# policy plan recommendations

## Updates to State Policy

### Current Policy Declaration

After more than 15 years since the state’s policy declaration was first codified, the Vermont legislature amended the statement in its 2019 session. The most significant changes were to remove “in order of precedence” from the end of paragraph (a) and to add a new goal to the original four. The revised language of the policy declaration is shown below (24 VSA Chapter 126 §5083). Goal number 2 is the one added in 2019.

(a) It shall be the State’s policy to make maximum use of available federal funds for the support of public transportation. State operating support funds shall be included in Agency operating budgets to the extent that funds are available. State policy shall support the maintenance of existing public transit services and creation of new services including the following goals:

(1) Provision for basic mobility for transit-dependent persons, as defined in the current public transit policy plan, including meeting the performance standards for urban, suburban, and rural areas. The density of a service area’s population is an important factor in determining whether the service offered is fixed route, demand-response, or volunteer drivers.

(2) Expanding public transit service in rural areas and increasing ridership statewide.

(3) Access to employment, including creation of demand-response service.

(4) Congestion mitigation to preserve air quality, decrease greenhouse gas emissions, and sustain the highway network.

(5) Advancement of economic development objectives, including services for workers and visitors that support the travel and tourism industry. Applicants for “new starts” in this service sector shall demonstrate a high level of locally derived income for operating costs from fare-box recovery, contract income, or other income.

There are three additional paragraphs in this section, but they are less policy-oriented than paragraph (a) and its five provisions. It should be noted that the new goal #2 is closely related to the study requested by the legislature in Section 20 of H. 529 (the same law that instituted the changes to the policy).

### Policy Priorities from Outreach Process

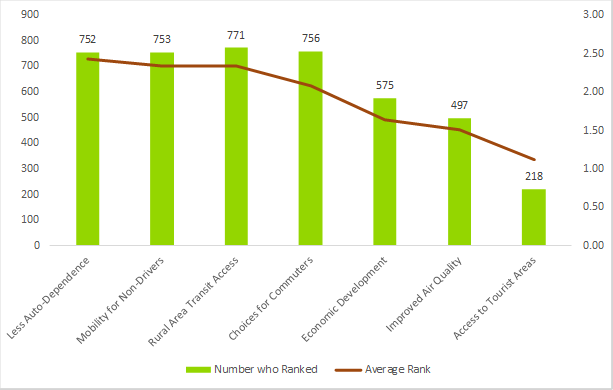
The MetroQuest survey of Vermonters allowed respondents to choose five from among seven possible policy priorities and to rank them in order of importance. Over 1,200 people responded to the survey and recorded their policy preferences. The graphs below show the results of the survey, first for all respondents taken together, and second for respondents from Chittenden County separately from those from the rest of Vermont. Overall, Chittenden County residents represented 44% of all survey respondents, a significantly higher percentage than their 26% share of the Vermont population.

The seven possible policy goals were defined as follows:

1. **Economic Development** includes transit services that could have a large positive impact on the economies of Vermont’s towns and cities by allowing growth to occur without having to build new roads and parking lots.
2. **Choices for Commuters** includes transit services aimed at getting people from their homes to the state’s largest employment centers.
3. **Mobility for Non-Drivers** includes transit services aimed at older adults and persons with disabilities, as well as people who do not have a license or cannot afford to own a car.
4. **Rural Area Transit Access** includes increased access to transit in rural areas—which could significantly increase public transit costs in the state—but would allow older adults to age in place.
5. **Access to Tourist Areas** includes transit services aimed at getting Vermont visitors to places like ski areas and state parks both to increase economic activity and reduce automobile impacts on sensitive environments.
6. **Less Auto-Dependence** includes transit services aimed at reducing dependence on automobiles for those who prefer living without a car.
7. **Improved Air Quality** includes transit services aimed at minimizing the environmental impacts of transportation in Vermont and reducing greenhouse gas emissions.

Figure 1 shows the number of respondents who selected each of the policy statements as one of their top five (column height) and also shows the average ranking (superimposed line – higher score is better). It can be seen that four of the policies garnered roughly equal support (though “choices for commuters” was ranked somewhat lower than the first three options) and significantly more than the other three policies. It should be noted that while the explanation of “improved air quality” incorporated reduced greenhouse gas emissions, many respondents may have thought it only referred to smog and carbon dioxide and other pollutants that were the focus of the Clean Air Act in the late 20th Century.

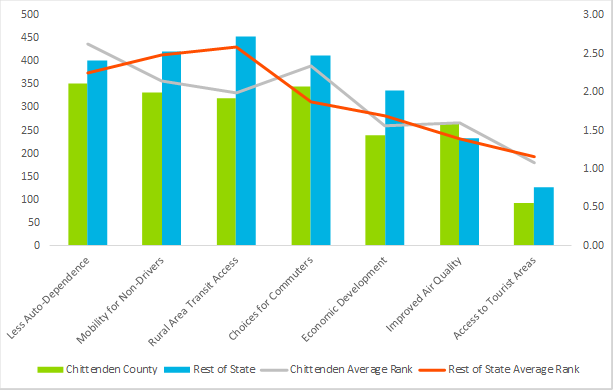
Figure | Statewide Policy Preferences



It is not surprising that the other two policies that were ranked lower were not as important to Vermont residents. While Vermonters support economic development overall, it is more of secondary characteristic of the benefits of public transit and has less immediate impact on a person’s mobility. Access to tourist areas would also be seen in this light as something beneficial to the Vermont economy, but less directly important to Vermont residents.

Figure 2 shows the policy preferences separately for Chittenden County residents and people who live in other Vermont counties. There was general agreement between the “urban” and “rural” residents of Vermont[[1]](#footnote-2) about which policies were the most important, but the relative rankings within the top four and the bottom three varied between the parts of the state.

Figure | Chittenden County vs. Rest of Vermont Policy Preferences



In Chittenden County, less auto-dependence and choices for commuters were the highest priority goals, while for residents elsewhere in Vermont, mobility for non-drivers and rural area transit access were most important. These results are not surprising, as most of the people in the urbanized portion of Chittenden County have good access to public transportation and can easily envision living without a car and having better commuting options. In other parts of the state, where there is little or no fixed-route bus service available, the concerns about basic mobility are much more salient and transit access in rural areas is a clear and present gap.

Among the three lower-ranked goals, economic development and access to tourist areas were more important for rural residents both because employment centers are scarce and distant for rural residents and because it is often the case that a tourist area (ski resort) is one of the most important nearby economic engines. Air quality, including concerns about greenhouse gas emissions, may be a more salient issue in Chittenden County because of the much higher level of traffic congestion there and also the recognition that a robust transit system, like Green Mountain Transit, can offer a real alternative to driving, something much harder for a rural resident to envision.

Ultimately, the State needs to have a set of policy priorities that treats both urban and rural residents in an equitable way. The second and third choices of both the Chittenden County residents and the rest of Vermont were the goals of providing mobility for non-drivers and choices for commuters. It is likely that rural residents who selected choices for commuters as a top-ranked goal were thinking beyond the description of “getting people from their homes to the state’s largest employment centers” to include access to jobs in rural areas as well. Thus, these priorities taken together represent basic mobility for essential needs and services, and the ability to get to work, whether for people who have the option to drive or for those who do not. It is not unreasonable to think of these functions as the two most essential purposes of a public transit system.

### Recommended Policy Language

Recognizing these two functions as the most important, further reinforced by the major themes of the needs analysis, where basic mobility and access to jobs were mentioned as critical in every region of the state, it is recommended to revise the policy goals in statute to reflect their primacy. Transit access in rural areas could be construed as covered under these two functions, but the need expressed during the public outreach phase was so great that it deserves to be called out separately. Indeed, the Vermont legislature just did so in the 2019 session.

