview and preliminary analyses of program trends and needs. Then the group of 30-plus attendees engaged in a fruitful discussion of E&D transportation issues and opportunities. At the second stakeholder meeting on December 1, 2015, the study team presented additional data analyses and the findings from the stakeholder interviews to the group. Both sessions were important forums to ensure that the data analyses accurately reflected the experiences of the transit providers and human service agency partners. The stakeholder groups also provided input on the content for the study report. The attendees, presentations, and notes from the stakeholder input meetings are included in Appendix A.

The other component of the qualitative research involved phone interviews with individual stakeholders, including public transportation providers, adult day centers, area agencies on aging, advocacy groups, and AHS. Conducted in October and November 2015, these interviews delved into the E&D transportation issues and needs for each region and captured both the transit providers’ and human service agencies’ perspectives. The stakeholder interviews provided invaluable insights into the successes, challenges, and opportunities for the E&D Program described in this report. Appendix B outlines the stakeholders who participated in the interviews and the interview guides.

**Report Structure**

Following this introduction, the report describes the current E&D Program and highlights program changes over the past decade. The remainder of the report is organized by the six topics requested by the Legislature. Each section describes the successes, challenges, and opportunities related to the topic. Then the report concludes with a summary of historical trends and future projections.

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\(^2\) 2015 membership included in Appendix A.
The report is structured as follows:

- Section 1: Introduction
- Section 2: Overview of Vermont’s E&D Transportation Program
- Section 3: Unmet Needs
- Section 4: Service Delivery
- Section 5: Coordination Opportunities
- Section 6: Local Match
- Section 7: Impacts of the Medicaid Waiver and NEMT
- Section 8: Technology
- Section 9: Findings and Recommendations
SECTION 2: OVERVIEW OF VERMONT’S E&D TRANSPORTATION PROGRAM

The goal of Vermont’s E&D Transportation Program continues to be to serve elders (age 60 and above) and persons with disabilities who have unmet transportation needs. The program helps Vermonters access various services including medical appointments, adult day centers, senior meals, shopping, social/personal, and employment.

State Policies

The E&D Program supports VTrans’ public transit goal to meet the basic mobility needs of all Vermonters including transit-dependent persons such as elders and persons with disabilities. The program also demonstrates how VTrans’ public transit policies on coordination have translated into actions on the ground. Every public transportation provider in the State serves as a regional broker that coordinates public transit services and human service transportation. The regional brokers coordinate services for E&D trips as well as NEMT provided through the State’s Medicaid program, administered by AHS. Figure 1 portrays the service areas for the regional brokers in Vermont.

Transportation Context

VTrans established the E&D Program in the late 1980s, recognizing the need to fill gaps in the transportation (both public transit and human service agency transportation) provided to elders and persons with disabilities. In addition to the Section 5310 capital program for E&D transportation, VTrans implemented an innovative funding program to support operations of E&D transportation services.

The E&D Program is one of several transportation resources available to Vermont’s elders and persons with disabilities. The transit providers serve as regional brokers for E&D transportation and NEMT, which provides medical trips to eligible Medicaid recipients. The transit providers also operate transit services for the general public, including fixed routes and ADA paratransit services, which elders and individuals with disabilities in the service areas can use. While regional coordination has led to a decrease in human service agency provided transportation, a few community agencies still operate their own vehicles and have drivers among their staff to transport clients. Some human service agencies both participate in the E&D Program and provide their own transportation, indicating that the E&D Program cannot meet all the agencies’ transportation needs.

3 2012 Vermont Public Transit Policy Plan.
Figure 1: Vermont E&D Transportation Program Service Areas

NOTES:
1) This map delineates general service areas for the Vermont Elders & Persons with Disabilities Transportation Program, also referred to as the “E&D” program. This is not to be confused with the Federal Transit Administration (FTA) 5310 Capital program formerly known as “Capital for the Elderly & Disabled”, subsequently renamed as “Enhanced Mobility of Seniors & Individuals with Disabilities” as part of MAP-21.

2) Towns are associated with their primary provider. Trips originating in one provider’s region may extend into another region. In some cases, multiple providers may serve a single municipality based upon geography and practical operating considerations. This is particularly true in areas along the Green Mountain range.
The growth in public transit services and ridership in Vermont over the past decade may have helped meet the needs of E&D individuals and reduced pressure on the E&D Program to serve the large increase in demand projected in the 2004 review. However, the E&D Program still plays a vital role in serving elders and persons with disabilities today, particularly those who live in rural areas with limited transportation options and those who are unable to physically use or afford other transportation services.

Transit providers and human service agencies alike identified the E&D Program as a lifeline for many elders and persons with disabilities, who would otherwise be isolated in their homes. The E&D Program also provides important transportation for elders who wish to stay in their homes, rather than move to a nursing home, and remain engaged in their communities (age in place).

### E&D Program Structure

Each year VTrans transfers federal funds from the Surface Transportation Program (STP) to the Section 5311 program for Non-Urbanized Area Formula Grants, which supports public transportation in the rural areas of the State. The transferred STP funds are designated for the provision of E&D transportation and awarded to the public transportation providers (and their human service agency partners) as Section 5311 grants. These grants require a 20% local match, which grant recipients may provide in cash, in-kind match (volunteer driver hours), or a mix of both. The goals of structuring the E&D Program this way were to maximize coordination between public transit providers and human service agencies, and to facilitate using the existing capacity among various transportation services to the maximum extent possible.

The E&D Program is meeting these goals. Public transit providers and human service agencies are successfully coordinating transportation services within their regions and across regions. Representatives from the public transit systems and human service agencies serve on Regional E&D Advisory Committees, led by the regional planning organizations. The Regional E&D Advisory Committee works together to submit an E&D program grant application each year, where the transit system serves as the broker for regional transportation services and the human service agency partners generally provide the local match. The transit systems hold contracts with each human service agency partner to serve their clients. The agreements outline expected service levels, often based on historical usage of E&D transportation, any service parameters for trip types and/or amount of trips, and billing and reporting processes. Most Regional E&D Advisory Committees meet regularly to discuss service issues and needs and to reallocate E&D funds within the region, if necessary.
Figure 2 depicts the structure for E&D Program funds and the organization of the Regional E&D Advisory Committees.

**Figure 2: E&D Funding and Organization**

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**E&D Program Trends and Changes**

In SFY 2015, the E&D Transportation Program provided about 182,000 trips to 4,900 individuals. The program cost $4.5 million including federal grants and local matching funds, and the average cost per trip was $25. The statewide breakdown on the funding and trips by trip type in SFY 2015 is shown in Table 1.

**Table 1: SFY 2015 E&D Program Resource and Service Allocation by Trip Type**

<table>
<thead>
<tr>
<th>Trip Type</th>
<th>Trips</th>
<th>Cost</th>
<th>Cost/Trip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Care (Dialysis / Cancer Treatments)</td>
<td>13,700</td>
<td>$517,400</td>
<td>$38</td>
</tr>
<tr>
<td>Non-Medicaid Medical</td>
<td>46,900</td>
<td>$1,452,300</td>
<td>$31</td>
</tr>
<tr>
<td>Senior Meals Programs</td>
<td>31,400</td>
<td>$726,700</td>
<td>$23</td>
</tr>
<tr>
<td>Adult Day Programs</td>
<td>31,800</td>
<td>$836,500</td>
<td>$26</td>
</tr>
<tr>
<td>Shopping</td>
<td>24,200</td>
<td>$360,800</td>
<td>$15</td>
</tr>
<tr>
<td>Vocational</td>
<td>11,000</td>
<td>$305,700</td>
<td>$28</td>
</tr>
<tr>
<td>Social/Personal</td>
<td>22,900</td>
<td>$312,100</td>
<td>$14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>181,900</strong></td>
<td><strong>$4,511,500</strong></td>
<td><strong>$25</strong></td>
</tr>
</tbody>
</table>
Figure 3 portrays the percentage of total E&D trips that each trip type accounted for in SFY 2015. E&D trips were most commonly used to access medical services, including critical care services (dialysis and cancer treatments), and daytime programs at adult day centers and senior meal sites.

Figure 3: SFY 2015 E&D Trips by Type

Figure 4 shows the share of costs by trip type in SFY 2015. While trips to adult day and senior meal programs comprised a similar share of total E&D costs as total trips, the share of costs associated with medical trips was notably higher (by ten percentage points).

Figure 4: SFY 2015 E&D Total Costs by Trip Type
Figure 5 illustrates the SFY 2015 cost per trip by trip type. Critical care and non-Medicaid medical trips had the highest costs per trip, followed by vocational and adult day trips. The critical care and medical trip costs were higher in part due to the regional locations of dialysis and cancer treatment centers as well as medical specialists. Shopping and social/personal trips had the lowest costs per trip, reflecting the local nature of these trips.

Figure 5: SFY 2015 Cost per Trip by Trip Type

The changes in E&D Program characteristics since the last review in 2004 are summarized below. The available historical data for the program varied slightly, so some program characteristics review the period from SFY 2004 to SFY 2015, while some are comparisons of SFY 2008 to SFY 2015. Data from SFY 2013 was also included in some reviews as an additional point of reference.

