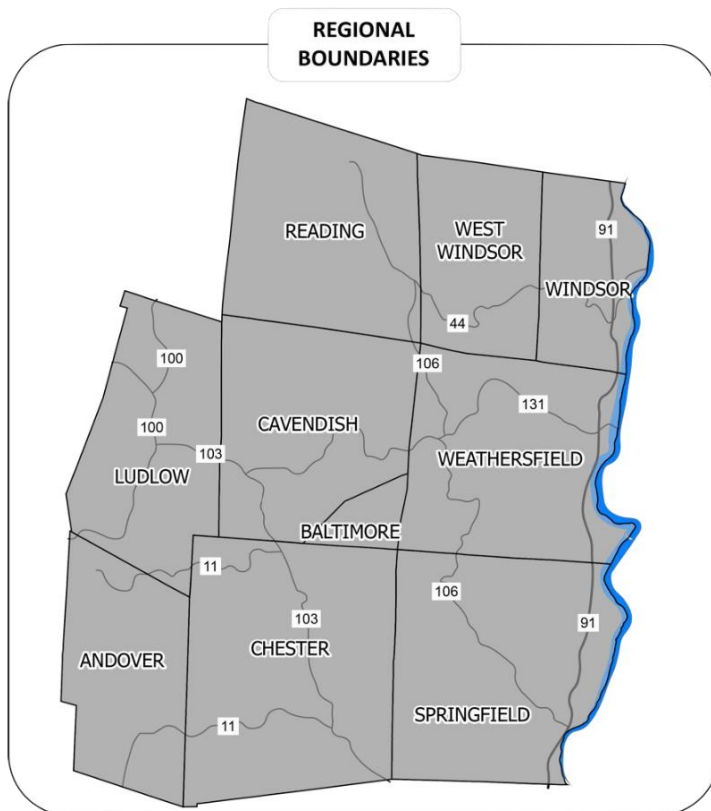


## CH 2: REGIONAL PROFILE

### Background

This chapter provides a historic review of the demographic, economic, and social factors that have influenced the Region. Data profiles are an important tool in the planning process as they give insight into current conditions along with historic patterns of change and those areas that will need particular attention in the future.

### A. Background of the Region



The Region is comprised of ten towns including their villages, hamlets, and dispersed populations. The member towns are Andover, Baltimore, Cavendish, Chester, Ludlow, Reading, Springfield, Weathersfield, West Windsor, and Windsor. The Region is in southeastern Vermont, along the Connecticut River, with Windham County to the south, Rutland County and the Green Mountains to the west, and the remainder of Windsor County to the north. The climate is generally temperate with moderately cool summers and cold winters; as in the rest of Vermont, it creates ideal conditions for summer and winter recreation, spectacular fall foliage, and springtime sap runs. The

weather is unpredictable, and large variations in temperature, precipitation, and other conditions may occur both within and between seasons and across different parts of the region.

## **B. Physiographic Characteristics**

Tectonic impact and glaciation have contributed to the physiographic diversity of the Region. The land is hilly and wooded with moderate to steep slopes. Southern Windsor County contains a broad range of landforms, from the rocky, acidic soils, spruce-fir forests and beech stands of the Green Mountains, to the fertile, sandy soils and white pines of the Connecticut River valley, and the hill farms, orchards, woodlots, and sugar bushes in between. The shallow upland soils tend to be dominated by bedrock, with small, dispersed sites containing "enriched" organic deposits. Soils along the Connecticut are deeper and more fertile, having been deposited by rivers of glacial melt, or by Lake Hitchcock, which covered a large part of the valley ten to twelve thousand years ago.

Much of the Region remains undeveloped or sparsely developed due to the physical constraints imposed by the terrain. Rivers and streams are interspersed throughout the Region, flowing south and east to the Connecticut River. The combination of mountains, streams, valleys, and rocky land has resulted in areas with outstanding geologic features such as Cavendish Gorge and various other peaks, gorges, cascades, and waterfalls. The three principal rivers are the Connecticut River, the Black River, and the Williams River. The broad Connecticut valley holds fertile agricultural land (discussed further in the Plan's Land Use, Natural Resources, and Cultural and Aesthetic Resources chapters), while the narrower and steeper Black and Williams valleys have traditionally been home to sawmills, woolen mills, gristmills, and small hydroelectric power dams. Numerous lakes, ponds, and wetlands comprise the remainder of the Region's surface water features.