Less auto-dependence, the last of the top four choices, reflects the third major theme of the needs analysis, listed in the prior chapter. As the most important priority for Chittenden County respondents, it also deserves separate mention. Further, the concept of improved air quality and reduced energy use/greenhouse gas emissions is tied very closely to reduced automobile use and thus can be combined with less auto-dependence into a single goal.

Finally, while economic development and access to tourist areas may not have ranked the highest among respondents from the general public, the State has a strong interest in these themes and the public sees important benefits from increased activity, even if it is not as directly apparent. It is proposed to combine these two goals into one, since, as stated above, tourism is a key economic engine in rural parts of the state.

All of the policy goals contained in the proposed language support the [Governor’s priority initiatives](https://governor.vermont.gov/content/governor-scotts-priority-initiatives):

* Grow the economy
* Make Vermont more affordable; and
* Protect the most vulnerable.

Goals 1 and 2 (below) aim to protect vulnerable Vermonters by improving their mobility. Goals 3 and 4 help to make Vermont more afforable by improving access to low-cost transportation options for all Vermonters. Goal 5 directly supports the initiative of growing the economy.

Suggested revised language for the policy declaration is provided below:

(a) It shall be the State’s policy to make maximum use of available federal funds for the support of public transportation. State operating support funds shall be included in Agency operating budgets to the extent that funds are available. State policy shall support the maintenance of existing public transit services and creation of new services to promote the following goals:

(1) Providing basic mobility for transit-dependent people.. Basic mobility allows for access to essential services including medical care (including mental health and dental services), food (grocery shopping and congregate meals), day care for children and older adults, and social and wellness resources.

(2) Providing access to employment both for people who are not able to drive themselves and for people who choose to use transit vehicles and other shared-ride services to avoid congestion and the cost of automobile commuting

(3) Expanding public transit service in rural areas for all trip purposes, making use of the most cost-effective means of serving low-density areas.

(4) Providing convenient mobility choices to reduce the dependence on private automobiles, thereby reducing traffic congestion, preserving air quality, decreasing greenhouse gas emissions and sustaining the viability of the highway network.

(5) Supporting economic development in urban and rural areas, including services for workers and visitors that support the travel and tourism industry.

(b) All services supported by state and federal funds administered by the Agency shall strive to increase ridership and meet performance standards as set in the most recent Public Transit Policy Plan and updated in the Agency’s annual Route Performance Report. The Agency shall work with transit providers to ensure efficient and effective use of transit subsidies and ameliorate the performance of those services that do not meet the defined standards. Providers shall design public transit service in the most appropriate and cost-effective way for their services areas, using all available appropriate service options.

The existing paragraphs (b), (c), and (d) in §5083 would follow the proposed text as paragraphs (c), (d), and (e).

## Performance Measurement Enhancement

The transit service performance measurement system used in the annual Route Performance Report has been in place since the 2006-7 PTPP with only minor modifications to the route classifications. That system uses two primary measures to gauge the performance of Vermont public transit services:

* Productivity – boardings per unit of service operated
* Cost-effectiveness – gross operating cost per passenger trip

For each route class, a performance standard is set (for the most part based on national peer groups derived from the National Transit Database) and Vermont routes and services are rated as “successful” if they perform as well as or better than the peer standard or “acceptable” if they perform at least half as well as the peer standard. Routes and services that are not acceptable are rated as underperforming and thus a priority for improvement through a service planning process. If a route or service underperforms for three consecutive years, it becomes a high priority for improvement.

The present PTPP proposes a modification of the route performance framework. The current two measures are both dependent on ridership. While ridership is perhaps the single most important characteristic of a transit service, including it in both measures may mask underlying issues with the cost structure of a transit provider. If the operating cost per unit of service for a provider is significantly higher than its peers in Vermont or national peers, there may be an issue that needs to be addressed, completely separate from how many riders the route carries.

At the same time, having two separate measures on which the routes and services are judged to be satisfactory or not can cloud the issue to some extent. If a route is acceptable for productivity but underperforming for cost effectiveness, is it an underperforming route or not?

Given these considerations, it is proposed to calculate and display the performance of all Vermont routes and services on two efficiency measures, but rate its performance on one measure that summarizes the other two. The efficiency measures are **ridership efficiency** (the same as productivity as it is calculated now) and **cost efficiency**, defined as the gross operating cost per unit of service provided.

As with the current route evaluation system, the unit of service is specific to the route class:

* Urban – unit is revenue mile
* Express commuter – unit is one-way revenue trip
* All others – unit is revenue hour

The two efficiency measures will be calculated for all Vermont routes and services and for national peer groups as well, as has been done over the past dozen years. These results will be shown in a series of graphs. However, unlike past reports, the “successful” and “acceptable” thresholds will not be shown on these graphs.

A third set of graphs displaying cost effectiveness will form the core of the Route Perfomance Report, and these graphs will show successful and acceptable thresholds. The graphs will show both the gross and net cost per passenger for each route or service, with the difference being any fare revenue attributable to that route. Ultimately, the cost borne by the taxpayer for a ride taken on a transit vehicle is the most relevant measure of the performance of that transit service. The gross cost per passenger maintains continuity with past reports, but the net cost per passenger shows the actual government subsidy for that trip, after the passenger has paid any applicable fare. Fare revenue will include money contributed by institutions through unlimited access programs and direct subsidies from ski resorts, but it will not include municipal or philanthropic contributions. The performance rating will be based on the net cost per passenger.[[2]](#footnote-3)

Because the efficiency graphs already compare all of the routes to national peer groups, it is proposed that the acceptable and successful standards are based on the average of the Vermont routes in each class. The successful standard will be set at a percentage of the class average (66% or 75%) and the acceptable standard will be set at a multiple of the class average (2, 2.5 or 3) to be determined. Until the numbers are run through the process, it is not possible to determine what an appropriate threshold would be to separate the underperforming routes and successful routes from the broader class of acceptable routes.

The other significant change from the prior method of service evaluation is to revise how demand response services are defined and treated. This change, which will be effective in the FY2019 Route Performance Report, takes a more holistic view of demand response service than was true in prior reports. In past reports, the Demand Response category consisted exclusively of agency van trips operated with E&D Program funds. Medicaid or other rides on agency vans were not included at all. The Volunteer Driver category included the administrative cost for all volunteer trips regardless of funding source, but did not include the mileage reimbursement cost.

The new Demand Response category will include all demand response service operated by the transit providers and their subrecipients. This includes the following modes of service:

* Van
* Volunteer driver (both administrative and mileage costs)
* Taxi
* Other

It also includes all E&D service and Medicaid service, as well as other demand response services operated under contract to human service agencies, such as adult day programs. Unlike past years, ADA paratransit service will also be included. While this is “required” service over which the provider has little control, it is still possible to coordinate trips between riders and among all of the demand response programs. Also, passenger revenue from ADA riders will be subtracted from the cost of service in calculating the cost per passenger, helping to mitigate the “penalty” that the providers associate with the lack of flexibility in serving ADA demand. Ultimately, VTrans wants to have an accounting of all of the service operated in Vermont by the transit providers.

While the separate charts for volunteer driver service will no longer appear in the report, the demand response charts for cost effectiveness will show the percentage of trips that are provided through volunteer drivers. Presumably, agencies that use volunteers for a greater portion of their trips should have a lower cost per passenger, though the relative distance of those trips also plays a factor in the cost. As stated elsewhere in the PTPP, the transit providers are strongly encouraged to serve demand with the lowest cost means available, which will usually be volunteer drivers, except in cases where there are enough proximate trips to allow a single van trip to serve several passengers at once.

## Criteria for Feasibility of New Services

Section 5083 of 24 VSA Chapter 126 states in paragraph (b):

The Agency of Transportation shall evaluate proposals for new public transit service submitted by providers in response to a notice of funding availability, by examining feasibility studies submitted by providers. The feasibility studies shall address criteria set forth in the most recent public transit policy plan.

