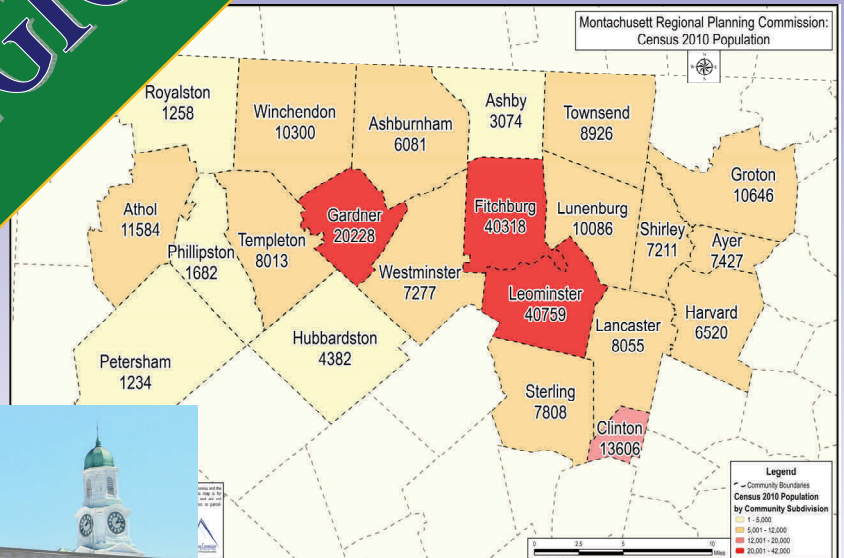


About us



Chapter 4 - REGIONAL PROFILE



Chapter 4 – A Profile of the Montachusett Region

Introduction

This following provides a robust profile of the Montachusett region through various sets of data. Sources for this data include the 2000 and 2010 U.S. Census, the American Community Surveys (ACS) conducted by the U.S. Census, as well as various MRPC reports developed in accordance with local studies and contracts. Additionally, projection figures for the region were developed by MassDOT in cooperation with the MRPC and are based upon methodologies outlined within this chapter.

Through tables, charts and brief analyses of the demographics presented, the reader will hopefully gain some understanding of the population that comprises the Montachusett region and their unique features and characteristics and how these traits can effect and impact the transportation network and its continued growth and development. The various data sets highlight the ever changing face of the region and provide background to the relationship that exists between the communities and their transportation needs.

The Region was settled as early as the 17th Century and began as small settlements that evolved from an era of agrarianism into the age of industrialization and now into the era of information and communications. The physical landscape can be described as “typical New England” with a mixture of compact urban centers and small rural communities containing “town commons”. Comprised of 22 communities located in north central Massachusetts, the region measures approximately 685 square miles in size. Of this area, approximately 654 square miles (or approximately 95%) is land.

As the decades have passed, the region’s population and workforce have weathered changes and have adjusted their work skills to conform to the needs of the business community that drives the regional economy.

- From 2000 to 2010 the population of the Montachusett Region increased from 228,005 to 236,475 persons (approximately a 3.7% increase). Over the next 5, 15 and 25 years the population is projected to change to 243,137 (2020), 246,935 (2030) and finally 243,883 (2040). These projected changes are slower than past trends.
- Residents in the Montachusett region are concentrated in Athol, Clinton, Fitchburg, Gardner, Groton, Leominster, Lunenburg, and Winchendon. Each of these eight communities has a population greater than 10,000 persons housing approximately 66% of the regions entire population.
- Towns are typically growing faster than their urban counterparts.
- In 2000 there were slightly more females than males in the Montachusett Region but now (2010) there are now slightly more males than females.

- In 1990 the average age of residents in the Montachusett Region was lower than the state average but equal to the national average. This is no longer true. In 2000 and 2010, the average age of residents in the Montachusett Region surpassed the state and national average age.
- As of 2010, eighty percent of the Montachusett Region's population is of working age, up from 66.1% in 2000. Population in the region grew at a faster rate than the regional job growth rate.
- The number of workers increased from 2000 to 2010. Notable losses occurred in: 1. Manufacturing; 2. Wholesale; and 3. Retail. All other job sectors experienced minor growth since 2000.
- Manufacturing jobs in the region decreased by 7,777 (-29.7%) since the year 2000. But the percentage of jobs in the region in manufacturing remains higher (16.1%) than both the Commonwealth of Massachusetts (9.7%) and the Nation (10.8%).
- The unemployment rate for the Montachusett Region peaked in 2010 at 8.7%, and has generally declined since, with unemployment at 6.1% as of 2014. However, this is still higher than the state (5.8) and slightly higher than the national (6.2) averages.
- The average commuting time (one way) for a resident of the Montachusett Region (29.7 minutes) was higher than both the State (27.7 minutes) and National (25.4 minutes) averages. Today, approximately 82.66% of Montachusett residents commute to work alone in their own vehicles, with the next most popular means of transportation being carpooling at 4.73%.

Regional Characteristics

Population

Table 4-1 and Figure 4-1 illustrate the population figures for the Montachusett Region from 1960 to 2010. Between 2000 and 2010 the region showed an increase of 3.7%. This exceeds the statewide increase of 3.1% during the same time period.



Table 4-1
Population of the Montachusett Region

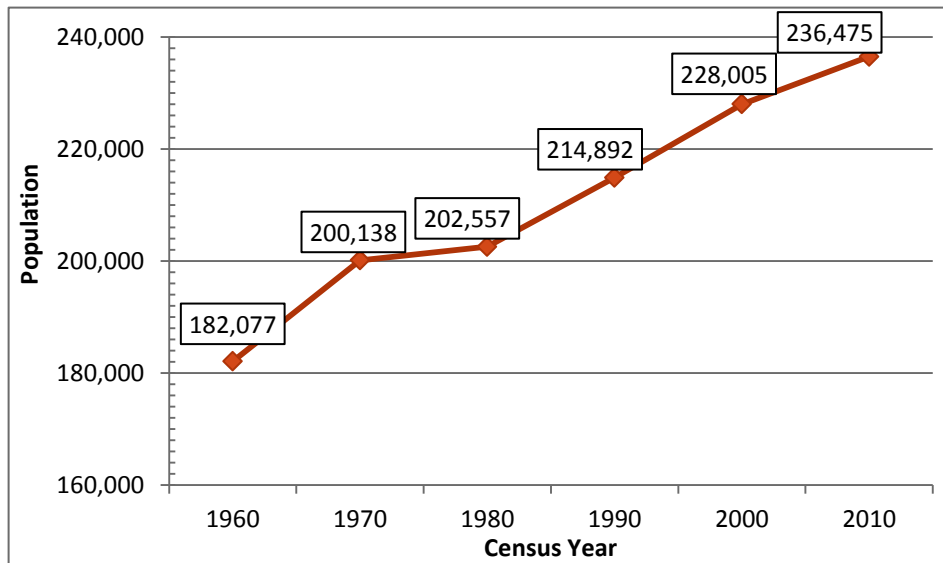
Community	1960	1970	1980	1990	2000	2010	1980- 1990 Percent Change	1990- 2000 Percent Change	2000- 2010 Percent Change
Ashburnham	2,758	3,484	4,075	5,433	5,546	6,081	33.3%	2.1%	9.6%
Ashby	1,883	2,274	2,311	2,717	2,845	3,074	17.6%	4.7%	8.0%
Athol	11,637	11,185	10,634	11,451	11,299	11,584	7.7%	-1.3%	2.5%
Ayer Total	14,927	8,325	6,993	6,871	7,287	7,427	-1.7%	6.1%	1.9%
Devens	N/A	2,462	710	620	266	N/A	N/A	N/A	N/A
Ayer	N/A	5,863	6,283	6,251	7,287	N/A	-0.5%	16.6%	N/A
Clinton	12,848	13,383	12,771	13,222	13,435	13,606	3.5%	1.6%	1.3%
Fitchburg	43,021	43,343	39,580	41,194	39,102	40,318	4.1%	-5.1%	3.1%
Gardner	19,038	19,748	17,900	20,125	20,770	20,228	12.4%	3.2%	-2.6%
Groton	3,904	5,109	6,154	7,511	9,547	10,646	22.1%	27.1%	11.5%
Harvard Total	2,563	12,494	12,170	12,329	5,981	6,520	1.3%	-51.5%	9.0%
Devens	N/A	9,532	8,118	7,667	751	N/A	N/A	N/A	N/A
Harvard	N/A	2,962	4,052	4,662	5,981	N/A	15.1%	28.3%	N/A
Hubbardston	1,217	1,437	1,797	2,797	3,909	4,382	55.6%	39.8%	12.1%
Lancaster	3,958	6,095	6,334	6,661	7,380	8,055	5.2%	10.8%	9.1%
Leominster	27,929	32,939	34,508	38,145	41,303	40,759	10.5%	8.3%	-1.3%
Lunenburg	6,334	7,419	8,405	9,117	9,401	10,086	8.5%	3.1%	7.3%
Petersham	890	1,014	1,024	1,131	1,180	1,234	10.4%	4.3%	4.6%
Phillipston	695	872	953	1,485	1,621	1,682	55.8%	9.2%	3.8%
Royalston	800	809	955	1,147	1,254	1,258	20.1%	9.3%	0.3%
Shirley Total	5,202	4,909	5,124	6,118	6,373	7,211	19.4%	4.2%	13.1%
Devens	N/A	957	718	686	0	N/A	N/A	N/A	N/A
Shirley	N/A	3,952	4,406	5,432	6,373	N/A	23.3%	17.3%	N/A
Sterling	3,193	4,247	5,440	6,481	7,257	7,808	19.1%	12.0%	7.6%
Templeton	5,371	5,863	6,070	6,438	6,799	8,013	6.1%	5.6%	17.9%
Townsend	3,650	4,281	7,201	8,496	9,198	8,926	18.0%	8.3%	-3.0%
Westminster	4,022	4,273	5,139	6,191	6,907	7,277	20.5%	11.6%	5.4%
Winchendon	6,237	6,635	7,019	8,805	9,611	10,300	25.4%	9.2%	7.2%
Devens *	N/A	12,951	9,546	8,973	1,017	N/A	N/A	N/A	N/A
Total	182,077	200,138	202,557	214,892	228,005	236,475	10.5%	1.8%	3.7%
Massachusetts	-	-	5,685,675	6,016,425	6,349,097	6,547,629	5.82%	5.53%	3.13%

Source: U.S. Census Bureau

N/A – Prior to the Devens Restructure in the 1990's, Devens military population was divided amongst the communities of Ayer, Harvard, and Shirley. Devens is no longer an active military installation with any significant population.



Figure 4-1
Population Trends in the Montachusett Region



Within the region, population increases from 2000 to 2010 varied from a high of 17.9% in Templeton to a loss of -3.0% in Townsend. The following towns all witnessed double digit percentage increases in their population making them the fastest growing Montachusett communities in 2010.

- Templeton (17.9%)
- Shirley (13.1%)
- Hubbardston (12.1%)
- Groton (11.5%)

On the opposite end of the spectrum, Gardner, Leominster and Townsend had the largest decreases in population.

- Townsend (-3.0%)
- Gardner (-2.6%)
- Leominster (-1.3 %)

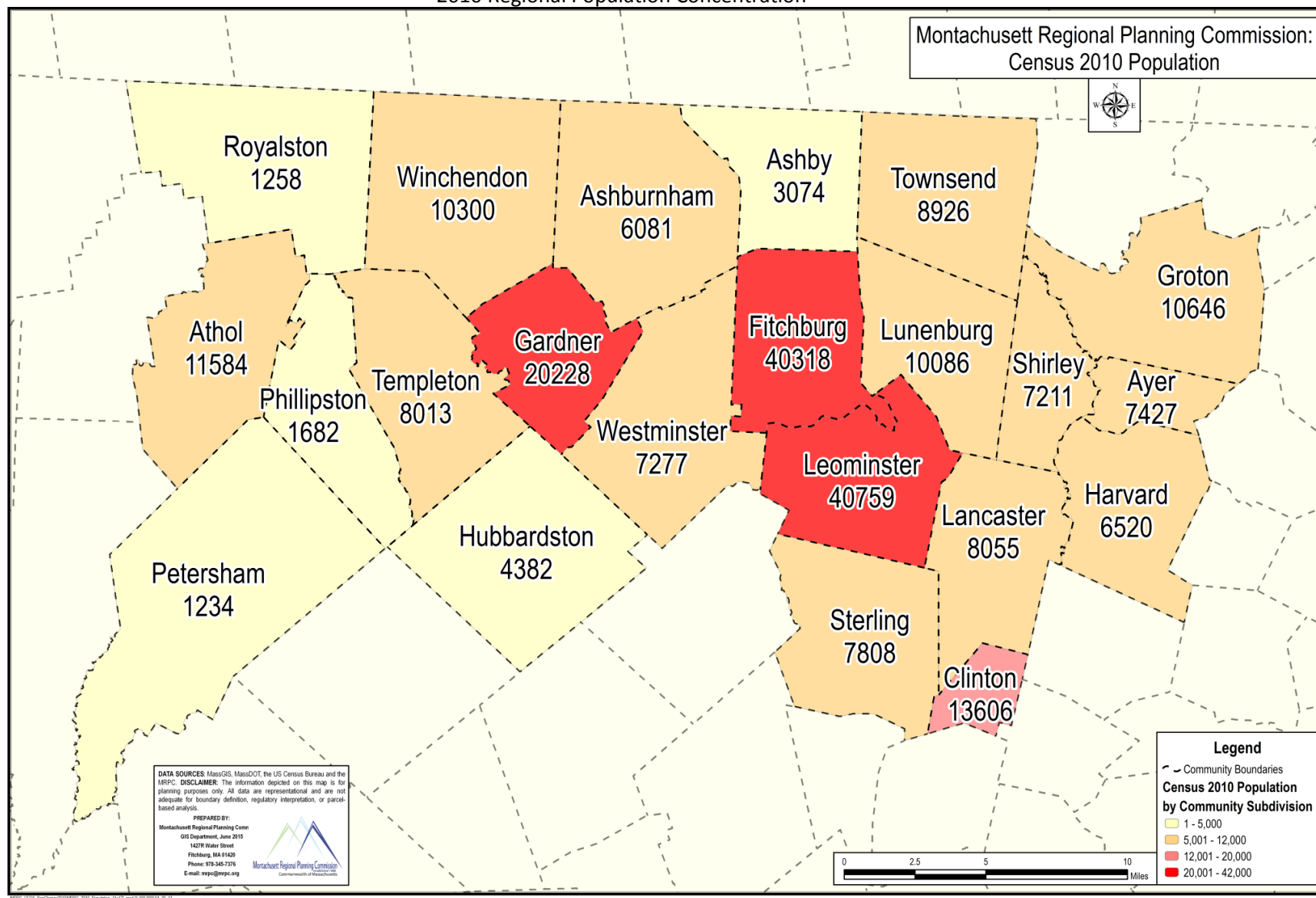
Residents of the Montachusett Region are concentrated in, from west to east, Athol, Winchendon, Gardner, Fitchburg, Leominster, Townsend, Lunenburg, Groton and Clinton. See Figure 4-2.

The 2000-2010 population growth patterns in the region indicate that the significant growth was primarily concentrated in most rural/suburban communities while population decreased in two of the three cities in the region. This is a continuation of the trend established by the 1980-2000 population growth patterns as development pressure from the Metro-Boston area move westward.

Transportation Network Impacts/Implications

Population within the Montachusett Region is still concentrated within the three urban cities of Fitchburg, Leominster and Gardner. However, growth is occurring fastest along the “rural”

Figure 4-2
2010 Regional Population Concentration



communities that are situated in close proximity to a major highway, i.e. Route 2 for Templeton, Shirley, and Hubbardston and Route 119 for Groton. These are a few of the major commuting roads for the region. Issues such as congestion, safety and infrastructure along these roads would of concern. Improving commuting options would also impact the commuting patterns on the network. In addition, growth is occurring on the periphery of the three major cities where more services such as commercial, entertainment and medical are available. Thus connections to these cities are an important issue.

Gender

Census 2010 data for gender shows a overall change in the female/male makeup of the Region. In 2000, there were slightly more females (50.3%) than males (49.7%) in the Montachusett Region. By the 2010 Census, this distribution had changed in favor of the male population. The overall percentage of females dropped to 49.0% (a decrease of 1.3%) while the percent of males increased to 51.0% (an increase of 1.3%). During this ten year period from 2000 to 2010, the male population increased at a rate almost twice that of the female population, 4.5% versus 2.4%, respectively.

