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TRANSIT SERVICE GAPS AND NEEDS

Transit service gaps and needs and estimates of the resources needed to improve transit services in the Bennington County (Southwest) region are discussed below. Note that while most of the towns and villages in Bennington County are included in the Bennington County Regional Commission (BCRC) service area, several are part of the Windham Regional Commission (WRC) service area and are not discussed here.

Overview of Existing Services

Fixed Route Services

Green Mountain Community Network (GMCN) operates local and regional fixed routes in the Bennington area branded as the Green Mountain Express (GMX).

The Blue, Red, Green, and Brown routes provide local service within the town of Bennington, focusing on key destinations such as Southwestern Vermont Medical Center and other health care facilities, two colleges, shopping areas, and employers. The Blue and Red routes operate from roughly 8:00 a.m. to 6:00 p.m. on weekdays, every 30 minutes. The Brown Route serves North Bennington, Southern Vermont College, and Bennington College with 5-6 round trips, two of which are seasonal and operate from late August through mid-June, on weekdays. Saturday service between downtown, Southwestern VT Medical Center, shopping areas, and the colleges is provided on the Green and Light Green routes, which operate between 11:00 a.m. and 5:00 p.m.

Regional GMX service connects the town of Bennington with other communities. The Orange, Emerald, and Purple routes each operate 4-6 round trips on weekdays; the Orange route to Manchester also operates two round trips on Saturday. Marble Valley Regional Transit District's Manchester to Rutland route offers four round trips Monday through Saturday, connecting with the Orange Line. The Emerald route provides service to Wilmington and, through connections with Southeast Vermont Transit's MOOver Bus 10, to Brattleboro. The Purple route connects the town of Bennington and Williamstown, MA through Pownal, VT.

All fixed routes deviate up to ¼ of a mile for pickups and drop-offs; deviations are scheduled a day in advance.

Dial-A-Ride and Other Services

GMCN also provides demand response service for eligible participants in human service program such as Medicaid (GMCN also serves Windham County), Reach Up, and Fair Hearing, and for individuals who are eligible for trips under the Elders and Persons with Disabilities (E&D) transportation program. Trips are provided on GMCN vehicles and by volunteer drivers. The E&D program serves older adults and people with disabilities in Bennington County as well as clients of GMCN's E&D partners: United Counseling Services (UCS), Bennington Project Independence (BPI), Southwestern Vermont Council on Aging (SVCOA), and Vermont Association for the Blind and Visually Impaired (VABVI). All partner organizations also operate services for their clients directly, coordinating with GMCN to avoid overlap.

Bennington College operates a shuttle service during the school year for students, faculty, and staff. Service is tailored to the specific needs of the college community. It operates within an eight-mile radius of the campus and provides service to Williamstown, MA on weekends.

Private intercity bus carriers that serve Bennington County include:



- ▶ Vermont Translines service on U.S. 7 between Burlington and Albany (one daily trip)
- ▶ Shires Connector from Manchester to Albany (two daily round trips)
- ▶ Yankee Trails service from Bennington to Albany (two weekday round trips)

Four taxi companies offer service within the county.

Key Destinations

Retail areas (including supermarkets), health care facilities, colleges and universities, and human service agency offices are primarily located in the following communities:

- ▶ Bennington
- ▶ Manchester

Some of those key destinations are shown in Figure 1 (more detail can be found on the route maps posted on the GMCN website, <http://greenmtcn.org/schedule.html>). GMX bus routes serve many local and regional destinations.

Employment and Commuting Patterns

Employers

Figure 2 shows the location of employers of various sizes in the county.

The highest concentration of employers is in and around the town of Bennington; Manchester also has a significant cluster of employers.

Large employers, with 100 or more employees, are located in Bennington, Manchester, and Arlington. A few smaller employers, with fewer than 100 employees, are scattered throughout the more rural towns.

Large employers that do not appear to be served directly by transit routes are located in Bennington, Manchester, Shaftsbury, Dorset, and Peru.