When VTrans has available funding through the federal Congestion Mitigation/Air Quality (CMAQ) program, it solicits proposals from transit providers under the New Services program, following the language of the statute.[[3]](#footnote-4) These proposals can be for capital expenses, such as new buses, or for operating expenses to create a new route or enhance the level of service on an existing route. For a project to be eligible for CMAQ funding, it must demonstrate a high likelihood that it will result in an increase in transit ridership which can then be related to a decrease in emissions from private vehicles. The funding is provided with an 80/20 match requirement, so that the transit agency is responsible for 20% of the net deficit (after subtracting fare revenue) through local support. The CMAQ funding is typically available for three years, after which time VTrans has usually identified continuing funding from Section 5311 and State operating funds for routes and service expansions that have proven to be viable.

In the past, the New Services application has included 20 items that need to be addressed, some of which describe the purpose and characteristics of the service, and others of which provide estimates of cost, ridership and target performance measures. The application has not specified precisely how the projects will be evaluated, other than to say, “VTrans will use several measures, including mobility improvements, environmental benefits, operating efficiencies, project coordination, regional connectivity, local financial commitment, and sustainability of funding continuation.”

As shown in the statutory language above, the PTPP is intended to provide guidance on the selection criteria for the New Services program. It is recommended that the current language in the application be clarified to identify five criteria as defined below:

1. **Acceptable performance –** By the third year of operation, the proposed service must achieve “acceptable” cost effectiveness as defined in the VTrans Route Performance Report. The forecast performance in the application must be substantiated by estimates of cost, ridership and fare revenue that are based in objective and publicly available data sources and reasonable estimates of market share with reference to existing similar routes.
2. **Demonstrated local support –** The applicant must show letters of support from local and regional organizations and evidence of commitments from local funding partners to provide the 20% local match of the net operating deficit.
3. **Environmental and/or congestion reduction benefits –** Through a narrative description supported by calculations, the project must show a net reduction in carbon dioxide and other air pollutant emissions and/or a reduction in traffic volume on congested roadways.
4. **Efficient schedule design and coordination –** For any route intended to serve commuters, the application must show communication with relevant employers so that convenient schedules that would be attractive to their employees can be designed. If the route is intended to coordinate with routes operated by other providers, a schedule showing convenient connections to other routes must be provided and a letter of support from the other provider(s) must be included.
5. **Mobility improvements and job access –** Routes that address an unmet need as described in the PTPP, including mobility for transit-dependent persons and access to jobs, will be rated favorably.

A specific scoring rubric is not included here, but VTrans should consider showing the relative weights of the criteria and the possible range of scores.

## Recommended Initiatives

In addition to updates to the state policy on public transit, the PTPP has always included an action plan to improve the statewide transit system. Through the process of engaging the public, stakeholders and agency staff, a set of recommended initiatives was developed. These are organized into five main groups, largely reflecting the critical themes and challenges discussed in chapter 3:

* Addressing aging Vermont
* Expansion of transit access
* Outreach and raising awareness
* Using technology to move to next generation of ride scheduling
* Land use planning and investments

The specific recommendations in these groups are organized into a prioritized implementation plan with immediate, short, and long term phases in chapter 6.

### Addressing Aging Vermont

As discussed in chapter 3, it is no longer possible to postpone dealing with the issue of mobility for older Vermonters. Of course, VTrans, in cooperation with the Agency of Human Services, the transit providers, and many other partners have been providing services for older adults for years, but the expected growth in the number of Vermonters over the age of 80 in the next ten years and beyond means that further and more aggressive action is needed. It is not just that additional service is needed, but that the type of service offered, differentiated mainly by its convenience, must be improved to meet the expectations of the Baby Boom generation.

Three specific actions are recommended here, though the longer-term land use investments in the fifth group are also relevant to the topic of aging. Those actions will be discussed below.

#### Establish Working Committee with the Agency of Human Services

The Department of Disability, Aging and Independent Living (DAIL) within the Agency of Human Services expends significant resources in studying and addressing the challenges faced by older Vermonters (as well as people with disabilities). The PTPP process has worked toward strengthening the relationship and communication between VTrans and DAIL so that the resources of the two state agencies can best complement each other.

Although DAIL is already a member of the Public Transit Advisory Committee, which meets quarterly, the PTPP recommends the establishment of a working committee focused on the issue of mobility for older Vermonters. The working committee would be led jointly by VTrans and DAIL and include representatives from other state and regional organizations with a stake in issues of aging. These include, but are not limited to, the following:

* AARP Vermont
* Vermont Association of Area Agencies on Aging
* United Ways of Vermont
* Community of Vermont Elders
* Vermont Association of Planning and Development Agencies
* Vermont Public Transportation Association
* Vermont Housing and Conservation Board

The working committee would be tasked with identifying short, medium and long range actions that need to be taken to prepare for the likely increase in transit demand as the Vermont population ages. Many of these actions are listed in this PTPP, but the needed actions will go beyond public transit. In order to address the needs of older Vermonters now and in the future, a coordinated effort is needed among state, regional and local agencies and governments to plan for future investments and secure the needed funding. A coordinated, joint effort among these many partners would be more likely to be successful in making a case before the Vermont legislature than any of them would be on their own.

#### More Comprehensive Planning for E&D

The Elders and Persons with Disabilities Transportation Program, referred to as E&D, has played a major role in providing mobility to these vulnerable demographic groups. With a major expansion of the E&D program in 2004 following the recommendations of the first PTPP, and further growth over the years through “flexing” of federal highway funds into the program, Vermont spends about $5 million annually on services targeted to people with disabilities and those over the age of 60. These funds are spent on demand-response service and scheduled trips on shopping shuttles.

While this program has functioned reasonably well overall and provided essential services to Vermonters, the conclusion of the analysis based on a prior review of the program in 2016[[4]](#footnote-5) as well as consultant and VTrans attendance at regional E&D committee meetings all over Vermont is that the program could benefit from new guidance and information sharing, as well as new policies and procedures. In the short term, the PTPP recommends that VTrans host a statewide E&D meeting and develop a work plan that would be carried out by all of the E&D regions. The specifics of the work plan template and the statewide E&D meeting are discussed in chapter 7, but the goal would be to replicate in all regions of Vermont the data collection process that has been undertaken in Chittenden County and to share best practices having to do with coordination, low-cost trips and volunteer management, among other topics. Additional E&D recommendations are included in chapter 7, many of which—particularly in the areas of addressing unmet needs, sharing information and best practices among partner organizations, increasing the productivity and coordination of services, and increased use of technology—are updates from the 2016 program review.

Establish Personal Mobility Accounts  
While it would not be restricted to older Vermonters, this recommendation would have immediate benefits for older adults and people with disabilities who currently obtain rides under the E&D program. A Personal Mobility Account (PMA) would allow individuals to make use of public transit services for whatever trip purposes they desired. It is recommended that the concept be pilot tested with people who are currently eligible under the E&D program, but later be expanded to the general public.

Initially, funds would flow into the PMAs from the E&D program in each region in what would essentially be an expansion of the Ticket To Ride (TTR) program. In some regions of Vermont, a portion of the E&D funding is set aside for the TTR program, which allows eligible individuals to take trips for whatever purpose they choose, not limited to the medical or shopping trips which constitute most of the E&D program. Under this proposal, TTR would be extended to all regions in the state, and wherever possible, a larger percentage of the E&D funding would be allocated to TTR. To supplement the public funds, private funds could come from the individual or family members/friends/community supporters. The program could potentially allow for people to earn non-cash credits in their PMA by serving as a volunteer driver while they are still able to drive.

