Vermont Agency of Transportation

Vermont Public Transit Policy Plan

Final Report

Submitted by:
KFH Group, Inc.

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ACKNOWLEDGEMENTS

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Thanks to the many Vermont citizens who participated in the public meetings, submitted comments, and shared their vision for transit in Vermont. Your input helped shape this plan.

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Executive Summary

INTRODUCTION

Public transportation plays a vital role in the high quality of life that Vermonters enjoy and the State of Vermont supports public transit services in a number of ways. The Vermont legislature views public transportation as "*an important matter of State concern, essential to the economic growth of the State and to the public health, safety and welfare of present and future generations of Vermonters*".[1] The Vermont Public Transit Policy Plan (PTPP) outlines transit policies and goals and strategies to meet current and emerging public transportation challenges.

The components of the PTPP provide policy level direction, guidance and performance tracking to help guide transit investments. The PTPP is part of a series of modal policy plans developed by the Vermont Agency of Transportation (VTrans) addressing, transit, rail, bike and pedestrian, aviation, freight, and roadway programs and policies. Together these policy plans provide direction for VTrans various programs, as well as forming the basis of Vermont's Long Range Transportation Business Plan (LRTBP).

The development of a PTPP every five years is required by Statute. The first PTPP was published in 2000 and the second was published in 2007. This document presents the 2012 PTPP update. While the PTPP is updated every five years, it serves as the primary guidance for continued development of public transit in the State over the next ten years. The PTPP report consists of both this document and the Technical Appendices that include the six Technical Memoranda produced during the planning process as well as an Appendix on the Intercity Bus Needs Assessment and Policy Options.

[1] 24 V.S.A. § 5082, Chapter 126: PUBLIC TRANSPORTATION

VISION, GOALS, AND POLICY FRAMEWORK

Vision

The Vision for public transit in Vermont is:

Public transit meets the basic mobility needs of all Vermonters including transit-dependent persons, provides access to employment and other modes, mitigates congestion, preserves air quality and promotes efficient energy use, and advances the State's economic development objectives – all in a safe, reliable, cost-effective, and environmentally responsible manner.

Goals

The State's primary public transit goal is to preserve and enhance the level of public transit in Vermont, provided that specific routes and services are well used by the traveling public. A subset of goals for public transit in Vermont is codified in 24 V.S.A. Chapter 126, S.5083:

"..State policy shall support the maintenance of existing public transit services and creation of new services including, in order of precedence, the following goals:

(1) Provision for basic mobility for transit-dependent persons, as defined in the public transit policy plan of January 15, 2000, 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) Access to employment, including creation of demand-response service.

(3) Congestion mitigation to preserve air quality and sustainability of the highway network.

(4) 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.

The breadth of the goals recognizes that different areas of the State have varying needs and that the types of transit services that are most effective may vary by location and local conditions. The policies proposed in this PTPP assume that the goals are truly in order of precedence specified in the Statute.

This PTPP update proposes a change to the third goal. It is suggested that the goal on "congestion mitigation" be broadened to preserving air quality and promoting energy efficiency, which could involve congestion mitigation as well as other actions. The proposal is for the goal to read "*(3) preservation of air quality and promotion of efficient energy use in the State.*"

Policy Framework

24 V.S.A. Chapter 126, S.5083 also sets the framework for State policy:

> *"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.*

The State is committed to meeting its vision and goals for public transit as expressed above and the PTPP recognizes that there are opportunities to expand public transit services in the State to meet the needs of all Vermonters. To this end, the State will continue to expand and enhance public transit services in the State. The current framework for Vermont public transit policy includes strategies aimed at:

- Preserving and enhancing existing public transit services that are well used by the traveling public,

- Monitoring the performance of transit services by VTrans and the boards of the transit providers to ensure the maximum value from available resources, and

- Using any additional public transit funds to support and promote the four goals noted above as in 24 V.S.A Chapter 126, S.5083.

Many of the challenges of providing comprehensive public transit in a State as rural as Vermont were discussed in detail in the technical memoranda included in the Technical Appendices. Policies that emerged during the PTPP process are categorized as addressing Funding Levels and Sources, Capital Investments, Coordination of Services, Interface with Land Use Planning, Regional Connectivity and Intercity Bus, Improvements to the "Transit Experience." Recommendations concerning Public Transit Planning and Technical Assistance are also included.

PUBLIC TRANSIT POLICIES

Specific policies needed to achieve the vision and goals for transit in Vermont include:

A. Funding Levels and Sources

1. Continue to seek additional funding to expand and enhance transit services to meet additional needs in the State.

2. Continue to maximize the use of available federal funds to support transit and to assist with State funding to the extent that funds are available within the State budget.

3. Continue to seek innovative funding sources and mechanisms that will increase investment in public transit, especially from the federal level. Policies in this area include:
   - Strongly encourage providers to maximize local funding for public transit.
   - Continue the VTrans goal of 20% local funding (exclusive of capital, Rural Transit Assistance Program (RTAP), Job Access and Reverse Commute (JARC), Rideshare, and Medicaid funding) and reinstitute efforts to track and report provider performance in meeting this goal.
   - Continue "flexing" (transferring) highway funds annually into the State's transit program to maximize their use for transit; particularly flexing federal highway funds from the Surface Transportation Program (STP) (for non-operating costs) and Congestion Mitigation and Air Quality (CMAQ) for operating and capital for new transit service demonstration projects).
   - Continue the integration of State Elderly and Disabled (E&D) Transportation operating funds with Non-Urbanized Area Formula Grants (Section 5311 program) to maximize coordination between human service agencies and public transit providers and to maximize use of vehicle capacity on all vehicles.
   - Continue to allow volunteer hours (in-kind) to be used as local match in the E&D Program.
   - Continue to capitalize preventive maintenance in an effort to prolong the life of the operator's fleets and allow Federal Transit Administration (FTA) operating funds to be used to cover other operating expenses.

4. Continue performance monitoring of the transit providers by VTrans and local governing boards to ensure that the maximum value is realized from available resources. Fund only services that successfully meet performance standards and use resources effectively. A policy change in this regard will:
   - Accelerate the process of eliminating "under-performing" routes/services so that resources can be shifted to successful services more quickly. This policy will allow under-performing *established "baseline" services* a total of 12 months to improve and *new services* 18 months to be tested and proven.

- Re-classify rural routes that operate less than once a day into demand-response calculation for that agency.

5. Focus service expansions on meeting basic mobility first, then subsequently, access to employment, air quality/energy efficiency/congestion mitigation, and economic development in that order. The major policy change will be a re-vamping of the State's New Services program in an effort to target new dollars toward areas of the State that currently have unmet needs and toward those services that are higher priorities as defined in the State Statute.
   - Remove the goal-based funding formula since it appears that over time the amendments to Section 5091 have rendered it ineffective. Existing services will continue to be funded as long as they meet performance standards, and new services will be funded based on their merit and need-based feasibility studies.
   - Update the New Services evaluation criteria to rank projects based on all State transit goals and distribute new funding based on statewide needs and priorities.
   - Re-institute the mandatory Transit Development Plan (TDP) process to ensure that new transit services funded under the New Services Program are justified. Increase the role for the Metropolitan Planning Organization (MPO) and the Regional Planning Commissions (RPC) in the process and create a new specialized planning studies component.

B. Capital Investments

1. Manage federal earmarks and capital projects effectively. The policy change proposed for managing earmarks, or any other major capital project, is to centralize FTA earmark/capital project management for Chittenden County at Chittenden County Transportation Authority (CCTA) and for the rest of the State at VTrans.

2. Continue to consider applications for vehicle replacement based on the vehicle design life as designated in the VTrans Vehicle Disposition and Transfer Procedures, based on a 20% spare ratio policy as appropriate.

3. Complete the statewide procurement of vehicles to reduce unit costs. Standardize the statewide fleet, and ensure compliance with federal and State procurement rules.

4. Initiate a Statewide facility funding program to assist transit operators that are building or improving operating facilities. Evaluate and entertain requests for capital funding for facilities based on the results of this comprehensive process and inclusion in an approved TDP.

5. Explore the concept of regional maintenance garages for some maintenance functions.

6. Establish procedures to justify the State's contribution to various passenger amenities and facilities.

7. Conduct statewide procurement for technology improvements to increase operating efficiency and improve user transit experience.

C. Coordination of Services

1. Continue to promote and enhance coordinated human service transportation, and general public transit through the regional public transportation brokers where appropriate.

2. Continue working with the Vermont Agency of Human Services (AHS) to maintain the linkage between transit providers and the State's Medicaid program.

D. Interface with Land Use Planning

1. Continue to support efforts to curtail sprawl and create transit-supportive communities consistent with other state-endorsed policies and programs such as Complete Streets and Smart Growth.

2. Continue to support the integration of transit services and facilities into State and local planning and design decisions. Include the evaluation of transit potential in project reviews at the State and local levels and the implementation of pedestrian-friendly designs by:
   - Incorporating transit considerations in VTrans-funded projects and programs at each stage of the planning, design, construction, implementation, operations, and maintenance activities. This will include consideration of both physical amenities (bus shelters, sidewalks and pedestrian amenities) and design elements that enhance transit operations and access (snow removal, adequate turning radii, and transit signal priority). New projects, reconstruction projects, and other transportation facility improvements will maintain or improve existing access and conditions for transit services or interfaces.
   - Providing guidance and assistance to local municipalities to incorporate appropriate transit elements in local site planning, design and construction reviews. This will include VTrans staff reviewing the transportation segments or chapters of each Regional Transportation Plan to ensure that transit is adequately addressed.

- Expanding the role of the MPO and the RPCs in facilitating transit and associated pedestrian considerations in local land use decisions.
- Educating and training Act 250 Boards and Regional Coordinators on transit issues, interface, and considerations.

E. Regional Connectivity and Intercity Bus

1. Continue funding regional and commuter services on the same basis as other local transit services, with no change in match ratios or other incentives, but reserve the flexibility to increase the State share of project costs as warranted.

2. Improve connectivity between public transit providers and other modes to serve markets both inside and outside Vermont.

3. When appropriate, build park and ride lots as intermodal facilities and ensure that they are served by transit.

4. Support a vital intercity bus network serving both intra-state and inter-state travel by updating the State intercity bus program. This has been started with the assessment of rural intercity bus needs and the FTA-required consultation process. If unmet needs are identified, VTrans will create program guidelines and solicit projects to address these needs, as appropriate.

F. Improving the "Transit Experience"

1. Continue working with transit operators and local communities to improve the transit user experience and attract riders, including choice riders, onto the system. This will include consideration of how to provide good pedestrian connection to transit stops, adequate street crossings, ADA accessible bus stops and pedestrian connections, and bike racks and bike parking at major transit stops and facilities.

2. Work to promote easy access to information about public transit services, including at intermodal facilities and via the Internet. This will include educating the public, particularly youth, on how to use public transit.

G. Public Transit Planning and Technical Assistance

1. Institute a transit planning assistance program to address individual transit operators planning needs and prepare locally developed TDPs and special

planning studies. The program will increase the role of the local RPC(s) and the MPO in public transit planning efforts.

2. Expand the Vermont Technical Assistance Program and take advantage of the FTA RTAP program which focuses on training and technical assistance projects and other support services tailored to meet the needs of transit operators in non-urbanized areas.

Chapter 1

Vermont's Public Transit Program

Public transportation plays a vital role in the high quality of life that Vermonters enjoy and the State of Vermont supports public transit services in a number of ways. The Vermont legislature views public transportation as a "*an important matter of State concern, essential to the economic growth of the State and to the public health, safety and welfare of present and future generations of Vermonters*"[2]. The Vermont Public Transit Policy Plan (PTPP) outlines transit polices and goals and to develop strategies to meet current and emerging public transportation challenges.

The components of the PTPP are consistent with Vermont's Long Range Transportation Business Plan (LRTBP) and provide policy level direction, guidance and strategies to guide transit investments. The PTPP is part of a series of modal policy plans developed by the Vermont Agency of Transportation (VTrans) addressing transit, rail, bike and pedestrian, aviation, freight, and roadway programs and policies. Together these policy plans provide direction for VTrans various programs, as well as forming the basis of the LRTBP.

The development of a PTPP every five years is required by Statute. The first PTPP was published in 2000 and the second was published in 2007. This document presents 2012 PTPP update. While the PTPP is updated every five years, it serves as the primary guidance for continued development of public transit in the State over the next ten years.

This section outlines the context within which public transit is provided in the State. More detail on the subject is provided in Technical Memorandum #1 - *The Context: Vermont's State Transit Program* which is included in Technical Appendix A.

As defined in the legislation, *public transportation* refers to passenger transportation "*by all means available to the general public*" while *public transit* service is a subset of that which means "*…any fixed route, paratransit, transportation brokerage, user-*

[2] 24 V.S.A. § 5082, Chapter 126: PUBLIC TRANSPORTATION

side subsidy, and or rideshare/ride-match program which is available to any person upon payment of the proper fare, and which is promoted to be available to all members of the public, including those with special needs"(24 V.S.A. § 5088(5)). While this PTPP is primarily focused on public transit services, it also is concerned with coordination and connections among public transit services as well as intermodal passenger connections to other forms of public transit such as intercity passenger rail and commercial aviation services.

PUBLIC OUTREACH

The 2012 update to the PTPP was prepared with the assistance and in consultation with a number of stakeholders. The VTrans Public Transit Advisory Council (PTAC) served as the Study Advisory Committee (SAC). The SAC/PTAC members represented a diverse set of interests. As detailed in Attachment 2, the SAC/PTAC members were consulted throughout the planning process and their feedback was folded into the development of the final PTPP.

Public input also was sought throughout the planning process. The Transportation Planners from the State's Regional Planning Commissions (RPCs), through the Transportation Planning Initiative (TPI), were also briefed on the plan and assisted in distributing the plan's information and public meeting notices. The project website was used to communicate with the public and solicit comments throughout the project. Two series of three public meetings were undertaken during the project. The first series solicited public and RPC input and identification of State transit issues at the beginning of the planning process and the second series solicited input from the public on the draft plan.

OVERVIEW OF VTRANS PUBLIC TRANSIT ADMINISTRATION

Most of the components of this PPTP will be implemented through the State's Public Transit Program. The VTrans Public Transit Program is managed under the agency's Policy, Planning and Intermodal Development (PPAID) Division, Public Transit Section. The Public Transit Section consists of a Public Transit Administrator, three Coordinators, and a Financial Administrator which assists with budgeting and administration of federal and State transit grants. Finally, statewide and regional planning assistance, including planning for public transit, is provided through the Division's Policy and Planning section where the preparation of modal plans is managed.

The role of the Public Transit Section is to oversee how federal and State funds are utilized and to be a bridge between the federal government, State legislature, and

the transit providers. The PPAID/Public Transit Section ensures that transit providers are providing services that are well-planned and consistent with the State's vision and goals for other transportation modes and land use policies.

The public transit program is somewhat unique among the other transportation modes because it involves grant making and on-going grant management activities for ten different public transit providers – both public and private-non-profit agencies. Annually, VTrans solicits grant applications from these providers, is responsible for allocating State and federal funds among them, and monitors their services and financial information on a monthly basis. Another unique feature is the need to coordinate or collaborate with other state agencies, particularly the Agency of Human Services (AHS), to ensure that services reach the most vulnerable Vermonters, but are also provided in a cost effective and efficient manner.

FEDERAL AND STATE FUNDING PROGRAMS

Public transit in Vermont, as in other states, is funded through fares, donations, local communities, agency-contracted services, and federal and State transit subsidy programs. In FY10, the operating budgets for public transit operators in the State totaled over $39M. In Vermont, as in many states, the federal (49 U.S.C.) and state transit programs provide substantial subsidies to the local transit providers.

While Chittenden County Transportation Authority (CCTA) is a direct recipient of FTA Section 5307 transit operating/capital funds for small urbanized areas, most of the federal funds flow through the VTrans to rural transit operators. The State is the designated recipient of all federal rural transit funding as well as funding for specialized services under Section 5310 (Elderly and Persons with Disabilities), Section 5316 (JARC) and Section 5317 (New Freedom). The FY11 Governor recommended State budget for public transit includes about $17 million in federal funds and $6.8 million in State funds for a total of $26 million (excluding the federal funds that flow directly from FTA to CCTA). Of this, there is a one-time grant of $2 million in American Recovery and Reinvestment Act (ARRA) funding for vehicles and $600,000 for planning and administration. The total budget is $26 million less the $2 million in ARRA for a net of $24 million. In addition, local communities contribute to transit services through match and users provide fares and other revenue.

Federal and State Transit Funding

Table 1-1 presents a summary of federal and State transit operating and capital subsidies from 2008 through 2011. When the ARRA funding is not considered, transit subsidies in the State increased overall $3 million or almost 16% during that period (between 3-10% annually).

Table 1-1: Public Transit - State and Federal Funds Only, FY 2008 - 2011								
					2011			
PROGRAM NAME	DESCRIPTION	2008	2009	2010	STATE	FEDERAL	ARRA	TOTAL
Project Development	Funding for Project Development and Evaluation	473,255	120,000	120,000	25,436	101,742		127,178
Congestion Mitigation/Air Quality (CMAQ)	Federal Highway Funding that can be used for public transportation	750,000	1,100,000	1,850,000		1,500,000		1,500,000
Rural Program Administration	S. 5311 Funding for Program Administration	507,931	543,288	546,237	90,282	361,126		451,408
S. 5311 Non-Urbanized Area Grants	Funding for Rural Transit in areas less than 50,000 population-Operating, Capital and Administration	12,938,898	13,202,700	14,284,345		5,609,347		5,609,347
Urban - State Operating Assistance	Funding for Urban Transit in Areas with 50,000 - 200,000 population - Capital and Operating (Chittenden County)					825,919		825,919
State Operating Assistance	State Funding for Operations				5,070,904			5,070,904
S. 5311 E&D Assistance	Funding for transportation service for Elders and Person with Disabilities				98,819	3,400,731		3,499,550
Rural Preventive Maintenance	Capitalization of Preventive Maintenance in Rural Areas	500,000	500,000	500,000		500,000		500,000
Urban Preventive Maintenance	Capitalization of Preventive Maintenance in Urban Area (Chittenden County)	500,000	500,000	500,000		500,000		500,000
State Technical Assistance	State Funding for Technical Assistance				200,000			200,000
Rural Technical Assistance (RTAP)	FTA funding for training and technical assistance					90,643		90,643
Kidney Association Grant	Vermont Kidney Association Grant				30,000			30,000
S. 5316	FTA Job Access and Reverse Commute Program for low income residents to access jobs	393,960	426,790	429,600	250,447	250,447		500,894
S.5317	FTA New Freedom Program for Persons with Disabilities beyond ADA	122,332	132,149	133,883		153,748		153,748
Rideshare	Encouragement of Carpools and Go Vermont	450,000	450,000	450,000		450,000		450,000
ARRA Capital	ARRA Capital Funding Program			5,680,572			2,000,000	2,000,000
S. 5309 Capital Grants	FTA and State Capital Grant Program for General Public	4,185,124	4,369,348	4,565,331	999,539	3,146,082		4,145,621
S. 5310 E&D Capital Grants	FTA and State Capital Grants for Elders and Persons with Disabilities				77,500	385,750		463,250
TOTAL PUBLIC TRANSIT PROGRAM		20,821,500	21,344,275	29,059,968	6,842,927	17,275,535	2,000,000	26,118,462
TOTAL PUBLIC TRANSIT APPROPRIATION*		19,151,569	19,719,221	26,259,839	6,842,927	15,896,777	2,000,000	24,739,704
TOTAL PUBLIC TRANSIT PROGRAM Minus ARRA Capital		20,821,500	21,344,275	23,379,396				24,118,462
	Percent Increase Over Previous Year		*3%*	*10%*				*3%*
*NOTE: Appropriations exclude FTA subsidies that pass through directly to CCTA.								

Funding Innovations in Vermont

In addition to public transit dollars, Vermont uses federal highway funds in innovative ways and "flexes" (transfers) highway funds annually into the State's transit program to maximize their use for transit. Vermont is a leader in flexing federal highway funds from the Surface Transportation Program (STP) and Congestion Mitigation and Air Quality Improvement Program (CMAQ) into its transit programs.

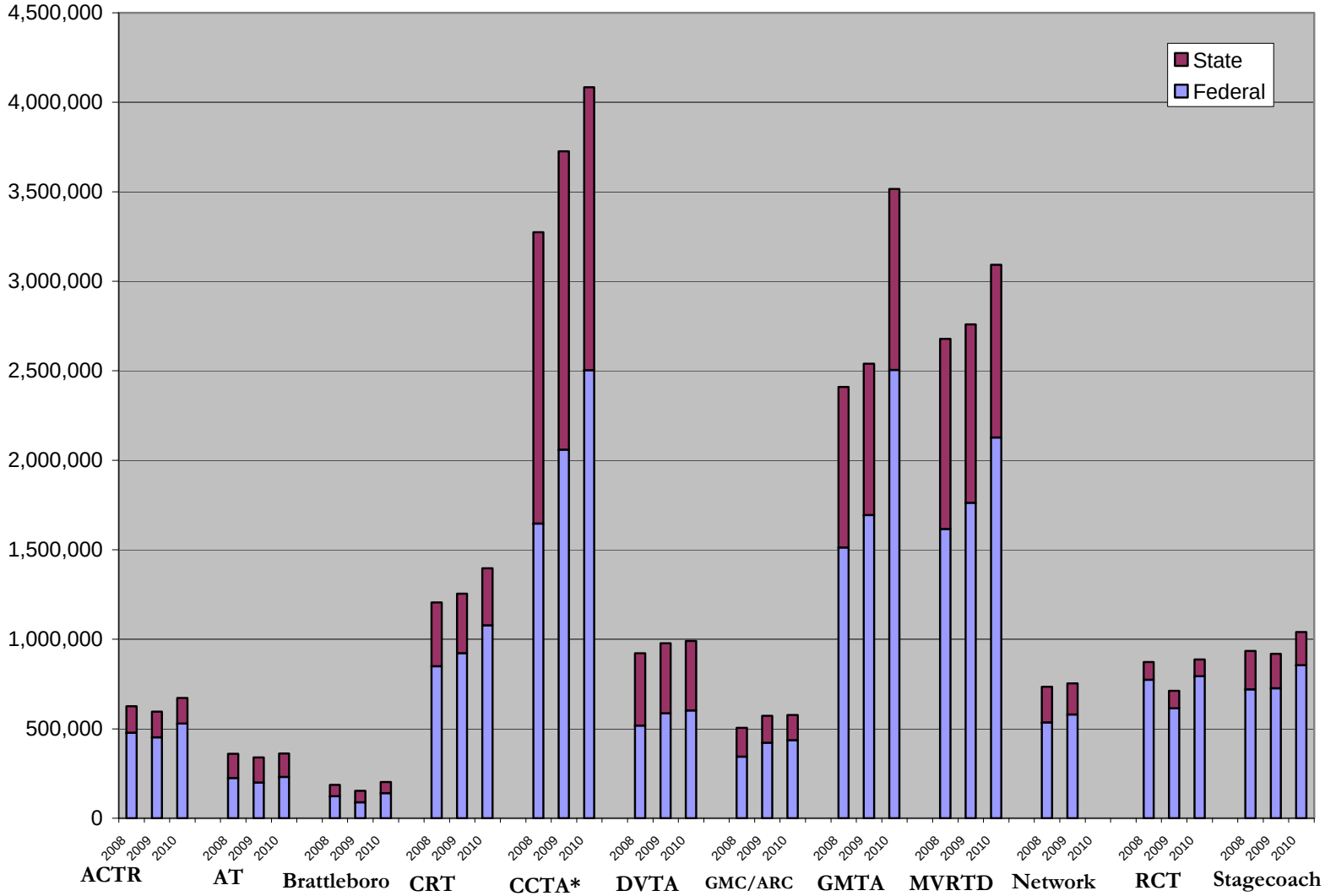
Also innovative is VTrans' integration of elderly and disabled (E&D) operating funds with its Non-Urbanized Area Formula Grants (Section 5311). The goal of the integrated program is to maximize coordination between human service agencies and public transit providers and to improve the utilization of unused capacity on services formerly restricted to E&D.

Another innovative component in the State's use of federal transit programs is its Rural Preventive Maintenance program. In an effort to prolong the life of the operator's fleets, the State has set aside $1 million annually to support preventive maintenance ($500,000 in rural areas and $500,000 in the urban area). By "capitalizing" rural preventive maintenance, those costs are eligible for 80% from the federal program and the transit providers only have to provide 20% in local share (if these costs were considered operating expenses, the federal program would cover only 50% of the net deficit).

Transit funding per capita in Vermont is higher than in other States with a similar rural/urban mix. The rural nature of the State makes it difficult to provide transit in traditional ways. Despite its rural character, the State will spend about $11.00 in State funding per capita on transit services in 2011. According to the 2010 *AASHTO Survey of State Funding for Public Transportation*, the other nine States with over half of their population in rural areas spent between $.43 - $4.52 in State funds on transit in 2008 -– less than half of the amount spent by Vermont that year ($9.50 per capita). The three States with somewhat comparable rural populations (WV, MS, and ME) only provided between $.54 and $1.67 in State transit funding per capita in 2008.

Table 1-1 indicates that budgets by program and funding subsidies have been increasing over the past few years. Mirroring this trend, Figure 1-1 presents trends in federal and State operating fund allocations to each of the providers from 2009 – 2010 (not including capital, Medicaid, or federal operating subsidies that CCTA receives directly from FTA). The figure shows a consistent and steady increase in operating funds available for transit services in the State.

Federal and State Operating Funds Allocations (2009-2010)



*Does not include the Federal S. 5307 operating funds received directly from FTA by CCTA.

STAKEHOLDERS

There are a number of stakeholders that play major roles in the public transit network in Vermont. In addition to the public and riders of the transit systems, the primary stakeholders that will be affected by this PTPP include:

- VTrans
- Public Transit Providers
- Transportation Planning Initiative (TPI) including the RPCs and their Transportation Advisory Committees (TACs), Metropolitan Planning Organization (MPO)[3] and their TAC and Public Transit Advisory Committee
- Vermont Public Transportation Association (VPTA)
- Vermont AHS and other State Agencies such as the Vermont Department of Labor and the Vermont Agency of Commerce and Community Development
- State and Local Officials

It is noted that each of Vermont's 11 RPCs has a TAC. The TACs include representatives from each town and some representation from the local transit operator. The MPO has a Public Transit Advisory Committee as well as a TAC that makes recommendations on action items to be considered by the full Board of Directors. Through its TPI, VTrans collaborates with the RPCs and the MPO to carry out transportation planning at the regional level. RPCs enter into cooperative agreements with VTrans for the agency to provide the Federal Highway Administration (FHWA) planning funds in exchange for collaborative transportation planning.

[3]The Chittenden County Metropolitan Planning Organization (CCMPO) and the Chittenden County Regional Planning Commission (CCRPC) merged effective July 1, 2011.

Chapter 2

Existing Vermont Public Transit System

PUBLIC TRANSIT SERVICES

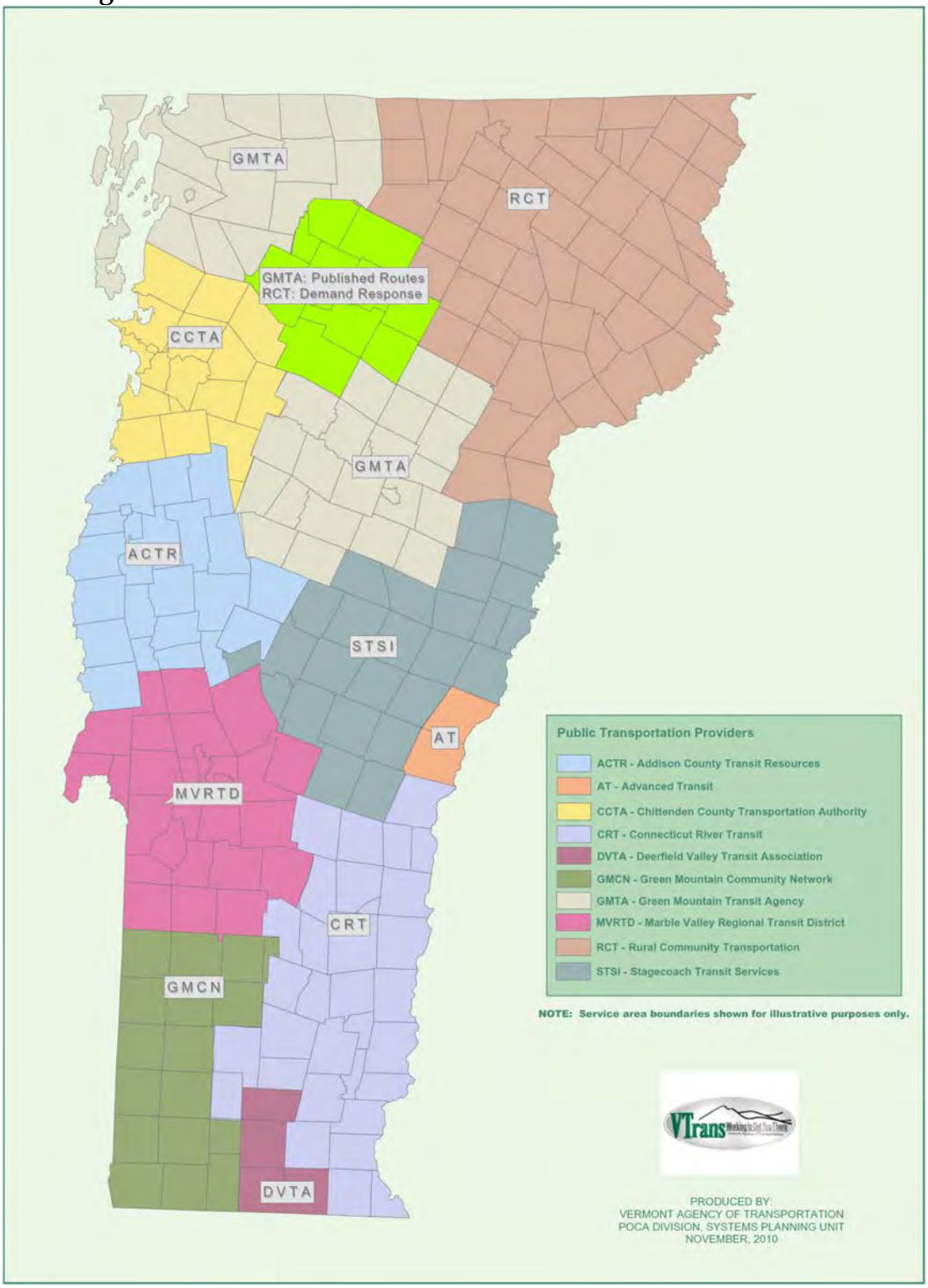
Vermont is served by ten public transit providers that offer a range of transit services, from local fixed-route to demand-response to commuter.[4] Figure 2-1 portrays VTrans' map of service areas for these transit providers, and Figure 2-2 illustrates the fixed and deviated routes operated throughout the State. It is important to note that demand responsive services offered by the public transit providers, which essentially cover the entire State, are not shown on these maps. Another note is that commuter services that extend from a common location may not necessarily interline.

The types of transit services, service characteristics, fares, coordination efforts, organizational structures, budgets, and vehicle fleets of Vermont's current public transit providers are summarized below.[5] More details on the services are included in Technical Memorandum 2 - *Existing Vermont Public Transit System and Demographic Analysis* and can be found in Technical Appendix B.

[4] The Brattleboro BeeLine is now operated by Connecticut River Transit, and is no longer considered a separate service.

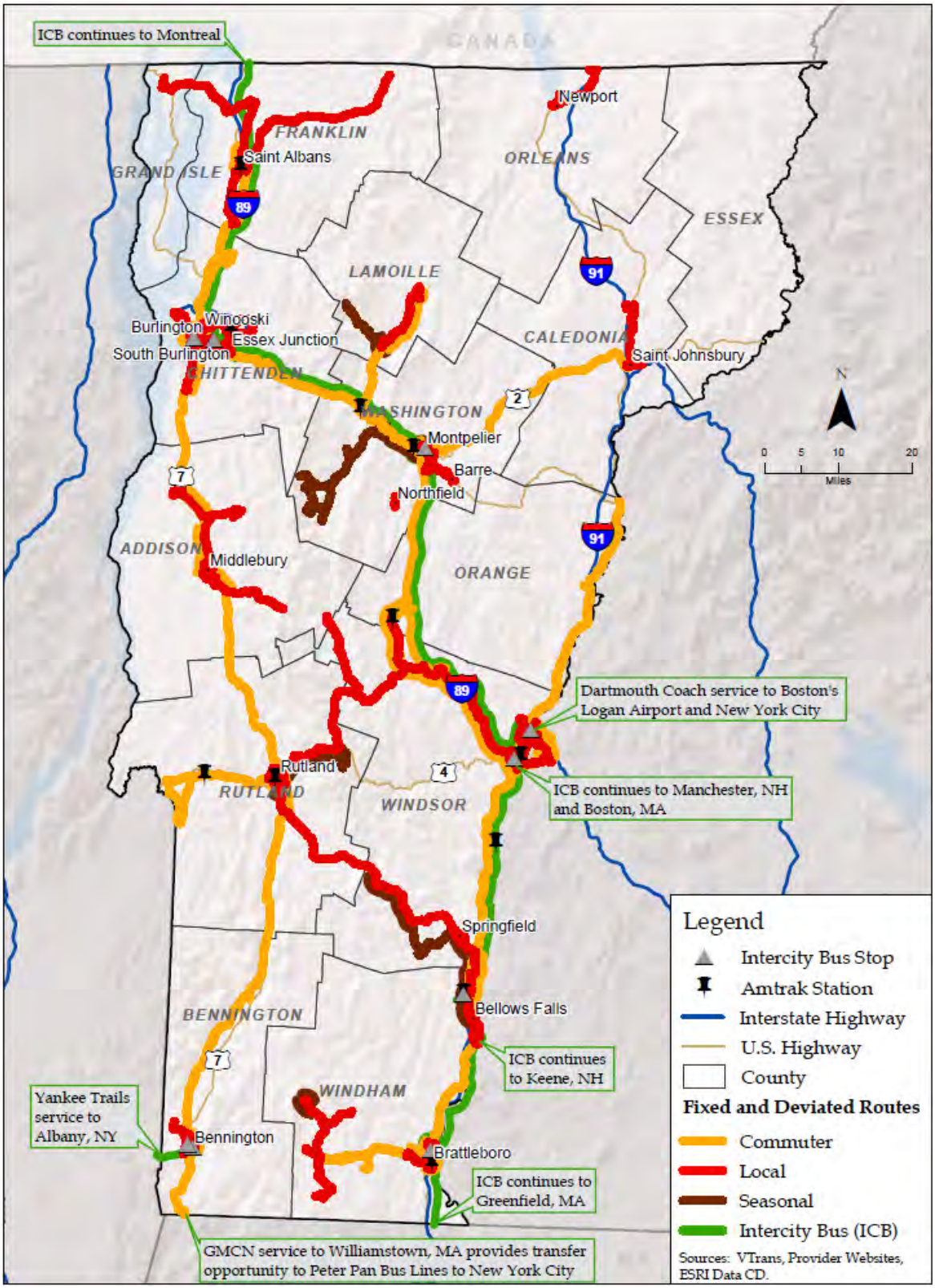
[5] Much of this information was based on the transit agencies' applications for FTA Sections 5311, 5316, 5317 and/or State Operating & Administration Assistance for FY 2011, provided by VTrans. The figures for the transit agencies' FY 2010 operating budgets and ridership were also provided by VTrans and represent data for the Section 5311 program and CMAQ-funded services only; the number of riders per hour and costs per passenger were also calculated with this data. The FY 2010 operating costs and ridership for CCTA were provided separately by CCTA.

Figure 2-1: Service Areas of Vermont's Public Transit Providers



Source: VTrans Website, **http://www.aot.State.vt.us/ops/PublicTransit/providers.htm**.

Figure 2-2: Fixed and Deviated Routes in Vermont



Advance Transit (AT)

AT provides public transit services across State lines in the Upper Valley, serving the towns of Hartford and Norwich in Vermont and Hanover and Lebanon in New Hampshire. AT also provides commuter service to Enfield and Canaan, New Hampshire. AT also provides Americans with Disabilities Act (ADA) complementary paratransit service, called Access AT, for eligible persons with disabilities who cannot use the fixed-route bus services due to his or her disability. Access AT is a curb-to-curb, shared ride service that operates in the same area and during the same hours as the fixed-route bus services.

Addison County Transit Resources (ACTR)

ACTR provides public transit services primarily in Addison County, except for the towns of Hancock and Granville, as well as commuter connections to Chittenden and Rutland Counties. In addition to transit for the general public, ACTR offers Dial-a-Ride services through programs for specialized populations including older adults, age 60 and above, persons with disabilities, and low-income families and individuals. ACTR partners with State agencies and human service organizations, such as the Vermont Department of Families and Children, the Vermont Association for the Blind and Visually Impaired, the Champlain Valley Agency on Aging, Counseling Service of Addison County, and Addison County Home and Health Hospice, to offer these programs.

Chittenden County Transportation Authority

Serving the greater Burlington area, CCTA operates the largest transit system in the State. These routes include local bus service in several cities and towns within Chittenden County, commuter services to cities in adjacent counties, and an employee shuttle from a satellite parking lot to downtown Burlington. CCTA also offers ADA paratransit services for eligible persons with disabilities. Operated through a contract by the Special Services Transportation Agency (SSTA), ADA paratransit services are available within three-quarters of a mile of the fixed-route system. Other services that CCTA provides include shopping shuttles from senior housing complexes to local supermarkets and special routes, called 'Neighborhood Specials', which connect residential neighborhoods in Burlington with local schools.

Connecticut River Transit (CRT)

CRT operates transit service in southeastern Vermont as "The Current." The Current provides several fixed-route services, including commuter and local routes, in Windham and Windsor Counties. Deviations of up to three-quarters of a mile from the fixed-route are available on the local services by request; requests must be made a day

in advance. The Current also provides Dial-A-Ride service, which is open to anyone in more than 30 towns within Windham and Windsor Counties.

CRT also operates the Brattleboro BeeLine, which serves the Town of Brattleboro in southeastern Windham County (in the past the Town of Brattleboro had operated their own transit system through a contract arrangement). The Brattleboro BeeLine also provides complementary ADA paratransit service, curb-to-curb transportation for eligible persons with disabilities, who are traveling between origins and destinations within three-quarters of a mile of the fixed-route services.

Deerfield Valley Transit Association (DVTA)

DVTA operates a public transit system, known as the "MOOver," for the communities and resorts in Deerfield Valley. The MOOver fixed-route system serves the towns of Dover, Wilmington, Whitingham, and Readsboro, with a connection to Brattleboro as well. DVTA also offers an Elderly and Disabled Transportation Program, in which it provides demand-response service for seniors age 60 and over and ADA-eligible persons with disabilities. DVTA also organizes volunteer drivers to be available to provide seniors and persons with disabilities with rides to medical appointments.

Green Mountain Community Network (GMCN)

GMCN provides public transit service in and around Bennington County. The "Green Mountain Express", or GMX, provides many different types of service, including deviated fixed routes. GMCN provides a Shoppers' Express Service to Bennington grocery stores three times a week, and on request, service to the Route 9 Trailhead Monday through Friday. The GMX also provides Elderly, Disabled, and Visually Impaired services for the general public and human service agencies in the area, such as the Vermont Center for Independent Living, United Counseling Services, and Bennington Project Independence. Demand-response service and transportation with volunteer drivers are other service options, depending on vehicle and driver availability.

Green Mountain Transit Agency (GMTA)

GMTA (operated by CCTA) provides various forms of public transit in Grand Isle, Franklin, and Washington Counties; the towns of Orange, Williamstown, and Washington in Orange County; and the towns of Stowe and Morrisville in Lamoille County. Most services are deviated fixed routes, with deviations of up to three-quarters of a mile available with 24-hour advanced notice. Services are differentiated by region: Capitol District, Mad River Valley, Stowe/Lamoille Valley, and Franklin/Grand Isle Region. GMTA service has different branding depending on the service area. It is known as "Mad Bus" in the Mad River Valley and incorporates the Stowe, Vermont

logo on marketing materials for transit services in the Stowe/Lamoille Valley area. GMTA provides ADA paratransit services for eligible persons with disabilities who cannot use GMTA fixed-route buses in the Town of Stowe.

Marble Valley Regional Transportation District (MVRTD)

MVRTD, known as "The Bus," serves Rutland County and operates a fixed-route network in Rutland as well as commuter services to adjacent counties. MVRTD provides ADA paratransit service, complementary to the local fixed routes in Rutland, for eligible passengers with disabilities. A deviated fixed-route service is provided in Proctor, with four trips a day. The Bus also operates several commuter routes between Rutland and other cities within Rutland County, as well as in adjacent counties. Additional seasonal service is provided to Killington to accommodate shift work in the resort area. Other services offered by The Bus include human service or contractual transportation with organizations including Vocational Rehabilitation, Southern Vermont Council on Aging, Castleton Community Seniors, Program for All Inclusive Care for the Elderly, Inter-Age, and the Foster Grandparent Program, to name a few. MVRTD also provides subscription, point-to-point service in Rutland City and Rutland Town, and administers the Medicaid and Reach-Up Programs in Rutland County.

Rural Community Transportation, Inc. (RCT)

RCT provides public transit in the Northeast Kingdom, including Caledonia, Essex, and Orleans Counties, as well as Lamoille County. RCT provides transit through various modes, including cars, taxis, vans, volunteer drivers, and vanpools. Services are available to the general public as well as the clients of partner human service agencies, including the Area Agency on Aging, Northeast Kingdom Human Services, Central Vermont Council on Aging, and the Northeast Kingdom Community Action. RCT acts as the Medicaid/Reach-Up broker for its service area. RCT operates two deviated fixed-route services, which will deviate up to a quarter-mile from the published routes. RCT partners with the GMTA in providing a commuter service between Montpelier and St. Johnsbury, along the US 2 corridor. The agency also operates five "Green Express" shuttles that serve outlying villages and towns, primarily transporting riders for shopping trips.

Stagecoach Transportation Services, Inc. (STSI)

STSI provides public transit service in Orange and northern Windsor Counties. ADA-eligible passengers can request deviations of up to a quarter-mile on both these services, with notice at least 24 hours in advance. The commuter services operate on weekdays, offering one to three trips each in the morning and evening peak periods. Geared toward shopping trips, the deviated fixed-route services provide one roundtrip a day, four to five times a month. STSI also provides demand response service,

including transportation for human service agencies, senior citizen centers, and medical centers. STSI manages Medicaid transportation and arranges trips for eligible passengers via a public transit route, volunteer driver, or taxi. STSI also has a program called Ticket to Ride, in which the organization pays up to 80% of the cost of transportation for senior citizens, age 60 and over, and persons with disabilities for various trip purposes. Passengers that are not eligible for Medicaid or the Ticket to Ride program may also privately pay for trips. STSI also manages a volunteer driver program.

COMMUTER AND INTERCITY TRANSPORTATION

Commuter Bus

As described above, several of the State's public transit providers also provide commuter services, which generally operate only during peak periods Monday through Friday and include express segments. Across the State, these services provide economic lifelines for many outlying communities to access jobs and a range of services in larger cities, where major employers, medical centers, educational institutions, and retail centers are located. These services also tend to attract choice riders as many Vermonters travel long distances to work.

Ridesharing

Go Vermont is a State initiative aimed at providing easily accessible and reliable information about commuting and ridesharing resources, including transit routes and services. The service was upgraded from a manual system to a web-based system in 2010. The highly successful rideshare/ride match program now has 4,200 registrants in the matching database, and the web-based system has freed up resources for outreach, marketing, and education. You-tube, television, and radio ads and local-motion educational programs are being conducted, and Vermont has 29 park-and-ride lots (see Figure 4-11 in Technical Appendix D) located throughout the State, making it easier to carpool or vanpool to various destinations.

Intercity Bus

Scheduled intercity bus service in Vermont is currently provided by three carriers, Greyhound Lines, Yankee Trails, and Megabus. Intercity bus service is fixed-route, fixed-schedule bus service open to the general public, operated with over-the-road coaches with the capability of carrying baggage or package express. The Greyhound Lines service in Vermont is provided on two routes. On the Montreal to Boston route, Greyhound has Vermont stops in Burlington, Montpelier, and White River Junction. There are four round-trips per day on this corridor, which is operated

seven days per week. The Burlington stop is now located at the Burlington International Airport, which is served by all trips, but the earliest bus of the day (both directions) also stops in downtown. In Burlington all trips have a 15-minute layover at the airport, and in White River Junction the buses make an initial stop at the White River Junction depot, travel to Hanover, NH, and then return to the White River depot before continuing. In Boston, two of the inbound trips make stops at Logan Airport (but not any northbound trips). Three of the schedules in each direction make a stop at the Manchester, NH Airport. To use intercity bus from Burlington to New York, it is necessary to transfer either in Boston or Montreal.

The other Greyhound route operates a single daily round-trip from White River Junction to Springfield, MA. This route has stops in Vermont at Bellows Falls and Brattleboro. The southbound bus serving this corridor leaves White River Junction well after the arrival of the bus from Burlington, but the northbound arrives in time to allow a rider to connect to either Burlington- or Boston-bound buses with minimal delay. New York can also be accessed on this route once a day with a layover/transfer in Springfield, MA. Finally, it is possible for Vermonters in the GMCN service area to take Peter Pan Bus Lines from Williamstown, MA to New York City (two round trips per day).

In August, 2011 Megabus inaugurated daily intercity bus service between the University of Vermont campus in Burlington and Boston. This service is operated twice a day, and has no intermediate stops.

Vermont's only other remaining scheduled intercity bus service is provided by Yankee Trails, which offers two round-trips per day from Bennington to Albany, New York (but does not serve the Albany airport). This service is provided Monday to Friday only. The Yankee Trails scheduled service is not interlined with Greyhound, so a Vermont resident cannot buy a bus ticket in Bennington for travel beyond the Albany terminus. Yankee Trails offers only separate cash fares. The fare from Bennington to Albany is $4.00. As a result of the lack of an interline agreement with Greyhound, the stop in Albany is on the street in front of the Greyhound terminal. Also, Greyhound's website and telephone information service does not have information on the Yankee Trails service.

Finally, while it does not serve Vermont directly, Dartmouth Coach operates between Hanover/Lebanon, NH through New London, South Station, Logan International Airport in Boston with eight round trips per day, as well as between Hanover/Lebanon, NH and New York City once or twice a day, depending on the day of the week.

Intercity Rail

Two Amtrak lines currently serve Vermont. The Ethan Allen Express provides daily service, one roundtrip a day, from New York, NY to Rutland, VT by way of Albany, NY. This train service also stops in Castleton, VT. The Vermonter provides daily service from Washington, D.C. to St. Albans, VT, offering connections to Baltimore, Philadelphia, and New York. One southbound and one northbound trip are provided each day. The other stops within Vermont include Essex Junction, Waterbury, Montpelier, Randolph, White River Junction, Windsor, Bellows Falls, and Brattleboro. Both train services are financed primarily through funding from VTrans.

Vermont – New York Ferries

Two companies provide ferry service between Vermont and New York. Lake Champlain Transportation (DBA: Lake Champlain Ferries) offers three crossings: the Northern Crossing from Grand Isle, VT to Plattsburgh, NY; the Central Crossing from Burlington, VT to Port Kent, NY; and the Southern Crossing from Charlotte, VT to Essex, NY. Ticonderoga Ferry offers a crossing between Ticonderoga, NY and Shoreham, VT. These ferry services generally operate year round, with availability depending on weather conditions during the winter months. Fares are charged for passengers, vehicles, and bicycles.

Chapter 3

Transit Needs in Vermont

An important component of the update to the PTPP was an analysis of transit needs, particularly at the regional and State levels. This analysis guided the policy approach to meet any unmet needs. A detailed review of transit needs is included in Technical Appendix D, *Technical Memorandum #4*: *Transit Needs Assessment,* which examines how well the State's existing transit network meets residents' needs and identified service gaps. This "gap analysis" identified issues ranging from geographic gaps and needs for increased service levels to the connectivity of transit and the desire for more information about services.

The results of this needs assessment were used to develop the public transit vision for Vermont and to recommend policies, goals, and objectives to improve the State's transit services and ensure that transit needs are met.

GAP ANALYSIS – TYPES OF SERVICES NEEDED

Technical Memorandum #4 provides the detailed analysis of the need for additional transit services in the State. The analysis included a number of elements:

- Review of needs identified in previous studies
- Public input on transit needs
- Demographic analysis of the need for transit
- Travel patterns and connectivity

Figures 3-1 and 3-2 demonstrate some results of the demographic analysis of transit needs. Figure 3-1 portrays relative transit need across the State based on the densities of potentially transit-dependent populations, including older adults, youth, persons with disabilities, low-income residents, and households without an automobile. This analysis identified Vermont's more urban areas as having the highest concentrations of potentially-transit dependent persons. Figure 3-2 portrays relative transit need based on the percentages of the same populations, complementing the

Figure 3-1: Relative Transit Need by Density of Potentially Transit-Dependent Populations (Scored through the Transit Dependence Index - Density)

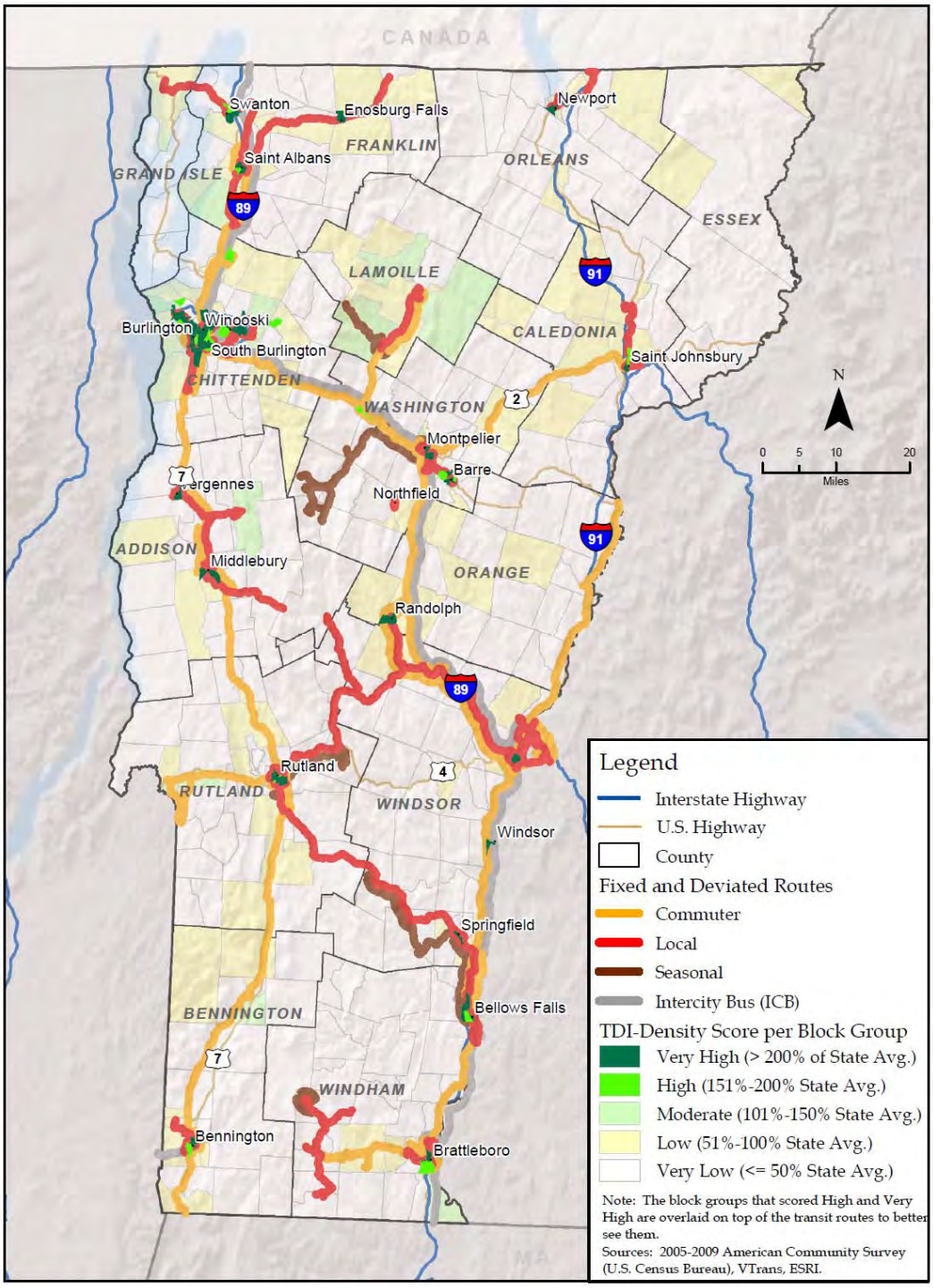
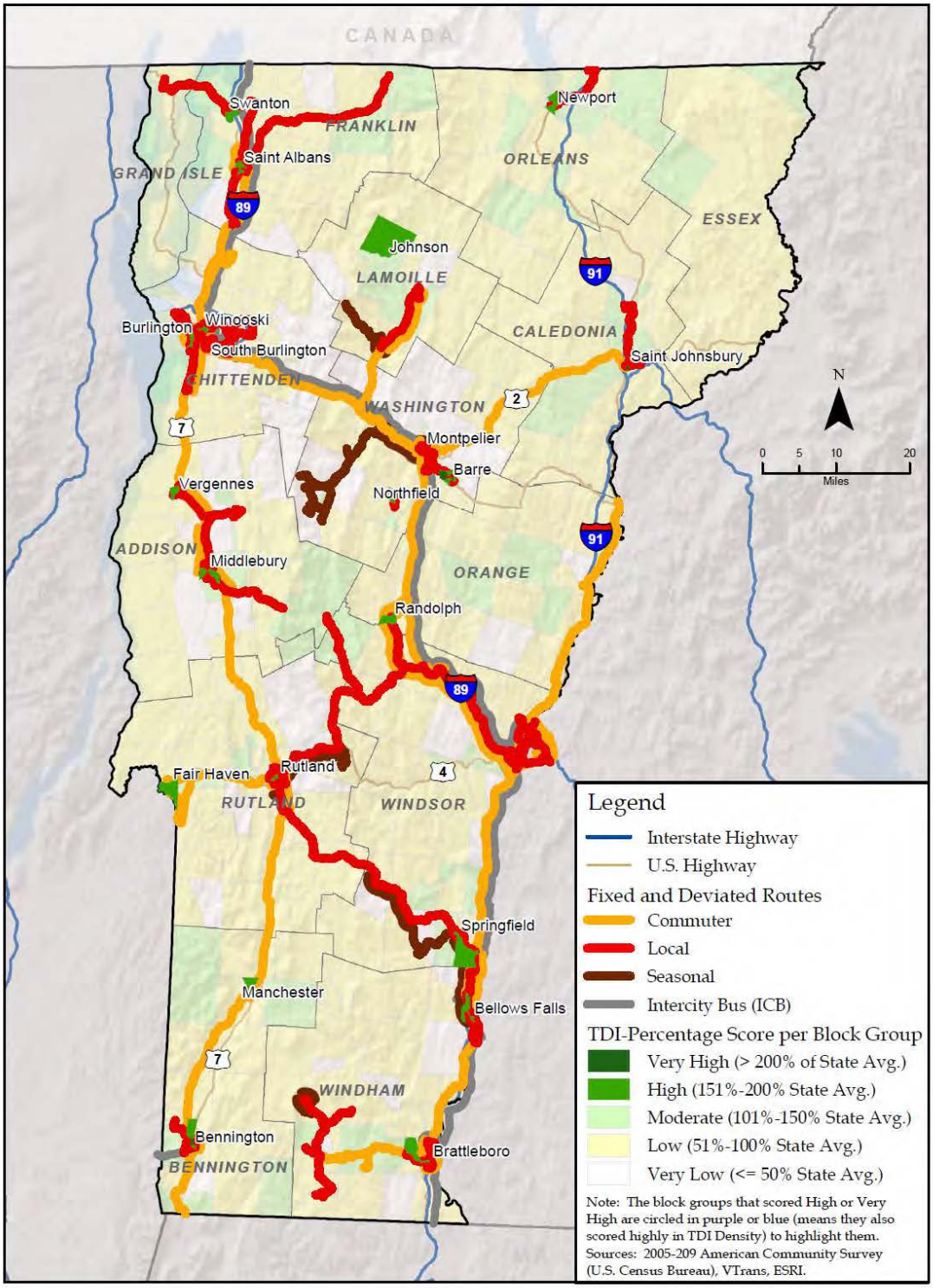


Figure 3-2: Relative Transit Need by Percentage of Transit-Dependent Populations (Scored through the Transit Dependence Index - Percentage)



density map by highlighting areas of potential transit need outside urban centers. The existing transit routes were overlaid on both demographic maps to identify geographic gaps in service, as well as potential service improvements in areas of higher transit need.

The analysis in Technical Memorandum #4 concluded that Vermont's existing transit providers generally provide good coverage through fixed- and deviated fixed routes in those parts of the State with the highest densities of potentially transit-dependent populations. All of the providers also offer demand- response, scheduled, and/or volunteer driver services to help meet transit needs in more rural areas, that do not have the density to support fixed-route services. The caveat is that most demand-response services are funded through the E&D Grant, Medicaid, or human service agencies. While E&D program services are open to the public, residents typically are clients of the human service agencies receiving services under other programs. Additional demand- response service, scheduled routes, and volunteer driver services would improve the convenience of public transit in outlying areas, where scheduled service to nearby large towns may only operate a few times a month and rides with volunteer drivers are subject to availability.

The Northeast Kingdom, Lamoille, and Orange Counties have areas with high relative transit needs, but limited fixed-route transit service; these areas also have lower population densities, which make fixed-route or deviated fixed-route transit service less feasible. Where such services already exist, such as Morrisville or the I-91 corridor in Orange County, these areas may be candidates for expanding service frequencies, hours, or days. In the Northeast Kingdom, where deviated fixed-route services are limited, new scheduled or deviated service could be implemented as population growth and densities warrant; these new services would play a vital role in connecting the Northeast Kingdom to the rest of the State.

The more urban areas around the State that currently have local or commuter services may also benefit from increased levels of service, such as expanded hours of service or higher frequencies, or new services such as weekend or evening service. Candidates for such transit growth include the areas surrounding Vermont's major cities: Burlington, St. Albans, Montpelier, Barre, Middlebury, Rutland, Springfield, Brattleboro, and Bennington. Hartford and White River Junction are additional areas with potential for transit growth, since the Upper Valley region hosts several major employers, educational facilities, and medical institutions. Expanding existing services provides further opportunities to coordinate transit between provider areas, both within Vermont and possibly across the State border to New Hampshire, New York, and Massachusetts, and better meet regional travel needs.

Vermont's current transit providers communicate often and engage in notable coordination efforts, from sharing information about other providers and highlighting connection points to sharing capital and training resources. The public transit networks also connect to other transportation modes, including park and ride lots, Amtrak, and Greyhound and other intercity bus providers, whenever possible. Vermont's public transit network provides good geographic coverage across the State through at least one form of transit (i.e., demand-response or volunteer driver service in the most rural areas). However, numerous opportunities exist to improve existing services, including more interlining of regional services and between local and intercity bus services, and introduction of new types of transit to boost local and regional accessibility.

Improvements to regional and inter-State connectivity, specifically making longer-distance trips feasible with fewer transfers and shorter travel times, were among the top transit needs identified through public input. In the past, Greyhound (formerly Vermont Transit) routes allowed Vermonters to travel between towns in-State. Increasingly, the in-State trips are being provided by local transit providers, and the gaps in long distance trips within Vermont are slowly being filled by regional and commuter services operated by the transit providers. However, many existing commuter and local routes have limited service hours, targeted toward commuters, and consequently do not meet regional transit needs for other trip purposes. Vermonters also frequently travel across the State borders for work, shopping, and recreation. With the reduction in intercity bus service, Greyhound now primarily provides the out-of-State linkages. Additional connections to New Hampshire especially would better meet the daily travel needs of Vermont residents and potentially encourage out-of-State visitors to Vermont.

While the demographic analysis focused on potentially transit-dependent populations, "choice riders" present another potential market for public transit. Choice riders are those that may own or have access to personal vehicles, but may choose to use transit services to save the costs related to owning an automobile, to reduce the environmental impacts of their transportation, or to experience less stressful commutes. The new commuter services that are emerging across the State often capture choice riders for these reasons. Improvements in the convenience and reliability of transit services are especially important for attracting these types of riders and increasing new transit users. Improvements ranging from increased service levels to additional amenities to technology, which provides real-time information and a trip planning function, were needs identified during this assessment.

GAP ANALYSIS – LEVEL OF SERVICE NEEDED

One question that was explored in the development of the PTPP is "*How much service would be needed to fully address the State's primary goal of meeting the mobility needs of*

transit dependent persons?" This section presents estimates of the number of trips that would be needed to fully address the State's primary goal of meeting basic mobility needs of transit dependent persons.

For this exercise, the transit dependent population is defined as persons without a car available for travel. Estimates of the number persons and households without a car available are shown in Table 3-1. The table also shows the current number of trips provided on public transit by geographical area.

Table 3-1: Carless Population

Geographic Area	Total Population	Zero Car Households	Estimated Carless Population	Trips Provided*
Urban	130,389	3,447	7,378	2,459,736
Small Town	216,345	7,720	16,853	585,434
Rural	273,680	3,971	9,589	386,905
TOTAL	**620,414**	**15,138**	**33,820**	**3,432,075**

* Data for FY10 excludes tourist and commuter services; includes demand responsive trips in each area. Urban represents CCTA's fixed route, E&D demand response, and E&D volunteer trips. Small Town data for services by all other providers designated as "rural" or "DR".

The number of trips that would be needed to meet basic mobility needs was estimated using a number of methods:

1. **National Household Travel Survey (NHTS) Trip Rates for Vermont**[6]– Two of the methods used data from the NHTS daily trip rates for households with one car to estimate how many trips carless households might take if a car were available.

2. **Reasonable Trip Rates** – Another exercise assumed that each carless person needs 12 round trips per month to meet basic mobility needs – for shopping, medical, and personal errands.

Since carless households currently are meeting *some* of their mobility needs through other modes (transit, bike, walking, riding with family or friends), the unmet needs were projected as the additional trips needed beyond current trip making.

[6] In 2009 the UVM Transportation Research Center, the MPO, and VTrans joined together and purchased an oversample or "add-on" of 1,690 households in the 2009 NHTS data —541 in Chittenden County and 1,149 in the rest of the state—resulting in a Vermont sampling intensity rate of 2.1%, in comparison to the national average of 0.4%.

All methods resulted in estimates of the need for between 6.7-6.9 million additional annual transit trips by people without cars beyond the approximately 3.4 million transit trips currently provided. It is important to note that, with the relatively high level of transit services available in Vermont, a large portion of the mobility needs of the transit dependent population are being met. While it probably is not reasonable to assume that all the unmet needs could or should be provided, the PTPP recognizes the need to expand transit services as funding permits.

Chapter 4

Public Transit Vision and Goals

This section presents a vision, goals, and a policy framework for public transit. For more information on how this vision relates to current services and issues identified during the planning process, refer to Technical Memorandum 5: *Policy and Performance Framework* which is included in Technical Appendix E.

VISION

The purpose of the PTPP is to define the goals, policies, and strategies for public transit in Vermont, all aimed at realizing a shared vision presented below. The 2009 Vermont Long Range Transportation Business Plan includes the overall VTrans vision for a "*safe, efficient and fully-integrated transportation system that promotes Vermont's quality of life and economic well-being*." VTrans' mission is "*to provide for the movement of people and commerce in a safe, reliable, cost-effective, and environmentally responsible manner*."

While the State does not currently have a defined vision for *public transit*, it could be inferred from goals outlined in Title 24, Chapter 126 of the V.S.A: *Public Transportation* and from the goals and vision expressed in the LRTBP. The proposed public transit vision is:

> *Public transit meets the basic mobility needs of all Vermonters including transit-dependent persons, provides access to employment and other modes, mitigates congestion, preserves air quality and promotes efficient energy use, and advances the State's economic development objectives – all in a safe, reliable, cost-effective, and environmentally responsible manner.*

GOALS AND OBJECTIVES

VTrans' major public transit goal is to preserve and enhance the level of public transit in Vermont. Policy Statements and goals for public transit in Vermont are codified in 24 V.S.A. Chapter 126, S.5083. According to this section:

"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, in order of precedence, the following goals:

(1) Provision for basic mobility for transit-dependent persons, as defined in the public transit policy plan of January 15, 2000, 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) Access to employment, including creation of demand-response service.

(3) Congestion mitigation to preserve air quality and sustainability of the highway network.

(4) 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.

The breadth of the goals recognizes that different areas of the State have varying needs and that the types of services that are most effective may vary by location and local conditions. While the legislative language indicates the goals are "in order of precedence," in recent years the language has not been interpreted to focus on one goal over any other. The policies being proposed in this PTPP have assumed that the goals are truly in order of precedence specified in the Statute.

This PTPP update proposes a change to the third goal. The Study Advisory Committee suggested that the goal on "congestion mitigation" be re-worded to broaden it to preserving air quality, which could involve congestion mitigation as well as other actions. The proposal is for the goal to read *"(3) preservation of air quality and promotion of efficient energy use in the State."*

Chapter 5

Key Issues

Through discussions with the PTAC, stakeholders, and the public, the most pressing issues that emerged are included in the Technical Appendices, *Technical Memorandum #3*: *Current Issues Related to Public Transit in Vermont,* namely:

- Funding Levels and Sources,
- Capital Investments,
- Coordination of Services,
- Interface with Land Use Planning,
- Regional Connectivity and Intercity Bus, and
- Improving the "Transit Experience."

FUNDING LEVELS AND SOURCES

Transit in Vermont has benefited from continued VTrans and legislative support, which has provided significant and creative levels of funding. Yet, funding is one of the most critical issues facing VTrans and its public transit providers. Many aspects of the funding issue are anticipated to arise in the next five to ten years:

- How to fund maintenance of current service levels,
- How to fund service expansions to serve unmet needs or gaps in service,
- How to manage and distribute funding for capital (vehicles, facilities, and passenger amenities), and
- How to maximize federal funding while encouraging and sustaining local financial support for services.

Funding to Maintain Current Levels of Service

While transit funding levels have been stable and grown some over the past few years, this has been accomplished in part by the use of federal funding under the CMAQ program to create new services. VTrans supports demonstration or pilot projects for new services using CMAQ funds. Demonstrations are funded for up to three years with up to 80% from the federal program and at least 20% from local funding; eligible expenses include operating and capital. The 2011 allocation of CMAQ dollars for transit in Vermont is $1.5M, and in 2010, the operating cost for the CMAQ routes was over $1M. Most of these services would be considered to have at least an "acceptable" performance under the current standards and would be eligible for continued funding.

One of the most critical funding issues that the State will face in the next few years is how to continue funding for successful services that are coming off the three year CMAQ demonstration period. Funding to transition successful CMAQ routes will require an increase in base funding allocation for systems. Without some source of additional funding, many of the successful services started under this program are now under threat of discontinuation. Local funding is not sufficient to pay the 100% net cost of the service – only the 20% local match.

VTrans has been providing the transit agencies with preventive maintenance funding from STP transfers in an attempt to backfill and replace the CMAQ funds when the services reach their three-year CMAQ funding time limit. STP funds can only be used for capital expenses, including "capitalized" preventive maintenance, and cannot be used to cover operating costs. Many of the public transit providers are now operating CMAQ services that cannot be funded with flexed STP preventive maintenance funding when they are no longer CMAQ eligible. Since most of the public transit providers have reached their capacity to absorb preventive maintenance funds (which may pay for 80% of an agency's eligible capitalized maintenance expenditures), funds from other source(s) would have to backfill any gap between the cost of the routes on CMAQ and the transit agency's ability to consume preventive maintenance funding.

A related issue is what may happen to funding if Vermont were to lose its status as an air-quality "attainment" area under the federal Clean Air Act (CAA). The State's CAA status allows it to use its CMAQ funds for purposes other than CAA compliance, namely to fund transit services statewide. Public transit is not only a beneficiary of the State's compliance status, it is itself also a valuable tool in Vermont's ability to meet air quality standards. Vermont's CAA status may change in the coming years given the U.S. Environmental Protection Agency's need to strengthen the National Ambient Air Quality Standards (NAAQS) to protect human health.

The range of the current (2011) proposed Ozone NAAQS challenges Vermont's attainment status. Loss of this status will affect the use of CMAQ funds in the future. Were that status to be lost, the State would have to re-direct its CMAQ funds to activities aimed at improving air quality in those areas of the State that are not in attainment (likely the Southwest and Burlington areas). These activities could include transit services, but the State would no longer have the flexibility to use CMAQ for its Statewide New Services demonstration program.

Another related, but unresolved issue, is what the State and transit providers will do if federal earmarks are eliminated. Under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), much of this was in the form of earmarks to VTrans and the transit operators (currently there is almost $37 million in active federal earmarks to local transit operators in the State. It is uncertain what will happen to earmarks under the 2011 or 2012 Congress and reauthorization of the federal transit programs. The two issues with earmarks are: 1) what will happen if they are eliminated? and 2) if they are continued, how they can best be managed in Vermont?

Finally, the management of earmarks to local communities is a difficult subject since the State does not contribute to these projects financially. Yet, it appears that too many earmarked funds languish due to municipalities' inabilities to manage FTA projects.

Funding for New Services and Expansions

Clearly, not all transit needs are being met in Vermont, or any other State. This project and the Short-Range Public Transportation Plans (SRPTPs) have identified gaps in service. Proposals for new services and expansions are initiated by the local transit providers and the communities they serve. As noted in Section 5083, "*Proposals for new service shall be evaluated by examining feasibility studies submitted by providers. These studies shall address criteria set forth in the public transit policy plan of January 15, 2000.*" The current method for creating new services is for the service to be proposed by the transit providers in their annual grant applications and funded as part of VTrans' New Starts Three-Year Demonstration program, using CMAQ funds. If a new service performs adequately, it becomes eligible for continued funding as an established "existing" service.

Given the scarcity of resources, it is important to plan services with the highest potential for success. Service expansions were a major focus in the 2000 PTPP that recommended the SRPTP process. The requirement for SRPTPs was legislatively mandated as a means of identifying and justifying where additional public transit services were needed. The first round of these plans was conducted by the transit providers in 2004. One of the primary purposes of the SRPTP was to explore the need

and feasibility for new transit services – including estimates of budget requirements. A more recent effort to update the plans was abandoned after the effectiveness of the approach came into question. While there is a recognition that transit services need to be well planned, the requirement that planning take place in this manner was eliminated from the legislation in 2009.

Finally, a related issue is how to expand services beyond the level possible under CMAQ. Relying on CMAQ alone will not allow the State to expand transit services to fill the gaps identified in this PTPP. While it may be possible to extend the period for CMAQ funding beyond the initial demonstration period, the State should be looking at ways to increase services over the long haul.

Local Funding and Fares

The ability of the transit systems to generate local share is a major issue for some providers. The local funds needed to support public transit typically come from the towns they serve, the farebox, and contracts with human service agencies. Local communities and residents in some areas also contribute a significant amount for transit services from their local property taxes. In some areas, there is continuing interest in developing alternatives to the local property tax as the primary source of local match.

With the 2007 PTPP, VTrans set a goal for all providers to cover at least 20% of their operating budget from non-FTA/FHWA and non State-sources (this is exclusive of capital, Rideshare, RTAP, JARC, and Medicaid funds). However, achievement of this goal has not been the focus of recent performance reports and additional data is needed to determine the extent to which the standard is met.

CAPITAL INVESTMENTS – VEHICLES, FACILITIES, AND PASSENGER AMENITIES

One of the broad issues considered in the PTPP is capital planning for the State's public transportation system. There has never been enough funding available to satisfy all the needs, and VTrans has had to prioritize what needs are funded. The State places priority on replacing existing vehicles and has an informal way to "prioritize" the need for replacement vehicles based on vehicle condition. In an effort to extend the useful life of the fleets, VTrans has distributed $1 million annually ($500,000 urban and $500,000 rural – allocated to providers based on expenditures in 2005) through a preventive maintenance program set up by the legislature.

Although expansion vehicles for new services can be funded through CMAQ as part of the New Service grants, the PTAC has expressed an interest in developing a

policy on expansion vehicles. This may be particularly timely as the State has received a State of Good Repair (SGR) grant as well as earmarks from the FTA for *replacement* of capital, but not for expansion vehicles. An additional vehicle issue raised has been the need for consistency of vehicle manufacturers for ease of maintenance. Finally, the need for a policy on when and how transit facilities are funded was also raised as an issue.

Outreach meetings and stakeholder interviews have suggested that the capital planning issue has three major aspects, one dealing with vehicles, one with facilities, and a third with other capital, but particularly technology enhancements. Each of these is discussed below, but as will be seen, they are related.

Vehicles

Currently VTrans' policy on vehicle replacement and capital focuses on ensuring compliance with FTA requirements regarding procurement and satisfactory continuing control. Recent efforts in funding have focused on replacements for worn-out vehicles to bring the statewide fleet into a state of good repair, and there is general agreement that the state of the vehicle fleet is (or soon will be, as funded vehicles arrive) as good as it has been in a very long time. Issues that have been identified include the need for consistent policy to support the fleet, including:

- A clear statement of vehicle replacement policy and consistent application, which relates the design life to consideration for replacement (and is consistent with FTA policy);
- A clear identification of the design life of different types of vehicles, in order to avoid either premature replacement or keeping vehicles on the road past their useful lives;
- Policy regarding allowable spare ratios to provide adequate backup, but avoiding excessive spare ratios and underutilization of vehicles;
- Policy regarding expansion vehicles, and when funding for fleet expansion will be considered;
- Changes in procurement to provide for statewide vehicle procurements instead of individual system procurements;
- Funding to support future services. The key to this is planning to predict vehicle capital needs in future years, by type of vehicle and program. This planning would help identify appropriate and allowable funding to provide timely replacement or meet expansion needs, and should be done annually.

- Better monitoring of preventive maintenance activities to extend the life of the fleet. The State could institute periodic reviews of sample preventive maintenance records of providers.

Transit Operating Facilities

Although vehicles remain the State's priority under its capital program, it has an interest in ensuring that the transit operators have adequate facilities. Currently VTrans does not have a policy regarding the funding and construction of transit operating and maintenance facilities. The State has not provided funding for facilities, either federal capital or a share of the local match. At the same time, a number of transit operators have identified a need for a facility, and have independently sought funding for feasibility studies, architectural and engineering work, land, and construction. As examples, STSI renovated the Randolph railroad freight house to create an administrative and storage facility, CRT has completed a new operating facility, DVTA has been working on a facility in Wilmington for some time, and ACTR is developing an operating facility. CCTA has its own facility. Most have sought the funding through federal earmarks, providing the local match through their own local funding sources. The VTrans role has been limited to providing letters of support, although in the case of the new facility for ACTR, the State is involved in providing the site. VTrans is not administering any of the grants for the facility projects that are in process.

In the absence of any VTrans policy regarding facilities, questions have been raised even about providing letters of support for these local projects, as there is no State position on which systems might need what kind of facility. At the same time, the lack of a coordinated process between VTrans and the local agencies regarding these earmark projects has also led to a situation in which a locally desired project may languish due to a lack of local administrative support or match funding. Simultaneously, Congressional efforts to eliminate earmarks may well end the opportunity for this type of local initiative project. All of these concerns suggest that there is a need for VTrans to develop policies to address facilities—both the operating facilities sought by CRT, ACTR, and DVTA, and intermodal passenger facilities.

Passenger Facilities

Another potential policy could address standards for when the State would consider various passenger amenities justified, and would accordingly contribute to the cost. The most costly of these is shelters, feasible for transfer points, high ridership stops, and major attractors such as universities, colleges, and hospitals.

COORDINATION OF SERVICES

Coordination of transportation resources among State agencies, transit providers (public and private), and human service providers is a means of ensuring that services are not duplicative or overlapping and that resources are used in a cost effective manner. Since the last PTPP, there has been an increased emphasis on coordination at the federal level. Even though Vermont is a recognized leader in the coordination of transportation resources among public transit and human service agencies, there is a need to maintain the level of coordination.

The AHS and VTrans have a Memorandum of Understanding (MOU) that outlines the manner in which they will coordinate (the original MOU expired, but a new one was recently executed). Departments and programs within AHS use the public transit provider for client transportation where appropriate. VTrans and AHS have worked to make funding more flexible and to encourage human service programs to use public transit providers as regional brokers of service for human service agency clients.

The most important coordination issue currently faced by Vermont's transit program is the need to maintain the linkage between transit providers and the State's Medicaid program.[7] Recognizing that coordination of transportation services is beneficial to both, the promotion and enhancement of coordinated human service transportation and general public transit has long been a Vermont State policy. State legislation in 24 V.S.A, Chapter 126, Section 5090 regarding Human Service Transportation States,

> *"The secretary of human services shall direct agency of human service programs to purchase client transportation through public transit systems in all instances where public transit services are appropriate to client needs and as cost efficient at other transportation."*

VTrans and AHS have historically worked to make funding more flexible and to encourage human service programs to use public transit providers as regional brokers

[7]One requirement of Title XIX of the Social Security Act (Medicaid) 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). While Title XIX does not include specific mention of NEMT, federal regulation, and the body of case law that have evolved from language in the Act clearly mandate that every State Medicaid program include provisions for necessary transportation of Medicaid recipients to and from providers of medical services. While funded with a combination of State and federal dollars, the programs themselves are State run, with each State determining its approach to NEMT. This explains why there are so many variations in service design among the States (and in some States each county).

of service for human service agency clients. The State recently developed a coordinated transportation plan in accordance with the requirements in SAFETEA-LU and the designation of regional brokers as relatively new mechanisms to advance this policy.

AHS has historically relied on community-based public transit brokers to serve the Medicaid clients residing in set geographical areas, while also coordinating NEMT services with their general public transit services. At $12M annually, the Vermont Health Access NEMT program is a major source of transportation funding in the State. The Department of Vermont Health Access (DVHA) within AHS administers the NEMT program.

Most of the public transit systems in Vermont function as the community-based brokers for NEMT. In this role, the transit agencies coordinate public transit and NEMT into one unified system for residents within their areas.[8] The current arrangement has many advantages, but also has raised questions regarding potential conflicts of interest; since the brokers can provide the service themselves, they could assign trips to their services despite the fact that the trip could be provided in a more cost-efficient manner. This is one of a number of issues raised by DVHA which desires to achieve improvements in accountability, quality, and access as well as lower service costs.

If DVHA competitively bids for NEMT broker(s), the existing transit systems could certainly bid on those contracts. However, if one or more of them are unsuccessful and a new non-coordinated broker is chosen, this could have a major impact on transit services in the State.

INTERFACE WITH LAND USE PLANNING

Discussions with stakeholders and the public have recognized that land use decisions can have a significant impact on the potential for residents to use transit. The discussions began with the desire to use transit as a means to create and support Transit Oriented Developments (TODs) in the State. TODs typically have land use density sufficient to support transit services, mixed land uses, and pedestrian- and bike-oriented designs that encourage walking and biking, less auto ownership and less auto mode share, and proximity of destinations such as retail, employment, and residential areas to transit stations/services. Vermont's traditional settlement pattern of compact, mixed-use villages surrounded by open countryside is consistent with smart-growth principles and meets the basic requirements of developments that could support transit services.

[8]In addition, DVHA purchases CCTA monthly passes for frequent-NEMT users that can ride fixed-route buses.

It is unlikely that densities and transit investments in most areas of the State would be able to support the traditional TOD concept where development occurs around, and as a result of, transit facilities and services. However, the concept of Transit Oriented Design, which considers the contribution transit makes to the mobility of residents in communities during the design stage, is appropriate. Vermont's primary statewide land use planning goal (24 VSA 4302(c)1) guides development toward existing and planned settlements. In doing so, Vermont positions itself to combat sprawl and create developments that could eventually support the provision of effective inter-municipal transit services, if local zoning codes are revised to be consistent with State planning goals and legislation. The State legislature has enacted a number of laws that create incentives for growth in its compact centers, including the Vermont Downtown Community Development Act, which created a process for revitalizing downtowns and village centers. More recently, 2006 legislation created a program to establish "designated downtowns" that would endorse development-ready, high density, mixed-use centers oriented around downtowns and village centers. The bill supports investment in growth center infrastructure that facilitates pedestrian and bike traffic and supports the use of public transit.

For most of the State, the most pressing policy issue is the need to establish a process to require or encourage that transit is considered when local municipalities make local land use decisions. Transit operators have a responsibility to reach out and participate in land use planning process. At the same time localities need to pay more attention to transit in the overall transportation planning and permitting process, so that development and major facilities (such as medical facilities) do not continue to be built without accommodations for transit service or off the transit network entirely. The MPO for the Chittenden County region and the RPCs across the State could play a role in facilitating transit considerations in local land use decisions.

The MPO and RPCs in Vermont conduct both regional and local planning. One of the MPO/RPCs' primary roles is to provide planning expertise and technical assistance to municipalities within their regions in a cost-effective manner. MPO/RPC staff work with municipalities on a range of planning issues including land use, permitting, and transportation, and are therefore uniquely positioned to facilitate interaction between these realms, particularly since staff at the municipal level are often dedicated to one planning realm. The MPO/RPCs work with a variety of entities including counties, towns, transit providers, and developers, and can take the initiative to bring these stakeholders together to actively incorporate Transit Oriented Design into new or planned developments.

The RPCs also have a contract with VTrans to coordinate the TPI and ensure local participation in the transportation decision-making process in order to meet federal requirements. With extensive experience in public outreach, as well as knowledge about planning and project development processes in both land use and

transportation, the RPCs can serve as the liaison between community groups and residents and local governments. RPCs can both advocate for transit considerations in local land use planning and educate local officials and the public about the benefits of Transit Oriented Design. The MPO and RPCs can also provide municipalities with valuable information and insights on how regional plans may impact local activities, or vice versa. Specifically, RPCs might promote the growth of regional transit networks or regional coordination of public transit and human services transportation to meet the needs that arise from new developments.

Other policy improvements to integrate transit and land use planning include adding evaluations of transit potential to local zoning and planning processes and implementing pedestrian-scale design. Current State development review considerations (including the Act 250 review process) do not directly address public transit and may only require a traffic impact study. State and local development review processes should look at improving transit services or addressing the mobility needs of Vermonters in the Act 250 review process. Finally, VTrans staff should be reviewing Regional Transportation Plans to ensure that transit is adequately addressed.

REGIONAL CONNECTIVITY AND INTERCITY BUS

A newly emerging and related set of issues in Vermont is the growth of regional commuter services, their success, and the need to develop a sustainable funding basis. Like the intercity connections, it reflects the fact that transit and transportation needs are increasingly long distance in nature, and are not limited to one service area. Determining the State role and the way in which regional and intercity needs can be addressed is one of the key policy areas initially identified for inclusion in the PTPP and in subsequent public outreach meetings. These issues are related in that they are generally services that provide longer-distance service, often on routes that go between the service areas of different providers. Key issues include the need for funding to maintain regional services that are meeting performance criteria and whether there are additional regional needs. On the intercity side, issues include the likely demand for such service (or whether the regional services are addressing intercity needs), and if warranted, how it can be funded and operated.

Inter-regional Commuter Routes

Since the last PTPP transit systems in Vermont have responded to regional commuter needs by developing regional commuter routes, and in general these are quite successful. For the most part, these services have been established under the State's New Services program, using CMAQ funding which provides operating assistance for three years. In general, these services have been designed based on identification of significant long-distance commuter patterns, focusing on attracting

"choice" riders who may have a private vehicle option. Ridership on most of the services has grown rapidly (one, the route from White River Junction to St. Johnsbury was discontinued due to poor performance), and led to calls for increased park and ride lot capacity and the need to ensure that transit serves these lots where appropriate.

A key issue for these services is funding, including local match. Started as "New Starts" with CMAQ funding, the initial three-year period for operating funding is ending or will shortly end. Under State policy regarding New Services, at this point successful services would be transitioned into the base program for these systems—potentially requiring additional funding from different sources such as STP transfers for bus purchases as well as State funds. Also, these services would require local match as part of the base program. Some have expressed concerns that on shared routes local match may be problematic. More than anything, a lack of a plan for future funding for these kinds of services would seem to be the major concern.

Intercity Bus

Over the past decade the State's primary intercity bus carrier, Greyhound Lines, reduced Vermont services to four daily round trips on the I-89 corridor and one daily-round trip on I-91 between White River Junction and Springfield, Massachusetts. Another carrier, Yankee Trails, provides two daily round-trips between Bennington and Albany. Vermonters can also access Dartmouth Coach services to Boston and New York City at stops in Hanover (Dartmouth College), Lebanon (Dartmouth Regional Transportation Terminal), and New London (park and ride lot off I-89) in New Hampshire. All other intercity bus service was discontinued due to a lack of profitability. Corridors that lost service included the Route 7 corridor between Burlington and Bennington (and continuing service to Albany), the link from Rutland to White River Junction, the link from Rutland to Springfield, and White River Junction to Newport via St. Johnsbury.

One of the other important distinctions between the regional commuter services and rural intercity bus service is the fact that there is an FTA program directed toward maintaining or improving rural intercity service. Section 5311(f) was developed as a policy response to exactly the situation faced by Vermont, the loss of rural intercity bus services. Under Section 5311(f) each State is directed to use up to 15% of its overall Section 5311 rural transit funding allocation for rural intercity bus services—unless the State certifies that there is no unmet rural intercity need in the State. Prior to SAFETEA-LU, States were left on their own regarding how to make the determination of "no unmet rural intercity need," but in the SAFETEA-LU legislation language was added requiring States to conduct a consultation process involving the intercity providers, studies or analysis, and other stakeholders. If, following that consultation, the State did certify, it would need to document the consideration it made of the input provided.

Vermont's certification status for the past several years is not documented at this point, but the State has not set aside the 15% amount or built up any kind of balance in a Section 5311(f) program. It is likely that submittal of a certification letter to reprogram these funds would require documentation of a consultation process. It is possible that such a process would not be able to say there is no unmet need, given the documented loss of rural intercity access and the likely written comments from Greyhound about the potential need for linkages to Rutland (at a minimum).

The outreach and stakeholder input to this PTPP process recognized the loss of the intercity services, but raised questions as well. One is whether the needs are being met by the regional commuter routes that have been developed. The possible role of the regional services in providing access to the existing intercity network could be considered in the consultation process, but the regional services, as currently provided, do not actually provide for the "meaningful" connection called for in the Section 5311(f) program circular. A "meaningful connection" is one in which the Section 5311(f) service must serve the same locations at times that permit convenient transfers to and from the national intercity network. The federal guidance does not specify how close the arrival and departure times of the Section 5311(f) service must be to those of the national intercity network carrier. In addition, while the map of Vermont's existing fixed and deviated services might make it appear that the regional services have filled in for the discontinued intercity routes, making some of these trips through end-to-end transfers between different regional operators would be so inconvenient and time-consuming that the trips are not practical or feasible.

The other question raised in the outreach was whether or not there is potential demand for intercity services, given that Greyhound abandoned them as unprofitable. Greyhound has supplied data on the former Vermont Transit/Greyhound routes, and it appears that the Route 7 Corridor had revenues on some trips of $2.35/mile, which means that if Greyhound (or another intercity operator) had costs of $4.00 per mile, these trips would have had a farebox recovery of nearly 60%, making it one of the better transit routes (on this measure) in the State. Note that intercity services need to be assessed differently, because there are relatively few boardings and long trips, with fares that vary by distance—so measures of effectiveness need to focus on how many passengers are on the bus over what distance, not just how many boardings there are.

Also, demand could be assessed using the new rural intercity bus demand Toolkit developed under the Transit Cooperative Research Program (TCRP) Project B-37. A preliminary use of the Toolkit results in estimated ridership for the Route 7 corridor of 11,400, if the service connects to the airports in both Burlington (Greyhound's station in Burlington is at the airport already) and Albany, with lower ridership of 5,700 if it does not. The data supplied by Greyhound shows that ridership on the Burlington – Rutland – Albany route was approximately 22,000 boardings annually. However, there was not enough demand to cover the fully-allocated cost of

the services at Greyhound cost levels—but a combination of operating assistance and a lower-cost operator might allow for service, at least in this corridor, that would have comparable performance to other rural transit routes in the State.

If one accepts the notion that a consultation process may find unmet needs in the Route 7 corridor (or elsewhere), the next questions that arise are those related to funding. Vermont's Section 5311(f) 15% share of its overall Section 5311 allocation would be about $400,000, and there is always the issue of local match—as the operating ratios for this program are the same as Section 5311 generally, with a limit on the federal share of 50% of the net operating deficit. Fortunately, as a means of dealing with the local match requirements for intercity services, FTA has an administrative program regulation for Section 5311(f) that allows for rural intercity projects to be defined as having both a subsidized segment and an unsubsidized segment. Bus-miles on the connecting unsubsidized segments can be valued at their fully-allocated cost, and 50% of this value (representing the value of capital) can be counted as in-kind operating match for the subsidized segment. With artful identification of project routes and services, it is thus possible to use the in-kind match to cover all or a large portion of the required operating match.

Technical Memorandum #3, included in Technical Appendix C, presented an illustration of the application of this funding method for a Burlington-Bennington-New York State line route, operated one round-trip per day, 365 days per year, connecting to Greyhound services at the Burlington Airport. The memorandum also presented an example of the use of the Pilot Project for an expanded rural intercity project, that would include not only the Burlington-Bennington-New York State line route described above, but a second connecting route from Rutland to Springfield, Bellows Falls, and Brattleboro, where it could potentially connect to a possible Section 5311(f) route in New Hampshire that would serve Keene (and continue to Boston). The Pilot Project funding mechanism can reduce or eliminate the need for operating cash match. It does require that the firm operating the unsubsidized service (which in Vermont would be Greyhound Lines) provide a letter agreeing to the use of their miles, and identifying the routes, schedules, and miles being contributed. Use of this funding method also means that the available federal funding does not cover as much service as it would if there were local cash match, as it is effectively being used as 100% of the net operating deficit.

In either event, it is likely that some or all of the 15% Section 5311(f) set-aside would need to be used to support these services. This would reduce the amount of Section 5311 funding available for other services by the amount used for rural intercity projects. The 15% set-aside amount is approximately $400,000.

IMPROVING THE "TRANSIT EXPERIENCE"

The public input process identified several needs related to improving the transit user experience. Transit riders requested additional amenities, such as bus shelters and posted schedules, and safety features, including more lighting at bus stops. There is a need to plan and implement good pedestrian connections to transit stops, adequate street crossings, signage, ADA accessible bus stops and pedestrian connections, and bike racks and bike parking at major transit stops and facilities. Residents also want more information about transit services, whether using smart technology to add predictability to transit service or unifying provider information through a statewide trip planner. The public also requested an orientation for new riders, particularly youth, to learn how to use transit and become more comfortable leaving their cars at home. Residents also discussed the need to attract new riders by promoting the benefits of transit, such as savings on gas costs and lowering individual carbon footprints, and changing the negative image of transit as the "welfare bus."

Chapter 6

Public Transit Framework and Policies

POLICY FRAMEWORK

As defined in the legislation, *public transit* service as a subset of public transportation is defined as "*…any fixed route, paratransit, transportation brokerage, user-side subsidy, and or rideshare/ride-match program which is available to any person upon payment of the proper fare, and which is promoted to be available to all members of the public, including those with special needs*" (24 V.S.A. § 5088(5)).

The State is committed to meeting its vision and goals for public transit as expressed above and the PTPP recognizes that there are opportunities to expand public transit services in the State to meet the needs of all Vermonters. To this end, the State will continue to expand and enhance public transit services in the State. The current framework for Vermont public transit policy includes strategies aimed at:

- Preserving and enhancing existing public transit services that are well used by the traveling public,

- Monitoring the performance of transit services by VTrans and the boards of the transit providers to ensure the maximum value from available resources, and

- Using any additional public transit funds to support and promote the four goals noted above as in 24 V.S.A Chapter 126, S.5083.

Many of the challenges of providing comprehensive public transit in a State as rural as Vermont were discussed in detail in the technical memoranda included in the Technical Appendices. As described in the previous chapter, the most pressing policy level issues that have emerged during the PTPP process can be categorized as addressing:

- Funding levels and sources,
- Capital investments,
- Coordination of Services,
- Interface with land use planning,
- Regional connectivity and intercity bus, and
- Improving the "Transit Experience."

Each of these issues was also described in Technical Memorandum #3, Technical Appendix C, along with possible alternative approaches for how each might be addressed in State policy. The final policies selected for inclusion in the PTPP are presented below.

POLICIES ON FUNDING LEVEL AND SOURCES

There are a number of State policies that will continue to provide the basic framework for how transit services are funded in the State. Currently VTrans policies being maintained include:

- Continue to seek additional funding to expand and enhance transit services to meet additional needs in the State.

- Continue to maximize the use of available federal funds to support transit and to assist with State funding to the extent that funds are available within the State budget.

- Continue to seek innovative funding sources and mechanisms that will increase investment in public transit, especially from the federal level.

- Strongly encourage providers to maximize local funding for public transit and all parties strive to increase the level of local funding to meet a goal of 20% local funding (exclusive of capital, RTAP, JARC, Rideshare, and Medicaid funding).[9]

- Continue funding only to services that successfully meet performance standards and use resources effectively.

[9]Some funding flexibility was built into the Elders and Persons with Disabilities program to allow operators to use non-cash match under that program (the value of volunteer hours can be used as local match), but the State still requires locally derived cash match the remaining programs.

- Focus service expansions on meeting the basic mobility first, then subsequently, access to employment, congestion mitigation, and economic development in that order.

Increasing Funding Levels

As outlined in Chapter 3, even with the relatively high level of transit services available in Vermont, not all transit needs are met in the State. The State will continue to seek additional State and federal funding to help meet these needs, particularly as new federal funding programs become available (such as the new Veteran's Transportation Program).

Based on the estimate of 2010 operating budgets and required vehicle capital costs from all federal, state, and local sources, the current level of services cost about $46M annually (2011 dollars). At an annual inflation rate of 3%, the cost to maintain the current level of services would rise to almost $53M annually over the next five years. (Table 6-1)

Table 6-1: Estimated Operating and Capital Costs to Maintain Existing Services

	Fiscal Year					
	2011	2012	2013	2014	2015	2016
*Operating**						
Federal/State	$14,534,691	$14,970,732	$15,419,854	$15,882,449	$16,358,923	$16,849,690
Total**	$39,419,691	$40,602,281	$41,820,350	$43,074,960	$44,367,209	$45,698,225
Capital (Vehicles Only)						
Federal/State	$6,325,650	$4,960,377	$3,958,451	$7,269,354	$4,614,731	$6,149,221
Total	$7,028,500	$5,511,530	$4,398,279	$8,077,060	$5,127,479	$6,832,468
TOTAL	**$46,448,191**	**$46,113,811**	**$46,218,629**	**$51,152,020**	**$49,494,688**	**$52,530,693**

Note: Assumes 3% inflation for operating and capital costs.
*Excluding federal funds that go directly to CCTA
**May include human service contract funds such as Medicaid transportation

The policy plan acknowledges, however, that a significant increase is unlikely in the short- term (5 year horizon). An overall increase in funding is unlikely beyond the funding needed to cover increases in cost (fuel, etc). Thus, many elements of the policy plan are aimed at doing more with the same level of funding. The plan acknowledges that transit funding per capita in Vermont is higher than in other States with a similar

rural/urban mix[10]. Currently, the federal and state transit budget for 2011 is $26M or almost $41.50 per capita. This is includes almost $7M in State funds, a significant commitment by the State which surpasses the commitment in other states that have a rural nature similar to Vermont.

Maintaining Current Funding Innovations

When considering policy changes, it is important not to abandon the innovative funding mechanisms currently employed by the State. To this end, the following policies will be maintained:

- Continue "flexing" (transferring) highway funds annually into the State's transit program to maximize their use for transit; particularly flexing federal highway funds from the STP (for non-operating costs) and CMAQ (for operating and capital funding for new service demonstration projects).

- Continue the integration of E&D operating funds with its Non-Urbanized Area Formula Grants (Section 5311) to maximize coordination between human service agencies and public transit providers and to maximize use of vehicle capacity on all vehicles.

- Continue the VTrans program to capitalize preventive maintenance in an effort to prolong the life of the operator's fleets and to and allow FTA operating funds to be used to cover other operating expenses.

- Continue with the VTrans' goal of 20% local funding (exclusive of capital, RTAP, JARC, Rideshare, and Medicaid funding) and reinstitute efforts to track and report on provider performance in meeting this goal.

- Continue to allow volunteer hours (in-kind) to be used as local match in the E&D Program.

Expanding Services

It appears that the VTrans New Service demonstration program (formerly called New Starts) is an effective way for VTrans to fund service expansions aimed at meeting additional needs. Yet relying solely on CMAQ as the funding mechanism for this program has created some challenges, most significant being how to increase baseline funding enough to absorb the cost of successful CMAQ new services. The following

[10] Despite its rural character, the State spent about $11.00 in State funding per capita on transit services in 2011. The other nine States significant rural populations in rural areas spent between $.43 - $4.52 in State funds on transit in 2008 -– less than half of the amount spent by Vermont that year ($9.50 per capita).

policy changes are intended to address the need to ensure that resources are used in the most effective manner.

Policies to Eliminate Under-Performing Routes or Services

One policy change aimed at freeing up funding for new services is to accelerate the process of eliminating "under-performing" routes/services so that resources can be shifted to successful services more quickly.

VTrans policy States that services that consistently under-perform and do not meet performance standards will not be supported with State/federal funds. Currently, the State monitors performance both monthly (using the monthly services indicator report) and annually. Existing policy would discontinue funding for existing "baseline" routes/services that do not meet performance standards for two consecutive years while CMAQ routes that have not performed well within the three year demonstration period currently are not considered for continued funding or conversion to a baseline service.

The new policy will accelerate the process and allow less time for services to prove themselves. VTrans will have the flexibility to work with the systems to extend the improvement period depending on the anticipated time involved in making improvements. This policy will allow under-performing *established "baseline" services* a total of 12 months to improve and *new services* a total of 18 months to become tested and proven. This could free-up a significant amount of funding.

The process over the 12-18 month period will entail:

- VTrans staff will review route/services performance quarterly to identify services/routes that are under-performing (based on the monthly reports submitted by the operators). VTrans will work toward a more automated method for transit systems to submit their monthly service indicator reports; in conjunction with more detailed procedures for VTrans staff to monitor and flag services that are under-performing.

- For established "baseline" services – if the services fall below acceptable performance levels in either the productivity or cost measure for two consecutive quarters, VTrans will work with the provider to adjust the service, provide more marketing, etc.

- For new services - if the services do not meet acceptable performance levels in either the productivity or cost measure after 12 months, VTrans will work with the provider to adjust the service, provide more marketing, etc.

- A plan and timeline for improvements will be written. This is intended to be a cooperative process. With justification/documentation, VTrans could grant exceptions for non-performing services if these services address needs for basic mobility and are unable to be provided in another manner. (For example, if it is determined that operating a rural route for 2-3 riders in a low density area is more cost effective than providing 2-3 demand-response trips).

- The services will have two additional quarters to improve after the improvement plan is implemented. They could have more time depending on what the adjustment entails.

- If there is no improvement in six months, service will no longer be eligible for funding.

- Funds will revert back to the State for re-distribution to fund either new services under the New Service program or "baseline" services that are graduating out of that Program (depending on whether the services were funded under CMAQ, Section 5311, or from another source).

The policy recognizes that some services, while important, inherently have lower productivity and/or higher costs. This may be particularly true of services to critical populations in low density areas or at off-peak hours. If, despite efforts to improve productivity and cost effectiveness, a particular service or route is unable to meet performance standards, VTrans could grant an exception that would allow it continued funding, depending on the justification for continuation.

Policy Changes to Revamp the State New Service Program

Public transit funding is currently allocated to the providers based on needs demonstrated during the annual grant application process and allocations are generally based on previous year allocations plus inflation. In essence, systems are eligible to receive the level of funding needed to maintain current services, as long as those services remain eligible and meet performance standards.[11] To fund new services, the policy allows local areas to apply for services under the New Services program mentioned above.

[11]Title 24 V.S.A, Chapter 126 Section 5091 (j) Notwithstanding subsection (i) of this section, and to the extent that appropriated funds are available, no provider who is otherwise eligible shall receive a lesser amount of operating funds than it expended on eligible operating expenses in State Fiscal Year 2001 for services that remain ongoing, and provided that the amount shall be evaluated as necessary to address changes in the cost of providing the services. In the event that a provider merges with or is otherwise succeeded by another provider, the successor provider shall be entitled to the same protection under this subsection that would have been available to the superseded provider.

Funding decisions regarding new services (including expansions to existing services - increased frequency, span or area of service) are based first on the feasibility study, and then on the demonstrated need for the services. In addition, The VTrans New Services program includes a review of proposed new services against evaluation criteria. The program guide[12] includes program goals that include supporting the "goals and objectives of the current Public Transportation Policy Plan". However, perhaps because the New Services program is funded with CMAQ, the evaluation criteria for selecting projects are mostly oriented toward maintaining air quality attainment. And, while maintaining air quality will continue to be a goal, the selection criteria do not address the remaining three goals, including the first goal of providing for the basic mobility for transit-dependent persons.

The following policy changes will be made to the New Services program in an effort to target new dollars toward areas of the State that currently have unmet needs and toward those services that are higher priorities as defined in the State statute.

- **Remove the goal-based funding formula** since it appears that over time the amendments to Section 5091 have rendered it ineffective. Existing services will continue to be funded as long as they meet performance standards, and new services would be funded based on their merit and need-based feasibility studies.

- **Update the New Services evaluation criteria to rank projects based on State transit goals** and distribute new funding based on statewide needs and priorities.

- **Re-institute the TDP** process to ensure that new transit services funded under the New Service Program are justified and well planned. The State will develop a minimum work scope for the TDPs and stagger funding assistance when the plans are prepared, so that two to three plans can be completed each year. The State will fund these plans and may provide consultants, or the plans could be procured locally. In either case, they would be developed in coordination with the RPCs and MPO. VTrans will work with the RPCs and MPO so the process could be funded and managed by them through the TPI program.

Policies Regarding Local Funding

To implement the State goal that local communities demonstrate a financial commitment to public transit, VTrans has a policy that 20% of each provider's operating budget be generated from "local sources." With the 2007 PTPP, VTrans set the standard

[12] *New Start Program Information Sheet*, VTrans, Public Transit Section, August 29, 2006.

that all providers should cover at least 20% of their operating budget from non-FTA/FHWA and non State-sources (this is exclusive of capital, Rideshare, RTAP, JARC, and Medicaid funds). This policy "target" is in lieu of a mandated farebox recovery rate, recognizing that farebox revenue is only one component of local funding. Some communities may chose to contribute directly to maintain a low fare or fare free services. Others may have access to private contributions (i.e., colleges, large employers, and ski resorts).

Currently the 20% goal for local funding is not included in the annual performance report to the legislature and, since the goal is a system-wide goal, there also is no policy to dictate what would happen if a transit provider was unable to meet the goal. While not a policy change, the PTPP recommends that VTrans monitor the 20% goal more closely and assist providers in developing and implementing strategies to increase local participation and financial support for transit. Close monitoring of this policy will require VTrans to collect financial data (operating costs and revenue sources) from the transit operators more consistently. Information needed to monitor whether the goal is met could be collected as part of the annual grant application (reporting on the previous year) or by revising the monthly service indicator reports that are submitted by the transit operators.

If a system is unable to meet the 20% local funding goal on a system-wide basis, they will be asked to explain their "good faith" efforts to generate this support from their local communities. Achievement of this policy goal also could be supported by a statewide marketing program and/or outreach to local community leaders. Reporting on this measure will be included in future annual *Public Transit Route Performance Review* submitted to the legislature.

State Initiatives to Increasing Productivity or Reduce Costs

Initiatives that would help the transit systems increase productivity or reduce the costs associated with providing existing services could allow the transit systems to create new services with the savings. While it is difficult to quantify the cost saving, a few initiatives that could improve productivity include:

- *Improved training* – Initiate new training programs aimed at service efficiency. Training has the potential to reduce service costs, but the manner in which training occurs could also be improved to be more cost effective. For example, CCTA puts on 10-20 maintenance training events annually and the other providers could attend for minimal cost.

- *Technology improvements* – Continue to support technological improvements at the systems since technologies such as Automatic Vehicle Locators (AVL), Mobile Data Terminals (MDTs), automated billing, and tracking could help

reduce costs (as well as increase service quality and improve ridership and farebox revenue). VTrans, AHS, and VPTA are partnering on a project to upgrade the intake and dispatching software statewide. (The current tool is six years old and is reaching its limitations.)

- *New vehicles and maintenance improvements* – Continue to ensure that vehicles are replaced at the end of their useful lives. The recent improvements in the condition/age of the fleet and improvements to preventive maintenance should reduce operating costs and extend the lives of the transit operator fleets.

POLICIES ON CAPITAL INVESTMENTS

Vermont relied heavily on earmarks to fund transit capital projects in the state. The two issues with earmarks are: 1) *what will happen if they are eliminated?* and 2) *if they are continued, how they can best be managed in Vermont?* On the first issue, there are a number of policy changes planned that will allow the State to position itself as competitive under the FTA's discretionary grant program. These improvements, outlined below, are aimed at demonstrating to FTA that transit providers in the State use capital funding effectively and cost-efficiently through initiatives such as statewide vehicle and equipment procurements, statewide vehicle and facility maintenance guidelines, and a statewide policy and program guidance for managing major capital projects (passenger amenities and facilities, operating/administrative facilities).

Managing Earmarks and Major Capital Projects

In the event that earmarks continue in some form under reauthorization, the State should address how those funds are managed. The policy change proposed for managing earmarks, or any other major capital project, is to centralize FTA earmark/capital project management for Chittenden County at CCTA and at VTrans for the rest of the State. VTrans and the operators will compile and submit a combined request to FTA for capital projects. Based on a statewide criteria and capital improvement program discussed below, projects that had State review and approval could be considered for State funding.

Funding Vehicles

Vehicle Replacement Policy

Vermont's current policy is to consider applications for vehicle replacement based on the vehicle design life as designated in the Vehicle Disposition and Transfer Procedures. While there are no policy changes that affect replacement of current

vehicles, a number of changes could be made to program procedures that will allow VTrans to implement and monitor its current policies in this area:

- Allow transit operators to replace vehicles that meet either the mileage or year thresholds as long at they can justify that the vehicle needs to be replaced based on maintenance records or other documentation.

- Revise the VTrans vehicle capital inventory database to include, in a separate column, each vehicle's Altoona useful life, and its in-service date. In addition there will be a category for light-duty vehicles with an Altoona service life of less than five years or 150,000 miles.

- Revise the VTrans annual grant application to include a Vehicle Utilization Chart showing the annual usage of each vehicle, including information regarding its use under a lease agreement (identify lessee), or if it is primarily being used as a backup (spare) or contingency fleet vehicle.

Statewide Vehicle Procurement Policy

One vehicle issue raised has been the need for purchasing vehicles from the same manufacturer for ease of maintenance. This could be handled, in part, by conducting a statewide procurement for transit vehicles. The new policy in this area will be to conduct a statewide procurement for the most commonly used vehicle types, using a process that:

- Involves the operators in the writing of the bid specifications based on their experience and knowledge,

- Provides for professional expertise in the development of the bid specifications,

- Provides for professional assistance in the procurement process to ensure compliance with procurement requirements of FTA and VTrans, and

- Provides for appropriate professional support to conduct bus production-line inspections, pre- and post-delivery inspections and certifications, and warranty oversight.

Spare Ratio Policy and Expansion Fleets

Spare ratios were raised as another issue, as a need for a clear consistent policy that would support vehicle replacement applications. FTA guidance for non-urbanized systems allows for a spare ratio of up to 20%, calculated by taking the number of spare

revenue vehicles and then dividing that number by the number of vehicles required for peak revenue service.

With the smallest transit fleet in the State now at 12 vehicles, it is suggested that the State set a policy of allowing up to a 20% spare ratio in evaluating requests for replacement and expansion vehicles. The change will allow systems to apply for vehicles needed to permit fleets (and sub-fleets in the case of multiple operations in different locations) to have an adequate spare ratio to maintain continuity of service while allowing for preventive maintenance. This ratio will be set at 20% of the peak vehicle requirements or a minimum of two vehicles. Transit operators with system-wide spare ratios under the 20% level could request "replacement vehicles" (as opposed to "expansion vehicles") to bring their fleets up to acceptable levels, reflecting the fact that they are not being added to expand service, but to improve quality and reliability.

Most expansion vehicles, beyond those needed to achieve an appropriate spare ratio, are provided through the New Services program; expansion capacity is thus linked to a specific project which also has operating funding for the 3-year demonstration period. But cases also may arise in which incremental growth in an existing service would require expansion vehicles outside of a "New Service" situation.

The State will allow systems to apply for vehicles when a transit provider can demonstrate that their spare ratio has dipped below the minimum level. Some situations that might call for expansion vehicles not funded as part of a "New Service" project include the need for additional vehicles to meet demand-response service demand, or if the funding for operation of a service or expansion (such as a frequency increase or route extension) is entirely locally funded. Because these situations are likely to be limited, the policy is to treat expansion needs outside of New Services program through the spare ratio policy, as described above. Systems will be allowed to apply for additional expansion vehicle capital when their fleet spare ratio declines to 20% or below, for services that are achieving acceptable productivity levels under the State guidelines.

Funding Facilities

Statewide Facility Program

VTrans will develop a statewide capital funding program to assist transit operators that are building or improving facilities. Instead of setting a hard and fast definition for when a system should own its administrative, operating, or maintenance facilities, VTrans will evaluate and entertain requests for facility capital based on the results of a comprehensive process that includes an assessment of whether or not a facility is needed, the functions that it would need to provide, space estimates by function, potential sites, estimated costs, etc. Systems that have included a facility in

their TDP and provided a completed facility assessment process will be eligible for consideration for available facility capital funding in any given year, with funding provided in a multi-year cycle beginning with the feasibility/site selection study, environmental analysis, site procurement, architectural and engineering work, construction, and equipment. The facility planning process will include an assessment comparing the costs of providing different levels of maintenance activities in-house at the proposed facility with the use of local vendors and/or use of another system's facility and staff. In considering these issues, the capabilities of facilities in nearby locations will need to be considered, along with the potential deadhead costs of moving vehicles long distances for repair.

By outlining the process as a multi-year process, the State can combine the requests and develop a statewide facility plan from a prioritized list of projects that would warrant funding. Implementing this policy recommendation will require the development of a VTrans facility assessment process that provides the process and the analysis tools to support local development of realistic applications for facilities. When a local system works through this process, it will go through a multi-step process that includes a project definition phase, a concept development phase including cost/benefit analysis, a screening and evaluation by the State program staff, identification of potential funding, an application phase, and finally contracting for design and construction. This process provides the data needed to the State transit program, which will be used to establish a transit Facility Priority List each year.

The development of a common State process with evaluation criteria has advantages in that the local system is tasked with identifying and documenting its needs, assessing the costs and benefits, and then submitting its concept for initial approval based on a known set of project evaluation criteria, rather than having a statewide study define what each system should have from a State program perspective.

Policy on Regional Shared Facilities for Major Maintenance

VTrans also will pursue the concept of regional maintenance garages for some maintenance functions. Given the need to deadhead vehicles to regional garages, it may not be practical for ***all*** vehicle maintenance to be done out of centralized or regional garages, especially not routine preventive maintenance. However, there are some maintenance functions or repairs such as engine overhauls, air conditioning servicing, lift maintenance, or body work, that could be conducted more cost effectively if they were centralized. Rather than creating new regional bus garages, one or more of the existing operator facilities could function in this role, and even provide spares to replace vehicles in maintenance as discussed above.

Funding Passenger Facilities and Amenities

Finally, VTrans will establish a policy to address when the State would consider various passenger amenities to be justified and would possibly contribute to the cost. Currently VTrans makes capital funding available for bus shelters, but without having established guidelines for when shelters are warranted. The consideration of applications for passenger facilities and amenities could include an assessment of shelter and amenity needs, prioritizing stop-level expenditures based on meeting ridership thresholds, or providing shelter at stops serving particular functions (at transfer points, at medical facilities, and at stops with significant levels of boardings). As part of the planning process, communities will consider pedestrian connections to transit stops, street crossings, signage, and ADA accessible bus stops and pedestrian connections.

Off-street passenger transfer centers (bus-only or intermodal facilities) will also be eligible, but would need to be justified through a process similar to that for operations facilities, in which the proposing locality will have to perform an initial feasibility study demonstrating the need or benefits, with subsequent planning, design and construction to follow if the facility is shown to be needed or justified. Bike racks and bike parking at major transit stops and facilities will reinforce the link between bike and transit modes.

This policy will extend only to the transit-related portions of projects, as the transit program funding will not be used to construct parking ramps or space for other non-transit related functions.

POLICIES ON COORDINATION OF SERVICES

Promotion and enhancement of coordinated human service transportation and general public transit has long been a Vermont State policy. State legislation in 24 V.S.A, Chapter 126, Section 5090. Human Service Transportation States, "*The secretary of human services shall direct agency of human service programs to purchase client transportation through public transit systems in all instances where public transit services are appropriate to client needs and as cost efficient at other transportation.*"

The most important coordination issue currently facing Vermont's transit program is the need to maintain the linkage between transit providers and the State's Medicaid program. While no transit policy changes are warranted at this time, clearly it is in everyone's interests for the transit operators, AHS, and VTrans to work together to address the issues AHS has raised regarding costs, accountability, potential conflicts of interest, quality of service and access (a more detailed discussion is presented in Technical Memorandum #3, included in Technical Appendix C).

POLICIES ON INTERFACE WITH LAND USE PLANNING

VTrans continues to support efforts to curtail sprawl and create transit oriented communities both through coordinated transportation planning with the RPCs, the MPO and Towns as well as through its role as a party to Act 250 development review proceedings.

The State has statewide land use planning goals and a number of laws that create incentives for growth in its compact centers, but needs to strengthen the process to require or encourage the consideration of transit when local municipalities make land use decisions. Localities will benefit if they integrate transit access in the overall transportation planning and permitting process, so that development and major facilities (such as medical facilities) do not continue to be built without consideration of transit service potential. Other improvements include adding evaluations of transit potential to local project review and implementing pedestrian-friendly design.

One policy initiative over the next few years will be to have the MPO and RPCs have a more active role in facilitating transit and associated pedestrian considerations in local land use decisions. The MPO/RPCs work with a variety of entities including towns, transit providers, and developers, and can take the initiative to bring these stakeholders together to actively incorporate transit-oriented design into new or planned developments. It is noted that a new State law (Act 34 of the 2010 Legislative Session) that went into effect on July 1, 2011 required that State transportation policy consider "complete street" principles of safety and accommodation of all transportation system users including motorist, bicyclists, public transit users, and pedestrians.