Dominant physiographic land features in the Region include two mountains - Okemo Mountain (in Ludlow and Mount Holly) and Mt. Ascutney (shared by Windsor, West Windsor, and Weathersfield) - with elevations over 3,000 feet above sea level. Mt. Ascutney is an example of a monadnock, an isolated mountain of erosion-resistant rock rising above a surrounding area worn flat by water and ice. In addition, Terrible Mountain in Andover is over 2,800 feet in elevation and Hawks Mountain, shared by Cavendish, Baltimore, and Weathersfield, is nearly 2,100 feet above sea level.

## **C. Population**

Vermont's earliest settlers, such as the Abenaki, lived and traveled according to the contours of the landscape and sources of food. Archeological evidence of indigenous settlements along the Connecticut River shows that the river was an important resource in this Region. Over the years,

transportation improvements and settlement patterns shifted in response to technological improvements and changing economic resources.

The following sections provide a detailed picture of population changes in the southern Windsor County Region since 1970.

### 1. POPULATION TRENDS

According to U.S. Census data from 1970 to 2020, populations in the Region’s towns have fluctuated (See Table 2.1 below), with the majority of the Region’s towns experiencing growth in population (Andover, Baltimore, Cavendish, Chester, Weathersfield and West Windsor). Out of towns, the highest growth was experienced in West Windsor (114.4%), and the highest decline in population was experienced in Ludlow (-28.2%). Despite this growth in the majority of towns, the overall population of the Region has declined over time, dropping from a population of 23,908 in 1970 to 23,543 residents in 2020, a 1.5% decrease, compared to the Vermont statewide population change, which increased by 40.5% since 1970.

Factors contributing to decreased population in the Region include the loss of major employers, (especially those in the machine tool industry), reductions in the average household size, the relatively high cost of living, difficulty to recruit new employees, and a lack of housing options. The COVID-19 pandemic has led to the conversion of second homes into primary residences and increased activity in the Region's real estate market driven by out-of-state buyers. Some pandemic migrants may become year-round residents in the Region. The recent increase of short-term rentals has also led to a decline of available long-term rentals. As of early 2022, it is too early to determine whether these trends will drive lasting population growth in the Region.

TABLE 2.1 REGIONAL POPULATION TRENDS 1970-2020							
Town	1970	1980	1990	2000	2010	2020	1970-2020 % Change
Andover	239	350	373	496	467	432	80.7%
Baltimore	170	181	190	250	244	312	83.5%
Cavendish	1,264	1,355	1,323	1,470	1,367	1,302	3%
Chester	2,371	2,791	2,832	3,044	3,154	3,036	28%
Ludlow	2,463	2,414	2,301	2,499	1,963	1,769	-28.2%
Reading	564	647	614	707	666	439	-22.2%
Springfield	10,063	10,190	9,579	9,078	9,373	8,935	-11.2%
Weathersfield	2,040	2,534	2,674	2,788	2,825	2,740	34.3%
West Windsor	571	763	923	1,067	1,099	1,224	114.4%
Windsor	4,158	4,084	3,714	3,756	3,553	3,354	-19.3%
Region	23,908	25,309	24,524	25,105	24,711	23,543	-1.5%

**Source:** U.S. Census Bureau (1970-2010 Decennial Census, 2020 American Community Survey 5-Year Estimates – Table B01001 - Sex by Age)

## **2. AGE CHARACTERISTICS**

The Region's population is aging, with 24.1% (5,677) of residents falling within the 65+ age bracket according to 2020 Census data, while the Region's proportion of school age children (ages 18 and under) continues to decline in the same way it has since 1970, declining from 19.3% to 17.2% of the Region from 2010 to 2020. As of 2020, the town with the highest percentage of residents age 18 and under was Baltimore (25.6%), while the town with the highest percentage of the population aged 65+ was Chester (29.8%).