For this program to function, all Vermont transit providers would need to allow for a “client-pay” billing procedure; some agencies now only operate trips funded through Medicaid, E&D or an agency partner. Once the funding channel is set up, the PMA could be used to pay for trips for any purpose operated by the transit provider, either with an agency van or a volunteer driver, or a brokered trip with a taxi. The individual would draw down funds in the PMA as needed, and while the public funds would be limited based on the policies of the regional E&D committee, the private sources would not be limited.

### Expansion of Transit Access

A clear message in the public outreach process is that more service is needed. In spite of the fact that Vermont spends about ten times per capita on public transit what its peer states do (see page 17 in chapter 2) there are still many unmet needs and large portions of the state have limited access to transit services. There are several strategies to expand the supply of service: increase the amount of funding from existing sources, bring new sources of funding to the table, and reduce the average cost of service. The specific recommendations in this group address all three of these strategies.

#### Spur Growth of Volunteer Driver Programs

Volunteer driver trips are by far the most cost-effective means of expanding access to transit, especially in low-density rural areas. Wages and benefits usually make up at least half of the cost of transit operations, so when a volunteer driver can provide the trip, the overall operating cost drops significantly.[[5]](#footnote-6) All across Vermont, agencies cite a lack of volunteers as the major limiting factor on their ability to make use of this mode of transit.

In discussions with stakeholders and agency staff, several specific actions rose to the top as effective means to increase the supply of volunteers:

1. **Create a check box on Vermont vehicle registration forms to sign up as a volunteer driver**Most Vermonters don’t know about the opportunity to serve as a volunteer or may find it difficult or cumbersome to sign up as one. Adding a check box to the vehicle registration form makes the first step in the process very easy. It would then be up to the volunteer coordinators at the transit providers or other volunteer organizations to contact the individual and complete the process.
2. **Streamline the background check process**Individuals who want to serve as volunteer drivers must pass a number of background checks. At the current time, even if they pass these checks with another organization, they still need to go through them again with the transit provider. Under this action, a single, statewide background check process would be established and funded so that all organizations that utilize volunteers could make use of a single round of background checks, at least for a range of time until they would need to be updated.
3. **Establish non-monetary incentives for volunteer drivers**The Personal Mobility Account program mentioned above offers one way that people can receive tangible benefits from volunteering without any cash changing hands, in that drivers could accumulate ride credits by driving, which they could use later when they can no longer drive themselves. Community recognition, celebrations and events are also effective means of providing non-monetary incentives to participate as a driver. It is not allowed to provide cash (other than mileage reimbursement) or material goods (such as tires) to volunteers and still have them be considered volunteers by the IRS.
4. **Increase marketing budget and collaborate with partner organizations**Transit providers advertise for volunteer drivers from time to time, and this helps to bring in new recruits. Increasing the budget for this advertising and using other available channels, such as social media and public radio, can help increase awareness of the volunteering opportunities. In a number of regional E&D meetings, partner organizations indicated a willingness and interest in helping to recruit new volunteers.
5. **Share best practices**Some agencies and regions in Vermont have had greater success than others in attracting and retaining volunteer drivers. Community pride and engagement—the sense that we all need to take care of each other—is integral to bringing more volunteers into the program. The methods used at the more successful agencies can be shared with others in the state.

#### Expand Access to Healthcare

Since April 2017, VTrans has been working on a program called Rides to Wellness, funded by a grant from the Federal Transit Administration. Using the federal funds as seed money, the program sought to demonstrate to hospitals and health centers that spending money on transportation so that patients did not miss their appointments because of a transportation barrier (car broke down, no money for gas, ride fell through, etc.) has a significant positive return on investment and improves health outcomes for their patients. The ultimate goal is for these healthcare providers to sustain the program using their own funds, once they realize the financial and health benefits.

Starting with two pilot sites, the program is poised to expand to five pilot sites in Autumn 2019. If the theory is borne out in practice and the healthcare providers sustain the investment, the funding pool for access to healthcare will have been expanded, thereby allowing for overall service to be expanded.

The Rides to Wellness concept is very much in line with the Accountable Care Organization (ACO) model for healthcare funding that is expanding in Vermont. This effort seeks to replace the fee-for-service model with one that emphasizing minimizing the total cost of care and improving health outcomes. It is possible that healthcare providers that are participating in the ACO program could apportion a segment of the overall funding allocation available under the ACO to transportation. A successful Rides to Wellness program would be strong evidence that this is a worthwhile way to use these funds.

#### Expand Access to Employment

At every Regional Forum held during the PTPP, the issue of access to employment was raised as an urgent need. It has also come up in the context of the Rides to Wellness program, because if someone loses their ability to get to work and thus loses their job, their health and overall wellness can quickly enter a severe downward spiral. For both long-term stability of employment and stopgap needs when a car breaks down, assistance with job access is a critical means of helping people help themselves and avoid a crisis which will ultimately be much more expensive to resolve.

Several actions are worth implementing to improve the ability of low-income Vermonters get to jobs:

1. **Increase awareness of ridesharing options through Go Vermont**The Go Vermont program actively promotes carpooling and vanpooling as ways to get to work. The more people that sign up with Go Vermont, the more opportunities there are for ridesharing. It is likely that if gasoline prices were to spike, interest in ridesharing would spike with it. In the meantime, linking Go Vermont to green activism, saving money, and social interaction can help encourage greater participation. Additional budget for marketing would also increase awareness of Go Vermont, a necessary step toward encouraging solo drivers to consider other travel options.
2. **Engage employers in helping to fund job access transportation**There are a number of ways that transportation services could be established that are partly or wholly funded by employers. Similar to Rides to Wellness, a JobRides program could be established, perhaps with seed money from the state and federal governments, to provide stopgap money for job transportation when someone suddenly loses their normal means of commuting. The program could be limited to low-income individuals or clients of community action programs. Working through the chamber of commerce or other economic services agency, employers could be asked to fund a share of the program to allow their employees to receive benefits. The positive return on investment would be derived from lower attrition and reduced turnover rates, which would save the employers in advertising and training costs.
3. **Create the “late bus” for shift workers**In non-urban areas that have some public bus routes, the services typically shut down in the early evening at the end of the traditional afternoon peak period. Employees who work later, or have second or third shift jobs, are unable to make use of these bus routes because there is often no service between 6:30 p.m. and 6:00 a.m. While it would be cost-prohibitive to operate the entire local bus system for several extra hours to accommodate the shift workers (since overall demand would be much lower in the late evening), it may be possible to operate a limited bus service that operates on a demand-response or subscription basis. In some programs of this type that are in operation in other areas, employees must meet income eligibility requirements and make one of their commute trips using the regular bus service (either the trip to a second shift job or the trip home from a third shift job), with the subsidized demand response service providing the other leg of the commute. Employers who complain about the difficulty of finding workers for later shifts could be a source of funds for at least the local match portion of this transit service. Participating employers would advertise the availability of the late bus to existing and potential workers and help to identify employees interested in this service. They would provide detailed information on their origin and destination locations and desired travel times, so that a reasonably efficient route could be designed. With modern software, such as that used for microtransit, an efficient path could be developed in real time so that no one would have to be on the bus for an inordinate amount of time. The service could be scaled as necessary to meet the demand. It is likely that some of the riders will eventually buy their own cars as they establish themselves in their jobs; this should be seen as a positive.
4. **Create partnerships with TNCs where available**Transportation Network Companies, such as Uber and Lyft, have developed partnership with transit agencies in many parts of the US. While currently available only in portions of Vermont, TNC drivers could serve as another resource for people to get to and from work when regular transit routes are not operating. Funding for these rides could be a combination of public and private dollars, and the rides could be limited to low-income individuals, as suggested above for the JobRides program.

#### Expand Local Connections

Fixed-route bus services, particularly in urban areas, serve a well-defined corridor and provide access to those within easy walking distance of a bus stop, usually considered to be one quarter mile, though some people are willing to walk farther. Even a relatively dense transit network, though, cannot provide such convenient access to all homes or workplaces within the broader service area. Park & Ride lots can promote access from a much wider area, but they usually best serve the “home” end of the transit trip.