Table 4-2
Gender Population in the Montachusett Region

Community	2000					2010					% Change 2000-2010	
	Population	Female	%	Male	%	Population	Female	%	Male	%	Female	Male
Ashburnham	5,546	2,729	49.2%	2,817	50.8%	6,081	2,992	49.2%	3,089	50.8%	8.8%	8.8%
Ashby	2,845	1,417	49.8%	1,428	50.2%	3,074	1,226	49.7%	1,545	50.3%	-15.6%	7.6%
Athol	11,299	5,830	51.6%	5,469	48.4%	11,584	5,888	50.8%	5,696	49.2%	1.0%	4.0%
Ayer	7,287	3,702	50.8%	3,585	49.2%	7,427	3,692	49.7%	3,735	50.3%	-0.3%	4.0%
Clinton	13,435	6,963	51.8%	6,472	48.2%	13,606	6,958	51.1%	6,648	48.9%	-0.1%	2.6%
Fitchburg	39,102	20,443	52.3%	18,659	47.7%	40,318	20,729	51.4%	19,589	48.6%	1.4%	4.7%
Gardner	20,770	10,125	48.7%	10,645	51.3%	20,228	9,872	48.8%	10,356	51.2%	-2.6%	-2.8%
Groton	9,547	4,816	50.4%	4,731	49.6%	10,646	5,382	50.6%	5,264	49.4%	10.5%	10.1%
Harvard	5,981	2,662	44.5%	3,319	55.5%	6,520	2,741	42.0%	3,779	58.0%	2.9%	12.2%
Hubbardston	3,909	1,932	49.4%	1,977	50.6%	4,382	2,193	50.0%	2,189	50.0%	11.9%	9.7%
Lancaster	7,380	3,268	44.3%	4,112	55.7%	8,055	3,518	43.7%	4,537	56.3%	7.1%	9.4%
Leominster	41,303	21,443	51.9%	19,860	48.1%	40,759	20,991	51.5%	19,768	48.5%	-2.2%	-0.5%
Lunenburg	9,401	4,746	50.5%	4,655	49.5%	10,086	5,081	50.4%	5,005	49.6%	6.6%	7.0%
Petersham	1,180	586	49.7%	594	50.3%	1,234	603	48.9%	631	51.1%	2.8%	5.9%
Phillipston	1,621	806	49.7%	815	50.3%	1,682	829	49.3%	853	50.7%	2.8%	4.5%
Royalston	1,254	605	48.2%	649	51.8%	1,258	632	50.2%	626	49.8%	4.3%	-3.7%
Shirley	6,373	2,680	42.1%	3,693	57.9%	7,211	2,959	41.0%	4,252	59.0%	9.4%	13.1%
Sterling	7,257	3,645	50.2%	3,612	49.8%	7,808	3,967	50.8%	3,841	49.2%	8.1%	6.0%
Templeton	6,799	3,382	49.7%	3,417	50.3%	8,013	3,966	49.5%	4,047	50.5%	14.7%	15.6%
Townsend	9,198	4,637	50.4%	4,561	49.6%	8,926	4,513	50.6%	4,413	49.4%	-2.7%	-3.4%
Westminster	6,907	3,462	50.1%	3,445	49.9%	7,277	3,637	50.0%	3,640	50.0%	4.8%	5.4%
Winchendon	9,611	4,845	50.4%	4,766	49.6%	10,300	5,133	49.8%	5,167	50.2%	5.6%	7.8%
Total	228,005	114,724	50.3%	113,281	49.7%	236,475	117,502	49.0%	118,670	51.0%	2.4%	4.5%

Source: 2000, 2010 U.S. Census

Age

The regional population is aging, consistent with the state and nation. In 1990 the average age of residents in the Montachusett Region was lower than the state average but equal to the national average. This is no longer the case. As indicated in Table 4-3, in 2000 and 2010, the average age of residents in the Montachusett Region surpassed the state and national average age. By 2010, this difference was 2.3 years greater than the state average and 4.2 years more than the national average. The average age within the region has increased by almost 4 years

Table 4-3
Median Age in the Montachusett Region
(Source: U.S. Census Bureau)

Community	1980 Median Age	1990 Median Age	2000 Median Age	2010 Median Age	Percent Change 2010 to 2000
Ashburnham	30.4	32.9	37.3	40.6	8.85%
Ashby	29.7	33.4	38.2	42.6	11.52%
Athol	33.2	33.3	38.6	40.6	5.18%
Ayer	25.7	29.5	34.8	38.2	9.77%
Clinton	30.4	32.9	37.1	39.3	5.93%
Fitchburg	30.1	31.1	34.1	34.7	1.76%
Gardner	33.2	33.9	37.5	40.6	8.27%
Groton	29.7	34.1	36.5	42.5	16.44%
Harvard	23.3	25.0	40.6	42.8	5.42%
Hubbardston	28.5	32.0	35.9	41.6	15.88%
Lancaster	27.5	31.2	35.9	38.9	8.36%
Leominster	30.1	32.8	36.3	40.0	10.19%
Lunenburg	32.1	35.7	39.4	43.7	10.91%
Petersham	33.9	39.4	43.2	48.0	11.11%
Phillipston	*	32.1	36.6	42.7	16.67%
Royalston	*	33.7	38.0	45.6	20.00%
Shirley	27.6	32.2	36.6	39.2	7.10%
Sterling	30.0	34.1	38.1	44.0	15.49%
Templeton	32.0	34.8	38.0	41.6	9.47%
Townsend	27.7	31.3	35.4	41.7	17.80%
Westminster	31.0	35.1	38.6	42.8	10.88%
Winchendon	30.3	33.2	35.0	38.7	10.57%
Region Avg.	29.8	32.9	37.4	41.4	10.70%
Mass. Avg.	31.1	33.5	36.5	39.1	7.12%
National Avg.	n/a	32.9	35.3	37.2	5.38%

each decade from 1990 (8.5 years to be exact from 1990 to 2010) while statewide this increase in the median age was only 5.6 years over the same 20 year span. Percentage wise, the Region far outpaced the state and nation with a 10.7% increase from 2000, almost 3.5% higher than Massachusetts (7.12%) and twice as great as the United States (5.38%).

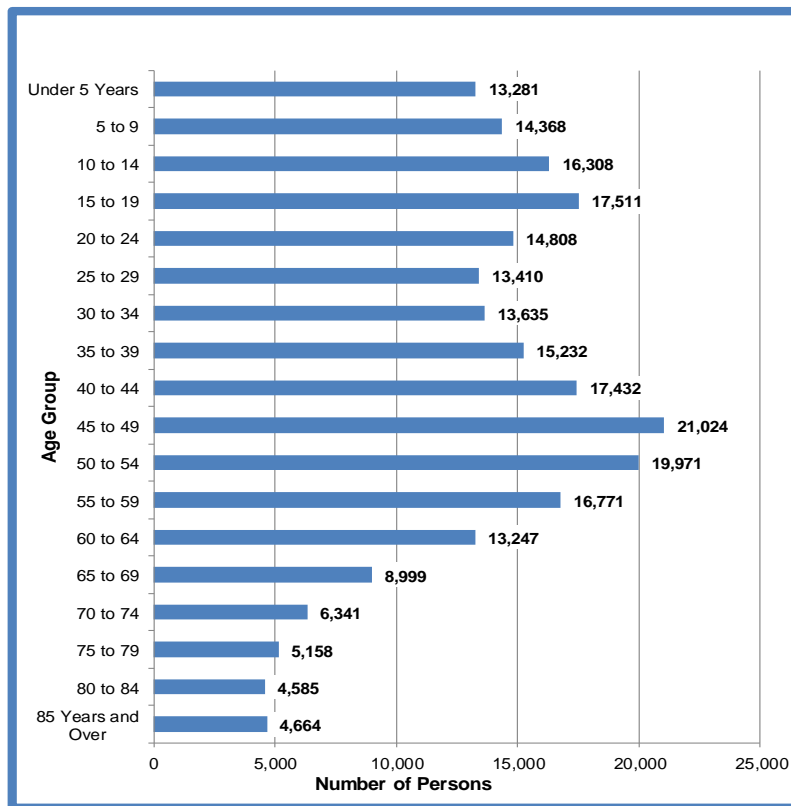
The communities with the highest median age were Petersham at 48.0 years, Royalston at 45.6 years, and Sterling at 44.0 years. In total, 16 (or 73%) of the 22 Montachusett communities had a median age of 40.0 years or greater. In

most cases, these 16 communities are smaller and more rural in nature and are home to 46% of the region's total population. Of the six communities with average ages below 40.0 years, the city of Fitchburg's median age of 34.7 years is nearly 4 years lower than the next lowest community, Ayer (38.2 years) and some 13.3 years less than the highest, Petersham. This average for Fitchburg is also 6.7 years lower than the Montachusett average (34.7 to 41.4, respectively), 4.4 years lower than the Massachusetts average (34.7 to 39.1) and 2.5 years less than the national average (34.7 to 37.2).

According to the 2010 U.S. Census, the largest age group in the Montachusett Region is 45 to 49 (21,024), followed by 50 to 54 (19,971). As seen in Figure 4-3, beginning at the 45 to 49 age group, there is a steady decline occurring in older age groups until age 85 and over. It can also be noted that there is a surge in ages 15 to 19 (17,511), followed by a decline until the 30 to 34 age group, where it begins to rise again.

Figure 4-3

Age Group Distribution in the Montachusett Region (Source: 2010 U.S. Census)



The 45 to 59 age group can be linked to the tail end of the baby boomer

generation and along with

the 60 to 64 age group show an increase in size across the region of almost 67% from 2000 to 2010. This is a continuation of a trend where according to the 2000 Census the largest age group increase was experienced by the 45 to 59 bracket (32.57%). Decreases of 12.66% and 26.82% were also seen in the Under 5 and 35 to 44 age groups, respectively between 2000 and 2010.

Within the individual communities of the region, the overall percentage of population identified as elderly, i.e. those individuals 65 and older, increased in 16 of the 22 from approximately 0.5% (Leominster) to 4.49% (Sterling). The remaining six municipalities saw decreases ranging from 0.44% (Petersham) to 2.24% (Clinton). Overall the region experienced a 0.09% increase in its elderly population from the 2000 Census. Elderly individuals therefore maintained a relatively constant percentage block of the overall region's total population of 12.58%.

Table 4-4

Age Group Changes in the Montachusett Region

Census Year	Age Groups							
	Under 5	5 to 17	18-20	21-34	35-44	45-59	60-64	65 & Over
1990	17,787	39,218	11,094	55,798	34,667	28,939	8,875	27,497
2000	14,963	44,500	8,055	39,871	41,426	42,920	7,786	28,486
% Change 1990 to 2000	-18.87%	11.87%	-37.73%	-39.95%	16.32%	32.57%	-13.99%	3.47%
2010	13,281	n/a	48,187	41,853	32,664	57,766	13,247	29,747
% Change 2000 to 2010	-12.66%	n/a	83.28%	4.74%	-26.82%	25.70%	41.22%	4.24%

Note: Group Ranges Do Not Correspond between 2000 and 2010

Table 4-5
Age of Population by Community in the Montachusett Region

Community	2010 Census							2000 Census	Percent Change 2010 to 2000
	Population	Under 5	Between 5 and 64	Male ≥ 65	Female ≥ 65	Total ≥ 65	% of Total Population ≥ 65	% of Total Population ≥ 65	
Ashburnham	6,081	311	5,175	285	310	595	9.78%	8.87%	0.91%
Ashby	3,074	151	2,600	157	166	323	10.51%	9.53%	0.98%
Athol	11,584	646	9,175	742	1,021	1,763	15.22%	17.17%	-1.95%
Ayer	7,427	490	6,088	344	505	849	11.43%	12.02%	-0.59%
Clinton	13,606	872	11,000	702	1,032	1,734	12.74%	14.98%	-2.24%
Fitchburg	40,318	2,719	32,598	1,991	3,010	5,001	12.40%	14.61%	-2.21%
Gardner	20,228	1,216	16,026	1,212	1,774	2,986	14.76%	16.09%	-1.33%
Groton	10,646	517	9,092	467	570	1,037	9.74%	7.00%	2.74%
Harvard	6,520	204	5,636	341	339	680	10.43%	7.64%	2.79%
Hubbardston	4,382	211	3,760	210	201	411	9.38%	6.93%	2.45%
Lancaster	8,055	346	6,764	399	546	945	11.73%	9.93%	1.80%
Leominster	40,759	2,417	32,555	2,335	3,452	5,787	14.20%	13.64%	0.56%
Lunenburg	10,086	488	8,214	636	748	1,384	13.72%	12.01%	1.71%
Petersham	1,234	57	966	100	111	211	17.10%	17.54%	-0.44%
Phillipston	1,682	76	1,441	84	81	165	9.81%	7.53%	2.28%
Royalston	1,258	58	1,054	78	68	146	11.61%	9.81%	1.80%
Shirley	7,211	325	6,214	298	374	672	9.32%	9.20%	0.12%
Sterling	7,808	403	6,349	459	597	1,056	13.52%	9.03%	4.49%
Templeton	8,013	445	6,460	506	602	1,108	13.83%	12.87%	0.96%
Townsend	8,926	449	7,621	398	458	856	9.59%	6.76%	2.83%
Westminster	7,277	319	6,123	401	434	835	11.47%	10.90%	0.57%
Winchendon	10,300	561	8,536	520	683	1,203	11.68%	10.48%	1.20%
Total	236,475	13,281	193,447	12,665	17,082	29,747	12.58%	12.49%	0.09%

Source: 2000, 2010 U.S. Census

From 2000 to 2010, the working age population for the Montachusett Region grew astoundingly by 25.59%, a major change from the region's 2.5% increase from 1990 to 2000. There are nearly forty thousand more people in the Montachusett Region that are of working age than there were in 2000, with the working age population now making up eighty percent of the region's overall population (80.0%).

The working age population also grew proportionately with the total population growth between 1980 to 1990 and 1990 to 2000. However, between 2000 and 2010, that segment of the population far exceeded the total regional population's growth of only 3.7% (i.e. by over 25%).

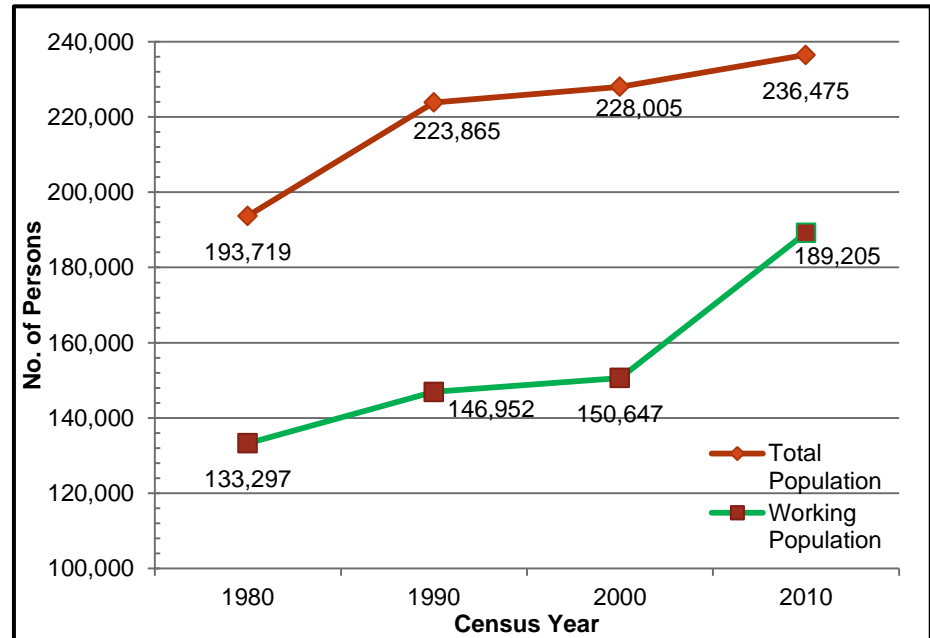
Table 4-6
Working Age Population in the Montachusett Region

Community	1990		2000		2010		
	Population	Working Age Population	Population	Working Age Population	Population	Working Age Population	% of Population
Ashburnham	5,433	3,619	5,546	4,192	6,081	4,782	78.64%
Ashby	2,717	1,770	2,845	1,926	3,074	2,439	79.34%
Athol	11,451	6,034	11,299	7,022	11,584	9,267	80.00%
Ayer	6,871	4,738	7,287	4,985	7,427	5,990	80.65%
Clinton	13,222	8,703	13,435	8,798	13,606	11,001	80.85%
Fitchburg	41,194	26,304	39,102	24,897	40,318	32,195	79.85%
Gardner	20,125	12,813	20,770	13,288	20,228	16,528	81.71%
Groton	7,511	5,204	9,547	6,179	10,646	8,027	75.40%
Harvard	12,329	8,952	5,981	4,188	6,520	5,254	80.58%
Hubbardston	2,797	1,868	3,909	2,600	4,382	3,425	78.16%
Lancaster	6,661	4,711	7,380	5,307	8,055	6,659	82.67%
Leominster	38,145	25,603	41,303	26,730	40,759	32,610	80.01%
Lunenburg	9,117	6,123	9,401	6,275	10,086	8,090	80.21%
Petersham	1,131	734	1,180	867	1,234	1,021	82.74%
Phillipston	1,485	1,001	1,621	1,108	1,682	1,351	80.32%
Royalston	1,147	699	1,254	835	1,258	1,024	81.40%
Shirley	6,118	4,324	6,373	4,601	7,211	6,050	83.90%
Sterling	6,481	4,412	7,257	5,262	7,808	6,153	78.80%
Templeton	6,438	4,181	6,799	4,442	8,013	6,350	79.25%
Townsend	8,496	5,552	9,198	6,298	8,926	7,037	78.84%
Westminster	6,191	4,150	6,907	4,639	7,277	5,808	79.81%
Winchendon	8,805	5,457	9,611	6,208	10,300	8,144	79.07%
Montachusett	223,865	146,952 65.64%	228,005	150,647 66.07%	236,475	189,205 80.01%	
Population 2000 to 2010	Change Increase		4,140 1.85%		8,470 3.71%		
Workforce 2000 to 2010	Change Increase			3,695 2.51%		38,558 25.59%	

Source: 1990, 2000 & 2010 U.S. Census

Please note that in the above table for 1980-1990 Population - Ayer, Harvard, Shirley populations include the Fort Devens Military Personnel.

Figure 4-4
Working Age Population vs. Total Population in the Montachusett Region



Source: 1980, 1990, 2000, 2010 U.S. Census

Transportation Network Impacts/Implications

From an analysis of the various data sets presented, in particular Table 4-4, we can see that the Region as a whole is aging at a faster rate than the Commonwealth and the nation between 2000 and 2010. While at the same time, births or new residents, within the younger age groups, i.e. those under 5 years, are declining at a faster rate. In other words, the elderly population is out growing the newborn population at an almost 3 to 1 margin. This trend is likely to continue as the next age groups, those 60 to 64 and 45 to 59, have also shown significant growth between 2000 and 2010. This increase in these population blocks will impact the types of transportation service needed moving forward. This could include better access and choices to medical and commercial areas, improved recreational facilities, ex. trails for walking and exercise, and more emphasis on safety and guidance on the road networks.

The changes to the working age population present transportation needs ranging from better mode options to access jobs and education to improved mobility on the road network. Additionally, problems with highway and freight infrastructure could ultimately impact the ability of business to continue to survive in the region resulting in possible job flight.

When looking at the workforce populations, we also see that between 2000 and 2010, there has been an almost 26% increase. At the same time, the total regional population grew by only 3.7%. This coupled with a decrease in the younger populations, would seem to indicate that those moving to the region are of the working age bringing in less younger family members.

Disability

According to the Census Bureau website, “The Census Bureau collects data on disability primarily through the American Community Survey (ACS) and the Survey of Income and Program Participation (SIPP). The definitions of disability are not always alike so caution should be taken when making comparisons across surveys. Generally,...the ACS has a more narrow definition (of disability) but is capable of producing estimates for states, counties, and metropolitan areas. Because the ACS has replaced the decennial long-form as the source for small area statistics, there is no disability data in the 2010 Census. (source: <http://www.census.gov/people/disability/>)

With that in mind, the comparison between prior census data and ACS data can be problematic. The ACS was started as a way to provide a “continuous measurement of the U.S. population and to reduce the ... complexity of the decennial census”.