The RPCs currently have a TPI agreement with VTrans to coordinate and ensure local participation in the transportation decision-making process in order to meet State and federal planning goals. The MPO and RPCs can also provide municipalities with valuable information and insights on how regional plans may impact local activities, or vice versa. Specifically, RPCs might promote the growth of regional transit networks or regional coordination of public transit and human services transportation to meet the needs that arise from new developments. At the local level, RPCs should advocate to revise local zoning codes to be consistent with State planning goals and legislation, specifically to gear new development toward existing downtowns and village centers that can be served by transit. Local zoning codes need to help combat sprawl and facilitate growth in areas already served by transit or located near the existing transit network.

A policy aimed at better linking transit with land use decisions is to ensure that transit is included in the Act 250 project review process. This policy also would encourage that the local review of permits for essential services, such as health care,

consider the ability of residents to access the site/services via public transit. Currently "*Criterion 5 provides that before granting a permit, the board or district commission shall find that the subdivision or development "{w}ill not cause unreasonable congestion or unsafe conditions with respect to use of the highways, railways, airports, and airways, and other means of transportation, existing and proposed*." As written, this language requires the Act 250 Boards to consider the impact that the proposed development would have on transit, existing and proposed. As they are statutory parties in the Act 250 process review, this could be accomplished by working through the MPO and the RPCs. The MPO/RPCs will ensure, through their role in the Act 250 reviews, that transit vehicles have access to any new projects being developed so that those developments can be reached by transit riders.

Along with this policy change, VTrans and the RPCs/MPO will undertake an initiative to educate the Act 250 Boards and the Act 250 Regional Coordinators on transit issues as they relate to developments and their contribution to reducing congestion.

On the state level, VTrans staff will review the transportation segments or chapter of each Regional Transportation Plan to ensure transit is adequately addressed. And, finally, to the extent reasonable, transit considerations will be incorporated into VTrans-funded projects and program at each stage of the planning, design, construction, implementation, operations, and maintenance activities. This would include consideration of both physical amenities (bus shelters, sidewalks, bicycle, and pedestrian amenities) and design elements that enhance transit operations and access (snow removal, adequate turning radii, and transit signal priority). This will result in new projects, reconstruction projects, and other transportation facility improvements maintaining or improving existing access and conditions for transit services or interfaces.

POLICIES ON REGIONAL CONNECTIVITY AND INTERCITY BUS

Determining the State role and the way in which regional and intercity needs can be addressed is one of the key policy areas initially identified for inclusion in the PTPP and in subsequent public outreach meetings. As noted in the issues section, there are significant differences in the trip purposes and potential destinations between the regional commuter services and the intercity services.

Inter-Regional Commuter Routes

As noted, one issue in Vermont is the growth of regional commuter services and the need to develop a sustainable funding basis. At this time, VTrans will continue funding these services on the same basis as other local transit services, with no change

in match ratios or other incentives applied because a route or service links the service areas of multiple operators. However, the State does reserve the right/flexibility to negotiate a higher State share for services that meet State priorities for new services. Finally, where appropriate, park and ride lots will be built as to be served by transit.

Update Intercity Bus Program

Over the past decade intercity bus services in the State have been reduced significantly. One of the other important distinctions between the regional commuter services and rural intercity bus service is the fact that the FTA requires each State to use at least 15% of its overall Section 5311 rural transit funding allocation for rural intercity bus services—unless the State certifies that there is no unmet rural intercity need in the State. The SAFETEA-LU legislation language requires that States conduct a consultation process involving the intercity providers, studies or analysis, and other stakeholders. If, following that consultation, the State certifies, it needs to document how it considered the input provided. For the past several years Vermont has conducted a consultation process, certified that intercity needs are being met and, thus, the State has not set aside the 15% amount or built up any kind of balance in a Section 5311(f) program.

The proposed intercity program starts with an expanded assessment of rural intercity bus needs that would then feed into the consultation process. The assessment and consultation process were initiated as part of the PTPP and initial results of that effort are included in Technical Appendix G.

If unmet needs are ultimately identified[13], VTrans will develop a service description/program for the services using the in-kind funding method. This would require detailed planning of schedules and connections, and assessment of likely funding needs (which would include assumptions regarding the likely operator and its costs, and the estimated revenue).[14] To pursue this type of intercity bus service, the process would entail the following.

[13] The preliminary needs assessment presented in Technical Memorandum #3 suggests that there is evidence of unmet need in rural areas for intercity bus services.

[14] It should be noted that Greyhound is not necessarily the operator, but would have to be a party to the project as the provider of the value of the in-kind miles. As both a potential applicant or bidder on the subsidized service and the provider of the in-kind match, Greyhound's current policy is to offer to provide the in-kind miles to whichever operator the State selects, as long the operator and the proposed service meet Greyhound's requirements for connecting service that can be quoted by them in their schedule information, has appropriate levels of insurance, is fixed-route fixed-schedule service at least five days per week, and has required legal federal and State operating authority.

Expanded Rural Intercity Bus Needs Assessment

A preliminary assessment of intercity bus needs was developed as part of the PTPP. This assessment identifies some preliminary unmet rural intercity travel needs and served as an input to an inclusive consultation process required under Section 5311(f).

Initiated Consultation Process

Following the needs assessment and prior to the call for projects for the next Section 5311 funding cycle, VTrans will complete the FTA-required consultation process. To begin this consultation process, VTrans 1) distributed the initial needs assessment sections of the PTPP, 2) solicited input on available services, unmet needs, capabilities, and opportunities from intercity bus providers, transit operators, the rail passenger program, and the public, and 3) documented that input. The consultation process will be completed as VTrans provides written documentation of how the results of the needs assessment and the consultation process were used in the development of State policy regarding certification of unmet needs or use of Section 5311(f) funding for projects.

Revise Program Application and Guidelines

If the process ultimately identifies unmet needs, VTrans will include in the Section 5311 application (or in a separate Section 5311(f) application) requests for services and connections in specific corridors to address the identified gaps. The consultation process may also identify needs such as capital for vehicles or facilities, or user information systems, and VTrans will need to consider its policy on eligibility of such requests as it assesses the results of the consultation in developing its policy.

POLICIES TO IMPROVE THE "TRANSIT EXPERIENCE"

The public input process identified several needs related to improving the transit user experience, beyond the service improvements addressed in service expansions (improved frequencies, span of service). The PTPP proposes that the image problem be addressed by creating a positive transit "brand" statewide; brand marketing refers to the method of propelling transit into the public consciousness as a positive travel option. The individual transit systems could be co-branded as one Vermont transit system, while keeping their separate identities. The object for this effort is to combine the strength of two brands, in order to combine the different perceived benefits associated with each into a single product or service.

Other proposed policies or initiatives to improve the transit experience include:

- Creating a statewide marketing and slogan campaign coordinated with or as part of the existing GoVermont program.

- Increasing use of technology to disseminate public information on transit services by plugging into Twitter, social networks, and other on-line information-sharing mechanisms.

- Improving user information through a statewide trip planner – perhaps using GoVermont.

- Completing efforts to include and maintain all transit services on Google Transit – perhaps using the University of Vermont's (UVM) transit program.

- Adding transit to Vermont's 511 program as part of the eight-State consortium effort.

- Improving passenger amenities (bus stops, shelters, transit centers) and improving information provided at passenger facilities.

- Educating the public, particularly youth and choice riders, on how to use public transit services.

POLICIES ON PERFORMANCE MONITORING

Statewide performance measures for public transit services are included in the VTrans *2008 Performance Measures Report* and include: 1) the percent of routes at or below an acceptable level for cost per passenger; and 2) the percent of routes at or above the acceptable level of passengers per hour. Although no target has yet been set, the goal for both measures is 100%.

Within the public transit program, performance monitoring of existing routes is conducted to ensure that the public investment in transit is well spent. In fact, legislation states, "*(b) The public transit advisory council shall annually evaluate existing services based on the goals...*" and *(c) The agency, in cooperation with the public transit advisory council, shall adopt appropriate performance and service standards for transit systems receiving federal or State assistance*." VTrans monitors the performance of its public transit services through the monthly services indicator reports which feed into the annual route performance report to the legislature. VTrans provides a report to the

legislature annually and the report, *2010 Transit Performance Reviews,* was submitted January 22, 2011.

The goal of the performance measurement process is to be able to fairly compare similar services and provide a means of how well these services meet the needs of Vermonters in relation to the funding available. The performance monitoring system becomes particularly important in light of the policy recommendation to enforce and speed up efforts to discontinue funding to underperforming routes/service. The performance monitoring program includes two components: 1) the monitoring process; and 2) the standards for evaluating whether performance is acceptable.

Monitoring Policies and Procedures

It appears that the current performance monitoring system is working relatively well and should remain as unchanged as possible to allow VTrans to track services in a consistent manner from 2007 onward. The current performance framework focuses on two performance areas: productivity and cost-effectiveness.[15] VTrans uses a single measure in each area and sets standards for these measures for the various types of transit service provided: urban, small town, rural, demand-response, tourism, commuter, and volunteer driver.[16]

Productivity is measured through boardings per hour, mile, or trip, depending on the type of transit service, while cost-effectiveness is measured by the cost per passenger. Another measure also used in other states is the percentage of operating costs covered by local funding - analogous to the State policy of 20% local funding.[17] Finally, the VTrans process for performance measurement has centered on the annual report to the Vermont Legislature and a series of service indicator reports, submitted by providers monthly or quarterly per funding program.

Suggestions for changes address the interpretation of the route classification scheme as it is applied to particular routes rather then the measures or route classifications, per se.

[15] In FY 2009, VTrans updated its performance measurement methodology to incorporate new data available through the Rural National Transit Database. (Source: VTrans. January 2011. *Public Transit Route Performance Reviews, Annual Report for State Fiscal Year 2010.*)

[16] VTrans only monitors the cost-effectiveness of volunteer driver services, through the administrative cost per trip. The 2007 PTPP determined that the administrative burden to track volunteer driver trips and the number of passengers on those trips would be too large, and the usefulness of this productivity measure is unclear.

[17] The goal of 20% local funding is exclusive of capital, RTAP, JARC, Rideshare, and Medicaid funding.

- There may be a need to re-classify particular routes. Some rural routes may really be commuter routes and vice versa, or a tourism route might be considered a rural route. VTrans will have transit agencies that wish to re-classify a route/service present a justification using the service descriptions in the legislative report.

- VTrans will re-classify rural routes that operate less than once a day to include them in the demand-response calculation for that agency.

In addition, policy changes and revisions will:

- Re-institute monitoring and enforcement of the 20% local funding target.

- Enforce State policy to discontinue State/federal funding for routes/services that under-perform, using the service standards outlined below and speed up timelines for discontinuation of under-performing services (see above).

Service Standards

The current system uses service standards or benchmarks based on a national peer review and standards are set annually for productivity, cost-effectiveness, and local share. *Productivity* measures vary by service class as follows:

- Urban – Boardings/mile
- Small Town, Rural, Demand-Response, and Tourism – Boardings/hour
- Commuter – Boardings/(round) trip

Cost effectiveness is measured in terms of cost per passenger trip for all types of service except volunteer trips. For both cost effectiveness and productivity, services are considered to be "successful" if they meet average levels for peers and "acceptable" if they are at 50% of the standard.

Local share or locally generated revenue is considered on a system-wide basis and expressed as the percentage of the system's operating expenses that are covered by non-FTA/FHWA and non-State sources. Considering this measure allows VTrans and the systems to measure how well each provider meets the requirement to generate at least 20% of their operating budget locally.

The only performance measure used for volunteer trips is the administrative cost per volunteer driver trip. In these cases, the standard for "success" is set at 80% of the average the Vermont operators and the "acceptable" standard is set at twice the level or 160% of the average.

It appears that the measures and standards are working relatively well and no suggestions are made for revising either the measures or procedure for setting the standards. However, it is suggested that boardings per trip on commuter routes represent boardings per round trip (to discount the impact that deadheading has on these services).

Chapter 7

Transit Planning and Assistance Program

This section includes proposals for 1) a planning assistance grant program to address transit planning needs in the State, and 2) a technical assistance program. More detail on the rationale and program elements can be found in Technical Memorandum #6: *Transit Planning Assistance Program* which is included in Technical Appendix F.

PLANNING ASSISTANCE PROGRAM

The transit planning assistance program is intended to address individual transit operators planning needs in coordination with the appropriate RPC/MPO consistent with 24 V.S.A. § 5089 Planning. The planning grant program is designed to encourage the effectiveness and efficiency of transit services and their coordination with human service transportation and is proposed to be conducted cooperatively with the local RPC(s)/MPO.

By way of background, a Regional TDP Grant Program was first established in Vermont in 1987 to assist transit operators and human service agencies plan for better coordination of passenger transportation services. Subsequently, service expansions were a major focus in the 2000 PTPP and the SRPTP process was recommended in the Plan as a means of identifying and justifying where additional public transit services are needed. The requirement for SRPTPs was legislatively mandated and the first series of these plans was conducted by the transit providers in 2004. Any proposed new services were required to be consistent with a current SRPTP. A more recent effort to update the plans was abandoned after the effectiveness of the approach came into question. While there is still a recognition that transit services need to be well planned, the requirement that planning take place in this manner was eliminated from the legislation in 2009. Currently, VTrans provides individual systems with limited planning funds on an "as needed" basis.

There remains common agreement that, given the scarcity of resources available for transit, it is important to plan services with the highest potential for success. As VTrans revises the State's New Service Program, the results of a local planning process take on additional importance. And, with the removal of the goal-based funding formula, the TDPs and special studies will be used as the primary basis for funding decisions regarding new services and expansions to existing services (increased frequency, span or area of service) as well as for capital funding. As noted in Section 5083, "*Proposals for new service shall be evaluated by examining feasibility studies submitted by providers...*"

Some essential components of the transit planning program include an increased role for MPO and the RPCs in the process, re-instatement of the TDP planning requirement (with modifications), and creation of a new specialized planning studies component. The VTrans transit planning program would include the following components.

Increase Role of the RPCs and MPO

The RPCs and MPO are already highly involved in the overall transportation planning in each region, but a PTPP policy objective is for the RPCs and MPO to have a more active role in facilitating transit considerations and transit planning. Transit planning at the regional or local level needs to 1) plan for effective and efficient transit services, 2) fully integrate transit into the overall transportation planning process (all modes), and 3) better link transit into the land use decision-making process.

Through its TPI, VTrans collaborates with the RPCs to carry out transportation planning at the regional level.[18] The RPCs contract with VTrans to coordinate the TPI also ensures local participation in the transportation decision-making process in order to meet federal requirements. The MPO and RPCs can provide municipalities with valuable information and insights on how regional plans may impact local activities, or vice versa. RPCs can both advocate for transit considerations in local land use planning and educate local officials and the public about the benefits of transit-oriented design.

The policy ensuring that transit is included in the Act 250 project review process and furthering the concept of transit-oriented design (by requiring that permits for essential services consider the ability of residents to access the site/services via public transit) would include a role for the RPCs/MPO to educate the Act 250 Regional Coordinators on transit issues. RPCs are a statutory party in the Act 250 permitting

[18] Vermont's 11 RPCs each has a TAC. The TACs include representatives from each town and some representation from the local transit operator. The MPO has a Public TAC as well as a TAC that make recommendations on action items to be considered by the full Board of Directors.

process, review Act 250 applications, and attend hearings, which are conducted by a three-member District Environmental Commission, to advocate for or dissent against a proposed subdivision or development.[19] As a statutory party to Act 250, the RPCs have an opportunity to ensure that the transit operators are informed and engaged in the process when transit is involved in a development. Transit operators can provide comments as well as work with the RPCs to address their concerns.

Require Transit Development Plans (TDPs)

VTrans will return to the requirement for a TDP and only those services and capital needs identified and justified in an approved TDP would be funded by VTrans. Rather than returning to a legislative mandate, the TDPs will be an administrative requirement. However, new services and projects will only be funded by VTrans if they are included in the locally developed TDP.

- TDPs will be prepared for each Transit Operator based on a common but tailored scope of work (see Technical Memorandum #6, Technical Appendix F for an outline of a sample work scope). A Transit Operator's TDP must be prepared in coordination and cooperation with the RPC for the area.

- Planning assistance funding from VTrans will cover the TDP preparation at 100% but not the local personnel time to administer the planning grant. The local management of the process could be handled by the RPCs/MPO under the TPI umbrella.

- VTrans will fund the initiation of two or three TDPs or updates per year.

- A TDP or update can be conducted by the RPC, Transit Operator's staff, a consultant hired by one of those two entities or by a consultant VTrans has on retainer. Regardless of which entity conducts the planning process, coordination and involvement of both the RPC and transit operator would be required.

- A Study Advisory Committee of interested parties will be formed to advise on the development of the plan. In addition to the RPC, transit operator, VTrans, and AHS, this Committee should include local elected officials, local human service agencies, rider advocates, and riders of the system.

[19] Hearing Information provided on the Vermont Natural Resources Board, Land Use Panel Website, **http://www.nrb.State.vt.us/lup/publications/nrb1.pdf**.

- Upon the completion of the TDP, the Governing Board for the Transit Operator will approve it. The RPCs, at the recommendation of the RPC's TAC will also adopt it. If the TDP's transit service covers more than one RPC region, then all affected RPCs would also adopt it.

- The TDP or its primary components will be incorporated into the RPC's Regional Transportation Plan and/or the transportation element of their Regional Plan.

- RPCs will attest that a bordering region's TDP is compatible with their region's regional and TDP plans.

- TDPs will be updated every five years, or more frequently as necessary.

- Any requests under the New Service Program or for capital assistance (rolling stock, new service(s), shelters, facilities/vehicle storage, equipment, etc.) must be consistent with a current TDP.

Fund Specialized Planning Studies

For studies outside the scope of TDPs, and that cannot be accomplished by the RPCs/MPO under the TPI program, transit systems can also apply directly to VTrans for funding to conduct special planning studies. These might include specialized planning projects on issues such as funding, passenger amenities, route re-alignments, facility feasibility studies, service feasibility studies/design of new services, capital replacement plans, coordination studies, or management reviews/plans. Funds for these studies will come from VTrans.

TECHNICAL ASSISTANCE AND TRAINING

The development of a Vermont Technical Assistance Program responds to State policy, included in statute, that requires "…*The agency of transportation shall provide guidance, training, funding, and technical assistance to transit systems in order to meet the performance and service standards established.*"

The technical assistance program will take advantage of the FTA RTAP Program which focuses on training and technical assistance projects and other support services tailored to meet the needs of transit operators in non-urbanized areas.

Management and Administration

The technical assistance program will be coordinated through VTrans and funded using FTA's RTAP and other State funds. The practice of allocating a nominal amount of funding (currently $3,000 annually) to each provider for training and conferences will continue, but the remainder of the program will be statewide.

Currently a VTrans staff person functions as the State's RTAP Program Manager, but this is only a small part of her responsibilities. Creating an effective technical assistance program will require VTrans assigning a staff member to manage the program (at least half time).

The PTPP process identified a number of areas that transit operators could use technical assistance and training, but these are just a start. The VTrans program manager will be tasked with:

- Developing an annual RTAP work plan and budget.
- Periodically surveying local transit providers about their training and technical assistance needs and priorities.
- Establishing an RTAP Advisory Group that meets periodically to discuss training needs and resources and help set the priorities of the program. This group should include representatives of rural transit operators (rookies as well as veterans), VTrans, PTAC, VPTA, and AHS.
- Getting fully involved with National RTAP, which provides a peer network among State RTAP coordinators. Consider joining or forming a multi-State RTAP group with other northeast States to collectively share program resources.

Target Audience

While relying heavily on the federal RTAP program and training and technical assistance needs in non-urbanized areas, the VTrans program will also address those needs in the urbanized area in Chittenden County. Thus, the target audience/eligible participants include all public transit operators in the State. It is noted that the federal RTAP program funds will continue to be targeted toward operators of service in rural areas.

Training

Training Classes

Under the new program, the State will conduct and/or sponsor training classes on a variety of topics, targeted at different functions in the transit organization, including upper management, supervisors, dispatchers, maintenance personnel, and drivers. For some topics, a train-the-trainer approach is appropriate (such as topics targeted at drivers).

While training resources available in Vermont may preclude development of new training programs and/or materials (such as videos or manuals), there are many training programs available through other sources. For example, the National RTAP program and CTAA offer a variety of training programs by their staff or contractors which are specifically targeted at rural transit programs. Or, the program could arrange for courses developed by the National Transit Institute, FTA, and the Transportation Safety Institute (TSI) to be presented in Vermont with priority registration for the RTAP target population. These courses are generally provided at little or no cost to the host state and the public transit participants; the host need only provide the facilities.

Training could be conducted by:

- Trainers on VTrans, RPC, or Transit Agency staff - this requires having the available expertise and staff time to conduct the training or cultivating it through a train-the trainer program.

- Outside Trainers—In addition to the trainers available through National RTAP, NTI, and CTAA, there are many excellent transit training consultants who could be utilized, with different specialties. Vermont could procure a team of contract trainers (such as Pennsylvania RTAP uses) to use as needed.

The program would establish an annual training calendar which includes the consortium – in conjunction with PTAC – in response to operator requests.

Set Minimum Training Standards

VTrans could also set minimum (suggested) training standards for public transit operators; training is already tracked by VTrans as part of the annual grant application. These would be set by working with VPTA and the PTAC. Recommended core topics to facilitate safe operations by all local programs include defensive driving, pre-trip inspections, passenger assistance methods (as covered in Passenger Service and Safety - PASS), emergency evacuation procedures/fire safety, first aid/CPR, and bodily fluid clean-up/bloodborne pathogen awareness, drug and alcohol awareness (including

prescription and over the counter medications), fatigue awareness and conflict resolution/dealing professionally with problem passengers. In another example, Georgia provides PASS and Drug and Alcohol training classes for local programs.[20].

Training Scholarships

Development of a formal RTAP scholarship program is recommended as a way to stretch training dollars. It may be useful to require scholarship recipients to submit a brief written report on their training experience.

Technical Assistance

Another important function of the program is to provide technical assistance to transit providers in the State. This can be achieved through a variety of approaches, many of which also serve outreach/marketing functions for the program.

Web-based Resource Library

The program will develop a web-based resource library of materials that will function as an on-line training and technical assistance resource center for systems to be able to download materials or borrow by mail through a VTrans lending library (for those materials not available in electronic form).

Technical Assistance and Information Sharing

Other technical assistance efforts could include:

- A newsletter (quarterly or semiannually recommended).
- Peer-to-peer network, identifying and sharing information about best practices and individual expertise among the rural and small urban programs, and facilitate communications between peers. Funding participant travel costs may be warranted to provide on-site technical assistance from peer-to-peer.
- Roundtable discussions among peers to address critical issues and brainstorm problem-solving approaches, at annual State conference or other meeting locations.

[20] Georgia's existing program was based on a State requirement that all Section 5311 vehicle operators receive PASS training, and all of the District Coordinators (seven of them, each with multiple systems) were required to be certified PASS trainers and provide the training periodically (on a Saturday, so that no drivers had to be taken off the road). The District Coordinators also conduct required Drug and Alcohol classes. The State also recommends First-Aid and Defensive Driving, but does not conduct it themselves.

Chapter 8

Implementation Plan

This section identifies the steps that VTrans will take to implement each of the plan elements/policy changes included in the PTPP. The matrix in Table 8-1 presents the implementation action plan including the action required, responsible part(ies) and supporting partners for each action. A timeline for actions as immediate, near-term (0-5 years), and long-term (5-10 years) is also included.

Many of the policy recommendations involve continuing existing policies and procedures. The implementation plan includes only those things that require changes or where staying the course requires action.

Table 8-1: Implementation Action Plan					
Plan Element	**Item No.**	**Action(s) Required**	**Responsible Party**	**Supporting Partners**	**Timeline**
Vision/Goals					
Change goal on congestion to "preserve air quality and efficient energy use in the State"	A	1. Legislative change	• VTrans Policy Planning and Intermodal Development (PPAID)		Immediate
		2. Revise new service grant application and evaluation criteria to accurately reflect the goals	• VTrans PPAID/ Public Transit		Immediate
Funding Levels and Sources					
Increase State and federal funding	B	1. Continue to seek additional State and federal funding	• VTrans PPAID/ Public Transit	• Transit Operators • VPTA • AHS	Immediate
Increase monitoring and reporting on policy that 20% of each provider's operating budget be generated from "local sources"	C	1. Gather complete and consistent data on local funds used for transit by revising the annual grant application or the monthly service indicator report	• VTrans PPAID/ Public Transit	• Transit Operators	Short Term
		2. Report the 20% performance measure in annual performance review to Legislature	• VTrans PPAID/ Public Transit	• Transit Operators	Short Term
		3. Revise annual grant application to require "good faith" effort certification from operators that do not meet the goal	• VTrans PPAID/ Public Transit	• Transit Operators	Short Term

Table 8-1: Implementation Action Plan					
Plan Element	**Item No.**	**Action(s) Required**	**Responsible Party**	**Supporting Partners**	**Timeline**
Shorten timing to eliminate under-performing routes	D	1. Create a more automated system for transit operators to submit monthly service indicator reports to VTrans	• VTrans PPAID/ Public Transit	• Transit Operators	Immediate
		2. Streamline procedures for VTrans staff to monitor route/service level data quarterly (using monthly service indicator and financial reports from operators).	• VTrans PPAID/ Public Transit	• Transit Operators	Short Term
		3. Identify routes that are under "acceptable" levels (for two quarters for baseline services, and four quarters for new services). • Develop/negotiate corrective action plan • Monitor performance for trial period (two more quarters for both baseline and new services; discontinue services that continue to under-perform) • Reprogram funds for other uses	• VTrans PPAID/ Public Transit	• Transit Operators	Short Term
Eliminate the current statutory funding formula for transit operators	E	1. Remove the goal-based funding formula in 24 VSA S.5091(i).	• Legislature • VTrans		Immediate
Update New Services evaluation criteria to rank projects based on State transit goals	F	1. Revise New Service evaluation criteria to reflect all State transit weighted goals (and distribute new funding based on statewide needs and priorities)	• VTrans PPAID/ Public Transit		Immediate

Table 8-1: Implementation Action Plan					
Plan Element	**Item No.**	**Action(s) Required**	**Responsible Party**	**Supporting Partners**	**Timeline**
		2. Revise SMP and application to require new services to be in TDP for funding	• VTrans PPAID/ Public Transit		Immediate
Re-institute the mandatory Transit Development Plan process to ensure that new transit services funded under the New Services Program are justified		See Planning Section below			Short Term
Capital Investments					
Conduct statewide vehicle and equipment procurements	G	1. Develop cooperative agreement among VTrans and transit operators	• VTrans PPAID/ Public Transit • Transit Operators		Immediate
		2. Develop vehicle and equipment specifications	• VTrans PPAID/ Public Transit • Transit Operators		Immediate
		3. Identify lead agency	• VTrans PPAID/ Public Transit	• Transit Operators	Immediate
		4. Conduct and manage procurements	• Lead Agency	• VTrans • Transit Operators	Short Term
Statewide vehicle guidelines	H	1. Standardize vehicle useful life criteria	• VTrans PPAID/ Public Transit		Immediate
		2. Standardize spare ratio definition and define "expansion" vs. "replacement" vehicles	• VTrans PPAID/ Public Transit		Immediate

Table 8-1: Implementation Action Plan					
Plan Element	**Item No.**	**Action(s) Required**	**Responsible Party**	**Supporting Partners**	**Timeline**
		3. Revise grant application(s) to reflect the above definitions and to require vehicles to be in TDP for funding	• VTrans PPAID/ Public Transit		Immediate
Statewide facility guidelines for investing in and managing operating facilities	I	1. Develop a locally-initiated common process for developing facilities including evaluation criteria	• VTrans PPAID/ Public Transit	• Transit Operators	Short Term
		2. Revise SMP and application to require facilities to be in TDP for funding	• VTrans PPAID/ Public Transit	• Transit Operators	Short Term
Shared regional maintenance garages	J	1. Solicit transit operator interest and commitment	• Transit Operators • Lead Agency • VTrans PPAID/ Public Transit		Long Term
		2. Identify lead agencies and/or centralized locations	• Transit Operators • VTrans PPAID/ Public Transit		Long Term
		3. Decide which maintenance functions could be performed at regional garages	• Transit Operators • Lead Agency • VTrans PPAID/ Public Transit		Long Term
		4. Establish policies and procedures and MOUs	• Transit Operators • Lead Agency • VTrans PPAID/ Public Transit		Long Term
State guidelines for investing in passenger facilities and amenities	K	1. Develop guidelines for when and where passenger facilities and amenities are needed/warranted	• VTrans PPAID/ Public Transit • MPO/RPCs • Local municipalities	• VTrans staff planning Park and Ride lots, Bike/Pedestrian facilities	Short Term

Table 8-1: Implementation Action Plan					
Plan Element	**Item No.**	**Action(s) Required**	**Responsible Party**	**Supporting Partners**	**Timeline**
Statewide policy and program guidance for managing major capital projects including earmarks	L	1. Develop procedures for centralization of FTA earmark/capital project management (rural at VTrans and urban at CCTA)	• VTrans PPAID/ Public Transit • CCTA	• Local municipalities • Transit Operators	Long Term
		2. Educate local governments on US DOT/FTA requirements, policies, and procedures	• VTrans PPAID/ Public Transit • CCTA	• Local municipalities • Transit Operators	Long Term
Technology improvements for transit	M	1. Conduct statewide procurement for scheduling and dispatching software – strive for uniformity for all transit systems	• Lead Agency • CCTA • VTrans PPAID/ Public Transit • Transit Operators	• AHS/DVHA (to build in Medicaid control features)	Immediate
		2. Conduct other statewide technology procurements (AVLs/MDTs, fareboxes, etc.) – strive for uniformity for all transit systems	• Lead Agency • CCTA • VTrans PPAID/ Public Transit • Transit Operators	• AHS/DVHA (to build in Medicaid control features)	Immediate
Coordination of Services					
Coordinated Medicaid program	N	1. Continue to address the issues AHS has raised regarding costs, accountability, potential conflicts of interest, quality of service, and access	• VTrans PPAID/ Public Transit • AHS/DVHA • Transit Operators		Immediate

Table 8-1: Implementation Action Plan					
Plan Element	**Item No.**	**Action(s) Required**	**Responsible Party**	**Supporting Partners**	**Timeline**
Interface 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	O	1. MPO and RPCs advocate to revise 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	• MPO/RPCs	• VTrans PPAID/Planning (funding through TPI) • Transit Operators	Short Term
		2. Follow and link transit considerations into the permitting process before the permit is issued; coordinate with local municipalities, transit operators, and VTrans (see Item O1)	• MPO/RPCs • VTrans PPAID • Transit Operators • Local Municipalities	• VTrans PPAID/Planning (funding through TPI)	Short Term
		3. Educate Act 250 boards and Regional Coordinators on creating a transit-friendly environment	• MPO/RPCs • Transit Operators	• VTrans PPAID/Planning (funding through TPI)	Short Term
		4. Bring transit considerations into the Act 250 review process. Participate in Act 250 hearings to advocate for transit	• MPO/RPCs • Transit Operators	• VTrans PPAID/Planning (funding through TPI)	Short Term

Table 8-1: Implementation Action Plan					
Plan Element	**Item No.**	**Action(s) Required**	**Responsible Party**	**Supporting Partners**	**Timeline**
Provide guidance and assistance to local municipalities to incorporate appropriate transit elements in all site planning, design, construction activities	P	1. 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.	• VTrans PPAID/ Public Transit • MPO/RPCs • Transit Operators	• VTrans PDD	Short Term
Develop guidance and direction for VTrans to incorporate appropriate transit elements in all its planning, design, construction, and maintenance activities	Q	1. 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.	• VTrans Program Development Division (PDD) • VTrans PPAID/ Public Transit	• MPO/RPCs • Transit Operators	Short Term
Regional Connectivity and Intercity Bus					
Maintain flexibility on funding for regional and commuter routes	R	1. Create flexibility within the transit program to negotiate a higher State share for services that meet State priorities for new regional services (that cross transit system boundaries)	• VTrans PPAID/ Public Transit	• Transit Operators • MPO/RPCs	Short Term

Table 8-1: Implementation Action Plan					
Plan Element	**Item No.**	**Action(s) Required**	**Responsible Party**	**Supporting Partners**	**Timeline**
Conduct intercity consultation process and, if needed, develop program guidelines and application	S	1. Complete consultation process	• VTrans PPAID/ Public Transit and Planning	• Private Operators • Transit Operators	Immediate
		2. Depending on outcome of consultation process: • Certify needs are met, or • Create program to use some or all of 15% of the S.5311 set aside; including developing program guidelines and soliciting projects to address unmet needs	• VTrans PPAID/ Public Transit and Planning	• Private Operators • Transit Operators	Immediate
Improving the Transit Experience					
Market public transit statewide	T	1. Develop statewide transit marketing campaign	• VTrans PPAID/ Public Transit • Transit Operators	• Consultant	Long Term
		2. Co-brand transit on statewide basis	• VTrans PPAID/ Public Transit • Transit Operators	• Consultant	Long Term
Technology improvements for enhanced user experience	U	1. Plug information into social media and other on-line information sharing sites	• VTrans PPAID/ Public Transit • Lead Agency • Transit Operators	• Consultant	Long Term
		2. Create statewide trip planner – GoVermont platform	• VTrans PPAID/ Public Transit • Lead Agency • Transit Operators	• Consultant	Long Term

Table 8-1: Implementation Action Plan					
Plan Element	**Item No.**	**Action(s) Required**	**Responsible Party**	**Supporting Partners**	**Timeline**
		3. Complete efforts to include transit services on Google maps	• VTrans PPAID/ Public Transit • Lead Agency • Transit Operators	• Consultant	Long Term
		4. Add transit to Vermont's 511 program as part of eight-state consortium	• VTrans PPAID/ Public Transit • Lead Agency • Transit Operators	• Consultant	Long Term
Performance Monitoring					
Route/service re-classification	V	1. Reclassify some routes based on operator requests	• VTrans PPAID/ Public Transit	• Transit Operators	Immediate
		2. Reclassify routes/services that operate less than once a day as demand response	• VTrans PPAID/ Public Transit	• Transit Operators	Immediate
Legislative report enhancement	W	1. Include narrative component to legislative report to "tell the story"	• VTrans PPAID/ Public Transit	• Consultants	Short Term
Technical Assistance/Training					
Improved Vermont RTAP technical assistance and training program	X	1. Assign VTrans staff member to manage the program (at least half-time)	• VTrans PPAID/Public Transit		Short Term
		2. Develop annual RTAP technical assistance and training program and budget; Initiate new training programs aimed at service efficiency	• VTrans PPAID/ Public Transit RTAP Coordinator	• Transit Operators	Short Term

Table 8-1: Implementation Action Plan					
Plan Element	**Item No.**	**Action(s) Required**	**Responsible Party**	**Supporting Partners**	**Timeline**
		3. Establish and manage RTAP Advisory Group	• VTrans PPAID/ Public Transit RTAP Coordinator	• Transit Operators	Short Term
		4. Create Training Calendar	• VTrans PPAID/ Public Transit RTAP Coordinator	• Transit Operators	Short Term
		5. Establish virtual library of materials, newsletters, peer networking	• VTrans PPAID/ Public Transit RTAP Coordinator	• Transit Operators	Short Term
Planning					
Transit development plans (TDPs)	Y	1. Finalize TDP Scope of Work (SOW)	• VTrans PPAID/ Planning and Public Transit	• Transit Operators • RPCs/MPO • Consultants	Immediate
		2. Develop process for administering the preparation of TDPs using MPO/RPCs and the TPI program	• VTrans PPAID/ Planning and Public Transit	• Transit Operators • RPCs/MPO • Consultants	Short Term
		3. Establish TDP priorities/schedule for transit operators – conduct 2 to 3 plans annually	• VTrans PPAID/ Planning and Public Transit		Short Term
Special studies	Z	1. Develop guidelines and application for special studies	• VTrans PPAID/Planning and Public Transit		Short Term

Attachment 1

Acronyms

AASHTO – American Association of State Highway and Transportation Officials

ACTR – Addison County Transit Resources

ADA – Americans with Disabilities Act of 1990

AHS – Vermont Agency of Human Services

ARRA – American Recovery and Reinvestment Act of 2009

AT – Advance Transit

CAA – Federal Clean Air Act

CAP – Vermont Climate Action Plan

CBD – Central Business District

CCTA – Chittenden County Transportation Authority

CCMPO - Chittenden County Metropolitan Planning Organization

CCRPC - Chittenden County Regional Planning Commission. The CCMPO and CCRPC merged effective July 1, 2011

CIDER – Champlain Islanders Developing Essential Resources

CMAQ – Federal Congestion Mitigation and Air Quality Improvement Program

CRT – Connecticut River Transit, also known as "The Current"

CTS – Community Transportation Services (New Hampshire)

DVTA – Deerfield Valley Transit Association, also known as "The MOOver"

E&D – Vermont's Elders and Persons with Disabilities funding program. May also refer to locally-operated specialized transportation services provided for elders and people with disabilities.

FHWA – Federal Highway Administration

FTA – Federal Transit Administration

GIS – Geographic (or Geospatial) Information System

GMCN – Green Mountain Community Network

GMTA – Green Mountain Transit Agency

GMX – Green Mountain Express

JARC – FTA's Job Access and Reverse Commute program

LRTBP – Vermont Long Range Transportation Business Plan

MOU – Memorandum of Understanding

MPO – Metropolitan Planning Organization

MVRTD – Marble Valley Regional Transportation District, also known as "The Bus"

NEMT – Non-Emergency Medical Transportation

PPAID – VTrans Division of Policy, Planning, and Intermodal Development

PDD – VTrans Program Development Division

PTAC – VTrans' Public Transit Advisory Council

PTPP – Vermont Public Transit Policy Plan

RCT – Rural Community Transportation, Inc.

RPC – Regional Planning Commission

RSVP – Retired and Senior Volunteer Program

RTAC – refers to MPO's Regional Public Transit Advisory Council

RPTAC – Regional Public Transportation Advisory Committee

RTAP – Rural Transit Assistance Program

SAFETEA-LU – Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users

Funding programs under SAFETEA-LU:

S.5307 – FTA's Section 5307 program, Urbanized Area Formula Funding

S.5309 – FTA's Section 5309 program, Capital Investment Program (Bus and Bus Facilities)

S.5310 – FTA's Section 5310 program, Transportation for Elderly Person and Persons with Disabilities

S.5311 – FTA's Section 5311 program, Non-urbanized (also referred to as "Other than Urbanized ") Area Formula Funding

S.5311(b)(3) – FTA's Section 5311(b)(3) program, Rural Transit Assistance Program (RTAP) (part of S.5311)

S.5311(f) – FTA's Section 5311(f) program, Rural Intercity Bus (part of S.5311)

S.5316 – FTA's Section 5316 program, Job Access and Reverse Commute (JARC)

S.5317 – FTA's Section 5317 program, New Freedom Program

SGR – FTA's State of Good Repair Initiative

SIBS – Vermont's Statewide Intercity Bus Study

SRPTP – Short-Range Public Transportation Plan

SSTA – Special Services Transportation Agency

STP – Surface Transportation Program

STSI – Stagecoach Transit Services, Inc.

TAC – Transportation Advisory Committee

TOD – Transit Oriented Development

TPI – Transportation Planning Initiative

UVTMA – Upper Valley Transportation Management Association

VPTA – Vermont Public Transportation Association

VTrans – Vermont Agency of Transportation

Attachment 2

Policy Plan Development and Public Involvement Process

POLICY PLAN DEVELOPMENT

The VTrans Policy Planning and Intermodal Development Division (PPAID) took the lead on the development of the 2012 update to the Vermont Public Transit Policy Plan (PTPP). The PTPP is one of a series of modal plans VTrans prepares to address transit, rail, bike and pedestrian, aviation, freight and roadway programs and policies. The VTrans Project Manager from PPAID, along with the staff of the VTrans Public Transit Section, formed an Internal Working Group that worked with an outside consultant to develop the Plan.

VTrans Executive Staff (comprised of Directors of each of the Agency's four Divisions, the Department of Motor Vehicles along with the Agency Secretary, Deputy Secretary and Assistant Attorney General) also provided overall guidance for the Plan. VTrans Executive Staff were briefed on the PTPP periodically, as it was being developed and finalized.

PUBLIC INVOLVEMENT PROCESS

The 2012 update to the PTPP was prepared with the assistance and in consultation with a number of stakeholders. The VTrans Public Transit Advisory Council (PTAC) served as the Study Advisory Committee (SAC). The SAC/PTAC members represented a diverse set of interests and included various state agencies, the transit providers, human service agencies and advocates, regional planners, legislative representatives, private operators and citizens. The SAC/PTAC was consulted throughout the planning process; materials from the Technical Memoranda and preliminary draft report were presented to the SAC/PTAC at a series of five meetings held in October 2010 and January, April, June, October 2011. In addition, the study team conducted one-on-one discussions, either in person or via telephone, with many members of the SAC/PTAC. Feedback from these discussions was folded into the development of the draft and final PTPP.

Public input also was sought throughout the planning process. The Transportation Planners from the State's Regional Planning Commissions (RPCs), through the Transportation Planning Initiative (TPI), were also briefed on the plan and assisted in distributing the plan's information and public meeting notices. The project website was used to communicate with the public and solicit comments throughout the project. The website was used to provide project team contact information, advertise public meetings, post the project schedule and materials (the Draft Final Report, Technical Memoranda, meeting presentations, summary of meeting results), and solicit public comments. Members of the public were encouraged to complete the comment form on the "feedback" page of the project website at **http://www.kfhgroup.com/vermonttransitplanupdate.htm**. Some submitted comments this way while other members of the public e-mailed comments directly to VTrans staff or the consultant team. The draft plan and technical memoranda also were posted on the VTrans website at **http://www.aot.state.vt.us/PublicTransit/PTPP.htm**.

Two series of three public meetings were undertaken during the project. The first, intended to solicit public and RPC input and identification of State transit issues at the beginning of the planning process, were held February 7, 8, and 9, 2011 and included one meeting on Vermont Interactive Television that reached all areas of the State. A second round of public meetings was held November 14, 16, and 17, 2011 to solicit input from the public on the draft plan. Again, one meeting was held on the Vermont Interactive Television so that interested parties from all areas of the State could participate. Copies of the notices are attached.

VTrans and MPO staff made presentations on the PTPP at a number of RPC Transportation Advisory Committee (TAC) meetings and at meetings of the TPI statewide group.

PUBLIC COMMENTS ON DRAFT PLAN

Comments on the draft plan were received from many interested parties including the SAC/PTAC, the RPCs, other state agencies, and members of the general public. There was a great deal of support for the elements of the draft plan and suggestions for strengthening and clarifying language on a number of those elements were incorporated into the final PTPP.

The following three areas were of particular interest to the reviewers:

1. **Park and Ride Connections and Integration** - Reviewers expressed a need for more park and ride lots, expanded transit services to park and ride lots, and ensuring that park and ride lots are addressed in local and regional transit planning efforts. Specifically, it was felt that transit plans should address how transit can serve park and ride lots as well as how to make them

more accessible by transit. The local transit providers should identify how connections to park and ride lots can facilitate enhanced use of public transit and, where possible, bus routes should be expanded to stop at park and ride lots and/or shuttles operated between park and ride lots and local downtowns. One reviewer wanted to ensure that park and ride lots are built as intermodal facilities for transit and bikes. These comments were incorporated into the final PTPP.

2. **Act 250 and Development Review Processes** – Efforts in the PTPP to integrate transit into the land use planning process were applauded by many of the reviewers. Some stressed the importance of the RPCs in addressing transit use during Act 250 reviews; as they are statutory parties in the Act 250 process review, the MPO/RPCs are the pivotal to this review process. A few reviewers proposed amending the Act 250 Criterion 5 to explicitly list transit. This was explored during the planning process but it was decided that, because transit is implicitly included in Criterion 5[21], it is not necessary to request this revision to the language in order for transit to be included in the Act 250 review process. However, if the language is changed in the future for other purposes, transit should be considered for explicit inclusion. Also, as outlined in the PTPP, VTrans and the RPCs/MPO will undertake an initiative to educate the Act 250 Boards and the Act 250 Regional Coordinators on transit issues as they relate to access to developments and their contribution to reducing congestion. One addition to the transit-land use connection section of the PTPP specifies that VTrans staff will review the transportation segments or chapter of each Regional Transportation Plan to ensure transit is adequately addressed.

3. **Transit Amenities** - Some reviewers wanted to reinforce and expand the PTPP section that addresses transit amenities. As a result, the final plan includes more language to ensure that there are good pedestrian connections to transit stops, adequate street crossings, signage, ADA accessible bus stops and pedestrian connections, and bike racks and bike parking at major transit stops and facilities. Educating youth on how to ride transit was also mentioned and is now addressed in the PTPP.

In addition, the many comments received regarding Intercity Bus needs were incorporated into Chapter 6 of the PTPP as well as into a separate *Intercity Bus Needs Assessment and Policy Options* document.

[21] Criterion 5 provides that before granting a permit, the board or district commission shall find that the subdivision or development "{w}ill not cause unreasonable congestion or unsafe conditions with respect to use of the highways, railways, airports, and airways, and other means of transportation, existing and proposed."

FOR IMMEDIATE RELEASE
January 28, 2011

Contact: Scott Bascom
(802) 828-5748

VTRANS TO HOST PUBLIC MEETINGS TO GATHER INPUT FOR VERMONT PUBLIC TRANSIT POLICY PLAN UPDATE

MONTPELIER – The Vermont Agency of Transportation (VTrans) will hold three public meetings, from February 7 to 9, regarding the Vermont Public Transit Policy Plan.

Last completed in 2007, the Public Transit Policy Plan outlines the State's transit policies and goals and develops strategies to meet current and emerging public transit challenges. VTrans is updating this plan, and seeks public input in this first round of meetings to help shape the vision for the State's transit system and to identify and explore related issues.

The public meeting times and locations are:

February 7, 2011

7:00 p.m. Vermont Interactive Television – 15 sites across the state, see **www.vitlink.org** for information and directions to the sites

February 8, 2011

7:00 p.m. Montpelier – Central Vermont Regional Planning Commission, 29 Main Street, Suite 4.

February 9, 2011

7:00 p.m. Rockingham – Connecticut River Transit, 706 Rockingham Road. For directions, see **http://www.crtransit.org/contact/contact_info.html**.

The Public Transit Policy Plan focuses on public transit services, specifically fixed route, paratransit, transportation brokerage, user-side subsidy, and rideshare/ride-match programs. The plan also addresses coordination and connections among public transit services and with other public transportation modes such as intercity passenger rail, commercial aviation services, and park and ride locations. However, VTrans has separate policy plans for Airports, Rail, Highways, and Pedestrian and Bicycle. In conjunction with these other policy plans, the Public Transit Policy Plan provides the basis for the Vermont Long Range Transportation Business Plan.

All members of the Vermont public are invited to attend and provide their input on the vision for the State's public transit system. For additional information and to see the progress of the Public Transit Policy Plan update, please visit the project website, **http://www.kfhgroup.com/vermonttransitplanupdate.htm**, or contact Scott Bascom of the Division of Planning, Outreach and Community Affairs, at VTrans by email at **scott.bascom@state.vt.us** or by phone at (802) 828-5748.

FOR IMMEDIATE RELEASE
October 13, 2011

Contact: Scott Bascom
(802) 828-5748

VTRANS TO HOST PUBLIC MEETINGS TO GATHER INPUT FOR VERMONT PUBLIC TRANSIT POLICY PLAN UPDATE

MONTPELIER – The Vermont Agency of Transportation (VTrans) will hold three public meetings, from November 14th to 17th, regarding the Vermont Public Transit Policy Plan.

Last completed in 2007, the Public Transit Policy Plan outlines the State's transit policies and goals and develops strategies to meet current and emerging public transit challenges. VTrans is updating this plan, and seeks public input in this second round of meetings to review the draft of the final report and receive input and comments.

The public meeting times and locations are:

November 14, 2011

7:00 p.m. Chittenden County Regional Planning Commission, 110 West Canal Street, Suite 202, Winooski, VT 05404; Telephone: (802) 846-4490

November 16, 2011

4:00 p.m. Vermont Interactive Television – 13 sites (Randolph Ctr. and Waterbury not available) across the state, see **www.vitlink.org** for info. and directions to the sites.

November 17, 2011

6:30 p.m. Rutland Regional Planning Commission, The Opera House, 67 Merchants Row, Third Floor, Rutland, VT 05702; Telephone: 802-775-0871.

The Public Transit Policy Plan focuses on public transit services, specifically fixed route, paratransit, transportation brokerage, user-side subsidy, and rideshare/ride-match programs. The plan also addresses coordination and connections among public transit services and with other public transportation modes such as intercity bus and passenger rail, commercial aviation services, and park and ride locations. However, VTrans has separate policy plans for Airports, Rail, Highways, and Pedestrian and Bicycle. In conjunction with these other policy plans, the Public Transit Policy Plan provides the basis for the Vermont Long Range Transportation Business Plan.

All members of the Vermont public are invited to attend and provide their input on the draft Public Transit Policy Plan. The draft plan will be available on the project web site by the end of October. To view the plan and additional information please visit the project website, **http://www.kfhgroup.com/vermonttransitplanupdate.htm**, or contact Scott Bascom of the Policy and Planning Division at VTrans by email at **scott.bascom@state.vt.us** or by phone at (802) 828-5748.

Vermont Agency of Transportation

Vermont Public Transit Policy Plan

Technical Appendices

Submitted by:
KFH Group, Inc.

January 2012

Technical Appendices

Appendix A: Technical Memorandum 1: *The Context: Vermont's State Transit Program*

Appendix B: Technical Memorandum 2: *Existing Vermont Public Transit System and Demographic Analysis*

Appendix C: Technical Memorandum 3: *Current Issues Related to Public Transit in Vermont*

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Appendix A

Technical Memorandum 1:
The Context: Vermont's State Transit Program

KFH GROUP, INC.

2012 Vermont Public Transit Policy Plan

Technical Memorandum 1
The Context: Vermont's State Transit Program

January, 2011
(Revised March, 2011)

Prepared for the:

State of Vermont
Agency of Transportation

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Technical Memorandum #1: The Context: Vermont's State Transit Program

Public transportation plays a vital role in the high quality of life that Vermonters enjoy and the State of Vermont supports public transit services in a number of ways. The Vermont legislature views public transportation as a "*matter of state concern, essential to the economic growth of the state and to the public health, safety and welfare of present and future generations of Vermonters.*" The purpose of the Vermont Public Transportation Policy Plan (PTPP) is to review and update transit polices and goals and to develop strategies to meet current and emerging public transportation challenges.

The components of the PTPP are to be consistent with Vermont's Long Range Transportation Business Plan (LRTBP) and provide policy level direction, guidance and performance tracking to help guide future transit investment decisions. The PTPP is part of a series of policy plans developed by the Vermont Agency of Transportation (VTrans) addressing, in addition to transit, rail, bicycles/pedestrians, air and roadway policies. Together these policy plans provide direction for VTrans various programs, as well as forming the basis of the LRTBP.

The PTPP is currently being updated for publication in 2012. The development of a PTPP every five years is required by Statute. The first PTPP was published in 2000 and the second, most recent, was published in 2007.[1] While the PTPP is updated every five years, it serves as the primary guidance for continued development of public transit in the State over the next ten years.

This technical memorandum presents the results of Task 1 and outlines the context within which public transit is provided in the State. It is the first in a series of eight technical memoranda that will be prepared as the PTPP plan is developed. The second technical memorandum being prepared concurrently outlines the status of public transit services and public transit needs in the State. The materials in this memorandum will be incorporated into the final report. We value and invite comments, corrections, and input from the various stakeholders at any point during the

[1] http://www.aot.state.vt.us/ops/PublicTransit/PTPP.htm

study, and anticipate making revisions to the materials contained in this memorandum as the draft report is developed.

The memorandum includes a number of contextual elements:

1. Overview of Public Transit Program Administration within VTrans
2. Current Vermont Public Transit Vision, Goals, and Policies
3. State and Federal Regulations and Policy Framework
4. Public Transit Stakeholders
5. Preliminary List of Issues Facing Public Transit in Vermont
6. Review of Other State Transit Policy Plans

As defined in the legislation, *public transportation* refers to passenger transportation "*by all means available to the general public*" while *public transit* service is a subset of that which means "*…any fixed route, paratransit, transportation brokerage, user-side subsidy, and or rideshare/ride-match program which is available to any person upon payment of the proper fare, and which is promoted to be available to all members of the public, including those with special needs*" (24 V.S.A. § 5088(5)). While this PTPP is primarily focused on public transit services, the update is concerned with coordination and connections between public transit services as well as intermodal passenger connections to other forms of public transit such as intercity passenger rail and commercial aviation services.

OVERVIEW OF VTRANS PUBLIC TRANSIT ADMINISTRATION

Most of the components of this PPTP will be implemented through the State's Public Transit Program. The VTrans Public Transit Program is managed under the agency's Policy, Planning, and Intermodal Development Division (PPAID), Public Transit Section. The Public Transit Section consists of a Public Transit Administrator and three Coordinators. The Public Transit Section is supported by the Division's Business Office, Grants Management Unit, which administers the federal and State transit grants. Finally, statewide and regional planning assistance, including planning for public transit, is also provided through PPAID where the preparation of modal plans is the responsibility of the Systems Planning Section.

The role of the Public Transit Section is to oversee how federal and State funds are utilized and to be a bridge between the federal government, State legislature, and

the transit providers. The Division Operations/Public Transit Section ensures that transit providers are providing services that are well-planned thought out, and consistent with the State's vision and goals for other transportation modes and land use policies.

The public transit program is somewhat unique among the other transportation modes because it involves grant making and on-going grant management activities for 11 different public transit providers – some public and others private-non-profits agencies. Annually, VTrans solicits grant applications from these providers, is responsible for allocating State and federal funds among them, and monitors their services and financial information on a monthly basis. Another unique feature is the need to coordinate or collaborate with other State agencies, particularly the Agency of Human Services (AHS), to ensure that services reach the most vulnerable Vermonters, but are also provided in a cost effective and efficient manner.

The Public Transit Section interfaces with the Stakeholders (which are defined below under Public Involvement and Consultation) on a number of levels. Key points of interface required in current State legislation are:

- **Managing Funds** – Manage federal and State operating and capital support funds in a manner that provides a foundation for financial stability and reliability in the provision of public transit services to the public. This involves meeting within the annual budget setting process with the Public Transit Advisory Council (PTAC) to establish the level of State funds needed by public transit in Vermont.

- **Monitoring** – Collect and analyze data on the effectiveness and efficiency of the public transit services funded under the State and federal programs. This includes evaluating both existing services and proposals for new services annually as well as adopting performance and service standards for transit systems receiving State and federal funds.

- **Training and Technical Assistance** - Provide guidance, training, funding, and technical assistance to transit systems to meet performance and service standards, in preparation of financial and management plans for each fiscal year,

- **Reporting -** Report to the legislature annually on financial and performance data for all public transit services that receive State and federal subsidies. VTrans reports annually to the legislature on transportation planning needs, expenditures, and cooperative planning efforts (S.5089) as well as to the federal funding sources.

- **Public Involvement and Consultation** - Develop the PTPP in consultation with stakeholders [public transit providers, Chittenden County Metropolitan Planning Organization (CCMPO), Regional Planning Commissions, and their Regional Transportation Advisory Committees]. Working with the PTAC, VTrans establishes both short and long-range fiscal, operating and capital investment plans to support public transit goals. This element also includes consulting with these stakeholders annually in advance of the award of planning funds. Available planning funds shall be awarded in accordance with State and federal law and as deemed necessary and appropriate by VTrans following this consultation.

CURRENT PUBLIC TRANSIT VISION, GOALS, AND POLICIES

Public Transit Vision

As defined in the 2009 Vermont Long Range Transportation Business Plan (LRTBP), the overall VTrans vision is for a "*safe, efficient and fully integrated transportation system that promotes Vermont's quality of life and economic well-being*." VTrans' mission is to provide for the movement of people and commerce in a safe, reliable, cost-effective, and environmentally responsible manner. For more on the LRTBP, refer to **http://www.aot.state.vt.us/planning/LRTBP.htm**.

While the State does not currently have a defined vision for *public transit*, it could be inferred from goals outlined in Title 24, Chapter 126 of the V.S.A: *Public Transportation* and from the goals and vision expressed in the LRTBP. A preliminary vision might be that:

> *Public transit would meet the basic mobility needs for all Vermonters and especially transit-dependent persons, provide access to employment, mitigate congestion, and advance the State's economic development objectives – all in a safe, reliable, cost-effective, and environmentally responsible manner.*

Current Goals for Public Transit in Vermont

VTrans' major public transit goal is to preserve and enhance the level of public transit in Vermont. Policy statements and goals for public transit in Vermont are codified in 24 V.S.A. Chapter 126, S.5083. According to this section:

> *"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, in order of precedence, the following goals:

(1) Provision for basic mobility for transit-dependent persons, as defined in the public transit policy plan of January 15, 2000, 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) Access to employment, including creation of demand-response service.

(3) Congestion mitigation to preserve air quality and the sustainability of the highway network.

(4) 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.

While the legislative language indicates the goals are "in order of precedence," the language has not been interpreted to focus on one goal over any other. The breadth of the goals recognizes that different areas of the State have varying needs and that the types of services that are most effective may vary by location and local conditions. The public transit providers in Vermont have created a diverse set of services to meet the needs in their areas and work cooperatively among themselves and with other transit providers to make the use of all available resources.

When considering any changes to the public transit goals for Vermont, it is interesting to consider the findings of the recent public opinion statewide transportation survey, conducted as part of the 2009 update of the LRTBP, which indicates the importance of transit to Vermonters. Two of the overarching themes in the responses were the need for VTrans to 1) preserve the current transportation system, and 2) improve and connect all transportation modes. Among other things, when asked what would make them drive their vehicle less, 37% of Vermont residents responded that nothing would make them drive less. This represents a significant change over the previous survey (2000) when two-thirds of respondents said nothing would make them drive less.

The next most popular response to encourage less driving was improved public transit (22%). Compared to June 2000, the number of Vermont residents that would like to have a greater share of the transportation budget spent on *increased mobility - making it easier to get around the State* increased by 14 percentage points (18% in 2000 versus 32% in 2006). Over the same period of time, the number of residents who would like to see a

greater share of funding spent on *public transit* increased by ten percentage points to 41%. Yet, only about one in ten Vermont residents had used local public transit service, passenger train service, or intercity bus lines in the past year; only 4% had used a special dedicated bus or van service for senior citizens and people with disabilities with an average frequency of 19.9 times each year.

Public Transit Policy in Vermont

The 2000 PTPP and 2007 PTPP Update both recommended a series of related policies to guide the VTrans public transit program. Overall, it is Vermont Public Transit Policy to:

- Preserve and enhance existing public transit services that are well used by the traveling public.

- Monitor the performance of transit services by VTrans and the boards of the transit providers to ensure the maximum value from available resources.

- Use any additional public transit funds to support and promote the four goals noted above as in 24 V.S.A Chapter 126, S.5083.

Specific policies also can be seen in a number of areas outlined below.

Funding

It is State policy to maximize the use of available federal funds to support transit and to allocate State funds to transit providers to the extent that funds are available. In order to maximize funding for transit, the State is always seeking and evaluating innovative funding sources to increase investment in public transit. VTrans strongly encourages providers to maximize local funding for public transit, and all parties strive to increase the level of local funding to meet a goal of 20% local funding (exclusive of capital, Rural Transit Assistance Program (RTAP), Job Access and Reverse Commute (JARC), Rideshare, and Medicaid funding). Finally, it is VTrans policy to consult with transit providers, CCMPO, and RPCs through the PTAC meetings on transit funding needs on an annual basis. Some funding flexibility was built into the Elders and Persons with Disabilities (E&D) Program to allow operators to use non-cash match under that program (the value of volunteer hours can be used as local match), but the State still requires that locally derived cash match the remaining programs.

Service Expansions

The funding allocation formula in 24 V.S.A Ch 126 S 5091 remains in effect for the allocation of any new funds, but VTrans distributes federal and State funds for new

incremental services based on demonstrated needs within communities through a competitive application. Funds used to establish new services and expand existing services are based first on the feasibility study and then the demonstrated need for the services. As noted in S.5083, "*Proposals for new service shall be evaluated by examining feasibility studies submitted by providers. These studies shall address criteria set forth in the public transit policy plan of January 15, 2000.*" The current method for creating new services is for the service to be proposed and funded as part of the agency's New Starts 3-Year Demonstration program. If a new service performs successfully, it becomes eligible for continued funding as an established "existing" service. These services often change commuting and lifestyle patterns for a constituency that results in fuel use reductions and lower emissions. Therefore, continued funding is essential if the State is to meet its four public transportation priority goals and its emission reduction targets under the State's Climate Change Plan.

Service expansions were a major focus in the 2000 PTPP, which recommended the Short-Range Public Transit Plan (SRPTP) process. The requirement for SRPTPs was legislatively mandated as a means of identifying and justifying where additional public transit services were needed. The first of these were conducted by the transit providers in 2004. One of the primary purposes of the SRPTP was to explore the need and feasibility for new transit services – including an expanded budget. A more recent effort to update the plans which was abandoned after the effectiveness of the approach came into question. While there is a recognition that transit services need to be well-planned, the requirement that planning take place in this manner was eliminated from the legislation in 2009.

Program Monitoring

Performance monitoring of existing routes is conducted to ensure that the public investment in transit is well spent. In fact, legislation states, "*(b) The public transit advisory council shall annually evaluate existing services based on the goals...*" and *(c) The agency, in cooperation with the public transit advisory council, shall adopt appropriate performance and service standards for transit systems receiving federal or state assistance.*" To ensure efficient use of available resources, VTrans monitors the performance of its public transit services through the monthly services indicator reports which feed into the annual route performance report to the legislature. The 2000 PTPP recommended a number of reporting requirements that would allow VTrans to monitor service (along with service standards). This process was enhanced and refined during the development of the 2007 PTPP and adjusted to reflect experience in using the framework.

Statewide performance measures for public transit are included in the VTrans *2008 Performance Measures Report* and include 1) the percent of routes at or below an acceptable level for cost per passenger and 2) the percent of routes at or above the

acceptable level of passengers per hour. Although no target has yet been set, the goal for both measures is 100%. It is currently State policy to consider discontinuing State/federal funding for routes/services that under-perform, using the service standards outlined below, for two consecutive years.

Service Standards

Service standards are used to assess the success of existing and new starts routes and services. The 2000 PTPP worked with the PTAC to establish service standards and, after three years using the performance standards and monitoring, the 2007 PTPP recommended changes to enhance that framework making it more useful and informative for all parties. Ultimately, the transit providers and their respective boards or commissions are responsible for providing the "best possible" transit services with available resources. This includes monitoring the performance of those services. That said, as the designated recipient of federal transit funding and the manager of State transit subsidies, the State has a role in ensuring that public transit agencies utilize federal and State transit funds wisely to finance the most productive services within their regions. While the federal programs provide the majority of the funding for transit, the State is the second largest funder.

The goal of performance measurement process is to be able to fairly compare similar services and provide a means of how well these services meet the needs of Vermonters in relation to the funding available. While focusing on meaningful measures, the process must also be useful and easy to understand and apply. The 2000 process used five performance measures and had different standards for six service types. The services were deemed acceptable or successful based on Vermont experience only, meaning the transit providers were ranked against each other. The 2007 PTPP recommended changes to the framework that included:

1. Use of standards or benchmarks based on a **national** peer review.
2. Changes to the route classifications and inclusion of volunteer driver programs.
3. Revisions to simplify and target the performance measures and inclusion of locally-generated revenue as a measure.

The new performance framework classifies routes/services and measures performance within the service classification. Classes include urban, small urban, rural, commuter, demand-response, and tourism. Performance is measured in terms of productivity, cost-effectiveness, and local share. Productivity measures vary by service class as follows:

- Urban – Boardings/mile

- Small Town, Rural, Demand-Response, and Tourism – Boardings/hour
- Commuter – Boardings/trip (run)

Cost effectiveness is measured in terms of cost per passenger trip for all types of service except volunteer trips. For both cost effectiveness and productivity, services are considered to be "successful" if they meet average levels for peers and "acceptable" if they are at 50% of the standard.

Local share or locally generated revenue is considered on a system-wide basis and expressed as the percentage of the system's operating expenses that are covered by non-Federal Transit Administration (FTA)/Federal Highway Administration (FHWA) and non-state sources. Considering this measure allows VTrans and the systems to measure how well each provider meets the requirement to generate at least 20% of their operating budget locally.

The only productivity measure for volunteer trips and the only measure of effectiveness used to date for these trips is the administrative cost per volunteer driver trip. In these cases, the standard for "success" was set at 80% of the average the Vermont operators, and the "acceptable" standard was set at twice the level or 160% of the average.

While the current performance monitoring process is not perfect, it appears to be working relatively well. The annual performance report to the legislature is currently being prepared for 2010. The 2009 report can be found at: **http://www.aot.state.vt.us/ops/PublicTransit/documents/AOT-OPS-PT_2009_Transit_Route_Performance_Review.pdf**. Once complete, the 2010 report also will be posted on the VTrans website.

Intercity Bus and Regional Connectivity

The State is committed to improving the connectivity between public and private carriers to serve the intercity bus and commuter markets and to providing easy access to information about those services. It is State policy to support the intercity bus network in Vermont, both intra-state and inter-state travel, by providing attractive and accessible features at convenient locations along major travel corridors (e.g., park and ride lots) and to funding connections to Amtrak services and commercial aviation when feasible. Projects and service improvements to enhance regional connectivity receive greater consideration for funding in the New Starts program. Funding for intercity bus carriers is limited to capital and operating assistance for routes that have not demonstrated economic viability.

Coordination

Promotion and enhancement of coordinated human service transportation and general public transit has long been a Vermont State policy. State legislation in 24 V.S.A, Chapter 126, Section 5090. Human Service Transportation states, "*The secretary of human services shall direct agency of human service programs to purchase client transportation through public transit systems in all instances where public transit services are appropriate to client needs and as cost efficient at other transportation.*" The State recently developed a coordinated transportation plan in accordance with the requirements in SAFETEA-LU, and the designation of regional brokers and enhancement of the roles of the Regional Public Transit Advisory Committees (RPTACs) for this purpose are relatively new mechanisms to advance this policy. VTrans and AHS have worked to make funding more flexible, and to encourage human service programs to use public transit providers as regional brokers of service for human service agency clients. As will be described under the programs section, Medicaid transportation is now administered directly by the AHS (rather than VPTA) with most of the transit operators as both providers and brokers.

Demographics and Transit Oriented Development

VTrans continues to support efforts to curtail sprawl and create transit-oriented communities both through coordinated planning and through its role as a party to Act 250 development review proceedings. In keeping with its goal to provide for basic mobility for all Vermonters, the State supports innovative transit solutions to serve shifting demographics such as "aging in place." There were a number of suggested strategies outlined in the 2007 PTPP Implementation Plan to advance State support for Transit Oriented Development (TOD) and changes in demographics.

Energy and the Environment

The State recognizes that reducing vehicle miles traveled by auto and increasing public transit ridership can reduce vehicle emissions and meet greenhouse gas targets. To this end, the State promotes the use of public transit as an energy saving and cleaner transportation alternative. VTrans also promotes the use of low emission technologies by transit providers. To further transit agencies' abilities to assist the State in meeting its greenhouse gas targets, operators need purchasing flexibility to introduce higher miles per gallon vehicles into their fleets, including sedans and lift-equipped mini-vans that can replace underutilized and fuel-intensive cut-away vans.

Technical Assistance

Finally, State policy, included in statute, required that "…*The agency of transportation shall provide guidance, training, funding, and technical assistance to transit systems in order to meet the performance and service standards established.*" A part of the State's requirement to provide technical assistance and training is met through its Rural Technical Assistance Program (RTAP), as described below.

FEDERAL AND STATE TRANSIT PROGRAMS

Public transit in Vermont, as in many states, is funded primarily through federal (49 U.S.C.) and State transit programs. While Chittenden County Transportation Authority (CCTA) is a direct recipient of FTA S.5307 transit operating/capital funds for small urbanized areas, most of the federal funds flow through the VTrans to rural transit operators. The State is the designated recipient of all federal rural transit funding as well as funding for specialized services under S.5310 (Elderly and Persons with Disabilities), S.5316 (JARC) and S.5317 (New Freedom). The FY11 Governor-recommended State budget for public transit includes about $17 million in federal funds and $6.8 million in State funds for a total of $26 million (excluding the federal funds that flow directly from FTA to CCTA). There is a one-time $2 million in American Recovery and Reinvestment Act (ARRA) funding for vehicles and $600,000 for planning and administration. The total FY11 budget is $26 million, less $2 million in ARRA, for a net of $24 million. In addition, local communities contribute to transit services through local match.

Table 1-1 presents a summary of federal and State transit operating and capital subsidies from 2008 through 2011. When the sporadic ARRA funding is not considered, transit subsidies in the State increased overall by $3 million, or almost 16%, during that period (between 3-10% annually).

Funding Innovations in Vermont

In addition to public transit dollars, Vermont uses federal highway funds in innovative ways and "flexes" (transfers) highway funds annually into the State's transit program to maximize their use for transit. Vermont is a leader in flexing federal highway funds from the Surface Transportation Program (STP) and Congestion Mitigation and Air Quality Improvement Program (CMAQ) into its transit programs.

Also innovative is VTrans' integration of E&D operating funds with its Non-Urbanized Area Formula Grants (S.5311). The goal of the new integrated program was to maximize coordination between human service agencies and public transit providers,

Table 1-1: Public Transit – State and Federal Funds Only, FY 2008 – 2011

PROGRAM NAME	DESCRIPTION	2008	2009	2010	2011 STATE	2011 FEDERAL	2011 ARRA	2011 TOTAL
Project Development	Funding for Project Development and Evaluation	473,255	120,000	120,000	25,436	101,742		127,178
Congestion Mitigation/Air Quality (CMAQ)	Federal Highway Funding that can be used for public transportation	750,000	1,100,000	1,850,000		1,500,000		1,500,000
Rural Program Administration	S. 5311 Funding for Program Administration	507,931	543,288	546,237	90,282	361,126		451,408
S. 5311 Non-Urbanized Area Grants	Funding for Rural Transit in areas less than 50,000 population-Operating, Capital and Administration					5,609,347		5,609,347
Urban - State Operating Assistance	Funding for Urban Transit in Areas with 50,000 - 200,000 population - Capital and Operating (Chittenden County)	12,938,898	13,202,700	14,284,345		825,919		825,919
State Operating Assistance	State Funding for Operations				5,070,904			5,070,904
S. 5311 E&D Assistance	Funding for transportation service Elders and Person with Disabilities				98,819	3,400,731		3,499,550
Rural Preventive Maintenance	Capitalization of Preventive Maintenance in Rural Areas	500,000	500,000	500,000		500,000		500,000
Urban Preventive Maintenance	Capitalization of Preventive Maintenance in Urban Area (Chittenden County)	500,000	500,000	500,000		500,000		500,000
State Technical Assistance	State Funding for Technical Assistance				200,000			200,000
Rural Technical Assistance (RTAP)	FTA funding for training and technical assistance					90,643		90,643
Kidney Association Grant	Vermont Kidney Association Grant				30,000			30,000
S. 5316	FTA Job Access and Reverse Commute Program for low income residents to access jobs	393,960	426,790	429,600	250,447	250,447		500,894
S.5317	FTA New Freedom Program for Persons with Disabilities beyond ADA	122,332	132,149	133,883		153,748		153,748
Rideshare	Encouragement of Carpools and Go Vermont	450,000	450,000	450,000		450,000		450,000
ARRA Capital	ARRA Capital Funding Program			5,680,572			2,000,000	2,000,000
S. 5309 Capital Grants	FTA and State Capital Grant Program for General Public	4,185,124	4,369,348	4,565,331	999,539	3,146,082		4,145,621
S. 5310 E&D Capital Grants	FTA and State Capital Grants for Elders and Persons with Disabilities				77,500	385,750		463,250
TOTAL PUBLIC TRANSIT PROGRAM		20,821,500	21,344,275	29,059,968	6,842,927	17,275,535	2,000,000	26,118,462
TOTAL PUBLIC TRANSIT APPROPRIATION*		19,151,569	19,719,221	26,259,839	6,842,927	15,896,777	2,000,000	24,739,704
TOTAL PUBLIC TRANSIT PROGRAM Minus ARRA Capital		20,821,500	21,344,275	23,379,396				24,118,462
	Percent Increase Over Previous Year		*3%*	*10%*				*3%*

*Note: Appropriations exclude FTA subsidies that pass through directly to CCTA.
Source: Public Transit's Three-Year as-passed budget, from the VTrans Operations Division, Grants Management.

and to improve the utilization of unused vehicle capacity on vehicles formerly restricted to E&D.

Another innovative component in the State's use of federal transit programs was the creation of a Rural Preventive Maintenance program. In an effort to prolong the life of the operators' fleets, the State has set aside $1 million annually to support preventive maintenance ($500,000 in rural areas and $500,000 in the urban area). By "capitalizing" rural preventive maintenance, those costs are eligible for 80% from the federal program, and the transit providers only have to provide 20% in local share. (If these costs were considered operating expenses, the federal program would cover only 50% of the net deficit.)

Federal Funding Programs

Vermont currently receives federal funding for transit through a number of programs including S.5307, S.5310, S.5311, S.5311(f), S.5309, S.5316 (JARC) and S.5317 (New Freedom). These federal programs are described below; more detail be found on the USDOT site at **http://www.fta.dot.gov/funding/grants_financing_263.html**. As noted above, VTrans is the designated recipient and administers transit funds for the non-urbanized areas as well as for the JARC and New Freedom programs statewide. CCTA is the direct recipient of federal transit subsidies in urban areas (operating and capital).

Aside from the federal formula programs, Vermont also receives funding from the federal competitive/discretionary programs, often through earmarks. Recently the State was awarded a grant under the FTA "State of Good Repair"; VTrans was awarded $6,392,000 for transit vehicle replacement in rural areas[2] and CCTA received $2,475,305 for transit vehicle replacement in its service area (VTrans replacement will be for two application cycles). In addition, the State received competitive/discretionary federal funds through the Federal Railroad Administration (FRA) for passenger rail services.[3] Robust local transit systems are an important part of the State's efforts to implement its policy priorities and maximize leverage of passenger rail funding. Passengers who arrive by rail can use local transit not only to access local town centers, but also as a viable transportation option once they have reached their end destinations.

[2] VTrans requested funds for VPTA system intake software but was not funded. There is a "maintenance of effort" provision but while the SGR grant cannot be used for other, non-vehicle capital items, it may free up other capital monies.

[3] Vermont got $50M in FRA ARRA funds to begin construction to improve 190 miles of track between St. Albans and Vernon on Amtrak's Vermonter line. – Awarded under the High-Speed Intercity Passenger Rail Program will be spent to install continuously welded rail and other track improvements, new crossties, crossing safety improvements – this may have an impact on Intercity bus needs and services.

Transit funding per capita in Vermont is higher than in other states with similar rural/urban mix. The rural nature of the State makes it difficult to provide transit in traditional ways. Vermont is the most rural State in the country with only 38% of the State's population residing in urban areas (2000 census). Despite its rural character, the State will spend about $11.00 in State funding per capita on transit services in 2011. According to the 2010 *AASHTO Survey of State Funding for Public Transportation*, the other nine states with over half of their population in rural areas spent between $.43 - $4.52 in State funds on transit in 2008 -– less than half of the amount spent by Vermont that year ($9.50 per capita). The three states with somewhat comparable rural populations (WV, MS, and ME) only provided between $0.54 and $1.67 in state transit funding per capita in 2008.

Table 1-1 indicates that budgets by program and funding subsidies have been increasing over the past few years. Mirroring this trend, Figure 1-1 presents trends in federal and State operating fund allocations to each of the providers from 2009 – 2010 (not including capital, Medicaid, or federal operating subsidies that CCTA receives directly from FTA). The figure shows a consistent and steady increase in operating funds available for transit services in the State.

In addition to its formula grants, the State receives discretionary S.5309 grants from FTA each year to replace vehicles and improve facilities (on the order of $800,000 - $900,000 annually is awarded directly to the State). Many Vermont municipalities and a few transit operators also receive discretionary federal grants directly from FTA for vehicles and a variety of other capital projects such as intermodal centers and maintenance/fueling facilities. The level of discretionary capital funding from the FTA to Vermont transit systems is significant (currently there is almost $37 million in active federal earmarks to local transit operators in the State, spanning a number of years in order to meet the planning, environmental, procurement, and civil rights requirements for FTA-funded projects). It should be noted that, under SAFETEA-LU, some of this was in the form of earmarks to VTrans and the transit operators, and it is uncertain what will happen to earmarks under reauthorization and the 2011 Congress.

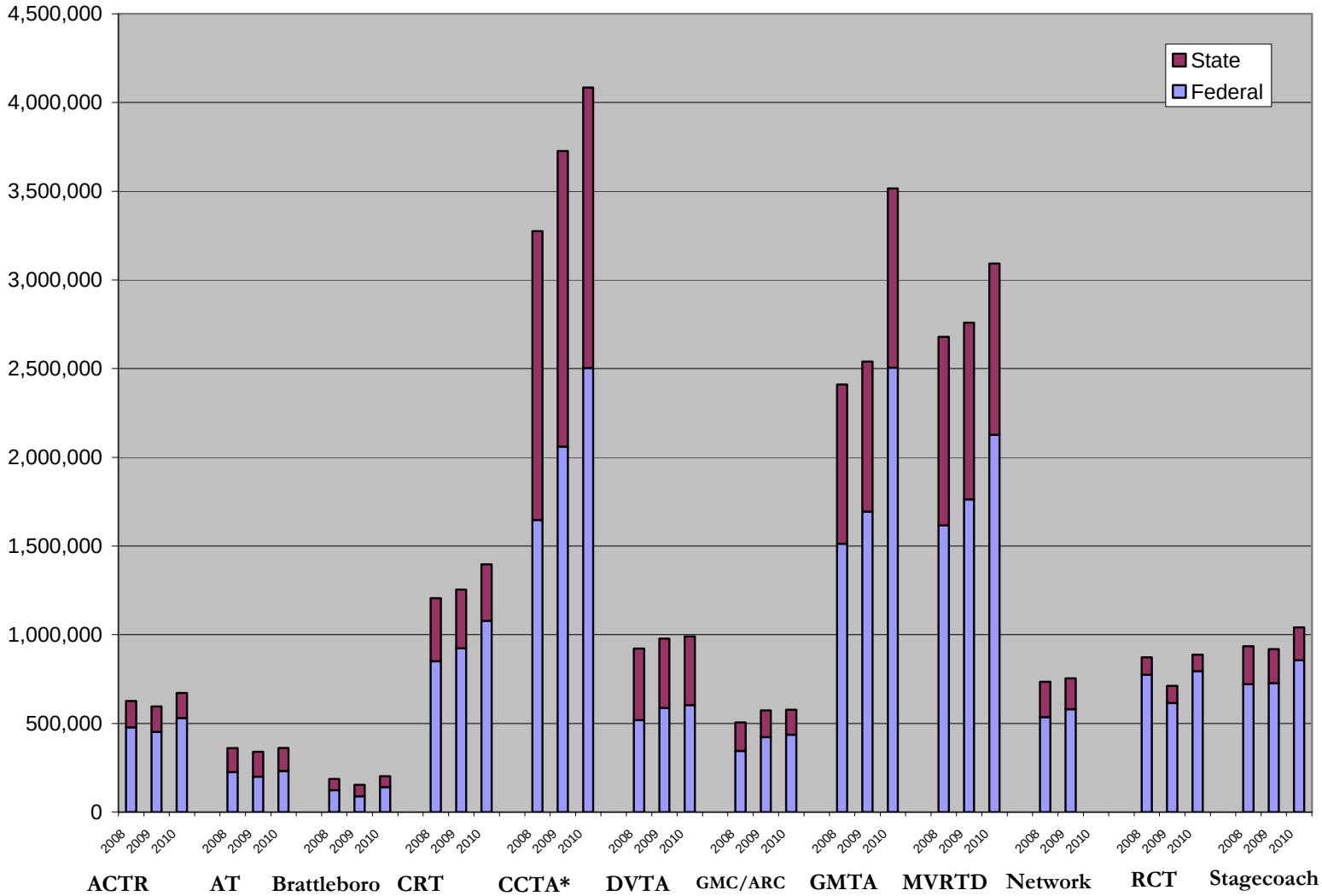
Total S. 5309 apportionments for the State were:

- 2008 - $5.3 million
- 2009 - $4.6 million
- 2010 - $4.0 million

Federal programs used to support transit in Vermont include the following:

- **Section 5311 – Non-Urbanized Area Formula Program –** S.5311 provides federal operating and capital funds in rural areas with less than 50,000 people

Figure 1-1: Federal and State Operating Funds Allocations (2009 – 2010)



*Does not include the Federal S. 5307 operating funds received directly from FTA by CCTA.

(this encompasses all areas in Vermont outside the Burlington urbanized area). The program pays for up to 80% of capital and administrative expenses and 50% of the net deficit (costs minus operating revenue) for operating, up to an annually allocated amount. Federal funds are allocated to states annually.

- **Section 5311 – Non-Urbanized Area Formula Program –** S.5311 provides federal operating and capital funds in rural areas with less than 50,000 people (this encompasses all areas in Vermont outside the Burlington urbanized area). The program pays for up to 80% of capital and administrative expenses and 50% of the net deficit (costs minus operating revenue) for operating, up to an annually allocated amount. Federal funds are allocated to states annually.

- **Section 5307 – Urbanized Area Formula Program –** This program provides transit subsidies in urbanized areas under 200,000 in population (Chittenden County – CCTA). For urban areas of this size, S.5307 funds can be used for operating or capital and the federal program will pay for up to 80% of capital items and 50% of the net deficit for operating expenses, up to an annually allocated amount. Federal funds are allocated to urbanized areas annually.

- **Section 5310 – Elderly Persons and Persons with Disabilities Capital Program -** Funding from FTA under S.5310 is available for capital assistance for private non-profit entities or public bodies providing coordinated transportation services to elders and person with disabilities. The federal program pays for up to 80% of the capital costs. Projects must be part of a locally developed coordinated human service – public transit plan to be eligible for funding. Federal funds are allocated to states annually.

- **Section 5316 – JARC Program** – The JARC program is a federal formula program to address the unique transportation challenges faced by welfare recipients and low-income persons seeking to obtain and maintain employment. The State is the designated recipient for JARC funds in Vermont, and eligible subrecipients are private non-profit organizations, State or local governments, and operators of public transit services including private operators of public transit services. Funds can be used for capital, planning, and operating expenses for projects that transport low income individuals to and from jobs and activities related to employment, and for reverse commute projects. Projects must be part of a locally developed coordinated human service – public transit plan to be eligible for funding. Federal funds are allocated to states annually (prior to SAFETEA-LU these

funds were discretionary; Vermont received a much higher level of funding before "formulization").

- **Section 5317 – New Freedom Program** - The New Freedom formula grant program seeks to reduce barriers to transportation services and expand the transportation mobility options available to people with disabilities beyond the requirements of the Americans with Disabilities Act (ADA) of 1990. The State is the designated recipient for the program, and eligible subrecipients are private non-profit organizations, State or local governments, and operators of public transit services including private operators of public transit services. Funds can be used for capital and operating expenses for new public transit services and new public transit alternatives beyond those required by the ADA that are designed to assist individuals with disabilities. Projects must be part of a locally developed coordinated human service – public transit plan to be eligible for funding. Federal funds are allocated to states annually. Note that the program also carries a high administrative burden, especially in proportion to the small amount of funding available – about $150,000 annually for Vermont.

- **Section 5311 (b)(3) – Rural Technical Assistance Program (RTAP)** – The RTAP program provides funding to assist in the design and implementation of training and technical assistance projects and other support services tailored to meet the needs of transit operators in nonurbanized areas.

- **Section 5311(f) Intercity Bus Program –** The S.5311(f) program allows states to subsidize intercity bus needs using their S.5311 formula grant funds. The state must use 15% of its annual apportionment to support intercity bus service, unless the Governor certifies, after consultation with affected intercity bus providers that the needs of the state are adequately met.

- **Section 5309 – Bus and Bus Related Equipment and Facilities Program** – This program provides capital assistance for new and replacement buses, related equipment, and facilities. It is a discretionary program to supplement formula funding in both urbanized and rural areas.

- **Section 5304 – Statewide Transportation Planning Program and Section 5303 – Metropolitan Transportation Planning Program -** These programs provide funding to support cooperative, continuous, and comprehensive planning for making transportation investment decisions in metropolitan areas and statewide. Federal planning funds are first apportioned to VTrans which then passes through metropolitan planning funding to the CCMPO which in turn passes funding on to CCTA for its planning activities.

- **Surface Transportation Program (STP)/FHWA for RPC/MPO Planning Assistance –** Transit planning is an eligible STP funded activity and, as such, regional planning organizations assist transit operators with their local transit planning using FHWA funds through the VTrans Transportation Planning Initiative or CCMPO funding.

- **CMAQ/FHWA –** CMAQ is a FHWA program to support areas of air quality non-attainment. Since Vermont is not "out of attainment," it can use CMAQ for eligible activities including new transit demonstrations/starts through flexing of FHWA funds.

Local match refers to the money that FTA requires from projects that is from non-federal sources. From FTA's perspective, all non-federal funding is local and can include State or local funds. Matching requirements for each of the programs is shown in Table 1-2 which is combination of FTA regulations and State policy.

State Funding Programs

In addition to administering the federal transit grants, the State contributes its own dollars both to provide the "local or non-federal match" for the federal funds and to increase the resources available for transit services in the State.

State Capital Program

Most of the federal programs require a 20% local match on capital items, and the State typically provides half of this match with the local communities providing the remaining 10%.

Table 1-2: FTA and Vermont Matching Requirements

Program	Federal Share	Non-Federal Local		Total
		State Share	Local Share	
Section 5311 – Federal Rural Operating Program				
• Project Administration	80%	20%		100%
• Preventive Maintenance	80%	20%		100%
• Operating Deficit	50%	50%		100%
Rural Preventive Maintenance Program	80%	0%	20%	100%
Elderly & Disabled Program	80%	0%	20%	100%
JARC	50%	50%	0%	100%
Rural General Public Marketing Program	80%	0%	20%	100%
Capital (Sections 5310 & 5311)	80%	10%	10%	100%
New Freedoms Program				
• Operating	50%	50%		100%
• Capital	80%	10%	10%	100%

State Operating Program

In addition, the Vermont Legislature created the State Operating Program to assist general public transit systems throughout the State. The State provides a portion of the non-federal share for the S.5311 operating subsidies in the non-urbanized areas – a major source of funding for the rural transit operations. There is no prescribed share of the operating subsidy that comes from the State. Available State funds are allocated among the rural operators based on need and maximizing the federal dollars available.

E&D Program

Vermont's E&D program coordinates funding from several federal, State, and local sources to make public transit as accessible, safe, responsive, convenient and affordable for as many people as possible. All services under the program are open to the public.

The program has two components – one for capital to fund vehicle purchases and the other contributes toward operating expenses for those vehicles. The Federal S.5310 formula allocation assists in the purchase of the vehicles used to serve this population and applicants apply as part of the combined annual application (80% federal, 10% State, and 10% local). One Lead Agency is designated as the S.5310 recipient for each area and assumes the responsibility for coordinating any requests for service in their area from any other group. Lead Agencies promote coordination, submit a combined application for funding in their region to VTrans, and lease vehicles to approved eligible agencies, as appropriate. In addition to entering into a lease agreement, the Lead Agencies also provide oversight of maintenance and disposal procedures in accordance with VTrans' policies as shown in Table 1-3.

Since the Federal S.5310 capital program is a formula allocation based on the number of elders and persons with disabilities in each state, and because of Vermont's small population, the S.5310 formula allocation is insufficient to meet the special needs for E&D population. So, each year Vermont transfers federal funds from the STP to be used in the E&D program and then awards them as S.5311 grants to local public transit providers to serve elders and persons with disabilities. In each public transit region, VTrans uses the designated Lead Agency public transit provider/broker as the administrative entity that submits an annual grant application for funds for E&D (and one human service organization, the Vermont Association for the Blind and Visually Impaired, serves the entire State). Grant recipients must match the State/federal funds with local resources, at 20%, although in some cases the local share is greater than 20% (this local share comes from the human service agencies and local municipalities).

Table 1-3: E&D Program Lead Agencies

Lead Agency Name	Service Area
Addison County Transit Resources	Addison County (less Hancock & Granville)
Chittenden County Transportation Authority	Chittenden County
Connecticut River Transit & Deerfield Valley Transit Association	Windham County Southern Windsor County – Andover, Baltimore, Cavendish, Chester, Chester Depot, Ludlow, Reading, Springfield, Weathersfield, West Windsor, Windsor & Weston
Green Mountain Community Network	Bennington County
Green Mountain Transit Agency	Franklin County Grand Isle County Orange County – Orange, Williamstown & Washington Washington County
Marble Valley Regional Transit District	Rutland County (less Pittsfield)
Rural Community Transportation	Caledonia, Essex, Lamoille & Orleans Counties
Stagecoach Transportation Services	• Addison County – Hancock and Granville • Rutland County – Pittsfield • Orange County (less Orange, Williamstown and Washington in Orange County) • Southern Windsor County – Barnard, Bethel, Bridgewater, Hartford, Norwich, Pomfret, Rochester, Royalton, Sharon, Stockbridge, Wilder, White River Junction, Woodstock, Plymouth & Hartland

As the designated brokers for regional transit services, the public transit providers contract with local human service agencies and deliver needed transportation services to agency clients. In many cases E&D-funded passengers and agency clients are commingled with other paratransit riders on the same vehicle to gain service and cost efficiencies.

New Starts Program

VTrans supports demonstration or pilot projects for new services using CMAQ funds. Demonstrations are funded for up to three years with up to 80% from the federal program and at least 20% local. Eligible expenses include operating and capital.

Many of the successful services started under this program are now under threat of discontinuation. VTrans has been providing the transit agencies with preventative maintenance funding (from Surface Transportation Program transfers) to replace the CMAQ funds when the services reach their three-year CMAQ funding time limit. Many of the public transit providers are now operating CMAQ services, which cannot be funded with preventative maintenance funding when they are no longer CMAQ-eligible. Local funding is not sufficient to pay the 100% net cost of the service, only the 20% local match. Thus the services are in jeopardy unless VTrans is able to provide State funding, or obtain a change in the federal CMAQ legislation as some other states have; such a change would extend CMAQ past a three-year demonstration project and to the life of the federal transportation authorization bill.

Go Vermont and Rideshare

Finally, VTrans operates Go Vermont as a resource for commuters who want to reduce the costs and environmental impacts of driving. The Go Vermont program assists Vermonters in finding less expensive transportation options, and also helps the state with its ongoing efforts to reduce greenhouse gas emissions. This web-based clearinghouse links the user to transportation options throughout the State, which includes an automated ride matching software service, a State-subsidized vanpool program, public transportation route information, rail services, and a link to park and ride locations. This program can be accessed at **www.connectingcommuters.org** or by calling (800) 685-RIDE.

Registering with Go Vermont automatically qualifies carpoolers for a "guaranteed ride home" in case of emergency. Registrants can also obtain parking passes for designated spaces at participating employers, as well as qualify for any incentive and drawings offered directly through the Go Vermont program. A state-of-the-art ridesharing program was launched in October 2009, which offers those seeking to carpool an Internet tool to search for others with whom they can share rides.

Local Funds and Matching Requirements

Local Funds

The local funds needed to support public transit typically come from towns they service, and local communities and residents are contributing a significant amount for

transit services from their local property taxes, through the farebox, and by seeking contracts with human service agencies. To secure the general property tax revenue, transit systems generally are required to appeal to the towns for support through Town Meeting ballot initiatives. While this requires a considerable effort on the part of the transit systems and distracts them from their primary responsibility of operating safe and efficient public transit services, it is consistent with the State goal to preserve and enhance the level of public transit services by encouraging local financial support for those services. Also consistent with this policy is the requirement that most local match be provided as cash. Currently the State only allows in-kind contributions as local match for the E&D program.

There is also a recognition that, in many communities, the only local source of funding is the general property tax since the legislature does not authorize communities to raise other taxes for transit (with the exception of a sales tax in Burlington, South Burlington, and Williston that helps pay for a CCTA route). Public transit competes with the local funding for most other services such as school and police and local transit providers often rely heavily on contracts with human service agencies as a source of non-federal matching funds.

One issue addressed in the 2007 PTPP was the request by the operators that the State have a more liberal interpretation of allowable sources and the percent of local matching funding. The only change made at that time was to allow for the utilization of volunteer hours (in-kind) as local match in the E&D program. No other changes were made since it was felt that allowing non-cash sources to replace local cash could lead to decline in overall cash available, which could lead to a decline in the level of service. The State also has the goal that the local communities have an ownership stake in, and commitment to, public transit. In addition, the State seeks to balances the need to maintain levels of service while providing more flexibility for the providers. Due to State funding cuts over the past several years, most human service providers are cash-strapped, and the need to allow Medicaid volunteer hours as an in-kind match for the E&D program is greater than ever.

The State also has the goal that the local communities have an ownership stake in, and commitment to, public transit. However, local E&D partners have had to shift cash resources to programs and services that are no longer funded by the State, thus risking lower participation rates in the E&D program and lower leveraging capacity statewide. In fact, the State's largest transit agency, operating in the highest population center, returns E&D funds to the State each year as a result of inadequate local match. This hurts service levels, and elders and persons with disabilities go without needed transportation. As the State seeks to balance the need to maintain levels of service, providing more flexibility to identify alternative sources of match for the E&D program would strengthen the program.

Funding Issues

Primary funding issues are funding levels, funding allocations and requirements for local contributions/local match. The following sections address the latter two issues.

Funding Allocation

The 2000 PTPP included a complicated new S.5311 funding allocation formula in an effort to include a number of objective measures (number of elderly persons, low income households, jobs) to determine how much of the public transit funding would be allocated to various operators in different parts of the State. This formula was incorporated into the State statute, but has never been used; in an effort not to reduce subsidies to any operator, it was agreed that the formula would be used only to distribute new funds above and beyond existing allocations, and no new sources of funding have materialized. This is not to say that there have been no new transit services funded since 2000, but most of the funding for the first three years of service expansion is derived from the CMAQ program and has been distributed using the New Starts evaluation plan. Public transit funding is currently allocated to the providers based on demonstrated need during the grant application process although allocations are generally based on previous year allocations plus inflation. The development of a new simpler funding allocation formula was discussed during the development of the 2007 PTPP but the legislation was not changed.

Agency Contracts and Medicaid

Revenue from agency contracts, including Medicaid funding, has historically been a significant source of funding for most of the transit operators in Vermont. Non-Emergency Medical Transportation (NEMT) is a covered service for the Medicaid and the Dr. Dynasaur programs. This program is administered directly by AHS and NEMT services are provided by local public transit brokers, as shown in Table 1-4:

Table 1-4: Medicaid Brokers

Area Served	Public Transit Broker
Addison County	ACTR – Addison County Transit Resources
Southern Windsor and Windham Counties	CRT – Connecticut River Transit
Bennington County	GMCN – Green Mountain Community Network
Franklin, Grand Isle and Washington Counties	GMTA – Green Mountain Transit Agency
Rutland County	MVRTD – Marble Valley Regional Transit District

Area Served	Public Transit Broker
Caledonia, Essex, Orleans and Lamoille Counties	RCT – Rural Community Transportation
Chittenden County	SSTA – Special Services Transportation
Orange and Northern Windsor Counties	STSI – Stagecoach Transportation Services

Capital Replacement

Previous versions of the PTPP and SRPTPs provided an analysis of capital replacement needs for the transit providers. The transit vehicles have prescribed vehicle life standards based on mileage, age and type of vehicle (determined by VTrans as regulated by FTA). There has never been enough funding available to satisfy all the needs although the State has an informal way to "prioritize" the need for replacement vehicles based on vehicle condition. Although, as noted above, in an effort to extend the useful life, VTrans has distributed $1 million annually ($500,000 urban and $500,000 rural – allocated to providers based on expenditures in 2005) through a preventive maintenance program set up by the legislature. The PTAC has expressed an interest in developing a policy on expansion vehicles. This may be particularly timely as the State has received a State of Good Repair (SGR) grant as well as earmarks from the FTA for *replacemen*t of capital but not expansion vehicles.

THE PLAYERS – STAKEHOLDERS

As can be seen, there are a number of stakeholders that play major roles in the public transit network in Vermont. In addition to the public and riders of the transit systems, the primary stakeholders that will be affected by this PTPP include:

- VTrans
- Public Transit Providers
- Public Transit Customers, including elders and persons with disabilities
- Transportation Planning Initiative (TPI) including the Regional Planning Commissions (RPCs) and their Transportation Advisory Committees (TACs), Chittenden County Metropolitan Planning Organization (CCMPO) and their TAC and Public Transit Advisory Committee (TAC)
- Vermont Public Transportation Association (VPTA)
- Vermont Agency of Human Services (AHS) and other State Agencies such as the Vermont Department of Labor and the Vermont Agency of Commerce and Community Development
- State and Local Officials
- Local human service agencies

- Non-profit organizations (i.e., CIDER)
- Private transportation providers (i.e., taxis)
- FTA

Transportation Planning Initiative (TPI), RPCs, and CCMPO

Vermont's 11 RPCs and the CCMPO, include:

- Northwest Regional Planning Commission
- Two Rivers-Ottauquechee Regional Commission
- Chittenden County Metropolitan Planning Organization
- Lamoille County Planning Commission
- Windham Regional Commission
- Northeastern Vermont Development Association
- Central Vermont Regional Planning Commission
- Southern Windsor County Regional Planning Commission
- Addison County Regional Planning Commission
- Rutland Regional Planning Commission
- Bennington County Planning Commission
- Chittenden County Regional Planning Commission

Each of the RPCs has a Transportation Advisory Committee (TAC). The TACs include representatives from each town and some representation from the local transit operator. The Chittenden County Metropolitan Planning Organization (CCMPO) has a Public Transit Advisory Committee as well as a TAC that makes recommendations on action items to be considered by the full Board of Directors.

Through its Transportation Planning Initiative (TPI), VTrans collaborates with the RPCs and the CCMPO to carry out transportation planning at the regional level. RPCs enter into cooperative agreements with VTrans for the agency to provide FHWA planning funds in exchange for collaborative transportation planning. Each region and the CCMPO prepare and update long range transportation plans that include detailed inventories of their transportation systems, identification of existing and future needs, general recommendations, specific project recommendations, and typically include a vision statement with supporting goals, objectives, or policies. The most common principles emphasized include using transportation to support economic diversity, vitality, and development; preserving and maintaining the existing transportation system; supporting the use of alternative modes; connecting transportation and land use; and improving safety for all modes of travel. The TPI Manual can be found at http://www.aot.state.vt.us/planning/Documents/Planning/TPIMANUALUPDATEFINAL052907.pdf.

Vermont Public Transportation Association (VPTA)

VPTA is a private nonprofit corporation. Incorporated in 1986, its purpose is to promote the economic and social welfare of Vermont residents by encouraging, developing, and providing transportation services to access employment, education, medical, social, recreational, and other services. The VPTA provides information about public transit to the public and to policymakers, coordinates information and resource sharing for members, and contracts with government agencies to administer and develop transportation services statewide. VPTA is also registered as a lobbying group. VPTA is partnering with VTrans and AHS in the investigation of new intake and dispatching software.

Vermont Agency of Human Services (AHS)

The AHS manages the State Medicaid program including the non-emergency medical and transportation funding. Revenue from Medicaid has historically been a significant source of funding for most of the transit operators in Vermont – local public transit operators are the providers and brokers for these services. At $12M annually, Vermont Health Access is a major source of transportation funding in the State. One significant current issue is that program is undergoing reductions, and the NEMT program is being cut $575,000 in 2010. The budget cut is to be managed with case management and coordination and efficiencies. A staff person was hired for the position of Quality Control Officer for the program, and effective January 1, 2011 there will be a new manual in place to govern the program. Changes made or anticipated could include a reduction in the per mile reimbursement rate and changes to the bus pass program.

Aside from Medicaid and NEMT transportation, AHS also administers other human service transportation programs including transportation for older adults, age 60 and above, and persons with disabilities. This program provides transportation for a variety of purposes, including medical appointments, work, shopping, adult day centers, and community activities, though availability varies by region and by funding availability. Reach Up is another program, administered by AHS, that offers transportation to employment-related activities and childcare for eligible families with children. As noted above, AHS is also partnering with VTrans and VPTA in the investigation of new intake and dispatching software.

PRELIMINARY LIST OF ISSUES

Many of the challenges of providing comprehensive public transit in a rural state are obvious and well known and many of these were discussed in the previous section.

What followers is a preliminary list of issues that will be further developed and explored in Task 3. Some are continuing others have emerged since the last PTPP.

Funding

Transit in Vermont has benefited from continued VTrans and legislative support that has provided significant and creative levels of funding. Yet, funding is one of the most critical issues facing VTrans and its public transit providers. One funding issue that has changed since the last PTPP was the formulization of the JARC program under SAFETEA-LU, which reduced the federal allocation to Vermont from about $800,000 to $230,000. Simultaneously, Vermont received a significant increase in 5311 funding, which was utilized to fund many if not all of the JARC routes in existence. While the New Freedom program was created during this time, Vermont receives only about $150,000 annually from that program.

Since local communities do not have dedicated transit funding sources, generating local revenues to support public transit is a challenge since transit competes with other local services for funds provided from the property tax. In some areas there is continuing interest in developing alternatives to the local property tax as the primary source of local match. This has led to multiple studies within the past decade devoted to an assessment of alternative funding sources that could be used on a regional basis. Now, in addition, there is the issue of funding multi-jurisdictional services such as commuter bus or intercity services.

In previous PTPP efforts the allocation methodology for local public transit funding has been a central topic, and it will also need to be reviewed as part of this PTPP.

Demographics

The State's population is aging and has an increasing desire to do so "in place." This trend will create dispersed demand for new services to meet the needs of elders, who formerly relied on their ability to drive to maintain independence in areas not currently served by public transit. On the national level, recommendations to address this issue have included expansion of volunteer drivers and encouraging the location of senior housing, continuing care communities, etc. where transit currently exists. Vermont has one of the oldest populations in the nation. Between 2007 and 2008, the two age cohorts with the largest percentage increases were 55-64 and 65+ years, and some areas of the State have in excess of 30% of their population over 55. Both the "aging in place" movement and the growth of senior communities may imply differing transportation patterns.

At the same time, the traditional household of a couple and two children is declining, with implications for new housing choices and locations that need to be better understood by transportation decision makers.

Finally, the growing number of seniors with more leisure time is one of several factors also contributing to the increased interest of states and their DOTs in supporting leisure travel. In states as diverse as Virginia and Montana, tourism is becoming a bigger part of the economy. In response, support has increased for federal programs geared toward improving the traveling experience, such as Transportation Enhancements and Scenic Byways.[4] The Vermont Byways Program has identified six scenic byways, ranging from 30 to 400 miles in length, across the State. Local and out-of-state visitors can enjoy numerous leisure and recreational activities along these byways, which represent great tourism opportunities in Vermont.[5]

While the average age of population is increasing, the general population rate of growth in Vermont has decreased since 2004. Between 2000 and 2009, the State's rate of growth (2.1%) was well below the national average (9.1%). Population size is not expected to change significantly in the near future although there are concerns about an aging workforce. Symptoms of Vermont's changing demographics include:

- Declining populations in Bennington, Essex, Rutland, Windham and Windsor Counties.

- Lamoille, Grand Isle and Franklin Counties showed greatest increases in population. Lamoille County can be attributed to continued development in towns of Stowe and Morristown. Grand Isle and Franklin Counties' growth can be attributed to the suburbanization of these areas as more people who work in the Burlington area choose longer commutes in exchange for diverse housing opportunities.[6]

Changes in Employment Trends

Another major national trend that will likely affect Vermont is the steady loss of manufacturing jobs and other changing economic factors. Information technology, along with major trade agreements, has encouraged outsourcing of many types of jobs, particularly manufacturing, to other countries. This shift in the economy is impacting states and localities in differing ways, some of which have changed transportation needs and patterns. Nationally, job growth is in the service economy, which includes

[4] Programs to improve transportation in National Parks and other public lands were increased 29 percent in SAFETEA-LU.
[5] Vermont Byways Program, **http://www.vermont-byways.us/**, 2010.
[6] Vermont Department of Labor, 2010 Vermont Economic-Demographic Profile Services, 2010.

tourism, and/or in information services; and yet advances in information technology have enabled workers to do many jobs without going to a traditional worksite because the technology can be used at home. This trend may mean an increase in telecommuting even though the proportion of workers who do so on a regular basis has remained small nationwide, about 2% to 4%. An increase in telecommuting could reduce the need for transit services.

At the same time, technology may improve the relative effectiveness of transit and ridesharing as commuter modes by reducing the uncertainty of transit and carpool matching. The real impact of information technology on transportation is only just being seen.

Coordination of Public Transit and Human Service Transportation

Coordination of transportation resources among state agencies, transit providers (public and private), and human service providers is a means of ensuring that services are not duplicative or overlapping and that resources are used in a cost effective manner. Since the last PTPP, there has been an increased emphasis on coordination at the federal level. Even though Vermont is a recognize leader in the coordination of transportation resources among public transit and human service agencies, the PTPP will be addressing the need to continue to improve coordination at both the State and local levels. AHS and VTrans has had a Memorandum of Understanding (MOU) that outlines the manner in which they will coordinate (the original MOU expired but a new one was recently executed). The AHS Secretary has directed AHS program, through legislation, to purchase client transportation through public transit systems in all instances where public transit services are appropriate to client needs and as cost efficient as other transportation. Departments and programs within AHS use the public transit provider for client transportation where appropriate. VTrans and AHS have worked to make funding more flexible and to encourage human service programs to use public transit providers as regional brokers of service for human service agency clients.

The 2008 Vermont Human Service – Public Transportation Coordination Plan and the local plans developed as part of that process are a resource for the PTPP, but it will need to address the results of that effort and assess the way in which programs have been implemented in response to that plan. Potential changes in federal programs as part of reauthorization (such as combining these programs) need to be considered in the development of policy plans. Other policy considerations include the needs identified and the approaches developed as part of the Critical Care Transportation Study Committee Report (discussed below).

Organizationally, VTrans has created the elders and disabilities program. As discussed in the section on funding, public transit operators are encouraged to combine

funding from the E&D portion of their S.5311 program with their public transit services making all transit services "open to the public" and available to the general public and special population including agency clients. The State Coordinated Transportation Plan can be found at **http://www.aot.state.vt.us/ops/PublicTransit/documents/HSCP.htm**.

Critical Care Transportation Issues

During Vermont's 2007 legislative session, it was determined that the Vermont's E&D transportation program was increasingly and annually stressed for funding. Chaired jointly by representatives of the Vermont Agency of Transportation (VTrans) and the AHS, the Critical Care Transportation Committee is composed of representatives of organizations that provide programs and services for dialysis and cancer patients, agencies whose clients are seniors and persons with disabilities, and rural and urban transit providers. The report of the Critical Care Transportation Committee was prepared in response to the Vermont legislature's requirement for a study to examine the present funding, function, administration, and effectiveness of critical care transportation. Critical care transportation is defined as "*transportation to and from dialysis and cancer treatment medical services for Vermonters not eligible for Medicaid transportation services*."

Their report recommended a number of immediate improvements including better tracking of trip types, more coordination to allow riders to cross agency geographic boundaries and changes to the program to recognize regional variation in needs and policy. The Committee also identified recommendations for long-term changes to the organizational structure and cost sharing components of the program. While the requisite funding was not available to implement new services, the program would have maintained the concept that services would continue to be provided through the public transit providers. AHS, as the agency responsible for administering the critical care transportation program, would have contracted with the State's public transit providers to serve as brokers of critical care transportation. As brokers, the public transit providers would have taken trip requests from riders, identify the most cost-effective and appropriate means of providing each trip – which might be a fixed route bus route, demand response service, or a volunteer driver – and assign the trip to that service. The complete report can be found at **http://www.aot.state.vt.us/ops/PublicTransit/documents/AOT-OPS-PT_CriticalCareTransportationProgram.pdf**.

Transit Oriented Development (TOD)

Transit Oriented Developments (TODs) typically have land use density sufficient to support transit services, and include characteristics such as mixed land uses; pedestrian- and bike-oriented designs that encourage walking and biking; less auto ownership and less auto mode share; and the proximity of retail, employment, and

residential areas to public transit facilities and services. Vermont's traditional settlement pattern of compact, mixed use villages surrounded by open countryside is consistent with smart-growth principles and meets the basic requirements of TOD. By implementing the primary statewide land use planning goal (24 VSA 4302(c)1) to guide development toward existing and planned settlements, Vermont positions itself to combat sprawl and create TODs that could support the provision of effective inter-municipal transit services, especially if local zoning codes are revised to be consistent with State planning goals and legislation. The *Vermont Planning Implementation Manual*, ***Topic Paper #23, Public Transportation (Transit)*** discusses requirements for TOD within Vermont's rural context: **http://www.vpic.info/pubs/implementation/pdfs/23-Transit.pdf**.

The State legislature has enacted a number of laws that create incentives for growth in its compact centers including the Vermont Downtown Community Development Act, which developed a process for revitalizing downtowns and village centers. More recently, 2006 legislation created a program to establish "designated downtowns" that would endorse development-ready, high density, mixed use centers oriented around downtowns and village centers. The bill supports investment in growth center infrastructure that facilitates pedestrian and bike traffic and supports the use of public transit. Pursuant to the principles of the Downtown Development Act, the Agency of Commerce and Community Development's Department of Economic, Housing, and Community Development issues grants to designated downtowns for "Downtown Transportation and Related Capital Improvements." More information on growth centers can be found at **http://www.dhca.state.vt.us/Planning/GrowthCenters.htm**.

The Department has also published guidelines for development at interstate highway interchanges to discourage the type of auto-oriented development that can be detrimental to the vitality of Vermont's historic centers. Again, local zoning codes would need to be aligned with State guidelines to prevent sprawl-type development. More information on this subject can be found at **http://www.dhca.state.vt.us/Planning/InterstateInterchange.htm**.

The Vermont Department of Health released a plan in April 2006 promoting community efforts to increase physical activity (biking and walking) through changes to the built environment and conducted a survey of the availability of sidewalks and other pedestrian amenities in Vermont's towns and villages. This plan relates to public transit since walking and biking are among the primary ways that riders access transit services. Making sure the infrastructure and amenities for pedestrians and bicyclists are in place would also help promote transit use.

Other important land use issues include:

- The need for additional attention to transit in the overall transportation planning and permitting process, so that development and major facilities (such as medical facilities) do not continue to be built without accommodations for transit service, or off the transit network;
- Getting transit added to local zoning and planning processes; and
- Pedestrian scale design.

Current State policies (Act 250) do not address public transit and may only require a traffic impact study. State policies should look at incorporating transit services in Vermont's efforts to address demographic changes, such as seniors aging in place. The need to elevate public transit as a consideration in corridor management planning has also been identified.

Environment and Energy Use

Utilizing public transit is good for the environment. It has the potential to reduce VMT and thus reduce emissions that affect Vermont's air quality and include green house gases (GHG), the cause of climate change. Recommendations in the 2007 PTPP included coordination between park and ride lots and commuter transit services to help increase transit use, the use of low emission and cleaner diesel technologies, and the inclusion of energy conservation and climate change considerations in State and regional transportation plans.

Air Quality Compliance

Vermont has maintained its air-quality "attainment" status under federal Clean Air Act (CAA). The State's CAA status allows it to use its CMAQ funds for purposes other than Clean Air Act compliance, namely to fund transit services statewide. Public transit is not only a beneficiary of the State's compliance status, it is itself a valuable tool in Vermont's ability to meet air quality standards. Vermont's Clean Air Act status may change in the coming years given the U.S. EPA's need to strengthen the National Ambient Air Quality Standards (NAAQS) to protect human health. The range of the current (2011) proposed Ozone NAAQS challenges Vermont's attainment status. Loss of this status will affect the use of CMAQ funds in the future.

Climate Change Planning

Public transit not only has the potential to reduce VMT but can also be more efficient on a passenger mile basis than single occupancy vehicles. The greater the efficiency, the less demand for carbon-based fuel and the reduction of GHG emissions

throughout Vermont's transportation system. Vermont has several policy statements and planning mandates regarding climate change:

- Vermont is a signatory to the New England Governors/Eastern Canadian Premiers global warming agreement which establishes greenhouse gas reduction goals for the region.

- Legislation was adopted in 2006 requiring a State climate action plan, establishing statewide emission reduction goals and requiring State agencies to consider GHG in their programs and policies.

- A comprehensive State climate change action plan was adopted in 2007 as well as a VTrans Climate Change plan.

- VTrans is working to improve its understanding of transportation's contribution of GHG in Vermont and the GHG benefits of increased transit use and other strategies, in order to measure progress in meeting the State's emission reduction goals.

The efficiency and cleanliness of transit vehicle technology is critical in increasing the overall emissions benefit of transit use. Transit providers often would prefer to replace aging fleets with newer, more environmentally friendly and efficient vehicles. However, the funding for replacement vehicles is limited, and the cost of hybrids or alternative fuel vehicles is significantly greater than diesel/gas fueled vehicles.

Intercity Bus Service

Since 1998 when the Statewide Intercity Bus Study was conducted, service available in the State has changed considerably, as has the federal program of assistance.[7] Intercity bus services are particularly important to the mobility of Vermonters since a greater proportion of intercity riders are youth, elders, and persons with low income. Despite their importance, intercity bus services have declined significantly in Vermont over the past few years. Only limited service remains, and there are frequency of service issues (four daily round trips along I-89 serving Burlington, Montpelier, and White River Junction; one daily round trip along I-91 serving White River Junction, Bellows Falls and Brattleboro; and two weekday round trips from Bennington to Albany). In addition to the elimination of many stops, another

[7] Intercity bus service was hard hit by the decline in travel after 9/11. A recent American Bus Association study shows that beginning in 2004, patronage began to increase again and is close to pre 9/11 levels. However, as with the airlines, the impact of 9/11 caused restructuring for scheduled intercity carriers like Greyhound.

issue is the relocation of the remaining stops from downtown locations to locations closer to the Interstates.

The FTA does support rural intercity services through the Section 5311(f) program, which sets aside a portion of the rural transit subsidies for such services, and states are obligated to spend 15% of the S.5311 funds for intercity bus transportation unless they certify that needs are being met. VTrans had become involved in intercity bus services by purchasing a bus for Vermont Transit; but, due to service cuts, that vehicle was removed from service by Vermont Transit. VTrans has been more inclined to support commuter-type services linking towns/village centers such as Montpelier, St. Albans, and Middlebury with Burlington and, recently, Brattleboro.