Many urban and suburban areas that have fixed-route bus service have tried to tackle the “first mile/last mile” problem through various means. Densely-populated areas may have feeder bus service, while some large employers operate shuttle vans to and from a transit station (usually on a rail system). In recent years, many areas across the US have experiemented with bike share or e-scooter systems[[6]](#footnote-7), which allow a rider to rent a bike or scooter at low cost from a docking station or just on the sidewalk and ride to their destination, leaving the bike/scooter at another docking station or sidewalk.

Vermont has limited experience with these systems, including [Greenride Bike Share](http://greenridebikeshare.com/) in Burlington (ongoing) and Bird scooters in Montpelier (Fall 2018). Winter conditions in Vermont are a barrier to these type of systems running year-round, but for at least a portion of the year, bike and scooter systems can solve the first mile/last mile problem for those riders who are able to use these vehicles comfortably and safely.

Microtransit is another solution being tried in an increasing number of areas. It is essentially a technology-enabled demand-response service that schedules rides in real time. Ride requests are either made on a smartphone or by calling into a reservation center (for those who do not have smartphone access). A database algorithm aggregates these ride requests into a driver manifest in real time and communicates that immediately to one of the vehicles on the road that can accomplish the trip most efficiently. Depending on the number of vehicles in service, the size of the service area and the level of demand, most requests could be accommodated in 15 minutes or less. Microtransit can be implemented either as software managing the operations of an existing demand response system of a transit provider, or as a complete package from a vendor including software, vehicles and drivers to operate them.

The service zone defined in a microtransit system can expand the access of a bus route to a much wider area. If the zone is centered on a transit station (such as the new intermodal transit center in Montpelier), anyone living or working with 2-3 miles of the station can have convenient rides to or from work or home. A pilot project for Montpelier is in the planning stage as of September 2019.

#### Expand Access to Available Seats in Transit Vehicles

Most demand-response trips operated in Vermont—either with agency vans or volunteer driver cars—are funded by programs with specific rider eligibility requirements, primarily E&D and Medicaid. Most transit provider treat these trips as exclusively open to clients of these program, even though there are no state or federal regulations preventing these trips from also carrying members of the general public. Indeed, federal E&D regulations state that it is allowable to carry non-elderly and non-disabled riders on these trips, provided that general public riders do not displace a rider who is eligible under the E&D program.[[7]](#footnote-8)

It is rare that all of the seats on these vehicles are filled with riders. In the short term, transit providers should implement a policy that if a non-eligible rider has origin and destination locations within a short distance, say a tenth of mile, of where eligible riders on a van/volunteer trip are already scheduled to go, that non-eligible rider should be allowed to ride in the vehicle, provided that there is available capacity. For example, if an older Vermonter has a medical appointment at a health clinic and has scheduled a ride to get there and back through the E&D program, and it so happens that their neighbor who is less than 60 years old also has an appointment at the same clinic around the same time, that neighbor should be allowed to share the ride. The non-eligible rider could be asked to pay a fare or a “suggested donation” of $2 or whatever amount was appropriate for the trip they were taking. (This amount would be worked out in advance when the eligible rider would have told the reservationist that their neighbor would also like to ride on that trip.)

In the longer term (see section below about the next generation in ride scheduling), a “client-pay” mechanism would be in place for all transit providers so that members of general public would have the ability to gain access to demand-response trips that are currently seen as off-limits to them. Appropriate fees for non-eligible riders would be determined based on a locally-developed policy, and these would be incorporated into the smartphone-based ride request app.

#### Support VPTA to Become a Viable Non-profit Broker

The Vermont Public Transportation Association serves many functions as the collective voice of the seven transit providers in the state. Since 2012 it has acted as the contractor to the Department of Vermont Health Access to provide non-emergency medical transportation (NEMT) in Vermont.

While it has served these functions, it does not have 501(c)(3) non-profit status itself, nor does it have the capacity to “broker” trips directly. Brokering trips means to find the most cost-effective means of providing that trip, whether by agency van, volunteer driver, taxicab or some other means, and then to assign the trip and handle the payment for it. All of the trips operated under the NEMT contract are brokered by the transit providers that are the members of VPTA.

There are cases where it may be more efficient for VPTA to broker trips directly rather than having the transit providers handle this function in its entirety. Trips that cross jurisdictional boundaries can be problematic for regional transit providers, and opportunities for coordination can be lost.

Under this recommendation, VTrans will offer financial and organizational support for VPTA to achieve non-profit status and acquire the ability to broker trips.

#### Expand Funding Pool Overall

In surveys and meetings, the call for more service generally was heard very clearly. In rural areas, people wanted bus routes serving more towns. In urban areas, people wanted more frequent service and longer hours. For demand response transportation, people wanted more types of trips served, so that, for instance, older adults could have more social interactions and not be limited to just medical and shopping trips. The trip limits on E&D riders in some regions of Vermont (see chapter 4) are purely a function of inadequate funding.

As noted elsewhere in the PTPP, for the recently completed Fiscal Year 2019, in addition to the $6.2 million in federal transit money that Vermont received (exclusive of money that goes directly to Green Mountain Transit for the Burlington urbanized area), the state transferred nearly $20 million in federal highway dollars into the transit program and spent nearly $8 million in State funds from the Transportation Fund (fuel taxes and registration fees).

The Vermont congressional delegation does everything it can to maximize federal transportation dollars coming to Vermont. The State could choose to transfer even more money from the federal highway program[[8]](#footnote-9) and spend more State dollars on public transit. The Section 40 legislative study conducted in 2014-2015 looked at various means to increase the available of non-federal and State funding. Those avenues could be explored more aggressively to make local dollars more available. Several of the action items above suggested ways to increase private sector participation in funding public transit.

In addition to these, contributions from educational institutions and ski resorts have helped fund public transit in both the urban and rural portions of the state. Any time that one of these employers or organizations proposes a large capital expenditure for expanding parking capacity, the local transit provider should make the strongest case possible that spending that money instead on public transit is a wiser long term investment.

### Outreach and Raising Awareness

The issue discussion of public awareness of transit in chapter 3 included several concepts for raising the visibility of public transit and changing transit’s image in the public consciousness. Those concepts form the core of the recommended initiatives below.

#### Continue Investment in Go Vermont

As mentioned in prior recommendations, the Go Vermont website and information center is the State’s primary portal for information about transit and shared-ride services. VTrans has worked assiduously for years to enhance the capabilities of the site and to advertise its presence to the traveling public. Two specific actions are recommended to further improve the sites functionality and visibility.

1. **Increase marketing and promote links from others**VTrans should continue to invest in the capabilities of the website and to increase the marketing budget, making sure that other organizations that generate trips, including hospitals, institutions, large employers and large retail outlets, include links to Go Vermont on their websites. Anytime a website in Vermont has a “Get directions” link, instead of taking the user to Google Maps or the like, it should take them to Go Vermont so that the user sees all transportation options, rather than just driving directions.
2. **Create interactive map of bus routes**VTrans should incorporate an interactive map showing all of the bus routes in the state. The page on bus services (<https://www.connectingcommuters.org/bus-info/bus-providers/>) currently has a map divided up into service regions with no representation of the actual bus routes. If users want more information on the bus services, they must leave Go Vermont by clicking on a link to one of the provider websites. This map should be replaced by one that is pannable and zoomable and shows all of the actual bus routes. It would include local, commuter and intercity bus routes. If the user then wants more detailed information about a specific route, a link would be offered to the provider website for schedule and fare information. While the trip planner function of Go Vermont incorporates all of these services, some people prefer to look at a map and decide for themselves how to travel. Furthermore, the map will show a significant amount of connectivity for most parts of the state, thereby promoting the overall goal of raising awareness of how much service is currently operated.
3. **Explore new program models and staffing structures for Go Vermont**Go Vermont began as a home-grown initiative within the Public Transit section of VTrans in 20XX. With investments of federal funds and staff resources, the program grew, and the management of the program was contracted out to XX in 201X. Nonetheless, Public Transit staff is still heavily involved in the oversight and development of the program. Given the numerous other responsibilities that belong to the Public Transit section and the importance of further growth of Go Vermont, it may make sense to establish a new “home” for Go Vermont within VTrans, including dedicated staff resources. Go Vermont is not strictly a public transit function; it also touches upon many program areas within VTrans, including intercity transportation, park & ride lots, transportation demand management, information technology, and highway efficiency.