Total Trips

Over the past decade, the total trips provided through the E&D Transportation Program remained stable, around 182,000 trips, though the mix of trips types has changed. The total number of trips has remained flat partly because a common strategy among the brokers and partner agencies has been to ration trips to contain costs. For example, individuals going to dialysis usually need three trips per week and those going to cancer treatment typically need five trips per week for several weeks. The regional partners have rationed the trips to prepare for any unexpected increase in these types of clients, which can impact the E&D budget significantly.
Figure 6 illustrates the trend in total trips by type from 2004 to 2015. In 2004 the highest numbers of E&D trips were provided to senior meals, employment, and adult day centers. In 2015 the most E&D trips were provided to non-Medicaid medical services, followed by trips to senior meals and adult day programs. This change occurred because the brokers and human service agency partners started to prioritize medical trips in 2004. Given funding constraints the providers wanted to make sure that medical needs were being met. At the same time the providers agreed that the E&D Program was not the most suitable source for daily employment trips, and VTrans made a policy decision to stop using E&D funds for excursion trips.

The combined effect of the above circumstances has resulted in relatively large increases (by 55%-79%) in non-Medicaid medical, social/personal, and shopping trips. However part of the increase in social/personal trips may have been due to the trip categories changing from 2004 to 2015; personal trips were grouped with social trips, and shopping became a standalone category. The largest percentage decrease has been in vocational trips (by 66%), with notable decreases in trips to senior meal programs and critical care (by 17-29%). Adult day trips have remained relatively stable, likely due to program budget limitations.

It is worth noting that the E&D Program provided a higher number of total trips (195,000) in 2013. The 2013 total represented an 8% increase over 2004, largely due to a significant rise in non-Medicaid medical trips, but then decreased by a similar amount by 2015. Stakeholders estimated that the number of non-Medicaid medical trips would have continued to increase through 2015, if not for the passage of the Affordable Care Act, which expanded the number of people eligible for Medicaid and NEMT.
**Funding**

The annual funding for the E&D Transportation Program has increased by $1.8 million over the past decade. While this appears to be a 65% increase, when taking into account the increase in the mileage reimbursement rate over the same period, E&D Program total costs have only increased 8%. The mileage reimbursement rate has a large impact as volunteer driver trips accounted for 43% of the total E&D Program costs in SFY 2015. The regional brokers use the standard mileage rate provided by the IRS, which increased by 53% between 2004 and 2015 (from 37.5 cents per mile to 57.5 cents per mile).

Figure 7 displays the trend in total costs by trip type from 2004 to 2015. In the last decade, the total costs have increased for every trip type, except vocational trips. The same trip types that experienced growth in total trips saw the largest percentage increases in total costs (more than doubled): non-Medicaid medical, social/personal, and shopping trips. Total costs for adult day trips also increased significantly, though the number of trips provided remained stable. Vocational was the only category to experience a decrease in total costs, given the decreased number of trips provided over the decade.

![Figure 7: Trends in E&D Program Total Costs by Trip Type](image)

Similar to the trend for total trips, the total cost of the E&D Program was higher in 2013, about $4.6 million. This trend was reflected in the total costs for the non-Medicaid medical, senior meals, adult day, and social/personal categories. However, total program costs only decreased slightly (by 2%) by 2015.
Cost per Trip

The E&D Program’s overall cost per trip increased from $15 in 2004 to $25 in 2015. As was the case for the total cost trend, the significant increase in the mileage reimbursement rate over this period contributed to much of the cost increase. Shown in Figure 8, the cost per trip increased for every trip category, most significantly for senior meals programs, vocational, adult day programs, and non-Medicaid medical. The costs per trip for senior meals and adult day programs have increased, though the total trips provided by E&D service providers remained stable or decreased. The transit providers reported that in recent years fewer riders have used E&D transportation to attend these daytime programs and the same vans have transported fewer riders, thereby resulting in a higher cost per passenger trip.

Figure 8: Trends in E&D Program Costs per Trip by Type

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4 DAIL notes that the overall number of attendees to adult day programs may not have decreased. Rather, more attendees may have been able to access Medicaid transportation through the Choices for Care Program or Day Health Rehabilitation Services.
**Number of Clients**

Between 2008 and 2015 the number of individuals served through the E&D Program increased by 7% from 4,500 to 4,900. This number peaked in 2013, when the program served 5,300 individuals, reflecting the same trend as for total trips and total costs. Stakeholders inferred that some individuals who previously relied on E&D resources may have become eligible for Medicaid with the passage of the Affordable Care Act, so that their medical trips became covered under NEMT.

The increase in total individuals served through the E&D Program, coupled with the stable number of total trips, indicates that additional elders and individuals with disabilities need transportation assistance but the brokers are now providing fewer trips per individual on average. In 2008 each E&D client took 40 one-way trips per year on average. This number has decreased to 37 one-way trips annually, or 3 one-way trips (1.5 roundtrip) per month.

The number of E&D clients by regional broker is shown in Figure 9. Most brokers have served an increasing number of individuals through the E&D Program in recent years, though RCT and STSI have seen decreases.

![Figure 9: Trends in E&D Individuals Served by Regional Broker](chart)

Note: The GMTA total includes the E&D clients served in Franklin/Grand Isle and the Capital District, as well as those in Chittenden County who are served by SSTA.
Trip Lengths

Stakeholders recommended reviewing trends in trip lengths as a possible contributor to the increase in program costs. From 2008 to 2015, the average length of an E&D trip increased by 11% from 11.4 to 12.6 miles per trip. Table 2 summarizes the average miles per trip by type. Critical care and non-Medicaid medical trips travel the longest distances (23-30 miles), which makes sense as the locations of dialysis and cancer treatment centers are spread out and medical specialists are only available at regional facilities. Average trip lengths to adult day centers and employment are the next longest, around ten miles. Senior meals, shopping, and social/personal trips are the shortest (three to six miles).

Table 2: Trends in Average Trip Length by Type

<table>
<thead>
<tr>
<th>Trip Type</th>
<th>2008</th>
<th>2013</th>
<th>2015</th>
<th>2008-2015 % Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Care (Dialysis / Cancer Treatments)</td>
<td>36.0</td>
<td>31.3</td>
<td>29.8</td>
<td>-17%</td>
</tr>
<tr>
<td>Non-Medicaid Medical</td>
<td>21.8</td>
<td>22.8</td>
<td>23.0</td>
<td>6%</td>
</tr>
<tr>
<td>Senior Meals Programs</td>
<td>1.8</td>
<td>3.2</td>
<td>3.2</td>
<td>77%</td>
</tr>
<tr>
<td>Adult Day Programs</td>
<td>9.5</td>
<td>8.6</td>
<td>10.4</td>
<td>9%</td>
</tr>
<tr>
<td>Shopping</td>
<td>4.6</td>
<td>4.2</td>
<td>5.1</td>
<td>12%</td>
</tr>
<tr>
<td>Vocational</td>
<td>9.8</td>
<td>4.3</td>
<td>8.9</td>
<td>-9%</td>
</tr>
<tr>
<td>Social/Personal</td>
<td>2.4</td>
<td>6.4</td>
<td>6.4</td>
<td>173%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11.4</strong></td>
<td><strong>11.8</strong></td>
<td><strong>12.6</strong></td>
<td><strong>11%</strong></td>
</tr>
</tbody>
</table>

In recent years the largest percentage increases in average trip length were seen in social/personal and senior meals trips, though these trips tend to be short. Shopping, adult day, and non-Medicaid medical trips saw small increases in average trip length, while critical care and vocational trip lengths decreased.

The regional brokers noted that the increase in E&D trip lengths, in combination with higher mileage reimbursement rates for volunteer driver trips, has created a multiplier effect that contributed to the increase in E&D Program costs in recent years.
Transportation Modes

In the last few years, the regional brokers have moved toward providing fewer trips by vans and more trips through volunteer drivers. Figure 10 compares the modal split of E&D trips in 2008 and 2015. Today van trips remain the most common mode to transport E&D individuals, many of whom require accessible vehicles, but the share of van trips has decreased by ten percentage points. The share of volunteer driver trips has seen a corresponding increase.

Figure 10: Trends in Mode Split of E&D Trips

The increase in volunteer driver trips represents a shift toward more cost-effective service, as well as a change in customer needs. The volunteer driver program accounts for 43% of the cost of E&D overall and 83% of the miles driven, making it the most cost-effective mode. The cost per mile for volunteer driver trips is about $1, compared to nearly $6 for van trips. The regional brokers use volunteer drivers to make long distance trips whenever possible. The average trip length of a volunteer driver trip is six times longer than van trips (29 miles compared to 5 miles in SFY 2015).

The regional brokers are also using volunteer drivers more in response to changing customer needs. As an example, as fewer elders are using E&D transportation to attend senior meal sites, vans may no longer be the appropriate mode of transport. Brokers have moved toward providing individualized volunteer driver trips to serve the smaller number of riders going to senior meal sites. It is worth noting that the share of E&D trips by taxi has also decreased slightly with a corresponding increase in bus and sedan trips. The decrease in taxi trips may be in part due to a taxi company in Chittenden County going out of business in 2014.
SECTION 3: UNMET NEEDS

The study team identified unmet needs for E&D transportation through several different approaches. First demographic data on the Vermont populations eligible for the program today and in the future were examined. E&D needs documented in recent studies were also reviewed. Stakeholders provided numerous insights into the changes in demand in recent years and the successes and challenges of the program. The study team then used the collected data to develop projections for future E&D transportation demand and funding. Trends in Medicaid and healthcare were also reviewed to determine possible impacts on the demand for E&D transportation. The findings of that analysis are described in Section 7 of this report.