Regional Connectivity, Transit, Rail Passenger Service, and Intercity Bus

The State's role in passenger rail and commuter rail has been the subject of much debate, with the State continuing to support Amtrak operation of service on two routes. In H.527 of the 2007 session, the Vermont legislature directed VTrans to "examine the feasibility of making public transportation in Vermont seamless, efficient, and user-friendly, with usable connections among in-state and out-of-state points." In this process, the agency shall develop a single overall method of marketing Amtrak, in coordination with all other public transit services.

A Study Regarding the Regional Connectivity of Vermont's Public Transportation System addressed the options for changing the rail passenger support, intercity bus, coordinating services with regional transit, and marketing a coordinated system. Since then, the State's budget problems have provided more focus on the costs of the rail passenger program, and the study did not include intercity bus recommendations.

One recommendation of the 2007 PTPP and recent studies on connectivity was to provide easily accessible and reliable information about routes and services. Accordingly, the State implemented a new initiative called, "Go Vermont." The Go Vermont Program (rideshare and ride match) was upgraded from a manual system to a web-based system in 2010. As a result, there are now 1,000 matches versus 30-40 per month. Resources have been freed up for outreach, marketing, and education. YouTube, television, and radio ads and loco-motion educational programs are being conducted. Vermont also has 49 park-and-rides lots (27 State-owned and 22 municipally owned) located throughout the State, making it easier to carpool or vanpool. For more information see the legislative report, *A Study Regarding the Regional Connectivity of Vermont's Public Transportation System January 2008* that can be found at **http://www.aot.state.vt.us/ops/PublicTransit/documents/AOT-OPS-PT_Section45.pdf**.

Commuter Bus and Regional Services

A related set of issues not a previous focus of the PTPP is the growth of regional commuter services, their success, and the need to develop a sustainable funding basis. Like the intercity connections, it reflects the fact that transit and transportation needs are increasingly long distance in nature, and are not limited to one service area. Determining the State role and the way in which these programs can be addressed given the federal funding programs and the need for local funding is a key PTPP issue.

Reauthorization

Given that federal reauthorization of SAFETEA-LU legislation is looming, the implications of various elements of reauthorization must be considered. For example, a standing proposal to combine S.5310, JARC, and New Freedom and perhaps include S.5311 in the mix could impact Vermont's transit programs.

Also of concern is the possibility that earmarks will be eliminated. Earmarks have become the subject of significant controversy in recent years. The earmarked money is allocated to the states by Congress rather than by using the normal budget formulae. Vermont has performed well recently by receiving a substantial amount of earmarked funds; VTrans and the State's transit operators were the recipients of the second highest per capita amount of earmarked dollars authorized under SAFETEA-LU. The elimination of earmarks could have a significant negative impact on transit in the State.

Other states benefit even more than Vermont by being named specifically in the SAFETEA-LU legislation as recipients of designated program funds. To level the playing field, Vermont could continue advocating for "Small State Minimum" language and work with the congressional delegation for more flexibility with specific programs in the legislation, which are vital to Vermont's greenhouse gas reduction goals. Specifically, the CMAQ funding supports the first three years of new routes that lower emissions. Vermont uses CMAQ funds for commuter routes throughout the State. As each route is weaned off its three-year CMAQ funds, it is backfilled with STP preventative maintenance funds. Since most of the public transit providers have reached their capacity to absorb preventative maintenance funds (which may pay for 80% of an agency's eligible maintenance expenditures), State funds must backfill any gap between the cost of the CMAQ routes and the agency's ability to consume preventative maintenance funding.

In the last SAFETEA-LU legislation reauthorization of 2003, six states received language in the bill to allow their CMAQ funds to continue funding ongoing operations. Vermont's congressional delegation could push for similar flexibility in the bill to subsidize transit operations over the length of the reauthorization period.

Alternately, other programs in the legislation such as the STP could be modified to provide flexibility in use for operating as well as capital costs.

Capital Plans

The PTPP process is a chance to review the capital needs of the State's public transit system, including vehicles, facilities, shelters, or technology. Capital planning issues raised by the PTAC at the kick-off meeting were:

- The need for expansion vehicles in addition to replacements.
- Consideration of a Statewide bus purchase for "clean" buses.
- The need for a policy on when and how transit facilities are funded.
- The need for consistency of vehicle manufacturers for ease of maintenance.

Technology

Technology is emerging as a way to improve the actual provision of transit services as well as the methods to disseminate public information on the services available. The 511 system was established in 1999 by the Federal Communications Commission as a nationwide three-digit telephone number for traveler information. It was envisioned as a simple phone number that travelers can remember and use for travel conditions regardless of their location in the United States. Implementation of the 511 system has been incremental on a state-by-state basis. Vermont's 511 program is part of an eight-state consortium that is sharing the cost to design and develop the system. Transit information should be part of that design.

VTrans, AHS and VPTA also are partnering to on a project to investigate the potential to upgrade intake and dispatching software statewide (the current tool is six years old and is reaching its limitations). Finally, the State is considering a statewide communications system and reviewing its technical assistance program to see what can be offered to public transit providers to improve delivery of services.

Organizational Structure for Transit

The recent legislative report on the organizational structure for providing public transit in Vermont concluded that the existing system has evolved in a logical manner, based on the primary, initial demand for transit services being local. In the report, local control and ability to respond to local needs was seen as a strong argument for maintaining and evolving the existing system. The existing service delivery model grew out of the demand and need for transportation services based primarily at the local and intra-regional level and it was concluded that this is still the most appropriate model based on the priority of transportation needs and programs currently being delivered.

While the report concluded that there are many good reasons to maintain local control and local transit provider services, it is uncertain whether the current structure can address the changing demands for various types of public transit services. As the demand for regional and intercity service increases, it was postulated that the model by which the services are delivered may evolve out of necessity. Ultimately, the report stated that "*the decision on which structure for delivering public transit throughout Vermont is best will be informed largely by the prioritization of the types of services that are most important to the people and the means by which they feel is most equitable to fund those services*." In conclusion, the report recommended:

1. Allow the existing system to evolve and take action to create efficiencies where opportunities present themselves.

2. Review the current statewide public transit network in the Public Transit Policy Plan update later this year and relate it to the *prioritization* of all public transit services, including local, regional, and intercity, and determine how well the current delivery structure matches the services to be provided in the future. The Section 78 Public Transit Report, March 2010, can be found at: **http://www.aot.state.vt.us/ops/PublicTransit/documents/AOT-OPS-PT_Section78.pdf**

NATIONAL EXPERIENCE WITH STATE POLICY PLANS

Even though conditions in Vermont are unique, there are lessons to be learned from how other states manage their public transit programs. The approaches taken by other states to address critical transit issues have been researched, catalogued, and categorized by likely key issues the PTPP will need to address. Appendix A includes a matrix of key issues addressed in the transportation plans of all 50 states.

All states have transportation plans, and these generally address transit to some extent, but few have developed policy plans specific to public transit. Appendix B also reviews transit-specific plans from six states in terms of key issues that may need to be addressed during the update of the Vermont PTPP. The following matrices (Tables 1-5 and 1-6) summarize these plans, highlighting the key current or emerging issues.

During Task 3, which will address specific issues relevant in Vermont, state solutions used by states with similar challenges will be explored in more depth.

Table 1-5: Statewide Transit Plan Discussion of National Policy Trends in Public Transportation

STATE	PLANNING DOCUMENT	KEY ISSUES FOR VERMONT PER 2007 PUBLIC TRANSPORTATION POLICY PLAN					
		Federal & State Funding	Demographic Equity	Coordination	Land Use	Environment	Connectivity
Michigan	State Long Range Transportation Plan 2005-2035: Transit Technical Report (2006)	•	•	•	•	X	X
Minnesota	Greater Minnesota Transit Plan 2010-2030 (2009)	•	•	•	•	X	•
Montana	TranPlan 21: Public Transportation Policy Paper (2007)	•	•	•	X	X	•
New Mexico	New Mexico Statewide Public Transportation Plan (2010)	•	•	•	X	•	•
South Carolina	South Carolina Statewide Transit Plan (2008)	•	•	•	•	X	•
Vermont	Vermont's Public Transportation Policy Plan (2007)	•	•	•	•	•	•

Table 1-6: Statewide Plan Discussion of National Policy Trends in Public Transportation

State	Planning Document	EMERGING ISSUES		
		Safety & Security	Planning Requirements	Technology
Michigan	State Long Range Transportation Plan 2005-2035: Transit Technical Report (2006)	•	X	•
Minnesota	Greater Minnesota Transit Plan 2010-2030 (2009)	•	X	•
Montana	TranPlan 21: Public Transportation Policy Paper (2007)	X	•	X
New Mexico	New Mexico Statewide Public Transportation Plan (2010)	•	•	X
South Carolina	South Carolina Statewide Transit Plan (2008)	X	X	X
Vermont	Vermont's Public Transportation Policy Plan (2007)	X	X	X

- • Policy Addressed
- X Policy Not Addressed
- – Policy Not Reviewed

Attachment

Acronyms

AASHTO – American Association of State Highway and Transportation Officials

ACTR – Addison County Transit Resources

ADA – Americans with Disabilities Act of 1990

AHS – Vermont Agency of Human Services

ARRA – American Recovery and Reinvestment Act of 2009

AT – Advance Transit

CAA – Federal Clean Air Act

CAP – Vermont Climate Action Plan

CBD – Central Business District

CCMPO – Chittenden County Metropolitan Planning Organization

CCTA – Chittenden County Transportation Authority

CIDER – Champlain Islanders Developing Essential Resources

CMAQ – Federal Congestion Mitigation and Air Quality Improvement Program

CRT – Connecticut River Transit, also known as "The Current"

CTS – Community Transportation Services (New Hampshire)

DVTA – Deerfield Valley Transit Association, also known as "The MOOver"

E&D – Vermont's Elders and Persons with Disabilities funding program. May also refer to locally-operated specialized transportation services provided for elders and people with disabilities.

FHWA – Federal Highway Administration

FTA – Federal Transit Administration

GIS – Geographic (or Geospatial) Information System

GMCN – Green Mountain Community Network

GMTA – Green Mountain Transit Agency

GMX – Green Mountain Express

JARC – FTA's Job Access and Reverse Commute program

LRTBP – Vermont Long Range Transportation Business Plan

MOU – Memorandum of Understanding

MPO – Metropolitan Planning Organization

MVRTD – Marble Valley Regional Transportation District, also known as "The Bus"

NEMT – Non-Emergency Medical Transportation

POCA – VTrans' Division of Planning, Outreach and Community Affairs

PTAC – VTrans' Public Transit Advisory Council

PTPP – Vermont Public Transit Policy Plan

RCT – Rural Community Transportation, Inc.

RPC – Regional Planning Commission

RSVP – Retired and Senior Volunteer Program

RTAC – refers to CCMPO's Regional Public Transit Advisory Council

RPTAC – Regional Public Transportation Advisory Committee

RTAP – Rural Transit Assistance Program

SAFETEA-LU – Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users

Funding programs under SAFETEA-LU:

S.5307 – FTA's Section 5307 program, Urbanized Area Formula Funding

S.5309 – FTA's Section 5309 program, Capital Investment Program (Bus and Bus Facilities)

S.5310 – FTA's Section 5310 program, Transportation for Elderly Person and Persons with Disabilities

S.5311 – FTA's Section 5311 program, Non-urbanized (also referred to as "Other than Urbanized ") Area Formula Funding

S.5311(b)(3) – FTA's Section 5311(b)(3) program, Rural Transit Assistance Program (RTAP) (part of S.5311)

S.5311(f) – FTA's Section 5311(f) program, Rural Intercity Bus (part of S.5311)

S.5316 – FTA's Section 5316 program, Job Access and Reverse Commute (JARC)

S.5317 – FTA's Section 5317 program, New Freedom Program

SGR – FTA's State of Good Repair Initiative

SIBS – Vermont's Statewide Intercity Bus Study

SRPTP – Short-Range Public Transportation Plan

SSTA – Special Services Transportation Agency

STP – Surface Transportation Program

STSI – Stagecoach Transit Services, Inc.

TAC – Transportation Advisory Committee

TOD – Transit Oriented Development

TPI – Transportation Planning Initiative

UVTMA – Upper Valley Transportation Management Association

VPTA – Vermont Public Transportation Association

VTrans – Vermont Agency of Transportation

APPENDIX A
MATRIX OF KEY AND EMERGING ISSUES ADDRESSED IN STATE TRANSPORTATION PLANS

Table: Statewide Plan Discussion of National Policy Trends in Public Transportation

STATE	PLANNING DOCUMENT	KEY ISSUES FOR VERMONT PER 2007 PUBLIC TRANSPORTATION POLICY PLAN						EMERGING ISSUES		
		Federal & State Funding	Demographic Equity	Coordination	Land Use	Environment	Connectivity	Safety & Security	Planning Requirements	Technology
Alabama	Alabama Statewide Transportation Plan (2008)	•	•	•	X	•	X	X	X	X
Alaska	Let's Get Moving 2030: Alaska Statewide Long-Range Transportation Policy Plan (2008)	•	X	X	X	X	X	•	X	X
Arizona	Move AZ: Long Range Transportation Plan (2004)	-	-	-	-	-	-	-	-	-
Arkansas	Arkansas Statewide Long-Range Intermodal Transportation Plan (2007)	•	X	X	X	X	X	X	X	X
California	California Transportation Plan 2025 (2006)	•	X	X	•	•	•	X	X	X
Colorado	Moving Colorado: Vision for the Future 2035 Statewide Transportation Plan (2008)	•	X	X	X	X	X	X	X	X
Connecticut	Connecticut On the Move: Strategic Long-Range Transportation Plan 2009-2035 (2009)	•	X	•	•	•	•	•	X	•
Delaware	-	-	-	-	-	-	-	-	-	-
Florida	Moving Together: 2025 Florida Transportation Plan (2005)	X	X	•	•	•	X	X	X	X
Georgia	2005-2035 Georgia Statewide Transportation Plan (2007)	•	X	X	X	X	X	X	X	X
Hawaii	Setting the Course: Hawaii Statewide Transportation Plan (2002)	-	-	-	-	-	-	-	-	-
Idaho	Idaho's Transportation Vision (2004)	-	-	-	-	-	-	-	-	-
Illinois	Illinois State Transportation Plan (2007)	X	X	X	X	•	•	X	X	X
Indiana	INDOT 2030 Long Range Transportation Plan (2007)	•	X	X	X	X	X	X	X	X
Iowa	Iowa in Motion: Transit System Plan (1999)	-	-	-	-	-	-	-	-	-
Kansas	Long Range Transportation Plan (2008)	•	X	X	X	X	X	X	X	X
Kentucky	Kentucky Long-Range Statewide Transportation Plan (2006)	X	X	X	X	X	X	X	X	X
Louisiana	Louisiana Statewide Transportation Plan (2003)	-	-	-	-	-	-	-	-	-
Maine	Keeping Maine Moving: 2004-2025 Long-Range Transportation Plan (2004)	-	-	-	-	-	-	-	-	-
Maryland	Maryland Transportation Plan (2009)	X	X	X	•	•	•	•	X	X
Massachusetts	The Commonwealth of Massachusetts Long-Range Transportation Plan (2006)	•	•	•	•	•	•	•	•	•
Michigan	**State Long Range Transportation Plan 2005-2035: Transit Technical Report (2006)**	•	•	•	•	X	X	•	X	•
Minnesota	**Greater Minnesota Transit Plan 2010-2030 (2009)**	•	•	•	•	X	•	•	X	•
Mississippi	Mississippi Unified Long-Range Transportation Infrastructure Plan (2007)	•	•	•	X	X	X	X	X	X
Missouri	Missouri Advanced Planning: Missouri's Long-Range Transportation Plan (2007)	•	X	X	X	X	X	X	X	X
Montana	**TranPlan 21: Public Transportation Policy Paper (2007)**	•	•	•	X	X	•	X	•	X
Nebraska	Nebraska Long-Range Transportation Plan (2006)	•	•	X	X	X	•	•	X	X
Nevada	Statewide Transportation Plan: Moving Nevada Through 2028 (2008)	•	•	X	X	X	X	•	X	X
New Hampshire	NH Long Range Transportation Plan 2010-2030 (2010)	•	•	•	•	•	•	•	X	X
New Jersey	New Jersey's Long-Range Transportation Plan (2008)	•	•	•	•	•	•	•	X	•
New Mexico	**New Mexico Statewide Public Transportation Plan (2010)**	•	•	•	X	•	•	•	•	X
New York	Strategies for a New Age: New York State's Transportation Master Plan for 2030 (2006)	•	•	•	•	•	•	•	X	•
North Carolina	Transit 2001 Technical Report (1997)	-	-	-	-	-	-	-	-	-
North Dakota	TransAction II: North Dakota's Statewide Strategic Transportation Plan (2007)	X	X	X	X	X	X	X	X	X
Ohio	Access Ohio 2004-2030: Statewide Transportation Plan (2004)	-	-	-	-	-	-	-	-	-
Oklahoma	2005-2030 Oklahoma Statewide Intermodal Transportation Plan (2005)	•	X	X	X	X	•	X	X	X
Oregon	Oregon Public Transportation Plan (1997)	-	-	-	-	-	-	-	-	-
Pennsylvania	Pennsylvania Mobility Plan (2006)	X	X	•	X	X	X	X	X	X
Rhode Island	Transportation 2030 (2010)	•	•	•	•	•	•	•	•	X
South Carolina	**South Carolina Statewide Transit Plan (2008)**	•	•	•	•	X	•	X	X	X
South Dakota	South Dakota Statewide Long Range Transportation Plan (2010)	•	•	•	X	X	X	X	X	X
Tennessee	Tennessee Long-Range Transportation Plan: Traditionally Underserved Populations Outreach and Analysis Approach (2006)	•	•	X	•	•	X	•	X	X
Texas	Texas Statewide Long-Range Transportation Plan 2035 (2010)	•	•	X	•	•	•	•	X	•
Utah	UDOT's Long Range Transportation Plan 2007-2030 (2007)	X	X	X	•	X	•	X	X	X
Vermont	**Vermont's Public Transportation Policy Plan (2007)**	•	•	•	•	•	•	X	X	X
Virginia	Virginia Surface Transportation Plan 2035 (2010)	•	•	•	•	•	X	•	•	•
Washington	Washington Transportation Plan 2007-2026 (2007)	•	X	•	•	X	•	X	•	X
West Virginia	WVDOT's Long-Range Multi-Modal Transportation Plan (2009)	•	•	X	X	X	X	X	X	X
Wisconsin	Connections 2030: Statewide Long-Range Transportation Plan (2009)	•	•	•	•	•	•	•	•	•
Wyoming	Wyoming Connects (2010)	•	•	X	•	X	•	X	X	X

APPENDIX B
DETAILED REVIEW OF SELECTED STATE TRANSIT POLICY PLANS

Michigan Department of Transportation's "State Long Range Transportation Plan: Transit Technical Report" (2006)

Federal & State Funding

Similar to other states, a significant portion of federal dollars for transit received by Michigan ($27.7 million in FY2006) came from six programs within the reauthorization bill. As for transit funding, Michigan's primary source is the Comprehensive Transportation Fund (CTF), which provided $188.8 million in FY2006 to support the following transit-related items: operating and capital assistance for urban and rural transit systems as well as marine passenger services; specialized transportation services and transportation-to-work services; state-contracted vanpool services; and debt service on CTF bonds that support routine capital costs. The primary revenue sources of the CTF are sales tax contributions and transfers from the Michigan Transportation Fund (MTF). Further, the MTF's two primary funding sources, which account for two-thirds of CTF revenue, are state motor fuel taxes and state motor vehicle registration fees.

In terms of policy to address issues of funding, one of the primary goals of the previously published transit plan was to ensure adequate funding, which translates to a predictable, sufficient funding base to meet increasing service needs. To do such would require a securing of locally generated funds, coordination of transportation funds from multiple sources, participation in the competitive grant application process, and continued reception of federal and state support. To specifically address this policy, the plan also denoted strategic incentives including the consideration of adopting a more predictable formula so state funding is tied more closely to the economy, a multi-year authorization bill that will provide funding targets for several years, and a two-year legislative budgeting cycle.

Demographic Equity

The Michigan plan has a portion of the report dedicated to the integration of transit assets, services, and operations in an effort to both remove economic barriers and generate economic activity by connecting current transit services to key segments of the population. These segments include urban commuters, students and young people, elderly and disabled persons, and ex-urban and regional commuters. Within the MDOT plan, most attention is given to the aging population, with a number of suggested initiatives aimed toward addressing potential results from a rise in this demographic

group. The four specific initiatives outlined in the plan are system design, community design, advanced technologies, and a coordination of services.

Further, the report lists strategies that agencies could strive to achieve in the short run, including: improved schedule reliability, guaranteed-ride-home services, increasing information for trip planning, customer relations training for drivers, and discovering ways to better service specialized travel needs. While in the long run, transit agencies need to vary the types of offered services and prices, so as to replace the current one-size-fits-all approach to public transportation. Finally, transit agencies need to shift the paradigm to a focus on mobility management, facilitation, and organizing rather than simply operating public transit services.

Coordination

The MDOT report identifies a transit policy surrounding coordination, which resulted from a transportation summit held in December 2003. The results of this summit summarized several issues impacting coordination within the state, which included a lack of state incentives to promote regional coordination among public transit systems and a limitation within the current funding distribution process that encourages a silo mentality. This problem identification led to the creation of a goal to integrate a multi-modal transportation system that is cross-locality and cross-regional in nature and a second goal to provide financial incentives for the development of a comprehensive and coordinated approach to statewide transportation systems at all levels on all projects. To achieve these goals, actions by the regional governments should aim to aim to create an information clearinghouse for all modes, which can be accessed by individuals, in addition to acting to entice all modes to participate in routine regional coordination forums, promoting the development of regional coordination plans, and the providing of best practices/technical assistance. Moreover, the state government should act to fund a service to inventory all transit methods that is available to the public, facilitate planning, hold regional summits, and also provide the best practices/technical assistance component.

In terms of human transportation coordination, the plan details six goals that were laid out by a workgroup associated with the Michigan *United We Ride Action Plan*. These goals include regional and local coordination to develop sustainable bodies serving the informal Transportation Coordination Zones that are based upon unique regional/local needs and operate within available sources, as well as goals of increasing customer participation, developing customer information systems, enhancing the economic value of coordination, promoting state administrative workgroup on barriers to coordination, and exploring methods to encourage the sharing of best practices and local resources.

Land Use

Specific discussion of strategies toward land use decisions in public transportation policy is limited in the MDOT plan. One of the goals revealed from the MDOT Transportation Summit was related to mobility options and sought the encouragement and incentivizing of urban land uses that support and sustain a world class transit system with particular attention toward transit and non-motorized modes. Also, the plan outlines a possible action item for the state as being the development of better ways to integrate transit planning, land use planning, and development decisions to increase transit ride use and usability. More discussion on the critical role of land use decisions on public transportation may be found in the *Land Use Technical Report* of the Michigan transportation plan.

Minnesota Department of Transportation's "Greater Minnesota Transit Plan 2010-2030" (2009)

Federal & State Funding

Public transit in Minnesota is currently funded through a variety of sources including the State General Fund, the Motor Vehicle Sales Tax (MVST), the federal government, and local jurisdictions. Although, the State General Fund has historically been the greatest contributor to transit, by 2012, the MVST will be providing at least 40% of its revenues toward statewide transit operating expenditures. To date, the increase in funding from this revenue source, which provided $7.2 million in 2005 and $14.2 million in 2009, has helped to alleviate burdens consequential of a decline in revenue provided by the State General Fund, which has decreased from $17.6 million to $16.1 million during the same time span. The local share of transit funding for the state is set by a local share funding formula where urbanized and small urban areas have a 20% share and rural areas have a local share of 15%, which is met through a combination of fare box or auxiliary revenues and local tax levels.

In terms of strategic direction in funding, the State of Minnesota has developed a policy to maintain and expand the statewide public transit network. The strategy is composed of three sequential steps in which the Minnesota Department of Transportation (MnDOT) will prioritize financial assistance toward existing transit services that meet performance targets. Upon reaching this goal, MnDOT will focus remaining funding sources on efforts to create transit services in areas without present transit service. Finally, in a scenario where both prior goals are fulfilled, MnDOT will provide available resources to expand the core service frequencies and service hours of existing service providers. These strategies will be evaluated by a measure of bus service hours and accessibility to intercity bus service that will in turn be measured by indicators of cost efficiency, service effectiveness, cost effectiveness, and availability.

Demographic Equity

One of the core challenges listed by MnDOT is the changing mobility needs of individuals who have by tradition had mobility limitations: seniors, minorities, low-income persons, and persons with disabilities. Each of these populations is expected to increase in the future and as such various efforts to address the unique challenges presented by population growth have been conducted by MnDOT. Efforts during this particular planning effort were aimed toward gathering public input and included facilitated workshops, structured interviews, and surveys.

Increasing the mobility for individuals is a declared policy by MnDOT, who has put forward specific strategy to work with metropolitan planning organizations (MPOs), regional development commissions (RDC), tribal and local governments, and transit providers to address mobility needs, in addition to a strategy to that long-range transit decisions address future demographic shifts through plans and policies. These separate strategies will be evaluated by the measure of service hours and accessibility to intercity bus, which will be more specifically indicated by availability and ridership productivity. Further, MnDOT has established a strategy to continue its investment in size-appropriate ADA-accessible equipment to maximize operating efficiencies, which will be evaluated by a measure of service life for the transit fleet.

Coordination

The policy of coordination in public transit services is described by MnDOT both in terms of coordination amongst human service agencies, as well as in regards to regional coordination. The assortment of human service programs, which are categorized into three broad categories (elderly and persons with disabilities program, non-emergency medical, and head start), and public transit providers presents a coordination challenge for state and local governments. In order to receive federal funding, these human service organizations must be part of a locally developed coordinated public transit-human service transportation plan. A reoccurring challenge arising from these coordination plans is an inability for intercounty travel by transit customers, as counties are often unwilling to allow their vehicles and drivers to cross county borders and regulations bar the sharing of vehicles between 5310 program operations and public transit operations.

In addressing such coordination challenges, MnDOT has proposed several strategies including: a partnership with state and local human service agencies to harmonize service planning and operations for individuals with mobility limitations, an expansion in marketing and information services to better inform target populations of available services, and the enhancement of communication at the local level through the establishment of mobility management organizations at the regional level. MnDOT

hopes the success of these specific strategies will be indicated by cost efficiency, service effectiveness, cost effectiveness, availability, and ridership productivity.

Land Use

The discussion concerning the land use and public transportation connection within MnDOT's plan mainly pertains to the dichotomy between the mainly-residential counties in the suburbs and the employment-rich Twin Cities and the development of facilities to better support this association. Three separate facilities are described in the plan (park-and-pool facilities, park-and-ride facilities, and bus-only shoulders) that may lead to improvements in transit service via alterations in land use. Park-and-pool facilities are generally created in the automobile-oriented suburbs where access to transit services is lacking, while park-and-ride facilities, also typically found in the outer edges of larger cities, provide transit accessibility to those outside the transit system's boundary. Bus-only shoulders enable the bus to utilize shoulders of congested highways during peak period travel. The Twin Cities Metropolitan Area has 290 miles of bus-only shoulders (more than five times the national total), which allow transit operators to maintain predictable route travel times during peak traffic and riders to gain perceived time savings. Further, the use of highway shoulders may be a temporary solution for buses during construction activities that inhibit capacity achievements.

MnDOT has established a strategy where they have arranged to work with local transit and planning officials to generate land use and transportation interaction decisions. In addition, MnDOT will work with a variety of agencies in order to assure the workforce has new routes, expanded vanpool and carpool assistance, and park-and-pool and park-and-ride facilities. This latter strategy will be measured by examining bus service hours in Greater Minnesota.

Connectivity

Concerning the issue of connectivity of public transportation services, MnDOT's plan addresses several possible transit options including intercity bus service, commuter bus service, rail service, volunteer drivers, university fare integration, and the aforementioned rideshare strategy. According to this plan, intercity bus service is currently available to the 85% of Minnesotans who live within 25 miles of an intercity bus stop. While only one carrier (Jefferson Lines) receives funding through the Section 5311(f) program, there are a great number of operators offering commuter bus routes for service to the Twin Cities and Rochester, with the latter urban area being linked to more than 40 surrounding cities via commuter bus lines. MnDOT believes the most popular commuter lines may one day be succeeded by intercity passenger rail service as was the case with the recently established Northstar Commuter Coach between Big Lake and downtown Minneapolis. While commuter service is often only available to residents near an urban hub, a volunteer driver system is intended to provide rural

residents access to destinations beyond the public transit system area served. In Greater Minnesota, 28 counties utilize a volunteer driver program, where transportation is provided by a volunteer who provides their own vehicle, as a strategy to address limited transit options and the high cost of private transportation.

University fare integration is a student-oriented program that allows students at local participating universities to take public transit at reduced or no cost. This effective travel demand management (TDM) strategy has enabled college towns to cope with the increased demand for parking due to university growth as well as the increase in congestion. Another TDM strategy has been MnDOT's rideshare efforts that utilize both carpooling and vanpooling, however, a pilot program near Moorhead was discontinued after it was deemed too expensive.

Montana Department of Transportation's "TranPlan21: Public Transportation Policy Paper" (2007)

Federal & State Funding

The Montana Department of Transportation (MDT) describes a key challenge for public transportation within the state as being the issue of funding. Currently, the funding of transit comes mainly from the federal funding programs, the use of Surface Transportation Program funds, and the Transportation Assistance for the Disabled and Elderly (TransADE) Program (funded through vehicle registration fees). A policy goal of MDT is to promote and support the increased use of public transportation systems through an action of transferring Urban Highway funds to transit at the request of local governments. Another action item to address support this policy is the inclusion of advanced project and design planning of highway improvements to include transit infrastructure needs. The result of this action will be a reduction in the future need for expensive and disruptive retrofits of the street and highway network, in addition to the inclusion of public transportation in the initial stages of urban highway projects that will make transit an integral part of the area's transportation network.

Demographic Equity

Montana has historically had an active, successful program for providing public transportation services to the elderly and persons with disabilities, which includes reception of the first Section 5310 vehicles in the nation. Within the aforementioned TransADE Program, MDT awards operating grants on a 54/46 operating, 80/20 administration, and 80/20 maintenance funding ratio to eligible transit providers who serve the elderly and persons with disabilities. To further address demographic equity, MDT has proposed an action item to support the implementation of rural ridesharing to help rural areas meet basic mobility needs. Also, within the third policy goal of the MDT plan, which is to improve the service to social service passengers and the

transportation disadvantaged, there is an action item to improve state agencies and local provider cooperation in funding consolidation. The development of cost-effective transit systems may arise through an increased role of the Transportation Advisory Committees (TACs), which provide local guidance for transit planning. Finally, MDT encourages a policy action item of continuing to work with the Public Service Commission to facilitate easier entry into passenger service provision, especially Medicaid transportation.

Coordination

To improve coordination among human service agencies, the Montana Department of Public Health and Human Services received federal grant money to develop the demonstration project, *The Real Choice Systems Change Grant*, to increase the effectiveness and efficiency of these agencies by providing coordination expertise, appropriate technical solutions, and funding for selected systems change projects. Although, Helena witnessed an increase in ridership from participation in the project, there are no further grants forthcoming. To address coordination in the future, an issue determined to be in need of improvement, MDT has suggested one policy action to be the use of TransADE funding as a medium for improved coordination. This action will use TransADE as a funding mechanism to improve the persistent problem of coordination and avoid duplication of funding and overlapping functions.

Connectivity

A major concern of MDT is the continued decline of intercity bus service in Montana, which has left 15.4% of its counties without intercity bus service. The state notes that rural communities have limited budgets and therefore must effectively concentrate their finite resources toward providing sufficient local service. MDT has concluded that the most effective role for the state government is to facilitate the use of intercity bus and rail by making private sector providers eligible for certain types of funding. This informing of potential providers to the availability of federal intercity funds will help to fulfill a policy goal of both preserving existing intercity transit service and encouraging the development of new services. Additional action items to meeting this policy goal include supporting the provision of intercity bus service through TransADE, where TransADE funds are an allowable source of a local match to federal funds, and the improvement of intermodal passenger facilities, so as to increase patronage by making public transit more attractive and accessible.

New Mexico Department of Transportation's "New Mexico Statewide Public Transportation Plan" (2010)

Federal & State Funding

Federal funding sources for public transportation in New Mexico is from 13 formula and discretionary grant programs authorized by the USDOT ($22.2 million in FY2009) in addition to ARRA capital projects ($27.5 million in FY2009). In terms of state funding, New Mexico provided operations, construction, and planning grants ($53.6 million in FY2009) to Regional Transit Districts (RTDs), New Mexico Park and Ride, and New Mexico Rail Runner Express. One approach employed by the State of New Mexico to more efficiently fund public transportation in its rural areas has been the 2003 creation of a RTD model. Additional legislation was passed within the RTD model that allows member counties to increase the Gross Receipts Tax (GRT) for regional transit district purposes via popular vote of an ordinance. Currently, there are four such RTDs in the state, which have experienced an efficiency of operations due to better coordination and economies of scale from consolidation of services. As for local funding sources, the majority of operators receive funding from the General Fund of their local governmental entity so as to provide the matching requirement for federal funding. One exception to this norm is the City of Santa Fe which dedicates one-quarter of one percent of GRT to fund transit as well as a portion of its lodger tax, since the fixed-route system supports several tourist-related events.

Demographic Equity

The NMDOT notes the primary benefit of public transportation as being a service to provide a basic level of mobility for those who for reasons of age, health or income levels must have an alternative to a private automobile to perform daily activities. This vantage to invest in the mobility and access afforded by public transportation is proactive in creating positive outcomes for individuals and communities rather than being a reactive response to urgent public needs in funding. The Park and Ride program sponsored by NMDOT and federal programs such as JARC provide improved access to many residents who would otherwise be unable to reach their employment sites.

The analysis accompanying this plan identifies 12 communities as priorities for new rural service and another 10 communities for new human services transportation. One defined responsibility of the plan is for NMDOT to sponsor demonstration projects, while a second is for local providers to provide services to special needs individuals according to federal and state guidelines. Finally, an objective of the NMDOT Transit & Rail Division is to promote the availability of some form of public transportation in all parts of the state, with particular attention to human service groups in small urban and rural areas.

Coordination

The NMDOT Transit & Rail Division have developed seven coordination plans, in lieu of federal mandates for recipients of federal funding for rural and small urban projects, which envelop a number of purposes including the listing of strategies to establish or improve public transportation services. In addition to promoting demographic equity, a strategy of these plans is to encourage collaboration between existing services. To address this strategy the state, regional and local/tribal transportation providers have provided considerable service investment to coordinate bus and van services with the scheduled train service of the Rail Runner Express. A guiding principle of the NMDOT plan is sustaining a partnership with tribal governments where the agency assists in the Section 5311c program aimed at creating public transportation on Indian reservations, as well as provides grant application and administrative support to the Tribal Governments in expanding their access to federal grants. Also, NMDOT supports a call center that provides customer information on transit services and connections in the Santa Fe area.

However, the most important aspect to regional coordination may be the implementation of the RTD organizational structure. These districts provide an umbrella service for the planning and delivering of public transportation for larger areas. Each of these RTDs can provide a centralized information center, a unified fare policy, and a clear definition to the types of services available. Further, RTDs can ensure coverage for dispatching and other duties by concentrating support staff in a single office. NMDOT lists a number of policies for RTDs to institutionalize, including: developing and adopting transit service plans for the region; identifying potential new services; identifying sources and demonstrating financial capacity to sustain operations; achieving economies of scale in service delivery; collaborating to achieve interconnectivity across regions; participating in marketing and promoting of services; and ensuring consistency in regional plans.

Environment

One of the guiding principles to the NMDOT plan expresses environmental responsibility through a reduction in carbon dioxide emissions and gasoline consumption. Further, according to the plan, a third primary benefit of public transportation is the environmental benefits of public transportation usage as indicated by air quality and energy conservation. The future addition of Park and Ride routes in the southern portion of the state would help to reduce air pollution, which is eagerly sought as the area between Anthony and El Paso has been designated a non-attainment area for particulate matter, while Sunland Park (adjacent to El Paso) has been designated a marginal non-attainment area for ozone. The addition of routes in this corridor was conservatively estimated to annually remove 3.4 million vehicle miles of travel, reduce carbon dioxide emissions by 1,654 tons, and reduce gasoline consumption by 170,000

gallons. NMDOT believes details the importance of all states and localities to demonstrate leadership and serve as role models on environmental stewardship.

Connectivity

In terms of connectivity, the plan states that one of the key functions of the state transportation system is to link cities and regions together. Intercity connectivity is an important high-level function of the transportation system that individual regions and cities cannot be expected to address on their own. This connectivity in intercity service is provided by the Park and Ride program, which connects outlying communities with the north-south Rail Runner Express service between Belen and Santa Fe. The plan also detailed six potential Park and Ride corridors for future consideration in expansion.

The priorities of intercity service include the continuation of existing intercity bus services, which will require an increase of 11 buses by 2025 to continue current service standards, and the continuation of the existing commuter rail service, which must continue to integrate the service with the Park and Ride routes and other local services. As for institutional and policy issues to consider in the future, the plan delegates the responsibility to collaborate toward interconnectivity within and across regions to the MPOs, RPOs, RTDs, and local providers.

South Carolina Department of Transportation's "South Carolina Statewide Transit Plan" (2008)

Federal & State Funding

Federal funding of public transit in South Carolina is derived from 12 different programs, with the amount of funding being closely correlated to total statewide ridership figures rather than population statistics. Funding from the state-level is restricted to a quarter of one cent from the state's Motor Fuel User Fee (16.8 cents per gallon), which provided approximately $5,864,000 toward public transit in 2004, and is distributed by formula. At the local-level, there are several systems that are establishing dedicated local funding sources through half-cent sales taxes and vehicle registration fees.

Federal funding for South Carolina has remained flat in recent years. This trend has occurred, despite the trend of stable growth in funding from many of the programs, due to a significant decline in funding from the Section 5309 Bus and Bus Facility program. State funding from the Motor Fuel User Fee, the other constrained funding source, has also remained flat in recent years and may experience an overall decrease in purchasing power in the later planning horizon due to the fee not being indexed to inflation rates. As these funding sources, and the complementary unconstrained sources, will not meet the transit needs of South Carolina, therefore, potential new,

dedicated funding sources must be identified. Potential alternative sources of funding, based upon input gathered from community leaders and state residents, may include mechanisms such as local motor fuel user fees, lottery revenues, local sales taxes, reallocation of DOT funds, vehicle registration fees, hospitality taxes, business taxes, etc.

Demographic Equity

A demographic concern noted by SCDOT is the steadily increase in the number of persons age 65 and older, with coastal and rural counties possessing a relatively high percentage of elderly residents. A second demographic concern within South Carolina is the state's high poverty rate in its rural areas. In the surveying process, community leaders listed the elderly, persons with disabilities, and impoverished persons as the groups most deserving of transit service, whereas the surveyed residents listed persons with disabilities, everyone, and elderly citizens as the three most deserving groups to serve.

Two of the developed policy visions by SCDOT address the issue of demographic equity: viability of transit and accessibility to all. These separate visions were further expressed within the action plan segment of the document. In accordance to the demand forecasts (8.9 million trips for the existing rural systems in 2030), South Carolina must expand transit service in its role as a mobility option through the identifying new services that are cost-effective with defined benefits that warrant sustainability and funding. Also, the state needs to target gaps in service to rural areas, as only 34% of the total transit need is currently being accommodated in counties with existing service. Finally, the state should look to partner with the new developments catering to the elderly population to help fund transit programs.

Coordination

Two strategies within the action plan are aimed toward increasing coordination through the planning process. The first policy, to engage non-traditional partners such as the chambers of commerce, tourist community, and economic development agencies, will be critical to the expansion of transit as well as premium service transit. Routes serving the coast and transporting many inland workers to and from their jobs has steadily increased in the recent past and are expected to continue this trend in the future. Human service transportation has been very successful in the state because of intense coordination planning exercises between transit providers and human service agencies. The Medicaid program has one of the largest transportation budgets of any program in the state must be further engaged, as the relationship between SCDOT and Department of Health and Human Services has been inhibited by the state political structure that has made them non-traditional partners. Other non-traditional partners that should be further engaged include private employers, non-profit organizations,

and government agencies. Transit providers may connect with these potential partners to promote the federally-sponsored tax-free commuter benefits program, Commuter Choice, which allows employers to pay $115 per month for their employees to commute by transit or vanpool in exchange for a tax deduction.

The second policy, to increase coordination among providers, is a strategy to integrate the efforts of the various state agencies in intra-agency and inter-agency coordination initiatives. However, the policy of the SCDOT plan alludes to the uniqueness of the separate regions within South Carolina and states that each COG should develop an evaluation process to identify which regional projects will receive funding.

Land Use

The discussion about the connection between land use and public transportation is limited within the SCDOT plan to one action item. This specific policy is aimed toward coordinating decisions concerning transportation, the traditional responsibility of the state, and land use, the traditional duty of local governments and their zoning ordinances. SCDOT views sprawl as an expensive occurrence, which must be remedied through cooperation between the state and its municipalities, which in the past has the lacked adequate incentive to initiate. A first voluntary step toward improving transportation and land use planning may be access management techniques that supervise access to facilities such as highways. This approach may preserve the operational integrity of the transportation system while maintaining land use compatibility in addition to increasing public safety, reducing congestion, and extending the life of major facilities.

Connectivity

Relating to connectivity, the South Carolina Statewide Transit Plan discusses intercity bus and rail service, commuter service, and the potential for future high-speed rail connections. In addition to the intercity bus service offered by several of South Carolina's public transit providers, there are three national or regional providers serving the state (Greyhound Lines, Southeastern Stages, and Carolina Trailways). Currently, there is service to all of the major cities in South Carolina, but, in accordance with national trends, many rural areas are without access to intercity bus transportation. South Carolina does not provide subsidies for intercity bus service. As for intercity rail service, there are only four trains that pass through the state. Yet despite an unattractive schedule and limited frequency, the ridership along these lines increased with the rise in gas prices and airfare. The state provides no contributions to the capital or operating cost of the Amtrak services and the thruway bus service between Florence and Columbia was discontinued after federal compliance issues and low ridership.

In contrast to expanding intercity bus and rail service, SCDOT seems to favor policies that increase commuter based services and investigate potential high-speed rail services. SCDOT believes the state should support regional commuter transit through an increase in capital expenditures such as the implementation of formal park and ride facilities, purchase of rolling stock, corridor preservation, and the introduction of pilot programs like the SmartRide program. Another source for commuter-based services may be an intercity bus program that connects suburban or rural residents to jobs along the coast. Finally, a corridor plan was completed during the development of the statewide transportation plan. This plan identified corridors for transit implementation that would attract choice riders. In addition, the state is actively producing high-speed rail studies that look to preserve right-of-way. Obviously, the implementation of a high-speed rail line through South Carolina would only be feasible through the creation of a funded national program.

Appendix B

Technical Memorandum 2: Existing Vermont Public Transit System and Demographic Analysis

KFH GROUP, INC.

2012 Vermont Public Transit Policy Plan

Technical Memorandum 2
Existing Vermont Public Transit System and Demographic Analysis

January, 2011
(Revised March, 2011)

Prepared for the:

State of Vermont
Agency of Transportation

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Technical Memorandum #2: Existing Vermont Public Transit System and Demographic Analysis

INTRODUCTION

The Vermont Public Transit Policy Plan (PTPP) is currently being updated for publication in 2012. The purpose of the PTPP is to review and update transit polices and goals and to develop strategies to meet current and emerging public transit challenges. The PTPP is part of a series of policy plans developed by the Vermont Agency of Transportation (VTrans) addressing, in addition to transit, rail, bicycles/pedestrians, air, and roadway policies. Together these policy plans provide direction for VTrans' various programs, as well as forming the basis of the State's Long Range Transportation Business Plan (LRTBP).

This technical memorandum presents the results of Task 2 and outlines the status of public transit services and public transit needs in the State. This is the second in a series of eight technical memoranda that will be prepared as the PTPP plan is developed. The first technical memorandum that was prepared concurrently outlines the context within which public transit is provided in the State. It should be noted that a discussion of the stakeholders and their organizational relationships was included in the technical memorandum on Task 1. Also, this second memorandum includes a preliminary transit needs analysis, while Task 4, presented in the fourth technical memorandum, provides a more detailed assessment with updated data.

This memorandum includes a number of elements:

- Inventory and Assessment of the Vermont Public Transit System
- Demographic Analysis of the Need for Public Transit
- In-State and Inter-State Connectivity

The use of management systems and other systems under development will be a specific topic of discussion with the operators at the next Public Transit Advisory

Council (PTAC) meeting. The discussion will include their use of management techniques or systems, financial or paratransit management software, communication techniques or products that currently are in use, and their evaluation of the usefulness of these. All systems seem to have a website with varying levels of complexity. Chittenden County Transportation Authority (CCTA) also offers instant notification of service changes on its commuter services through a text alert system. During the previous PTAC meeting the need for new demand response scheduling/dispatching software was discussed.

INVENTORY AND ASSESSMENT OF THE PUBLIC TRANSIT SYSTEM

Vermont is served by ten public transit providers that offer a range of transit services, from local fixed-route to demand response to commuter.[1] Figure 2-1 portrays VTrans' map of service areas for these transit providers, and Figure 2-2 illustrates the fixed and deviated routes operated throughout the State. It is important to note that demand responsive services offered by the public transit providers, which essentially cover the entire State, are not shown on these maps. Another note is that commuter services that extend from a common location may not necessarily interline.

The types of transit services, service characteristics, fares, coordination efforts, organizational structures, budgets, and vehicle fleets of Vermont's current public transit providers are summarized below.[2] This information on existing transit services is analyzed together with demographic data, presented in the second part of this memorandum, to determine potential unmet transit needs in Vermont.

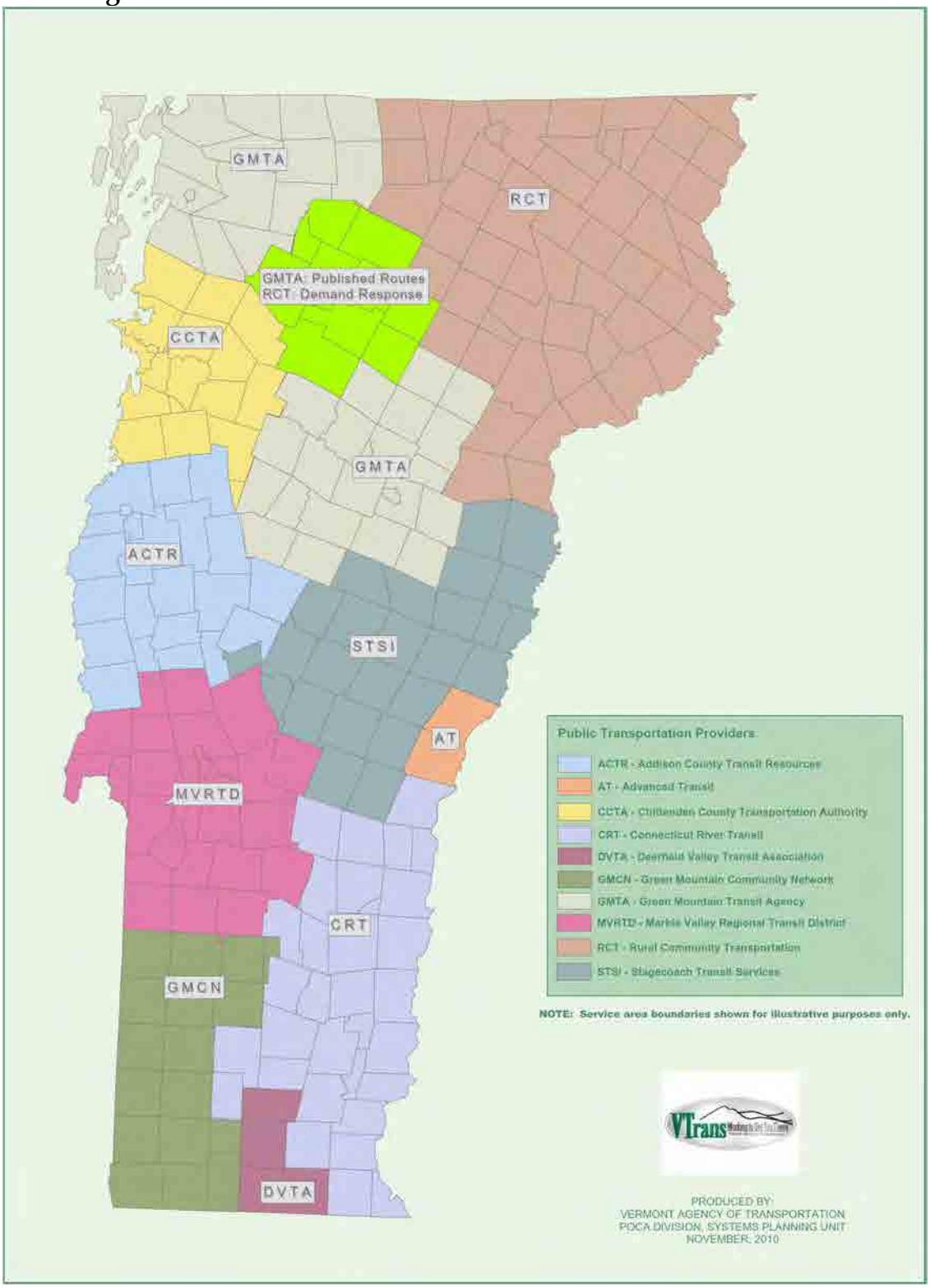
Advance Transit (AT)

AT provides public transit services across State lines in the Upper Valley, serving the towns of Hartford and Norwich in Vermont and Hanover and Lebanon in New Hampshire. AT also provides commuter service to Enfield and Canaan, New Hampshire. Figure 2-3 captures a map of AT's fixed-route bus services. These services operate Monday through Friday, generally between 6:00 a.m. and 7:00 p.m. at 30-minute to hourly headways. The shuttles that serve Dartmouth College and

[1] The Brattleboro BeeLine is now operated by Connecticut River Transit, and is no longer considered a separate provider.

[2] Much of this information was based on the transit agencies' applications for FTA Section 5311, 5316, 5317 and/or State Operating & Administration Assistance for FY 2011, provided by VTrans. The figures for the transit agencies' FY 2010 operating budgets and riderships were also provided by VTrans and represent data for the 5311 program and CMAQ-funded services only; the number of riders per hour and costs per passenger were also calculated with this data. The FY 2010 operating costs and ridership for CCTA were provided separately by CCTA.

Figure 2-1: Service Areas of Vermont's Public Transit Providers



Source: VTrans Website, **http://www.aot.state.vt.us/ops/PublicTransit/providers.htm**.

Figure 2-2: Fixed and Deviated Routes in Vermont

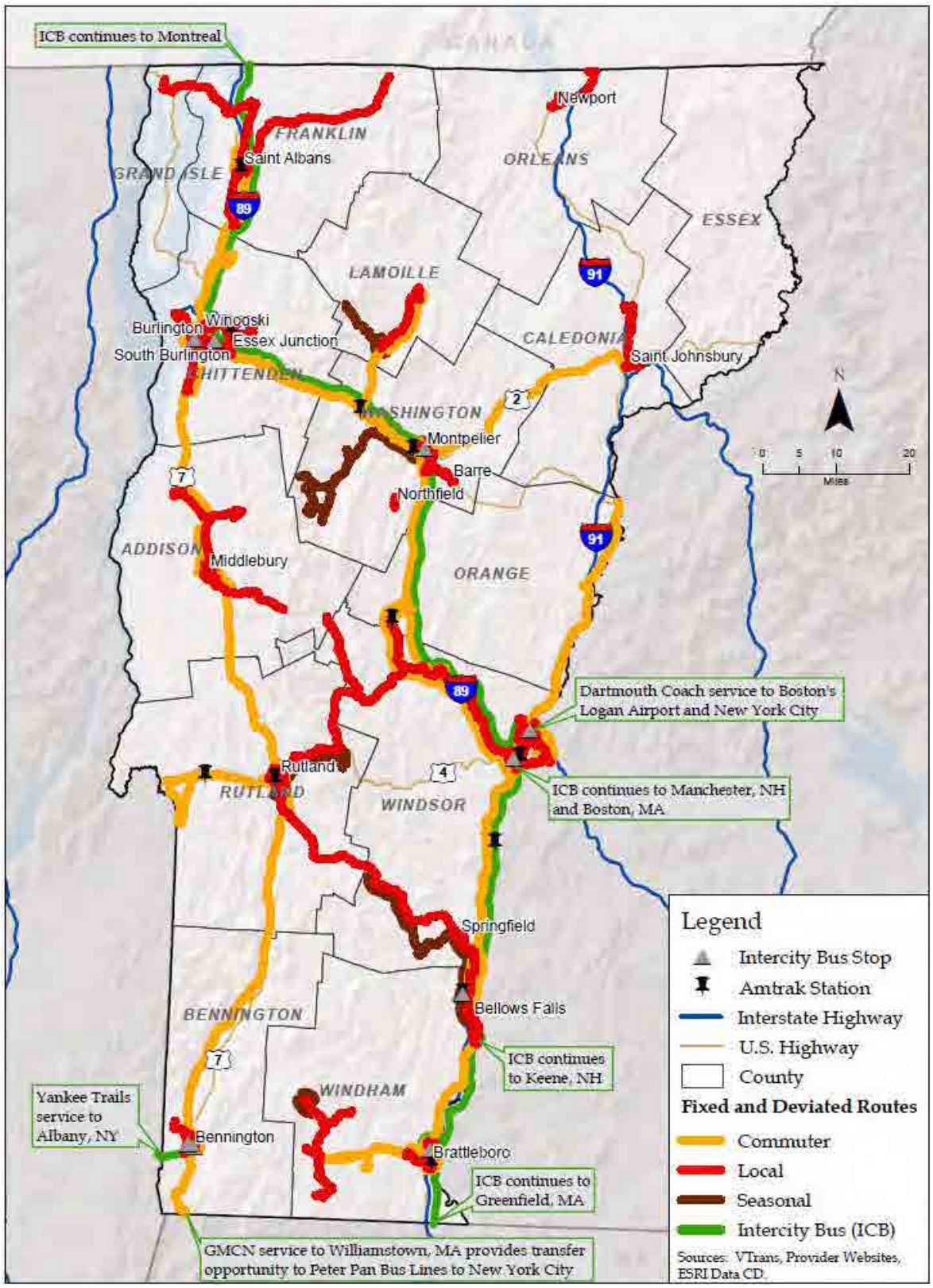
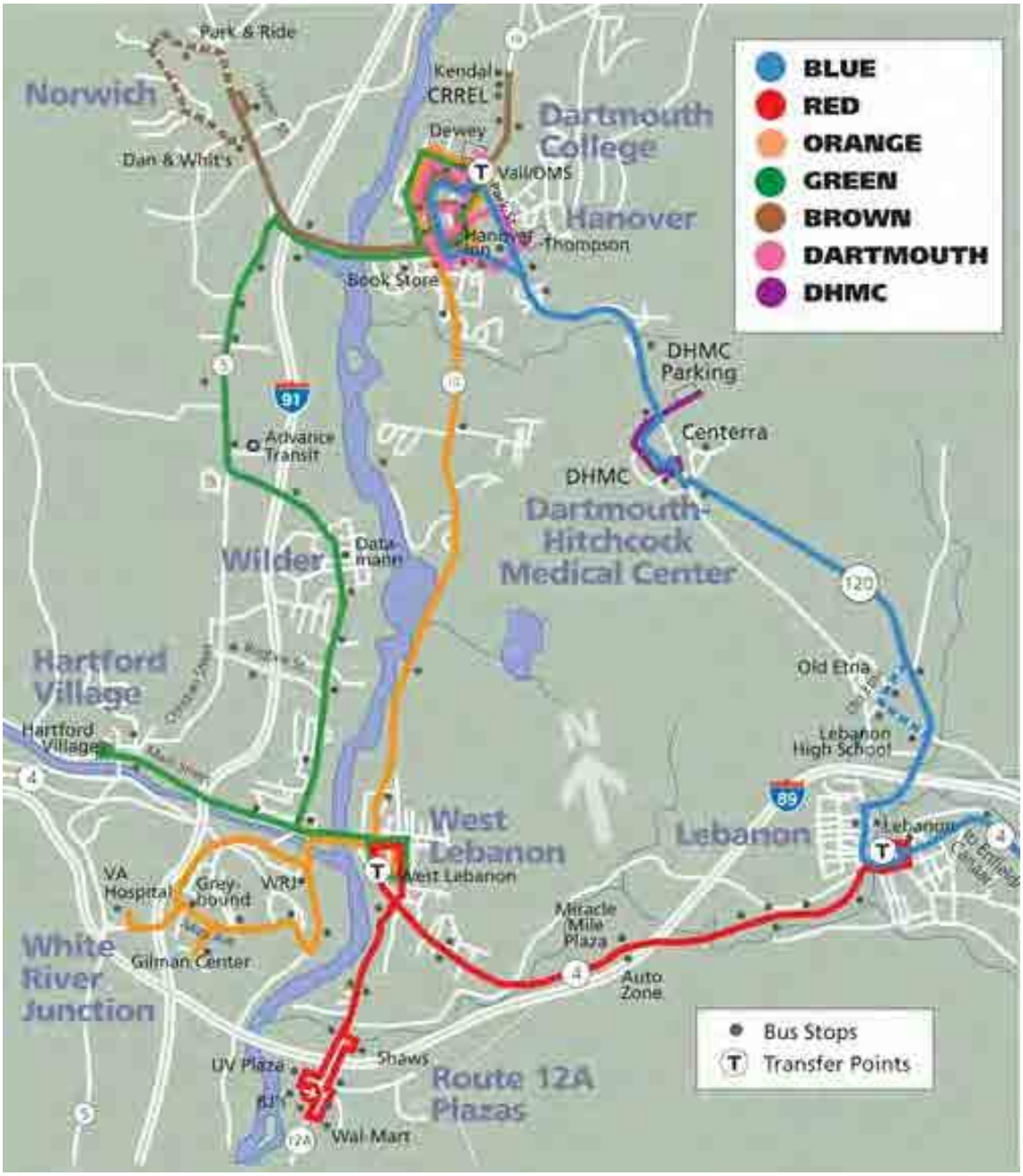


Figure 2-3: Advance Transit Fixed-Route Services



Source: AT Website, **http://www.advancetransit.com/routefinder.htm**.

Dartmouth-Hitchcock Medical Center operate at higher frequencies, and the Dartmouth Shuttle also provides night service until 9:00 p.m. While passengers must typically access these services at AT bus stops, deviations up to a quarter-mile may be reserved in advance on the Dartmouth Shuttle evening service, and flag stops are permitted on a portion of the Red Route. AT also provides Americans with Disabilities Act (ADA) complementary paratransit service, called Access AT, for eligible persons with disabilities who cannot use the fixed-route bus services due to his or her disability. Access AT is a curb-to-curb, shared ride service that operates in the same area and during the same hours as the fixed-route bus services.

All AT services are fare-free, thanks to the contributions of Upper Valley towns, Dartmouth College, and the Dartmouth-Hitchcock Medical Center. AT provides information about its services through a website and schedule brochures that are distributed to hundreds of locations, such as offices, banks, and grocery stores, throughout the service area. AT promotes its services at trade shows and community events, and is an active member of three Chambers of Commerce as well as the Upper Valley Transportation Management Association (UVTMA). Through the UVTMA, AT coordinates with Stagecoach Transit Services and Connecticut River Transit in Vermont and Community Transportation Services in New Hampshire to provide information on public transit and promote connections between transit systems in the region. AT also promotes intermodal transportation with connections to Amtrak, Greyhound, and Dartmouth Coach.

AT is a non-profit organization led by an Executive Director and overseen by a Board of Directors. The Board of Directors includes members appointed by municipalities and representatives of local institutions, including Dartmouth College, Dartmouth-Hitchcock Medical Center, and the Upper Valley Lake Sunapee Regional Planning Commission. AT also has a separate ADA Advisory Committee whose members are consumers. The Board oversees the Executive Director, sets agency policy, and approves the budget and service changes, and members act as liaisons with local communities and institutions.

In FY 2010, AT's forecasted total operating budget was $4.52 million. The services funded through VTrans, the Green, Brown, and Orange Routes, cost about $466,000. Funding sources included federal grants (S.5311 and Congestion Mitigation and Air Quality Improvement Program (CMAQ)) and State assistance from both Vermont and New Hampshire, local contributions from municipalities and institutions, foundation grants, a bus sponsorship program for local businesses, and a philanthropy development program with more than 1,000 donors. In FY 2010, the ridership for the Green, Brown, and Orange Routes was about 66,400, and AT had 16.3 riders per hour and a cost per passenger of $7.02. The vehicle fleet includes seven wheelchair accessible vehicles. Buses also have bicycle racks, which can accommodate two bicycles.

Addison County Transit Resources (ACTR)

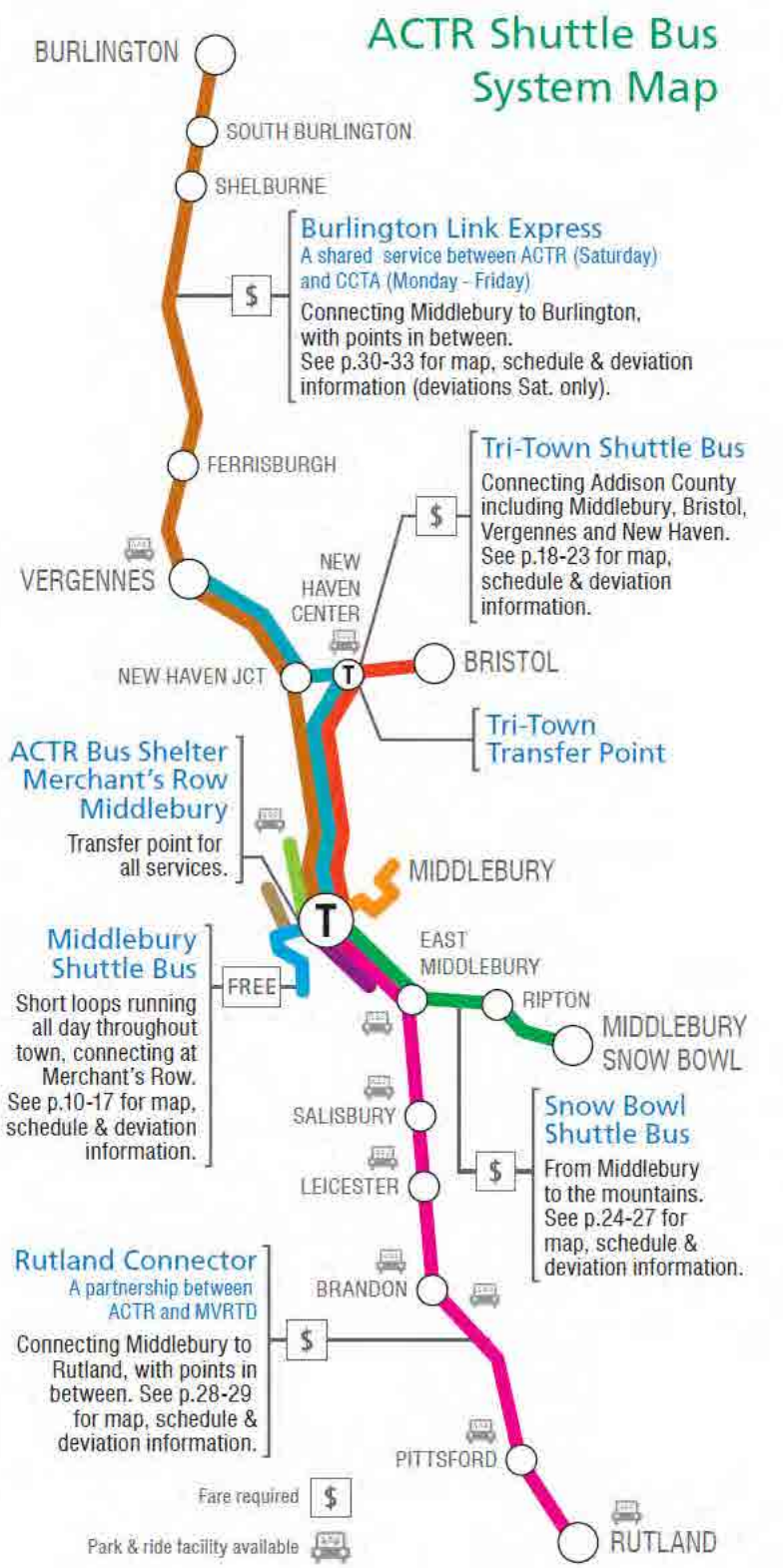
ACTR provides public transit services primarily in Addison County, except for the towns of Hancock and Granville, as well as commuter connections to Chittenden and Rutland Counties. Figure 2-4 displays ACTR's shuttle bus system. Deviations up to a half-mile on most of these routes (a quarter-mile for the Rutland Connector and Saturday Burlington Link Express) may be requested a day in advance. Most services operate Monday through Friday between 5:30 a.m. and 7:30 p.m., with headways ranging from 30 minutes to hourly. A few shuttle bus services run during the weekend, and Dial-a-Ride services are available all day.

In addition to transit for the general public, ACTR offers Dial-a-Ride services through programs for specialized populations including older adults, age 60 and above, persons with disabilities, and low-income families and individuals. ACTR partners with State agencies and human service organizations, such as the Vermont Department of Families and Children, the Vermont Association for the Blind and Visually Impaired, the Champlain Valley Agency on Aging, Counseling Service of Addison County, and Addison County Home and Health Hospice, to offer these programs.

The local shuttle bus services in Middlebury are fare-free, as are services provided through the Medicaid and Elders and Persons with Disabilities (E&D) programs. The regional bus services within Addison County have a $1 fare, while those to Burlington and Rutland have $2 to $4 fares. Ten-ride and monthly passes are also available, and youth and older adults pay discounted fares. ACTR provides information about its services through its website, annual reports, and newsletters and distributes more than 10,000 schedules annually. ACTR is now on Google Transit. ACTR works closely with businesses, local economic development groups, human service agencies, civic groups, educational institutions, and hotels to promote its services and increase opportunities for coordination.

ACTR is a nonprofit organization with 28 employees including 16 staff drivers, along with 35 to 40 volunteer drivers. The Executive Director reports to a Board of Directors, and ACTR has an E&D Advisory Committee, which consists of representatives from the partner agencies of its E&D program. In FY 2010, the operating cost for ACTR services was $699,800. Funding sources included federal grants (S.5311 and CMAQ), State assistance, fare revenues, program service revenues, and local contributions and sponsorships. In FY 2010, ACTR provided 78,300 trips through its shuttle bus system and E&D program, at 5.2 riders per hour and a cost per passenger of $8.94. The vehicle fleet includes 19 wheelchair accessible vehicles; ACTR leases six additional vehicles to a local adult day program.

Figure 2-4: Addison County Transit Resources Shuttle Bus System



Source: ACTR Website, **http://www.actr-vt.org/bus_schedules/index.php**.

Chittenden County Transportation Authority

Serving the greater Burlington area, CCTA operates the largest transit system in the State. Its fixed-route network of 19 bus routes is displayed in Figure 2-5. These routes include local bus service in several cities and towns within Chittenden County, commuter services to cities in adjacent counties, and an employee shuttle from a satellite parking lot to downtown Burlington. Service is provided Monday through Saturday, generally from 6:15 a.m. to 10:30 p.m. on 30-minute headways and hourly service after 6:15 p.m. Two trunk line routes provide 15-minute headways during peak hours. There is limited late night service until roughly midnight on two routes. Saturday service is generally provided from 5:55 a.m. to 8:00 p.m., with varying 30-minute and hourly headways. Late night service is limited to one route running until midnight. Sunday service is limited to three routes, which generally run from 8:15 a.m. to 7:00 p.m. with 60-minute headways.

CCTA also offers ADA paratransit services for eligible persons with disabilities. Operated through a contract by the Special Services Transportation Agency (SSTA), ADA paratransit services are available within three-quarters of a mile of the fixed-route system. Other services that CCTA provides include shopping shuttles from senior housing complexes to local supermarkets and special routes, called 'Neighborhood Specials', which connect residential neighborhoods in Burlington with local schools.

CCTA's regular fare for its local routes is $1.25, and $0.60 discount fares are available for youth, seniors, and Medicare card holders. The fare for LINK Express services within Chittenden County is $3.00, and for LINK commuter service to adjacent counties $4.00. The College Street Shuttle in Burlington is free. Several passes are available at discounted rates including ten-ride tickets and monthly passes. The fare for ADA paratransit service is $2.50 for each one-way trip. CCTA provides information about its services through its website, brochures, public meetings, and various community events including "Way to Go" week, which promotes alternative transportation modes.

CCTA has several partnerships that promote the use of its services. CCTA has partnered with universities and colleges within its service area to offer the Unlimited Access Program, in which the schools provide funding to CCTA and students, staff, and faculty members may ride CCTA for free. CCTA's Smart Business Program involves partnerships with local businesses to promote transit use, some through subsidies of CCTA tickets or passes, among their employees. CCTA also runs a "Provide-a-Ride" program in which it provides one free bus ride to social service and non-profit organizations per monthly pass sold. CCTA's coordination efforts include providing transfer, schedule, and fare information for ACTR on its schedule for Middlebury

Figure 2-5: Chittenden County Transportation Authority Fixed-Route Network

Source: CCTA Website, **http://www.cctaride.org/bus-information/system-map.html**.

services. CCTA also manages the Green Mountain Transit Agency (GMTA), which provides public transit service in several adjacent counties. GMTA and its services are described separately below.

CCTA is Vermont's first and only transit authority, chartered by the Vermont General Assembly in 1973. Thirty years later, the General Assembly granted CCTA authority to operate outside of Chittenden County, which led to its management of GMTA in central Vermont. CCTA is currently governed by a Board of Commissioners, appointed from its eight member municipalities. CCTA's governance structure will change on July 1, 2011 as it adds four new Board members from the GMTA service area. Annually, the Board sets short- and long-term goals, which guide the CCTA General Manager in setting priorities for each fiscal year. CCTA also has ADA Paratransit and Elderly and Persons with Disabilities advisory committees. In FY 2010, CCTA's fixed-route services, shopping shuttles, and Neighborhood Specials cost about $7.66 million to operate. Funding sources included several types of federal funding, State assistance, fare revenues, local contributions from member municipalities, and private funding from area institutions. In FY10, CCTA provided more than 2.4 million trips, at 29.5 riders per hour and a cost per passenger of $3.14. The vehicle fleet includes 92 lift-equipped wheelchair accessible vehicles, and all buses used in the fixed-route system are equipped with bicycle racks.

Special Services Transportation Agency

Individuals with disabilities, who are not able to use CCTA's fixed-route buses, must apply to CCTA to use ADA paratransit services. Based in Colchester, SSTA is a private, non-profit corporation that has a contract to operate CCTA's ADA paratransit services, available within three-quarters of a mile of the fixed-route system. The ADA paratransit services are provided during the same operating hours as CCTA's fixed routes, described above. Riders wishing to use the ADA paratransit services must call SSTA to schedule a ride. The fare for a one-way ADA paratransit trip is $2.50, while the round trip costs $5.00. Punch tickets for ten one-way trips are available for sale at the SSTA office. An additional person may also pay the fare to ride from the same origin to the same destination; personal care attendants may ride for free.

Within its service area of Burlington, Winooski, and parts of Colchester, SSTA also works with human service agencies to provide transportation services through three other programs: daycare transportation, Elderly and Persons with Disabilities transportation, and non-emergency medical transportation.[3] SSTA provides door-to-door daycare transportation on behalf of Child Care Resource, a nonprofit human service organization that works with families and providers on early child care and

[3] SSTA Website, **http://www.sstarides.org/**.

education.[4] SSTA also provides transportation for older adults, age 60 or older, and persons with disabilities under the State's Elderly and Persons with Disabilities grant. SSTA's Elderly and Persons with Disabilities program transports eligible individuals to meal sites and shopping destinations and for non-Medicaid medical trips and other trip purposes. Most services are provided from 7 a.m. to 5 p.m. on weekdays, though some services operate more limited hours only on specific days. Depending on the E&D service, donations of $1.00 or $2.50 are suggested, and a few services are free. SSTA's other program provides non-emergency Medicaid transportation through Personal Services Contracts between the Vermont Agency of Human Services and local public transit brokers. Eligible users must schedule this type of transportation at least 24 hours in advance.

SSTA's annual operating budget is about $4 million including brokerage costs and taxi reimbursements. The agency provides approximately 116,000 trips per year, not including brokered rides by taxis. SSTA's fleet consists of approximately 50 vehicles, including 30 lift-equipped vehicles and nine sedans.[5] CCTA leases 35 vehicles to SSTA.[6]

Connecticut River Transit (CRT)

CRT operates transit service in southeastern Vermont as "The Current." Shown in Figure 2-6, The Current provides several fixed-route services, including commuter and local routes, in Windham and Windsor Counties. Deviations of up to three-quarters of a mile from the fixed-route are available on the local services by request; requests must be made a day in advance. Most services are provided on weekdays only, the commuter services during peak periods only (generally between 5:30 a.m. and 9:00 a.m. and between 3:00 p.m. and 8:00 p.m.) and the local services during the midday period (from 9:00 a.m. to 3:00 p.m.). The exceptions are a commuter route that serves a shift schedule and a seasonal commuter service to Okemo Mountain Resort, both of which operate daily. The commuter services generally have one- or two-hour headways, while the local services operate at 40-minute to hourly headways. The Current also provides Dial-A-Ride service, which is open to anyone in more than 30 towns within Windham and Windsor Counties. This door-to-door service is available on weekdays only, between 7:00 a.m. and 5:00 p.m. depending on the area. Riders must call two days in advance to schedule a ride.

The Current has suggested fare donations of $1.00 to $3.00 depending on the type of service; no one is refused a ride if they are unable to make a donation. Tokens

[4] Child Care Resource Website, **http://www.childcareresource.org/about-us**.
[5] According to SSTA's Website, **http://www.sstarides.org/About/Vehicles.asp**.
[6] Based on email regarding CCTA fleets from Aaron Frank, Assistant General Manager of CCTA, to KFH Group in May, 2011.

Figure 2-6: Connecticut River Transit Fixed Routes

Source: CRT Website, **http://www.crtransit.org/businfo/system_map.html**.

are also available for purchase in bulk at a discounted rate per ride. The Current provides information on its services through its website, press releases, bus schedules, phone books, mass media, and posters. The Current coordinates extensively with human service agencies and meets with other transit providers in the region to plan services and facilitate regional transit connections and information sharing. The Current connects with intercity bus and train services, and works with taxi providers to deliver some of The Current's transit services. Ridesharing information is also available on The Current's website.

CRT is a nonprofit organization with 22 full-time staff and seven part-time staff, in addition to 55 regular volunteers. The Board of Directors includes representatives from several municipalities within the service area. The Board has an advisory committee whose members include representatives from regional planning commissions, human service organizations, and communities in the service area. The Board reviews the system's finances, and with its advisory committee, sets yearly goals for CRT and makes recommendations on service plans. CRT also participates in a regional stakeholders Transit Advisory Committee, with transportation planners from the regional planning commissions, representatives of State and local human service agencies, and representatives of nearby transit providers, to coordinate the Elderly and Persons with Disabilities grant.

In FY 2010, the operating cost for CRT services was $1.17 million. Funding sources included federal grants, State assistance, fare revenues, and local contributions from municipalities, employers, and human service agencies. In FY 2010, The Current provided 126,500 trips, at 5.7 riders per hour and a cost per passenger of $9.21. The vehicle fleet includes 26 wheelchair accessible vehicles, which are all equipped with bike racks.

The Brattleboro BeeLine

CRT operates the Brattleboro BeeLine, which serves the Town of Brattleboro in southeastern Windham County (in the past the Town of Brattleboro had operated their own transit system through a contract arrangement). A map of the BeeLine's fixed-route services is shown in Figure 2-7. Service is provided daily, from 6:30 a.m. to 6:30 p.m. from Monday through Saturday and from 9:30 a.m. to 3:30 p.m. on Sundays. Headways during the week are generally one hour, though some trips are at 1.5 - to 2-hour frequencies; weekend service operates at 1.5-hour headways. The Brattleboro BeeLine also provides complementary ADA paratransit service, curb-to-curb transportation for eligible persons with disabilities, who are traveling between origins and destinations within three-quarters of a mile of the fixed-route services.

Figure 2-7: Brattleboro BeeLine Fixed-Route Services

Source: Brattleboro BeeLine Website, **http://www.beelinevt.com/?page_id=2**.
(Note: Website no longer exists. BeeLine schedules can be found at CRT's Website: **http://www.crtransit.org/businfo/between_intown.html**.)

The adult fare for BeeLine fixed-route services is $1.00, $0.50 for students 13 to 18 years old, and $0.25 for children younger than 13 years old. Larger quantities of adult tokens may be purchased at a discounted rate. The fare for paratransit service is twice the regular fare; there is no additional fare to travel with a personal care attendant. Riders using the paratransit service must call 24 hours in advance to schedule a ride. While the fixed-route services have stops designated in the schedule, riders may also flag the bus down anywhere along the route as long as the bus can safely pull over. The Brattleboro BeeLine coordinates with CRT and the Deerfield Valley Transit Association (DVTA) to provide connections to Bellows Falls and Wilmington, respectively. The BeeLine provides information about its services through its website and the websites of the Town of Brattleboro and The Current, and brochures.

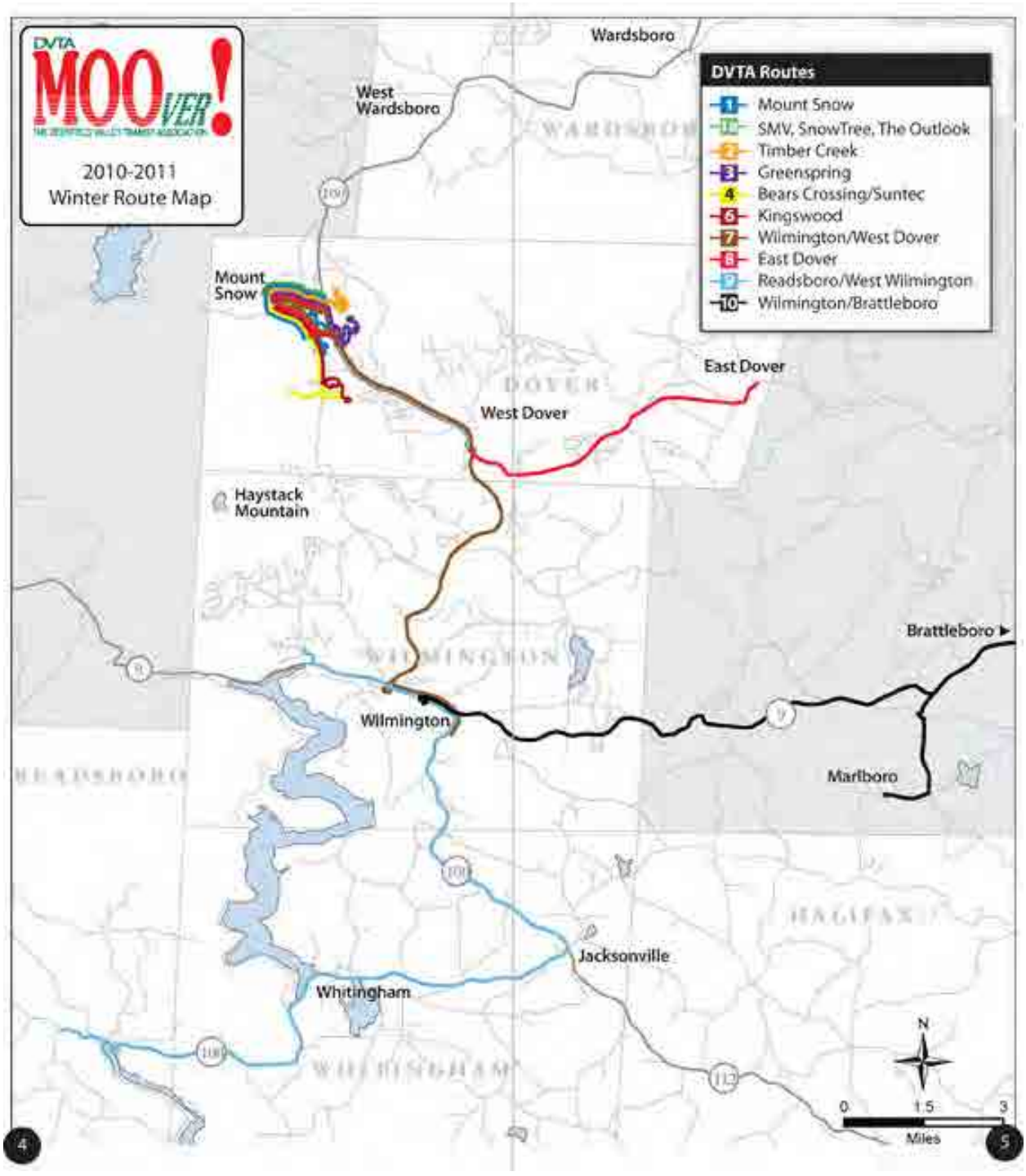
In FY 2010, the BeeLine carried nearly 63,000 riders at a cost of $210,700. These figures translated into 14.32 riders per hour and $3.35 cost per passenger. The vehicle fleet includes five wheelchair accessible vehicles.

Deerfield Valley Transit Association

DVTA operates a public transit system, known as the "MOOver," for the communities and resorts in Deerfield Valley. Shown in Figure 2-8, the MOOver fixed-route system serves the towns of Dover, Wilmington, Whitingham, and Readsboro, with a connection to Brattleboro as well. This map displays the winter service, which is operated from Thanksgiving to the first week of April and includes several routes that serve ski resorts. The summer fixed-route service consists of four core routes (numbers 7 through 10). Deviations of up to a quarter-mile from the fixed routes are available upon request, at least 24 hours in advance. The seasonal, resort-oriented services generally operate daily from 8:00 a.m. to 5:00 p.m., at half-hour intervals; some routes have 15- to 20-minute headways during weekends and holidays. The other routes generally provide daily service, from about 6:00 a.m. to 6:00 p.m. during the week with adjusted hours at night or during the weekend, though two routes also serve schools with peak period schedules. The headways are generally 30 minutes, though one commuter route provides fixed schedule service.

DVTA also offers an Elderly and Disabled Transportation Program, in which it provides demand response service for seniors age 60 and over and ADA-eligible persons with disabilities. Some service is provided to set destinations scheduled for specific days, coordinated with the Council on Aging and an adult day care, while another van service called "Van-Go" may provide trips according to individual needs. DVTA also organizes volunteer drivers to be available to provide seniors and persons with disabilities with rides to medical appointments. All MOOver services are free for passengers. The MOOver provides information on its services through a website, schedule brochures, posters at sites along its routes, ads in the local newspaper,

Figure 2-8: Deerfield Valley Transit Association Fixed-Route System



Source: DVTA Website, **http://www.moover.com/index.php?map_rts_all**. The winter routes map is shown above. In the summer, only routes 7, 8, 9, and 10 run.

periodic new releases, local television, and radio advertisement as needed. On a regular basis, DVTA meets with human service agencies in the region and CRT, and communicates with the Brattleboro BeeLine and Greyhound. The MOOver provides connections to and coordinates service opportunities with neighboring transit systems, Greyhound, and Amtrak. Information about the MOOver's connections to neighboring transit systems and other transportation options in the area are available on its website.

The DVTA is a private nonprofit corporation that employs eight staff and between 12 and 25 full-time and part-time drivers, depending on the season. DVTA has a Board of Directors and an E&D Regional Transportation Advisory Committee, which includes representatives from human service agencies, the regional planning commission, and CRT. DVTA also participates in the regional planning commission's Transportation Advisory Committee. In FY 2010, the operating cost for MOOver services was $1.06 million. Funding sources included federal grants, State assistance, fare revenues, and local contributions from human service agencies and resort communities. In FY 2010, the MOOver provided 206,300 trips, at 15.4 riders per hour and a cost per passenger of $5.13. The vehicle fleet includes 20 buses and minibuses, and all but one are wheelchair accessible.

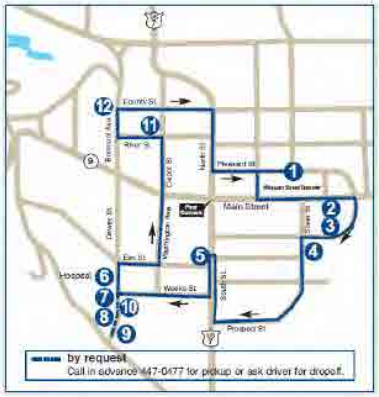
Green Mountain Community Network (GMCN)

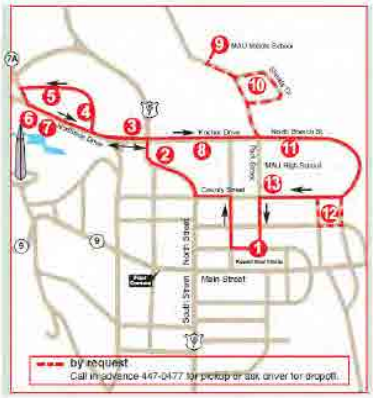
GMCN provides public transit service in and around Bennington County. The "Green Mountain Express", or GMX, provides many different types of service, including the deviated fixed routes shown in the series of maps in Figure 2-9. The Green Mountain Express will deviate up to a quarter-mile from the published routes, and requests must be made one day in advance. The local routes operate Monday through Friday between 7:30 a.m. and 6:00 p.m., with one operating during the midday on Saturday. Headways on the local routes are generally 30 minutes during the week, though some service may be up to 1.5 hours between trips, and hourly for Saturday service. The regional route, which includes service to Williamstown, Massachusetts, operates daily between 6:30 a.m. and 7:00 p.m., except for Sunday service that ends at 3:00 p.m. Six daily roundtrips are provided on the regional service during the week, and two daily roundtrips during the weekend. Fares on the local routes are $0.50 and on the regional route between $0.50 and $2.00, depending on the passenger's origin and destination. Those that request a deviation must pay double the regular fare.

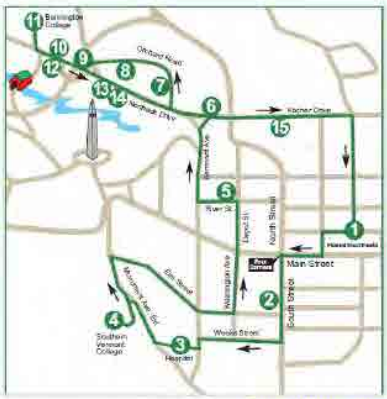
GMCN also provides a Shoppers' Express Service to Bennington grocery stores three times a week, and on request, service to the Route 9 Trailhead Monday through Friday. Fares are $1.00 roundtrip and $3.00 one-way, respectively. The Green Mountain Express also provides Elderly, Disabled, and Visually Impaired services for the general public and human service agencies in the area, such as the Vermont Center for Independent Living, United Counseling Services, and Bennington Project

Figure 2-9: Green Mountain Community Network Deviated Fixed Routes

Bennington Area (Blue, Red, and Green Lines)

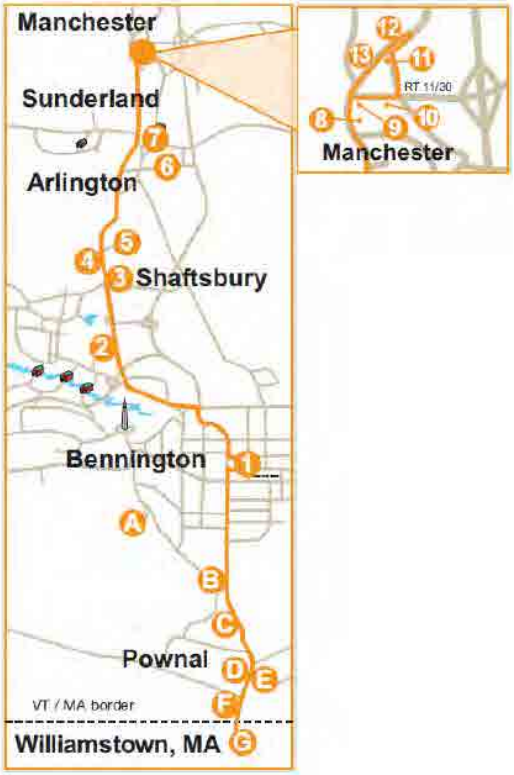






North Bennington, Bennington College, and South Vermont College (Brown Line)

Manchester, Bennington, Pownal, and Williamstown (Orange Line)



Source: GMCN Website, http://www.greenmtncn.org/schedules/BusSchedule2010.pdf.

Independence. Demand response service and transportation with volunteer drivers are other service options, depending on vehicle and driver availability. GMCN coordinates with a variety of groups, including human service agencies, educational institutions, chambers of commerce, businesses, and civic groups to promote its services and develop new partnerships. The Green Mountain Express provides information about its services through its website, brochures, a newsletter, maps and signage at activity centers, informational meetings, and fairs. Passengers may also access information through Facebook and Twitter.

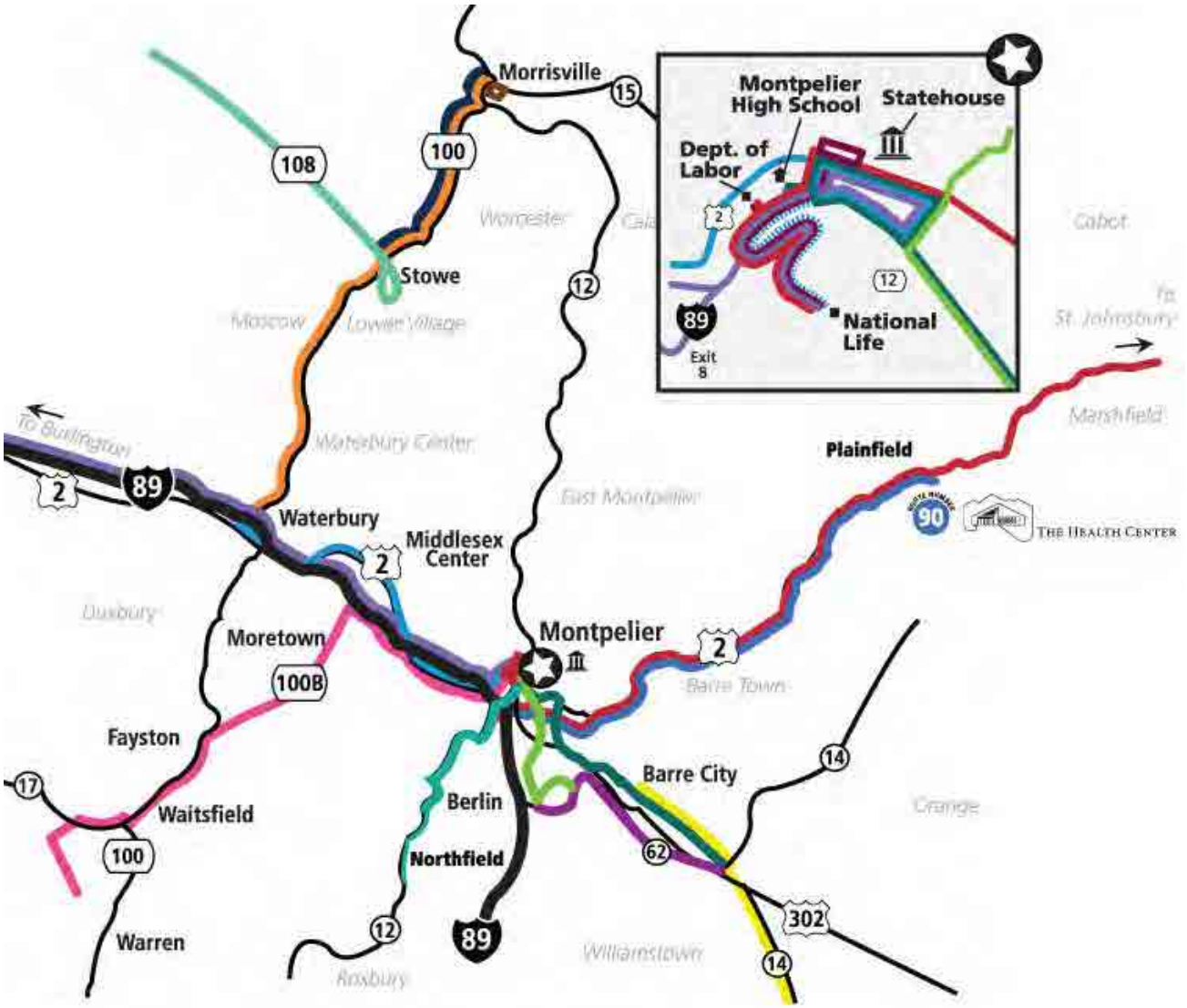
GMCN is a private nonprofit organization that manages the Green Mountain Express as well as the Green Mountain Retired and Senior Volunteer Program (RSVP) and Volunteer Center. GMCN has a transit staff of about 18 employees including 12 full- and part-time drivers. GMCN has a volunteer Board of Directors and a Public Transit Advisory Committee, which includes representatives from partner agencies, legislative members, the regional planning commission, employers, and occasionally consumers. In FY 2010, the operating cost for GMCN services was $590,100. Funding sources included federal grants, State assistance, fare revenues, and contract revenues (Medicaid). In FY 2010, the Green Mountain Express provided 64,900 trips, at 4.4 riders per hour and a cost per passenger of $9.09. The vehicle fleet includes 14 wheelchair accessible vehicles.

Green Mountain Transit Agency (GMTA)

GMTA provides various forms of public transit in Grand Isle, Franklin, and Washington Counties; the towns of Orange, Williamstown, and Washington in Orange County; and the towns of Stowe and Morrisville in Lamoille County. Figure 2-10 displays the GMTA regional system map. Most services are deviated fixed routes, with deviations of up to three-quarters of a mile available with 24-hour advanced notice. Services are differentiated by region: Capitol District, Mad River Valley, Stowe/Lamoille Valley, and Franklin/Grand Isle Region. GMTA service has different branding depending on the service area. It is known as "Mad Bus" in the Mad River Valley and incorporates the Stowe, Vermont logo on marketing materials for transit services in the Stowe/Lamoille Valley area.

The Capitol District routes generally operate Monday through Saturday, between 7:00 a.m. and 6:00 p.m. during the week and between 8:00 a.m. and 6:00 p.m. on Saturday. The services in the Mad River Valley are seasonal, as they mainly serve ski resorts, and operate from early December to early April. These routes run daily from about 8:00 a.m. to 6:00 p.m. A few Mad River Valley services operate as fixed routes in the morning, and change to Dial-A-Ride service in the afternoon. The Stowe/Lamoille Valley area routes include commuter services that operate between 6:00 a.m. and 7:30 p.m., local service that operates between 8:00 a.m. and 3:00 p.m. on

Figure 2-10: Green Mountain Transit Agency Regional System Map



Source: GMTA Website, **http://www.gmtaride.org/regional/system-map-all.html**.

weekdays only, and one seasonal, daily fixed-route service that runs between 7:00 a.m. and 10:30 p.m. The service in the Franklin/Grand Isle Region consists of a downtown shuttle that operates Monday through Saturday, from 6:00 a.m. to 6:30 p.m. during the week and from 9:45 a.m. to 3:20 p.m. on Saturday, and shuttles that provide commuter service between towns, which operate one roundtrip per day during weekdays. The headways on most GMTA services range from 30 minutes to hourly. GMTA provides several commuter routes, which offer one to four trips during each peak period.

GMTA provides ADA paratransit services for eligible persons with disabilities who cannot use GMTA fixed-route buses in the Town of Stowe. Paratransit service is available up to three-quarters of a mile from the published fixed routes, excluding commuter and deviated-fixed routes. Other transportation services offered include Medicaid transportation, Elderly and Disabled transportation, volunteer drivers, and demand response service in select communities, which require reservations two business days in advance of travel. GMTA also operates a few community shuttles, many of which are sponsored and provide free service once a week to community destinations such as grocery stores and medical services.

Fares are $0.50 on the regular routes, $1.00 on the commuter routes, and $4.00 on the LINK Express to Burlington. (LINK is co-operated with CCTA.) Discounted fares, generally half the regular fares, are available for youth, seniors age 60 and over, and persons with disabilities. Most of the Mad River Valley and Franklin/Grand Isle Region routes are fare-free, with the exception of a Mad River Valley commuter route that charges fares of $1.00 and $2.00, depending on the passenger's origin and destination. Several shuttles within the Capit0l District and Stowe/Lamoille Valley service areas are also free.

GMTA promotes its services through its website, annual reports, and distribution of a comprehensive Bus Map and Guide to local destinations such as hotels, resorts, medical centers, education centers, and shopping areas. Its marketing staff engages in grassroots outreach to human service agencies, municipalities, and visitor centers. The transit provider also works with the United Way 2-1-1 information hotline to provide information about its services. GMTA meets with various human service agencies, such as Care Partners and Champlain Valley Agency on Aging, senior centers, food shelf locations, employment/training programs, local and regional planning commissions, and other transportation providers to discuss opportunities for transportation coordination. GMTA routes provide connections to neighboring transit systems, including the CCTA and Rural Community Transportation, and park and ride lots. GMTA schedules emphasize both connections to other GMTA services and transfer opportunities to other transit systems.

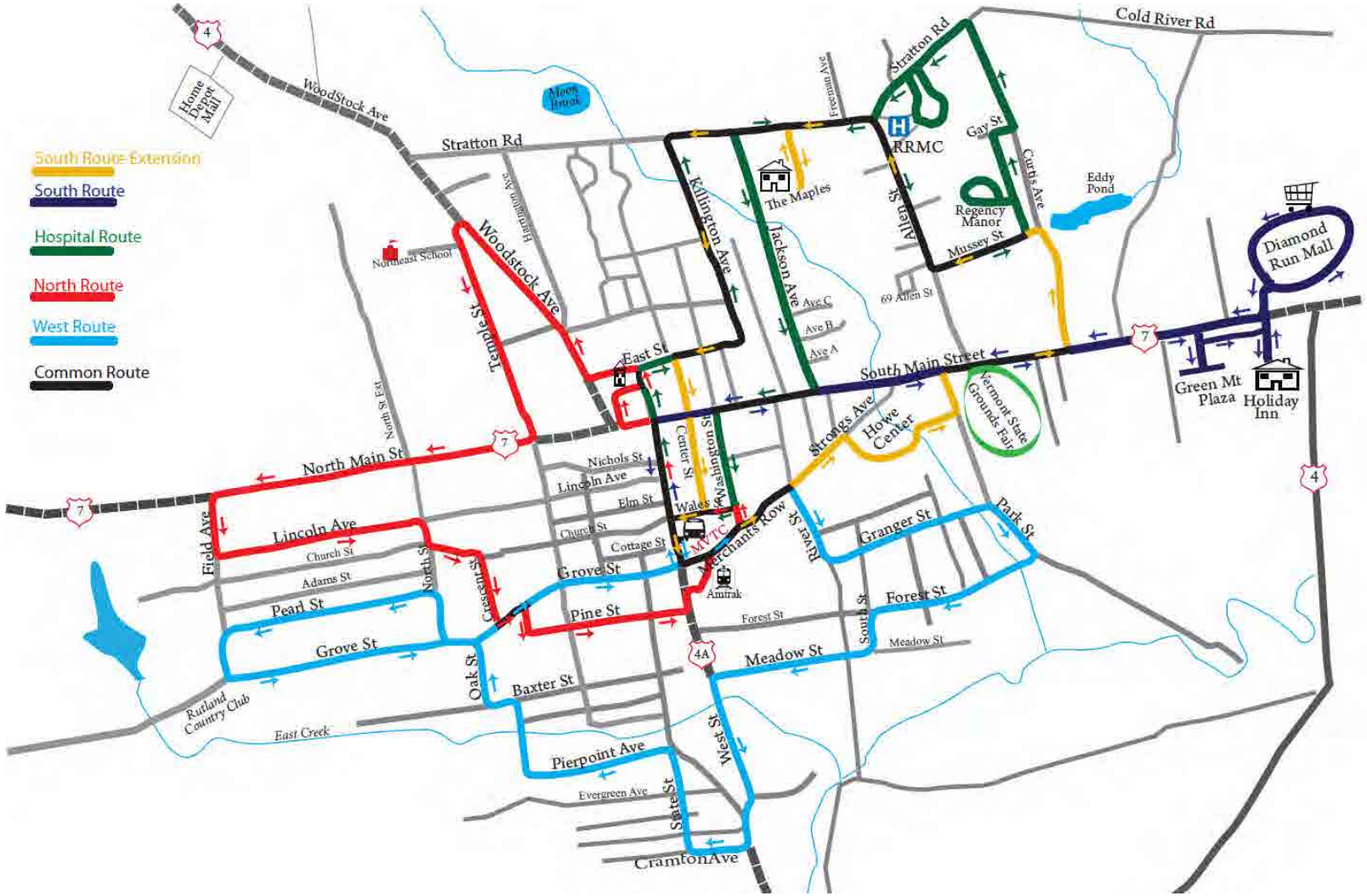
GMTA is a nonprofit agency that contracts with the CCTA to manage and operate its services. Since 2006 GMTA has had its own locally-appointed Board of Directors, comprised of representatives from municipalities, regional planning organizations, and the Regional Elderly and Disabled Partners Advisory Committee, but plans to join with CCTA under one Board of Commissioners in 2011. GMTA currently works with Transit Advisory Committees (TACs) in the Mad River Valley and the Stowe/Lamoille Valley area. These TACs include representatives from regional planning commissions, municipalities, chambers of commerce, businesses, and resorts. GMTA also works with the Central Vermont Regional Elderly and Disabled Partners Advisory Committee and the Franklin/Grand Isle Regional Elderly and Disabled Partners Advisory Committee. GMTA contracts with Rural Community Transportation to operate its ADA paratransit service along GMTA's Mountain Road Shuttle route (Lamoille County), and with Champlain Islanders Developing Essential Resources (CIDER), a community-based organization, to operate service in Grand Isle County.

In FY 2010, the operating cost for GMTA services was $2.81 million. Funding sources included federal grants, State assistance, fare revenues, Medicaid, and local contributions from numerous municipalities, chambers of commerce, and resorts. In FY 2010, GMTA provided 290,000 trips, at 6.3 riders per hour and a cost per passenger of $9.70. The vehicle fleet includes 73 wheelchair accessible vehicles, which are equipped with bike racks.

Marble Valley Regional Transportation District (MVRTD)

MVRTD, known as "The Bus," serves Rutland County and operates a fixed-route network in Rutland as well as commuter services to adjacent counties. Figure 2-11 displays the system's fixed routes in Rutland. Service is provided Monday through Friday, starting at 6:30 a.m. with the last bus leaving at 6:00 p.m., and on Saturdays from 8:00 a.m. to 5:30 p.m. with a one-hour break at noon. Headways are 30 minutes. MVRTD provides ADA paratransit service, complementary to the local fixed routes in Rutland, for eligible passengers with disabilities. A deviated fixed-route service is provided in Proctor, with four trips a day. The Bus also operates several commuter routes between Rutland and other cities within Rutland County, as well as in adjacent counties. These commuter services operate between five and seven days a week, depending on the route, and offer deviations up to a quarter-mile from the fixed routes. Additional seasonal service is provided to Killington to accommodate shift work in the resort area. Other services offered by The Bus include human service or contractual transportation with organizations including Vocational Rehabilitation, the Rutland Regional Board for Family Services, and the Foster Grandparent Program. MVRTD also provides subscription, point-to-point service in Rutland City and Rutland Town, and administers the Medicaid and Reach-Up Programs in Rutland County.

Figure 2-11: Marble Valley Regional Transportation District Fixed-Route Network in Rutland



Source: MVRTD Website, **http://www.thebus.com/pdf/maps/Newcityroutesmap09.pdf**.

Regular fares for the fixed routes are $0.50, and seniors age 60 and over pay $0.25. Saturday fixed-route service in Rutland is free. A ten-ride coupon and monthly pass are also available at a discounted rate per trip. Paratransit fares in Rutland are twice the regular fare. Fares on the Proctor Route are $1.00, with an additional dollar charged for deviations up to three-quarters of a mile of the published route. The commuter services charge $2.00 per one-way trip and $0.50 extra for deviations, except for the route to Ludlow, which is fare-free with a suggested donation of $3.00. Subscription service costs $6.00 one-way in Rutland City and $12.00 in Rutland Town.

MVRTD provides information about its services through a website and schedule brochures that are distributed to locations throughout the region, such as chambers of commerce, shopping centers, and resorts. MVRTD also provides Elderly and Disabled Program transportation to partner agencies such as the ARC-Rutland. MVRTD partners with the regional planning commission, economic development groups, and local government agencies to promote public transit, and has worked with area businesses and special interest groups to develop projects.

All MVRTD services begin and end at the Marble Valley Regional Transit Center in Rutland, fostering easy connections between services. Some commuter routes also connect to transit services provided by neighboring systems, such as GMCN and CRT. MVRTD works with other transit providers to share information on connecting services. The fixed routes in Rutland provide a connection to Amtrak service, and the commuter service also connects to park and ride lots and the Rutland Southwestern Vermont Regional Airport.

MVRTD is a local government agency that employs 65 to 88 persons, with additional staff on board to provide increased seasonal service. Currently, the agency does not have a Transit Advisory Committee, but participates in numerous regional associations including the Rutland Region Transportation Council, the Elderly and Disabled Persons Advisory Committee, and the Rutland, Mendon, Killington Public Transit Committee. In FY 2010, the operating cost for MVRTD services was $2.89 million. Funding sources included federal grants, State assistance, fare revenues, contract revenues, Medicaid, municipal contributions, and donations. In FY 2010, the system provided 475,900 trips, at 10.4 riders per hour and a cost per passenger of $6.06. The vehicle fleet includes 65 vehicles, most of which are wheelchair accessible.

Rural Community Transportation, Inc. (RCT)

RCT provides public transit in the Northeast Kingdom, including Caledonia, Essex, and Orleans Counties, as well as Lamoille County. RCT provides transit through various modes, including cars, taxis, vans, volunteer drivers, and vanpools. Services are available to the general public as well as the clients of partner human service agencies, including the Area Agency on Aging, Northeast Kingdom Human Services,

Central Vermont Council on Aging, and the Northeast Kingdom Community Action. RCT acts as the Medicaid/Reach-Up broker for its service area.

RCT operates two deviated fixed-route services, which will deviate up to a quarter-mile from the published routes. These routes operate Monday through Friday from about 7:00 a.m. to 6:00 p.m.; one provides Saturday service between 9:00 a.m. and 2:00 p.m. These services operate approximately at two-hour headways. RCT partners with the GMTA in providing a commuter service between Montpelier and St. Johnsbury, along the US 2 corridor. The agency also operates five "Green Express" shuttles that serve outlying villages and towns, primarily transporting riders for shopping trips. These shuttles generally operate twice a month, and require advanced reservations for pickups. Figure 2-12 displays the RCT system map for these services.

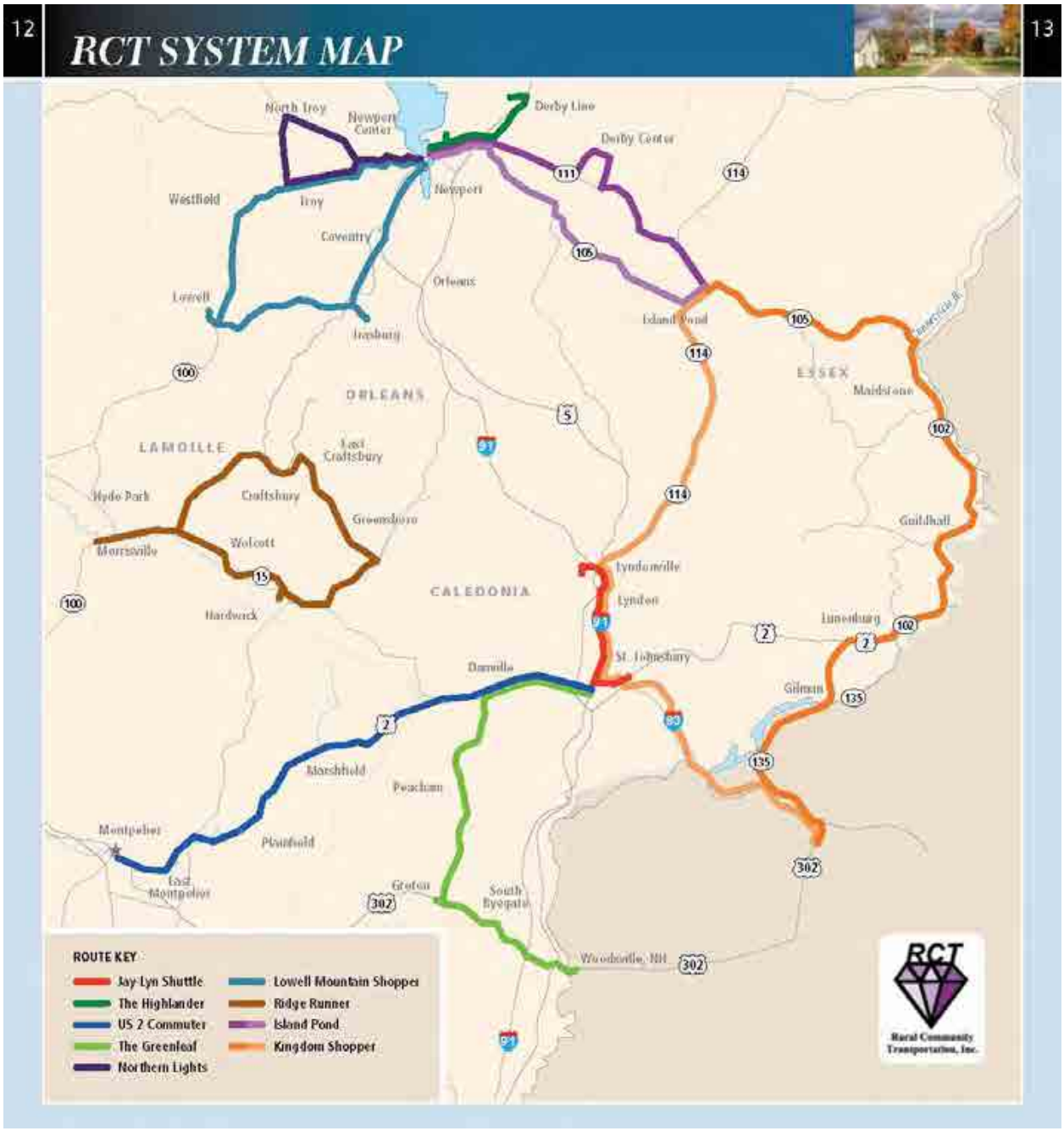
The deviated fixed routes and the Green Express shopping routes are free of charge, while the commuter service costs $1.00 to $2.00 depending on whether passengers ride within a town or between towns. Discounted fares for youth, seniors age 60 and over, and persons with disabilities cost half the regular fare. Ten-ride and monthly passes are also available.

In addition to this variety of services, RCT owns a limited liability corporation, called "Kingdom Express," which offers charter service with lift-equipped vehicles for special needs passengers.

RCT provides information about its services through its website, advertisements through partner agencies and town websites, a monthly newsletter, mailings of schedules to residences, and presentations at community meetings. RCT works with local planning commissions, human service agencies, businesses, State agencies, and community groups to determine transportation needs and additional opportunities for transportation coordination. Other coordination efforts include shared training sessions for drivers, sharing back-up vehicles with other agencies, and purchasing rides for passengers on other services. The system participates in regional transportation advisory councils, chambers of commerce, and emergency response teams. RCT also works with for-profit bus companies in the area and makes referrals where appropriate. RCT promotes intermodal transportation through its commuter service, which serves park and ride lots and connects with the GMTA system, providing connections to rail and air transportation.

RCT is a private, nonprofit organization, which was originally created to coordinate Medicaid transportation, and now acts as a transportation brokerage that provides service to the general public and human service programs. The system employs about 19 full-time and nine part-time staff among three offices, and organizes anywhere from 150 to 200 volunteer drivers. RCT has a Board of Directors and a Transit Advisory Committee, which includes representatives from municipalities, the

Figure 2-12: Rural Community Transportation, Inc. Route Map



Source: RCT Website, **http://www.riderct.org/**.

State, and the general public. The organization also participates in an Elderly and Disabled Persons partnership with area human service agencies. In FY 2010, the operating cost for RCT services was $477,900. Funding sources included federal grants, State assistance, program service revenues, and local contributions. In FY 2010, RCT provided 47,600 trips through its deviated fixed-route services and E&D program, at 5.3 riders per hour and a cost per passenger of $10.04. The vehicle fleet includes 17 wheelchair accessible vehicles.

Stagecoach Transportation Services, Inc. (STSI)

STSI provides public transit service in Orange and northern Windsor Counties. Figure 2-13 displays the system's commuter routes and deviated fixed routes. ADA-eligible passengers can request deviations of up to a quarter-mile on both these services, with notice at least 24 hours in advance. The commuter services operate on weekdays, offering one to three trips each in the morning and evening peak periods. Geared toward shopping trips, the deviated fixed-route services provide one roundtrip a day, four to five times a month. The fare for the commuter routes is $3.50 one-way, with reduced fares for Dartmouth College and Dartmouth-Hitchcock Medical Center. reduced fare. The fares for the deviated fixed routes range from $3.00 to $5.00 round-trip depending on the passenger's origin and destination.

STSI also provides demand response service, including transportation for human service agencies, senior citizen centers, and medical centers. STSI manages Medicaid transportation and arranges trips for eligible passengers via a public transit route, volunteer driver, or taxi. STSI also has a program called Ticket to Ride, in which the organization pays up to 80% of the cost of transportation for senior citizens, age 60 and over, and persons with disabilities for various trip purposes. Passengers that are not eligible for Medicaid or the Ticket to Ride program may also privately pay for trips. STSI also manages a volunteer driver program. These deviated fixed-route, commuter, and demand response services generally operate during the week between 6:00 a.m. and 6:00 p.m.

STSI provides information about its services through a website, newsletter, and a Consumer's Guide, which is distributed on STSI vehicles and other destinations served. The system coordinates with other transportation providers by including information on other transportation options, including AT services, on its website and schedules. STSI participates in the local Chamber of Commerce and the Regional Transit Management Association, and work with civic groups and economic development groups to promote public transit. STSI encourages intermodal transportation by serving park and ride lots and providing transfer opportunities to adjacent transit systems and Amtrak.