The 18-64 age group (U.S. Census changed this to 20-64 in 2000), which represents the labor force, has remained relatively stable since 1980. From 1990 to 2000, only Springfield and Windsor experienced declines in this age group, again probably due to subsequent employment losses. From 2000 to 2010, half of the Region's towns experienced growth in this population, Windsor having the greatest increase at 4.8%, with Springfield following with an increase of 3.8%, while West Windsor had the largest decrease in the Region with a decline of 1.1%. From 2010 to 2020, in the Region overall this age group decreased by 9.4%, with the largest increase in Baltimore (115%) and the largest decrease in Reading (-31%).

Regionally, the 65 and older age group, representing the retired and elderly, continued to increase from 1990 to 2000, but at a slower rate than the previous two decades. From 2000 to 2010, 80% of the Region's towns showed an increase in the 65 and older population, with Andover, Ludlow, Reading, Weathersfield and West Windsor showing the largest increases, ranging from 4.3 to 4.8%. Springfield and Windsor were the only towns to show decreases, at 1.2 and 2.7%, respectively. From 2010 to 2020, this aging population in the Region increased by 20.8% overall, with the largest increases in Chester (73%) and Springfield (30.4%). In terms of decreases, Andover and Weathersfield exhibited the most significant decreases with percent changes of 19.6% and 8.6% respectively.

## **D. Economy**

### **1. ECONOMIC TRENDS**

Southern Windsor County belongs to a region which earned the nickname "Precision Valley" early in the twentieth century. The large numbers of companies specializing in precision manufacturing created wealth and a high standard of living. Opportunities were available to anyone willing to invest the time and energy to master requisite skills up through the 1970s.

Since the 1970s, many of the large machine tool firms sold off their industrial sites or abandoned them in bankruptcy reorganizations. Despite economic development measures and programs, and the fact that the "Precision Valley" is located near institutions of higher education and has infrastructure more conducive to manufacturing, it has yet to fully recover.

## 2. POVERTY AND WAGES

According to the U.S. Census, as of 2020, approximately 421 (7%) of the Region’s 5,985 families were below poverty level, approximately a 17% decrease from 2010. In addition to this decrease in families below the poverty level, the average median family income in the Region has increased by roughly 24.3% from 2010, from \$62,619 to \$77,828. In the Region, Chester had the highest median family income (\$104,948), while Ludlow had the lowest, at \$58,594. However, despite increases in income, compared to the 2020 statewide average annual wages (\$54,075), all of the towns in the Region fell short, with Springfield having the highest average annual wages in the Region with \$52,479, a number that did however surpass the average value for Windsor County (\$51,962).

TABLE 2.2 POVERTY STATUS OF FAMILIES IN THE REGION OVER THE LAST 12 MONTHS (2020)								
Town	Total Number of Families		Families Below Poverty Level		Families at or Above Poverty Level		Percent Change (2010-2020)	
	2010	2020	2010	2020	2010	2020	Below	At/Above
<b>Andover</b>	133	117	0	4	133	113	N/A	-15%
<b>Baltimore</b>	63	87	1	14	62	73	1300%	17.7%
<b>Cavendish</b>	381	311	19	8	362	303	-58%	-16.3%
<b>Chester</b>	954	871	71	19	883	852	-73.2%	-3.5%
<b>Ludlow</b>	575	445	43	39	532	406	-9.3%	-23.7%
<b>Reading</b>	231	123	4	0	227	123	-100%	-45.8%
<b>Springfield</b>	2,590	2,117	237	263	2,353	1,854	11%	-21.2%
<b>Weathersfield</b>	845	726	31	42	814	684	35.5%	-16%
<b>West Windsor</b>	286	330	9	0	277	330	-100%	19.1%
<b>Windsor</b>	760	858	92	32	668	826	-65.2%	23.6%
<b>Regional</b>	6,818	5,985	507	421	6,311	5,564	-17%	-11.8%

**Source:** U.S. Census Bureau (2020 ACS 5-Year Estimates (Table B17013 – Poverty Status In The Past 12 Months of Families By Household Type By Number of Persons in Family))