Demographic Analysis

According to recent Census data, approximately 155,000 Vermonters are eligible for the E&D Transportation Program. This total includes 117,000 individuals age 60 and above and 38,000 persons with disabilities ages 18-64.5 The E&D population in the Burlington urbanized area is excluded for the purposes of this analysis. This is due to the fact that this population receives service through the extensive fixed-route system operated by CCTA in the urbanized area, as well as the associated ADA Paratransit service. A small amount of state funding is made available to CCTA to utilize as a safety net in the urbanized area for E&D clients because the federal E&D funds provided to the regional providers in the form of 5311 Non-Urbanized Area Public Transit grants can only be utilized in the non-urbanized areas of the State.

The E&D Program is open to any Vermont resident that meets the age or disability criteria, but the regional brokers report that in reality the individuals they serve are primarily low-income. Therefore the study team further examined the population most likely to use the E&D Program as eligible individuals living below the poverty level. The statewide total population more likely to use the E&D Program is about 18,000, including 6,000 low-income elders and 12,000 low-income adults with disabilities ages 18-64.6 On the whole, about 12% of eligible Vermonters are likely to use the E&D Program, which includes 7% of eligible elders and one-third of eligible individuals with disabilities.

Serving Individuals with Disabilities

For several years ACTR has transported community members with visual impairments to periodic support group meetings, where they discuss common challenges, learn about assistive device technology, and feel less isolated by coming together. ACTR makes the most of its resources by coordinating trips together in one or two cars.

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5 Based on 2009-2013 American Community Survey (ACS) 5-year estimates, tables S0101 and S1810. The total eligible individuals may include double counting of elders ages 60-64 who also have a disability.

6 Based on 2009-2013 ACS tables S1701 and C18130. The poverty data was only available for age segments up to and over 65, so these estimates do not account for elders ages 60-64 that live below the poverty level.
Table 3 outlines the total eligible population and the eligible population likely to use the E&D Program, based on income, in each regional broker’s service area. The table also compares the eligible population to the actual number of E&D clients by broker in SFY 2015. In looking at the eligible population that is low-income, just over one-quarter of those individuals are already using the E&D Program. A few brokers including ACTR, GMTA, and MVRTD are already serving 40-50% of the eligible low-income population. The other brokers are serving one-quarter or less of this population.

### Table 3: Eligible E&D Population by Regional Broker

<table>
<thead>
<tr>
<th>Regional Broker</th>
<th>Total Population Eligible for E&amp;D</th>
<th>Eligible Population Living Below Poverty</th>
<th>% Likely to Use E&amp;D Program</th>
<th>2015 Number of E&amp;D Clients</th>
<th>% Currently Use E&amp;D Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTR</td>
<td>10,200</td>
<td>1,100</td>
<td>10%</td>
<td>424</td>
<td>40%</td>
</tr>
<tr>
<td>GMCN</td>
<td>12,300</td>
<td>1,300</td>
<td>11%</td>
<td>340</td>
<td>26%</td>
</tr>
<tr>
<td>GMTA⁸</td>
<td>48,300</td>
<td>3,500</td>
<td>7%</td>
<td>1,575</td>
<td>45%</td>
</tr>
<tr>
<td>MVRTD</td>
<td>19,800</td>
<td>2,100</td>
<td>11%</td>
<td>1,060</td>
<td>50%</td>
</tr>
<tr>
<td>RCT</td>
<td>24,800</td>
<td>5,800</td>
<td>23%</td>
<td>575</td>
<td>10%</td>
</tr>
<tr>
<td>SEVT</td>
<td>25,300</td>
<td>2,700</td>
<td>11%</td>
<td>587</td>
<td>22%</td>
</tr>
<tr>
<td>STSI</td>
<td>14,100</td>
<td>1,700</td>
<td>12%</td>
<td>301</td>
<td>17%</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>154,900</strong></td>
<td><strong>18,200</strong></td>
<td><strong>12%</strong></td>
<td><strong>4,862</strong></td>
<td><strong>27%</strong></td>
</tr>
</tbody>
</table>

**Elders Population Projections**

The E&D Program serves Vermont elders age 60 and above. Stakeholders reported that 80-90% of existing E&D clients are elders, therefore the population projections for this group were an important factor in determining future E&D demand.

The best available population projections for Vermont elders at the time of the study were developed by the Vermont Agency of Commerce and Community Development (ACCD).⁹ The ACCD applied historical mortality, birth, and net migration rates from the 1990s and 2000s to 2010 Census data to estimate future populations by age cohort. The average projections based on the two

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⁷ This percentage was calculated as the 2015 number of E&D clients divided by the eligible population living below the poverty level, based on stakeholder input that low-income elders and individuals with disabilities are most likely to use the E&D Program.

⁸ The GMTA totals exclude the population in the Burlington Urbanized Area, as these individuals are not eligible for CCTA/GMTA’s E&D Program.

scenarios (one per decade) indicated that Vermont’s elders population will increase from about 132,000 in 2010 to 188,000 in 2020 (42%). By 2030 the elders population will have reached 222,000 (another 18% increase). The State’s elders population is projected to grow by 90,000 (68%) from 2010-2030. For comparison, Vermont’s total population over this period is anticipated to grow by 20,000 (3%).

Figure 11 portrays the projected growth of Vermont’s elders population as a portion of the total population in 2020 and 2030. The share of elders increases from 21% in 2010 to 34% in 2030.

Figure 11: Vermont’s Projected Population Growth from 2010 to 2030
Figure 12 displays the future projections for Vermont’s elders population by age cohort. In 2010 individuals in their 60s accounted for more than half of the elders population. In 2020 this remains the case, accompanied by large percentage increases in the number of individuals in their 70s. By 2030, people in their 60s and 70s comprise about equal parts of the elders population (40%) and the population in their 80s has increased to 22%. The population projections capture the aging of the baby-boomer population, whose numbers are a significant contributor to the projected growth of Vermont’s elders population over the next 15 years.

In 2020 the majority of the baby-boomer population will be over 60 and up to their early 70s. The regional brokers anticipate that the youngest age cohort will not use E&D transportation because they are able to drive themselves and many will continue working. The E&D Program will primarily serve the older age cohorts and continue to do so in 2030, with the main difference being the larger volume of elders in their late 70s to 80s as the baby-boomer population ages.
Persons with Disabilities Population Projections

Recent studies by the Department of Disabilities, Aging, and Independent Living (DAIL) found that the number of people with disabilities living in the community is projected to increase as the disability rate among younger adults rises and the elders populations grows. The most recent projections for persons with disabilities in Vermont outline a 35% increase over a decade, based on a 2007 total of 4,800 people with disabilities living in the community. The number of younger people with disabilities, ages 18-64, is projected to increase by 22%, while the population of elders with disabilities is expected to grow by 42%. Table 4 summarizes DAIL’s projections for Vermonters with a disability living in the community.

Table 4: Population Projections for Vermont Residents with Disabilities

<table>
<thead>
<tr>
<th>Age</th>
<th>2007 Actual</th>
<th>2017 Projection</th>
<th>2007-17 Projection</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-64</td>
<td>1,569</td>
<td>1,922</td>
<td>22%</td>
</tr>
<tr>
<td>65+</td>
<td>3,226</td>
<td>4,568</td>
<td>42%</td>
</tr>
<tr>
<td>Total</td>
<td>4,795</td>
<td>6,490</td>
<td>35%</td>
</tr>
</tbody>
</table>

The DAIL studies cited small increases in the per capita disability rate among the younger population (by 1.3-2.2% annually) and slightly declining disability rates for elders age 65 and above (by 0.8-0.9% annually). Vermont elders are expected to remain healthy, living without a disability, for longer. However, the population of elders with disabilities is still anticipated to increase given the large projected growth in Vermont’s elders population through 2020 and beyond.11

Regional Distribution of Participants, Funding, and Trips

The E&D Program is structured such that services are provided through regional E&D brokers and their human service agency partners. One issue explored in the study is whether the allocation of funding is equitable among the regions. The 2015 data showed that the E&D Program currently:

- **Serves 3% of the total eligible population on average.** The number of clients per capita does not vary significantly among the regions, ranging from 2-5%.

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- **Provides 1.2 trips per capita on average.** The number of trips per capita was similar between the regions, with each providing about one trip per person eligible for the E&D Program.

- **Costs $29 per capita on average.** The funding per capita was comparable among the regions, except for ACTR and GMCN at the high and low ends, respectively. However both values still fell within two standard deviations of the State average.

Table 5 presents the number of unduplicated clients and E&D funding by region in 2015, both in absolute terms and per capita (based on the total population eligible for the E&D Program in each region).