#### Document Stories of the Value of Public Transit

In the modern age, little spreads information better than a short video featuring people telling their own story. When it comes to explaining how a service works to newcomers, or generating support for funding local transit at a Town Meeting such short videos of current users of public transit explaining how it makes a difference in their lives would likely be much more effective than agency staff trying to make the case.

VTrans should consider allocating a portion of its planning funds, or seeking a grant from the Community Transportation Association of America, AARP or other organization, to produce a series of short videos in all the regions of Vermont. The transit providers would identify individuals willing to tell their stories by asking E&D riders and posting signs on bus routes seeking volunteers. Then a staff person and videographer would conduct the interview on a bus, van or volunteer driver vehicle. It would be important to have local interviews for each region, as many parts of Vermont are relatively insular and would see someone living on the opposite side of the state as not as relevant or compelling.

These videos could be incorporated into the Go Vermont website and then shown at Town Meetings across the state when local funding proposals are being discussed. Widespread distribution of the videos would have the double benefit of raising awareness of existing services and increasing support for local funding.

#### Encourage All Transit Providers to Establish an “Ambussadors” Program

For people who have never used public transit, boarding a bus for the first time can seem daunting. Many transit providers have ongoing or occasional programs to pair new riders with “bus buddies” who will ride with them to allay their fears. Since some members of the public associate the term “bus buddies” with schoolchildren, VTrans recommends an “Ambussadors” program be an ongoing initiative for all transit providers.

An Ambussador would do outreach to senior centers, employers, housing complexes or any other populations where transit service may be underutilized due to a lack of understanding of how transit works, or fears about the riding experience. The Ambussador, who could be an agency staff member or a volunteer, would explain how to ride and then be available to ride one-on-one with anyone who feels the need for a companion for the first ride or two.

This program has the dual benefit of helping individuals to overcome their fears of riding and helping to spread the word about the existence of transit services. Time and again, word of mouth is shown to be one of the most effective ways of raising public awareness of a service, much more able to penetrate the blizzard of information in the public realm than standard advertising or social media.

#### Continue and Expand Partnerships and Activities to Raise Awareness

Partner organizations in the public and private sectors each have communication channels to their members and constituents. VTrans should continue and expand efforts to develop reciprocal relationships with these partners so that all parties become more informed about existing and future services offered. Most of these partners have been mentioned already in the context of other recommendations:

* AARP Vermont
* United Ways of Vermont
* Other State agencies (DAIL, Agency of Commerce and Community Development [ACCD])
* Vermont League of Cities and Towns
* Community Transportation Association of America
* E&D partner organizations
* Local elected officials

#### Create Informational Brochure: “How Transit Works in Vermont”

While most Vermonters and visitors are aware that there is some public transit in the state, few really understand how it works and how the various transit operators—mostly private, non-profit entities—relate to VTrans and vice versa. A brochure, that would be available in print form and online, could explain the basics of public transit, including the types of services available, the roles of VTrans and the public and private transit operators, as well as partnerships with human service agencies and other non-profits. The brochure could also be used as a means to publicize the existence of volunteer driver programs and explain the value and rewards of being a volunteer driver. The brochure would point to Go Vermont as the best source of additional information.

#### Engage with Public Media to Spur Discussion and Raise Awareness

In July 2019, the PTPP was the subject of an hour-long show on Vermont Public Radio’s call-in show, Vermont Edition. VPR found the episode to be very successful, with a greater-than-normal call volume and many engaged listeners. A follow-up inquiry has already been sent, proposing additional shows with a more detailed look at specific topics including the following:

* “Conversations on Aging in Vermont” - VTrans and DAIL officials, perhaps with AARP and Area Agencies on Aging, would dive deeper into the challenges the state faces with our aging population.
* “Microtransit and the future of rural service” - Microtransit could be a model for other small towns and rural areas, combining new technology, volunteer drivers, and existing transit agencies.
* “Rural and village development and its relationship to transportation” - What do Vermonters want the state to look like? Rural sprawl or vibrant towns and villages? How can a change in land use patterns, supportive of and supported by public transit, have a real impact on greenhouse gas emissions in Vermont?

Public transit has the potential to play a much more significant role in many aspects of the lives of Vermonters. Having this discussion in the public square makes an expanded role more feasible.

### Using Technology to Move to Next Generation of Ride Scheduling

The proliferation of smartphone technology and the rise of transportation network companies offer the promise of changing the paradigm for demand response transportation. For decades, obtaining a demand response ride has required calling the transit provider at least a day in advance, making a reservation, negotiating the pick up and drop off times and then hoping that the vehicle arrives within the allowed 20-30 minute window. On the transit provider side, the process involves taking the request, entering it into a scheduling system (either manual or automated), generating a driver manifest, sending that to the driver (either on paper, or more recently on tablet computers), and finally operating the trips, trying to accommodate any last-minute changes.

Companies such as Via, TransLOC, Uber, Moovit and others are offering an entirely new model of scheduling rides under the concept of microtransit (described above). The service is available now and in operation in dozens of cities in the US and around the world. However, the real paradigm shift would come by expanding the rider interface of the microtransit model to cover all modes of public transit and to handle all transportation funding programs. That is to say, if someone requests a ride from point A to point B, this next generation software would be able to show all of the options available and the prices and travel times associated with each. These options could include the following:

* Regular bus routes
* Flexible bus routes (route deviation services)
* Transit agency vans
* Volunteer drivers overseen by the transit agency
* Participating taxi companies
* TNC drivers

In rural areas where volunteer drivers and agency vans may be the only nearby options, the software would send out the trip request to all volunteer drivers in the area, many of whom may be sitting at home. Among all who respond to the request within a short amount of time (say, 3 minutes), the software would assign the trip to the driver who could accomplish the trip most efficiently. At the same time, the software would be looking for any other trip requests that could be grouped with that first one, so that the driver could carry two passengers instead of just one. If an agency van is already in operation in that area, the software would likely assign the rider to the van, rather than calling another vehicle (the volunteer driver) into service.

The system would also need to be able to handle multiple ways to pay for the trip. If the rider is eligible for Medicaid transportation and the trip is to a health care location for a medical visit, then the charge would go to Medicaid. If the rider is over 60 or has a disability, the trip would be charged to the E&D program. If the rider is not eligible for any of these (or other) subsidy programs, then the rider would be charged directly for the trip. If Personal Mobility Accounts are created as recommended above, the payment could come directly from the rider’s account. The software would track the costs incurred for each program or individual and then process the billing accordingly.

None of the parts of this new model are infeasible with currently available technology. However, putting all of the pieces together and working with a vendor to coordinate all of the transportation resources and funding programs would be a significant effort. The potential for increased mobility and increased efficiency is very large, though, especially if there were to be a major expansion of the volunteer driver pool resulting from some of the initiatives described earlier.

The PTPP recommends that VTrans begins planning for this transition to a next generation system, so that it can be implemented in the next five to ten years.