After the 2000 Census, the ACS questions on disability were reviewed and new questions were developed and six disability types identified.

- Hearing difficulty - deaf or having serious difficulty hearing (DEAR).
- Vision difficulty - blind or having serious difficulty seeing, even when wearing glasses (DEYE).
- Cognitive difficulty - Because of a physical, mental, or emotional problem, having difficulty remembering, concentrating, or making decisions (DREM).
- Ambulatory difficulty - Having serious difficulty walking or climbing stairs (DPHY).
- Self-care difficulty - Having difficulty bathing or dressing (DDRS).

Independent living difficulty - Because of a physical, mental, or emotional problem, having difficulty doing errands alone such as visiting a doctor’s office or shopping (DOUT).

Disability data was obtained from the 2008-2012 ACS 5 Year Estimates. Those responding to the disability questions of the ACS were compiled into the following age groups:

- Those under 18 with a disability.
- Those aged 18 to 64 with a disability.
- Those over age 65 with a disability.



Table 4-7
2008-2012 ACS Disability by Age Group in the Montachusett Region

Community	2010 Census Population	2008-2012 ACS 5 Year Estimates						
		ACS Total Civilian Non- Institutionalized Population	Total w/ Disability Under 18	Total w/ Disability 18 to 64	Total w/ Disability ≥ 65	Total Population w/ Disability	2012 ACS Percent w/ Disability ≥ 65	Percent of Total Population w/ Disability
Ashburnham	6,081	6,067	139	344	155	638	2.55%	10.52%
Ashby	3,074	3,066	30	147	123	300	4.01%	9.78%
Athol	11,584	11,416	152	1,227	734	2,113	6.43%	18.51%
Ayer	7,427	7,343	131	562	231	924	3.15%	12.58%
Fitchburg	40,318	39,721	677	3,028	1,962	5,667	4.94%	14.27%
Clinton	13,606	13,509	161	668	622	1,451	4.60%	10.74%
Gardner	20,228	19,129	313	1,672	1,140	3,125	5.96%	16.34%
Groton	10,646	10,619	47	163	312	522	2.94%	4.92%
Harvard	6,520	5,481	50	162	138	350	2.52%	6.39%
Hubbardston	4,382	4,366	67	202	197	466	4.51%	10.67%
Lancaster	8,055	6,600	44	213	240	497	3.64%	7.53%
Leominster	40,759	40,519	616	2,806	2,104	5,526	5.19%	13.64%
Lunenburg	10,086	10,289	224	512	394	1,130	3.83%	10.98%
Petersham	1,234	1,232	6	44	111	161	9.01%	13.07%
Phillipston	1,682	1,929	13	118	61	192	3.16%	9.95%
Royalston	1,258	1,051	16	63	55	134	5.23%	12.75%
Shirley	7,211	5,631	78	200	263	541	4.67%	9.61%
Sterling	7,808	7,734	47	282	266	595	3.44%	7.69%
Templeton	8,013	7,748	115	535	253	903	3.27%	11.65%
Townsend	8,926	8,981	230	350	195	775	2.17%	8.63%
Westminster	7,277	7,282	0	514	147	661	2.02%	9.08%
Winchendon	10,300	10,286	106	590	502	1,198	4.88%	11.65%
Total	236,475	229,999	3,262	14,402	10,205	27,869	4.44%	12.12%

Source: 2008-2012 ACS

Table 4-8
2000 Census Disability by Age Group in the Montachusett Region

Community	2000 Census Population	Population 5 and Under	Total w/ Disability 5 to 20	Total w/ Disability 21 to 64	Total w/ Disability ≥ 65	Total Population w/ Disability 5 and Over	% of Total Population w/ Disability Age ≥ 65	Percent of Total Population w/ Disability 5 yrs and Over	Change in % of Total Population w/ Disability Age ≥ 65; ACS vs 2000 Census
Ashburnham	5,546	332	90	459	200	749	3.61%	14.37%	-1.05%
Ashby	2,845	166	40	176	119	335	4.18%	12.50%	-0.17%
Athol	11,299	648	260	1,238	727	2,225	6.43%	20.89%	0.00%
Ayer	7,287	513	175	878	293	1,346	4.02%	19.87%	-0.88%
Fitchburg	39,102	2,637	1,036	5,098	2,386	8,520	6.10%	23.36%	-1.16%
Clinton	13,435	803	287	1,883	802	2,972	5.97%	23.53%	-1.37%
Gardner	20,770	1,244	454	2,507	1,295	4,256	6.23%	21.80%	-0.28%
Groton	9,547	837	139	730	249	1,118	2.61%	12.84%	0.33%
Harvard	5,981	342	91	265	106	462	1.77%	8.19%	0.75%
Hubbardston	3,909	293	77	306	81	464	2.07%	12.83%	2.44%
Lancaster	7,380	367	78	646	225	949	3.05%	13.53%	0.59%
Leominster	41,303	2,929	777	4,531	1,878	7,186	4.55%	18.73%	0.65%
Lunenburg	9,401	554	215	701	418	1,334	4.45%	15.08%	-0.62%
Petersham	1,180	60	189	385	82	177	6.95%	15.80%	2.06%
Phillipston	1,621	96	25	70	50	237	3.08%	15.54%	0.08%
Royalston	1,254	71	41	107	53	201	4.23%	16.99%	1.01%
Shirley	6,373	379	85	597	187	869	2.93%	14.50%	1.74%
Sterling	7,257	483	64	435	332	831	4.57%	12.27%	-1.14%
Templeton	6,799	457	131	699	356	1,186	5.24%	18.70%	-1.97%
Townsend	9,198	647	18	169	235	809	2.55%	9.46%	-0.38%
Westminster	6,907	415	71	449	234	754	3.39%	11.61%	-1.37%
Winchendon	9,611	690	274	1,048	348	1,670	3.62%	18.72%	1.26%
Total	228,005	14,963	4,617	23,377	10,656	38,650	4.67%	18.14%	-0.24%

Source: 2010 U.S. Census

Within the MRPC region, 12.12% of the total civilian non-institutionalized population is categorized as disabled. In the 2000 Census, the total population over the age of 5 with a disability stood at 18.14%. Limitations with the census versus the ACS disability breakdowns likely account for the discrepancies in the total population percentages. More than half (13) of the 22 MRPC communities had disability rates of over 10% with the communities of Athol, Gardner and Fitchburg having the highest percentages (18.5%, 16.34% and 14.27%, respectively). Not surprisingly, these are three of the five most populated communities in the MRPC region. Of the five rural communities with total populations less than 5,000 (Royalston, Phillipston, Petersham, Ashby and Hubbardston), the percentage of individuals classified as disabled range from a high of 13.07% (Petersham) to a low of 9.78% (Ashby). Statewide, the Commonwealth of Massachusetts has an average of 11.21% of the population identified as disabled. The MRPC region therefore is slightly higher than the statewide average, 12.12% to 11.21%.



Transportation Network Impacts/Implications

Disabled individuals have a number of specific transportation related issues and concerns. These range from access to medical facilities and appointments to access to commercial and employment areas. This accessibility issue was a point of emphasis from the outreach meetings and indicated a need to improve, promote and provide various service options.

Additionally, the Montachusett MPO endorsed in January of 2015 a “Coordinated Public Transit – Human Services Plan” (HST). This plan documents the Montachusett region’s unmet human-service transportation needs of individuals with disabilities, low-income individuals and the elderly. The HST identified a series of Gaps, Needs and Comments related to services, in particular transit, that effect and impact the target communities (including the disabled). These are documented in the HST as well as presented later in this RTP in the discussion on Transit. Individuals interested in the complete HST should visit the MRPC website at www.mrpc.org.

Race/Minority

Race and Ethnic Minority populations are defined as Asian American, Black or African American, Hispanic or Latino, Native Hawaiian and Other Pacific Islander, American Indian and Alaskan Native. These breakdowns were used by the Census Bureau following guidance from the U.S. Office of Management and Budget (OMB). The Census Bureau defines Hispanic or Latino origin in the 2010 census as referring to a “person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race.” The Census Bureau relies on self-identification in answering the Race and Ethnic Minority questions.

In 2000, the nonwhite population of the Montachusett Region stood at 9.4% of the region’s entire population. As of 2010, we saw an increase in this segment to 11.18% of the region’s entire population. This represents an increase of 1.76% in the ten year period. In terms of total numbers, Fitchburg (8,789) and Leominster (6,584) contain the largest populations of nonwhites in the region, followed by Clinton (1,761) and Gardner (1,732). The two major urban areas, i.e. Fitchburg and Leominster, also saw the largest gain in non-white population over the 2000 to 2010 decade with increases of over 1,000 individuals, 1,694 and 1,263 respectively. Four communities saw increases over 100% in their Non-white populations during this same time period; Royalston (129.41%), Ashburnham (109.23%), Templeton (107.14%) and Groton (101.89%). These large increases are related to the relatively small overall population of the municipalities. All four, have total populations in 2010 of less than 11,000 individuals. Royalston itself has a total population just over 1,200 individuals. Table 4-11 highlights these changes.

In terms of race, according to the 2010 U.S. Census, the white population made up 88.8% of the region’s population, followed by black or African-American, at 3.3%. People who claimed “other” made up 3.3% of the region’s population, and people who claimed “two or more races” made up 2.2%.



Tables 4-9 and 4-10 show a growing diversity in the Montachusett Region as various ethnic groups are increasing in size from 1990 levels with an almost doubling in percentage and numbers (from 14,755 and 6.59% in 1990 to 26,433 and 11.18% in 2010). The minority population is predominately concentrated in the urban areas with approximately 64% of those identified as non-white residing in Fitchburg, Leominster and Gardner. This percentage is unchanged from 2000 figures.

Table 4-9
2010 Census Race Population in the Montachusett Region

Community	White	%	Black or African American	%	American Indian or Alaskan Native	%	Asian	%	Native Hawaiian or Pacific Islander	%	Other	%	Two or more Races	%
Ashburnham	5,809	95.5	59	1.0	8	0.1	71	1.2	2	0.0	38	0.6	94	1.5
Ashby	2,986	97.1	12	0.4	5	0.2	10	0.3	1	0.0	11	0.4	49	1.6
Athol	11,040	95.3	113	1.0	29	0.3	84	0.7	0	0.0	114	1.0	204	1.8
Ayer	6,260	84.3	439	5.9	19	0.3	270	3.6	16	0.2	174	2.3	249	3.4
Clinton	11,845	87.1	470	3.5	47	0.3	182	1.3	5	0.0	746	5.5	311	2.3
Fitchburg	31,529	78.2	2,049	5.1	133	0.3	1,465	3.6	13	0.0	3,657	9.1	1,472	3.7
Gardner	18,496	91.4	568	2.8	64	0.3	293	1.4	10	0.0	349	1.7	448	2.2
Groton	10,111	95.0	46	0.4	7	0.1	294	2.8	1	0.0	36	0.3	151	1.4
Harvard	5,887	90.3	264	4.0	4	0.1	217	3.3	3	0.0	21	0.3	124	1.9
Hubbardston	4,270	97.4	26	0.6	2	0.0	21	0.5	0	0.0	17	0.4	46	1.0
Lancaster	6,959	86.4	624	7.7	7	0.1	140	1.7	0	0.0	199	2.5	126	1.6
Leominster	34,175	83.8	2,060	5.1	73	0.2	1,124	2.8	23	0.1	2,153	5.3	1,151	2.8
Lunenburg	9,600	95.2	90	0.9	17	0.2	157	1.6	0	0.0	67	0.7	155	1.5
Petersham	1,213	98.3	2	0.2	1	0.1	5	0.4	0	0.0	3	0.2	10	0.8
Phillipston	1,624	96.6	20	1.2	0	0.0	9	0.5	0	0.0	5	0.3	24	1.4
Royalston	1,219	96.9	7	0.6	9	0.7	9	0.7	0	0.0	4	0.3	5	0.4
Shirley	6,213	86.2	579	8.0	16	0.2	201	2.8	6	0.1	70	1.0	126	1.7
Sterling	7,751	97.0	55	0.7	14	0.2	68	0.9	5	0.1	23	0.3	72	0.9
Templeton	7,752	96.7	58	0.7	10	0.1	42	0.5	0	0.0	30	0.4	121	1.5
Townsend	8,624	96.6	56	0.6	18	0.2	75	0.8	0	0.0	35	0.4	118	1.3
Westminster	7,007	96.3	65	0.9	14	0.2	73	1.0	0	0.0	36	0.5	82	1.1
Winchendon	9,672	93.9	154	1.5	17	0.2	190	1.8	0	0.0	95	0.9	172	1.7
Total	210,042	88.8	7,816	3.3	514	0.2	5,000	2.1	85	0.0	7,883	3.3	5,310	2.2

Source: 2010 Census



Table 4-10
1990, 2000, 2010 Race Populations in the Montachusett Region

Community	1990			2000			2010		
	Total Population	White	Non-White	Total Population	White	Non-White	Total Population	White	Non-White
Ashburnham	5,433	5,414	19	5,546	5,416	130	6,081	5,809	272
Ashby	2,717	2,707	10	2,845	2,789	56	3,074	2,986	88
Athol	11,451	11,136	315	11,299	10,884	415	11,584	11,040	544
Ayer	6,871	5,702	1,169	7,287	6,261	1,026	7,427	6,260	1,167
Clinton	13,222	12,395	827	13,435	11,849	1,586	13,606	11,845	1,761
Fitchburg	41,194	36,935	4,259	39,102	32,007	7,095	40,318	31,529	8,789
Gardner	20,125	19,290	835	20,770	19,343	1,427	20,228	18,496	1,732
Groton	7,511	7,312	199	9,547	9,282	265	10,646	10,111	535
Harvard	12,329	10,201	2,128	5,981	5,484	497	6,520	5,887	633
Hubbardston	2,797	2,771	26	3,909	3,846	63	4,382	4,270	112
Lancaster	6,661	5,969	692	7,380	6,237	1,143	8,055	6,959	1,096
Leominster	38,145	35,469	2,676	41,303	35,982	5,321	40,759	34,175	6,584
Lunenburg	9,117	8,995	122	9,401	9,120	281	10,086	9,600	486
Petersham	1,131	1,110	21	1,180	1,147	33	1,234	1,213	21
Phillipston	1,485	1,479	6	1,621	1,584	37	1,682	1,624	58
Royalston	1,147	1,142	5	1,254	1,237	17	1,258	1,219	39
Shirley	6,118	5,329	789	6,373	5,347	1,026	7,211	6,213	998
Sterling	6,481	6,443	38	7,257	7,116	141	7,808	7,751	57
Templeton	6,438	6,340	98	6,799	6,673	126	8,013	7,752	261
Townsend	8,496	8,281	215	9,198	8,972	226	8,926	8,624	302
Westminster	6,191	6,030	161	6,907	6,734	173	7,277	7,007	270
Winchendon	8,805	8,660	145	9,611	9,223	388	10,300	9,672	628
Total	223,865	209,110	14,755	228,005	206,533	21,472	236,475	210,042	26,433
Percent		93.41%	6.59%		90.58%	9.42%		88.92%	11.18%

Source: 1990, 2000, 2010 U.S. Census

Table 4-11

Change in Race Characteristics by Community in the Montachusett Region

COMMUNITY	2000 NON-WHITE POPULATION	2010 NON-WHITE POPULATION	2000 - 2010	
			CHANGE	PERCENT CHANGE
ASHBURNHAM	130	272	142	109.23%
ASHBY	56	88	32	57.14%
ATHOL	415	544	129	31.08%
AYER	1,026	1,167	141	13.74%
CLINTON	1,586	1,761	175	11.03%
FITCHBURG	7,095	8,789	1,694	23.88%
GARDNER	1,427	1,732	305	21.37%
GROTON	265	535	270	101.89%
HARVARD	497	633	136	27.36%
HUBBARDSTON	63	112	49	77.78%
LANCASTER	1,143	1,096	-47	-4.11%
LEOMINSTER	5,321	6,584	1,263	23.74%
LUNENBURG	281	486	205	72.95%
PETERSHAM	33	21	-12	-36.36%
PHILLIPSTON	37	58	21	56.76%
ROYALSTON	17	39	22	129.41%
SHIRLEY	1,026	998	-28	-2.73%
STERLING	141	57	-84	-59.57%
TEMPLETON	126	261	135	107.14%
TOWNSEND	226	302	76	33.63%
WESTMINSTER	173	270	97	56.07%
WINCHENDON	388	628	240	61.86%
TOTAL	21,472	26,433	4,961	23.10%

Source: 2000, 2010 Census



National Origin

Data from the 2008-2012 ACS shows that the foreign born population in the Montachusett region is approximately 11% of the overall total population. This equates to 89% having been born in the United States. Of those born outside of the U.S., individuals born in Latin America (3.29%) or Asia (1.61%) comprised the next largest blocks. These two origin groups comprise approximately 86% of the region's population identified as being "Foreign Born".

Compared to the Commonwealth of Massachusetts, the region has a higher percentage of U.S. born individuals (89% compared to 83%), a slightly less percentage of those born in Latin America (5% compared to 3%) and a higher percentage of those born in North America (1.26% in the Montachusett region versus 0.46% in the state.