Figure 2-13: Stagecoach Transportation Services, Inc.
Commuter and Deviated Fixed Routes

Source: STSI Website, **http://www.stagecoach-rides.org/**.

STSI is a private, nonprofit organization that employs 21 full-time and three part-time staff. The agency has a Board of Directors, comprised of municipal representatives, and does not have a separate transit Advisory Committee, but participates in the regional planning commission's Transportation Advisory Committee. In FY 2010, the operating cost for STSI services was $1.2 million. Funding sources included federal grants, State assistance, fare revenues, Medicaid, and local contributions from municipalities, major employers, and social service agencies. In FY 2010, STSI provided 69,800 trips, at 5.6 riders per hour and a cost per passenger of $17.10. The vehicle fleet includes 25 wheelchair accessible vehicles.

Commuter and Intercity Transportation

Commuter Bus

As described above, several of the State's public transit providers also provide commuter services, which generally operate only during peak periods Monday through Friday and include express segments. Across the State, these services provide economic lifelines for many outlying communities to access jobs and a range of services in larger cities, where major employers, medical centers, educational institutions, and retail centers are located.

Ridesharing

Go Vermont is a State initiative aimed at providing easily accessible and reliable information about commuting and ridesharing resources, including transit routes and services. The service was upgraded from a manual system to a web-based system in 2010. The highly successful rideshare/ride match program now has 1,000 matches, and the web-based system has freed up resources for outreach, marketing, and education. You-tube, television, and radio ads and local-motion educational programs are being conducted, and Vermont has 29 park-and-ride lots located throughout the State, making it easier to carpool or vanpool to various destinations.

Intercity Bus

Scheduled intercity bus service in Vermont is currently provided by two carriers, Greyhound Lines and Yankee Trails. Intercity bus service is fixed-route, fixed-schedule bus service open to the general public, operated with over-the-road coaches with the capability of carrying baggage or package express. The Greyhound Lines service in Vermont is provided on two routes. On the Montreal to Boston route, Greyhound has Vermont stops in Burlington, Montpelier, and White River Junction. There are four round-trips per day on this corridor, which is operated seven days per week. The Burlington stop is now located at the Burlington International Airport (BTV), which is served by all trips, but the earliest bus of the day (both directions) also stops in

downtown. In Burlington all trips have a 15-minute layover at the airport, and in White River Junction the buses make an initial stop at the White River Junction depot, travel to Hanover, NH, and then return to the White River depot before continuing. In Boston, two of the inbound trips make stops at Logan Airport (but not any northbound trips). Three of the schedules in each direction make a stop at the Manchester, NH Airport. To use intercity bus from Burlington to New York, it is necessary to transfer either in Boston or Montreal.

The other Greyhound route operates a single daily round-trip from White River Junction to Springfield, MA. This route has stops in Vermont at Bellows Falls and Brattleboro. The southbound bus serving this corridor leaves White River Junction well after the arrival of the bus from Burlington, but the northbound arrives in time to allow a rider to connect to either Burlington- or Boston-bound buses with minimal delay. New York can also be accessed on this route once a day with a layover/transfer in Springfield, MA. Finally, it is possible for Vermonters in the GMCN service area to take Peter Pan Bus Lines from Williamstown, MA to New York City (two round trips per day).

Vermont's only other remaining scheduled intercity bus service is provided by Yankee Trails, which offers two round-trips per day from Bennington to Albany, New York. This service is provided Monday to Friday only. The Yankee Trails scheduled service is not interlined with Greyhound, so a Vermont resident cannot buy a bus ticket in Bennington for travel beyond the Albany terminus. Yankee Trails offers only separate cash fares. The fare from Bennington to Albany is $4.00. As a result of the lack of an interline agreement with Greyhound, the stop in Albany is on the street in front of the Greyhound terminal. Also, Greyhound's website and telephone information service does not have information on the Yankee Trails service.

Finally, while it does not serve Vermont directly, Dartmouth Coach operates between Hanover/Lebanon, NH through New London, South Station, Logan International Airport in Boston with eight round trips per day, as well as between Hanover/Lebanon, NH and New York City once a day.

Both Greyhound Lines and Yankee Trails are private, for-profit entities. All operating and capital costs of the Vermont services are paid from the farebox, as Vermont does not provide any type of financial assistance. It should be noted that there are only six places in Vermont with intercity bus service, which is a substantial decline from the 55 points with service identified in the 1998 *Vermont Statewide Intercity Bus Study.* Since the time of that study, Vermont Transit Lines, which was a wholly-owned subsidiary of Greyhound Lines, has been completely merged into Greyhound, and the route coverage substantially reduced. VTrans had provided Vermont Transit with Federal Section 5309 capital for an accessible coach in return for continued service on

rural routes, but with the restructuring the rural services ended and the bus was purchased by Greyhound. Since that time there has been no funding provided for rural intercity bus service, though it should be noted that annual applications are sent to the identified intercity carriers, and that in-state commuter bus services are operated by various transit providers in the State and serve some travel needs between towns.

Intercity Rail

Two Amtrak lines currently serve Vermont. The Ethan Allen Express provides daily service, one roundtrip a day, from New York, NY to Rutland, VT by way of Albany, NY. This train service also stops in Castleton, VT, and motor coach connections are available to Killington and Okemo ski resorts during the ski season. The Vermonter provides daily service from Washington, D.C. to St. Albans, VT, offering connections to Baltimore, Philadelphia, and New York. One southbound and one northbound trip are provided each day. The other stops within Vermont include Essex Junction, Waterbury, Montpelier, Randolph, White River Junction, Windsor, Bellows Falls, and Brattleboro. Both train services are financed primarily through funding from VTrans.

Vermont – New York Ferries

Two companies provide ferry service between Vermont and New York. Lake Champlain Transportation (DBA: Lake Champlain Ferries) offers three crossings: the Northern Crossing from Grand Isle, VT to Plattsburgh, NY; the Central Crossing from Burlington, VT to Port Kent, NY; and the Southern Crossing from Charlotte, VT to Essex, NY. Ticonderoga Ferry offers a crossing between Ticonderoga, NY and Shoreham, VT. These ferry services generally operate year round, with availability depending on weather conditions during the winter months. Fares are charged for passengers, vehicles and bicycles.

DEMOGRAPHIC ANALYSIS

Demographic and economic characteristics of the population are key factors that highlight the potential need for public transit services. This analysis identifies the location of population segments that tend to be more dependent on public transit services, and compares these areas to existing transit services to determine gaps where service might be expanded or new services implemented. These populations were mapped individually and also in a combined analysis, called the "Ranking Maps", discussed later in this section. Employment across the State was also analyzed to determine how well existing services are meeting potential commuting needs. The methodology for the demographic analysis is described below.

Methodology

The demographic analysis examined four potentially transit-dependent population segments:

- **Elders –** Persons age 65 and above. This group may include those who either choose not to drive any longer, have previously relied on a spouse for mobility, or because of factors associated with age can no longer drive;

- **Persons with disabilities** – Persons age 16 and over who have a disability lasting six months or more that makes leaving the home alone for simple trips such as shopping and medical visits difficult for them;

- **Low-income residents –** Persons living below the poverty level who may not have the economic means to either purchase or maintain a personal vehicle; and

- **Autoless households** – Number of households without an automobile. One, if not the most, significant factor in determining transit needs is the lack of an available automobile for members of a household to use.

Figures for the above variables were collected from 2010 Nielson Claritas data, where available, or 2000 Census data, the most recent data available for all population segments. The 2000 Census data was collected at the Block Group level to provide more geographic detail regarding potential transit needs across the State. This data was also adjusted by the statewide population increase from 2000 to 2010, and consequently better reflects the current demographic distribution.

The first step in the analysis was using GIS ArcMap to map the densities of these individual population segments, in persons per square mile. The densities of potentially transit-dependent populations are a good indicator of the type of transit service that may be most feasible in an area. For example, fixed-route transit service is often prioritized for areas that contain higher densities of potentially transit-dependent persons, while demand response service is more feasible for low or moderate density areas. The existing transit services operated by the State's ten providers were also overlaid on the demographic maps in these three categories:

- **Local** – Fixed-route or deviated fixed-route service that generally operates all day and mainly serves one city or town, or connects adjacent cities or towns.

- **Commuter** – Typically longer routes that operate during peak periods, primarily in one direction, and include express segments.

- **Seasonal** – Routes that serve a specific tourism area or destination, such as ski resorts, and typically operate a few months out of the year.

In addition, intercity bus services provided by Greyhound Lines and Yankee Trails were also included in the demographic maps. Viewing the existing services with the demographic and employment data helped identify areas with unmet needs and opportunities for future transit investments.

The second step of the demographic assessment involved a combined analysis, where the data for the four population segments above were summarized by Block Group. Each Block Group was ranked, relative to the other Block Groups across the State, by potential transit need (i.e., a Block Group with greater numbers older adults, persons with disabilities, low-income residents, and autoless households ranked higher than another Block Group with smaller numbers of these populations). These rankings were performed twice, once based on the density of the population segments, and a second time based on the percentage of the population segments.[7] As mentioned previously, the density ranking helped identify service gaps and the types of transit service that may be most appropriate for those areas. The percentage ranking provided a different perspective on transit needs by highlighting those areas in the State that may not have dense populations, but where a high proportion of the existing community has potential transit needs. These populations may be spread out over relatively large areas and consequently do not have the density to support fixed-route bus service. However, the transit needs still exist, and these relative high need areas may be opportunities for new or improved demand response or scheduled transit services.

The summary rankings for density and percentage of transit-dependent persons, per Block Group, were divided into natural breaks representing ranges of very low, low, moderate, high, and very high relative need. The results for the individual analyses of the potentially transit-dependent population segments and the combined analyses are described below.

[7] The numbers of people in each category are not added together in each Block Group because the categories are not mutually exclusive. For example, an older adult could also have an income below the poverty level and/or have no automobile available to them for personal use. It should also be noted that "autoless households" refer to occupied housing units and not persons.

Potentially Transit-Dependent Populations

Elders

Age is considered a potential indicator of the need for public transit services. As seniors grow older, many eventually lose their ability to drive. Public transit becomes an essential element in maintaining their quality of life and avoiding relocation to assisted living facilities or a nursing home. Figure 2-14 shows the number of seniors per square mile by Block Group according to the 2010 Nielson Claritas data. Generally, areas with high concentrations of seniors, such as Newport, St. Albans, Burlington, Barre-Montpelier, Rutland, Springfield, Brattleboro, and Bennington, are geographically well served with local demand responsive, fixed- or deviated fixed-route service, but can be limited in terms of span of hours, days, and frequency of service.

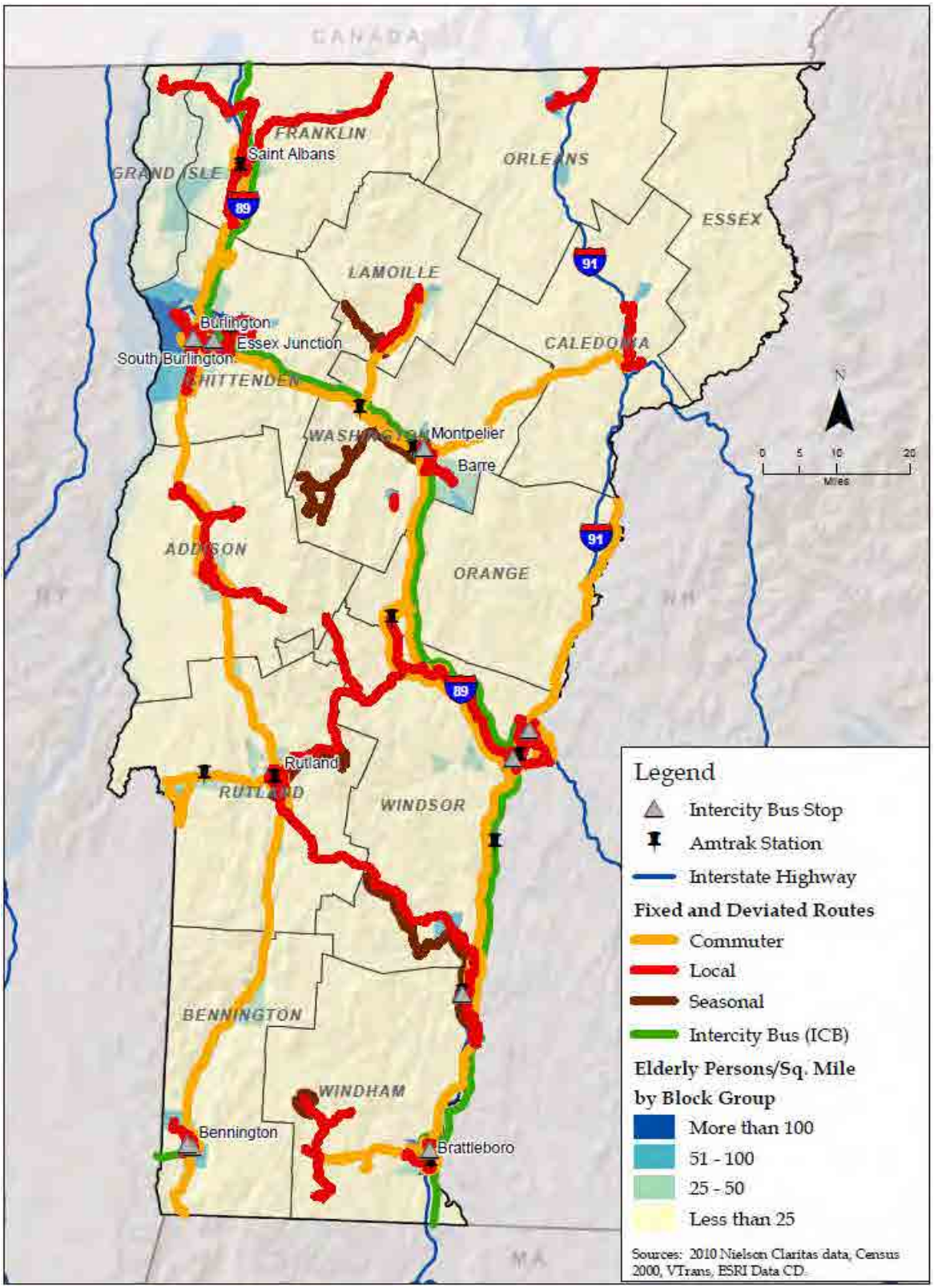
While localized service is generally available, intercity service between the State's more urban areas is more limited. Intercity service is important for seniors who travel for medical services, shopping, and visiting friends and family. Public transit services between Chittenden County and the rest of the State are primarily limited to weekday commuter routes, typically requiring very early morning or late afternoon (peak commuter) trips. Furthermore, some trips require multiple connections. With the exception of Rutland and White River Junction, none of Vermont's larger urban areas are connected through fixed or deviated fixed routes.

There are a couple of areas that are worth noting due to limited transit service. The first is the western region of Chittenden County, which contains large pockets of older adults. Although most areas in Greater Burlington are served by CCTA routes and the ACT Burlington Express, parts of the South End, Colchester and Jericho are outside of CCTA's service area. The second area worth noting is the area southeast of Barre, particularly South Barre. While GMTA serves the Barre-Montpelier region with deviated fixed routes, the area southwest (Northfield) receives very limited deviated fixed-route service. Additional areas with concentration of seniors but limited transit service include Bradford, Windsor, and Wallingford.

Persons with Disabilities

Transit accessibility offers more enriched lives for people with disabilities who require accessible transportation for various trip purposes, from employment and medical treatment to shopping and social activities. Public transit is an important option for individuals with disabilities, especially where they do not have the ability to drive themselves or lack access to a personal vehicle. Local economies also benefit from the availability of an expanded workforce and increased access to businesses and retail

Figure 2-14: Elderly Density



centers. Figure 2-15 highlights concentrations of people with disabilities throughout Vermont. To create this map, data from the 2000 Census were adjusted using the percent increase of the total statewide population between 2000 and 2010 according to Nielson Claritas data.

The concentrations of persons with disabilities correspond to the State's larger urban areas, such as Greater Burlington, Saint Albans, Newport, Montpelier-Barre, Rutland, Bennington, and Brattleboro. Those areas are fairly well served by existing fixed/deviated fixed routes and commuter routes, which also provide connections between the cities.

Low-Income Residents

Figure 2-16 considers an additional potential indicator for transit use – individuals living below the poverty line. Transportation costs put a tremendous strain on low-income household budgets. According to the Surface Transportation Policy Project's 2003 report, *Transportation Costs and the American Dream*, the poorest 20% of American households spend about 40% of their take-home pay on transportation.[8] For many low-income households, owning and maintaining a vehicle is necessary for travel to their workplace; providing a public transit option could help ease this financial burden. Figure 2-16 shows the number of individuals living below the poverty level per square mile in Vermont. To create this map, data from the 2000 Census were adjusted using the percent increase of the total statewide population between 2000 and 2010 according to Nielson Claritas data.

Although populations living below the poverty level are found throughout the State, there are higher concentrations in the Greater Burlington area, Saint Albans, Newport, Barre-Montpelier, Rutland, Bennington, and Brattleboro. Other high need places include Milton, Swanton, Morrisville, Saint Johnsbury, Waterbury, Middlebury, Randolph, White River Junction, and Bellows Falls. The areas with relatively high numbers of residents living below the poverty line generally have established fixed/deviated fixed and commuter routes, with the exceptions of South Barre and part of Northfield in Washington County and Hardwick in west Caledonia County.

Autoless Households

The lack of a vehicle is a significant economic issue when households are not autoless by choice and public transit is unavailable. Vermont's major employment areas are regional in nature, and inter-town travel is required for many residents to reach

[8] The Surface Transportation Policy Project is a nationwide coalition of planners, community development organizations, and advocacy groups, which seeks to improve the national transportation system and promote safer communities.

Figure 2-15: Persons with Disabilities Density

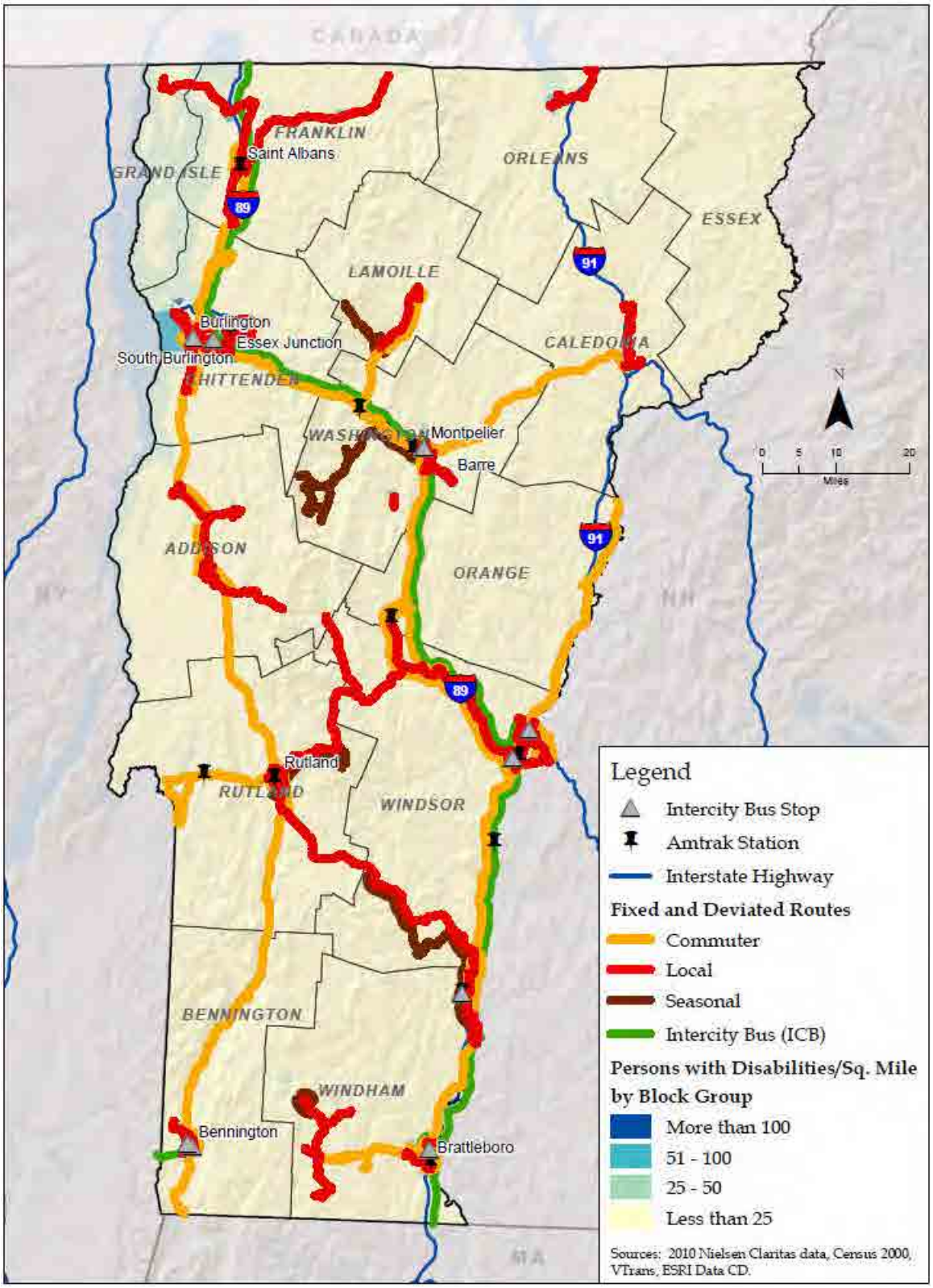
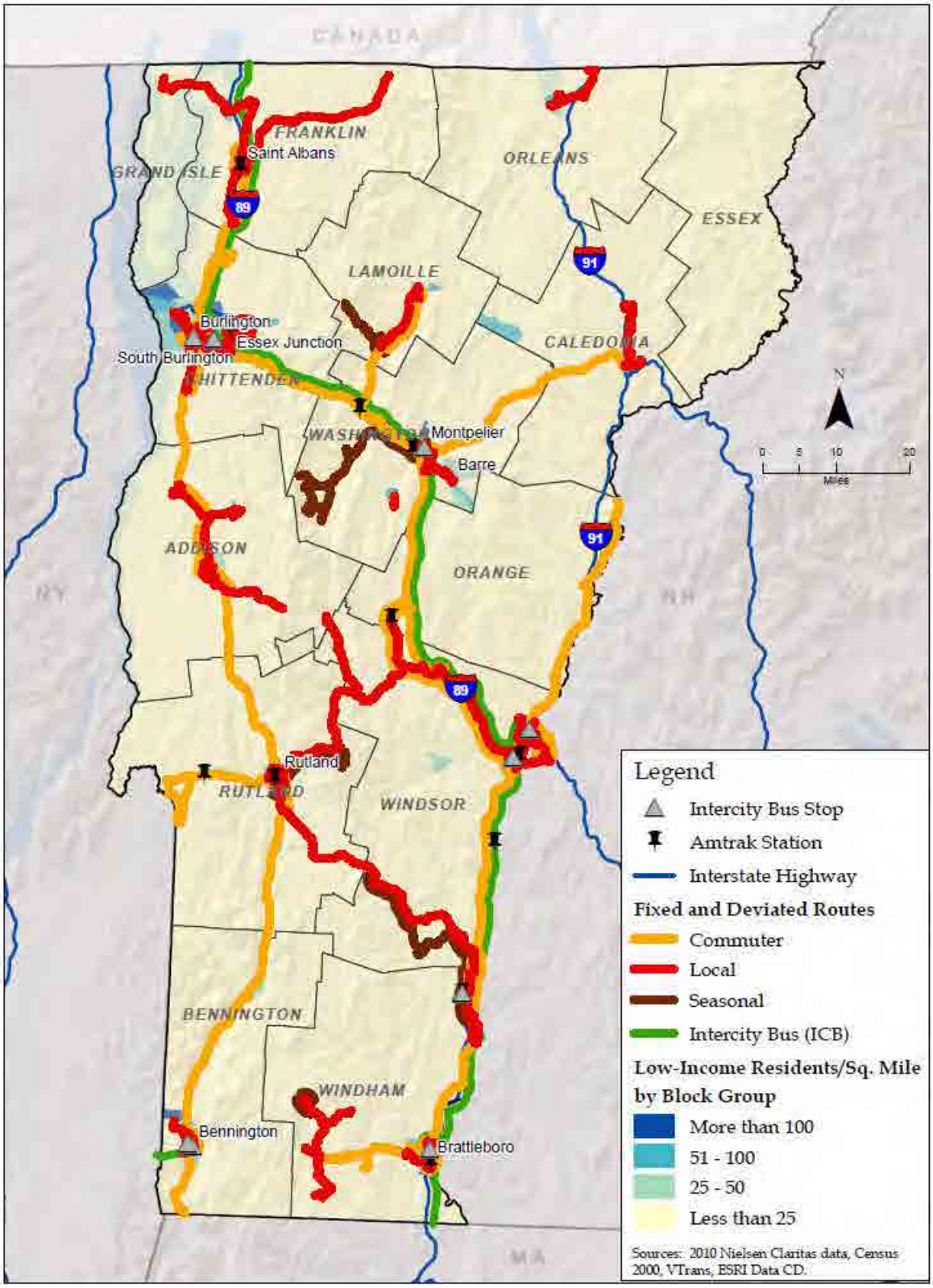


Figure 2-16: Low-Income Residents Density



employment sites. Public transit is also vital for members of autoless households to access medical services, educational opportunities, shop, and attend social activities.

The number of autoless household per square mile is detailed in Figure 2-17. That autoless households correlate with low-income households suggests, in part, that many Vermont households are autoless not by choice, but due to low income and affordability factors. The highest densities of autoless households are found in Greater Burlington, Saint Albans, Newport, Barre-Montpelier, Saint Johnsbury, Middlebury, Rutland, White River Junction, Bellows Falls, Brattleboro, and Bennington. These areas are generally well served by local fixed-route/deviated fixed-route as well as commuter services.

Ranking Maps

Density Ranking of Transit-Dependent Populations

Figure 2-18 shows the relative levels of need for public transit, by Block Group, based on the density of transit-dependent populations. Block groups were ranked based on high, moderate, and low levels of relative transit need. The Block Groups with high relative need based on ranked density were largely concentrated around Vermont's major cities – such as Burlington, Montpelier, Barre, Rutland, Bennington, Springfield, and Brattleboro.

While most of the Block Groups with high relative need have adequate fixed-/deviated fixed-route service or commuter service, there are some that are lacking any bus transportation. A number of these areas are located outside of major cities, particularly outside of Burlington, Saint Albans, Rutland, Springfield, Bennington, and Brattleboro. The cities themselves are well served with both fixed/deviated fixed routes and commuter routes, but the surrounding areas, which have a high relative density of transit dependent persons, are often without either.

Burlington is relatively well-served geographically, though limited in terms of span of hours, days, and frequency of service, by CCTA fixed and commuter routes. Nearby Milton and Richmond are only served by CCTA commuter buses, and Underhill, Jericho, and Hinesburg have no bus transportation available. Similarly, though the Montpelier-Barre region is served by GMTA's deviated fixed routes and commuter service, the area south of Barre lacks service, save a weekly shuttle in Northfield, despite having high relative densities of transit-dependent persons. Rutland is served by MVRTD routes but the area surrounding Rutland, particularly the City of Proctor, has high relative need and limited deviated fixed-route service. Southwestern Bennington County, southeastern Windsor County, and southeastern Windham County also include areas with high relative densities of transit dependent

Figure 2-17: Autoless Households Density

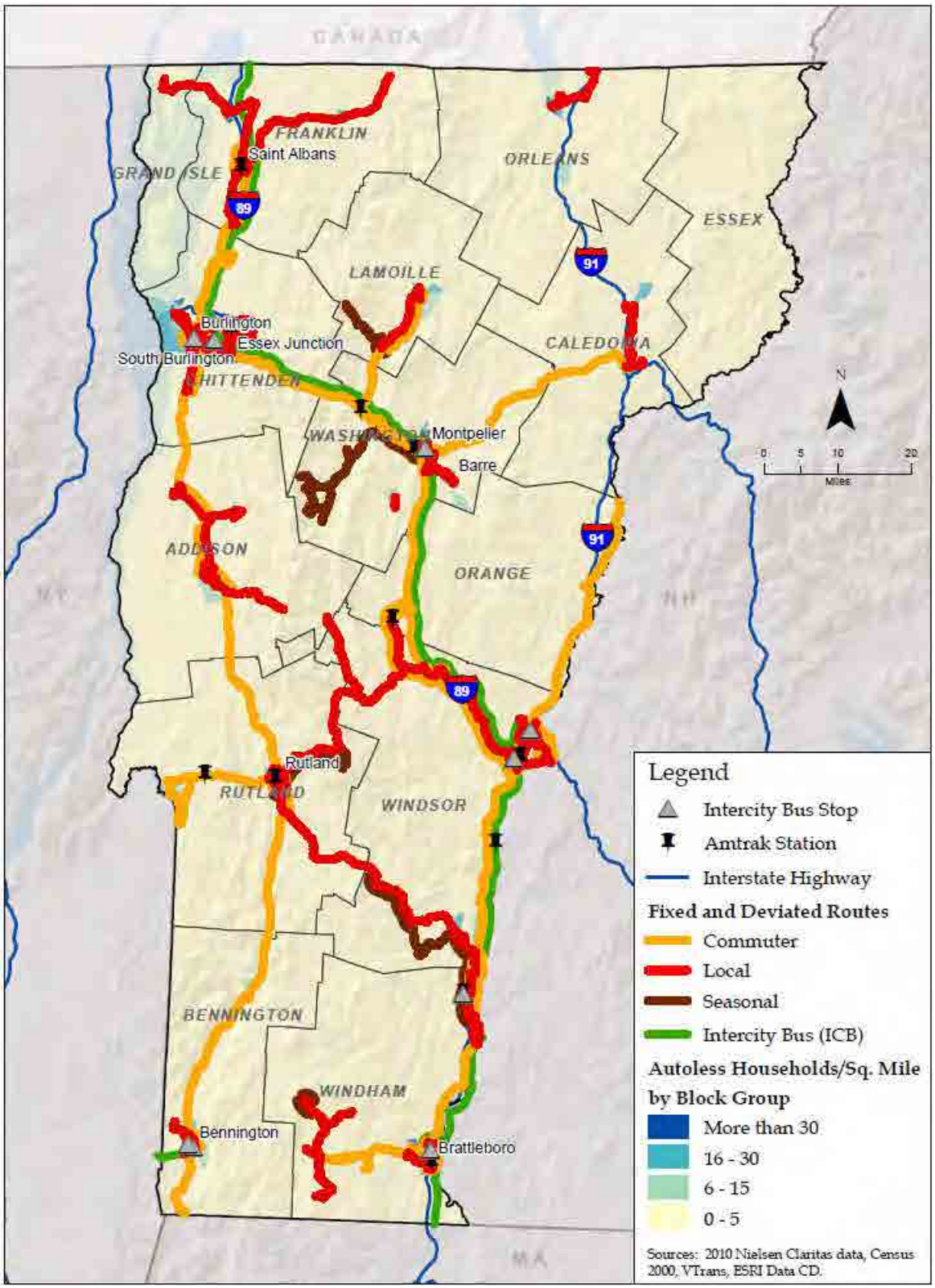
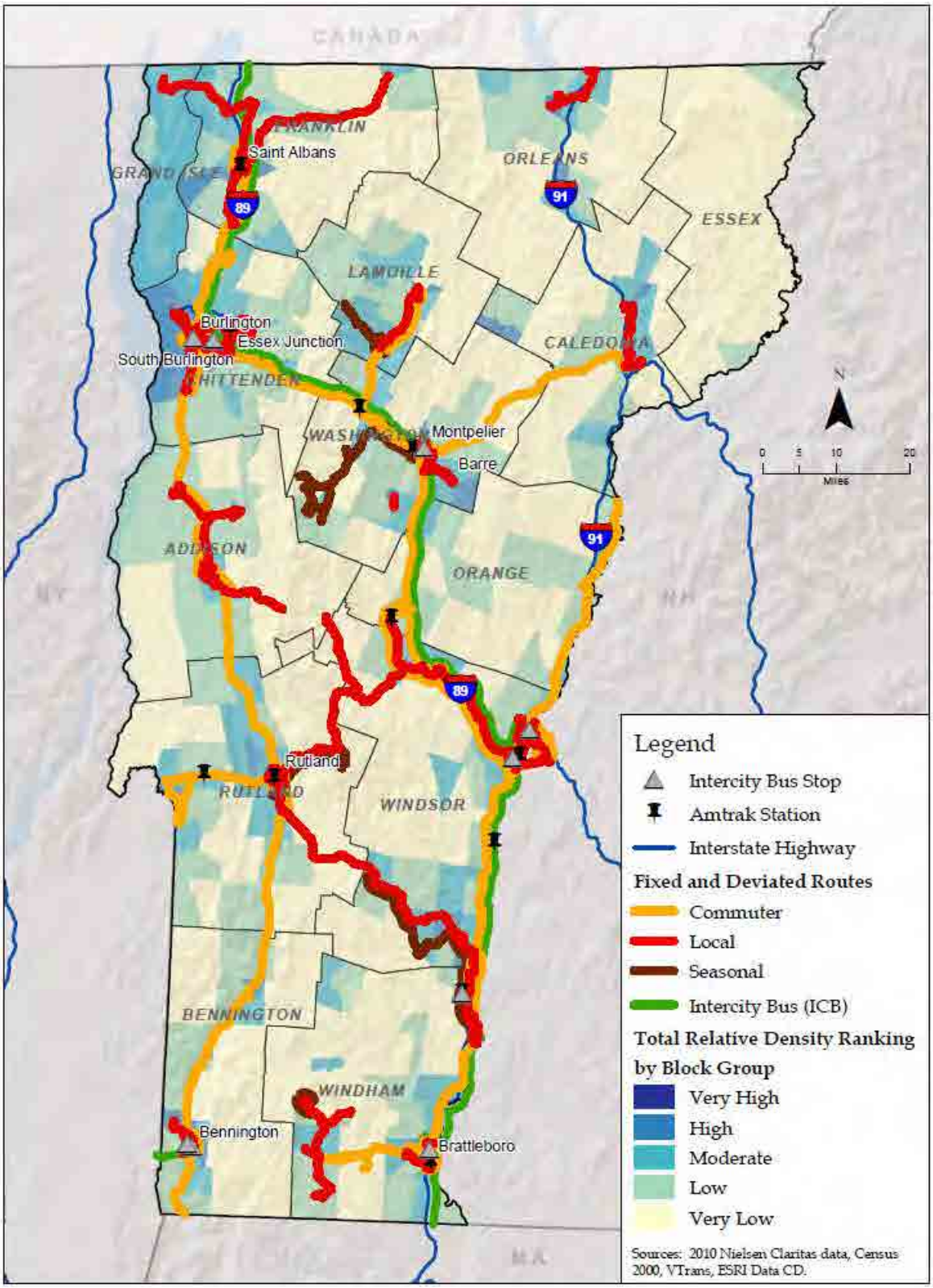


Figure 2-18: Total Density Ranking of Transit-Dependent Persons



persons and bus service in only a few of the major cities, leaving large pockets of high need populations unserved.

Figure 2-18 also shows that there are smaller cities with high densities of transit dependent persons, but no bus service, or only commuter service. The areas south of Hardwick and north of Lyndonville in Caledonia County have very high relative need; while Lyndonville has local service just south in Lyndon, Hardwick is without any service nearby. Additionally, Manchester has very high relative need, but is only served by the NVRTD Manchester Connector.

Percentage Ranking of Transit-Dependent Populations

The percentages of potentially transit-dependent populations were also summed by Block Group and mapped to examine relative levels of transit need throughout the State. Figure 2-19 shows the results, which highlight notably different areas than the density ranking map. Block Groups with a high or moderate percentage-based need are found in the central areas of the larger cities, but also in a number of rural areas around the State. This includes largely unserved areas in the southern part of the State, particularly in Bennington, Windsor, and Rutland Counties, the north portion of Orleans County, as well as large areas of Caledonia County. The populations in these outlying areas could be well served by intercity or regional connections to the nearest major city, as well as local transit service. The areas with the highest percentage of transit-dependent populations are in some cases similar to those identified previously when considering the density ranking.

Employment Data (2010)

Job concentrations are an important indicator of demand for public transit to serve employment-related trips. Most of Vermont's larger cities account for a higher number of jobs than residents. Chittenden County, for example, contains less than one quarter of Vermont's population but approximately 32% of the State's employment base.

Data for the population of individuals employed in each city was obtained through the 2010 2nd Quarter Employment and Wages data from the Vermont Department of Labor. Figure 2-20 shows that the majority of cities that are large employment centers are located in the northwestern part of the State. Rutland and Brattleboro are two other large employment centers located outside of northwestern Vermont. Most other employment centers are served by fixed or deviated fixed routes as well as commuter routes. There are a handful of employment centers that lack both fixed-/deviated fixed-route and commuter services – those located in the northwestern part of the State in Grand Isle, Franklin, Lamoille and Caledonia Counties and in

Figure 2-19: Total Percentage Ranking of Transit-Dependent Persons

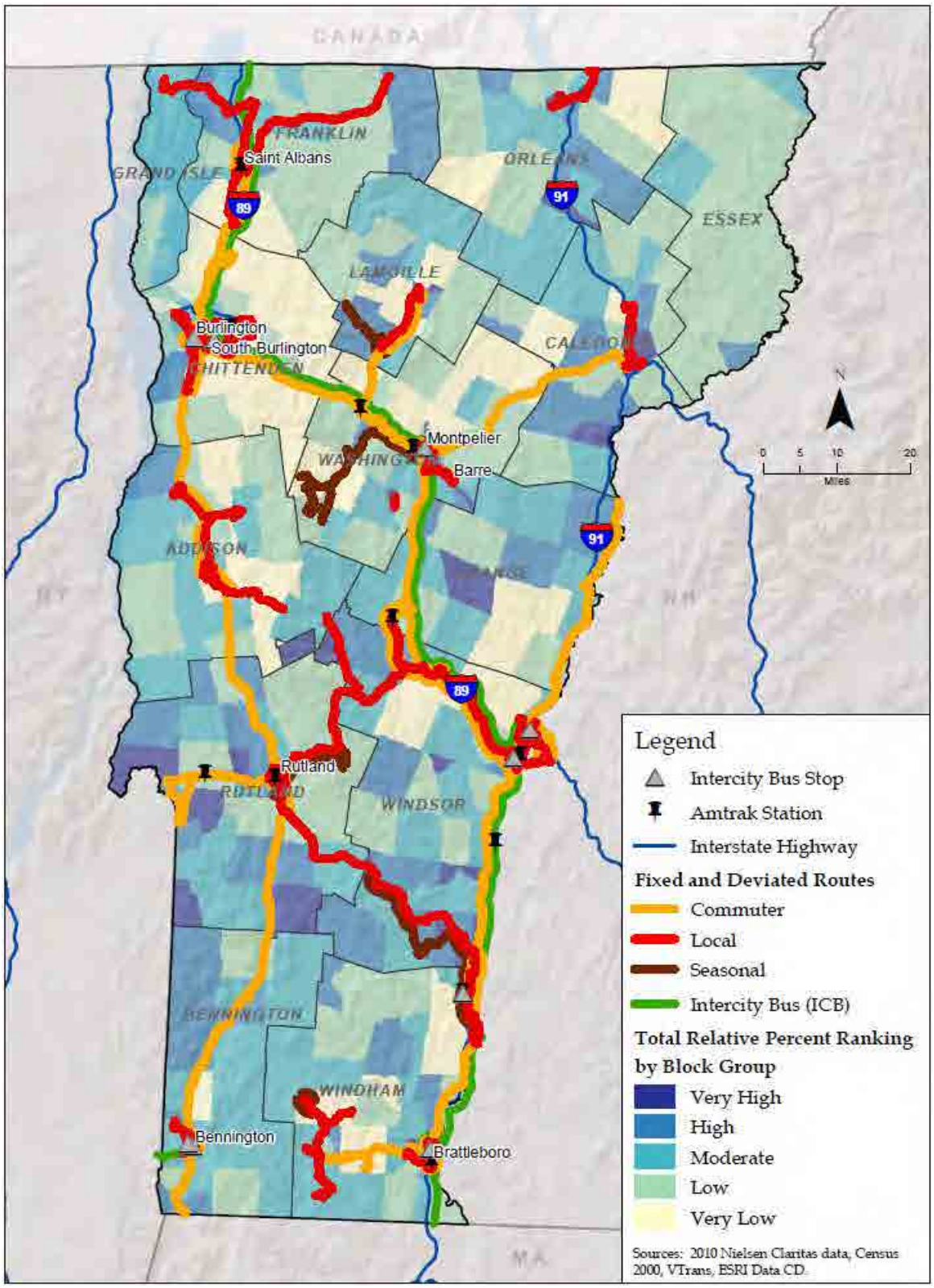
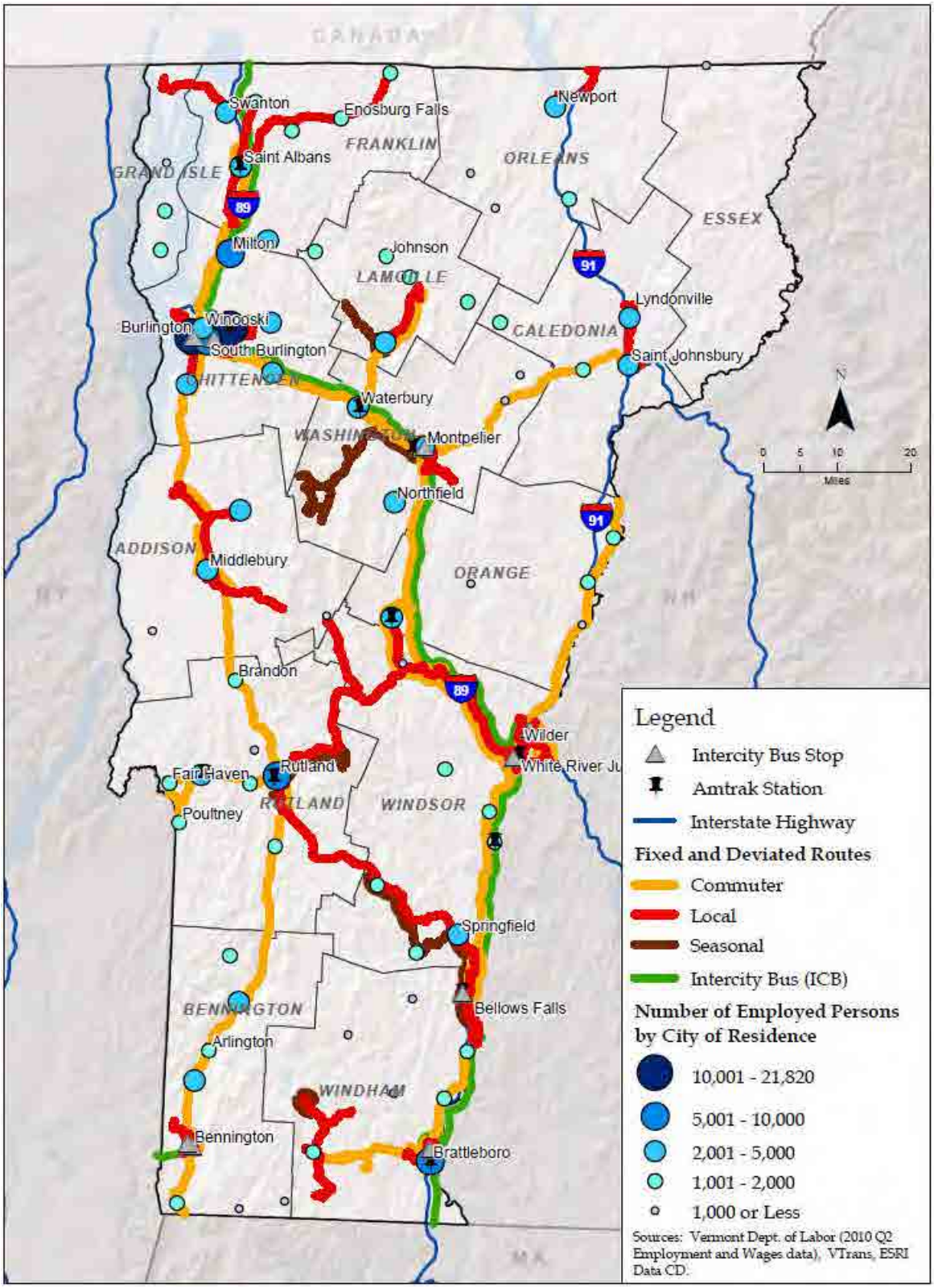


Figure 2-20: Employment by City/Town (2010)



Woodstock in Windsor County. While these towns are all smaller employment centers, it is worth noting that there is a lack of service to these areas.

Connectivity – In-State and Out-of-State

As demonstrated above, the Vermont public transit system consists of a collection of services operating in a parallel, but generally complementary, manner. In order for these services to create a "network" that allows Vermonters to reach destinations outside areas served by their local public transit operator and, indeed, outside the State, it is essential that these services connect in a meaningful way.

This section focuses on the existence of such connections and their effect on the statewide public transit system in Vermont, including:

- The need for in-state (regional) and inter-state connections,
- Whether and how well they are being served by the current public transit system, and
- Organizational structure affecting the ability to improve connectivity.

Need for Regional and Intercity Connections

Since the last PTPP, there has been a new emphasis on regional and intercity connections. Travel needs are increasingly long distance in nature, and are not limited to the areas served by the local public transit system. Key markets to be served include:

- tourists including leisure travelers and day excursions,
- commuters,
- transit dependent populations needing services or to visit family/friends outside their area.

Existing Intra-state or Regional Connections

Being able to access locations in the State that are outside the public transit service area is a challenge for many Vermonters. There are services available to meet many, but not all, of these regional trip-making needs.

Since the 2007 PTPP, there has been a growth of regional commuter services for both year-round and seasonal workers. Commuter routes that extend beyond the traditional areas service by each of the operators and seasonal connections currently include:

- ACTR extends into Chittenden and Rutland Counties with commuter services. Rutland to Middlebury is operated jointly with MVRTD (partially as a replacement for town-to-town service and access formerly provided by the Vermont Transit route that was discontinued in the Western Corridor). ACTR also operates a seasonal route called the Snow Bowl.

- MVRTD extends local services in Rutland into Middlebury, Manchester, Bellow Falls, Ludlow, and Fair Haven. It also has a seasonal route to Killington, primarily for workers.

- CRT has a number of commuter routes that connect to other transit sytems - Rockingham – Lebanon (connecting to AT and STSI), Bellows Falls-Brattleboro (connecting with DVTA). The system also has a seasonal service to Okemo Mountain Resort and connects to Amtrak in Bellow Falls (Upper Valley Commuter Route).

- DVTA extends beyond its service area to Brattleboro and has a seasonal route to Mt. Snow.

- GMCN/GMX connects to MVRTD and for out-of state travel links to Peter Pan – Berkshire Transit, and Yankee Trails.

- GMTA is an example of a coordinated system that was created as a combination of the services operated by Stowe Transit, CVTA, Mad Bus, and Network to provide both local services and cross county commuter and general public routes.

- RCT has a route from St. Johnsbury to Montpelier where it links to Intercity Rail and air and various park and rider lots. This is operated in conjunction with GMTA.

- STSI operates two commuter routes along the I-89 and I-91 corridors into the employment centers of White River Junction and Lebanon and Hanover, NH

- CCTA operates the LINK Express commuter service to adjacent counties.

- AT provides commuter service to Enfield and Canaan, New Hampshire. Through the UVTMA, AT coordinates with Stagecoach Transit Services and CRT in Vermont and Community Transportation Services in New Hampshire to provide information on public transit and promote connections between

transit systems in the region. AT also promotes intermodal transportation with connections to Amtrak, Greyhound, and Dartmouth Coach.

The Section 45 study on Regional Connectivity looked at intra-state connections in terms of both possibility and "practicality". The definition of practical public transit trip was that it would take no longer then two times as long as it would be to drive, and require no more than two transfers among vehicles. It found that route connections exist among most of the State's populated towns and cities (with the exception of the Northeast Kingdom) but that the set of practical connections was limited. Most disconnected from intra-state transit fixed-route network is the Northeast Kingdom. Also it found that a trip from Burlington to Bennington is possible, but is not very practical requiring three transfers and most of a day. Since then a Route 2, St. Johnsbury to Montpelier, service has been instituted, which also allows for travel between St. Johnsbury and Burlington via connections with CCTA/GMTA LINK Express.

There are 49 State and municipally owned park and ride lots throughout the State that serve commuters and carpoolers. About two-thirds of the State-owned lots and nearly half of the municipal-owned lots are served by existing transit services, primarily commuter services or local routes with commuter-like schedules.

Existing Inter-State Connections

Intercity Bus, rail, and air provide connections to out-of-state locations for Vermonters and provide access to Vermont for visitors and tourists. Many of the transit systems in the State provide bus connections to Amtrak and to the few Intercity Bus stations that remain active – providing for both long distance in-state travel and out-of-state connections. As documented above, the intercity bus services have been drastically reduced over the past decade. Currently there are only two intercity routes operated by Vermont Transit (Greyhound) although connections among these routes at White River Junction, and connections to the larger Greyhound network offer wider array of choices.

Information Gap

While some service "gaps" exist, there is also an information gap for potential riders. A central source of information for travelers is essential to support public transit needed in Vermont – one that is "*seamless, efficient, user friendly with usable connections among in-state and out-of-state points*". [9] While there have been some strides

[9] In the 2007 session, the Vermont legislature directed VTrans to examine the feasibility of making public transportation in Vermont seamless, efficient, and user-friendly with usable connections among in-state and out-of-state points.

in compiling and sharing information on all transit services in the State as well as mention in marketing materials of connections and possible transfers among routes operated by different systems, without one central information sharing mechanism, it remains difficult to navigate through the information available on the various transit system media and websites. While Go Vermont has a start on matching ridesharing trips, there is currently no "trip planner" function on the Go Vermont site, (similar to Oregon).

Organizational Structure

As described in the previous section, the public transit system in Vermont consists of a collection of many independent parts including ten local public transit providers, Intercity Bus services operated by the private sector, and shared ride services such as shuttles and car and van-pooling.

A 2009 recent legislative report on the organizational structure for providing public transit in Vermont[10] concluded that the existing system has evolved in a logical manner, based on the primary, initial demand for transit services being local. The existing service delivery model grew out of the demand and need for transportation services based primarily at the local and intra-regional level and it was concluded that this is still the most appropriate model based on the priority of transportation needs and programs currently being delivered. However, the report postulated that as the demand for regional and intercity service increases, the model by which the services are delivered may evolve out of necessity. The report recommended that existing systems be allowed to evolve and take action to create efficiencies where interconnectivity opportunities present themselves. It also recommended that this update to the PTPP examine whether high-priority public transit services, including local, regional, and intercity, can be well-served under the current delivery structure.

Determining the State role and the way in which regional services can be addressed given the federal funding programs is a key PTPP issue. The fact that such services have emerged and are successful is a tribute to the need especially given the complexity required to secure the "local share" – which communities benefit, which should contribute, and how to determine a fair balance of financial support.

Organizational issues that arise when trying to provide better in-state and out-of-state connections will be examined in more detail during Task 4.

[10] *Section 35 Public Transit Study*, Interim Report, March 2009.

CONCLUSIONS ON PUBLIC TRANSIT SERVICES AND NEEDS IN VERMONT

Vermont's existing transit providers generally provide good coverage through fixed- and deviated fixed-routes, in those parts of the State with the highest densities of potentially transit-dependent populations. However, service is limited in terms of span of hours, days, and frequency of service in those same communities. All of the providers also offer demand- response, scheduled, and/or volunteer driver services to help meet transit needs in more rural areas, which do not have the density to support fixed-route services. The caveat is that most demand response services are funded through the Elderly and Disabled Persons grant, Medicaid, or human service agencies; while E&D program services are open to the public, residents often must be eligible for these programs or clients of the human service agencies to receive services under other programs. Additional demand response service, scheduled routes, and volunteer driver services would improve the convenience of public transit in outlying areas, where scheduled service to nearby large towns may only operate a few times a month and rides with volunteer drivers are subject to availability.

The Northeast Kingdom, Lamoille, and Orange Counties, and southern Rutland, northern Bennington, and northern Windham Counties have areas with high relative transit needs, but limited transit service. These areas are candidates for expanding existing transit services, and possibly implementing new scheduled, fixed-route, or deviated fixed-route service as population growth and densities warrant. The more urban areas around the State that currently have local or commuter services may also benefit from increased levels of service, such as expanded hours of service or higher frequencies, or new services such as weekend or evening service. Candidates for such transit growth include the areas surrounding Vermont's major cities: Burlington, Montpelier, Barre, Rutland, Bennington, Springfield, and Brattleboro. Grand Isle County also has notable high density areas with potentially transit-dependent populations, where fixed- or deviated fixed-route service is currently not available, save one round trip per weekday that serves Alburgh.

Vermont's current transit providers communicate often and engage in notable coordination efforts, from sharing information about other providers and highlighting connection points to sharing capital and training resources. The public transit networks also connect to other transportation modes, including park and ride lots, Amtrak, and Greyhound, whenever possible. Vermont's public transit network provides decent coverage across the State through at least one form of transit (i.e., demand response or volunteer driver service in the most rural areas), although it should be noted that funding for general demand response public transit is quite limited. Numerous opportunities still exist to improve existing services and introduce new types of transit to boost local and regional accessibility.

While the demographic analysis focused on potentially transit-dependent populations, "choice riders" present another potential market for public transit. Choice riders are those that own personal vehicles, but may choose to use transit services to save the costs related to owning an automobile, to reduce the environmental impacts of their transportation, or to experience less stressful commutes. Improvements to existing fixed-route and deviated fixed-route services, including expanded spans of service and higher frequencies, are especially important for attracting these types of riders and increasing new transit users.

Finally, in the past, Vermont Transit routes allowed Vermonters to travel between towns in-State as well as provided linkages to out-of-state destinations. With the reduction in intercity bus service, Greyhound now primarily provides the out-of-state linkages. Increasingly, the in-state trips are being provided by local transit providers; the gaps in in-state long distance trips are slowly being filled by regional services operated by the transit providers. However, these services have been planned to primarily serve commuter markets, and only secondarily provide town-to-town access.

Attachment

Acronyms

AASHTO – American Association of State Highway and Transportation Officials

ACTR – Addison County Transit Resources

ADA – Americans with Disabilities Act of 1990

AHS – Vermont Agency of Human Services

ARRA – American Recovery and Reinvestment Act of 2009

AT – Advance Transit

CAA – Federal Clean Air Act

CAP – Vermont Climate Action Plan

CBD – Central Business District

CCMPO – Chittenden County Metropolitan Planning Organization

CCTA – Chittenden County Transportation Authority

CIDER – Champlain Islanders Developing Essential Resources

CMAQ – Federal Congestion Mitigation and Air Quality Improvement Program

CRT – Connecticut River Transit, also known as "The Current"

CTS – Community Transportation Services (New Hampshire)

DVTA – Deerfield Valley Transit Association, also known as "The MOOver"

E&D – Vermont's Elders and Persons with Disabilities funding program. May also refer to locally-operated specialized transportation services provided for elders and people with disabilities.

FHWA – Federal Highway Administration

FTA – Federal Transit Administration

GIS – Geographic (or Geospatial) Information System

GMCN – Green Mountain Community Network

GMTA – Green Mountain Transit Agency

GMX – Green Mountain Express

JARC – FTA's Job Access and Reverse Commute program

LRTBP – Vermont Long Range Transportation Business Plan

MOU – Memorandum of Understanding

MPO – Metropolitan Planning Organization

MVRTD – Marble Valley Regional Transportation District, also known as "The Bus"

NEMT – Non-Emergency Medical Transportation

POCA – VTrans' Division of Planning, Outreach and Community Affairs

PTAC – VTrans' Public Transit Advisory Council

PTPP – Vermont Public Transit Policy Plan

RCT – Rural Community Transportation, Inc.

RPC – Regional Planning Commission

RSVP – Retired and Senior Volunteer Program

RTAC – refers to CCMPOs Regional Public Transit Advisory Council

RPTAC – Regional Public Transportation Advisory Committee

RTAP – Rural Transit Assistance Program

SAFETEA-LU – Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users

Funding programs under SAFETEA-LU:

S.5307 – FTA's Section 5307 program, Urbanized Area Formula Funding

S.5309 – FTA's Section 5309 program, Capital Investment Program (Bus and Bus Facilities)

S.5310 – FTA's Section 5310 program, Transportation for Elderly Person and Persons with Disabilities

S.5311 – FTA's Section 5311 program, Non-urbanized (also referred to as "Other than Urbanized ") Area Formula Funding

S.5311(b)(3) – FTA's Section 5311(b)(3) program, Rural Transit Assistance Program (RTAP) (part of S.5311)

S.5311(f) – FTA's Section 5311(f) program, Rural Intercity Bus (part of S.5311)

S.5316 – FTA's Section 5316 program, Job Access and Reverse Commute (JARC)

S.5317 – FTA's Section 5317 program, New Freedom Program

SGR – FTA's State of Good Repair Initiative

SIBS – Vermont's Statewide Intercity Bus Study

SRPTP – Short-Range Public Transportation Plan

SSTA – Special Services Transportation Agency

STP – Surface Transportation Program

STSI – Stagecoach Transit Services, Inc.

TAC – Transportation Advisory Committee

TOD – Transit Oriented Development

TPI – Transportation Planning Initiative

UVTMA – Upper Valley Transportation Management Association

VPTA – Vermont Public Transportation Association

VTrans – Vermont Agency of Transportation

Appendix C

Technical Memorandum 3: Current Issues Related to Public Transit in Vermont

KFH GROUP, INC.

2012 Vermont Public Transit Policy Plan

Technical Memorandum 3
Current Issues Related to Public Transit in Vermont

April, 2011
(Revised May, 2011)

Prepared for the:

State of Vermont
Agency of Transportation

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Technical Memorandum #3: Current Issues Related to Public Transit in Vermont

INTRODUCTION

The Vermont Public Transit Policy Plan (PTPP) is currently being updated for publication in 2012. The purpose of the PTPP is to review and update transit polices and goals and to develop strategies to meet current and emerging public transit challenges. The PTPP is part of a series of policy plans developed by the Vermont Agency of Transportation (VTrans) addressing, in addition to transit, rail, bicycles/pedestrians, air, and roadway policies. Together these policy plans provide direction for VTrans' various programs, as well as forming the basis of the State's Long Range Transportation Business Plan (LRTBP).

This technical memorandum presents the results of Task 3 and outlines the issues facing Vermont's public transit program. It is the third in a series of eight technical memoranda that will be prepared as the PTPP plan is developed. A preliminary list of issues were introduced in Technical Memorandum #1 and subsequently discussed with the Public Transit Advisory Council (PTAC), a variety of stakeholders, and the public at a series of three public meetings held the first week in February, 2011. The long list was condensed to six salient and overriding issues that VTrans is likely to face over the next five to ten years.

The project approach to defining and exploring issue areas involves the following actions:

- Identify and refine issues—compare to State goals; history; existing legislation or policy; and input from the Study Advisory Committee (SAC)/PTAC, Regional Planning Commissions (RPCs)/Metropolitan Planning Organization (MPO), and the public to this point.
- Develop alternative approaches to respond—changes in policy, funding, alternative programs, or parties.

The approaches presented in this memorandum are intended as a starting point for discussion among the various stakeholders and should not be considered recommendations. Recommend changes—whether legislative, policy, procedure, or funding—with schedule implications and identification of responsible parties will continue to evolve over the course of the project with any recommendations.

Public Outreach

As mentioned, one component of this task was to solicit public and RPC/MPO input through a series of public meetings that were held February 7, 8, and 9, 2011 including one meeting on Vermont Interactive Television that reached all areas of the State. The meeting presentation and a summary of the results of the meetings can be found on the Documents page of the project website. The project website is also being used to solicit public comments throughout the project via the comment form on the Feedback page of the website: **Vermont Public Transit Policy Plan Website**.

Finally, the study team conducted one-on-one discussions, either in person or via telephone, with many members of the SAC/PTAC. Interviews with additional stakeholders will continue throughout the project.

The next step in this process will be to present the potential approaches to addressing the issues to the PTAC and post the memorandum on the project website. The results of these discussions and feedback will be folded into the development of the policy and performance framework for the State's Public Transit Policy Plan (Task 5).

Condensed List of Issues

Many of the challenges of providing comprehensive public transit in a rural state are obvious and well known, and many of these were discussed in the Task 1 Technical Memorandum. Some are continuing while others have emerged since the last PTPP. The most pressing issues that emerged from the preliminary set of issues presented in Technical Memorandum #1 and through discussions with the PTAC, stakeholders, and the public included:

- Funding Levels and Sources,
- Funding for Capital Needs,
- Coordination and Medicaid Transportation,
- Interface with Land Use Planning,
- Regional Connectivity and Intercity Bus, and
- Improving the "Transit Experience."

Each of these issues is described along with possible alternative approaches for how they might be addressed in State policy. As mentioned above, it is anticipated that the materials presented will provide the starting point for discussions among various stakeholders - leading to policies that can be included in the final policy plan.

FUNDING LEVELS AND SOURCES

Transit in Vermont has benefited from continued VTrans and legislative support, which has provided significant and creative levels of funding. Yet, funding is one of the most critical issues facing VTrans and its public transit providers. Many aspects of the funding issue are anticipated to arise in the next five to ten years:

- How to fund maintenance of current services levels,
- How to fund service expansions to serve unmet needs or gaps in service,
- How to manage and distribute funding for capital (vehicles, facilities, and passenger amenities), and
- How to maximize federal funding while encouraging and sustaining local financial support for services.

Funding to Maintain Current Levels of Service

How to Pay for Successful Congestion Mitigation and Air Quality Improvement (CMAQ) Program-Funded New Starts after the 3-year Demonstration

While transit funding levels have been stable and grown some over the past few years, this has been accomplished in part by the use of federal CMAQ funds to create new services. VTrans supports demonstration or pilot projects for new services using CMAQ funds. Demonstrations are funded for up to three years with up to 80% from the federal program and at least 20% from local funding; eligible expenses include operating and capital. The 2011 allocation of CMAQ dollars for transit in Vermont is $1.5M, and in 2010, the operating cost for the CMAQ routes was over $1M. Most of these services would be considered to have at least an "acceptable" performance under the current standards and would be eligible for continued funding.

One of the most critical funding issues that the State will face in the next few years is how to continue funding for successful services that are coming off the three year CMAQ demonstration period. Funding to transition successful CMAQ routes will require an increase in base funding allocation for systems. Without some source of additional funding, many of the successful services started under this program are now

under threat of discontinuation. There is not local funding sufficient to pay the 100% net cost of the service – only the 20% local match.

VTrans has been providing the transit agencies with Preventive Maintenance funding from Surface Transportation Program (STP) transfers in an attempt to backfill and replace the CMAQ funds when the services reach their three-year CMAQ funding time limit. STP funds can only be used for capital expenses, including "capitalized" preventive maintenance, and cannot be used to cover operating costs and, many of the public transit providers are now operating CMAQ services that cannot be funded with flexed STP preventive maintenance funding when they are no longer CMAQ eligible. Since most of the public transit providers have reached their capacity to absorb Preventive Maintenance Funds (which may pay for 80% of an agency's eligible capitalized maintenance expenditures), funds from other source(s) would have to backfill any gap between the cost of the routes on CMAQ and the transit agency's ability to consume Preventive Maintenance funding.

Alternative Approaches to paying for these services include:

- **Provide additional State funding.**
- **Eliminate "unproductive" services** and shift funding to the successful services.
- **Seek a change in the federal CMAQ legislation** as some other states have to extend CMAQ past a three-year demonstration project to the life of the federal transportation authorization bill. In the last Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) legislation re-authorization of 2003, six states received language in the bill to allow their CMAQ funds to continue funding ongoing operations. Vermont's congressional delegation could push for similar flexibility in the bill to subsidize transit operations over the length of the reauthorization period. However, this could eliminate the "new starts" component of the program since, if services are not "graduated off", funding would not be available to start new services.
- **Seek (hope for) other program changes at the federal level**. Under re-authorization, other programs in the legislation, such as the STP, could be modified to provide flexibility in use for operating as well as capital costs.

Planning for the Possibility that CMAQ Funds for Transit are Restricted

Vermont has maintained its air-quality "attainment" status under the federal Clean Air Act (CAA). The State's CAA status allows it to use its CMAQ funds for purposes other than Clean Air Act compliance, namely to fund transit services

statewide. Public transit is not only a beneficiary of the State's compliance status, it is itself also a valuable tool in Vermont's ability to meet air quality standards. Vermont's CAA status may change in the coming years given the U.S. Environmental Protection Agency's need to strengthen the National Ambient Air Quality Standards (NAAQS) to protect human health.

The range of the current (2011) proposed Ozone NAAQS challenges Vermont's attainment status. Loss of this status will affect the use of CMAQ funds in the future. Were that status to be lost, the State would have to re-direct its CMAQ funds to activities aimed at improving air quality in those areas of the State that are not in attainment (likely the Southwest and Burlington area). These activities could include transit services, but the State would no longer have the flexibility to use CMAQ for its statewide New Starts demonstration program.

Alternative Approaches - The public transit operators should be made aware of the potential impact that a change in air quality attainment status could have on the VTrans program in general and funding for their system in particular . Presumably there could be a "phase down" period for services that are currently funded under CMAQ as well as a process by which the State justifies funding transit services in its non-attainment areas with CMAQ dollars as long as they meet air quality attainment goals.

Planning for Changes in Federal Discretionary Grants and Earmarks

VTrans, as well as many Vermont municipalities and a few of the transit operators, have received discretionary federal grants directly from the Federal Transit Administration (FTA) for vehicles and a variety of other capital projects, such as intermodal centers and maintenance/fueling facilities. The level of discretionary capital funding from the FTA to Vermont transit systems is significant and spans a number of years, as is necessary to meet the planning, environmental, procurement, and civil rights requirements for FTA-funded projects.

Another related, but unresolved issue, is what the State and transit providers will do if federal earmarks are eliminated. Under SAFETEA-LU, much of this was in the form of earmarks to VTrans and the transit operators (currently there is almost $37 million in active federal earmarks to local transit operators in the State). It is uncertain what will happen to earmarks under reauthorization and the 2011 Congress. The two issues with earmarks are 1) what will happen if they are eliminated and 2) if they are continued, how they can best be managed in Vermont?

What to do if Earmarks are Eliminated

The earmarked money is allocated to the states by Congress rather than using the normal budget formulae. Vermont has performed well recently by receiving a substantial amount of earmarked funds; currently there is almost $37 million in active federal earmarks to local transit operators in the State and another $1.9M direct to VTrans. The elimination of earmarks at the federal level could have a significant negative impact on transit in the State. If earmarks are eliminated, the State and local operators will have to compete with other states and transit systems for FTA discretionary federal grants.[1]

In addition to planning for the possibility that the State may have less capital funding available if earmarks are eliminated, the State should be able to position itself to be competitive under the FTA's discretionary grant program.

Approaches might include:

- To level the playing field, Vermont should continue advocating at the national level for "Small State Minimum" language (where each state receives at least a minimum level of capital funding), and work with the congressional delegation for more flexibility with specific programs in the legislation that are vital to Vermont's transit goals.

- The State should also advocate for continuation of the Small Transit Incentive Cities allocation that was created under SAFETEA-LU since this benefits Burlington/CCTA.

How Earmarks Should be Managed

The management of earmarks to local communities is a difficult subject since the State does not contribute to these projects financially. Yet, it appears that too many earmarked funds languish due to municipalities' inabilities to manage FTA projects.

[1] Transit funds are distributed through both formula and allocated programs. Allocated programs include both 1) funds earmarked in legislation or Congressional Committee Reports, and 2) funds available for FTA to distribute under its discretionary programs. From FY 1993 through FY 2008 almost the entire bus capital appropriation was earmarked during the appropriation process. SAFETEA-LU includes authorization earmarks for approximately one-half of bus capital funds for FY 2006 through FY 2009.

Alternative Approaches to managing earmarks include:

- **Centralize FTA earmark management** - Earmarked funds for rural agencies could go to VTrans to manage the project, and earmarks for urban transit could go to CCTA to manage the project.
- **Consider State contributions to local projects** based on a statewide criteria and capital improvement program discussed below; only for projects that had State review and approval
- **Collectively request earmarks (State and operators) –** VTrans and the operators could compile and submit a combined request for one earmark.
- **More active role for the RPCs/MPO –** The RPCs/MPO could work with municipalities to put the project management out to bid, or the RPCs/MPO could manage the earmark directly.

Funding for New Services and Expansions

Clearly, not all transit needs are being met in Vermont, or any other state. This project and the Short-Range Public Transportation Plans (SRPTPs) have identified gaps in service. Unmet and increasing needs include additional transit to serve youth, elders, and other non Elders and Persons with Disabilities (E&D) populations outside the fixed-route service area, as well as critical care issues. The State's population is aging and has an increasing desire to do so "in place." This trend will create dispersed demand for new services to meet the needs of elders, who formerly relied on their ability to drive to maintain independence, in areas not currently served by public transit. At the same time, the economy has created a group of new "transit-dependent" persons in youth, young adults, and a variety of other individuals and households without a car available.

Funding for New Services

Proposals for new services and expansions are initiated by the local transit providers and the communities they serve. As noted in S.5083, "*Proposals for new service shall be evaluated by examining feasibility studies submitted by providers. These studies shall address criteria set forth in the public transit policy plan of January 15, 2000.*" The current method for creating new services is for the service to be proposed by the transit providers in their annual grant applications and funded as part of VTrans' New Starts Three-Year Demonstration program, using CMAQ funds. If a new service performs adequately, it becomes eligible for continued funding as an established "existing" service. These services often change commuting and lifestyle patterns for a constituency, which results in fuel use reductions and lower emissions. Therefore, continued funding is essential if the State is to meet its four public transportation

priority goals and its emission reduction targets under the State's Climate Change Action Plan.

Given the scarcity of resources it is important to plan services with the highest potential for success. Service expansions were a major focus in the 2000 PTPP that recommended the SRPTP process. The requirement for SRPTPs was legislatively mandated as a means of identifying and justifying where additional public transit services were needed. The first of these were conducted by the transit providers in 2004. One of the primary purposes of the SRPTP was to explore the need and feasibility for new transit services – including an expanded budget. A more recent effort to update the plans was abandoned after the effectiveness of the approach came into question. While there is a recognition that transit services need to be well planned, the requirement that planning take place in this manner was eliminated from the legislation in 2009.

Alternative Approaches to ensuring that new, needed services are adequately planned include:

- **Re-institute the mandatory SRPTP planning process,** but stagger the plan preparation so that two to three plans are completed each year. The State would fund these plans and could provide consultants, or the plans could be procured locally & in coordination with the RPCs.
- **Continue to rely on the voluntary planning process** but ensure that VTrans staff is highly involved.
- **Work with the RPCs to develop transit planning capabilities** since VTrans already funds the RPCs under the Transportation Planning Initiative (TPI) program. The RPCs already meet frequently with transit providers and human service providers to review routes, financials, and ridership data, in addition to regional Transportation Advisory Committees discussing transit issues as they arise. Perhaps the RPC transportation planning staff could take a more active role in helping providers plan the details regarding new services as needed.

"Permanent" Funding for Expanded Services

Where will the money come from to expand services beyond the level possible under CMAQ? Relying on CMAQ alone will not allow the State to expand transit services to fill the gaps identified in this project. While it may be possible to extend the period for CMAQ funding beyond the initial demonstration period, the State should be looking at ways to increase services for the long haul.

Alternative Approaches to expand transit services to fill gaps would involve 1) increasing overall funding, 2) increasing productivity or initiating other cost-saving measures, or 3) re-allocating existing funding among the providers or programs.

- **Increase State Transit Funding Levels** – In recent years, the overall annual transit operating subsidies from federal and State sources have increased 3% to 10%, which has been enough to cover cost increases due to inflation and some modest service increases. Increasing funding levels much beyond the increases needed for inflation is probably unrealistic.

- **Increase Productivity or Cut Costs of Existing Services** – Reducing the costs associated with providing existing services could allow the transit systems to create new services with any savings. This could be accomplished by making current services more productive or reducing costs in particular areas.

  Approaches might include:

  - *Improved training* – Improved training could cut costs and improve service efficiency and quality. This could be provided in a cost effective manner by coordinating training among the operators. For example, CCTA puts on 10-20 maintenance trainings annually and the other providers could attend for minimal cost (this will be addressed further in Task 6: *Transit Planning Assistance Program*).
  - *Technology improvements* – Technologies such as automatic vehicle locators (AVL), mobile data terminals (MDTs), automated billing and tracking could help reduce costs (as well as increase service quality and improve ridership).
  - *New vehicles and maintenance improvements* – The improvement in the condition/age of the fleet should reduce operating (fuel) and maintenance costs, as should improved preventive maintenance.

- **Cut Under-Performing Routes and Services –** Another alternative for freeing up funding would be to cut funding for under-performing routes or services. The State monitors performance both monthly (using the monthly services indicator report) and annually. It appears that the current performance monitoring system is working relatively well and should remain essentially unchanged (although this will be examined more closely in Task 5). There may be a need for some tweaking of how particular routes are classified. For example, some rural routes may really be commuter routes and vice versa, or a tourism route might be considered a rural route. There has also been a

suggestion that boardings per trip on commuter routes represent round trip boardings. *(I thought it was.)*

VTrans policy states that services, which consistently under-perform and do not meet performance standards, will not be supported with State/federal funds. Currently, VTrans policy includes a consideration that State/federal funding for routes/services that under-perform for two consecutive years are discontinued. However, it does not appear that any routes or services have been "de-funded" in recent years.

In the 2010 performance report, ten regular services and three CMAQ Year 2 and Year 3 services did not meet the "acceptable" standards for at least one measure. The total operating costs on these services were over $1M, including $580K for the regular services and $450K for those CMAQ services that are nearing the middle to end of their demonstration period. Assuming the State/federal funds cover almost 75% of the cost of non-CMAQ services and 100% of the cost for CMAQ services, cutting these under-performing services could free up almost $890K for new, more productive services.

Specific Approaches to Cutting Under-Performing Services include:

- **CMAQ routes that do not meet performance standards should not be considered for further funding**. The original concept was that new services had an initial 18 months to perform. If they were not acceptable within 18 months, they had the next 18 months to adjust and meet performance standards. After that, if they were still not performing, then they would no longer be eligible for subsidies, and the routes would lose that funding.
- **Other, on-going routes and services that do not meet performance guidelines for two consecutive years would not continue to be subsidized.** In these cases, a policy would have to be developed to address whether:
  - Funds would be put back into the statewide pot and redistributed to other New Starts projects on a statewide basis,
  - The transit provider would have the opportunity to create a new service aimed at meeting the same need, or
  - The transit provider would be allowed to re-direct these subsidies toward other, unrelated projects.

- **Re-Distribute Funding –** It is unlikely that the State will implement a wholesale re-distribution of federal and State subsidies. Federal and State dollars are now distributed based on State legislation in Title 24 V.S.A, Chapter 126, S.5091. The funding allocation formula S.5091 remains in effect for the allocation of any *new* funds, but VTrans distributes federal and State funds for new *incremental* services based on demonstrated needs within communities through a competitive application. As noted above, funds used to establish new services and expand existing services are based first on the feasibility study, and then on the demonstrated need for the services.

  Thus, public transit funding is currently allocated to the providers based on demonstrated need during the grant application process, although allocations are generally based on previous year allocations plus inflation. In essence, systems are eligible to receive the level of funding needed to maintain current services, as long as those services remain eligible and meet performance standards.[2] To fund new services, the policy allows local areas to apply for services under the New Start program mentioned above.

  Since the New Start program is an open competitive process, one issue that was expressed by some of the providers is that they do not understand how the decisions regarding New Start applications are made. This is in contrast to the E&D Program funds, which are distributed by a formula that is transparent and easy to understand. The E&D Funding Formula was revised in 2007 and includes the percentages of elders, persons with disabilities, people living below the poverty level, and population density. VTrans does have a formal New Start Program process that includes evaluation criteria. The program guide[3] includes program goals that include supporting the "goals and objectives of the current Public Transportation Policy Plan". However, since the New Start program is funded with CMAQ, the evaluation criteria for selecting projects are mostly oriented toward maintaining air quality attainment. And, while congestion mitigation is one of the four transit goals, the selection criteria for the New Starts program do not address the remaining three goals, namely:

  - Provision for basic mobility for transit-dependent persons . . .;

[2]Title 24 V.S.A, Chapter 126 Section 5091 (j) Notwithstanding subsection (i) of this section, and to the extent that appropriated funds are available, no provider who is otherwise eligible shall receive a lesser amount of operating funds than it expended on eligible operating expenses in state fiscal year 2001 for services that remain ongoing, and provided that the amount shall be evaluated as necessary to address changes in the cost of providing the services. In the event that a provider merges with or is otherwise succeeded by another provider, the successor provider shall be entitled to the same protection under this subsection that would have been available to the superseded provider.

[3] *New Start Program Information Sheet*, VTrans, Public Transit Section, August 29, 2006

- Access to employment, including creation of demand-response service; and
- Advancement of economic development objectives, including services for workers and visitors that support the travel and tourism industry.

In fact, it appears that higher State/federal transit operating funding, trips, and hours per capita are being provided in more densely populated areas (Rutland) and relatively less in sparsely populated areas (northeast). While this phenomenon can probably be explained by the proliferation of volunteer driver programs and other cost effective services in the northeast, there may be a need to revise the New Starts evaluation criteria to shift funds to lower density areas to better address the three other transit goals described above, especially for transit to provide basic mobility for transit-dependent persons. As a result, some funding for the New Starts program might be redirected toward non-fixed route services that may be more appropriate in these areas.

Specific Approaches to making gradual shifts in funding levels as new dollars become available would be based on local needs and support for transit:

– **Remove Goal-Based Formula –** The operating funding formula could be removed since it appears that over time the amendments to Section 5091 have rendered it ineffective. Existing services would continue to be funded as long as they meet performance standards, and new services would be funded based on their merit and need-based feasibility studies.

– **Update the New Starts Evaluation Criteria to Rank Projects Based on State Transit Goals**, shown below - The State could broaden New Starts evaluation criteria to better incorporate the concepts from the S.5091 funding formula and stated transit policy. Thus, the base funding to continue existing services would be set, but new funding would be distributed based on statewide needs and priorities using the updated funding criteria.

24 V.S.A. Chapter 126, S.5083…*State policy shall support the maintenance of existing public transit services and creation of new services including, in order of precedence, the following goals:*

(1) Provision for basic mobility for transit-dependent persons, as defined in the public transit policy plan of January 15, 2000, 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) Access to employment, including creation of demand-response service.
(3) Congestion mitigation to preserve air quality and the sustainability of the highway network.
(4) 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.

- **Maximize Use of Capital Funding for Preventive Maintenance.** Currently, there seems to be more capital money available than operating. There may be an opportunity to expand the current State program to capitalize preventive maintenance to free up operating funds currently used for maintenance. Note – the PTAC can help identify if their systems have more PM operating expenses that could be capitalized.

Local Funding and Fares

With the 2007 PTPP, VTrans set a goal for all providers to cover at least 20% of their operating budget from non-FTA/Federal Highway Administration (FHWA) and non State-sources (this is exclusive of capital, Rideshare, RTAP, JARC, and Medicaid funds). The ability of the transit systems to generate local share is a major issue for some providers. The local funds needed to support public transit typically come from the towns they serve, the farebox, and contracts with human service agencies. Local communities and residents in some areas also contribute a significant amount for transit services from their local property taxes.

There is also a recognition at the State level that, in many communities, the major local source of funding is the general property tax, since the legislature does not authorize communities to raise other taxes for transit (with the exception of a sales tax in Burlington, South Burlington, and Williston). Since local communities do not have dedicated transit funding sources, generating local revenues to support public transit is a challenge. While property taxes are stable and the utilization of property taxes creates a situation where local transit supports local needs, transit competes with other local services for funds provided from the property tax. In some areas there is continuing interest in developing alternatives to the local property tax as the primary source of local match. This has led to multiple studies within the past decade devoted to an assessment of alternative funding sources that could be used on a regional basis. Now, in addition, there is the issue of funding multi-jurisdictional services such as commuter bus or intercity services. Funding regional and intercity trips is addressed in the section on Regional Connectivity and Intercity Bus below.

To secure the general property tax revenue, transit systems generally are required to appeal to the towns for support through Town Meeting ballot initiatives. While this requires a considerable effort on the part of the transit systems and distracts them from their primary responsibility of operating safe and efficient public transportation services, it is consistent with the State goal to preserve and enhance the level of public transit services by encouraging local financial support for those services. Also consistent with this policy is the requirement that most local match be provided as cash. Currently the State only allows in-kind contributions as local match for the E&D Program.

Alternative Approaches to address the local match issues might include 1) creating more flexibility in terms of what sources can be used to meet local match requirements; and 2) enforcing the 20% local share performance goal and assisting the providers in generating local support.

Creating More Flexibility in What Can Be Used as Local Match

One issue addressed in the 2007 PTPP was the request by the operators that the State have a more liberal interpretation of allowable sources and the percent of local match funding. The only change made at that time was to allow for the utilization of volunteer hours (in-kind) as local match in the E&D Program. No other changes were made due to the perception that allowing non-cash sources to replace local cash could lead to a decline in overall cash available, which could result in a decline in the level of service and a loss of local interest in transit.

Stakeholders report that, due to State funding cuts over the past couple of years, most human service providers are cash-strapped, and the need for flexibility in the local match under all transit programs is greater than ever. They also report that local E&D partners have had to shift cash resources to programs and services that are no longer funded by the State, thus risking lower participation rates in the E&D Program and lower leveraging capacity statewide. Currently, despite operating constrained programs where there is documented additional need, local E&D Programs sometimes run out of in-kind match and lack cash match to draw down federal funds. In fact, the State's largest transit agency, operating in the highest population center, returns E&D funds to the State each year as a result of inadequate local match. This hurts service levels, and elders and people with disabilities go without needed transportation. As the State seeks to balance needs for maintaining levels of service, providing more flexibility to identify alternative sources of match for the E&D Program would strengthen the program.

Alternative Approaches to providing more flexibility in what would be considered local match might include:

- Clarifying that transit operators can use volunteer hours, accumulated under the Medicaid volunteer driver program, as a local match for E&D funds (per FTA Circular 9070.1F).

Changes to Local Share Performance Measure

The State has the goal that the local communities demonstrate a financial commitment to public transit. VTrans' policy that 20% of each provider's operating

budget be generated from "local sources" encourages local systems to maintain an adequate level of local financial support for transit. This policy "target" is in lieu of a mandated farebox recovery rate, recognizing that farebox revenue is only one component of local funding. Some communities may chose to contribute directly to maintain a low fare or fare free services. Others may have access to private contributions (i.e., colleges and ski resorts).

While VTrans ensures that local match requirements are met for each grant, the 20% goal for local funding is not monitored per se and is not included in the annual performance report to the legislature. There is also no policy to dictate what would happen if a transit provider was unable to meet the goal.

Alternative Approaches to help with local share would include:

- **Monitor the 20% Goal More Closely** – At the same time, assist providers in developing and implementing strategies to increase local participation and financial support for transit. This could be tied to a statewide marketing program and/or outreach to local community leaders. This may be something that can be addresses in Task 6 as part of the RTAP program.
- **Provide More Flexibility in Local Share** – It looks like some E&D funding and New Freedom funding may be left on the table because no local match is available. Allowing more flexibility in what is considered local share may not increase overall funding for transit if no additional federal transit funds are forthcoming.
- **Pursue Legislation Allowing Local Tax** – Pursue legislation to allow local communities to generate local dedicated taxes? A statewide tax? In some areas there is continuing interest in developing alternatives to the local property tax as the primary source of local match.

FUNDING FOR CAPITAL NEEDS – VEHICLES, FACILITIES, AND PASSENGER AMENITIES

One of the broad issues to be considered is capital planning for the State's public transportation system. While previous versions of the PTPP and SRPTPs provided an analysis of capital replacement needs for the transit providers, there has never been enough funding available to satisfy all the needs, and VTrans has to prioritize what needs are funded. The State places priority on replacing existing vehicles and has an informal way to "prioritize" the need for replacement vehicles based on vehicle condition. In an effort to extend the useful life of the fleets, VTrans has distributed $1 million annually ($500,000 urban and $500,000 rural – allocated to providers based on

expenditures in 2005) through a preventive maintenance program set up by the legislature.

Although expansion vehicles for new services can be funded through CMAQ as part of New Starts grants, the PTAC has expressed an interest in developing a policy on expansion vehicles. This may be particularly timely as the State has received a State of Good Repair (SGR) grant as well as earmarks from the FTA for *replacemen*t of capital but not for expansion vehicles. An additional vehicle issue raised has been the need for consistency of vehicle manufacturers for ease of maintenance. Finally, the need for a policy on when and how transit facilities are funded was also raised as an issue.

Outreach meetings and stakeholder interviews have suggested that the capital planning issue has three major aspects, one dealing with vehicles, one with facilities, and a third with other capital, but particularly technology enhancements. Each of these is discussed below, but as will be seen, they are related.

Vehicles

Currently VTrans' policy on vehicle replacement and capital focuses on ensuring compliance with FTA requirements regarding procurement and satisfactory continuing control. Recent efforts in funding have focused on replacements for worn-out vehicles to bring the statewide fleet into a state of good repair, and there is general agreement that the state of the vehicle fleet is (or soon will be, as funded vehicles arrive) as good as it has been in a very long time.

However, this achievement is allowing for reflection on how to best maintain the vehicle fleet over time and provide for sufficient capacity for expansion and adequate spares to provide quality service. Issues that have been identified include the need for consistent policy to support the fleet, including:

- A clear statement of vehicle replacement policy and consistent application, which relates the design life to consideration for replacement (and is consistent with FTA policy);
- A clear identification of the design life of different types of vehicles, in order to avoid either premature replacement or keeping vehicles on the road past their useful lives;
- Policy regarding allowable spare ratios to provide adequate backup, but avoiding excessive spare ratios and underutilization of vehicles;
- Policy regarding expansion vehicles, and when funding for fleet expansion will be considered;

- Changes in procurement to provide for statewide vehicle procurements instead of individual system procurements;
- Funding to support future services. The key to this is planning to predict vehicle capital needs in future years, by type of vehicle and program. This planning would help identify appropriate and allowable funding to provide timely replacement or meet expansion needs, and should be done annually. And last but not least,
- Better monitoring of preventive maintenance activities to extend the life of the fleet. The State could institute periodic reviews of sample PM records of providers.

Each of these areas is discussed below. These changes in vehicle-related policy would require implementation through changes in the grant application, reporting requirements, procurement procedures, and disposition requirements—all needing to be included in the State Management Plan for these programs.

Vehicle Replacement

The 2007 PTPP included a policy statement calling for the development of a vehicle replacement plan. Vermont's current policy is to consider applications for vehicle replacement based on the vehicle design life as designated in the Vehicle Disposition and Transfer Procedures. Guidelines regarding vehicle design life are shown in Table 3-1, and the State policy technically provides that vehicles can be replaced when meeting the year *or* mile thresholds, whichever comes first. However, in practice VTrans currently requires both the year *and* mile thresholds to be met (except for special cases) in an effort to extend the life of the State's fleet.

Table 3-1: Vehicle Design Life

Vehicle Type	Years	Miles
Cutaways (16′ – 28′) or Small Buses (<30′)	5 years	150,000 miles
Medium Buses (30′ – 35′)	10 years	350,000 miles
Standard Buses (35′ – 40′)	12 years	500,000 miles
Light Duty, Mid-Size Bus (25′ – 35′)	5 years	150,000 miles
Medium Duty, Mid-Size Bus (25′ – 35′)	7 years	200,000 miles
Intercity Motor Coach	12 years	1,000,000 miles

Based on this table and the associated language, the current policy does follow FTA general guidance (as applied to Section 5307 and 5309 subrecipients, for which FTA specifies the useful life) in that it allows for replacement when either the years of service or mileage criterion is met, whichever comes first. It should be noted that

VTrans has no category for light-duty vehicles with an Altoona service life of less than five years or 150,000 miles, although there appears to be 49 such vehicles in the State's transit fleet, either three-year sedans/minivans or four-year/100,000 mile van-type vehicles.

The State also will consider replacing vehicles that have not met the useful life criteria, but have "extraordinary maintenance problems" or other special requirements with appropriate justification. VTrans must provide prior written approval for a premature replacement, and it has a depreciation formula to determine the fair market value of a vehicle. Procedures also exist to allow for transfers of equipment to other eligible subrecipients. However, in determining whether to approve a transfer, VTrans evaluates whether a vehicle has any remaining useful life—VTrans will not determine that there is no useful life, unless it has met *both* the years of service and mileage criteria.

VTrans provides the titles for vehicles to the grantee, but the State holds a security lien on the vehicles. The lien is only removed clearing the title to the subrecipient if the useful life standards have been met, or a vehicle disposition form has been submitted and approved by VTrans.

VTrans has an annual statewide vehicle inventory report that lists all vehicles used by the transit providers. However, the usefulness of this file to support the evaluation of capital grant applications and planning for overall capital needs is limited somewhat by the way vehicle types are identified and useful life information is captured. The State requests that the operators provide information on the FTA Altoona test design life of each vehicle, and on the anticipated year of replacement. For most vehicles this has been provided, but in a number of cases vehicles with similar descriptions are shown with different design life information, or different replacement years.

This may be correct data, if vehicles with similar names and capacities are available in both "light-duty" and "medium-duty" versions, but it may lead the State to reject a valid replacement if it assumes that the data is incorrect. From the existing file, the vehicle make and model identification is often not sufficient to allow one to look up the design life on the Altoona website. In addition, some systems have not provided the information for particular vehicles, or have described vehicles that have different life expectancies under a common description. For these reasons, the data file has not been fully utilized as a source for information to allow forward planning of capital needs.

In order to develop a capital replacement funding plan, VTrans will need to obtain correct data from the transit operators, and in the future it may make sense to make some relatively minor changes in the reporting requirements to:

- Require a copy of the appropriate page of the Altoona test to be attached when a new vehicle is put in service, supporting the data provided in the inventory (this will help support that the Altoona test was reviewed as part of the procurement as well). The useful life of that vehicle would be defined by the Altoona test;
- Request odometer readings at specified intervals, to allow computation of vehicle usage over the past year and provide better information about the anticipated year of replacement based on miles or years of service; and
- Request descriptive information about the use of a vehicle as a backup, or if it is subleased to another agency.

With such information, on-going utilization of this data could be used to assist in planning capital needs for vehicles. Table 3-2 presents an example of the kind of summary vehicle capital funding plan that could be developed from the statewide vehicle inventory, based on a policy of replacing vehicles at their expected life as expressed in years. It is based on the 2011 statewide inventory and does not include new vehicle replacement under the American Recovery and Reinvestment Act of 2009 (ARRA) (as they had not arrived yet). It should be noted that a large portion of the capital needs can be attributed to on-going replacement of CCTA large buses. A plan with projected statewide vehicle capital needs is needed for the Statewide Transportation Improvement Program (STIP) for non-urbanized areas, and is included in the Transportation Improvement Program (TIP) for the urbanized area (Greater Burlington).

Vehicle Procurement

As noted above, one vehicle issue raised has been the need for consistency of vehicle manufacturers for ease of maintenance. This could be handled, in part, by conducting a statewide procurement for transit vehicles. Currently VTrans does not conduct any statewide vehicle procurements on behalf of the transit operators, and each system has to conduct or coordinate its own procurement process. In some cases arrangements have been made to piggyback on procurements conducted by other states. Many states with substantial rural transit programs have brought the procurement of transit vehicles for Section 5311, 5310, 5316, and 5317 projects in house, with the state conducting the procurement, and operators selecting the size vehicle and options from a list provided by the state, which actually has the contract with the manufacturer or vendor.

Table 3-2: Sample Vehicle Capital Funding Plan for Vermont

Estimated Costs per Vehicle:

Vehicle Type:	Length	Capacity Range	Expected Years	Expected Miles	Average Unit Cost
Sedan	16-18	4	4	100,000	$20,000
Minivan	18	5	4	100,000	$29,000
Small Bus-Light Duty	20-25	10-12	4	100,000	$58,000
Small Bus-Medium Duty	20-30	8-28	5	150,000	$68,500
Medium-Duty Bus	23-40	18-39	7	200,000	$88,500
Medium-Duty Large Bus	25-39	14-43	10	350,000	$195,000
Heavy-Duty Transit Bus	30-40	27-43	12	500,000	$500,000

Estimated Funding Needs for Vehicle Capital Over 5 Years:

Vehicle Type:	*Overage Vehicles* Units	Unit Cost	Total	*FY 12* Units	Unit Cost	Total	*FY 13* Units	Unit Cost	Total	*FY 14* Units	Unit Cost	Total	*FY 15* Units	Unit Cost	Total	*FY 16* Units	Unit Cost	Total
Sedan	4	$20,000	$80,000	0	$20,000	$0	0	$20,800	$0	0	$21,632	$0	3	$22,497	$67,492	1	$23,397	$23,397
Minivan	0	$29,000	$0	3	$29,000	$87,000	0	$30,160	$0	3	$31,366	$94,099	2	$32,621	$65,242	0	$33,926	$0
Small Bus-Light Duty	9	$58,000	$522,000	4	$58,000	$232,000	5	$60,320	$301,600	11	$62,733	$690,061	4	$65,242	$260,968	0	$67,852	$0
Small Bus-Medium Duty	17	$68,500	$1,164,500	14	$68,500	$959,000	9	$71,240	$641,160	19	$74,090	$1,407,702	31	$77,053	$2,388,649	27	$80,135	$2,163,653
Medium-Duty Bus	2	$88,500	$177,000	8	$88,500	$708,000	1	$92,040	$92,040	5	$95,722	$478,608	9	$99,550	$895,954	11	$103,532	$1,138,857
Medium-Duty Large Bus	3	$195,000	$585,000	7	$195,000	$1,365,000	0	$202,800	$0	7	$210,912	$1,476,384	4	$219,348	$877,394	1	$228,122	$228,122
Heavy-Duty Transit Bus	9	$500,000	$4,500,000	4	$500,000	$2,000,000	6	$520,000	$3,120,000	6	$540,800	$3,244,800	0	$562,432	$0	4	$584,929	$2,339,717
	44		$7,028,500	40		$5,351,000	21		$4,154,800	51		$7,391,654	53		$4,555,699	44		$5,893,747

Note: All vehicles in the state inventory were categorized into vehicle types by the Altoona Life Expectancy Years reported by the transit operators. (Vehicles that have been replaced, or were noted as staff or service vehicles were not included in the above estimates.)

There are significant potential advantages to a statewide procurement:

- The burden of meeting FTA procurement requirements is lifted from the individual operators, who are likely to find compliance difficult and a significant administrative workload.
- The State's burden of monitoring subrecipient compliance with FTA vehicle procurement requirements is significantly reduced.
- Larger vehicle orders may result in better pricing from vendors and manufacturers.
- Purchase of a set of common vehicles across the State may facilitate common maintenance policies, sharing of maintenance, joint parts procurement, etc.

Against these potential advantages some disadvantages may also exist:

- Individual operators preparing their own bid specifications may desire upgrades or options not included in a common State specification and not available as an option.
- If a statewide procurement results in the purchase of a troublesome type of vehicle, all systems suffer from it.
- State procurement systems may not be able to conduct transit vehicle procurements meeting FTA requirements in a timely way, as they have no experience with this type of procurement.

Alternative Approaches to the vehicle procurement policy could involve:

- **Continuation of the current system;**
- **Statewide procurement by VTrans**;
- **Statewide procurement by a lead operator** or other third party with procurement experience, who conducts a statewide procurement with the other operators; or
- **Statewide procurement through a consultant contract by AOT, VPTA or an operator.**

For any option involving joint procurement, the issue of developing vehicle specifications that would provide for a reliable vehicle with a range of appropriate options could be addressed through a committee of the participating operators, perhaps with some additional technical assistance if required. Vermont's transit operators have

significant experience with the types of vehicles they operate, and their input into the specification would be needed in any event. A joint procurement appears to have significant advantages, and further development of this issue is warranted.

Spare Ratio Policy

Spare ratios were raised as another issue, as a need for a clear consistent policy that would support vehicle replacement applications. General FTA guidance for non-urbanized systems allows for a spare ratio of up to 20%, calculated by taking the number of spare vehicles (subtracting the number of vehicles needed for peak service from the total revenue fleet), and then dividing that number by the number of vehicles required for peak service. So a system with 13 vehicles, needing ten for peak service, has three spare buses and a spare ratio of 30% (three divided by ten). Typically very small fleets require higher percentages, as there is a need to have enough spares to have a back-up vehicle available at all times, even if another vehicle is being worked on. Also, enough spare vehicles are needed to allow for timely preventive maintenance.

Some states have sought to avoid high overall spare ratios for the state that result from having many small systems, each with a 20% (or higher) spare ratio, by setting up state lease fleets that systems can use when their own vehicles are down. The Georgia Department of Transportation (DOT) maintains a fleet of lease vehicles, which are kept at the DOT District offices. These are purchased with Section 5311 capital funds, the local share generated in part by a lease fee of $0.10 per mile and in part by proceeds of vehicle disposition sales. Georgia has over 100 subrecipients in the program, many of which have fewer than ten vehicles. Issues with the combined spare fleet include the staff time required to travel to a District office (sending two persons) and retrieve the vehicle, the difficulty in keeping the fleet of spares ready to go (with intermittent use they often have their own problems), the attendant delay in getting the leased spare into service, and then the issues involved in returning it.

Practically speaking, if a vehicle goes down in service, it may take two days to get the replacement into service, and during that time repairs can often be completed for the system's own vehicle. Such shared spares are not a substitute for having some spare capacity to immediately provide backup, but such a program can provide useful backup for a vehicle that is out of service for a prolonged time for major repairs. In addition, if the leased spare vehicle is a state vehicle there must be staff available to ensure its maintenance, etc. Such an option would make sense in Vermont only if somehow combined with regional maintenance facilities, where an operator performed major repairs on vehicles from several systems, and the maintenance facility owner could be responsible for the lease spares.

With the smallest transit fleet in the State now at 12 vehicles, it makes sense to consider a State policy that allows up to a 20% spare ratio (or higher for very small fleets) in evaluating requests for replacement, as an alternative to the administrative and other costs associated with a fleet of spares.[4]

Alternative Approaches to establishing a policy on spare ratio might be:

- **Use the FTA 20% spare ratio** to evaluate when and if fleet sizes are appropriate. This should be tempered with the overall size age and condition of the fleet, maintenance situation, etc.
- **Establish a statewide "loaner" program** for typical or common types of vehicles that could be used to supplement (but not supplant) a more modest set of spares located at the various transit properties.

Expansion Vehicle Policy

Based on the State policy of funding any new services as New Starts, whether expansions of existing routes (increased frequency, span or area of service) or new routes or service coverage, and then evaluating them against established performance standards to determine continuation, there is a need for some policy regarding expansion capital. VTrans policy is to provide capital for funded New Starts, which would include additional vehicles needed for expansion of existing services (such as an increase in frequency). Expansion capacity is thus linked to a specific project which also has operating funding for the demonstration period.

In the situation where a New Start does not meet performance expectations and is discontinued, the operator can potentially pull the New Start vehicles into its overall replacement plan, or follow VTrans policy permitting transfers of vehicles between eligible sub-recipients. These options provide flexibility for continued use of vehicle capital.

The case may arise in which incremental growth in an existing service would require expansion vehicles, but it is not clear that this is a "New Start" situation. For example, a demand-responsive service may have added demand, but is not providing expanded hours or coverage.

[4] As of the FY 2011 inventory, GMCN has the smallest Vermont fleet of 12 vehicles. Advance Transit's Vermont inventory shows seven vehicles, but their total fleet size is about 30 vehicles (used for their services in New Hampshire as well). (Sources: VTrans, Advance Transit Website, **http://www.advancetransit.com/**.)

Alternative Approaches to expansion vehicles policy might be:

- **Based on Spare Ratio –** One option would be to allow expansion vehicles beyond those needed for New Starts when the transit provider can demonstrate that their spare ratio has dipped below a certain minimum level – for example 15% or 20%?
- **Based on Ridership Increases** - Another option would be to have a policy providing for expansion vehicles in such a situation when ridership achieves a particular level, continued growth is predicted, and operating funding is available. For example, an additional demand-response vehicle may be warranted if the existing vehicles are each providing 500 trips per month. The productivity requirement would need to be evaluated based on Vermont conditions and productivity for that type of service. Or it could be a combination of a minimum productivity level for that type of service, and full utilization of vehicles in terms of span of services—for example all demand-response vehicles in a fleet are achieving 1.5 boardings per hour and 2,500 revenue service hours per year.
- **Based on Vehicle Utilization** - Some states collect vehicle utilization data showing what route or type of service each vehicle is used for during the reporting period (which may be quarterly), the hours it is in use, the miles and ridership accumulated during that period. Such reporting may be of use in supporting the need for expansion vehicles; or if there are concerns about excessive fleet sizes and low utilization, or conversely, low fleet sizes and excessive utilization; or for examining the potential for coordination of services. It is most easily accomplished if all or most of the systems have scheduling software that can be used to produce the report, otherwise it would be a substantial reporting burden. More typically this type of analysis is done as part of a periodic Short-Range Transit Plan.

Transit Operating Facilities

Although vehicles remain the State's priority under its capital program, it has an interest in ensuring that the transit operators have adequate facilities. Currently VTrans does not have a policy regarding the funding and construction of transit operating and maintenance facilities. The State has not provided funding for facilities, either federal capital or a share of the local match. At the same time, a number of transit operators have identified a need for a facility, and have independently sought funding for feasibility studies, architectural and engineering work, land, and construction. As examples, STSI renovated the Randolph railroad freight house to create an administrative and storage facility, CRT has completed a new operating facility, DVTA has been working on a facility in Wilmington for some time, and ACTR is developing

an operating facility. CCTA has its own facility. Most have sought the funding through federal earmarks, providing the local match through their own local funding sources. The VTrans role has been limited to providing letters of support, although in the case of the new facility for ACTR the State is involved in providing the site. VTrans is not administering any of the grants for the facility projects that are in process.

In the absence of any VTrans policy regarding facilities, questions have been raised even about providing letters of support for these local projects, as there is no State position on which systems might need what kind of facility. At the same time, the lack of a coordinated process between VTrans and the local agencies regarding these earmark projects has also led to a situation in which a locally desired project may languish due to a lack of local administrative support or match funding. Simultaneously, Congressional efforts to eliminate earmarks may well end the opportunity for this type of local initiative project. All of these concerns suggest that there is a need for VTrans to develop policies to address facilities—both the operating facilities sought by CRT, ACTR, and DVTA, and intermodal passenger facilities.

The development of State policy needs to take into account the primary reasons for a system to have an operating or passenger facility. Even small rural systems may benefit from having a facility. Many of Vermont's rural/small urban systems have their roots in human service transportation, with administrative staff in rented or donated space, the few vehicles parked nearby or taken home at night by the drivers, and maintenance and repairs done by local garages. At some point, the increases in fleet size due to growth and consolidation of operations will result in a need to consider facility needs. Potential benefits of transit facilities include:

- The ability to provide secure storage for the fleet, and depending on needs sheltered or indoor vehicle storage. Secure storage reduces damage losses due to vandalism and theft, sheltered storage reduces staff costs for snow and ice removal, and air-conditioning for cool-down times.
- Adequate administrative space, appropriately designed, and adjacent to vehicle storage, increases oversight of the fleet and control over vehicle dispatch (including oversight of pre- and post-trip inspection, fare collection, and employee time).
- Repair bays allow for in-house preventive maintenance, improving vehicle reliability and minimizing downtime—if the fleet size is large enough to allow direct employment of maintenance technicians as full- or part-time staff.
- Operating efficiencies are gained by staff not having to coordinate with the local garage schedule and transporting vehicles to/from the local garage.
- Secure parts storage and on-site bulk fueling can result in lower unit costs.

- Appropriate location of a maintenance facility may result in operating cost savings by minimizing the mileage and non-revenue time for vehicles to get to the points where they go in-service or come out of service.

Obviously there are a number of considerations that would enter into a determination of whether or not a system would need a facility, the size of the facility, and what it would include. In general, even the smallest operations need administrative space for the management staff, scheduling and dispatch, and for drivers to report for work and check in. A secure, lighted, off-street parking area is also a desirable, minimal need. It is best if the vehicle storage and the administrative offices are co-located to maximize management control and minimize time spent by staff going between locations. Often these needs can be met through use of existing public facilities or rented space, but it gets more difficult as a system has more vehicles and staff. Beyond these minimal needs, the location, sizing, and design of a transit operating facility requires significant additional analysis. Rather than a simple statewide policy stating that all systems need a facility, there is a need to analyze each system to determine facility needs and optimal locations. With such information the State would be in a position to establish a statewide policy supporting the development of particular types of facilities, and establish priorities that could potentially be addressed in ongoing funding decisions.

Alternative Approaches to establishing a State transit facility program include at least three potential approaches:

- **Statewide Assessment and Prioritization** - One would be the development of a statewide facility plan, collecting data on each system and its needs, and creating a prioritized list of projects that would warrant funding.
- **State System for Entertaining and Evaluation Local Requests** - Another approach could be to develop a process for each system to follow in developing its facility needs and project proposals, providing the documentation that would support grant applications (whether for earmarks or to VTrans). Minnesota has taken the latter approach, developing a "Transit Facility Guidebook" that provides the process and the analysis tools to support local development of realistic applications for facilities. When a local system works through this process it goes through a multi-step process that includes a project definition phase, a concept development phase including cost/benefit analysis, a screening and evaluation by the State program staff, identification of potential funding, an application phase, and finally contracting for design and construction. This process provides the data needed to the State transit program, which uses it to establish a transit Facility Priority List each year.

- **Regional Shared Facilities for Major Maintenance –** Finally, regional maintenance garages could be established for some maintenance functions. Given the need to deadhead vehicles to regional garages, it may not be practical for **all** vehicle maintenance to be done out of centralized or regional garages, especially not routine preventive maintenance. However, there may be some maintenance functions or repairs such as engine overhauls, air conditioning servicing, lift maintenance, or body work, that could be conducted more cost effectively if they were centralized. This could involve creating new regional bus garages, or one or more of the existing operator facilities could function in this role.

The development of a common State process with evaluation criteria has advantages in that the local system is still tasked with identifying and documenting its needs, assessing the costs and benefits, and then submitting its concept for initial approval based on a known set of project evaluation criteria. The alternative is having a statewide study define what each system should have from a State program perspective. However, further recommendations on the development of a statewide facility policy might well require consideration of the likely range of needs, including the potential number of facilities and likely scale.

Passenger Facilities

Another potential policy could address standards for when the State would consider various passenger amenities justified and would accordingly contribute to the cost. The most costly of these is shelters, feasible for transfer points, high ridership stops, and major attractors such as universities, colleges, and hospitals.

The State might consider establishing bus stop design, placement, and amenity guidelines that could address the following main elements:

- **Bus Stop Signage** – Provides consistency on the design and types of information displayed. Ensures all bus stops have appropriate signage and adheres to the Americans with Disabilities Act Accessibility Guidelines (ADAAG) regarding the height of the sign and the size of letters and numbers that are on the sign.
- **Placement** – Assist in determining appropriate and safe placement relative to the nearest intersection (nearside, farside, or midblock).
- **Landing/Pedestrian Pad** – Provides guidance on appropriate size, slope, and orientation of pedestrian pad to ensure ADA compliance.

- **Sidewalk Connections** – Ensures stops are properly connected by appropriate sized sidewalks and curb ramps and complies with the ADAAG and the Public Right of Way Accessibility Guidelines (PROWAG).
- **Curb Clearance** – Ensures adequate clearance along the curb that will allow buses to completely pull up parallel to the stop.
- **Lighting** – Minimize the safety and security risks to pedestrians and waiting passengers.
- **Passenger Amenities** (shelters, benches, bike racks) - Development of appropriate design guidelines for amenities to ensure proper placement and orientation of such amenities. The design guidelines for shelters should also address the accessibility of shelters for persons in wheelchairs ensuring adequate clearance to enter and maneuver inside the shelter.
- **Bus Stop Guidance** – Provides minimum criteria for installing amenities to guide the transit system in prioritizing use of limited capital resources. For example, stops can be classified into three types – Basic, Enhanced, and Transit Center. Table 3-3 is an example of a bus stop guidance that could be used to prioritize elements and amenities at stops.

Table 3-3: Sample Bus Stop Guidelines

Bus Stop Element/Passenger Amenity	Basic Stop	Enhanced Service Bus Stop	Transit Center
Bus Stop Sign	Yes	Yes	Yes
ADA 5'x8' Landing Pad	Yes	Yes	Yes
Sidewalk	Yes	Yes	Yes
Lighting	Evening Service	Yes	Yes
Seating	Trip Generator Based	Yes	Yes
Expand Boarding & Alighting Area (Rear-door access)	No	Site Specific	Yes
Bus Bay (Pull Off)	No	Site Specific	Yes
Shelter(s)	1 (50+ boardings/day)	1	2 +
Trash Receptacle	Site Specific	Yes	Yes
Information Case	Yes	Yes	Yes
System Map	Contingent on Shelter	Yes	Yes
Real-time Display (LED + Audio)	Optional	Yes	Yes
Interactive Phone System On-Site	No	No	Yes

COORDINATION AND MEDICAID TRANSPORTATION

Coordination of transportation resources among State agencies, transit providers (public and private), and human service providers is a means of ensuring that services are not duplicative or overlapping and that resources are used in a cost effective manner. Since the last PTPP, there has been an increased emphasis on coordination at the federal level. Even though Vermont is a recognized leader in the coordination of transportation resources among public transit and human service agencies, there is a need to maintain the level of coordination.

The Vermont Agency of Human Services (AHS) and VTrans have a Memorandum of Understanding (MOU) that outlines the manner in which they will coordinate (the original MOU expired, but a new one was recently executed). Departments and programs within AHS use the public transit provider for client transportation where appropriate. VTrans and AHS have worked to make funding more flexible and to encourage human service programs to use public transit providers as regional brokers of service for human service agency clients.

The most important coordination issue currently faced by Vermont's transit program is the need to maintain the linkage between transit providers and the State's Medicaid program.[5] Recognizing that coordination of transportation services is beneficial to both, the promotion and enhancement of coordinated human service transportation and general public transit has long been a Vermont State policy. State legislation in 24 V.S.A, Chapter 126, Section 5090 regarding Human Service Transportation states,

> *"The secretary of human services shall direct agency of human service programs to purchase client transportation through public transit systems in all instances where public transit services are appropriate to client needs and as cost efficient at other transportation."*

VTrans and AHS have historically worked to make funding more flexible and to encourage human service programs to use public transit providers as regional brokers

[5]One requirement of Title XIX of the Social Security Act (Medicaid) 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). While Title XIX does not include specific mention of NEMT, federal regulation and the body of case law that have evolved from language in the Act clearly mandate that every state Medicaid program include provisions for necessary transportation of Medicaid recipients to and from providers of medical services. While funded with a combination of state and federal dollars, the programs themselves are state run, with each state determining its approach to NEMT. This explains why there are so many variations in service design among the states (and in some states each county).

of service for human service agency clients. The State recently developed a coordinated transportation plan in accordance with the requirements in SAFETEA-LU and the designation of regional brokers as relatively new mechanisms to advance this policy.

AHS has historically relied on community-based public transit brokers to serve the Medicaid clients residing in set geographical areas, while also coordinating NEMT services with their general public transit services. At $12M annually, the Vermont Health Access NEMT program is a major source of transportation funding in the State. The Department of Vermont Health Access (DVHA) within AHS administers the NEMT program.

Most of the public transit systems in Vermont function as the community-based brokers for NEMT. In this role, the transit agencies coordinate public transit and NEMT into one unified system for residents within their areas.[6] Each of these community-based brokers operates slightly differently but in general the program work as follows:

- DVHA certifies Medicaid clients as being eligible for NEMT because they have no other means of getting to medical services. Currently, there are over 86,000 Medicaid clients that are eligible for NEMT 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 that the service/medical need is eligible for NEMT.
- 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 service on their demand-response service. Most services are shared ride and clients are co-mingled with the general public and often with clients of other agencies.

The Vermont community-based brokers are paid an administrative fee for each trip requested and "brokered" as well as reimbursed for the direct cost of the taxi fare, reimbursement of volunteer drivers, or for the cost of providing the trip on their own services/vans.

The current arrangement has many advantages but also has raised questions regarding potential conflicts of interest; since the brokers can provide the service themselves, they could assign trips to their services despite the fact that the trip could be provided in a more cost-efficient manner. This is one of a number of issues raised by

[6]In addition, DVHA purchases CCTA monthly passes for frequent-NEMT users that can ride fixed-route buses.

DVHA which desires to achieve improvements in accountability, quality and access as well as lower service costs.

Benefits of the Current Arrangement

The Medicaid program, its 86,000 clients eligible for NEMT, and the public transit program all benefit from the high level of coordination between public transit and human service transportation in the State. Benefits include:

- Transit administrative structure and capital investments are already in place and subsidized by the federal transit programs. When a specialized service is required that is not available elsewhere in the community, this allows the transit systems to provide services in a cost-effective manner.
- As community-based brokers, the transit operators are most likely to attract and retain volunteer drivers.
- Coordination and co-mingling of clients from various programs can reduce the per trip cost for all programs.
- Placing riders on the appropriate service is good business practice for the transit operators. The transit providers are in the community and deal daily with the needs of that community. They are also aware of potential services to meet those needs. Under the current brokerage model, there is no incentive for transit operators to provide demand responsive services when a less expensive service is available. The transit systems incur additional operating costs for each demand responsive trip that they provide. On the other hand, there is an incentive for the transit operators to place trips on fixed routes – additional trips improve performance of those routes without increasing operating costs.
- Clients also benefit from coordinated services by having one point of information and entry into the system. Clients call one central number to arrange for public transit trips and Medicaid trips.
- The quality of service provided by public transit systems can be higher than under other brokerages models. If not coordinated with public transit services, Medicaid standards for transportation services can be lower. Driver training requirements, vehicle standards, safety standards, and other requirements typically adhered to by transit providers are not always required by Medicaid agencies. Having the public transit agencies operate broker services can ensure that a consistently high level of service is provided both to Medicaid clients and the public in general.

- Medicaid contracts help leverage State and federal transit funds - Policy statements and goals for public transit in Vermont, codified in 24 V.S.A. Chapter 126, S.5083 state that: *"It shall be the state's policy to make maximum use of available federal funds for the support of public transportation….State policy shall support the maintenance of existing public transit services and creation of new services."* The current arrangement furthers the State goal of maximizing the use of available federal funding. 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.