Figure 1: Transit Services in Bennington County

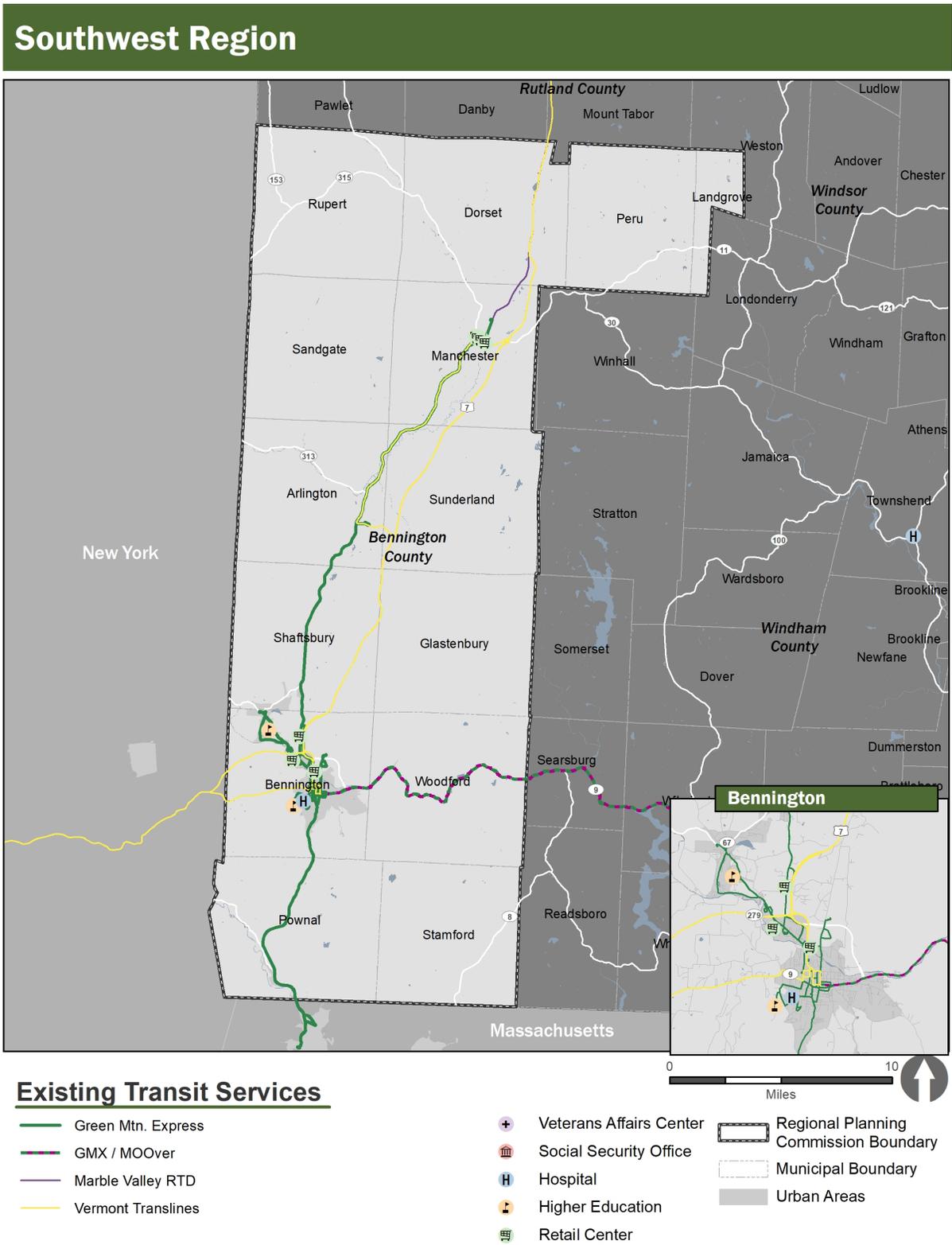
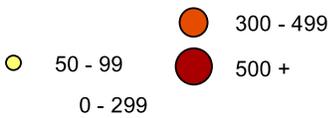
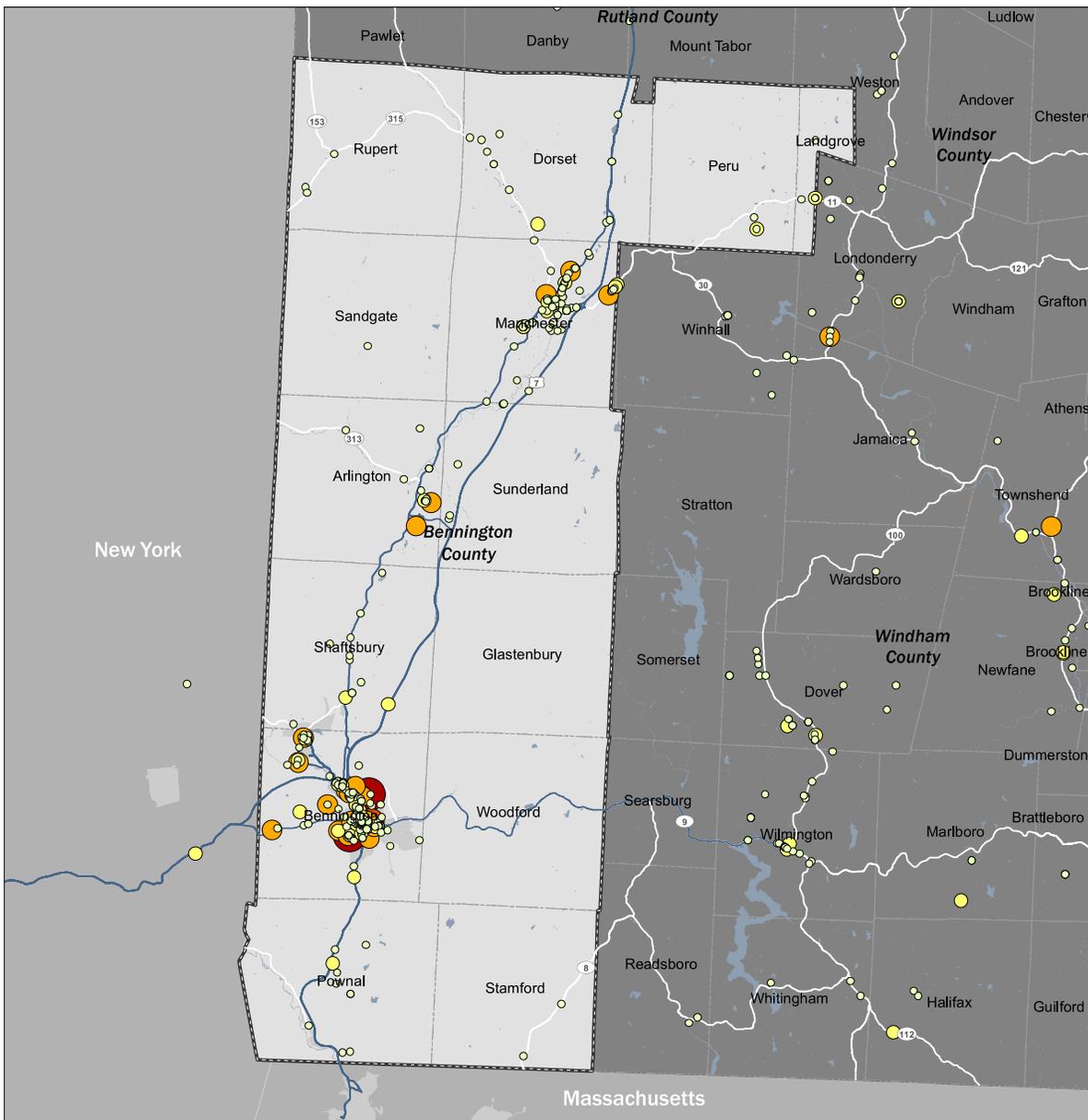


Figure 2: Employers in Bennington County



Source: Dun & Bradstreet, 2005



Commuting Patterns

Table 1 presents an overview of where Bennington County residents work and where individuals who are employed in Bennington County live.

Table 1: Employment in Bennington County, 2015

Employment	Number	Percent of Total Bennington County Employment	Percent of Total Employed Bennington County Residents
Workers in Bennington County			
Total Employees in Bennington County	16,459	100%	
Bennington County Residents Employed in Bennington County	9,512	58%	
Residents of Other Areas Working in Bennington County	6,947	42%	
Residents of Other Vermont Counties	3,134	19%	
Residents of Other States	3,813	23%	
Residents of Bennington County			
Total Employed Bennington County Residents	14,507		100%
Bennington County Residents Employed in Bennington County	9,512		66%
Bennington County Residents Employed in Other Areas	4,995		34%
Working in Other Vermont Counties	3,254		22%
Working in Other States	1,741		12%

Source: U.S. Census, Longitudinal Employer-Household Dynamics, 2015

Nearly 60% of all those employed in Bennington County live in the county. Of the 42% of employees who live outside of the county, 19% are residents of other Vermont counties, including Rutland, Windham, Windsor, Chittenden, Addison, and Washington counties. Twenty-three percent of Bennington County employees live in other states, particularly New York, Massachusetts, and New Hampshire.

Sixty-six percent of the 14, 507 Bennington County residents who are employed also work in the county. Twenty-two percent of employed county residents work in other Vermont counties, including Rutland, Windham, Chittenden, Windsor, and Washington counties. The remaining 12% of employed Bennington County residents work in New York, New Hampshire, Massachusetts, and other states.

Figure 3 illustrates the daily commuting travel flows into the town of Bennington at the town level.

Most commuters to Bennington come from within the town, Shaftsbury, Pownal, and towns in Rensselaer and Washington counties, NY. Significant numbers of daily commuters are drawn from those New York communities.

Daily commuting trips from other towns to Manchester are shown in Figure 4. While most trips originate in Manchester and adjacent towns, commuters are drawn from the town of Bennington and a number of Rutland County communities. Relatively small numbers of commuters to Manchester originate in eastern Vermont.