<b>TABLE 2.3 MEDIAN FAMILY INCOME BY TOWN (2010-2020)</b>		
<b>Town</b>	<b>Median Family Income (2010 Inflation-Adjusted Dollars)</b>	<b>Median Family Income (2020 Inflation-Adjusted Dollars)</b>
<b>Andover</b>	\$54,531	\$92,250
<b>Baltimore</b>	\$70,625	\$78,750
<b>Cavendish</b>	\$57,792	\$70,938
<b>Chester</b>	\$61,484	\$104,948
<b>Ludlow</b>	\$58,869	\$58,594
<b>Reading</b>	\$67,250	\$70,313
<b>Springfield</b>	\$50,833	\$62,917
<b>Weathersfield</b>	\$62,306	\$79,118
<b>West Windsor</b>	\$86,250	\$95,833
<b>Windsor</b>	\$56,250	\$64,615
<b>Regional Average</b>	\$62,619	\$77,828

Source: U.S. Census Bureau (2020 ACS 5-Year Estimates (Table B19113 – Median Family Income in the Last 12 Months [In 2010 Income-Adjusted Dollars], Median Family Income in the Last 12 Months [In 2020 Income-Adjusted Dollars])

<b>TABLE 2.4 ANNUAL WAGES IN THE REGION (2020)</b>	
<b>Town</b>	<b>Average Annual Wages</b>
<b>Andover</b>	\$35,687
<b>Baltimore</b>	No data available
<b>Cavendish</b>	\$41,304
<b>Chester</b>	\$47,263
<b>Ludlow</b>	\$39,419
<b>Reading</b>	\$45,903
<b>Springfield</b>	\$52,479
<b>Weathersfield</b>	\$45,106
<b>West Windsor</b>	\$47,320
<b>Windsor</b>	\$51,583
<b>Windsor County</b>	\$51,962
<b>Vermont</b>	\$54,075

Source: <https://www.housingdata.org/profile/income-employment/wages>, Vermont Department of Labor

TABLE 2.5 RESIDENTS EMPLOYED BY INDUSTRY TYPE							
Industry By Sector	2000		2010		2020		
	Employed Residents	% of Total Industries*	Employed Residents	% of Total Industries*	Employed Residents	% of Total Industries*	% Change 2000-2020
Services	2,879	22.2%	5,969	23.4%	6,138	56.5%	113.2%
Manufacturing	2,273	17.5%	1,422	18.4%	1,160	10.7%	- 49%
Trade	1,709	13.2%	1,736	13.9%	1,094	10.1%	- 36%
Construction	904	7%	1,075	7.3%	814	7.5%	- 10%
Finance/Ins./Real	501	3.9%	426	4.1%	649	6%	29.5%
Tran./Util./Comm	760	5.9%	465	6.2%	273	2.5%	- 64.1%
Ag./Forest/Min.	319	2.5%	268	2.6%	273	2.5%	- 14.4%

\*Includes industries not listed in this table, based on total employed residents in all industries (2010 = 12,315 residents, 2020 = 10,862 residents)

**Source:** U.S. Census Bureau (2010 & 2020 ACS 5-Year Estimates (Table C24030 – Sex by Industry for the Civilian Employed Population 16 Years and Over)

## E. Housing

### 1. HOUSING UNIT GROWTH

According to U.S. Census data, there were 10,463 housing units in the Region in 2020, representing a 33% decrease since 2010 (15,619). The majority of households in the Region in 2020 are single-family homes (70%) with multi-family units comprising another 23%, and mobile homes representing the remaining 7%. From 2010 to 2020, just one of the Region’s towns (Baltimore) experienced increases in the number of housing units, illustrating a large decrease in housing units across the Region over the last decade. **Table 2.6** below illustrates how growth in total housing units in the Region’s ten towns has varied.

The Region has a significant need for housing as discussed in the Housing Chapter. A third of homeowners are cost burdened and more than half of renters are cost burdened (see Table 2.7). Residents at risk of homelessness have increased, especially during the pandemic. New housing options, especially of the so called “missing middle” types, are needed to provide homes for residents aging in place, starter homes, affordable housing and workforce housing.