- Medicaid contracts help improve productivity on fixed routes - In all areas of the State with fixed-route services, the transit operators direct NEMT clients toward those services, which increases transit ridership (at no additional cost) and provides a low cost trip for DVHA. In the CCTA service area, DVHA purchases monthly passes for NEMT clients who would otherwise be provided more expensive demand-responsive van or taxi service. At $42 per month, this is less expensive for DVHA than one to two round trips on taxis or a specialized service. This program provides an incentive for clients to use fixed-route services in general, since they have unlimited use of the fixed-route services. Use of fixed routes for NEMT is distinct from demand responsive services because, unless the routes are standing room only, transit providers do not incur additional costs to provide fixed-route services to NEMT clients.

Changes and Potential Impacts

If DVHA competitively bids for NEMT broker(s), the existing transit systems could certainly bid on those contracts. However, if one or more of them are unsuccessful and a new non-coordinated broker is chosen, this could have a major impact on transit services in the State.

Reduction on Coordination – Contrary to Transit Policy to Maximize Coordination

NEMT has been in existence since the mid-1970s, when program coordination was first employed to maximize scarce resources, especially in rural areas. VTrans' goal in integrating its E&D operating funds with the Non-Urbanized Area Formula Grants

(S.5311) was to maximize coordination between human service agencies and public transit providers, and to improve the utilization of unused vehicle capacity on vehicles formerly restricted to E&D. At $12M annually, any coordination effort in Vermont that does not include Medicaid is missing the largest participant.

The current coordinated system of delivery allows for efficiencies through co-mingling general public routes with NEMT. Seats are filled on particular runs that would otherwise have increased vacancies without coordination. As a result, the cost-per-trip of public transit services is reduced from what it would be in an uncoordinated system.

Potential Inability to Draw Down Some Portion of Federal Transit Funds

There isn't a current estimate of the amount of federal funds that would be "lost" without the ability to use NEMT as local match. However, it appears to be significant. According to the 2009 rural National Transit Database (NTD), transit systems in Vermont provided almost 440,000 coordinated demand-responsive trips and spent almost $6.3M in "other federal funds" to help cover operating costs. This represents over one-fifth of what they spent on operating costs and 25% of their operating deficits. While not all of this was Medicaid dollars and it isn't clear how much may have been needed to match the federal transit dollars, it is obvious that without NEMT dollars as local match, many of the transit programs will have to be reduced. If State funds were needed to replace the federal funds, the net effect would be to substitute 100% State dollars for NEMT, which is at least 50% federal dollars.

Reduction in Transit Fixed-Route Riders

There is also a possibility of a loss in fixed-route ridership. This is especially an issue in the CCTA service area where DVHA purchases monthly passes.

Reduction in Volunteer Rides

Without the benefit of the base of community support generated by the community brokers, volunteers may be more reluctant to participate. Volunteer retention is already an issue being addressed in the program. It's arguable that without the connection to local communities, volunteer drivers would be even more difficult to recruit and retain.

Potential Reduction in Quality

Another subject, which is often raised with the introduction of private-for-profit brokers that are not also transit operators, is the potential absence of uniform service standards and a "level playing field." Often the standards for operating Medicaid

transportation service are less stringent than that of public transit operators. The level playing field issue poses challenges to transit systems in competing with an operator, who is operating at a different standard of service. Transit operators often cite the difficulty of competing when the Medicaid standards of service are low. Driver training requirements, minimum standards, vehicle standards, safety standards, and other requirements typically adhered to by transit are not always required by Medicaid agencies. This encourages two different levels of service – one for public transit and a lower standard for Medicaid clients.

Alternative Approaches to the coordination and Medicaid issue for VTrans (recognizing that it is an AHS decision) include:

- **Do Nothing** – Let the process continue and plan for how to mitigate the negative effect on the transit program/funding.
- **Work with DVHA and the Current NEMT Community-Based Transit Providers to Negotiate a New Contract** – Help to facilitate a negotiated contract that meets the needs of DVHA. This will require working on improving the parts of the system that are not working for DVHA – like improving the verification that the trips provided are to eligible medical appointments and/or services. The statewide software may also provide a tool to help with the Medicaid trip eligibility verification process.
- **Work with DVHA to Write contracts that Maintain a Strong Relationship with Transit Operators** – Work to help create an RFP that has a high likelihood of continuing the Medicaid-public transit coordination arrangements that are essential to implementing VTrans and other State policies.
- **Work with DVHA to Help Obtain Whatever Waivers are Needed to Keep the Existing Community-Based Brokers**.

INTERFACE WITH LAND USE PLANNING

Discussions with stakeholders and the public have recognized that land use decisions can have a significant impact on the potential for residents to use transit. The discussions began with the desire to use transit as a means to create and support Transit Oriented Developments (TODs) in the State. TODs typically have land use density sufficient to support transit services, mixed land uses, and pedestrian- and bike-oriented designs that encourage walking and biking, less auto ownership and less auto mode share, and proximity of destinations such as retail, employment, and residential

areas to transit stations/services. Vermont's traditional settlement pattern of compact, mixed-use villages surrounded by open countryside is consistent with smart-growth principles and meets the basic requirements of developments that could support transit services.

It is unlikely that densities and transit investments in most areas of the State would be able to support the traditional TOD concept where development occurs around, and as a result of, transit facilities and services. However, the concept of Transit Oriented Design, which considers the contribution transit makes to the mobility of residents in communities during the design stage, is appropriate. Vermont's primary statewide land use planning goal (24 VSA 4302(c)1) guides development toward existing and planned settlements. In doing so, Vermont positions itself to combat sprawl and create developments that could eventually support the provision of effective inter-municipal transit services, if local zoning codes are revised to be consistent with State planning goals and legislation. The State legislature has enacted a number of laws that create incentives for growth in its compact centers, including the Vermont Downtown Community Development Act, which created a process for revitalizing downtowns and village centers. More recently, 2006 legislation created a program to establish "designated downtowns" that would endorse development-ready, high density, mixed-use centers oriented around downtowns and village centers. The bill supports investment in growth center infrastructure that facilitates pedestrian and bike traffic and supports the use of public transit.

For most of the State, the most pressing policy issue is the need to establish a process to require or encourage that transit is considered when local jurisdictions make land use decisions. Localities need to pay more attention to transit in the overall transportation planning and permitting process, so that development and major facilities (such as medical facilities) do not continue to be built without accommodations for transit service or off the transit network entirely. The Metropolitan Planning Organization (MPO) for the Chittenden County region and the Regional Planning Commissions (RPCs) across the State could play a role in facilitating transit considerations in local land use decisions.

The MPO and RPCs in Vermont conduct both regional and local planning. One of the MPO/RPCs' primary roles is to provide planning expertise and technical assistance to municipalities within their regions in a cost-effective manner. MPO/RPC staff work with municipalities on a range of planning issues including land use, permitting, and transportation, and are therefore uniquely positioned to facilitate interaction between these realms, particularly since staff at the municipal level are often dedicated to one planning realm. The MPO/RPCs work with a variety of entities including counties, towns, transit providers, and developers, and can take the initiative

to bring these stakeholders together to actively incorporate Transit Oriented Design into new or planned developments.

The RPCs also have a contract with VTrans to coordinate the Transportation Planning Initiative (TPI) and ensure local participation in the transportation decision-making process in order to meet federal requirements. With extensive experience in public outreach, as well as knowledge about planning and project development processes in both land use and transportation, the RPCs can serve as the liaison between community groups and residents and local governments. RPCs can both advocate for transit considerations in local land use planning and educate local officials and the public about the benefits of Transit Oriented Design. The MPO and RPCs can also provide municipalities with valuable information and insights on how regional plans may impact local activities, or vice versa. Specifically, RPCs might promote the growth of regional transit networks or regional coordination of public transit and human services transportation to meet the needs that arise from new developments.

Other policy improvements to integrate transit and land use planning include adding evaluations of transit potential to local zoning and planning processes and implementing pedestrian-scale design. Current State policies (including the Act 250 review process) do not address public transit and may only require a traffic impact study. State policies should look at incorporating transit services or addressing the mobility needs of Vermonters into the Act 250 review process.

Alternative Approaches to linking transit with land use decisions might include:

- **Modify the Act 250 Criterion 5 –** Modify language in Act 250 Criterion 5 to include transit. Currently "*Criterion 5 provides that before granting a permit, the board or district commission shall find that the subdivision or development "{w}ill not cause unreasonable congestion or unsafe conditions with respect to use of the highways, railways, airports, and airways, and other means of transportation, existing and proposed*."[7] Furthering the concept of Transit Oriented Design, the criteria could require that permits for essential services be dependent on the ability of residents to access the site/services via public transit.
- **Education and Training** – Educate the Act 250 Boards and the Act 250 Regional Coordinators on transit issues.

[7] See the District Commission Training Manual, a reference for District Environmental Commissioners and others on Act 250 and its implementation, **http://nrb.state.vt.us/lup/publications/manual/5final.pdf**.

REGIONAL CONNECTIVITY AND INTERCITY BUS

A newly emerging and related set of issues in Vermont is the growth of regional commuter services, their success, and the need to develop a sustainable funding basis. Like the intercity connections, it reflects the fact that transit and transportation needs are increasingly long distance in nature, and are not limited to one service area. Determining the State role and the way in which regional and intercity needs can be addressed is one of the key policy areas initially identified for inclusion in the PTPP and in subsequent public outreach meetings. These issues are related in that they are generally services that provide longer-distance service, often on routes that go between the service areas of different providers. Key issues include the need for funding to maintain regional services that are meeting performance criteria and whether there are additional regional needs. On the intercity side, issues include the likely demand for such service (or whether the regional services are addressing intercity needs), and if warranted, how it can be funded and operated.

Inter-regional Commuter Routes

Since the last PTPP transit systems in Vermont have responded to regional commuter needs by developing regional commuter routes, and in general these are quite successful. Routes established as regional services include:

- Upper Valley (to Hanover & Lebanon NH)
  - I-91 south (CRT)
  - I-89 north to Montpelier (Stagecoach)
  - I-89 south and I-91 north (Stagecoach)
- Bellows Falls-Brattleboro (CRT)
- Bellows Falls-Rutland (CRT & MVRTD)
- Western Corridor (US 7) services
  - St. Albans to Burlington (CCTA)
  - Burlington to Middlebury (CCTA & ACTR)
  - Rutland-Middlebury (ACTR & MVRTD)
  - Williamstown, MA-Bennington-Manchester-Rutland (GMCN & MVRTD)
- Brattleboro-Wilmington (DVTA)
- Burlington to Montpelier (CCTA & GMTA)
- Montpelier to St. Johnsbury (US 2 corridor) (RCT & GMTA)

For the most part these services have been established under the State's New Starts program, using CMAQ funding which provides operating assistance for three years. In general, these services have been designed based on identification of significant long-distance commuter patterns, focusing on attracting "choice" riders who may have a private vehicle option. Ridership on most of the services has grown rapidly (one, the route from White River Junction to St. Johnsbury was discontinued due to poor performance), and led to calls for increased park and ride lot capacity.

One question going forward is whether or not there are other corridors that are likely to need service of this type. A review of Census Journey-to-Work data suggests that, for the most part, the corridors with significant potential demand are served. The needs are discussed in more detail in Technical Memorandum #4. There may be a future need for additional frequencies, or larger vehicles, if demand on those corridors grows as has happened with the Burlington/Montpelier route which added frequencies and a mid-day run. There may be demand for additional commuter (peak-hour, peak direction) services in the Burlington region, but these are within the region.

Another key issue for these services is funding, including local match. Started as New Starts with CMAQ funding, the initial three-year period for operating funding is ending or will shortly end. Under State policy regarding New Starts, at this point successful services would be transitioned into the base program for these systems—potentially requiring additional funding from different sources such as STP transfers for bus purchases as well as State funds. Also, these services would require local match as part of the base program. Some have expressed concerns that on shared routes local match may be problematic. More than anything, a lack of a plan for future funding for these kinds of services would seem to be the major concern.

A pragmatic approach to the policy questions given the current program (but not the current funding levels) would suggest that successful inter-regional routes graduating from the New Starts program would be included in a system's ongoing transit base, with increased State/federal funding for continuation. Expansion of service on these routes could be treated as New Starts (in terms of frequency expansions or route extensions), to make use of available CMAQ funding.

For those routes being shifted from the New Starts program into the ongoing transit system base service, the additional local match required could be derived from a variety of sources depending on the type of service and the local, regional, or state-level benefits associated with that service. No potential source of local match should be excluded, with funding ratios and sources remaining flexible to address the unique set of markets and beneficiaries that might be associated with different routes and services.

A **policy alternative** that might be considered would be to regard such inter-regional services as partly a State responsibility, with a higher portion of the local operating match provided by the State. The difficulty (in addition to finding the funding) comes from the need to have an equitable policy that would truly define the services with a higher State involvement, particularly for routes entirely within one system's service area. A higher State participation could provide incentives for trying to include services that are primarily local. In addition, there may be questions about the need for additional State support for services that serve non-transit-dependent commuters (though these trips also support State transit goals regarding air-quality and congestion relief).

Intercity Bus

Over the past decade the State's primary intercity bus carrier, Greyhound Lines, reduced Vermont services to four daily round trips on the I-89 corridor, stopping in Vermont only in Burlington (the airport), Montpelier, and White River Junction on the services linking Montreal and Boston; and one daily-round trip on I-91 between White River Junction and Springfield, Massachusetts, with stops in Bellows Falls and Brattleboro. Another carrier, Yankee Trails, provides two daily round-trips between Bennington and Albany. Vermonters can also access Dartmouth Coach services to Boston and New York City at stops in Hanover (Dartmouth College), Lebanon (Dartmouth Regional Transportation Terminal), and New London (park and ride lot off I-89) in New Hampshire. All other intercity bus service was discontinued due to a lack of profitability. Corridors that lost service included the Route 7 corridor between Burlington and Bennington (and continuing service to Albany), the link from Rutland to White River Junction, the link from Rutland to Springfield, and White River Junction to Newport via St. Johnsbury.

It should be noted that there are significant differences in the trip purposes and potential destinations between the regional commuter services and the intercity services. Intercity services in Vermont, both passenger rail and intercity bus, have long been routed and scheduled to pick up passengers in Vermont towns and cities and transport them to major destinations outside the State. Even the 1998 Vermont intercity bus study noted that most of the services then existing were designed mainly to provide for departures toward Albany, New York City, and Boston in the morning, with return trips arriving late in the day (continuing on to Montreal in some cases). The ability of a resident of Bennington or Brattleboro to travel north to Montpelier or Burlington and return the same day was very limited.

Needs for intrastate trips have largely been addressed by the transit providers within their service regions, and more recently the regional commuters have addressed this for trip lengths that could be served effectively on schedules allowing for a day in

the destination city (there are still some gaps in meeting this need, such as the inability to make a day trip from Rutland to Burlington and back on the regional services). Intercity trips are typically taken for family or social reasons, rather than as business trips or work commutes, and the riders are generally infrequent users. However, the riders value the ability to make these trips, as can be seen in the fact that most intercity services are able to charge fares that cover the full cost of the trip.

Given the losses of intercity bus service, how much of Vermont has intercity access? The recently released U.S. DOT study "The U.S. Rural Population and Scheduled Intercity Transportation in 2010: a Five-Year Decline in Transportation Access" measured access by looking at the population within a 25-mile radius of a small or non-hub commercial service airport, bus station, ferry terminal, or rail station; or within a 75-mile radius of a medium- or large-hub airport. It found that the percentage of Vermont's rural (non-urbanized) population with access to intercity bus service declined from 99.8% in 2005 to 78.8% in 2010 (largely as a result of the Greyhound/Vermont Transit restructuring). Vermont's two daily Amtrak trains to New York City provide access to 83.6% of the rural population, according to the same study. The rural areas of Vermont that have access only to intercity bus (but not rail or air service) include only 6.5% of the rural population, meaning that there is significant overlap of the current bus service origin areas with those of intercity rail and air. The importance of documenting the loss of access is related to the federal funding programs that provide for intercity bus service assistance in rural areas, as can be seen in the next section.

One of the other important distinctions between the regional commuter services and rural intercity bus service is the fact that there is an FTA program directed toward maintaining or improving rural intercity service. Section 5311(f) was developed as a policy response to exactly the situation faced by Vermont, the loss of rural intercity bus services. Under Section 5311(f) each state is directed to use up to 15% of its overall Section 5311 rural transit funding allocation for rural intercity bus services—unless the state certifies that there is no unmet rural intercity need in the state. Prior to SAFETEA-LU, states were left on their own regarding how to make the determination of "no unmet rural intercity need," but in the SAFETEA-LU legislation language was added requiring states to conduct a consultation process involving the intercity providers, studies or analysis, and other stakeholders. If, following that consultation, the state did certify, it would need to document the consideration it made of the input provided.

Vermont's certification status for the past several years is not documented at this point, but the State has not set aside the 15% amount or built up any kind of balance in a Section 5311(f) program. It is likely that submittal of a certification letter to reprogram these funds would require documentation of a consultation process. It is possible that such a process would not be able to say there is no unmet need, given the documented

loss of rural intercity access and the likely written comments from Greyhound about the potential need for linkages to Rutland (at a minimum).

The outreach and stakeholder input to this point in the current PTPP process has recognized the loss of the intercity services, but raised questions as well. One is whether the needs are being met by the regional commuter routes that have been developed. The possible role of the regional services in providing access to the existing intercity network could be considered in the consultation process, but the regional services, as currently provided, do not actually provide for the "meaningful" connection called for in the Section 5311(f) program circular. A "meaningful connection" is one in which the Section 5311(f) service must serve the same locations at times that permit convenient transfers to and from the national intercity network. The federal guidance does not specify how close the arrival and departure times of the Section 5311(f) service must be to those of the national intercity network carrier. In addition, while the map of Vermont's existing fixed and deviated services might make it appear that the regional services have filled in for the discontinued intercity routes, making some of these trips through end-to-end transfers between different regional operators would be so inconvenient and time-consuming that the trips are not practical or feasible.

The other question raised in the outreach was whether or not there is potential demand for intercity services, given that Greyhound abandoned them as unprofitable. Greyhound has supplied data on the former Vermont Transit/Greyhound routes, and it appears that the Route 7 Corridor had revenues on some trips of $2.35/mile, which means that if Greyhound (or another intercity operator) had costs of $4.00 per mile, these trips would have had a farebox recovery of nearly 60%, making it one of the better transit routes (on this measure) in the State. Note that intercity services need to be assessed differently, because there are relatively few boardings and long trips, with fares that vary by distance—so measures of effectiveness need to focus on how many passengers are on the bus over what distance, not just how many boardings there are.

Also, demand could be assessed using the new rural intercity bus demand Toolkit developed under the Transit Cooperative Research Program (TCRP) Project B-37. A preliminary use of the Toolkit results in estimated ridership for the Route 7 corridor of 11,400, if the service connects to the airports in both Burlington (Greyhound's station in Burlington is at the airport already) and Albany, with lower ridership of 5,700 if it does not. The data supplied by Greyhound shows that ridership on the Burlington – Rutland – Albany route was approximately 22,000 boardings annually. However, there was not enough demand to cover the fully-allocated cost of the services at Greyhound cost levels—but a combination of operating assistance and a lower-cost operator might allow for service, at least in this corridor, that would have comparable performance to other rural transit routes in the State.

If one accepts the notion that a consultation process would find unmet needs in the Route 7 corridor (or elsewhere), the next questions that arise are those related to funding. Vermont's Section 5311(f) 15% share of its overall Section 5311 allocation would be about $400,000, and there is always the issue of local match—as the operating ratios for this program are the same as Section 5311 generally, with a limit on the federal share of 50% of the net operating deficit. Fortunately, as a means of dealing with the local match requirements for intercity services, FTA has an administrative program regulation for Section 5311(f) that allows for rural intercity projects to be defined as having both a subsidized segment and an unsubsidized segment. Bus-miles on the connecting unsubsidized segments can be valued at their fully-allocated cost, and 50% of this value (representing the value of capital) can be counted as in-kind operating match for the subsidized segment. With artful identification of project routes and services, it is thus possible to use the in-kind match to cover all or a large portion of the required operating match.

Table 3-4 presents an illustration of the application of this funding method for a Burlington-Bennington-New York state line route, operated one round-trip per day, 365 days per year, connecting to Greyhound services at the Burlington Airport. As can be seen, the projected net deficit of $109,835 can be completely matched by the available unsubsidized connecting miles from Greyhound, leaving an additional $80,665 in in-kind value to be used on other routes. In this example, it is assumed that the ridership is at the low end of the projected range of demand, and the operating cost per mile of the operator is $3.50 a mile, which is lower than Greyhound costs, more typical of a private regional intercity operator. Lower per-mile costs could potentially reduce the net deficit.

Table 3-5 presents an example of the use of the Pilot Project for an expanded rural intercity project, that would include not only the Burlington-Bennington-New York state line route described above, but a second connecting route from Rutland to Springfield, Bellows Falls, and Brattleboro, where it could potentially connect to a possible Section 5311(f) route in New Hampshire that would serve Keene (and continue to Boston). It is included here to illustrate the impact on local match requirements. As can be seen, the additional route increases the net deficit to $250,775 (which is still less than the $400,000 of the entire 15% set-aside), but the number of Greyhound in-kind miles is no longer enough to provide the entire local match, so nearly $61,000 in cash match would be required. This example was chosen based on a previous Greyhound route. Scheduling would allow for connections between the two Section 5311(f) routes in Rutland, with connections to Greyhound services in Burlington and Albany. It would require coordination with New Hampshire to have funding provided for portions of the route in that state. It should be noted that Utah and Colorado, and Colorado and Kansas have collaborated on joint funding of multi-state services.

Table 3-4: Example of Potential Section 5311(f) Pilot Project Funding for Vermont Rural Intercity Service on the Route 7 Corridor Using Greyhound In-Kind Miles as Local Match

Project Description: Provides One Round-Trip Per Day to Connect Burlington with Bennington (Albany)
Connects with Greyhound Services in Burlington, Albany. Connecting schedules shown on attached table.

SUMMARY OF ESTIMATES

	Annual		
	Cost	Revenue	Deficit
New Route:	$ 332,150	$ 223,015	$ 109,135
In-kind Capital Match Available: (Greyhound connecting service)	$ 189,800		
			Excess Match
			$ 80,665

DETAILED ESTIMATES

	Operating Costs		Operating Revenue		Operating Deficit
New Route: Burlington to Bennington, to NY State line (Albany)	Round Trip Miles	260	Daily Passenger Boardings	16	$ 109,135.00
	Daily Trips	1	Annual Ridership (1)	5,700	
	Daily Miles	260	Fare (2)	39.00	
	Operating Days	365	Annual Revenue	$ 223,015	
	Ann. Miles	94,900			
	Cost/Mile	$ 3.50			
	Total Cost	$ 332,150.00			

	Operating Costs		Eligible Match	
Connection to Greyhound Service: Swanton to White River Junction	Round Trip Miles	260	Value of In-Kind Capital Costs (50% of operating cost)	$ 189,800
	Daily Trips (3)	1		
	Daily Miles	260		
	Operating Days	365		
	Ann. Miles	94,900		
	Cost/Mile (4)	$ 4.00		
	Total Cost	$ 379,600		

Notes:
(1) Ridership estimated based on TCRP B-37 low trip rate estimate.
(2) Fare estimated based on $2.35 per mile revenue, divided by 5,700 annual riders.
(3) For purposes of determining the value of in-kind capital, only one round-trip per day of the Greyhound miles from Swanton to White River Junction, Vermont, was used.
(4) Estimated at $4.00 per mile based on recent Greyhound reports.

Table 3-5: Vermont Section 5311(f) Pilot Project--Rural Intercity Service in the Route 7 Corridor from Burlington to Bennington (New York State line) and from Rutland to Brattleboro (Boston) Using Greyhound Miles as In-kind Match

Project Description: Provides One Round-Trip Per Day to Connect Burlington with Bennington (Albany) and One Round-Trip Per Day to Connect Rutland to Brattleboro (Boston)
Connects with Greyhound Services in Burlington, Albany, Brattleboro. Connecting schedules shown on attached table.

SUMMARY OF ESTIMATES

	Annual		
	Cost	Revenue	Deficit
New Route:	$ 523,775	$ 273,000	$ 250,775
In-kind Capital Match Available: (Greyhound connecting service)	$ 189,800		
			Excess Match
			$ (60,975)

DETAILED ESTIMATES

	Operating Costs		Operating Revenue		Operating Deficit
New Route: Burlington to Bennington, to NY State line (Albany) Plus Rutland-Brattleboro (Keene-Nashua Boston)	Round Trip Miles	410	Daily Passenger Boardings	16	$ 250,775.00
	Daily Trips	1	Annual Ridership (1)	7,000	
	Daily Miles	410	Fare (2)	39.00	
	Operating Days	365	Annual Revenue	$ 273,000	
	Ann. Miles	149,650			
	Cost/Mile	$ 3.50			
	Total Cost	$ 523,775.00			

	Operating Costs		Eligible Match	
Connection to Greyhound Service: Swanton to White River Junction	Round Trip Miles	260	Capital costs (50% of operating cost)	$ 189,800
	Daily Trips (3)	1		
	Daily Miles	260		
	Operating Days	365		
	Ann. Miles	94,900		
	Cost/Mile (4)	$ 4.00		
	Total Cost	$ 379,600		

Notes:
(1) Ridership estimated based on TCRP B-37 low trip rate estimate.
(2) Fare estimated based on $2.35 per mile revenue, divided by 5,700 annual riders.
(3) For purposes of determining the value of in-kind capital, only one round-trip per day of the Greyhound miles from Swanton to White River Junction, Vermont, was used.
(4) Estimated at $4.00 per mile based on recent Greyhound reports.

The Pilot Project funding mechanism can reduce or eliminate the need for operating cash match. It does require that the firm operating the unsubsidized service (which in Vermont would be Greyhound Lines) provide a letter agreeing to the use of their miles, and identifying the routes, schedules, and miles being contributed. Use of this funding method also means that the available federal funding does not cover as much service as it would if there were local cash match, as it is effectively being used as 100% of the net operating deficit.

Several **Alternative Approaches** may address intercity issues, and there are some tools available:

- The **consultation process** alone is not really an option, but must be conducted and documented if Vermont is to have the option of doing a full or partial certification (a state can certify that it did not need the full 15% for rural intercity services).
- If unmet needs are identified, there are at least two general options to be investigated by more detailed service planning:
  - One way of providing this access might be to **modify or expand the regional transit services operated by Vermont's public transit providers to make meaningful connections to the national intercity bus network.** This could involve additional trips to meet scheduled intercity buses, and additional miles to connect at the intercity bus stations—but such services would be eligible for Section 5311(f) assistance. This would require additional planning efforts to evaluate connections, costs, and likely revenues—and assessment of the degree to which it would provide intercity access to the population that has lost it.
  - Another alternative would be to **further develop a proposal for re-instituting intercity bus service on the Route 7 corridor, using the in-kind funding method**. This would require more detailed planning of schedules and connections, and assessment of likely funding needs (which would include assumptions regarding the likely operator and its costs, and the estimated revenue). It should be noted that Greyhound is not necessarily the operator, but would have to be a party to the project as the provider of the value of the in-kind miles. As both a potential applicant or bidder on the subsidized service and the provider of the in-kind match, Greyhound's current policy is to offer to provide the in-kind miles to whichever operator the State selects, as long the operator and the proposed service meet Greyhound's requirements for connecting service that can be quoted by them in their schedule information, has appropriate levels of insurance, is fixed-route fixed-schedule service at least five days per week, and has required legal federal and State operating authority.

In either event, it is likely that some or all of the 15% Section 5311(f) set-aside would need to be used to support these services. This would reduce the amount of Section 5311 funding available for other services by the amount used for rural intercity projects. The 15% set-aside amount is approximately $400,000. However, without more detailed service planning it is not possible to tell if or how much of the rural intercity needs can be addressed with that level of funding, or if more would be required, as seen in Table 3-5.

Implementation of a Section 5311(f) rural intercity program could be accomplished in several ways. The State could view itself as the grantee, and issue a Request for Bids (RFB) for particular services that it has identified as filling gaps in the State's intercity network In that case the firms responding would be bidders on a competitive contract to provide the services specified by the State. This approach was successfully used by Washington State in the development of its "Travel Washington" network of intercity connectors to the Greyhound and other intercity routes, and is also used in Oregon for its "POINT" network of rural intercity feeders (which also connect to state-supported Amtrak service). Other states have kept their Section 5311(f) programs as grant programs, allowing more discretion in the choice of operators, but increasingly they also define the routes and services desired as part of the grant solicitation, rather than simply announcing the availability of funding and hoping that the resulting applications will provide service that addresses the highest priority corridors or fills network gaps. In either case VTrans would need to take an active role in program implementation.

Changes in State policy to support the implementation of rural intercity bus services would not only need to consider the potential transit funding impact as Section 5311 funds were shifted to the rural intercity projects, but also the relationship of the potential services to the developing State-supported Amtrak services. Ideally, these rural intercity routes would provide connectivity among all modes, but the FTA Section 5311(f) circular makes it clear that this funding is intended to provide meaningful connections to the national intercity bus network as its first priority, not the rail passenger network. Section 5311(f) also cannot be used for commuter bus services, so it is not a potential source of funding for the regional services graduating from the New Starts program, unless they provide for the "meaningful connection".

Another trend in the public transit industry that is worth noting in relation to intercity bus services is the rise of "curbside buses" or "Chinatown buses", which provide curb-to-curb, express bus services between major cities, such as New York, Washington, D.C., and Philadelphia., and increasingly to medium-size cities too.[8]

[8] Austen, Ben. (2011, April 7). The Megabus Effect. *Bloomberg Businessweek*. Retrieved April 11, 2011, from **http://www.businessweek.com/magazine/content/11_16/b4224062391848.htm**.

These curbside carriers generally pick up and drop off passengers at the curb, where a stop is designated with a simple sign. They manage reservations and sell tickets online, and have minimal overhead costs as they do not operate bus terminals and only need a small support staff. They are nimble in comparison to passenger rail or air services, and can add buses as demand (shown through website sales) warrants and alter routes or stop locations through online notifications.

Curbside buses are the fastest growing transportation mode in the country, with ridership growing by 33% in 2010.[9] The fares are considerably cheaper than rail or air services, and thus appeal to students, young people, and others looking for affordable transportation, especially as gas prices have increased. The buses are often equipped with free Wi-Fi and power outlets and have drawn technology savvy passengers who surf the internet, work, or watch movies on computers and other electronic devices during their rides. Curbside buses have found a niche in serving travel distances of 200 to 300 miles, such as New York to D.C. or Boston, Los Angeles to Las Vegas, and Chicago to Detroit. These trips are typically too short to justify the expense and hassle of a flight and long enough that driving is not enjoyable or very affordable.[10] These bus services have demonstrated that choice riders will ride buses (particularly if there are limited stops) if the fare is low and there are multiple schedule frequencies. It is not yet clear whether these new passengers will be willing to ride more traditional intercity bus services having realized that bus service can be quite acceptable.

The large corporate companies that operate curbside bus service include Megabus and BoltBus (a collaboration between Greyhound and Peter Pan), while the "original" Chinatown bus carriers include Fung Wah and New Century Travel. Megabus is the largest private company to operate curbside bus service in the United States, and has been expanding services to medium-size cities with populations around one million, now serving more than 50 cities from the Midwest to the East Coast.[11] In some cases Megabus has added stops at smaller locations with large college populations, such as State College, Pennsylvania (Penn State) and Christiansburg, Virginia (Virginia Tech).

Recently other carriers have begun offering such service. In northern New England Dartmouth Coach provides one or two express round-trips per day (depends on the day of the week) from its station in Lebanon, New Hampshire (with one stop in Hanover) to New York City, with its New York stop on the curb in front of the Yale Club adjacent to Grand Central Station (rather than using the Port Authority Bus Terminal). Its buses are also equipped with Wi-Fi and power outlets.

[9] Ibid.
[10] Ibid.
[11] As of May 2011, according to the Megabus USA Website, **http://us.megabus.com/BusStops.aspx**.

Based on the observed behavior of the curbside companies, it is unlikely that these private carriers will institute new service to any of the rural or small urban locations in Vermont that have lost service in the past few years. The most likely opportunity for curbside buses in Vermont may be a stop in Burlington along a route that connects larger, nearby cities like Montreal and Boston, Albany, or New York City (Megabus already serves the latter three cities, but not Montreal). Greyhound provides four round-trips per day on the Montreal-Boston route, with Vermont stops in Burlington, Montpelier, and White River Junction. In other parts of the country it is responding to curbside competition with its own similar product, Greyhound Express[12], which also offers on-line ticket purchase, some seats at extremely low prices, Wi-Fi, curbside stop locations, etc. It is likely that Greyhound would seek to respond to potential or announced competition on its route by implementing Greyhound Express service on the current corridor.

In terms of State policy, under the federal bus regulatory policy and its pre-emption of state regulations, the private carriers can add or exit routes or services responding only to market forces. State policy needs to consider what the market will provide, and then use available tools (such as Section 5311(f)) to address needs that remain unmet, such as service to smaller population centers on existing routes and places that have lost intercity bus service.

IMPROVE THE "TRANSIT EXPERIENCE"

The public input process identified several needs related to improving the transit user experience. Transit riders requested additional amenities, such as bus shelters and posted schedules, and safety features, including more lighting at bus stops. Residents also want more information about transit services, whether using smart technology to add predictability to transit service or unifying provider information through a statewide trip planner. The public also requested an orientation for new riders to learn how to use transit and become more comfortable leaving their cars at home. Residents also discussed the need to attract new riders by promoting the benefits of transit, such as savings on gas costs and lowering individual carbon footprints, and changing the negative image of transit as the "welfare bus."

The image problem could be addressed by creating a positive transit "brand" statewide; brand marketing refers to the method of propelling transit into the public consciousness as a positive travel option. The individual transit systems could be co-branded as one Vermont transit system while keeping their separate identities. The typical co-branding agreement involves two or more companies acting in cooperation to

[12] See the Greyhound website: http://www.greyhound.com/Express/default.aspx

associate their various logos, color schemes, or brand identifiers. The object for this effort is to combine the strength of two brands, in order to combine the different perceived benefits associated with each into a single product or service.

Alternative Approaches to improve the transit experience could include:

- **Increasing marketing statewide** – Create a statewide slogan campaign such as "I'm your neighbor and, by the way, I ride transit" and perhaps the statewide transit "brand" **described above.**
- **Improving park and ride lots, shelters, and other amenities** – Transit users want both passenger amenities and bus information at park and ride lots. (The majority of the park and rides have transit services to/from them, but only one in five includes a shelter or passenger facilities.)
- **Improving Information Technology** - Technology is emerging as a way to improve the methods to disseminate public information on the services available. The transit systems statewide need to be plugged into Twitter, social networks, and other on-line information-sharing mechanisms. Possible short term improvements include:
  - Improving user information through a statewide trip planner – perhaps using GoVermont.
  - An initiative to place transit services on Google maps – ACTR and AT (partially) have already done this. The UVM transit program could potentially help with this initiative.
  - Adding transit to the 511 system, which was established in 1999 by the Federal Communications Commission as a nationwide three-digit telephone number for traveler information. It was envisioned as a simple phone number that travelers can remember and use for travel conditions regardless of their location in the United States. Implementation of the 511 system has been implemented on a state-by-state basis. Vermont's 511 program is part of an eight-state consortium that is sharing the cost to design and develop the system. Transit information should be part of that design.

- **Improving Operating Technology** – Updated technology is also a way to improve the actual provision of transit service. VTrans, AHS, and VPTA are also partnering on a project to investigate the potential to upgrade intake and dispatching software statewide. (The current tool is six years old and is reaching its limitations.)

Appendix D

Technical Memorandum 4: Transit Needs Assessment

KFH GROUP, INC.

2012 Vermont Public Transit Policy Plan

Technical Memorandum 4
Transit Needs Assessment

April, 2011
(Revised May, 2011)

Prepared for the:

State of Vermont
Agency of Transportation

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Table of Contents

Technical Memorandum #4: Transit Needs Assessment

INTRODUCTION

An important component of the update to the Vermont Public Transit Policy Plan (PTPP) is an analysis of transit needs, particularly at the regional and state levels, to guide a policy approach to meet any unmet needs. This technical memorandum presents the results of Task 4, which examined how well the State's existing transit network meets residents' needs and identified service gaps. This "gap analysis" identified issues ranging from geographic gaps and needs for increased service levels to the connectivity of transit and the desire for more information about services.

This technical memorandum is the fourth in a series of eight that will be prepared as the PTPP is developed. It provides an update of the preliminary needs analysis included in the second technical memorandum, and delves into additional data and public input to determine the latest transit needs that should be addressed through State policy. This memorandum includes a number of elements:

- Review of Needs Identified in Previous Studies
- Public Input on Transit Needs
- Demographic Analysis of the Need for Transit
- Travel Patterns and Connectivity

The results of this needs assessment will be used in completing the remaining tasks of this PTPP update, including developing the public transit vision for Vermont and recommending policies, goals, and objectives to improve the State's transit services and ensure that transit needs are met.

REVIEW OF NEEDS IDENTIFIED IN PREVIOUS STUDIES

This portion of the needs assessment examined previous studies related to transit needs, which helped establish a context for this update of the PTPP. The needs identified in previous studies regarding human service transportation coordination, in which public transit operators are active participants, and the transportation needs of elders, persons with disabilities, and youth are described below. Vermont's public transit providers also have Short-Range Public Transportation Plans, which identify local route-level needs, but these were not included in this analysis, which focuses more on statewide trends.

Vermont Human Service Transportation Coordination Plan

The 2008 *Vermont Human Service Transportation Coordination Plan* was an effort undertaken by the Vermont Agency of Transportation (VTrans) to meet new federal planning requirements and guide future coordination activities in the State.[1] The report details current state-level coordination policies and practice in Vermont and the previous Public Transportation Policy Plan, discusses the target population and their access to transportation services, points out regional transportation issues, and provides State coordination strategies.

The Plan described common issues raised by transit providers, human service agencies, and other stakeholders. These issues included regional connection issues, service/trip coordination issues, service availability issues, and financial considerations. The two regional connection issues identified included 1) the weakness of regional connections due to the fact that many providers do not cross jurisdictional boundaries; and 2) the difficulty of transporting clients cost-effectively due to the long distances traveled to the clients and/or to the destinations.

There were a number of common service/trip coordination issues. A primary issue was the need to improve efforts to combine trips or riders. More interaction is needed between transit providers, local human service agencies, and Vermont Agency of Human Services (AHS) regional staff regarding client transportation.[2] Some other issues were related to services and housing locations and how these affect the trips. Service availability was also an area for improvement, specifically the need for expanded service hours, particularly for work trips. Medical transportation for non-Medicaid–eligible individuals is also very limited, and that lack of transportation prevents some seniors from attending adult day health programs.

[1] VTrans Website, **http://www.aot.state.vt.us/ops/PublicTransit/documents/HSCP.htm**.
[2] It is worth noting that for many years regional planning commissions have met monthly with local and regional human service agencies and transit providers to coordinate service and review financial and ridership data.

The Plan offered several state-level strategies to improve coordination. One of the strategies was to encourage trip coordination and vehicle sharing coordination between organizations providing transportation coverage to the same areas. The plan also recommended developing a consolidated information dissemination approach to promote transportation services. Other strategies included holding regular meetings with transportation providers and improving inter-regional coordination.

Vermont Elders and Persons with Disabilities Transportation Program Review

The 2005 report, *Vermont Elders and Persons with Disabilities Transportation Program Review,* commissioned by the Vermont Department of Aging and Independent Living, assesses the Vermont Elders and Persons with Disabilities (E&D) Transportation Program, discusses the program's successes and challenges, and provides recommendations and strategies for future improvement of the program.[3] As more elders and persons with disabilities 'age in place,' a practice supported by the State, they require safe, reliable, and affordable transportation to basic services and amenities. The E&D Transportation Program provides a variety of transportation services, such as trips for medical appointments, senior meals, adult day care, employment, and shopping.

The program has been successful thus far, serving a diverse population that includes persons in Vermont who are over the age of 60 and/or have a disability. Still, the program faces a number of challenges, including the sense of vulnerability to costs, inconsistent service delivery over time, inconsistencies in travel prioritization and rationing, and a lack of outreach or marketing efforts. Another challenge that has been identified through stakeholder input in this PTPP process is providers having to set a budget based on the unpredictability of when their clients will become Medicaid-eligible or –ineligible.

The report found that program funding is not adequate to meet the needs and expectations of program participants. The study recommended that future funding levels should be, at a minimum, tied to inflation costs and changes in the underlying population of qualifying program participants. Another important finding was that land use and urban form have a strong impact on the success of elders who are able to age in place. The study interviewed seniors who are able to use fixed-route bus service and reported that the bus gave them independence and flexibility, among the most important attributes for successful aging in place. The report recommended that

[3]Submitted by Wilbur Smith Associates and JSI Consulting to the State of Vermont Department of Aging and Independent Living. 2005, **http://ddas.vermont.gov/ddas-publications/publications-transportation/publications-transportation-documents/transportation-prog-review-2005**.

opportunities to coordinate land use and transportation planning with human service program design should be pursued and explored.

The Listening Project: Giving Voice to Adolescent Youth Living in Difficult Circumstances

The Listening Project: Giving Voice to Adolescent Youth Living in Difficult Circumstances is a 2007 report developed by Youth Services Incorporated, a nonprofit organization that assists local youth and their families and is also a member of the Vermont Coalition of Runaway and Homeless Youth Programs.[4] The report was developed to provide information that the agency and the community need to better serve youth in Windham County. While this report focused on Windham County, the findings are likely applicable to the youth population throughout Vermont.

The report generates ideas to be used as guides for planning in Windham County, one of which is the importance of providing places for youth to gather. Youth interviewed for the report stated that they want safe and fun places to spend time and to hold activities. An important part of providing these spaces is providing auxiliary services such as transportation, which would enable youth to visit and spend time at such places. Many teens are among the Windham County residents that do not have their own transportation, and consequently have a hard time getting to activities. The report found that outside of the immediate Brattleboro area, teens do not have transit options to go to and return home from activities after school hours. Expanding the hours of transit service, destinations served, and coordination between transportation providers could help teens access educational opportunities, jobs, cultural events, and other daily activities.

PUBLIC INPUT ON TRANSIT NEEDS

VTrans highly values public input as part of its planning process, and accordingly held the first round of meetings in February 2011 to obtain public input for this update of the PTPP. Three meetings were held, one through the VIT Worldwide (formerly Vermont Interactive Television) public videoconferencing network and two others in Montpelier and Rockingham. Residents were invited to share their input to help shape the vision for transit in Vermont. Several representatives from the transit systems and regional transportation planners also attended these meetings. The discussion topics included strengths and weaknesses of the existing transit network, the characteristics desired for transit in Vermont, and issues that need to be addressed. The detailed notes of input received through the public meetings are included in the

[4] Youth Services, Inc. website, **http://youthservicesinc.org/images/stories/pdfs/listeningproject.pdf**.

attachment to this report, and specific transit needs that were identified are described below. VTrans also has an ongoing online process to collect public input for the PTPP, where residents may download and email a comment card to provide their feedback and perspectives on the transit topics mentioned above. The relevant input regarding transit needs provided through these comment cards are also included in the summary below.

Some of the common needs identified through public input related to service levels and serving specific trip purposes and needy populations. Where transit services exist, residents voiced a need for evening and late night service, particularly to serve employees that work late shifts outside of regular commute hours. There is also a need for expanded service hours and frequencies on existing routes. Residents requested additional types of transit service in some areas. Northeast Vermont, for example, lacks fixed-route service, particularly to serve commuting needs. Residents also identified a need for the Americans with Disabilities Act (ADA) paratransit-like services outside of areas with fixed-route transit, where they are not required to provide complementary ADA paratransit service. Improving transit to serve trip purposes other than commuting was identified as a need. Weekend regional service for non-commute purposes and weekend service to local ski areas during the winter were also requested. Youth and elders were specific population groups that were identified as having transit needs; youth need to access activities outside of school, and elders need to access healthcare, grocery stores, and pharmacies.

Many residents identified the need for inter-regional connectivity. While transit systems may serve their local areas relatively well, it is difficult to travel between regions and provider service areas. The number of regional transit routes, mainly commuter service, has increased in the last few years but additional improvements could be made to increase access to employment, provide weekend service, and allow riders to make longer distance day trips. A LINK express service between Burlington and Jericho and bus service connecting Burlington and Rutland were specifically requested. The Northeast Kingdom is also isolated and lacks regional connections to other parts of the State, as well as an intra-regional connection between the existing local deviated services in Newport and St. Johnsbury. On a related note, residents also discussed the need for regional transit connections outside the State, such as trips to take workers and shoppers across the New York and New Hampshire borders. More intercity bus service to destinations outside of Vermont, including New Hampshire and New York City, was also discussed as a transit need.

Intermodal connectivity was a popular issue that identified the need to make transit more convenient and accessible by promoting other alternative modes, including walking, bicycling, ridesharing, and car-sharing. These modes could help fill gaps in the existing transit network or facilitate access to fixed-route and deviated transit.

Providing options for riders to travel the "first mile" to or "last mile" from a transit stop was another identified need. Intercity bus service in Vermont is not very accessible since there are limited stops in Vermont; then local transit services must be extensive to provide the connection between homes and intercity bus stops. Physical facilities, such as intermodal terminals, increased signage, and information on transit schedules were identified as needs to promote connections between modes. Riders also requested additional park and ride lots to facilitate increased transit use. Transit connections to airports, specifically from Montpelier to Burlington International Airport, was another need identified through public input.

The public input process also identified several needs related to the transit user experience. Transit riders requested additional amenities, such as bus shelters and posted schedules, and safety features, including more lighting at bus stops. Residents also wanted more information about transit services, whether using smart technology to add predictability to transit service or unifying provider information through a statewide trip planner. The public also requested an orientation for new riders to learn how to use transit and become more comfortable leaving their cars at home. Residents also discussed the need to attract new riders by promoting the benefits of transit, such as savings on gas costs and lowering individual carbon footprints, and changing the negative image of transit as the "welfare bus."

DEMOGRAPHIC ANALYSIS OF THE NEED FOR TRANSIT

Demographic and economic characteristics of the population are key factors that highlight the potential need for public transit services. This analysis identified the location of population segments that tend to be more dependent on public transit services, and compared these areas to existing transit services to determine geographic gaps where service might be expanded or new services implemented.[5] This geography-focused assessment complements other input on needs regarding service levels, quality, and connectivity, also discussed in this memorandum.

The demographic analysis included several components: a look at the new 2010 Census data and trends in the past decade; a Transit Dependence Index (TDI) to determine areas of high relative need based on transit-dependent populations; and gap analyses to determine whether the existing transit network serves specific populations, such as young adults and Medicaid recipients. (The working population and

[5] Note that the maps only portray fixed and deviated transit routes, and Vermont's transit providers also provide other types of transit services. Depending on the provider, these other services may have eligibility stipulations, or may be available to the general public. Additional transit needs related to these other types of services are described elsewhere in this memorandum, identified through previous studies and public input.

commuting needs are examined later in this memorandum in the Travel Patterns and Connectivity section.) The methodology for the demographic analysis is described below.

Methodology

A main effort in updating the preliminary needs analysis included in the second technical memorandum involved examining newer data sources that have become available. The first such data was from the 2010 Census, released in February 2011. However, the 2010 Census data is intended for redistricting purposes in each state and only includes information on population counts, race, Hispanic ethnicity, and housing units and occupancy.[6] To date, the only 2010 Census data that is useful for this needs analysis was the total population, which was used to determine population densities across the State. Population densities help identify the type of transit service that may be most appropriate for a community.

Another new source of data examined in this update was the 2005 – 2009 American Community Survey (ACS), released by the U.S. Census Bureau in December 2010. The ACS is different than the Census data and represents "pooled estimates" over the entire given time period, based on sample surveys. Census data, on the other hand, represents total counts at a specific time.[7] The ACS data is accompanied by margin of error measures related to the methodology of sampling, which affects the precision of the data. However, the 2005 – 2009 ACS was useful for this needs analysis because more detailed demographic data, such as transit dependent subpopulations, are available at the block group level.

The demographic analysis examined data at the block group level to more accurately identify and depict areas of potential transit need in Vermont, compared to the county or town levels. The five-year estimate for the ACS is based on the largest sample size and is therefore the most reliable compared to other ACS data collected over shorter time frames. The needs analysis primarily used the 2005 – 2009 ACS data for the TDI, which scored Vermont's block groups relative to each other based on potentially transit-dependent populations, rather than as counts to represent transit needs.

Additional data examined in this needs analysis included employment by town, reported by the Vermont Department of Labor, and transportation-eligible Medicaid recipients, provided by the AHS. (Data on Vermont employer locations from Dun &

[6] Vermont State Data Center, Center for Rural Studies, University of Vermont. "Readme" notes in 2010 Census summary for Vermont. February 2011, **http://crs.uvm.edu/census/**.
[7] Sawyer, Will. "10 Important Points for Tuesday's Census Bureau Data Release." December 2010, **http://crs.uvm.edu/census/acs/acs_10_points_2010.pdf**.

Bradstreet and park and ride lots from VTrans were also obtained and are discussed later in this memorandum.)

Mapping

The Geographic Information System (GIS) ArcMap 10 program was used to portray much of the demographic and employment data examined in this analysis. The existing transit services operated by the State's ten providers were also overlaid on the demographic maps in these three categories:

- **Local –** Fixed-route or deviated fixed-route service that generally operates all day and mainly serves one city or town, or connects adjacent cities or towns.

- **Commuter –** Typically longer routes that operate during peak periods, primarily in one direction, and include express segments.

- **Seasonal –** Routes that serve a specific tourism area or destination, such as ski resorts, and typically operate a few months out of the year.

In addition, scheduled intercity bus services provided by Greyhound Lines and Yankee Trails were also included in the demographic maps. Viewing the existing services with the demographic and employment data helped identify areas with unmet needs and opportunities for future transit investments.

Transit Dependence Index

The TDI was part of the demographic analysis that examined potential transit needs through a scoring process. This index included data on five population segments that tend to be more dependent on transit services:

- **Elders –** Persons age 65 and above. This group may include those who either choose not to drive any longer, have previously relied on a spouse for mobility, or because of factors associated with age can no longer drive;

- **Youth –** Persons ages 10 to 19. This group includes young people in their pre-teen or teenage years, who have begun to make their own choices and spend time independent of their families and home life, but they are either too young to drive by themselves or simply do not have access to a vehicle;

- **Persons with disabilities –** Persons age 16 and over who have a disability lasting six months or more that makes leaving home alone for simple trips such as shopping and medical visits difficult for them;

- **Low-income residents** – Persons living below the poverty level who may not have the economic means to either purchase or maintain a personal vehicle; and

- **Autoless households** – Number of households without an automobile. One, if not the most, significant factor in determining transit needs is the lack of an available automobile for members of a household to use.

Data for these potentially transit-dependent population segments were collected from 2005 – 2009 ACS data, with the exception of the data for persons with disabilities, for which 2000 Census numbers were adjusted to reflect population changes up to the 2005 – 2009 period.[8] The TDI calculated a composite score of potential transit need, based on the above population segments, for each Census block group in Vermont. Though it varied depending on the approach to the TDI, described in Table 4-1, this composite score essentially represented the sum of the scores a block group received within each transit dependent category. The scores per transit dependent category ranged from 1 to 5, and were assigned accordingly:[9]

Table 4-1: Scoring per Transit Dependent Category

Score Assigned to Block Group	Where the Value of the Block Group is:
1	<= State Average
2	> State Average and <= 1.33 x State Average
3	> 1.33 x State Average and <= 1.66 x State Average
4	> 1.66 x State Average and <= 2.0 x State Average
5	> 2.0 x State Average

[8] In 2008, the ACS changed its survey questions regarding disability. The changes were drastic enough that data collected through the 2008 ACS and subsequent ACS efforts cannot be compared to earlier ACS results or the 2000 Census data on disabilities. (Source: Brault, Matthew. "Review of Changes to the Measurement of Disability in the 2008 American Community Survey." September 2009, http://www.census.gov/hhes/www/disability/2008ACS_disability.pdf.) The 2005 – 2009 ACS data does not include data for persons with disabilities, since the questions regarding disability changed during the five-year period. Consequently, 2000 Census data on persons with disabilities is still used in this needs analysis and adjusted by the total population growth rate between the 2000 Census and the 2005 – 2009 ACS. Adjusting the 2000 data by this growth rate is meant to provide an approximation of changes in the number of persons with disabilities since 2000. It is recognized that this growth rate is not entirely accurate, since the 2000 Census represents actual counts while the 2005 – 2009 ACS represents "pooled estimates" over five years based on a sample survey.

[9] This scoring methodology (and the overall Transit Independence Index) is modeled off an Environmental Justice Index, which shows relative concentrations of minority or low-income populations. (Source: Forkenbrock, David and Sheeley, Jason. *National Cooperative Highway Research Program Report 532: Effective Methods for Environmental Justice Assessment*. 2004.)

Therefore, block groups with higher numbers or percentages of persons within a transit dependent category received higher scores. Then the composite score, which summed the scores for all the transit dependent categories for the block groups, helped determine areas with more potential transit needs within the State.

The numbers or percentages of persons within the transit dependent categories were used to score the block groups depending on the approach for calculating the TDI. The first approach used the *numbers* of transit-dependent persons and factored in the population density per block group. In this approach, the block groups were also scored based on population density. Then the composite score, called the TDI – Density score (TDI–Density), per block group was calculated by multiplying its score for population density by the sum of its scores for the transit-dependent population segments.[10] The TDI-Density score helped identify areas that have higher concentrations of potentially transit dependent persons, and accordingly more potential needs that may be suitable for new or improved fixed and deviated transit services.

The second approach used the *percentages* of transit-dependent persons to score the block groups per transit dependent category. Then the composite score, called the TDI – Percentage score (TDI–Percentage), per block group was calculated by adding a block group's scores for each transit-dependent population segment. The TDI-Percentage score helped identify areas of transit need where a high proportion of the total population is potentially transit-dependent, though the area may lack population density. This approach is important since Vermont is such a rural state. The TDI-Percentage scores helped determine areas with relatively high transit needs outside of Vermont's urban centers, which may have opportunities for new or improved demand-response or scheduled transit services.

For both TDI approaches, the results were portrayed on GIS maps by thresholds determined by the average score for the State as shown in Table 4-2:

Table 4-2: Relative Levels of Transit Need Based on Composite Scores

Relative Level of Transit Need per Block Group	Where the Composite Score of the Block Group for the TDI approach was:
Very High	More than 200% of State Average
High	151% - 200% of State Average
Moderate	101% - 150% of State Average
Low	51% - 100% of State Average
Very Low	50% or Less of State Average

[10] The scores for population density were assigned in a similar manner, based on the State average, as described earlier; however, the scores ranged from 0 to 4 for population density, instead of 1 to 5. The TDI-Density composite score lays heavy emphasis on the potential concentration of transit-dependent persons in the block group.

The purpose of portraying the results in this manner was to highlight areas that have more potential transit need than the State average. However, the analysis still wanted to recognize areas that might have scored slightly lower than the State average, since they may also have transit needs, but to a lower degree relative to other parts of the State. The results of the TDI analysis are described later in the memorandum.

2010 Census Data

The 2010 Census data, representing actual counts, helped establish state and regional demographic trends in the last decade. Vermont's total population grew by 2.8%between 2000 and 2010, with a population of 625,741 at the end of the decade. This growth rate was quite modest compared to the national growth rate of 9.7% over the same time period. Figure 4-1 displays the total population changes (in percentages) over the decade by county. The northern part of the State has seen the largest percentage growth, with Chittenden, Lamoille, Caledonia, and Franklin Counties experiencing more than 5% of growth in the last decade. Seven of the other ten counties also experienced smaller population increases, with Grand Isle, Windham, and Bennington Counties growing the least, by less than 1%. According to the 2010 Census, the populations of Windsor, Essex, and Rutland Counties decreased, but by less than 3% in each county.

Figure 4-2 provides a closer look at these population trends, displaying the percent change in population between 2000 and 2010 by town. Among those towns that have grown more than 10%, those with the highest total populations in 2010 are located in Northwest Vermont and include South Burlington, Williston, Winooski, St. Albans, Fairfax, and Cambridge. The towns with the next highest total populations, which have grown more than 10%, are more dispersed across the northern part of the State and include Newbury, Monkton, Burke, Berkshire, and Wolcott. While several of these towns have existing fixed-route or deviated transit, others including Fairfax, Cambridge, Monkton, Burke, and Wolcott do not. These towns that have experienced significant population growth and have higher total population numbers may be candidates for new or improved transit services, pending further analysis of their potentially transit-dependent populations.

Figure 4-3 displays the cities and towns in Vermont by their total populations in 2010. This map indicates that the existing fixed-route and deviated transit network provides some level of service to nearly all places with a population higher than 5,000, except for Jericho. Some existing fixed-route or deviated service levels are also limited. For example, Colchester is only indirectly served through commuter service at the Chimney Corners park and ride lot, and Northfield has a deviated service that only operates on Wednesday mornings. Several towns with populations less than 5,000 are also served by the existing network, some as stops between larger cities and others as standalone service, such as the deviated route between Newport and Derby Line.

Figure 4-1: Percent Change in Population from 2000 to 2010 by County

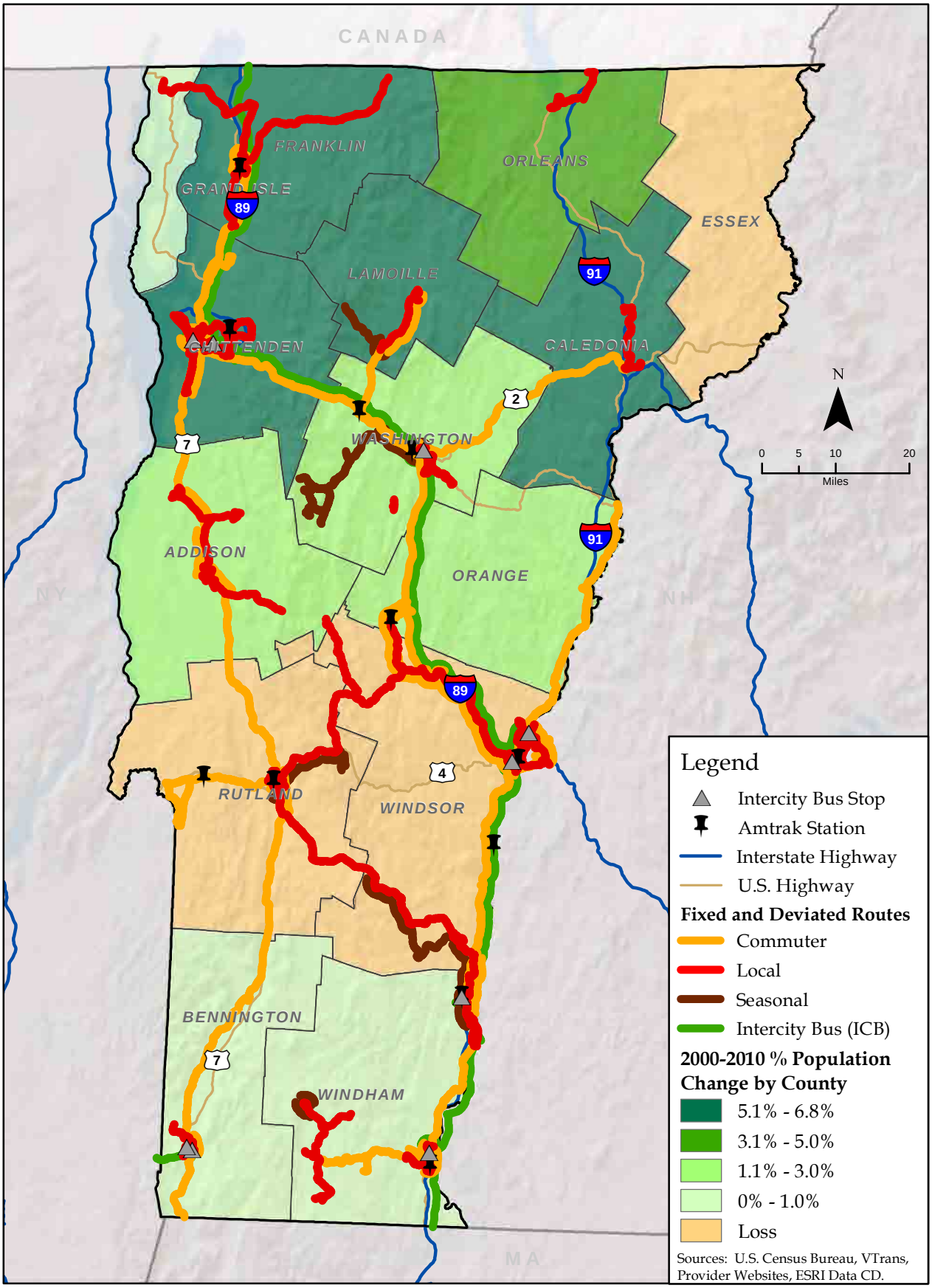


Figure 4-2: Percent Change in Population from 2000 to 2010 by Town

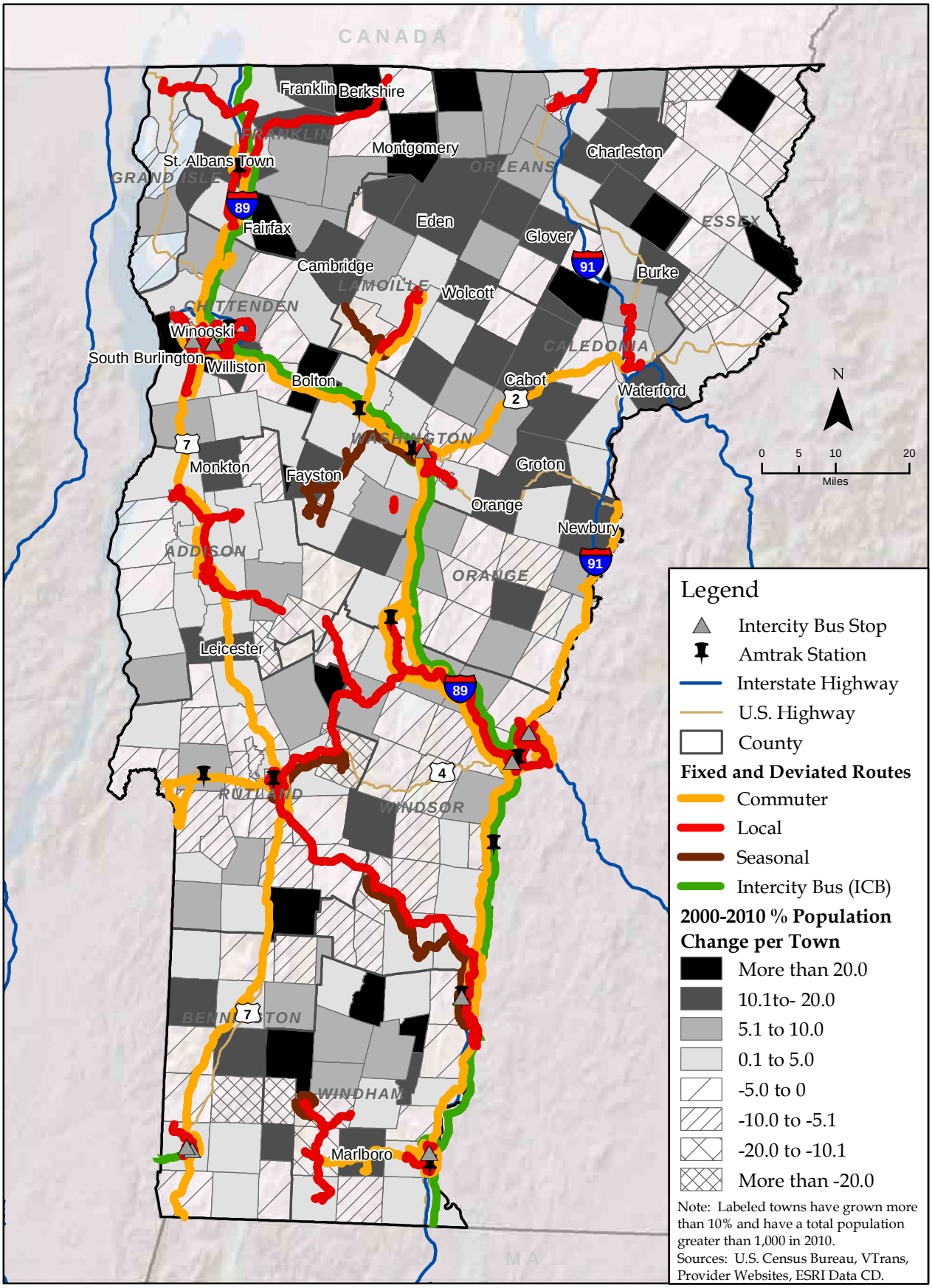
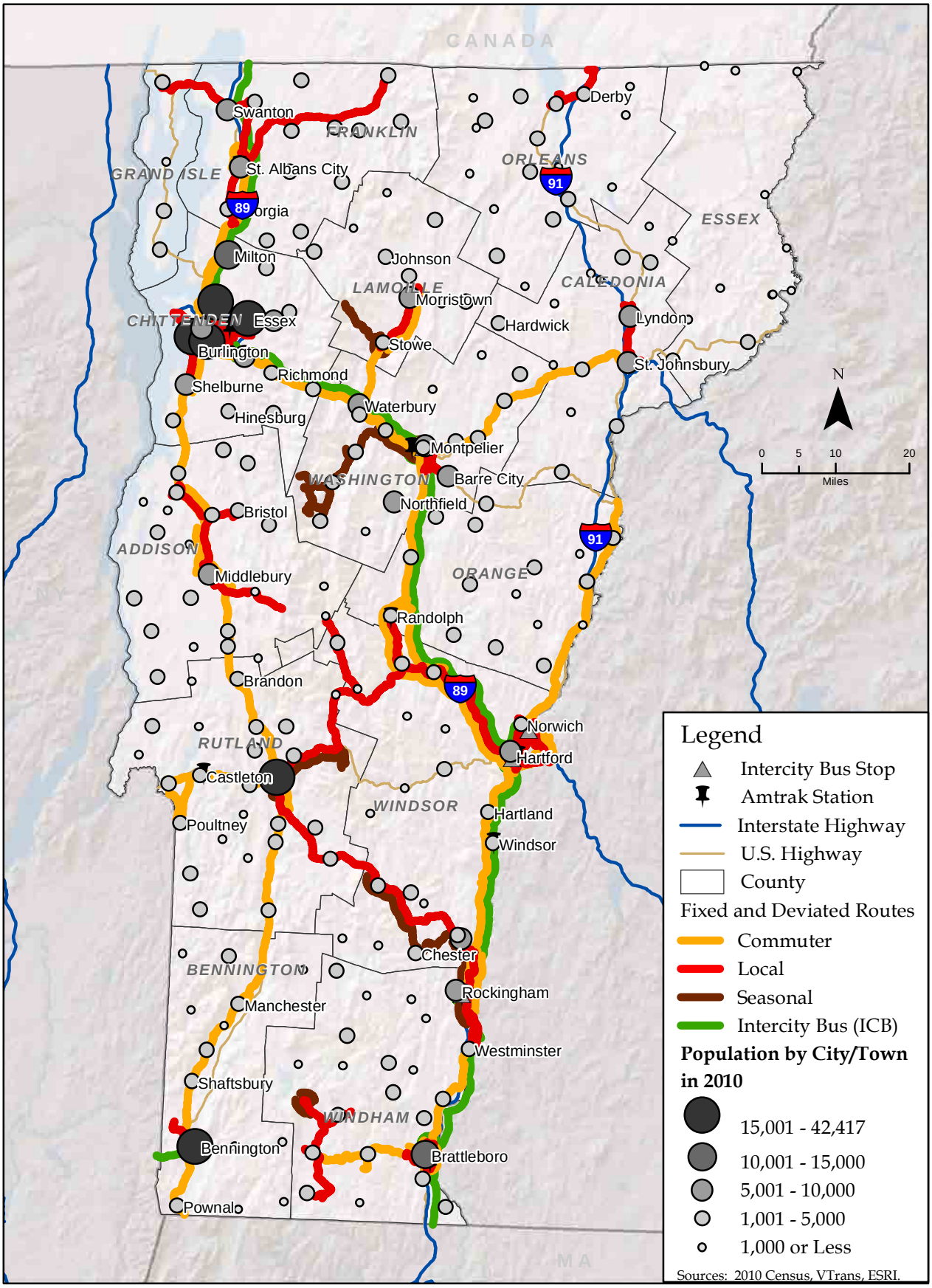


Figure 4-3: Population by City/Town in 2010



A more specific application of the 2010 Census data used the total population counts to examine Vermont's population density by block group, shown in Figure 4-4. As described in the TDI approaches, population density is one indicator of the type of transit service that may be most feasible in an area. For example, fixed-route or deviated transit service is often prioritized for areas with higher population densities (1,000 – 2,000 or more persons per square mile), while demand response or scheduled service is more feasible for low or moderate density areas (with less than 1,000 persons per square mile).

The map of population density indicates that all of Vermont's higher density areas are served by some fixed-route or deviated transit service. In fact, nearly all areas with moderate and high population densities are served by local transit, with the exceptions of Milton, Waterbury, and Windsor, which are only served through commuter routes. Ludlow, near the Okemo Mountain Resort, is another moderate density area that is served by local and commuter transit, but these services are commuter-like in that trips are only provided in the morning and evening peak periods. The population density map also indicates that several low density areas have fixed-route or deviated transit service. For example, Enosburg Falls, Lyndon, and Bristol are served by local transit; and Chester, southwest of Springfield, is served by seasonal commuter service. A "low" density community that is not currently served by fixed or deviated transit is Jericho, east of Burlington. While Jericho's population density is portrayed as low, it nearly reaches the threshold for moderate density and could feasibly support new fixed-route or deviated service. (Keep in mind that this demographic analysis primarily highlights the geographic extent of existing transit, and communities with existing services may still have additional transit needs related to service expansions or improvements.)

Transit Dependence Index

TDI-Density

As described earlier, the TDI-Density score helped identify areas that have higher concentrations of potentially transit dependent persons. These areas represent feasible candidates for new or improved fixed-route and deviated transit services. Figure 4-5 displays the results of the TDI factoring in population density per block group. The block groups shaded in green represent those that scored higher than the State average; the darkest green areas scored more than double the State average. The yellow and white areas scored less than or equal to the State average, with the yellow representing block groups that scored 50% of the State average up to the average itself.

Figure 4-4: Population Density (2010)

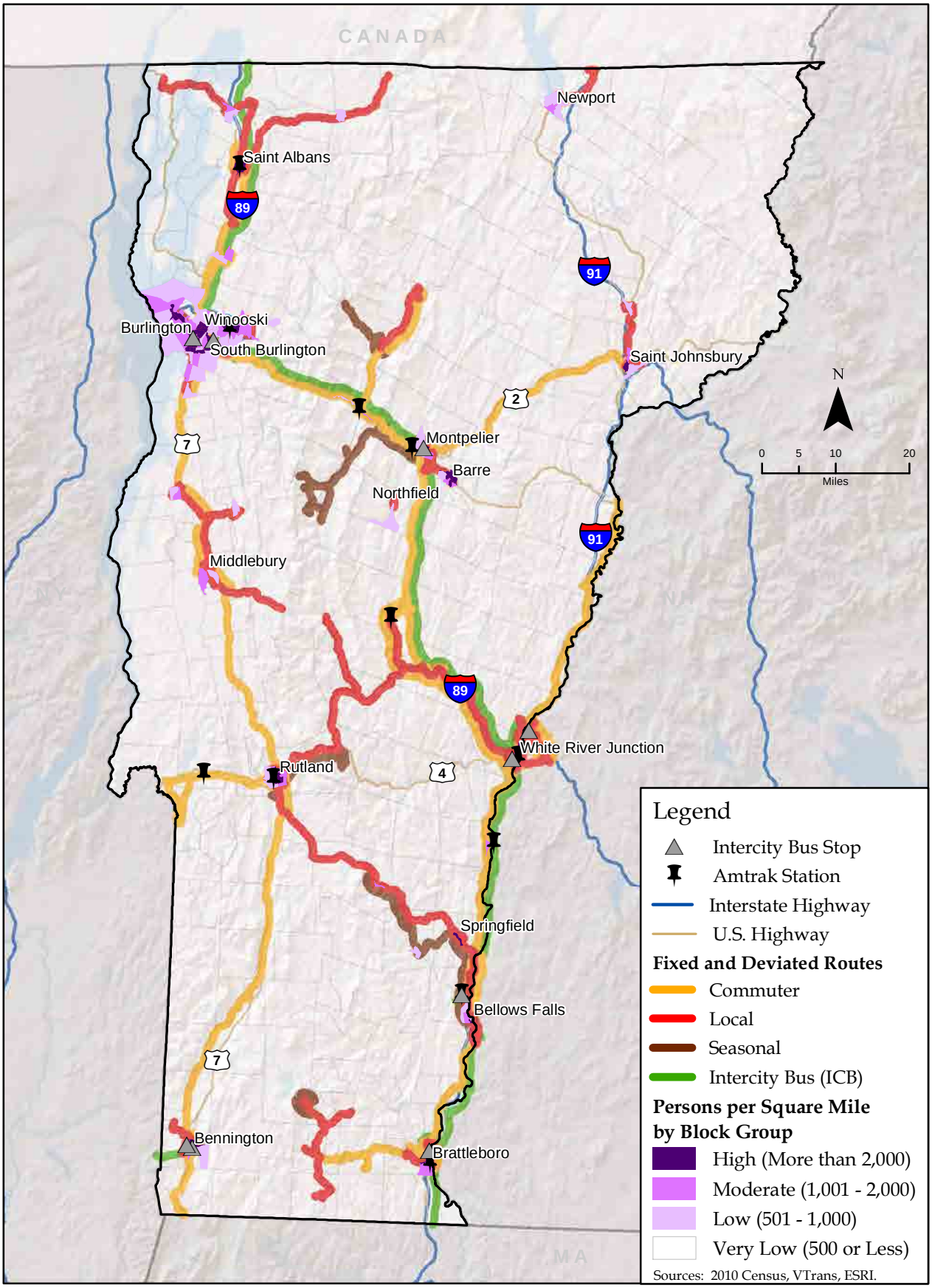
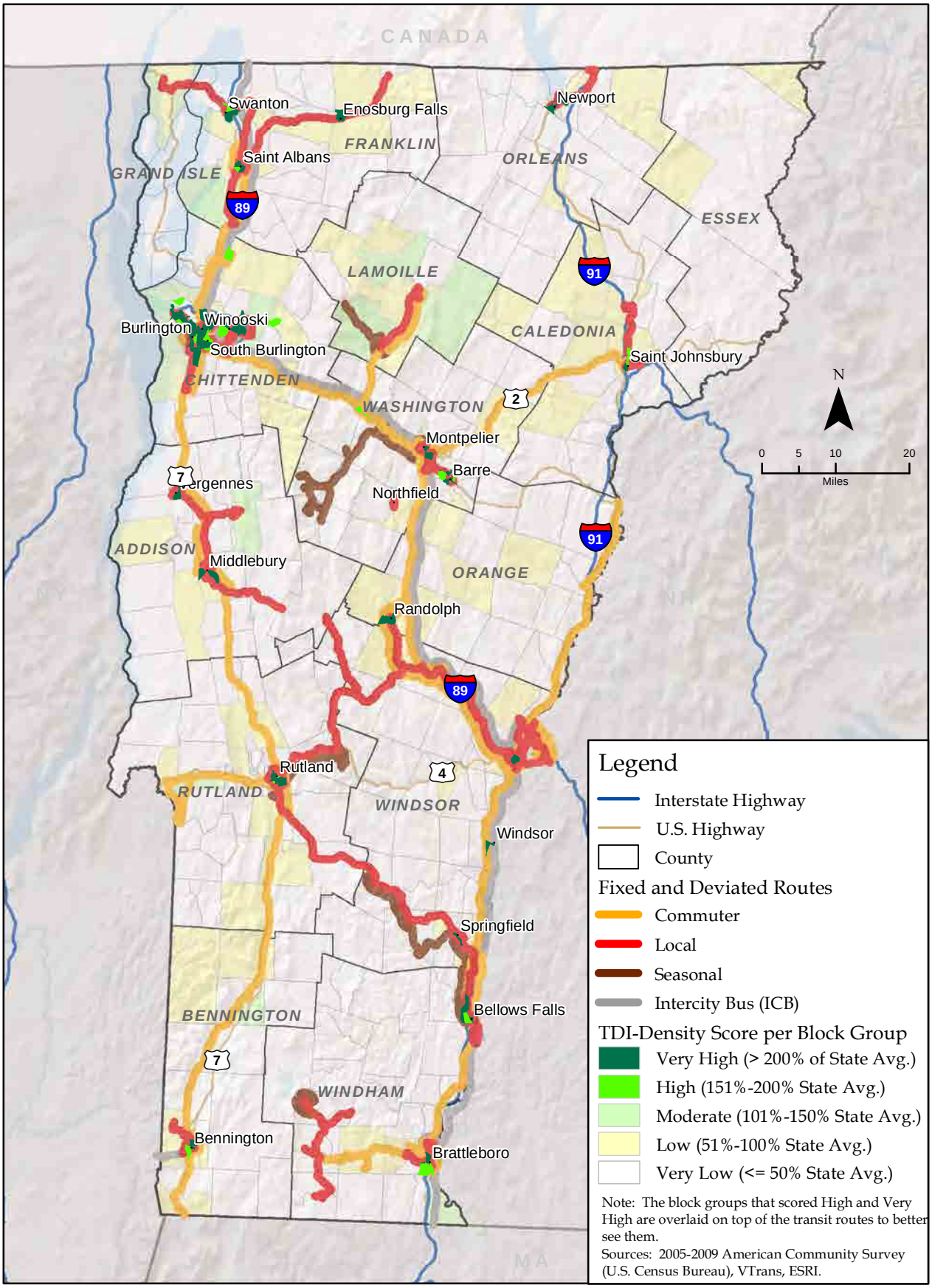


Figure 4-5: Transit Dependence Index Factoring in Population Density



The results are fairly similar to the general population density map, though some areas with moderate general population density scored higher in TDI-Density, indicating high concentrations of transit-dependent populations in those communities. All the cities that have high general population densities also scored "very high" in TDI-Density: St. Albans, the greater Burlington area, Montpelier, Barre, St. Johnsbury, White River Junction, Rutland, Springfield, Bellows Falls, Brattleboro, and Bennington. Additional areas that scored very high in TDI-Density included Swanton, Enosburgh, Newport, Vergennes, Middlebury, Randolph, and Windsor. Most of these areas have moderate general population densities, except for Enosburgh and Randolph, which have low and very low population densities, respectively. All places that scored very high in TDI-Density are currently served by fixed-route or deviated transit, including local service except for Windsor, which is served by commuter service and Amtrak.

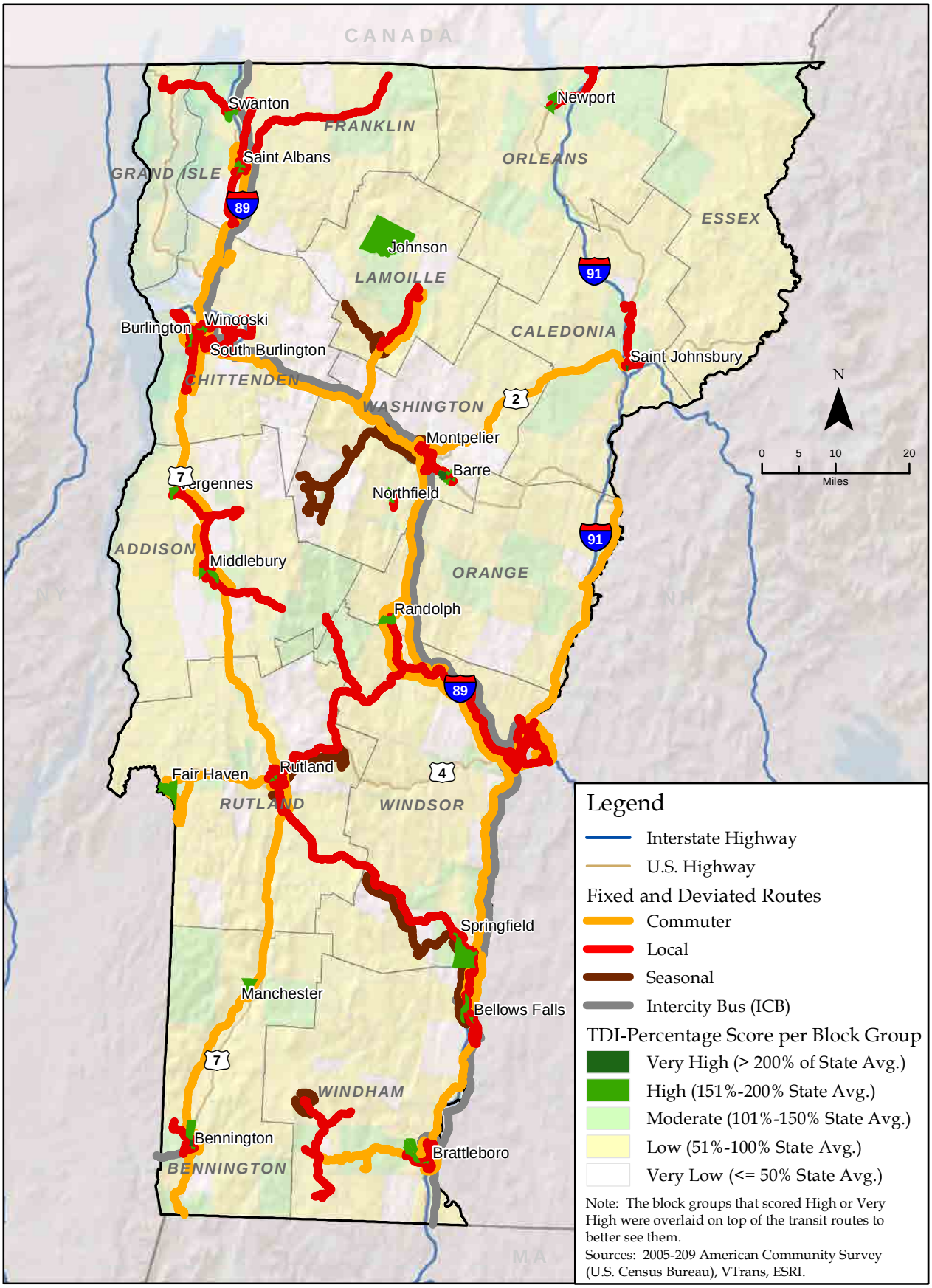
The next group of communities that scored "high" in TDI-Density included Milton, Jericho, and Waterbury. (Many of the places that scored very high also included block groups with high scores.) While Milton and Waterbury are served by commuter routes, Jericho is not currently served by fixed-route or deviated transit. The areas that scored "moderate" in TDI-Density were more dispersed across the State, including parts of Lamoille County, Bristol, Castleton, Fair Haven, Ludlow, Chester, and Manchester. Most of these areas with moderate transit needs based on density currently have some form of fixed-route or deviated transit except for the areas near Johnson and Wolcott in Lamoille County.

The areas in yellow shown on the map also have some level of density and transit-dependent populations, though they scored lower than the State average. These areas may be better candidates for new or improved demand-response or scheduled transit service. A few of the transit systems such as The Current, the Green Mountain Express, and Green Mountain Transit Agency (GMTA), provide demand-response or Dial-A-Ride service to the general public; while other systems provide ADA paratransit service and demand response service to eligible or specialized populations only. Increased demand response service open to the general public may be an opportunity to improve transit where the systems do not currently provide this service.

TDI-Percentage

Shown in Figure 4-6, the results of the TDI-Percentage scores complemented the TDI-Density scores by highlighting additional areas with relatively high transit needs outside of Vermont's urban centers. The TDI-Percentage results identified block groups with high proportions of transit-dependent persons, regardless of population density. Again, the block groups shaded in green represent those that scored higher than the State average, while the yellow and white areas scored less than or equal to the State average. Three cities scored "very high," or more than twice the State average, in terms

Figure 4-6: Transit Dependence Index Based on Percentages of Transit-Dependent Populations



of their percentages of transit-dependent persons: St. Johnsbury, Barre, and Bennington. Many of the places that had scored very high in TDI-Density also scored "high" in TDI-Percentage: Swanton, St. Albans, Burlington, Winooski, Newport, Vergennes, Middlebury, Randolph, Rutland, Springfield, Bellows Falls, Brattleboro, and Bennington. Additional places that scored high in TDI-Percentage were Johnson, Northfield, Fair Haven, and Manchester. Nearly all these communities are currently served by the existing fixed-route and deviated transit network, except for Johnson.

Many more rural areas across the State were determined to have "moderate," above the State average, transit needs in the TDI-Percentage scoring process. Those that are not currently served by fixed-route or deviated transit include North Hero in Grand Isle County; Albany and Barton in Orleans County; Island Pond in Essex County; Chelsea and Corinth in Orange County; Weathersfield in Windsor County; and Readsboro in Bennington County. As seen in the map, many of the remaining block groups in the State were scored as "low" based on the percentage of transit-dependent populations. Large portions of Essex and Rutland Counties scored just below the State average and indicate additional areas that have high proportions of transit-dependent persons, if not high densities.

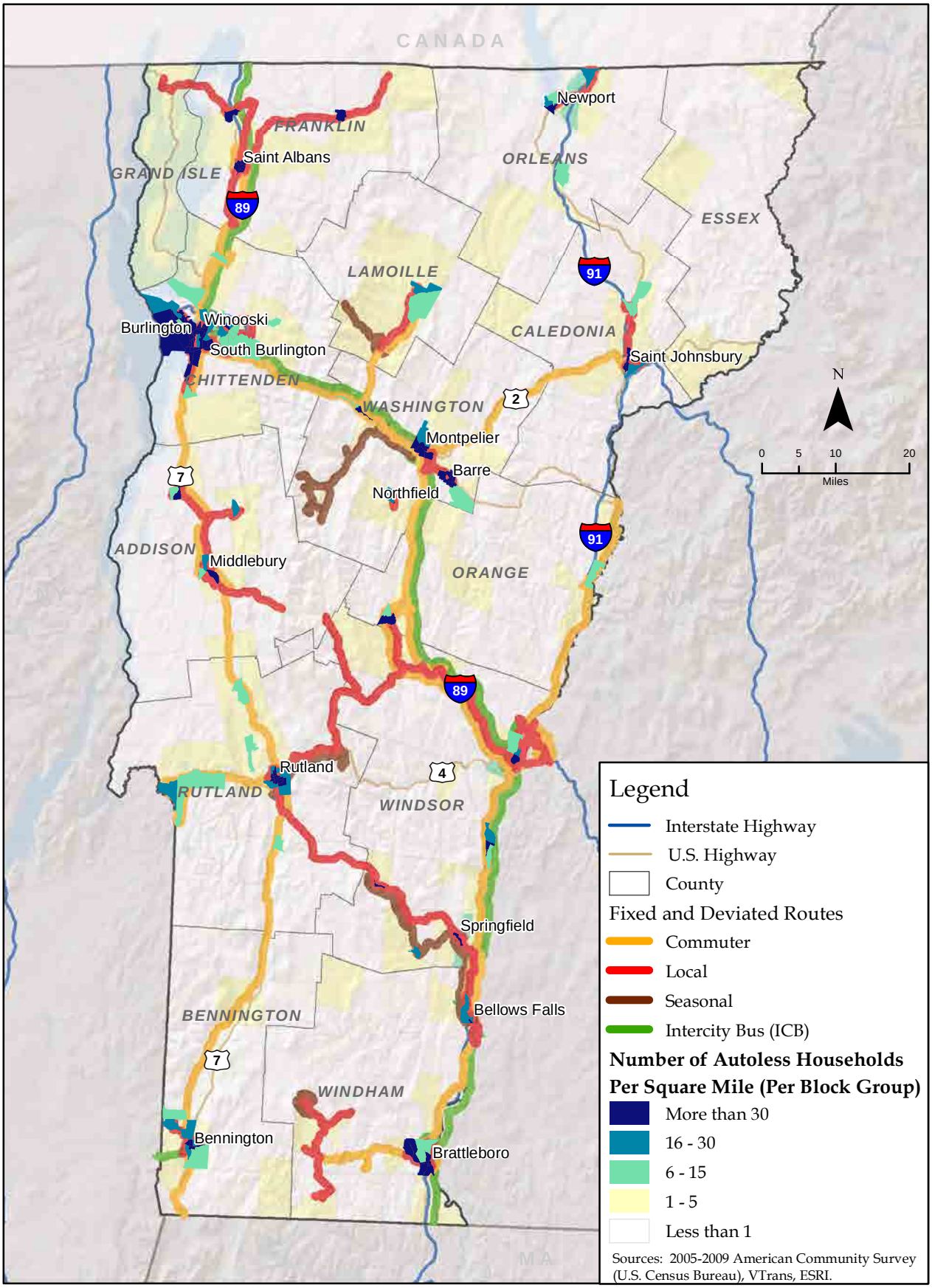
Other Population Segments with Potential Transit Needs

Autoless Households

While this population segment was included in the TDI, autoless households were also examined separately because the lack of access to a vehicle is one, if not the most, important factor in determining transit needs. The lack of a vehicle is a significant economic issue when households are not autoless by choice *and* public transit is unavailable. Vermont's major employment areas are regional in nature, and inter-town travel is required for many residents to reach employment sites. Members of autoless households may also rely heavily on transit options to access medical services, educational opportunities, shop, and attend social activities.

The density of autoless households, or the number of households without access to a car per square mile, in each block group is shown in Figure 4-7. The highest densities of autoless households are found in Greater Burlington, St. Albans, Swanton, Enosburgh, Newport, St. Johnsbury, Montpelier, Barre, Waterbury, Vergennes, Middlebury, Randolph, Rutland, White River Junction, Windsor, Springfield, Ludlow, Bellows Falls, Brattleboro, and Bennington. Several additional places across the State have moderate need based on the density of autoless households: Morrisville, Bristol, Northfield, Fair Haven, and Chester. All of these communities currently have some form of fixed-route or deviated transit service, but could be candidates for additional or

Figure 4-7: Density of Autoless Households



improved service since their residents, who do not own or have access to a personal vehicle, may have the most urgent need for public transit options.

Transportation-Eligible Medicaid Recipients

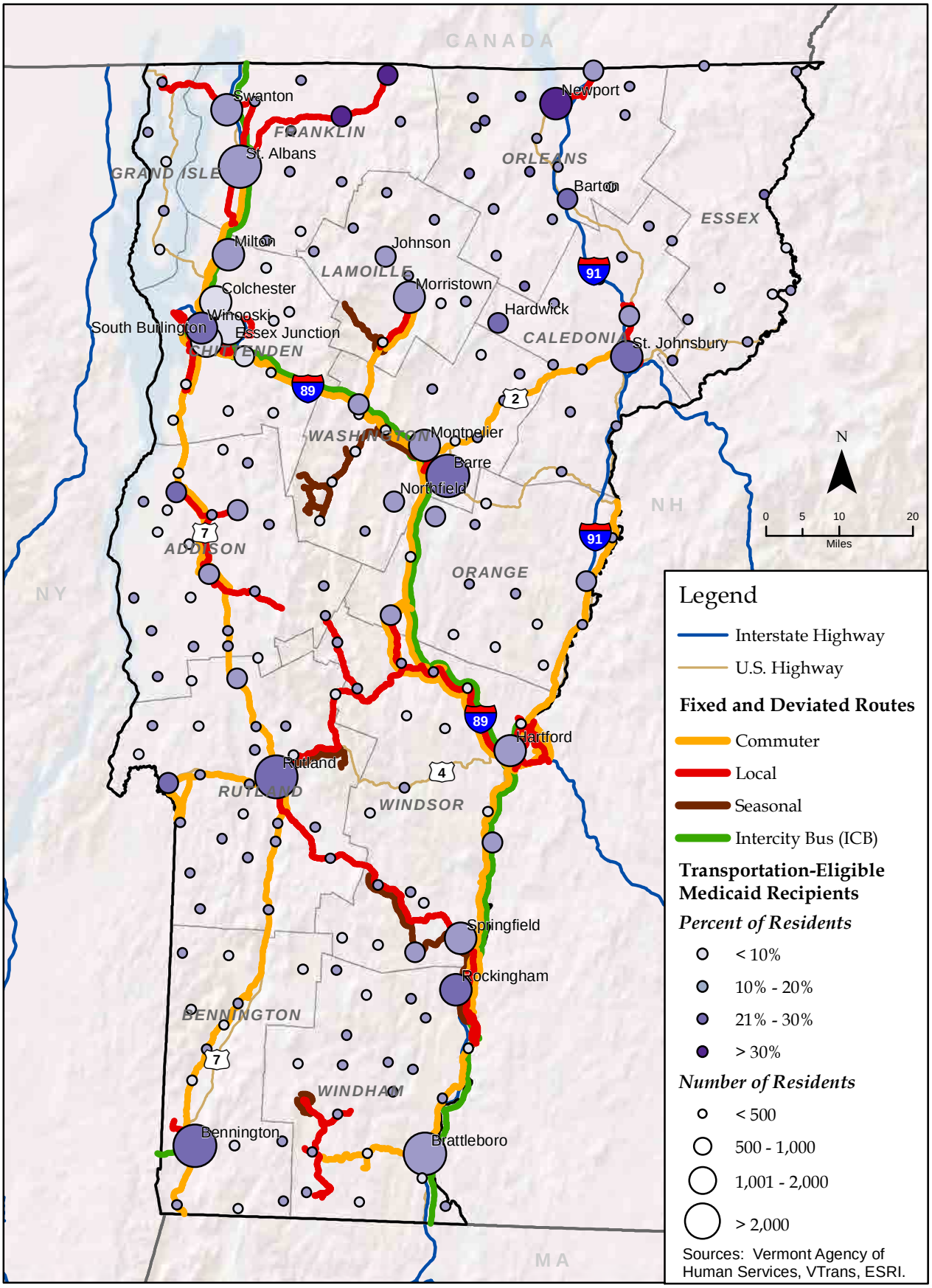
Using Medicaid data provided by the State, Figure 4-8 shows the number of transportation-eligible Medicaid recipients by town in 2010.[11] The size of the circle represents the number of residents that are transportation-eligible Medicaid recipients, and the color of the circle represents the percentage of the town population that is comprised of transportation-eligible Medicaid recipients. Towns with darker purple circles have a higher percentage of residents who are transportation eligible Medicaid recipients (more than 20%) while towns with lighter purple circles have a lower percentage of residents who are transportation eligible Medicaid recipients (less than 20%). Statewide, transportation-eligible Medicaid recipients comprise approximately 13.8% of the population.

The cities with the highest numbers of transportation-eligible Medicaid recipients – Rutland, Bennington, St. Albans, Barre, and Brattleboro – are also among the cities with the largest general populations. In addition to having the highest absolute numbers of residents who are transportation-eligible Medicaid recipients, these towns also have percentages (about 20% or more) well above the statewide average.

Most of the other cities with high numbers of transportation-eligible Medicaid recipients (represented by the large circles) have some sort of fixed or flexible route transit service available. Western Franklin and Chittenden Counties have numerous towns with high absolute numbers and above average percentages of residents who are transportation-eligible Medicaid recipients. These counties are served by GMTA's fixed routes and Chittenden County Transportation Authority's (CCTA) fixed routes and commuter routes. Several towns along I-91 in Windham and Winsor Counties have high absolute numbers, as well as high percentages of residents who are transportation-eligible Medicaid recipients. The I-91 corridor is served by CRT's fixed routes and commuter routes. Additionally, Lamoille and Orleans Counties have several towns with large absolute numbers and high percentages of transportation-eligible Medicaid recipients. While most of these towns are served by GMTA and Rural Community Transportation, Inc. (RCT), these counties have the least amount of fixed-route or deviated service available.

[11] Data provided by the Vermont Agency of Human Services in March 2011.

Figure 4-8: Transportation-Eligible Medicaid Recipients by Town (2010)



There are four towns in Vermont with over 500 residents who are transportation-eligible Medicaid recipients, that don't have any fixed-route or deviated service available: Barton in Orleans County, Hardwick in Caledonia County, Johnson in Lamoille County, and Northfield in Washington County. While a number of towns have above average percentages of residents who are transportation-eligible Medicaid recipients, and lack fixed-route or deviated transit service, the majority of these towns have smaller absolute numbers of these recipients (less than 400). The percentage of residents who are transportation-eligible Medicaid recipients highlights more rural areas that have potential transit needs but smaller populations. It is telling to look at a town's absolute number of transportation-eligible Medicaid recipients because towns with larger numbers are more likely to have the ridership to support fixed-route or deviated service.

TRAVEL PATTERNS AND CONNECTIVITY

Commuting Patterns

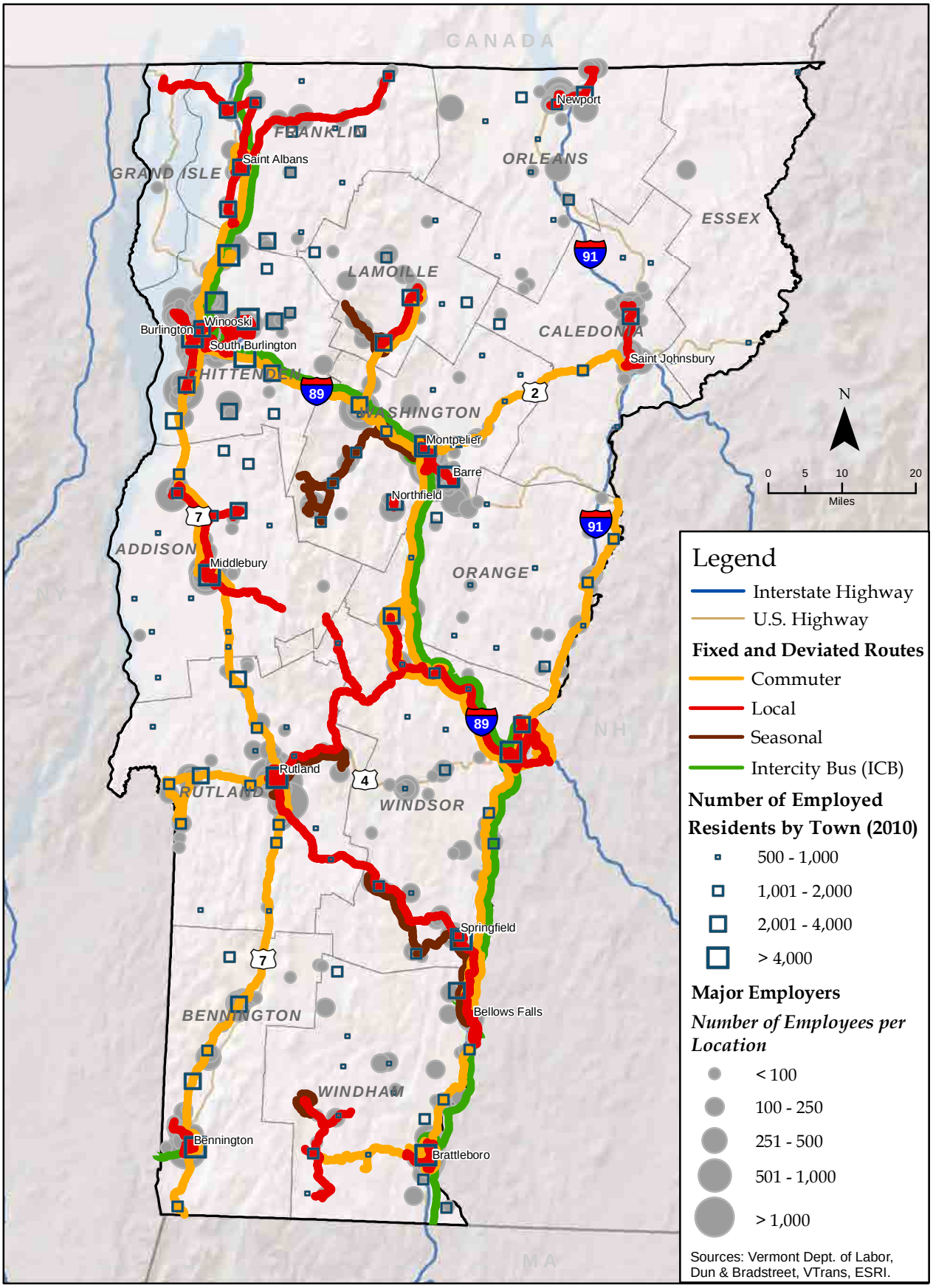
Origins and Destinations

Figure 4-9 displays the number of employed persons by their town of residence in 2010 (shown by the square symbols) and major employment sites with at least 50 employees (shown by the circle symbols). Though the specific travel patterns between these points were not available, the comparison of origins and destinations for work trips helped identify whether geographic gaps exist in terms of the existing fixed-route and deviated transit network serving potential work trips. The data for employed persons by town of residence was obtained from the Vermont Department of Labor's Economic & Labor Market Information in partnership with the U.S. Bureau of Labor Statistics; the data represent averages for 2010. The map indicates that most towns with significant resident workforces of more than 2,000 are served by the existing fixed-route and deviated transit network; the exceptions are Fairfax, Jericho, and Hinesburg outside the Greater Burlington area.

The data for major employer sites with 50 or more employees was obtained from Dun & Bradstreet in March 2011. This data included public and private sector employers as well as all branch locations of the employers with at least 50 employees at the branch. Vermont's largest employers, with more than 1,000 employees per site, are located in Burlington, Colchester, Shelburne, Montpelier, Rutland, and Bennington.[12]

[12] The specific employers with more than 1,000 employees per location include Fletcher Allen Health Care, Vermont National Guard, University of Vermont, American Morgan Horse Institute, General Electric Company, Rutland Regional Medical Center, Vermont Agency of Transportation, Central Vermont Medical Center, and Northshire Medical Center. (Source: Dun & Bradstreet.)

Figure 4-9: Comparison of Employed Residents by Town and Major In-State Employer Sites (with 50 or more employees)



Additional towns that host employers with at least 500 workers per location include South Burlington, Vergennes, Middlebury, Waterbury, and Brattleboro.[13]

Many of these major employment locations are located along interstate or U.S. highways. As seen in the map, the largest clusters of employment locations are currently served by fixed-route or deviated transit services. Moderate size employers, with 270 to 400 employees, that are not served by the existing network include Champlain Valley Union High School District in Hinesburg and Jay Peak Ski Resort and Ethan Allen Orleans Division in Orleans County. South Barre and the corridor along Route 4 in Windsor County are additional areas with a notable concentration of employers that are not currently served by fixed-route or deviated service. Some smaller clusters of employers that lack fixed-route or deviated transit service include North Hero in Grand Isle County, Jericho in Chittenden County, Johnson and Hyde Park in Lamoille County, Greensboro in Orleans County, and Townshend in Windham County. Note that major employers outside the State were not included in the analysis, but public input and Journey to Work data, described below, indicated that Vermonters also commute to New Hampshire and New York and some even to Canada (Montreal).

The existing fixed-route and deviated transit network provides good geographic coverage of Vermont's major commute origins and destinations. When combined with the analysis of Journey to Work data below, the data indicates a few potential connections that could improve transit for the purpose of commuting.

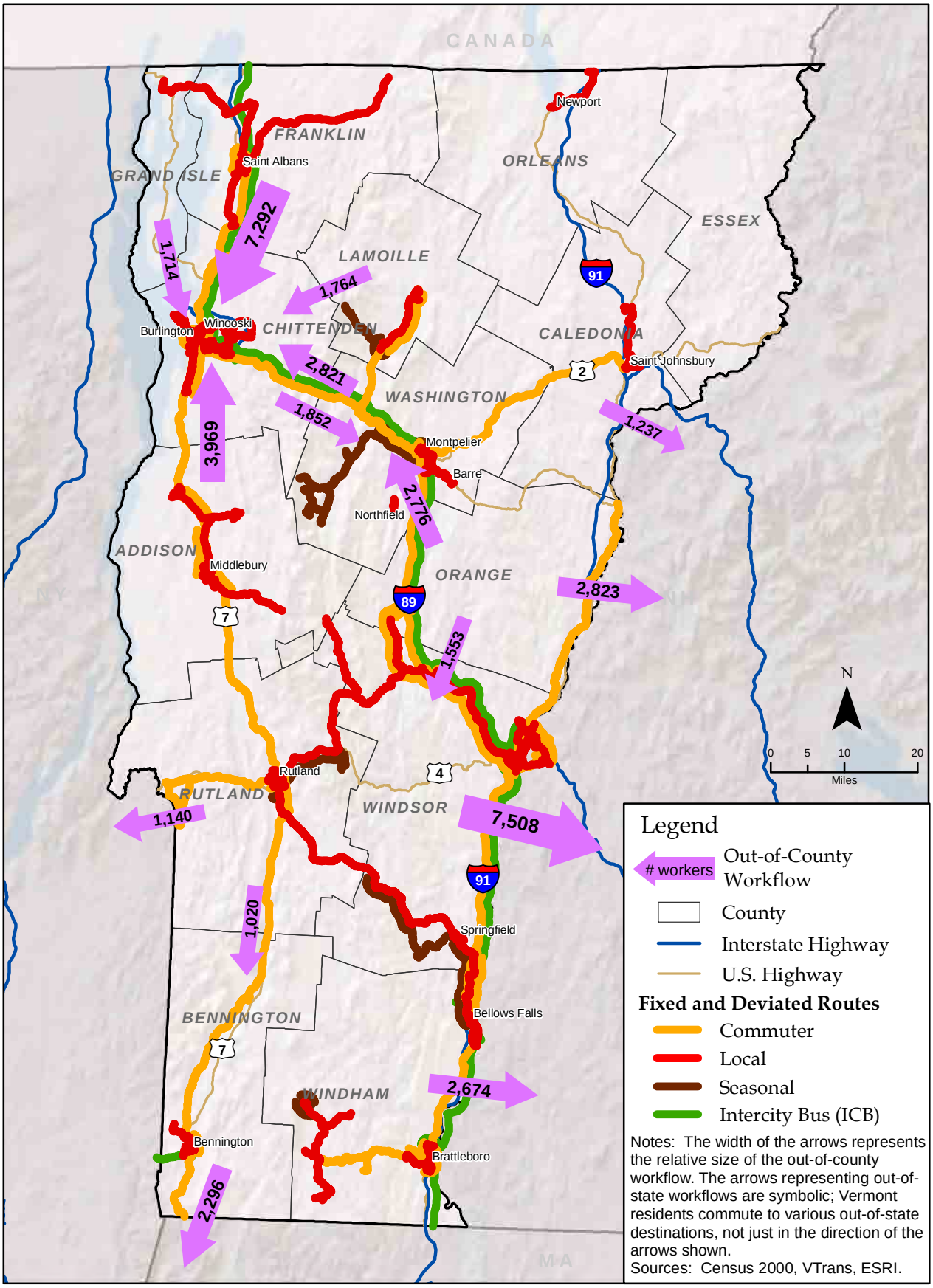
Journey-to-Work

Detailed analysis of Journey-to-Work data from the 2000 Census, the most recent data available, provided valuable information about county-to-county travel patterns, namely where people work and where they live.[14] While the 2000 Census Journey-to-Work data was somewhat dated, this analysis was still helpful in illustrating commuting trends, especially when combined with the analysis of 2010 data for employed residents by town and employer locations. Figure 4-10 highlights the largest out-of-county workflows in Vermont. Note that the Journey-to-Work data also indicated that many Vermonters live and work in the same county; at the State level, 79% of residents take in-county work trips. Highlights from this analysis are described below:

[13] The major employers with at least 500 employees per location in these towns include Vermont Air National Guard, South Burlington High School, Goodrich Sensors and Integrated Systems, Middlebury College, Vermont Department of Corrections, Vermont State Colleges, Windham Southeast Supervisory Union, Brattleboro Retreat, and C&S Wholesale Produce.

[14] Journey-to-Work data is part of the Census Transportation Planning Products (CTPP). The next update of the CTPP will use American Community Survey data from 2006 – 2010, and is expected to be released in 2012. (Source: **http://www.trbcensus.com/newsltr/sr0111.pdf**.)

Figure 4-10: Journey-to-Work Out-of-County Commute Patterns



- The counties where the largest proportions of residents commuted outside of the county included Grand Isle (32%), Essex (41%), and Orange (47%). About half of Grand Isle's working residents commuted to Chittenden County. One-third of Essex County's working residents commuted to New Hampshire, while one-fifth worked in Caledonia County. Nearly one-fifth of Orange County's resident workforce commuted to New Hampshire and Washington County each; about one-tenth commuted to Windsor County.

- About one-fifth (21.1%) of those that worked in Chittenden County commuted from other counties (19.6%) or from out-of-state (1.5%): 7,292 of these trips (37%) originated in Franklin County, 3,969 (20%) from Addison County, 2,821 workers (14%) from Washington County, and around 1,700 workers (9%) each from Grand Isle and Lamoille Counties. Notable numbers of Chittenden County's working residents also worked in other counties (though the percentages were small), namely Washington County and Franklin County with 1,852 (2.3%) and 1,126 (1.4%) of Chittenden County's resident workforce, respectively.

- Other large out-of-county workflows in terms of absolute numbers of commuters included Orange County residents who commuted to Washington County and Windsor County. 2,776 members (19%) of Orange County's workforce commuted to Washington County, and 1,553 members (11%) of its workforce to Windsor County. 1,020 Rutland County residents (3.3% of the resident workforce) also commuted to Bennington County.

- The five counties on the eastern border of Vermont lost a notable portion of their resident workforces to New Hampshire, mainly Grafton County where Dartmouth College and Dartmouth Hitchcock Medical Center are located. As mentioned earlier, about one-third of Essex County's resident workers commuted out-of-state. A quarter of Windsor County's resident workforce commuted out-of-state, mainly to Grafton County, NH and some to Sullivan County, NH. Nearly 20% of Orange County's resident workforce commuted out-of-state, with the majority of residents working in Grafton County, NH. About 12% of Windham County's resident workforce commuted out-of-state, mainly to Cheshire County, NH; and about 9% of Caledonia County's resident workers commuted out of Vermont, most to Grafton County, NH.

- On the western border of Vermont, relatively high numbers of residents from Rutland and Bennington Counties commuted out-of-state. 2,296 members (13%) of Bennington's resident workforce and 1,140 members (4%) of Rutland's resident workforce commuted out-of-state. Berkshire County, MA was the destination for the highest proportion of Bennington County

residents commuting out-of-state, followed by several New York counties.[15] The most common out-of-state employment destination for Rutland residents was Washington County, NY.

When analyzed in conjunction with the origins and destinations of commuters described above, the travel patterns from the Journey-to-Work data indicated that existing commuter routes serve work trips into and out of Chittenden County quite well. Some commuter service currently exists for commuters traveling from Orange County to Windsor County, from Rutland County to Bennington County, and from Bennington County to Williamstown, MA. A noticeable gap is transit for Orange County residents who may be working in Washington County or in New Hampshire. Additional connections to workplaces out-of-state could also provide new transit options for commuters from Caledonia, Windsor, Windham, Bennington, and Rutland Counties.

Park and Ride Lots

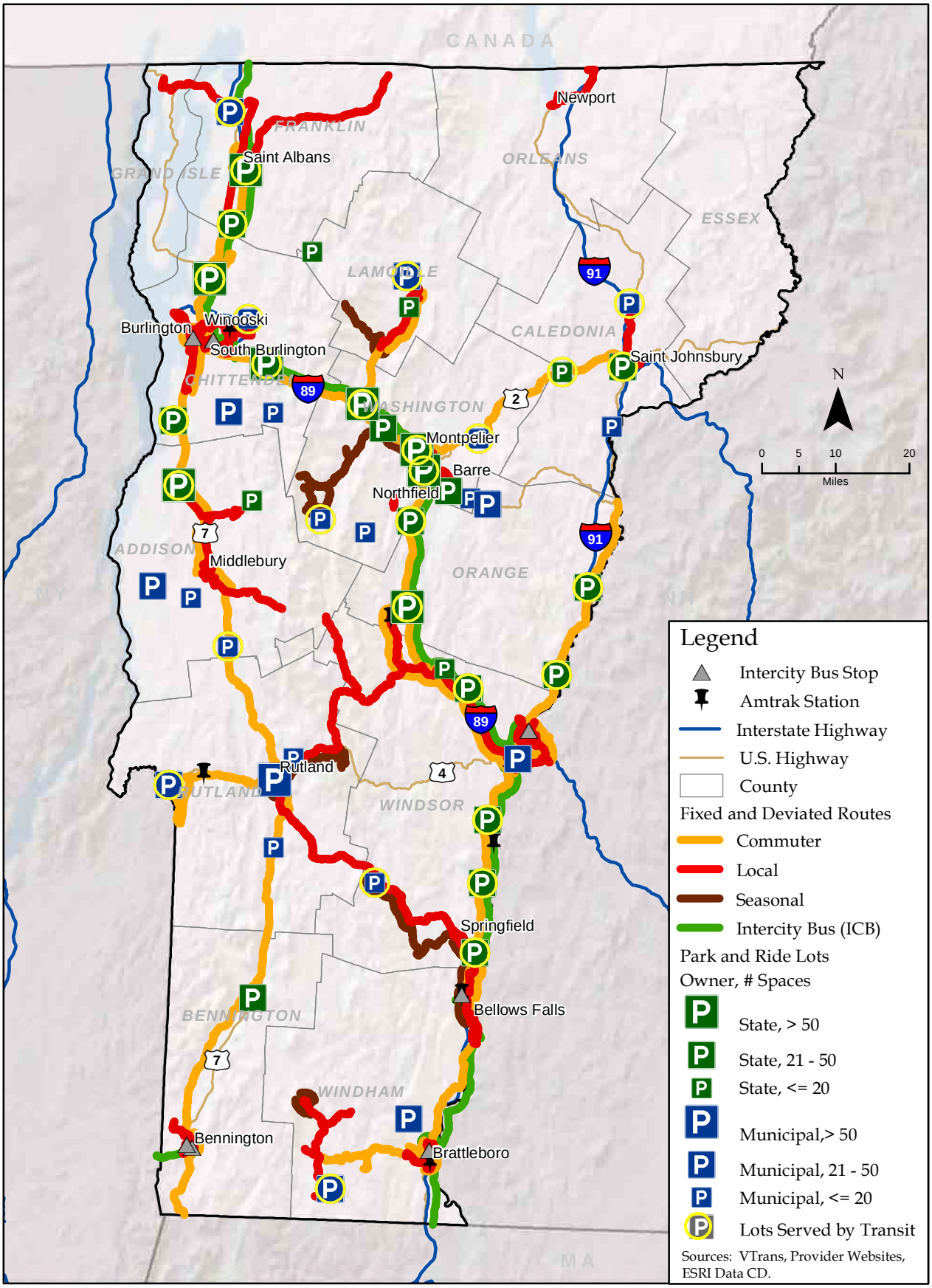
Figure 4-11 displays the 27 State-owned park and ride lots throughout Vermont, which provide a total of 1,113 parking spaces for commuters, carpools, and vanpools. The map also shows several of the State's 31 municipally owned park and ride facilities.[16] The lots served by existing fixed-route or deviated transit are circled in yellow. Vermont's transit providers serve about two-thirds of the State-owned park and ride lots and nearly half the municipally-owned lots. The lots are mainly served by commuter services or local services that have commuter-like schedules. About one in five park and ride lots includes shelter of some sort, and a slightly lower percentage has bike racks available; most lots with these amenities are owned by the State. Many municipal lots have been developed through VTrans' Municipal Park-and-Ride Grant Program, which funds engineering and construction activities for small park and ride facilities to be owned and maintained by municipalities.