Figure 3: Daily Commuters to Bennington Town

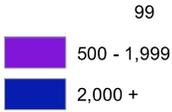
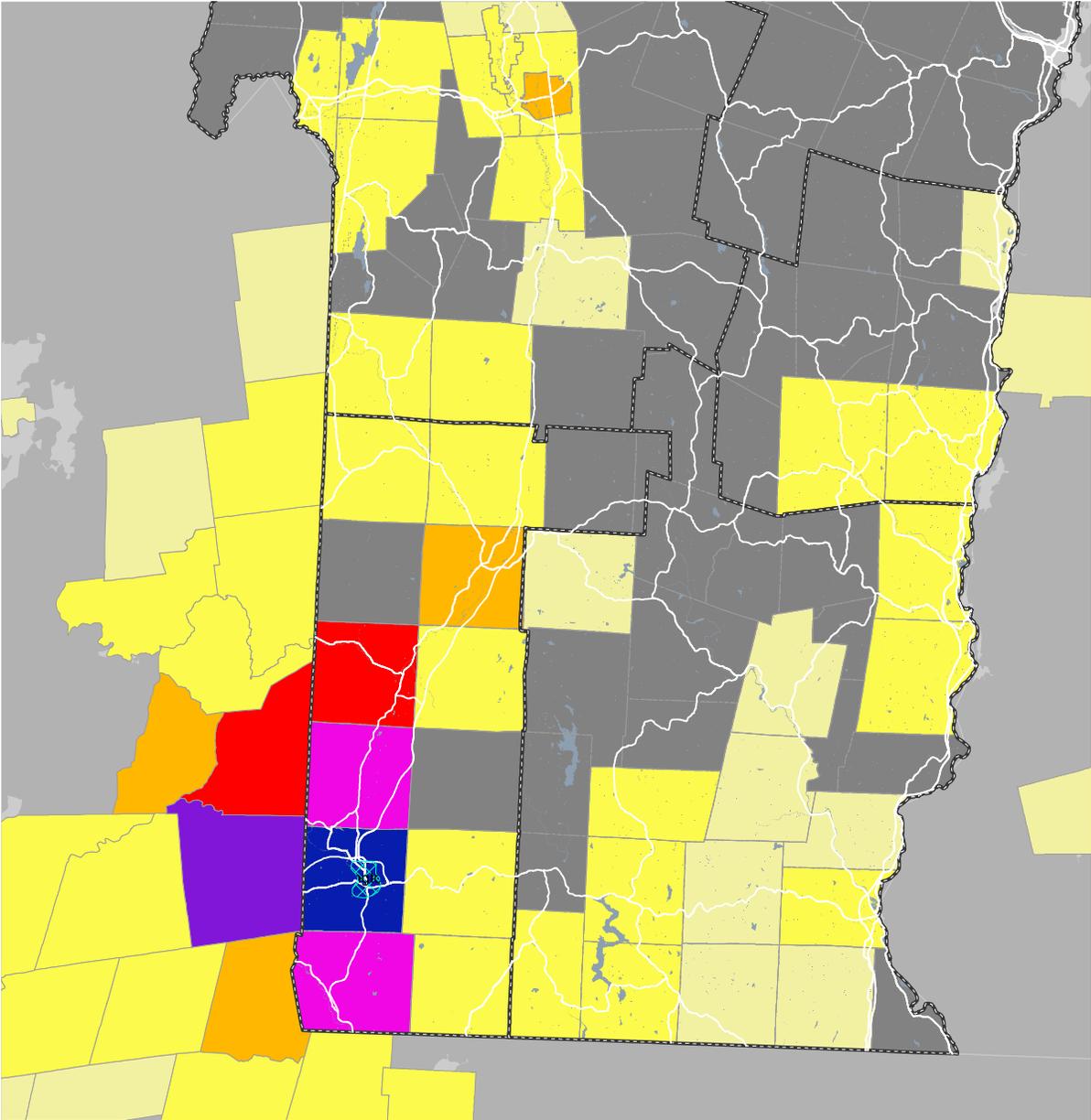
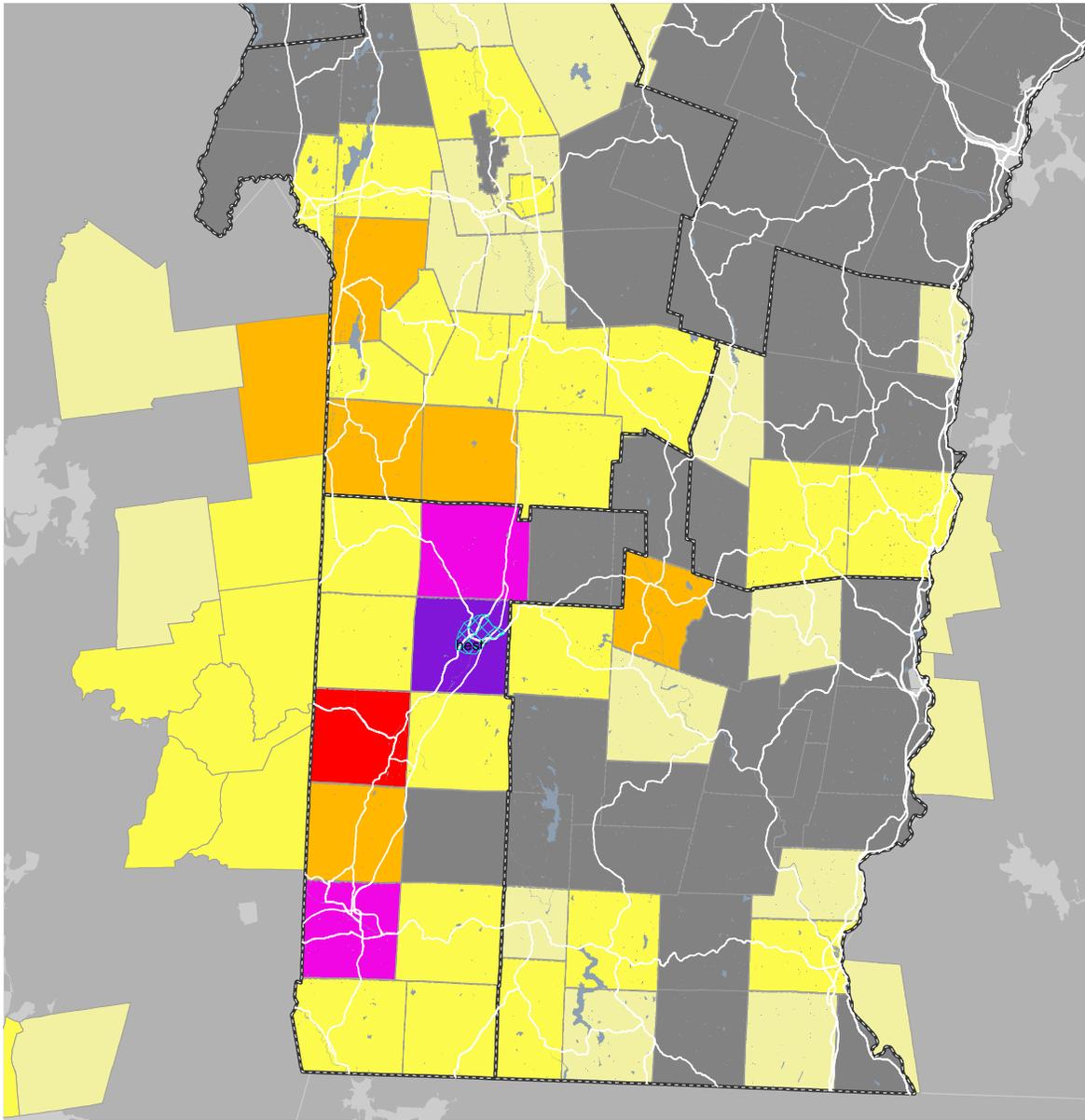


Figure 4: Daily Commuters to Manchester



**Commuters to
Manchester**



Municipal Boundary



Demographic Overview

This section presents an overview of the demographic characteristics of Bennington County and summarizes the location and density of the general population of the county and specific market segments that are likely to need transit service because they cannot or choose not to drive.