TABLE 2.6 HOUSING UNIT GROWTH BY TOWN							
Town	2000		2010		2020		
	Housing Units	% of Region	Housing Units	% of Region	Housing Units	% of Region	% Change 2000-2020
Andover	350	2.5%	408	2.6%	159	1.5%	- 54.6%
Baltimore	113	0.8%	100	0.6%	114	1.1%	0.9%
Cavendish	852	6%	1,323	8.5%	473	4.5%	- 44.5%
Chester	1,611	11.3%	1,793	11.5%	1,421	13.6%	- 11.8%
Ludlow	3,001	21.1%	3,285	21%	839	8%	- 72%
Reading	404	2.8%	448	2.9%	209	2%	- 48.3%
Springfield	4,232	29.8%	4,324	27.7%	4,227	40.4%	- 0.1%
Weathersfield	1,315	9.3%	1,427	9.1%	1,003	9.6%	- 23.7%
West Windsor	716	5.1%	799	5.1%	494	4.7%	- 31%
Windsor	1,611	11.3%	1,712	11%	1,524	14.6%	- 5.4%
Region	14,205	100%	15,619	100%	10,463	100%	- 26.3%

**Source:** U.S. Census Bureau 2000-2010, (2020 ACS 5-Year Estimates (Table B25003 – Tenure))

TABLE 2.7 COST BURDEN BY TOWN – OWNERS (WITH MORTGAGES) & RENTERS (2020)								
Town	Paying Less than 30% of Income		Paying 30-49.9% of Income		Paying 50% of Income or more		Percent Cost-Burdened	
	Owners	Renters	Owners	Renters	Owners	Renters	Owners	Renters
Andover	46	1	10	21	14	0	34%	95%
Baltimore	34	4	15	0	4	3	36%	43%
Cavendish	125	16	20	27	35	26	30%	77%
Chester	444	84	61	44	19	28	15%	46%
Ludlow	158	196	70	28	61	58	45%	30%
Reading	56	13	17	0	32	8	47%	38%
Springfield	982	460	395	272	156	408	36%	60%
Weathersfield	424	19	159	2	18	19	29%	52%
West Windsor	165	22	53	16	27	11	33%	55%
Windsor	296	291	137	224	42	102	38%	53%

**Source:** U.S. Census Bureau (2020 ACS 5-Year Estimates (Table B25091 – Mortgage Status By Selected Monthly Owner Costs as a Percentage Of Household Income in the Past 12 Months, Table B25070 – Gross Rent As a Percentage Of Household Income in the Past 12 Months))



## 2. VACATION AND SECOND HOME DEVELOPMENT

In 2020, seasonal housing units made up roughly 38% of the Region’s housing stock, with 3,961 total units. **Table 2.8** breaks down this number by town. From 2010 to 2020, the number of seasonal housing units in the Region jumped slightly, with an increase of 269 new seasonal units. From 2010 to 2020, 80% of the Region’s towns’ numbers of housing units increased, with only Baltimore and Springfield showing decreases. Due to the recreational opportunities Okemo Mountain Resort and the lakes region have to offer, Ludlow holds the largest number of seasonal units in the Region, at 2,197 as of 2020. West Windsor also shows an increasing trend, influenced in part by local efforts to expand recreational opportunities.

During the COVID-19 pandemic, many second home owners stayed in their vacation homes more permanently and many out-of-staters bought properties in the Region. It is not clear at this point the proportion of these individuals that will become year-round residents or move back to their primary homes elsewhere.

TABLE 2.8 SEASONAL HOUSING UNIT GROWTH BY TOWN (2020)				
Town	2000	2010	2020	% Change 2000-2020
Andover	110	174	202	83.6%
Baltimore	3	7	0	- 100%
Cavendish	195	303	417	113.8%
Chester	261	317	453	73.6%
Ludlow	1,871	2,195	2,197	17.4%
Reading	94	142	152	61.7%
Springfield	150	134	64	- 57.3%
Weathersfield	103	102	118	14.6%
West Windsor	226	264	294	30.1%
Windsor	30	54	64	113.3%
Region	3,043	3,692	3,961	30.2%

**Source:** U.S. Census Bureau (2020 ACS 5-Year Estimates (Table B25004 – Vacancy Status))

## G. Transportation

### 1. TRANSPORTATION TRENDS

Because of the largely rural nature of Vermont, automobile transportation is essential to everyday life. This prominence of automobile use is evident when looking into the state’s transportation statistics, as total vehicle miles traveled show a consistent increase from 2000 to 2010. The resulting wear and tear from this increased roadway traffic will require significant investment. However, these numbers dip back down in 2020 which could be the result of the COVID-19 pandemic and its effect on how often people were traveling, as more residents worked from home and avoided unessential travel, leading to less overall roadway usage.