The Newport and Bennington regions are notable in that they do not have park and ride lots. Newport is currently only served by local deviated transit, and a park and ride lot could be helpful if a new regional service is implemented between Newport and St. Johnsbury. A new park and ride lot in Bennington could also promote use of the existing regional services to Williamstown, MA and Manchester, VT, especially since transfers from the local Bennington routes are not accepted on the northbound trips toward Manchester. These areas have at least three new park and ride facilities

[15] The Journey to Work data indicated that 1,137 Bennington residents commuted to Berkshire County, MA, out of 1,231 residents that commuted to Massachusetts; and 883 Bennington residents commuted to New York, with Rensselaer County, Albany County, and Washington County as the most common destinations.

[16] *VTrans 2011 Fact Book*. **http://www.leg.state.vt.us/reports/2011ExternalReports/264206.pdf**.

Figure 4-11: Park and Ride Lots (State and Municipal)



planned in Norton, Bennington, and Readsboro, funded through VTrans' Municipal Park-and-Ride Grant Program.[17]

Burlington and Middlebury also lack specifically designated park and ride lots, but transit users and carpoolers may utilize other parking options such as municipal parking lots or private garages. While park and ride lots are generally free of charge, users likely need to pay to use municipal or private parking lots or garages. Commuters in the Windham region will also have additional access to a park and ride facility when the State completes its new park and ride lot at Putney in FY 2012.[18] This new lot contributes to the goal of VTrans' Park and Ride Program to double the number of State-owned park and ride spaces between 2008 and 2018.[19] Input provided during the public meetings regarding the PTPP indicated a need for more lighting and amenities at park and ride lots to facilitate transit use.

Connectivity – In-State and Out-of-State

Vermont's existing public transit system consists of a collection of services operating in a parallel, but generally complementary, manner. In order for these services to create a "network" that allows Vermonters to reach destinations outside areas served by their local public transit operator and, indeed, outside the State, it is essential that these services connect in a meaningful way. Meaningful connections refer to services that are coordinated to provide convenient overall transit trips for riders. Examples include service schedules that are coordinated such that riders can transfer from one route to another with a relatively short wait time; transfer points or intermodal hubs where riders can physically transfer between services with ease; and the availability of information regarding connecting services on the providers' websites and rider brochures.

This section focuses on the existence of such connections and their effect on the statewide public transit system in Vermont, including:

- The need for in-state (regional) and inter-state connections,
- Whether and how well they are being served by the current public transit system, and
- Organizational structure affecting the ability to improve connectivity.

[17] VTrans. "Vermont Municipal Park-and-Ride Grant Program Summary." January 2011, http://www.aot.state.vt.us/parknride/Documents/2011MunicipalParkandRideAwardSummary01-26-11.pdf.
[18] According to April 2011 email from Matt Mann, Senior Planner, Windham Regional Commission.
[19] Zicconi, John (VTrans Director Planning, Outreach & Community Affairs). "Improved and Expanded Waterbury Park & Ride Opens." June 2010, http://www.aot.state.vt.us/pressreleases/2010/June/WaterburyParkAndRideOpens.htm.

Need for Regional and Intercity Connections

Since the last PTPP, there has been a new emphasis on regional and intercity connections. Travel needs are increasingly long distance in nature, and are not limited to the areas served by the local public transit system. Key markets to be served include:

- Tourists including leisure travelers and day excursions,
- Travelers needing connections to airports,
- Commuters, and
- Transit-dependent populations needing services outside their area to medical appointments or to visit family/friends.

Intra-state or Regional Connections

Being able to access locations in the State that are outside the public transit service area is a challenge for many Vermonters. There are services available to meet many, but not all, of these regional trip-making needs.

Since the 2007 PTPP, there has been a growth of regional commuter services for both year-round and seasonal workers. Current commuter routes that extend beyond the traditional areas served by each of the operators and seasonal connections are described below.

- Addison County Transit Resources (ACTR) extends into Chittenden and Rutland Counties with commuter services. Rutland to Middlebury is operated jointly with Marble Valley Regional Transportation District (MVRTD) (partially as a replacement for the Vermont Transit Route that was discontinued in the Western Corridor). ACTR also operates a seasonal route called the Snow Bowl.

- MVRTD extends local services in Rutland into Middlebury, Manchester, Bellow Falls, Ludlow, and Fair Haven. It also has a seasonal route to Killington, primarily for workers.

- Connecticut River Transit (CRT) has a number of commuter routes that connect to other transit systems: the Rockingham – Lebanon route connects to Advance Transit (AT) and Stagecoach Transit Services (STSI), while the Bellows Falls - Brattleboro route connects with Deerfield Valley Transit Association (DVTA). The system also has a seasonal service to Okemo

Mountain Resort and connects to Amtrak in Bellow Falls with the Upper Valley Commuter Route.

- DVTA extends beyond its service area to Brattleboro and has a seasonal route to Mt. Snow.

- GMCN/Green Mountain Express connects to MVRTD, and for out-of-state travel links to Peter Pan, Yankee Trails, and Berkshire Transit (a regional transit authority in Massachusetts).

- GMTA is an example of a coordinated system that was created as a combination of the services operated by Stowe Transit, Central Vermont Transportation Agency, and Network to provide both local services and cross-county commuter and general public routes.

- RCT has a route from St. Johnsbury to Montpelier, which serves various park and ride lots and links to intercity rail in Montpelier. This is operated in conjunction with GMTA.

- STSI operates two commuter routes along the I-89 and I-91 corridors into the employment centers of White River Junction and Lebanon and Hanover, NH.

- CCTA operates the LINK Express commuter service to adjacent counties.

- AT provides commuter service to Enfield and Canaan, New Hampshire. Through the Upper Valley Transportation Management Association (UVTMA), AT coordinates with Stagecoach Transportation Services and CRT in Vermont and Community Transportation Services in New Hampshire to provide information on public transit and promote connections between transit systems in the region. AT also promotes intermodal transportation with connections to Amtrak, Greyhound, and Dartmouth Coach.

Referring back to Figure 4-3, which displays these regional services along with connections to local transit and an overlay of cities and towns by size, the map indicates that all of Vermont's larger cities are served by transit and many are connected through commuter services. Local services complement the commuter network by connecting smaller towns to urban centers. The notable regional gaps in the statewide network are between:

- St. Albans and Newport;
- Newport and St. Johnsbury (this connection was also requested through public input);

- St. Johnsbury and Wells River, to connect to White River Junction (and nearby Hanover and Lebanon, NH); and
- Bennington to Wilmington, to connect to Brattleboro.

The Section 45 study on Regional Connectivity looked at intra-state connections in terms of both possibility and "practicality." The definition of a practical public transit trip was that it would take no longer then two times as long as it would be to drive, and require no more than two transfers among vehicles. It found that route connections exist among most of the State's populated towns and cities (with the exception of the Northeast Kingdom), but that the set of practical connections was limited. Most disconnected from the intra-state fixed-route transit network is the Northeast Kingdom. The study also found that a trip from Burlington to Bennington is possible, but is not very practical, requiring three transfers and most of a day.

Since the study was completed, a Route 2 service has been instituted between St. Johnsbury and Montpelier. A practical connection between Montpelier and White River Junction (and nearby Hanover and Lebanon, NH) is a gap that remains. While STSI provides geographic coverage of the I-89 corridor through two commuter routes, the services are not scheduled such that riders can transfer at Randolph to continue toward Montpelier or White River Junction.

Inter-State Connections

Intercity bus, rail, and air provide connections to out-of-state locations for Vermonters and provide access to Vermont for visitors and tourists. Many of the transit systems in the State provide bus connections to Amtrak and to the few intercity bus stations that remain active – providing for both long distance in-state travel and out-of-state connections. The intercity bus services have been drastically reduced over the past decade. Currently there are only two intercity routes operated by Greyhound, although connections among these routes at White River Junction and connections to the larger Greyhound network offer a wider array of inter-state transportation choices.

Vermont's transit systems schedule their local services to provide some practical connections with less than two-hour wait times, and some less than one hour, to and from intercity bus services. For example, GMCN's Red Line offers a connection to Yankee Trails service toward Albany each weekday (a second connection is possible, but requires a 2.5-hour wait), providing the opportunity for a day trip to Albany.[20] GMCN's Orange Line provides two connections in Williamstown, MA to Peter Pan Bus Lines' services toward New York and Boston Logan International Airport Monday

[20] However, the rider would need alternative local transportation in Bennington on the return trip, since Red Line service ends at 5:00 p.m. and Yankee Trails arrives back from Albany to Bennington at 7:20 p.m. This bus trip also takes about twice the time that driving would, but still offers an option for those unable to drive.

through Friday. AT's Green Route connects to Dartmouth Coach in Hanover, NH and provides six connections each weekday to Boston South Station and Logan International Airport, with two possible connections for the return trip in Hanover; as well as eight connections to New York City during the week, with one return trip connection available per weekday. Vermont's local operators facilitate these inter-state connections by providing schedule information and highlighting connection points on their websites and brochures. Expanded hours and weekend service for local routes, particularly to accommodate return trips to Vermont, could further improve inter-state travel for Vermonters and visitors.

Information Gap

While some service "gaps" exist, there is also an information gap for potential riders. A central source of information for travelers – one that is *"seamless, efficient, user friendly with usable connections among in-state and out-of-state points"* – is essential to support public transit needs in Vermont.[21] While there have been some strides in compiling and sharing information on all transit services in the State, as well as mention in marketing materials of connections and possible transfers among routes operated by different systems, without one central information sharing mechanism, it remains difficult to navigate through the information available on the various transit system media and websites. While Go Vermont has a start on matching ridesharing trips, there is currently no "trip planner" function on the Go Vermont site.

Organizational Structure

The public transit system in Vermont consists of a collection of many independent parts including ten local public transit providers, intercity bus services operated by the private sector, and shared ride services such as shuttles, car-pooling, and van-pooling.

A 2009 recent legislative report on the organizational structure for providing public transit in Vermont concluded that the existing system has evolved in a logical manner, based on the primary, initial demand for transit services being local.[22] The existing service delivery model grew out of the demand and need for transportation services based primarily at the local and intra-regional level, and it was concluded that this is still the most appropriate model based on the priority of transportation needs and programs currently being delivered. However, the report postulated that as the demand for regional and intercity service increases, the model by which the services are

[21] In the 2007 session, the Vermont legislature directed VTrans to examine the feasibility of making public transportation in Vermont seamless, efficient, and user-friendly with usable connections among in-state and out-of-state points.
[22] *Section 35 Public Transit Study*, Interim Report, March 2009.

delivered may evolve out of necessity. The report recommended that existing systems be allowed to evolve and take action to create efficiencies where interconnectivity opportunities present themselves. It also recommended that this update to the PTPP examine whether high-priority public transit services, including local, regional, and intercity, can be well-served under the current delivery structure.

Determining the State role and the way in which regional services can be addressed, given the federal funding programs, is a key PTPP issue. The fact that such services have emerged and are successful is a tribute to the need especially given the complexity required to secure the "local share" – which communities benefit, which should contribute, and how to determine a fair balance of financial support.

CONCLUSIONS ON PUBLIC TRANSIT NEEDS IN VERMONT

Vermont's existing transit providers generally provide good coverage through fixed- and deviated fixed routes in those parts of the State with the highest densities of potentially transit-dependent populations. All of the providers also offer demand-response, scheduled, and/or volunteer driver services to help meet transit needs in more rural areas, which do not have the density to support fixed-route services. The caveat is that most demand-response services are funded through the E&D Grant, Medicaid, or human service agencies. While E&D program services are open to the public, residents typically must meet eligibility criteria or be clients of the human service agencies to receive services under other programs. Additional demand-response service, scheduled routes, and volunteer driver services would improve the convenience of public transit in outlying areas, where scheduled service to nearby large towns may only operate a few times a month and rides with volunteer drivers are subject to availability.

The Northeast Kingdom, Lamoille, and Orange Counties have areas with high relative transit needs, but limited transit service; these areas also have lower population densities, which make fixed-route or deviated transit service less feasible. Where such services already exist, such as Morrisville or the I-91 corridor in Orange County, these areas may be candidates for expanding service frequencies, hours, or days. In the Northeast Kingdom, where deviated services are limited, new scheduled or deviated service could be implemented as population growth and densities warrant; these new services would play a vital role in connecting the Northeast Kingdom to the rest of the State.

The more urban areas around the State that currently have local or commuter services may also benefit from increased levels of service, such as expanded hours of service or higher frequencies, or new services such as weekend or evening service.

Candidates for such transit growth include the areas surrounding Vermont's major cities: Burlington, St. Albans, Montpelier, Barre, Middlebury, Rutland, Springfield, Brattleboro, and Bennington. Hartford and White River Junction are additional areas with potential for transit growth, since the Upper Valley region hosts several major employers, educational facilities, and medical institutions. Expanding existing services provides further opportunities to coordinate transit between provider areas, both within Vermont and possibly across the State border to New Hampshire, New York, and Massachusetts, and better meet regional travel needs.

Vermont's current transit providers communicate often and engage in notable coordination efforts, from sharing information about other providers and highlighting connection points to sharing capital and training resources. The public transit networks also connect to other transportation modes, including park and ride lots, Amtrak, and Greyhound and other intercity bus providers, whenever possible. Vermont's public transit network provides decent geographic coverage across the State through at least one form of transit (i.e., demand-response or volunteer driver service in the most rural areas). However, numerous opportunities exist to improve existing services, including more interlining of regional services and between local and intercity bus services, and introduce new types of transit to boost local and regional accessibility.

Improvements to regional and inter-state connectivity, specifically making longer-distance trips feasible through fewer transfers and shorter travel times, were among the top transit needs provided through public input. In the past, Greyhound (Vermont Transit) routes allowed Vermonters to travel between towns in-state. Increasingly, the in-state trips are being provided by local transit providers, and the gaps in long distance trips within Vermont are slowly being filled by regional and commuter services operated by the transit providers. However, many existing commuter and local routes have limited service hours, targeted toward commuters, and consequently do not meet regional transit needs for other trip purposes. Vermonters also frequently travel across the State borders for work, shopping, and recreation. With the reduction in intercity bus service, Greyhound now primarily provides the out-of-state linkages. Additional connections to New Hampshire especially would better meet the daily travel needs of Vermont residents and potentially encourage out-of-state visitors to Vermont.

While the demographic analysis focused on potentially transit-dependent populations, "choice riders" present another potential market for public transit. Choice riders are those that own personal vehicles, but may choose to use transit services to save the costs related to owning an automobile, to reduce the environmental impacts of their transportation, or to experience less stressful commutes. Improvements in the convenience and reliability of transit services are especially important for attracting these types of riders and increasing new transit users. Improvements ranging from

increased service levels to additional amenities to technology, which provides real-time information and a trip planning function were needs identified during this assessment.

ATTACHMENT

VTrans Vermont Agency of Transportation

Vermont Public Transit Policy Plan Update
Notes from Public Meetings
February 7 – 9, 2011

What are the strengths and weaknesses of the existing transit program?

Strengths:

Overall

- Commitment of public transit providers; most providers are committed to and work well with riders to provide transportation from point A to B
- Regional approach to transit (this was mentioned as both a strength and weakness)
- Ridership more diverse and expanding beyond transit dependent, inter-generational contact beneficial
- Transit operators try to work together
- Vermont Human Service Transportation Coordination Plan - a foundation for working together
- "Way to Go" week – new rider started riding, nice promotion

Funding

- Funding flexibility is a strength, as is the commitment of the state to funding transit
- Vermont funds transit quite well compared to neighboring states
- Legislative support for transportation funding for youth programs

Intercity Bus

- Does a lot for Montpelier; can bike into town and catch Greyhound (though this is hard in bad weather).
  - Intercity bus facilitates economic development; people commute between Montpelier and Montreal
  - Intercity bus to Boston is the same price as Jet Blue, but can board directly in Montpelier
  - The intercity bus stop in front of City Hall has more visibility.

Provider-Specific

- Marble Valley Regional Transit District (MVRTD) has nice drivers
- Use Rutland fixed route to get to work, happy with 30-minute headway
- Connecticut River Transit (CRT) transports workers to Hanover/Lebanon, a regional employment center
- Chittenden County Transportation Authority (CCTA) provides excellent geographic coverage with fixed route system
- Regional approach to transit is strength in northwest region and for CCTA, exemplified by new inter-regional services to St. Albans and Montpelier
- CRT has network of neighboring providers, with whom they coordinate services

<u>Weaknesses:</u>

Service Characteristics

- No evening/late night service (i.e., MVRTD fixed-route service in Rutland – needed for employment at the mall)
- Some service levels are inadequate in hours and frequency
- Providers don't have to have Americans with Disabilities Ace (ADA) paratransit for commuter services; leaves a gap
- Outside fixed route service areas, ADA-like paratransit service is lacking

Transit Markets/Areas Served

- With the federal mandate to serve everyone, providers are limited in serving specific needs with the exception of Medicaid and Elderly and People with Disabilities (E&D) program (i.e., Stagecoach is discussing transit for the Parent-Child Center, but cannot offer service aside from piggybacking on existing E&D service). Need to expand MOU between VTrans and Agency of Human Services
- Lack of regional services or connectivity - Riders within a service area cannot get transit service outside of it (i.e., Winooski residents use supermarket in Colchester, but can't get transit to cross town lines – funding issue)
- Difficult to serve dispersed needs populations
- Difficult for regional planning commission (RPC) to plan for critical care clients (have more than the RPC budgeted for)
- Northeast region lacks fixed route service especially for commuters
- For service in southern part of the state – difficult to make connections to New Hampshire, where transit is less well funded

Coordination

- Coordination is sometimes a patchwork approach, where transit provider is in individual discussions with human service agencies rather than the community coming together as a whole
- Transit providers are territorial; can be hard to work together/coordinate

Modes/Connectivity

- First mile/last mile are lacking
  - Getting to intercity bus – traveling with luggage is difficult
  - No taxis in Montpelier
- Lack of airport transportation (i.e., need to travel from Montpelier to Burlington International Airport (BVT) to catch flights)
- Need park and ride expansion, including shelters and safety features
  - Safety/security is a weakness at existing park & rides, including lighting and proximity to a main road, especially in Waterbury

Funding

- Chronic underfunding of transit (not only for transit dependent riders but also choice riders)
  - Can't provide all services that people want

Information

- Go Vermont can be limited
  - If no one matches with your specific points A and B, then the ridesharing system comes up with no match; potential user then needs to expand to potential points along the route to find potential matches
  - Though VTrans did recently develop an option on the Go Vermont website for less commitment/on-the-spur trips – See 'Single Trips' under Carpool/Vanpool heading
- Lack of information/awareness of transit services (i.e., a 60+ resident didn't know that E&D program transit service is available)
- Perception of transit ridership (think mainly low-income, but ridership is diverse); need to change stigma of "welfare bus"
- Need statewide marketing of transit; coordinate with "Way to Go" week

What characteristics do we want Vermont's transit services to have?

- Transit should stop at all schools
  - Not only do kids need transportation, but parents also need more access to schools for meetings; transit could boost parent involvement
  - Policy statement: Where there is no transit stop, put one at or near school as close as possible
- Transit should connect to out-of-state locations
  - Over the NY and NH borders for workers and shoppers
  - Into New York, Boston, Albany, and Montreal

How do we get there? What issues need to be addressed?

Trip Purposes/Transit Markets

- Transit needs are different in different areas of the state
- Transit needs to serve non-commuting purposes (i.e., elderly need transportation to the pharmacy and grocery)
- Youth travel
  - Transportation is number 2 issue for youth (ages 13 – 19, up to 21) (number 1 issue was places to gather, which is directly impacted by transportation)
  - Out of school transportation needs; trip purposes include career center, social activities
  - Might be able to get to their destination using existing services, but need service to get home too
  - Youth advocates have strong partnership with Windham Regional Commission and school superintendent, who are looking to partner with public transit
  - Other stakeholders include school supervisory unions/districts, which run small school transportation systems; present opportunities for transit providers to provide services (i.e., After the after school program, kids could take transit home instead of separate school buses)
- Vermont's population is aging, and many elders prefer aging in place
  - What are the numbers, the level of demand for transit services?
  - Review planned locations for nursing homes and assisted living facilities
  - Relates to transit and land use: for elders that need long-term human services in their home, at some point the human service agency needs to require elders to live on a bus route to receive services more efficiently
  - Nursing assistants that provide human services need transportation to receive training and access clients' homes; difficult transportation access reduces the attractiveness of jobs
- In Chittenden County, younger families are moving away from downtown to find more affordable housing, but need transportation options to reach downtown

Inter-regional Connectivity

- Use non-traditional transit (i.e., demand-response service) in less dense areas
- Need connections between local transit provider areas
- Need more inter-regional services to get people to work
  - Commuter watersheds represent low-hanging fruit; commuters are repeat customers
  - Better service times to access employment
  - Commuter services/LINK routes in past few years have been successful
  - Strong interest in LINK express from Burlington to Jericho

- Need ability to make day trips (over longer distances between towns), particularly return trips
- Need weekend regional service (i.e., Montpelier to Burlington or Williston)
- Expand transit services to underserved areas. Vermont Public Transit Policy Plan should consider varying needs among regions and give preference to underserved regions
- No intercity services to/from Northeast Kingdom
- Connect existing "stub" networks in Northeast Kingdom

Intermodal Connectivity

- Currently lacking, i.e., local bus stop is different than Greyhound stop, which is far from the Amtrak station
- Promote and consider additional modes, such as ridesharing, park and rides, and Zip Car, to promote transit use and/or fill gaps in transit service (i.e., gap in night service)
- There is a need for physical intermodal terminals
- Post signage, schedules
- State needs a policy to facilitate park & ride implementation
  - Override town objections to park & ride lots as a land use?
  - Need more park & ride access to transit (i.e., no park & ride between Waterbury and Montpelier)
- Potential policy on connections to airport (i.e., added single trip coordination option on Go Vermont; provide information that Dartmouth Coach runs to NYC though not direct to airport)

Funding

- Consider multi-year grant awards to providers:
  - Single-year awards do not allow leveling between good and bad years
  - Providers have no safety net or rainy day funds to address changing costs such as gas prices, maintenance, healthcare premiums, etc.
- Since municipalities contribute money, transit service areas end up being limited to town boundaries
- Policy on funding and efficiency: Given the number of dollars, provide the more efficient mode of service (i.e., intercity bus vs. rail)

Safety and Security/Amenities

- Need more bus shelters, schedules posted
- Lack of visibility at bus stops – need more lighting
- Prioritize improvements at heavily used stops
- Generally not funded through the state
- Need physical transit centers – opportunity to promote ridesharing and slugging (possibly register ahead of time)

Collaboration Opportunities

- Collaboration between public transit and school bus providers
- Encourage and reward collaboration between non-profits and private businesses (i.e., when a major employer contributes funding to transit)

Information/Marketing

- Use smart transit technology to add predictability to transit use and boost ridership
  - Use GPS, Next Bus system
  - Need easy information on transit to the airport
  - How to provide capital funding for smart technology?
- Unification of provider information – statewide trip planner?
- No New Rider Orientation available
  - How to ride?
  - Where are stops? Am I at the right place?
- Get rid of stigma of riding the bus; improve the image of transit
  - Passersby complain that they always see the bus empty
  - Non-users think of transit as the welfare bus
  - Statewide marketing campaign to appeal to choice riders
- Promoting more transit use/transit benefits
  - Highlight bus stops
  - Promote benefits, such as financial savings and decrease in carbon footprint
  - Save the state money
    - Save costs of highway/road maintenance
    - i.e., transportation for youth to reach job training can be more expensive than the training itself
- Policy on transit research – examine and consider transit impacts on various societal issues/sectors
  - If we increase public transit use, it's better for everyone; research transit impacts on the economy, employers, consumers, healthcare, green jobs, sustainability
  - Get research out to public

Transit and Land Use

- TOD is good, but could also promote Transit Supportive Development – incentivize development around transit stops or along transit routes (where transit already exists or could serve)
- Place employers/jobs in transit accessible places

Planning and Operations

- Consider statewide pool of vehicles, which can shift between providers depending on demand in different areas

- State needs to provide guidance in how to meet spike in demand when gas prices increase; need to develop contingency plan
    - Goals/objectives should include decreasing vehicle miles traveled (VMT), increasing transit use and park & ride use
- For the Critical Care Report, don't force each transit providers to designate number of critical care patients/riders served per year – it may be better to have one statewide target and pool resources needed to serve this population

Intercity Bus

- Does it make sense to re-establish intercity bus if demand is insufficient?
- Greyhound has different parameters than public transit. Where Greyhound needed to recover its full costs, and charged higher fares that decreased demand, public transit is subsidized and providers don't have to recover full costs
- It is difficult to re-establish demand
- VTrans has data from CMAQ routes, which help fill intercity gaps
- Determine whether intercity service is correct/good service? Cost-effective?

Other Comments:

- Providers have been doing own short range transit plans, though not required by VTrans or Statute. Central Vermont Regional Planning Commission is doing a Transit Development Plan now, and MVRTD recently did one
- Chittenden County MPO conducting regional park and ride plan
- There is a need for more park and ride lots - A few years ago, the State took out a popular Williston park & ride that was overflowing with cars
- League of Women Voters is conducting a Transportation Study on how to move around the rural state efficiently
- United Way community assessment in Windham County, looking at employment, education, and healthcare; transportation affects all areas
- Vermont Coalition of Runaway and Homeless Youth Programs, a coalition of 12 member programs, wants to address statewide issue of youth transportation needs
- For the November public meetings, perhaps hold a Vermont Interactive Television (VIT) videoconference meeting during the day time – when transit is available!

Appendix E

Technical Memorandum 5: Policy and Performance Framework

KFH GROUP, INC.

2012 Vermont Public Transit Policy Plan

Technical Memorandum 5: Policy and Performance Framework

Revised
August, 2011

Prepared for the:

State of Vermont
Agency of Transportation

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Technical Memorandum #5: Policy and Performance Framework

INTRODUCTION

The Vermont Public Transit Policy Plan (PTPP) is currently being updated for publication in 2012. The purpose of the PTPP is to review and update transit polices and goals and to develop strategies to meet current and emerging public transit challenges. The PTPP is part of a series of policy plans developed by the Vermont Agency of Transportation (VTrans) addressing, in addition to transit, rail, bicycles/pedestrians, air, and roadway policies. Together these policy plans provide direction for VTrans' various programs, as well as forming the basis of the State's Long Range Transportation Business Plan (LRTBP).

This technical memorandum presents the results of Task 5 and proposes a vision, goals, and a policy framework for public transit. It also includes proposed policy changes needed to meet the vision and goals including a review of the current performance monitoring program. It is the fifth in a series of technical memoranda being prepared as the PTPP plan is developed.

For more background on the context within which public transit is provided in the State, readers are referred to Technical Memorandum #1 which included an overview of Public Transit Program Administration within VTrans, current Vermont public transit vision, goals, and policies and the State and Federal Regulations. All the project technical memoranda can be found at the project website **http://www.kfhgroup.com/vermonttransitplanupdate.htm** .

Technical Memorandum #5 also builds on a number of other previous technical memoranda but particularly, Technical Memorandum #3 which outlined the issues facing Vermont's public transit program. A preliminary list of issues was introduced in Technical Memorandum #1 and subsequently discussed with the Study Advisory Committee (the Public Transit Advisory Council (PTAC)), a variety of stakeholders, and

the public at a series of three public meetings held the first week in February, 2011. In Technical Memorandum #3, the long list was condensed to six salient and overriding issues that VTrans is likely to face over the next five to ten years. Alternative approaches for how VTrans might address these issues were presented and served as a starting point for discussion among the various stakeholders. These were further discussed by the PTAC, reviewed by the RPCs/MPO and comments were solicited from additional stakeholders.

It is recognized that proposed changes to policy - whether legislative, procedural, or funding - will continue to evolve over the course of the project. The materials included in this memorandum were presented to the Study Advisory Committee for review on June 22, 2011; revisions have been made to reflect comments received from the Study Committee and RPCs.

VISION

The purpose of the PTPP is to define the goals, policies and strategies for public transit in Vermont, all aimed at realizing a shared vision presented below. As noted in Technical Memorandum #1, the 2009 Vermont Long Range Transportation Business Plan includes the overall VTrans vision for a "*safe, efficient and fully-integrated transportation system that promotes Vermont's quality of life and economic well-being*." VTrans' mission is "*to provide for the movement of people and commerce in a safe, reliable, cost-effective, and environmentally responsible manner*."

While the State does not currently have a defined vision for *public transit*, it could be inferred from goals outlined in Title 24, Chapter 126 of the V.S.A: *Public Transportation* and from the goals and vision expressed in the LRTBP. The proposed public transit vision is:

> *Public transit meets the basic mobility needs of all Vermonters including transit-dependent persons, provides access to employment, mitigates congestion, and advances the State's economic development objectives – all in a safe, reliable, cost-effective, and environmentally responsible manner.*

GOALS AND OBJECTIVES

VTrans' major public transit goal is to preserve and enhance the level of public transit in Vermont. Policy statements and goals for public transit in Vermont are codified in 24 V.S.A. Chapter 126, S.5083. According to this section:

"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, in order of precedence, the following goals:

(1) Provision for basic mobility for transit-dependent persons, as defined in the public transit policy plan of January 15, 2000, 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) Access to employment, including creation of demand-response service.

(3) Congestion mitigation to preserve air quality and the sustainability of the highway network.

(4) 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.

The breadth of the goals recognizes that different areas of the State have varying needs and that the types of services that are most effective may vary by location and local conditions. While the legislative language indicates the goals are "in order of precedence," in recent years the language has not been interpreted to focus on one goal over any other. The policies being proposed in this PTPP have assumed that the goals are truly in order of precedence specified in the statute. There was also discussion at the Study Advisory Committee meeting in June that the goal on congestions mitigation could be re-worded to expand beyond congestion to "Reduction in greenhouse gas emissions".

POLICY FRAMEWORK

As defined in the legislation, *public transit* service as a subset of public transportation is defined as "*…any fixed route, paratransit, transportation brokerage, user-side subsidy, and or rideshare/ride-match program which is available to any person upon payment of the proper fare, and which is promoted to be available to all members of the public, including those with special needs*" (24 V.S.A. § 5088(5)).

The state is committed to meeting its vision and goals for public transit as expressed above and the PTPP recognizes that there are opportunities to expand public

transit services in the state to meet the needs of all Vermonters. To this end, the state will continue to expand and enhance public transit services in the state. The current framework for Vermont public transit policy includes strategies aimed at:

- Preserving and enhancing existing public transit services that are well used by the traveling public,

- Monitoring the performance of transit services by VTrans and the boards of the transit providers to ensure the maximum value from available resources, and

- Using any additional public transit funds to support and promote the four goals noted above as in 24 V.S.A Chapter 126, S.5083.

Many of the challenges of providing comprehensive public transit in a state as rural as Vermont were discussed in the previous technical memoranda. The most pressing policy level issues that have emerged during the PTPP process to date are:

- Funding Levels and Sources,
- Coordination and Medicaid Transportation,
- Interface with Land Use Planning,
- Regional Connectivity and Intercity Bus, and
- Improvements to the "Transit Experience."

Each of these issues was described in TM#3 along with possible alternative approaches for how they might be addressed in State policy. This memorandum includes proposed changes to policies that may be included in the final policy plan.

FUNDING POLICIES

There are a number of State policies that provide the basic framework for how transit services are funded in the State. Currently, it is VTrans policy to:

- Maximize the use of available federal funds to support transit and to assist with State funding to the extent that funds are available within the state budget.

- Continue to seek innovative funding sources and mechanisms that will increase investment in public transit, especially from the federal level.

- Strongly encourages providers to maximize local funding for public transit and all parties strive to increase the level of local funding to meet a goal of 20% local funding (exclusive of capital, Rural Transit Assistance Program (RTAP), Job Access and Reverse Commute (JARC), Rideshare, and Medicaid funding).[1]

- Continue funding only to services that successfully meet performance standards and use resources effectively.

- Focus service expansions on meeting the basic mobility first, then subsequently, access to employment, congestion mitigation, and economic development in that order.

Funding Levels

While the PTAC wants to continue to seek additional State and federal funding, the policy plan should acknowledge that a significant increase is unlikely in the short-term (5 year horizon). An overall increase in funding is unlikely beyond the funding needed to cover increase in cost (fuel, etc).

Funding Sources and Innovations

So, the most salient question is how to do more with the same level of funding. As mentioned in Technical Memorandum #1, transit in Vermont has benefited from continued VTrans and legislative support, which has provided significant and creative uses of funding sources. Yet, funding is one of the most critical issues facing VTrans and its public transit providers. Aspects of the funding issue that are anticipated to arise in the next five to ten years include:

- How to maintain current service levels including those services coming off the Congestion Mitigation and Air Quality Improvement Program (CMAQ) three year demonstration period.

- How to fund service expansions to serve unmet needs or gaps in service. While transit funding levels have been stable and grown some over the past few years, this has been accomplished in part by the use of federal CMAQ

[1]Some funding flexibility was built into the Elders and Persons with Disabilities (E&D) program to allow operators to use non-cash match under that program (the value of volunteer hours can be used as local match), but the State still requires locally derived cash match the remaining programs.

funds to create new services and the preventive maintenance funding program.

- How to manage and distribute funding for capital (vehicles, facilities, and passenger amenities), and

- How to maximize federal funding while encouraging and sustaining local financial support for services.

Changes in funding policies being proposed are presented below.

Policies for Maintaining Current Service Levels

When considering policy changes, it is important not to abandon the innovative funding mechanisms currently employed by the State. To this end, the following policies should continue:

- Continue "flexing" (transfers) highway funds annually into the State's transit program to maximize their use for transit; particularly flexing federal highway funds from the Surface Transportation Program (STP) (for non-operating costs) and CMAQ (for operating and capital for a 3-year new service demonstration projects) into its transit programs.

- Continue the integration of E&D operating funds with its Non-Urbanized Area Formula Grants (Section 5311) to maximize coordination between human service agencies and public transit providers and to maximize use of vehicle capacity on all vehicles.

- Continue the VTrans program to capitalize preventive maintenance in an effort to prolong the life of the operator's fleets and to free up FTA operating funds.

- Continue with the VTrans' goal of 20% local funding (exclusive of capital, RTAP, JARC, Rideshare, and Medicaid funding) and reinstitute efforts to track and report on provider performance in meeting this goal.

Policies for Expanding Services

It appears that the VTrans New Service demonstration program (formerly called New Starts) is an effective way for VTrans to fund service expansions aimed at meeting additional needs. Yet relying solely on CMAQ as the funding mechanism for this program has created some challenges, most significant being how to increase baseline funding enough to absorb the cost of successful CMAQ new services.

Policies to Eliminate Under-Performing Routes or Services

One recommended policy change that would free up funding for new services would be to speed up the process of eliminating "under-performing" routes/services so that resources can be shifted to successful services more quickly. The State monitors performance both monthly (using the monthly services indicator report) and annually.

VTrans policy states that services that consistently under-perform and do not meet performance standards will not be supported with State/federal funds. Currently, the policy would discontinue funding for existing "baseline" routes/services that do not meet performance standards for two consecutive years. Also, CMAQ routes that have not performed well within the three year demonstration period currently are not considered for continued funding or conversion to a baseline service. However, it appears that few existing routes or services have been "de-funded" in recent years.

The proposed policy would speed up the process and allow less time for services to prove themselves. VTrans would have the flexibility to work with the systems to extend the improvement period depending on the anticipated time involved in making improvements. Process would be:

- Systems submit route/service level performance data quarterly.

- For established "baseline" services – if the services fall below acceptable performance levels in either the productivity or cost measure for two consecutive quarters, VTrans would work with the provider to adjust the service more/marketing/etc.

- For new services - if the services do not meet acceptable performance levels in either the productivity or cost measure after 12 months, VTrans would work with the provider to adjust the service more/marketing/etc.

- A plan and timeline for improvements would be written. This is intended to be a process of negotiation. With justification/documentation, VTrans could grant exceptions for non-performing services if these services address needs for basic mobility and are unable to be provided in another manner. (For example, if it is determined that operating a rural route for 2-3 riders in a low density area is more cost effective than providing 2-3 demand response trips).

- The services would have two additional quarters to improve after the improvement plan is implemented – could have more depending on what the adjustment entails.

- If no improvement in six months, service would no longer be eligible for funding.

- Funds would revert back to state pot for re-distribution to fund either new services under the New Service program or "baseline" services graduating out of that Program (depending on which services are being de-funded).

This policy would allow under-performing *established "baseline" services* a total of 12 months to improve and *new services* 18 months to become tested and proved. This could free-up a significant amount of funding. In the 2010 performance report, ten regular services and three CMAQ Year 2 and Year 3 services did not meet the "acceptable" standards for at least one measure. The total operating costs on these services were over $1M, including $580K for the regular services and $450K for those CMAQ services that were nearing the middle to end of their demonstration period. Assuming the State/federal funds cover about 80%of the total operating costs, cutting these under-performing services could free up almost $828K for new, more productive services.

The policy recognizes that some services, while important, inherently have lower productivity and/or higher costs. This may be particularly true of services to critical populations in low density areas or at off-peak hours. If, despite efforts to improve productivity and cost effectiveness, a particular service or route is unable to meet performance standards, VTrans could grant an exception that would allow it continued funding.

Policy Changes to Re-Vamp the State New Service Program

Public transit funding is currently allocated to the providers based on needs demonstrated during the annual grant application process and allocations are generally based on previous year allocations plus inflation. In essence, systems are eligible to receive the level of funding needed to maintain current services, as long as those services remain eligible and meet performance standards.[2] To fund new services, the policy allows local areas to apply for services under the New Services program mentioned above.

[2]Title 24 V.S.A, Chapter 126 Section 5091 (j) Notwithstanding subsection (i) of this section, and to the extent that appropriated funds are available, no provider who is otherwise eligible shall receive a lesser amount of operating funds than it expended on eligible operating expenses in state fiscal year 2001 for services that remain ongoing, and provided that the amount shall be evaluated as necessary to address changes in the cost of providing the services. In the event that a provider merges with or is otherwise succeeded by another provider, the successor provider shall be entitled to the same protection under this subsection that would have been available to the superseded provider.

Funding decisions regarding new services (including expansions to existing services - increased frequency, span or area of service) are based first on the feasibility study, and then on the demonstrated need for the services. As noted in Section 5083, "*Proposals for new service shall be evaluated by examining feasibility studies submitted by providers. These studies shall address criteria set forth in the public transit policy plan of January 15, 2000.*" Service expansions were a major focus in the 2000 PTPP which recommended the Short-Range Public Transit Plans (SRPTP) process and the requirement for SRPTPs was legislatively mandated at that time. Recent efforts to update the plans were abandoned after the effectiveness of the approach came into question and the requirement that planning take place in this manner was eliminated from the legislation in 2009.

The VTrans New Services program includes a review of proposed new services against evaluation criteria. The program guide[3] includes program goals that include supporting the "goals and objectives of the current Public Transportation Policy Plan". However, perhaps because the New Services program is funded with CMAQ, the evaluation criteria for selecting projects are mostly oriented toward maintaining air quality attainment. And, while congestion mitigation is one of the four transit goals, the selection criteria do not address the remaining three goals, namely:

- Provision for basic mobility for transit-dependent persons
- Access to employment, including creation of demand-response service
- Advancement of economic development objectives, including services for workers and visitors that support the travel and tourism industry.

The following policy changes are proposed for the New Services program in an effort to target new dollars toward areas of the state that currently have unmet needs and toward those services that are higher priorities as defined in the state statute.

- **Remove the goal-based funding formula** since it appears that over time the amendments to Section 5091 have rendered it ineffective. Existing services would continue to be funded as long as they meet performance standards, and new services would be funded based on their merit and need-based feasibility studies.
- **Update the New Services evaluation criteria to rank projects based on State transit goals** and distribute new funding based on statewide needs and priorities.

[3] *New Start Program Information Sheet*, VTrans, Public Transit Section, August 29, 2006.

- **Re-institute the Mandatory Transit Development Plan (TDP)** process to ensure that new transit services funded under the New Services Program are justified. The State would develop a minimum work scope for the TDPs and stagger when the plans are prepared so that two to three plans are completed each year. The State would fund these plans and could provide consultants, or the plans could be procured locally and in coordination with the RPCs and MPO. VTrans would work with the RPCs and MPO so the process could be funded and managed by them through the Transportation Planning Initiative (TPI) program.

Policies Aimed at Planning for Changes in CMAQ

There are no policy changes suggested at this time for dealing with the possibility that the State may no longer have unconstrained use of CMAQ funds. This is an issue that will be monitored closely so that adjustments can be made if needed. Vermont has maintained its air-quality "attainment" status under the federal Clean Air Act (CAA) which allows it to use its CMAQ funds for purposes other than Clean Air Act compliance, namely to fund transit services statewide. Were that status to be lost, the State would have to re-direct its CMAQ funds to activities aimed at improving non-attainment air quality in those areas of the State that are not in attainment (likely the Southwest and Burlington area). These activities could include transit services, but the State would no longer have the flexibility to use CMAQ for its statewide New Services demonstration program.

While the State is in a "wait and see" mode, the public transit operators are aware of the potential impact that a change in air quality attainment status could have on the VTrans program in general and funding for their system in particular. Presumably there could be a "phase down" period for services that are currently funded under CMAQ as well as a process by which the state justifies funding transit services in its non-attainment areas with CMAQ dollars as long as they meet air quality attainment goals. Creating a program that is flexible on the state level will help if adjustments are needed to accommodate a re-direction to the CMAQ funding.

Policies Aimed at Planning for End/Reduction in Earmarks

The two issues with earmarks are: 1) What will happen if they are eliminated? and 2) If they are continued, how they can best be managed in Vermont? On the first issue, there are a number of policy changes that could help the State in the event that earmarks go away. VTrans, as well as many Vermont municipalities and a few of the transit operators, have received discretionary federal grants directly from the Federal Transit Administration (FTA) for vehicles and a variety of other capital projects, such as

intermodal centers and maintenance/fueling facilities. The level of discretionary capital funding from the FTA to Vermont transit systems is significant and spans a number of years, as is necessary to meet the planning, environmental, procurement, and civil rights requirements for FTA-funded projects. It is uncertain what will happen to earmarks under reauthorization and the 2011 Congress.

There are a number of policy changes suggested that would allow the State to position itself as competitive under the FTA's discretionary grant program. These improvements are aimed at demonstrating to FTA that providers in the state are using capital funding effectively and cost-efficiently include:

- Statewide vehicle and equipment procurements (addressed in capital section below),
- Statewide vehicle and facility maintenance guidelines and a program for managing capital assets, and
- Statewide policy and program guidance for managing major capital projects (passenger amenities and facilities, operating/administrative facilities)

Policies Aimed at Managing Earmarks and Major Capital Projects

In the event that earmarks continue in some form under reauthorization, the state should address how those funds are managed. The management of earmarks to local communities is a difficult subject since the State does not necessarily participate in the earmark request, nor does it contribute to these projects financially. Yet, it appears that many earmarked funds languish due to complexities of properly managing FTA projects. This process could be used to manage any major capital asset that is funded with federal and/or state dollars.

The policy change proposed for managing earmarks, or any other major capital project, is to centralize FTA earmark/capital project management for the rural agencies at VTrans and for urban transit at CCTA. VTrans and the operators would compile and submit a combined request for capital projects. Based on a statewide criteria and capital improvement program discussed below, projects that had State review and approval could be considered for State funding.

Policies Regarding Local Funding

The ability of the transit systems to generate local share is a major issue for some providers. The local funds needed to support public transit typically come from the towns they serve, the farebox, and contracts with human service agencies. Local

communities and residents in some areas also contribute a significant amount for transit services from their local property taxes. In some areas there is continuing interest in developing alternatives to the local property tax as the primary source of local match.

While some providers are seeking more flexibility in terms of what sources can be used to meet local match,[4] no changes are being proposed that would allow non-cash sources to replace local cash because it is perceived that this may lead to a decline in overall cash available, which could, in turn, result in a decline in the level of service. VTrans continues to allow for the utilization of volunteer driver hours as in-kind local match in the E&D program.

The State has the goal that local communities demonstrate a financial commitment to public transit and to implement this VTrans has a policy that 20% of each provider's operating budget be generated from "local sources." With the 2007 PTPP, VTrans set the standard that all providers should cover at least 20% of their operating budget from non-FTA/Federal Highway Administration (FHWA) and non State-sources (this is exclusive of capital, Rideshare, RTAP, JARC, and Medicaid funds). This policy "target" is in lieu of a mandated farebox recovery rate, recognizing that farebox revenue is only one component of local funding. Some communities may chose to contribute directly to maintain a low fare or fare free services. Others may have access to private contributions (i.e., colleges, large employers, and ski resorts).

Currently the 20% goal for local funding is not included in the annual performance report to the legislature and, since the goal is a system-wide goal, there also is no policy to dictate what would happen if a transit provider was unable to meet the goal. While not a policy change, the plan recommends that VTrans monitor the 20% goal more closely and assist providers in developing and implementing strategies to increase local participation and financial support for transit. Close monitoring of this policy will require VTrans to collect financial data (operating costs and revenue sources) from the transit operators more consistently. Information needed to monitor whether the goal is met could be collected as part of the annual grant application (reporting on the previous year) or by revising the monthly service indicator reports that are submitted by the transit operators.

If a system is unable to meet the 20% local funding goal on a system-wide basis, they could be asked to explain their "good faith" efforts to generate this support from their local communities. Achievement of this policy goal also could be tied to a statewide marketing program and/or outreach to local community leaders. Reporting on this measure should be included in the annual *Public Transit Route Performance Review* submitted to the legislature.

[4] In addition to the 2007 change to allow utilization of volunteer hours as in-kind local match in the E&D Program.

One source of local funds that may be untapped to date is the State Aid to Towns Highway funds. The state makes an annual appropriation for state aid to town highways in accordance with 19 V.S.A. Section 306(a). There is no requirement that state funds be matched with local funds, other than a requirement that municipalities expend no less than $300 per mile of local tax revenues on their highways (19 V.S.A. Section 307). This appropriation is distributed to towns based on their mileage of Class 1, 2, and 3 town highways. Towns can use the monies apportioned to it as the non-federal share of public transit assistance (19 V.S.A. Section 306(a)(5)).

State Initiatives to Increasing Productivity or Reduce Costs

Initiatives that would help the transit systems increase productivity or reduce the costs associated with providing existing services could allow the transit systems to create new services with savings. While it is difficult to quantify the cost saving, a few initiatives that could improve productivity include:

- *Improved training* – Initiate new training programs aimed at service efficiency. Training has the potential to reduce service costs but the manner in which training occurs could also be improved to be more cost effective. For example, CCTA puts on 10-20 maintenance trainings annually and the other providers could attend for minimal cost.
- *Technology improvements* – Continue to support technological improvements at the systems since technologies such as Automatic Vehicle Locators (AVL), Mobile Data Terminals (MDTs), automated billing and tracking could help reduce costs (as well as increase service quality and improve ridership/farebox). VTrans, AHS, and VPTA are partnering on a project to upgrade the intake and dispatching software statewide. (The current tool is six years old and is reaching its limitations.)
- *New vehicles and maintenance improvements* – Continue to ensure that the fleets are not beyond their useful lives. An improvement in the condition/age of the fleet and improvements to preventive maintenance should reduce operating costs and extend the lives of the fleets.

Policies for Capital Needs – Vehicles, Facilities, and Passenger Amenities

One of the broad issues being considered in the PTPP is capital planning for the State's public transportation system. Because there has never been enough capital funding available, VTrans has established policies that prioritize capital investments. The State places priority on replacing existing vehicles based on miles, age, and vehicle condition. VTrans also has created its preventive maintenance program in an effort to

extend the useful life of the fleets. Finally, the State has received a State of Good Repair (SGR) grant as well as earmarks from the FTA for replacement of capital, but not for expansion vehicles.

Although expansion vehicles for new services can be funded through CMAQ as part of New Services grants, if services are going to expand outside that program then there is a need to create a policy on expansion vehicles. An additional vehicle issue raised has been the need for consistency of vehicle manufacturers for ease of maintenance (related to decreasing operating costs addressed above). Finally, the need for a policy on when and how transit facilities are funded was also raised as an issue.

The PTPP process to date has identified three capital planning issues that need policy attention, one dealing with vehicles, one with facilities, and a third with other capital, but particularly technology enhancements. Each of these is discussed below, but as will be seen, they are related.

Policies on Funding Vehicles

Recent efforts in funding have focused on replacements for worn-out vehicles to bring the statewide fleet into a state of good repair, and there is general agreement that the state of the vehicle fleet is (or soon will be, as funded vehicles arrive) as good as it has been in a very long time.

However, this achievement is allowing for reflection on how to best maintain the vehicle fleet over time and provide for sufficient capacity for expansion and adequate spares to provide quality service. Issues that have been identified include the need for consistent policy to support the fleet, including policies on:

- **Replacement Vehicles** – need for a clear and consistent application of vehicle replacement policy as it relates to when a vehicle should be replaced (and is consistent with FTA policy);
- **Spare Ratios and Expansion Vehicles** – need for a policy regarding expansion vehicles and when funding for fleet expansion will be considered. This is related to a spare ratio policy aimed at providing adequate backup, but avoiding excessive spare ratios and underutilization of vehicles;
- **Procurement Process** – need for a centralized statewide vehicle procurement.

Each of these areas is discussed below. The proposed changes in vehicle-related policies would require implementation through the grant application, reporting

requirements, procurement procedures, and disposition requirements—all needing to be included in the State Management Plan for these programs.

Vehicle Replacement Policy. Vermont's current policy is to consider applications for vehicle replacement based on the vehicle design life as designated in the Vehicle Disposition and Transfer Procedures. Written guidelines regarding vehicle design life were shown in Technical Memorandum #3. The State will consider replacing vehicles that have not met the useful life criteria but have "extraordinary maintenance problems" or other special requirements with appropriate justification. Procedures also exist to allow for transfers of equipment to other eligible subrecipients; in these cases VTrans evaluates whether a vehicle has met *both* the years of service and mileage criteria.

The current policy follows FTA useful life guidance in that it allows for replacement when either the years of service or mileage criterion is met, whichever comes first. However, in practice, VTrans has been requiring that vehicle meet both mileage and year thresholds. It should be noted that VTrans has no category for light-duty vehicles with an Altoona service life of less than five years or 150,000 miles, although there appear to be 49 such vehicles in the State's transit fleet, either three-year sedans/minivans or four-year/100,000 mile van-type vehicles.

VTrans has an annual statewide vehicle inventory report that lists all vehicles used by the transit providers. However, the usefulness of this file to support the evaluation of capital grant applications and planning for overall capital needs is limited somewhat by the way vehicle types are identified and useful life information is captured.

A plan with projected statewide vehicle capital needs is needed for the Statewide Transportation Improvement Program (STIP) for non-urbanized areas, and is included in the Transportation Improvement Program (TIP) for the urbanized area (Greater Burlington). With such information, on-going utilization of this data can be used to assist in planning capital needs for vehicles. Technical Memorandum #3 presented an example of the kind of summary vehicle capital funding plan that could be developed from the statewide vehicle inventory, based on a policy of replacing vehicles at their expected life as expressed in years.

While there are no policy changes that affect replacement of current vehicles, a number of suggestions are made for program procedures that would allow VTrans to implement and monitor its current policies in this area:

- Allowing transit operators to replace vehicles that meet either the mileage or year thresholds as long at they can justify that the vehicle needs to be replaced based on maintenance records or other documentation.

- Revising the VTrans vehicle capital inventory database to include, in a separate column, each vehicle's Altoona useful life, and its in-service date. In addition there should be a category for light-duty vehicles with an Altoona service life of less than five years or 150,000 miles.

- Revising the VTrans annual grant application to include a Vehicle Utilization Chart showing the annual usage of each vehicle, including information regarding its use under a lease agreement (identify lessee), or if is primarily being used as a backup (spare) or contingency fleet vehicle.

Statewide Vehicle Procurement Policy. One vehicle issue raised has been the need for consistency among vehicle manufacturers for ease of maintenance. This could be handled, in part, by conducting a statewide procurement for transit vehicles. The advantages and disadvantages of this approach were outlined in Technical Memorandum #3.

VTrans does not currently conduct any statewide vehicle procurements on behalf of the transit operators, and each system has to conduct or coordinate its own procurement process. Many states with substantial rural transit programs have brought the procurement of transit vehicles in house, with the state conducting the procurement, and operators selecting the size vehicle and options from a list provided by the state. However, for reasons outlined in Technical Memorandum #3, it is suggested that Vermont pursue a statewide procurement through a lead transit agency or through VTrans either internally, or with the assistance of a consultant. The issue of developing vehicle specifications that would provide for a reliable vehicle with a range of appropriate options could be addressed by using a committee of the participating operators, with some additional technical assistance if required.

The recommended policy in this area is to conduct a statewide procurement for the most commonly used vehicle types, using a process that:

- Involves the operators in writing the bid specifications based on their experience and knowledge,

- Provides for professional expertise in the development of the bid specifications,

- Provides for professional assistance in the procurement process to ensure compliance with procurement requirements of FTA and VTrans, and

- Provides for appropriate professional support to conduct bus production-line inspections, pre- and post-delivery inspections and certifications, and warranty oversight.

Thus, the statewide procurement could utilize a lead operator or VTrans, assisted by an advisory committee made up of the other participating operators. This process will require staff time and possibly consultant assistance to develop estimates of the required units, bid specifications, conduct the procurement, monitor the production and delivery process, and oversee any warranty issues. The lead operator may well require additional administrative funding to cover some of the costs of the additional statewide participation, and because the larger order will require additional steps (production-line inspection).

Spare Ratio Policy. Spare ratios were raised as another issue, as a need for a clear consistent policy that would support vehicle replacement applications. General FTA guidance for non-urbanized systems allows for a spare ratio of up to 20%, calculated by taking the number of spare revenue vehicles and then dividing that number by the number of vehicles required for peak revenue service. Typically, very small fleets require higher percentages, as there is a need to have enough spare back-up vehicles available at all times and to allow for timely preventive maintenance.

As described in Technical Memorandum #3, some states have sought to avoid high overall spare ratios for the state that result from having many small systems, each with a 20% (or higher) spare ratio, by setting up state lease fleets that systems can use when their own vehicles are down. Such shared spares are not a substitute for having some spare capacity to immediately provide backup, but such a program can provide useful backup for a vehicle that is out of service for a prolonged time for major repairs. Such an option would make sense in Vermont only if somehow combined with regional maintenance facilities, where an operator performed major repairs on vehicles from several systems, and the maintenance facility owner could be responsible for the lease spares. A statewide vehicle loaner fleet is not recommended at this time because there is no VTrans staff to oversee and maintain such a fleet. Additional vehicles would be needed to support such a fleet, and it makes more sense to provide that capital to operators that can put them to use in a regular fleet rotation and provide maintenance.

With the smallest transit fleet in the State now at 12 vehicles, it is suggested that the State set a policy of allowing up to a 20% spare ratio in evaluating requests for

replacement and expansion vehicles.[5] Table 5-1 presents current data on the spare ratios of Vermont's public transit operators based on their reported peak vehicle requirement (from the latest annual grant application) and their current fleet. In some cases the fleet size is such that the spare ratio is below the allowed 20% while a few systems have spare ratios slightly over 20%. The table suggests that to bring systems that have too few vehicles up to a maximum of 20% and allowing at least two spares at each system would require 13 additional vehicles.

A suggested policy change is to allow for systems to apply for vehicles needed to permit fleets (and sub-fleets in the case of multiple operations in different locations) to have an adequate spare ratio to maintain continuity of service while allowing for preventive maintenance. This ratio would be set at 20% of the peak vehicle requirements or a minimum of two vehicles. Transit operators with system-wide spare ratios under the 20% level could request replacement vehicles (as opposed to expansion vehicles) to bring their fleets up to acceptable levels.

Expansion Vehicle Policy. Most expansion vehicles, beyond those needed to achieve an appropriate spare ratio, are met through the New Services program; expansion capacity is thus linked to a specific project which also has operating funding for the 3-year demonstration period. In the situation where a New Start does not meet performance expectations and is discontinued, the operator can potentially pull the New Service vehicles into its overall replacement plan or follow VTrans policy permitting transfers of vehicles between eligible sub-recipients. These options provide flexibility for continued use of vehicle capital.

As noted above, the state should allow systems to apply for vehicles when a transit provider can demonstrate that their spare ratio has dipped below the minimum level. But cases also may arise in which incremental growth in an existing service would require expansion vehicles outside of a "New Service" situation. Some situations that might call for expansion vehicles not funded as part of a "New Service" project include the need for additional vehicles to meet demand-response service demand, or if the funding for operation of a service or expansion (such as a frequency increase or route extension) is entirely locally funded.

[5] As of the FY 2011 inventory, GMCN has the smallest Vermont fleet of 12 vehicles. Advance Transit's Vermont inventory shows seven vehicles, but their total fleet size is about 30 vehicles (used for their services in New Hampshire as well). (Sources: VTrans, Advance Transit Website, **http://www.advancetransit.com/**.)

Table 5-1: FY 2011 Recommended Spare Ratios

		Current		With *"Up to"* 20% Spare Ratio		
Provider	**# Vehicles Needed to Operate Peak Service**	**Spares**	**Spare Ratio**	**Spares**	**Spare Ratio**	**Additional Spares Needed**
ACTR Total	24	1	See Fleet			**2**
ACTR Fleet	**15**	**1**	**6.7%**	3	20.0%	
ACTR-lease to Elderly Services, Inc.	9	0	0.0%			
AT	**6**	**0**	**0.0%**	1	16.7%	**1**
CCTA Total	83	9	See Fleet			**0**
CCTA Fleet	**46**	**9**	**19.6%**	9	19.6%	
CCTA-lease to Essex	2	0	0.0%			
CCTA-lease to SSTA	35	0	0.0%			
CRT Total	**28**	**1**	**3.6%**	5	17.9%	**4**
CRT Fleet	25	1	4.0%			
Brattleboro Beeline Services	3	0	0.0%			
DVTA	**18**	**3**	**16.7%**	3	16.7%	**0**
GMCN	**12**	**0**	**0.0%**	2	16.7%	**2**
GMTA Total	41	9	22.0%	9		**0**
GMTA-Capital District	**17**	**4**	**23.5%**	3	17.6%	
GMTA-Franklin/Grand Isle	**9**	**1**	**11.1%**	2	22.2%	
GMTA-Mad Bus	**9**	**2**	**22.2%**	2	22.2%	
GMTA-Stowe/Lamoille	**6**	**2**	**33.3%**	2	33.3%	
GMTA-lease to CIDER	2	0	0.0%			
GMTA-lease to Montpelier Senior Center	1	0	0.0%			
MVRTD	**39**	**9**	**23.1%**	7	17.9%	**0**
RCT	**17**	**0**	**0.0%**	3	17.6%	**3**
STSI Total	23	3	See Fleet			**1**
STSI Fleet	**20**	**3**	**15.0%**	4	20.0%	
STSI-lease to senior centers	3	0	0.0%			
Vermont Total		35		46		**13**

Notes: Numbers in bold are considered the spare ratio per provider. Vehicles leased to other organizations and service/staff vehicles were not included in determining the current spare ratios. GMTA's spare ratios are considered per region. Sources: FY11 grant applications to VTrans, VTrans staff for updated numbers where applicable.

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Because these situations are likely to be limited, the current recommendation is to treat expansion needs outside of New Services program through the spare ratio policy, as described above. Systems would be allowed to apply for additional expansion vehicle capital when their fleet spare ratio declines to 20% or below, for services that are achieving acceptable productivity levels under the state guidelines.

Policies on Funding Facilities

Although vehicles remain the State's priority under its capital program, it has an interest in ensuring that the transit operators have adequate facilities. The overall State program goal is to ensure that each system has adequate usable space for its administrative functions, has secure vehicle storage (to protect the vehicles and the federal and state interest in the fleet), and has the capabilities to maintain the fleet in a State of Good Repair (through the appropriate combination of in-house, vendor or contracted vehicle preventive maintenance and repair).

Currently VTrans does not have a policy regarding the funding and construction of transit administrative, operating, and maintenance facilities. In the past, the State provided funding for facilities in the form of federal capital or a share of the local match. Recently, a number of transit operators have identified a need for a facility and have independently sought funding for feasibility studies, architectural and engineering work, land, and construction. Many have sought the funding through federal earmarks, providing the local match through their own local funding sources. In recent years, the VTrans role has been limited to providing letters of support, although in one case of a new facility the State is involved in providing state-owned property for the site. VTrans is not administering any of the grants for the facility projects that are in process.

The development of State policy on facilities needs to take into account the primary reasons for a system to have a facility and whether the state would contribute funding to the project. Obviously there are a number of considerations that would enter into a determination of whether or not a system would need to own its facility, the size of that facility, and what it would include. Rather than a simple statewide policy stating that all systems need a facility, there is a need to analyze each system to determine facility needs and optimal locations. With such information the State would be in a position to establish a statewide policy supporting the development of particular types of facilities, and establish priorities that could potentially be addressed in ongoing funding decisions.

One policy change suggested is that VTrans develop a statewide capital funding program to assist transit operators that are building or improving facilities. Table 5-2

presents an inventory of the current status of transit administrative and operating facilities in Vermont. As can be seen, CCTA, CRT, AT, GMTA (Capital District), GMTA (Stowe), SSTA and MVRTD own some or all of their administrative and operating facilities. STSI has its administrative facilities in the restored freight depot in Randolph, which is leased but has had federally-funded leasehold improvements. ACTR and DVTA are both in the process of developing projects to build operations facilities using earmarks and local match. DVTA owns the property used as its maintenance shop, which would be the site of its new facility, but it rents administrative (and some vehicle storage) space several miles from the shop. GMCN is also working on the development of a new operations facility to include increased capability for in-house maintenance.

Based on this limited review, it would appear that facility capital needs include the funding to complete the ACTR, DVTA, and GMCN facilities (all of which would include adequate garage facilities to perform most maintenance, but probably not specialized repair such as engine or transmission rebuilds or major body work). RCT and the GMTA/Network services have facility needs for both administrative and maintenance facilities, and no planning or analysis has been initiated to locate or size such facilities. STSI could use vehicle maintenance and storage, assuming that it would seek to continue its use of the Depot Square facility for administrative space. And potentially the Brattleboro BeeLine could use a secured vehicle storage area so its vehicles could be dispatched locally rather than from the CRT garage.

The second policy recommendation is that, instead of setting a hard and fast definition for when a system should own its administrative, operating, or maintenance facilities, VTrans evaluate and entertain requests for facility capital based on the results of an comprehensive process that includes an assessment of whether or not a facility is needed, the functions that it would need to provide, space estimates by function, potential sites, estimated costs, etc. Systems that have included a facility in their Transit Development Plan (TDP) and provided a completed facility assessment process would be eligible for consideration for available facility capital funding in any given year, with funding provided in a multi-year cycle beginning with the feasibility/site selection study, environmental analysis, site procurement, architectural and engineering work, construction, and equipment. The facility planning process would include an assessment comparing the costs of providing different levels of maintenance activities in-house at the proposed facility with the use of local vendors and/or use of another system's facility and staff. In considering these issues, the capabilities of facilities in nearby locations would need to be considered, along with the potential deadhead costs of moving vehicles long-distances for repair.

Table 5-2 – Inventory of Transit Facilities

Provider	Administrative Facility	Maintenance Facility	Notes on Admin Facility	Notes on Maintenance Facility	Other Notes	Federal/State Dollars	Fleet Size
ACTR	X	None yet - Earmark	Administrative offices are leased.	All maintenance services outsourced to local shops (no contracts), except for very minor repairs/service. Major repairs (i.e. lifts) made in Hinesburg or Essex.		Earmark for New Facility	16; plus additional 9 leased to Elderly Services, Inc
AT	X	X	Administrative offices located in Wilder VT. Budget includes depreciation amounts for land improvement and building & improvements. "Property Taxes" $0.	All preventive maintenance and light repairs done in house; wheelchair lifts are maintained and repaired at AT garage. Some warranty work and heavy repairs sent to local shops. (application)	Their Dec 2008 TDP capital plan includes $1.5M (ARRA) in FY2010 for a proposed Phase 2 expansion of their maintenance facility, above and beyond the facility expansion previously funded in FY2008. Phase 2 expansion includes more vehicle storage space and significant energy-saving improvements. TDP assumes this will be funded by 100% federal stimulus grant. FTA ARRA website says project broke ground July 2009 - proposed expansion will hold projected fleet size of 40 buses and 55 employees. ARRA funds will support expansion of bus storage facility and rehabilitation of existing admin offices - designed to meet LEED Silver certification.	Yes	31 total fleet including NH service; only 6 vehicles used on VT routes.
CCTA	X	X	Appears to own facility. Capital plan for FY11-13 includes "Facility PM".	Facility located at 15 Industrial Parkway Burlington, Vermont 05401. Built in 1997, facility houses the Maintenance Dept, Operations, Administrative Offices, and the Bus Garage. Maintenance Dept consists of 6 work bays (5 with in-ground lifts and 1 with a portable lift), parts and tools storage rooms, welding-part cleaning room, break room, machine and bench area, dispatch office, admin staff offices, indoor service wash bay, and parking garage for all revenue vehicles.	CCTA also responsible for care of all leased vehicles purchased with grant funds. CCTA mechanics perform maintenance on Essex-leased vehicles in house. Appears that SSTA provides maintenance for the vehicles leased to them, and reports to CCTA Maintenance Manager. In 2009, CCTA Maint Dept repairs and maintains 63 advanced design transit buses, and 7 support vehicles. 23 ADA vehicles also leased to SSTA.	Yes	55 plus 5 contingency fleet; plus 2 leased to GMTA and 35 leased to SSTA
CRT (plus Brattleboro BeeLine)	X	X	Owns new facility. Leases bus storage and park & ride.	New 20,000 sf facility houses offices, storage area for buses, and a maintenance bay; potential future expansion and P&R. Does all maintenance in-house including major repairs (i.e., lift repairs); no contracts. (For FY11, planning to add 4 extra bays for bus storage, 1 shop lift, and bus wash.)		Yes	29 including BeeLine vehicles
DVTA	X	X	Has garage and admin office - appears to own shop but rents office (budget includes $14,200 mortgage, and $8400 office rent). Earmark to build new facility.	All maintenance services except alignment are done in house.		Earmark for New Facility	21
GMCN	X	None yet - Earmark	Appears to rent current facility. (FY11 budget includes $17,400 office rent.) Developing new facility, to include a wash station and maintenance bay. (FY11 budget includes $30K mortgage - for new facility?)	Does minor repairs in house (such as bulb replacements, fluid level maintenance, cleaning), with verbal agreements to do vehicle repairs at local shops in Bennington. Will expand in-house maintenance services with new facility.		Earmark for New Facility	12
GMTA	X	Partial	Stowe has small bus garage built with FTA earmark. Mad Bus has dispatch office, but buses outside. Capital District has Wheels facility. Network leases a facility but it's expensive and inadequate. (Aaron email)	Contracts with CCTA for maintenance for Stowe/Lamoille Co, Mad River Valley, Franklin and Grand Isle Counties, occasionally for Capital District. "All maintenance is performed in-house . . No contracts with local maintenance shops." Audit mentions fixed assets, including buildings and improvements, also Shop equipment. How work if maintenance contracted with CCTA? GMTA operating budget includes maintenance materials and supplies. Also mentioned in-kind property donations worth $88K. Facility Maintenance costs $57K.	Sub-contract with RCT to provide complementary paratransit on Mountain Road Shuttle.	Yes	Capital District - 21 Franklin/Grand Isle - 10 Mad Bus - 11 Stowe/Lamoille - 8 plus 2 leased to CIDER and 1 to Montpelier
MVRTD	X	X	Appears to own facility. FY11 budget includes depreciation expenses (nothing on rent).	All maintenance including lift repairs are performed in-house		Yes	48
RCT	X	None	Appears to rent facility. FY11 budget includes $80k rental expense. (Moved to new facility in Feb 2010 - more expensive? Previous facility only cost $30K in FY10.)	Outsources all maintenance with the preferred private garage. New main office in St. Johnsbury, with branch offices in Newport and Morrisville; vehicles parked outside.	In Feb 2010, Kingdom Express LTD started providing charter service.		15 in FY11 inventory, though reported 17 needed for maximum service
SSTA	X	X	SSTA has an administrative/office space in a facility purchased in part with federal/state dollars (80% federal and 10% state)	Facility has maintenance space and all maintenance is provided in-house with the exception of warranty work and major work (transmissions, body work)		Yes	50 including 35 from CCTA
STSI	X	None	Stagecoach office located at Depot Square in Randolph, adjacent to Amtrak stop. Appears to rent current facility. FY11 budget includes $122,300 for "occupancy" total ($52,800 under S.5311 Ops, Admin & PM). Also includes operating space allocation between Medicaid and General Public.	Only in-house maintenance includes pre- and post-trip vehicle inspections and cleaning. All other maintenance is outsourced to area garages by geographic location; no contracts with garages.		Yes	23; plus 3 additional vehicles leased to Senior Centers

By outlining the process as a multi-year process, the state can combine the requests and develop a statewide facility plan from a prioritized list of projects that would warrant funding. Implementing this policy recommendation would require the development of a VTrans facility assessment process, in a manner similar to that used in Minnesota. Minnesota has developed a "Transit Facility Guidebook" that provides the process and the analysis tools to support local development of realistic applications for facilities. When a local system works through this process it goes through a multi-step process that includes a project definition phase, a concept development phase including cost/benefit analysis, a screening and evaluation by the State program staff, identification of potential funding, an application phase, and finally contracting for design and construction. This process provides the data needed to the State transit program, which uses it to establish a transit Facility Priority List each year.

The development of a common State process with evaluation criteria has advantages in that the local system is tasked with identifying and documenting its needs, assessing the costs and benefits, and then submitting its concept for initial approval based on a known set of project evaluation criteria, rather than having a statewide study define what each system should have from a State program perspective.

Policy on Regional Shared Facilities for Major Maintenance. Finally, it is suggested that the concept of regional maintenance garages should be pursued for some maintenance functions. Given the need to deadhead vehicles to regional garages, it may not be practical for ***all*** vehicles maintenance to be done out of centralized or regional garages, especially not routine preventive maintenance. However, following the Illinois state model, there are some maintenance functions or repairs such as engine overhauls, air conditioning servicing, lift maintenance, or body work, that could be conducted more cost effectively if they were centralized. It has been suggested that, rather than creating new regional bus garages, one or more of the existing operator facilities could function in this role and even provide spares to replace vehicles in maintenance as discussed above.

Policies on Funding Passenger Facilities

Another need is for a policy to address when the State would consider various passenger amenities justified and would accordingly contribute to the cost. The most costly of these is shelters, feasible for transfer points, high ridership stops, and major attractors such as universities, colleges, and hospitals. Currently VTrans makes capital funding available for bus shelters, but without having established guidelines for when shelters are warranted. The consideration of applications for passenger facilities and amenities should include an assessment of shelter and amenity needs, prioritizing stop-

level expenditures based on meeting ridership thresholds, or providing shelter at stops serving particular functions (at transfer points, at medical facilities, and at stops with significant levels of boardings. Off-street passenger transfer centers (bus-only or intermodal facilities) would also be eligible, but would need to be justified through a process similar to that for operations facilities, in which the proposing locality would have to perform an initial feasibility study demonstrating the need or benefits, with subsequent planning, design and construction to follow if the facility could be shown to be needed or justified. This policy would extend only to the transit-related portions of projects, as the transit program funding will not be used to construct parking ramps or space for other non-transit related functions.

COORDINATION POLICIES

Coordination of transportation resources among State agencies, transit providers (public and private), and human service providers is a means of ensuring that services are not duplicative or overlapping and that resources are used in a cost effective manner. Promotion and enhancement of coordinated human service transportation and general public transit has long been a Vermont State policy. State legislation in 24 V.S.A, Chapter 126, Section 5090. Human Service Transportation states, "*The secretary of human services shall direct agency of human service programs to purchase client transportation through public transit systems in all instances where public transit services are appropriate to client needs and as cost efficient at other transportation.*"

The Vermont Agency of Human Services (AHS) and VTrans have a Memorandum of Understanding (MOU) that outlines the manner in which they will coordinate. Departments and programs within AHS use the public transit provider for client transportation where appropriate. VTrans and AHS have worked to make funding more flexible, and to encourage human service programs to use public transit providers as regional brokers of service for human service agency clients. The policy of integrating the State's E&D and rural transit programs was another step toward maintaining the level of coordination that Vermont is known for on the national level.

The most important coordination issue currently facing Vermont's transit program is the need to maintain the linkage between transit providers and the State's Medicaid program. AHS has historically relied on community-based public transit agencies to act as the broker and service provider and serve the Medicaid clients residing in set geographical areas, while also coordinating Non-emergency Medicaid Transportation (NEMT) services with their general public transit services. At $12M annually, the Vermont Health Access NEMT program is a major source of transportation funding in the State. The Department of Vermont Health Access (DVHA) within AHS administers the NEMT program.

In the role of community-based brokers for NEMT, the transit agencies coordinate public transit and NEMT into one unified system for residents within their areas.[6] Each of these community-based brokers operates slightly differently but in general DVHA certifies Medicaid clients as being eligible for NEMT because they have no other means of getting to medical services[7]. The community-based brokers take trip requests directly from clients and verify from the DVHA system that the person is eligible for NEMT and that the service/medical need is eligible for NEMT. 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 service on their demand-response service. Most services are shared ride and clients are co-mingled with the general public and often with clients of other agencies.

The current arrangement has many advantages and Technical Memorandum #3 outlined the benefits of this arrangement to VTrans, AHS and the transit operators. However, there are a number of issues that have been raised by DVHA as the agency seeks to improve the program and reduce costs. The analysis in Technical Memorandum #3 discussed the ramifications if the arrangement were discontinued. While no transit policy changes are warranted at this time, clearly it is in everyone's interests for the transit operators, AHS and VTrans to work together to address the issues AHS has raised regarding costs, accountability, potential conflicts of interest, quality of service and access.

POLICIES LINKING TRANSIT AND LAND USE

VTrans continues to support efforts to curtail sprawl and create transit oriented communities both through coordinated transportation planning with the RPCs, the MPO and Towns as well as through its role as a party to Act 250 development review proceedings. Discussions with stakeholders and the public have recognized that land use decisions can have a significant impact on the potential for residents to use transit. The discussions began with the desire to use transit as a means to create and support Transit Oriented Developments (TODs) in the State. TODs typically have land use density sufficient to support rail transit services, mixed land uses, and pedestrian- and bike-oriented designs that encourage walking and biking, less auto ownership and less auto mode share, and proximity of destinations such as retail, employment, and residential areas to transit stations/services.

[6]In addition, DVHA purchases CCTA monthly passes for frequent-NEMT users that can ride fixed-route buses.

[7] Currently, there are over 86,000 Medicaid clients that are eligible for NEMT in the State.

It is unlikely that population densities and transit investments in most areas of the State would be able to support the traditional TOD concept where development occurs around, and as a result of, transit facilities and services, usually commuter rail. However, the concept of Transit Oriented Design, which considers the contribution transit makes to the mobility of residents in communities during the project development and design stage, is appropriate. The state has statewide land use planning goals and number of laws that that create incentives for growth in its compact centers but there needs to strengthen the process to require or encourage the consideration of transit when local jurisdictions make land use decisions. Localities need to pay more attention to transit access in the overall transportation planning and permitting process, so that development and major facilities (such as medical facilities) do not continue to be built without consideration of transit service potential. Other improvements include adding evaluations of transit potential to local project review and implementing pedestrian-friendly design.

One policy objective would be to have the Chittenden County Metropolitan Planning Organization (CCMPO) in Greater Burlington area and Regional Planning Commissions (RPCs) have a more active role in facilitating transit and associated pedestrian considerations in local land use decisions. The MPO and RPCs in Vermont conduct both regional and local planning. One of the MPO/RPCs' primary roles is to provide planning expertise and technical assistance to municipalities within their regions in a cost-effective manner. MPO/RPC staff work with municipalities on a range of planning issues including land use, permitting, and transportation, and are therefore uniquely positioned to facilitate interaction between these realms, particularly since staff at the municipal level are often dedicated to one planning realm. The MPO/RPCs work with a variety of entities including counties, towns, transit providers, and developers, and can take the initiative to bring these stakeholders together to actively incorporate transit oriented design into new or planned developments. It is noted that a new State law goes into effect on July 1, 2011 requiring that state transportation policy consider "complete street" principles of safety and accommodation of <u>all</u> transportation system users including motorist, bicyclists, public transit users and pedestrians.

The RPCs currently have a Transportation Planning Initiative (TPI) agreement with VTrans to coordinate and ensure local participation in the transportation decision-making process in order to meet state and federal planning goals. With extensive experience in public outreach, as well as knowledge about planning and project development processes in both land use and transportation, the RPCs can serve as the liaison between community groups and residents and local governments. RPCs can both advocate for transit considerations in local land use planning and educate local officials and the public about the benefits of transit oriented design. The MPO and

RPCs can also provide municipalities with valuable information and insights on how regional plans may impact local activities, or vice versa. Specifically, RPCs might promote the growth of regional transit networks or regional coordination of public transit and human services transportation to meet the needs that arise from new developments.

State policies also should look at incorporating transit services or addressing the mobility needs of Vermonters into the Act 250 review process. A proposed policy change aimed at better linking transit with land use decisions is to modify language in Act 250 Criterion 5 to include transit. Currently "*Criterion 5 provides that before granting a permit, the board or district commission shall find that the subdivision or development "{w}ill not cause unreasonable congestion or unsafe conditions with respect to use of the highways, railways, airports, and airways, and other means of transportation, existing and proposed*." Furthering the concept of transit oriented design, the criteria could require that permits for essential services be dependent on the ability of residents to access the site/services via public transit. As they are statutory parties in the Act 250 process review, this could be accomplished by working through the MPO and the RPCs. Along with this policy change, VTrans and the RPCs/MPO should undertake an initiative to educate the Act 250 Boards and the Act 250 Regional Coordinators on transit issues.

Thus, an overall suggestion is to expand the role of RPCs in facilitating transit considerations in local land use decision processes. RPCs can participate in State and local processes. As "Vermont's landmark land use and development law," Act 250 outlines a permitting process for new development or redevelopment – a prime opportunity to incorporate transit into land use decisions through a State legislative vehicle.[8] The Act 250 reviews should assure that transit vehicles have access to any new projects being developed so that those developments can be reached by transit riders. The Act 250 Statute specifies a potential role for regional planning commissions in assisting the Land Use Panel of the Natural Resources Board, which oversees and enforces Act 250 permits:

> *The land use panel may designate or require a regional planning commission to receive applications, provide administrative assistance, perform investigations, and make recommendations.* (10 V.S.A. § 6027(c)).

Providing or promoting transit services, through direct contributions to operate services or inclusion of transit infrastructure in the development, are legitimate ways for developers to mitigate the traffic impacts of their projects and to comply with Criterion 5 of Act 250.

[8] Quoted description of Act 250 from VTrans' ConnectVermont website, http://www.connectvermont.com/tabid/74/Default.aspx.

At the local level, RPCs should advocate to revise local zoning codes to be consistent with State planning goals and legislation, specifically to gear new development toward existing downtowns and village centers that can be served by transit. Local zoning codes need to help combat sprawl and facilitate growth in areas already served by transit or located near the existing transit network.

POLICIES ON REGIONAL CONNECTIVITY AND INTERCITY BUS

Determining the State role and the way in which regional and intercity needs can be addressed is one of the key policy areas initially identified for inclusion in the PTPP and in subsequent public outreach meetings. These issues are related in that they are generally services that provide longer-distance service, often on routes that go between the service areas of different providers. Key issues include the need for funding to maintain regional services that are meeting performance criteria and whether there are additional regional needs. On the intercity side, issues include the likely demand for such service (or whether the regional services are addressing intercity needs), and if warranted, how it can be funded and operated.

It should be noted that there are significant differences in the trip purposes and potential destinations between the regional commuter services and the intercity services. Intercity services in Vermont, both passenger rail and intercity bus, have long been routed and scheduled to pick up passengers in Vermont towns and cities and transport them to major destinations outside the State. Intercity bus services often use over-the-road buses (OTRBs) with luggage compartments. Needs for intrastate trips have largely been addressed by the transit providers within their service regions, and more recently the inter-regional commuter services have addressed this for trip lengths that could be served effectively on schedules allowing for a day in the destination city. Intercity trips, are typically taken for family or social reasons, rather than as business trips or work commutes, and the riders are generally infrequent users.

Policies on Inter-Regional Commuter Routes

A newly emerging and related set of issues in Vermont is the growth of regional commuter services, their success, and the need to develop a sustainable funding basis. Like the intercity connections, it reflects the fact that transit and transportation needs are increasingly long distance in nature, and are not limited to one service area.

Transit systems in Vermont have responded to regional commuter needs by developing regional commuter routes, and in general these are quite successful. For the most part these services have been established under the State's New Services program, using CMAQ funding which provides operating assistance for three years.

Most of these services have been designed based on identification of significant long-distance commuter patterns, focusing on attracting "choice" riders who may have a private vehicle option. Ridership on most of the services has grown rapidly and led to calls for increased park and ride lot capacity and added frequencies.

A key issue for these services is funding, including local match. Started as New Services with CMAQ funding, the initial three-year period for operating funding is ending or will shortly end. The proposed policy regarding the inter-regional routes is that they be considered as any transit service would be under the overall policy addressing New Services. Existing successful inter-regional routes (based on the state transit performance measures) graduating from CMAQ funding would need to be included in a system's ongoing transit base, with the required State/federal funding provided to the operator for continuation. Further, even if baseline funding is available, transitioning from CMAQ funding to baseline funding will shift the federal funding share from 80% (under CMAQ) to 50% of the deficit (under S.5311), increasing the need for local match.

The general assessment of potential needs for such services suggests that the corridors with significant commuter flows are already served at some level, and that future changes will be in terms of schedule or frequency changes, or perhaps minor routing changes. Expansion of service on these routes could be treated as New Services (in terms of frequency expansions or route extensions) to make use of available CMAQ funding for operating assistance and required capital.

For those routes being shifted from the CMAQ funded New Services program into the ongoing transit system base service, the additional local match required could be derived from a variety of sources depending on the type of service and the local, regional or state-level benefits associated with that service. No potential source of local match should be excluded, with funding ratios and sources remaining flexible to address the unique set of markets and beneficiaries that might be associated with different routes and services.

At this time the recommendation is to fund these services on the same basis as other local transit services, with no change in match ratios or other incentives applied because a route or service links the service areas of multiple operators. The transit operator serving the origin area of a route or service is typically the operator of the service, and its residents are likely to be the beneficiaries of the service, and therefore appropriately the source of the local match. One proposed policy was to regard such inter-regional services as partly a State responsibility, with a higher portion of the local operating match provided by the State. The difficulty (in addition to finding the funding) comes from the need to have an equitable policy that would truly define the services with a higher State involvement, particularly for routes entirely within one

system's service area. In addition, there may be questions about the need for additional State support for such services if they are not serving Goal #1 – basic mobility. However, the state should reserve the right/flexibility to negotiate a higher state share for services that meet state priorities for new services.

Policies on Intercity Bus

Over the past decade intercity bus services in the state have been reduced significantly. It should be noted that there are significant differences in the trip purposes and potential destinations between the regional commuter services and the intercity services. Intercity services in Vermont, both passenger rail and intercity bus, have long been routed and scheduled to pick up passengers in Vermont towns and cities and transport them to major destinations outside the State. Needs for intrastate trips have largely been addressed by the transit providers within their service regions, and more recently the regional commuters have addressed this for trip lengths that could be served effectively on schedules allowing for a day in the destination city (there are still some gaps in meeting this need, such as the inability to make a day trip from Rutland to Burlington and back on the regional services).

One of the other important distinctions between the regional commuter services and rural intercity bus service is the fact that there is an FTA program directed toward maintaining or improving rural intercity service. Section 5311(f) was developed as a policy response to exactly the situation faced by Vermont, the loss of rural intercity bus services. Under Section 5311(f) each state is directed to use at least 15% of its overall Section 5311 rural transit funding allocation for rural intercity bus services—unless the state certifies that there is no unmet rural intercity need in the state. Prior to SAFETEA-LU, states were left on their own regarding how to make the determination of "no unmet rural intercity need," but in the SAFETEA-LU legislation language was added requiring states to conduct a consultation process involving the intercity providers, studies or analysis, and other stakeholders. If, following that consultation, the state certifies, it needs to document how it considered the input provided. For the past several years Vermont has conducted a consultation process, certified that intercity needs are being met and, thus, the State has not set aside the 15% amount or built up any kind of balance in a Section 5311(f) program.

The outreach and stakeholder input in the current PTPP process has recognized the loss of the intercity services, but raised questions as well. One is whether the needs are being met by the regional commuter routes that have been developed. The possible role of the regional services in providing access to the existing intercity network could be considered in the consultation process, but the regional services, as currently provided, do not actually provide for the "meaningful" connection called for in the Section 5311(f) program circular. In addition, while the map of Vermont's existing fixed

and deviated services might make it appear that the regional services have filled in for the discontinued intercity routes, making some of these trips through end-to-end transfers between different regional operators would be so inconvenient and time-consuming that the trips are not practical or feasible.

The other question raised in the outreach was whether or not there is potential demand for intercity services, given that Greyhound abandoned them as unprofitable. Technical Memorandum #3 presented an analysis that shows that there may be enough demand for intercity services if those services were subsidized and outlines a possible intercity service along the Route 7 corridor – with a plan for using Greyhound in-kind miles as the local matching. This Pilot Project funding mechanism can reduce or eliminate the need for operating cash match.

One significant issue that should be acknowledged is that using all of the 15% Section 5311(f) set-aside would reduce the amount of Section 5311 funding available for other services by about $400,000. Changes in state policy to support the implementation of rural intercity bus services would not only need to consider the potential transit funding impact as Section 5311 funds were shifted to the rural intercity projects, but also the relationship of the potential services to the developing state-supported Amtrak services. Ideally, these rural intercity routes would provide connectivity among all modes, but the FTA Section 5311(f) circular makes it clear that this funding is intended to provide meaningful connections to the national intercity bus network as its first priority, not the rail passenger network. Section 5311(f) also cannot be used for commuter bus services, so it is not a potential source of funding for the regional services graduating from the New Starts program, unless they provide for the "meaningful connection".

The proposed intercity program starts with an expanded assessment of rural intercity bus needs that would then feed into the consultation process. If unmet needs are identified[9], VTrans will develop a service description/program for the services using the in-kind funding method. This would require detailed planning of schedules and connections, and assessment of likely funding needs (which would include assumptions regarding the likely operator and its costs, and the estimated revenue)[10]. To pursue this type of intercity bus service, the process would entail the following.

[9] The preliminary needs assessment presented in Technical Memorandum #3 suggests that there is evidence of unmet need in rural areas for intercity bus services.

[10] It should be noted that Greyhound is not necessarily the operator, but would have to be a party to the project as the provider of the value of the in-kind miles. As both a potential applicant or bidder on the subsidized service and the provider of the in-kind match, Greyhound's current policy is to offer to provide the in-kind miles to whichever operator the state selects, as long the operator and the proposed service meet Greyhound's requirements for connecting service that can be quoted by them in their schedule information, has appropriate levels of insurance, is fixed-route fixed-schedule service at least five days per week, and has required legal federal and state operating authority.

Expanded Rural Intercity Bus Needs Assessment

The preliminary assessment of the Route 7 corridor presented in Technical Memorandum #3 suggests that an expanded version in the form of a White Paper, looking at the rest of the state as well, should be developed prior to the consultation process. This White Paper will identify unmet intercity travel needs and address how intercity bus services can be coordinated with rail passenger services to provide a complete network for intercity mobility. The resulting White Paper on intercity bus needs to serve as input to an inclusive consultation process.

Consultation Process

Following the needs assessment and prior to the call for projects for the next S.5311 funding cycle, VTrans will conduct the FTA-required consultation process. This consultation will include distribution of the needs assessment sections of the PTPP, and solicitation of input on available services, unmet needs, capabilities and opportunities from intercity bus providers, transit operators, the rail passenger program, and the public. The consultation process will document the input, and provide written documentation of how the results of the needs assessment and the consultation process were used in the development of state policy regarding certification of unmet needs or use of Section 5311(f) funding for projects.

Development of Program Application and Guidelines

If the process identifies unmet needs, VTrans will include in the Section 5311 application (or in a separate Section 5311(f) application) requests for services and connections in specific corridors to address the identified gaps. The consultation process may also identify needs such as capital for vehicles or facilities, or user information systems, and VTrans will need to consider its policy on eligibility of such requests as it assesses the results of the consultation in developing its policy.

POLICIES TO IMPROVE THE "TRANSIT EXPERIENCE"

The public input process identified several needs related to improving the transit user experience, beyond the service improvements addressed in service expansions (improved frequencies, span of service). Transit riders requested additional amenities, such as bus shelters and posted schedules, and safety features, including more lighting at bus stops. Residents also want more information about transit services, whether using smart technology to add predictability to transit service or unifying provider information through a statewide trip planner. The public also requested an orientation

for new riders to learn how to use transit and become more comfortable leaving their cars at home. Residents also discussed the need to attract new riders by promoting the benefits of transit, such as savings on gas costs and lowering individual carbon footprints, and changing the negative image of transit as the "welfare bus."

We are proposing that the image problem be addressed by creating a positive transit "brand" statewide; brand marketing refers to the method of propelling transit into the public consciousness as a positive travel option. The individual transit systems would be co-branded as one Vermont transit system while keeping their separate identities. The object for this effort is to combine the strength of two brands, in order to combine the different perceived benefits associated with each into a single product or service.

Other proposed policies or initiatives to improve the transit experience include:

- Creating a statewide marketing and slogan campaign (through Go Vermont?)
- Increasing use of technology to disseminate public information on transit services by plugging into Twitter, social networks, and other on-line information-sharing mechanisms.
- Improving user information through a statewide trip planner – perhaps using GoVermont.
- Completing efforts to include and maintain all transit services on Google maps – perhaps using the UVM transit program.
- Adding transit to Vermont's 511 program as art of the eight-state consortium effort.

PERFORMANCE MONITORING

Statewide performance measures for public transit services are included in the VTrans *2008 Performance Measures Report* and include 1) the percent of routes at or below an acceptable level for cost per passenger, and 2) the percent of routes at or above the acceptable level of passengers per hour. Although no target has yet been set, the goal for both measures is 100%.

Within the public transit program, performance monitoring of existing routes is conducted to ensure that the public investment in transit is well spent. In fact, legislation states, "*(b) The public transit advisory council shall annually evaluate existing services based on the goals...*" and *(c) The agency, in cooperation with the public transit advisory council, shall adopt appropriate performance and service standards for transit systems receiving federal or state assistance*. VTrans monitors the performance of its public transit

services through the monthly services indicator reports which feed into the annual route performance report to the legislature." VTrans provides a report to the legislature annually and the report, 2010 Transit Performance Reviews was submitted January 22, 2011.

The goal of performance measurement process is to be able to fairly compare similar services and provide a means of how well these services meet the needs of Vermonters in relation to the funding available. The performance monitoring system becomes particularly important in light of the policy recommendation to enforce and speed up efforts to discontinue funding to underperforming routes/service. As part of the analysis of the state's performance measurement procedures, the project team reviewed similar processes in other states.

Considering the implementation of any performance monitoring scheme must recognize the challenge in balancing competing needs for transit service given available resources. For example, should service be provided in a corridor with high ridership potential, which would score well given the set performance standards, or should service be provided to smaller groups of transit-dependent persons, who rely on transit for basic mobility to medical treatment and social services? The latter type of service may score lower in the performance measures, but provides an important "lifeline" to riders who may not have other means of transportation and also meets the highest state public transit policy goal. This consideration is important but the standards currently are not being used to evaluate one service against another, rather whether the service meets a minimum level of performance for that type of service. Further, it's our judgment that, at 50% of the national average, the standards for what is "acceptable" performance are low enough that services not meeting these standards should not be provided in their current form. Routes/services that do not meet these minimum standards should be re-designed (i.e., low performing fixed routes changed to demand response services).

The performance monitoring program includes two components – 1) the monitoring process and 2) the standards for evaluating whether performance is acceptable.

Monitoring Policies and Procedures

It appears that the current performance monitoring system is working relatively well and should remain as unchanged as possible to allow VTrans to track services in a consistent manner from 2007 onward. Studies of the transit performance measures used in other states indicate that Vermont's performance framework is comparable with its peers. One way it's comparable to other states is that VTrans tracks performance measures annually. The annual legislative report compares data for the current year with the previous year's performance, and provides an analysis of notable changes over

the year. VTrans also uses trend analysis in implementing its policy regarding routes or services that under-perform. Further, VTrans' Public Transit Coordinators perform trend analysis in comparing the monthly service indicator reports and the transit agencies conduct trend analysis in continually tracking various performance measures internally.

The current performance framework focuses on two performance areas: productivity and cost-effectiveness.[11] VTrans uses a single measure in each area and sets standards for these measures for the various types of transit service provided: urban, small town, rural, demand response, tourism, commuter, and volunteer driver.[12] These standards were based on the operating statistics of peer providers nationally that offer similar transit services and have similar size operations as those in Vermont.[13] While the performance standards have been based on a national peer review since the 2007 PTPP, in FY 2009 VTrans changed the standards for Commuter routes to reflect an internal Vermont average instead.

Productivity is measured through boardings per hour, mile, or trip, depending on the type of transit service, while cost-effectiveness is measured by the cost per passenger. Other states also use these performance measures in monitoring their transit systems. Some studies on benchmarking and performance evaluations for transit systems categorize passenger trips per mile or hour as a measure of service effectiveness – the degree to which service is utilized.[14] Vermont's productivity measures are similar to other states. Such transit studies generally agree that cost per passenger trip is a measure of cost-effectiveness, or the ability to meet demand for transit services given available resources.[15]

[11] In FY 2009, VTrans updated its performance measurement methodology to incorporate new data available through the Rural National Transit Database. (Source: VTrans. January 2011. *Public Transit Route Performance Reviews, Annual Report for State Fiscal Year 2010.*)

[12] VTrans only monitors the cost-effectiveness of volunteer driver services, through the administrative cost per trip. The 2007 PTPP determined that the administrative burden to track volunteer driver trips and the number of passengers on those trips would be too large, and the usefulness of this productivity measure is unclear.

[13] Vermont Agency of Transportation. February 2007. *Vermont's Public Transportation Policy Plan.* VTrans Public Transit Section Website, **http://www.aot.state.vt.us/PublicTransit/PTPP.htm**.

[14] Institute for Transportation Research and Education (ITRE) at North Carolina State University. August 2010. *FY 2010 ITRE Task Order 4, Implementing a Benchmarking Process at North Carolina Transit Systems, Project Report, Documentation of Research Activities.*

[15] Studies on performance measurements and benchmarking for transit systems, reviewed here, included *TCRP Report 88: A Guidebook for Developing a Transit Performance-Measurement System*, by Kittelson & Associates, Inc. et al. in 2003; *Benchmark Rankings for Transit Systems in the United States*, by the National Center for Transit Research Center for Urban Transportation Research in 2004, and *Operating Statistics Reporting Project Report*, prepared by the Institute for Transportation Research and Education at North Carolina State University for the North Carolina Department of Transportation Public Transportation Division in 2010.

Another measure also found in other states is the percentage of operating costs covered by local funding - analogous to the State policy of 20% local funding.[16] While VTrans has not actively enforced this goal, it does monitor local funding through review of the providers' budgets and grant applications, and should establish a process to actively evaluate providers in this performance area and report on this measure as part of the annual legislative report. It is worth noting that local funding differs from the other two measures for productivity and cost-effectiveness in that local funding is evaluated per system, while the other standards are applied to individual routes (except for demand response and volunteer driver services, which are examined per system).

Finally, the VTrans process for performance measurement has centered on the annual report to the Vermont Legislature and a series of service indicator reports, submitted by providers monthly or quarterly per funding program. The "legislative report" is a very visual report and displays data for individual routes against performance standards in a series of graphs, organized by type of transit service. The service indicator reports do not include performance standards, but provide data to VTrans' Public Transit Coordinators who continuously monitor the transit routes.[17] While the 2007 PTPP included a narrative comparing Vermont's transit services to the peer averages, this type of evaluation and explanation through narrative has not been updated or provided since.[18] It is suggested that VTrans incorporate a narrative component to its performance framework for transit services at least annually, perhaps in conjunction with its legislative report. Performance measures on their own do not "tell the whole story" about transit services, and an evaluative narrative will help explain changes in performance and other factors for consideration such as State or local priorities that specific routes fulfill.

Suggestions for changes have more to do with interpretation of the route classification scheme as it is applied to particular routes.

- There may be a need to re-classify particular routes. Some rural routes may really be commuter routes and vice versa, or a tourism route might be considered a rural route. VTrans will have transit agencies that wish to re-classify a route/service present a justification using the service descriptions in the legislative report.

[16] The goal of 20% local funding is exclusive of capital, Rural Transit Assistance Program (RTAP), Job Access and Reverse Commute (JARC), Rideshare, and Medicaid funding.
[17] Vermont Agency of Transportation. February 2007. *Vermont's Public Transportation Policy Plan.* VTrans Public Transit Section Website, **http://www.aot.state.vt.us/PublicTransit/PTPP.htm**.
[18] See Appendix I of the 2007 PTPP – the memorandum by Stephen Falbel and Heather Richardson regarding the Peer Selection Process and Analysis Findings.

- Creation of a new classification for rural routes that operate less than once a day – or a policy that moves these services into demand response calculation for that agency.

In addition, suggested policy changes and revisions would:

- Re-institute monitoring and enforcement of the 20% local funding target.

- Enforce State policy to discontinue State/federal funding for routes/services that under-perform, using the service standards outlined below - Speed up timelines for when under-performing services would be discontinued (see above).

- Include a narrative component to the legislative report to tell the story.

Policy on Service Standards

The current system uses service standards or benchmarks based on a national peer review and standards are set annually for productivity, cost-effectiveness, and local share. *Productivity* measures vary by service class as follows:

- Urban – Boardings/mile
- Small Town, Rural, Demand-Response, and Tourism – Boardings/hour
- Commuter – Boardings/trip (run)

Cost effectiveness is measured in terms of cost per passenger trip for all types of service except volunteer trips. For both cost effectiveness and productivity, services are considered to be "successful" if they meet average levels for peers and "acceptable" if they are at 50% of the standard.

Local share or locally generated revenue is considered on a system-wide basis and expressed as the percentage of the system's operating expenses that are covered by non-FTA/FHWA and non-state sources. Considering this measure allows VTrans and the systems to measure how well each provider meets the requirement to generate at least 20% of their operating budget locally.

The only performance measure used for volunteer trips is the administrative cost per volunteer driver trip. In these cases, the standard for "success" is set at 80% of the average the Vermont operators and the "acceptable" standard is set at twice the level or 160% of the average.

It appears that the measures and standards are working relatively well and no suggestions are made for revising either the measures or procedure for setting the standards. However, it should be clarify that boardings per trip on commuter routes represent round trip boardings or runs (to discount the impact that deadheading has on these services).

APPENDIX A

Sample New Service Program Evaluation Form

APPENDIX A

SAMPLE NEW SERVICE PROGRAM EVALUATION FORM

Date: _____ Fiscal Year: _____

Vermont Agency of Transportation
Public Transit Section

NEW SERVICE PROGRAM RATING SHEET

Rater's Signature: _____
Project Name/Route: _____
Transit Agency Name: _____

The evaluation criteria for New Service projects were developed with consideration of the program's primary goals:

- *Support cost-effective investments to preserve and maintain public transit infrastructure.*
- *Invest in connectivity to other regions and to other alternative modes of transportation to improve accessibility and increase ridership in Vermont.*
- *Support the goals and objectives of the current Public Transit Policy Plan.*
- *Maintain air quality attainment in Vermont.*

The program also has a local match (non Federal or State funds) requirement of 20 percent (20%).

1. Supports Goals of Public Transit Policy Plan – Maximum of 30 points

This score determines whether a project supports the goals for public transit in Vermont, as codified in V.S.A. Chapter 126, S.5083. The four goals are listed below in order of precedence:

- Provision for Basic Mobility of Transit-Dependent Persons.
- Access to Employment, including creation of demand-response service.
- Congestion Mitigation to preserve air quality and the sustainability of the highway network.
- Advancement of Economic Development Objectives, including services for workers and visitors that support the travel and tourism industry.

The scoring chart below weights the individual scores based on the order of precedence of the goals. Choose the rating from 0 to 3 per goal, and then multiply by the factor for order of precedence to determine the score per goal. Then sum the four scores to obtain the overall score for this first category.

Goal	Does Not Support	Somewhat Supports	Solidly Supports	Strongly Supports	Factoring in Order of Precedence	Score per Goal
Basic Mobility	0	1	2	3	x 5.00	
Access to Employment	0	1	2	3	x 3.00	
Congestion Mitigation	0	1	2	3	x 2.00	
Economic Development	0	1	2	3	x 1.67	
Rater's Score for Supporting Goals –						

Rater's Notes

2. Transit Mode Share Improvements – Maximum of 10 points

The transit mode share score gauges the new service's capacity to shift travelers from single occupancy vehicles to public transit. Will the project improve the ability of Vermonters to access places by transit? Can an increase in public transit ridership reasonably be expected as a result of this project?

Rater's Notes

Rater's Score for Mobility Improvements –

3. Environmental Benefits – Maximum of 10 points

Evaluate whether the project produces environmental benefits, such as decreased emissions (as people shift from single occupancy vehicles to public transit) and contributions to air quality attainment in Vermont.

Rater's Notes

Rater's Score for Environmental Benefits –

4. Performance – Maximum of 10 points

The project's forecasted productivity and cost effectiveness should be comparable to VTrans' performance standards for these measures *for the type of service proposed.*

Rater's Notes

Rater's Score for Operating Efficiencies –

5. Project Coordination – Maximum of 10 points

Evaluate how well the project is coordinated with the transit agency's existing routes. For example, is the project's schedule, including frequency and span of service, coordinated with those of the existing routes to facilitate transfers? Does the transit agency plan to promote such transfers on its marketing materials? Does the project promote local transit connectivity?

Rater's Notes

Rater's Score for Project Coordination –

6. Regional Connectivity – Maximum of 10 points

Evaluate the project's connectivity to services outside its transit agency, including other public transit providers' routes and other modes (i.e., Amtrak, park and ride lots, bike trails). Does the project promote regional connectivity by alternative transportation modes? Does the project fill a regional gap in the statewide transit network?

Rater's Notes

Rater's Score for Regional Connectivity –

7. Local Financial Commitment – Maximum of 15 points

This category evaluates two criteria, with a maximum of 5 points each:

A) Stability and reliability of the proposed local match to operating and capital costs, and
B) Whether adequate provisions have been made to cover unanticipated cost overruns or funding shortfalls.
C) Potential for continuation of funding for the project after the three years of start-up funding from the New Services Program. When the service is no longer "new," the PTPP recommends funding the project like other local transit services. Is the local match sustainable, and can additional local match be obtained to meet the 50% requirement for operating projects (compared to the 20% local match requirement for the New Services Program)?

Rater's Notes

Rater's Score for Local Financial Commitment –

PROJECT RATING SUMMARY

Category	Rater's Score	Maximum Points Possible
1. Supports Goals of Public Transit Policy Plan		35
2. Transit Mode Share Improvements		10
3. Environmental Benefits		10
4. Performance		10
5. Project Coordination		10
6. Regional Connectivity		10
7. Local Financial Commitment		15
TOTAL POINTS		**100**

Rater's Overall Priority Ranking Number for This Project against All Other Proposals:

_____ Out of _____ Proposals

Appendix F

Technical Memorandum 6:
Transit Planning Assistance Program

KFH GROUP, INC.

2012 Vermont Public Transit Policy Plan

Technical Memorandum 6: Transit Planning Assistance Program

Revised
August, 2011

Prepared for the:

State of Vermont
Agency of Transportation

4920 Elm Street, Suite 350 ◆Bethesda, MD 20814 ◆(301) 951-8660◆FAX (301) 951-0026

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Technical Memorandum #6: Transit Planning Assistance Program

INTRODUCTION

The Vermont Public Transit Policy Plan (PTPP) is currently being updated for publication in 2012. The purpose of the PTPP is to review and update transit polices and goals and to develop strategies to meet current and emerging public transit challenges. The PTPP is part of a series of policy plans developed by the Vermont Agency of Transportation (VTrans) addressing, in addition to transit, rail, bicycles/pedestrians, air, and roadway policies. Together these policy plans provide direction for VTrans' various programs, as well as forming the basis of the State's Long Range Transportation Business Plan (LRTBP).

This technical memorandum presents the results of Task 6 and includes proposals for 1) a planning assistance grant program to address transit planning needs in the State, and 2) a technical assistance program. It is the sixth in a series of technical memoranda being prepared as the PTPP plan is developed. It has been reviewed by the Study Advisory Committee and revised based on comments received.

PLANNING ASSISTANCE PROGRAM

This section includes a proposed transit planning assistance grant program intended to address individual transit operators planning needs in coordination with the appropriate Regional Planning Commissions (RPC)/Metropolitan Planning Organization (MPO) consistent with 24 V.S.A. § 5089 Planning. The planning grant program is being designed to encourage the effectiveness and efficiency of transit services and their coordination with human service transportation and is proposed to be conducted cooperatively with the local RPC(s)/Chittenden County Metropolitan Planning Organization (CCMPO).

By way of background, a Regional Transportation Development Planning (TDP) Grant Program was first established in Vermont in 1987 to assist transit operators and human service agencies plan for better coordination of passenger transportation Services. Subsequently, service expansions were a major focus in the 2000 PTPP and the Short Range Public Transit Planning (SRPTP) process was recommended in the Plan as means of identifying and justifying where additional public transit services are needed. The requirement for SRPTPs was legislatively mandated and the first series of these plans was conducted by the transit providers in 2004. Any proposed new services were required to be consistent with a current SRPTP. A more recent effort to update the plans was abandoned after the effectiveness of the approach came into question. While there is still a recognition that transit services need to be well planned, the requirement that planning take place in this manner was eliminated from the legislation in 2009. Currently, VTrans provides individual systems with limited planning funds on an as needed basis.

There remains common agreement that, given the scarcity of resources available for transit, it is important to plan services with the highest potential for success. If VTrans revises the State's New Service Program (as proposed in TM#5), the results of a local planning process take on additional importance. With the removal of the goal-based funding formula, the Transit Development Plans (TDPs) and special studies will be used as the primary basis for funding decisions regarding new services and expansions to existing services (increased frequency, span or area of service) as well as for capital funding. As noted in Section 5083, "*Proposals for new service shall be evaluated by examining feasibility studies submitted by providers...*"

Some essential components of the proposed plan include an increased role for CCMPO and the RPCs in the transit planning process, re-instatement of the TDP planning requirement (with modifications), and creation of a new specialized planning studies component. Thus, the VTrans transit planning program would include the following components.

Increased Role of the RPCs and CCMPO

The RPCs and CCMPO are already highly involved in the overall transportation planning in each region, but a PTPP policy objective would be for the RPCs and CCMPO to have a more active role in facilitating transit considerations and transit planning. Transit planning at the regional or local level needs to 1) plan for effective and efficient transit services, 2) fully integrate transit into the overall transportation planning process (all modes), and 3) better link transit into the land use decision-making process.

The MPO and RPCs in Vermont currently conduct both regional and local planning. One of the MPO/RPCs' primary roles is to provide planning expertise and technical assistance to municipalities within their regions in a cost-effective manner. MPO/RPC staff work with municipalities on a range of planning issues including land use, permitting, and transportation, and are therefore uniquely positioned to facilitate interaction between these realms, particularly since staff at the municipal level are often dedicated to one planning realm. The MPO/RPCs work with a variety of entities including counties, towns, transit providers, and developers, and can take the initiative to bring these stakeholders together to actively incorporate transit oriented design into new or planned developments. See the Vermont Association of Planning and Development Agencies (VAPDA) website at **http://www.vapda.org/** for more information in regional planning agencies in the state.

Through its Transportation Planning Initiative (TPI), VTrans collaborates with the RPCs and the CCMPO to carry out transportation planning at the regional level.[1] RPCs enter into cooperative agreements with VTrans for the agency to provide FHWA planning funds in exchange for collaborative transportation planning. Each region and the CCMPO prepare and update long range transportation plans that include detailed inventories of their transportation systems, identification of existing and future needs, general recommendations, specific project recommendations, and typically include a vision statement with supporting goals, objectives, or policies. The most common principles emphasized include using transportation to support economic diversity, vitality, and development, preserving and maintaining the existing transportation system, supporting the use of alternative modes, connecting transportation and land use, and improving safety for all modes of travel. The TPI Manual can be found at **TPI Manual Update**.

The RPCs contract with VTrans to coordinate the TPI also ensures local participation in the transportation decision-making process in order to meet federal requirements. With extensive experience in public outreach, as well as knowledge about planning and project development processes in both land use and transportation, the RPCs can serve as the liaison between VTrans and/or Transit Operators and community groups, residents and local governments. The MPO and RPCs can also provide municipalities with valuable information and insights on how regional plans may impact local activities, or vice versa. Specifically, RPCs might coordinate the growth of regional transit networks or regional coordination of public transit and human services transportation to meet the needs that arise from new developments.

[1] Vermont's 11 RPCs each has a Transportation Advisory Committee (TAC). The TACs include representatives of from each town and some representation from the local transit operator. The CCMPO has a Public Transit Advisory Committee as well as a TAC that make recommendations on action items to be considered by the full Board of Directors.

It also is noted that a new State law goes into effect on July 1, 2011 requiring that state transportation policy consider "complete street" principles of safety and accommodation of all transportation system users including motorist, bicyclists, public transit users and pedestrians.

RPCs can both advocate for transit considerations in local land use planning and educate local officials and the public about the benefits of transit oriented design. The proposed policy change to modify language in Act 250 Criterion 5 to include transit and further the concept of transit oriented design by requiring that permits for essential services be dependent on the ability of residents to access the site/services via public transit would include a role for the RPCs/MPO to educate the Act 250 Regional Coordinators on transit issues. The Act 250 program is implemented through nine District Environmental Commissions, whose boundaries, like the RPC boundaries, generally follow County lines.[2,3] RPCs are a statutory party in the Act 250 permitting process. They can participate in any Act 250 hearing, which is conducted by a three-member District Environmental Commission, to advocate for or dissent against a proposed subdivision or development.[4] Currently, one of the RPCs' primary roles in the Act 250 process relates to Criterion 10, determining whether the project "is in conformance with any duly adopted local or regional plan or capital program" (10 V.S.A. § 6086 Issuance of permit; conditions and criteria). RPC staff members have a variety of expertise, such as transportation and energy, and may also participate in the Act 250 process on these other issues. The current level of participation by RPCs in the Act 250 process varies; some are very active while others are quite inactive, depending on the resources available and the type of area the RPC serves.

Transit Development Plans (TDPs)

As mentioned in Technical Memorandum #5, a return to the requirement for mandatory TDP is being proposed. Only those services and capital needs identified in an approved TDP would be funded by VTrans.

The plans would be completed every five years with a five year planning horizon. However, to make the process more effective from an overall State perspective, only 2-3 would be completed each year. A minimum work scope would be developed by VTrans that would include organizational, service, capital and financial planning elements (see Appendix A for an outline of a sample work scope). This work scope could be tailored to specific needs for each TDP.

[2] Vermont Natural Resources Board, Land Use Panel Website, **http://www.nrb.state.vt.us/lup/**.
[3] There are a few areas where the two sets of boundaries do not coincide (there are 11 RPCs).
[4] Hearing Information provided on the Vermont Natural Resources Board, Land Use Panel Website, **http://www.nrb.state.vt.us/lup/publications/nrb1.pdf**.

Funding for the TDPs would come from VTrans (no local match) and would be coordinated through VTrans. The local management of the process could be handled by the RPCs/MPO under the TPI umbrella. The State could provide consultants (perhaps under a multi-year task order to avoid annual procurements) or the plans could be procured locally by the RPCs in coordination with the transit operators (or vice versa). Regardless of which entity conducts the planning process, coordination and involvement of both the RPC and transit operator would be required. A Study Advisory Committee of interested parties would be formed to advice on the development of the plan. In addition to the RPC, transit operator, VTrans and AHS, this committee should include local elected officials, local human service agencies, rider advocates, and riders of the system.

In summary,

- TDPs will be prepared for each Transit Operator based on a common but tailored scope of work. A Transit Operator's TDP must be prepared in coordination and cooperation with the RPC for the area.

- Planning assistance from VTrans will cover the TDP preparation at 100% but not the personnel time to administer it.

- VTrans will fund the initiation of two or three TDPs or updates per year.

- A Plan or update can be conducted by the RPC, Transit Operator's staff, a consultant hired by one of those two entities or by a consultant VTrans has on retainer.

- Upon the completion of the TDP, the governing board for the Transit Operator will approve it. The RPCs, at the recommendation of the RPC's Transportation Advisory Committee (TAC) will also adopt it. If the TDP's transit service covers more than one RPC region then, all affected RPCs would also adopt it.

- It is anticipated that the TDP or primary components of it would be incorporated into the RPC's Regional Transportation Plan and/or the transportation element of their Regional Plan.

- It is anticipated that RPCs attest that a bordering region's TDP is compatible with their region's regional and TDP plans.

- TDPs would be updated every five years, or more frequently as necessary.

- The TDP should contain the (applicable) components of the "outline" in the PTPP.

- Any requests for capital assistance (rolling stock, new service(s), shelters, facilities/vehicle storage, equipment, etc.) must be consistent with a current TDP.

Specialized Planning Studies

For studies outside the scope of SRPTPs, and that cannot be accomplished by the RPCs/CCMPO under the TPI program, transit systems could also apply directly to VTrans for funding to conduct special planning studies. These might include specialized planning projects on issues such as funding, passenger amenities, route re-alignments, facility feasibility studies, service feasibility studies/design of new services, capital replacement plans, coordination studies or management reviews/plans. Funds for these studies would come from VTrans.