Table 2 provides summary demographic characteristics for Bennington County as of 2016, as compared to Vermont as a whole.

Table 2: Demographic Characteristics of Bennington County, 2012-2016

	Bennington County	Vermont
Total population	34,999	626,249
Population density	61 persons per square mile	68 persons per square mile
Population age 60 and over	28%	24%
Population age 80 and over	5.8%	4.3%
Residents living below poverty line	13.4%	11.6%

Source: American Community Survey 5-year Average 2012-2016

With 35,000 residents, Bennington County contained 5.6% of Vermont's population in 2016. The county is slightly less densely populated than the state as a whole, at 61 people per square mile. Nearly one-third of the county's population are age 60 and over. Nearly 6% of residents are age 80 and over, the second highest percentage of older seniors in the state. Over 13% of the county's residents are living in poverty, as compared to 12% of the state's residents. This is the third highest level of poverty in the state.

Population Density

Figure 5 shows the concentration of the population in Bennington County. Density is a helpful characteristic to consider in the context of public transportation services because it is one measure of where service, particularly fixed route service, is likely to be needed and cost-effective.

The highest level of density is found in the town of Bennington, especially in the downtown area. The rest of the town and Arlington show moderate levels of density. Other communities in the county have a population density that can be considered rural.

Market Segments and Transit Propensity

Groups that are likely to need transit services because they do not drive, for reasons of disability, income, or choice, include older adults, people with disabilities, individuals with limited or no access to a car, and younger adults. Figure 6 through Figure 8 show the number and percentage (as compared to the state average) of individuals in the first three groups at the town level in Rutland County. All data was obtained from the American Community Survey (ACS) 2012-2016 Five-year Estimates.

Older Adults

Figure 6 shows the number and percentage of adults age 80 and over in 2012-2016, as compared to the statewide average, in Bennington County communities. The focus in Figure 6 is on this older age group



Figure 5: Population Density in Bennington County, 2017

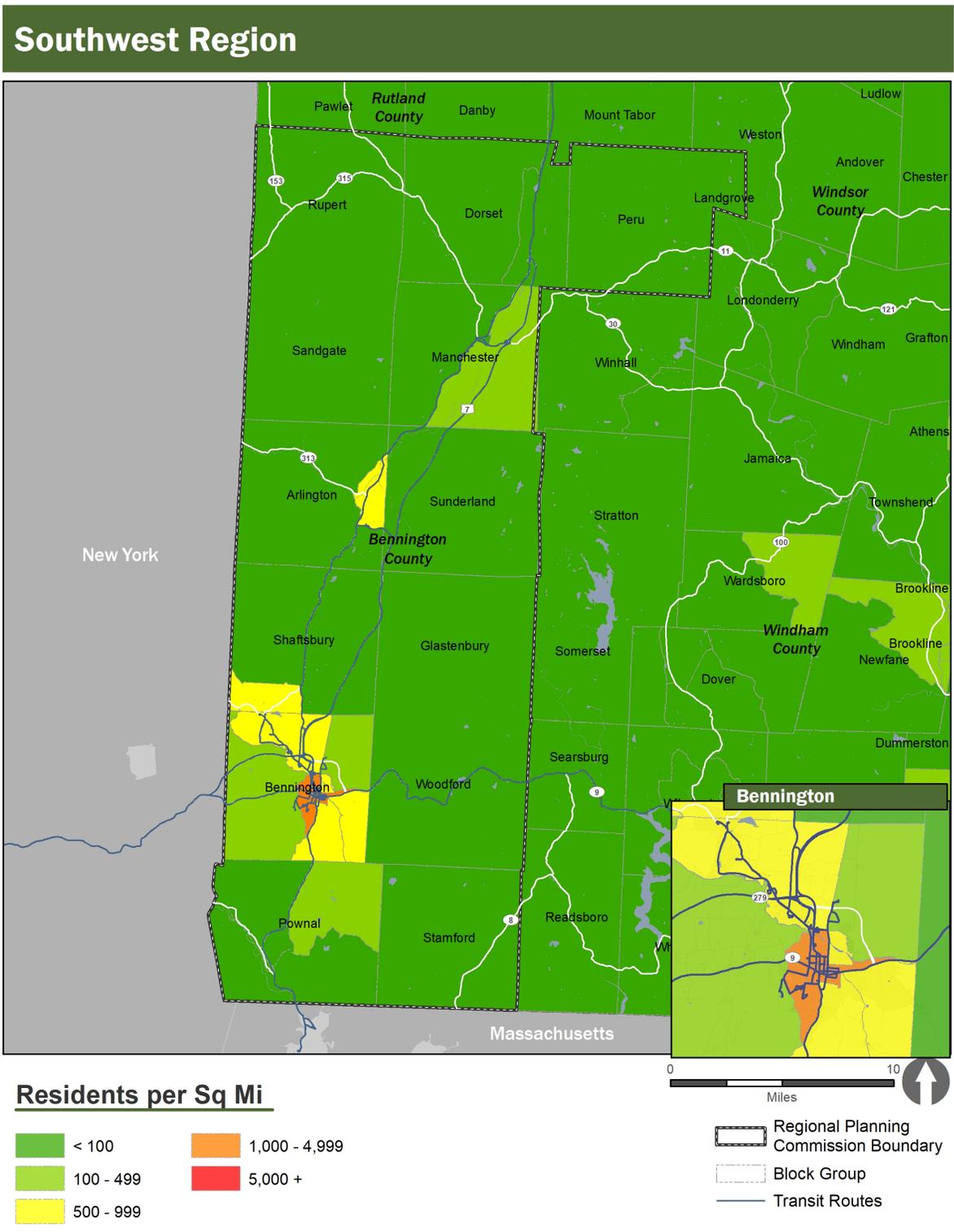
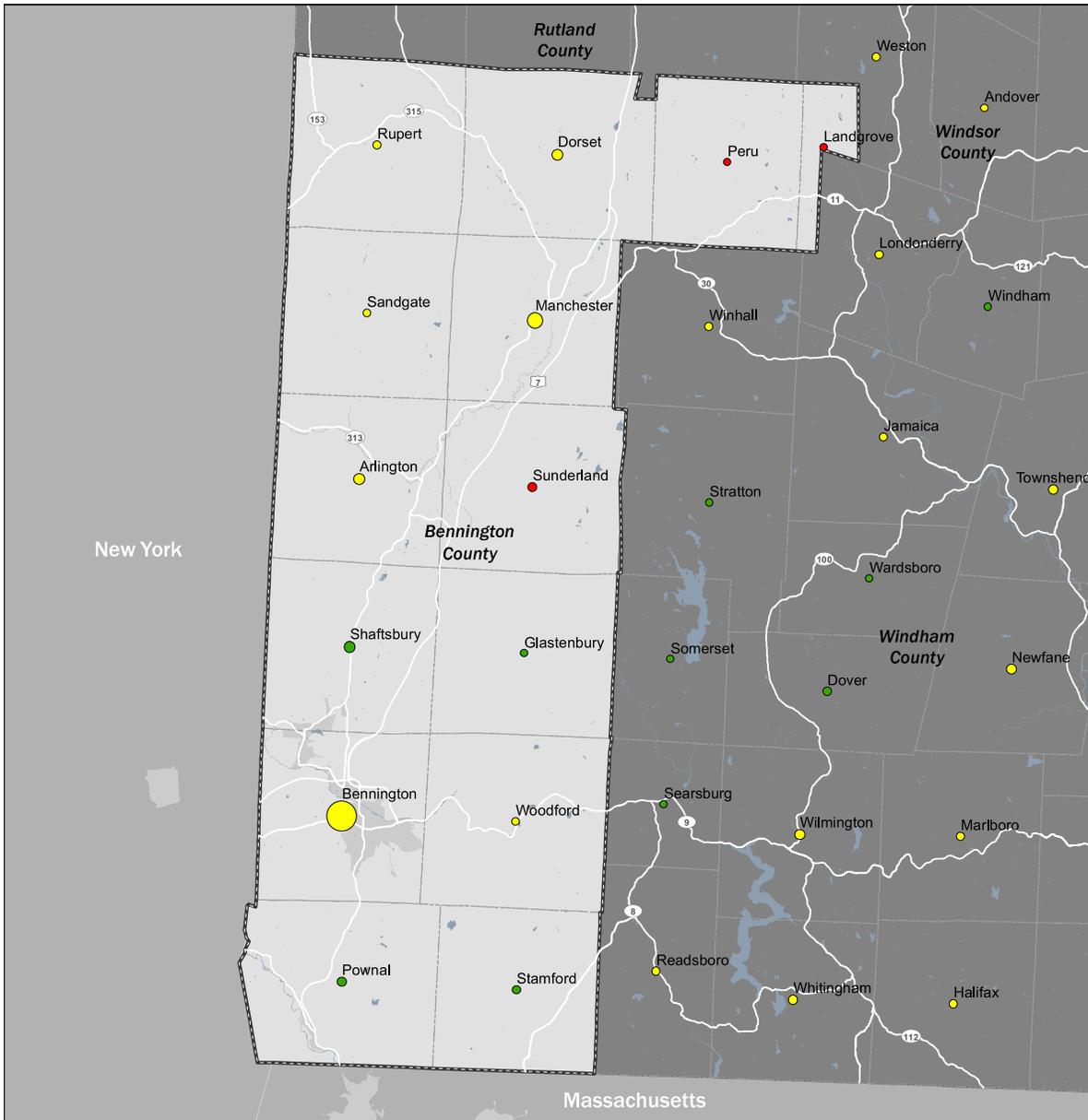