### Table 5: 2015 E&D Clients and Funding by Region

<table>
<thead>
<tr>
<th>Regional Broker</th>
<th>Total Population Eligible for E&amp;D 12</th>
<th>Number of E&amp;D Clients</th>
<th>E&amp;D Clients as Percent of Eligible Pop.</th>
<th>Number of E&amp;D Trips</th>
<th>E&amp;D Trips per Eligible Person</th>
<th>E&amp;D Costs</th>
<th>E&amp;D Costs per Eligible Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTR</td>
<td>10,200</td>
<td>424</td>
<td>4%</td>
<td>11,900</td>
<td>1.2</td>
<td>$449,000</td>
<td>$44</td>
</tr>
<tr>
<td>GMCN</td>
<td>12,300</td>
<td>340</td>
<td>3%</td>
<td>10,300</td>
<td>0.8</td>
<td>$208,000</td>
<td>$17</td>
</tr>
<tr>
<td>GMTA</td>
<td>48,300</td>
<td>1,575</td>
<td>3%</td>
<td>61,800</td>
<td>1.3</td>
<td>$1,339,000</td>
<td>$28</td>
</tr>
<tr>
<td>MVRTD</td>
<td>19,800</td>
<td>1,060</td>
<td>5%</td>
<td>23,200</td>
<td>1.2</td>
<td>$521,000</td>
<td>$26</td>
</tr>
<tr>
<td>RCT</td>
<td>24,800</td>
<td>575</td>
<td>2%</td>
<td>22,800</td>
<td>0.9</td>
<td>$723,000</td>
<td>$29</td>
</tr>
<tr>
<td>SEVT</td>
<td>25,300</td>
<td>587</td>
<td>2%</td>
<td>30,600</td>
<td>1.2</td>
<td>$778,000</td>
<td>$31</td>
</tr>
<tr>
<td>STSI</td>
<td>14,100</td>
<td>301</td>
<td>2%</td>
<td>21,200</td>
<td>1.5</td>
<td>$531,000</td>
<td>$38</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>154,900</strong></td>
<td><strong>4,862</strong></td>
<td><strong>3%</strong></td>
<td><strong>181,900</strong></td>
<td><strong>1.2</strong></td>
<td><strong>$4,549,000</strong></td>
<td><strong>$29</strong></td>
</tr>
</tbody>
</table>

### Future Projections for E&D Transportation Demand and Funding

The regional brokers reported that they have the capacity to serve all E&D clients, but the level of service is constrained by available funding. For example, a broker may be able to provide three out of five weekly trips to cancer treatment, and the client asks family to take them for the two other trips. As another example, a broker may negotiate with the rider to take a shopping trip at a different day or time, when a vehicle is scheduled to be in the area, to provide the most cost-effective transportation.

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12 Based on 2009-2013 ACS 5-year estimates, tables S0101 and S1810. The total eligible individuals may include double counting of elders ages 60-64 who also have a disability. The total excludes residents in the Burlington Urbanized Area, as these individuals are not eligible for CCTA/GMTA’s E&D Program.
The stakeholders reported a need for services beyond those that can be provided within existing funding levels. This need for additional E&D transportation has not changed since the program was last reviewed in 2004. Evidence of unmet needs is found in:

- The presence of trip rationing across every geographic region of the State and program area;

- The lack of outreach or program marketing in most areas of the State. The regional brokers acknowledge that additional elders and persons with disabilities could benefit from the E&D Transportation Program, but most do not market the program for fear of straining already stretched resources.

It is difficult to identify the true unmet need for E&D transportation because the program has been constrained for many years. Since the last program review, the regional brokers and partners have prioritized trip types (e.g., medical over shopping and personal), limited the number of trips or funding per individual, and limited the days and times of service – due to funding limitations at both the state and local levels.

Stakeholders reported that some E&D individuals may have needs, but no longer call to request trips because they know the program limitations and have already been denied in the past. These individuals must find other transportation solutions, or forego their trips entirely. The other major factor affecting latent demand is the low level of public awareness of the E&D Transportation Program as a resource for its target populations.

The current E&D Transportation Program includes seven categories of trips: adult day programs, critical care, non-Medicaid medical, senior meals programs, shopping, social/personal, and vocational. The study team examined each trip category independently in developing estimates for unconstrained and future demand.

The methodology for the demand estimates involved identifying all potential program participants if existing prioritization and rationing mechanisms were removed, and if services were extended to the wider, eligible population. The unconstrained estimates for number of trips were based on assumptions of acceptable levels of service for program participants. The unconstrained costs were projected by multiplying the unconstrained number of trips by current costs per trip. Then the estimated E&D funding gap was calculated as the difference between current levels of funding and the unconstrained costs.
The study team developed estimates for:

- Additional trips required to serve existing E&D clients with less trip rationing, and
- Constrained demand today for all potential E&D clients,
- Unconstrained demand today for all potential E&D clients,
- Future unconstrained demand in 2020 and 2030 for all potential E&D clients.

Figure 13 portrays the process that the study team used to develop the current and future demand estimates for E&D transportation services. Further details about the assumptions used in developing the demand estimates are included in Appendix C.

**Figure 13: Process to Estimate Current and Future Demand Estimates**

*Estimated Constrained Demand Today for All Potential Clients*
- Identified all potential program participants by trip category
- Assumed same number of trips provided per participant as today

*Estimated Unconstrained Demand Today for All Potential Clients*
- Identified all potential program participants by trip category
- Made assumptions of acceptable levels of service for participants

*Estimated Unconstrained Demand Today for Existing Clients Only with Less Trip Rationing*
- Applied expanded trips & increased cost per participant (from estimate of unconstrained demand today) to existing number E&D clients

*Estimated Unconstrained Demand in 2020 & 2030 for All Potential Clients*
- Applied projected population growth rates to estimate of unconstrained demand today
Figure 14 summarizes the results for the demand estimates for the E&D Program. It is important to note that public transit and other human service programs such as NEMT will continue to meet many of the transportation needs of elders and persons with disabilities. This effort was intended to estimate the cost of expanding the E&D Program to meet the needs of elders and persons with disabilities that are not currently met by public transit and human service transportation.

**Figure 14: Results of E&D Program Demand Estimates**

Unconstrained Demand Today for Existing Clients Only
- Serve 4,900 existing E&D clients annually
- Increase annual one-way trips from 182,000 to 400,000 (120% increase)
- Increase annual funding from $4.5M to $9.4M (109% increase)

Unconstrained Demand Today for All Potential Clients
- Increase annual E&D clients from 4,900 to 5,200 (7% increase)
- Increase annual one-way trips from 182,000 to 195,000 (7% increase)
- Increase annual funding from $4.5M to $4.8M (7% increase)

Constrained Demand Today for All Potential Clients
- Increase annual E&D clients from 4,900 to 5,200 (7% increase)
- Increase annual one-way trips from 182,000 to 195,000 (7% increase)
- Increase annual funding from $4.5M to $4.8M (7% increase)

Unconstrained Demand in 2020 for All Potential Clients
- Increase annual E&D clients by 15-18% (depending on trip category)
- Increase annual one-way trips from 182,000 to 493,000 (171% increase)
- Increase annual funding from $4.5M to $11.6M (157% increase)

Unconstrained Demand in 2030 for All Potential Clients
- Increase annual E&D clients by 32-35% (depending on trip category)
- Increase annual one-way trips from 182,000 to 574,000 (216% increase)
- Increase annual funding from $4.5M to $13.5M (200% increase)

Note: Funding amounts shown in 2015 dollars.
Stakeholder Input

The regional brokers and human service agency partners provided input on the current successes of the E&D Program, the challenges including specific unmet needs, and the opportunities to improve the program and enhance mobility for elders and persons with disabilities in Vermont.

While individuals generally must be a client at a partner agency to access E&D transportation services, some regions operate the Ticket to Ride Program. In these regions a portion of E&D funding is set aside for individuals who are not affiliated with any human service agencies. The individuals can self-register for a limited number of discretionary personal trips and pay 20% of the cost of the trip. In other regions without the Ticket to Ride Program, regional brokers may refer individuals not currently affiliated with a human service agency to a partner agency to obtain E&D transportation. Stakeholders identified opportunities to extend E&D service to the general public by seeking private contributions to increase funding for the Ticket to Ride Program and by expanding the Ticket to Ride Program to other regions.

Stakeholders commonly cited social and excursion trips as an unmet need, particularly for elders who are isolated in rural areas. Vermont elders often face numerous challenges including chronic pain, grief, and depression; when combined with physical isolation in rural areas these factors make elders a high risk population. Providing more social trips through the E&D Program could help promote social and emotional wellness among elders.

Stakeholders also identified needs for more specialized and accompanied transportation, such as door through door service. Elders are living longer and may have chronic health issues living at home. Stakeholders reported that compared to many years ago clients now are much frailer and have more complex needs. The abilities of elders may also change quickly, resulting in different transportation needs (to accommodate oxygen, walkers, etc.). These trends combined with the projected population growth of Vermont’s elders and persons with disabilities point toward increased needs for specialized transportation in the next 10-15 years.

Figure 15 summarizes the input collected from the stakeholders regarding unmet needs and gaps in resources.

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Serving High Need Individuals

Michael had debilitating arthritis and required daily medical care. He relied on ACTR’s Dial-A-Ride service to attend appointments that were not on a bus route or the only available times did not work with the bus schedule.