Table 4-12 – Country of Birth by Community in the Montachusett Region (Source: 2008-2012 ACS)

COMMUNITY	TOTAL POPULATION	BORN IN UNITED STATES	BORN IN PUERTO RICO, U.S. ISLAND AREAS, OR BORN ABROAD TO AMERICAN PARENT(S)	FOREIGN BORN					
				EUROPE	ASIA	AFRICA	OCEANIA	LATIN AMERICA	NORTHERN AMERICA
ASHBURNHAM	6,077	5,910	79	0	0	0	0	74	14
% OF TOTAL		97.25%	1.30%	0.00%	0.00%	0.00%	0.00%	1.22%	0.23%
ASHBY	3,066	2,935	24	59	11	0	0	0	37
% OF TOTAL		95.73%	0.78%	1.92%	0.36%	0.00%	0.00%	0.00%	1.21%
ATHOL	11,591	11,099	191	147	67	13	0	28	46
% OF TOTAL		95.76%	1.65%	1.27%	0.58%	0.11%	0.00%	0.24%	0.40%
AYER	7,480	6,641	210	227	128	43	0	162	69
% OF TOTAL		88.78%	2.81%	3.03%	1.71%	0.57%	0.00%	2.17%	0.92%
CLINTON	13,618	11,771	325	190	156	0	0	1,103	73
% OF TOTAL		86.44%	2.39%	1.40%	1.15%	0.00%	0.00%	8.10%	0.54%
FITCHBURG	40,314	33,500	2,329	480	881	321	0	2,215	588
% OF TOTAL		83.10%	5.78%	1.19%	2.19%	0.80%	0.00%	5.49%	1.46%
GARDNER	20,250	18,087	422	289	412	12	19	476	533
% OF TOTAL		89.32%	2.08%	1.43%	2.03%	0.06%	0.09%	2.35%	2.63%
GROTON	10,687	9,998	123	242	174	0	100	18	32
% OF TOTAL		93.55%	1.15%	2.26%	1.63%	0.00%	0.94%	0.17%	0.30%
HARVARD	6,505	5,734	174	115	243	16	0	185	38
% OF TOTAL		88.15%	2.67%	1.77%	3.74%	0.25%	0.00%	2.84%	0.58%
HUBBARDSTON	4,366	4,171	42	15	20	0	0	55	63
% OF TOTAL		95.53%	0.96%	0.34%	0.46%	0.00%	0.00%	1.26%	1.44%
LANCASTER	7,935	7,166	289	124	76	21	0	172	87
% OF TOTAL		90.31%	3.64%	1.56%	0.96%	0.26%	0.00%	2.17%	1.10%
LEOMINSTER	40,879	33,400	1,871	436	978	848	0	2,532	814
% OF TOTAL		81.70%	4.58%	1.07%	2.39%	2.07%	0.00%	6.19%	1.99%
LUNENBURG	10,356	9,665	49	261	167	0	0	105	109
% OF TOTAL		93.33%	0.47%	2.52%	1.61%	0.00%	0.00%	1.01%	1.05%
PETERSHAM	1,232	1,168	6	21	16	4	2	4	11
% OF TOTAL		94.81%	0.49%	1.70%	1.30%	0.32%	0.16%	0.32%	0.89%
PHILLIPSTON	1,941	1,872	38	7	8	0	0	10	6
% OF TOTAL		96.45%	1.96%	0.36%	0.41%	0.00%	0.00%	0.52%	0.31%
ROYALSTON	1,051	996	16	17	16	0	0	0	6
% OF TOTAL		94.77%	1.52%	1.62%	1.52%	0.00%	0.00%	0.00%	0.57%
SHIRLEY	7,352	6,016	486	161	205	46	0	328	110
% OF TOTAL		81.83%	6.61%	2.19%	2.79%	0.63%	0.00%	4.46%	1.50%
STERLING	7,808	7,505	50	114	25	2	0	82	30
% OF TOTAL		96.12%	0.64%	1.46%	0.32%	0.03%	0.00%	1.05%	0.38%
TEMPLETON	7,965	7,647	122	20	38	0	0	51	87
% OF TOTAL		96.01%	1.53%	0.25%	0.48%	0.00%	0.00%	0.64%	1.09%
TOWNSEND	8,981	8,554	150	92	50	0	0	77	58
% OF TOTAL		95.25%	1.67%	1.02%	0.56%	0.00%	0.00%	0.86%	0.65%
WESTMINSTER	7,282	6,933	20	143	24	0	0	0	162
% OF TOTAL		95.21%	0.27%	1.96%	0.33%	0.00%	0.00%	0.00%	2.22%
WINCHENDON	10,333	9,910	62	89	125	0	0	122	25
% OF TOTAL		95.91%	0.60%	0.86%	1.21%	0.00%	0.00%	1.18%	0.24%
REGIONAL TOTAL	237,069	210,678	7,078	3,249	3,820	1,326	121	7,799	2,998
% OF TOTAL		88.87%	2.99%	1.37%	1.61%	0.56%	0.05%	3.29%	1.26%
MASSACHUSETTS	6,560,595	5,425,337	163,793	232,344	281,747	79,543	3,255	344,083	30,480
% OF TOTAL		82.70%	2.50%	3.54%	4.29%	1.21%	0.05%	5.24%	0.46%

Language

Utilizing the Census and the 2007-2011 ACS, approximately 5% (or 11,054 people) of the MRPC population age five and older were identified to speak English less than very well, not well or not at all. The majority of those individuals reside in Leominster and Fitchburg (respectively). The communities of Shirley and Harvard also have a high Limited English Proficiency (LEP) population which is likely impacted by the closing and reuse of the Fort Devens military facility. Table 4-13 highlights the percentage of each community's population aged 5 and over that are identified as speaking English less than very well (ELTVW). Table 4-14 provides information on the various languages of those identified as speaking ELTVW. The languages selected for identification in the Table 4-14 represent ELTVW populations of 3.00% or greater residing within the region.

Table 4-13
Population Age 5+ Who Speak English Less Than
Very Well in the Montachusett Region



Community	Total Pop. Age 5+	Speaks English Less Than Very Well	% Speaks English Less Than Very Well
Ashburnham	5,781	35	0.61%
Ashby	2,868	28	0.96%
Athol	10,994	194	1.77%
Ayer	7,053	271	3.91%
Clinton	12,445	625	4.91%
Fitchburg	37,709	3,505	9.32%
Gardner	18,954	736	3.87%
Groton	10,174	19	0.19%
Harvard	6,274	307	4.86%
Hubbardston	4,105	0	0.00%
Lancaster	7,536	54	0.70%
Leominster	38,406	3,877	10.11%
Lunenburg	9,444	193	2.01%
Petersham	1,225	10	0.85%
Phillipston	1,791	16	1.00%
Royalston	1,005	20	1.67%
Shirley	6,887	520	7.55%
Sterling	7,362	78	1.05%
Templeton	7,538	133	1.76%
Townsend	8,236	162	1.91%
Westminster	6,904	60	0.86%
Winchendon	9,691	211	2.17%
TOTAL	222,382	11,054	4.95%

U.S. Census 2007-2011 American Community Survey

Table 4-14
Population That Speak English Less Than Very Well by Language in the Montachusett Region

Community	Total Population Over 5	Speaks English Less Than Very Well (ELTVW)	Spanish or Spanish Creole ELTVW	French ELTVW	Portuguese ELTVW	French Creole ELTVW	Chinese ELTVW	Korean ELTVW	Other Languages ELTVW
Ashburnham	5,781	35	17	0	0	18	0	0	0
Ashby	2,868	28	13	0	0	0	0	0	15
Athol	10,994	194	25	15	51	37	0	0	66
Ayer	7,053	271	58	34	85	0	0	0	94
Clinton	12,445	625	455	8	16	40	0	10	96
Fitchburg	37,709	3,505	2,571	101	96	104	92	0	541
Gardner	18,954	736	229	246	44	0	33	24	160
Groton	10,174	19	0	12	0	0	0	0	7
Harvard	6,274	307	84	0	0	29	34	65	95
Hubbardston	4,105	0	0	0	0	0	0	0	0
Lancaster	7,536	54	43	0	0	0	0	0	11
Leominster	38,406	3,877	2,285	290	329	160	173	203	437
Lunenburg	9,444	193	51	25	0	0	0	32	85
Petersham	1,225	10	0	0	0	0	10	0	0
Phillipston	1,791	16	5	0	11	0	0	0	0
Royalston	1,005	20	0	0	9	0	3	0	8
Shirley	6,887	520	341	76	0	0	0	36	67
Sterling	7,362	78	45	0	0	0	0	0	33
Templeton	7,538	133	7	16	68	0	42	0	0
Townsend	8,236	162	43	14	18	0	0	0	87
Westminster	6,904	60	0	28	0	0	0	0	32
Winchendon	9,691	211	87	26	10	0	0	0	88
Total	222,382	11,054	6,359	891	737	388	387	370	1,922
Percentage	-	-	57.53%	8.06%	6.67%	3.51%	3.50%	3.35%	17.39%

U.S. Census, 2007-2011 American Community Survey

The 2007-2011 ACS has data on language use for the region. Approximately 13.70% of the Montachusett Region was identified as speaking a language other than English. Not surprisingly, Fitchburg and Leominster have the highest percentages in the region, with 24.04% and 23.29%, respectively, of their population over age 5 identified as such. Ashburnham and Phillipston are on the other end of the spectrum with percentages of 2.63% and 3.57%, respectively.

Table 4-15
Language Spoken Other Than English in the
Montachusett Region
(U.S. Census, 2007-2011 American Community Survey)

Community	Total Population Over 5	Language Spoken Other Than English Number	Percent of Population
Ashburnham	5,781	152	2.63%
Ashby	2,868	115	4.01%
Athol	10,994	532	4.84%
Ayer	7,053	771	10.93%
Clinton	12,445	2,132	17.13%
Fitchburg	37,709	9,067	24.04%
Gardner	18,954	2,253	11.89%
Groton	10,174	515	5.06%
Harvard	6,274	743	11.84%
Hubbardston	4,105	210	5.12%
Lancaster	7,536	734	9.74%
Leominster	38,406	8,943	23.29%
Lunenburg	9,444	635	6.72%
Petersham	1,225	129	10.53%
Phillipston	1,791	64	3.57%
Royalston	1,005	68	6.77%
Shirley	6,887	1,116	16.20%
Sterling	7,362	289	3.93%
Templeton	7,538	304	4.03%
Townsend	8,236	648	7.87%
Westminster	6,904	436	6.32%
Winchendon	9,691	618	6.38%
Total	222,382	30,474	13.70%

In response to regulations, the MRPC developed for adoption and endorsement by the Montachusett Metropolitan Planning Organization (MMPO) in February 2013, a Limited English Proficiency (LEP) Plan that seeks to identify reasonable steps to provide “language assistance for LEP persons who seek meaningful access to MPO programs as required by Executive Order 13166.” A Limited English Proficiency person is defined as one who does not speak English as the primary language and who has a limited ability to read, speak, or write, or understand English.

In developing the plan to determine the MPO’s extent of obligation to provide LEP services, the MPO undertook a U.S. Department of Transportation four factor LEP analysis. For a complete discussion of the LEP please see the Montachusett MPO

Limited English Proficiency Plan February 2013 on the MRPC website, www.mrpc.org.

Transportation Network Impacts/Implications

During the outreach meetings held for this RTP, a common theme when discussing transit issues was the need for better communication and training to those populations with limited English proficiency. Their ability to take full advantage of the services that are in place is hampered by this language barrier.

Income

For the following demographics related to income, data was derived from American Community Survey 2007-2011 5 year estimates, and the 1990 and 2000 Census unless otherwise noted.

Median Family Income

Median Family Income is defined as an annual income figure for which there are as many families with incomes below that level as there are above that level.

The Montachusett Region's median family income increased at a rate of 40.6%, a higher rate than the Commonwealth of Massachusetts (35.2%), and the United States (28.5%).

Harvard (\$161,250), Groton (\$135,143), and Sterling (\$117,240) had the highest median family incomes of the Montachusett Region whereas; Fitchburg (\$55,169), Athol (\$59,095), and Gardner (\$63,413) had the lowest in the region.

Ashburnham's median family

income grew at an exceptional rate of 66.2% since 2000, with the next highest rate of increase being Sterling (52.4%).

While the median family income for the region was higher than the Commonwealth of Massachusetts, only 9 of 22 communities had higher median family incomes than the entire state. However, 19 of 22 communities had higher median family incomes than the national average.

Regionwide the median family income rose 40.6% from \$62,297 in 2000, to \$87,576 in 2011. The MFI for the region is higher than the state (\$83,371) and the country as a whole (\$64,293). The percent increases in MFI from 2000 for the region are also greater than those experienced by the state and the nation.

Table 4-16
Median Family Income in the Montachusett Region
Sources: 2000 U.S. Census, American Community Survey 2007-2011

COMMUNITY	MEDIAN FAMILY INCOME (1990)	MEDIAN FAMILY INCOME (2000)	MEDIAN FAMILY INCOME (2007-2011)	PERCENT CHANGE 2000-2011
ASHBURNHAM	\$45,359	\$58,993	\$98,056	66.2%
ASHBY	\$49,310	\$64,900	\$84,655	30.4%
ATHOL	\$33,263	\$41,061	\$59,095	43.9%
AYER	\$32,939	\$61,968	\$78,947	27.4%
CLINTON	\$40,139	\$53,308	\$77,964	46.3%
FITCHBURG	\$33,357	\$43,291	\$55,169	27.4%
GARDNER	\$35,430	\$47,164	\$63,413	34.5%
GROTON	\$60,000	\$92,014	\$135,143	46.9%
HARVARD	\$47,481	\$119,352	\$161,250	35.1%
HUBBARDSTON	\$46,853	\$66,058	\$95,203	44.1%
LANCASTER	\$46,924	\$66,490	\$101,196	52.2%
LEOMINSTER	\$41,927	\$54,660	\$73,704	34.8%
LUNENBURG	\$49,625	\$63,981	\$95,000	48.5%
PETERSHAM	\$45,855	\$58,125	\$81,250	39.8%
PHILLIPSTON	\$40,069	\$52,011	\$75,234	44.7%
ROYALSTON	\$36,923	\$51,818	\$73,125	41.1%
SHIRLEY	\$43,372	\$66,250	\$78,493	18.5%
STERLING	\$53,339	\$76,943	\$117,240	52.4%
TEMPLETON	\$38,074	\$52,936	\$75,753	43.1%
TOWNSEND	\$50,629	\$67,173	\$91,023	35.5%
WESTMINSTER	\$51,986	\$61,835	\$82,596	33.6%
WINCHENDON	\$35,828	\$50,086	\$73,162	46.1%
MONTACHUSETT REGION	\$43,576	\$62,297	\$87,576	40.6%
MASSACHUSETTS	\$44,367	\$61,664	\$83,371	35.2%
UNITED STATES	\$35,225	\$50,046	\$64,293	28.5%

Median Household Income

Median household income is defined by the U.S. Census as the median income of the householder and all other persons 15 years old and over in the household, whether related to the householder or not.

The communities of Harvard (\$142,411), Groton (\$117,903), and Sterling (\$102,270) had the highest median household incomes of the Montachusett Region, while Fitchburg (\$48,010), Gardner (\$48,108), and Athol (\$50,866) had the lowest. Athol however, had one of the highest rates of increases in median household income at 52.0% from 2000 to 2011.

From 2000 to 2011 the median household income of the Montachusett Region rose 37.9%, a higher rate than the Commonwealth of Massachusetts (30.7%), and the United States (25.6%). The region's median household income of \$75,344 is nearly ten thousand dollars higher than the Commonwealth of Massachusetts (\$65,981), and over twenty thousand dollars higher than the United States (\$52,762).

Table 4-17
Median Household Income in the Montachusett Region

COMMUNITY	MEDIAN HOUSEHOLD INCOME (1990)	MEDIAN HOUSEHOLD INCOME (2000)	MEDIAN HOUSEHOLD INCOME (2007-2011)	PERCENT CHANGE 2000-2011
ASHBURNHAM	\$42,442	\$55,568	\$81,842	47.3%
ASHBY	\$46,250	\$61,000	\$82,614	35.4%
ATHOL	\$27,094	\$33,475	\$50,866	52.0%
AYER	\$29,326	\$46,619	\$54,899	17.8%
CLINTON	\$34,091	\$44,740	\$61,796	38.1%
FITCHBURG	\$27,101	\$37,004	\$48,010	29.7%
GARDNER	\$28,035	\$37,334	\$48,108	28.9%
GROTON	\$55,169	\$82,869	\$117,903	42.3%
HARVARD	\$47,299	\$107,934	\$142,411	31.9%
HUBBARDSTON	\$42,650	\$61,462	\$83,333	35.2%
LANCASTER	\$41,552	\$60,752	\$87,962	44.8%
LEOMINSTER	\$35,974	\$44,893	\$58,585	30.5%
LUNENBURG	\$43,199	\$56,812	\$83,265	46.6%
PETERSHAM	\$39,063	\$47,833	\$65,781	35.6%
PHILLIPSTON	\$35,573	\$46,845	\$74,043	58.1%
ROYALSTON	\$33,333	\$44,444	\$59,609	34.1%
SHIRLEY	\$38,377	\$53,334	\$71,146	33.4%
STERLING	\$49,345	\$67,188	\$102,270	52.2%
TEMPLETON	\$34,395	\$48,482	\$70,116	44.6%
TOWNSEND	\$46,910	\$61,745	\$76,250	23.5%
WESTMINSTER	\$46,292	\$57,755	\$78,632	36.1%
WINCHENDON	\$32,362	\$43,750	\$58,137	32.9%
REGION	\$38,901	\$54,629	\$75,344	37.9%
MASSACHUSETTS	\$36,247	\$50,502	\$65,981	30.7%
UNITED STATES	\$29,243	\$41,994	\$52,762	25.6%

Sources: 2010 U.S. Census; American Community Survey 2007-2011

Per Capita Income

The Montachusett Region experienced a 37.2% increase in per capita income since 2000, a higher rate of increase than the Commonwealth of Massachusetts, at 35.2%, and the United States, at 29.3%.

Table 4-18
Per Capita Income in the Montachusett Region
(Sources: 2000 U.S. Census; American Community Survey 2007-2011)

COMMUNITY	PER CAPITA INCOME (1990)	PER CAPITA INCOME (2000)	PER CAPITA INCOME (2007-2011)	PERCENT INCREASE 2000-2011
ASHBURNHAM	\$15,595	\$21,659	\$32,880	51.8%
ASHBY	\$16,611	\$21,648	\$32,434	49.8%
ATHOL	\$12,444	\$16,845	\$24,384	44.8%
AYER	\$14,586	\$26,400	\$32,179	21.9%
CLINTON	\$15,328	\$22,764	\$30,563	34.3%
FITCHBURG	\$12,140	\$17,256	\$24,060	39.4%
GARDNER	\$13,207	\$18,624	\$24,974	34.1%
GROTON	\$22,832	\$33,877	\$47,003	38.7%
HARVARD	\$17,397	\$40,867	\$50,971	24.7%
HUBBARDSTON	\$15,575	\$23,072	\$32,618	41.3%
LANCASTER	\$14,619	\$21,010	\$34,374	63.6%
LEOMINSTER	\$15,960	\$21,769	\$28,445	30.7%
LUNENBURG	\$19,166	\$26,986	\$35,868	32.9%
PETERSHAM	\$17,542	\$24,222	\$27,475	13.4%
PHILLIPSTON	\$13,216	\$18,706	\$28,273	51.1%
ROYALSTON	\$12,421	\$18,297	\$32,031	75.1%
SHIRLEY	\$15,581	\$20,556	\$24,427	18.8%
STERLING	\$17,830	\$28,844	\$44,089	52.9%
TEMPLETON	\$13,347	\$21,994	\$26,891	22.3%
TOWNSEND	\$15,694	\$22,658	\$31,201	37.7%
WESTMINSTER	\$16,798	\$24,913	\$31,391	26.0%
WINCHENDON	\$13,143	\$18,798	\$25,845	37.5%
REGION	\$15,501	\$23,262	\$31,926	37.2%
MASSACHUSETTS	\$17,224	\$25,925	\$35,051	35.2%
UNITED STATES	\$14,420	\$21,587	\$27,915	29.3%

The communities of Harvard (\$50, 971), Groton (\$47,003), and Sterling (\$44,089)

experience the highest per capita incomes in the region, while Fitchburg (\$24,060), Athol (\$24,384) and Shirley (\$24, 427) have the lowest.