Figure 6: Number and Percentage of Adults Age 80 and Over in Bennington County Communities, 2012-2016



because younger seniors typically continue to drive and because a significant rise in this population is expected in Vermont (and nationwide) in the next 10-20 years.

The town of Bennington is above the Vermont average in terms of percentage of older seniors; between 750 and 1,000 individuals over age 80 live in the town. The percentage of older seniors in Sunderland, Peru, and Landgrove is more than twice the state average, but the populations in those communities are small in number.

People with Disabilities

Figure 7 shows the number and percentage of people with disabilities, as compared to the statewide average, in Bennington County communities. Four types of disabilities are included: those associated with hearing, vision, cognition, and working.

People with disabilities tend to live in communities on the western side of the county. The largest number—over 2,250 individuals, live in the town of Bennington.

Auto Ownership

The number and percentage of households in Bennington County towns with limited access to an auto in 2012-2016 are shown in Figure 8. Households with one resident and no vehicle and those with two or more members but only one vehicle or no vehicle are included.

Bennington is the only town in the county that contains a relatively large number of households with one car or less—between 1,500 and 2,000 households. Bennington and Manchester are above the state average in terms of percentage of households with limited auto access.

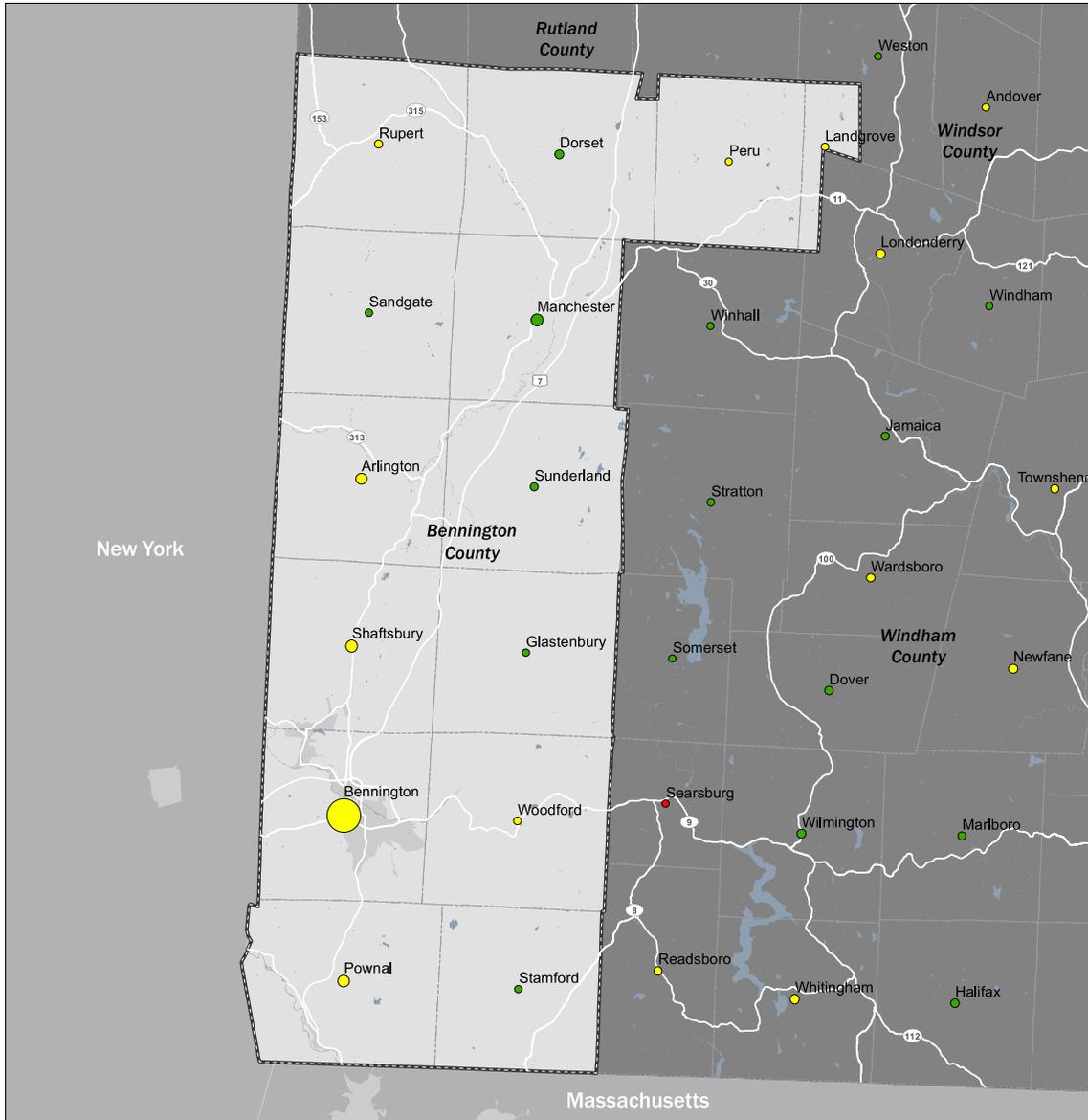
Transit Propensity

As noted above, older adults, people with disabilities, individuals with lower incomes, and younger adults are likely to need transit services because they cannot or do not drive. The transit propensity index mapped in Figure 9 combines information about the location and weighted size of the county's total population and of various populations that are typically dependent on transit services—youth, older adults, people with disabilities, people living in poverty, and households with one car or less.