“I couldn’t have made it through without ACTR transportation. It gave me access to the help I needed to get back on my feet. When things got better I decided to give back by becoming an ACTR volunteer driver. There are so many who have no other way to get around, and it’s a relief for those who are raising kids, working, and caring for aging parents.”

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### Figure 15: Stakeholder Input on E&D Needs and Resources

#### Successes
- Serving E&D individuals that really need transportation assistance
- Key element to elders aging in place
- Provides lifeline to residents in rural areas
- Brokers are able to provide some level of service to everyone
- Provides cost-effective transportation
- Promotes community health
- High community support & collaboration
- VTrans supports regional brokers

#### Challenges
- Currently managing E&D funding by running constrained program
- Existing level of funding is insufficient to meet known needs
- Service parameters restrict amount of service & trip types
- Unmet needs include social/excursion trips, trips for general public E&D, service in rural outlying areas, transportation for Choices for Care Moderate Needs individuals
- Individuals generally must be served by a partner agency to access E&D services
- Future projections of increased needs for elders, critical care, adult day services, drug rehabilitation & door through door service. Target populations are anticipated to have greater needs for specialized transportation in the future.
- Considerable latent demand due to growing eligible population, but limited awareness of program
- More E&D individuals must be served with same or less funding
- Human service agency budgets have seen reductions
- Difficulties for human service agency partners to manage E&D allotment
- Reach of E&D funding is impacted by size of service area & development patterns, availability of volunteer drivers & broker operating costs
- Difficulties recruiting volunteer drivers

#### Opportunities
- Important to provide consistent or increased funding for E&D Program
- More funding could provide more trips to existing clients, serve new E&D individuals, serve more Choices for Care Moderate Needs individuals, provide specialized transportation where needed, allow new partner agencies to join program
- Continue to monitor how needs of elders & persons with disabilities are being met through various transportation resources including E&D - regularly assess role of program & level of funding needed
- Increase outreach & marketing to help identify true need for E&D transportation
- Expand Ticket to Ride Program with private contributions & expand to other regions
- Human service agency partners are pursuing other funding sources (private, foundations, towns, etc.)
- Improve data & billing processes
- Improve services to growing elders population
- Expand State support to recruit volunteer drivers, build awareness with Legislature of unmet needs & participate in Regional E&D Advisory Committees
- More research & advocacy
SECTION 4: SERVICE DELIVERY

Following the 2004 E&D Program review, Vermont’s transit providers worked with human service agency partners to fully implement the regional service delivery model. Transportation services for elders and persons with disabilities including public transit services, E&D program services, and NEMT are now centralized with the regional brokers. Many human service agencies work with the regional broker(s) serving their clients to arrange transportation. A few human service agencies still operate their own vehicles separately, but this is the exception. Where human service agencies continue to provide transportation, these services complement the E&D Program by providing additional trips and more specialized transportation than the current E&D funding level allows.

Figure 16 summarizes the input collected from the stakeholders on the current successes, challenges, and opportunities regarding the delivery of E&D transportation in Vermont.
### Figure 16: Stakeholder Input on E&D Service Delivery

#### Successes
- Regional service delivery model facilitates coordination - regional brokers coordinate trips between partner agencies & between E&D, NEMT & client pay trips
- Effective use of multiple funding sources
- Flexibility for each region to tailor program to meet specific needs
- Brokers work with clients to determine best fit, least cost mode for E&D transport
- Brokers & partners generally work well together - reallocate funding when needed & build volunteer base
- Partners’ knowledge of their clients helps maximize use of E&D funding
- Framework for coordinated transportation sets up a safety network - connects E&D individuals to services beyond transportation & volunteer drivers monitor wellness of riders

#### Challenges
- Partners with clients in multiple regions have to request trips from multiple brokers that provide varying service levels & different rules/reporting requirements
- Inconsistency & some lack of transparency among regions in billing & rates
- Broker may not be able to serve new partners due to capacity constraints
- Regional groups hesitant to encourage new partners to join given limited E&D funding

#### Opportunities
- Continue to support regional service delivery model, which facilitates successful coordination between public transit & human service agency transportation services
- Better utilize available trips (e.g., encourage more clients to use fixed route bus when feasible, coordinate more riders on volunteer driver trip)
- Capacity available during midday
- Explore a model for invoicing & billing that may be implemented statewide to provide consistency between regions
- More active Regional E&D Advisory Committee in some areas
- Increase communication to help partners better understand service delivery & funding allocations
- Innovative service models that may be more cost-efficient (e.g., establishing demand response buses for scheduled, coordinated trips to common destinations, rather than individual trips to same destination at different times)
- Idea exchange on successes, best practices, & lessons learned between regions
SECTION 5: COORDINATION OPPORTUNITIES

In the last decade the regional service delivery model operated in Vermont has provided a strong foundation for coordinating public transit and human service transportation services.

Every regional broker operates a fully coordinated service, where E&D riders, Medicaid riders, riders of contracted service, and the general public could travel in the same vehicle. The cost of each trip is split among the different programs and contracts, thereby reducing the cost to each program. Vermont’s transit systems have served in this capacity as regional broker over the past decade with much success.

Figure 17 summarizes the input collected from the stakeholders on the current successes, challenges, and opportunities regarding coordinated transportation services in Vermont.
Figure 17: Stakeholder Input on Coordination Opportunities

<table>
<thead>
<tr>
<th>Successes</th>
<th>Challenges</th>
<th>Opportunities</th>
</tr>
</thead>
</table>
| • E&D Program is important for regional transportation coordination  
  • All regions currently coordinate transportation well - brokers & partners have good relationships  
  • Hybrid system of using transit & human service agency transportation, when needed, works well  
  • High efficiency service  
  • Increased utilization of existing fleet  
  • Extends impact of E&D funding  
  • Broker & partner may share volunteer resources  |
| • Efficient service delivery at expense of customer experience (e.g., longer waits & trip times, negotiating trips)  
  • Current manual scheduling/coordination of trips is time consuming & tedious  
  • Difficult to blend different types of clients (elders, substance abuse) on same vehicle  
  • Cancellations & no shows disrupt coordination & results in higher operating costs  
  • Capacity constraints may limit service for certain markets or trip types  
  • When funds are re-allocated within region, one partner may need to restrict social/personal trips to meet other partner’s medical needs  |
| • Continue to support transportation coordination efforts between regional brokers/transit providers and human service agency partners  
  • Increase coordination of trips across regions and brokers  
  • Coordinate additional trips at times when vehicles have capacity  
  • Add new partners to E&D Program where possible and appropriate  
  • Examine no shows & cancellations to reduce disruptions to coordinated trips  
  • Coordinate with Meals on Wheels (now provided by Area Agencies on Aging for elders and by the Vermont Center for Independent Living for younger adults with disabilities)  
  • Coordinate with nursing homes that have vehicles  |
**SECTION 6: LOCAL MATCH**

The majority of funding for the E&D grants is from federal sources, but VTrans requires the grant applicants to contribute a 20% local match. In many regions the E&D partners including human service agencies and municipalities provide the local match as cash. In some regions, the transit provider provides the value of volunteer driver hours as in-kind match. This approach benefits areas that have limited local cash, but the downside is that in-kind match uses up the E&D grant faster. Some regions provide a mix of cash and in-kind value for their local match.

A common issue identified by human service agency partners was that their budgets have seen reductions. Many human service agencies do not have enough State or private funds and have relied more on federal funding, but struggle to provide the local match. For some agency partners, E&D transportation is critical to get clients on-site so they can receive services. These agencies have had to eliminate other programs or staff and benefits in order to provide the local match for the E&D Program. While the agencies are pursuing other funding sources including foundations and towns, another opportunity would be to increase the flexibility of local match sources to allow the agency’s transportation staff or agency-provided transportation as in-kind match.

Figure 18 summarizes the input collected from the stakeholders on the current successes, challenges, and opportunities regarding local match for the E&D Transportation Program.
Figure 18: Stakeholder Input on E&D Local Match

**Successes**
- Most regions can meet 20% local match
- Partners know their E&D allotment a year in advance, can plan for local match
- Some regions have ample volunteer driver in-kind match, where partners would otherwise have difficulty finding cash
- Some partners use unrestricted (non-VTrans) State funds for cash match

**Challenges**
- Difficult for some partners to provide 20% cash match & broker does not have volunteer hours available for in-kind
- Some partners need to eliminate other programs or staff/benefits to meet E&D local match
- Where partners have had to decrease cash match, lost E&D services
- Partners have in-kind match available, but use cash because in-kind uses up grant faster
- Need more E&D funding, but difficult for some partners to provide more local cash

**Opportunities**
- Establish a statewide pool to share in-kind match resources
- Provide more flexibility in sources for local match (e.g., transportation staff & agency-provided transportation as in-kind)
- More E&D funding without match requirements – allow partners to serve more people
SECTION 7: IMPACTS OF THE MEDICAID WAIVER AND NEMT

Background

Under Title XIX of the Social Security Act, the Medicaid Program provides medical assistance to families with low incomes and to individuals with disabilities. Medicaid is financed through a federal-state partnership but administered on the state level; each state designs and operates its own program within broad federal guidelines established by the Centers for Medicare and Medicaid Services (CMS). Federal law does specify a set of “mandatory services” that all states must cover for the traditional Medicaid population.