### Long-Term Land Use Planning and Investments

#### Work with State, Regional and Local Entities to Promote Transit-Supportive Development

Having vibrant town and village centers, where many people live, work and play, is strongly supportive of public transit. The more people that are within walking distance of a bus stop, the more efficiently a bus route can operate and the more cost effective a service can become. In the rural areas of Vermont, if more people lived in clusters in village centers rather than being spread in the hills, bus routes connecting towns together would be much more viable. Within those village centers, more trips would be possible by walking, and more local shops and eateries would be economically viable because more people would be close by. For older Vermonters, living in such a place would remove the strictures on meeting life’s essential needs and social interactions as well, because short trips could be accomplished on foot or inexpensively on a transit vehicle.

While this vision would achieve progress for many of the goals and policies stated in the PTPP as well as many other State planning documents, there are significant barriers to realizing the vision, mostly relating to a lack of affordable housing. The first barrier is the **lack of water and sewer infrastructure.** In many Vermont towns, it is currently impossible to build more housing in a village center because there is no available capacity in the existing water and sewer systems. Many of these systems are also near or past the end of their useful life and are in need of replacement and upgrades. The first step must be planning work to identify priority investments in this critical infrastructure, followed by the allocation of funds to begin construction of upgrades and capacity expansion.

Once the infrastructure capacity exists to allow for new housing, developers must be encouraged to **build new housing** in appropriate locations and at an appropriate scale, incorporating accessibility features and ensuring that at least a portion of any new development is reserved for low- or limited-income residents. This may require public-private partnerships and subsidies in some cases. Updates to Act 250 should allow for fast-tracking village center developments that meet all of these criteria.

Housing alone does not make a village vibrant. **Development for other activities** such as shopping (food and household items), daycare, health services, banking, restaurants, and other small scale employment is essential to a vital and functioning town. In many Vermont towns, old buildings exist that can be rehabilitated to accommodate these uses. In other cases, new buildings would need to be constructed.

As discussed earlier, a **regional transit provider should always be included** in early discussions of new housing or other developments. Input is needed as to the location of the developments, so that they can be served efficiently by existing and planned bus routes, as well as the design of the facility, so that accessible bus stops are incorporated when appropriate, and driveways and entrances would not prohibit service by a bus or van, when that type of front door service would be appropriate.

Of course, this is a simplified version of a lengthy and complex process. But if these steps are taken, it would go a long way toward making transit service in rural areas more viable and reducing dependence on automobiles all across Vermont. Other than conversion of the fleet to electric vehicles, this type of transformation of the landscape, coupled with an expansion of rural transit services linking village centers to each other, would be the most effective way to reduce greenhouse gas emissions in the state.

Obviously, VTrans cannot alone carry out the steps to bring about this future land use vision, but it can help advocate for these type of investments at the regional and local level, and support State and federal funding to promote these land use changes. Specific action items that VTrans and other can pursue to promote these actions include maintaining focus on two objectives in the Long Range Transportation Plan (numbered 6.1 and 6.2 in the LRTP document[[9]](#footnote-10)) that connect transportation to land use planning and investment. These objectives are as follows:

* Maintain and strengthen the vitality of Vermont’s villages and downtowns.
  + Support transportation improvements and services assessed as critical to enhancing and connecting downtowns and villages
  + Coordinate planning, project development, and implementation with ACCD in support of State Designated areas
* Make transportation investments that promote active transportation and reduce social isolation.
  + Support downtown and village investments that improve the viability and safety of active transportation
  + Strengthen the coordinated provision of public transit services with Medicaid and other social service program transportation needs
  + Conduct health impact assessments for selected transportation projects, programs, and policies and apply what is learned to future investments

The 2012 PTPP also included several recommendations on this topic that are still relevant today:

1. **More active role for MPO/RPCs in facilitating transit and associated pedestrian considerations in Act 250 reviews and local land use decisions**Specific activities include:
   1. Revising local zoning codes to be consistent with State planning goals and legislation to gear new development toward areas that can be served by transit; include Complete Streets legislation and VTrans bike/pedestrian policies
   2. Linking transit considerations into the permitting process before the permit is issued; coordinate with local municipalities, transit operators, and VTrans
   3. Educating Act 250 boards and Regional Coordinators on creating a transit-friendly environment
   4. Bringing transit considerations into the Act 250 review process. Participate in Act 250 hearings to advocate for transit
2. **Provide guidance and assistance to local municipalities to incorporate appropriate transit elements in all site planning, design, construction activities**Work with local municipalities as they review and approve local projects to ensure developers build transit elements into projects including: bus pull outs, pavement markings (including cross walks to serve transit stops), bus stop signage, shelters, etc. Create process for VTrans staff to review Regional Transportation Plans to ensure transit adequately addressed.
3. **Develop guidance and direction for VTrans to incorporate appropriate transit elements in all its planning, design, construction, and maintenance activities**Work with planners/engineers designing transportation facilities to build transit elements into all projects including: bus pull outs, pavement markings (including cross walks to serve transit stops), bus stop signage, shelters, etc.

#### Invest in Workforce Development to Maintain Transit Provider Staffing

Suppose that federal, state and local goverments as well as the private sector decided that a major increase in transit funding was warranted and allocated funds to double the amount of transit provided in Vermont. At this point in time, even if they had enough buses available to run much more service, the transit providers would not be able to use all of that money because there are not enough bus drivers available, nor enough mechanics available to maintain the bus fleet.

There is a national shortage of bus operators and mechanics affecting large urban operators as well as small urban and rural providers.[[10]](#footnote-11) The average age of drivers and mechanics is significantly higher than the average age of the workforce overall,[[11]](#footnote-12) and as these workers retire, there are not nearly enough young people with the background—or apparently, the interest—in filling these positions. It has also been difficult to find experienced and qualified personnel to fill management and executive positions at transit agencies.

FTA funding is available under Section 5314 to assist with workforce development. VTrans should work with colleges and universities, such as Vermont Technical College, to establish programs to train drivers and mechanics. The Vermont legislature should also consider changes to the law so that people who acquire commercial driver’s license (CDL) credentials while serving in the military can easily qualify for a passenger transportation endorsement with an appropriate level of training.

#### Support Electrification of the Transit Fleet

The 2016 *Comprehensive Energy Plan* published by the Vermont Department of Public Service contains several goals related to public transit. Three of the four primary recommendations regarding public transit are also recommended in the PTPP:[[12]](#footnote-13)

1. Expand the Go Vermont website and increase its use for events.
2. Research a state pilot program for parking cash‑outs to decrease single occupancy vehicle commuting.
3. Continue supporting employer programs to encourage carpooling, vanpooling transit, walking, and biking for employees’ commute trips.
4. Continually investigate software and other technology improvements to make taking transit easier and increase rideshare, vanpool, carshare, and other options.

The Plan also discusses in great detail the electrification of the vehicle fleet in Vermont. While public transit overall has a positive impact on reducing greenhouse gas emissions by increasing shared rides and reducing automobile trips (especially in more urbanized areas), that impact can be magnified by replacing diesel buses and vans with electric vehicles.

VTrans, working with the transit providers, has begun the procurement of electric transit vehicles. Experience with these initial vehicles on the hilly terrain and in winter conditions will guide future procurements, with the ultimate goal of substantially reducing greenhouse gas emissions from transit vehicles.

# Implementation Plan

This chapter presents an action plan for VTrans and its partners to implement the recommendations of the PTPP over the coming decade. The recommendations from the prior chapter are organized into implementation timeframes and the responsible parties for each action are identified.

This action plan also encompasses those strategies and projects that were identified through development of the Human Service Transportation Coordination Plan (HSTCP) as potential solutions to service gaps and challenges for older adults, people with disabilities, and individuals with lower incomes. Strategies and projects included in the HSTCP—and priorities among them—provide a guide to use of federal Section 5310 funding during the planning timeframe covered by the PTPP and HSTCP. Transportation projects that are supported with federal Section 5310 funds must be included in the HSTCP, “as strategies, activities, and/or specific projects addressing an identified service gap or transportation coordination objective articulated and prioritized within the plan”[[13]](#footnote-14). HSTCP strategies and projects are included below and in the regional needs assessments (Appendices X through X).