The Town of Lancaster's per capita income grew at an exceptional rate since 2000 (63.6%), with the next greatest s rate increase seen in Sterling (52.9%), Ashburnham (51.8%), and Phillipston (51.1%).

Poverty/Low Income

The definition of "low-income" can vary depending on the agency or program in question as well as by other factors, i.e. region or state. For the purposes of this plan, "low-income" or "poverty" as defined by the Census Bureau was utilized since the census data is the basis for analysis.

The Congressional Research Service Report "Poverty in the United States: 2013 by Thomas Gabe states the following:

"The Census Bureau's poverty thresholds form the basis for statistical estimates of poverty in the United States. The thresholds reflect crude estimates of the amount of money individuals or families, of various size and composition, need per year to purchase a basket of goods and services deemed as "minimally adequate," according to the living standards of the early 1960s. The thresholds are updated each year for changes in consumer prices. In 2013, for example, the average poverty threshold for an individual living alone was \$11,888; for a two-person family, \$15,142; and for a family of four, \$23,834."

From the Census Bureau, the following table was identified that provides 2013 income figures to help determine poverty levels.

Table 4-19
Poverty Thresholds for 2013 by Size
of Family in the Montachusett Region

SIZE OF FAMILY UNIT	WEIGHTED AVERAGE THRESHOLDS
ONE PERSON (UNRELATED INDIVIDUAL).....	\$11,888
UNDER 65 YEARS.....	\$12,119
65 YEARS AND OVER.....	\$11,173
TWO PEOPLE.....	\$15,142
HOUSEHOLDER UNDER 65 YEARS.....	\$15,679
HOUSEHOLDER 65 YEARS AND OVER.....	\$14,095
THREE PEOPLE.....	\$18,552
FOUR PEOPLE.....	\$23,834
FIVE PEOPLE.....	\$28,265
SIX PEOPLE.....	\$31,925
SEVEN PEOPLE.....	\$36,384
EIGHT PEOPLE.....	\$40,484
NINE PEOPLE OR MORE.....	\$48,065

Table 4-20
Poverty Level Thresholds in the 2000
Census

Size of Family Unit	
One person	\$8,501
Two people	\$10,869
Three people	\$13,290
Four people	\$17,029
Five people	\$20,127
Six people	\$22,727
Seven people	\$25,912
Eight people	\$28,967
Nine or more people	\$34,417

Source: U.S. Census and Poverty: 1999, Census 2000 Brief,
May 2003, U.S. Census Bureau

From the Census 2000 Brief “Poverty: 1999”, different poverty level thresholds were established based upon the size of the family unit. Table 4-20 provides those thresholds.

Because of the different methods and time frames utilized to collect data for the decennial census and the ACS, comparisons “may differ from those reported in the Current Population Survey, Annual Social and Economic Supplement and those in Census 2000.”

Based on the 2008-2012 ACS data, the percentage of the overall regional population that are below the poverty level stands at 10.49%, slightly lower than the Massachusetts average (11.03%). This represents a 2.27% increase from 2000 data.

Six of the 22 Montachusett communities (Athol, Ayer, Fitchburg, Gardner, Shirley and Templeton) have poverty rates that exceed the Massachusetts average while a seventh, Lancaster, sits just under the state rate. Fitchburg far and away has the highest in the region at 19.10%, some 8.61% percentage points above the regional average and 8.07% above the state average. Shirley and Lancaster suffered the biggest rise in poverty level from 2000. Shirley saw their rate go up 8.80% from 2.70% to 11.50% while Lancaster went from 3.21% to 6.99%. It is possible that some of this change may be related to census reporting methods dealing with then Fort Devens that was situated within the towns of Ayer, Harvard, Lancaster and Shirley. The base closed as an active military site in 1996.

Communities with the lowest poverty level rates include: Sterling (2.20%), Groton (3.20%), Ashby (3.50%), and Phillipston (3.70%). All are below 4.0%.

Please note that the above tables have not been adjusted for inflation but are simply Census figures.

Table 4-21
Population Below Poverty Level in the Montachusett Region

MRPC/MART COMMUNITIES	CENSUS 2000			2008-2012 ACS 5 YEAR ESTIMATE			CHANGE IN % OF POPULATION BELOW POVERTY LEVEL; ACS VS 2000 CENSUS
	POPULATION 2000	NUMBER BELOW POVERTY	% BELOW POVERTY LEVEL	POPULATION ACS ESTIMATE	EST BELOW POVERTY LEVEL	% EST BELOW POVERTY LEVEL	
ASHBURNHAM	5,546	350	6.31%	6,015	344	5.70%	-0.61%
ASHBY	2,845	143	5.03%	3,066	108	3.50%	-1.53%
ATHOL	11,299	1,038	9.19%	11,372	1,596	14.00%	4.81%
AYER	7,287	765	10.50%	7,339	967	13.20%	2.70%
CLINTON	13,435	949	7.10%	13,430	1,275	9.50%	2.40%
FITCHBURG	39,102	5,627	14.39%	38,024	7,274	19.10%	4.71%
GARDNER	20,770	1,863	8.97%	19,113	2,490	13.00%	4.03%
GROTON	9,547	376	4.00%	10,599	338	3.20%	-0.80%
HARVARD	5,981	106	1.77%	5,481	344	6.30%	4.53%
HUBBARDSTON	3,909	143	3.66%	4,366	307	7.00%	3.34%
LANCASTER	7,380	237	3.21%	6,471	663	10.20%	6.99%
LEOMINSTER	41,303	3,889	9.42%	40,494	3,996	9.90%	0.48%
LUNENBURG	9,401	382	4.06%	10,294	532	5.20%	1.14%
PETERSHAM	1,180	66	5.80%	1,171	90	7.70%	1.90%
PHILLIPSTON	1,621	93	5.80%	1,929	71	3.70%	-2.10%
ROYALSTON	1,254	109	8.69%	1,049	100	9.50%	0.81%
SHIRLEY	6,373	172	2.70%	5,585	640	11.50%	8.80%
STERLING	7,257	213	2.94%	7,739	171	2.20%	-0.74%
TEMPLETON	6,799	588	8.65%	7,722	999	12.90%	4.25%
TOWNSEND	9,198	464	5.10%	8,955	407	4.50%	-0.60%
WESTMINSTER	6,907	212	3.07%	7,225	368	5.10%	2.03%
WINCHENDON	9,611	953	9.92%	10,249	806	7.90%	-2.02%
MONTACHUSETT REGION	228,005	18,738	8.22%	227,688	23,886	10.49%	2.27%
MASSACHUSETTS	6,349,097	573,421	9.03%	6,333,378	698,286	11.03%	1.99%

Source: 2010 U.S. Census

Transportation Network Impacts/Implications

Income impacts the transportation needs and services required by a community or population. Those places with a lower household, median or per capita income have populations that rely on extra services outside of owning their own vehicles, i.e. transit and other mode options. When reviewing the above tables, three communities, Fitchburg, Athol and Gardner, rank among the top five communities in all metrics. These communities are urban in nature with a more diverse population. Transportation networks that serve the less car dependent populations are a greater need in these locations in order to assist individuals in employment, education, shopping and other essential services, i.e. medical, etc.

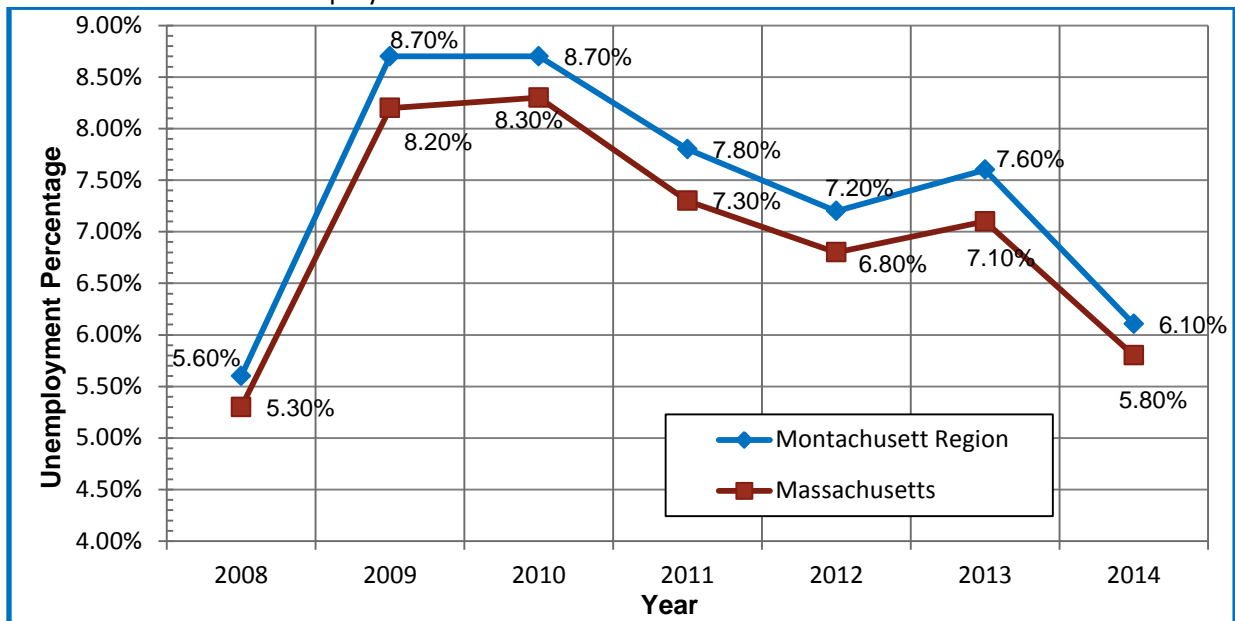
Unemployment

Unemployment rates in the MRPC/MART communities have reflected the trends seen statewide over the years from 2008 to 2014. The lack of employment is an obvious factor to those living at or below the poverty level. An additional contributor to this has been the decline of manufacturing jobs in the region which often provide an entry into the workforce for many low income individuals. The region once enjoyed the highest concentration of manufacturing jobs in the Commonwealth, but this sector has been experiencing a decline for decades consistent with state and national trends.

Table 4-22
Historical Unemployment Rates in the Montachusett Region

COMMUNITIES	UNEMPLOYMENT RATES						
	2008	2009	2010	2011	2012	2013	2014
ASHBURNHAM	6.20%	9.30%	9.50%	8.80%	7.70%	8.30%	5.90%
ASHBY	5.90%	9.40%	9.30%	8.20%	8.20%	8.70%	5.30%
ATHOL	7.20%	11.00%	11.40%	10.00%	9.20%	9.90%	7.90%
AYER	5.20%	7.80%	8.30%	7.30%	6.50%	6.50%	6.20%
CLINTON	6.20%	9.40%	10.20%	9.10%	8.60%	9.30%	6.60%
FITCHBURG	7.30%	11.10%	11.70%	11.00%	10.10%	10.40%	8.30%
GARDNER	7.70%	11.10%	11.30%	10.40%	9.50%	9.60%	7.60%
GROTON	4.20%	6.30%	6.30%	5.90%	5.20%	5.50%	4.30%
HARVARD	3.80%	6.30%	5.80%	5.00%	5.00%	4.80%	4.10%
HUBBARDSTON	5.50%	8.80%	8.60%	7.50%	6.40%	7.30%	5.50%
LANCASTER	5.60%	9.10%	8.70%	7.30%	7.00%	7.10%	4.70%
LEOMINSTER	6.50%	10.20%	10.70%	9.60%	8.90%	9.40%	7.00%
LUNENBURG	5.80%	9.00%	8.80%	8.20%	7.60%	7.60%	5.30%
PETERSHAM	4.60%	7.60%	8.70%	6.60%	5.90%	7.70%	6.10%
PHILLIPSTON	6.20%	10.20%	9.90%	8.50%	9.40%	9.20%	7.10%
ROYALSTON	7.20%	9.90%	10.10%	10.20%	8.50%	9.50%	6.30%
SHIRLEY	5.30%	8.10%	8.30%	7.20%	7.10%	6.70%	6.60%
STERLING	4.40%	7.20%	7.80%	6.40%	5.70%	6.00%	5.30%
TEMPLETON	6.90%	10.50%	10.40%	9.30%	9.10%	8.90%	6.40%
TOWNSEND	4.60%	7.20%	8.10%	6.40%	6.00%	6.10%	5.50%
WESTMINSTER	5.80%	9.10%	9.10%	8.10%	8.20%	8.40%	5.50%
WINCHENDON	7.20%	10.70%	11.10%	10.20%	9.30%	9.30%	6.80%
MONTACHUSETT REGION	5.60%	8.70%	8.70%	7.80%	7.20%	7.60%	6.10%
MASSACHUSETTS	5.30%	8.20%	8.30%	7.30%	6.80%	7.10%	5.80%

Figure 4-5
Unemployment Rates Montachusett vs. Massachusetts



Workforce

From 1990 to 2000:

- At least 2,015 new jobs were created in the Montachusett Region. (However, new job growth of 1.9% did not keep pace with population growth in the region at 6.1 %.)
- A significant job gain occurred in the Services & Public Administration sector. This sector increased by 12,844 new jobs 35.5%).
- The construction trade gained 574 new jobs increasing 9.9% over the 1990 level.
- Less people were employed in the Wholesale & Retail Trade sector in 2000 than in 1990. This sector decreased by 5,186 jobs (24.3%).

From 2000 to 2010:

- From 2000 to 2010, manufacturing jobs in the region decreased by 7,777 (-29.7%). However, it should be noted that the percentage of jobs in the region in Manufacturing remains higher than both the Commonwealth of Massachusetts (9.7%) and the Nation (10.8%).
- Manufacturing jobs in the region decreased by 7,777 (-29.7%). However, it should be noted that the percentage of jobs in the region in manufacturing remains higher (16.1%) than both the Commonwealth of Massachusetts (9.7%) and the Nation (10.8%).

Employment Sector Codes

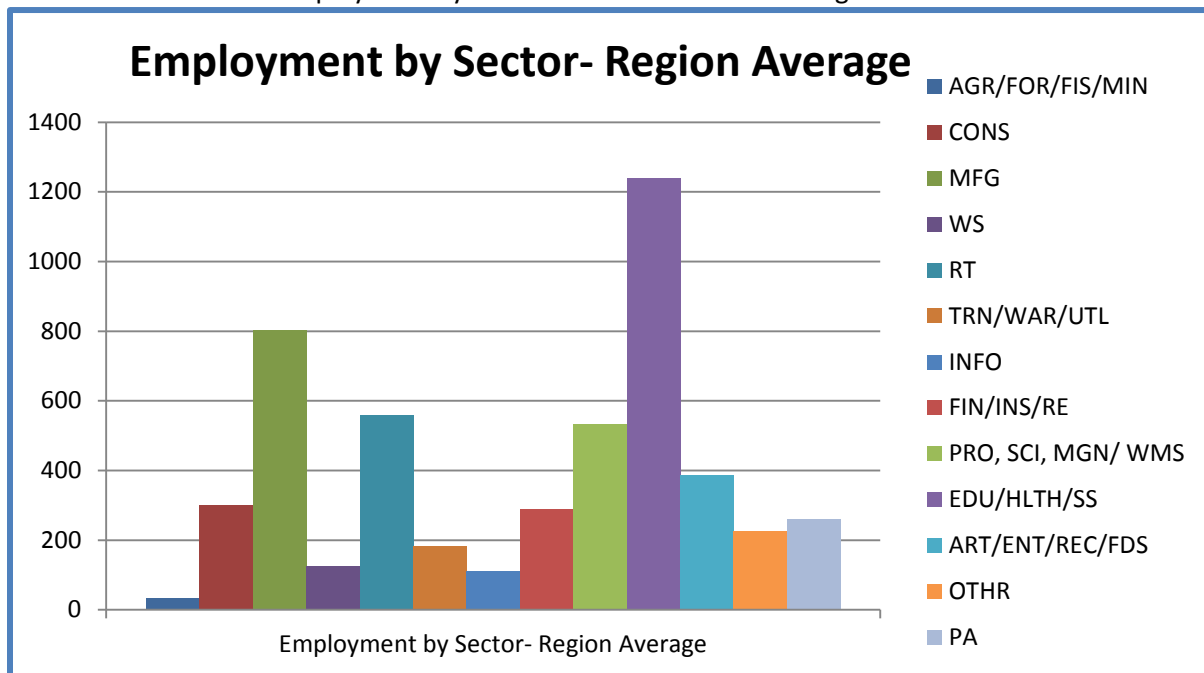
AGR	AGRICULTURE	FIS	FISHING	MIN	MINING	SCI	SCIENTIFIC
ART	ARTS	FOR	FORESTRY	OTHR	OTHER	SS	SOCIAL SERVICES
CONS	CONSTRUCTION	HLTH	HEALTHCARE	PA	PUBLIC ADMINISTRATION	TRN	TRANSPORTATION
EDU	EDUCATION	INFO	INFORMATION	PRO	PROFESSIONAL	UTL	UTILITIES
ENT	ENTERTAINMENT	INS	INSURANCE	RE	REAL ESTATE	WAR	WAREHOUSE
FDS	FOOD SERVICE	MFG	MANUFACTURING	REC	RECREATION	WMS	WASTE MANAGEMENT
FIN	FINANCE	MGN	MANAGEMENT	RT	RETAIL	WS	WHOLESALE