One requirement of the Medicaid program is that states assure necessary transportation to the nearest available and appropriate medical facilities for Medicaid eligible clients. Part of this assurance is accomplished through their Non-Emergency Medical Transportation (NEMT). Since states have control over how their Medicaid programs are administered, there is considerable variation in how states provide NEMT services to Medicaid recipients.

How Medicaid NEMT Works in Vermont

In Vermont, the Medicaid Program is managed by the Department of Vermont Health Access (DVHA) within AHS. NEMT is a covered service for those enrolled in Medicaid and Dr. Dynasaur programs with the exception of those enrolled in the “moderate needs group” (MNG) covered under the State’s Choices for Care Program.

To provide NEMT services in the State, DVHA has personal services contracts with seven NEMT brokers that manage the program on the regional level and provide appropriate transportation to Medicaid-covered services. Medicaid brokers are paid a negotiated per member per week fee. In exchange, the brokers provide all appropriate transportation for Medicaid clients in their service area. Some of the brokers directly operate a portion of the services they manage while others do not.

In 2015, there were approximately 210,000 Vermonters enrolled in the Medicaid Program. Almost 8,600 unduplicated clients (4%) received NEMT services.

Coordination of E&D Program with NEMT

NEMT is particularly important to the E&D program for a number of reasons:

1. Many of the riders transported under the E&D Program are also NEMT riders,
2. All of the E&D providers are also public transit systems and NEMT brokers (with the addition of SSTA that provides E&D transportation and NEMT in the Chittenden County area), and thus,
3. Changes in rider eligibility for NEMT can affect the demand for E&D transportation.
The community-based public transit agencies listed in Table 6 serve Medicaid clients and E&D riders residing in set geographical areas, effectively coordinating NEMT services with their general public transit services. The relationship between the E&D Program and NEMT allows for co-mingled, shared, coordinated trips.

**Table 6: Regional Brokers by Service Area**

<table>
<thead>
<tr>
<th>Area Served</th>
<th>Public Transit/Medicaid Broker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addison County</td>
<td>ACTR – Addison County Transit Resources</td>
</tr>
<tr>
<td>Southern Windsor and Windham Counties</td>
<td>SEVT – Southeast Vermont Transit</td>
</tr>
<tr>
<td>Bennington County</td>
<td>GMCN – Green Mountain Community Network</td>
</tr>
<tr>
<td>Franklin, Grand Isle and Washington Counties</td>
<td>GMTA – Green Mountain Transit Agency</td>
</tr>
<tr>
<td>Rutland County</td>
<td>MVRTD – Marble Valley Regional Transit District</td>
</tr>
<tr>
<td>Caledonia, Essex, Orleans, and Lamoille Counties</td>
<td>RCT – Rural Community Transportation</td>
</tr>
<tr>
<td>Orange and Northern Windsor Counties</td>
<td>STSI – Stagecoach Transportation Services</td>
</tr>
<tr>
<td>Chittenden County</td>
<td>SSTA – Special Services Transportation Agency</td>
</tr>
</tbody>
</table>

The transit agencies coordinate public transit and NEMT into one unified system for residents within their areas. Each of the community-based brokers operates slightly differently but in general the program works as follows:

- DVHA certifies Medicaid clients as being eligible for NEMT because they have no other means of getting to medical services. Currently, NEMT is provided to over 8,600 unduplicated Medicaid clients in the State.

- The community-based brokers take trip requests directly from clients and verify from the DVHA system that the person is eligible for NEMT and has a Medicaid-eligible appointment.

- The brokers decide which of the services available within their areas is most appropriate for that trip. If possible, they direct the client to their fixed-route system. If not, they arrange for a volunteer driver, a taxi trip, or provide the trip on their demand response service. All services are shared rides, and clients are co-mingled with the general public and often with clients of other agencies.

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14 In addition, DVHA purchases CCTA monthly passes for frequent-NEMT users that can ride fixed-route buses.
The current arrangement furthers the State goal of maximizing the use of available federal funding. In order to draw down and use federal dollars, the federal funding programs require transit operators to match those federal dollars with a non-federal or “local” share. For operating subsidies, transit providers must cover 50% of their net operating deficit (operating costs minus operating revenue) from “local sources.” State transit funding can be used to meet a portion of the non-federal share as can contributions from local towns (generally from property taxes), institutions (colleges, hospitals), and private businesses (ski resorts).

Recognizing how difficult it can be to generate cash from local sources, the federal programs allow transit grantees in rural and small urban areas (all of Vermont) to use certain agency contract dollars, including Medicaid, as either operating revenue or non-federal match. Some of the transit operators rely on their Medicaid contract to meet a significant portion of their non-federal share; without those dollars, they would lose a portion of their federal transit subsidies. This is especially important in areas without significant local resources.

**Vermont Waiver(s)**

In 2015 Vermont consolidated its two Section 1115(s) waivers from CMS into one 1115 waiver. Up until 2015, Vermont Medicaid operated under two Section 1115(s) waivers from CMS, the Global Commitment to Health and the Choices for Care demonstrations that date back a number of decades. In 1995, Vermont implemented a Section 1115(a) Demonstration, the Vermont Health Access Plan (VHAP). The primary goal was to expand access to comprehensive health care coverage through enrollment in managed care for uninsured adults with household incomes below 150% (later raised to 185% of the federal poverty level for parents and caretaker relatives with dependent children in the home). DVHA, as a managed care entity, administers the waiver and Vermont’s public health coverage programs, including Medicaid and VHAP.

In the fall of 2005, Vermont secured approval for a five-year 1115 Medicaid waiver, known as the “Global Commitment Waiver,” that allowed the State to fundamentally restructure its Medicaid Program. The Global Commitment (GC) to Health Section 1115(a) Demonstration, implemented on October 1, 2005, continued VHAP and provided flexibility with regard to the financing and delivery of health care to promote access, improve quality, and control program costs.

Vermont’s Choices for Care Section 1115(a) Demonstration, implemented on October 1, 2005 and renewed through September 30, 2015, addressed consumer choice and funding equity for low-income seniors and people with disabilities by providing an entitlement to both home and community based services (HCBS) and nursing home care. Prior to this, the only entitlement was for nursing home care. The goal of this demonstration was to increase choices available to persons in need of long term care, such as elders and persons with disabilities, by providing more opportunities for home and community based care (in addition to nursing facilities).
In January 2015, CMS approved an amendment to the 1115 waivers allowing the State to consolidate the State’s Choices for Care Demonstration with the Global Commitment Demonstration. This effectively amended the Vermont section 1115(a) Medicaid demonstration, entitled “Global Commitment to Health,” effective through December 31, 2016. The State has applied to CMS to renew the Global Commitment to Health Section 1115 waiver for another five-year period extending from January 1, 2017 through December 31, 2021.

As of October 2014, approximately 52% of people enrolled in Choices for Care’s Highest/High Needs groups were served in a home- or community-based setting, while 48% were served in a nursing facility. The primary goal of Choices for Care is to support individual choice among a range or “menu” of long term care services and settings. The Choices for Care Data Report for 2014 reveals that a large majority (approximately 85%) of participants receiving Home- and Community-Based Services (HCBS) report that they had good choice and control over home- and community-based services, and that these services were provided when and where they needed them.

One of the goals of Choices for Care is to ‘shift the balance,’ serving a lower percentage of people in nursing homes and a higher percentage of people in alternative settings. Choices for Care has achieved progress since 2005, with enrollment in HCBS and Enhanced Residential Care (ERC) settings exceeding enrollment in nursing homes for the first time in 2013 (currently 52% HCBS/48% nursing home).

**Moderate Needs Group (MNG)**

The Choices for Care “Moderate Needs” Program is an option for people who may not meet nursing home level of care, but require some services to assist them to remain independent in their home, preventing a more intense level of service. As of January 2015, approximately 1,400 people were enrolled to receive MNG services. Services to the MNG are generally limited to case management, adult day, and homemaker services. Services are also limited by the capped funding allocation to adult day and homemaker providers, and about 200 unduplicated individuals in the MNG received adult day services during 2015. There are waiting lists for Moderate Needs individuals to receive adult day services, though these waiting lists are limited to a few areas of the State.

People on Moderate Needs who do not have Medicaid coverage are not eligible for NEMT. Last year, a “flexible funding” option was added to the Moderate Needs Program that gave providers a way to help pay for necessary transportation, especially when people needed to get to adult day and did not have Medicaid coverage. However, there is a finite amount of

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15 Vermont Global Commitment 1115 Demonstration Extension Request; Draft for Public Comment 10/30/15
16 Draft Interim Program Evaluation, Global Commitment to Health 11-W-00194/1, October 2015.
17 DAIL, per personal communication from the Deputy Commissioner in January 2016.
funding for all services to the MNG enrollees, and transportation is only provided if it’s absolutely necessary.

**Waiver Impacts on E&D Transportation Demand**

As individuals choose home and community based care instead of nursing facilities, their needs for community transportation within the community increase. All of the people who participate in the Choices for Care Program are eligible for Medicaid benefits including transportation to medical appointments (with the exception of those in the MNG mentioned above). Other trips within the community (for shopping, errands, social/recreation) are needed but not paid for by Medicaid. Many of these trips are provided through the E&D Program.