As shown in Figure 9, the highest propensity—in the Moderate to Moderate-High range—is found in the town of Bennington. The towns of Woodford and Glastenbury and parts of Pownal, Arlington, and Manchester show transit propensity in the Low/Moderate range.



Figure 7: Number and Percentage of People with Disabilities in Bennington County Communities, 2012-2016



Disability Rate
with a Disability

- Below Average
- 1x - 2x Average
- 2x - 3x Average

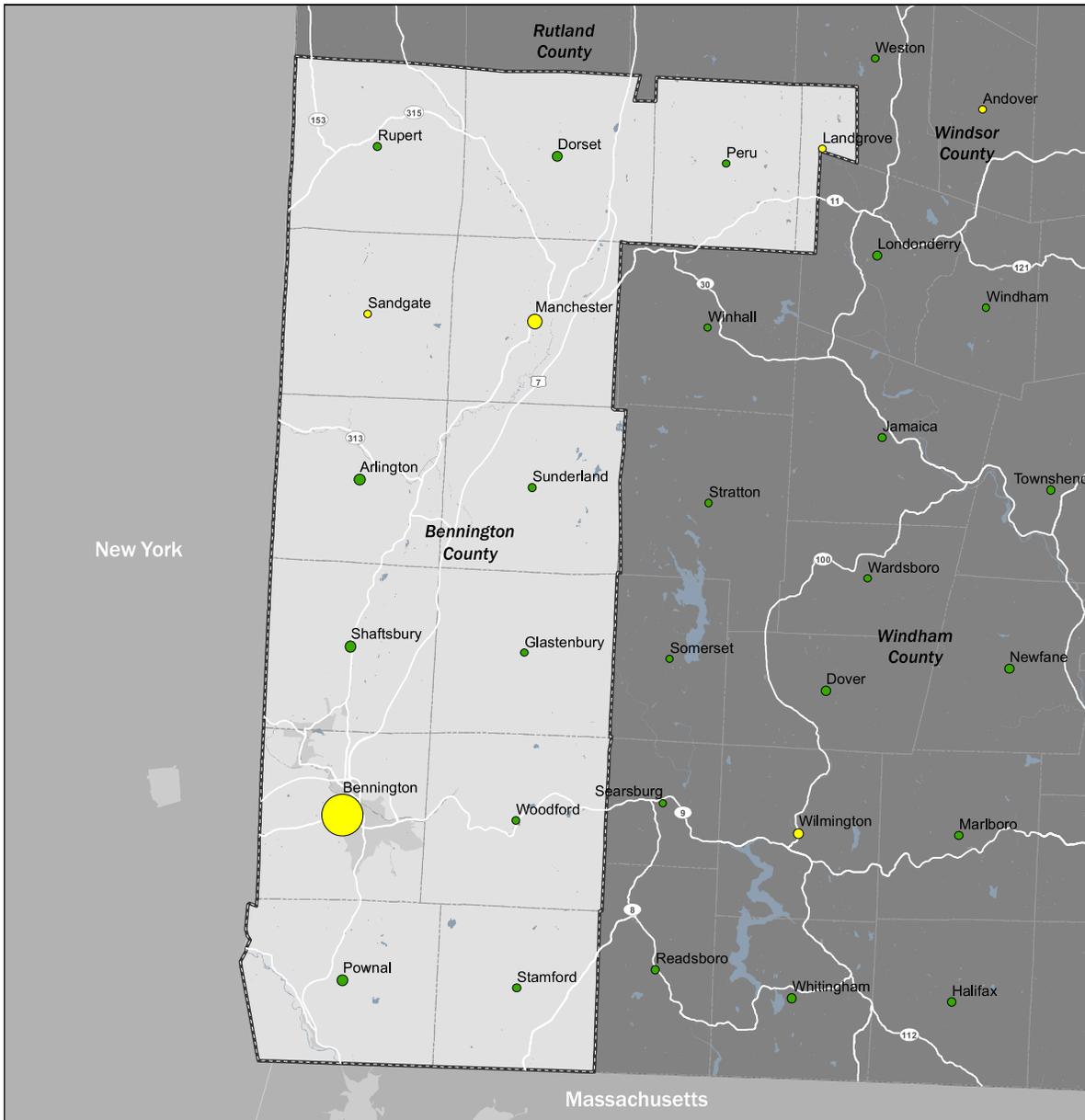
VT Average = 14.0%

Total Population
with a Disability

- 1
- 750
- 1,500
- 2,250
- 3,000



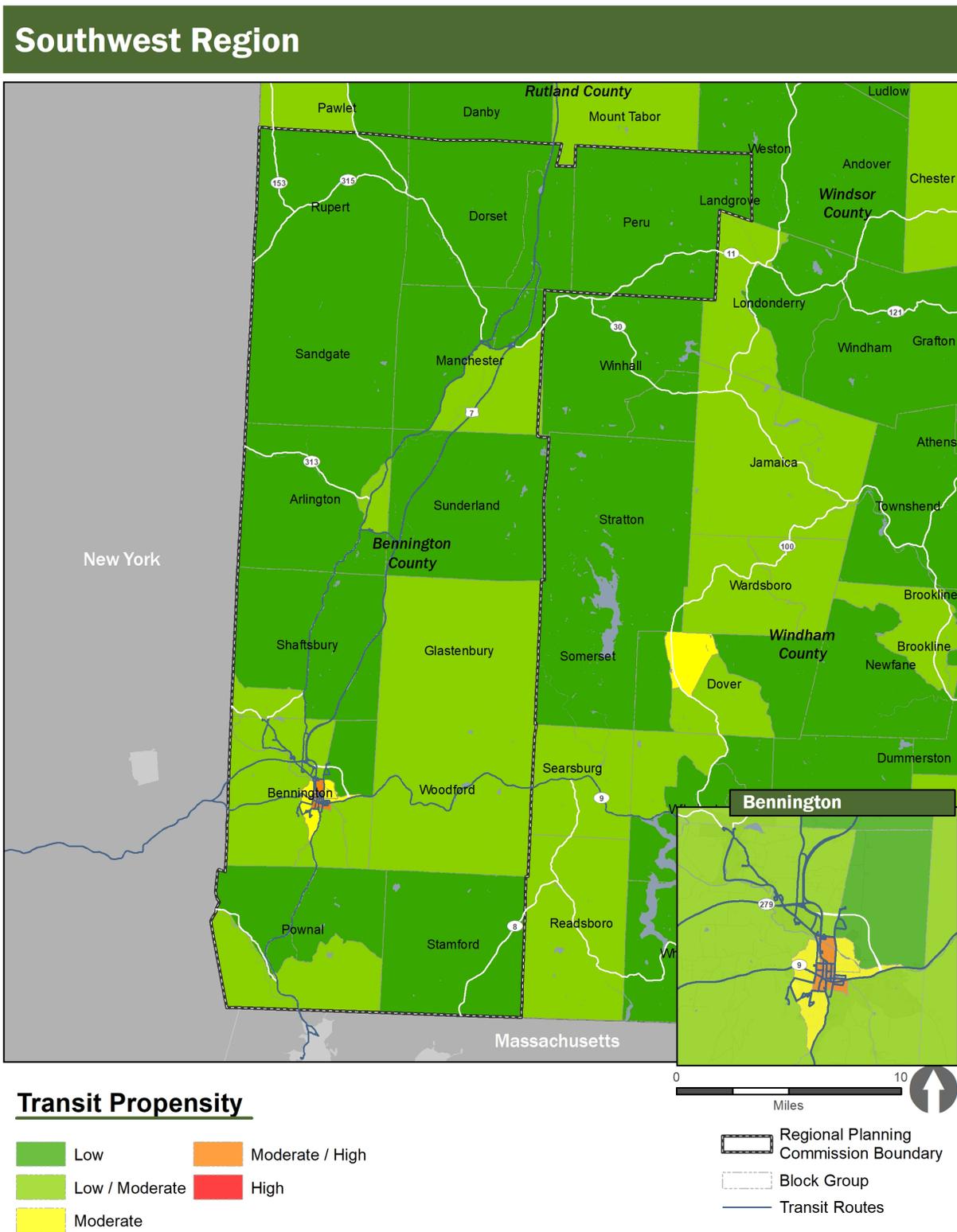
Figure 8: Number and Percentage of Households with Limited Auto Ownership in Bennington County Communities, 2012-2016



**Person & 0 Cars or
2+ People & 0-1 Cars**



Figure 9: Transit Propensity Index, Bennington County



Regional Forum Comments

Stakeholders and members of the public who participated in the regional forum held in Bennington on December 18, 2018 made comments regarding service gaps, travel challenges, unmet transportation needs, and potential solutions, as summarized below.

Service Gaps and Challenges

Geographic Gaps and Challenges

- ▶ Rural areas are hard and expensive to serve with public transportation. Increased access in rural areas is connected to successful aging in place.
- ▶ First/last-mile issue still needs to be addressed.
- ▶ Bennington County borders two states—New York and Massachusetts. Looking at challenges and solutions should be done without regard to state lines.
- ▶ There are currently gaps in the bicycle infrastructure that poses a barrier to bike travel or biking to transit. Bike paths are available in some areas but not others. Interstate rail trails and bike facilities in Watertown, Burlington, and Manchester offer opportunities for expanding the infrastructure. This is also a tourist issue.
- ▶ A transit option to Montpelier would save many hours for all types of public employees who need to attend meetings in the capital.
- ▶ Route 7 and Route 9 are major travel corridors; both need a higher level of service.

Temporal Gaps

- ▶ Evening service until 9 p.m. in Bennington would allow students to patronize stores and restaurants, individuals to attend evening community meetings and events, and workers to use transit home from work in the evening.
- ▶ There are a number of 24-hour factories operating in the county, as well as the hospital. Employers need workers and employees need a way to travel to 2nd and 3rd shift jobs.
- ▶ More convenient connections to Montpelier and Burlington—options may be available, but too time-consuming or inconvenient (transfers) to be useful.
- ▶ Weekend services are needed.
 - People with disabilities would use them for shopping and recreational trips.
- ▶ More frequent service to Albany to make connections to train service and the airport would be useful.

Trip Type Gaps and Challenges

- ▶ Access to jobs, especially for people with disabilities, is an issue in this region. The more people who work, the more benefits for the local economy as well as those individuals. In addition, employment leads to economic stability, a social determinant of health.
- ▶ People with disabilities also need options for shopping and recreational trips.

Accessibility Needs

- ▶ Taxi vehicles are not wheelchair-accessible. Some large cities have helped taxi providers to acquire accessible vehicles.