Table 4-23
Employment by Sector by Community in the Montachusett Region

COMMUNITY	AGR/ FOR/ FIS/ MIN	CONS	MFG	WS	RT	TRN/ WAR/ UTL	INFO	FIN/ INS/ RE	PRO, SCI, MGN/ WMS	EDU/ HLTH/ SS	ART/ ENT/ REC/ FDS	OTHR	PA	TOTALS
ASHBURNHAM	15	278	461	85	231	79	67	319	347	883	255	92	241	3,353
ASHBY	37	121	201	94	215	91	17	51	153	479	106	63	86	1,714
ATHOL	13	550	824	99	523	247	151	304	291	1,375	315	132	178	5,002
AYER	30	196	420	53	318	146	190	181	548	836	278	172	295	3,663
CLINTON	27	384	1,122	225	843	329	230	378	938	1,457	466	364	538	7,301
DEVENS	0	23	0	0	29	0	0	0	12	80	17	3	53	217
FITCHBURG	55	1,066	3,096	360	2,363	711	416	937	1,664	4,787	1,845	684	714	18,698
GARDNER	28	529	1,545	228	1,059	148	76	448	611	2,397	1,110	304	457	8,940
GROTON	47	163	1,030	182	406	38	135	459	1,099	1,146	298	210	150	5,363
HARVARD	9	133	426	56	139	44	123	171	527	726	51	121	87	2,613
HUBBARDSTON	20	198	430	47	250	33	90	98	203	575	117	86	109	2,256
LANCASTER	14	147	570	27	691	72	57	171	419	901	234	148	90	3,541
LEOMINSTER	81	921	3,295	584	2,419	794	443	1,233	1,978	4,897	1,877	1,148	1,021	20,691
LUNENBURG	37	597	644	179	614	228	145	380	632	1,281	298	326	242	5,603
PETERSHAM	34	49	54	3	29	24	14	19	90	187	49	13	34	599
PHILLIPSTON	25	95	158	32	124	49	20	21	47	242	50	33	107	1,003
ROYALSTON	6	60	98	19	57	9	6	15	52	141	42	13	51	569
SHIRLEY	0	126	433	116	193	133	54	220	359	533	271	143	196	2,777
STERLING	69	300	514	33	411	193	54	278	627	1,017	212	216	241	4,165
TEMPLETON	17	241	518	43	394	298	79	222	314	998	151	200	356	3,831
TOWNSEND	61	354	846	145	599	161	72	158	505	1,308	212	223	181	4,825
WESTMINSTER	47	217	736	81	388	176	49	286	454	907	302	194	184	4,021
WINCHENDON	96	206	991	159	553	177	66	279	371	1,335	293	290	373	5,189
TOTAL	768	6,954	18,412	2,850	12,848	4,180	2,554	6,628	12,241	28,488	8,849	5,178	5,984	115,934
REGION AVG	33	302	801	124	559	182	111	288	532	1,239	385	225	260	5,041
PERCENTAGE EMPLOYED BY SECTOR	0.7%	6%	15.9%	2.5%	11.1%	3.6%	2.2%	5.7%	10.6%	24.6%	7.6%	4.7%	5.2%	

Source: American Community Survey 2008-2012 5-Year Estimates

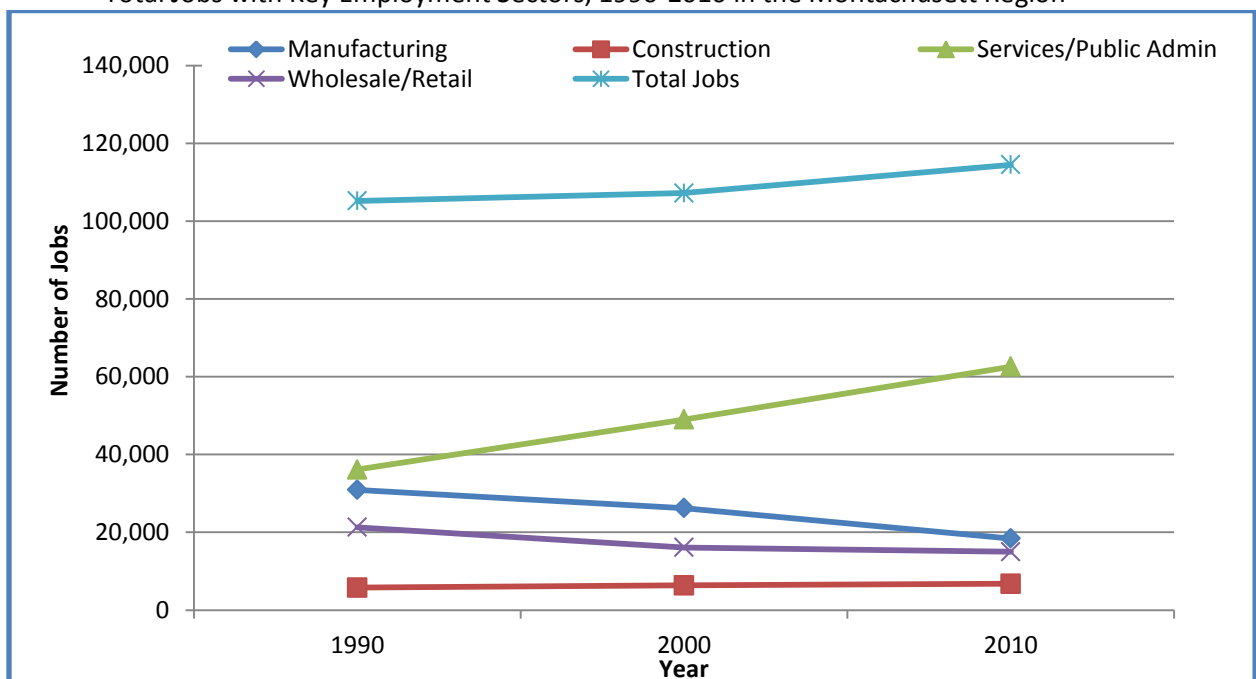
Figure 4-6
Employment by Sector in the Montachusett Region



Source: American Community Survey 2008-2012 5-Year Estimates

According to the US Census and the American Community Survey, the number of workers increased from 2000 to 2010. Notable losses occurred in: 1. Manufacturing; 2. Wholesale; and 3. Retail. All other job sectors experienced minor growth since 2000.

Figure 4-7
Total Jobs with Key Employment Sectors, 1990-2010 in the Montachusett Region



Transportation Network Impacts/Implications

Employment growth within the region has been driven as of late by the Education, Health Services and Social Services sectors (as illustrated in Figure 4-6. These are more professional level jobs that typically may rely on individual transportation options, i.e. personal vehicles. The second and third largest sectors are in the Manufacturing and Retail sectors. These can tend to be lower paying jobs with higher turnover rates. Employees in these sectors can be more dependent on additional transportation options outside of a personal vehicle. Other modes such as transit and walking/bicycling are likely to be more important to this sector especially in what are typically the non-peak commute times, i.e. “second and third shift” hours.

The higher unemployment rates within the region also highlight a segment that is also likely to be less dependent on a personal vehicle. The three communities that currently exceed the state rate of 7.10%, Fitchburg (8.3%), Athol (7.90%), and Gardner (7.60%) are all urban or urban like municipalities that have a population segment that likely need multiple options to seek jobs, education and training, as well as to support everyday life.

Education

Attainment Level

Based upon data from the 2008-2012 ACS, the percentage of high school only graduates in the larger urban centers is higher than the region’s high school diploma only rate of 30.3%. The percentage of Montachusett residents with Bachelor’s Degrees only have increased from 18.9% in 2000 to 19.06%, with the percentage of those with Graduate/Professional Degrees decreasing slightly from 12.90% in 2000 to 12.80%. Although the Montachusett Region ranks higher than the national average in Bachelor’s Degrees only and Graduate/Professional Degrees, they are still below the corresponding state averages.

Please note in the table below, 4-24, the figures are not graduation rates but the percent of the population that has a High School degree or equivalent only, an Associate’s Degree only or a Bachelor’s Degree only. Needless to say, those with Associate’s, Bachelor’s or Graduate/Professional degrees are also in possession of a High School degree or equivalent.



Table 4-24

Percentage of Education Level Attained in the Montachusett Region

Source: American Community Survey 2008-2012

COMMUNITY	HIGH SCHOOL GRADUATE ONLY	ASSOCIATES DEGREE ONLY	BACHELOR'S DEGREE ONLY	GRADUATE OR PROFESSIONAL DEGREE
ASHBURNHAM	29.80%	12.40%	20.80%	14.50%
ASHBY	32.40%	11.50%	16.80%	10.90%
ATHOL	40.70%	9.10%	10.30%	3.70%
AYER	27.10%	8.90%	24.00%	12.40%
CLINTON	29.30%	8.10%	21.30%	10.80%
FITCHBURG	33.50%	9.50%	13.70%	6.80%
GARDNER	32.30%	10.00%	12.30%	6.00%
GROTON	12.60%	5.70%	39.80%	29.30%
HARVARD	16.50%	4.70%	27.60%	32.90%
HUBBARDSTON	36.00%	11.30%	17.50%	8.60%
LANCASTER	26.30%	10.30%	17.70%	16.60%
LEOMINSTER	31.50%	9.80%	17.60%	7.10%
LUNENBURG	27.70%	11.60%	22.90%	11.60%
PETERSHAM	23.00%	7.50%	19.50%	25.30%
PHILLIPSTON	38.80%	10.60%	12.30%	7.80%
ROYALSTON	38.90%	7.90%	13.50%	9.30%
SHIRLEY	33.60%	5.00%	14.40%	8.50%
STERLING	21.80%	7.20%	30.10%	22.20%
TEMPLETON	39.80%	12.90%	10.20%	6.80%
TOWNSEND	34.50%	9.40%	22.10%	8.80%
WESTMINSTER	26.90%	11.60%	23.50%	12.60%
WINCHENDON	33.50%	12.10%	11.40%	9.00%
REGION AVG.	30.30%	9.41%	19.06%	12.80%
MASSACHUSETTS	25.90%	7.70%	22.20%	16.80%
UNITED STATES	28.20%	7.70%	17.90%	10.60%

Education Systems and Workforce Development

Within the region, several public school districts are educating young persons from pre-kindergarten through high school. Also various private schools educate residents at approximately the same age levels. The area also has several charter schools. Montachusett Technical Vocational High School is located in Fitchburg offering trade school curriculum at the high school level. Located in Gardner, Mount Wachusett Community College (MWCC) offers two-year programs while Fitchburg State University

offers four-year programs. In addition, there are many private sector educational operators offering training courses. The North Central Massachusetts Workforce Investment Board, Inc. promotes the economic and social welfare of the region through education, employment and training programs that increase employability of young people and adults. The Job Corps at Devens also increases the chances of young adults to obtain work in the region.

Housing

Dwelling Units

Regionwide, a significant number of new dwelling units were created between 1980 and 1990 as the percentage of new units realized was 15.9% (11,946 units). The 1991 recession slowed the development of new units. However, the Montachusett Region has been experiencing continued new housing construction since 1994. Between 1990 and 2000 new dwelling units increased by another 3.9% (3,367 units). From 2000 to 2010, new dwelling units increased by

9.00%, a much higher rate than what occurred between 1990 and 2000. Only one community (Harvard, -8.0%) experienced a decrease in dwelling units, after experiencing a near thirty percent loss in dwelling units just the decade before. Communities like Hubbardston (22.20%), Lancaster (22.10%) and Templeton (20.90%) rebounded very well from the slow development of housing units in the 1990s by posting the highest rates of increased dwelling units in the Montachusett Region by 2010.

Table 4-25
Number of Dwelling Units in the Montachusett Region

COMMUNITY	TOTAL NUMBER OF DWELLING UNITS				% CHANGE		
	1980	1990	2000	2010	1980-1990	1990 - 2000	2000-2010
ASHBURNHAM	1,849	2,279	2,204	2,599	23.30%	-3.30%	17.90%
ASHBY	802	959	1,011	1,191	19.60%	5.40%	17.80%
ATHOL	4,212	4,840	4,824	5,231	14.90%	-0.30%	8.40%
AYER	2,802	2,891	3,154	3,462	3.20%	9.10%	9.80%
CLINTON	4,943	5,635	5,844	6,397	14.00%	3.70%	9.50%
FITCHBURG	15,347	16,665	16,002	17,117	8.60%	-4.00%	7.00%
GARDNER	7,477	8,654	8,838	9,126	15.70%	2.10%	3.30%
GROTON	2,249	2,774	3,393	3,989	23.30%	22.30%	17.60%
HARVARD	2,807	3,141	2,225	2,047	11.90%	-29.20%	-8.00%
HUBBARDSTON	623	1,025	1,360	1,662	64.50%	32.70%	22.20%
LANCASTER	2,010	2,095	2,141	2,614	4.20%	2.20%	22.10%
LEOMINSTER	12,988	15,533	16,976	17,873	19.60%	9.30%	5.30%
LUNENBURG	3,133	3,486	3,668	4,133	11.30%	5.20%	12.70%
PETERSHAM	364	448	474	546	23.10%	5.80%	15.20%
PHILLIPSTON	304	631	739	802	107.60%	17.10%	8.50%
ROYALSTON	358	469	526	574	31.00%	12.20%	9.10%
SHIRLEY	1,829	2,183	2,156	2,427	19.40%	-1.20%	12.60%
STERLING	1,793	2,308	2,637	2,965	28.70%	14.30%	12.40%
TEMPLETON	2,082	2,276	2,597	3,139	9.30%	14.10%	20.90%
TOWNSEND	2,404	2,894	3,184	3,385	20.40%	10.00%	6.30%
WESTMINSTER	1,982	2,405	2,694	2,960	21.30%	12.00%	9.90%
WINCHENDON	2,636	3,349	3,660	4,199	27.00%	9.30%	14.70%
MONTACHUSETT	74,994	86,940	90,307	98,438	15.90%	3.90%	9.00%

Source: 1990, 2000 & 2010 U.S. Census

Owner Occupancy

In 2010, Ashby, Harvard, Hubbardston and Phillipston were the only Montachusett region communities with 90% or more of their occupied units defined as owner-occupied. On the other end of the spectrum, Ayer, Clinton, Fitchburg, Gardner, and Leominster have the lowest percentage of owner-occupied dwelling units sitting below 60%. Conversely, these same five communities had renter-occupied rates between 40 to 46% setting them apart from the next highest level renter-occupied community of Athol at only 28.80% and the remainder of the region.

Table 4-26
Owner Occupancy in the Montachusett Region

COMMUNITY	OWNER OCCUPIED UNITS		% OWNER OCCUPIED		RENTER OCCUPIED UNITS		% RENTER OCCUPIED	
	2000	2010	2000	2010	2000	2010	2000	2010
ASHBURNHAM	1,714	1,928	88.90%	89.80%	215	220	11.10%	10.20%
ASHBY	899	1,014	91.90%	91.80%	79	91	8.10%	8.20%
ATHOL	3,156	3,315	70.30%	71.20%	1,331	1,341	29.70%	28.80%
AYER	1,661	1,861	55.70%	59.70%	1,321	1,257	44.30%	40.30%
CLINTON	3,028	3,293	54.10%	56.50%	2,569	2,538	45.90%	43.50%
FITCHBURG	7,708	8,191	51.60%	54.00%	7,235	6,974	48.40%	46.00%
GARDNER	4,520	4,518	54.60%	54.90%	3,762	3,706	45.40%	45.10%
GROTON	2,740	3,128	83.80%	83.30%	528	625	16.20%	16.70%
HARVARD	1,638	1,730	90.50%	91.40%	171	163	9.50%	8.60%
HUBBARDSTON	1,195	1,417	91.40%	90.50%	113	149	8.60%	9.50%
LANCASTER	1,622	1,932	79.20%	80.20%	387	477	20.80%	19.80%
LEOMINSTER	9,545	9,830	57.90%	58.60%	6,946	6,937	42.10%	41.40%
LUNENBURG	3,086	3,383	87.30%	88.20%	450	452	12.70%	11.80%
PETERSHAM	362	428	82.60%	86.80%	76	65	17.40%	13.20%
PHILLIPSTON	527	582	90.90%	91.90%	53	51	9.10%	8.10%
ROYALSTON	393	436	87.50%	87.60%	56	62	12.50%	12.40%
SHIRLEY	1,467	1,669	70.50%	73.70%	610	595	29.50%	26.30%
STERLING	2,186	2,445	85.00%	87.00%	387	365	15.00%	13.00%
TEMPLETON	1,996	2,393	82.80%	83.00%	415	489	17.20%	17.00%
TOWNSEND	2,624	2,776	84.40%	85.70%	486	464	15.60%	14.30%
WESTMINSTER	2,169	2,342	85.80%	86.20%	360	374	14.20%	13.80%
WINCHENDON	2,492	2,755	72.30%	72.30%	955	1,055	27.70%	27.70%
MONTACHUSETT	56,728	61,366	66.56%	68.32%	28,505	28,450	33.44%	31.68%

Source: 2000, 2010 Census

Types of Housing Units

Communities with the highest percentages of family households include Harvard (80.45%), Hubbardston (78.48%), and Ashby (78.01%).

Communities with the highest percentages of nonfamily households include Clinton (41.44%), Ayer (41.28%), and Gardner (39.07%).

The average household size in the region was about the same for all communities, ranging anywhere from 2.3 to 2.8 people. The average family size was also about the same for all communities, ranging anywhere from 2.9 to 3.2 people.