Enrollment in the “Moderate Needs Group” is based both on clinical and financial eligibility criteria. Individuals enrolled in the High Needs Group and a small number of Medicaid eligible individuals in the MNG may receive NEMT, but the majority of individuals in the MNG are not eligible for NEMT. Most MNG individuals are approved to receive community based medical services through Medicaid, but must rely on the E&D Program for transportation needs.

**NEMT Trends Affecting the E&D Program**

The Choices for Care Program has been in place for many years now and, while it continues to have an impact on the need for E&D services, recent changes under the Affordable Care Act (ACA) may have had a greater impact on NEMT and therefore E&D services. One of the most significant provisions in the ACA allowed states to expand Medicaid eligibility coverage to non-disabled adults under the age of 65, without dependent children, with incomes at or below 133% of the federal poverty level. The ACA has impacted NEMT in the following ways:

1. The ACA contributed to the expansion in the number of people eligible for Medicaid in the State from 180,265 in 2013 (pre-ACA) to 210,168 in 2015 after the ACA was implemented – an increase of almost 30,000 people. This represented a 17% increase in monthly enrollment during this period.

2. NEMT trips also increased 17% from 407,000 one-way trips in 2013 to 468,000 in 2015.

3. NEMT participants are increasing from 7,905 unduplicated NEMT participants in FY 2014 to 8,599 in FY 2015 and 8,673 in FY 2016 (to date).

The increase in the NEMT trips has been more than expected – it was anticipated that new enrollees would have less need for NEMT since they would be more ambulatory and less transit-dependent than the traditional Medicaid-eligible population. Further, the newly enrolled population was expected to continue with travel arrangements they had in place.
prior to enrolling in Medicaid. However, while it’s not possible to say for certain, it appears that the additional Medicaid enrollees may have access to health care for the first time, and new medical trips are being generated.

It has been postulated that the ACA expansion may have shifted some client trips from E&D to Medicaid/NEMT, but stakeholders have not reported this to be the case. This may be because the new Medicaid clients are not eligible for E&D services or are not clients of existing partner agencies.

**Stakeholder Input**

Figure 19 summarizes the input collected from the stakeholders on the impacts of the Medicaid waiver and NEMT on the E&D Program.
**Figure 19: Stakeholder Input on Impacts of the Medicaid Waiver and NEMT**

<table>
<thead>
<tr>
<th>Successes</th>
<th>Challenges</th>
<th>Opportunities</th>
</tr>
</thead>
</table>
| • Possible that increase in Medicaid enrollees and NEMT riders eased pressure on E&D Program - demand for E&D transportation not as high as expected over past decade  
• Few observed impacts to E&D Program from ACA, little shift in E&D trips to NEMT (e.g., GMTA saw 20-25 E&D clients move to NEMT, RCT saw 17% increase in Medicaid enrollees but uncertain if individuals were using E&D before)  | • Increase in individuals choosing home and community based care through Choices for Care Waiver Program means low-income E&D individuals are living at home longer, and may have chronic health issues - resulting in increased transportation needs including more specialized transportation  
• Choices for Care Moderate Needs individuals comprise a large portion of attendees to adult day centers - their transportation is not covered (except for the small number also eligible for Medicaid) so they rely on E&D or other transportation  
• Regional brokers have not seen E&D resources freed up following ACA expansion - still receive more E&D transportation requests than able to serve  
• With regional brokers serving both E&D and NEMT Programs, increased NEMT trips and costs may compromise E&D services  
• Volunteer driver resources have shifted to a majority serving NEMT trips, which results in less resources available to serve E&D trips  
• Regional brokers report NEMT reimbursement is insufficient to cover costs - costs possibly shifted to other programs including E&D given shared, coordinated trips | • Keep coordinating at State level (VTrans and AHS) to ensure coordinated regional broker model continues  
• Monitor use of coordinated transportation resources to ensure that the increase in NEMT services does not negatively affect regional brokers’ ability to provide E&D trips, in terms of vehicle capacity and funding |
SECTION 8: TECHNOLOGY

The study team also examined the role of existing and emerging technology in expanding and improving service to elders and persons with disabilities. The primary technology project that stakeholders identified was a VTrans supported effort to update all the transit systems’ scheduling and dispatch software to the same system (RouteMatch).

The software update will improve the efficiency and effectiveness of trip scheduling at each of the regional broker locations. This will be possible by improving the ability to combine trips when appropriate, avoiding no-shows and confusion over cancellations by using an automated call system to remind clients of their scheduled trips, and increasing the ability for regions to communicate with one another when crossing from one service area to another.

Improvements in vehicle fleet options have also helped provide more efficient and cost-effective service. Whereas the transit providers could previously only purchase lift-equipped vans through the E&D capital program, around 2012 VTrans changed its policy to expand the variety of vehicles eligible for E&D capital support, which has impacted the operation of E&D services. Transit providers are now beginning to use smaller, passenger size vehicles that still allow for the transportation of individuals who use wheelchairs without the expense of running a full-size “cutaway” transit vehicle simply because it has a lift. Some providers have also incorporated sedans into their fleets for transports of ambulatory E&D clients.

VTrans is currently planning several technology based pilot projects that aim to increase the utilization of existing public transit services. Three pilot projects will provide real-time arrival information to the general public, allowing individuals to access surplus capacity available on nearby demand response vehicles. VTrans is working with Bridj, a transportation network company, and the United States Department of Agriculture to develop a rural pilot project in the Northeast Kingdom. Transit providers have also provided their route schedules to Google Transit so individuals can see their transit options when planning trips online.

These technologies and customer information tools are highlighted in the stakeholder input summary in Figure 20.
Figure 20: Stakeholder Input on Existing and Emerging Technologies

<table>
<thead>
<tr>
<th>Successes</th>
<th>Challenges</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Regional brokers have high hopes for new RouteMatch software to help improve trip coordination, data processing, and cost allocation to different funding programs and reduce cancellations and no shows - benefits include more service capacity, faster communication to partner agencies, and ability to track vehicles in real time.</td>
<td>• Some regional brokers uncertain if mixed fleet will result in long-term operations savings (e.g., now operating two vehicles, such as a van and a sedan, instead of one).</td>
<td>• Continue to implement RouteMatch system statewide, and pursue best use of built-in functions.</td>
</tr>
<tr>
<td>• Variety of E&amp;D vehicles has resulted in short-term operations savings.</td>
<td>• In rural areas with limited cell phone service, riders cannot reach brokers to reschedule trips &amp; partner agency is charged for trip.</td>
<td>• Continue to monitor modern ridesharing platforms (Uber, Bridj, etc.) for their potential application in rural environments; pursue pilot projects to explore these potential solutions as appropriate.</td>
</tr>
<tr>
<td>• VTrans working with University of Vermont Transportation Research Center to develop trip planner tool for people with disabilities.</td>
<td></td>
<td>• Provide real-time information to improve customer experience (e.g., reduce wait times in cold weather, notification of delays).</td>
</tr>
</tbody>
</table>

Opportunities

• Develop one source (e.g., app) for customers to schedule rides across regions & providers.
• Establish online ride scheduling system for partner agencies to schedule trips directly with regional brokers.
SECTION 9: FINDINGS AND RECOMMENDATIONS

This section summarizes the trends identified for the E&D Transportation Program over the last decade and highlights the findings and recommendations for each topic requested by the Legislature.

Program Trends

The original intent of the E&D Program was to fill gaps in existing transportation services for elders and persons with disabilities. Therefore it is important to view the E&D Program within the context of the overall transportation system, which is currently very dynamic.

Over the past decade, the E&D Transportation Program has experienced an increase in costs, while the total number of trips provided has remained stable. The significant increase in the mileage reimbursement rate (by 53%) paid to volunteer drivers and the increase in average trip lengths (by 11%) contributed to the program cost increase. The flat trend in total E&D trips was not necessarily an indicator of stable need. The total number of trips has not changed since the last program review partially because a common strategy among the brokers and partner agencies has been to ration trips to contain costs. Individuals eligible for the E&D Program have also been able to meet their transportation needs through other resources.

Both the amount of public transportation services provided and transit ridership in Vermont have increased significantly over the last decade. The number of individuals enrolled in Medicaid and using NEMT to access medical services has also increased considerably. Some human service agencies continue to provide their own transportation, which complements the E&D Program by filling gaps and meeting more specialized transportation needs.

In recent years the E&D Program has supported a higher number of elders and persons with disabilities, but individuals have taken fewer trips on average given funding constraints. In reality, some individuals needed E&D service multiple times per week to access critical care or substance abuse treatment, which means that other individuals received less than the average of three one-way trips per month.

New technologies and new types of services have changed the ways that mobility needs are met. The demographics of the E&D populations have also changed, translating into demand for different amounts and types of service. Today and through 2020 individuals in their 60s comprise the largest share of Vermont’s elders population. These young elders are staying active and working longer, which translates into decreased need for E&D transportation in

Critical Care Needs

Irene uses GMTA’s E&D service to get to radiation treatments. “As a recovering cancer patient I am so grateful for the rides to Burlington - Radiation. This certainly made my life a bit easier. To all the caring people who have handled my phone calls - you are special.”

-Irene, Montpelier resident
the short-term, but high projected needs – in both volume and more specialized transportation needs – in the next 10-15 years. This combination of factors helps explain an observed leveling off in demand for E&D transportation in recent years.