TECHNICAL ASSISTANCE AND TRAINING

Another aspect of the PTPP is the development of a Vermont Technical Assistance Program. State policy, included in statute, requires that "…*The agency of transportation shall provide guidance, training, funding, and technical assistance to transit systems in order to meet the performance and service standards established.*"

The technical assistance program will take advantage of FTA's RTAP Program which focuses on training and technical assistance projects and other support services tailored to meet the needs of transit operators in non-urbanized areas. Objectives of the federal RTAP are, among others:

- to foster the development of state and local capacity for addressing the training and technical assistance needs of the rural/small urban transportation community;

- to improve the quality of information and technical assistance available through the development of training and technical assistance resource materials;

- to facilitate peer-to-peer self help through the development of local networks of transit professionals, and

- to support the coordination of public, private, specialized, and human service transportation services.

Management and Administration

The technical assistance program will be coordinated through VTrans and funded using FTA's RTAP Program and other State funds. The practice of allocating a nominal amount of funding (currently $3,000 annually) to each provider for training and conferences would continue, but the remainder of the program would be state-wide.

Currently a VTrans staff person functions as the State's RTAP Program Manager but this is only a small part of her responsibilities. Creating an effective technical assistance program will require at least a half-time staff person. That person/function could be at VTrans, VPTA, a lead agency, a consulting firm, or the university. The alternative approaches to the management function are:

1. VTrans - assign a VTrans staff member to manage the program (at least half time).
2. If a larger program is desired than VTrans staff resources can provide, consider contracting out all or part of the program to:
   - VPTA (although this would require reviving the organization)
   - UVM – Transportation Research Center
   - a consulting firm
   - a large rural transit operator

The PTPP process has identified a number of areas that transit operators could use technical assistance and training but these are just a start. The program manager would be tasked with:

- Developing an annual RTAP work plan and budget.
- Periodically surveying local transit providers about their training and technical assistance needs and priorities.
- Establishing an RTAP Advisory Group that meets periodically to discuss training needs and resources and help set the priorities of the program. This group should include representatives of rural transit operators (rookies as well as veterans), VTrans, PTAC, VPTA, and AHS.
- Getting fully involved with National RTAP, which provides a peer network among state RTAP coordinators. Consider joining or forming a multi-state RTAP group with other northeast states to collectively share program resources.

Target Audience

While relying heavily on the federal RTAP program and training and technical assistance needs in non-urbanized areas, the VTrans program will also address those needs in the urbanized area in Chittenden County. Thus, the target audience/eligible participants include all public transit operators in the State.

Training

Training Classes

Under the new program, the State would conduct and/or sponsor training classes on a variety of topics, targeted at different functions in the transit organization, including upper management, supervisors, dispatchers, maintenance personal, and drivers. For some topics, a train-the-trainer approach is appropriate (such as topics targeted at drivers).

While training resources available in Vermont may preclude development of new training programs and/or materials (such as videos or manuals, there are a lot of training programs available. For example, the National RTAP program and CTAA offer a variety training programs by their staff or contractors, which are specifically targeted at rural transit programs. Or, the program could arrange for courses developed by NTI, FTA, and the Transportation Safety Institute (TSI) to be presented in Vermont with priority registration for the RTAP target population. These courses are generally provided at little or no cost to the host state and the public transit participants; the host need only provide the facilities.

Training could be conducted by:

- Trainers on VTrans, RPC or Transit Agency staff - this requires having the available expertise and staff time to conduct the training or cultivating it through a train-the trainer program.

- Outside Trainers—In addition to the trainers available through National RTAP, NTI and CTAA, there are many excellent transit training consultants who could be utilized, with different specialties. Vermont could procure a team of contract trainers (such as Pennsylvania RTAP uses) to use as needed.

The program would establish an annual training calendar which includes the consortium – in conjunction with PTAC – in response to operator requests.

Set Minimum Training Standards

VTrans could also set minimum (suggested) training standards for public transit operators. These would be set by working with VPTA and the PTAC (see Appendix B for an example of such standards set by NCDOT). Recommended core topics to facilitate safe operations by all local programs include defensive driving, pre-trip inspections, passenger assistance methods (as covered in Passenger Service and Safety - PASS), emergency evacuation procedures/fire safety, first aid/CPR, and bodily fluid clean-up/bloodborne pathogen awareness, drug and alcohol awareness (including prescription and over the counter medications), fatigue awareness, conflict resolution/dealing professionally with problem passengers. In another example, Georgia provides PASS and Drug and Alcohol training classes for local programs[5].

Training Scholarships

Development of a formal RTAP scholarship program also is recommended as a way to stretch training dollars. Many states offer scholarships to assist staff of local Section 5311 programs in attending training they otherwise would be unable to afford. The following policies and procedures would need to be established:

- eligibility policies
  - -- eligible applicants (types of organizations from which staff would be eligible)
  - -- eligible activities (such as training workshops, professional conferences, and other professional development opportunities relevant to managing or operating rural public transportation)
  - -- expenses (such as tuition and/or travel expenses, and if travel expenses, any limitations or minimum distance requirements)
  - -- any parameters of frequency or amount of awards to any particular organization, to ensure equitable distribution
- application process
- evaluation criteria, including
  - -- demonstration of need
  - -- value to individual, organization, and/or state of training to be attended
  - -- decision-making authority (with an individual or advisory group)

[5] Georgia's existing program was based on a state requirement that all S.5311 vehicle operators receive PASS training, and all of the District Coordinators (seven of them, each with multiple systems) were required to be certified PASS trainers and provide the training periodically (on a Saturday, so that no drivers had to be taken off the road). The District Coordinators also conduct required Drug and Alcohol classes. The state also recommends First-Aid and Defensive Driving, but does not conduct it themselves.

-- procedures for ensuring that requests are evaluated and determined in a timely manner, notification of award or decline
-- procedures for awardees to submit request for payment, for processing request and issuing payment, for tracking awards against state's scholarship budget

It may be useful to require scholarship recipients to submit a brief written report on their training experience.

Technical Assistance

Another important function of the program is to provide technical assistance to transit providers in the State. This can be achieved through a variety of approaches, many of which also serve outreach/marketing functions for the program.

Web-based Resource Library

The program could develop a web-based resource library of materials. This would function as an on-line training and technical assistance resource center for systems to be able to download materials or borrow by mail through a VTrans lending library (for those materials not available in electronic form).

- Periodically research availability and add copies of new resources that would be beneficial for rural and small urban transit systems. Sources of such resources include the National RTAP, FTA, TCRP, CTAA, APTA, and NTI. The materials available through these sources cited are generally available for free or a nominal charge. Also, other state RTAP programs have produced their own excellent materials, such as Iowa's *Your Ticket to Safety*, New York State's *Passenger Relations for Outstanding Service (PROS)*, and Pennsylvania's seven-module PennSCORE program. These materials may be available through the state of origin. If out of print, they may often be borrowed from another state's RTAP library, copied, and returned. A good source of information on materials developed by other states is the National RTAP's online catalog at http://www.nationalrtap.org/ResourceCatalog.

- Maintain an up-to-date electronic catalog of materials that can be searched or sorted by subject matter, and post online or make available through email. A simple spreadsheet can serve this purpose.

- Promote the availability of the resource library among the local programs, and issue announcements when useful new materials are added.

Technical Assistance and Information Sharing

Other technical assistance efforts could include:

- A newsletter (quarterly or semiannually recommended).
- Peer-to-peer network, identifying and sharing information about best practices and individual expertise among the rural and small urban programs, and facilitate communications between peers. Funding participant travel costs may be warranted to provide on-site technical assistance from peer-to-peer.
- Roundtable discussions among peers to address critical issues and brainstorm problem-solving approaches, at annual state conference or other meeting locations.
- Toll-free number to call with technical assistance questions.
- Hands-on /on-site technical assistance by VTrans staff or contracted expert.
- Rural transit roadeo, to reinforce driver safety training programs and overall driver professionalism, as well as to provide peer networking opportunities.

APPENDIX A

Sample Outline Of
Transit Development Plan (TDP)
Work Scope

APPENDIX A

SAMPLE OUTLINE OF TRANSIT DEVELOPMENT PLAN (TDP) WORK SCOPE

INTRODUCTION

The TDP documents a planning process that builds on or formulates the county's or region's goals and objectives for transit, reviews and assesses current transit services, identifies unmet transit needs, and develops an appropriate course of action to address the objectives in the short-range future, typically a five-year horizon.

A completed TDP serves as a guide for the local transit system, providing a roadmap for implementing service and/or organizational changes, improvements, and/or potential expansion during the five-year period. The tasks outlined in this sample scope of work are standard for a short-range transit planning process, though subtasks will be tailored to address unique local issues through consultation with the provider and VTrans.

BACKGROUND

[*Description of the service area, existing transit services, and current issues.*]

SCOPE

**Notes: The technical memoranda included as subtasks below generally become chapters of the draft final and final plans. The RPC and transit operator staff will have opportunities to review the technical memoranda and provide input, before sending the memoranda to the Study Advisory Committee (which may be the RPCs Transit Advisory Committee) and VTrans for review.*

Task 1: Initiate Project and On-Going Management

This task provides background information and sets priorities for the study. Efforts include setting up a Study Advisory Committee (SAC) to incorporate input from the public and agencies affected by public transit services into the planning process, and reviewing previous studies and plans to determine existing data and better understand local trends and issues relevant to transit.

Subtask 1.1: Project "Kick-Off" Meeting

Subtask 1.2: Document Mission, Goals, and Objectives

Subtask 1.3: Review of Previous Studies and Data

Subtask 1.4: Ongoing Project Management

Task 2: Review of Existing Services

The first phase of data collection includes assessment of existing transportation services, both public transit and private non-profit agency transportation services; interviews of stakeholders and public outreach to obtain public input on transit issues and concerns; and review and evaluation of performance data for existing transit routes and services. This task also reviews current management practices; funding sources for both operations and capital; the current fare structure; the transit system's bus stop inventory with regard to pedestrian and bicycle access; and other transportation providers and purchasers of transportation service, particularly to determine coordination activities and opportunities with public transit.

Subtask 2.1: Public and Stakeholder Input

Subtask 2.2: Review and Assess the Existing Public Transit System

Subtask 2.3: Assess Transit Fleet, Facilities, and Technology

Subtask 2.4: Management and Institutional Structure

Subtask 2.5: Review of Funding Sources

Subtask 2.6: Review of Fare Policy

Subtask 2.7: Review and Assess Pedestrian and Bicycle Access

Subtask 2.8: Profile and Analysis of Other Area Providers and Purchasers of Transportation Service

Subtask 2.9: Technical Memorandum #1 – Review of Existing Services

Task 3: Review Demographics and Land Use

The second phase of data collection analyzes potential transit needs based on demographic and land use data. Data collected include the 2010 Census and the American Community Survey from the U.S. Census Bureau; major trip generators such as major employers, medical facilities, educational institutions, human service agencies, and shopping centers; travel patterns including major corridors and seasonal patterns; and zoning and land use regulations that may impact transit.

Subtask 3.1: Develop Land Use Profile (Analysis and Evaluation)

Subtask 3.2: Develop Population Profile (Analysis and Evaluation)

Subtask 3.3: Technical Memorandum #2 – Review of Needs

Task 4: Issues and Opportunities

Under this task, additional data and input regarding potential transit needs are obtained and examined, including interviews with community representatives, the transit system's guidelines and policies regarding need for service, connections to other local and regional transit services (in-state and in adjacent states) and to other modes; and the potential need for an intermodal center to facilitate transportation connectivity.

Subtask 4.1: Community and Transit Advisory Committee Input

Subtask 4.2: Transit System Goals and Service Development Policies/Guidelines

Subtask 4.3: Connectivity Assessment

Subtask 4.4: Intermodal (Passenger) Facility Needs

Subtask 4.5: Technical Memorandum #3 – Goals, Objectives, and Issues

Task 5: Development of Transit Service, Organizational, and Capital Options

This task compares the results of the transit needs analysis with existing services to develop service and organizational alternatives. This task also develops options for capital investments, whether in vehicles, facilities, or technology, based on transit

needs. These alternatives are evaluated and discussed with the transit system's staff and the SAC for potential inclusion in the recommended plan.

Subtask 5.1: Service Alternatives

Subtask 5.2: Organizational Alternatives

Subtask 5.3: Capital Alternatives – Vehicles, Facilities, and Technology

Subtask 5.3.1: Vehicle Plan – Replacement and Expansion

Subtask 5.3.2: Technology Plan

Subtask 5.3.3: Facilities Plan

Subtask 5.4: Technical Memorandum #4 – Selecting Preferred Service, Organizational, and Capital Alternatives

Task 6: Preparation of the TDP

This task combines the information captured in the technical memoranda into one comprehensive plan that outlines the recommendations for the transit system. The plan will provide implementation details, focusing on the first year of the planning period with conceptual guidance for the remaining plan years. The draft final report will be presented to the SAC, the general public, and elected officials, with the aim of policy adoption. The plan will be revised based on input collected through this process, and the final report will be provided to the transit system in appropriate formats for printing and posting on the system's website.

Subtask 6.1: Compatible Organizational Structure

Subtask 6.2: Route and Schedule Structures

Subtask 6.3: Equipment and Staff Requirements for Plan Implementation

Subtask 6.4: Operating and Capital Budgets

Subtask 6.5: Ridership and Vehicle Miles Projections for Recommended Alternatives

Subtask 6.6: Suggested Timeline for Implementation

Subtask 6.7: Title VI and Charter Bus Analysis

Subtask 6.8: Draft Final Report

Subtask 6.9: Presentations

Subtask 6.10: Incorporate Revisions and Produce the Final Plan

Task 7 – Plan Adoption

Upon the completion of the TDP, the governing board for the Transit Operator will approve it. The RPCs, at the recommendation of the RPC's Transportation Advisory Committee (TAC), also will adopt it. If the TDP's transit service covers more than one RPC region then, all affected RPCs would also adopt it. It is anticipated that the TDP or primary components of it would be incorporated into the RPC's Regional Transportation Plan and/or the transportation element of their Regional Plan. It also is anticipated that RPCs attest that a bordering region's TDP is compatible with their region's regional and TDP plans.

PROJECT SCHEDULE

[*Description of estimated project timeframe, including completion of the draft final report. A chart portrays the proposed project schedule by task, noting approximate times of deliverables and key stakeholder meetings.*]

STAFF AND BUDGET

[*Description of staffing, including the Project Manager, Task Leader, planners, and analysts, and proposed budget for the project. A table portrays the staff hours proposed and costs estimated per task.*]

APPENDIX B

Example of Minimum Training Requirements (NCDOT)

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

October 30, 2007

MEMORANDUM

TO: Community Transportation Systems

FROM: Miriam S. Perry, Director

SUBJECT: Policy Guidance for **Minimum Training Standards for Community and Human Service Transportation System Vehicle Operators**

The stated mission of the North Carolina Department of Transportation is "Connecting people and places in North Carolina - safely and efficiently, with accountability and environmental sensitivity." Community Transportation systems must meet all Federal and state guidelines, regulations and laws regarding the safe transportation of their passengers. The Minimum Training Standards for Community and Human Service Transportation System Vehicle Operators are to be implemented by local systems as part of the effort toward meeting those requirements. The effective date of the standards is July 1, 2008.

Please contact your regional safety and training specialist if you have any questions concerning this policy.

SOURCE DOCUMENTS

1. Federal Transit Administration (FTA) Circular 9040.1F "Non-Urbanized Area Formula Program Guidance and Grant Application Instructions" effective April 1, 2007, Section X (see 49 U.S.C. Chapter 53 - Section 5329: Investigation of Safety Hazards)
2. 29 CFR 1910.1030(g)(2)-Bloodborne pathogens-Information and Training
3. 49 CFR 655.14-Prevention of Alcohol Misuse and Prohibited Drug Use in Transit Operations-Education and Training Programs
4. 49 CFR 37.173-Americans with Disabilities Act-Training requirements

MSP/pta

Click to view: **Minimum Training Standards for Community and Human Service Transportation System Vehicle Operators**

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
PUBLIC TRANSPORTATION DIVISION
1550 MAIL SERVICE CENTER
RALEIGH, NC 27699-1550

TELEPHONE: 919-733-4713
FAX: 919-733-1391

WWW.DOT.STATE.NC.US/TRANSIT/TRANSITNET/

LOCATION:
TRANSPORTATION BUILDING
1 SOUTH WILMINGTON STREET
RALEIGH NC

Minimum Training Standards for Community and Human Service Transportation System Vehicle Operators

- **Defensive Driving**
  - Shall include all vehicle operators, including any employees that operate the vehicles in revenue service or carry passengers for any other trip purpose;
  - *Initial training must be a certified program, or curriculum must be equal to an existing certified program.*

- **Americans with Disabilities Act (ADA)**
  - Shall include sensitivity to passenger needs, passenger assistance, wheelchair handling, proper securement (both passenger and mobility device) and proper use of wheel chair lift, including emergency operation.
  - The ADA requires training all personnel to "proficiency", which is defined as expert performance. All vehicle operators must be periodically evaluated (at least once per year after the probationary period is completed) to ensure that they are using all of the ADA equipment correctly, and providing proper passenger assistance. An evaluation ("Driver Performance Evaluation") form (including instructions for use) is available from the NCDOT/PTD Safety and Training Unit for this purpose. The Safety and Training staff use the Check Ride form during System Safety Program Plan Reviews.
  - *Drivers that are not meeting proficiency must be given remedial training until they are proficient.*

- **Bloodborne Pathogens**
  - Shall follow the Occupational Safety and Health Administration guidelines for the training as listed in Standard 29 CFR 1910.1030(g)(2)
  - The OSHA Standard spells out the content of the training.
  - *Training must be done annually (OSHA requirement).*

- **Emergency Procedures for Vehicle Operators**
  - Shall include all procedures (communication and notification, passenger handling, vehicle evacuation, etc.), use of equipment (web cutters, fire extinguishers, etc.) and protocols (radio communication, after accident reporting, etc.) required by the local system.
  - *Participation in local or regional Emergency Management drills is strongly encouraged.*

- **Illegal Drug Use**
  - Shall include all training on the effects and consequences of prohibited drug use on personal health, safety, and the work environment, and on the signs and symptoms that may indicate prohibited drug use. *This shall be done upon hire.* (Required under 49 CFR 655.14)

- **General**
  - **All new hires must have all of the training completed as soon as possible, but no later than ninety (90) days of hire. New hires must complete Defensive Driving and ADA training prior to starting revenue service.**
  - *Refresher training must be done annually.*
  - All of the training materials must be on file for review by the NCDOT/PTD. Materials shall include but not be limited to course outline (may be included in instructor's manual), instructor's manual, sample student manual (if one is used), handouts and copy of Power Point slides if used in lieu of instructor's manual.
  - Records of training performed (for each individual trained) must be kept on file for a minimum of five (5) years. Records shall include proof of attendance (roster or certificate of completion, if provided), date of the course, and type of instruction delivery (instructor led, self-instruction, etc.), name and certification (if applicable) of instructor
  - The system must make a periodic, but no less than annual evaluation of each driver's performance of the techniques, skills or knowledge required under each of the categories and provide refresher or remedial training as needed, in addition to the scheduled training.

Appendix G

Intercity Bus Needs Assessment and Policy Options

KFH GROUP, INC.

2012 Vermont Public Transit Policy Plan

INTERCITY BUS NEEDS ASSESSMENT AND POLICY OPTIONS

White Paper

January, 2012

Prepared for the:

State of Vermont
Agency of Transportation

4920 Elm Street, Suite 350 ◆Bethesda, MD 20814 ◆(301) 951-8660◆FAX (301) 951-0026

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Chapter 1

Background and Policy Context

POLICY CONTEXT

Since 1998 when the Statewide Intercity Bus Study was conducted, intercity bus service availability in Vermont has changed considerably, as has the federal program that could be used to provide assistance.[1] Intercity bus services are particularly important to the mobility of Vermonters since a greater proportion of intercity riders are youth, elders, and persons with low income. Despite their importance, intercity bus services have declined significantly in Vermont over the past few years. Only limited service remains, and there are frequency of service issues. Currently there are only four daily round trips along I-89 serving Burlington, Montpelier, and White River Junction; one daily round trip along I-91 serving White River Junction, Bellows Falls and Brattleboro; and two weekday round trips from Bennington to Albany.

The FTA does support rural intercity services through the Section 5311(f) program, which sets aside a portion of the rural transit subsidies for such services, and states are obligated to spend 15% of the Section 5311 funds for intercity bus transportation unless they certify that needs are being met. Vermont Agency of Transportation (VTrans) has been certifying and using this funding for other rural transit needs. In 2003-4 VTrans did become involved in intercity bus services by purchasing a bus for Vermont Transit (at that time an autonomous subsidiary of Greyhound Lines); but, due to service cuts that eliminated the rural services the bus was intended to support, the state recovered its interest in the bus from Greyhound. VTrans has been more inclined to support commuter-type services linking towns/village centers such as Montpelier, St. Albans, and Middlebury with Burlington

[1] Intercity bus service was hard hit by the decline in travel after 9/11. A recent American Bus Association study shows that beginning in 2004, patronage began to increase again and is close to pre 9/11 levels. However, as with the airlines, the impact of 9/11 caused restructuring for scheduled intercity carriers like Greyhound.

and, recently, Brattleboro. Commuter services are not eligible for funding under the Section 5311(f) program.

Regional Connectivity, Transit, Rail Passenger Service, and Intercity Bus

The State's role in passenger rail and commuter rail has been the subject of much debate, with the State continuing to support Amtrak operation of service on two routes. In H.527 of the 2007 session, the Vermont legislature directed VTrans to "examine the feasibility of making public transportation in Vermont seamless, efficient, and user-friendly, with usable connections among in-state and out-of-state points." In this process, the agency shall develop a single overall method of marketing Amtrak, in coordination with all other public transit services.

A Study Regarding the Regional Connectivity of Vermont's Public Transportation System addressed the options for changing the rail passenger support, intercity bus, coordinating services with regional transit, and marketing a coordinated system. Since then, the State's budget problems have provided more focus on the costs of the rail passenger program, and the study did not include intercity bus recommendations.

One recommendation of the 2007 PTPP and recent studies on connectivity was to provide easily accessible and reliable information about routes and services. Accordingly, the State implemented a new initiative called, "Go Vermont." The Go Vermont Program (rideshare and ride match) was upgraded from a manual system to a web-based system in 2010. As a result, there are now 1,000 matches versus 30-40 per month. Resources have been freed up for outreach, marketing, and education. YouTube, television, and radio ads and loco-motion educational programs are being conducted. Vermont also has 49 park-and-rides lots (27 State-owned and 22 municipally owned) located throughout the State, making it easier to carpool or vanpool. For more information see the legislative report, *A Study Regarding the Regional Connectivity of Vermont's Public Transportation System January 2008* that can be found at **http://www.aot.state.vt.us/ops/PublicTransit/documents/AOT-OPS-PT_Section45.pdf**.

Overall Vermont Public Transit Policy in Vermont as It Relates to Intercity Bus

The 2000 PTPP and 2007 PTPP Update both recommended a series of related policies to guide the VTrans public transit program. Overall, it is Vermont Public Transit Policy to:

- Preserve and enhance existing public transit services that are well used by the traveling public.

- Monitor the performance of transit services by VTrans and the boards of the transit providers to ensure the maximum value from available resources.

- Use any additional public transit funds to support and promote the four goals in 24 V.S.A Chapter 126, S.5083:
  - Provide basic mobility for transit-dependent persons to critical services,
  - Provide transit services to jobs,
  - Mitigate congestion, and
  - Support economic development

Intercity bus services would address these goals by providing a means for long-distance trips by persons who do not have a vehicle available (or one considered reliable enough for a long trip) or cannot drive themselves, which would fall under basic mobility. Data on intercity bus rider characteristics and trip purposes suggests that a substantial percentage of intercity bus riders are transit dependent, at least for that type of trip.

In the past the largest percentage of intercity bus trips were made for the purpose of visiting family and friends, attending school or military service, and for personal business (such as job-hunting, etc.) rather than employer-paid business travel or daily commuting to work. Given the limited frequency of existing services (and the lack of congestion in Vermont) it is unlikely that intercity bus service would mitigate congestion. However, if the unspoken subtext of that goal is to reduce greenhouse gas emissions, it should be noted that regular-route, scheduled intercity bus service is the most energy efficient passenger travel mode, and so intercity bus service does address other state goals concerning energy and the environment.

The goal of supporting economic development is likely addressed only in a peripheral way by intercity bus service, in that maintaining access by intercity bus can allow students or seasonal employees without autos to reach campuses or seasonal resorts. These potential users are a critical part of supporting the education industry and tourism.

Intercity Bus and Regional Connectivity Policy

The current State policy addressing intercity bus transportation and regional connectivity calls for the State to improve the connectivity between public and private carriers to serve the intercity bus and commuter markets and to provide easy access to information about those services. It is State policy to support the intercity bus network in Vermont, for both intra-state and inter-state travel, by providing attractive and accessible features at convenient locations along major travel corridors (e.g., park and ride lots) and to funding connections to Amtrak services and commercial aviation when feasible. Projects and service improvements to enhance regional connectivity receive greater consideration for funding in the New Service program, which funds new services with federal Congestion Mitigation and Air Quality (CMAQ) funding. State

policy limits funding for intercity bus carriers to capital and operating assistance for routes that have not demonstrated economic viability, though in fact the State is not providing any such assistance at this time.

Potential Funding Source: Section 5311(f) Rural Intercity Bus Assistance Program

The likely source of funding (and program requirements) if Vermont were to provide assistance to intercity bus carriers would be the FTA Section 5311(f) program. As described above, this program allows states to subsidize rural intercity bus needs using their Section 5311 formula grant funds. The state must use 15% of its annual apportionment to support intercity bus service, unless the Governor certifies, after consultation with affected intercity bus providers that the needs of the state are adequately met. However, recent changes in the program have included the requirement for a consultation process that includes participation from the intercity carriers and other stakeholders to be conducted by the state prior to certification; and the option of using the existing unsubsidized intercity bus service as in-kind match for operating assistance.

This white paper is intended to be the initial step in the consultation process that VTrans will conduct prior to issuing its grant solicitation for FY 2013 Section 5311 funding. It will serve to document the current state of the intercity bus service in Vermont, changes in that network over the last decade, the relationship of that network to potential need based on demographics and the location of potential intercity bus destinations, the identification of gaps in the network, potential services that could address such gaps, and the likely costs and potential funding requirements. It is intended to serve as the basis for a process that will invite comment on the need for rural intercity bus service assistance from current and potential intercity service providers, public transit operators, other stakeholders, and the public.

Chapter 2

Inventory of Existing Intercity Passenger Services

INTERCITY BUS

Intercity bus service is fixed-route, fixed-schedule bus service open to the general public, generally operated with over-the-road coaches with the capability of carrying baggage or package express. Scheduled intercity bus service within Vermont is currently provided by two carriers, Greyhound Lines and Yankee Trails, but there is also scheduled intercity bus service provided to points just outside the state that is potentially usable by Vermont residents. These include services provided by Peter Pan Bus Lines, Dartmouth Coach, and Concord Coach. Figure 2-1 presents a map of these routes.

The Greyhound Lines service in Vermont is provided on two routes. On the Montreal to Boston route, Greyhound has Vermont stops in Burlington, Montpelier, and White River Junction. There are four round-trips per day on this corridor, which is operated seven days per week. Exhibit 2-1 presents a schedule for this route, and Table 2-1 provides the stop locations (in Vermont). The Burlington stop is now located at the Burlington International Airport (BTV), which is served by all trips, but the earliest bus of the day (both directions) also stops in downtown. In Burlington all trips have a 15-minute layover at the airport, and in White River Junction the buses make an initial stop at the White River Junction depot, travel to Hanover, NH, and then return to the White River depot before continuing. In Boston, two of the inbound trips make stops at Logan Airport (but not any northbound trips). Three of the schedules in each direction make a stop at the Manchester, NH Airport. To use intercity bus between Burlington and New York, it is necessary to transfer either in Boston or Montreal.

Figure 2-1: Existing Intercity Bus Service in Vermont

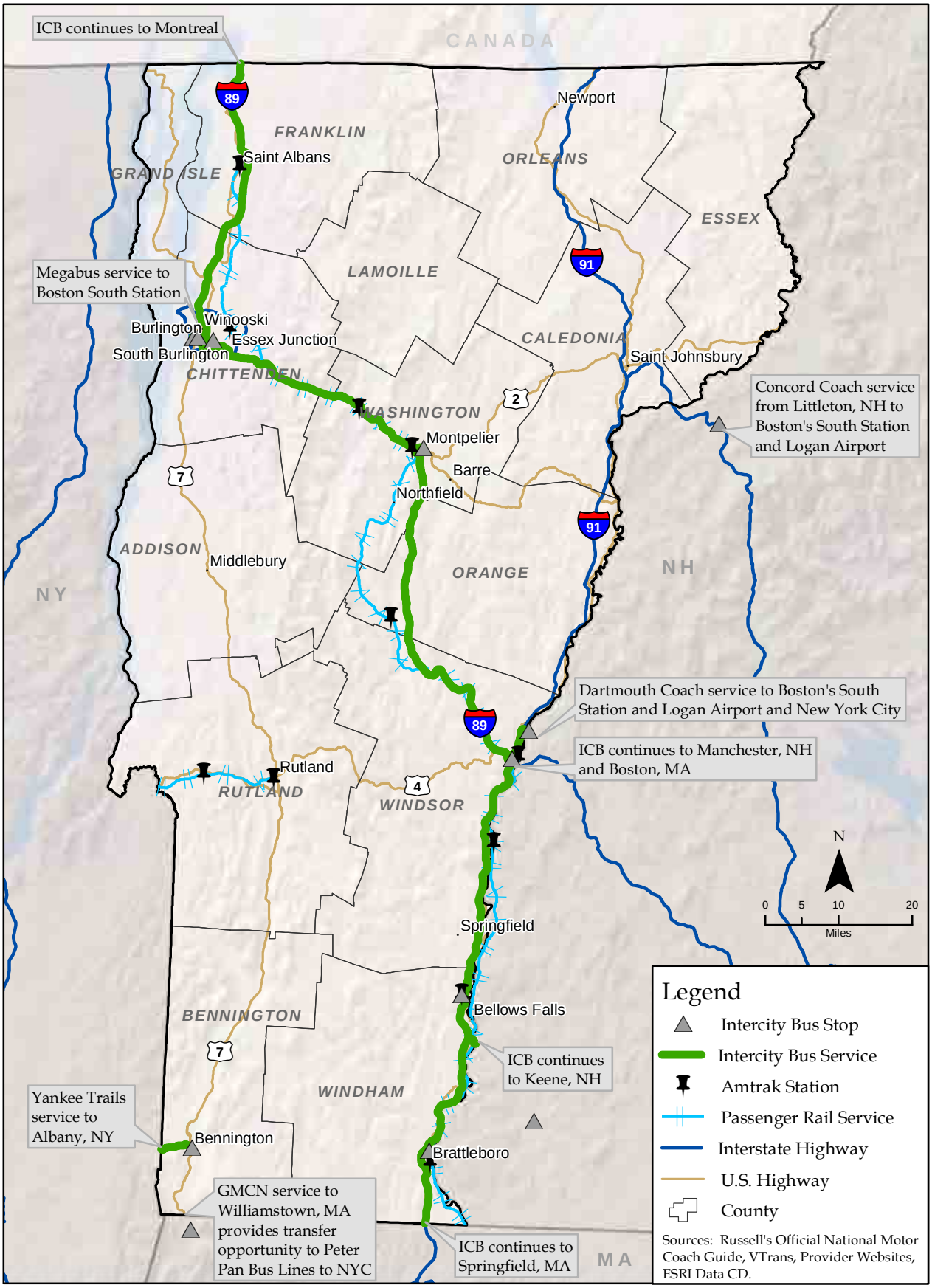


Exhibit 2-1

BOSTON - BURLINGTON - MONTREAL
TABLE 62

Carrier	SCHEDULE NUMBER		9122	9124	126	9120	9128
	1-11-11						
	FREQUENCY						
GL	**Montreal, PQ**	LV	23:30	08:15	10:45		15:45
	St. Jean, PQ						
	Burlington, VT (*Airport)*	AR	02:00	10:45	13:15		18:15
	Burlington, VT (*Airport)*	LV	02:15	11:15	13:45		18:30
	Burlington, VT *(Downtown)*		02:25				
	Montpelier, VT		03:10	12:00	14:30		19:15
	White River Jct., VT	AR	04:05	12:55	15:25		20:10
	Hanover, NH					19:45	
	White River Jct., VT	AR				20:00	
	White River Jct., VT	LV	04:20	13:30	16:00		20:30
	Hanover, NH		04:35	13:45			
	Concord, NH			14:55			
	Manchester, NH			15:25			21:55
	Manchester Arpt, NH		06:05	15:40	17:30		
	Boston Logan Arpt, MA						
	Boston, MA	AR	07:05	16:40	18:30		22:55
GL	Boston Logan Arpt, MA		D 07:25		D 18:50		

BOSTON - BURLINGTON - MONTREAL
TABLE 62

Carrier	SCHEDULE NUMBER		9127	9125	145	9143
	1-11-11					
	FREQUENCY					
GL	Boston Logan Arpt, MA	LV				
	Boston, MA	LV	23:35	07:15	10:00	13:45
	Boston Logan Arpt, MA					
	Manchester Arpt, NH				11:05	14:45
	Manchester NH		00:40	08:20		15:00
	Concord, NH					15:30
	Hanover, NH		D 01:55		D 12:30	D 16:40
	White River Jct., VT	AR	02:05	09:35	B 12:40	B 16:50
	Hanover, NH					
	White River Jct., VT	LV	02:20	10:05	13:10	17:15
	Montpelier, VT		03:15	11:00	14:05	18:10
	Burlington, VT *(Downtown)*		04:00			
	Burlington, VT *(Airport)*	AR	04:10	11:45	14:50	18:55
	Burlington, VT *(Airport)*	LV	04:15	12:00	15:05	19:00
	St. Jean, PQ				17:20	
GL	**Montreal, PQ**	AR	06:45	14:30	17:35	21:30

Table 2-1: Points in Vermont Served by Greyhound - 2011

Towns Served	Location
Bellows Falls	54 Depot Street Bellows Falls, Vermont 05101
Brattleboro	Shell Gas Station 429 Canal Street Brattleboro, Vermont 05302
Burlington	Burlington Airport 1200 Airport Drive #1 Burlington, Vermont 05401
Burlington Winooski Main	Burlington Downtown 219 S. Winooski Ave. Burlington Winooski Main Vermont 05401
Montpelier	Bafitos 23 Main Street Montpelier, Vermont 05602
White River Junction	Summit Dist-Greyhound Station 44 Sykes Mountain Ave. White River Jct., Vermont 05001

The other Greyhound route operates a single daily round-trip from White River Junction to Springfield, MA. The schedule for this route is presented in Exhibit 2-2. It has additional Vermont stops at Vermont at Bellows Falls and Brattleboro (also shown in Table 2-1). The southbound bus serving this corridor leaves White River Junction well after the arrival of the bus from Burlington, but the northbound arrives in time to allow a rider to connect to either Burlington- or Boston-bound buses with minimal delay. New York can also be accessed on this route once a day with a layover/transfer in Springfield, MA. Efforts are under way to move the Bellows Falls stop to the Connecticut River Transit facility just off I-91, where there would be parking as well staff for ticket sales.

Exhibit 2-2

SPRINGFIELD - WHITE RIVER JCT
TABLE 67

Carrier	SCHEDULE NUMBER				122
	1-11-11				NYD WRJ
	FREQUENCY				
GL	**Springfield, MA**	ET	LV		9:40
	Northampton, MA				10:05
	Greenfield, MA				10:35
	Brattleboro, VT				11:05
	Keene, NH				11:35
	Bellows Falls, VT				12:10
	White River Jct., VT		AR		12:50
	White River Jct., VT		LV		
GL	**Hanover, NH**	ET	AR		

WHITE RIVER JCT - SPRINGFIELD
TABLE 67

Carrier	SCHEDULE NUMBER				123
	8-17-10				BUR NYD
	FREQUENCY				
GL	**Burlington, VT**	ET	LV		
	Montpelier, VT				
	Hanover, NH		LV		
	White River Jct., VT		AR		
	White River Jct., VT		LV		8:25
	Bellows Falls, VT		AR		9:05
	Bellows Falls, VT		LV		9:10
	Keene, NH				9:45
	Brattleboro, VT				10:15
	Brattleboro, VT				10:15
	Greenfield, MA				10:50
	Northampton, MA				11:20
GL	**Springfield, MA**	ET	AR		11:45

Vermont's only other remaining scheduled intercity bus service is provided by Yankee Trails, which offers two round-trips per day from Bennington to Albany, New York. This service is provided Monday to Friday only, as can be seen in Exhibit 2-3. The Yankee Trails scheduled service is not interlined with Greyhound, so a Vermont resident cannot buy a bus ticket in Bennington for travel beyond the Albany terminus. Yankee Trails offers only separate cash fares. The fare from Bennington to Albany is $4.00. As a result of the lack of an interline agreement with Greyhound, the stop in Albany is on the street in front of the Greyhound terminal. Also, Greyhound's website and telephone information service does not have information on the Yankee Trails service.

Many Vermont residents are also able to make intercity bus connections in relatively close proximity to their communities by traveling to intercity bus stops in adjacent states. Vermonters in the GMCN service area can take Peter Pan Bus Lines from Williamstown, MA to New York City (two round trips per day). Dartmouth Coach operates between Hanover/Lebanon, New Hampshire and both South Station (connections to MBTA, Amtrak and numerous other bus lines) and Logan International Airport in Boston (with a stop at the park and ride lot in New London, NH) with eight round trips per day. Dartmouth Coach also operates between Hanover/Lebanon, NH and New York City once a day. This service operates express, with no stops, and utilizes the curb in front of the Yale Club (near Grand Central Station) as its New York City terminal. Dartmouth Coach is owned by Concord Coach of New Hampshire, and Concord Coach also operates a daily service between Littleton, New Hampshire and Boston, with numerous stops. Vermonters living in the St. Johnsbury area can use this service to reach New Hampshire points and Boston.

All of these firms, including those serving Vermont directly (Greyhound Lines and Yankee Trails) are private, for-profit entities. All operating and capital costs of the Vermont services are paid from the farebox, as Vermont does not currently provide any type of financial assistance. In 2003-4 VTrans provided Vermont Transit with Federal Section 5309 capital for an accessible over-the-road-bus (OTRB), ostensibly in return for continued service on rural routes. Vermont Transit Lines, which was a wholly-owned subsidiary of Greyhound Lines, has been completely merged into Greyhound, and the route coverage substantially reduced with the national restructuring of Greyhound routes. In 2005-6 the rural services ended and the remaining state/federal interest in the OTRB was purchased by Greyhound. Since that time there has been no funding provided for rural intercity bus service, though it should be noted that annual applications are sent to the identified intercity carriers. Also, in-state commuter bus services are operated by various transit providers in the State and serve some travel needs between towns.

Exhibit 2-3

About Us
Travel Packages
Bus Charters
Cruise Express
Hoosick Falls Line Run
Gift Cards
Request A Quote
Policy
Search for Tours

HOOSICK FALLS LINE RUN SCHEDULE

Hoosick Falls/Bennington, VT Line Run Schedule
PLEASE NOTE: OPERATING MONDAY-FRIDAY ONLY
(Does NOT run on Saturday, Sunday OR State Holidays)
MAIN POINTS OF DEPARTURE
Bennington, VT: School Street & Route 9 (Northwest Corner of Intersection)
Hoosick Falls: Woods Memorial Park in front of the Police Station
Troy Terminal: Corner of Third & Ferry Street
Albany Terminal: Greyhound Bus Terminal, Corner of Dallius & Hamilton
(NOT inside Greyhound Bus Terminal)

Click HERE for prices.
(times/prices as of September 2, 2010)

Departure Time	Leaving From	Departure Time	Leaving From
6:45am	Hoosick Falls	5:15pm	Albany Greyhound
7:00am	Potter Hill	5:25pm	Albany State Plaza
7:02am	Boyntonville	5:35pm	Menands
7:05am	Pittstown	5:40pm	Watervliet
7:15am	Raymertown	5:50pm	Troy Terminal
7:20am	Haynerville	6:00pm	Sycaway
7:25am	Center Brunswick	6:05pm	Center Brunswick
7:30am	Sycaway	6:15pm	Haynersville
7:40am	Troy Terminal	6:20pm	Raymertown
7:45am	Watervliet	6:25pm	Pittstown
7:50am	Menands	6:30pm	Boyntonville
8:05am	Albany-State Plaza	6:35pm	Potter Hill
8:10am	Albany Greyhound	6:40pm	Hoosick Falls
		6:55pm	Hoosick
		7:15pm	Old Bennington
		7:20pm	Bennington, VT
9:10am	Albany Greyhound	7:25pm	Bennington, VT
9:20am	Menands	7:27pm	Old Bennington
9:25am	Watervliet	7:40pm	Hoosick
9:30am	Troy Terminal	7:50pm	Hoosick Falls
9:35am	Sycaway	8:00pm	Potter Hill
9:40am	Center Brunswick	8:05pm	Boyntonville
9:45am	Haynersville	8:10pm	Pittstown
9:50am	Raymertown	8:15pm	Raymertown
9:55am	Pittstown	8:20pm	Haynersville
10:00am	Boyntonville	8:25pm	Center Brunswick
10:05am	Potter Hill	8:30pm	Sycaway
10:10am	Hoosick Falls	8:40pm	Troy Terminal
10:40am	Hoosick	8:45pm	Watervliet
10:45am	Old Bennington	8:50pm	Menands
10:50am	Bennington, VT	9:05pm	Albany Greyhound
11:05am	Bennington, VT		
11:10am	Old Bennington		
11:20am	Hoosick		
11:30am	Hoosick Falls		
11:45am	Potter Hill		
11:50am	Boyntonville		
11:55am	Pittstown		
12:00pm	Raymertown		
12:05pm	Haynerville		
12:10pm	Center Brunswick		
12:15pm	Sycaway		
12:25pm	Troy Terminal		
12:30pm	Watervliet		
12:35pm	Menands		
12:50pm	Albany Greyhound		

Top

Prices

Line Run	Bennington	Hoosick	Hoosick Falls	Potter Hill	Boyntonville	Pittstown	Raymertown	Haynerville	Center Brunswick	Sycaway
Bennington	-	$0.75	$1.10	$1.50	$1.50	$2.50	$2.50	$2.50	$2.85	$2.85
Hoosick	$0.75	-	$0.75	$1.10	$1.10	$1.50	$1.50	$1.50	$2.50	$2.50
Hoosick Falls	$1.10	$0.75	-	$0.75	$1.10	$1.50	$1.50	$1.50	$2.50	$2.50
Potter Hill	$1.50	$1.10	$0.75	-	$0.75	$1.10	$1.10	$1.10	$1.50	$1.50
Boyntonville	$1.50	$1.10	$1.10	$0.75		$0.75	$1.10	$1.10	$1.50	$1.50
Pittstown	$2.50	$1.50	$1.50	$1.10	$0.75	-	$0.75	$0.75	$1.10	$1.10
Raymertown	$2.50	$1.50	$1.50	$1.10	$1.10	$0.75	-	$0.75	$1.10	$1.10
Haynerville	$2.50	$1.50	$1.50	$1.10	$1.10	$0.75	$0.75	-	$0.75	$1.10
Center Brunswick	$2.85	$2.50	$2.50	$1.50	$1.50	$1.10	$1.10	$0.75		$0.75
Sycaway	$2.85	$2.50	$2.50	$1.50	$1.50	$1.10	$1.10	$1.10	$0.75	-
Troy	$2.85	$2.50	$2.50	$1.50	$1.50	$1.10	$1.10	$1.10	$0.75	-
Watervliet	$4.00	$2.85	$2.85	$2.50	$2.50	$1.50	$1.50	$1.50	$1.10	$1.10
Menands	$4.00	$2.85	$2.85	$2.50	$2.50	$1.50	$1.50	$1.50	$1.10	$1.10
Albany	$4.00	$2.85	$2.85	$2.50	$2.50	$1.50	$1.50	$1.50	$1.10	$1.10

IMPACTS OF THE LOSS OF RURAL INTERCITY BUS SERVICE

It should be noted that there are now only six places in Vermont with intercity bus service, which is a substantial decline from the 55 points with service identified in the 1998 *Vermont Statewide Intercity Bus Study.* Exhibit 2-4 depicts the intercity bus and rail network available to Vermont at the time of the previous study. Table 2-2 lists the points that have lost intercity bus service since that study.

Greyhound Lines purchased Vermont Transit in 1975, and the firm became a fully-owned subsidiary of Greyhound Lines[1]. However, its management remained independent, and the firm was run as a separate company, with its own cost structure, maintenance facilities, employees and agents. Vermont Transit had lower operating costs than the parent firm, and this fact enabled the firm to continue operating many lightly-used rural/small town routes. Despite this, in September 2005 the national restructuring of Greyhound services resulted in the discontinuation of all Vermont Transit service in the Route 7 corridor; the Route 103 corridor from Rutland through Ludlow and Springfield; and the Newport to White River Junction route. Subsequently, in 2008 the remaining daily round-trip between Rutland and White River Junction was discontinued, leaving Rutland with no intercity bus service.

The loss of the Newport-White River Junction service was not surprising, because it carried few riders, had no through ridership, and incurred costs (driver lodgings, etc.) resulting from overnighting a bus in Newport. However, the loss of the Route 7 corridor on the western side of the state, particularly service from Burlington to Albany via Rutland and Bennington, was more significant. The frequency had been two round-trips per day, there were connections in Rutland to White River Junction (connecting to buses to Boston and New York) and to Bellows Falls/Brattleboro (and on to Boston) with connecting service to New York. All of these connections disappeared with the restructuring, and currently Middlebury, Rutland, Manchester, Springfield and Newport have no intercity bus connection.

To some extent these connections have been replaced with other services, including state-supported Amtrak services on two routes, and significantly increased availability of regional connections provided by the public transit operators. These alternatives are discussed below. Other types of providers such as Middlebury Transit have arisen to provide a different type of intercity transportation, offering advance-reservation ground transportation service (at higher fares than typical intercity bus fares) to airports and

[1] In 2008, following the purchase of Greyhound by First Group of the United Kingdom, Vermont Transit (along with Carolina Coach and Texas, New Mexico, & Oklahoma Stage Lines) was consolidated into Greyhound.

Table 2-2: Comparison of 1996 and 2011 Vermont Intercity Bus and Rail Service Points

Service Point	Full Bus Agency (1)	Amtrak Service	1996 Timetable Number (3)	1996 Frequency (Daily Service, Each Way)	2011 Timetable Number (3)	2011 Frequency (Daily Service, Each Way)
Arlington			1986	3 Scheduled plus (4) 1 Discharge Only		None
Ascutney	Yes		1995	7 Scheduled		None
Barnet			1997	1 Scheduled plus 1 Discharge Only		None
Barton	Yes		1997	2 Scheduled		None
Bellows Falls	Yes	Yes	1990	4 Scheduled		None
			1995	8 Scheduled	67	2 Scheduled
			Amtrak-Rail	2 Scheduled		2 Scheduled
			Amtrak-Bus	1 Receive only, 1 Discharge Only		None
Bennington	Yes		1986	6 Scheduled	Yankee Tr.	2 Scheduled
			Bonanza-2042	6 Scheduled		None
Bradford			1997	2 Scheduled		None
Brandon	Yes		1986	6 Scheduled		None
		Yes	Amtrak-Bus	2 Scheduled		None
Brattleboro	Yes	Yes	1990	4 Scheduled		None
			1995	9 Scheduled	67	2 Scheduled
			Amtrak-Rail	2 Scheduled		2 Scheduled
			Amtrak-Bus	1 Receive only, 1 Discharge Only		None
Bridgewater			2001	2 Flagstops (5)		None
Burlington	Yes		1986	6 Scheduled		None
			1987	10 Scheduled	62	8 Scheduled
		Yes	Amtrak-Bus	2 Scheduled		None
Burlington-Essex Junctio		Yes	Amtrak	2 Scheduled		2 Scheduled
Charlotte			1986	6 Flag stops		None
Cuttingsville			1990	4 Flag stops		None
Danby			1986	6 Highway Stops (6)		None
East Dorset			1986	6 Highway Stops		None
East Wallingford			1990	4 Highway Stops		None
Equinox House			1986	3 Flag stops plus 1 Discharge Only		None
Fairlee	Yes		1997	2 Scheduled		None
Long Trail Lodge			2001	2 Flag stops		None
Ludlow	Yes		1990	4 Scheduled		None
Lyndonville	Yes		1997	2 Scheduled		None
Manchester	Yes		1986	6 Scheduled		None
Middlebury	Yes		1986	6 Scheduled		None
		Yes	Amtrak-Bus	2 Scheduled		None
Middlebury College			1986	3 Discharge Only		None
Montpelier	Yes	Yes	1987	9 Scheduled	62	8 Scheduled
New Haven Junction			1986	6 Flag Stops		None
Newport	Yes		1997	2 Scheduled		None
North Clarendon			1986	6 Highway Stops		None
			1990	4 Highway Stops		None
Orleans			1997	1 Highway Stop		None
Proctorsville			1990	4 Highway Stops		None
Quechee			2001	2 Flag Stops		None
Randolph		Yes	Amtrak	2 Scheduled Stops		2 Scheduled
Randolph Center	Yes		1987	3 Scheduled Stops		None
Rutland	Yes	Yes	1986	6 Scheduled Stops		None
			1987	7 Scheduled Stops		None
Rutland (continued)			2001	4 Scheduled Stops		None
			Amtrak	2 Scheduled Stops		2 Scheduled
		Yes	Amtrak-Bus	2 Scheduled		None
Shelburne			1986	1 Scheduled plus 5 Flag Stops		None
Sherburne	Yes(2)		2001	4 Scheduled Stops		None
South Shaftsbury			1986	1 Scheduled, 1 Flag, 1 Discharge Only		None
South Wallingford			1986	6 flag stops		None
St. Alban's		Yes	Amtrak	2 Scheduled		None
Springfield	Yes		1990	4 Scheduled		None
St. Johnsbury	Yes		1997	2 Scheduled		None

Table 2-2: Comparison of 1996 and 2011 Vermont Intercity Bus and Rail Service Points

Service Point	Full Bus Agency (1)	Amtrak Service	1996 Timetable Number (3)	1996 Frequency (Daily Service, Each Way)	2011 Timetable Number (3)	2011 Frequency (Daily Service, Each Way)
St. Michael's College			1986	2 Scheduled (Discharge-Sundays)		None
Taftsville			2001	2-flagstops		None
Trinity College			1986	2 Scheduled (Discharge-Sundays)		None
Vergennes	Yes		1986	5 Scheduled, 1 Flag Stop		None
		Yes	Amtrak-Bus	2 Scheduled		None
University of Vermont			1986	2 Scheduled (Discharge-Sundays)		2 Scheduled
Wallingford	Yes		1986	5 Scheduled, 1 Flag Stop		None
Waterbury	Yes		1987	4 Scheduled, 2 Discharge Only		None
Waterbury-Stowe		Yes	Amtrak	2 Scheduled		2 Scheduled
Wells River	Yes		1997	2 Scheduled		None
West Bridgewater			2001	2 Flag Stops		None
White River Junction	Yes		1987	12 Scheduled	62	8 Scheduled
			1995	10 Scheduled	67	2 Scheduled
			2001	4 Scheduled		None
			1997	2 Scheduled		None
			Amtrak-Rail	2 Scheduled		2 Scheduled
			Amtrak-Bus	1 Receive Only, 1 Discharge Only		None
Windsor-Mt. Ascutney		Yes	Amtrak	2 Scheduled		2 Scheduled
Woodstock	Yes		2001	4 Scheduled		None

(1) Full service bus agency sells passenger tickets and accepts bus package express.
(2) Handles tickets only.
(3) Timetable numbers from Russell's Guide.
(4) Scheduled service is defined as being shown in the timetable as stopping at a particular time to discharge and receive passengers.
(5) At flagstops buses will stop only on signal to pick up or dropoff passengers.
(6) At a highway stop - buses do not go into town or to an agency to pick up or dropoff passengers.

train stations. But for most of Vermont there has been a significant reduction in intercity bus services—in terms of coverage, frequency and connectivity.

INTERCITY PASSENGER RAIL

Although there are differences in the user and trip characteristics of intercity bus and rail, rail passenger service also provides a surface, non-auto transit mode which may be considered to address many of the same travel needs. The map in Figure 2-1 also presents the routes of the two Amtrak lines that currently serve Vermont. The *Ethan Allen Express* provides daily service, one roundtrip a day, from New York, NY to Rutland, VT by way of Albany, NY. This train service also stops in Castleton, VT, and motor coach connections are available to Killington and Okemo ski resorts during the ski season. The *Vermonter* provides a single daily service from Washington, D.C. to St. Albans, VT, offering connections to Baltimore, Philadelphia, and New York. One southbound and one northbound trip are provided each day. The other stops within Vermont include Essex Junction, Waterbury, Montpelier, Randolph, White River Junction, Windsor, Bellows Falls, and Brattleboro. Both train services are financed primarily through funding from VTrans.

REGIONAL TRANSIT CONNECTIONS

Since the 2007 PTPP, there has been a growth of regional commuter services for both year-round and seasonal workers. Commuter routes that extend beyond the traditional areas service by each of the operators and seasonal connections currently include:

- Addison County Transit Resources (ACTR) extends into Chittenden and Rutland Counties with commuter services. Rutland to Middlebury is operated jointly with Marble Valley Regional Transit District (MVRTD) (partially as a replacement for town-to-town service and access formerly provided by the Vermont Transit route that was discontinued in the Western Corridor), and Middlebury to Burlington is operated jointly with Chittenden County Transportation Authority (CCTA).

- MVRTD offers regional services from Rutland into Middlebury, Manchester, Bellows Falls, Ludlow, and Fair Haven. It also has a seasonal route to Killington, primarily for workers.

- Connecticut River Transit (CRT) has a number of commuter routes that connect to other transit systems: the Rockingham – Lebanon route

(connecting to AT and Stagecoach Transportation Services (STSI)) and the Bellows Falls- Brattleboro (connecting with Deerfield Valley Transit Association DVTA)). The system also has a seasonal service to Okemo Mountain Resort and connects to Amtrak in Bellow Falls (Upper Valley Commuter Route).

- DVTA extends beyond its service area to Brattleboro and has a seasonal route to Mt. Snow.

- Green Mountain Community Network (GMCN)/GMX connects to MVRTD to cover the Route 7 corridor from Bennington to Rutland, and for out-of state travel it links to Peter Pan Bus Lines in Williamstown, Massachusetts (service to New York).

- Rural Community Transportation (RCT) has service on Route 2 from St. Johnsbury to Montpelier where a passenger could connect to Amtrak or Greyhound. This is operated in conjunction with Green Mountain Transit Agency (GMTA).

- STSI operates two commuter routes along the I-89 and I-91 corridors into the employment centers of White River Junction and Lebanon and Hanover, NH.

- CCTA operates the LINK Express commuter services between Burlington, Waterbury, and Montpelier to the east, Middlebury to the south, and to adjacent counties.

- Advance Transit (AT) provides commuter service to Enfield and Canaan, New Hampshire. Through the Upper Valley Transportation Management Association (UVTMA), AT coordinates with Stagecoach Transit Services and CRT in Vermont and Community Transportation Services in New Hampshire to provide information on public transit and promote connections between transit systems in the region. AT also promotes intermodal transportation with connections to Amtrak, Greyhound, and Dartmouth Coach.

For the most part these services have been established under the State's New Starts program, using Congestion Mitigation and Air Quality Improvement Program (CMAQ) funding which provides operating assistance for three years. In general, these services have been designed based on identification of significant long-distance commuter patterns, focusing on attracting "choice" riders who may have a private vehicle option. Ridership on most of the services has grown rapidly (one, the route from White River Junction to St. Johnsbury was discontinued due to poor performance), and led to calls for increased park and ride lot capacity.

Some of these services (and other local transit routes as well) have been scheduled to provide some practical connections with less than two-hour wait times, and some less than one hour, to and from intercity bus services. For example, GMCN's Red Line offers a connection to Yankee Trails service toward Albany each weekday (a second connection is possible, but requires a 2.5-hour wait), providing the opportunity for a day trip to Albany.[2] GMCN's Orange Line provides two connections in Williamstown, MA to Peter Pan Bus Lines' services toward New York and Boston Logan International Airport Monday through Friday. AT's Green Route connects to Dartmouth Coach in Hanover, NH and provides six connections each weekday to Boston South Station and Logan International Airport, with two possible connections for the return trip in Hanover; as well as eight connections to New York City during the week, with one return trip connection available per weekday. Vermont's local operators facilitate these inter-state connections by providing schedule information and highlighting connection points on their websites and brochures.

However, even if a number of transit systems connect to the remaining intercity bus (and rail) service, it is not clear that they are a substitute for the intercity bus services that once existed. The Section 45 study on Regional Connectivity looked at intra-state connections in terms of both possibility and "practicality". The definition of practical public transit trip was that it would take no longer then two times as long as it would be to drive, and require no more than two transfers among vehicles. It found that route connections exist among most of the State's populated towns and cities (with the exception of the Northeast Kingdom) but that the set of practical connections was limited. The area of the state most disconnected from the intra-state transit fixed-route network is the Northeast Kingdom. Also it found that a trip from Burlington to Bennington is possible, but is not very practical requiring three transfers and most of a day. Since then a Route 2, St. Johnsbury to Montpelier, service has been instituted, which also allows for travel between St. Johnsbury and Burlington via connections with CCTA/GMTA LINK Express.

CONCLUSIONS

It should be noted that there are significant differences in the trip purposes and potential destinations between the regional commuter services and the intercity services. Intercity services in Vermont, both passenger rail and intercity bus, have long been routed and scheduled to pick up passengers in Vermont towns and cities and transport them to major destinations outside the State. Even the 1998 Vermont intercity

[2] However, the rider would need alternative local transportation in Bennington on the return trip, since Red Line service ends at 5:00 p.m. and Yankee Trails arrives back from Albany to Bennington at 7:20 p.m. This bus trip also takes about twice the time that driving would, but still offers an option for those unable to drive.

bus study noted that most of the services then existing were designed mainly to provide for departures toward Albany, New York City, and Boston in the morning, with return trips arriving late in the day (continuing on to Montreal in some cases). The ability of a resident of Bennington or Brattleboro (or even Rutland) to travel north to Montpelier or Burlington and return the same day was very limited if it existed at all.

Needs for intrastate trips have largely been addressed by the transit providers within their service regions, and more recently the regional commuters have addressed this for trip lengths that could be served effectively on schedules allowing for a day in the destination city (there are still some gaps in meeting this need, such as the inability to make a day trip from Rutland to Burlington and back on the regional services). Intercity trips are typically taken for family or social reasons, rather than as business trips or work commutes, and the riders are generally infrequent users. However, the riders value the ability to make these trips, as can be seen in the fact that most intercity services are able to charge fares that cover the full cost of the trip.

Given the losses of intercity bus service, how much of Vermont has intercity access? The recently released U.S. DOT study "The U.S. Rural Population and Scheduled Intercity Transportation in 2010: a Five-Year Decline in Transportation Access" measured access by looking at the population within a 25-mile radius of a small or non-hub commercial service airport, bus station, ferry terminal, or rail station; or within a 75-mile radius of a medium- or large-hub airport. It found that the percentage of Vermont's rural (non-urbanized) population with access to intercity bus service declined from 99.8% in 2005 to 78.8% in 2010 (largely as a result of the Greyhound/Vermont Transit restructuring). Vermont's two daily Amtrak trains to New York City provide access to 83.6% of the rural population, according to the same study. The rural areas of Vermont that have access only to intercity bus (but not rail or air service) include only 6.5% of the rural population, meaning that there is significant overlap of the current bus service origin areas with those of intercity rail and air. Additional intercity bus route coverage in rural areas would be needed to reach the populations not already served.

The importance of documenting the loss of access is related to the federal funding programs that provide for intercity bus service assistance in rural areas, as can be seen in Chapter 4.

Chapter 3

Analysis of Intercity Bus Service Needs

Demographic and economic characteristics of the population are key factors that highlight the locations that have a concentration of potential need for public transit services, either because of the characteristics of the population, the overall size of the population, or the density of the population. In addition, some places are likely to have a need for intercity bus service because a major activity attracts persons from distant locations. These places may have colleges and universities, military bases, major regional medical facilities, and state or federal correctional facilities (both for visitors and release of inmates). In this chapter both demographics and major trip generators are identified.

DEMOGRAPHIC ANALYSIS OF INTERCITY BUS NEEDS

This analysis identifies the location of population segments that tend to be more dependent on intercity bus services, and compares these areas to the existing intercity bus network to determine gaps where service might be expanded or new services implemented. It is very similar to the analysis for public transit generally, except that it also includes the 18 to 24 year old population segment that forms a major portion of intercity bus ridership. At that age many persons are traveling to and from higher educational institutions or military bases; they are more likely to be traveling alone and to not have a vehicle available, both factors that increase bus usage. After reviewing transit-dependent populations individually, a combined analysis of the density of these populations indicates areas that may have higher potential needs for intercity bus service. The methodology for the demographic analysis is described below.

Methodology

The demographic analysis examined five potentially transit-dependent population segments:

- **Older Adults** – Persons age 65 and above. This group may include those who either choose not to drive any longer, have previously relied on a spouse for mobility, or because of factors associated with age can no longer drive;

- **Persons with disabilities** – Persons age 16 and over who have a disability lasting six months or more that makes leaving the home alone for simple trips such as shopping and medical visits difficult for them;

- **Low-income residents –** Persons living below the poverty level who may not have the economic means to either purchase or maintain a personal vehicle; and

- **Autoless households** – Number of households without an automobile. One, if not the most, significant factor in determining transit needs is the lack of an available automobile for members of a household to use.

- **Young Adults -** Persons 18 to 24 years of age. This group may include persons who do not a vehicle available for the trip, cannot have a vehicle at the destination, or have chosen not to use private vehicles.

The most recent data available for these population segments were collected from 2010 Nielson Claritas data, where available, or 2000 Census data.[1] The data was collected at the Census Block Group level to provide more geographic detail regarding potential transit needs across the State. The 2000 Census data was also adjusted by the statewide population increase from 2000 to 2010 to better approximate the current demographic distribution.

The first step in the analysis was using GIS ArcMap to map the densities of these individual population segments, in persons per square mile. The densities of potentially transit-dependent populations are a good indicator of the type of transit service that may be most feasible in an area. For example, fixed-route transit service is often prioritized for areas that contain higher densities of potentially transit-dependent persons, while demand response service is more feasible for low or moderate density areas. In addition, current intercity bus services including those provided in-State by Greyhound Lines and Yankee Trails and nearby opportunities for connections in New Hampshire and Massachusetts were included in the demographic maps.

The second step of the demographic assessment involved a combined analysis, where the data for the five population segments above were summarized by Census Block Group. Each Block Group was ranked, relative to the other Block Groups across

[1] The data for persons with disabilities and low-income residents were not available with the 2010 Nielson Claritas dataset, so 2000 Census data was used.

the State, by potential need for intercity bus service (i.e., a Block Group with greater densities of older adults, persons with disabilities, low-income residents, autoless households, and young adults ranked higher than another Block Group with smaller densities of these populations). Analyzing the densities of these population segments helped identify service gaps and the types of transit service that may be most appropriate for those areas.[2]

The summary density rankings for transit-dependent persons, per Block Group, were divided into natural breaks representing ranges of high, moderate, and low relative need. The results for the individual analyses of the potentially transit-dependent population segments and the combined analysis are described below.

It should be noted that this methodology focused mainly on the likely ridership for "traditional" intercity bus services, persons with higher transportation need characteristics who are also likely to need local public transit. Potential "choice" riders of intercity bus service are not captured through this demographic analysis because quantifying such demand is difficult, and public input is often a more feasible approach for collecting and analyzing data about choice markets. Young adults may be the exception, in representing both potentially transit-dependent riders and choice riders, because this age group constitutes a large portion of riders that choose to use "curbside" intercity bus services, described in more detail in Chapter 5.

Potentially Transit-Dependent Populations

Burlington is the State's only urbanized area and has the highest population densities including numbers of transit-dependent persons per square mile. Since this demographic analysis focused on densities of potential intercity bus riders, the results repeatedly highlighted that Burlington and surrounding communities, including Colchester, Winooski, Essex Junction, and South Burlington, have high needs for intercity bus service. Burlington also has the highest level of intercity bus service in the State at six roundtrips daily.[3] The descriptions per transit-dependent population below then focus on other towns outside of Greater Burlington that may have high relative need for intercity bus service. Whether intercity service should connect these towns to Burlington or to each other will be determined through additional analysis of public

[2] The numbers of people in each category are not added together in each Block Group because the categories are not mutually exclusive. For example, an older adult could also have an income below the poverty level and/or have no automobile available to them for personal use. It should also be noted that "autoless households" refer to occupied housing units and not persons.

[3] Four roundtrips are provided by Greyhound, while two roundtrips are provided by Megabus with service to Boston, starting August 17, 2011. (Source: Megabus Website, **http://us.megabus.com/expandboston.aspx**)

input and potential ridership estimates for route concepts, provided through a rural intercity bus demand model.

Older Adults

Age is considered a potential indicator of the need for public transit services. As seniors grow older, many eventually lose their ability to drive. Public transit becomes an essential element in maintaining their quality of life and avoiding relocation to an assisted living facility or a nursing home. Figure 3-1 shows the number of older adults, age 65 and above, per square mile by Block Group according to the 2010 Nielson Claritas data. The areas with the highest concentrations of seniors include St. Albans, Barre-Montpelier, St. Johnsbury, Rutland, Bellows Falls, Brattleboro, and Bennington. St. Albans, St. Johnsbury, and Rutland lie outside the existing intercity bus network, and Barre residents need to drive or take the local GMTA bus about seven miles to access the Greyhound stop in Montpelier.

Additional towns with relatively high densities of older adults include Swanton, Enosburg Falls, Newport, Waterbury, Northfield, Vergennes, Middlebury, Randolph, White River Junction, Windsor, Ludlow, and Springfield. Only White River Junction is served by current intercity bus service and Amtrak, while Waterbury, Randolph, and White River Junction are also Amtrak stops. The other towns may be candidates for new stops on existing intercity bus routes or for stops on new routes.

Intercity service is important for older adults who travel for medical services, shopping, and visiting friends and family. Public transit services between Chittenden County and the rest of the State are primarily limited to weekday commuter routes, typically requiring very early morning or late afternoon (peak commuter) trips. Furthermore, some trips require multiple connections. New intercity bus connections, especially rural intercity service that serves smaller towns between the larger urban areas, provide an important transportation option for seniors.

Persons with Disabilities

Transit accessibility offers more enriched lives for people with disabilities who require accessible transportation for various trip purposes, from employment and medical treatment to shopping and social activities. Public transit including intercity bus service is an important option for individuals with disabilities, especially where they do not have the ability to drive themselves or lack access to a personal vehicle. Local economies also benefit from the availability of an expanded workforce and increased access to businesses and retail centers. Figure 3-2 highlights concentrations of people with disabilities throughout Vermont. To create this map, data from the 2000 Census were adjusted using the percent increase of the total statewide population between 2000 and 2010 according to Nielson Claritas data.

Figure 3-1: Older Adults (Age 65 and Above) Population Density

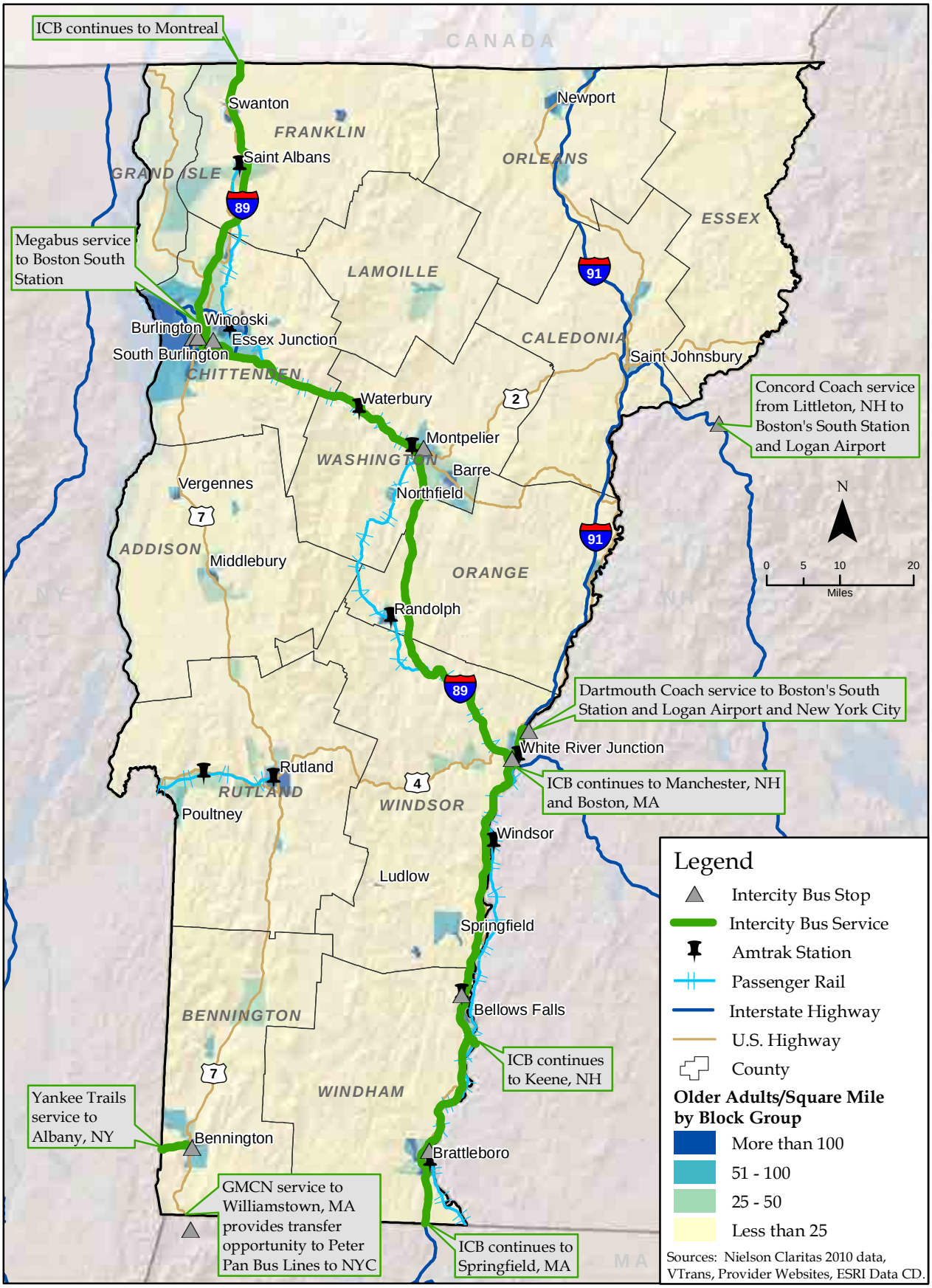
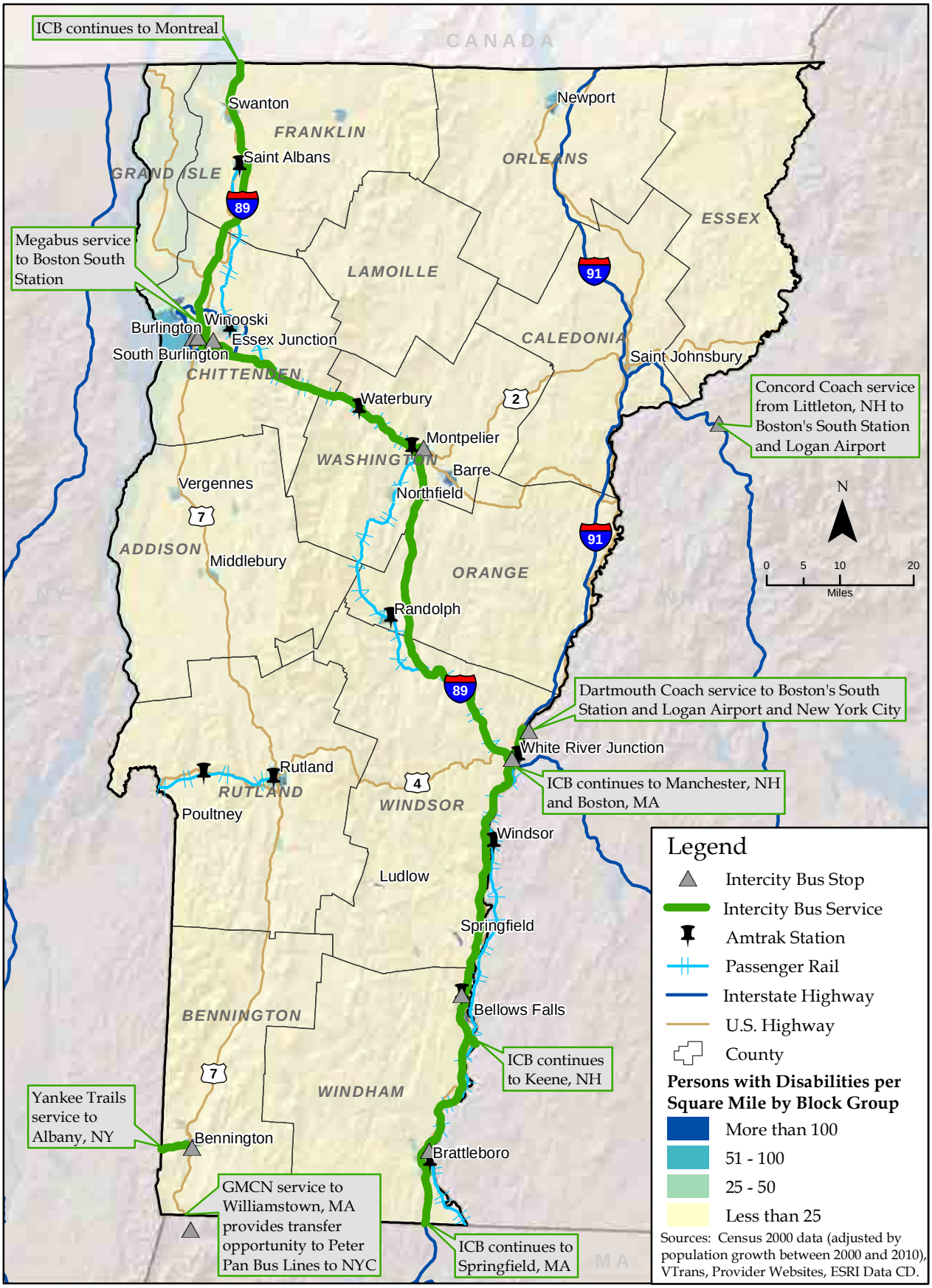


Figure 3-2: Persons with Disabilities (Age 16 and Above) Population Density



The concentrations of persons with disabilities correspond to the State's larger urban areas. The highest densities are found in St. Albans, Barre, Rutland, Bellows Falls, Brattleboro, and Bennington. Additional towns with relatively high need based on densities of persons with disabilities include Swanton, Newport, St. Johnsbury, Montpelier, White River Junction, Ludlow, and Springfield. Swanton, St. Albans, and Springfield lie along existing intercity bus routes, but are not currently served. St. Johnsbury is about 23 miles away from the intercity bus stop in Littleton, NH, while Newport and Ludlow have neither intercity bus nor passenger rail service.

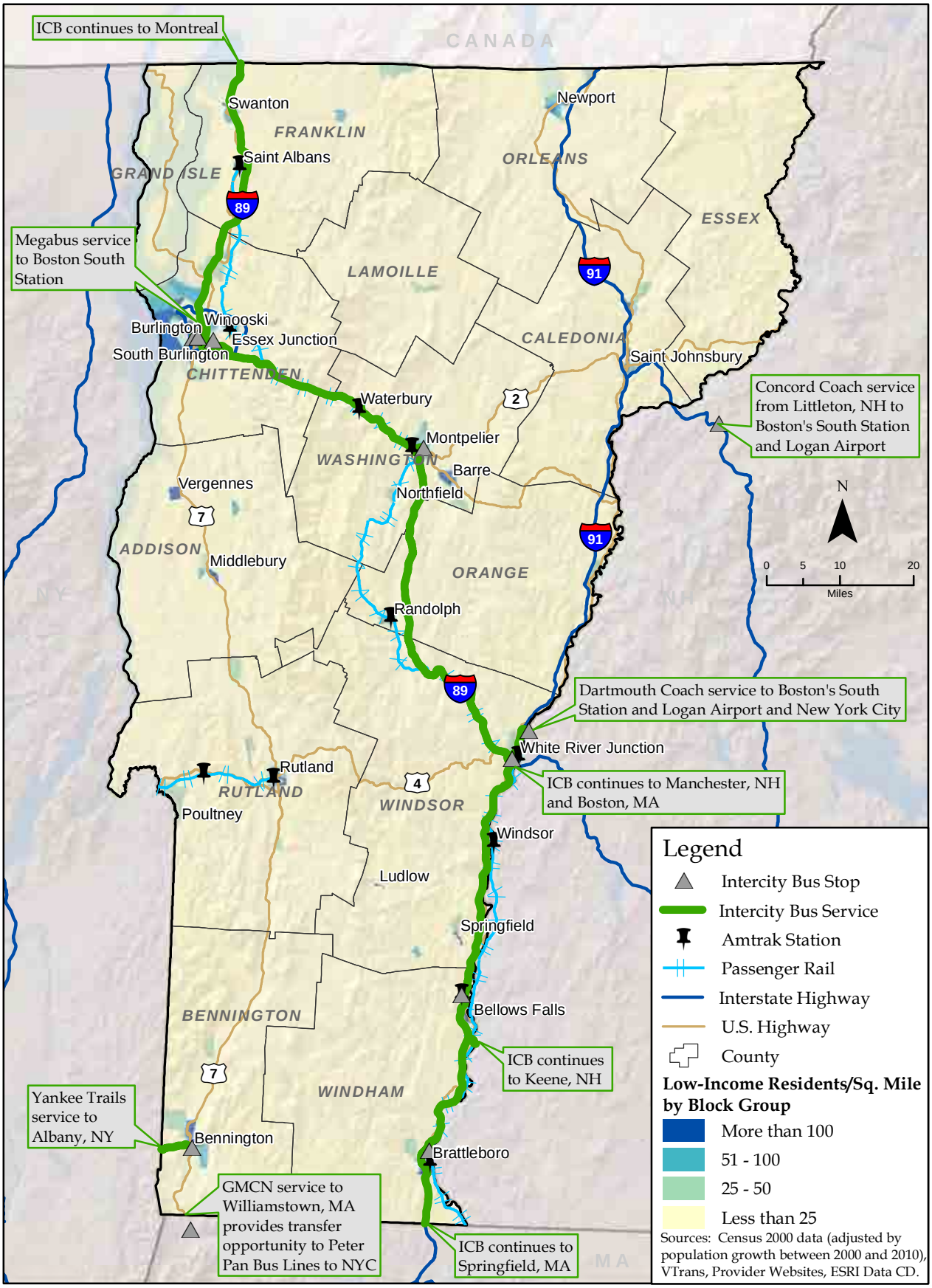
Low-Income Residents

Figure 3-3 considers an additional potential indicator for transit use – individuals living below the poverty line. Transportation costs put a tremendous strain on low-income household budgets. According to the Surface Transportation Policy Project's 2003 report, *Transportation Costs and the American Dream*, the poorest 20% of American households spend about 40% of their take-home pay on transportation.[4] For many low-income households, owning and maintaining a vehicle is necessary for travel to their workplace. Intercity bus could provide a more affordable transportation option for long-distance commutes, social visits, and shopping, especially where residents in rural areas need to access shopping and services only available in nearby urban areas. Figure 3-3 shows the number of individuals living below the poverty level per square mile in Vermont. To create this map, data from the 2000 Census were adjusted using the percent increase of the total statewide population between 2000 and 2010 according to Nielson Claritas data.

The highest concentrations of low-income residents are found in Barre, Rutland, Brattleboro, and Bennington, while St. Albans, St. Johnsbury, Montpelier, and Bellows Falls have the next highest densities. Of these higher need towns, St. Johnsbury, St. Albans, and Rutland currently have no intercity bus service, though St. Johnsbury residents are indirectly served by Concord Coach in Littleton, NH and the latter two towns are served by Amtrak. Barre is not directly served by intercity bus, but is located about seven miles from the Greyhound stop in Montpelier and local transit service is available to meet some Greyhound trips. Additional towns with relatively high densities of persons living below the poverty level include Swanton, Newport, Lyndon, Waterbury, Vergennes, Middlebury, White River Junction, Windsor, Ludlow, and Springfield. None of these towns, except for White River Junction, are served by the existing intercity bus network.

[4] The Surface Transportation Policy Project is a nationwide coalition of planners, community development organizations, and advocacy groups, which seeks to improve the national transportation system and promote safer communities.

Figure 3-3: Persons Living Below the Poverty Level Population Density



Autoless Households

The lack of a vehicle is a significant economic issue when households are not autoless by choice and public transit is unavailable. Vermont's major employment areas are regional in nature, and inter-town travel is required for many residents to reach employment sites. Members of autoless households also depend on transportation alternatives to access daily activities including medical services, educational opportunities, shopping, and social functions. Intercity bus can provide an important alternative to connect the urban areas in Vermont and to connect rural communities to the services and opportunities that may only be available in urban areas.

The number of autoless household per square mile is detailed in Figure 3-4. **(**Note that this part of the analysis considers households without cars, rather than individuals.) Outside of Burlington, Barre and Brattleboro have the highest densities of autoless households, followed by St. Johnsbury, Montpelier, Rutland, Bellows Falls, and Bennington. St. Johnsbury is the primary high need area that has neither intercity bus nor passenger rail service. (Barre is indirectly served by both modes in Montpelier.) The towns with high concentrations of autoless households have local transit service, which is important for residents looking to access intercity bus service. Local transit schedules and service hours should complement intercity bus trips to help Vermonters, especially those without access to a personal vehicle, travel the "first mile" or "last mile" of their trips.

Additional towns that have significant densities of autoless households include White River Junction, Newport, and Springfield. The latter two are not served by existing intercity bus service; Newport is particularly isolated from the intercity bus and passenger rail networks, while Springfield is located along a current Greyhound route.

Young Adults

Persons ages 18 to 24 constitute a notable portion of the intercity bus market. This group may include persons who do not have a vehicle available for the trip, cannot have a vehicle at the destination, or have chosen not to use private vehicles. This analysis examined the density of young adults across the State, shown in Figure 3-5 and found that (outside of Burlington) Rutland, Colchester, Bellows Falls, and Brattleboro have the highest densities of young adults. The latter two towns are currently served by one daily roundtrip between White River Junction and Springfield, MA. Colchester and Rutland do not have any intercity bus service, though Rutland is served by a daily roundtrip on Amtrak's Ethan Allen Express route.

Additional towns that have at least 100 young adults per square mile include Swanton, Saint Albans, Newport, Saint Johnsbury, Barre-Montpelier, Vergennes, Middlebury, Poultney, White River Junction, Windsor, Ludlow, Springfield, and

Figure 3-4: Density of Autoless Households

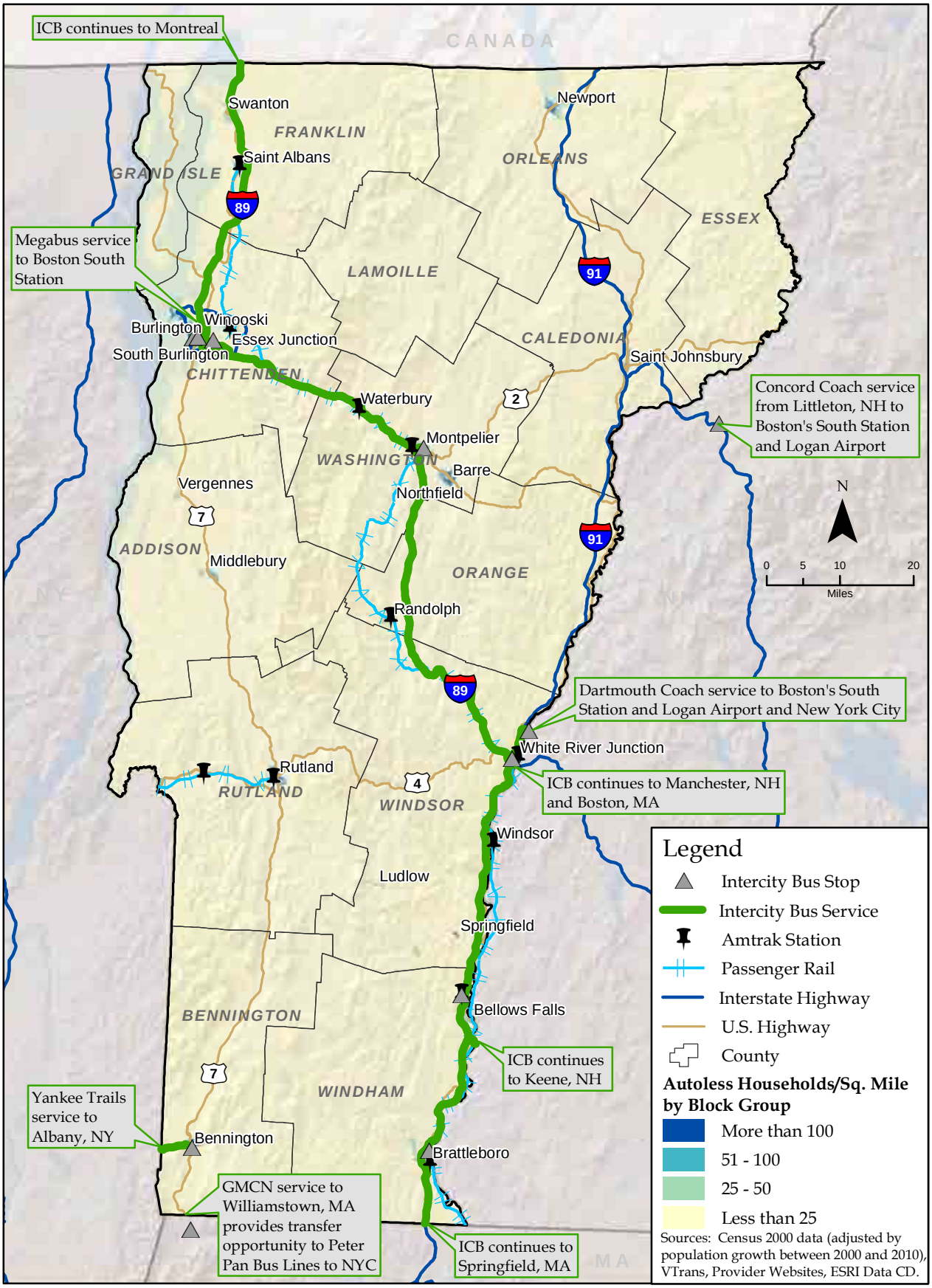
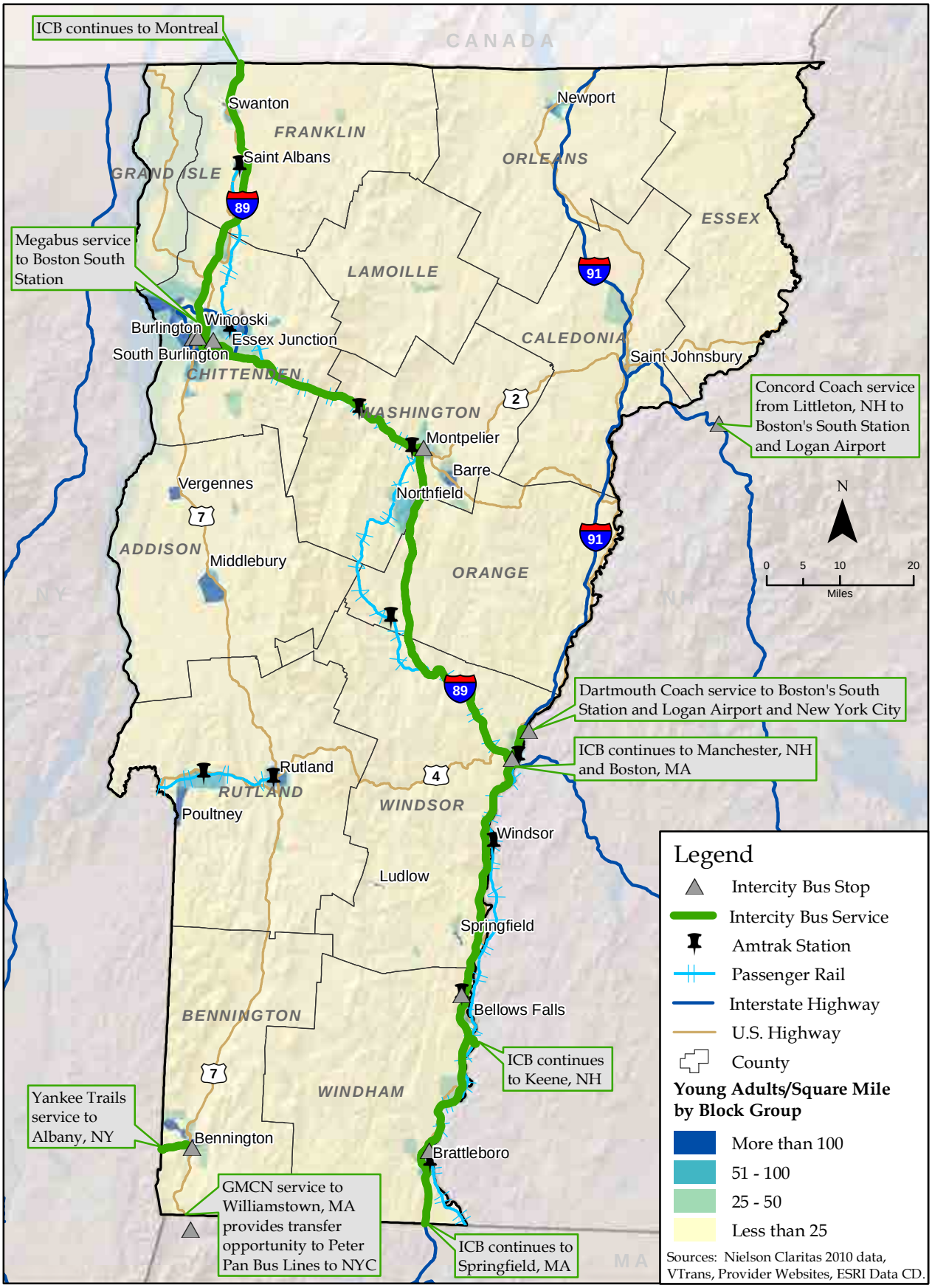


Figure 3-5: Young Adults (Ages 18-24) Population Density



Bennington. Many of these towns may have a density of young adults due to colleges, universities, or vocational schools; or nearby ski areas, such as Okemo Mountain near Ludlow and Ascutney Mountain near Windsor. These potential intercity bus destinations are discussed further below.

Combined Density Ranking of Transit-Dependent Populations

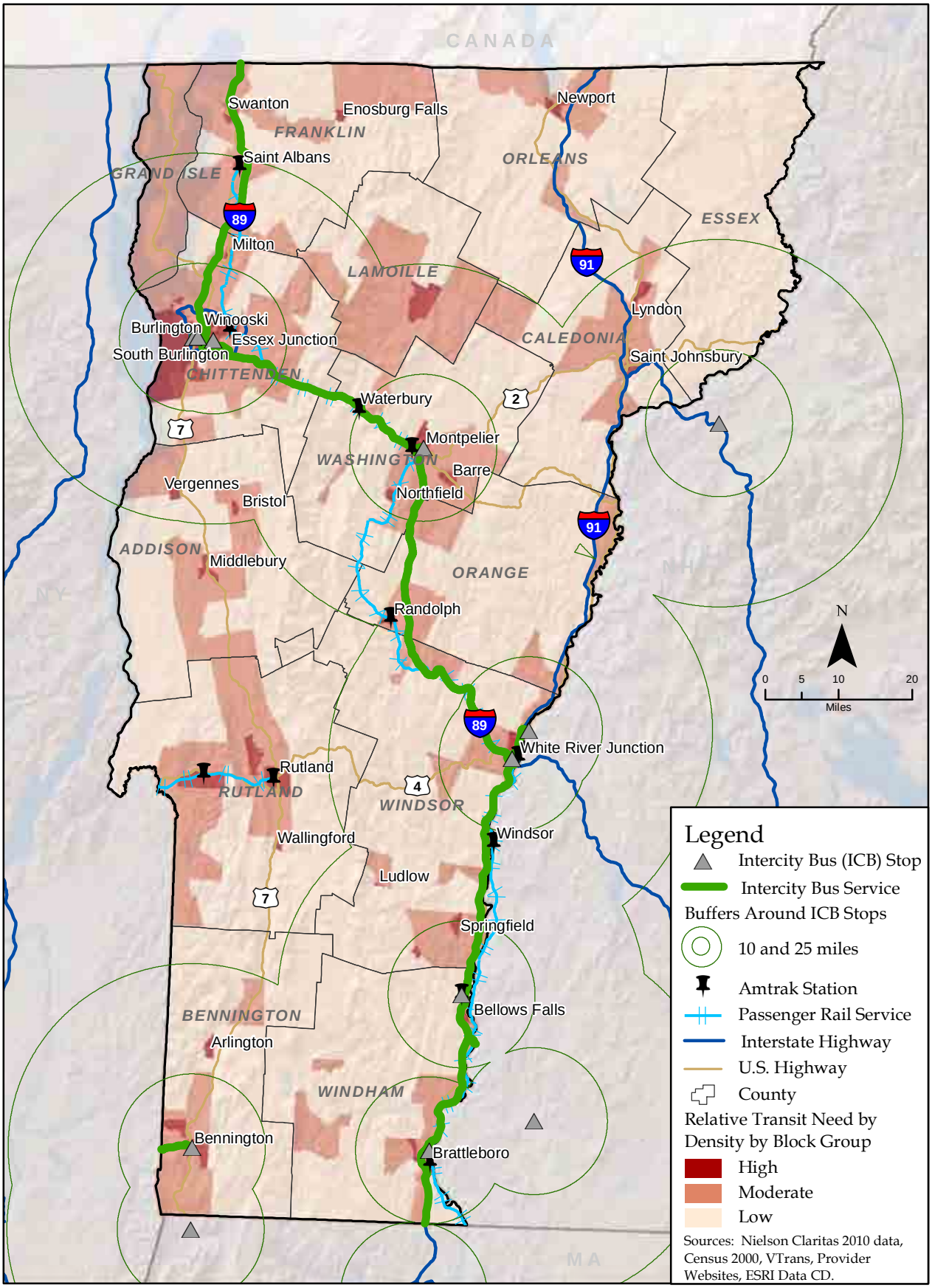
Figure 3-6 shows the relative levels of need for intercity bus service, by Block Group, based on the density of transit-dependent populations. 10- and 25-mile market areas were shown around the existing intercity bus stops to determine high need areas that currently have limited access to intercity bus services. The 10-mile buffer captured potential riders who have reasonably good and feasible access to the service, whether by local transit service, catching a ride with a friend or relative, or taking a taxi. The 25-mile buffer captured potential riders who have more limited access to intercity bus service, especially residents that live farther than 25 miles away. This analysis highlighted areas that have high concentrations of transit-dependent persons and are located more than ten miles from existing intercity bus stops.[5] The lists below include high need areas with populations of at least 2,500; these are unserved areas with rural intercity bus need that should be considered for potential service under the Section 5311(f) program.

The following towns have block groups with "High" concentrations of transit-dependent persons and are located more than 25 miles from an existing intercity bus stop: (The towns in bold ranked higher in potential needs.)

- **Swanton** – about 38 miles away from the Burlington stop
- **Newport** – about 65 miles away from the Montpelier stop
- **Rutland** – approximately 45 miles away from the White River Junction stop, 50 miles from the Bellows Falls stop, and 55 miles from the Bennington stop
- Morristown – approximately 30 miles to the Montpelier stop and 40 miles to the Burlington stop
- Lyndon – about 30 miles to the Littleton, NH stop and 44 miles away from the Montpelier stop
- Bristol – about 28 miles away from the Burlington stop
- Middlebury – about 36 miles away from the Burlington stop
- Randolph – about 27 miles to the Montpelier stop and 35 miles to the White River Junction stop
- Castleton – about 60 miles from the White River Junction stop and 65 miles from the Bennington stop

[5] Note that some high need areas in the map appear to lie within the 25-mile buffers, but the driving distance to the nearest intercity bus is actually farther. The analysis lists estimates of the actual driving distances, many of which were farther than they appear on the map.

Figure 3-6: Combined Density Ranking of Transit-Dependent Populations



Due to the greater distances that these high need areas are located from the current intercity bus network, these towns may be good candidates for entirely new routes, with the exception of Randolph, which lies along Greyhound's service in the I-89 corridor.

Located more than ten miles, but less than 25 miles away from an existing stop, the towns below also have "High" concentrations of transit-dependent persons and are good candidates for new or expanded intercity service because they lack local transit service that can regularly connect their residents to the intercity bus network: (The towns in bold ranked higher in potential needs.)

- **St. Albans** – nearly 25 miles away from the Burlington stop
- **St. Johnsbury** – about 23 miles away from the Littleton, NH stop or about 40 miles away from the Montpelier stop
- **Windsor** – about 14 miles away from the White River Junction stop
- Vergennes – about 25 miles away from the Burlington stop
- Springfield – about 14 miles to the Bellows Falls stop

While many of these towns have some level of local transit service, most are commuter routes that operate during peak periods and/or weekdays only, or riders need to transfer between two or more local transit routes to get to the intercity bus stop. A high number of transfers makes travel by transit less convenient and attractive, so these towns could be candidates for more direct service by a new or expanded intercity route.

Additional towns were also identified as high need based on the combined density ranking, but had populations less than 2,500 and may be less feasible as intercity bus stops: (Again, the towns in bold ranked higher in potential needs.)

- **Ludlow** – about 26 miles away from the Bellows Falls stop and about 40 miles away from the White River Junction stop
- Enosburg Falls – about 50 miles away from the Burlington stop
- Wallingford – about 45 miles away from the Bennington stop and 57 miles from the White River Junction stop
- **Waterbury** – about 10 miles away from the Montpelier stop and 25 miles away from the Burlington stop
- Milton – about 18 miles away from the Burlington stop
- Arlington – about 15 miles away from the Bennington stop

Major Destinations for Intercity Bus Service

Whereas the demographic analysis described above highlighted potential origin areas for intercity bus riders, major destinations in Vermont were also analyzed to determine potential "end" points that are common for intercity bus trips. Described further below, these destinations included colleges and universities, major medical centers, correctional facilities, ski resorts, and major intermodal connections at airports and rail stations. Military bases are another common trip generator for intercity bus services, but none are located in Vermont. This analysis also mapped the major destinations overlaid with existing intercity bus services and the 25-mile buffer around current stops to determine major destinations that may have limited access to the existing intercity bus network.

Educational Facilities

As discussed previously, a major segment of the intercity bus market is young adults, persons 18 to 24 years old. To some extent the ability of college students to use intercity bus services to make trips to and from home is a function of the location of their homes and the degree to which bus service comes close to home. Figure 3-7 indicates the locations of all two-year colleges and technical schools, four-year colleges and universities, and independent schools in Vermont in relation to the existing intercity bus network and the 10 mile- and 25 mile- service areas. Table 3-1 lists all these educational facilities, their locations, and student enrollment including undergraduate and graduate students, where available.

About half of the educational facilities included in this analysis, mainly the four-year colleges, offer student housing on or around campus. Community colleges and technical schools are generally commuter programs, though Vermont Technical College also offers a four-year undergraduate program with a residential component. Greater Burlington and Brattleboro have concentrations of educational facilities, and higher educational institutions are otherwise distributed throughout the State. The schools around Burlington are relatively well served by existing intercity bus service, especially with the addition of Megabus service to Boston, and Brattleboro schools are served by one daily roundtrip by Greyhound. Several colleges are located farther than 25 miles from current intercity bus stops: Johnson State College, Middlebury, and Castleton State College each have 2,000 or more students; while Green Mountain College, College of St. Joseph in Vermont, Sterling College, and the Community Colleges of Vermont in Newport, Middlebury, and Rutland are smaller schools. Eight other higher educational facilities were located between 10 and 25 miles from existing stops, but all had enrollments of 1,400 or less: Lyndon State College, Springfield College School of Human Services, Vermont Technical College in Randolph Center, Vermont Law School, Marlboro College, and the Community Colleges of Vermont in St. Albans, Morrisville, and St. Johnsbury.

Figure 3-7: Intercity Bus Destinations - Educational Facilities

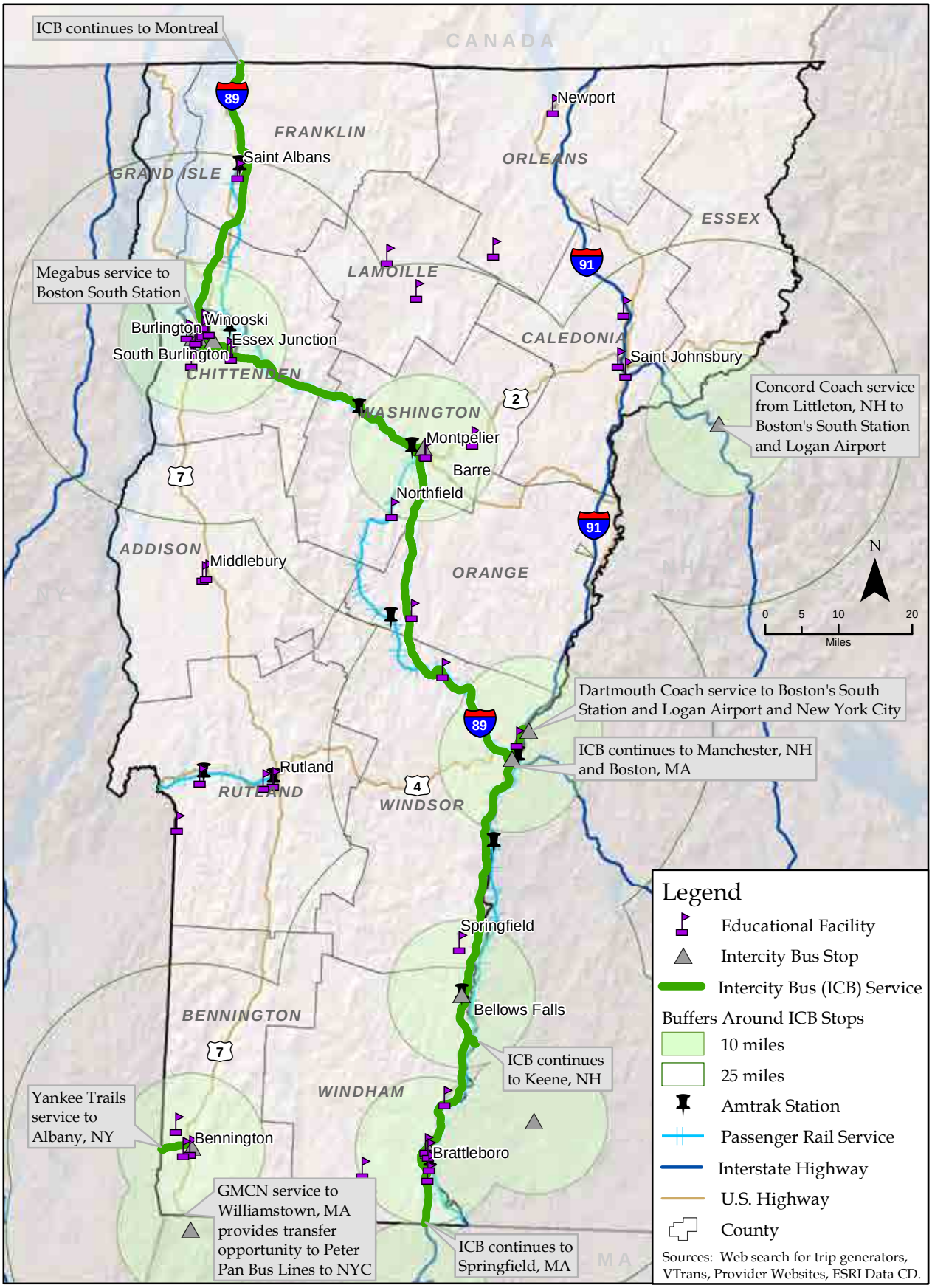


Table 3-1: Educational Facilities

Name	Address	Town/City	Zip Code	Enrollment
Bennington College	1 College Dr	Bennington	05201	811
Burlington College	351 North Ave	Burlington	05401	200
Castleton State College	86 Seminary St	Castleton	05735	2,215
Champlain College	163 S Willard St	Burlington	05401	2,000
College of St. Joseph in Vermont	71 Clement Rd	Rutland	05701	425
Goddard College	123 Pitkin Rd	Plainfield	05667	246
Green Mountain College	1 Brennan Circle	Poultney	05764	820
Johnson State College	337 College Hill Rd	Johnson	05656	2,000
Lyndon State College	1001 College Rd	Lyndonville	05851	1,436
Marlboro College	2582 South Rd	Marlboro	05344	330
Middlebury College	14 Old Chapel Rd	Middlebury	05753	2,450
Norwich University	158 Harmon Dr	Northfield	05663	3,300
Saint Michael's College	56 College Pkwy	Colchester	05446	2,700
School for International Training Graduate Institute	1 Kipling Rd	Brattleboro	05301	42
Southern Vermont College	982 Mansion Dr	Bennington	05201	500
University of Vermont	85 S Prospect St	Burlington	05405	13,568
Community College of Vermont - Bennington	324 Main St	Bennington	05201	7,000 at all locations and online
Community College of Vermont - Brattleboro	70 Landmark Hill	Brattleboro	05301	
Community College of Vermont - Middlebury	10 Merchants Row	Middlebury	05753	
Community College of Vermont - Montpelier	32 College St	Montpelier	05602	
Community College of Vermont - Morrisville	197 Harrell St	Morrisville	05661	-
Community College of Vermont - Newport	100 Main St	Newport	05855	-
Community College of Vermont - Rutland	24 Evelyn St	Rutland	05701	-
Community College of Vermont - St. Albans	142 S Main St	St. Albans	05478	-
Community College of Vermont - St. Johnsbury	1197 Main St	St. Johnsbury	05819	-
Community College of Vermont -Springfield	307 South St	Springfield	05156	-
Community College of Vermont -Upper Valley	145 Billings Farm Rd	White River Junction	05001	-
Community College of Vermont -Winooski	1 Abenaki Way	Winooski	05404	-
Landmark College	1 River Rd S	Putney	05346	490
New England Culinary Institute	56 College St	Montpelier	05602	500
Sterling College	16 Sterling Dr	Craftsbury Common	05827	125
Vermont College of Fine Arts	36 College St	Montpelier	05602	225
Vermont Law School	164 Chelsea St	South Royalton	05608	601
Vermont Technical College - Williston	201 Lawrence Place	Williston	05495	1340 Total
Vermont Technical College - Randolph Center	124 Admin Dr	Randolph Center	05061	-
Southern New Hampshire Univ. - Vermont Graduate Programs	463 Mountain View Dr	Colchester	05446	n/a
Fletcher Allen Health Care School of Cytotechnology	111 Colchester Ave	Burlington	05401	n/a
O'Briens Aveda Institute	1475 Shelburne Rd	South Burlington	05403	n/a
Springfield College School of Human Services	347 Emerson Falls Rd	St. Johnsbury	05819	n/a
The Salon Professional Academy	400 Cornerstone Dr	Williston	05495	n/a
Union Institute & University - Brattleboro Academic Center	3 University Way	Brattleboro	05301	n/a
Union Institute & University - Psy.D. Program	28 Vernon St	Brattleboro	05302	n/a
Union Institute & University - Montpelier Academic Center	62 Ridge St	Montpelier	05602	n/a

n/a = not available
Source: Consortium of Vermont Colleges Website, http://www.vtcolleges.org/#, and school websites

Major Medical Centers

Although medical trips make up a small percentage of intercity bus trips, the ability to make trips from rural areas and small towns to major medical facilities is often a policy consideration for maintaining bus services. It may be less of a consideration for patient transportation than for family and friends to visit, simply because most intercity services are not frequent enough to permit same-day outpatient visits. In addition, use of intercity bus services to provide regional medical trips requires a ride to and from the bus station at either end of the bus trip, adding to the cost, time, and physical effort required. However, in some states (for example Texas), long-distance medical trips under Medicaid do utilize intercity bus services. Employees at regional medical centers are another potential market for intercity bus services, though intercity bus schedules may not be conducive for commuter use.

Table 3-2 presents a list of all the hospitals and regional medical centers located in the State, including the number of beds per facility. These facilities are also displayed with the intercity bus network in Figure 3-8. Several medical centers are located along current intercity bus routes, though only seven are reasonably served by intercity bus taking into account that local transit, a ride with someone, or taxis must be used to access the medical center to and from the bus stop. Vermont's largest medical center, Fletcher Allen Health Care in Burlington, is less than a mile from the Megabus stop and three miles from the Greyhound stop. The Dartmouth-Hitchcock Medical Center is the second largest hospital accessible to Vermonters, located just across the State border in Lebanon, NH. Advance Transit's Orange Route connects riders between the Greyhound stop in White River Junction and the hospital, but the local route only operates on weekdays.

Northwestern Medical Center, Vermont State Hospital, Gifford Medical Center, Mt. Ascutney Hospital and Health Center, and Springfield Hospital are located near existing routes but not at stops. Newport, Middlebury, and Rutland have medical centers that are located more than 25 miles from the existing intercity bus network.

Intermodal Transportation Hubs

This category of destinations includes commercial airports and Amtrak stations, where passengers can connect between intercity bus, rail, flights, local public transportation, and/or private transportation options such as taxis. These transportation hubs are shown in Figure 3-9 and listed in Table 3-3**,** along with the locations of park and ride lots. The two commercial airports in Vermont are Burlington International Airport and Rutland Southern Vermont Regional Airport. The Burlington International Airport is currently served by Greyhound, with four round-trips daily; CCTA, providing local transit service to Burlington, South Burlington, and the University of Vermont; and private taxi operators. Rutland Southern Vermont Regional

Table 3-2: Major Medical Facilities

Hospital	Address	Town/City	Zip Code	Beds
Brattleboro Memorial Hospital	17 Belmont Ave	Brattleboro	05301	61
Brattleboro Retreat	75 Linden St	Brattleboro	05302	149
Central Vermont Medical Center	130 Fisher Rd	Berlin	05602	122
Copley Hospital	528 Washington Hwy	Morrisonville	05661	43
Dartmouth-Hitchcock Medical Center	1 Medical Center Dr	Lebanon, NH	03745	369
Fletcher Allen Health Care	111 Colchester Ave	Burlington	05401	562
Gifford Medical Center	44 S Main St	Randolph	05060	52
Grace Cottage Hospital	185 Grafton Rd	Townshend	05353	19
Mt. Ascutney Hospital & Health Ctr.	289 County Rd	Windsor	05089	33
North Country Hospital	189 Prouty Dr	Newport	05855	49
Northeastern Vermont Regional Hospital	1315 Hospital Dr	St. Johnsbury	05819	75
Northwestern Medical Center	133 Fairfield St	St. Albans	05478	70
Porter Medical Center	115 Porter Dr	Middlebury	05753	45
Rutland Regional Medical Ctr.	160 Allen St	Rutland	05701	188
Southwestern Vermont Medical Ctr.	100 Hospital Dr E	Bennington	05201	99
Springfield Hospital	25 Ridgewood Rd	Springfield	05156	69
Vermont State Hospital	103 S Main St	Waterbury	05676	53
Veterans Affairs Medical Center	215 N Main St	White River Jct.	05009	60

Sources: Vermont Association of Hospitals and Health Systems, Dartmouth-Hitchcock Medical Center, and U.S. News Health (http://health.usnews.com/best-hospitals/dartmouth-hitchcock-medical-center-6120170/details) Websites.