- ▶ Bus stops need to be made more visible with signs and benches/shelters so that people are aware of available services and have convenient and safe places to wait for buses, especially in inclement weather.



Technology Challenges

- ▶ Seniors are not likely to use smartphone-based apps.
- ▶ Something like EZPass is needed to pay for trips—easy to use, stored value, universal across providers.

Affordability Gaps

- ▶ People with disabilities who are under age 60 sometimes have difficulty with the 20% copay for E&D rides

Other Comments

- ▶ It shouldn't be necessary to choose between public transit goals; a good transit system should address all areas. Asking for priorities implies that resources are available for addressing only some areas. A different way of looking at the question is to ask, "Can we provide access to destinations and opportunities that doesn't require a car"? Focus on shared issues and barriers.
- ▶ Home- and community-based services are more cost-effective than institutional settings for seniors and people with disabilities.
- ▶ Level of service—days and hours of service, frequency, convenience of transfers—can be a barrier to use of public transit.
- ▶ Taxi service is not always reliable or of high quality. Providers may be concerned about liability when transporting customers with disabilities. It can be costly to use.
- ▶ One Uber driver, who lives in Albany, is sometimes available for trips in the county. Lyft is trying to enter the market.

Comments from the Bennington County E&D Committee

Development of the PIPP included discussions with the stakeholder committees that provide oversight for administration of the Vermont Elders and Persons with Disabilities (E&D) Transportation Program in each of nine regions, including Bennington County. Members of the E&D advisory committees typically include the local public transportation provider; partner organizations—municipalities, human service agencies, and other organizations—that receive services for their clients from the provider, and sometimes also operate services for those clients directly; and the regional planning agency that serves the area.

The discussions with those committees yielded additional comments about transportation needs and potential solutions in those regions.

Services in Bennington County that are supported with E&D program funds are provided by GMCN and all of the four partner organizations. They include demand response services and rides provided by volunteer drivers for older adults, people with disabilities, and individuals participating in programs and services offered by the partners. United Counseling Services (UCS), Bennington Project Independence (BPI), Southwestern Vermont Council on Aging (SVCOA), and Vermont Association for the Blind and Visually Impaired (VABVI) are the four partner organizations.

Comments regarding transportation needs and service gaps include the following:

- ▶ Residents of Stamford, on the Massachusetts line and close to North Adams, have few transportation options. GMCN reports that a Shopper's Express route, very popular in Manchester, was not well utilized in Stamford.
- ▶ Fixed route services are well utilized by E&D partners' clients. Partners, especially UCS, encourage clients to try the bus system and help them learn to use it. In addition, GMCN provides travel training.



The success of the fixed route system may be part of the reason that E&D funds have so far been sufficient to meet the needs of the E&D populations.