Table 4-27
Household Types in the Montachusett Region

COMMUNITY	TOTAL HOUSEHOLDS		FAMILY HOUSEHOLDS				NONFAMILY HOUSEHOLDS			
	2000	2010	2000	'00 %	2010	'10 %	2000	'00 %	2010	'10 %
ASHBURNHAM	1,929	2,148	1,541	79.89%	1,661	77.33%	388	20.11%	487	22.67%
ASHBY	978	1,105	783	80.06%	862	78.01%	195	19.94%	243	21.99%
ATHOL	4,487	4,656	2,970	66.19%	2,989	64.20%	1,517	33.81%	1,667	35.80%
AYER	2,982	3,118	1,773	59.46%	1,831	58.72%	1,209	40.54%	1,287	41.28%
CLINTON	5,597	5,831	3,400	60.75%	3,408	58.45%	2,197	39.25%	2,423	41.55%
FITCHBURG	14,943	15,165	9,363	62.66%	9,362	61.73%	5,580	37.34%	5,803	38.27%
GARDNER	8,282	8,224	5,086	61.41%	5,011	60.93%	3,196	38.59%	3,213	39.07%
GROTON	3,268	3,753	2,568	78.58%	2,867	76.39%	700	21.42%	886	23.61%
HARVARD	1,809	1,893	1,494	82.59%	1,523	80.45%	315	17.41%	370	19.55%
HUBBARDSTON	1,308	1,566	1,071	81.88%	1,229	78.48%	237	18.12%	337	21.52%
LANCASTER	2,049	2,409	1,552	75.74%	1,758	72.98%	497	24.26%	651	27.02%
LEOMINSTER	16,491	16,767	10,902	66.11%	10,559	62.97%	5,589	33.89%	6,208	37.03%
LUNENBURG	3,535	3,835	2,668	75.47%	2,832	73.85%	867	24.53%	1,003	26.15%
PETERSHAM	438	493	299	68.26%	344	69.78%	139	31.74%	149	30.22%
PHILLIPSTON	580	633	443	76.38%	477	75.36%	137	23.62%	156	24.64%
ROYALSTON	449	498	330	73.50%	330	66.27%	119	26.50%	168	33.73%
SHIRLEY	2,067	2,264	1,426	68.99%	1,561	68.95%	641	31.01%	703	31.05%
STERLING	2,573	2,810	2,069	80.41%	2,170	77.22%	504	19.59%	640	22.78%
TEMPLETON	2,411	2,882	1,809	75.03%	2,124	73.70%	602	24.97%	758	26.30%
TOWNSEND	3,110	3,240	2,476	79.61%	2,483	76.64%	634	20.39%	757	23.36%
WESTMINSTER	2,529	2,716	1,954	77.26%	2,047	75.37%	575	22.74%	669	24.63%
WINCHENDON	3,447	3,810	2,477	71.86%	2,639	69.27%	970	28.14%	1,171	30.73%
MONTACHUSETT	85,262	89,816	58,454	68.56%	60,067	66.88%	26,808	31.44%	29,749	33.12%

Source 2000, 2010 U.S. Census

Table 4-28
Average Household Size in the Montachusett Region

Source 2000, 2010 U.S. Census

COMMUNITY	AVG. HOUSEHOLD SIZE		AVG. FAMILY SIZE	
	2000	2010	2000	2010
ASHBURNHAM	2.90	2.80	3.20	3.10
ASHBY	2.90	2.80	3.30	3.10
ATHOL	2.50	2.50	3.00	3.00
AYER	2.30	2.30	2.90	3.00
CLINTON	2.40	2.30	3.10	3.00
FITCHBURG	2.50	2.50	3.10	3.10
GARDNER	2.40	2.30	3.00	2.90
GROTON	2.90	2.80	3.30	3.20
HARVARD	2.90	2.80	3.20	3.10
HUBBARDSTON	3.00	2.80	3.30	3.10
LANCASTER	2.80	2.70	3.20	3.10

COMMUNITY	AVG. HOUSEHOLD SIZE		AVG. FAMILY SIZE	
	2000	2010	2000	2010
LEOMINSTER	2.50	2.40	3.10	3.00
LUNENBURG	2.70	2.60	3.10	3.00
PETERSHAM	2.50	2.40	3.00	2.90
PHILLIPSTON	2.80	2.70	3.20	3.00
ROYALSTON	2.80	2.50	3.30	3.00
SHIRLEY	2.60	2.50	3.10	3.10
STERLING	2.80	2.70	3.20	3.10
TEMPLETON	2.70	2.70	3.10	3.10
TOWNSEND	3.00	2.80	3.30	3.10
WESTMINSTER	2.70	2.70	3.10	3.10
WINCHENDON	2.80	2.60	3.20	3.10

Median Sale Price

As reported by the Warren Group, the median selling price for a single family home in Massachusetts in 2014 was \$330,000. This represented an 11.86% increase from the 2010 average of \$295,000. Median sales prices for the Commonwealth therefore rebounded from the prior five year period of 2000 to 2005 that saw a decrease of 16.90%.

Within the Montachusett region, the median sales price also increased from 2010 to 2014 by 7.44% (less than the state as a whole but still a positive change). The prior

Table 4-29
Median Sales Price by Calendar Year in the
Montachusett Region
(Source: The Warren Group 2000-2014)

period from 2005 to 2010 saw the region suffer a decrease in median sales prices of 23.74%, almost 7% greater decline than the Commonwealth.

Comparing homes sales prices from 2010 to 2014, a turnaround was seen for 19 of the 22 communities of the Montachusett Region. These municipalities had experienced a negative change, i.e. decline in median sales prices, from 2005 to 2010 but experienced a modest to large increase from 2010 to 2014. Phillipston saw a 56.27%

COMMUNITY	MEDIAN SALES PRICE - CALENDAR YEAR				5 YEAR % CHANGE	4 YEAR % CHANGE
	2000	2005	2010	2014	2005- 2010	2010- 2014
ASHBURNHAM	\$135,000	\$258,000	\$196,000	\$221,500	-24.03%	13.01%
ASHBY	\$153,500	\$275,000	\$186,000	\$210,000	-32.36%	12.90%
ATHOL	\$82,300	\$179,900	\$99,450	\$115,000	-44.72%	15.64%
AYER	\$189,950	\$335,000	\$343,940	\$286,250	2.67%	-16.77%
CLINTON	\$150,000	\$272,500	\$190,000	\$203,500	-30.28%	7.11%
FITCHBURG	\$119,000	\$213,950	\$141,000	\$145,000	-34.10%	2.84%
GARDNER	\$124,000	\$219,000	\$149,950	\$155,000	-31.53%	3.37%
GROTON	\$360,000	\$472,000	\$404,000	\$412,000	-14.41%	1.98%
HARVARD	\$447,500	\$620,000	\$507,000	\$544,250	-18.23%	7.35%
HUBBARDSTON	\$173,700	\$256,250	\$201,250	\$206,500	-21.46%	2.61%
LANCASTER	\$210,000	\$337,456	\$269,950	\$281,250	-20.00%	4.19%
LEOMINSTER	\$150,000	\$264,000	\$207,000	\$205,000	-21.59%	-0.97%
LUNENBURG	\$195,000	\$302,000	\$224,500	\$245,000	-25.66%	9.13%
PETERSHAM	\$175,000	\$264,000	\$240,000	\$214,500	-9.09%	-10.63%
PHILLIPSTON	\$114,500	\$252,500	\$125,100	\$195,500	-50.46%	56.27%
ROYALSTON	\$110,000	\$182,950	\$134,750	\$190,000	-26.35%	41.00%
SHIRLEY	\$193,900	\$340,000	\$247,000	\$330,000	-27.35%	33.60%
STERLING	\$240,000	\$329,900	\$272,800	\$300,000	-17.31%	9.97%
TEMPLETON	\$130,000	\$241,025	\$173,000	\$178,000	-28.22%	2.89%
TOWNSEND	\$179,950	\$288,950	\$224,900	\$226,800	-22.17%	0.84%
WESTMINSTER	\$159,950	\$298,000	\$210,000	\$238,500	-29.53%	13.57%
WINCHENDON	\$115,000	\$214,000	\$145,800	\$154,000	-31.87%	5.62%
REGION	\$177,648	\$291,654	\$222,427	\$238,980	-23.74%	7.44%
MASSACHUSETTS	\$215,000	\$355,000	\$295,000	\$330,000	-16.90%	11.86%

increase followed by Royalston at 41.00%. Three communities, Ayer, Leominster and Petersham continued to see a decline in sales prices with Ayer being the only community that had seen an increase from 2005 to 2010 that now experienced a decline of 16.77%.

Harvard and Groton continue to lead the region in average sales price surpassing \$400,000. Two new communities, Shirley and Sterling cracked the \$300,000 level in 2014, while Ayer fell from the \$300,000's to \$286,250 still fifth highest in the region. Athol was again the lowest median price in 2014 but did see their average surpass the \$100,000 level going from \$99,450 in 2010 to \$115,000, a 15.64% increase more than double the regional average.

Travel Characteristics

Means of Travel

The 2008-2015 American Community Survey 5 Year Estimate was conducted of people who either worked away from home or worked at home. Of the total sample of these workers who are residents of the Montachusett Region the data revealed that:

- More than nine out of ten (91.07%) of the residents commuted to work in a vehicle alone (83.09%) or carpooled (7.98%).
- Though small in number at 2,479, or 2.18%, people walked to work rather than using public transportation.
- Only 1.47% of the population, or 1,676 residents indicated that they used public transportation (excluding taxi) as their principal means of travel to work.

The number of those people that work at home equaled 4.31% of the total sample, or 4,797 people.

Compared to prior census data in 1990 and 2000, the overall percentage of individuals that drive alone to work increased with each succeeding census, from 79.72% in 1990, to 82.70% in 2000 and finally to 83.09% in the 2008-2015 ACS. Overall, there was a 3.37% increase in the percentage of drive alone workers from 2000.

Correspondingly, individuals that carpooled or used public transit decreased with each census data set. The percentage of those that bicycled, walked or worked at home did show an increase from 1990 to 2000 (.63% to 6.33%) and from 2000 to the 2008-2015 ACS (6.33% to 7.98%).

According to the ACS 2008-2015 Estimates, residents of Fitchburg are slightly less car dependent or auto-capable when it comes to getting to work (77.82% versus 83.09% in the Montachusett Region) and have the third-highest dependence (at 2.75%) upon public transit to get to work behind that of Shirley at 7.13% and Ayer at 5.57%. These two communities are stops on the MBTA Fitchburg Commuter Rail Line to Boston.



Looking at the three major communities, i.e. Fitchburg, Leominster and Gardner, with fixed route bus service, there is a decline in the numbers and percentages of those that use public transportation as a means to get to work from 2000. At the same time, the numbers for those working at home or driving alone have increased for these municipalities. It should be noted that the ACS counts are estimates and based upon a smaller sample size, therefore, the margin of error can be significant depending on the dataset.

Table 4-30
Means of Travel in the Montachusett Region

COMMUNITY	MEANS OF TRAVEL						TOTAL
	CAR, TRUCK, OR VAN/ DROVE ALONE	CAR, TRUCK, OR VAN/ CARPOOLED	PUBLIC TRANSPORTATION (EXCLUDING TAXI)	WALKED	OTHER MEANS	WORKED FROM HOME	
ASHBURNHAM	2,921 90.91%	192 5.98%	30 0.93%	10 0.31%	0 0.00%	60 1.87%	3,213
ASHBY	1,483 87.60%	48 2.84%	4 0.24%	25 1.48%	0 0.00%	133 7.86%	1,693
ATHOL	3,984 80.73%	531 10.76%	33 0.67%	74 1.50%	31 0.63%	282 5.71%	4,935
AYER	2,974 82.84%	123 3.43%	200 5.57%	43 1.20%	24 0.67%	226 6.30%	3,590
CLINTON	5,984 83.18%	644 8.95%	37 0.51%	165 2.29%	104 1.45%	260 3.61%	7,194
FITCHBURG	14,301 77.82%	1,924 10.47%	506 2.75%	812 4.42%	250 1.36%	584 3.18%	18,377
GARDNER	6,973 79.73%	978 11.18%	35 0.40%	360 4.12%	180 2.06%	220 2.52%	8,746
GROTON	4,382 83.72%	244 4.66%	87 1.66%	48 0.92%	82 1.57%	391 7.47%	5,234
HARVARD	1,932 77.19%	103 4.12%	41 1.64%	37 1.48%	34 1.36%	356 14.22%	2,503
HUBBARDSTON	2,227 90.27%	169 6.85%	12 0.49%	0 0.00%	0 0.00%	59 2.39%	2,467
LANCASTER	2,867 82.67%	274 7.90%	31 0.89%	101 2.91%	10 0.29%	185 5.33%	3,468
LEOMINSTER	17,340 84.94%	1,674 8.20%	279 1.37%	439 2.15%	141 0.69%	542 2.65%	20,415
LUNENBURG	4,698 84.82%	354 6.39%	54 0.97%	42 0.76%	94 1.70%	297 5.36%	5,539
PETERSHAM	454 77.08%	45 7.64%	12 2.04%	21 3.57%	0 0.00%	57 9.68%	589
PHILLIPSTON	867 88.38%	63 6.42%	4 0.41%	7 0.71%	5 0.51%	35 3.57%	981
ROYALSTON	505 90.99%	31 5.59%	0 0.00%	8 1.44%	4 0.72%	7 1.26%	555
SHIRLEY	2,238 81.38%	86 3.13%	196 7.13%	7 0.25%	68 2.47%	155 5.64%	2,750
STERLING	3,642 88.12%	281 6.80%	42 1.02%	0 0.00%	37 0.90%	131 3.17%	4,133
TEMPLETON	3,104 83.13%	417 11.17%	36 0.96%	51 1.37%	19 0.51%	107 2.87%	3,734
TOWNSEND	4,240 88.31%	254 5.29%	28 0.58%	41 0.85%	8 0.17%	230 4.79%	4,801
WESTMINSTER	3,289 83.90%	185 4.72%	0 0.00%	21 0.54%	39 0.99%	386 9.85%	3,920
WINCHENDON	4,173 83.71%	459 9.21%	9 0.18%	167 3.35%	83 1.66%	94 1.89%	4,985
MONTACHUSETT	94,578 83.09%	9,079 7.98%	1,676 1.47%	2,479 2.18%	1,213 1.07%	4,797 4.21%	113,822

Source: American Community Survey 2008-2015 5 year Estimates

Table 4-31
Change in Travel Modes in the Montachusett Region

MEANS OF TRAVEL	1990	2000	2008-2015 ACS	CHANGE 2000-2015
DRIVE ALONE	79.72%	82.70%	83.09%	3.37%
CARPPOOL	12.83%	9.61%	7.98%	-4.85%
PUBLIC TRANSIT	1.82%	1.35%	1.47%	-0.35%
BICYCLE/WALK/WORK AT HOME	5.63%	6.33%	7.46%	1.83%

Source: 1990, 2000 Census, American Community Survey 2008-2015 5 year Estimates

Table 4-32
Change in Travel Modes in Fixed Route Communities in the Montachusett Region

COMMUNITY		CAR, TRUCK, OR VAN/ DROVE ALONE	CAR, TRUCK, OR VAN/ CARPOOLED	PUBLIC TRANSPORTATION (EXCLUDING TAXI)	WALKED	OTHER MEANS	WORKED FROM HOME	TOTAL
FITCHBURG	2015	14,301	1,924	506	812	250	584	18,377
		77.82%	10.47%	2.75%	4.42%	1.36%	3.18%	
	2000	13,151	4,560	618	681	1356	361	20,727
		63.45%	22.00%	2.98%	3.29%	6.54%	1.74%	
	1990	13,322	5,336	615	852	1225	0	21,350
		62.40%	24.99%	2.88%	3.99%	5.74%	0.00%	
GARDNER	2015	6,973	978	35	360	180	220	8,746
		79.73%	11.18%	0.40%	4.12%	2.06%	2.52%	
	2000	7,559	2,378	301	322	449	197	11,206
		67.45%	21.22%	2.69%	2.87%	4.01%	1.76%	
	1990	6,481	2,610	125	495	632	0	10,343
		62.66%	25.23%	1.21%	4.79%	6.11%	0.00%	
LEOMINSTER	2015	17,340	1,674	279	439	141	542	20,415
		84.94%	8.20%	1.37%	2.15%	0.69%	2.65%	
	2000	16,740	3,596	558	339	823	445	22,501
		74.40%	15.98%	2.48%	1.51%	3.66%	1.98%	
	1990	15,873	4,534	369	539	990	0	22,305
		71.16%	20.33%	1.65%	2.42%	4.44%	0.00%	

Source: 1990, 2000 Census, American Community Survey 2008-2015 5 year Estimates

Mean Travel Time

The average (mean) time to commute to work has also increased for communities in the region as well as in the nation as a whole. Based on the 2008-2012 ACS, the region's average travel time has increased 0.6 minutes (or 36 seconds) since 2000. Only three communities, Harvard,

Westminster and Townsend saw a decrease in their mean travel time. The towns of Petersham, Lunenburg and Winchendon saw their travel time's increase by 5 or more minutes from 2000 times.

Workers in the Montachusett region have longer travel times compared to the state and national averages. Based on the 2008-2015 figures, this time is over two minutes greater the Massachusetts average of 27.7 and just over 4 minutes greater than the national average of 25.4 minutes.

Table 4-33
Mean Travel Times in the Montachusett Region

COMMUNITY	2000 (MINS.)	2008-2012 (MINS.)	CHANGE (MINS.)	PERCENT CHANGE
ASHBURNHAM	31.4	35.9	4.5	14.33%
ASHBY	31.4	32.7	1.3	4.14%
ATHOL	24.6	27.2	2.6	10.57%
AYER	28.3	29.5	1.2	4.24%
CLINTON	24	25.8	1.8	7.50%
FITCHBURG	23.2	26.7	3.5	15.09%
GARDNER	24.1	26.1	2.0	8.30%
GROTON	33.5	34.1	0.6	1.79%
HARVARD	32.2	32	-0.2	-0.62%
HUBBARDSTON	35.5	36.2	0.7	1.97%
LANCASTER	26.2	26.9	0.7	2.67%
LEOMINSTER	25.5	26	0.5	1.96%
LUNENBURG	26	32	6.0	23.08%
PETERSHAM	29.6	37.5	7.9	26.69%
PHILLIPSTON	29.4	32	2.6	8.84%
ROYALSTON	35.1	35.4	0.3	0.85%
SHIRLEY	30.9	33	2.1	6.80%
STERLING	28.8	31.6	2.8	9.72%
TEMPLETON	25.2	27.6	2.4	9.52%
TOWNSEND	36.4	34.4	-2.0	-5.49%
WESTMINSTER	28.7	27.3	-1.4	-4.88%
WINCHENDON	29.5	34.5	5.0	16.95%
MONTACHUSETT REGION	29.1	29.7	0.6	2.06%
MASSACHUSETTS	27	27.7	0.7	2.59%
U.S.	25.5	25.4	-0.1	-0.39%

Source: American Community Survey 2007-2011

Transportation Network Impacts/Implications

The data above indicates that there is more reliance on personal vehicles to get to work than was evident in prior census years. While overall, the mean travel time for the region has not



increased significantly, several communities have seen double digit percentage increases. These communities range from the typical “bedroom” communities (Ashburnham, Lunenburg and Petersham) to the more urban centric (Athol, Fitchburg and Winchendon). The economic downturn experienced by the nation as well as the Montachusett Region over the last dozen years or so has no doubt impacted these figures. As jobs are reduced or eliminated, people must look further and further away for employment. This in turn can translate into an increased dependence on automobiles and less on other modes. The MBTA commuter rail service in the region may eventually draw some of these individuals to transit once service all rail improvements are completed and implemented. However, further encouragement to employees and employers to consider car/van pools, ride sharing and transit options is needed to help reach greenhouse gas and mode shift goals for the Commonwealth.