A table at the end of this chapter summarizes the strategies and projects identified in each region and notes their location in each regional document.

## Immediate Term (First Year)

### Funding and Management of Transit Program

* Continue to seek additional State and federal funding
  + VTrans Public Transit staff supported by Planning and other partners
* Implement enhanced Route Performance Report for State Fiscal Year 2020
  + VTrans Public Transit staff
* Implement revised New Services criteria
  + VTrans Public Transit staff
* Continue to conduct statewide vehicle and equipment procurements
  + VTrans Public Transit staff in partnership with transit operators
* Continue to update statewide vehicle guidelines in coordination with Transit Asset Management Plans
  + VTrans Public Transit staff
* Expand access to available seats in transit vehicles
  + VTrans Public Transit staff in cooperation with VPTA and transit providers

### Partnerships and Planning

* Establish working committee with AHS to address transportation related aging in Vermont
  + VTrans Public Transit and Planning staff
* More comprehensive planning through the E&D Committees
* Planning will include adoption of annual workplans by E&D committees. Workplans will include better assessment of unmet needs, action plans to address needs and monitor progress, and procedures for adding new partner organizations if/when additional funding becomes available.
* Planning will also include periodic (annual or bi-annual) statewide E&D meeting to share information and best practices, address issues that affect all regions.
  + VTrans Public Transit and Planning staff in cooperation with RPCs, VPTA, transit providers and partner organizations.

### Technology and Raising Public Awareness

* Continue to support technology improvements for transit
  + VTrans Planning and Public Transit staff in partnership with transit operators
* Continue investment in Go Vermont
* Increase marketing and promote links from others
* Create interactive map
  + VTrans Public Transit staff
* Develop basic informational brochure explaining “How Transit Works in Vermont”
  + VTrans Public Transit and Planning staff
* Engage with public media to spur discussion and raise awareness
  + VTrans Public Transit and Planning staff in cooperation with AHS and other agencies

## Short Term (Year 2 through 4)

### Policy Updates

* Pass legislation to incorporate revised policy goals into statute
  + VTrans Public Transit staff and Vermont legislature
* Continue to maintain monitoring and reporting on policy 20% of each provider’s operating budget be generated from “local sources”
  + VTrans Public Transit staff through the Route Perfomance Review process
* Explore reinstituting requirement for Transit Development Plans (i.e. short-range service plans completed every 5-6 years) for all transit providers
  + VTrans Planning and Public Transit staff in coordination with RPCs

### Coordination with Land Use Planning

* More active role for MPO/RPCs in facilitating transit and associated pedestrian considerations in Act 250 reviews and local land use decisions
  + MPO, RPCs, VTrans Planning staff, municipalities
* Provide guidance and assistance to local municipalities to incorporate appropriate transit elements in all site planning, design, construction activities
  + VTrans Planning in cooperation with RPCs
* Promote town and village center development, including infrastructure investments
  + VTrans Planning in cooperation with RPCs, ACCD and municipalities

### Partnerships and Planning

* Continue investment in Go Vermont
* Explore new program models and staffing structures
  + VTrans Public Transit staff
* Support VPTA to become a viable non-profit broker
  + VTrans Public Transit and Planning staff
* Invest in workforce development to maintain transit provider staffing
  + VTrans Public Transit, planning, and research staff in cooperation with VPTA and transit providers

### Expansion of Transit Access

* Establish Personal Mobility Accounts
  + VTrans Public Transit staff in cooperation with transit providers
* Spur growth of volunteer driver programs
  + VTrans Public Transit and Planning staff in cooperation with Vermont legislature, transit providers, area partners, and SerVermont
* Expand access to healthcare
  + VTrans Public Transit staff
* Expand access to employment
  + VTrans Public Transit and Planning staff
* Expand local connections (i.e. first mile/last mile)
  + VTrans Planning staff in cooperation with RPCs and municipalities

### Raising Public Awareness to Increase the Use of Public Transit

* Encourage all transit providers to establish an “Ambussadors” program
  + AOT Transit staff, transit providers, RPCs, area partners such as local Energy Committees
* Document stories of value of public transit
  + VTrans Public Transit and Planning staff in cooperation with transit providers
* Continue and expand partnerships and activities to raise awareness
  + VTrans Public Transit and Planning staff

## Long Term (Year 5 through 10)

* Develop statewide policy and program guidance for managing major capital investments
  + VTrans Planning and Public Transit staff
* Continue to develop guidelines for investing in maintenance /storage facilities and promote shared regional vehicle maintenance facilities where appropiate
  + Transit operators, VTrans Planning and Public Transit staff with RPCs, municipalities and transit operators
* Continue to develop guidelines for investing in passenger facilities and amenities
  + VTrans Planning and Public Transit staff in coordination with RPCs, municipalities and transit operators
* Support fleet electrification
  + Transit operators, VTrans Planning and Public Transit staff
* Develop next generation of ride scheduling
  + VTrans Public Transit and Planning staff in cooperation with transit providers

1. It is recognized that portions of Chittenden County are rural, and portions of the rest of the state qualify as urban clusters or micropolitan areas, but this geographic division is nonetheless a convenient way to contrast urban and rural policy priorities. [↑](#footnote-ref-2)
2. It is understood that there are questions of equity in comparing systems that charge a fare with those that do not. However, it is assumed that systems that do not charge a fare would have higher ridership than they would if they charged fares, and thus have a reduced cost per passenger. [↑](#footnote-ref-3)
3. The statute does not restrict the funding source of new services to CMAQ, but over the past 15 years, that has been the only source of new discretionary funding available to expand service. If the federal government were to expand Section 5311 funding substantially, VTrans could theoretically solicit new service proposals using those funds. [↑](#footnote-ref-4)
4. *Vermont Elders & Persons with Disability Transportation Program Review, Act 40 (2015) Section 12* [↑](#footnote-ref-5)
5. It should be noted that in cases where an agency van can carry several riders at once, it can be more cost-effective than individual volunteer driver cars providing separate trips for each of those passengers. [↑](#footnote-ref-6)
6. <https://www.bts.gov/topics/passenger-travel/bikeshare-and-e-scooters> [↑](#footnote-ref-7)
7. See FTA Circular 9070.1G, page VI-3 and VI-4 [↑](#footnote-ref-8)
8. There are restrictions as to the use of “flexed” federal highway funds such that it may not be possible to transfer more highway funds into the E&D program, given the current levels of expenses for administrative costs, capital and preventive maintenance. These are the only types of costs that flexed highway funds from the Surface Transportation Program can be used for—not regular operations. The rest of the transit program outside of E&D could potentially make use of additional flexed highway funds if they were available. [↑](#footnote-ref-9)
9. <https://vtrans.vermont.gov/sites/aot/files/planning/documents/planning/2040_LRTP_%20Final.pdf> (see page 64) [↑](#footnote-ref-10)
10. <https://www.citylab.com/transportation/2018/06/why-wont-anyone-drive-the-bus/563555/> among many other articles [↑](#footnote-ref-11)
11. <https://www.metro-magazine.com/management-operations/article/735512/touting-agency-career-ladder-key-to-recruit-bus-technicians?utm_source=email&utm_medium=enewsletter&utm_campaign=20191008-NL-MET-Express-BOBCD191002004&omdt=NL-MET-Express&omid=1004749687&oly_enc_id=6345H9988623E1K> [↑](#footnote-ref-12)
12. Parking cash-outs are a worthwhile policy initiative and are discussed in more detail in the Section 20 study considering increased public transit ridership. [↑](#footnote-ref-13)
13. FTA C 9070\_1G, Enhanced Mobility of Seniors and Individuals with Disabilities Program Guidance and Application Instructions, 6/6/14; page V-1. [↑](#footnote-ref-14)