MetroQuest Responses

Respondents to the online MetroQuest survey conducted in September through December 2018 had the opportunity to identify a trip they would like to make using transit service but cannot due to lack of service or infrequent/inconvenient schedules. Respondents were also able to provide comments about the origin and/or destination of the trip they would like to make.

Forty-one residents of Bennington County towns that are included in the BCRC region commented on their desired trips. Several identified locations out of state to which they would like to travel, including North Adams, MA; Portland, ME; New York City; Albany, and New London, CT. More often, respondents from Arlington, Bennington, Bondville, Dorset, East Dorset, Manchester, Manchester Center, and North Bennington identified destinations in those communities, plus Burlington and Montpelier, as locations to which they would like to take transit services.

Survey respondents were also asked to choose up to three transit improvements that would make them or people they know more willing to use public transportation. Choices were:

- More service near my home
- Service to my desired destinations
- More frequent service
- Service that runs evenings and/or weekends
- Faster service
- More reliable
- Cheaper
- If I felt safer riding on it
- If I understood how it works
- Nothing, I prefer driving
- Other

Of the 60 responses to this question from Bennington County communities included in the BCRC region, 68% were in the top four categories: more service near my home (17%), more service to my destinations (22%), more frequent service (17%) and service in the evenings and/or weekends (13%).

Summary of Transit Service Gaps and Needs

The information presented above about Bennington County's demographic characteristics, location of employers and key destinations, existing transit services, and comments from residents and stakeholders point to the following transit service gaps and needs for the Bennington County region.

Geographic Service Gaps

GMCN local fixed route service provides extensive coverage of the town of Bennington and connects Bennington with Manchester and Pownal. Regional connections to Wilmington and Brattleboro (Windham County) and Williamstown, MA. Marble Valley Regional Transit District provides service that connects Manchester with Rutland (Rutland County). Except for the Emerald Route that runs from Bennington to Brattleboro (operated in cooperation with SEVT's MOOVer division), routes run in a north-south direction. Fixed route services cover areas that contain most of the county's population and many key



destinations. Deviations of up to ¼ mile from fixed routes provide coverage for people with disabilities and others who need or desire a door-to-door trip.

Communities in which fixed route service does not operate include:

- Stamford
- Glastenbury
- Sunderland
- Dorset
- Peru
- Landgrove
- Rupert

Residents of those communities, and those who live outside of the fixed route service area in other towns, have limited public transit service options, if any, available to them. Survey responses identified “more service near my home” and “service to my desired destinations” as transit improvements that would make the respondents more willing to use public transportation.

First and last mile options were noted as a need in regional forum comments.

Large employers that do not appear to be served directly by transit routes are located in Bennington, Manchester, Shaftsbury, Dorset, and Peru.

Temporal Service Gaps

Two of the GMCN fixed routes in the town of Bennington (Blue and Red routes) operate 10 hours a day on weekdays, with trips every 30 minutes, a very good level of service for a small urban or rural area. However, schedules are not likely to accommodate those who need to travel to work in the early morning or evening hours, on weekends, or for 3rd shifts.

Other routes operate more limited hours and offer fewer trips. The Brown route serving Bennington, North Bennington, and the two colleges operates 5-6 trips on weekdays in some months; two trips are in operation only during the school year. The only Saturday fixed route service available in the county, the Green and Light Green routes, operates for six hours at a frequency of approximately 45 minutes. The three regional routes connecting Bennington and other communities provide 4-6 round trips on weekdays; the Orange route to Manchester also operates two round trips on Saturday.

Comments and survey responses from stakeholders and members of the public expressed the need for service beyond 9:00 p.m. in Bennington, additional hours that would accommodate 2nd and 3rd shift work trips, and weekend service.

Gaps for Specific Rider Groups, Trip Types

Access to jobs was identified as an important issue in Bennington County, particularly for those who work non-traditional hours, such as early morning or evening hours, 3rd shifts, or weekends.

People with disabilities noted the need for more options for shopping and recreational trips.



Transit Market Segments

Size of Market Segments

For the purposes of developing public transit policies that focus transit investments on the markets that will most benefit from those policies, the number of individuals in Bennington County in each of seven sub-markets has been estimated. Market segments are mainly related to age but are also subdivided by income. Automobile availability is treated as a secondary characteristic, related to the age and income of each particular group. The results are shown in Table 3.

Table 3: Estimated Transit Market Segments, Bennington County, 2017

Market Segment	Likely Low-Auto Access	Estimated Number in Region, 2017
Youth (under 18)	X	6,264
Young adult (18-24), employed/student	X (by choice)	3,101
Adult (25-64)		13,005
Adult (25-64), below poverty line	X	1,317
People with disabilities (under age 80)	X	4,800
Younger seniors (65-79)		4,158
Older seniors (80+)	X	1,966
Total		34,612

Source: U.S. Census, American Community Survey (ACS) 5-Year Estimates

Youth and young adults, adults living in poverty, people with disabilities, and older seniors—those age 80 and older—are likely to have less access to a car for personal travel than adults with higher incomes and “newer” seniors, who typically continue to drive. Young adults, for reasons having to do with a number of generational trends, may prefer not to drive or own a car. For members of the other market segments, however, lack of access to a car is likely due more to an inability to drive or afford a car than to a choice. In Bennington County, market segments that are likely to have limited or no access to a car make up 50% of the population.

Impacts of Service Gaps on Market Segments

Table 4 summarizes the effect of the service gaps identified for Bennington County on the various transit sub-markets in the region.

Many gaps are broad enough to affect all market segments. These include travel challenges or needs related to:

- ▶ Geographic coverage
- ▶ Accessibility, which can include access to bus stops for all potential riders, not just those with disabilities
- ▶ Information about transit options
- ▶ Technology to make use of transit service more convenient

Other gaps are applicable to all but the youngest and oldest market segments because they deal with access to jobs or other types of trips those segments are not likely to make.

Finally, some gaps are specific to certain market segments. For example, only older adults and people with disabilities are affected by funding constraints in the E&D transportation program that can limit numbers or trip types.



Table 4: Gap Analysis by Transit Market Segment

Market Segment	Youth (under 18)	Young Adult (18-24), Employed or Student	Adult (25-64)	Adult (25-64), Below Poverty Line	People with Disabilities	Younger Seniors (65-79)	Older Seniors (80+)
Likely Low Auto Access	X	X (by choice)		X	X		X
Geographic Gaps							
Rural communities lack transit options	X	X	X	X	X	X	X
Employers in some communities are not served by transit		X	X	X	X		
Temporal Gaps							
Fixed route services end at 6:00 pm in Bennington, earlier in other communities		X	X	X	X	X	X
Regional routes operate more limited hours		X	X	X	X	X	X
Saturday service is limited		X	X	X	X	X	X
Trip Type Gaps							
Existing service hours do not accommodate work trips in non-traditional hours		X	X	X	X		
Options for shopping and recreational trips are needed					X		X
Accessibility Needs							
Bus stops need to be made more visible, convenient, and safer	X	X	X	X	X	X	X
Taxi and volunteer driver services, which could provide service during non-transit hours, are not accessible					X		X
Technology Challenges							
Older adults are less likely to use smartphone apps						X	X
Information Gaps							
Not an issue for riders in this region							
Affordability Issues							
20% copay for E&D rides is difficult for some					X	X	X