Projections

Projections of Montachusett regional level and community level population, household, and employment were completed with information provided by the U.S. Census Bureau, MassDOT and the UMass Donahue Institute. This analysis provides growth projections to year 2040 which will contribute to the transportation demands of the future that need to be addressed.

Population

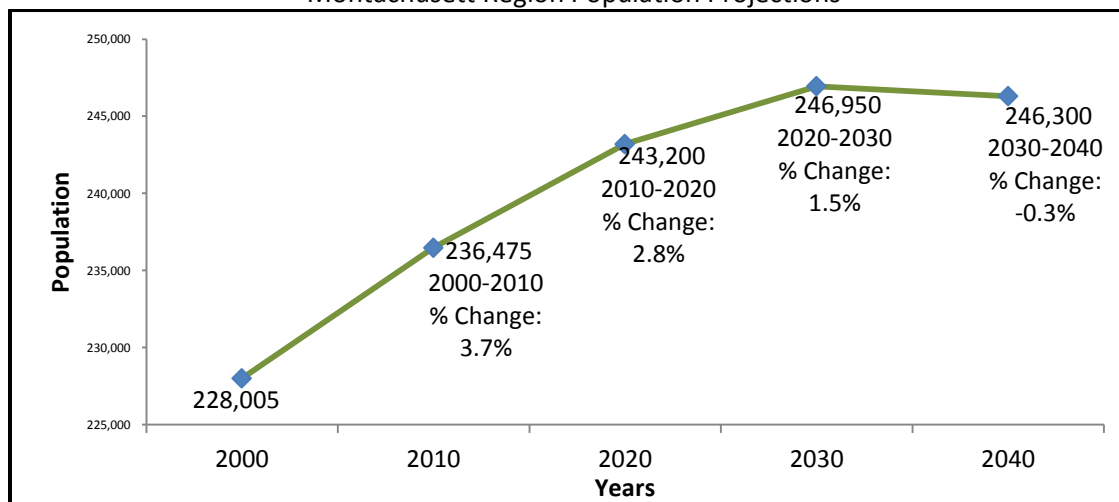
When compared to the United States and Massachusetts, the population of the Montachusett region is expected to grow at a significantly lower rate until 2040 (Table 4-34). By 2040, the expected population growth rate for the region of 4.2% is 78.4% lower than the United States expected growth rate of 19.4% and 58.8% lower than the Massachusetts expected growth rate of 10.2%.

Table 4-34
Comparison of Population Projections

	2010-2020	2010-2030	2010-2040
USA	5.1%	12.9%	19.4%
MASSACHUSETTS	3.8%	7.8%	10.2%
MONTACHUSETT REGION	2.8%	4.4%	4.2%

Population growth in the region is expected to peak in 2030 to 246,950 persons but slightly decrease by -0.3% (-650 persons) by 2040 (Figure 4-8).

Figure 4-8
Montachusett Region Population Projections



Within the communities of the Montachusett region, population changes from 2010 to 2040 will vary from an increase of 37% (2,962 persons) in Templeton to a decrease of -13% (-2,628 persons) in

Gardner. Of the three

cities of Gardner, Fitchburg, and

Leominster,

Fitchburg is the only city

projected to gain

population with a 5%

(2,022 persons) increase while

in Leominster it is expected

to decrease by -10.4%

(-4,259 persons). See Table 4-35 for

population projections for

Table 4-35

Population Projections within Montachusett Region Communities

	2000	2010	2020	2030	2040	10 YEAR PERCENT CHANGES			
						2000-2010	2010-2020	2020-2030	2030-2040
ASHBURNHAM	5,546	6,081	6,449	6,780	6,900	9.6%	6.1%	5.1%	1.8%
ASHBY	2,845	3,074	3,228	3,340	3,313	8.0%	5.0%	3.5%	-0.8%
ATHOL	11,299	11,584	12,296	13,415	14,700	2.5%	6.1%	9.1%	9.6%
AYER	7,287	7,427	7,546	7,685	7,700	1.9%	1.6%	1.8%	0.2%
CLINTON	13,435	13,606	14,317	15,000	15,200	1.3%	5.2%	4.8%	1.3%
FITCHBURG	39,102	40,318	41,520	42,260	42,340	3.1%	3.0%	1.8%	0.2%
GARDNER	20,770	20,228	19,700	18,600	17,600	-2.6%	-2.6%	-5.6%	-5.4%
GROTON	9,547	10,646	11,073	11,754	12,042	11.5%	4.0%	6.1%	2.4%
HARVARD	5,981	6,520	6,511	6,559	6,700	9.0%	-0.1%	0.7%	2.1%
HUBBARDSTON	3,909	4,382	4,791	5,230	5,480	12.1%	9.3%	9.2%	4.8%
LANCASTER	7,380	8,055	8,735	9,434	9,600	9.1%	8.4%	8.0%	1.8%
LEOMINSTER	41,303	40,759	39,850	38,000	36,500	-1.3%	-2.2%	-4.6%	-3.9%
LUNENBURG	9,401	10,086	10,550	10,730	10,480	7.3%	4.6%	1.7%	-2.3%
PETERSHAM	1,180	1,234	1,277	1,325	1,350	4.6%	3.5%	3.8%	1.9%
PHILLIPSTON	1,621	1,682	1,702	1,685	1,600	3.8%	1.2%	-1.0%	-5.0%
ROYALSTON	1,254	1,258	1,225	1,200	1,150	0.3%	-2.6%	-2.0%	-4.2%
SHIRLEY	6,373	7,211	7,924	8,557	8,650	13.1%	9.9%	8.0%	1.1%
STERLING	7,257	7,808	7,950	7,750	7,500	7.6%	1.8%	-2.5%	-3.2%
TEMPLETON	6,799	8,013	9,213	10,200	10,975	17.9%	15.0%	10.7%	7.6%
TOWNSEND	9,198	8,926	9,000	8,600	7,900	-3.0%	0.8%	-4.4%	-8.1%
WESTMINSTER	6,907	7,277	7,504	7,625	7,445	5.4%	3.1%	1.6%	-2.4%
WINCHENDON	9,611	10,300	10,840	11,220	11,175	7.2%	5.2%	3.5%	-0.4%

each Montachusett region community.

Households

The number of households in the region is expected to generally follow the same projected growth pattern as projected population growth. However, the number of households does not peak in 2030 as population is expected to do but rather continues to increase slightly by 0.8% (812 households) by 2040 (Figure 9).

Within the communities of the Montachusett region, household changes will vary from a total increase of 41.9% (1,208 households) in Templeton to a total decrease of -9.9% (-813 households) in Gardner. Of the three cities of Gardner, Fitchburg, and Leominster, Fitchburg is the only city projected to gain households with an 8.8% (1,331 households) increase while in Leominster it is expected to decrease by -7.2% (-1,213 households). See Table 36 for household projections for each Montachusett region community.

Figure 4-9
Montachusett Region Household Projections

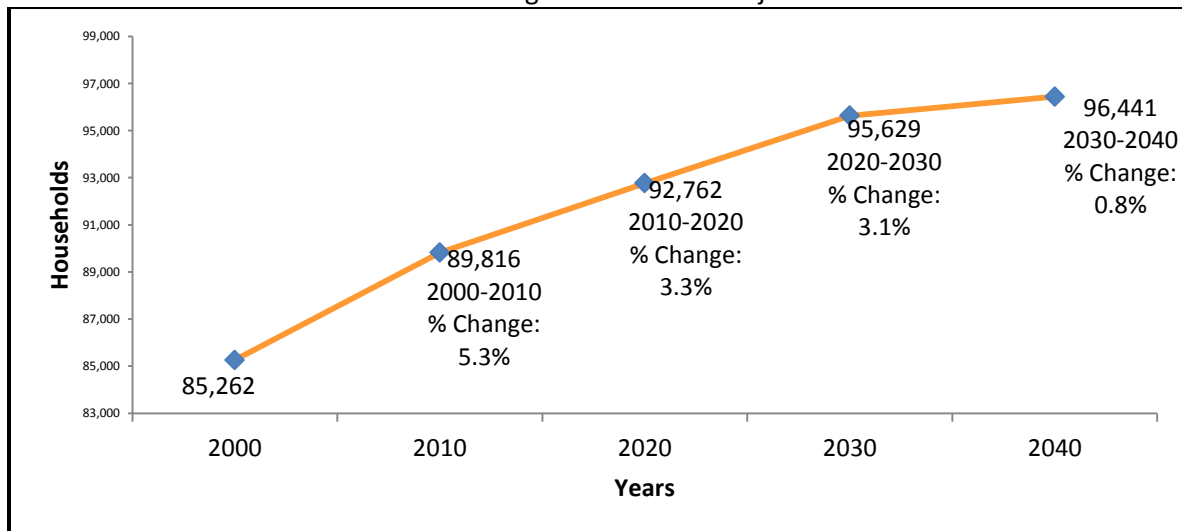


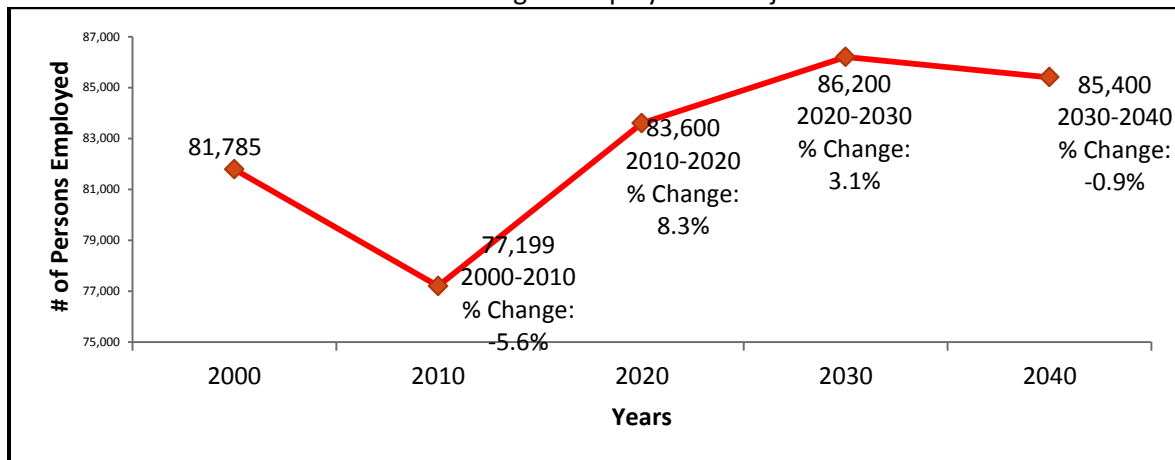
Table 4-36
Household Projections within Montachusett Region Communities

						10 YEAR PERCENT CHANGES			
	2000	2010	2020	2030	2040	2000-2010	2010-2020	2020-2030	2030-2040
ASHBURNHAM	1,929	2,148	2,289	2,456	2,524	11.4%	6.6%	7.3%	2.8%
ASHBY	978	1,105	1,169	1,228	1,241	13.0%	5.8%	5.0%	1.1%
ATHOL	4,487	4,656	4,966	5,521	6,120	3.8%	6.7%	11.2%	10.8%
AYER	2,982	3,118	3,183	3,298	3,345	4.6%	2.1%	3.6%	1.4%
CLINTON	5,597	5,831	6,173	6,576	6,745	4.2%	5.9%	6.5%	2.6%
FITCHBURG	14,943	15,165	15,717	16,274	16,496	1.5%	3.6%	3.5%	1.4%
GARDNER	8,282	8,224	8,060	7,738	7,411	-0.7%	-2.0%	-4.0%	-4.2%
GROTON	3,268	3,753	3,927	4,239	4,395	14.8%	4.6%	7.9%	3.7%
HARVARD	1,809	1,893	1,898	1,955	2,011	4.6%	0.3%	3.0%	2.9%
HUBBARDSTON	1,308	1,566	1,723	1,907	2,027	19.7%	10.0%	10.7%	6.3%
LANCASTER	2,049	2,409	2,627	2,883	2,983	17.6%	9.0%	9.7%	3.5%
LEOMINSTER	16,491	16,767	16,501	16,005	15,554	1.7%	-1.6%	-3.0%	-2.8%
LUNENBURG	3,535	3,835	4,039	4,178	4,123	8.5%	5.3%	3.4%	-1.3%
PETERSHAM	438	493	511	534	554	12.6%	3.7%	4.5%	3.7%
PHILLIPSTON	580	633	641	645	619	9.1%	1.3%	0.6%	-4.0%
ROYALSTON	449	498	488	482	470	10.9%	-2.0%	-1.2%	-2.5%
SHIRLEY	2,067	2,264	2,501	2,761	2,813	9.5%	10.5%	10.4%	1.9%
STERLING	2,573	2,810	2,881	2,849	2,797	9.2%	2.5%	-1.1%	-1.8%
TEMPLETON	2,411	2,882	3,332	3,753	4,090	19.5%	15.6%	12.6%	9.0%
TOWNSEND	3,110	3,240	3,288	3,193	2,970	4.2%	1.5%	-2.9%	-7.0%
WESTMINSTER	2,529	2,716	2,813	2,910	2,874	7.4%	3.6%	3.4%	-1.2%
WINCHENDON	3,447	3,810	4,035	4,244	4,279	10.5%	5.9%	5.2%	0.8%

Employment

Employment growth in the region is expected to peak in 2030 to 86,200 persons but slightly decrease by -0.9% (-650 persons) by 2040 (Figure 4-10). A total of nearly 8,201 new jobs are projected for the Montachusett region from 2010 to 2040, an overall increase of 10.6%. Devens will most likely be a major driver of the increase in employment growth primarily in the eastern half of the Montachusett region. See Figure 4-10 for ten year projection intervals to 2040.

Figure 4-10
Montachusett Region Employment Projections



See the Demographic Profile and Forecasting Challenges and Recommendations section below for the solutions that are needed to address the projected population, household, and employment increases.

Challenges

- As the region's population continues to age resulting in a higher median age as well as growing numbers of those over 60, different segments of the transportation network will be affected. How can potential impacts in safety, congestion and transit adapt to an aging population?
- The working age population and size have increased since 2000. Does the network provide adequate opportunities for employees to access jobs within the region as well as outside of it?
- Related to the workforce population increases, does the transportation network provide enough options and reliability for potential employers to locate in the region thus producing more economic benefits?
- The number and percentage of disabled individuals has declined from 2000 levels, however, they are still a significant part of the overall population (just over 12%). Are the networks providing adequate options for this segment to address their needs, i.e. medical, employment, education? What gaps or shortcomings need to be prioritized?
- The population is getting more and more diverse in terms of minority populations and language. As these segments grow are individuals able to make use of the transportation systems, especially transit, to meet their daily needs? Is enough being done to educate the population about available options especially in the urban communities?
- How does the MPO improve and expand its public outreach to include these segments of the population in the decision making process?
- The per capita income is increasing in the Montachusett region while at the same time the number living below the poverty level is also increasing. Are these individuals being

left out of the planning process and what can be done or improved to aid their economic future, i.e. access to job centers and education?

- The percentage of people that travel alone to work has increased in the region from 1990 and 2000 meaning more single occupant vehicles on the road. How can we affect a mode shift along the guidelines of the state policy that will reverse this trend resulting in reduced Green House Gas emissions and improved health in the region?

Moving Forward – Addressing the Challenges

- Continued review and updates to the transit system need to be maintained in order to effectively provide support to the aging population. Expansion to needed services such as medical and shopping should remain a priority.
- With the increasing elderly populations outside of the core urban centers that are currently serviced by fixed route transit options, options for transit connections to medical services needs to be addressed. Whether through expanded council-on-aging services, fixed route expansion or new ride options, it is important that mobility options be maintained.
- The increase in what are typically classified as Title VI and EJ populations also need various travel options to address economic, work and shopping needs. With a larger concentration of these populations within the urban areas, transit expansion needs to be maintained as a priority.
- Additionally, more outreach and education related to available options and services should be conducted.
- Mode options for workers need to be advanced in order to encourage individuals to shift out of their vehicles and over to more “environmentally sensitive” means. This will advance the state’s “Mode Shift” goal while also helping to attain Green House Gas reduction milestones. The Fitchburg Commuter Rail Line provides a major opportunity for achieving these goals. Connection services would appear to be an area ripe for investigation and advancement. Additionally, the region’s trail network can be improved and expanded in order to provide additional walking and biking mode options.
- The continued improvement of the regions highway infrastructure is necessary to promote economic activity and vitality in all communities. Continued emphasis on maintaining pavement conditions and reducing bridge deficiencies will allow for greater marketing of available industrial and commercial areas. This in turn will help increase employment in the region for the growing local workforce.

While it appears that most of the recommendations are transit related, really all of the transportation networks can be utilized to address the needs of the regions diverse population. Improvements to each system will have impacts across all walks of life by easing access to medical, educational, commercial, employment and recreational options.

Action Items

Action	Next Steps	Outcome
Conduct Transit Development Plans for fixed route services	Future UPWP Tasks	Changes and adjustments to the transit system to address needs
Address elderly population issues related to medical and other services especially in rural areas	Updates to the Coordinated Public transit – Human Services Plan	Potential programs and services; potential capital projects in TIPs
Improve outreach to Title VI and EJ populations, groups and organization to improve input, services and programs	Update Region’s Public Participation Program Monitor and solicit participation by advocates to Joint Transportation Committee	Improved dissemination of information to targeted populations
Promote and examine mode options within the Region to assist with Mode Shift Goals as well as Green House Gas Goals	Continue support of trail expansion with focus on commuter trails Expand participation in Safe Routes to School among communities	New trail projects New Safe routes to School projects Decrease in passenger vehicle usage
Advance key infrastructure projects within the region that maintain accessibility to medical, commercial, educational and employment areas	Revise TIP evaluation measures as needed Conduct project and location specific studies in the UPWP to address congestion, pavement and safety issues	More robust TIP projects that address key needs and priorities