TABLE 2.9 VEHICULAR TRANSPORTATION TRENDS IN VERMONT					
Category	2000	2010	2020	% Change 2000-2010	% Change 2010-2020
Population	608,827	625,741	624,340	2.8%	- 0.2%
Motor Fuel Use (Gal.)	411,065,000	388,998,000	323,840,199	- 5.4%	- 16.7%
Total Vehicle Miles Traveled	6,553,996,076	7,250,000,000	5,990,600,000	10.6%	- 17.4%
Automobile Registrations	388,773	290,000	193,407	- 25.4%	- 33.3%
Truck Registrations	137,611	271,544	384,462	97.3%	41.6%
Total Motor Vehicle Registrations	637,671	566,650	607,890	- 11.1%	7.3%
Total Miles of Highway	14,275	14,189	14,248	- 0.6%	- 0.4%

**Source:** U.S. Census Bureau (2020 ACS 5-Year Estimates (Table B01001 – Sex by Age), Federal Highway Administration (FHWA), Vermont Agency of Transportation (VTTrans)

A transportation system that safely and efficiently accommodates the mobility needs of commuters and businesses is essential to growing and strengthening the regional economy. Maintaining good access to major market areas by keeping existing infrastructure in good working condition and in addition to making freight, commuter, and tourist travel more efficient through intermodal connections is key.

Because the regional economy lags behind economic growth in Vermont and in the Upper Valley, a growing number of commuters will travel outside of the Region for employment, causing a spike in single-occupant vehicle use. In order to combat this upward trend, other modes of travel should be marketed and made available to employees by businesses. Infrastructure improvements such as expanded or new park-and-ride lots and increased fixed-route transit services would also provide commuters with cheaper and more efficient travel options.

## 2. Regional Commuting Patterns

According to the U.S. Census Bureau, in 2020 there were 6,626 residents in the Region who commute to work outside their town of residence, equating to 62%. Since 2000, the number of residents who live and work within the Region has decreased greatly, as more residents seek job opportunities outside their home towns. However, there has been an increase in the number of commuters coming into the Region from other areas to work. The traffic generated by these workers, particularly during peak hours, provides insight into the Region's commuter traffic

patterns. Public transportation providers within the Region have noted that since 2000, commuting has increased particularly between Springfield/Weathersfield and the Upper Valley.

TABLE 2.10 COMMUTING TRENDS IN THE REGION (2020)					
Town	Total Employed	Residents who Work in Town of Residence		Residents who Work Outside Town of Residence	
		2020	2020	2020	2020
Andover	186	43		143	
Baltimore	146	14		132	
Cavendish	592	150		442	
Chester	1,511	668		843	
Ludlow	779	469		310	
Reading	256	74		182	
Springfield	3,656	1,897		1,759	
Weathersfield	1,274	212		1,062	
West Windsor	566	61		505	
Windsor	1,730	482		1,248	
Region	10,696	4,070	38%	6,626	62%

**Source:** U.S. Census Bureau (2020 ACS 5-Year Estimates (Table B08009 - Sex of Workers By Place of Work - Minor Civil Division Level for Selected States [CT, ME, MA, MI, MN, NH, NJ, NY, PA, RI, VT, WI], Table B23025 – Employment Status for the Population 16 Years and Over)

TABLE 2.11 COMMUTING TRENDS IN THE REGION (2010)					
Town	Total Employed	Residents who Work in Town of Residence		Residents who Work Outside Town of Residence	
		2010	2010	2010	2010
Andover	236	74		162	
Baltimore	118	15		103	
Cavendish	607	152		455	
Chester	1,719	895		824	
Ludlow	1,054	634		420	
Reading	373	56		317	
Springfield	4,381	2,303		2,078	
Weathersfield	1,423	258		1,165	
West Windsor	518	166		352	
Windsor	1,556	425		1,131	
Region	11,985	4,978	41.5%	7,007	58.5%

**Source:** U.S. Census Bureau (2020 ACS 5-Year Estimates (Table B08009 - Sex of Workers By Place of Work - Minor Civil Division Level for Selected States [CT, ME, MA, MI, MN, NH, NJ, NY, PA, RI, VT, WI], Table B23025 - Employment Status for the Population 16 Years and Over)