Unmet Needs

Stakeholders reported that the E&D Program currently covers only the most basic needs such as access to critical care and medical services and shopping. This level of service is vital for existing users who are primarily low-income elders and residents in rural areas that would otherwise be isolated. However, Vermont’s elders and persons with disabilities have many unmet transportation needs that would enhance their quality of life:

- **An increased number of trips** - additional trips beyond the quota per person currently in place due to funding limitations.

- **A greater variety of trips, especially social and excursion trips** – elders and persons with disabilities have more needs than just going to the doctor and grocery shopping. Vermont elders often face numerous challenges including chronic pain and depression; when combined with physical isolation these factors make elders a high risk population. More social trips could help promote social wellness among elders.

- **More specialized transportation** – stakeholders reported a growing need for door to door and door through door service.

- **More freedom to make trips** – being able to request medical trips on shorter notice, travel outside of transit system operating hours (early morning, late evening, and weekends), and take trips at the day and time requested instead of needing to negotiate trips.

It is difficult to identify the true need for E&D transportation because the program has been constrained for many years – in terms of prioritizing trip types (e.g., medical over shopping and personal), limiting the number of trips per individual, and limiting the days and times of service – due to funding limitations at both the state and local levels. Stakeholders reported that some E&D individuals may have needs, but no longer call to request trips because they know the program limitations and have already been denied in the past. These individuals must find other transportation solutions, or forego the trip(s) entirely.

The other major factor affecting latent demand is the low level of public awareness of the E&D Transportation Program as a resource for its target populations. The public transit providers reported limited to no promotion of the E&D Program due to fears that they would be overwhelmed with demand beyond the available resources. The human service agency partners in each region have also largely remained the same, meaning the individuals served
through E&D remain primarily clients of the partner agencies and these clients have been transported for the same trip purposes over the years. The funding limitations of the E&D Program have inadvertently closed it off as a resource to eligible individuals, who may not be affiliated with a partner agency, and to other human service agencies that would be interested in joining the program.

<table>
<thead>
<tr>
<th>Recommendations Regarding Unmet Needs</th>
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| • Continue to support the E&D Program through consistent or increased funding.  
• Continue to monitor how the needs of elders and persons with disabilities are being met through various transportation resources including the E&D Program, in order to regularly assess the role of the program and the level of funding needed.  
• Increase outreach and marketing about the program to help identify the true need for E&D transportation.  
• Expand Ticket to Ride Program with private contributions and to other regions.  
• Expand State support through assistance in recruiting volunteer drivers and regular involvement with Regional E&D Advisory Committees. |

**Service Delivery**

The regional service delivery model facilitates coordination and allows the brokers to effectively use multiple funding sources. The public transit providers, serving as regional transportation brokers, have become more creative in providing trips. Regional brokers have been able to meet the need for longer trips, particularly to critical care and medical services, by increasing the use of volunteer drivers. The cost per mile for volunteer driver trips is a fraction (one-sixth) of the cost for van trips. The brokers have relied more on volunteer drivers to meet E&D transportation needs, but face increased costs due to rising mileage reimbursement rates and longer trip lengths, as well as challenges recruiting and retaining volunteer drivers.

The partnership between transit providers and human service agencies established in the regional service delivery model provides a safety network in communities, where elders and persons with disabilities can access services beyond transportation and the volunteer drivers help monitor the wellness of individuals. The difficult trips that require more specialized transportation (often to critical care and medical services) are still provided through the E&D Program, and sometimes supplemented by human service transportation, but other trip needs are served through general public transit service, NEMT, and rides from family and friends.
Coordinating Opportunities

Every region is successfully coordinating transportation to provide cost-effective services to multiple markets including E&D riders, Medicaid riders, riders of contracted service, and the general public. The regional brokers have made significant progress in coordinating public transit and human service transportation services since 2004. The E&D Program is an important contributor to coordinated transportation across the State. The regional brokers and human service agency partners work well together. This partnership helps extend the reach of E&D Program resources.

The challenges associated with coordination include impacts to the customer experience (longer waits and trip times, having to negotiate trips), difficulties blending different client types such as elders with people receiving substance abuse treatment, the disruption of cancellations and no shows, and difficulties splitting costs with comingled rides.

Recommendations Regarding Coordination Opportunities

- Continue to support the transportation coordination efforts between the regional brokers/transit providers and the human service agency partners.
- Increase coordination of trips across regions and brokers.
- Coordinate additional trips at times when vehicles have capacity.
- Add new partners to the E&D Program where possible and appropriate.
Local Match

Most regions are meeting the 20% local match requirement for the E&D grants. The flexibility to provide local match as cash or in-kind volunteer driver hours allows the regional brokers and their human service agency partners to use the resources most available to them. Regions that provide local cash have struggled when partner agencies’ budgets have seen reductions. With transportation vital to their programs, the partner agencies have sometimes eliminated other programs, staff, or benefits to be able to provide the local cash. A concern with using in-kind match as opposed to cash is that in-kind match uses the E&D grant faster, so fewer trips can be provided overall.

<table>
<thead>
<tr>
<th>Recommendations Regarding Local Match</th>
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<tbody>
<tr>
<td>• Establish a statewide pool to share in-kind match resources.</td>
</tr>
<tr>
<td>• Provide more flexibility in the sources for in-kind match (e.g., value of transportation staff and transportation services that human service agency partners provide beyond E&amp;D services)</td>
</tr>
</tbody>
</table>

Impacts of the Medicaid Waiver and NEMT

The Choices for Care Program has supported more individuals staying in their homes longer and receiving home- and community-based care, rather than moving to nursing facilities. This has resulted in some increase in the need for community transportation, such as shopping and social/personal trips, which are not covered under Medicaid and can be provided through the E&D Program. However, the impact on the E&D Program has not been large since the elders and persons with disabilities participating in the waiver program tend to be frail and have minimal trip needs.

An increase in Medicaid enrollment and NEMT services, following expansion of Medicaid eligibility under the ACA, may have had a greater impact on E&D services. While there has not been a notable shift in client trips from E&D to NEMT, the demand for medical trips has increased in recent years and stakeholders anticipate serving people with greater needs. The increase in NEMT demand has led regional brokers to use a majority of volunteer driver resources to serve NEMT trips, with fewer volunteer driver resources available for E&D trips. Regional brokers reported that NEMT reimbursements have been insufficient to cover NEMT costs, so it is possible that costs have shifted to other programs including E&D.
Technologies

The regional brokers have high hopes for the VTrans’ supported update of their scheduling and dispatch software to improve trip coordination within each region and across regions, data processing for the billing/invoicing process, cost allocation to different funding sources, communication to partner agencies, and the ability to track vehicles in real time. The new system can also potentially improve the customer experience by sending notifications of delays and wait times.

The brokers have expanded the variety of vehicles used to provide E&D transportation. Some are now using smaller accessible vehicles as well as sedans, both of which have lower operating costs than the full-size vans with wheelchair lifts that were used exclusively for E&D transportation in the past. Stakeholders expressed interest in using technology to improve the information available to customer and human service agency partners.

Many of the recommendations described above are interrelated. For example, the recommendation to increase coordination between the regional brokers, beyond the current levels, will be facilitated by the implementation of the new RouteMatch software across all transit providers. Once all the transit providers are on the same platform, they should be able to view each other’s vehicles and capacity to coordinate additional trips that cross regional lines. The software update should also assist the brokers in the service delivery recommendation to better coordinate trips. RouteMatch will automatically schedule trips and

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<th>Recommendations Regarding Impacts of the Medicaid Waiver and NEMT</th>
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<td>• Keep coordinating at State level (VTrans and AHS) to ensure coordinated regional broker model continues.</td>
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<tr>
<td>• Monitor the use of coordinated transportation resources to ensure that the increase in NEMT services does not negatively affect regional brokers’ ability to provide E&amp;D trips, in terms of vehicle capacity and funding.</td>
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<th>Recommendations Regarding Technologies</th>
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<td>• Continue to implement RouteMatch system statewide, and pursue best use of built-in functions.</td>
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<td>• Continue to monitor modern ridesharing platforms (Uber, Bridj, etc.) for their potential application in rural environments; pursue pilot projects to explore these potential solutions as appropriate.</td>
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<td>• Provide real-time information to improve the customer experience.</td>
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<td>• Develop one source for customers to schedule rides across regions and providers.</td>
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<tr>
<td>• Establish an online ride scheduling system for partner agencies to directly schedule trips with the regional brokers.</td>
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maximize the use of vehicles, saving significant time and effort that transit system staff currently spends in manually scheduling coordinated trips.

As another example, the recommendation to establish a monitoring program to regularly assess unmet needs is related to the recommendation for regular meetings of the statewide E&D stakeholder group. This group could identify changes in needs and service delivery and provide insights to the role of the E&D Program in the larger context of other transportation resources. The insights provided by the transit providers, human service agencies, advocacy organizations, and other state agencies were invaluable in developing this report. Ideally VTrans and AHS can build upon this stakeholder participation and interest to establish a long lasting partnership – ensuring that the E&D Program continues to play an important role in meeting the mobility needs of Vermont’s elders and persons with disabilities.