Figure 3-8: Intercity Bus Destinations - Major Medical Facilities

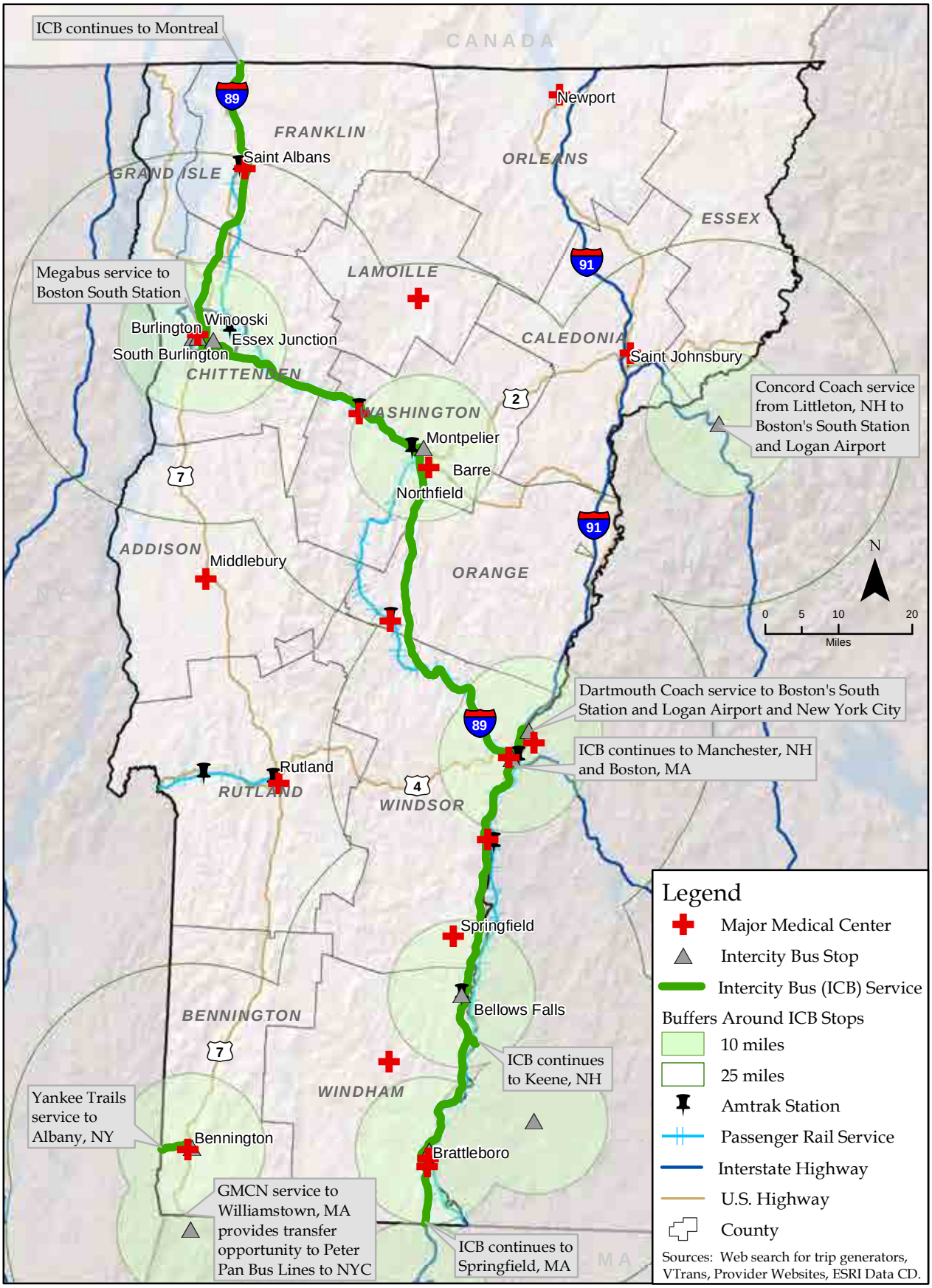


Figure 3-9: Intercity Bus Destinations - Intermodal Transportation Hubs

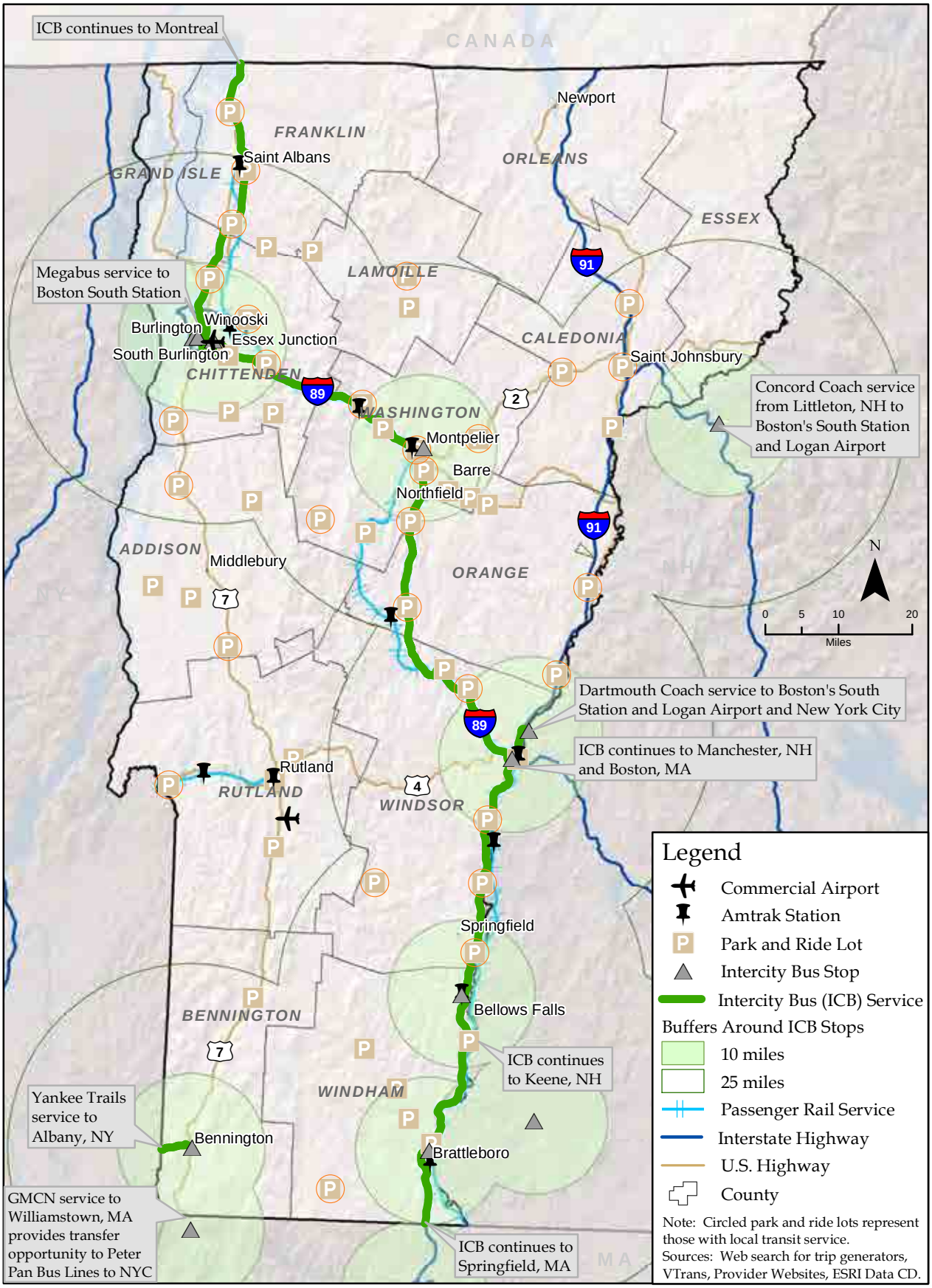


Table 3-3: Intermodal Transportation Hubs

Type	Name	Address	Town/City	Zip Code
Airport	Burlington International Airport	1200 Airport Dr	South Burlington	05403
Airport	Rutland Southern Vermont Regional Airport	1002 Airport Rd	North Clarendon	05759
Amtrak Station	Bellows Falls	54 Depot Sq	Bellows Falls	05101
Amtrak Station	Brattleboro	10 Vernon Rd	Brattleboro	05301
Amtrak Station	Castleton	266 Main St	Castleton	05735
Amtrak Station	Essex Junction	29 Railroad Ave	Essex Junction	05452
Amtrak Station	Montpelier	Junction Rd & Short Rd	Montpelier	05602
Amtrak Station	Randolph	S Main St	Randolph	05060
Amtrak Station	Rutland	25 Evelyn St	Rutland	05701
Amtrak Station	St. Albans	40 Federal St	St. Albans	05001
Amtrak Station	Waterbury	US Hwy 2 & Park Row	Waterbury	05676
Amtrak Station	White River Junction	102 Railroad Row	White River Junction	05478
Amtrak Station	Windsor	26 Depot Ave	Windsor	05089

Source: Airport and Amtrak Websites.

Airport is not served by any intercity bus routes, but passengers can use public transit service provided by Marble Valley Regional Transit District or taxis.

Vermont has 11 Amtrak stations: Castleton and Rutland are served by the Ethan Allen Express, while the other stations are served by the Vermonter route. Both State and municipal park and ride lots were included in the map to demonstrate opportunities for intercity bus riders to use park and ride lots, whether on existing or new routes. Existing intercity bus stops promote intermodal connections in that the majority is located near Amtrak stations and park and ride lots and is also served by local transit services. Coordinated schedules between modes and expanded hours of service, for local transit in particular, could greatly improve the convenience and feasibility of using intercity bus service. Rutland and Castleton are the primary Amtrak stops located more than 25 miles from intercity bus service.

Correctional Facilities

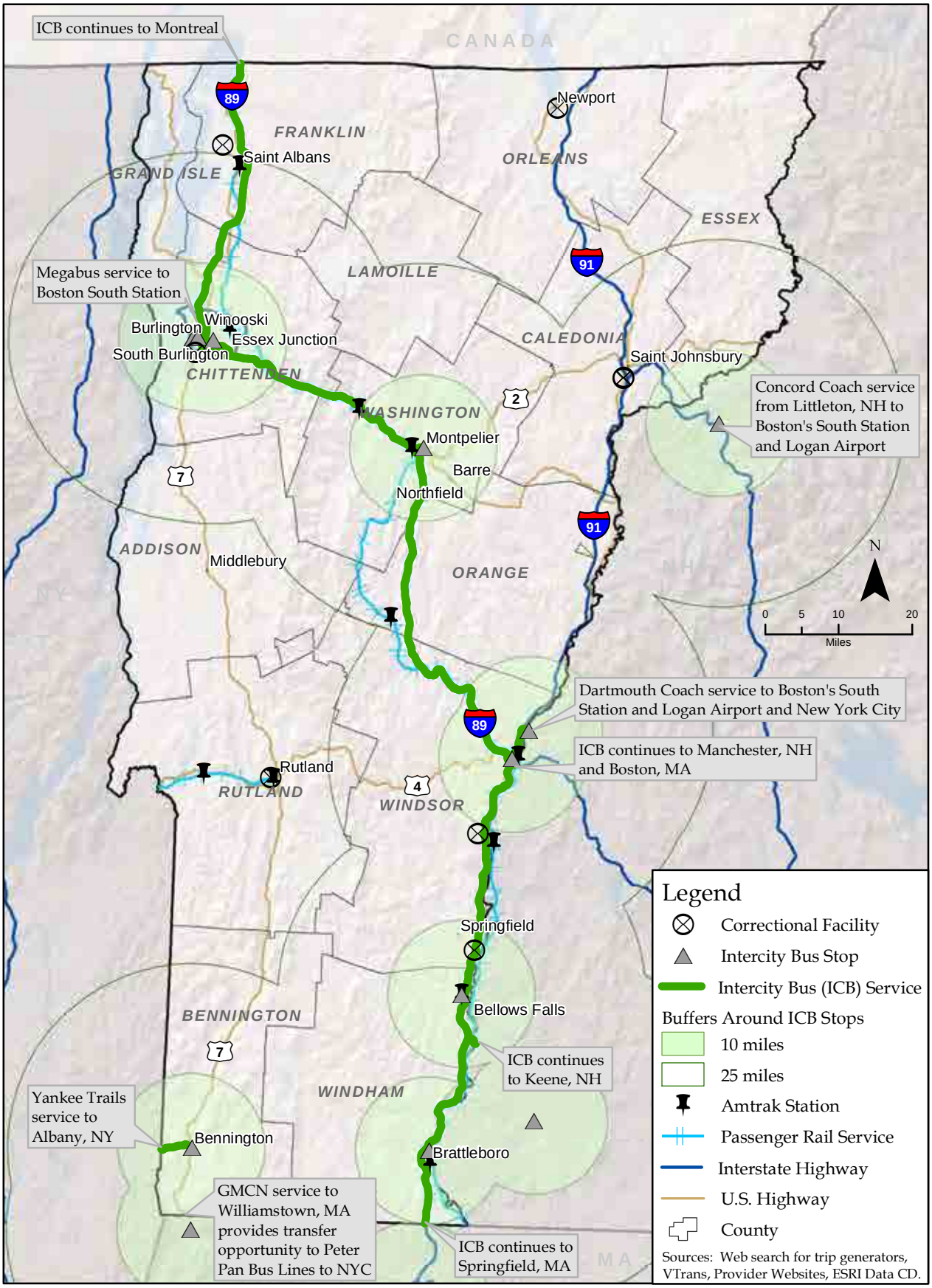
The demand for correctional facility trips accounts for a small percentage of intercity bus trips, but the ability to make these trips from rural areas and small towns may be crucial to visiting family members, released inmates, and employees. Table 3-4 is a list of State correctional facilities in Vermont, which are mapped in Figure 3-10. Only three of Vermont's eight correctional facilities are reasonably served by existing intercity bus services, including the facilities in Windsor and Springfield, which are still more than ten miles away from the nearest stops. The St. Johnsbury facilities are about 20 miles from the Concord Coach stop in Littleton, NH. The correctional facilities in Newport, St. Albans, and Rutland are farther than 25 miles from the existing intercity network, though the latter two are close to Amtrak stations.

Table 3-4: Correctional Facilities

Correctional Facility	Address	Town/City	Zip Code
Chittenden Regional Correctional Facility	7 Farrell St	South Burlington	05403
Marble Valley Regional Correctional Facility	167 State St	Rutland	05701
Northeast Regional Correctional Facility (NERCF) Comp	1270 US Route 5	St. Johnsbury	05819
NERCF Complex - Caledonia Community Work Camp	1266 US Route 5	St. Johnsbury	05819
Northern State Correctional Facility	2559 Glen Rd	Newport	05855
Northern State Correctional Facility	3649 Lower Newton Rd	Swanton	05488
Southeast State Correctional Facility	546 State Farm Rd	Windsor	05089
Southern State Correctional Facility	700 Charlestown Rd	Springfield	05156

Source: Vermont Department of Corrections Website, http://www.doc.state.vt.us/custody-supervision/facilities.

Figure 3-10: Intercity Bus Destinations - Correctional Facilities



Ski Areas and Resorts

Given Vermont's significant ski industry, ski areas and resorts could be popular tourism and employment destinations for intercity bus riders. Shown in Figure 3-11 and listed in Table 3-5, Vermont's ski areas are mostly located within reasonable driving distances (approximately 25 miles) of existing intercity bus stops. However, none are directly served by existing intercity routes, and the current services are only feasible if the riders have transportation options to cover the distance between the intercity stops and the ski areas. Some local transit systems do provide such services, such as the Moover between Brattleboro and Mount Snow and The Current between Bellows Falls and Okemo Mountain. Otherwise, intercity bus riders would need to pay for expensive taxi rides or catch a ride with someone.

While intercity bus provides an affordable option for frugal travelers, most tourists visiting ski resorts will most likely take personal vehicles, especially since ski and snowboard equipment can be unwieldy to travel with. However, it should be noted that some ski shops in New York City operate day trips, using intercity bus-like coaches, to Vermont's ski areas, demonstrating that some tourism demand for intercity services exists. Seasonal workers at the ski areas, who are often young adults traveling on a budget, may be more likely to use intercity bus services to access employment opportunities.

PUBLIC INPUT ON TRANSIT NEEDS

VTrans highly values public input as part of its planning process, and accordingly held public meetings in February 2011 to obtain input for this PTPP update. Three meetings were held, one through the VIT Worldwide (formerly Vermont Interactive Television) public videoconferencing network and two others in Montpelier and Rockingham. Residents were invited to share their input to help shape the vision for transit in Vermont. Several representatives from the transit systems and regional transportation planners also attended these meetings. The discussion topics included strengths and weaknesses of the existing transit network, the characteristics desired for transit in Vermont, and issues that need to be addressed. VTrans also has an ongoing online process to collect public input for the PTPP, where residents may download and email a comment card to provide their feedback and perspectives on the transit topics mentioned above. The feedback regarding intercity bus needs provided through these public input avenues is described below.

Many residents identified the need for inter-regional connectivity. While transit systems may serve their local areas relatively well, it is difficult to travel between regions and provider service areas. The number of regional transit routes, mainly

Figure 3-11: Intercity Bus Destinations - Ski Areas and Resorts

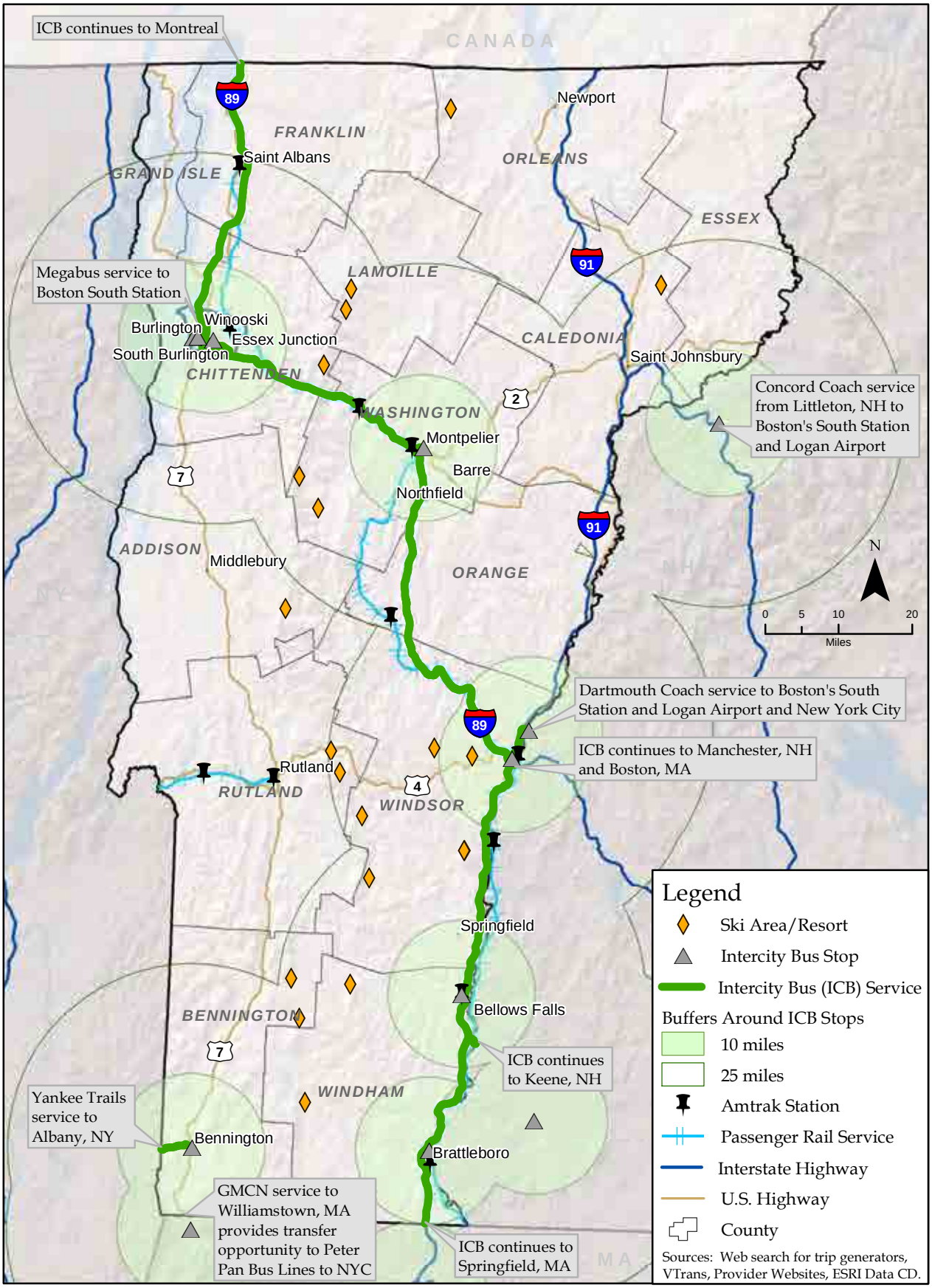


Table 3-5: Ski Areas and Resorts

Ski Area/Resort	Address	Town/City	Zip Code	Estimated Employees*
Ascutney	485 Hotel Rd	Brownsville	05037	320
Bear Creek	Rome Top Rd	Plymouth	05056	n/a
Bolton Valley	4302 Bolton Valley Access Rd	Richmond	05477-7702	200
Bromley Mountain	3984 Vermont Route 11	Peru	05152-9708	50
Burke Mountain	223 Sherburne Lodge Rd	East Burke	05832	n/a
Jay Peak	4850 VT Route 242	North Troy	05859-9404	400
Killington Resort & Pico Mountain	4763 Killington Rd	Killington	05751-9746	80
Mad River Glen	23-61 Mad River Resort Rd	Waitsfield	05673	120
Magic Mountain	495 Magic Mountain Access Rd	Londonderry	05148	n/a
Middlebury College Snow Bowl	6886 Vermont 125	Hancock	05748	n/a
Mount Snow	39 Mount Snow Rd	West Dover	05356	80
Okemo Mountain	77 Okemo Ridge Rd	Ludlow	05149-9692	245
Pico Mountain at Killington	73 Alpine Dr	Killington	05751	n/a
Quechee Lakes	176 Waterman Hill Rd	Hartford	05001	n/a
Smugglers' Notch	4323 VT Route 108 S	Jeffersonville	05464	200
Stowe	5781 Mountain Rd	Stowe	05672	359
Stratton	19 Village Lodge Rd	Stratton	05360	270
Sugarbush	1840 Sugarbush Access Rd	Warren	05674-9747	160
Suicide Six (The Woodstock Inn & Resort)	14 The Green	Woodstock	05091	190

*Employee estimates are based on February 2011 data for individual employers from Dun & Bradstreet. Estimates are based on companies named after the resort or major lodge/inn, so employment is likely underestimated since data for additional establishments (i.e., retail and restaurants) near the ski area is not included.
n/a = not available

Source: SkiReport.com Map of Vermont Ski Areas, http://www.skireport.com/vermont/map, and resort websites.

commuter service, has increased in the last few years but additional improvements could be made to increase access to employment, provide weekend service, and allow riders to make longer distance day trips. A LINK express service between Burlington and Jericho and bus service connecting Burlington and Rutland were specifically requested. The Northeast Kingdom is also isolated and lacks regional connections to other parts of the State, as well as an intra-regional connection between the existing local deviated services in Newport and St. Johnsbury. On a related note, residents also discussed the need for regional transit connections outside the State, such as trips to take workers and shoppers across the New York and New Hampshire borders. More intercity bus service to destinations outside of Vermont, including New Hampshire and New York City, was also discussed as a transit need.

Intermodal connectivity was a popular issue that identified the need to make transit more convenient and accessible by promoting other alternative modes, including walking, bicycling, ridesharing, and car-sharing. These modes could help fill gaps in the existing transit network or facilitate access to transit services, including intercity bus. Providing options for riders to travel the "first mile" to or "last mile" from a transit stop was another identified need. Intercity bus service in Vermont is not very accessible since there are limited stops in Vermont; then local transit services must be extensive to provide the connection between homes and intercity bus stops. Physical facilities, such as intermodal terminals, increased signage, and information on transit schedules were identified as needs to promote connections between modes. Riders also requested additional park and ride lots to facilitate increased transit use. Transit connections to airports, specifically from Montpelier to Burlington International Airport, was another need identified through public input.

Information Gap

While some service "gaps" exist, there is also an information gap for potential riders. A central source of information for travelers is essential to support public transit needed in Vermont – one that is *"seamless, efficient, user friendly with usable connections among in-state and out-of-state points"*. [6] While there have been some strides in compiling and sharing information on all transit services in the State as well as mention in marketing materials of connections and possible transfers among routes operated by different systems, without one central information sharing mechanism, it remains difficult to navigate through the information available on the various transit system media and websites. While Go Vermont has a start on matching ridesharing trips, there is currently no "trip planner" function on the Go Vermont site, (similar to Oregon).

[6] In the 2007 session, the Vermont legislature directed VTrans to examine the feasibility of making public transportation in Vermont seamless, efficient, and user-friendly with usable connections among in-state and out-of-state points.

SUMMARY

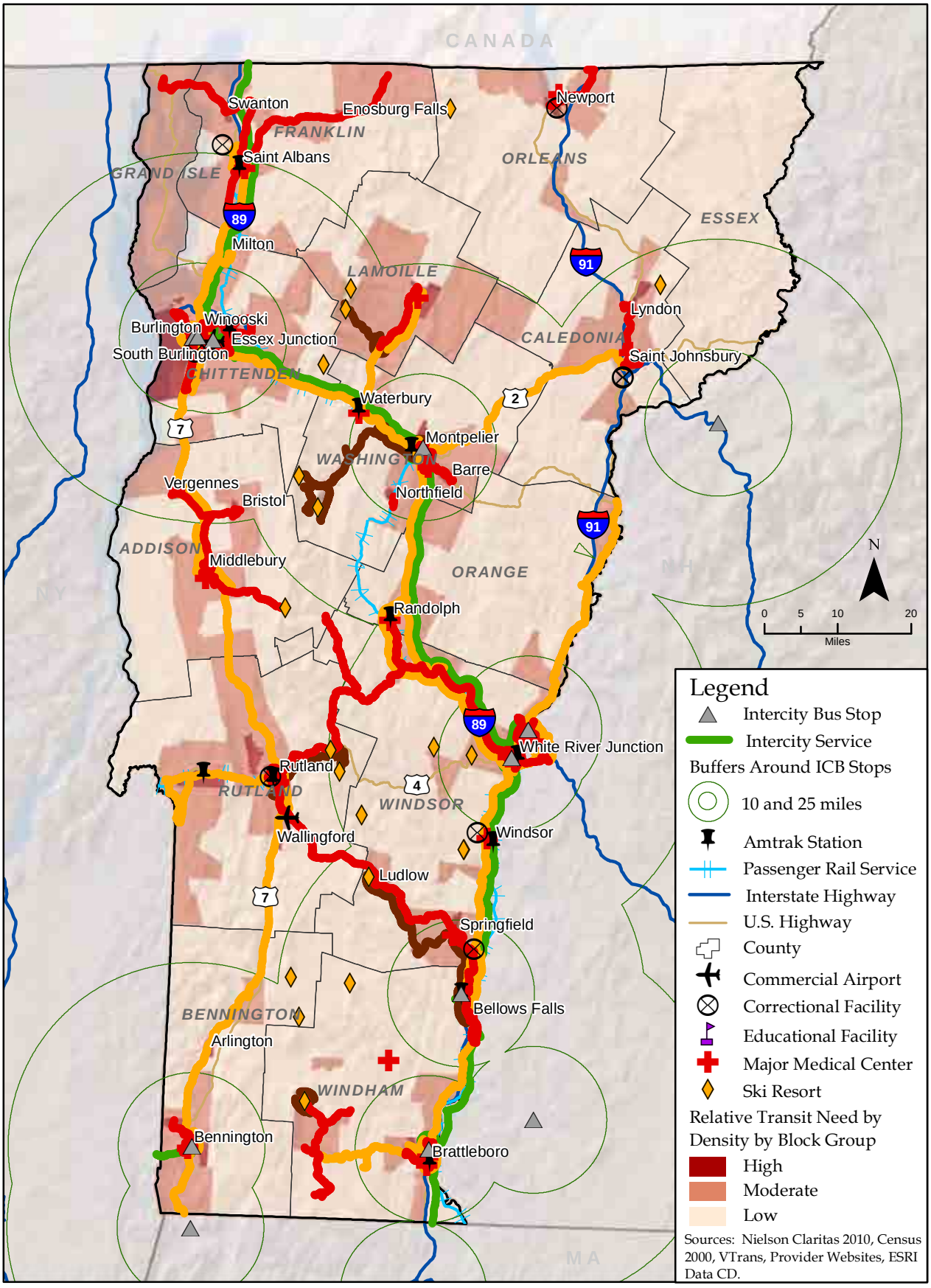
The needs analysis examined both demographic data and major destinations to determine areas with higher potential need for intercity bus service. Newport, Rutland, Middlebury, and Morristown could be considered among the highest priorities for new or expanded intercity service due to their longer distances from current stops, concentrations of transit-dependent persons and destinations, and relatively larger populations. Lyndon also met similar needs thresholds, and a new intercity stop could be established in nearby St. Johnsbury, which has a larger concentration of major destinations. Other towns with high needs and several major destinations, which are about 25 miles or less from existing stops, could be considered for expanded intercity bus service: St. Albans, Randolph, Windsor, and Springfield. These towns are already located along current intercity bus routes, and could potentially be added as new stops. Another alternative would be to increase local or regional transit services to better connect these towns to the intercity bus network.

Additional towns that had sufficient population sizes and high densities of transit-dependent persons, but fewer major intercity bus destinations included Swanton, Bristol, Castleton, and Vergennes. These communities could be considered for intermediate stops along new routes, or again, local transit services could be improved to act as feeder routes to the intercity bus network.

Figure 3-12 portrays the combined density ranking results with major destinations and other existing transit services including local, commuter, and seasonal routes. The map indicates that most of the high needs areas identified through this analysis have some form of transit service to connect them to the statewide (fixed- and deviated fixed-route) network, with the exception of Newport, which is quite isolated from the rest of the State. However, many of these local and regional transit services do not operate everyday and their schedules are typically not coordinated with intercity buses to provide feasible connections and promote the use of intercity services. Another consideration for developing new or improved intercity bus routes is whether to serve towns that already have passenger rail service. Intercity bus can provide a more affordable option than Amtrak, and passengers appreciate having multiple transit options for their trips, but the demand for long-distance transit will need to be assessed to help address this issue.

Additional needs identified through public input included the ability to use transit for regional day trips, both within Vermont and to urban areas across the State border, and more intercity bus service to destinations outside of Vermont, including New Hampshire and New York City.

Figure 3-12: Combined Density Ranking of Transit-Dependent Populations with Major Destinations and Existing Fixed- and Deviated Fixed-Route Transit



Chapter 4

Policy Options

In the distant past, Vermont Transit routes allowed Vermonters to travel between towns in-State as well as provided linkages to out-of-state destinations. With the reduction in intercity bus service, Greyhound (and Amtrak—and now Megabus) primarily provides the out-of-state linkages. Increasingly, the in-state trips are being provided by local transit providers; the gaps in in-state long distance trips are being addressed by regional services operated by the transit providers. However, these services have been planned to primarily serve commuter markets, and only secondarily provide access to the intercity network. The existing intercity network is that which is provided by the marketplace (except the Amtrak services), but there is a federal program that is intended to provide assistance to address the lack of rural intercity connections in the areas of the state that do not have direct or close access to the intercity bus network. This program is called the Section 5311(f) program of rural intercity bus assistance.

SECTION 5311(F) RURAL INTERCITY BUS ASSISTANCE

One of the important distinctions between the regional commuter services and rural intercity bus service is the fact that there is a Federal Transit Administration (FTA) program directed toward maintaining or improving rural intercity service. Section 5311(f) was developed as a policy response to exactly the situation faced by Vermont, the loss of rural intercity bus services. Under Section 5311(f) each state is directed to use up to 15% of its overall Section 5311 rural transit funding allocation for rural intercity bus services—unless the state certifies that there is no unmet rural intercity need in the state. Prior to SAFETEA-LU, states were left on their own regarding how to make the determination of "no unmet rural intercity need," but in the SAFETEA-LU legislation language was added requiring states to conduct a consultation process involving the intercity providers, studies or analysis, and other stakeholders. If, following that consultation, the state did certify, it would need to document the consideration it made of the input provided.

In recent years Vermont has certified (annually) that it has no unmet rural intercity bus needs, allowing the state to use this funding for other Section 5311 services. Vermont has not set aside the 15% amount or built up any kind of balance in a Section 5311(f) program (unlike many states that began setting aside Section 5311(f) pending the results of the consultation process). It is likely that submittal of a certification letter to reprogram these funds would require documentation of a consultation process. It is possible that such a process would not be able to say there is no unmet need, given the documented loss of rural intercity access, the analysis of unserved areas with a density of potential need, and possible comments from stakeholders about the potential need for rural intercity linkages.

The outreach and stakeholder input to this point in the current PTPP process has recognized the loss of the intercity services, but raised questions as well. One is whether the needs are being met by the regional commuter routes that have been developed. The possible role of the regional services in providing access to the existing intercity network could be considered in the consultation process, but the regional services, as currently provided, do not actually provide for the "meaningful" connection called for in the Section 5311(f) program circular. A "meaningful connection" is one in which the Section 5311(f) service must serve the same locations at times that permit convenient transfers to and from the national intercity network. The federal guidance does not specify how close the arrival and departure times of the Section 5311(f) service must be to those of the national intercity network carrier.

In addition, while the map of Vermont's existing fixed and deviated services might make it appear that the regional services have filled in for the discontinued intercity routes, making some of these trips through end-to-end transfers between different regional operators would be so inconvenient and time-consuming that the trips are not practical or feasible, as documented in the Act 45 study described above. Thus it is likely that it would be difficult for VTrans to certify that there are no unmet rural intercity needs.

POTENTIAL DEMAND FOR RURAL INTERCITY BUS SERVICE

The other question raised in the outreach was whether or not there is potential demand for intercity services, given that Greyhound abandoned them as unprofitable. Greyhound has supplied data on the former Vermont Transit/Greyhound routes, and it appears that the Route 7 Corridor had revenues on some trips of $2.35/mile, which means that if Greyhound (or another intercity operator) had costs of $4.00 per mile, these trips would have had a farebox recovery of nearly 60%, making it one of the better transit routes (on this measure) in the State. Note that intercity services need to be

assessed differently as compared to local transit, because there are relatively few boardings and long trips, with fares that vary by distance—so measures of effectiveness need to focus on how many passengers are on the bus over what distance, not just the number of boardings.

Also, demand could be assessed using the new rural intercity bus demand Toolkit developed under the Transit Cooperative Research Program (TCRP) Project B-37. A preliminary use of the Toolkit results in estimated ridership for the Route 7 corridor of 11,400, if the service connects to the airports in both Burlington (Greyhound's station in Burlington is at the airport already) and Albany, with lower ridership of 5,700 if it does not. The data supplied by Greyhound shows that ridership on the Burlington – Rutland – Albany route was approximately 22,000 boardings annually (with multiple daily frequencies). However, there was not enough demand to cover the fully-allocated cost of the multiple services at Greyhound cost levels—but a combination of operating assistance, reduced frequency, and a lower-cost operator might allow for service, at least in this corridor, that would have comparable performance to other rural transit routes in the State. A similar demand analysis for the Newport to White River Junction corridor results in a range of estimated ridership between 2,400 and 5,900 annual trips, using the same stops served by the former Vermont Transit/Greyhound route. The feasibility of routes to serve these corridors is discussed below.

POTENTIAL FUNDING FOR RURAL INTERCITY BUS SERVICE

If one accepts the notion that a consultation process would find unmet needs and significant potential demand in the Route 7 corridor (or elsewhere), the next questions that arise are those related to funding. Vermont's Section 5311(f) 15% share of its overall Section 5311 allocation would be about $400,000, and there is always the issue of local match—as the operating ratios for this program are the same as Section 5311 generally, with a limit on the federal share of 50% of the net operating deficit. Fortunately, as a means of dealing with the local match requirements for intercity services, FTA has an administrative program regulation for Section 5311(f) that allows for rural intercity projects to be defined as having both a subsidized segment and an unsubsidized segment. Bus-miles on the connecting unsubsidized segments can be valued at their fully-allocated cost, and 50% of this value (representing the value of capital) can be counted as in-kind operating match for the subsidized segment. With artful identification of project routes and services, it is thus possible to use the in-kind match to cover all or a large portion of the required operating match.

Table 4-1 presents an illustration of the application of this funding method for a Burlington-Bennington-New York state line route, operated one round-trip per day, 365 days per year, connecting to Greyhound services at the Burlington Airport. As can be seen, the projected net deficit of $109,835 can be completely matched by the available unsubsidized connecting miles from Greyhound, leaving an additional $80,665 in in-kind value to be used on other routes. In this example, it is assumed that the ridership is at the low end of the projected range of demand, and the operating cost per mile of the operator is $3.50 a mile, which is lower than Greyhound costs, more typical of a private regional intercity operator. Lower per-mile costs could potentially reduce the net deficit.

Table 4-2 presents an example of the use of the Pilot Project for an expanded rural intercity project, that would include not only the Burlington-Bennington-New York state line route described above, but a second connecting route from Rutland to Springfield, Bellows Falls, and Brattleboro, where it could potentially connect to a possible Section 5311(f) route in New Hampshire that would serve Keene (and continue to Boston). It is included here to illustrate the impact on local match requirements. As can be seen, the additional route increases the net deficit to $250,775 (which is still less than the $400,000 of the entire 15% set-aside), but the number of Greyhound in-kind miles is no longer enough to provide the entire local match, so nearly $61,000 in cash match would be required. This example was chosen based on a previous Greyhound route. Scheduling would allow for connections between the two Section 5311(f) routes in Rutland, with connections to Greyhound services in Burlington and Albany**.** Table 4-3 presents a potential timetable for these routes, including the connection in Rutland for the route from Rutland to Brattleboro. It would require coordination with New Hampshire to have funding provided for portions of the route in that state. It should be noted that Utah and Colorado, and Colorado and Kansas have collaborated on joint funding of multi-state services, so it is possible that New Hampshire could use the same program if it also sought to reinstate services from Keene and Nashua.

Table 4-4 presents a similar analysis for the route from Newport to White River Junction. The fact that it is a relatively long route serving a lower population means that the ridership demand is less, and consequently the estimated farebox recovery is lower, and the subsidy per passenger is higher, than those of the Route 7 corridor. Note also that the analysis for this corridor is using the same Greyhound miles as match, so a program constrained to require no local cash match could not support both this corridor and the Route 7 services.

Table 4-1: Example of Potential Section 5311(f) Pilot Project Funding for Vermont Rural Intercity Service on the Route 7 Corridor Using Greyhound In-Kind Miles as Local Match

	Annual Cost	Annual Revenue	Annual Deficit	Farebox Recovery	Subsidy/Pass.
	$ 332,150	$ 223,015	$ 109,135	67%	$19.15
In-kind Capital Match Available (Greyhound connecting service)	$ 213,525				

Excess Match
$ 104,390

Project Description: Provides One Round-Trip Per Day to Connect Burlington with Bennington (Albany)
Connects with Greyhound Services in Burlington, Albany. Connecting schedules shown on attached table.

	Operating Costs		Operating Revenue		Operating Deficit
New Route:	Round Trip Miles	260	Daily Ridership	16	$ 109,135.00
Burlington to	Daily Trips	1	Annual Ridership	5,700	
Bennington,	Daily Miles	260	Fare (2)	39.00	
to NY State line	Operating Days	365	Annual Revenue	$ 223,015	
(Albany)	Ann. Miles	94,900			
	Cost/Mile	$ 3.50			
	Total Cost	$ 332,150.00			

Connection	**Operating Costs**		**Eligible Match**
Greyhound	Round Trip Miles	260	Value of In-Kind Capital costs (50% of operating cost)
Service: Swanton	Daily Trips	1	$ 213,525
to White River	Daily Miles	260	
Junction	Operating Days	365	
	Ann. Miles	94,900	
	Cost/Mile (4)	$ 4.50	
	Total Cost	$ 427,050	

Notes:

(1) Ridership estimated based on TCRP B-37 low trip rate estimate.
(2) Fare estimated based on $2.35 per mile revenue, divided by 5,700 annual riders.
(3) For purposes of determining the value of in-kind capital, only one round-trip per day of the Greyhound miles from Swanton to White River Junction,Vermont, was used.
(4) Estimated at $4.50 per mile based on recent Greyhound reports.

Table 4-2: Vermont Section 5311(f) Pilot Project--Rural Intercity Service in the Route 7 Corridor from Burlington to Bennington (New York State line) and from Rutland to Brattleboro (Boston) using Greyhound Miles as In-kind Match

	Annual Cost	Annual Revenue	Annual Deficit	Farebox Recovery	Subsidy/Pass.
	$ 523,775	$ 273,000	$ 250,775	52%	$35.83
In-kind Capital Match Available (Greyhound connecting service)	$ 213,525				
			Excess Match		
			$ (37,250)		

Project Description: Provides One Round-Trip Per Day to Connect Burlington with Bennington (Albany)
Connects with Greyhound Services in Burlington, Albany. Connecting schedules shown on attached table.

	Operating Costs		Operating Revenue		Operating Deficit
New Route:	Round Trip Miles	410	Daily Ridership	16	$ 250,775.00
Burlington to	Daily Trips	1	Annual Ridership	7,000	
Bennington,	Daily Miles	410	Fare (2)	39.00	
to NY State line	Operating Days	365	Annual Revenue	$ 273,000	
(Albany)	Ann. Miles	149,650			
Plus Rutland-	Cost/Mile	$ 3.50			
Brattleboro	Total Cost	$ 523,775.00			
(Keene-Nashua					
Boston)					

	Operating Costs		Eligible Match
Connection	Round Trip Miles	260	Capital costs (50% of operating cost)
Greyhound	Daily Trips	1	$ 213,525
Service: Swanton	Daily Miles	260	
to White River	Operating Days	365	
Junction,	Ann. Miles	94,900	
	Cost/Mile (4)	$ 4.50	
	Total Cost	$ 427,050	

Notes:

(1) Ridership estimated based on TCRP B-37 low trip rate estimate.
(2) Fare estimated based on $2.35 per mile revenue, divided by expected ridership.
(3) For purposes of determining the value of in-kind capital, only one round-trip per day of the Greyhound miles from Swanton to White River Junction,Vermont, was used.
(4) Estimated at $4.50 per mile based on recent Greyhound reports.

Table 4-3: Proposed Timetable for Route 7 Albany-Burlington Service with Connecting Greyhound Service, and Connecting Service from Rutland to Boston
(Vermont ICB Proposal for Route 7 Corridor)

North	Stop	South
10:05	White River Junction	**8:10**
11:00	Montpelier	**7:15**
11:45	Burlington Airport	**6:15**

	Southbound		Northbound				
	8:15	*Montreal*	***8:30***				
		St. Jean, PQ					
	10:45	Burlington Airport, VT	***7:00***				
12:00	11:00	Burlington Airport	**7:00**	**6:00**			
12:40	11:40	Vergennes	**6:15**	**5:15**			
1:05	**12:05**	Middlebury	**5:55**	**4:55**			
1:25	**12:25**	Brandon	**5:30**	**4:30**			
2:05	**1:05**	Rutland	**5:00**	**4:00**			
2:15	**1:15**	Rutland	**4:50**	**3:50**	**2:15**	LV Rutland	**3:35**
3:00	**2:00**	Manchester	**4:05**	**3:00**	**2:50**	Ludlow	**2:45**
3:15	**2:15**	Arlington	**D**	**D**	**3:15**	Springfield	**2:25**
3:35	**2:35**	Bennington	**3:35**	**2:35**	**3:40**	Bellows Falls	**2:05**
D	**D**	Troy, NY	**f**	**f**	**4:10**	Brattleboro	**1:35**
4:35	**3:35**	Albany Airport	**2:35**	**1:35**	**4:40**	Keene, NH	**1:05**
4:45	**3:45**	Albany	**2:00**	**1:00**	**7:30**	Boston-Logan	10:00

f Flag stop (stops on request).

D Discharge only (no passengers are picked up at this place).

Table 4-4: Example of Potential Section 5311(f) Pilot Project Funding for Vermont Rural Intercity Service on the Newport-White River Junction Using Greyhound In-Kind Miles as Local Match

	Annual Cost	Annual Revenue	Annual Deficit	Farebox Recovery:	Subsidy/Pass.
	$ 268,275	$ 86,400	$ 181,875	32%	$75.78
In-kind Capital Match Available (Greyhound connecting service)	$ 213,525				

Excess Match
$ 31,650

Project Description: Provides One Round-Trip Per Day to Connect Newport with White River Junction)
Connects with Greyhound Services in White River Junction. Connecting schedules shown on attached table.

	Operating Costs		Operating Revenue		Operating Deficit
New Route:	Round Trip Miles	210	Daily Ridership	7	$ 181,875.00
Newport, VT to	Daily Trips	1	Annual Ridership	2,400	
White River	Daily Miles	210	Fare (2)	36.00	
Junction, VT	Operating Days	365	Annual Revenue	$ 86,400	
(Albany)	Annual Bus-Miles	76,650			
	Cost/Mile	$ 3.50			
	Total Cost	$ 268,275.00			

	Operating Costs		Eligible Match
Connection	Round Trip Miles	260	Value of In-Kind Capital costs (50% of operating cost)
Greyhound	Daily Trips	1	$ 213,525
Service: Swanton	Daily Miles	260	
to White River	Operating Days	365	
Junction,	Ann. Miles	94,900	
	Cost/Mile (4)	$ 4.50	
	Total Cost	$ 427,050	

Notes:

(1) Ridership estimated based on TCRP B-37 low trip rate estimate.
(2) Fare estimated based on current Greyhound standard fares for similar trip length.
(3) For purposes of determining the value of in-kind capital, only one round-trip per day of the Greyhound miles from Swanton to White River Junction,Vermont, was used.
(4) Estimated at $4.50 per mile based on recent Greyhound reports.

These examples have been developed to show that under the existing program, services that partially address the loss of rural intercity service could be provided without additional local match, and without using more Section 5311 funding than the 15% set-aside. None of these examples is based on a particular operator of the subsidized service, only that an operator is found that can provide the service on a fully-allocated cost basis of $3.50 per bus-mile. The operator could be public (one of the existing public transit operators) or private (one of the private intercity operators). Lower cost operators could allow for more service, and use of a higher cost operator (such as Greyhound) could limit the amount of service provided (but result in higher ridership due to national marketing and information).

The Pilot Project funding mechanism can reduce or eliminate the need for operating cash match. It does require that the firm operating the unsubsidized service (which in Vermont would be Greyhound Lines) provide a letter agreeing to the use of their miles, and identifying the routes, schedules, and miles being contributed. Use of this funding method also means that the available federal funding does not cover as much service as it would if there were local cash match, as it is effectively being used as 100% of the net operating deficit.

Several **Alternative Approaches** may address intercity issues, and there are some tools available:

- The **consultation process** alone is not really an option, but must be conducted and documented if Vermont is to have the option of doing a full or partial certification (a state can certify that it did not need the full 15% for rural intercity services).
- If unmet needs are identified, there are at least two general options to be investigated by more detailed service planning:
  - One way of providing this access might be to **modify or expand the regional transit services operated by Vermont's public transit providers to make meaningful connections to the national intercity bus network.** This could involve additional trips to meet scheduled intercity buses, and additional miles to connect at the intercity bus stations—but such services would be eligible for Section 5311(f) assistance. This would require additional planning efforts to evaluate connections, costs, and likely revenues—and assessment of the degree to which it would provide intercity access to the population that has lost it.
  - Another alternative would be to **further develop the proposal for re-instituting intercity bus service on the Route 7 corridor, using the in-kind funding method**. This would require more detailed planning of schedules and connections, and assessment of likely funding needs (which

would include assumptions regarding the likely operator and its costs, and the estimated revenue). It should be noted that Greyhound is not necessarily the operator, but would have to be a party to the project as the provider of the value of the in-kind miles. As both a potential applicant or bidder on the subsidized service and the provider of the in-kind match, Greyhound's current policy is to offer to provide the in-kind miles to whichever operator the State selects, as long the operator and the proposed service meet Greyhound's requirements for connecting service that can be quoted by them in their schedule information, has appropriate levels of insurance, is fixed-route fixed-schedule service at least five days per week, and has required legal federal and State operating authority.

In either event, it is likely that some or all of the 15% Section 5311(f) set-aside would need to be used to support these services. This would reduce the amount of Section 5311 funding available for other services by the amount used for rural intercity projects. The 15% set-aside amount is approximately $400,000. However, without more detailed service planning it is not possible to tell if or how much of the rural intercity needs can be addressed with that level of funding, or if more would be required.

Implementation of a Section 5311(f) rural intercity program could be accomplished in several ways. The State could view itself as the grantee, and issue a Request for Bids (RFB) for particular services that it has identified as filling gaps in the State's intercity network In that case the firms responding would be bidders on a competitive contract to provide the services specified by the State. This approach was successfully used by Washington State in the development of its "Travel Washington" network of intercity connectors to the Greyhound and other intercity routes (see Appendix A), and is also used in Oregon for its "POINT" network of rural intercity feeders (which also connect to state-supported Amtrak service). Other states have kept their Section 5311(f) programs as grant programs, allowing more discretion in the choice of operators, but increasingly they also define the routes and services desired as part of the grant solicitation, rather than simply announcing the availability of funding and hoping that the resulting applications will provide service that addresses the highest priority corridors or fills network gaps. In either case VTrans would need to take an active role in program implementation.

Changes in State policy to support the implementation of rural intercity bus services would not only need to consider the potential transit funding impact as Section 5311 funds were shifted to the rural intercity projects, but also the relationship of the potential services to the developing State-supported Amtrak services. Ideally, these rural intercity routes would provide connectivity among all modes, but the FTA Section 5311(f) circular makes it clear that this funding is intended to provide meaningful connections to the national intercity bus network as its first priority, not the rail passenger network. Section 5311(f) also cannot be used for commuter bus services, so it

is not a potential source of funding for the regional services graduating from the New Starts program, unless they provide for the "meaningful connection".

"CURBSIDE" BUS SERVICES

During the public outreach efforts for the PTPP several commenters have asked whether or not Vermont "curbside" intercity bus operators could or would address the lack of intercity services. These comments reflect the rise of "curbside buses" or "Chinatown buses", which provide curb-to-curb, express bus services between major cities, such as New York, Washington, D.C., and Philadelphia, and increasingly to medium-size cities too.[1] These curbside carriers generally pick up and drop off passengers at the curb, where a stop is designated with a simple sign. They manage reservations and sell tickets online, and have minimal overhead costs as they do not operate bus terminals and only need a small support staff. They are nimble in comparison to passenger rail or air services, and can add buses as demand (shown through website sales) warrants and alter routes or stop locations through online notifications.

Curbside buses are the fastest growing transportation mode in the country, with ridership growing by 33% in 2010.[2] The fares are considerably cheaper than rail or air services, and thus appeal to students, young people, and others looking for affordable transportation, especially as gas prices have increased. The buses are often equipped with free Wi-Fi and power outlets and have drawn technology savvy passengers who surf the internet, work, or watch movies on computers and other electronic devices during their rides. Curbside buses have found a niche in serving travel distances of 200 to 300 miles, such as New York to D.C. or Boston, Los Angeles to Las Vegas, and Chicago to Detroit. These trips are typically too short to justify the expense and hassle of a flight and long enough that driving is not enjoyable or very affordable.[3] These bus services have demonstrated that choice riders will ride buses (particularly if there are limited stops) if the fare is low and there are multiple schedule frequencies. It is not yet clear whether these new passengers will be willing to ride more traditional intercity bus services having realized that bus service can be quite acceptable.

The large corporate companies that operate curbside bus service include Megabus and BoltBus (a collaboration between Greyhound and Peter Pan), while the "original" Chinatown bus carriers include Fung Wah and New Century Travel. Megabus is the largest private company to operate curbside bus service in the United

[1] Austen, Ben. (2011, April 7). The Megabus Effect. *Bloomberg Businessweek.* Retrieved April 11, 2011, from **http://www.businessweek.com/magazine/content/11_16/b4224062391848.htm**.
[2] Ibid.
[3] Ibid.

States, and has been expanding services to medium-size cities with populations around one million, now serving more than 50 cities from the Midwest to the East Coast.[4] In some cases Megabus has added stops at smaller locations with large college populations, such as State College, Pennsylvania (Penn State) and Christiansburg, Virginia (Virginia Tech)—and in August 2011 it will add service between Burlington and Boston, serving the student union at the University of Vermont.

Other carriers have begun offering such service. In northern New England Dartmouth Coach provides one or two express round-trips per day (depends on the day of the week) from its station in Lebanon, New Hampshire (with one stop in Hanover) to New York City, with its New York stop on the curb in front of the Yale Club adjacent to Grand Central Station (rather than using the Port Authority Bus Terminal). Its buses are also equipped with Wi-Fi and power outlets.

Based on the observed behavior of the curbside companies, it is unlikely that these private carriers will institute new service to any of the rural or small urban locations in Vermont that have lost service in the past few years. Megabus is addressing the most likely opportunity for curbside buses in Vermont, which is a stop in Burlington along a route that connects to larger, nearby cities like Montreal and Boston, Albany, or New York City (Megabus already serves the latter three cities, but not Montreal). Greyhound provides four round-trips per day on the Montreal-Boston route, with Vermont stops in Burlington, Montpelier, and White River Junction. In other parts of the country it is responding to curbside competition with its own similar product, Greyhound Express[5], which also offers on-line ticket purchase, some seats at extremely low prices, Wi-Fi, curbside stop locations, etc. It is likely that Greyhound would seek to respond to potential or announced competition on its route by implementing Greyhound Express service on the current corridor.

In terms of State policy, under the federal bus regulatory policy and its pre-emption of state regulations, the private carriers can add or exit routes or services responding only to market forces. State policy needs to consider what the market will provide, and then use available tools (such as Section 5311(f)) to address needs that remain unmet, such as service to smaller population centers on existing routes and places that have lost intercity bus service.

SUMMARY AND CONCLUSIONS

This chapter demonstrates that there is federal funding available to address the rural intercity service gaps identified in the previous chapter, and that the amount

[4] As of May 2011, according to the Megabus USA Website, **http://us.megabus.com/BusStops.aspx**.
[5] See the Greyhound website: http://www.greyhound.com/Express/default.aspx

would allow Vermont to address a significant portion of these needs. This federal Section 5311(f) funding cannot be used to provide commuter bus services, or intercity services that have as their primary connection commercial air or rail passenger service, and is expressly intended to provide a means for states to address the loss of intercity bus services in rural areas.

Under the current FTA guidance, there is a method that would allow Vermont to use this funding without having to provide any local cash operating match. In order to use that funding without also having to supply local match, Vermont would have to work with Greyhound Lines to ensure that the services funded would provide connecting service to the existing Greyhound Lines. However, these are federal funds that Vermont is already using for other purposes, and so other sources would need to be found to replace that funding.

An examination of the recent expansion of unsubsidized "curbside" intercity bus services as an alternative to use of the Section 5311(f) suggests that these services are unlikely to ever serve the small cities and towns of rural Vermont. They do reveal, however, that intercity bus service can be attractive to passengers who have other modal choices.

Given the documented loss of rural intercity service, and the needs analysis above, a certification by VTrans that there are no unmet rural intercity needs (which would allow the state to continue using these funds for something other than intercity bus service), it would need to conduct a consultation process that would include solicitation of input from intercity bus providers, as well as other stakeholders—and together with the results of this study, a final determination would need to be made regarding whether or not the existing rural intercity bus needs are being met. This determination would need to document to FTA that VTrans had conducted this process, and how it made the determination that there were no unmet needs (given the loss of services and the unserved population).

Chapter 5

Proposed Policy and Program Actions

POLICIES ON REGIONAL CONNECTIVITY AND INTERCITY BUS

Determining the State role and the way in which regional and intercity needs can be addressed is one of the key policy areas initially identified for inclusion in the PTPP and in subsequent public outreach meetings. These issues are related in that they are generally services that provide longer-distance service, often on routes that go between the service areas of different providers. For the regional services, the key issues include the need for funding to maintain regional services that are meeting performance criteria and whether there are additional regional needs. On the intercity side, issues include the likely demand for such service (or whether the regional services are addressing intercity needs), and if warranted, how it can be funded and operated.

It should be noted that there are significant differences in the trip purposes and potential destinations between the regional commuter services and the intercity services. Intercity services in Vermont, both passenger rail and intercity bus, have long been routed and scheduled to pick up passengers in Vermont towns and cities and transport them to major destinations outside the State. Intercity bus services often use over-the-road buses (OTRBs) with luggage compartments. Needs for intrastate trips have largely been addressed by the transit providers within their service regions, and more recently the inter-regional commuter services have addressed this for trip lengths that could be served effectively on schedules allowing for a day in the destination city. Intercity trips are typically taken for family or social reasons, rather than as business trips or work commutes, and the riders are generally infrequent users.

Policies on Intercity Bus

Over the past decade intercity bus services in the state have been reduced significantly. It should be noted that there are significant differences in the trip purposes and potential destinations between the regional commuter services and the

intercity services. Intercity services in Vermont, both passenger rail and intercity bus, have long been routed and scheduled to pick up passengers in Vermont towns and cities and transport them to major destinations outside the State. Needs for intrastate trips have largely been addressed by the transit providers within their service regions, and more recently the regional commuters have addressed this for trip lengths that could be served effectively on schedules allowing for a day in the destination city (there are still some gaps in meeting this need, such as the inability to make a day trip from Rutland to Burlington and back on the regional services).

One of the other important distinctions between the regional commuter services and rural intercity bus service is the fact that there is an FTA program directed toward maintaining or improving rural intercity service. Section 5311(f) was developed as a policy response to exactly the situation faced by Vermont, the loss of rural intercity bus services. Under Section 5311(f) each state is directed to use at least 15% of its overall Section 5311 rural transit funding allocation for rural intercity bus services—unless the state certifies that there is no unmet rural intercity need in the state. Prior to SAFETEA-LU, states were left on their own regarding how to make the determination of "no unmet rural intercity need," but in the SAFETEA-LU legislation language was added requiring states to conduct a consultation process involving the intercity providers, studies or analysis, and other stakeholders. If, following that consultation, the state certifies, it needs to document how it considered the input provided. For the past several years Vermont has conducted a consultation process, certified that intercity needs are being met and, thus, the State has not set aside the 15% amount or built up any kind of balance in a Section 5311(f) program.

The outreach and stakeholder input in the current PTPP process has recognized the loss of the intercity services, but raised questions as well. One is whether the needs are being met by the regional commuter routes that have been developed. The possible role of the regional services in providing access to the existing intercity network could be considered in the consultation process, but the regional services, as currently provided, do not actually provide for the "meaningful" connection called for in the Section 5311(f) program circular. In addition, while the map of Vermont's existing fixed and deviated services might make it appear that the regional services have filled in for the discontinued intercity routes, making some of these trips through end-to-end transfers between different regional operators would be so inconvenient and time-consuming that the trips are not practical or feasible.

The other question raised in the outreach was whether or not there is potential demand for intercity services, given that Greyhound abandoned them as unprofitable. Chapter 4 presented an analysis that shows that there may be enough demand for intercity services if those services were subsidized and outlines a possible intercity service along the Route 7 corridor – with a plan for using Greyhound in-kind miles as

the local matching. This Pilot Project funding mechanism can reduce or eliminate the need for operating cash match.

One significant issue that should be acknowledged is that using all of the 15% Section 5311(f) set-aside would reduce the amount of Section 5311 funding available for other services by about $400,000. Changes in state policy to support the implementation of rural intercity bus services would not only need to consider the potential transit funding impact as Section 5311 funds were shifted to the rural intercity projects, but also the relationship of the potential services to the developing state-supported Amtrak services. Ideally, these rural intercity routes would provide connectivity among all modes, but the FTA Section 5311(f) circular makes it clear that this funding is intended to provide meaningful connections to the national intercity bus network as its first priority, not the rail passenger network. Section 5311(f) also cannot be used for commuter bus services, so it is not a potential source of funding for the regional services graduating from the New Starts program, unless they provide for the "meaningful connection".

PROPOSED ACTIONS

The proposed intercity program starts with this document, which is an expanded assessment of rural intercity bus needs. It is intended to serve as the needs assessment aspect of the overall consultation process. If unmet needs are identified[1], VTrans will need to develop a service description/program for the services using the in-kind funding method. This would require detailed planning of schedules and connections, and assessment of likely funding needs (which would include assumptions regarding the likely operator and its costs, and the estimated revenue)[2]. The overall process would include the following steps.

Consultation Process

Following the needs assessment and prior to the call for projects for the next S.5311 funding cycle, VTrans will conduct the FTA-required consultation process. This consultation will include distribution of the needs assessment sections of the PTPP, and

[1] The preliminary needs assessment presented in Chapter 3 does present evidence of unmet need in rural areas for intercity bus services.

[2] It should be noted that Greyhound is not necessarily the operator, but would have to be a party to the project as the provider of the value of the in-kind miles. As both a potential applicant or bidder on the subsidized service and the provider of the in-kind match, Greyhound's current policy is to offer to provide the in-kind miles to whichever operator the state selects, as long the operator and the proposed service meet Greyhound's requirements for connecting service that can be quoted by them in their schedule information, has appropriate levels of insurance, is fixed-route fixed-schedule service at least five days per week, and has required legal federal and state operating authority.

solicitation of input on available services, unmet needs, capabilities and opportunities from intercity bus providers, transit operators, the rail passenger program, and the public. The consultation process will document the input, and provide written documentation of how the results of the needs assessment and the consultation process were used in the development of state policy regarding certification of unmet needs or use of Section 5311(f) funding for projects.

Development of Program Application and Guidelines

If the process identifies unmet needs, VTrans will include in the Section 5311 application (or in a separate Section 5311(f) application) requests for services and connections in specific corridors to address the identified gaps. The consultation process may also identify needs such as capital for vehicles or facilities, or user information systems, and VTrans will need to consider its policy on eligibility of such requests as it assesses the results of the consultation in developing its policy. Given the limited amount of Section 5311(f) funding, the scope for capital projects would be limited.

CONCLUSIONS

- Vermont residents have limited access to the national intercity bus network.

- This access has declined significantly over the past decade:
  - The number of points served has declined from 55 to six, and
  - The percentage of the rural (nonurbanized) population having intercity bus access within 25 miles has declined from 99.8% in 2005 to 78.8% today, according to the Bureau of Transportation Statistics.

- Intercity passenger rail, although it serves several stations that are in locations not also served by intercity bus, generally serves the same population already served by intercity bus. Only 6.5% of rural residents are uniquely served by intercity bus.

- Regional and local transit services are operated in some of the same corridors that have lost intercity bus service, but a previous study conducted for the state legislature highlighted the fact that these services do not offer practical connections, because of scheduling designed to serve commuter and other local markets rather than long-distance riders or connections to remaining intercity services. Long-distance trips using these services would require transfers (sometimes multiple transfers), and have significant wait times.

- Analysis of demographic data reveals that 14 towns across the State with populations of 2,500 or more have high densities of transit-dependent persons and are located more than ten miles from intercity bus stops; nine of these towns are more than 25 miles from remaining intercity bus stops. These towns could be candidates for potential intercity bus service under the Federal Section 5311(f) program.

- Analysis of potential key destinations reveals that there are 17 colleges or universities more than ten miles from an intercity bus stop, nine of which are more than 25 miles; ten major medical centers that are more than ten miles from a stop, three of which are more than 25 miles away; nearly all State correctional facilities are more than ten miles from existing intercity bus service, and three are farther than 25 miles away; and most ski areas and resorts are within reasonable driving distances of existing stops, but intercity bus riders would need another reliable mode to complete their trips.

- The Federal Section 5311(f) program of rural intercity bus assistance is available to address these service gaps, but it is funding that Vermont is already using for other purposes, and so other sources would need to be found to replace that funding. The set-aside under Section 5311(f) is 15% of the state's overall Section 5311 allocation, or about $400,000.

- In order to use that funding without also having to supply local match, Vermont would have to work with Greyhound Lines to insure that the services funded would provide connecting service to the existing Greyhound Lines.

- This funding cannot be used to provide commuter bus services, or intercity bus services that have as their primary connection commercial air or rail passenger service. It is not available to replace CMAQ operating funding for successful commuter bus services.

- Before Vermont can use this funding for something other than intercity bus service, it would need to conduct a consultation process that would include solicitation of input from intercity bus providers, as well as other stakeholders—and together with the results of this study, it would need to consider whether or not the existing rural intercity bus needs are being met. It would need to document to FTA that it had conducted this process, and how it made the determination that there were no unmet needs (given the loss of services and the unserved population).

- If Vermont determines that there is unmet need, it would need to develop and implement a program/process for addressing service needs in those areas of unmet need.

Chapter 6

Vermont Rural Intercity Consultation Process

In Chapter 5 it was recommended that Vermont conduct a consultation process to solicit input about the need for rural intercity bus services. This chapter documents that process, which took place during the period from September through November of 2011. It included a survey and a statewide consultation meeting. Also considered as part of this process is input on this topic provided as part of the overall 2011 Vermont Public Transit Policy Plan.

CONSULTATION PROCESS SURVEY

As part of the consultation process, a survey was developed and sent to identified potential providers of intercity bus services, public transit operators in Vermont, and to the transportation planners at regional planning agencies. Twelve completed surveys were received.

Survey Form

A survey form was developed to solicit input on intercity needs, and it asked questions about current services, information and marketing, perceived service needs, areas or groups needing services, other needs (such as facilities, etc.). Three versions of the survey were developed: one for private intercity bus firms, a second for public transit operators, and a third for planning agencies. The main differences were in the wording regarding existing services. A cover letter was developed for each survey form as well. Examples of the letters and blank surveys are included in Appendix A.

Mailing List

A list of potential intercity bus carriers was developed to include firms currently providing scheduled intercity service in Vermont or adjacent states, and firms offering charter or airport limousine-type service in Vermont. Information on potential providers and contact information was obtained from internet searches, Yellow Pages listings, and from membership rosters of the New England Bus Association available

on-line. Appendix B presents a list of the intercity providers who were sent survey forms.

SURVEY RESULTS

As noted above 12 surveys were received, six from private carriers, two from planning agencies, and four from transit providers:

- Intercity/Private Carriers:
  - Premier Coach—Randall Charlebois
  - Adirondack Trailways—Anne M. Noonan
  - Student Transportation of Vermont dba Mountain Transit dba Bet-Cha Transit—John Sharrow
  - Peter Pan Bus Lines—Michael Sharff
  - Greyhound Lines—Stephanie Gonterman
  - Middlebury Transit Inc./Burlington Limousine and Car Services/Vermont Chauffeured Transportation—Bill Fuller

- Planning Agencies:
  - Lamoille County Planning Commission—Amanda Holland
  - Bennington County Regional Commission—Mark Anders

- Public Transit Providers:
  - Green Mountain Community Network—Donna Baker
  - CCTA/GMTA—Meredith Birkett
  - Advance Transit—Van Chestnut
  - Rural Community Transportation, Inc.

Survey responses are summarized below by question:

1. Do you operate scheduled intercity bus services in Vermont or adjacent states?

   - Greyhound Lines—Four roundtrips per day between Montreal and Boston, with Vermont stops in Burlington (downtown), Burlington Airport, Montpelier and White River Junction; and one round-trip per day between White River Junction and Springfield, Massachusetts, with Vermont stops in Bellows Falls and Brattleboro.
   - Peter Pan—One roundtrip per day between Greenfield, MA and Springfield, MA.
   - Yankee Trails—Bennington, VT to Albany, two roundtrips per day.

- Adirondack Trailways—extensive service in New York State, closest routes to Vermont are Montreal-NY via Plattsburgh and Albany (with intermediate stops).

2. Do you operate scheduled long-distance services (from public transit provider survey)?

   - GMCN—Feeder service to Manchester, VT, and to Williamstown, MA; regular unsubsidized private service to Albany Airport, train and bus depots for local college students (using privately funded vehicles)—Thursday and Friday afternoons outbound and Sunday and Monday evenings inbound. Colleges pay the bulk of the costs of these trips. In partnership with DVTA they plan to submit a CMAQ request for the Bennington to Wilmington route.
   - Advance Transit—commuter service connecting Canaan, Enfield, and Lebanon, NH.
   - RCT—Route 2 Commuter, demand-response, Kingdom Express does charter.
   - CCTA—Montpelier Link, Middlebury Link, St. Albans Link, and US 2 Commuter.

3. Other types of service provided:

   - Student Transportation—school, charter, shuttle.
   - Adirondack Trailways—service to Albany Airport, Amtrak in Utica, Syracuse, and next to Amtrak in Rochester, NY.
   - Premier Coach—Charter, Amtrak replacement bus service when lines closed for track maintenance.
   - Greyhound Lines—charter service.

4. Areas or corridors needing intercity service:

   - Private carriers:

     - Premier Coach—Western Corridor of Vermont, connection to Albany Amtrak.
     - Peter Pan--Springfield, MA to Greenfield, MA to Burlington, VT; (Route 2 in Massachusetts—serving Berkshires, Greenfield, Boston).
     - Adirondack Trailways—Route 7 Corridor Burlington to Albany.
     - Student Transportation—Burlington to Albany, Rutland-Boston, White River Junction to Springfield, MA.

- Greyhound Lines—Daily roundtrip service from White River Junction to Albany, New York, with intermediate stops (Vermont locations only) in Bridgewater, Rutland, Danby, Manchester Center, Arlington and Bennington.

- Planning Agencies:

  - Bennington County Regional Commission—Bennington to Albany, Bennington to Boston, Bennington/Manchester to Burlington, Bennington/Manchester to Montpelier.
  - Lamoille County Planning Commission—Route 100 into Lamoille County, connection to Route 15 corridor destinations.

- Transit Providers:

  - Green Mountain Community Network, Inc.—Bennington to Albany (airport, train, bus connections), Manchester to Albany (airport, train, bus connections) Bennington to Williamstown, MA (to intercity bus); Bennington to Brattleboro.
  - Advance Transit—Route 4 Corridor Woodstock to White River Junction/Lebanon/Hanover.
  - RCT—St. Johnsbury to Littleton, NH to connect with Concord Trailways; Newport/St. Johnsbury/Wells River (connect with Stagecoach); Hardwick to Burlington.
  - CCTA/GMTA—Saturday/Sunday St. Albans Link service, Sunday Middlebury Link to connect to Greyhound at Burlington International Airport. Saturday/Sunday Service on the Route 2 commuter between St. Johnsbury and Montpelier.

5. Destinations or Groups Needing More Service:

   - Private Carriers:

     - Premier Coach—New York City, Albany.
     - Peter Pan—no specific market group.
     - Adirondack Trailways—low income people, seniors and students. Also note many requests for service to/from NY state points to Bennington, Rutland, and Burlington.
     - Student Transportation—service to connect current rail and public transportation, coordinating service. Where possible replace local services with intercity service (Burlington to Albany).

- Greyhound Lines—generally identified southwest Vermont as needing more service, connections to intercity networks to provide links to major northeastern cities, provided a sample service concept for White River Junction to Albany via Rutland and Bennington. Connections in White River Junction would allow service to Burlington, Montreal, or Boston; connections in Albany would tie to other GLI services to Montreal, Boston, New York City, Buffalo; to Adirondack Trailways services to Long Island; and to Peter Pan service to Springfield, Hartford and Providence. Access to the Albany Airport would be provided.

- Planning Agencies:

  - Bennington County Regional Commission—Commuters traveling from Bennington to Albany, visitors traveling from Albany Amtrak or Albany airport to SW Vermont.
  - Lamoille County Planning Commission—Medical facilities (Morristown), ski resorts (Stowe, Jeffersonville, and colleges (Johnson)).

- Transit Providers:

  - GMCN—college students, seniors, youth, persons with disabilities, employees, persons needing access to urban services (includes veterans affairs). Users would need connectivity at destinations to reach other modes, retail, medical, offices, tourism destinations, colleges, sports venues.
  - Advance Transit—Additional evening service on the Orange Route to allow better connections to Amtrak.
  - RCT—St. Johnsbury to Littleton, NH to connect with Concord Trailways; Newport/St. Johnsbury/Wells River (connect with Stagecoach); Hardwick to Burlington.
  - CCTA/GMTA—Weekend service to Burlington (will be less productive than commuter services).

6. Other Improvement Needs:

   - Middlebury Transit—more public/private cooperation.
   - Premier Coach—use private providers with subsidies to add service in the western corridor.
   - Adirondack Trailways—if new services instituted, would need sales outlets, and marketing to promote new services.

- Greyhound Lines—If operated by Greyhound rural services would require vehicle capital for two small buses. Service would also need marketing and promotion for new services, Greyhound also recommends including any new services under their Greyhound Connect branding, and on their internet site.
- Peter Pan—We need other states to do similar consultation and planning for intercity service.
- RCT—VTrans should fund more service with CMAQ funds to create commuter routes with connections.
- Advance Transit—We are going to do a TDP for Advance Transit, with a focus on increasing frequency on Green and Orange routes, and connections to the Swim Center—which could service a park and ride lot. A park and ride lot is needed near the I-91/I-89 interchange.
- GMCN—Bennington—We are building a multi-modal center to link intercity and regional services, adding more service to connect to rural areas of the county and to connect to future planned rail passenger services.
- CCTA/GMTA—We will be getting over-the-road coaches for Montpelier Link and other Link routes under an FTA Bus and Bus Facilities Livability Grant.
- Bennington County Regional Commission—Needs include schedules, other information, and marketing—all in one website for current services operated by different entities, including firms like Yankee Trails. It is hard to get information from different sources that may not be known to the potential user.

SUMMARY

To sum up the responses:

- No respondent said there are no unmet intercity needs.

- The Albany-Bennington-Rutland-Middlebury corridor is the most frequently identified service need, including connections to the Albany airport, Amtrak, and intercity bus services.

- Other intercity corridors identified as areas of need include:
  - Albany-Bennington-Rutland-White River Junction (with intermediate stops).
  - Bennington-Wilmington-Brattleboro.
  - Newport to White River Junction.

- Woodstock to White River Junction (and Lebanon/Hanover New Hampshire).

- A need was identified for weekend service where existing regional commuter services are provided (Middlebury to Burlington, for example), or for transit connections to existing intercity service (St. Johnsbury to Littleton, NH, for example).

- There was some focus on information needs for existing service and connections, and the need to have sales outlets and marketing for any new services.

- The only facility need identified is a park and ride in WRJ at the I-89/I-91 interchange.

- One intercity provider explicitly mentioned a need for bus capital to operate funded expansion services.

CONSULTATON MEETING

In addition to the written survey, all of those surveyed were invited to a meeting held on November 15, 2011 at the VTrans offices in Montpelier, Vermont. Approximately 16 persons attended, in addition to VTrans' staff and consultants. Three private carriers, nine transit operators, and two regional planning agencies were represented, along with a member of the Vermont legislature. A list of the attendees is included as Appendix C.

A presentation covered the Section 5311(f) program, the needs assessment, and the policy options including use of the in-kind match provisions. A copy of this presentation is included as Appendix D. Following the presentation, attendees were invited to ask questions or add their comments regarding the need for additional rural intercity services in Vermont, and the appropriate policy. There was considerable discussion of needs and potential policies.

Decision on Certification of Unmet Intercity Needs Still Open

An initial question was whether or not a decision had already been made by the state regarding certification of "no unmet rural intercity needs" (as required by FTA if the 15 percent set-aside is to be used for other purposes), and if so would the input at the meeting have any impact. VTrans' staff made it clear that no decisions regarding the Section 5311(f) program had been made, and that the state was still examining the

needs study and considering options, and it would take into account all input provided. Another question concerned the likely fiscal year of any potential change in state policy regarding intercity bus. VTrans' staff replied that at this point FY14 was the focus of discussion.

In-Kind Match

Other questions concerned the in-kind match provisions and how that could work to reduce or eliminate the need for local or state cash operating match. One clarification is that Greyhound is not the only potential provider of in-kind miles for match—a carrier such as Adirondack Trailways could use its own connecting services as match, as long as they are fixed-route, fixed-schedule intercity services, and they are not already being used as match under another state Section 5311(f) program. There was also some discussion of how to ascertain the true costs of intercity bus service provided by private carriers, which would be needed either to value the in-kind miles correctly, to determine actual net deficits if they receive subsidies, and for performance measures. The consultants stated that Greyhound had provided this data in other states using the in-kind match method.

Determining Unmet Rural Intercity Need Given Existing Regional Transit Connections

A discussion of what constituted unmet intercity need followed. It was noted that many of Vermont's transit operators had implemented services that would allow residents of towns without intercity service to get to towns with service, for example from Middlebury (no intercity service) to Burlington (intercity service available). One questioner asked if Greyhound match miles could be used to support these services. The federal regulations would allow such an arrangement if the services provided "a meaningful connection" to the intercity services, and there would need to be a granting of these miles by the intercity carrier. Typically "a meaningful connection" has meant that the subsidized service needs to operate to the same location as the intercity bus stop, arriving and departing within a two-hour window on either side of the intercity service schedule, seven days per week (or at least five), with the connection included in both regional and intercity carrier public information. Ideally, there would be an interline ticketing arrangement between the operator providing the subsidized service and the carrier providing the unsubsidized service. It is not clear how many of the transit links provided by the transit operators currently meet these requirements, or what might be needed to enable them to do so.

This led to further discussion of the potential demand for intercity connections as compared to commuter services. Would an additional service in these corridors that offered a meaningful connection carry enough riders by itself to justify the funding? An

example again was the Middlebury to Burlington service operated by ACTR. It is commuter service with multiple frequencies into Burlington in the morning, returning in the late afternoon. These buses go to the Cherry Street terminal shared with CCTA, but do not go on to Greyhound's stop at the Burlington Airport. A passenger on the ACTR buses would need to transfer to a CCTA bus going to the airport (and some do). Does this meet the need of Middlebury residents for access to intercity connections? ACTR has not heard requests for any service beyond the commuter service, according to Jim Moulton of ACTR, and in general he feels that intercity needs from Middlebury are met, even though it does not have intercity service.

A general point made about the connections provided by the local transit operators is that the needs assessment should include more detailed analysis of the potential of these services to be considered as meeting intercity needs—do they provide a meaningful connection now, or what changes would need to be made to allow them to be considered as providing a meaningful connection?

Potential for Cost Savings from Alternative Operational Models

It was suggested that perhaps the remaining rural intercity needs could be met most efficiently by a service model unlike the standard intercity bus service that had been withdrawn—that perhaps the use of small buses instead of over-the-road coaches would reduce subsidy requirements and be more appropriate given the anticipated low levels of demand. Intercity bus operators replied that most of the costs of operating bus services are labor or labor-related, and that it was unlikely that small buses would save very much. Also, intercity bus demand is very peaked, with higher ridership around weekends and holidays, and that any cost savings from operating small buses off-peak could be lost if several buses needed to be used to meet peak demands, which could otherwise be met by a single large bus (with a single driver).

Measures of Need, Demand and Performance

A related point is that the likely demand for a low frequency intercity service might be very low, and there is a need for some tool or metric to compare spending of funds on such a service to the potential use of the funding on other services—in effect measuring the opportunity cost of using funds for an intercity route as compared to other transit needs, given that these funds have been used in the past for other rural services. There is a value judgment that must be made regarding the kinds of trips that merit support.

It was suggested that rural intercity services could have performance measures like other transit services in Vermont, with services below a certain level losing funding. Measures used in other states have included farebox recovery and subsidy per

passenger. Farebox recovery is most comparable to the profitability test of the private market, as it encompasses fare policy, usage, and operating costs—it could be compared to other transit services. Subsidy per passenger can be used as a cap, with a level set at the cost of alternative services—for example the cost of sending the same passenger by taxi or limousine, or at the level of subsidy per passenger for other intercity modes such as passenger rail. For proposed service estimates of demand, revenue, and cost could be used to develop likely performance, which could be considered in evaluating whether or not a particular service should be funded.

Areas or Corridors with Unmet Rural Intercity Needs

Other participants made the point that although some areas in Vermont have new services that could be seen as replacing intercity service, other areas have not. Rutland, although it has Amtrak service to Albany and New York City, does not have any intercity bus service that could allow connections north to Burlington and Montreal, or east to Boston. Existing connections developed by the transit operators for commuters to Burlington do not allow Rutland passengers to make the round-trip in the same day. Newport has lost its connection to Greyhound and Amtrak services in White River Junction, and there is a need for links from that region, possibly to the Concord Coach services from Littleton, New Hampshire, if not to White River Junction. Another corridor that lacks service, which might be considered as intercity, is Bennington-Wilmington-Brattleboro. A general observation was that there was a need for service to Boston from the western half of the state (south of Burlington).

Conclusions from the Meeting

There was a lot of discussion and many valid points were made. No consensus was reached, and VTrans staff noted again that no decisions had been made, and that all of the comments would be considered as a proposed policy is developed. There was some agreement that more was needed of the degree to which existing regional transit services provided adequate access to remaining intercity bus services, and that possibly there was not as much unmet rural intercity need as it would appear by looking at a map of discontinued services.

ADDITIONAL INPUT

As part of the concurrent PTPP, there were several opportunities provided for public input regarding transit needs, and in several cases intercity needs were identified. These included:

- At the Montpelier meeting, a user of the Greyhound Montreal-Boston service (resident of Montpelier) commented on the need to maintain this service, which he used for frequent trips to Montreal. In general he noted that intercity bus supports economic development, by allowing such trips directly from Montpelier, and that having the stop in front of City Hall increased its visibility and made it more accessible (even by bicycle).

- At other public meetings, there was discussion of broader intermodal and intercity needs, including some rural intercity needs:

  - There are difficulties in making connections between different modes (local transit to intercity bus) where stops are not co-located,
  - There is a need for intercity service from the Northeast Kingdom,
  - There is a need for connections between regions within the state, including more commuter services,
  - There is a need for services that allow for day-trips between towns,
  - There is a need for weekend regional services, and
  - There is a need for improved information that would allow a user to put together trips that involve several providers, or allow a potential traveler to share the ride on a particular trip.

- There were also questions about state policy regarding intercity bus, including concerns about initiating new or replacement services if demand is insufficient, the difficulty in re-establishing ridership that has been lost, and concerns that subsidized intercity bus service would not be cost-effective. Data reflecting the ridership on the CMAQ-funded regional routes demonstrates higher levels of usage, and they can be seen as helping to fill intercity bus network gaps. In response it was noted that the private, unsubsidized carriers had set fares and reduced frequency to maximize farebox recovery, and that the demand seen by public operators likely reflects lower fares and higher frequencies that can be provided because the public operators do not have to recover their full costs.

- At the Rutland public meeting there was a clear expression that the state needed to address the loss of mobility resulting from the loss of intercity bus service on the western side of the state. Even though Rutland has Amtrak service to Albany and New York City, it was felt that former bus riders were left with no options, and that it was still difficult to get to Burlington (with multiple transfers) even with the public transit services. There was strong sentiment that a connection to intercity services in White River Junction was needed (as well as to medical and shopping facilities in nearby New Hampshire). One commenter suggested that Vtrans needed to create a kind

of statewide transit authority to provide the regional/intercity services that would replace the kind of network formerly provided by Vermont Transit.

GENERAL CONCLUSIONS

In general, the surveys, meetings, and public outreach process (for the PTPP) resulted in a general expression that there are unmet rural intercity needs, particularly in these corridors (destination points shown in brackets):

- [Albany] – Bennington – Manchester – Rutland – Middlebury - Burlington [Montreal or Boston]
- [Albany] – Bennington – Manchester – Rutland – Bridgewater - White River Junction-[Boston]
- Newport-St. Johnsbury - White River Junction (with intermediate stops) - [Boston or Springfield (MA) - New York City]
- [Albany] – Bennington – Wilmington – Brattleboro - [Springfield (MA) - New York City]

Discussion in the consultation meeting and in the PTPP meetings also included concerns that the demand on some or all of these routes for intercity service could be too low to justify funding, or that existing regional/commuter services provided adequate access to the remaining intercity bus services, or that Amtrak services met some of these needs.

However, of the places in the corridors cited, only Middlebury and Bennington residents have the opportunity to reach a city served by the national intercity bus network without one or more transfers between public transit services, and even then Middlebury residents would need to transfer to local bus (which is fairly frequent) to reach the airport/intercity bus station in Burlington. Although there is Amtrak service from Rutland to Albany and New York City, input suggested that it serves a different market segment than was formerly served by intercity bus, and that both of Vermont's Amtrak services go to New York City, leaving access to Boston limited to the existing intercity bus service. Some input recommended improvements to information systems to facilitate trips involving multiple transfers between different operators as a means of addressing the limited demand.

Ultimately it may be that the funding required to provide intercity service in some of these corridors would be too great, given limited ridership. However, Vermont has addressed similar questions for other transit routes by applying benchmark performance measures, and denying or eliminating funding for services that did not have enough ridership. Such an approach would likely be applied to any intercity services receiving funding as well.

APPENDIX A

Examples of the Letters and Blank Surveys

October 1, 2011

Dear _____:

The State of Vermont, through the Vermont Agency of Transportation (Vtrans), is conducting a statewide intercity bus needs assessment. A major focus of this study is to determine the potential need for state/federal assistance to maintain or provide connections from rural areas to connect with the national intercity bus network. Federal funding is potentially available for operating assistance, capital assistance (including the purchase of vehicles and other equipment or facilities), or marketing. Vtrans has already conducted an initial analysis of the need for and feasibility of implementing new rural intercity bus services, which is available for download at [http://www.kfhgroup.com/vermonttransitplanupdate.htm]. This letter is intended to solicit your input regarding unmet needs for scheduled intercity bus services, particularly rural services. We would also appreciate it if you could provide information about any scheduled services currently provided by your firm.

Your input will be considered as Vermont decides whether to develop a program of rural intercity bus assistance under Title 49 U.S.C. Section 5311(f). It will help establish program goals, assess the degree to which available services meet the needs, and make recommendations on needed program activities, services, and potential funding sources. A vital component of this assessment is consultation with existing and potential operators of rural intercity bus services regarding unmet rural intercity service needs, and your assistance in this regard would be greatly appreciated.

Based on Federal Transit Administration Circular 9040.1F the "Intercity Bus Service means regularly scheduled bus service for the general public that operates with limited stops over fixed routes connecting two or more urban areas not in close proximity, that has the capacity for transporting baggage carried by passengers, and that makes meaningful connections with scheduled intercity bus service to more distant points, if such service is available." Commuter bus service is not included in this definition.

Aspects of intercity services in Vermont that you can assist us in understanding include:

1. Existing scheduled services that provide connections between the rural areas and urban areas and how this information is made available to the public;

2. Areas/corridors/regions that you perceive as having an unmet need for service, whether there is a complete absence of service, or if existing services do not meet the needs.

3. Other aspects of intercity services in Vermont that need to be addressed. This could include facilities, wheelchair accessibility, marketing and information, schedule connections, etc.

Please provide your comments on the attached survey form, and return it in the self-addressed, postage paid envelope, or by fax or e-mail. **We would greatly appreciate a response by November 1, 2011**. In addition to this survey, **your input can be provided at a meeting on this topic to be held on November 15th, 2011, at 1:00 pm, in Montpelier at the Vtrans offices** in the National Life building in the 5th floor Board Room. At that meeting additional information will be provided regarding the Section 5311(f) program and how it could potentially be used in Vermont.

If you have no comment, please indicate that on the form and return it to us. Also, please let us know if you wish to be included in subsequent aspects of this study (and the best way to contact you or your firm). We will then distribute project information and requests for information as we proceed with the study. If you would not like to receive project information, just let us know in your response.

Vtrans has engaged the KFH Group, Inc. to compile the results of the survey and assist in the study. If you have any questions about the survey itself, please contact Fred Fravel at the KFH Group at 301-951-8660 or ffravel@kfhgroup.com. You can contact me, Barbara Donovan if you have any questions or concerns about this Vtrans initiative. We look forward to hearing from you.

Sincerely,

Barbara Donovan
AOT Public Transit Administrator
Barbara.donovan@state.vt.us

Enclosure: Needs Survey

VERMONT INTERCITY BUS CONSULTATION:
INTERCITY BUS OPERATOR SURVEY

Name:_____

Organization:_____

Mailing Address:_____

Phone:_____

Email:_____

Intercity Bus Service means regularly scheduled bus service for the general public that operates with limited stops over fixed routes connecting two or more urban areas not in close proximity, that has the capacity for transporting baggage carried by passengers, and that makes meaningful connections with scheduled intercity bus service to more distant points, if such service is available.

1. Based on this definition, do you operate any scheduled intercity bus services in Vermont or adjacent states? **Yes** ❑ **No** ❑

   If "Yes" please describe in terms of stops served, schedules, etc. (attach timetables or other information if available)

   _____

   _____

   _____

   _____

   Do you operate any other kinds of service, such as connections to airports or train stations, charter or tour service? Please describe:

   _____

   _____

   _____

   _____

2. How/Where do you make information of these services available to the public? Websites, brochures, posted schedules, etc.

3. Are there areas or corridors that you consider as having a need for more intercity bus service (particularly in rural areas)? This could be areas with no service, or places with existing service that could benefit from additional service (more schedules, local service, etc.).

4. Are there particular markets or groups that you see needing more service? Where do you think people wish to go - are there destinations needing additional service?

5. Please offer any comments regarding other aspects of intercity bus services that you see as needing improvement, such as vehicles, condition of bus facilities, schedule information, wheelchair accessibility, marketing, etc.

6. Do you want to receive future notifications about this study, including any additional surveys, meeting notices, or study reports? **Yes** ❑ **No** ❑

If "Yes", please provide review contact information at the top of this survey, and make sure it is complete.

Please return by November 1, 2011:

Fred Fravel
KFH Group, Inc.,
4920 Elm St., Ste 350
Bethesda, MD 20814.

Or fax to 301-951-0026, or email to ffravel@kfhgroup.com.

October 1, 2011

Dear _____:

The State of Vermont, through the Vermont Agency of Transportation (Vtrans), is conducting a statewide intercity bus needs assessment. A major focus of this study is to determine the potential need for state/federal assistance to maintain or provide connections from rural areas to connect with the national intercity bus network. Federal funding is potentially available for operating assistance, capital assistance (including the purchase of vehicles and other equipment or facilities), or marketing. Vtrans has already conducted an initial analysis of the need for and feasibility of implementing new rural intercity bus services, which is available for download at [kfhgroup ptpp website] This letter is intended to solicit input from the providers of local/regional public transit services in Vermont regarding the existence or lack of scheduled intercity bus services in your area, and any service you offer that connects with, or has potential to feed, into existing intercity bus services. We know that the regional transit operators operate a range of services and can provide a local perspective on potential or identified needs for providing scheduled transportation services to connect small town populations to larger urban areas and interstate services.

Your input, and the analysis in the draft needs assessment will be used by Vtrans as it considers whether to establish a program of rural intercity bus assistance under Title 49 U.S.C. Section 5311(f). It will also help establish program goals, assess the degree to which available services meet the needs, and make recommendations on needed program activities, services, and potential funding sources. A vital component of this assessment is consultation with existing and potential operators of rural intercity bus services regarding unmet rural intercity service needs, and your assistance in this regard would be greatly appreciated.

Based on Federal Transit Administration Circular 9040.1F the "Intercity Bus Service means regularly scheduled bus service for the general public that operates with limited stops over fixed routes connecting two or more urban areas not in close proximity, that has the capacity for transporting baggage carried by passengers, and that makes meaningful connections with scheduled intercity bus service to more distant points, if such service is available." Commuter bus service is not included in this definition.

Aspects of intercity service needs in Vermont that you can assist us in understanding include:

1. Existing scheduled services that provide connections between the rural areas and urban areas and how is this information made available to the public;

2. Areas/corridors/regions that you perceive as having an unmet need for service, whether there is a complete absence of service, or if existing services do not meet the needs.

3. Other aspects of intercity services in Vermont that need to be addressed. This could include facilities, wheelchair accessibility, marketing and information, schedule connections, etc.

Please provide your comments on the attached survey form and return it in the self-addressed, postage paid envelope, by fax or e-mail. We would greatly appreciate a response by November 1. In addition to this survey form, your input is invited at a meeting to be held on November ___, at _____, in Montpelier at the Vtrans offices in the National Life building in Room ____.

If you have no comment, please indicate that on the form and return it to us. Also, please let us know if you wish to be included in subsequent aspects of this study (and the best way to contact you). We will then distribute project information and requests for information as we proceed with the study. If you would not like to receive project information, just let us know in your response.

Vtrans has engaged the KFH Group, Inc. to compile the results of the survey and assist in the study. If you have any questions about the survey itself, please contact Fred Fravel at the KFH Group at 301-951-8660 or ffravel@kfhgroup.com. You can contact me, Dave Peletier, at _____ if you have any questions or concerns about this Vtrans initiative. We look forward to hearing from you.

Sincerely,

Dave Peletier

VERMONT INTERCITY BUS CONSULTATION
LOCAL TRANSIT PROVIDER SURVEY

Name:_____

Organization:_____

Mailing Address:_____

Phone:_____

Email:_____

Intercity Bus Service means regularly scheduled bus service for the general public that operates with limited stops over fixed routes connecting two or more urban areas not in close proximity, that has the capacity for transporting baggage carried by passengers, and that makes meaningful connections with scheduled intercity bus service to more distant points, if such service is available.

1. Are there areas or corridors that you consider as having a need for more intercity bus service (particularly in rural areas)? This could be areas with no service, or places with existing service that could benefit from additional service (more schedules, local service, etc.).

   _____

   _____

   _____

2. Are there particular markets or groups that you see needing more service? Where do you think people wish to go - are there destinations needing additional service?

   _____

   _____

   _____

3. Please offer any comments regarding other aspects of intercity bus services that you see as needing improvement, such as vehicles, condition of bus facilities, schedule information, wheelchair accessibility, marketing, etc.

   _____

   _____

   _____

4. Do you currently operate any long-distance services (Scheduled or demand-response)? **Yes** ❑ **No** ❑

   If "Yes" please describe in terms of pickup points, destinations, stops served, how passengers make reservations, eligibility restrictions, schedules, fares, etc. (attach timetables or other information if available)

   _____

   _____

   _____

   _____

5. How/Where do you make information of these services available to users? Websites, brochures, posted schedules, etc.

   _____

   _____

   _____

   _____

6. Do you see any potential need or opportunity to expand or modify these services to connect with existing intercity bus services or meet needs for intercity bus services?

   _____

   _____

   _____

   Do you want to receive future notifications about this study, including any additional surveys, meeting notices, or study reports? **Yes** ❑ **No** ❑

   If "Yes", please provide review contact information at the top of this survey, and make sure it is complete.

   Please return by November 1, 2011:

   Fred Fravel
   KFH Group, Inc.,
   4920 Elm St., Ste 350
   Bethesda, MD 20814

   Or fax to 301-951-0026, or email to ffravel@kfhgroup.com

APPENDIX B

Surveyed Intercity Providers

Appendix B: VT Operators of Transportation Services

Organization	Contact		Address				Email	Phone	Fax
	L, Name	F, Name	Street	City	Zip Code	State			
Greyhound Lines, Inc.	Isaacs	Randy	361 West Main Street	Hendersonville	37075	TN	risaacs@greyhound.com	615.338.0847	615-338-0845
Concord Coach Lines, Inc.; Dartmount Coach; Boston Express	Blunt	Harry	7 Langdon Street	Concord	03301	NH		603-228-3300	
Yankee Trails World Travel	Adams	Jeff	569 Third Avenue Ext.	Rensselaer	12144	NY	jadams@yankeetrails.com	518-286-2400,ext. 203	518-283-3279
Adirondack Transit Lines	Berardi	Eugene	499 Hurley Avenue	Hurley	12443	NY	info@trailwaysny.com	845-339-4230	845-339-5222
Peter Pan Bus Lines	Picknelly	Peter	P.O. Box 1776	Springfield	01102	MA	customerservice@peterpanbus.com	413-781-2900	
MegaBus	Mullin	Amanda	4400 S. Racine Ave	Chicago	60609	IL	megabusmedia@hanser.com	800.340.6434	
Dattco Coach & Tour									
Premier Coach Company	Charlebois	Randall	946 Route 7 South	Milton	05468	VT	randy@premiercoach.net	802-655-4456	802-655-4213
Bristol Tours, Inc.	Bolles	Susan	P.O. Box 198	Bristol	05443	VT	mark@bristoltoursusa.com	802-453-2661	
Middlebury Transit	Fuller	Bill and Sara	P.O. Box 423	Middlebury	05753	VT		802-388-3838	
Bet-cha Transit			202 Marinelli Road	Middlebury	05753	VT		802-388-7800	
Mountain Transit	Sharrow	John	19 Precast Road	Milton	05468	VT	jsharrow	802-893-1334	
Lamoille Valley Transportation	Prive	Norman	643 VT Route 15 W	Morrisville	05661	VT	norm@lvt.org	802-888-2103	

APPENDIX C

List of the Attendees
Consultation Meeting – November 15, 2011

Interaty Bns - Sign In 11/15/11

Name	Affiliation	phone	email
Meredith Birkett	CCTA	864-0211	mbirkett@cctaride.org
Petra Keating	CCRPC	660 4021	pkeating@ccrpcvt.org
Barbara Donovan	VTrans	828-2828	barbara.donovan@state.vt.us
Stephanie Gorterman	Greyhound		
	AT	802-295-1824	VCHESNUT@ADVANCETRANSIT.com
ANNE NOONAN	TRAILWAYS	845 339 4230	anoonan@trailwayny.com
Katharine Otto	SWCRPC		kotto@swcrpc.org
Mary HABIG	CRT	802-460-7433	mhabig@crtransit.org
Brian Waterman	CRT	802 460 .7433	Bwaterman@crtransit.org
Bob Young	Premier	802-655-4317	bob@premiercoach.net
Chris Andreasson	ADVANCE TRANSIT	802 295-1824 ext 206	chrisa@advancetransit.com
Jim Moulton	ACTR	802-388-1946	jim@actr-vt.org
DAVID PALMER	STAGECOACH	802 728-3713	DPALMER@STAGECOACHBUSES.ORG
DONNA BAKER	GREEN MTN EXPRESS	447-0477	dbaker@greenmtnexpress.org
Myrja Dana	MVRD	775-3244 x113	/adx@vermontel.net
Ross MacDonald	VTrans	828-5577	Ross.macdonald@state.vt.us
Amy Rast	VTrans	828-6521	amy.rast@state.vt.us
Mollie Burke	VT. Leg.	802-257-4844	mburke@sover.net
Leonard Linney	DVTA	802-464-8187	leonard@moover.com

APPENDIX D

Rural Intercity Transit Consultation Meeting Presentation – November 15, 2011

Rural Intercity Transit Consultation Meeting

Source: The Dartmouth, http://thedartmouth.com/2008/03/25/news/coach

November 15, 2011

Today's Agenda

1:00 – 1:15	Introductions/Agenda/Goals
1:15 – 2:00	5311/5311(f) Basics
2:00 – 2:30	White Paper on Unmet Intercity Needs
2:30 – 3:30	Discussion on Vermont Policy: Certification, Program Options, Services and Funding
3:30 – 4:00	Summary and next steps
4:00	Adjourn – Thank you for your participation

History – Rural Intercity Services

- Intercity bus network formerly regulated at federal (ICC) and state levels
- Resulted in cross-subsidies that supported rural services
- Decline in rural bus services and growth in human service agency transportation led to creation of federal rural transit program in 1975--began as Section 18, it is now called the Section 5311 program.
- Bus Regulatory Reform Act of 1982 and ICC Sunset in 1989 ended federal and state economic regulation
- Carriers abandoned unprofitable rural service from that time to the present—number of stops declined from about 15,000 to around 2,000 today.
- Federal policy response was limited assistance as part of rural transit program—initially called Section 18(i), now Section 5311(f).

FTA Section 5311: Rural Public Transportation Program

- Administered by VTrans
- Provides funding for transportation in areas under 50,000 population, called Non-Urbanized areas
- Eligible applicants include public agencies and private non-profit agencies
- Services must be open to the general public without restrictions, but may be designed to maximize use by persons who are transportation disadvantaged (including elderly and persons with disabilities)
- Funding is available for capital (vehicles, computers, facilities, etc.); operations (subsidies); and planning, administration and marketing
- Federal S.5311 shares:
  - Up to 80 percent federal for capital; administration, planning and marketing
  - Up to 50 percent of the net operating deficit for operations

FTA Section 5311(f): Rural Intercity Program

- Subsection of the overall Section 5311 program
- Also must serve Non-Urbanized areas- under 50,000 population
- Intercity service is defined in the FTA guidance
- Federal S.5311(f) shares same as for S. 5311—but with the addition of a program of in-kind match that can enable funding of up to 100 percent of the net operating deficit
- New federal consultation requirements require involvement of intercity operators and other stakeholders
- Also administered by VTrans

Definition of Intercity Service

- Regularly scheduled bus service
- General Public
- Operates with limited stops between two or more urban areas not in close proximity
- Not commuter service
- Fixed-route, capable of carrying baggage
- Meaningful connection with national intercity network

Meaningful Connection

- To National Network of Intercity Bus Service
- Service to physical locations where connections can be made (stations or stops)
- Scheduled to facilitate connection with intercity bus service
- Information to make connection—schedules, stop locations
- Interline ticketing not required by FTA, but Greyhound and other firms are supportive

Eligible Uses of S.5311(f) Funds

- Operating Assistance (generally 50/50 match on net deficit):
  - Funding of net deficit on a particular route or service
  - Funding for all intercity routes to support the network
  - Purchase-of-service/demonstration projects
  - User-side subsidies
- Capital Assistance (generally 80/20):
  - Vehicles
  - Shelters, stops, signage
  - Intermodal facilities (related to rural usage)
  - Computers/communications equipment (ticketing)
  - ADA accessibility equipment
- Planning and Marketing
  - Studies
  - Marketing Plans, materials, campaigns
  - Information systems

FTA Section 5311(f) In-Kind Operating Match

- Only applies on Section 5311(f) Operating Assistance projects

- Redefines the project to include both the subsidized rural intercity route and connecting unsubsidized intercity service

- The value of the capital on the unsubsidized portion is used as "in-kind" match for the operating subsidy on the subsidized portion

- The value of the in-kind capital is calculated as 50% of the fully-allocated operating cost per mile on the unsubsidized portion, times the the number of revenue miles included in the project

FTA Section 5311(f) In-Kind Operating Match (cont.)

- The value of the in-kind capital is calculated as 50% of the fully-allocated operating cost per mile on the unsubsidized portion, times the number of revenue miles included in the project

- If enough unsubsidized revenue miles are included in the project, the subsidized portion is effectively 100 percent federally funded (no cash local match required)

- Agreement from the carrier providing the unsubsidized miles to participate in the project must be included in the application/bid package, documenting the services to be used as match

- A potential disadvantage is that this method uses the funds available to the state at twice the rate of the normal 50 percent federal/50 percent local match on the net deficit

Sample Projects: Operating Assistance

- Route-level assistance:
  - Washington State: state is S.5311(f) grantee, contracts for particular
  - service in four corridors
  - Michigan: funds service on five routes with an intercity carrier
  - Minnesota: funds service on a number of rural routes with an intercity carrier
  - Maryland is funding two routes, one operated by a regional carrier and the other by a national firm
- Network assistance:
  - Iowa funds a set amount per-mile on all rural intercity services
  - New York funds all upstate intercity bus service on a rate per mile and per passenger
- Rural feeder assistance:
  - California funds Sage Stage, rural operator, on connecting route to Greyhound in Reno
  - Alabama funds rural operator West Alabama to connect with Greyhound

Sample Projects: Capital

- **Vehicles:**
  - Georgia funds private intercity carriers to purchase coaches for use in rural areas
  - Michigan funds coaches for scheduled service throughout the state
  - Colorado has purchased coaches for two private intercity operators
  - Washington is funding smaller buses for use on contracted rural intercity routes
  - Maryland funded an over-the-road bus and three small buses for use on routes

- **Facilities:**
  - Minnesota funded a portion of the Minneapolis intermodal terminal (in proportion to rural usage)
  - California intermodal terminal projects
  - Numerous states have funded trailblazer sign projects to direct people to station locations
  - New Hampshire used CMAQ funds to build intercity bus stations, leased to private operators who operate and maintain them (including park and ride lots)
  - Texas has funded intercity bus station rehab and accessibility projects

- **Other:**
  - Computers and ticketing equipment funded in a number of states
  - Shelters at rural stops of intercity service
  - A number of states have funded retrofits of intercity vehicles to support ADA accessibility

Sample Projects: Other

- Washington State funding of development of traveler information system (Google Transit statewide)

- Iowa funding of 1-800 telephone assistance operated by Jefferson Lines to tell users how to use rural transit to connect to intercity

- Marketing research in Minnesota, Iowa

Section 5311(f) Funding Levels

- 15 percent set-aside of a state's S.5311 rural transit apportionment is for rural intercity

- Unless a state has conducted a consultation process with intercity operators and certifies that it has no unmet intercity needs

- Vermont amount:

Intercity Bus Needs Assessment and Policy Options White Paper

- Completed in September 2011, part of the 2012 Vermont Public Transit Policy Plan (PTPP)

- Included:
  - Background and policy context
  - Inventory of existing intercity passenger services
  - Analysis of intercity bus service needs based on demographic analysis and identification of potential key destinations
  - Input from PPTP stakeholders and public meetings

- Policy Options:
  - Conduct consultation process to obtain additional input from stakeholders and potential providers, and if warranted
  - Develop a rural intercity program element in the state's overall public transportation program using Section 5311(f)
  - Potential funding/use if the in-kind funding method to implement new services on identified corridors using an RFP process
  - Provide capital funding for vehicles to operate new services

Review of Previous Planning Studies:

- **February 1998: Vermont Statewide Intercity Bus Study**
  - **Inventory of existing service**
  - **Identified unmet needs**
  - **identified gaps in the network and potential services to fill them**
  - **Policy and funding options**

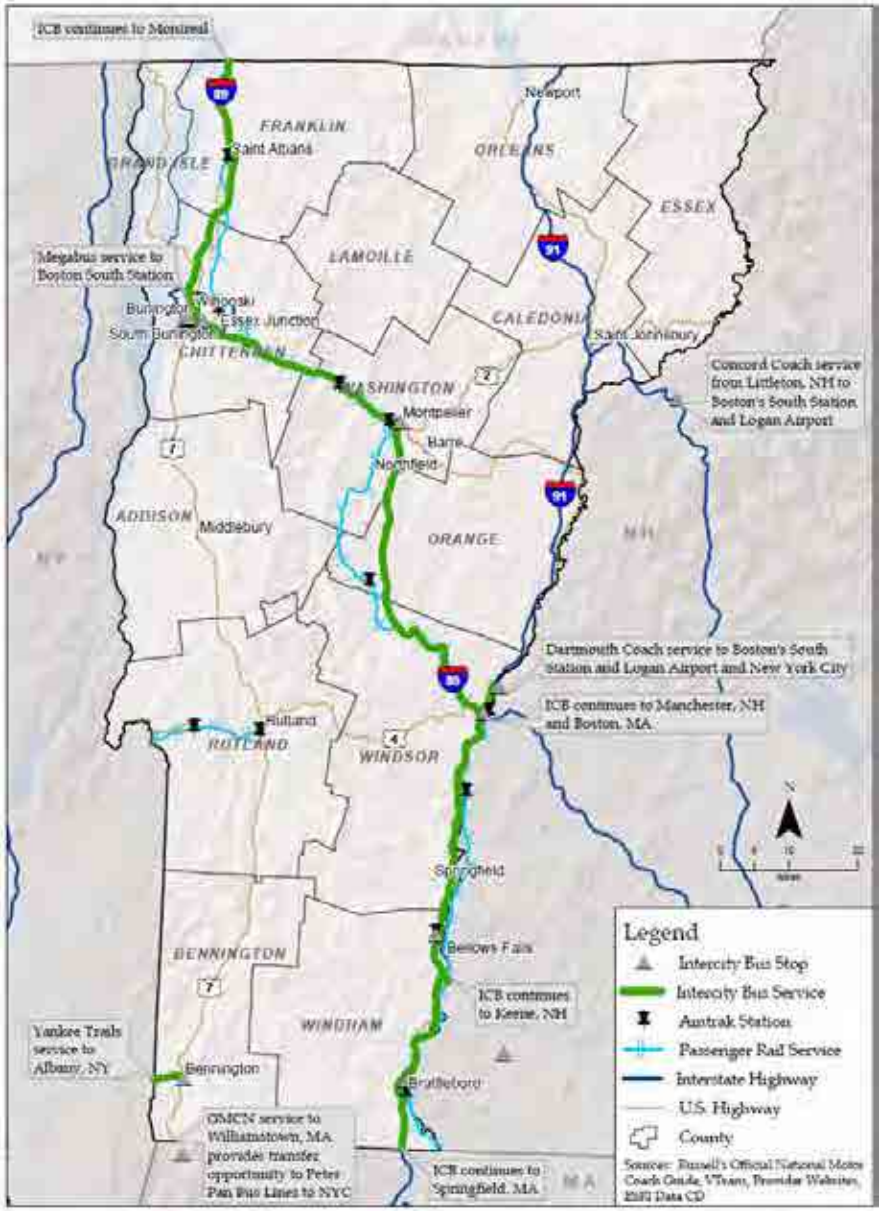
- **January 2008: A Study Regarding the Regional Connectivity of Vermont's Public Transportation System –Legislative Report**
  - **Reviewed ability to make intercity or regional trips using existing transit services following reduction in intercity bus services**
  - **Found that many trips are technically possible, but would require multiple transfers and delays**
  - **Recommended improved information about available service and potential connections**

Inventory of Current Providers

- Six providers of regularly scheduled intercity bus services:
  - Greyhound Lines
  - Megabus
  - Yankee Trails
  - Concord Coach (NH)
  - Dartmouth Coach (NH)
  - Peter Pan Bus Lines (MA)

- Within Vermont service is limited:
  - Greyhound: Montreal-Burlington-Montpelier-White River Junction-Boston and White River Junction-Bellows Falls-Brattleboro-Springfield
  - Yankee Trails: Bennington-Albany
  - Megabus: Burlington-Boston

Figure 2-1: Existing Intercity Bus Service in Vermont



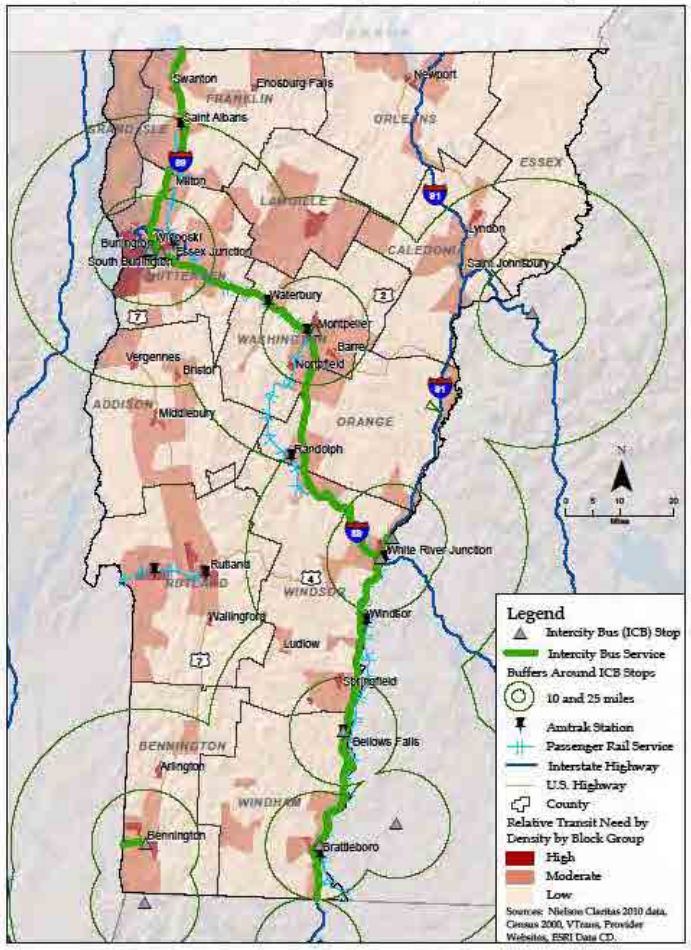
Demographic Analysis:

Identify persons with characteristics similar to those of intercity bus passengers

- **Young adults**
- **Older adults**
- **People with low income**
- **People with disabilities**
- **Autoless households**
- **Density adjustment**

Unmet Needs Based on Demographic Data

- Fourteen towns with populations greater than 2,500 and high densities of transit dependent persons are more than ten miles from existing intercity bus stops
- Nine of these towns are more than 25 miles from the nearest intercity bus stop



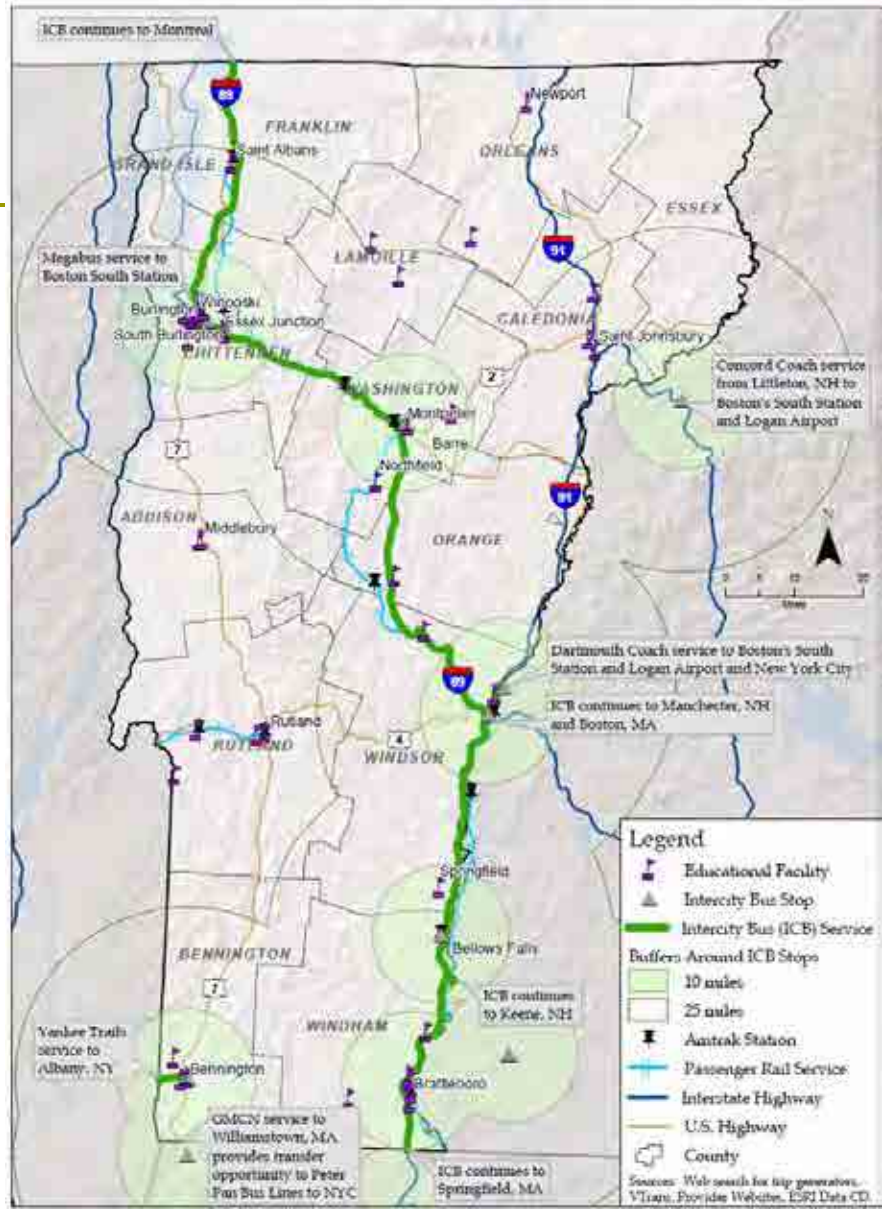
Establishing Intercity Bus Need: Destinations

- **Location of Intercity Bus Stops**

  And:
  - **Colleges and universities**
  - **Correctional facilities**
  - **Hospitals**
  - **Major airports**
  - **Military Installations**
  - **Recreation sites—ski areas**

- **Many unserved origins and destinations are in the Route 7 Corridor, Newport**

Figure 3-7: Intercity Bus Destinations - Educational Facilities



Potential Corridors:

- Illustrative Routes in the White Paper:
  - Burlington-Middlebury-Rutland-Manchester-Bennington-Albany (NY)
  - Rutland-Springfield-Bellows-Falls-Brattleboro (Boston)
  - Newport-White River Junction

- Other Routes are possible, or other connections

- Route 7 corridor may be possible using in-kind match alone with no local cash match

Recommended approach:

- VTrans should not certify no unmet needs—demographic analysis and input from the surveys identified intercity service needs

- Offer a Section 5311(f) program separate from the overall Section 5311 grant program

- Begin with a solicitation for service in a limited number of corridors

- Use the in-kind funding method so that carriers or localities do not have to provide local cash match for operating projects

- Use an RFP process to solicit bids to provide desired routes (like Washington and Oregon programs)

- Continue planning and consultation process

Establishing Intercity Bus Need: Statewide Outreach

Purpose of Discussion –

1. Review and discuss Vermont's intercity transportation: Needs, Desires, Planning

2. Discuss potential solutions to address intercity transportation needs

3. Marketing and Branding